

MAY 2019



**BUILDING EXCELLENT SCHOOLS TODAY**



**COLORADO**  
Department of Education  
Division of Capital Construction

**SUMMARY OF BUILDING EXCELLENT SCHOOLS TODAY (BEST)  
FY2019-20 GRANT APPLICATIONS  
RECEIVED FEBRUARY 25, 2019**





## SUMMARY OF BUILDING EXCELLENT SCHOOLS TODAY (BEST) FY2019-20 GRANT APPLICATIONS

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**BEST FY2018-19 Grant Application Review Ground Rules****Schedule & Time**

Please be respectful of each other's time. Make your best effort to adhere to the schedule, including time allotted for breaks and lunch.

**Completing Work**

Each member shall complete their share of the work for each grant reviewed. Waiver Evaluation Sheets will be collected after each grant review.

**Decision Making**

Grant evaluations sheets will be completed by each individual member during each initial grant review, and then the CCAB as a whole will make a public motion to move a grant project to the recommendation shortlist. Once all grants have been reviewed Grant Evaluation Sheets will be collected and the final prioritized list will be generated.

**Participation**

All members may speak freely and listen attentively. All members shall participate in all phases of the process, unless they are required to recuse themselves.

**Focus**

The discussions should remain focused on the grant application proposals and the information provided by Division staff and the grant applicant.

**Openness / Conflict**

Members are encouraged to share relevant issues. Each individual's input is valued. Each member shall manage conflict effectively.

**Critique**

Each member shall take their work seriously, provide meaningful feedback on their evaluation sheets, reflect and self-critique along the way.

**Humor**

Each member shall remember to keep a good sense of humor, smile and enjoy the company of others as we move forward in helping needy public schools throughout the State.

### INTRODUCTION

In 2008, HB08-1335 established a new program called Building Excellent Schools Today (BEST) to assist School Districts, Charter Schools, Institute Charter Schools, BOCES, and the Colorado School for the Deaf and Blind (CSDB) with capital improvements to facilities. The Bill (and future amendments):

- Created the Division of Public School Capital Construction Assistance (Division) within CDE to administer the program;
- Established the Capital Construction Assistance Board (CCAB) to oversee the program;
- Created the Assistance Fund to fund BEST projects;
- Required the establishment of Public School Facility Construction Guidelines (Guidelines);
- Required a statewide facility assessment;
- Provides funding to the assistance fund for capital construction projects addressing health & safety, technology, overcrowding, and other;
- Provides technical assistance to school districts, charter schools, BOCES, and the CSDB.

Revenues supporting the Assistance Fund (BEST Funds) consist of:

- State Land Trust revenue from rental income, land surface leases, timber sales, and mineral leases;
- Colorado Lottery Spillover;
- Marijuana Excise Tax;
- Interest from monies in the assistance fund.

The Division received 58 grant applications for the FY2019-20 BEST grant cycle. The amount initially requested for BEST funds was \$447.4 million with applicants providing \$378.5 million in matching funds. Individual grant amounts have been revised through staff review. The CCAB is responsible for submitting a prioritized list of recommended projects from the applications to the State Board for final approval and award. This book summarizes all of the applications submitted and provides additional data to assist with the evaluation of the applications.

Division staff have read each application and completed a thorough review process to evaluate scope, budget, proposed solution, conformance with Public School Facility Construction Guidelines (established by the CCAB), and alignment with statewide assessment findings. Staff comments have been incorporated into the scoring rubrics provided to the board.

Section 6.2 of the BEST Rules requires the CCAB, taking into consideration the Statewide Assessment, to prioritize and determine the type and amount of the grant or matching grant from applications for projects deemed eligible for BEST funding based on the following criteria, in descending order of importance:

- Projects that will address safety hazards or health concerns at existing public school facilities, including concerns relating to public school facility security, and projects that are designed to incorporate technology into the educational environment.
  - As used in this subsection, “technology” means hardware, devices, or equipment necessary for individual student learning and classroom instruction, including access to electronic instructional materials, or necessary for professional use by a classroom teacher.
  - In prioritizing an application for a public school facility renovation project that will address safety hazards or health concerns, the CCAB shall consider the condition of the entire public school facility for which the project is proposed and determine whether it would be more fiscally prudent to replace the entire facility than to provide financial assistance for the renovation project;

- Projects that will relieve overcrowding in public school facilities, including but not limited to projects that will allow students to move from temporary instructional facilities into permanent facilities;
- All other projects.

BEST grants are matching grants and each applicant is required to provide matching funds in an amount determined using criteria in statute. An applicant can submit a waiver request for part, or for the entire matching requirement. The CCAB will evaluate each request and make a decision whether the waiver should be approved or denied.

#### **Grant Applicant Review Process:**

Applications will be reviewed in the order provided, organized by project type, then alphabetically by county, then applicant name. The applicant's photos will be projected during the project discussions.

Applicants will have the opportunity to present their project to the CCAB. Each applicant is limited to two minutes for their presentation and is allowed to have any representatives available to answer questions pertaining to their grant application.

**NOTE: Having a representative present is voluntary. The application will not be penalized for absence of a representative.**

#### **Individual Grant Application Review:**

- 1) When a grant is up for review, the Director will ask the Division staff representative and the grant applicant to approach the review tables.
- 2) The Director of the Division will introduce the project (applicant name & project title), then ask the applicants' presenters to introduce themselves.
- 3) The presenters will be given a two-minute window to present to the CCAB:
  - The presentation should include any items the applicant wishes to highlight or address pertaining to the proposed project. No visual materials will be allowed for the presentation.
- 4) Following the applicant's presentation, the Board Chair will open the floor to any discussion / questions the CCAB may have.
- 5) After the CCAB has reviewed the grant application and all questions have been answered, each CCAB member will complete a grant application evaluation sheet.
- 6) The CCAB will then chose to move the application to a funding recommendation shortlist.
  - NOTE: Moving an application to a funding recommendation shortlist does not guarantee the application will be awarded. See below for the shortlist prioritization procedure.
  - If a project that has a waiver is not voted to the shortlist, the waiver will not be reviewed.
- 7) If an application is voted to a shortlist and a waiver is requested as part of the application package, the CCAB will evaluate the waiver, ask any questions, and complete a waiver evaluation sheet.
  - Statutory waivers (waivers to prevent exceeding maximum available bonding capacity) will automatically be approved; a waiver evaluation will not be needed.
  - The Board Chair will entertain a motion to approve the applicant's waiver request:



- An applicant whose waiver request is denied is still eligible to receive a grant.
- 8) This process will be repeated until all applications have been reviewed.
- 9) Upon completion of the application review, Division staff will input the CCAB scores from the shortlisted application evaluations into a master spreadsheet that will tally the total scores for each project.

#### **Review of Prioritized Grant Applications:**

- After compiling the scores and assigning recommended funding sources (cash or lease/purchase), Division staff will present the CCAB with the results of the shortlisted grant application evaluations.
  - The shortlisted projects will be sorted by their identified statutory need – priority 1, 2, or 3.
  - The sorted projects will be prioritized by their evaluation score, as determined by the average overall CCAB score among voting members, with any ties broken by an additional ranking by each member.
  - In the event of any remaining ties in scoring, the board will break the tie.
- The CCAB will review the prioritized list and make any final discussion remarks.
- A funding line will be drawn at the set amount of available funding (State share), which the CCAB will review and make their final motion to approve the list. The prioritized list may include backup projects to be awarded in the event a higher ranked project fails to secure matching funds.
- The CCAB review will yield a prioritized list of projects to submit to the State Board for approval. The prioritized list will include the CCAB's recommendation as to the amount and type of financial assistance to be provided and a statement of the source and amount of applicant matching moneys for each recommended project, based upon information provided by the applicant.
- The State Board may approve, disapprove, or modify the provision of financial assistance for any project recommended by the CCAB if the State Board concludes that the CCAB misapplied the prioritization criteria in the statute. If the State Board concludes that the CCAB misapplied the prioritization criteria in the statute, then the State Board shall specifically explain its reasons for finding that the CCAB misapplied the prioritization criteria in writing.
- The above is intended to be only a general outline of the process. The CCAB's recommendations will be made in accordance with applicable statutes and rules.

#### **Attachments:**

- BEST Grant Program Rules
- Public School Facility Construction Guidelines
- BEST Grant Priority Guidelines
- Map of Participating Applicants
- Example of a BEST Grant Application Evaluation Tool
- School District Minimum Matching Calculation
- Charter School Minimum Matching Calculation
- Example of a BEST Grant Waiver Evaluation Tool for School Districts and BOCES
- Example of a BEST Grant Waiver Evaluation Tool for Charter Schools
- Glossary of Terms Used

## COLORADO DEPARTMENT OF EDUCATION

## DIVISION OF PUBLIC SCHOOL CAPITAL CONSTRUCTION ASSISTANCE

## 1 CCR 303-3

BUILDING EXCELLENT SCHOOLS TODAY GRANT PROGRAM**Authority**

§ 22-43.7-106(2)(i)(I) C.R.S., the Public School Capital Construction Assistance Board may promulgate rules, in accordance with Article 4 of Title 24, C.R.S., as are necessary and proper for the administration of the BEST Act.

**Scope and Purpose**

This regulation shall govern the Building Excellent Schools Today (BEST) Public School Capital Construction Assistance Program pursuant to the BEST Act.

**1. Definitions**

- 1.1. "Applicant" means an entity that submits an Application for Financial Assistance to the Board, including:
  - 1.1.1.A School District;
  - 1.1.2.A District Charter School;
  - 1.1.3.An Institute Charter School;
  - 1.1.4.A Board of Cooperative Educational Services (BOCES);
  - 1.1.5.The Colorado School for the Deaf and Blind.
- 1.2. "Application" means the Application for Financial Assistance submitted by an Applicant.
- 1.3. "Assistance Fund" means the public school capital construction assistance fund created in § 22-43.7-104(1) C.R.S.
- 1.4. "Authorizer" means the School District that authorized the charter contract of a Charter School or, in the case of an Institute Charter School, as defined in § 22-43.7-106(1) C.R.S., the State Charter School Institute created and existing pursuant to § 22-30.5-502(6) C.R.S.
- 1.5. "BEST Act" means § 22-43.7-101 C.R.S. et seq.
- 1.6. "BEST Lease-purchase Funding" means funding from a sublease-purchase agreement entered into between the state and an entity as described in 2.1 pursuant to § 22-43.7-110(2) C.R.S.
- 1.7. "BEST Cash Grant" means cash funding as a matching grant.
- 1.8. "BEST Emergency Grant" means a request for Financial Assistance in connection with a Public School Facility Emergency.

- 1.9. “Board” means the Public School Capital Construction Assistance Board created in § 22-43.7-106 (1) C.R.S.
- 1.10. “Board of Cooperative Educational Services” or “BOCES” means a Board of Cooperative Services created and existing pursuant to § 22-5-104 C.R.S. that is eligible to receive State moneys pursuant to § 22-5-114 C.R.S.
- 1.11. “Capital Construction” has the same meaning as set forth in § 24-30-1301 (2); C.R.S. except that the term also includes technology, as defined in § 22-43.7-109 (5)(a)(I)(B)
- 1.12. “Capital Renewal Reserve” means moneys set aside by an Applicant that has received an award for a project for the specific purpose of replacing major Public School Facility systems with projected life cycles such as, but not limited to, roofs, interior finishes, electrical systems and heating, ventilating, and air conditioning systems.
- 1.13. “Charter School” means a Charter School as described in § 22-54-124 (1)(f.6)(I)(A) or (1)(f.6)(I)(B) C.R.S.
- 1.14. “Eligible Charter School” means a qualified charter school that is eligible for the Loan Program as defined in § 22-30.5-408(1)(c) C.R.S. and authorized to receive financial assistance pursuant to 22-43.7-103(7) C.R.S.
- 1.15. “Division” means the Division of Public School Capital Construction Assistance created in § 22-43.7-105 C.R.S.
- 1.16. “Financial Assistance” means BEST Cash Grants; BEST Lease-purchase Funding; BEST Emergency Grants; funding provided as matching grants by the Board from the Assistance Fund to an Applicant; or any other expenditure made from the Assistance Fund for the purpose of financing Public School Facility Capital Construction as authorized by the BEST Act.
- 1.17. “Grantee” means a School District, Charter School, Institute Charter School, BOCES or the Colorado School for the Deaf and Blind that has applied for Financial Assistance and received an award.
- 1.18. “Institute Charter School” means a Charter School chartered by the Colorado State Charter School Institute pursuant to § 22-30.5-507 C.R.S.
- 1.19. “Loan Program” means the charter school matching moneys loan program pursuant to 22-43.7-110.5 C.R.S.
- 1.20. “Matching Moneys” means moneys required to be used directly to pay a portion of the costs of a Public School Facility Capital Construction project by an Applicant as a condition of an award of Financial Assistance to the Applicant pursuant to § 22-43.7-109 (9) C.R.S and/or 22-43.7-110(2) C.R.S.
- 1.21. “Project” means the Capital Construction Project for which Financial Assistance is being requested.
- 1.22. “Public School Facility” means a building or portion of a building used for educational purposes by a School District, Charter School, Institute Charter School, a Board of Cooperative Education Services, the Colorado School for the Deaf and Blind created and existing pursuant to § 22-80-102(1)(a) C.R.S., including but not limited to school sites, classrooms, data centers, libraries and media centers, cafeterias and kitchens, auditoriums, multipurpose rooms, and other multi-use spaces; except that “Public School Facility” does not include a learning center, as defined in § 22-30.7-102(4) C.R.S., that is not used for any other public school purpose and is not part of a building otherwise owned, or leased in its entirety, by a School District, a Board of

Cooperative Education Services, a Charter School, Institute Charter School, or the Colorado School for the Deaf and Blind for educational purposes.

- 1.23. “Public School Facility Construction Guidelines” means Public School Facility Construction Guidelines as established in § 22-43.7-107 C.R.S.
- 1.24. “Public School Facility Emergency” means an unanticipated event that makes all or a significant portion of a Public School Facility unusable for educational purposes or poses an imminent threat to the health or safety of persons using the Public School Facility.
- 1.25. “School District” means a School District, other than a junior or community college district, organized and existing pursuant to law in Colorado pursuant to § 22-43.7-103 (14) C.R.S.
- 1.26. “State Board” means the State Board of Education created and existing pursuant to section 1 of article IX of the State Constitution.
- 1.27. “Statewide Assessment” means the Financial Assistance priority assessment conducted pursuant to § 22-43.7-108 C.R.S.

## 2. Eligibility

2.1. The following entities are eligible to apply for Financial Assistance:

2.1.1.A School District;

2.1.2.A District Charter School or individual school of a School District if the school applies through the School District in which the school is located. The School District shall forward the Application from a Charter School or individual school of a School District to the Division with its comments;

2.1.3.An Institute Charter School;

2.1.4.A Board of Cooperative Educational Services (BOCES);

2.1.5.The Colorado School for the Deaf and Blind.

2.2. The Board may only provide Financial Assistance for a Project for a Public School Facility that the Applicant owns or will have the right to own in the future under the terms of a lease-purchase agreement with the owner of the facility or a sublease-purchase agreement with the state entered into pursuant to § 22-43.7-110(2) C.R.S.

2.3. The Board, with the support of the Division and subject to the approval of the State Board and the lessor of the property, may provide financial assistance as specified in this section to an applicant that is operating or will operate in the next budget year in a leased facility that is:

2.3.1.Listed on the state inventory of real property and improvements and other capital assets maintained by the Office of the State Architect pursuant to § 24-30-1303.5, C.R.S.; or

2.3.2.State-owned property leased by the State Board of Land Commissioners, described in § 36-1-101.5, C.R.S., to the applicant.

2.3.3.An award of financial assistance must be used to preserve or enhance the value of state-owned, leased property.

- 2.4. The Board may only provide financial assistance for a capital construction project for a public school in existence for at least three years at any time before the Board receives an application for financial assistance.
- 2.5. For a BEST Emergency Grant, the Applicant shall be operating in the Public School Facility for which Financial Assistance is requested.

### 3. Assistance Board

#### 3.1. Conflict of Interest

##### 3.1.1. In regard to Board members providing information to potential Applicants:

- 3.1.1.1. Board members shall exercise caution when responding to requests for information regarding potential Applications, especially in regard to questions that may increase the chances that the Board would give a favorable recommendation on an Application or Project.

- 3.1.2. If a potential or actual conflict of interest occurs with a Board member, the Board member will complete a Conflict of Interest disclosure form and it will be presented at the following CCAB meeting. The Division shall document the date of the disclosure, the name of the board member and conflict disclosed, and the documented disclosure shall be retained and made available at all board meetings which evaluation of applications or voting occurs.

- 3.1.3. Board members, and their firms, shall not present their position on the Board to School Districts, Charter Schools, Institute Charter Schools, BOCES, or the Colorado School for the Deaf and Blind as an advantage for using their firm over other firms in a bid to provide services on any capital construction project.

##### 3.1.4. In regard to Board members avoiding potential conflicts of interest in evaluation of and voting on Applications:

- 3.1.4.1. If a Board member's firm has no prior involvement regarding the Project included in an Application and the Board member does not have a direct or indirect substantial financial interest in an Application, the Board member may appropriately vote on the Application, but may not bid or work on the Project. The Board member's firm may bid or work on the Project, so long as the Board member plays no role in the entire procurement process and the Board member discloses any conflict of interest;

- 3.1.4.2. No Board member shall participate in the Board's evaluation process, including voting, for any Application when the Board member has a direct or indirect substantial financial interest in the Project or Application or the Board member's firm has had prior involvement with the Applicant directly related to the Project or Application;

- 3.1.4.3. At all times Board members must exercise judgment and caution to avoid conflicts of interest and/or appearance of impropriety, and should inform the Division staff of any questionable situation that may arise. A Board member may recuse himself or herself from any vote.

- 3.1.4.4. Board members shall be aware of and comply with the Colorado Code of Ethics, § 24-18-108.5(2), C.R.S., and shall not perform any official act which may have a direct economic benefit on a business or other undertaking in which the member has a direct or substantial financial interest.

3.1.4.4.1. A financial interest means a substantial interest held by an individual which is (i) an ownership interest in a business, (ii) a creditor interest in an insolvent business, (iii) an employment or prospective employment for which negotiations have begun, (iv) an ownership interest in real or personal property, (v) a loan or any other, or (vi) a directorship or officer ship in a business.

3.1.4.4.2. An official action means any vote decision, recommendation, approval, disapproval or other action, including inaction, which involves the use of discretionary authority.

3.1.5. In cases where a Board member has violated the conflict of interest policy as determined by the board chair, the Division Director will notify the Board member's appointing authority of the violation in writing. In the event of a conflict involving the board chair, the vice-chair will make the determination.

#### 4. Matching Requirement

4.1. Except as provided below in section 4.2, Financial Assistance may be provided only if the Applicant provides Matching Moneys in an amount equal to a percentage of the total cost of the Project determined by the Board after consideration of the Applicant's financial capacity, based on the following factors:

4.1.1. With respect to a School District's Application for Financial Assistance:

4.1.1.1. The School District's assessed value per pupil relative to the state average;

4.1.1.2. The School District's median household income relative to the state average;

4.1.1.3. The School District's bond redemption fund mill levy relative to the statewide average;

4.1.1.4. The percentage of pupils enrolled in the School District who are eligible for free or reduced-cost lunch;

4.1.1.5. The school district's current available bond capacity remaining;

4.1.1.6. The school district's unreserved fund balance as a percentage of its annual budget; and

4.1.1.7. The amount of effort put forth by the School District to obtain voter approval for a ballot question for bonded indebtedness, including but not limited to, a ballot question for entry by the district into a sublease-purchase agreement of the type that constitutes an indebtedness of the district pursuant to § 22-32-127 C.R.S., during the ten years preceding the year in which the district submitted the Application, which factor may be used only to reduce the percentage of Matching Moneys required from a district that has put forth such effort and not to increase the amount of Matching Moneys required from any district;

4.1.1.8. A School District shall not be required to provide any amount of Matching Moneys in excess of the difference between the School District's limit of bonded indebtedness, as calculated pursuant to § 22-42-104 C.R.S., and the total amount of outstanding bonded indebtedness already incurred by the School District.

4.1.2. With respect to a Board of Cooperative Education Services' Application for Financial Assistance:

- 4.1.2.1. The average assessed value per pupil of all members of the Board of Cooperative Education Services participating in the Project relative to the state average;
  - 4.1.2.2. The average median household income of all members of the Board of Cooperative Education Services participating in the Project relative to the state average;
  - 4.1.2.3. The average bond redemption fund mill levy of all members of the Board of Cooperative Education Services participating in the Project relative to the statewide average;
  - 4.1.2.4. The percentage of pupils enrolled in the member schools within the Board of Cooperative Education Services that are participating in the Project who are eligible for free or reduced-cost lunch;
  - 4.1.2.5. The average available bond capacity remaining of all members of the board of cooperative services participating in the capital construction project;
  - 4.1.2.6. The average unreserved fund balance as a percentage of the annual budget of all members of the board of cooperative services participating in the capital construction project; and
  - 4.1.2.7. The amount of effort put forth by the members of the Board of Cooperative Education Services to obtain voter approval for a ballot question for bonded indebtedness, including but not limited to a ballot question for entry by any member into a sublease-purchase agreement of the type that constitutes an indebtedness of the member pursuant to § 22-32-127 C.R.S., during the ten years preceding the year in which the Board of Cooperative Education Services submitted the Application, which factor may be used only to reduce the percentage of Matching Moneys required from a Board of Cooperative Education Services whose members, or any of them, have put forth such effort and not to increase the amount of Matching Moneys required from any Board of Cooperative Education Services.
- 4.1.3. With respect to a Charter School's Application for Financial Assistance:
- 4.1.3.1. The weighted average of the match percentages for the school districts of residence for the students enrolled in a district charter school or fifty percent of the average of the match percentages for all school districts in the state for an institute charter school;
  - 4.1.3.2. Whether the charter school's authorizer retains no more than ten percent of its capacity to issue bonds;
  - 4.1.3.3. Whether the charter school is operating in a district-owned facility at the time it submits its application;
  - 4.1.3.4. In the ten years preceding the year in which the charter school submits the application, the number of times the charter school has attempted to obtain or has obtained:
    - 4.1.3.4.1. Bond proceeds pursuant to 22-30.5-404 C.R.S through inclusion in a ballot measure submitted by the charter school's authorizer to the registered electors of the school district:
    - 4.1.3.4.2. Proceeds from a special mill levy for capital needs pursuant to 22-30.5-405 C.R.S.;
    - 4.1.3.4.3. Grant funding for capital needs from a source other than the assistance fund; and

4.1.3.4.4. Funding for capital construction from bonds issued on its behalf by the Colorado Educational and Cultural Facilities authority created and existing pursuant to 23-15-104(1)(a), C.R.S., or from some other source of financing.

4.1.3.5. If the charter school is a district charter school, the student enrollment of the charter school as a percentage of the student enrollment of the charter school's authorizing school district.

4.1.3.6. The percentage of students enrolled in the charter school who are eligible for the federal free and reduced-cost lunch program in relation to the overall percentage of students enrolled in the public schools in the State who are eligible for the federal free and reduced-cost lunch program.

4.1.3.7. The percentage of the per pupil revenue received by the charter school that the charter school spends on facility costs other than facilities operations and maintenance.

4.1.3.8. The charter school's unreserved fund balance as a percentage of its annual budget.

4.1.3.9. The match percentage for a charter school calculated based on the above criteria shall not be higher than the highest match percentage for a school district, or lower than the lowest match percentage for a school district, in the same grant cycle.

#### 4.2. Waiver or reduction of Matching Moneys

4.2.1. An Applicant may apply to the Board for a waiver or reduction of the Matching Moneys requirement. Such application shall discuss unique issues demonstrating why the percentage is not representative of the Applicant's current financial state. The Board may grant a waiver or reduction if it determines:

4.2.1.1. That the waiver or reduction would significantly enhance educational opportunity and quality within a School District, Board of Cooperative Education Services, or Applicant school,

4.2.1.2. That the cost of complying with the Matching Moneys requirement would significantly limit educational opportunities within a School District, Board of Cooperative Education Services, or Applicant school, or

4.2.1.3. That extenuating circumstances deemed significant by the Board make a waiver appropriate.

4.2.2. An applicant must complete a waiver application and submit it to the Board in conjunction with their grant application. The waiver application shall explain issues and impacts in detail, including dollar amounts of the issues and impacts, and demonstrate why each of the factors used to calculate their Matching Moneys percentage are not representative of their actual financial capacity. The Board will determine the merit of the waiver by evaluating each waiver application using the prescribed waiver application evaluation tool.

#### 4.3. Charter School matching moneys Loan Program.

4.3.1. The Charter School matching moneys Loan Program will assist Eligible Charter Schools in obtaining the Matching Moneys requirement for an award of Financial Assistance pursuant to 22-43.7-109 C.R.S.

4.3.2. An Eligible Charter School that chooses to seek a loan through the Loan Program shall apply to the Board to receive a loan.



- 4.3.3. To be an Eligible Charter School for the Loan Program means a Charter School that is described in § 22-30.5-104 or an Institute Charter School as that term is defined in § 22-30.5-502 has a stand-alone credit assessment or rating of at least investment grade by a nationally recognized rating agency at the time of issuance of any qualified Charter School bonds on behalf of the Charter School by the Colorado educational and cultural facilities authority pursuant to the "Colorado Educational and Cultural Facilities Authority Act", article 15 of title 23, C.R.S., and that has been certified as a qualified Charter School by the State Treasurer.
- 4.3.4. The Board may approve a loan for an Eligible Charter School in an amount that does not exceed fifty percent of the amount of Matching Moneys calculated for the Eligible Charter School pursuant to 22-43.7-109(9)(c) C.R.S.
- 4.3.5. If a loan is approved by the Board the project will be considered as a BEST Lease-Purchase project pursuant to 22-43.7-110.5(2)(b)C.R.S., and the proposed project must be one that is financeable.
- 4.3.6. The Board shall direct the State Treasurer to include the amount of a loan approved pursuant to the terms in the Lease-Purchase agreement entered into pursuant to 22-43.7-110 (2) C.R.S. to provide Financial Assistance to the Eligible Charter School for which the loan is approved.
- 4.3.7. Charter School Loan Program application
- 4.3.7.1. An application for a loan shall include:
- 4.3.7.1.1. Basic contact information, justification for seeking a BEST loan and documentation of a stand-alone credit assessment or rating of at least investment grade by a nationally recognized rating agency for the Charter School;
  - 4.3.7.1.2. Identify the Charter Schools current facilities and indicate if those facilities are owned, leased or in a lease-purchase agreement;
  - 4.3.7.1.3. A current credit disclosure statement along, any business notes payable or reviews, notices or warnings from the Charter School's authorizer;
  - 4.3.7.1.4. Financial information to include internal financial statements, CPA Audits and IRS 990's for the previous three years. Detailed operating budget for the current and next year. The Charter School's projected operating budget for the next five years. Enrollment figures for the previous three years, the current year and the following three years;
  - 4.3.7.1.5. CDE listed minimum match requirement for the BEST grant;
  - 4.3.7.1.6. Amount of total match provided by the Charter School for the BEST grant;
  - 4.3.7.1.7. Amount of the loan request for the BEST grant;
  - 4.3.7.1.8. A loan application from a Charter School shall include signatures of the District Superintendent, School Board Officer, and the Charter School Director;
  - 4.3.7.1.9. A loan application from an Institute Charter School shall include signatures of the Charter School Institute Director and the Institute Charter School Director;

4.3.7.1.10. Applications that are incomplete may be rejected without further review.

#### 4.3.8. Charter School Loan Program deadline for submission

4.3.8.1. The loan application, along with any supporting material, shall be submitted with the BEST grant application on or before the BEST grant application due date.

4.3.8.2. An application will not be accepted unless it is received in the Board office by 4:30 p.m. on or before the deadline date determined by the board.

4.3.8.3. The Board may, in its sole discretion and upon a showing of good cause in written request from an Applicant, extend the deadline for filing an Application.

#### 4.3.9. To receive a loan through the Loan Program, an Eligible Charter School shall:

4.3.9.1. Authorize the State Treasurer to withhold moneys payable to the Eligible Charter School in the amount of the loan payments pursuant to 22-30.5-406 C.R.S.;

4.3.9.2. Pay an interest rate on the loan that is equal to the interest rate paid by the State Treasurer on the Lease-Purchase agreement entered into pursuant to 22-43.7-110 C.R.S. to provide Financial Assistance to the Eligible Charter School for which the loan is approved;

4.3.9.3. Amortize the loan payments over the same period in years as the Lease-Purchase agreement entered into pursuant to 22-43.7-110 C.R.S. to provide Financial Assistance to the Eligible Charter School for which the loan is approved; except that the Eligible Charter School may pay the full amount of the loan early without incurring a prepayment penalty; and

4.3.9.4. Create an escrow account for the benefit of the state with a balance in the amount of six months of loan payments.

## 5. Applications

### 5.1. Deadline for submission

5.1.1. Except as provided below, Applications shall be filed with the Board on or before a date determined by the Board.

5.1.2. An Application will not be accepted unless it is received in the Board office by 4:00 p.m. on or before the deadline date determined by the Board. This does not apply to an Application in connection with a Public School Facility Emergency;

5.1.3. The Board may, in its sole discretion and upon a showing of good cause in a written request from an Applicant, extend the deadline for filing an Application.

5.2. The Board prefers Applications to be in electronic form, but one hard copy to the Board office is acceptable. Each Application shall be in a form prescribed by the Board and shall include, but not be limited to, the following (with supporting documentation):

5.2.1. A description of the scope and nature of the Project;

- 5.2.2.A description of the architectural, functional, and construction standards that are to be applied to the Project that indicates whether the standards are consistent with the Construction Guidelines and provides an explanation for the use of any standard that is not consistent with the Construction Guidelines;
- 5.2.3.The estimated amount of Financial Assistance needed for the Project and the form and amount of Matching Moneys that the Applicant will provide for the Project;
- 5.2.4.If the Project involves the construction of a new Public School Facility or a major renovation of an existing Public School Facility, a demonstration of the ability and willingness of the Applicant to renew the Project over time that includes, at a minimum, the establishment of a capital renewal budget and a commitment to make annual contributions to a Capital Renewal Reserve within a School District's capital reserve fund or any functionally similar reserve fund separately maintained by an Applicant that is not a School District;
- 5.2.5.If the Application is for Financial Assistance for the renovation, reconstruction, expansion, or replacement of an existing Public School Facility, a description of the condition of the Public School Facility at the time the Applicant purchased or completed the construction of the Public School Facility and, if the Public School Facility was not new or was not adequate at that time, the rationale of the Applicant for purchasing the Public School Facility or constructing it in the manner in which it did;
- 5.2.6.A statement regarding the means by which the Applicant intends to provide Matching Moneys required for the project, including but not limited to voter-approved multiple-fiscal year debt or other financial obligations, utility cost savings associated with any utility costs-savings contract, as defined in § 24-30-2001 (6), gifts, grants, donations, or any other means of financing permitted by law, or the intent of the Applicant to seek a waiver of the Matching Moneys requirement. If an Applicant that is a School District or a Board of Cooperative Educational Services with a participating School District intends to raise Matching Moneys by obtaining voter approval to enter into a sublease-purchase agreement that constitutes an indebtedness of the district as pursuant to § 22-32-127 C.R.S., it shall indicate whether it has received the required voter approval or, if the election has not already been held, the anticipated date of the election;
- 5.2.7.A description of any efforts by the Applicant to coordinate Capital Construction projects with local governmental entities or community-based or other organizations that provide facilities or services that benefit the community in order to more efficiently or effectively provide such facilities or services, including but not limited to a description of any financial commitment received from any such entity or organization that will allow better leveraging of any Financial Assistance awarded;
- 5.2.8.If deemed relevant by the applicant, a statement of the applicant's annualized utility costs, including electricity, natural gas, propane, water, sewer, waste removal, telecommunications, internet, or other monthly billed utility services, and the amount of any reduction in such costs expected to result if the applicant receives financial assistance;
- 5.2.9.A copy of any existing Master Plan or facility assessment relating to the facility(ies) for which Financial Assistance is sought;
- 5.2.10. Any other information that the Board may require for the evaluation of the project;
- 5.2.11. An Application from a School District shall include signatures of the Superintendent and a District Board Officer;
- 5.2.12. An Application from a Charter School shall include signatures of the District Superintendent, School Board Officer, and the Charter School Director;

5.2.13. An Application from an Institute Charter School shall include signatures of the Charter School Institute Director and the Institute Charter School Director;

5.2.14. An Application from a Board of Cooperative Educational Services shall include signatures of the BOCES Director and a BOCES Board Officer;

5.2.15. An Application from the Colorado School for the Deaf and Blind shall include signatures of the Colorado School for the Deaf and Blind Director and a Colorado School for the Deaf and Blind Board Officer.

### 5.3. BEST Lease-Purchase Funding

5.3.1. In addition to the information required in section 5.2 above, the Applicant shall agree to provide any necessary documentation related to securing the lease-purchase agreement.

### 5.4. BEST Emergency Grants

5.4.1. Applicant shall contact the Division by phone, fax, or email. Appropriate follow up documentation will be determined based on type and severity of emergency, including financial need.

5.4.2. In the event the Governor declares a disaster emergency, pursuant to § 24-33.5-704(4) C.R.S., the Division shall, as soon as possible following the declaration of the disaster emergency, contact each affected school facility in any area of the State in which the Governor declared the disaster emergency to assess any facility needs resulting from the declared disaster emergency.

5.4.2.1. The Division must report its findings to the Board as soon as possible following its outreach.

5.4.2.2. In determining whether to recommend to the State Board that Emergency Financial Assistance be provided, the Board shall consider the findings that the Division provided to the Board.

5.4.3. The Board shall meet within fifteen days of receiving the Application for a BEST Emergency Grant to determine whether to recommend to the State Board that emergency Financial Assistance be provided, the amount of any assistance recommended to be provided, and any conditions that the Applicant shall meet to receive the assistance.

5.5. Applications that are incomplete may be rejected without further review.

5.6. The Board may request supplementation of an Application with additional information or supporting documentation.

## 6. Application Review

### 6.1. Time for Review

6.1.1. The Board, with the support of the Division, will review the Applications;

6.1.2. The Board will submit the prioritized list of Projects to the State Board for which the Board is recommending Financial Assistance according to the timeline established by the Board;

6.1.3. In the case of Financial Assistance that involves lease-purchase agreements, the prioritized list is subject to both the preliminary approval of the state board and the final approval of the capital development committee.

6.1.4. The Board may, in its discretion, extend these deadlines.

6.2. The Board, taking into consideration the Statewide Financial Assistance Priority Assessment, conducted pursuant to § 22-43.7-108 shall prioritize and determine the type and amount of the grant or matching grant for Applications for Projects deemed eligible for Financial Assistance based on the following criteria, in descending order of importance:

6.2.1. Projects that will address safety hazards or health concerns at existing Public School Facilities, including concerns relating to Public School Facility security, and projects that are designed to incorporate technology into the educational environment

6.2.2. As used in § 22-43.7-109(5)(a)(1), “technology” means hardware, devices, or equipment necessary for individual student learning and classroom instruction, including access to electronic instructional materials, or necessary for professional use by a classroom teacher.

6.2.2.1. In prioritizing an Application for a Public School Facility renovation project that will address safety hazards or health concerns, the Board shall consider the condition of the entire Public School Facility for which the project is proposed and determine whether it would be more fiscally prudent to replace the entire facility than to provide Financial Assistance for the renovation project.

6.2.3. Projects that will relieve overcrowding in Public School Facilities, including but not limited to projects that will allow students to move from temporary instructional facilities into permanent facilities, and.

6.2.4. All other projects.

6.2.5. Among other considerations, the Board may take into account the following in reviewing Applications:

6.2.5.1. The amount of the matching contribution being provided in excess of or less than the minimum;

6.2.5.2. Whether the Applicant has been placed on financial watch by the Colorado Department of Education;

6.2.5.3. Overall condition of the Applicant’s existing facilities;

6.2.5.4. The project cost per pupil based on number of pupils affected by the proposed Project;

6.2.5.5. The project life cycle.

6.2.5.6. The Public School Facility’s Facility Condition Index (FCI), Colorado Facility Index (CFI), school priority score and construction guidelines score.

6.2.5.7. The Applicants ability to help itself, including available bonding capacity, planning and criteria in sections 4.1.1 or 4.1.2 or 4.1.3.

6.3. Additional actions the Board may take when reviewing an Application:

6.3.1. The Board may modify the amount of Financial Assistance requested or modify the amount of Matching Moneys required;

6.3.2. The Board may recommend funding a project in its entirety or recommend a partial award to the project;

6.3.2.1. If a project is partially funded a written explanation will be provided.

6.4. The Board shall submit to the State Board the prioritized list of Projects. The prioritized list shall include:

6.4.1. The Board's recommendation to the State Board as to the amount of Financial Assistance to be provided to each Applicant approved by the Board to receive funding and whether the assistance should be in the form of a BEST Cash Grant, BEST Lease-purchase Funding or a BEST Emergency Grant.

6.5. In considering the amount of each recommended award of Financial Assistance, the Board shall seek to be as equitable as practical in considering the total financial capacity of each Applicant.

## **7. BEST Lease-purchase Funding**

7.1. Subject to the following limitations, the Board may instruct the State Treasurer to enter into lease-purchase agreements on behalf of the state to provide Lease-purchase Funding for Projects for which the State Board has authorized provision of Financial Assistance.

7.2. Whenever the State Treasurer enters into a lease-purchase agreement pursuant to § 22-43.7-110 C.R.S., the Applicant that will use the facility funded with the Lease-purchase Funding shall enter into a sublease-purchase agreement with the state that includes, but is not limited to, the following requirements:

7.2.1. The Applicant shall perform all the duties of the state to maintain and operate the Public School Facility that are required by the lease-purchase agreement;

7.2.2. The Applicant shall make periodic rental payments to the state, which payments shall be credited to the Assistance Fund as Matching Moneys of the Applicant;

7.2.3. Ownership of the Public School Facility shall be transferred by the state to the Applicant upon fulfillment of both the state's obligations under the lease-purchase agreement and the Applicant's obligations under the sublease-purchase agreement.

## **8. Payment and Oversight**

8.1. Payment.

8.1.1. All Cash Grant Financial Assistance Grantees must sign a grant contract with CDE outlining the terms and conditions associated with the Financial Assistance.

8.1.2. All Financial Assistance awarded is expressly conditioned on the availability of funds.

8.1.3. Payment of Financial Assistance will be on a draw basis. As a Grantee expends funds on a Project, the Grantee may submit a request for funds to the Division on a fund request form provided by the Division. The fund request shall be accompanied by copies of invoices from the vendors for which reimbursement is being requested and any other documentation requested by the Division.

8.1.3.1. The Division will review the fund request and make payment. Payments will only be made for work that is included in the Project scope of work defined in the Application.

8.1.3.2. If the Grantee is a School District, request for payment shall come from the School District. Requests will not be accepted from individual School District schools.

8.1.3.3. If the Grantee is a District Charter School, request for payment shall come from the School District. Payment shall be made to the School District and the School District shall make payment to the charter school. The School District may not retain any portion of the moneys for any reason.

8.1.3.4. If the Grantee is an Institute Charter School, request for payment shall come from the Charter School Institute and the Charter School Institute shall make payment to the Institute Charter School. Payment shall be made directly to the Charter School Institute.

8.1.3.5. If the Grantee is a Board of Cooperative Educational Services, request for payment shall come from the Board of Cooperative Educational Services. Requests will not be accepted from individual Board of Cooperative Educational Services schools.

8.1.3.6. If the Grantee is the Colorado School for the Deaf and Blind, request for payment shall come from the Colorado School for the Deaf and Blind.

8.1.4. Payment of BEST Lease-purchase Funding will be determined by the terms of the lease-purchase agreement and any subsequent sublease-purchase agreements.

8.1.5. Each grant cycle the Board may make a motion to authorize up to 5% of the assistance fund dollars be used to address grant reserves for projects awarded in that given year.

8.1.5.1. Grant reserve requests shall be submitted on a Division provided application;

8.1.5.2. Grant reserve applications will be submitted to the Board as an action item at the board meeting following the date the grant reserve application was submitted to the Division.

8.1.5.3. Grant reserve draws shall be limited to issues that were unforeseen, unanticipated and could not have been known about or planned for at the time the Application was submitted.

## 8.2. Oversight

8.2.1. When a Grantee completes Project, it shall submit a final report to the Division on a Division provided form before final payment will be made. Once the final report is submitted and final payment is made, the Project shall be considered closed.

8.2.2. If a Grantee has not used all Financial Assistance on a closed out BEST Cash Grant, the unused balance will be returned to the Assistance Fund.

8.2.3. If a Grantee has not used all Financial Assistance on a closed out Lease-Purchase Grant, the unused balance will be treated in accordance with the Board policy on returning Matching Moneys.

8.2.4. The Division may make site visits to review Project progress or to review a completed Project;

8.2.5. The Division may require a Grantee to hire additional independent professional construction management to represent the Applicant's interests, if the Division deems it necessary due to the size of the Project, the complexity of the Project, or the Grantee's ability to manage the Project with Grantee personnel.

8.2.6. Upon completion of a new school, major renovation or addition Project, the Grantee shall affix a permanent sign that reads: "Funding for this school was provided through the Building Excellent Schools Today Program from local matching dollars, Colorado State Land Board, School Trust Lands, the Colorado Lottery, and excise taxes." with modifications if waived in writing by the Division.

#### **9. Technical Consultation**

The Division will provide technical consultation and administrative services to School Districts, Charter Schools, Institute Charter Schools, BOCES and the Colorado School for the Deaf and



## DEPARTMENT OF EDUCATION

## Division of Public School Capital Construction Assistance

## PUBLIC SCHOOL FACILITY CONSTRUCTION GUIDELINES

## 1 CCR 303-1

PUBLIC SCHOOL FACILITY CONSTRUCTION GUIDELINES**Article 1 – Purpose and Authority to Promulgate Rules**

## 1.1. Purpose

1.1.1. Section 22-43.7-107(1)(a), C.R.S. states, The board shall establish public school facility construction guidelines for use by the board in assessing and prioritizing public school capital construction needs throughout the state as required by section 22-43.7-108, C.R.S. reviewing applications for financial assistance, and making recommendations to the state board regarding appropriate allocation of awards of financial assistance from the assistance fund only to applicants. The board shall establish the guidelines in rules promulgated in accordance with article 4 of title 24, C.R.S.

1.1.2. Section 22-43.7-107(1)(b), C.R.S. states, It is the intent of the general assembly that the Public School Facility Construction Guidelines established by the board be used only for the purposes specified in section 1.1.1 above.

1.1.3. The Public School Facility Construction Guidelines shall identify and describe the capital construction, renovation, and equipment needs in public school facilities and means of addressing those needs that will provide educational and safety benefits at a reasonable cost.

## 1.2. Statutory Authority

1.2.1. Section 22-43.7-106(2)(i)(I) C.R.S. states, the board may promulgate rules in accordance with article 4 of title 24, C.R.S. The board is directed to establish Public School Facility Construction Guidelines in rule pursuant to 22-43.7-107(1)(a), C.R.S.

**Article 2 – Definitions**

2.1. The definitions provided in 22-43.7-103, C.R.S., shall apply to these rules. The following additional definitions shall also apply:

“C.R.S.” means Colorado Revised Statutes.

“ES” means Elementary School.

“F.T.E.s” means Full Time Equivalent Students.

“Gross Square Feet (GSF)” means the total area of the building (inclusive of all levels as applicable) of a building within the outside faces of the exterior walls, including all vertical circulation and other shaft (HVAC) areas connecting one floor to another.

“Guidelines” means the Public School Facility Construction Guidelines.

"Historical significance" means having importance in the history, architecture, archaeology, or culture of this state or any political subdivision thereof or of the United States, as determined by the state historical society.

"HS" means High School.

"K12" means Kindergarten through 12<sup>th</sup> Grade School that is under all one facility / campus.

"MS" means Middle School.

"SF" means Square Foot.

"S.T.E.M." means Science, Technology, Engineering, & Mathematics.

### **Article 3 – Codes, Documents and Standards incorporated by reference**

- 3.1. The following materials are incorporated by reference within the Public School Facility Construction Guidelines:
  - 3.1.1.ASHRAE 90.1-2013 Energy Standard for Buildings Except Low-Rise Residential Buildings.
  - 3.1.2.ASHRAE Standard Benchmark Energy Utilization Index (October 2009).
  - 3.1.3.ASHRAE Standard 189.1 - 2011 Standard for the Design of High-Performance Green Buildings.
  - 3.1.4.ANSI/ASA S12.60-2010/ Part 1, Acoustical Performance Criteria, Design Requirements, and Guidelines for Schools, Part 1 Permanent Schools
  - 3.1.5.International Code Council's International Plumbing Code (2015) amended by Rules and Regulations of the Colorado State Plumbing Board 3 CCR 720-1, 2016-4-1
  - 3.1.6.National Fire Protection Association (NFPA) 70: National Electrical Code (2014).
  - 3.1.7.National Fire Protection Association (NFPA) 13: Standard for the Installation of Sprinkler Systems, 2013 Edition
  - 3.1.8.National Fire Protection Association (NFPA) 72: National Fire Alarm and Signaling Code, 2013 Edition.
  - 3.1.9.National Fire Protection Association (NFPA) 80: Standard for Fire Doors and Other Opening Protectives, 2016 Edition
  - 3.1.10. ASHRAE Standard 62.1-2013 Ventilation for Acceptable Indoor Air Quality (2013).
  - 3.1.11. Colorado Department of Public Health and Environment which references Air Quality, Hazardous Waste, Public and environmental health, Radiation Control, Solid Waste and Water Quality.
  - 3.1.12. International Fire Code (IFC) – 2015 Edition, First Printing: May 2014 (Copyright 2014 by International Code Council, Inc. - Washington, D.C.), including Appendices B and C.
  - 3.1.13. International Mechanical Code - 2015 Edition, First Printing: May 2014 (Copyright 2014 by International Code Council, Inc. - Washington, D.C.)
  - 3.1.14. International Energy Conservation Code (IECC) - 2015 Edition, First Printing: May 2014 (Copyright 2014 by International Code Council, Inc. - Washington, D.C.)
  - 3.1.15. International Existing Building Code – 2015 Edition, First Printing: May 2014 (Copyright 201 by International Code Council, Inc. - Washington, D.C.)

3.1.16. All projects shall be constructed and maintained in accordance with the codes and regulations as currently adopted by the Colorado Division of Fire Prevention & Control which incorporates current building, fire, existing building, mechanical, and energy conservation codes.

3.2. The Division shall maintain copies of the complete texts of the referenced incorporated materials, which are available for public inspection during regular business hours with copies available at a reasonable charge. Interested parties may inspect the referenced incorporated materials by contacting the Director of the Division of Public School Capital Construction Assistance, 1580 Logan Street, Suite 310, Denver, Colorado 80203.

3.3. This rule does not include later amendments or editions of the incorporated material.

**Article 4 - These Guidelines are not mandatory standards to be imposed on school districts, charter schools, institute charter schools, the boards of cooperative services or the Colorado School for the Deaf and Blind. As required by statute, the Guidelines address:**

**4.1 Health and safety issues, including security needs and all applicable health, safety and environmental codes and standards as required by state and federal law. Public school facility accessibility.**

4.1.1 **Sound building structures.** Each building should be constructed and maintained with sound structural foundation, floor, wall and roof systems.

4.1.1.1 - All building structures shall conform to all applicable codes adopted by the Colorado Division of Fire Prevention and Control in 8 CCR 1507-30.

4.1.2 **Classroom Acoustics.** To address issues of reverberation time and background noise in classrooms refer to ANSI/ASA S12.60-2010/ Part 1, American National Standard Acoustical Performance Criteria, Design Requirements, and Guidelines for Schools, Part 1: Permanent Schools.

4.1.3 **Roofs.** A weather-tight roof that drains water positively off the roof and discharges the water off and away from the building. All roofs shall be installed by a qualified contractor who is approved by the roofing manufacturer to install the specified roof system and shall receive the specified warranty upon completion of the roof. The National Roofing Contractors Association divides roofing into two generic classifications: low-slope roofing and steep-slope roofing. Low-slope roofing includes water impermeable, or weatherproof types of roof membranes installed on slopes of less than or equal to 3:12 (fourteen degrees). Steep slope roofing includes water-shedding types of roof coverings installed on slopes exceeding 3:12 (fourteen degrees).

4.1.3.1 - Low slope roofing systems:

4.1.3.1.1- Built-up – minimum 4 ply, type IV fiberglass felt, asphalt BUR system. Gravel or cap sheet surfacing required.

4.1.3.1.2- Ethylene Propylene Diene Monomer - minimum 60 mil EPDM membrane, with a ballasted or adhered system.

4.1.3.1.3- Poly Vinyl Chloride - minimum 60 mil PVC membrane adhered or mechanically attached systems.

4.1.3.1.4- Thermal Polyolefin - minimum 60 mil membrane adhered or mechanically attached systems.

4.1.3.1.5- Polymer-modified bitumen sheet membrane - Styrene-Butadiene-Styrene (SBS) membranes only, to be used only as a component of a built-up system noted above.

4.1.3.2 - Steep slope roofing systems:

4.1.3.2.1- Asphalt shingles - minimum 50 year spec asphalt shingles, UL Class A.

4.1.3.2.2- Clay tile and concrete tile - minimum 50 year spec clay or concrete tile, UL Class A.

- 4.1.3.2.3- Metal roof systems for steep-slope applications - minimum 24 gage prefinished steel, standing seam roof system with a minimum 1.5" seam height.
- 4.1.3.2.4- Slate - ¼" minimum thickness, 50 year spec. UL Class A.
- 4.1.3.2.5- Synthetic shingles - minimum 50 year spec, UL Class A.
- 4.1.4 Electrical Systems – Power Distribution and Utilization.** Safe and secure electrical service and distribution systems shall be designed and installed to meet the National Electrical Code (NEC, NFPA 70); edition as enforced by the Colorado State Buildings Programs (SBP), unless otherwise more stringent based on local Authority Having Jurisdiction (AHJ), and ANSI/ASHRAE/IES Standard 90.1-2013 "Energy Standard for Buildings Except Low-Rise Residential Buildings".
- 4.1.4.1 – Energy use intensity should not exceed the U.S. Department of Energy (DOE) building benchmarks, and shall conform to ASHRAE Standard Benchmark Energy Utilization Index (October 2009).
- 4.1.4.2 - Emergency lighting shall operate when normal lighting systems fail in locations and shall conform to all applicable codes adopted by the Colorado Division of Fire Prevention and Control in 8 CCR 1507-30.
- 4.1.5 Lighting Systems.** Lighting systems shall be designed and installed to achieve appropriate lighting levels utilizing energy-efficient lighting fixtures and energy-saving automatic and manual control systems.
- 4.1.5.1 - Lighting systems shall be designed and installed to meet the National Electrical Code (NEC, NFPA 70) edition as enforced by the Colorado State Buildings Programs (SBP), unless otherwise more stringent based on local Authority Having Jurisdiction (AHJ).
- 4.1.5.2 – Illuminance levels shall meet the requirements for applicable spaces as recommended within in the Illuminating Engineering Society (IES) Handbook, and dictated by the Rules and Regulations Governing Schools in the State of Colorado 6 CCR 1010-6.
- 4.1.5.3 – Lighting power density shall not exceed the values indicated in ANSI/ASHRAE/IES Standard 90.1-2013.
- 4.1.5.4 - Lighting Control Systems shall be provided to comply with ANSI/ASHRAE/IES Standard 90.1-2013.
- 4.1.6 Mechanical Systems – Heating, Ventilation, and Air Conditioning (HVAC).** Safe and energy efficient mechanical systems shall be designed and installed to provide proper ventilation, and maintain the building temperature and relative humidity, while achieving appropriate sound levels.
- 4.1.6.1 – Mechanical systems shall be designed and installed to meet the International Mechanical Code, International Fuel Gas Code, International Building Code, and other Codes as adopted by the Colorado Division of Fire Prevention and Control in 8 CCR 1507.
- 4.1.6.2 - Healthy building indoor air quality (IAQ) shall be provided through the use of the mechanical heating, ventilation and air conditioning (HVAC) systems, or by operable windows, and by reducing air infiltration and water penetration with a tight building envelope, in compliance with the enforced International Building Code and ASHRAE Standard 62. 1- 2013.
- 4.1.6.3- Mechanical systems shall comply with: ASHRAE Standard 62.1-2013 Ventilation for Acceptable Indoor Air Quality, ASHRAE Standard 90.1-2013 Energy Standard for Buildings Except Low-Rise Residential Buildings, and ASHRAE Standard 189.1-2014 Standard for the Design of High-Performance Green Buildings.
- 4.1.6.4 Sound levels due to mechanical equipment shall comply with Occupational Safety & Health Administration Standard 1910.95 and ANSI/ASA Standard S12.60-2010 Part 1 for acoustical considerations within school facilities.

- 4.1.7 **Plumbing Systems** - Waste Water, Storm water, Domestic Water and Plumbing Supporting HVAC shall be in compliance with Division of Fire Prevention and Control in 8 CCR1507 and the Colorado Department of Health & Environment regulations.
- 4.1.8 **Fire Protection Systems.** Building fire detection, alarm and emergency notification systems in all school facilities shall be designed in accordance with State requirements. Exceptions where code required systems are not mandatory and the occupancy classification according to the International Building Code 2015 does not warrant a system. All fire management systems shall conform to all applicable codes adopted by the Colorado Division of Fire Prevention and Control in 8 CCR 1507-30 and the adopted Fire Code.
- 4.1.8.1 - Types of fire alarm notifications systems.
- 4.1.8.1.1 – Internal audible and visual alarms.
- 4.1.8.1.2 – External alarm monitoring and dispatch via internet / modem, telephone, radio, or cellular monitoring systems.
- 4.1.8.2 - Automatic Sprinkler Systems in Group E Occupancy a sprinkler system shall be provided as noted in the adopted Fire Code. Refer to the adopted Fire Code for exceptions.
- 4.1.8.2.1 All Group E fire areas greater than 12,000 square feet in area.
- 4.1.8.2.2 Throughout every portion of educational buildings below the lowest level of exit discharge serving that portion of the building.
- 4.1.8.3 - Types of Fire Protection Water Supplies.
- 4.1.8.3.1- Fire hydrants.
- 4.1.8.3.2- Static fire water storage tanks.
- 4.1.9 **Means of egress.** A continuous and unobstructed path of vertical and horizontal egress travel from any occupied portion of a building or structure to a *public way*. A means of egress consists of three separate and distinct parts: the exit access, the *exit* and the *exit discharge*. Reference 2015 International Building Code, Chapter 2, Definitions. A building code analysis shall be conducted to determine all code requirements.
- 4.1.10 **Facilities with safely managed hazardous materials.** Potential hazardous materials in building components, which are identified in the Asbestos Hazard Emergency Response Act (AHERA) report, may include: asbestos, radon, lead, lamps and devices containing mercury. Additional hazardous materials may include: science chemicals, cleaning chemicals, blood-borne pathogens, acid neutralization tank for science departments, and bulk fuel storage (UST/AST) management that may be stored by the occupant.
- 4.1.10.1 - Public schools shall comply with all AHERA criteria and develop, maintain, and update an asbestos management plan, to be kept on record at the school district. This should include a building survey of the exterior of the building, and identification of all friable, non-friable, and trace asbestos materials. Reference regulation Number 8, Control of Hazardous Air Pollutants, 5 CCR 1001-10.
- 4.1.10.2 - All new facilities and additions shall conduct radon testing following completion of construction within nineteen months after occupancy as required by Colorado Department of Public Health and Environment, 6 CCR 1010-6.
- 4.1.10.3 - Lead based paint. All schools shall conform to the regulations adopted by the Colorado Air Quality Control Commission governing the abatement of lead-based paint from target housing (constructed prior to 1978) and child-occupied facilities, reference C.R.S. 25-5-1101.

4.1.11 **Security.** The degree of resistance to, or protection from, harm. It applies to any vulnerable and valuable asset; such as a person, building or dwelling. Security provides "a form of protection where a separation is created between the assets and the threat." These separations are generically called "controls," and sometimes include changes to the asset or the threat. These separations and degrees of resistance can be achieved through several models and techniques.

4.1.11.1 - Video Management Systems (VMS).

4.1.11.1.1 - Cameras. Video cameras are typically used to implement a video management system. In new construction, these should be internet protocol (IP) cameras on Power over Ethernet (PoE) cabling infrastructure, with color CCD, day-night operation and supplemental IR illuminators and environmental accessories as required for application, Cameras should support motion activation, digital zoom and focus, and standard video compression. Fixed and pan-tilt-zoom (PTZ) cameras shall be considered to meet requirements. Consideration shall be given to cameras with integral audio microphones.

4.1.11.1.2 - Monitoring & Recording Systems. - A central video management system should be capable of monitoring live feeds from multiple cameras from a central location and remote locations, recording all video, searching and reviewing recorded video, and exporting video to portable digital media. A minimum of 30 days of storage of all videos at 15fps (frames per second) is required.

4.1.11.2 - Controlled Access.

4.1.11.2.1 - General Requirements

4.1.11.2.1.1 - The number of entryways into the building or onto the campus should be limited. New construction shall be designed to restrict normal entrance to only one or two locations, with no recessed doorways, provided that sufficient entryways are available for fire department access and shall conform to all applicable codes adopted by the Colorado Division of Fire Prevention and Control in 8 CCR 1507-30.

4.1.11.2.1.2 - All exterior doors shall be locking and equipped with panic bars to open readily from the egress side. Panic bars should utilize flush push bar hardware to prevent chaining doors shut.

4.1.11.2.1.2.1 - Unless a door is intended for ingress, exterior doors should not have handles and locks on the outside. In all cases exposed hardware should be minimized, provided that sufficient entryways are available for fire department access and shall conform to all applicable codes adopted by the Colorado Division of Fire Prevention and Control in 8 CCR 1507-30.

4.1.11.2.1.3 - Doors should be constructed of steel, aluminum alloy, or solid-core hardwood. If necessary, glass doors should be fully framed and equipped with burglar-resistant tempered glass. Translucent glass should be avoided in all cases.

4.1.11.2.1.4 - Exit doors with panic push-bars should be "Access Control Doors" per the codes adopted by the Colorado Division of Fire Prevention and Control in 8 CCR 1507-30, to prevent easy access by criminals and vandals, or in a lock-down / lock-out situation.

4.1.11.2.1.5 - Heavy-duty metal or solid-core wooden doors should be used at entrances in areas containing expensive items. These areas include classrooms, storerooms, and custodians' rooms. Interior doorway doors should also be heavy-duty metal or solid-core wooden doors.

- 4.1.11.2.1.6 - Door hinges should have non-removable pins.
- 4.1.11.2.1.7 - Door frames should be constructed of pry-proof material.
- 4.1.11.2.1.8 - Armored strike plates shall be securely fastened to the door frame in direct alignment to receive the latch easily.
- 4.1.11.3 - Automated Locking Mechanisms.
  - 4.1.11.3.1.1 Use of automated locking mechanisms (electronic access control) should be considered for exterior doors identified for entry and select interior doors associated with the main entry vestibule.
  - 4.1.11.3.1.2 Acceptable automated electronic access control systems include RF-based proximity credential readers and biometric scanning devices. If the electronic access control systems are to be utilized the following shall apply:
    - 4.1.11.3.1.2.1 - School personnel may be issued credentials for authenticating their identity in order to maintain efficient access to school facilities.
    - 4.1.11.3.1.2.2 Students are not necessarily expected to carry electronic access control credentials. During normal arrival times, electronic locking systems may be disengaged via a timer while entries are monitored by school personnel.
    - 4.1.11.3.1.2.3 All exterior doors shall utilize door position switches to notify staff of open doors and eliminate “door propping”.
    - 4.1.11.3.1.2.4 Doors utilizing electronic access controls shall “fail secure” from the unsecure side. Free egress shall not be inhibited from the secure side in any scenario.
- 4.1.11.4 Manual Locking Devices
  - 4.1.11.4.1 Use of a manual locking mechanism, such as traditional cylinder and key locks, should be provided for all interior doors requiring access control.
  - 4.1.11.4.2 Manual and Electronic access control should not be used on the same door.
- 4.1.11.5 Emergency Lockdown
  - 4.1.11.5.1 All exterior doors shall be able to be quickly and automatically secured from a position of safety (Administrative desk, Principal’s office, etc) without traveling to each individual exterior door.
  - 4.1.11.5.2 Interior doors to occupied spaces shall be capable of quickly being secured from the inside by school personnel. Locking of doors may be done via manual deadbolt or automatic locking mechanism. Locking mechanism shall not interfere with automatic closing and latching functions required by the fire code and may have door sidelights, or door vision glass that allow line of sight into the corridors during emergencies, and shall conform to all applicable codes adopted by the Colorado Division of Fire Prevention and Control in 8 CCR 1507-30.
- 4.1.11.6 Intrusion Detection
  - 4.1.11.6.1 A system shall be put in place to identify, alarm, and notify authorities in the case of unauthorized entry.

#### 4.1.11.7 Alarm System

Passive infrared (PIR) sensors shall be located interior to all building entries to monitor human movement.

4.1.11.7.1.1 – An alarm keypad shall be located at selected building entries to arm and disarm the intrusion detection system.

4.1.11.7.1.2 – A manual alarm device shall be located in a position of safety (Administrative desk, Principal's office, etc.) to force intrusion detection system into alarm status.

4.1.11.7.1.3 – The intrusion detection shall notify local authorities or monitoring company upon alarm status.

#### 4.1.11.8 Security Integration

4.1.11.8.1 The Video Management System (VMS), Access Control System, and Intrusion Detection System may be components of an integrated security solution.

#### 4.1.11.9 - Main Entry Physical Security

4.1.11.9.1 - Building vestibules. Where appropriate, buildings shall employ double entry door designs that provide a secured area for visitors to authenticate and gain clearance. Known as "man traps", security vestibules solve several common security issues such as students opening doors for visitors, visitors bypassing check-in points, direct access to the interior from attackers, piggy-back entrances, and propped doors.

4.1.11.9.2 - Video based entrance intercom systems. Building designs shall allow for school personnel to be able to monitor incoming visitors from a safe location out of reach, or line of sight from incoming visitors who have not yet been authenticated or cleared for entry. These entry points shall use remote video and access control technology to conduct multi-factor authentication of incoming visitors (e.g. visual verification and ID, PIN/password and ID, or biometric and other form of visual identification).

4.1.11.9.2.1 - Video based entrance systems shall use IP technology to allow access control to be conducted by school personnel from multiple locations, so that multiple personnel can provide coverage for screening incoming visitors.

4.1.11.9.3 - Line of sight. The front entrance should be designed to maximize the line of sight distance for school occupants to detect an intruder from each relevant perimeter (e.g. classroom to hallway, office or guard station to entryway, or entryway to exterior fence access, or exterior fence access to property perimeter).

4.1.11.10 - Event alerting and notification (EAN) system. An EAN system that utilizes an intercom / phone system with communication devices located in all classrooms and throughout the school to provide efficient inter-school communications, and communication with local fire, police, and medical agencies during emergency situations.

4.1.11.11 - Secure sites should include the following:

4.1.11.11.1 - Locations to avoid.

4.1.11.11.2 - Location of utilities.

4.1.11.11.3 - Roof access.



- 4.1.11.11.4 - Lighted walkways.
  - 4.1.11.11.5 - Secured playgrounds.
  - 4.1.11.11.6 - Bollards at main entrances and shop areas with overhead doors.
  - 4.1.11.11.7 - Signage.
- 4.1.12 **Health code standards.** Schools, including labs, shops, vocational and other areas with hazardous substances shall conform to the Department Of Public Health and Environment, Division of Environmental Health and Sustainability, 6 CCR 1010-6 Rules and Regulations Governing Schools in the State of Colorado.
- 4.1.13 **Food preparation equipment and maintenance.** Food preparation and associated facilities equipped and maintained to provide sanitary facilities for the preparation, distribution, and storage of food as required by Department Of Public Health And Environment, Division of Environmental Health and Sustainability, 6 CCR 1010-6 Rules and Regulations Governing Schools in the State of Colorado.
- 4.1.14 **Health care room.** A separate health care room shall be provided and shall comply with the Department Of Public Health and Environment, Division of Environmental Health and Sustainability, 6 CCR 1010-6 Rules and Regulations Governing Schools in the State of Colorado.
- 4.1.15 **A site that safely separates pedestrian and vehicular traffic and is laid out with the following guidelines:**
- 4.1.15.1 - Physical routes for basic modes (busses, cars, pedestrians, and bicycles) of traffic should be separated as much as possible from each other. If schools are located on busy streets and/or high traffic intersections, coordinate with the applicable municipality or county to provide for adequate signage, traffic lights, and crosswalk signals to assist school traffic in entering the regular traffic flow.
  - 4.1.15.2 - When possible, provide a dedicated bus staging and unloading area located away from students, staff, and visitor parking.
  - 4.1.15.3 - Provide an adequate driveway zone for stacking cars on site for parent drop-off/pick-up zones. Drop-off area design should not require backward movement by vehicles, and be one-way in a counterclockwise direction where students are loaded and unloaded directly to the curb/sidewalk. Students should not have to load or unload where they have to cross a vehicle path before entering the building. It is recommended all loading areas have "No Parking" signs posted.
  - 4.1.15.4 - Provide well-maintained sidewalks and a designated safe path leading to the school entrance(s).
  - 4.1.15.5 - Building service loading areas and docks should be independent from other traffic and pedestrian crosswalks. If possible, loading areas shall be located away from school pedestrian entries.
  - 4.1.15.6 - Facilities should provide bicycle access and storage if appropriate.
  - 4.1.15.7 - Fire lanes shall conform to all applicable codes adopted by the Colorado Division of Fire Prevention and Control in 8 CCR 1507-30 or the local fire department. Local fire department must adhere to the codes adopted by DFPC.
  - 4.1.15.8 - Playgrounds shall comply with the ICC A117.1-2009 Accessible and Usable Buildings and Facilities and shall conform to all applicable codes adopted by the Colorado Division of Fire Prevention and Control in 8 CCR 1507-30.
- 4.1.16 **Severe weather preparedness.**

4.1.16.1 - Designated emergency shelters shall conform to all applicable codes adopted by the Colorado Division of Fire Prevention and Control in 8 CCR 1507-30 and ICC 500.

**4.2 Technology, including but not limited to telecommunications and internet connectivity technology and hardware, devices or equipment necessary for individual student learning and classroom instruction, including access to electronic instructional materials, or necessary for professional use by a classroom teacher..**

4.2.1 Educational facilities for individual student learning, classroom instruction, online instruction and associated technologies, connected to the Colorado institutions of higher education distant learning networks “Internet” and “Internet two.”

4.2.2 Educational facilities shall be supplied with standards-based wired and wireless network connectivity.

4.2.3 Security and associated filtering and intrusion control for internal voice, video and data networks shall be provided.

4.2.4 External internet service provider (ISP) connection and internal wide area network (WAN) connections meeting or exceeding recommended guidelines of the state education technology education directors association (SETDA) broadband imperative, and devices meeting or exceeding recommended specifications according to the most current version of technology guidelines for the partnership for assessment of readiness for college and careers (PARCC) assessments.

4.2.5 Provide school administrative offices with web-based activity access.

4.2.6 Building shall be constructed with long-term sustainable technology infrastructure. Facilities should be built with sufficient data cabling and/or conduit and power infrastructure to allow for maximum flexibility as technological systems are upgraded and replaced in the future. A plan for technology lifecycle review intervals should be put in place for review at 2-4 year intervals.

4.2.6.1 Applicable Standards. The design and installation of technology systems shall comply with:

4.2.6.1.1 ANSI/TIA/EIA-568-C

4.2.6.1.2 ANSI/TIA/EIA-569

4.2.6.1.3 ANSI/TIA/EIA-606-B

4.2.6.1.4 ANSI/TIA/EIA-607-B

4.2.6.1.5 ANSI/BICSI 001-2009, Information Transport Systems Design Standard for K-12 Educational Institutions.

4.2.7 Telecom Equipment Rooms

4.2.7.1 - Uninterruptible power supplies (UPS). Telecom Rooms (TRs) and Equipment Rooms (ERs) shall be provided with UPS equipment to provide continuous clean power to communications systems for a minimum of 90 minutes.

4.2.7.2 - Generators. A backup generator shall be considered for providing backup power to telecommunications systems if backup power is required beyond 9 minutes, or if the generator is already located for other purposes.

4.2.7.3 - Heating, Ventilation and Air Conditioning (HVAC). Mechanical equipment shall be used to accommodate heating loads within TRs and ERs. Ventilation-only systems may be used in spaces with limited equipment, active cooling systems should be considered for larger rooms. Maintained

space temperatures shall target 65 degrees F. peak space temperatures shall not exceed 90 degrees F.

4.2.7.3.1 Direct evaporative cooling systems shall not be used, due to lack of control on humidity levels.

4.2.7.4 - Alarms shall be provided to notify assigned school personnel if environmental conditions approach or exceed bounds of operational conditions.

4.2.8 Connectivity standards.

4.2.8.1 - Wireless. Data cabling shall be planned to support appropriately spaced multiple-antenna wireless networking infrastructure allowing for wireless access points to support expected quantity of connected devices and required bandwidth. Support for 802.11b/g/n, 802.11ac, and/or newer protocols are recommended.

4.2.8.2 - Wired.

4.2.8.2.1- Cabling. All new runs of copper data cable should be Category 6 cable or newer standards. Any data outlet should be supplied by two cables. Unshielded twisted pair (UTP) shall be used unless local conditions warrant otherwise.

4.2.8.2.2- Telecom Rooms (TRs) and Equipment Rooms (ERs). TRs and ERs shall be connected by conduit and a combination of copper and fiber optic cable to allow for maximum data performance and upgradeability.

4.2.8.2.3- TR to classroom. Classrooms should have a data outlet on the wall at the front and back of the room at a minimum for network/ internet access. Additional cabling may be warranted for security, audiovisual and special systems purposes.

4.2.8.2.4- TR to office, and library or technology/media centers. Any areas designed for independent work or study should have a dedicated data outlet with two copper cable runs each.

4.2.8.2.5- TR to common areas, auditorium, and cafeteria. Common areas should contain data outlets located as required to support program and curriculum requirements.

**4.3 Building site requirements. Functionality of existing and planned public school facilities for core educational programs, particularly those educational programs for which the State Board has adopted state model content standards. Capacity of existing and planned public school facilities, taking into consideration potential expansion of services for the benefit of students such as full-day kindergarten and preschool- and school-based health services and programs.**

4.3.1 Traditional education model, S.T.E.M. & Montessori / Expeditionary education models.

4.3.1.1 - Minimum occupancy requirements for schools:

Median Gross Square Foot (GSF) Per Pupil								
F.T.E.s	Traditional ES (K-5)		Traditional MS (6-8)		Traditional HS (9-12)		Traditional K-12	
	GSF/Pupil	Total GSF	GSF/Pupil	Total GSF	GSF/Pupil	Total GSF	GSF/Pupil	Total GSF
100	151	15,064	161	16,102	192	19,183	164	16,393
200	146	29,197	159	31,813	190	38,030	161	32,298
300	141	42,401	157	47,136	188	56,540	159	47,715
400	137	54,674	155	62,068	187	74,713	157	62,645
500	132	66,017	153	76,610	185	92,550	154	77,087
600	127	76,429	151	90,763	183	110,050	152	91,041
700	123	85,912	149	104,526	182	127,214	149	104,508
800	118	94,464	147	117,899	180	144,041	147	117,488
900	113	102,086	145	130,883	178	160,531	144	129,979
1000	109	108,778	143	143,476	177	176,685	142	141,984
1100	104	114,540	142	155,680	175	192,502	140	153,500
1200	99	119,371	140	167,494	173	207,982	137	164,529

Median Gross Square Foot Per Pupil - Alternate Programs (Expeditionary (Exp.), Montessori (Mtsri.), S.T.E.M.)												
F.T.E.s	Alt. ES (GSF/Pupil)			Alt. MS (GSF/Pupil)			Alt. HS (GSF/Pupil)			Alt. K12 (GSF/Pupil)		
	Exp.	Mtsri.	S.T.E.M.	Exp.	Mtsri.	S.T.E.M.	Exp.	Mtsri.	S.T.E.M.	Exp.	Mtsri.	S.T.E.M.
100	160	161	156	171	169	166	203	198	201	174	172	180
200	155	156	151	169	167	164	202	196	199	171	170	177
300	150	151	146	167	165	162	200	194	197	169	167	175
400	145	146	141	164	163	160	198	192	195	166	164	172
500	140	141	137	162	161	158	196	191	194	163	162	169
600	135	136	132	160	159	156	194	189	192	161	159	167
700	130	131	127	158	157	154	193	187	190	158	157	164
800	125	126	122	156	155	152	191	185	188	156	154	161
900	120	121	117	154	153	150	189	184	187	153	152	159
1000	115	116	113	152	151	148	187	182	185	151	149	156
1100	110	111	108	150	149	146	186	180	183	148	146	153
1200	105	106	103	148	147	144	184	179	181	145	144	151

Square Foot Values - Assembly									
F.T.E.s	ES Assembly		MS Assembly		HS Assembly		K12 Assembly		
	Cafeteria	Auditorium	Cafeteria	Auditorium	Cafeteria	Auditorium	Cafeteria	Auditorium	
100	675	1,300	675	1,500	675	1,700	675	1,700	
200	1,200	1,600	1,200	1,800	1,200	2,000	1,200	2,000	
300	1,800	1,900	1,800	2,100	1,800	2,300	1,800	2,300	
400	2,400	2,400	2,400	2,600	2,400	2,800	2,400	2,800	
500	3,000	2,700	3,000	2,900	3,000	3,100	3,000	3,100	
600	3,600	3,000	3,600	3,200	3,600	3,400	3,600	3,400	
700	4,200	3,900	4,200	3,900	4,200	3,900	4,200	3,900	
800	4,800	4,200	4,800	4,200	4,800	4,200	4,800	4,200	
900	5,400	4,500	5,400	4,500	5,400	4,500	5,400	4,500	
1000	6,000	4,800	6,000	4,800	6,000	4,800	6,000	4,800	
1100	6,600	5,100	6,600	5,100	6,600	5,100	6,600	5,100	
1200	7,200	5,400	7,200	5,400	7,200	5,400	7,200	5,400	

- Cafeteria Capacity assumes three (3) seatings without a secondary function overlay.
- Auditorium Capacity SF is sized for 1/3 of General enrollment and is inclusive of stage (size varies: 1,000 to 1,800); Basis is 9 SF per seat (1/3 FTES) plus stage at various sizes, stage includes a small amount of storage or similar support.

Square Foot (SF) Values - Core Classrooms (Minimum (Min) classroom size = 675 sf)								
F.T.E.s	ES Min (24-30 FTES)		MS Min (24-30 FTES)		HS Min (24-30 FTES)		K12 Min (24-30 FTES)	
	SF/Pupil	Total SF	SF/Pupil	Total SF	SF/Pupil	Total SF	SF/Pupil	Total SF
Kindergarten	38	1,140	-	-	-	-	38	1,140
Grade 1	32	960	-	-	-	-	32	960
Grade 2	32	960	-	-	-	-	32	960
Grade 3	32	960	-	-	-	-	32	960
Grade 4	30	900	-	-	-	-	30	900
Grade 5	30	900	-	-	-	-	30	900
Grade 6	-	-	30	900	-	-	30	900
Grade 7	-	-	28	840	-	-	28	840
Grade 8	-	-	28	840	-	-	28	840
Grade 9	-	-	-	-	28	840	28	840
Grade 10	-	-	-	-	28	840	28	840
Grade 11	-	-	-	-	28	840	28	840
Grade 12	-	-	-	-	28	840	28	840
Montessori	40	1,200	40	1,200	40	1,200	40	1,200
Expeditionary	36	1,080	36	1,080	36	1,080	36	1,080

Square Foot (SF) Values - Exploratory Spaces (minimum size = 675 sf)								
F.T.E.s	ES Min (24-30 F.T.E.s)		MS Min (24-30 F.T.E.s)		HS Min (24-30 F.T.E.s)		K12 Min (24-30 F.T.E.s)	
	SF/Pupil	Total SF	SF/Pupil	Total SF	SF/Pupil	Total SF	SF/Pupil	Total SF
Comp/Tech	30		32	-	32	-	32	
Music	35		35	-	35	-	35	
Science	38		40		44		44	
Lecture	28		28		28		28	
Art	35		40		45		45	
Gym / MP	3,000 SF (50'x60')		5,400 SF (60'x90')		7,300 SF (70'x104')		7,300 SF (70'x104')	
Special Ed	37		37		37		37	
VoAg	-	-	-	-	60	-	60	-
Media Center	1200 sf (30 occ)		2400 sf (60 occ)		3600 sf (60 occ)		3600 sf (60 occ)	
"Gymnasium"	4,400 SF (See notes)		4,400 SF (See notes)		-		-	

- ES Gymnasium basis is 50'X60' play area; Capacity Assumes (GE\*.25)/7 periods (without fixed seats)
- MS Gymnasium basis is 60'X90' play area; Capacity Assumes (GE\*.5)/7 periods (without fixed seats)
- HS Gymnasium basis is 70'X104' practice gym; Capacity Assumes (GE\*.5)/7 periods (with limited fixed seats) Note: National Federation of State High School Association's standards outline an "ideal" court for high school age as 84'x50' (and not greater than 94'x50')
- "Gymnasium" basis is 50'x60' play area and 1000 SF platform stage with 400 SF storage

Instructor / Support Areas		
Space Type:	Square Feet	Notes:
Office - typical	120	
Office - large	150	
Work room	250	Multiple individual (or in aggregate) may be required due to scale
Team planning (conf)	240	12-16 occupants (assembly use)
Instruction - sm group	320	16 occupants (classroom use)
Storage	50	Ave per instructor
Staff toilets	50	Multiple may be required due to scale

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**4.3.2 Other rooms.**

- 4.3.2.1 - Facilities with preschools shall comply with Rules Regulating Child Care Centers (Less Than 24-Hour Care) 12 CCR 2509-8 and shall comply with the Colorado Department of Public Health and Safety's Regulations Governing Child Care, 6 CCR 1010-7.
- 4.3.2.2 - Special education classrooms. Special Education classrooms and facilities meeting or exceeding the accessibility and adaptive needs of the current and reasonably anticipated student population, in

accordance with Section 504 and Title II of the Americans with Disabilities Act, the Exceptional Children's Educational Act, and Individuals with Disabilities Education Act.

#### **4.4 Building performance standards and guidelines for green building and energy efficiency.**

Section 24-30-1305.5 C.R.S., requires all new facilities, additions, and renovation projects funded with 25% or more of state funds to conform with the High Performance Certification Program (HPCP) policy adopted by the Office of the State Architect (OSA) if:

- The new facility, addition, or renovation project contains 5,000 or more building square feet; and
- The project includes an HVAC system; and
- If increased initial cost resulting from HPCP can be recouped by decreased operational costs within 15 years, and
- In the case of a renovation project, the cost of the renovation exceeds 25% of the current value of the property.

##### **4.4.1 High Performance Certification Programs.**

4.4.1.1 The Department of Personnel and Administration, Office of the State Architect has determined the following three guidelines as meeting the High Performance Certification Program (HPCP) requirements per C.R.S.24-30-1305.5; the U.S. Green Building Council, Leadership in Energy and Environmental Design – New Construction (USGBC LEED™-NC) guideline with Gold as the targeted certification level; and the Green Building Initiative (GBI), Green Globes guideline with Three Globes the targeted certification level; and for the Colorado Department of Education, K-12 construction, the Collaborative for High Performance Schools (US-CHPS) is an optional guideline with Verified Leader as the targeted certification level.

4.4.1.2 – LEED, or Leadership in Energy and Environmental Design (for schools) is a globally recognized symbol of excellence in green building.

4.4.1.2.1 LEED is an internationally recognized certification system that measures a building using several metrics, including: energy savings, water efficiency, sustainable land use, improved air quality, and stewardship of natural resources.

4.4.1.2.2 Points are awarded on a 100-point scale, and credits are weighted to reflect their potential environmental impacts. Different levels of certification are granted based on the total number of earned points. The four progressive levels of certification from lowest to highest are: certified, silver, gold and platinum.

4.4.1.3 United States Collaborative for High Performance Schools (US-CHPS). US-CHPS reflects the three priority outcomes of the Core Criteria. These are, in order of importance.

4.4.1.3.1 Maximize the health and performance of students and staff.

4.4.1.3.2 Conserve energy, water and other resources in order to save precious operating dollars.

4.4.1.3.3 Minimize material waste, pollution and environmental degradation created by a school.

4.4.1.3.4 The CHPS National Technical Committee has weighted the available point totals for prerequisites and credits in seven categories to reflect these three priorities.

##### **4.4.2 Renewable energy strategies.**

4.4.2.1 - Solar Photovoltaic / Solar Thermal.

4.4.2.2 - Geothermal / Geo exchange.

4.4.2.3 - Wind.

4.4.2.4 - Passive Solar Design.

#### **4.4.3 Energy management plan.**

4.4.3.1- Energy programs assist with creating a culture of energy efficiency within a school. Reference Energy Star Guidelines for Energy Management to help develop a plan.

#### **4.4.4 Other energy efficient options.**

4.4.4.1- ENERGY STAR Labeled HVAC / mechanical systems.

4.4.4.2- Windows, doors, and skylights (collectively known as fenestration).

4.4.4.3 Building Envelope.

4.4.4.3.1- The interface between the interior of the building and the outdoor environment, including the walls, roof, and foundation – serves as a thermal barrier and plays an important role in determining the amount of energy necessary to maintain a comfortable indoor environment relative to the outside environment.

4.4.4.3.2- Roof. Roof design and materials can reduce the amount of air conditioning required in hot climates by increasing the amount of solar heat that is reflected, rather than absorbed, by the roof. For example, roofs that qualify for ENERGY STAR® are estimated to reduce the demand for peak cooling by 10 to 15 percent.

4.4.4.3.3 Insulation is important throughout the building envelope.

4.4.4.4- Lighting.

4.4.4.4.1- Light emitting diodes (LEDs), compact fluorescents (CFLs) and fluorescent lighting should be considered over traditional incandescent lighting.

4.4.4.4.5- Commissioning, retro commissioning and re-commissioning.

4.4.4.4.5.1- Commissioning ensures that a new building operates initially as the owner intended and that building staff are prepared to operate and maintain its systems and equipment.

4.4.4.4.5.2- Retro commissioning is the application of the commissioning process to existing buildings.

4.4.4.4.5.3- Re-commissioning is another type of commissioning that occurs when a building that has already been commissioned, undergoes another commissioning process.

4.4.4.4.6- Measurement and verification.

4.4.4.4.6.1 Measurement and verification (M&V) is the term given to the process for quantifying savings delivered by an Energy Conservation Measure (ECM), as well as the sub-sector of the energy industry involved with this practice. M & V demonstrates how much energy the ECM has avoided using, rather than the total cost saved.

#### 4.4.4.4.7- Landscaping

4.4.4.4.7.1 Irrigation: Consider water management which could include reducing storm-water run-off, preventing erosion and decreasing the effects of soil expansion.

4.4.4.4.7.2 Plant Materials: Consider Native materials, Xeriscaping.

4.4.4.4.7.3 Grass/ Sod Areas: Consider use of grass/ sod areas, consider water use, alternate options if planting sports fields.

#### 4.4.4.4.8– Permitting

4.4.4.4.8.1 Application for public school construction projects permits can be made at the DFPC website, [www.colorado.gov/dfpc](http://www.colorado.gov/dfpc) > Sections > Fire & Life Safety > Permits and Construction > School Construction.

4.4.4.4.8.2 If a local building department has entered into a memorandum of understanding (MOU) with DFPC, that local building department is considered a Prequalified Building Department (PBD). A School District may, at its discretion, choose to apply for permit through DFPC or the PBD that has jurisdiction of construction projects for the location of the school construction project. The list of PBD's is available on the DFPC website, School Construction.

#### **4.5 The historic significance of existing public school facilities and their potential to meet current programming needs by rehabilitating such facilities.**

4.5.1 Buildings that are 50 years or older at the time of application may be subject to the State Register Act 24-80.1-101 to 108 in determining if the affected properties have historical significance.

4.5.1.1 - Historical significance means having importance in the history, architecture, archaeology, or culture of this state or any political subdivision thereof or of the United States, as determined by the state historical society.

4.5.2 When determining if a facility should be replaced, the cost to rehabilitate versus the cost to replace should be evaluated.



Below are general guidelines to assist with project priority identification:

**C.R.S. 22-43.7-109(5)(a, b, c, and d):**

**(5)** *The Assistance Board, taking into consideration the financial assistance priority assessment conducted pursuant to section 22-43.7-108, shall prioritize applications that describe public school facility capital construction projects deemed eligible for financial assistance based on the following criteria, in descending order of importance:*

**(a)(I)(A)** *Projects that will address safety hazards or health concerns at existing public school facilities, including concerns relating to public school facility security, and projects that are designed to incorporate technology into the educational environment; (B) As used in this subsection (5)(a)(I), “technology” means hardware, devices, or equipment necessary for individual student learning and classroom instruction, including access to electronic instructional materials, or necessary for professional use by a classroom teacher (II) In prioritizing an application for a public school facility renovation project that will address safety hazards or health concerns, the Assistance Board shall consider the condition of the entire public school facility for which the project is proposed and determine whether it would be more fiscally prudent to replace the entire facility than to provide financial assistance for the renovation project.*

Potential Projects

- Molds and fungi abatement
- Major structural hazards
- Threatening electrical
- Threatening HVAC, boiler, plumbing, indoor air quality hazards
- Potable water hazards
- Asbestos testing and abatement (friable) and being disturbed
- Roof repairs and replacement - with leaks causing damage to the facility
- Proper chemical storage
- Fire alarms
- Fire sprinklers
- Lead abatement
- Exterior door monitoring
- Master key and/or card systems for doors
- Equipment for surveillance and security
- Underground fuel tank removal and replacement
- Radon remediation
- Exit and emergency lighting
- Upgrade technology infrastructure
- Hardware, devices, and equipment for instructional use
- Other health, safety, security hazards or technology needs

**(b)** *Projects that will relieve overcrowding in public school facilities, including but not limited to projects that will allow students to move from temporary instructional facilities into permanent facilities.*

Potential Projects

- Eliminate modulars
- Reduce existing overcrowding
- Reduce the number of students per classroom
- Other

*(c) All other projects. (While these projects could be considered a health, safety or security concern in certain circumstances, they may not necessarily pose an imminent concern during this application period)*

Potential Projects

Improve temperature control and indoor air quality  
Air conditioning for convenience  
Additional space for new program(s)  
HVAC repairs, replacement and new installation for scheduled maintenance  
Plumbing fixture upgrades for water savings  
Upgrading the electrical systems to meet current energy codes, reduce energy or increase service  
Provide proper acoustics to reduce noise  
Roof repairs or replacement - due to age or regular scheduled maintenance (no leak issues)  
ADA or code upgrades when not required  
Window and door replacement for energy savings  
Insulation for temperature control  
Addition of energy saving windows to increase natural light and reduce lighting costs  
Asbestos abatement (friable but non-disturbed)  
Asbestos abatement (non-friable)  
Caulking to reduce air infiltration  
Reduce energy costs  
Exterior entry vestibules for ice, snow and wind costs  
Grading to improve site drainage  
Upgrade ceiling, wall and floor finishes  
Increase storage for better organization  
Lighting upgrades  
Parking lot paving  
Playground or athletic field improvements  
Other



<b>Applicant:</b>		<b>Board Member:</b>		
<b>Project Name:</b>				
<b>Grant Application Statutory Need</b>				
Pursuant to 22-43.7-109(5) C.R.S., the board shall prioritize applications that describe public school facility capital construction projects deemed eligible for financial assistance based on the following criteria, in descending order of importance:				
<b>Priority 1</b>	This application addresses safety hazards or health concerns at existing public school facilities, including concerns relating to public school facility security, and projects that are designed to incorporate technology into the educational environment. See glossary for definition of “technology”.			
<b>Priority 2</b>	This application will relieve current overcrowding in public school facilities, including but not limited to allowing students to move from temporary instructional facilities into permanent facilities.			
<b>Priority 3</b>	This application is for other types of capital improvements not addressed in priorities 1-2.			
<b>Division Comments: After review of the application, the division would consider this project a priority ____.</b>				
<b>After Review of the Application, the Evaluator would Consider this Application a Priority:</b>				
<i>(Evaluator Comments &amp; Notes)</i>				
<b>Grant Application Scoring Key</b>				
<b>Strongly Disagree</b> 1	<b>Somewhat Disagree</b> 2	<b>Neutral</b> 3	<b>Somewhat Agree</b> 4	<b>Strongly Agree</b> 5
<i>Review each section below and provide a score for each question based on your review of the application. Provide comment for scores of 1 or 2. Comments for scores of 3, 4 or 5 are optional.</i>				
<b>Conditions of the Entire Public School Facility</b>				
<b>Division FCI Comments:</b>				
<b>Division Requirement Comments:</b>				
<b>Evaluator Review of Conditions of the Entire Public School Facility</b>			<b>Score 1-5 for Each</b>	
The Facility Condition Index (FCI) from the statewide facility assessment, or an assessment provided by the applicant, supports the scope of the proposed project.				
The requirements noted in the statewide assessment or assessment provided by the applicant, support the deficiencies that are being identified?				
The due diligence performed by the applicant supports the scope of the project.				
<b>Total out of 15:</b>				
<i>(Evaluator Comments &amp; Notes)</i>				
<b>Financial Capacity</b>				
<b>Division Comments:</b>				
<b>Evaluator Review of Financial Capacity</b>			<b>Score 1-5 for Each</b>	
The applicant has made efforts to leverage available resources to enhance their financial contribution to the project or provide cost efficiencies to the project.				
The applicant is contributing a suitable amount towards the capital needs of their facilities.				
<b>Total out of 10:</b>				

<i>(Evaluator Comments &amp; Notes)</i>		
<b>Project Proposal</b>		
<b>Division Comments:</b>		
<b>Evaluator Review of Project Proposal</b>	<b>Score 1-5 for Each</b>	
The deficiencies presented by the applicant are compelling and clearly noted within the application.		
The solution presented by the applicant resolves all deficiencies noted within the application.		
The scope of work proposed in the solution appears to be reasonable and well planned.		
The project is urgent in nature.		
The project complies with the BEST Construction Guidelines.		
<b>Total out of 25:</b>		
<i>(Evaluator Comments &amp; Notes)</i>		
<b>Other Application Considerations</b>		
<b>Division Comments:</b>		
<b>Evaluator Review of Other Application Considerations</b>	<b>Score 1-5 for Each</b>	
The cost, cost per SF, and/or cost per pupil seem appropriate and supportable.		
The SF of the project and/or SF per pupil seem reasonable and supportable.		
The applicant is willing to pursue a fair, competitive, and transparent selection process for contractors and consultants or has identified a reasonable alternative.	YES (5)	NO(1)
<b>Total out of 15:</b>		
<i>(Evaluator Comments &amp; Notes)</i>		
<b>Grand Total of All Scores (out of 65):</b>		
<b>Evaluator Recommendation to Shortlist this Application (Check One)</b>		
<b>Recommended to Shortlist</b>	<input type="checkbox"/>	<b>Not Recommended to Shortlist</b>
<b>If the Application is Not Recommended to the Shortlist, Please Provide the Evaluator's Justification</b>		
<b>Evaluator Notes Section for Information Only</b>		

The BEST Grant requires each applicant to provide a local contribution to the project in the form of a match. To determine the financial capacity for a school district, a match percentage is calculated annually using criteria identified in 22-43.7-109(9)(a) C.R.S. The range of all school district matching percentages is normalized so the statewide average is approximately 50%. Below is a guide explaining how school district minimum match percentages are calculated. The following criteria are considered when determining the applicant's minimum matching percentage:

- Per pupil assessed valuation;
- The district’s median household income (using the most current census data);
- Percentage of pupils eligible for free or reduced cost lunch;
- Current bond mill levy;
- Unreserved general fund balance;
- Current bond capacity remaining;
- Bond election failures and successes in the last 10 years.

The per pupil assessed valuation, district median household income, percentage of pupils eligible for free or reduced cost lunch, current bond mill levy, unreserved general fund balance, and current bond capacity remaining for each school district are individually sorted and assigned a number 1-178. The number represents the school district’s rank relative to the statewide average for any given criteria.

**Example: 1**

District	PPAV	Rank PPAV	Household Income	Rank Household Income	FRED	Rank FRED	Bond Mill Levy	Rank Bond Mill Levy	Unreserved General Fund Balance	Rank Unreserved General Fund Balance	Bond Capacity Remaining	Rank Bond capacity Remaining
A	\$100,000	30	\$30,000	67	79%	7	4.2	34	\$350,000	35	\$1,000,000	92
B	\$ 79,000	11	\$40,000	172	34%	89	11	4	\$700,000	98	\$20,000	2
C	\$217,000	107	\$25,000	8	25%	114	0	80	\$1,500,000	120	\$12,000,000	114

After each criterion is assigned a rank, the rank is then multiplied by a normalization factor and a weighting factor to produce a matching percentage for that individual criterion.

The normalization factor is used to cap the overall matching requirement at 100% and generate a statewide average of 50%. To achieve this, 100 is divided into 178 to produce a normalization factor of .5618.

The Weighting factor is used to assign a specific weight to each statutory criterion.

**Example: 2**

District	Rank PPAV	PPAV Normalized and Weighted at 5%	Rank Household Income	Household Income Normalized and Weighted at 15%	Rank FRED	FRED Normalized and Weighted at 20%	Rank Bond Mill Levy	Bond Mill Levy Normalized and Weighted at 20%	Rank Unreserved General Fund Balance	Unreserved General Fund Balance Normalized and Weighted at 20%	Rank Bond capacity Remaining	Bond capacity Remaining Normalized and Weighted at 20%
A	30	3%	67	4%	7	1%	34	4%	35	5%	92	13%
B	11	1%	172	10%	89	5%	4	1%	98	14%	2	1%
C	107	6%	8	1%	114	6%	80	9%	120	17%	114	16%

All the individual criteria percentages are then combined to arrive at a minimum matching requirement for those specific criteria.

**Example: 3**

District	PPAV Normalized and Weighted at 5%	Household Income Normalized and Weighted at 15%	FRED Normalized and Weighted at 20%	Bond Mill Levy Normalized and Weighted at 20%	Unreserved General Fund Balance Normalized and Weighted at 20%	Bond capacity Remaining Normalized and Weighted at 20%	Combined Criteria Percentages
A	3%	4%	1%	4%	5%	13%	30%
B	1%	10%	5%	1%	14%	1%	32%
C	6%	1%	6%	9%	17%	16%	55%

The final matching percentage takes the matching percentage listed in example 3 and subtracts 1% for each bond election failure and success during the last 10 years to arrive at the final minimum matching requirement for a school district.

**Example: 4**

District	Number of Bond Election Successes	Number of Bond Election Failures	Final Minimum Adjusted Match Percentage
A	0	0	30%
B	1	2	29%
C	2	0	53%

BOCES matching percentages are calculated by taking an average of the member districts matching percentages that comprise a particular BOCES to give that BOCES a unique matching percentage.

The charter school match calculation is to be utilized for charter schools who intend to apply for a BEST grant in any given grant cycle.

### Starting Point

#### **Weighted average of district matches which comprise the charter school student population**

The starting point will be the weighted average district matches of the student body of the charter school. For example if 40% of the charter school population come from district X and 60% comes from district Y the starting point will be a weighted average of the two district matches. This is used since district match is comprised of household income, PPAV, district FRED, Mill Levy and Bonding history. If it is a CSI school the starting point will be half of the statewide BEST district matching average.

### Adjustment Factors

#### **Questions Pertaining to Effort**

- **Does your authorizing district have 10% or less bonding capacity remaining?**  
This is used as an adjustment factor to look at the charter schools ability to provide a match through a district bond election. If the charter school is a CSI charter school their response will automatically be N/A and no adjustment will be made.
- **Is the charter school in a district owned facility?**  
This is considered since charter schools in district owned facilities are not required to pay rent or a lease.
- **Over the last 10 years how many times has the charter school attempted to get or attained bond proceeds from an Authorizer's ballot measure for capital needs?**  
This is an adjustment factor to evaluate the charter schools past effort to help themselves without State assistance. The number they report needs to be validated by evidence of effort i.e. ballot questions, emails, meeting minutes etc. If the school is a CSI charter school their response will be N/A and no adjustment will be made.
- **Over the last 10 years how many times has the charter school attempted to do a special mill levy override pursuant to 22-30.5-405 for capital needs?**  
This is an adjustment factor to evaluate the charter schools past effort to help themselves without State assistance. The number they report needs to be validated by evidence of effort i.e. ballot questions, emails, meeting minutes etc. If the school is a CSI charter school their response will be N/A and no adjustment will be made.
- **Over the last 10 years how many times has the charter school attempted or attained grant funding through a non-BEST source for capital needs?**  
This is an adjustment factor to evaluate the charter schools past effort to help themselves without State assistance. The grants they apply for need to be grants for capital needs in which they were not only eligible for but also good candidates for receipt of funds. The number they report needs to be validated by evidence of effort i.e., award letters, formal non-award letters, emails, meeting minutes etc.
- **Over the last 10 years how many times has the charter school attempted or obtained funding through CECFA or another type of financing?**



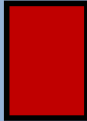
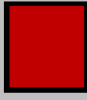
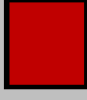




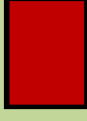




This is an adjustment factor to evaluate the charter schools past effort to help themselves without State assistance. The number they report needs to be validated by best evidence of effort i.e., award letters, formal non-award letters, application denials, emails, meeting minutes etc.

**Questions Pertaining to Capacity**

- **Charter school enrollment as a percent of district enrollment**  
This is an adjustment factor to help evaluate the likeliness that a charter school could successfully win a special mill levy or bond election if they were the only question on the ballot.
- **Free/Reduced lunch percent in relation to the statewide average charter school free/reduced lunch percent**  
This is an adjustment factor which helps evaluate the capabilities of the charter school through a capital campaign or savings to raise a match.
- **Percentage of Per Pupil Revenue spent on Non-Maintenance & Operations facilities costs**  
This is an adjustment factor which looks at how much the charter school is spending on facilities and if they are allocating funds to take care of themselves.
- **Unreserved fund balance as a percent of budget**  
This is an adjustment factor which looks at the available funds for a match. (NOTE: If the charter school has a parent foundation they need to provide the foundations fund balance as well.)
- **Final Adjusted Match Percentage**  
This is calculated by taking the starting point and adding in all the adjustment factors.

**Ranges for FY19-20 Grant Cycle**

<p><b>Enrollment as a % of District Spread</b></p> <p>&gt;25 5%</p> <p>25-22.5 4%</p> <p>22.5-20 3%</p> <p>20-17.5 2%</p> <p>17.5-15 1%</p> <p>15-12.5 0%</p> <p>12.5-10 -1%</p> <p>10-7.5 -2%</p> <p>7.5-5 -3%</p> <p>5-2.5 -4%</p> <p>2.5-0 -5%</p>	<p><b>Percentage of PPR spent on non M&amp;O facilities costs</b></p> <p>&gt;25 -5%</p> <p>25-22.5 -4%</p> <p>22.5-20 -3%</p> <p>20-17.5 -2%</p> <p>17.5-15 -1%</p> <p>15-12.5 0%</p> <p>12.5-10 1%</p> <p>10-7.5 2%</p> <p>7.5-5 3%</p> <p>5-2.5 4%</p> <p>2.5-0 5%</p>
<p><b>Unreserved fund balance as a percent of budget</b></p> <p>&gt;30 5%</p> <p>30-27 4%</p> <p>27-24 3%</p> <p>24-21 2%</p> <p>21-18 1%</p> <p>18-15 0%</p> <p>15-12 -1%</p> <p>12-9 -2%</p> <p>9-6 -3%</p> <p>6-3 -4%</p> <p>3-&lt;=0 -5%</p>	<p><b>2016 FRED 41.5% Charter Statewide Average</b></p> <p>&gt;75.1 -5%</p> <p>75.0-67.6 -4%</p> <p>67.5-60.1 -3%</p> <p>60.0-52.6 -2%</p> <p>52.5-45.1 -1%</p> <p>45.0-37.6 0%</p> <p>37.5-30.1 1%</p> <p>29.9-22.5 2%</p> <p>22.4-15.0 3%</p> <p>14.9-7.5 4%</p> <p>7.4&lt;=0 5%</p>

<u>Starting Point</u>		
Weighted average of district matches which comprise the student population		If the Charter School is a CSI school the starting point is 50% of the average district matches
<u>Yes/No Questions</u>	Yes/No	Adjustment Percentage
Does the district have 10% or less bonding capacity remaining (CSI Schools leave blank)		5% decrease if Yes No change if No
Is the charter school in a district owned facility		5% Increase if Yes No change if No
<u>Over the last 10 years</u>		
How many times has the charter school attempted to or attained bond proceeds from an Authorizer's ballot measure for capital needs (CSI Schools leave blank)		1% decrease in match for each occurrence up to 5%
How many times has the charter school attempted to do a special mill levy override pursuant to 22-30.5405 for capital needs? (CSI Schools leave blank)		1% decrease in match for each occurrence up to 5%
How many times has the charter school attempted or attained grant funding through a non-BEST source for capital needs		1% decrease in match for each occurrence up to 5%
How many times has the charter school attempted or obtained funding through CECFA or another type of financing		3% decrease in match for attempted 5% decrease for obtained
<u>Adjustments</u>		Adjustment Percentage
Charter school enrollment as a percent of district enrollment (CSI Schools leave blank)		Adjustment of up to 5 percentage points up or down based on relative difference
Free/Reduced lunch percent in relation to the statewide average charter school free/reduced lunch percent		Adjustment of up to 5 percentage points up or down based on relative difference
Percentage of PPR spent on non M&O facilities costs		Adjustment of up to 5 percentage points up or down based on relative difference
Unreserved fund balance as a percent of budget		Adjustment of up to 5 percentage points up or down based on relative difference
<b>Final Adjusted Match Percentage</b>		

Board Member: \_\_\_\_\_

The BEST grant is a matching grant. Each applicant is assigned a unique minimum matching requirement, based on the factors outlined in statute, to identify financial capacity. An applicant may apply to the Capital Construction Assistance Board for a waiver or reduction of the matching moneys requirement for their project if the applicant determines the minimum match is not reflective of their current financial capacity.

Please review the applicant’s waiver application responses. Answer the questions below by marking each response with a yes or no. Subsections A-H to question 2 are related directly to the factors used in calculating the matching contribution; a response indicating “agreed” to a subsection indicates the applicant does not believe this factor is inaccurately or inadequately reflecting financial capacity.

Be sure to look at the specifics when reviewing each question and evaluate the applicant’s explanation to the issues and impacts that make it impossible for the applicant to make its full matching contribution. Please ensure that responses align with the overall determination or describe why they did not align in the section for Board Member Comments.

- Yes - The response demonstrated a high need for a reduction in the match contribution
  - No - The response did not demonstrate sufficient need for a reduction in the applicant’s match contribution
  - N/A - The applicant indicated “agreed” to the matching factor question
- 

**Grant Applicant Name:** Sample School District

**Project Name:** HS Renovation and Expansion

Waiver application questions

1. Please describe why a waiver or reduction of the matching contribution would significantly enhance educational opportunity and quality within your school district, charter school or BOCES, or why the cost of complying with the matching contribution would significantly limit educational opportunities within your school district or BOCES.

**Does this response support a reduction in the applicant’s match contribution? YES or NO**

2. Please describe any extenuating circumstances which should be considered in determining the appropriateness of a waiver or reduction in the matching contribution.

**Does this response support a reduction in the applicant’s match contribution? YES or NO**

A. Justification for per pupil assessed valuation not being representative of their financial capacity.

**Does this response support a reduction in the applicant’s match contribution? YES NO N/A**

B. Justification for the district’s median household income not being representative of their financial capacity.

**Does this response support a reduction in the applicant’s match contribution? YES NO N/A**

C. Justification for percentage of pupils eligible for free or reduced cost lunch not being representative of their financial capacity.

**Does this response support a reduction in the applicant’s match contribution? YES NO N/A**

D. Justification for bond election failures and successes in the last 10 years not being representative of their financial capacity.

**Does this response support a reduction in the applicant’s match contribution? YES NO N/A**

E. Justification for bond mill levy not being representative of their financial capacity.

**Does this response support a reduction in the applicant’s match contribution? YES NO N/A**

F. Justification for the school district's current available bond capacity remaining not being representative of their financial capacity.

**Does this response support a reduction in the applicant’s match contribution? YES NO N/A**

G. Justification for the school district's unreserved fund balance not being representative of their financial capacity.

**Does this response support a reduction in the applicant’s match contribution? YES NO N/A**

H. Other unusual financial burdens not reflected in the match calculation.

**Does this response support a reduction in the applicant’s match contribution? YES NO N/A**

3.What efforts has the applicant made to coordinate the project with local governmental entities, community based organizations, or other available grants or organizations to more efficiently or effectively leverage the applicant’s ability to contribute financial assistance to the project? Please include all efforts, even those which may have been unsuccessful.

**Does this response support a reduction in the applicant’s match contribution? YES or NO**

Final Determination

SAMPLE SCHOOL DISTRICT	Amount of Grant Request	Amount of Applicant Contribution	Total Project Cost
<b>Request with waiver</b>	\$19,448,042.80	\$31,731,017.20	\$51,179,060.00
<b>Request without waiver</b>	\$15,353,718.00	\$35,825,342.00	\$51,179,060.00

**Considering the overall application for a waiver or reduction in the matching contribution, do the circumstances demonstrated by the applicant make a waiver appropriate? YES or NO**

Additional Board Member Comments: If responses do not align with overall determination, please indicate why.

Board Member: \_\_\_\_\_

The BEST grant is a matching grant. Each applicant is assigned a unique minimum matching requirement, based on the factors outlined in statute, to identify financial capacity. An applicant may apply to the Capital Construction Assistance Board for a waiver or reduction of the matching moneys requirement for their project if the applicant determines the minimum match is not reflective of their current financial capacity.

Please review the applicant’s waiver application responses. Answer the questions below by marking each response with a yes or no. Subsections A-K to question 2 are related directly to the factors used in calculating the matching contribution; a response indicating “agreed” to a subsection indicates the applicant does not believe this factor is inaccurately or inadequately reflecting financial capacity.

Be sure to look at the specifics when reviewing each question and evaluate the applicant’s explanation to the issues and impacts that make it impossible for the applicant to make its full matching contribution. Please ensure that responses align with the overall determination or describe why they did not align in the section for Board Member Comments.

- Yes - The response demonstrated a high need for a reduction in the match contribution
- No - The response did not demonstrate sufficient need for a reduction in the applicant’s match contribution
- N/A - The applicant indicated “agreed” to the matching factor question

**Grant Applicant Name:** Sample Charter School

**Project Name:** New PK-8 School

Waiver application questions

1. Please describe why a waiver or reduction of the matching contribution would significantly enhance educational opportunity and quality within your school district, charter school or BOCES, or why the cost of complying with the matching contribution would significantly limit educational opportunities within your school district or BOCES.

**Does this response support a reduction in the applicant’s match contribution?** YES or NO

2. Please describe any extenuating circumstances which should be considered in determining the appropriateness of a waiver or reduction in the matching contribution.

**Does this response support a reduction in the applicant’s match contribution?** YES or NO

A. Justification for the weighted average of district matches which comprise the student population.

**Does this response support a reduction in the applicant’s match contribution?** YES NO N/A

B. Justification for the district authorizer having 10% or less bonding capacity remaining.

**Does this response support a reduction in the applicant’s match contribution?** YES NO N/A

C. Justification for the charter school in a district-owned facility.

**Does this response support a reduction in the applicant’s match contribution?** YES NO N/A

D. Justification for the number of times the charter school attempted or attained bond proceeds from an authorizer's ballot measure for capital needs.

**Does this response support a reduction in the applicant’s match contribution?** YES NO N/A

E. Justification for the number of times the charter school attempted to do a special mill levy override pursuant to 22-30.5-405 for capital needs.

**Does this response support a reduction in the applicant’s match contribution?** YES NO N/A

F. Justification for the number of times the charter school attempted or attained grant funding through a non-BEST source for capital needs.

**Does this response support a reduction in the applicant’s match contribution?** YES NO N/A

G. Justification for the number of times the charter school attempted or obtained funding through CECFA or another type of financing.

**Does this response support a reduction in the applicant’s match contribution?** YES NO N/A

H. Justification for charter school enrollment as a percent of district enrollment.

**Does this response support a reduction in the applicant’s match contribution?** YES NO N/A

I. Justification for free/reduced lunch % in relation to the statewide average charter school free/reduced lunch %.

**Does this response support a reduction in the applicant’s match contribution?** YES NO N/A

J. Justification for percentage of PPR spent on non-M&O facilities costs.

**Does this response support a reduction in the applicant’s match contribution?** YES NO N/A

K. Justification for unreserved fund balance as a percent of budget.

**Does this response support a reduction in the applicant’s match contribution?** YES NO N/A

3. What efforts has the applicant made to coordinate the project with local governmental entities, community based organizations, or other available grants or organizations to more efficiently or effectively leverage the applicant’s ability to contribute financial assistance to the project? Please include all efforts, even those which may have been unsuccessful.

**Does this response support a reduction in the applicant’s match contribution?** YES or NO

Final Determination

SAMPLE CHARTER SCHOOL	Amount of Grant Request	Amount of Applicant Contribution	Total Project Cost
Request with waiver	\$15,560,678.90	\$818,983.10	\$16,379,662.00
Request without waiver	\$13,267,526.22	\$3,112,135.78	\$16,379,662.00

**Considering the overall application for a waiver or reduction in the matching contribution, do the circumstances demonstrated by the applicant make a waiver appropriate?** YES or NO

Additional Board Member Comments: If responses do not align with overall determination, please indicate why.

**Adequacy Index**

A metric that objectively measures the current adequacy of a school. It is based on a set of questions that measure each school's compliance with the Facility Insight standards. Each adequacy question is scored 0-5. Each question is weighted and the overall index is expressed in the form of a 0.00-1.00 percentage range, with a 0.00 representing full adequacy, and a 1.00 representing inadequacy.

**Adverse Historical Effect**

CRS 24-80.1-101 requires state agencies involved with projects affecting properties determined to have historical significance by History Colorado or listed on the State Register of Historic Properties to consult with History Colorado. The Division is required to consult with History Colorado on any public school facility requesting State funds for capital improvement projects in facilities that are 50 years or older. As part of the consultation process, History Colorado will make a determination of effect on the proposed scope of the project for any facilities determined to have historical significance. If History Colorado makes a determination of "adverse effect" the project will require further consultation, modification, or negotiation, with potential resolution from the Governor's Office.

**Affected pupils**

The total number of pupils currently enrolled (as of October 1, 2017) that are affected by the proposed application.

**Affected square feet (Sq Ft)**

The total square feet affected by the proposed application.

**Applicant Previous BEST Grants**

The number of BEST grants the applicant has been previously been awarded.

**Charter School Capital Construction Funding (CSCC Allocation)**

Each year, funds are distributed to qualified charter schools based on pupil count. \$20 million is distributed annually from the State Education Fund and 12.5% of marijuana excise taxes deposited into the Assistance Fund (\$5 million in FY 2018-19, with pending legislation to adjust to \$9.25M). This funding can be used by the Charter School or Institute Charter School to pay for school construction, renovation, financing, or the purchasing or leasing of facilities. The purpose of this funding is to promote a safe and healthy learning environment for all Colorado students.

**Certificate of Participation**

A financing tool available for use by the CCAB in funding large grant projects through a Lease/Purchase agreement.

**Condition Budget**

Condition Budget in Facility Insight is the cost to remediate current requirement needs measured within the FCI. Requirements are assigned a Category, Priority, and System in order for the requirement costs to be categorized appropriately and to assign a time frame for action. The category and priority determine whether or not the Requirement's costs are measured in the FCI; for example, requirements which are assigned a priority 4 or which are in the optimization category are not measured in the FCI and therefore not captured in the condition budget. Most requirements not calculated in the condition budget for Facility Insight are missing fire sprinkler systems.

**Contingency**

These costs are added for potential scope changes, unforeseen conditions, detail conflicts, and / or design changes. The contingencies assist with keeping costs within budget and managing risk. The application lists construction and owner contingencies separately.

***Construction Contingency***

A percentage added to the construction budget for unforeseen field conditions, estimating variables, and other non-discretionary change orders.

**Owner Contingency**

A percentage added to the construction budget to cover design revisions and discretionary change orders within the grant scope.

**Cost Per Sq Ft**

The affected square feet divided by the total project cost; can be broken up into soft and hard costs of construction:

**Soft Cost per Sq Ft** - Owner costs not typically included as a direct construction cost. Costs may include design consultants, testing, permitting, project management, financing and legal fees, furniture fixtures & equipment, abatement, site development and utility costs, and owner-installed items such as technology infrastructure, as well as other pre-construction and post-construction costs to a project.

**Hard Cost per Sq Ft** – Costs related to the actual, physical construction of the project. Costs may include: quantifiable labor and materials required to complete the project, site work, landscaping, contingencies, escalation, bonds, fees, and insurance.

**Escalation %**

A percent of the project hard costs added to account for an inflationary increase in material and labor costs from the time of budget preparation to the anticipated time of bid.

**Facility Condition Index (FCI)**

Facility Condition Index (FCI) is an industry-standard metric that objectively measures the current condition of a facility, allowing comparison both within and among assets. To determine FCI for any given set of assets, the total cost of remedying requirements is divided by the current replacement value. Generally, the higher the FCI, the poorer the condition of the facility.

**Facility Insight**

The statewide assessment program established in 2016 to renew and refresh the original 2009 Parsons assessment data and create a long term, sustainable solution using in-house assessors.

**Gross square feet (GSF)**

The size of the enclosed floor space of a building in square feet, typically measured to the outside face of the enclosing wall.

**Gross Sq Ft Per Pupil**

Gross Sq Ft of the proposed project divided by the number of affected pupils.

**High Performance Certification Program (HPCP)**

C.R.S. 24-30-1305.5 requires all new facilities, additions, and renovation projects that meet the following criteria to follow HPCP policy adopted by the Office of the State Architect:

- The project receives 25% or more of state funds; and
- The new facility, addition, or renovation project contains 5,000 or more building square feet; and
- The building includes an HVAC system; and
- In the case of a renovation project, the cost of the renovation exceeds 25% of the current value of the property.



HPCP requires projects to receive third party verification. HPCP stipulates that qualifying projects should obtain a minimum standard for energy efficiency. In the case of public school projects that minimum standard is either LEED Gold, CHPS-Verified Leader, or Green Globes – Three Globes. A modification to the target certification goal may be granted. In instances where achievement of the certification goal is not feasible, an applicant may request a modification of the HPCP policy or a waiver if certain conditions exist.

### **Historical Register**

The Division is required to consult with History Colorado on any public school facility requesting State funds for capital improvement projects in facilities that are 50 years or older. As part of the consultation process, History Colorado will make a determination of historical significance, which also identifies whether the project is listed or nominated for either the state or national Register of Historic Places.

### **Operations & Maintenance, Facility Acquisition & Construction (3yr Avg OMFAC/Pupil)**

The combined total reported by district (district and CSDB applicants) or school (charter, BOCES applicants) to CDE finance for fiscal year spending in categories relating to facility plant operations & maintenance, as well as facility acquisition and construction. A 3-year average per pupil is reported for each applicant.

### **Prioritization Criteria**

#### **1. Health, Safety & Technology**

Projects that will address safety hazards or health concerns at existing public school facilities, including concerns relating to public school facility security, and projects that are designed to incorporate technology into the educational environment.

#### **2. Overcrowding**

Projects that will relieve overcrowding in public school facilities, including but not limited to projects that will allow students to move from temporary instructional facilities into permanent facilities.

#### **3. Other**

All other projects not relating to health & safety, overcrowding and technology.

### **Replacement Value**

Replacement Value in Facility Insight is the automatically generated total amount of expenditure required to construct a replacement facility to the current building codes, design criteria, and materials. The Replacement Value for a single asset is based on the sum of the system replacement costs.

### **Requirement**

In the context of the statewide assessment, Facility Insight, a requirement is a facility need or a deficient condition that should be addressed. A requirement can affect an assembly, piece of equipment, or any other building system.

### **Requirement Cost**

Requirement Cost in Facility Insight is the cost to remediate all requirements, including those requirements not measured within the FCI. See the definition of Condition Budget for understanding what's measured within the FCI.

### **System Group**

System Groups are defined based on Unifomat categories. For example, the System Group "Plumbing System" includes systems with a Unifomat category of D20. System groups most commonly referenced in Facility Insight and sample inclusions:

**Electrical System** - Uniformat D50; Low Tension Service, Wiring, Lighting, Communications, Security. Systems such as Main Electrical Service, Distribution Equipment, Panelboards, Lighting, Branch Wiring, Telephone, Fire Alarm, Card Access, Burglar Alarms, Security Cameras, Local Area Network, Exit Signs, Emergency Generators, Exit Signs, etc.

**Equipment and Furnishings** - Uniformat E; Systems such as Kitchen Equipment, Casework, Theater Seating, etc.

**Exterior Enclosure** - Uniformat B20 & B30; Exterior Walls, Exterior Windows, Exterior Doors, Roofing. Systems such as CMU Block Walls, Aluminum Windows, Storefront/Hollow Metal Doors, Single-Ply Membrane Roof, etc.

**Fire Protection** - Uniformat D40; Systems such as Wet Standpipes, Wet Sprinklers, Kitchen Hood Suppression, Fire Extinguishers, etc.

**Furnishings** - Uniformat E20; Systems such as Student Lockers, Bleachers, etc.

**HVAC System** - Uniformat D30; Gas Supply, Heat/Cooling Generating Systems, Distribution Systems, Terminal and Package Units, Controls, Dust/Fume Collectors. Systems such as Propane Tanks, Natural Gas Service, Boilers, Central Air Handling Units, Exhaust (building, kitchen, restroom, etc.), Rooftop Units, Pneumatic/Digital Controls, etc.

**Interior Construction and Conveyance** - Uniformat C & D10; Partitions, Interior Doors, Fittings, Finishes and Conveyance. Systems such as Gypsum Walls, Wood Doors, Toilet Partitions, Signage, Stairs, Ceiling/Wall/Floor Finishes, Elevators, etc.

**Plumbing System** - Uniformat D20; Plumbing Fixtures, Domestic Water and Sanitary Waste. Systems such as Restroom Fixtures, Water Heaters, Water Distribution Piping, Roof Drainage, Sanitary Waste Piping, etc.

**Site** - Uniformat G; All systems located on the site such as Pavement, Fencing, Lighting, Utilities, etc.

**Structure** - Uniformat A & B10; Substructure and Superstructure such as Foundation Walls, Footings, Single-Story Steel Framed Roof on Columns, etc.

### **Uniformat**

A standard for classifying building specifications, cost estimating, and cost analysis in the U.S. and Canada. The elements are major components common to most buildings. The system can be used to provide consistency in the economic evaluation of building projects. It was developed through an industry and government consensus and has been widely accepted as an ASTM standard.

*\*Points are rated accordingly: 5 = Very Good, 4 = Good, 3 = Average, 2 = Poor, 1 = Very Poor*

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# **BUILDING EXCELLENT SCHOOLS TODAY (BEST) FY2019-20 APPLICATION SUMMARIES**

**LIST OF ALL APPLICATIONS SORTED BY COUNTY**



**COLORADO**  
Department of Education

**DIVISION OF CAPITAL CONSTRUCTION**

**MAY 2019**



# BEST FY2019-20 APPLICATION SUMMARIES

All Applications Sorted by County, then Applicant

Page #	County	Project Title	Amount of Grant Request	Amount of Applicant Contribution	Total Project Costs	Cost Per Sq Ft
77	Adams	ADAMS COUNTY 14 ACMS New School Replacement	\$30,571,522.85	\$25,013,064.15	\$55,584,587.00	\$456.03
86	Adams	Global Village Academy Northglenn K-8 New School	\$25,159,546.30	\$10,782,662.70	\$35,942,209.00	\$429.93
95	Adams	MAPLETON 1 Valley View ES New School Replacement	\$17,414,793.86	\$6,441,088.14	\$23,855,882.00	\$397.60
433	Adams	WESTMINSTER PUBLIC SCHOOLS ECC Roof Replacement	\$930,849.15	\$761,603.85	\$1,692,453.00	\$72.61
453	Adams	WESTMINSTER PUBLIC SCHOOLS Shaw Heights MS Boiler Replacement	\$342,517.45	\$280,241.55	\$622,759.00	\$7.24
109	Arapahoe	ADAMS-ARAPAHOE 28J East MS Remodel and Addition	\$17,680,732.40	\$26,521,098.60	\$44,201,831.00	\$337.42
57	478 Arapahoe	BYERS 32J Asbestos Abatement	\$35,668.36	\$51,327.64	\$86,996.00	\$25.59
376	Arapahoe	SHERIDAN 2 ECC/SOAR Academy Roof Replacement	\$930,876.66	\$546,705.34	\$1,477,582.00	\$35.09
484	Baca	PRITCHETT RE-3 Building System/ Safety Upgrades	\$3,910,681.65	\$205,825.35	\$4,116,507.00	\$125.94
495	Baca	SPRINGFIELD RE-4 Safety Upgrades	\$513,515.08	\$356,849.46	\$870,364.54	\$9.32
121	Baca	WALSH RE-1 New PK-12	\$26,294,374.22	\$5,458,233.97	\$31,752,608.19	\$483.78
502	Boulder	Justice High School HS Health, Safety & Adequacy Improvements	\$921,525.36	\$1,081,790.64	\$2,003,316.00	\$205.47
383	Boulder	ST VRRAIN VALLEY RE 1J District Wide Roofing Repair & Replacement	\$667,566.72	\$1,418,579.28	\$2,086,146.00	\$26.37
468	Clear Creek	CLEAR CREEK RE-1 ES Boiler Replacement	\$117,042.48	\$183,066.44	\$300,108.92	\$10.21
141	Conejos	NORTH CONEJOS RE-1J Centauri HS Replacement	\$24,224,076.15	\$6,419,081.85	\$30,643,158.00	\$417.99

Page #	County	Project Title	Amount of Grant Request	Amount of Applicant Contribution	Total Project Costs	Cost Per Sq Ft
161	Costilla	SIERRA GRANDE R-30 PK-12 Replacement	\$35,213,784.85	\$13,779,307.11	\$48,993,091.96	\$580.56
174	Crowley	CROWLEY COUNTY RE-1-J HS-ES Renovation/ MS Addition	\$54,136,741.57	\$5,500,000.00	\$59,636,741.57	\$399.12
514	Denver	DENVER COUNTY 1 George Washington HS Fire Suppression Upgrades	\$1,471,517.40	\$2,117,549.44	\$3,589,066.84	\$10.60
519	Denver	DENVER COUNTY 1 Gilpin ES Galvanized/ Stream Piping Replacement	\$3,344,136.35	\$4,812,293.76	\$8,156,430.11	\$379.23
188	Denver	Expeditionary BOCES RMSEL Building/ Safety Upgrades/ Addition	\$4,404,556.22	\$7,499,649.78	\$11,904,206.00	\$198.73
390	Douglas	DOUGLAS COUNTY RE 1 Trailblazer ES Roof Replacement	\$128,651.60	\$514,606.40	\$643,258.00	\$12.67
525	Douglas	PLATTE RIVER CHARTER ACADEMY School Safety/ Security Upgrades	\$118,851.33	\$421,381.99	\$540,233.32	\$360.16
394	Eagle	EAGLE COUNTY RE 50 Berry Creek MS Roof Replacement	\$300,861.75	\$902,585.25	\$1,203,447.00	\$15.01
531	El Paso	COLORADO SPRINGS 11 RJ Wasson Academic Campus System Upgrades	\$1,566,281.20	\$2,784,499.90	\$4,350,781.10	\$17.18
540	El Paso	ELLICOTT 22 ES/HS Safety Upgrades	\$2,150,585.28	\$836,338.72	\$2,986,924.00	\$274.03
437	El Paso	LEWIS-PALMER 38 Prairie Winds ES Roof Replacement	\$357,298.08	\$759,258.42	\$1,116,556.50	\$25.85
457	El Paso	LEWIS-PALMER 38 Ray Kilmer ES Boiler Replacement	\$140,049.66	\$297,605.54	\$437,655.20	\$8.74
547	El Paso	Thomas Maclaren State Charter School Maclaren Safety Upgrades	\$1,323,282.18	\$197,731.82	\$1,521,014.00	\$332.17
556	El Paso	WIDEFIELD 3 ES MS HS Fire Alarm/Camera Upgrades	\$317,626.43	\$457,072.19	\$774,698.62	\$2.96
565	Elbert	LEGACY ACADEMY Safety/ Security Upgrades	\$572,101.20	\$468,082.80	\$1,040,184.00	\$184.82
577	Grand	EAST GRAND 2 District Wide Safety Upgrades	\$2,185,142.40	\$5,907,977.60	\$8,093,120.00	\$30.91

Page #	County	Project Title	Amount of Grant Request	Amount of Applicant Contribution	Total Project Costs	Cost Per Sq Ft
198	Huerfano	LA VETA RE-2 PK-12 Building Replacement	\$35,978,780.88	\$5,499,999.12	\$41,478,780.00	\$559.13
584	Jefferson	JEFFERSON COUNTY R-1 JeffcoNet - Fiber Network Infrastructure	\$2,000,000.00	\$8,000,000.00	\$10,000,000.00	\$23.58
221	La Plata	Animas High School New HS	\$20,072,474.44	\$1,056,446.02	\$21,128,920.46	\$454.39
590	La Plata	DURANGO 9-R Animas ES Boiler Replacement	\$87,773.02	\$214,892.55	\$302,665.57	\$7.01
594	La Plata	DURANGO 9-R DHS Fire Alarm and Intercom System Upgrade	\$110,588.60	\$270,751.40	\$381,340.00	\$1.48
398	La Plata	MOUNTAIN MIDDLE SCHOOL MMS Roof Replacement	\$118,343.28	\$53,168.72	\$171,512.00	\$26.01
252	Lake	LAKE COUNTY R-1 West Park PK-2 ES Replacement	\$20,805,668.40	\$13,870,445.60	\$34,676,114.00	\$592.80
472	Larimer	POUDRE R-1 HS Welding Ventilation and Expansion	\$636,563.40	\$1,485,314.60	\$2,121,878.00	\$298.86
264	Las Animas	HOEHNE REORGANIZED 3 Vocational Agriculture Building Replacement	\$1,775,689.27	\$3,156,780.93	\$4,932,470.20	\$616.56
272	Las Animas	TRINIDAD 1 Trinidad MS Building System/ Safety Upgrades	\$11,040,260.73	\$4,509,402.27	\$15,549,663.00	\$154.00
293	Mesa	JUNIPER RIDGE COMMUNITY SCHOOL New K-8 School	\$14,231,499.53	\$440,149.47	\$14,671,649.00	\$499.04
309	Mesa	MESA COUNTY VALLEY 51 Grand Junction HS Replacement	\$9,920,438.56	\$114,085,043.44	\$124,005,482.00	\$474.75
403	Moffat	MOFFAT COUNTY RE:NO 1 ES Roof Replacement	\$835,225.00	\$835,225.00	\$1,670,450.00	\$33.34
463	Montrose	MONTROSE COUNTY RE-1J Olathe MS HVAC Replacement	\$395,708.06	\$645,628.94	\$1,041,337.00	\$47.92
443	Montrose	MONTROSE COUNTY RE-1J Roof Replacements 1HS, 1MHS, 1MS, 2 ES	\$1,755,359.22	\$2,864,007.14	\$4,619,366.36	\$27.70
598	Otero	CHERAW 31 Building System/ Safety Upgrades	\$2,762,188.40	\$1,183,795.03	\$3,945,983.43	\$71.75

Page #	County	Project Title	Amount of Grant Request	Amount of Applicant Contribution	Total Project Costs	Cost Per Sq Ft
320	Otero	MANZANOLA 3J PK-12 Addition and Renovation	\$31,386,774.74	\$200,000.00	\$31,586,774.74	\$467.95
607	Prowers	GRANADA RE-1 Building System/ Safety Upgrades	\$3,361,303.54	\$2,335,821.10	\$5,697,124.64	\$84.74
411	Pueblo	PUEBLO CITY 60 FIMS Partial Roof Replacement	\$475,639.82	\$291,521.18	\$767,161.00	\$21.92
334	Rio Blanco	MEEKER RE1 HS Renovation & Addition	\$7,529,595.31	\$32,099,853.69	\$39,629,449.00	\$457.45
418	Rio Grande	MONTE VISTA C-8 Delta Center Roof Replacement	\$131,891.25	\$43,963.75	\$175,855.00	\$25.71
422	Routt	SOUTH ROUTT RE 3 HS North Roof Replacement	\$289,332.96	\$227,333.04	\$516,666.00	\$31.89
620	Weld	EATON RE-2 Districtwide Secure Entries	\$478,886.40	\$1,516,473.60	\$1,995,360.00	\$6.29
428	Weld	GREELEY 6 Scott ES Roof Replacement	\$597,001.05	\$729,667.95	\$1,326,669.00	\$22.08
348	Weld	JOHNSTOWN-MILLIKEN RE-5J Letford ES Replacement School	\$8,366,653.25	\$25,099,959.75	\$33,466,613.00	\$446.22
370	Weld	JOHNSTOWN-MILLIKEN RE-5J Milliken ES Roof Replacement	\$303,436.00	\$910,308.00	\$1,213,744.00	\$31.28
357	Yuma	YUMA 1 HS Addition/Renovation and MS Renovation	\$15,968,229.00	\$15,968,229.00	\$31,936,458.00	\$403.09
<b>Totals:</b>			<b>\$448,862,060.30</b>	<b>\$370,371,340.97</b>	<b>\$819,233,401.27</b>	



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# **BUILDING EXCELLENT SCHOOLS TODAY (BEST) FY2019-20 APPLICATION SUMMARIES**

**LIST OF CHARTER SCHOOL APPLICATIONS SORTED BY COUNTY**



**COLORADO**  
Department of Education

**DIVISION OF CAPITAL CONSTRUCTION**

**MAY 2019**

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# BEST FY2019-20 APPLICATION SUMMARIES

List of Charter School Applications Sorted by County

Page #	County	Project Title	Amount of Grant Request	Amount of Applicant Contribution	Total Project		Cost Per Sq Ft
					Costs	Costs	
86	Adams	Global Village Academy Northglenn	\$25,159,546.30	\$10,782,662.70	\$35,942,209.00	\$429.93	
502	Boulder	Justice High School	\$921,525.36	\$1,081,790.64	\$2,003,316.00	\$205.47	
525	Douglas	PLATTE RIVER CHARTER ACADEMY	\$118,851.33	\$421,381.99	\$540,233.32	\$360.16	
547	El Paso	Thomas MaClaren State Charter School	\$1,323,282.18	\$197,731.82	\$1,521,014.00	\$332.17	
565	Elbert	LEGACY ACADEMY	\$572,101.20	\$468,082.80	\$1,040,184.00	\$184.82	
221	La Plata	Animas High School	\$20,072,474.44	\$1,056,446.02	\$21,128,920.46	\$454.39	
398	La Plata	MOUNTAIN MIDDLE SCHOOL	\$118,343.28	\$53,168.72	\$171,512.00	\$26.01	
293	Mesa	JUNIPER RIDGE COMMUNITY SCHOOL	\$14,231,499.53	\$440,149.47	\$14,671,649.00	\$499.04	
<b>Totals:</b>					<b>\$62,517,623.62</b>	<b>\$14,501,414.16</b>	<b>\$77,019,037.78</b>



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# **BUILDING EXCELLENT SCHOOLS TODAY (BEST) FY2019-20 APPLICATION SUMMARIES**

**LIST OF APPLICATIONS WITH MATCHING FUNDS CONTINGENT  
ON A 2019 BOND ELECTION**



**COLORADO**  
Department of Education

**DIVISION OF CAPITAL CONSTRUCTION**

**MAY 2019**

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# BEST FY2019-20 APPLICATION SUMMARIES

List of Applications with Matching Funds Contingent upon a Proposed 2019 Bond Election

Page #	County	Applicant Name	Project Title	Amount of Grant Request	Amount of Applicant Contribution	Total Project Costs	Cost Per Sq Ft
121	Baca	WALSH RE-1	New PK-12	\$26,294,374.22	\$5,458,233.97	\$31,752,608.19	\$483.78
141	Conejos	NORTH CONEJOS RE-1J	Centauri HS Replacement	\$24,224,076.15	\$6,419,081.85	\$30,643,158.00	\$417.99
174	Crowley	CROWLEY COUNTY RE-1-J	HS-ES Renovation/ MS Addition	\$54,136,741.57	\$5,500,000.00	\$59,636,741.57	\$399.12
577	Grand	EAST GRAND 2	District Wide Safety Upgrades	\$2,185,142.40	\$5,907,977.60	\$8,093,120.00	\$30.91
252	Lake	LAKE COUNTY R-1	West Park PK-2 ES Replacement	\$20,805,668.40	\$13,870,445.60	\$34,676,114.00	\$592.80
264	Las Animas	HOEHNE REORGANIZED 3	Vocational Agriculture Building Replacement	\$1,775,689.27	\$3,156,780.93	\$4,932,470.20	\$616.56
272	Las Animas	TRINIDAD 1	Trinidad MS Building System/ Safety Upgrades	\$11,040,260.73	\$4,509,402.27	\$15,549,663.00	\$154.00
309	Mesa	MESA COUNTY VALLEY 51	Grand Junction HS Replacement	\$9,920,438.56	\$114,085,043.44	\$124,005,482.00	\$474.75
348	Weld	JOHNSTOWN-MILLIKEN RE-5J	Letford ES Replacement School	\$8,366,653.25	\$25,099,959.75	\$33,466,613.00	\$446.22
357	Yuma	YUMA 1	HS Addition/Renovation and MS Renovation	\$15,968,229.00	\$15,968,229.00	\$31,936,458.00	\$403.09
<b>Totals:</b>				<b>\$174,717,273.55</b>	<b>\$199,975,154.41</b>	<b>\$374,692,427.96</b>	





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# **BUILDING EXCELLENT SCHOOLS TODAY (BEST) FY2019-20 APPLICATION SUMMARIES**

## **LIST OF APPLICATIONS WITH A WAIVER REQUEST**



**COLORADO**  
Department of Education

**DIVISION OF CAPITAL CONSTRUCTION**

**MAY 2019**



# BEST FY2019-20 APPLICATION SUMMARIES

List of Applications with a Waiver Request (Excluding Statutory Waivers)

Page #	County	Project Title	Amount of		Total Project Costs	Cost Per Sq Ft
			Grant Request	Applicant Contribution		
174	Crowley	CROWLEY COUNTY RE-1-J HS-ES Renovation/ MS Addition	\$54,136,741.57	\$5,500,000.00	\$59,636,741.57	\$399.12
198	Huerfano	LA VETA RE-2 PK-12 Building Replacement	\$35,978,780.88	\$5,499,999.12	\$41,478,780.00	\$559.13
221	La Plata	Animas High School New HS	\$20,072,474.44	\$1,056,446.02	\$21,128,920.46	\$454.39
252	Lake	LAKE COUNTY R-1 West Park PK-2 ES Replacement	\$20,805,668.40	\$13,870,445.60	\$34,676,114.00	\$592.80
272	Las Animas	TRINIDAD 1 Trinidad MS Building System/ Safety Upgrades	\$11,040,260.73	\$4,509,402.27	\$15,549,663.00	\$154.00
293	Mesa	JUNIPER RIDGE COMMUNITY SCHOOL New K-8 School	\$14,231,499.53	\$440,149.47	\$14,671,649.00	\$499.04
320	Otero	MANZANOLA 3J PK-12 Addition and Renovation	\$31,386,774.74	\$200,000.00	\$31,586,774.74	\$467.95
403	Moffat	MOFFAT COUNTY RE:NO 1 ES Roof Replacement	\$835,225.00	\$835,225.00	\$1,670,450.00	\$33.34
411	Pueblo	PUEBLO CITY 60 FIMS Partial Roof Replacement	\$475,639.82	\$291,521.18	\$767,161.00	\$21.92
484	Baca	PRITCHETT RE-3 Building System/ Safety Upgrades	\$3,910,681.65	\$205,825.35	\$4,116,507.00	\$125.94
547	El Paso	Thomas MaClaren State Charter School MaClaren Safety Upgrades	\$1,323,282.18	\$197,731.82	\$1,521,014.00	\$332.17
565	Elbert	LEGACY ACADEMY Safety/ Security Upgrades	\$572,101.20	\$468,082.80	\$1,040,184.00	\$184.82
598	Otero	CHERAW 31 Building System/ Safety Upgrades	\$2,762,188.40	\$1,183,795.03	\$3,945,983.43	\$71.75
<b>Totals:</b>			<b>\$197,531,318.54</b>	<b>\$34,258,623.66</b>	<b>\$231,789,942.20</b>	



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# BUILDING EXCELLENT SCHOOLS TODAY (BEST) FY2019-20 APPLICATION SUMMARIES

BEST GRANT APPLICATION REVIEW ORDER



**COLORADO**  
Department of Education

**DIVISION OF CAPITAL CONSTRUCTION**

**MAY 2019**

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# BEST FY2019-20 APPLICATION SUMMARIES

BEST Grant Application Review Order

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390	Douglas	DOUGLAS COUNTY RE 1	Trailblazer ES Roof Replacement
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540	El Paso	ELLCOTT 22	ES/HS Safety Upgrades
547	El Paso	Thomas MacLaren State Charter School	MacLaren Safety Upgrades
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565	Elbert	LEGACY ACADEMY	Safety/ Security Upgrades
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● **Facilities Impacted by this Grant Application** ●

**ADAMS COUNTY 14 - ACMS New School Replacement - Adams City MS - 1959**

District:	Auditor - Adams 14
School Name:	Adams City MS
Address:	4451 EAST 72ND AVENUE
City:	COMMERCE CITY
Gross Area (SF):	98,900
Number of Buildings:	1
Replacement Value:	\$34,439,117
Condition Budget:	\$18,326,790
Total FCI:	0.53
Adequacy Index:	0.32



**Condition Budget Summary**

System Group	Replacement Cost	Requirement Cost	SCI
Electrical System	\$7,207,657	\$4,434,990	0.62
Equipment and Furnishings	\$395,853	\$194,855	0.49
Exterior Enclosure	\$3,803,226	\$618,022	0.16
Fire Protection	\$14,733	\$787,161	53.43
Furnishings	\$510,831	\$68,758	0.13
HVAC System	\$9,037,691	\$4,290,336	0.47
Interior Construction and Conveyance	\$6,472,490	\$4,692,492	0.72
Plumbing System	\$1,599,604	\$1,788,382	1.12
Site	\$2,180,464	\$2,201,952	1.01
Structure	\$3,216,569	\$32,079	0.01
<b>Overall - Total</b>	<b>\$34,439,117</b>	<b>\$19,109,027</b>	<b>0.55</b>

# BEST FY2019-20 GRANT APPLICATION SUMMARIES

**Applicant Name:** ADAMS COUNTY 14

**County:** Adams

**Project Title:** ACMS New School Replacement

**Applicant Previous BEST Grant(s):** 5

**Has this project been previously applied for and not funded?** Yes

**If Yes, please explain why:** This project was approved by all CCAB members to be moved to the shortlist and was only 1 point away from being funded. Enough funds were not available.

## Project Type:

- |  |  |  |   |
|--|--|--|---|
| <input type="checkbox"/> New School                    | <input checked="" type="checkbox"/> Roof               | <input checked="" type="checkbox"/> Asbestos Abatement | <input type="checkbox"/> Water Systems                |
| <input checked="" type="checkbox"/> School Replacement | <input checked="" type="checkbox"/> Fire Alarm         | <input checked="" type="checkbox"/> Lighting           | <input checked="" type="checkbox"/> Facility Sitework |
| <input type="checkbox"/> Renovation                    | <input checked="" type="checkbox"/> Boiler Replacement | <input checked="" type="checkbox"/> Electrical Upgrade | <input type="checkbox"/> Land Purchase                |
| <input type="checkbox"/> Addition                      | <input checked="" type="checkbox"/> HVAC               | <input checked="" type="checkbox"/> Energy Savings     | <input checked="" type="checkbox"/> Technology        |
| <input checked="" type="checkbox"/> Security           | <input checked="" type="checkbox"/> ADA                | <input checked="" type="checkbox"/> Window Replacement | <input type="checkbox"/> Other                        |

## General Information About the District / School, and Information About the Affected Facilities:

Adams County School District 14 (Adams 14) is situated in Commerce City in Denver's northeastern metropolitan area. Adams 14 currently serves approximately 7,000 students and caters to the community's historic and culturally rich neighborhoods. It is the district's mission to enable all of their students to reach their full learning potential through meaningful opportunities and innovative educational programs. Through its partnerships with the Commerce City community, Adams 14 strives to inspire, educate and empower every student to succeed in the 21st century.

In 2010 the district and the community came together to create a master plan. This plan was intended to help guide their efforts for change within the district, which has long struggled with poor test scores and low graduation rates. This master plan outlined several goals for the district, but in particular it pointed out a variety of deficiencies in the school district's facilities. The master plan specifically identified three schools that were in need of replacement due to their advanced age, and their inability to meet the needs of modern learning. Adams City Middle School (ACMS) was one of these schools.

The building that ACMS is housed in first opened as a public school in 1956, the same year that saw Dwight Eisenhower re-elected President of the United States and the death of the nation's last living Civil War veteran. ACMS continues to serve Commerce City as a neighborhood public school, with grades six through eight. While the district has upgraded the facility over its many decades of service, the physical plant no longer adequately supports 21st century instructional programming.

ACMS is one of only two middle schools in Adams 14. Enrollment for the 2018-2019 school year is currently at 807 students. Approximately 58% of ACMS students do not speak English as their primary language, and 88% of their students qualify for free or reduced lunch. An estimated 12% of ACMS students qualify for one of the school's special education programs. The school also provides basic student health services (physicals, inoculations, etc.) through the Kids First program and mental health and behavioral provided by two licensed therapists through the Community Reach program.

## Deficiencies Associated with this Project:

One of the most pressing issues for safety and security at Adams City Middle School (ACMS) is the current building layout and location. ACMS was originally built in 1959 with open air hallways, which were a problem for students transitioning between classrooms during poor weather. These hallways were eventually enclosed, and two additional hallways were added to connect the buildings. These added hallways are too narrow, and they often become congested when the students travel between classrooms. These corridors are the only interior access points for two wings of the school, so the students must use these to navigate from one end of the building to the other. During non-passing periods, this can take as little as 2 minutes. But during passing periods it takes more than 5 minutes to get through the same hallways. This creates a safety concern because the school's staff are unable to move quickly through the hallways in the event of an emergency.

These additions have also created numerous blind corners and other hiding spots both inside the building and around the exterior. This is already a security concern, but this issue is compounded by the school's proximity to the Center for Detox

## BEST FY2019-20 GRANT APPLICATION SUMMARIES

Treatment at the Community Reach Center. Multiple individuals seeking services at this clinic have either attempted to enter the school or they loiter on the school's grounds. This happens multiple times every year and each time the administration has to escort these people off of the school property.

The location of the school is also a problem due to its proximity to the new RTD light rail station and its parking structure on Birch Street. This new station is expected to significantly increase the number of cars using the roads around ACMS. This increase in traffic will present serious safety concerns for the middle school students who often walk or bike to school. The new parking structure is anticipated to increase in traffic on Birch Street specifically. This presents a major safety risk for the students since this street currently serves as the school's student pick up and drop off site.

Adams 14's maintenance team does an excellent job of maintaining their facilities. The district knows how important it is to have adequate facilities for their students to learn in. Currently, the building's FCI is 53%, up 8% from last year (and expected to do the same this year as other major systems expire), but this does not capture the other major health and safety concerns caused by the school's adverse layout and location.

### Interior Safety & Security:

**Security Issues:** The many changes to the school's layout have created a variety of security concerns that are now inherent to the design of the school. For example, the building has 42 exterior points of entry. Many of these doors are unlabeled and the administration is not able to monitor them consistently. Some doors do not latch properly due to the building's shifting foundations. District maintenance has to constantly repair and modify the door frames to get the doors to close properly.

**Lines of site:** The layout of the school makes it difficult to have clear lines of site. The building's hallways have many blind corners, and other potential hiding spots that would present a security risk if an intruder entered the building.

**Code compliance:** Many of the school's exterior and interior doors are not ADA compliant. None of the restrooms are ADA accessible and there are only 3 ADA accessible parking spaces on the site. According to the ADA's Parking Lot Requirements, there should be at least 10 accessible parking spaces. The main parking lot only has 17 spaces for visitors (including ADA accessible spaces), so parents and visitors often have to park on the busy street in front of the school.

**Fire Protection:** There is no fire sprinkler system installed in the building, and the fire alarm system is past the end of its useful life and in need of replacement. This creates a serious life safety issue for both students and staff.

**Interior flooring:** Most of the school's classrooms have non-friable asbestos containing floor tile and mastic under carpet. This carpeting is all beyond its useful life and needs to be replaced. In one classroom, the asbestos tile has sustained water damage and is being monitored. The custodial office, boy's gym storage room, and the hallway going from the school's central (C) wing to its eastern (D) wing also have asbestos tile flooring and mastic, but this is uncovered by carpet. While the custodial office floor remains in good condition, the boy's gym storage room and hallway have several cracked or nicked tiles that are being waxed (in addition to the district's O&M program) to prevent ACM release.

**Asbestos:** The acoustical spray on the ceiling of Building A contains friable asbestos, and sustained damage before being encapsulated. Most of the pipe fitting insulations in the building also contain friable asbestos. This has been an issue for maintenance staff when they have had to access these areas to repair broken water pipes and do routine maintenance.

**Emergency backup systems:** Emergency battery pack lights have been installed in the school's corridors and in the large assembly spaces, but not in any other spaces. The school also lacks an emergency generator. All of the current emergency backup systems are at the end of their useful lives, and are in need of replacement.

**Domestic water distribution:** This system is past its useful life and needs to be budgeted for replacement. There have been reported concerns over the color and odor of the water in the school. Most of the school's water heaters are beyond their useful lives and are in need of replacement. One was already replaced this year and the others are not expected to last much longer.

## BEST FY2019-20 GRANT APPLICATION SUMMARIES

**Sanitary waste:** The school's sewer lines often back up into the science classrooms and bathrooms following heavy snow or rain. The sinks and drains in the science classrooms have flooded multiple times over the last few years. This has caused consistent issues with indoor air quality in the classrooms and other parts of the building. The entire sanitary waste system is well beyond its useful life and needs to be replaced immediately.

**Electrical distribution system:** The electrical distribution system is beyond its useful life and is unable to support the school's technological needs. Due to the school's many additions, there are currently seven electrical panels in various locations throughout the school. The breakers in these panels trip regularly in spite of the minimal demand throughout the building. There are not enough power outlets in either the classrooms or the administrative spaces, and several of these outlets are in unsafe or inconvenient locations. The staff uses extension cords and multiple outlet receptacles extensively to work around this. As power has been added over the years, the new wires had to be run along the outside of the cinder block walls throughout the hallways and classrooms.

**HVAC :** The functionality of the school's HVAC system is extremely unpredictable. The system often shuts down over the weekend when the staff is not available to restart it. When this happens it takes several hours for the system to restart and effectively regulate the temperature throughout the entire school building. This forces all of the students to work in classrooms that are either very warm or freezing. There are three classrooms and one staff office (Assistant Principal) that do not have heat at all. There are an additional 10 classrooms that are extremely cold consistently throughout the winter; these temperatures often reach the low 60's. Approximately 8 classrooms do not have air conditioning, and the temperature in these rooms was over 90 degrees during the first week of school.

**Plumbing:** The plumbing system is original to the building and is past its useful life. The original water lines have become a major issue for the district. They require continual repair and cause damage to interior walls, ceilings and flooring throughout the building. This, coupled with the sanitary and asbestos issues, makes it hard to maintain a safe environment for students to be in.

**Gas lines:** These pipes have corroded over the years and continue to develop leaks throughout the school building, but particularly in the science classrooms. Last September, Adams 14 maintenance staff discovered gas was leaking from one of the mechanical rooms in the school's southwest wing. Upon further inspection they realized the gas line had five separate leaks. They were forced to evacuate all of the students and staff for the remainder of the day while this was being remedied. This happens several times each school year.

**Intercom/telephones:** The intercom and telephone systems are nearing the end of their useful lives. The intercom system no longer works in the eastern wing hallway, and the system was never installed in the gymnasium. This prevents the administration from making a school-wide announcement during an emergency. The administration has tried to work around this by using the phone all-call system, but there are no phones in the gymnasiums, and it is extremely difficult to hear the phone announcements in crowded classrooms.

**Locker rooms & lockers:** Due to a lack of lockers in the building, roughly 25% of students do not have a locker. The locker rooms (for gym class) do not have enough lockers for all of the students while they are in class. This forces the students to carry their gym clothes and equipment with them throughout the day, and these items are not secure during their PE classes. The layout of the locker rooms make it difficult for teachers to see all of the students at one time, so effectively supervising the students in this space is challenging. Additionally, there are no working showers in the school's locker rooms. They have been shut off because it is no longer feasible to repair them. The gang shower units need to be completely replaced and new water supply lines need to be installed to provide a working shower for the locker rooms.

**Special programming spaces:** The school's mild moderate needs program does not have an adequate number of classrooms available. There are only three classrooms available to this program, and one of these is a repurposed old storage room. This forces these teachers to share classrooms which creates a variety of instructional problems. Several of these classrooms also do not meet CDE's size guidelines for special education programs and do not have adequate storage, sinks, whiteboards or technology.

## BEST FY2019-20 GRANT APPLICATION SUMMARIES

**Restrooms:** The school currently has only 12 restrooms available for use by the students and 10 restrooms available to the faculty and staff. Most of these restrooms are undersized and are intended to serve over 800 students. The limited number of restrooms and the lack of ADA compliance in these rooms creates accessibility issues. This encourages students and staff to seek out restrooms in other wings of the school, but this only further exacerbates the safety issues related to the congested hallways.

**Exterior:**

**Water mitigation:** After heavy snow or rain, water enters the building through the vents and under several of the exterior doors. This is a problem in the school's band room, choir room, both gymnasiums, the library, the STEM lab, the computer lab as well as multiple hallways and classrooms. During colder months, ice usually forms from most of the building's overhangs making it dangerous to enter or exit the building. The drainage system around the building is completely inefficient. Water drains from the roof right next to the building creating large pools of water that rest along the building's foundations.

**Foundation:** There are cracks in the building's foundation wall. This is particularly notable on the northeastern corner of the gymnasium. This cracking is being aggravated by the school's water mitigation system, which does not deposit water at an adequate distance from the building to prevent damage to the foundation walls.

**Exterior windows:** The building's exterior windows are past their useful life. Most of them are covered in a film that over time has become mostly opaque. This creates problems with visibility from inside the building which could create safety issues in an emergency.

**Exterior doors:** The current building has 42 exterior doors. All of these are locked at all times for security reasons, except the front doors which are monitored by the administration. The front doors are also the only exterior doors that are ADA compliant. None of the other doors, including the classroom's exterior doors, are ADA compliant.

**Site:**

**Parking lots:** There are approximately 45 parking spaces available for use by staff, and 17 for parents and the community. These are split into two parking lots on the south and west sides of the school site. Because of the lack of space available for parents and visitors, many have to park along 72nd Avenue.

**Student drop-off site:** The school's site lacks space for a dedicated student drop off site. The students are currently dropped off on Birch Street & 72nd Avenue. The students have to walk through the staff parking lot, or cross a busy street in order to access the school building. This presents a safety concern because 72nd is a busy street, and students usually walk through the staff parking lot while staff members are parking. This will become an even more significant safety issue after the new RTD light rail station and parking structure are built and amount of traffic around ACMS increases.

**Site lighting:** The school's courtyards are inadequately lit at night, which makes student supervision difficult during after school activities.

**Sidewalks and walkways:** Several of the pedestrian walkways are past their useful life and are in need of replacement. There are no sidewalks on the west side (Birch St) of the school, which creates safety complications during student pickup and dropoff times.

**Running track and field:** The running track is composed of asphalt and currently has a significant amount of damage. This has rendered the track unusable for the school's track and field events. The track's bleachers only accommodate 120 spectators, which is not enough space for the typical number of attendees. The track also lacks team seating for either the home or visiting teams.

### **Proposed Solution to Address the Deficiencies Stated Above:**

The district initially considered renovating the current ACMS building, but quickly realized that the cost of renovation outweighed the potential benefits. Renovation would not be able to fully address the safety and security concerns that are inherent to the layout of the school nor would it address the issues with the school's location. It was with this in mind that the district began planning to build a new ACMS on a new site location. The students currently attending ACMS would continue

## BEST FY2019-20 GRANT APPLICATION SUMMARIES

using the old ACMS building during construction.

The new ACMS will be 121,887 gross square feet, and will house grades 6 through 8. The new building will allow for a safe and secure main entry, which will have unobstructed visual access to the parking lots and student drop off areas. A formal student drop off area would be included in the site plans to ensure student safety. The building will be oriented to maximize the use of the new site's natural daylight in all classroom spaces. This will reduce the school's reliance on artificial lighting, reduce the building's electrical requirements, and create a more comfortable learning environment for the students.

The new building will include 46 educational spaces. These will include 6 core classrooms and 2 science laboratories for each grade (6th-8th). ACMS's SpEd programs would also have dedicated spaces with 5 classrooms, a convertible classroom/sensory room, a sensory room and a room for only their affective needs students. These have all been sized appropriately based on planned enrollment, and program requirements.

This building will include, in addition to the core classrooms and SpEd rooms, spaces for a STEM lab, 2 Art labs, 2 Music rooms, and dedicated space for English language learners. This will be made possible, in part, by a modern electrical system that will be built to handle the needs of 21st century learning.

A larger cafeteria is planned along with a stage to accommodate student performances and other smaller gatherings. This cafetorium will eliminate the need for a dedicated auditorium.

The new site will have a track and field, a play area for students and parking for roughly 150 cars.

The new ACMS would share a campus with the new Alsup Elementary School (Alsup). Alsup is one of ACMS's feeder schools, and their current campuses are already close together. By moving ACMS to the new Alsup site, the district plans to make the most of the existing synergy between the schools. One of the ways that this will happen is through the sharing of common site spaces, like the bus drop off site and field space.

This shared campus would create opportunities for efficiencies during the construction process as well. Alsup is currently going through the design phase process, and construction is expected to begin in early 2020. It is anticipated that there will be overlap in the construction schedules for Alsup and ACMS. This will give the construction team the chance to align building activities in order to save time and money on both projects.

A new location would also solve many of the safety concerns the district identified at the current ACMS location. The school would have fewer problems with individuals from the center attempting to enter the school, or loitering on the grounds. These center guests pose a security risk to ACMS's students and staff. Moving the school to the new site location will reduce this risk.

The school would also be further away from the RTD's new light rail station and parking structure. This would minimize the additional traffic on the streets directly around ACMS, which would make it safer for students to walk or bike to school.

The new school building will further reduce the number of security concerns through an updated layout. This layout would minimize the number of exterior entry points and would provide better lines of site. This relocation would also make it possible to design a safer student drop off location and usable athletic fields.

### **How Urgent is this Project?**

Adams City Middle School's needs are very urgent. This is supported by the daily security risks presented by the building's layout and location. The building also has many systems that are beyond their useful life-cycle and require frequent repairs to remain operational.

The classroom wing additions to the school have created a complicated layout with many blind corners. This makes effectively monitoring students very difficult, and would present complications in the event of an intruder entering the building. The school's narrow hallways pose additional risks because staff members are unable to quickly respond to emergencies during passing periods. This creates an unnecessary risk to the health and safety of the students.

## BEST FY2019-20 GRANT APPLICATION SUMMARIES

ACMS's proximity to the new light rail station and parking structure creates additional urgency because traffic is anticipated to significantly increase directly next to the school's property. This is a safety risk for the students who walk or bike to school. This will also create safety concerns for students who are dropped off by their parents. The school's site does not have a formal student drop off location, so students are dropped off on Birch Street and 72nd Avenue. The light rail station parking structure will also be on Birch Street, which is expected to drastically increase traffic on this specific road.

The plumbing in the ACMS building is mostly original, and is in dire need of replacement. Sewage frequently backs up into classrooms, presenting a health risk to both students and staff. When this happens the school has to sanitize the carpeting in the affected classrooms. This carpeting cannot be removed due to the asbestos tile that exists throughout the building.

The age of the plumbing also results in frequent gas leaks inside the building. This has required ongoing maintenance and repairs, and it would be difficult to replace this system without destructive construction. Each time a leak is detected the entire school building has to be evacuated and the students usually have to wait for hours to go back inside. This often results in a school closure until the line is repaired, and students are unable to re-enter the building during that time.

The school additionally lacks some basic fire protection systems (e.g. sprinklers), and the fire alarm systems need to be replaced. The district's 2010 master plan also noted that the fire alarm system did not meet all of the NFPA's code requirements. Smoke and heat detection is limited to a few areas, and many of the classrooms with exterior doors do not have manual pulls. This creates an immediate and urgent safety concern for the students.

The capacity of the electrical system in the building is maxed out. Breakers are constantly being tripped and have to be reset. Teachers and staff have to use extension cords and multiple outlet receptacles throughout the building in order to have adequate electrical access. This fundamentally limits the amount of technology that can be used in the building, which presents serious concerns about equitable access to learning.

The HVAC system is in need of immediate replacement. This system often shuts down without warning. When this happens over the weekend, it takes several hours to re-regulate the temperature in the building. The classrooms are often uncomfortably hot or cold and there have been many complaints about poor air quality within the building. This is not conducive to a high quality learning environment for the students.

Most of the deficiencies noted in the above section cannot be resolved by renovating the Adams City Middle School building. These are problems that all directly impact the health and safety of ACMS's students, and many of these issues are inherent to the building and building site. In order to address these through renovation the building would have to be gutted, and the structure would have to be fundamentally changed. It is simply not cost-effective to try to bring this building up to 21st century learning standards.

**Does this Project Conform with the Public School Facility Construction Guidelines?** Yes

**If not, provide an explanation for the use of any standard not consistent with the guidelines:**

Adams County School District 14 has reviewed the Public School Facility Construction Guidelines and will comply with the Guidelines established by the Capital Construction Assistance Board.

**How Does the Applicant Plan to Maintain the Project if it is Awarded?**

For FY2018/19 the district has budgeted \$3,531,906 for capital improvements. We currently have 6,507 students (K-12). This equates to \$543 per pupil invested towards capital.

Much of these funds are allocated to facilities repair and updating. In year when major projects and costly repairs are necessary, district funds will be rolled over from the previous year to buffer the costly impact. Some of the costly repairs are projects such as plumbing, HVAC, roofing, concrete/asphalt, athletic field repair. With limited funds, it is necessary to often put other repairs on hold as other become more of a priority.

The Adams 14 maintenance plan for a newly constructed school is characterized by a holistic approach to the facility beginning at the design phase and sustaining the school throughout the lifecycle of the facility. Maintenance personnel will be

## BEST FY2019-20 GRANT APPLICATION SUMMARIES

integral members of the design process. During construction, maintenance personnel will have access to the site to view infrastructure that will later be concealed. During commissioning, maintenance personnel will integrate into the SchoolDude Computer-aided Maintenance Management System (CMMS) Preventive Maintenance module all the tasks and schedules for all the equipment and systems included in the general contractor's Operations and Maintenance Manuals. Maintenance personnel will familiarize themselves with the operating parameters of the installed equipment and systems before commissioning is complete to ensure that the equipment is operated and maintained as designed. Maintenance personnel will enforce all warranties, tracking each through the warranty period. The Maintenance Manager will establish parameters of individual performance with detailed descriptions of staff positions, routine performance reviews, daily supervision and communicated expectations. The CMMS operates as the central clearing house and audit trail for all work requests, current work status, and staff/faculty communication. The CMMS will track the performance of the installed capital equipment against the planned lifecycle for each, thus identifying each for planned asset renewals. Support technicians of various trades (plumbing, HVAC, electrical, access/security, grounds, carpentry, IT, kitchen, custodial) will contribute their core competencies to the sustainment of the facilities and communication with the staff and faculty.

Adams 14 understands the importance of maintenance and we have a very robust system in place to ensure all issues are addressed immediately. Since the majority of our buildings are older, we have had to maintain a healthy capital reserve fund to ensure our schools remain adequate learning environments for all our students.

**Describe the condition of the public school facility at the time it was purchased or constructed and, if the facility was not new or was not adequate as a public school facility at that time, provide the rationale for purchasing the facility or constructing it in the manner in which you did:**

The facility has been owned and operated continuously by the school district since it was constructed in 1959. This brick and mortar building met the construction and educational standards required at that time.

**Describe the history of capital improvements made to the facility by the district/charter school in order to make it suitable for students. Include a list of all capital projects undertaken in the affected facility in the last 3 years:**

The middle school has had numerous capital improvements over the last 60 years. Parking lot and roadway improvements around the entire site, including new sidewalks around the entire building. New landscaping irrigation installed in 1990. Electrical distribution upgrades, including new exterior lights and controls (2000), and a new roof. Inside the building, new flooring has installed throughout, a new boiler and chiller, and plumbing fixture upgrades. A lot of these systems have or are ready to expire in the next few years. We have done an excellent job of maintaining our facilities and even extended the life on a majority of the systems throughout. After assessing Adams City Middle School and all the needs it currently has or will have in the next few years, it makes financial sense to build a new school as opposed trying to renovate an inadequate and decrepit building.

Over the last three years, we have invested a substantial amount of money into the middle school to keep it suitable for our students. Our maintenance staff has responded to nearly 1,000 work order requests over the last three years. Recently, one of our water heaters that feeds the western side of the building went out and was replaced. We also have had to do some plumbing and sanitary sewer upgrades on the east side of the building due to sewer line back ups that continue to be an issue. We also replaced the main gas line that feeds the boiler room on the west side of the school.

**What options outside of the BEST grant has the applicant investigated or leveraged to address the school's facility needs?**

Adams 14 used \$7,500,000 of its own funds and sold \$7,000,000 in COPs to fund our new elementary school this past year.

Adams 14 has attempted a bond 3 times in the past 9 years to address our schools facility needs. However, we have been unsuccessful at securing those funds. Therefore, funds to address all facility needs have come from the districts capital reserve funds through a list that was prioritized based on urgency. Unfortunately, our capital reserve funds are limited and our conditions are being maintained rather than corrected due to funding restrictions.

Adams 14 also works closely with the city and has intergovernmental agreements in place for joint use of our facilities. We let the city use our various fields and gyms, and in turn, they help with the maintenance & upkeep; and have even paid for upgrades for new basketball backboards/hoops and upgrades for the field equipment.

**How do you budget annually to address capital outlay needs in your district/charter? Include \$/FTE for the prior fiscal year:**



## BEST FY2019-20 GRANT APPLICATION SUMMARIES

For FY 2018/19 this district has budgeted \$3,531,906 this year for capital improvements. We currently have 6,507 students (K-12). This equates to \$543 per FTE invested towards capital. This is districtwide amount. Adams 14 is currently budgeting a minimum of \$2,000,000 a year for capital improvements. This amount is based off the 2010 master plan. A new master plan is currently underway and once this is complete, the district will need to reevaluate how much needs to be budgeted for capital outlay. This new amount is anticipated to be more than \$2M / year.

**If relevant to your project, what are your current annualized utility costs, and what amount of reduction in such costs do you expect to result from this project?**

We are not relying on a reduction in utility costs in our determination of the affordability of this project. We do anticipate that the future utility costs will see a reduction in cost per sq ft. especially in electricity and water as we move ACMS to the new site. We do anticipate using this cost savings to offset any increased operating costs that may arise due to the different layout, furniture and fixtures, size or shape of the new building.

<b>Grant Request:</b>	\$30,571,522.85	<b>CDE Minimum Match %:</b>	45%
<b>Applicant Match:</b>	\$25,013,064.15	<b>Actual Match % Provided:</b>	45%
<b>Total Project Cost:</b>	\$55,584,587.00	<b>Is a Waiver Letter Required?</b>	No
<b>Affected Sq Ft:</b>	121,887	<b>Contingent on a 2019 Bond?</b>	No
<b>Affected Pupils:</b>	809	<b>Source of Match:</b>	2019 bond election or capital reserve fund and/or general fund
<b>Cost Per Sq Ft:</b>	\$456.03		
<b>Soft Costs Per Sq Ft:</b>	\$68.43	<b>Escalation %:</b>	8%
<b>Hard Costs Per Sq Ft:</b>	\$387.60	<b>Construction Contingency %:</b>	3%
<b>Cost Per Pupil:</b>	\$68,708	<b>Owner Contingency %:</b>	6%
<b>Gross Sq Ft Per Pupil:</b>	151	<b>Historical Register?</b>	No
<b>Is a Master Plan Complete?</b>	No	<b>Adverse Historical Effect?</b>	No
<b>Who owns the Facility?</b>	District	<b>Does this Qualify for HPCP?</b>	Yes
<b>If owned by a third party, explanation of ownership:</b>			
<b>If match is financed, explanation of financing terms:</b>			

### Financial Data (School District and BOCES Applicants)

<b>District FTE Count:</b>	6,200	<b>Bonded Debt Approved:</b>	
<b>Assessed Valuation:</b>	\$733,627,550	<b>Year(s) Bond Approved:</b>	
<b>PPAV:</b>	\$118,327	<b>Bonded Debt Failed:</b>	\$139,700,000
<b>Unreserved Gen Fund 17-18:</b>	\$11,499,307	<b>Year(s) Bond Failed:</b>	13,14
<b>Median Household Income:</b>	\$45,328	<b>Outstanding Bonded Debt:</b>	\$69,905,000
<b>Free Reduced Lunch %:</b>	85%	<b>Total Bond Capacity:</b>	\$146,725,510
<b>Existing Bond Mill Levy:</b>	9.057	<b>Bond Capacity Remaining:</b>	\$76,820,510
<b>3yr Avg OMFAC/Pupil:</b>	\$1,183.18		

● **Facilities Impacted by this Grant Application** ●

**Global Village Academy Northglenn - K-8 New School - Global Village Academy - Northglenn - 1997**

<b>District:</b>	Auditor - Charter School Institute
<b>School Name:</b>	Global Village Academy - Northglenn
<b>Address:</b>	555 W 112th Ave
<b>City:</b>	Northglenn
<b>Gross Area (SF):</b>	65,000
<b>Number of Buildings:</b>	1
<b>Replacement Value:</b>	\$17,743,195
<b>Condition Budget:</b>	\$6,917,991
<b>Total FCI:</b>	0.39
<b>Adequacy Index:</b>	0.23



**Condition Budget Summary**

System Group	Replacement Cost	Requirement Cost	SCI
Electrical System	\$2,958,551	\$1,114,796	0.38
Equipment and Furnishings	\$245,396	\$228,804	0.93
Exterior Enclosure	\$3,668,451	\$1,245,717	0.34
Fire Protection	\$690,834	\$12,558	0.02
Furnishings	\$23,954	\$0	0.00
HVAC System	\$1,369,083	\$1,693,049	1.24
Interior Construction and Conveyance	\$2,523,989	\$989,237	0.39
Plumbing System	\$951,776	\$19,048	0.02
Site	\$3,223,602	\$1,565,343	0.49
Structure	\$2,087,560	\$78,568	0.04
<b>Overall - Total</b>	<b>\$17,743,195</b>	<b>\$6,947,120</b>	<b>0.39</b>

# BEST FY2019-20 GRANT APPLICATION SUMMARIES

**Applicant Name:** Global Village Academy Northglenn

**County:** Adams

**Project Title:** K-8 New School

**Applicant Previous BEST Grant(s):** 0

**Has this project been previously applied for and not funded?** Yes

**If Yes, please explain why:** On June 4, 2018, GVA-N was informed the Public School Capital Construction Assistance Board (CCAB) approved GVA-N's proposal and recommended GVA-N as a back-up candidate for potential funding via a BEST Lease-Purchase option.

## Project Type:

- |  |   |   |  |
|--|---|---|--|
| <input checked="" type="checkbox"/> New School | <input type="checkbox"/> Roof               | <input type="checkbox"/> Asbestos Abatement | <input type="checkbox"/> Water Systems     |
| <input type="checkbox"/> School Replacement    | <input type="checkbox"/> Fire Alarm         | <input type="checkbox"/> Lighting           | <input type="checkbox"/> Facility Sitework |
| <input type="checkbox"/> Renovation            | <input type="checkbox"/> Boiler Replacement | <input type="checkbox"/> Electrical Upgrade | <input type="checkbox"/> Land Purchase     |
| <input type="checkbox"/> Addition              | <input type="checkbox"/> HVAC               | <input type="checkbox"/> Energy Savings     | <input type="checkbox"/> Technology        |
| <input type="checkbox"/> Security              | <input type="checkbox"/> ADA                | <input type="checkbox"/> Window Replacement | <input type="checkbox"/> Other             |

## General Information About the District / School, and Information About the Affected Facilities:

GVA-N is an international school that provides language immersion instruction in Mandarin Chinese, Spanish and Russian. The school's mission is: Global Village Academy students will become fluent and literate in English and a second world language, excel academically in core content subjects, and develop twenty-first century skills, including cross-cultural understanding. Our students develop a global perspective by learning a second language. Additionally, they explore diverse cultures in order to cultivate understanding and develop the skills needed to live and work with others internationally. In our immersion program, students from kindergarten to fifth grade spend half of their day in the immersion language. The core subjects of science and math are taught in the immersion classroom. Students receive instruction in English for the core content subjects of reading, writing, and social studies. Students in middle school are transitioned to a traditional schedule with an hour of language. Since opening in 2011 with 275 students, GVA-N has shown steady enrollment. This forced GVA-N to cap enrollment in 2015 at 1000 students due to lack of space. There are currently 891 students enrolled in the school. Nearly half (46%) of students currently attending GVA-N qualify for free or reduced lunch. Our percentage of ELL students continues to increase with the school currently servicing around 45 percent. GVA-N is considered a Title I school.

GVA-N has received a School Performance Framework rating of "Performance" every year since opening, with the exception of the 2016-2017 school year. It is the belief of administration and teaching staff that deficiencies in internet infrastructure and lack of space to provide adequate testing environments have both contributed to that school year's decrease in student performance on standardized tests. A switch to paper tests in school year 2017-18 yielded a 23.3% increase in points earned on the school's performance framework moving GVA-N from a score of 47.5% in 2016-17 to 70.8% in 2017-18 (back to Performance).

The founders of GVA-N entered into a ten-year lease (with the option to buy) of the current facility, in 2011. The term of the lease is through June 2021. The plan was to purchase the building around year five. As the years progressed, the building began to show evidence of the foundation shifting. By the fifth year of the lease, the shifting became so significant that purchasing the building was no longer a feasible option. Several attempts were made to negotiate with building owners in an effort to find a solution that would result in the purchase of the facility after mitigation of the structural issues, with little success. At the time GVA-N entered into the lease, GVA-N was aware that prior work to mitigate the highly expansive soil had been completed. The foundation continued to shift and GVA-N solicited RF Consulting Engineers and Architecture Plus to conduct a thorough evaluation of the site and structure.

Maintenance of the building has been costly. A comprehensive list of critical repairs can be found in the RF Consulting Engineer/Architecture Plus (January 2017) report submitted as part of this application.

## Deficiencies Associated with this Project:

To ensure the safety of our students and staff, GVA-N continues to finance on-going "improvements" to the facility that are a

## BEST FY2019-20 GRANT APPLICATION SUMMARIES

direct result of the slab's movement. In addition, the State's February 2018 facility assessment also highlighted the impact of the structural slab's heaving citing the movement caused drywall cracking, tile cracking, ceiling grid separations, and light fixtures to misalign. The report also detailed how the walls do not extend to the roofline and the slab movement has caused walls to crack and joints to separate in multiple locations. The consequences from the slab movement continue to impact the safety and welfare of students and staff.

Greater detail of the safety/security issues that face GVA-N are cited below. Many of the facility related challenges are a direct outcome of the continuous heaving of the slab, which is a result of the highly expansive soil.

**Interior flooring:** The slab of the facility is constantly shifting (not just shifting, rising more than 7 inches overall and falling 1.5 inches in other areas) due to the highly expansive soils. GVA-N had several engineers provide reports, investigate the movement, and attempt to provide solutions however the slab continues to move. This has caused numerous issues throughout the facility. Large cracks are present across the entire campus floor. The rear quarter of the entire facility has noticeably sunk which has caused walls to break open and further cracking on the floor. The carpeted areas are well beyond their useful life and have tears and worn areas down to the concrete floor. Hidden shifting under carpeting has caused dangerous tripping hazards, resulting in multiple staff and student falls.

**Code/ADA compliance:** It is difficult to push wheelchairs on carpeted hallway floors that are uneven and cracking, none of the doors are automatic (someone has to open them for people in wheelchairs or crutches) but GVA-N has not received any citations.

**Lines of Site:** The school is a series of narrow corridors which provide no lines of sight around the facility. Because of this, it is not possible to see what is happening between corridors or from one side of the facility to another.

**Interior doors:** Adjustments are continually needed as doors won't latch for lockdowns due to wall movements.

**Exterior doors:** Exterior doors are beyond their designed life. Unable to monitor open/close status. Can easily be propped ajar. Doors continually have repairs to maintain their ability to electronically/remotely allow entrance to the building.

**Security issues:** There are several exterior doors to the facility, which are difficult to monitor throughout the day. The entrance to the school is not secure. While parents are "buzzed" in, there is no barrier between the lobby and the classroom hallways. GVA-N has 10 interior cameras covering 7 of 9 exterior doors, including recently added 6 exterior cameras. No door sensors to tell when doors are open or secured. Rear of the campus has an entry gate allowing adequate flow for drop-off and pick-up but is adjacent to 2 apartment complexes and unrestricted street access.

**Sanitary waste/plumbing:** The toilets throughout the facility have had numerous backups and repairs, causing at least one school closure. Waste pipe sizing appears inadequate. Damage to plumbing system maybe a direct result of the heaving slab. Sewage smell wafts from drains in bathrooms. An additional drain was installed in one of the boys' bathrooms when an overflowing toilet resulted in standing water. The water would not flow to the original drain because floor movement caused the floor to slope in the opposite direction which resulted in waste water flowing into the (carpeted) hallway adjacent to the restroom. During the most recent Winter Break the plumbing from the exterior kitchen fats/oils/grease trap was found to be broken and had to be excavated and replaced.

**Domestic water distribution:** Supply piping sizes are inadequate to support eyewash and emergency showers in science rooms.

**Electrical distribution system:** Sporadic outages have caused school to CLOSE on two separate occasions and on a third occasion, meeting space was rented at a nearby hotel for professional development due to lack of building electricity.

**Fire:** The fire panel and duct mounted smoke sensors have had to have parts replaced and serviced multiple times to keep it in proper functioning order. The fire sprinkler lines have also had to have multiple repairs to meet inspection requirements. Continual adjustments needed to sprinkler system heads due to the shifting of building.

## BEST FY2019-20 GRANT APPLICATION SUMMARIES

Emergency backup systems: There is no emergency backup power system on this campus.

HVAC: The HVAC system is deficient and well beyond its intended life. There are hot and cold disparities across the building. The RTU's and exhaust fans have exceeded their useful life and are constantly being serviced in order to keep them functioning and to prevent leaks from entering the facility. The makeup air units have had several components go bad requiring replacement. Dampers have gone bad requiring replacement. The controls system was inoperative and experienced several issues requiring diagnostics and repairs. Exhaust fans have gone bad requiring repairs. There have also been mechanical heating failures which have caused emergency repairs to keep school in session. Air conditioning has completely ceased to operate in several classrooms. As the roof membrane comes up to meet the HVAC units, water intrusion continues to negatively impact the instruction of students.

Ceiling finishes: Ceiling tiles have fallen out of the ceiling grid due to the movement of the building. This has been a huge safety concern and the ceiling requires constant monitoring to prevent tiles from falling onto the students or staff. Several ceiling tiles are stained throughout the facility indicative of water intrusion from the rooftop EPDM coating that is beyond its expected life. Over the last two summers, over \$12K has been spent to "rehang" ceiling tiles that were falling on students and staff. This type of repair will be needed on an ongoing basis without the repair of the slab. On one occasion a light fixture with no suspension wires came loose from the acoustic ceiling grid, swung down into an active classroom with children and was only retained by the live electrical supply cable.

Casework: All furniture is second hand, casework is nearly nonexistent - cabinets only exist in one classroom, one hallway and 2 teacher lounges. There are coat racks in the elementary classrooms. No closets, cabinets or storage of any kind in the rooms (other than donated bookcases). Since the coat racks were installed on adjacent walls, any shifting around those walls specifically has caused the racks to detach from the walls.

Interior wall structure: There have been repairs to walls to relieve the tension they are experiencing due to the shifting of the slab. There have been braces installed to help remediate wall movement. Even with these repairs there are countless areas throughout the facility where the walls are separated causing major interior structural damage. Some gaps are so large that students routinely pass notes through the walls or stick hands through them.

Roof structure and roof membrane: The heaving of the slab and columns are causing the interior walls to push up the steel roof frame with the potential for separation of the roof from the exterior walls and columns. In addition, the roof is 22 years old and has reached the end of its expected service life. The parapet flashing and top caps are in poor condition and despite numerous repairs, there is continuous signs of leaking in the facility. The roof will need to be replaced in the next year or so. Additionally, all rain or snow storms result in random leaks into classrooms and offices.

Exterior walls and windows: The exterior elastomeric coating is peeling in some areas due to moisture penetrating behind the coating. The caulking along the perimeter walls is in poor condition, again causing water intrusion. The windows need to be resealed and the coating repaired where needed. It should be noted that any patching of the existing coating will be very difficult to match and the repairs will most likely be very noticeable.

Roadways and Parking Lots: There is alligatoring across the entire parking lot. There are several cracks in the asphalt that allow storm water to penetrate the ground. The south and east parking areas slope toward the building causing drainage issues. Due to the poor drainage, when it snows there are several large areas of ponding which creates large ice areas for slips, trips & falls. Additionally, traffic cones are the only barrier between students playing on the playground and cars in the parking lot - likewise for pick-up and drop-off times.

Surrounding thoroughfares: School is bordered by 35 MPH thoroughfare to the south with one unlit 20 MPH sign in each direction, delineating a school zone.

Sidewalks and walkways: The sidewalk concrete is in fair condition with noted cracked sections throughout and heaving along the west and south sides of the facility. This has resulted in serious tripping hazards.

## BEST FY2019-20 GRANT APPLICATION SUMMARIES

**Storm runoff:** The storm drainage for the entire property is in poor condition. There is an indication that the storm drain plumbing that carries water off the roof on the south side of the building may be broken. The storm drains and gutter pans that were designed to empty into the retention ponds do not currently carry water - an indication of being broken or clogged. The retention ponds themselves are full of trees and other vegetation.

**Gymnasium:** The current gymnasium is a carpeted open space in the middle of the campus. It is not appropriately sized for ES/MS/HS curriculum functions. GVA-N cannot hold athletic events in the gymnasium space, it is not equipped with the standard equipment provided in a gymnasium space, the carpet is torn and worn to the extent that it was necessary to tape sections and work around the flooring to prevent trip hazards for students. There is a giant ceiling support pole in the middle of the room. The ceiling height is also not standard height for a gymnasium space. It is not suited for performances or general assembly area but being used as such. The local fire department defines the maximum capacity as 143 people.

**Cafeteria:** The local fire department defines the maximum capacity as 162 people. This forces us to restrict the number of students that can be fed at one time, which extends the lunch hour from 10:15am until 1:30pm daily.

**Site lighting:** GVA-N spent \$35K to upgrade/improve exterior and interior lighting to LED for better light coverage across the site while saving monthly costs.

**Site:** GVA-N has had to invest a large amount of funding to meet the site requirements and the landscaping regulations by the City of Northglenn and are not supported by the property manager.

### **Proposed Solution to Address the Deficiencies Stated Above:**

GVA-N is a world-class school that supports K-8 education in English and a second world language and promotes educational readiness in a global economy, as well as 21st-century skills, including the ability to work in cross-cultural situations. The school opened in 2011 with under 300 students and grew quickly to nearly 1,000 within 6 years. Students spend half of their day learning core content in either Spanish, Russian or Mandarin Chinese. The second half of their day is spent in the English classroom. Spanish or Russian is the first language of nearly half the school's population. GVA-N has provided a community in which English Language Learners and their families receive the benefit of learning English while simultaneously maintaining their heritage. Simultaneously, English speakers are provided the opportunity to learn a new language and culture through exposure to authentic language experiences.

The proposed master plan will allow GVA-N to address all its educational and operational goals and needs for a comprehensive kindergarten through eighth grade facility. The master plan is based upon the acquisition and development of a new campus site; due to the limitations of the existing building, the high degree of disruption, and displacement of students if the school was to remain on the existing campus.

The school moved forward with its Master Plan in December of 2018 and acquired property located at 12525 Grant Drive, Thornton, CO, within an industrial office park development; the nearest major intersection is 120th and I-25. The land parcel of 14.7 acres is located at the intersection of Grant Street and Grant Drive, with the western boundary parallel to I-25. The site offers approximately 1200 lineal feet of street frontage, which is ideal for a charter school that typically has a high reliance upon parent transportation. The site high point is along the south edge with a consistent downward slope from south to north. The site slope to a natural drainage way along the north edge.

The proposed site plan places the new K-8 facility on the highest portion of the site, which will require grading the overall site into three plateaus to support field play, playgrounds and parking areas. All major utilities will be tied into the existing infrastructure network that services the industrial office park. The City of Thornton provides water/sewer to the property and gas is provided by Xcel Energy.

The new K-8 school is organized to allow for a safe and secure main entry into the building directly adjacent to administration. The location also has direct visual access to the parking and student drop areas. The main entrance has a southeast exposure to minimize and weather-related safety issues. The overall building configuration supports an easy compartmentalizing of students within learning communities for increased safety.

## BEST FY2019-20 GRANT APPLICATION SUMMARIES

The building concept plan is slightly rotated to optimize the classroom wing orientation for daylighting of the classroom along an east-west axis. This orientation also limits the impact of any I-25 traffic noise.

Highly active student spaces (Gym and Cafetorium) are located to the north adjacent to the hard court and field play. This location promotes easy transitions of student from lunch to recess activities without impacting other educational spaces.

The implementation of small-learning communities will support a comprehensive K-8 school with the ability to cluster K-2nd grade, 3-5th grade and 6-8th grade learners and staff. The two-story classroom areas will support 39 classrooms, 2 science labs and technology/makerspace supporting 960 students. Due to the language immersion program of GVA-N, 8 language classrooms are provided to support the rotation of students from core classrooms to specials. Core classrooms can be arranged in grade level clusters (ie. small-learning communities) if the enrollment supports the distribution. More importantly the plan organization allows the school long term flexibility to support modulation of grade level enrollment.

The exploratory spaces (Art and Music) are centrally located on the main level to promote shared use of the spaces. The exploratory spaces will be designed to reflect the core of 21st century learning tenants promoting hands-on, experiential, collaborative educational environments.

The new K-8 campus plan offers a highly flexible and collaborative 21st century learning environment that is desperately needed to support GVA-N's educational mission.

### **How Urgent is this Project?**

The lease for the current building ends June 2021. Without mitigation of the structural issues, there is no option to purchase. The foundational shifting is a costly expense that the school is required to cover should it choose purchase the facility. Entering into a new lease of the current building will result in more funding going toward "band-aiding" a building that will continue to move and thus continue to require repair, resulting in an endless cycle of wasted funds that should/could be spent on a new, permanent facility. If this project is not awarded, GVA-N will independently finance the project in multiple phases. GVA-N envisions the initial phase would enable it to operate and function; however, outdoor fields, playgrounds, gymnasium and non-essential facility amenities would be phased in over time.

**Does this Project Conform with the Public School Facility Construction Guidelines?** Yes

**If not, provide an explanation for the use of any standard not consistent with the guidelines:**

### **How Does the Applicant Plan to Maintain the Project if it is Awarded?**

Upon completion of the grant, the GVA-N Board of Directors will appropriate funds for the capital reserve of approximately \$100,000 per year. The Board's facility and committee will continue to meet quarterly to examine both short and long term projects to ensure the facility is well maintained.

The current lease is a triple net lease that requires GVA-N pay for all maintenance and building repairs and, as a result, the school's budget has covered these expenses. Since the lease began in 2011, the school has invested over \$1 million dollars of PPR revenue, excluding annual lease payments, to ensure the facility remained a safe environment for attending students.

**Describe the condition of the public school facility at the time it was purchased or constructed and, if the facility was not new or was not adequate as a public school facility at that time, provide the rationale for purchasing the facility or constructing it in the manner in which you did:**

GVA Northglenn (GVA-N) entered into a lease agreement at the current location in, 2011, its first year of operations. At the time, the facility had shown some signs of previous movement, but nothing severe. In addition, the Landlord had claimed that past water issues were mitigated via a significant amount of money the Landlord had spent on drainage and landscaping around the exterior of the building (which the work was verified as completed prior to entering into the lease). However, despite these representations, GVA-N insured that, should there be future building movements, the Landlord would be responsible for any necessary repairs arising out of ongoing movements. Given that it was communicated to GVA-N at the time of lease execution that the building previous issues had been fixed and given the protections against future movements that were negotiated into the Lease, GVA-N agreed to enter into a lease with the intent of purchasing the facility at some point in the future. As time passed, the facility continued to heave and move, requiring increasingly significant repairs, which

## BEST FY2019-20 GRANT APPLICATION SUMMARIES

have been an ongoing debate with the Landlord as to who is responsible for payment. Although GVA-N is not responsible for any payments, any disputed costs are not large enough to warrant legal avenues at this time. Given this continued movement and the increasing costs of remediation and maintenance, GVA-N sought a permanent solution and purchased land in Thornton. This property affords GVA-N the necessary acreage to construct a new facility that will meet its current student needs, as well as allow for future enrollment growth of up to a maximum of 960 students. GVA-N continues to finance the necessary improvements to ensure the safety of GVA-N's students and staff, but firmly believes the permanent facility solution to be constructed at Thornton location will end the cycle of throwing good money after bad, ensuring future funds may be directed to the classrooms where they belong.

### **Describe the history of capital improvements made to the facility by the district/charter school in order to make it suitable for students. Include a list of all capital projects undertaken in the affected facility in the last 3 years:**

The current facility was previously a call center in Northglenn. GVA-N contracted out to have the facility completely renovated to be suitable as a school campus. As time progressed, the heaving of the slab caused major structural issues. GVA-N had studies performed to address the structural issues. GVA-N also incurred significant remediation costs associated with the structure's movement to ensure the facility remained safe for occupants. Beyond those major investments to provide a safe, educationally suitable environment for the students, additional capital expenditures and ongoing maintenance continue to draw on resources that could otherwise be used to benefit educational programs. Broken out below are the costs associated with capital improvements to the facility as well as the yearly maintenance costs associated with operations for the past five years:

#### Year Amount Per Category Facility Improvements and Annual Maintenance Costs

2014 \$325,362.95 Capital Expenditures for Facility (Improvements to facility, including 7th grade expansion)

2014 \$31,575.86 General Repair/Maintenance for Facility (Electrical, plumbing, and HVAC)

2014 Total \$356,938.81

2015 \$188,914.42 Capital Expenditures for Facility (Improvements to facility to meet 8th grade expansion)

2015 \$41,496.71 General Repair/Maintenance for Facility (Security, electrical and HVAC)

2015 Total \$230,411.13

2016 \$77,821.21 General Repair/Maintenance for Facility (Insulation, painting, security, plumbing, and electrical)

2017 \$114,659.99 Capital Expenditures for Facility (Landscaping of grounds ~ City compliance)

2017 \$179,181.65 General Repair/Maintenance for Facility (Ceiling repairs, electrical, plumbing, heating and security)

2017 Total \$293,841.64

2018\* \$82,440.71 General Repair/Maintenance for Facility (Electrical, security, IT, windows, heating and lighting)

\*Includes \$12,299.95 of expenses paid in January 2019.

### **What options outside of the BEST grant has the applicant investigated or leveraged to address the school's facility needs?**

Existing "conversion" options were explored; however, the tight real estate market made such alternatives very difficult to identify and secure. In addition, the increase of construction costs, real estate costs, and recently tax-exempt bond interest rates impacting Colorado charter schools, new construction options appear to not be viable alternatives at this point without the support of subsidies from other resources. Should the need arise to moved forward without BEST support, GVA-N would consider its options to pursue multiple phases of construction. The initial phase would enable it to operate and function; however, outdoor fields, playgrounds, gymnasium and non-essential facility amenities would be phased in over time.

### **How do you budget annually to address capital outlay needs in your district/charter? Include \$/FTE for the prior fiscal year:**

For school year 2018-19, GVA-N budgeted \$1,431 per FTE to address capital outlay. For school year 2017-18, the cost of capital outlay per FTE was \$1,799, which incorporated the one-time capital outlay to meet City of Northglenn's landscaping requirements.

Below is a summary of these annual budget expenditures:

Water, Sewer & Garbage - \$18,500



## BEST FY2019-20 GRANT APPLICATION SUMMARIES

Snow Removal & Lawn Services - \$42,000  
 Janitorial Cleaning Services - \$61,200  
 Repairs and Maintenance Services - \$100,000  
 Rental of Land & Building - \$686,907  
 Utilities - \$80,000  
 Leasehold Improvements - \$50,000  
 Furniture and Fixtures - \$10,000  
 Capitalized Equipment - \$10,000  
  
 TOTAL - \$1,058,607

**If relevant to your project, what are your current annualized utility costs, and what amount of reduction in such costs do you expect to result from this project?**

As noted in the prior section (Y), GVA currently budgets \$80,000 for utility costs and an additional \$20,000 in telecommunications services. In the prior year the actual expenditures in this category was \$110,000. While we cannot currently determine the exact amount of savings in utilities, we fully expect a reduction in our new facility. The existing facility was renovated from a call center and the new proposed facility will be built using high performance standards and designed from the ground up as a high performing school campus. Beyond utilities, we also plan to see a reduction in the annual costs allocated to facility repairs.

<b>Grant Request:</b>	\$25,159,546.30	<b>CDE Minimum Match %:</b>	27%
<b>Applicant Match:</b>	\$10,782,662.70	<b>Actual Match % Provided:</b>	30%
<b>Total Project Cost:</b>	\$35,942,209.00	<b>Is a Waiver Letter Required?</b>	No
<b>Affected Sq Ft:</b>	83,600	<b>Contingent on a 2019 Bond?</b>	No
<b>Affected Pupils:</b>	891	<b>Source of Match:</b>	2018A Bond Issued in Subseries
<b>Cost Per Sq Ft:</b>	\$429.93		
<b>Soft Costs Per Sq Ft:</b>	\$55.05	<b>Escalation %:</b>	4%
<b>Hard Costs Per Sq Ft:</b>	\$374.88	<b>Construction Contingency %:</b>	5%
<b>Cost Per Pupil:</b>	\$40,339	<b>Owner Contingency %:</b>	5%
<b>Gross Sq Ft Per Pupil:</b>	94	<b>Historical Register?</b>	No
<b>Is a Master Plan Complete?</b>	No	<b>Adverse Historical Effect?</b>	No
<b>Who owns the Facility?</b>	3rd Party	<b>Does this Qualify for HPCP?</b>	Yes

**If owned by a third party, explanation of ownership:**

GVA-N subleases from the Global Village Academy Northglenn Building Corporation, a 501c3 non-profit corporation, which leases from building owner.

**If match is financed, explanation of financing terms:**

In December of 2018, GVA-N via the Global Village Academy – Northglenn Building Corporation (a non-profit corporation) the “Corporation” issued through Colorado Educational and Cultural Facilities Authority, Charter School Revenue Bonds, Series 2018A. Subseries 2018A-1 in the amount of \$2,540,000 was initially issued to finance the purchase of land located at 12525 Grant Drive, Thornton, Colorado. The 2018A Bonds may be issued in “subseries” to facilitate the construction of a new school on said property.

### Financial Data (Charter Applicants)

<b>Authorizer Min Match %:</b>	25%	<b>CEFCA or financing attempts:</b>	0
<b>&lt; 10% district bond capacity?</b>	NA	<b>Enrollment as % of district:</b>	NA

## BEST FY2019-20 GRANT APPLICATION SUMMARIES

<b>Authorizer Bond Attempts:</b>	NA	<b>Free Reduced Lunch %</b>	45.4%
<b>Authorizer MLO Attempts:</b>	NA	<b>% of PPR on Facilities:</b>	8%
<b>Non-BEST Capital Grants:</b>	0	<b>Unreserved Gen Fund % Budget:</b>	20.94%
<b>FY18-19 CSCC Allocation*:</b>	\$212,945.62	<b>3yr Avg OMFAC/Pupil:</b>	\$1,439.70

\*CSCC Allocation figures are based on a \$25M statewide appropriation. Pending legislation may to revise to \$29.25M

**Who will facility revert to if school ceases to exist?** In the unlikely event that GVA-N ceases to exist, the facility would go to bond holders.

● **Facilities Impacted by this Grant Application** ●

**MAPLETON 1 - Valley View ES New School Replacement - Valley View ES - 1959**

<b>District:</b>	Auditor - Mapleton 1
<b>School Name:</b>	Valley View ES
<b>Address:</b>	660 West 70th Avenue
<b>City:</b>	Denver
<b>Gross Area (SF):</b>	35,690
<b>Number of Buildings:</b>	3
<b>Replacement Value:</b>	\$7,928,009
<b>Condition Budget:</b>	\$4,742,340
<b>Total FCI:</b>	0.60
<b>Adequacy Index:</b>	0.16



**Condition Budget Summary**

System Group	Replacement Cost	Requirement Cost	SCI
Electrical System	\$799,584	\$751,133	0.94
Equipment and Furnishings	\$259,840	\$256,514	0.99
Exterior Enclosure	\$832,837	\$486,530	0.58
Fire Protection	\$10,935	\$149,250	13.65
HVAC System	\$1,091,504	\$1,190,939	1.09
Interior Construction and Conveyance	\$2,289,668	\$538,750	0.24
Plumbing System	\$265,017	\$320,905	1.21
Site	\$1,241,772	\$1,175,933	0.95
Special Construction	\$378,434	\$0	0.00
Structure	\$758,418	\$20,705	0.03
<b>Overall - Total</b>	<b>\$7,928,009</b>	<b>\$4,890,659</b>	<b>0.62</b>

# BEST FY2019-20 GRANT APPLICATION SUMMARIES

**Applicant Name:** MAPLETON 1

**County:** Adams

**Project Title:** Valley View ES New School Replacement

**Applicant Previous BEST Grant(s):** 4

**Has this project been previously applied for and not funded?** Yes

**If Yes, please explain why:** An application for funding for Valley View's replacement building was submitted in 2018. Overall, support for the grant was positive and the project was shortlisted, however, the BEST program funds were not sufficient to cover all shortlisted projects.

## Project Type:

- |  |   |   |  |
|--|---|---|--|
| <input type="checkbox"/> New School                    | <input type="checkbox"/> Roof               | <input type="checkbox"/> Asbestos Abatement | <input type="checkbox"/> Water Systems     |
| <input checked="" type="checkbox"/> School Replacement | <input type="checkbox"/> Fire Alarm         | <input type="checkbox"/> Lighting           | <input type="checkbox"/> Facility Sitework |
| <input type="checkbox"/> Renovation                    | <input type="checkbox"/> Boiler Replacement | <input type="checkbox"/> Electrical Upgrade | <input type="checkbox"/> Land Purchase     |
| <input type="checkbox"/> Addition                      | <input type="checkbox"/> HVAC               | <input type="checkbox"/> Energy Savings     | <input type="checkbox"/> Technology        |
| <input type="checkbox"/> Security                      | <input type="checkbox"/> ADA                | <input type="checkbox"/> Window Replacement | <input type="checkbox"/> Other             |

## General Information About the District / School, and Information About the Affected Facilities:

The mission of Mapleton Public Schools, an innovative, diverse and deeply rooted learning community, passionately committed to the uniqueness and potential of each student, is to guarantee that all students can achieve their dreams and contribute enthusiastically to their community, country and world. Most of Mapleton's 6,673 students (reported without Mapleton's online partnership school, Colorado Connections Academy) live in unincorporated Adams County. In the 2018-19 school year, 68% of students receive free/reduced lunch and 45% are learning English as a second language.

Mapleton has a long history of education reform. In 2001, troubled by flat test scores and declining graduation rates, leaders recognized the traditional system was failing students. In 2004, after community-wide strategic planning, Mapleton introduced a system of choice offering families a menu of small-by-design schools with varied instructional models.

Today, instructional models include Expeditionary Learning (EL), Big Picture, International Baccalaureate, STEM, Leadership, Community, Workshop and University Partnership, among others. There are no default neighborhood schools. Families use a variety of tools, including websites, school visits and discovery fairs to choose the school that will best meet their needs. Mapleton maintains a comprehensive transportation plan that buses students living within district boundaries to their school of choice.

Evidence of success:

- Graduation rates have increased for the fifth year in a row.
- Enrollment rates have increased for the seventh year in a row.
- The college acceptance rate has increased from 70% in 2006 to 98% in every year since 2010.
- ACT scores increased from 14.4 in 2005 to 19.2 in 2016.

In 2010, Mapleton embarked on a multi-year capital construction campaign to address the district's aging facilities. With support from the community and the state's BEST program, Mapleton has improved many of the District's school buildings. In 2016, a District Facilities Taskforce, made up of more than 100 community members, studied state facility assessments and determined there was an urgent need for improvements at several school buildings. Our community has supported facility improvements up to the verge of its bonding capacity, yet Mapleton is still more than \$70M short of the total dollar amount necessary to address all of the urgent needs.

Valley View, a K-8 building constructed more than 60 years ago, is in dire need of replacement. Valley View was constructed in 1959. One addition, a library space, was constructed in 1993. In 2001, a modular classroom was added to the east of the building. In 2004, a one-story detached structure, referred to as the annex, was added to the west side of the building.

This grant would support the replacement of Valley View, moving Mapleton into the third phase of our district's Master Plan.

## BEST FY2019-20 GRANT APPLICATION SUMMARIES

Valley View has an average FCI of .53. Mapleton has explored renovating this building, but given the costs to address the significant health, safety, security and technology issues, there is no responsible fiscal merit to this approach. This important school building replacement will be made possible in part by the 2016 community-supported bond but will not be possible without BEST support.

Although the student population continues to decline because of poor facility conditions, Valley View currently serves 374 students in grades K-8. Of those students, 74% receive free/reduced lunch and 43% are learning English as a second language. Many students who attend Valley View live within one mile of the school. This school uses a Workshop model to support student learning, which provides opportunities for collaboration, discussion and independent learning.

### **Deficiencies Associated with this Project:**

The deficiencies at Valley View present daily health, safety and security hazards. The building and its operating systems are functioning well beyond life span, and 'Band-Aids' are no longer a fiscally responsible or safe solution. From the extensive health and life safety issues presented by the lack of a designated bus loop and drop off area, to poor air quality within the building, to serious site security and safety issues presented by the building's disjointed layout and deteriorating/rotting foundation, Valley View's deficiencies are extensive and pressing. The issues also create ongoing financial problems for the district, which will soon be spending a disproportionate amount of its maintenance budget to keep the building functional.

### **LIFE AND HEALTH SAFETY ISSUES - SITE:**

Valley View's main entry faces west 70th Avenue, a heavily traveled, four-lane road. Use of west 70th Avenue has increased substantially as unincorporated Adams County has continued to experience a population boom. Travelers use 70th Avenue to access several major highways and interstates. Heavy traffic on this road is constant, especially during busy student drop-off and pick-up times.

The student drop-off and pick-up area, located within the main parking lot, is extremely congested, challenging and ultimately dangerous, in part because this lot was not designed to accommodate student drop-off and pick-up. To get to school, students coming from the surrounding neighborhoods must cross the busy, four-lane street and weave through rows of cars navigating a congested makeshift kiss-and-go-lane. This dangerous combination of cars and kids has resulted in one near tragic accident involving three students, as well as several near misses. Four years ago, three students walking through the parking lot to access the sidewalk during dismissal were struck by a car and pinned between the car's bumper and the school wall. The unfortunate and horrific accident permanently injured all three students. Only one of the students involved in the accident was able to return to Valley View. The other two students had to transfer to different Mapleton schools because Valley View is not ADA accessible and could not accommodate their accessibility needs. Future similar accidents are a major worry, as precautionary measures have been exhausted and many young students continue to regularly access the school through the parking lot, walking among cars that are entering, exiting, or attempting to park in a small, crowded space.

There is no designated bus drop off loop at Valley View, so students must exit and board the bus on Fox street, just off of 70th Avenue, next to the school. This creates congestion in the neighborhood and dangerous situations for students, parents and neighbors. Parents often park on the opposite side of the street of the buses and students walk through parked buses as well as neighborhood traffic to get to their parents. This is a significant and daily safety risk for Valley View students. Because buses are parked in the neighborhood, the school does not have a safe, designated area for students to wait to get on the bus after school. Teachers must dedicate the last several minutes of school every day - valuable class time - to escorting students outside one classroom at a time as to not overwhelm the sidewalk with students and create an even more dangerous situation.

### **SITE/SECURITY HAZARDS, UNSECURED ENTRY WAYS:**

Valley View's disjointed layout presents severe safety and security issues, including several unsecured entryways and an overall inability for adequate site supervision.

Valley View's layout makes it difficult to supervise the various entryways and one overcrowded hallway used by all nearly 400 students, 30 staff members, as well as parents and visitors. None of the entry points to the school building have any line of sight from the main office. There is also no line of sight from the main office to the play spaces on the south side of the building. The one main hallway supports all student traffic, making for a crowded and potentially hazardous situation during

## BEST FY2019-20 GRANT APPLICATION SUMMARIES

the busy passing periods and arrival and dismissal times.

Although there is a buzzer system at the main entrance, there is no line of sight from the front door to the main office. There is also no lockdown system in the foyer. If an intruder were to enter the building it would be possible for the intruder to get near or even into classrooms before being noticed by office staff, as the only view to the front entry is a small window from the director's (principal) office. There are currently three rooms between the entry and the main office that are accessible and completely out of the line of sight of the main office.

The annex is separated from the main building by a narrow, unsupervised pedestrian alley. There are no safety and security measures in place between the annex and the main school building. The alley is fenced off on the north side but must remain unlocked on one side to allow for playground access, to serve as an emergency exit and comply with safety codes. All students in all grade levels must regularly pass between the unsupervised alley to access the gym, cafeteria, main office, intervention services, art, performing arts, and other programming. On any given day, the alley is used upwards of 1,000 times by students and staff. The doors accessing both the annex and the main building have no line of sight from administration or any classroom. Anyone entering school property from the large open field to the south of building could access the annex or the main building through the unlocked gate. There is also a blind alcove that would make it possible for an intruder to hide from school officials or law enforcement.

The south entry doors, which are locked by a keypad, are used frequently throughout the day by staff coming in and out of the staff parking lot, staff moving students to and from the playground and field and by staff welcoming students arriving by buses in the morning or releasing students to the buses in the afternoon. Parents choosing to drop their students off in the neighborhood also use the south doors as a main access point. Because there is such a high volume of staff, student and parent traffic, the keypad code is often compromised and is changed frequently. Still, the door is frequently found unlocked. There is no line of sight from the main office to the south entry doors and the doors are not monitored by visual controls. An intruder could easily sneak into the building and access classrooms without being noticed. Also, Valley View staff are never sure who has knowledge of the keypad code.

The modular classroom, located to the east of the building, has no line of sight from any classroom or administration and is not monitored by visual controls. As with all of Valley View's entry points, an intruder could easily enter this building undetected.

Valley View is located on 8.7 acres. The security fence around the field, playground and school building is in disrepair and has multiple entry points that have been breached, undermining security. Valley View has had several instances of vagrants walking through the neighborhood coming onto school property. Dogs and other animals frequently run onto the playground. Over the past six years, dozens of work orders have been filed through Mapleton's Operations Department to repair new and reoccurring holes in the fence and broken gates. While we have been fortunate to not have a serious event occur on campus, the playground and play areas are unsecure and are not easily monitored. This puts the Valley View community at risk of many dangerous occurrences, including child abduction, and underscores the need for a more secure building.

### INADEQUATE AIR QUALITY CONTROL:

Classrooms in Valley View are rarely at a comfortable temperature conducive to learning--they are either too cold or too hot. It is difficult to maintain comfortable heating in the main school building and gym/cafeteria space because of the poor condition of the HVAC equipment, which is approaching the end of its useful life, according to the Colorado Department of Education Facility Assessment. When the heat does come on, classrooms can often warm up to 90 degrees. When the heat does not come on, classrooms can get so cold, parents have donated blankets and coats for students and staff to wear during the day just to stay comfortable. The unit heaters in the classrooms were installed in the mid-1990s. Some classrooms have noisy, disruptive radiators that squeak and are beyond repair. The cafeteria/gymnasium is heated by ceiling mounted unit heaters that are not controllable from the ground and must be adjusted manually, which is not easy to do during the school day or when temperatures change quickly. This means the space is often uncomfortable. Additionally, because of the lack of air exchange and makeup air in the building, tempered fresh air is not an option for students and staff. The district has done what it can to regulate the temperature by replacing windows with double pane glass and adding insulation above the ceiling. Classrooms in the main building are often reported as having a "musty" smell, which might be caused by the buildup of

## BEST FY2019-20 GRANT APPLICATION SUMMARIES

condensation up between the interior roof insulation. Additionally, testing demonstrated the general air quality at Valley View is poor. To address this issue, the District would need to upgrade the entire mechanical system, a costly and significant undertaking for a building that has other substantial health and safety issues. Because the air quality problem does not represent an isolated issue, addressing it in isolation would not be a responsible use of the District's limited funds.

### STRUCTURAL DEFICIENCIES - ANNEX:

The annex, which serves as the middle school classroom wing, has excessive settlement on all four sides and is pulling away from the concrete. The wood foundation is rotting away, as there is no proper drainage and site sidewalks drain back into the building at various places. There is a noticeable two-inch drop in the foundation around the stairs and a three-inch drop in the foundation in other areas of the building. The rotting and separating foundation create numerous entry points for large amounts of water, as well as spiders, mice and other pests that impact the quality of learning for Valley View's 6th - 8th grade students. Students often report finding mouse droppings, spiders and other insects inside their desks, in books and on bookshelves, and throughout the classroom.

Site drainage is of particular concern, as there is often a pool of water near the building's exterior electrical equipment. In inclement weather, the settlements create ice hazards on the walkways around the building. The sinking concrete has created numerous tripping hazards around the annex in highly-trafficked areas by students and staff.

### UNSAFE BATHROOMS:

The main school building does not have the appropriate number of bathrooms required by current code. The current building only has half the number of bathrooms required to serve the number of students in the building, and the bathrooms are not ADA compliant. The health office does not have a bathroom and the only bathroom designated for adults is shared with students needing to access the health office. The kindergarten classrooms also do not have bathrooms. The bathrooms in the main building frequently clog and flood, making them inaccessible and causing an offensive odor throughout the building. When the bathrooms in the main building are closed, which has happened almost monthly this school year, younger students have to travel outside to use the bathrooms in the annex, which were designed for and are used by middle school students. For safety reasons, teachers do not allow younger students to use these bathrooms alone, so teachers must stop their lessons and escort the entire classroom to the restrooms, disrupting learning.

The bathroom floors are VCT and have significant water damage, allowing water and urine to seep under the VCT tiles. This makes the bathroom floors essentially unable to be fully and completely cleaned. The bathrooms, as well as the main hallway, main office and nearby classrooms all smell of urine. Neither the boys or girls bathrooms have the code required makeup air or air exchanges and there are no exhaust systems to ventilate the bathrooms. This contributes to the poor air quality noticed throughout the main building.

The single designated staff toilet, which is also the only ADA accessible toilet, is down a hallway that is too narrow to be accessed by someone in a wheelchair.

The floors in both restrooms in the annex building are deteriorating and pulling away from the foundation. Some of the stalls need to be replaced entirely, making the space difficult to clean and thus contributing to the overall poor air quality in the annex. When the bathroom in the main building clogs, this bathrooms in the annex are the only bathrooms available to the nearly 400 students at Valley View.

### TECHNOLOGY:

As noted in the CDE Facility Assessment report, Valley View does not have a designated computer lab and many classrooms, including the library, do not have adequate casework or technology equipment. The building layout, systems and electrical capacity create daily difficulties in incorporating technology into the educational environment. Problems with internet connectivity make it hard of Valley View to fully embrace 21st-century learning, as well as many of the initiatives adopted by the Board of Education to enhance student learning.

### ELECTRICAL:

Significant electrical issues exist in all areas of Valley View's main building. In the hallway, drinking fountains leak onto

## BEST FY2019-20 GRANT APPLICATION SUMMARIES

exposed electrical connections. When students are using the water fountain, water sprays onto the exposed electrical receptacles. Classrooms have very few outlets, forcing teachers to use power strips and extension cords, often to a dangerous extent. This strain on the limited electrical system has been cited in numerous fire inspection notices. To approximate a 21st-century learning environment, teachers are using 2-prong to 3-prong converters to plug in LCD/Doc cam carts. The weight of the converters is causing outlets to sag, exposing live wires.

### ASBESTOS:

An assessment by RHL Engineering found asbestos in pipe fittings, pipe insulation, ceiling tiles, floor tiles, door and window caulking, and block filler. A serious safety concern is asbestos-containing floor tiles that have the potential for damage. Other concerns include soffit caulking, ceiling tiles, soffit panels, and the boiler.

### LACK OF ADA COMPLIANCE:

Valley View is not ADA compliant. No part of the building is accessible to a handicapped person, which is inconsistent with Mapleton's school of choice design, as students with certain needs cannot select to attend Valley View. Multiple students with accessibility needs in our district are unable to select Valley View as their school of choice because we are unable to accommodate them. The modular does have a ramp, however the structure lacks handrails, doors, clearance and additional hardware that would make the building and classrooms accessible. Also, it is worth nothing that the CDE Facility Assessment report cited the ramp to be operating beyond its life expectancy. The bathroom in the modular is also not handicapped accessible due to clearance and access.

### OUTDATED KITCHEN SYSTEMS:

The kitchen area, which is located in the shared gym/cafeteria space, is congested and small, making it difficult to implement the District's healthy, from-scratch food initiative. The kitchen equipment is outdated, the kitchen floor does not meet code and the VCT has significant water damage. The tiles on the kitchen floor are separating, which allows water to seep under it creating a prime habitat for mold.

### FIRE ALARM SYSTEM:

The fire alarm system is outdated and does not meet code. The fire alarm system sounds intermittently, nearly five times a month. The school district and fire department have been unable to determine if this is caused by faulty wiring or a control issue.

### EDUCATIONAL SUITABILITY:

Instructionally, Valley View is trending in the right direction, however curriculum, technology and 21st century learning opportunities are all fettered by the current condition of the building. Additionally, many of the initiatives adopted by the Board of Education to improve learning outcomes for students cannot be implemented with fidelity because of space limitations. Originally designed as a K-5 school, many classes are held in rooms that do not match the instruction taking place. For instance, the middle school science classroom is located in the annex. The room has no running water or the capacity for science laboratory work. Students must carry buckets of water to and from the bathroom to conduct experiments. None of Valley View's middle school students have access to appropriate, modern science facilities. Many experiments required at this grade level cannot be done, or are done in a limited capacity, causing many students miss out on the learning experience. Because of room limitations, orchestra, band and choir are taught in the teacher's work space. Art is held in the modular building, which has a carpeted floor, not conducive to K-8 art projects. There is no designated space for confidential special services, including counseling services and testing. School psychologists meet with students with no sound separation.

### SHARED GYM/CAFETERIA SPACE:

The shared gym/cafeteria space creates a multitude of inefficiencies that impact the learning environment in many negative ways. To ensure all students have an opportunity to eat, the time the physical education teacher can actually use the gym is severely limited. No physical education class can be scheduled between 11 a.m. and 12:35 p.m. Often, physical education class must start outside while staff clean up after lunch. Lunch hours and eating time have been compressed as much as possible to allow for all grades to have physical education. On indoor recess days, students are confined to classrooms and do not get those very valuable opportunities to move around. The food serving line extends outside of the gym, creating congestion and a dysfunctional serving area.



# BEST FY2019-20 GRANT APPLICATION SUMMARIES

## Proposed Solution to Address the Deficiencies Stated Above:

Mapleton Public Schools initially considered renovating Valley View but recognized quickly that the cost of renovating the building was far greater than replacing the facility. Educational buildings are generally constructed with a 50-year life expectancy. This building has more than exceeded its life span. Built in 1959, the building is 60 years old. One addition was constructed in 1993, and minimal renovations have been done to the main building in the last six decades. The annex, which is a detached building, is considered to have a 20-year life span, but the site and structural failures, such as the rotting wood foundation and poor site drainage, have undermined that life span. Any renovation would fail to address the site and building safety issues, including the parking lot, lack of bus drop-off, and site security. An assessment by RLH Engineering, Inc. found asbestos in floor tiles, ceiling tiles, soffit caulking, transit soffit panels, boiler pipe fittings, pipe insulation, door and window caulking and block filler. Therefore, asbestos abatement costs would be extensive in the case of renovation. There is no cost-effective way to retrofit the building to make it ADA compliant because it is asbestos-coated masonry construction. The district also realizes it would be difficult to fix the many safety and security issues created by Valley View's site layout through renovation alone. After much consideration and review, the district decided a replacement building is the only fiscally and educationally sound solution to the aforementioned issues.

The solution to the long list of building deficiencies is a new replacement building. This new building will be constructed approximately where the current building sits, but rotated 180 degrees so that the main entry, parking lots and drop-off and pick-up lanes will be orientated to the south. This location is best because it addresses many of the site safety and security issues addressed in the deficiency section. For example, having the main entry facing south allows the school to move all parent and bus traffic off of 70th Avenue and Fox Way, out of the neighborhood and onto the school site. The new orientation also improves the line of sight from the main office to the main entry, parking areas, and play area by making those areas visible from the main office and administration offices. South-facing parking areas also help to prevent dangerous ice buildup common with north-facing parking lots during the winter months. There are many additional building solutions and site improvements that come from keeping the building on the north end of the property and orienting the main entrance toward the south.

### LIFE SAFETY:

- The revised site plan includes secured and supervised entryways and supervised playground entryways to the south.
- The revised site plan adjusts traffic patterns, moving the main entrance away from the busy 70th Avenue, as well as creating designated drop-off and pick-up lanes and bus lanes to remove congestion from the neighborhood streets. The new site plan allows all site circulation to come onto the site instead of crowding 70th Avenue and Fox Street.
- The new building would provide both passive and active security features that meet today's school security requirements. Passive security features include a clear view by the administration to visitors entering the building, a reduction in the number of entrances, and simple, supervisable circulation. Active security features include electronic locks at the entry vestibule, requiring visitors to check into the office, and an intercom system that allows for frequent and timely communication in emergency situations.
- The master plan of the site eliminates the student safety problems associated with moving between the main building, the annex and the modular by removing the modular and annex and bringing all grade levels together in one building. The new building design will ensure high levels of visibility and active security at each entrance.
- The new classrooms will be designed with ample visibility, allowing staff to see into classrooms easily, while also providing safe spaces out of sight in the case of an active intruder.
- The building design includes simple hallways for easy supervision.

### HEALTH SAFETY:

- The new systems would be built up to modern codes and would meet CHPS requirements, creating spaces that maximize health benefits to students, staff and the community.
- The updated systems in the new building would resolve all air quality control issues, creating safe and comfortable learning spaces.

### TECHNOLOGY:

- The building design includes adequate power and learning spaces to meet the 21st-century learning needs of all students and staff.

# BEST FY2019-20 GRANT APPLICATION SUMMARIES

## EDUCATIONAL SUITABILITY:

- The new building will be 60,000 square-feet and designed to accommodate 482 students in grades PreK-8. The new building will include many spaces the current building does not have, as well as preschool classrooms to meet the strong and growing demand for preschool in the community. The new building will be designed to have appropriate intervention spaces and support areas that are lacking in the current building. This design will also "right-size" the classrooms, to ensure students are able to receive the best instruction in learning environments designed for their age and needs.

## Classrooms include:

- Preschool (2) (Not in current building)
- Kindergarten (3)
- 1-2 classroom (4)
- 3-4 classroom (4)
- 5-6 classroom (4)
- 7-8 classroom (3)
- Special education classroom (Not in current building)

## Education support areas include:

- Music room (Not in current building)
- Art room (Not in current building)
- Science rooms (Not in current building)
- Language room (Not in current building)
- Gym (Not in current building)
- Sensory space/Intervention classroom (Not in current building)

## Core spaces include:

- Reception area
- Director's office
- Assistant Director's office
- Teacher workroom
- Clinic w/restroom (Not in current building)
- Mothers room (Not in current building)
- Conference room (Not in current building)

## Support spaces include:

- Custodial spaces
- Staff restrooms
- Student restrooms
- Electrical room
- Mechanical room

## OTHER:

The building will be fully ADA accessible, in contrast to the current building, which lacks ADA accessible paths of egress and restrooms.

## How Urgent is this Project?

Mapleton Public Schools cannot wait any longer to address the significant and severe deficiencies present at Valley View. We cannot continue to expose our students to the risks of an increasingly unhealthy and unsafe learning environment. There are no temporary solutions, or quick fixes available to address the deficiencies of this building. Valley View is a popular school model and is loved by the community and Mapleton families. Families want to choose this school, but the condition of the building is sometimes causing them to choose other schools in the district. Mapleton is a district of choice where students are

## BEST FY2019-20 GRANT APPLICATION SUMMARIES

supported by schools that cater to their needs, interests and learning styles. Because Valley View is not ADA compliant, this school cannot be an option for many students.

### LIFE SAFETY:

The condition of the building continues to decline. Since our first Valley View BEST application, the foundation around the annex has continued to sink and is down more than an inch in just one year. Water continues to drain below the building, causing the foundation to rot. The damage is extensive and has caused the annex to be infested with mice and other pests.

There is no way to renovate the building and existing layout to address the unsecured entryways. This safety issue will be an ongoing concern until a replacement of the building can be achieved. Because programming space is already limited, students will need to continue to travel between the main building and the annex. Valley View students will not be protected until a better layout can be provided.

Mapleton has tried to accommodate a safe drop-off and pick up area as much as possible, however, there is no feasible way to modify the existing drop-off/pick-up area given the current site, the surrounding parking lot and the school entry points. Traffic will only continue to increase along 70th Avenue, and parents will continue to navigate the congestion and chaos as best they can in order to get their children to school. This will continue to be a growing risk for the Valley View community.

### HEALTH SAFETY:

Since our 2018 BEST grant application, issues with the one restroom in the main building persist, contributing to the overall poor air quality within the building. With the HVAC systems approaching the end of useful life, classroom temperatures are irregular. To maintain comfort during the winter months parents have donated blankets and coats to help keep kids comfortable as they learn.

The fire alarm systems continue to activate unpredictably for reasons unknown to both the district and the fire department. This electrical issue puts all students at risk when vacating the building multiple times per month.

### EDUCATIONAL SUITABILITY:

Valley View pride is real and deep in Mapleton. Families would like to choose to send their children to Valley View, but sometimes make other decisions when they find that the condition of the building is so poor. Although the school has experienced a slight decline in enrollment due to the conditions of the building, Valley View's location and school model make it a preferred and popular choice for families. An improved facility is necessary to for Valley View to function with Mapleton's school of choice model and to provide for the educational needs of Mapleton students wishing to attend Valley View.

The Mapleton community is committed to reinvesting in our schools and showed their support by approving a bond in 2016. This bond, \$150M, is the largest bond in district history and puts us right at the limit of our bonding capacity. Unfortunately, even with this amazing show of support from our community, we are still more than \$70M short, as the district's buildings have more than \$220M in needs.

With the required match already in hand, BEST funds are necessary to help us stretch our dollars and bring quality learning spaces to students in all corners of our district.

**Does this Project Conform with the Public School Facility Construction Guidelines?** Yes

**If not, provide an explanation for the use of any standard not consistent with the guidelines:**

This project is a replacement building of an existing elementary building being used as a PreK - 8th grade. This project conforms to CDE Public School Facility Construction Guidelines 1 CCR 303(1) and would be considered a combination of a traditional ES and traditional MS.

4.1 - The replacement building, and associated site work, will comply with all guidelines of section 4.1: Health and safety issues.

Exceptions:

4.1.16 Severe Weather Preparedness: This project does not intend to have a designated emergency shelter.

## BEST FY2019-20 GRANT APPLICATION SUMMARIES

4.2 - The replacement building will allow for complete compliance with all guidelines of section 4.2, Technology.

4.3 - The proposed project meets the CDE Public School Facility Construction Guidelines section 4.3: Building site requirements, including functionality and capacity. The master planning team collaboratively developed a program for the school to meet the overall goals of the school and district vision. The proposed plan is based on this program and will provide learning environments that meet and exceed state model content standards.

The project is a combination of "Traditional EM" and "Traditional MS" identified in section 4.3.1 of the Public School Facility Construction Guidelines. The project will also include space for 2 preschool classrooms.

4.3.1.1 - Minimum occupancy requirements: The current enrollment is 374 students. Interpolating the Median GSF per pupil chart of a traditional ES and traditional MS, the minimum total square footage with two preschool classrooms is recommended to be 57,700 square feet. The school district's central enrollment ("school choice") system will direct students to this school to fill 2 classrooms per grade for a max total of 482 students. Interpolating the Median GSF per pupil chart of a traditional ES and traditional MS, the minimum total square footage with two preschool classrooms, in this case, would be recommended to be 67,800 square feet. The proposed project is 60,000 square feet.

The school typically has class sizes of 16 to 25 students. Classrooms are sized for 25 students using the recommended SF/pupil (32 SF/pupil primary, 30 SF/pupil secondary) and are larger than the minimum classroom size of 675 SF. Planned classrooms are 850 SF.

In addition to standard classrooms, and following the minimum recommendations, the addition includes (1) science room, (1) music room, (1) art room, a STEM/tech lab, special education rooms, gymnasium, and media center.

The cafeteria meets median size requirements. The project does not include an auditorium. The district maintains a shared auditorium off-site.

The program also includes administrative areas, offices, clinic, bathrooms, conference room, reception area and building support areas to accommodate the educational program. These are centrally located for students and staff.

4.4 - Building performance standards: The proposed addition will meet the Performance Certification Program (HPCP) policy adopted by the Office of the State Architect.

4.5 - Historic Significance: The existing buildings do not have historical significance according to the Colorado Historic Society.

### **How Does the Applicant Plan to Maintain the Project if it is Awarded?**

For the 2018-19 school year, Mapleton Public Schools had an Operations and Maintenance budget (including utilities) of \$5,960,601. This is approximately \$953 per funded pupil (excluding Colorado Connections Academy, Mapleton's online contract school). The actual expenditures for Operations/Maintenance over the past six years are as follows:

2012-13:

Salaries: \$2,098,628

Benefits: \$603,524

Purchased Services: \$874,222

Supplies and Materials: \$1,229,051

Property: \$35,690

Other: \$1,379

Total O & M: \$4,842,494.

2013-14:

Salaries: \$2,226,876

Benefits: \$668,014

Purchased Services: \$1,271,480

Supplies and Materials: \$1,355,246

Property: \$8,885

## BEST FY2019-20 GRANT APPLICATION SUMMARIES

Other: \$1,935  
Total O & M: \$5,532,436.

2014-15:  
Salaries: \$2,246,779  
Benefits: \$694,820  
Purchased Services: \$1,088,686  
Supplies and Materials: \$1,272,322  
Property: \$25,073  
Other: \$1,574  
Total O & M: \$5,329,254.

2015-16:  
Salaries: \$2,421,242  
Benefits: \$771,513  
Purchased Services: \$874,914  
Supplies and Materials: \$1,147,331  
Property: \$12,914  
Other: \$2,139  
Total O & M: \$5,230,053.

2016-17:  
Salaries: \$2,395,905  
Benefits: \$770,089  
Purchased Services: \$1,089,533  
Supplies and Materials: \$1,187,841  
Property: \$6,782  
Other: \$3,025  
Total O & M: \$5,453,175.

2017-18:  
Salaries: \$2,478,226  
Benefits: \$801,159  
Purchased Services: \$973,018  
Supplies and Materials: \$1,141,121  
Property: \$34,682  
Other: \$3,000  
Total O & M: \$5,431,206.

As with most non-instructional district budgets, Operations and Maintenance allocations have fluctuated over the past several years due to pressures on other aspects of the district mission, namely improving instruction, increasing opportunities and raising student achievement. Some of the cuts to services come from contracted services, such as plumbing services, roofing services, and lawn services, as well as reductions in supplies and materials. District needs have been assessed and prioritized based on a hierarchy of impending needs to address adequate safety and security of students.

Mapleton also allocates funds to a Capital Reserve Fund, as required by state law, for the purpose of funding capital project needs of the district. Mapleton maintains a five-year operational plan which prioritizes larger capital improvements, major equipment purchases, and transportation fleet upgrades based on the urgency of need. The Capital Reserve Fund was budgeted over the past six years, as follows:

2012-13 Capital Reserve:  
Total Allocation: \$1,959,672

## BEST FY2019-20 GRANT APPLICATION SUMMARIES

Student FTE: 6,043  
Allocation Per Pupil: \$324.

2013-14 Capital Reserve:  
Total Allocation: \$1,030,062  
Student FTE: 5,786  
Allocation Per Pupil: \$178.

2014-15 Capital Reserve:  
Total Allocation: \$2,340,600  
Student FTE: 5,836  
Allocation Per Pupil: \$401.

2015-16 Capital Reserve:  
Total Allocation: \$1,390,000  
Student FTE: 5,870  
Allocation Per Pupil: \$237.

2016-17 Capital Reserve:  
Total Allocation: \$1,748,541  
Student FTE: 5,896  
Allocation Per Pupil: \$296.

2017-18 Capital Reserve:  
Total Allocation: \$1,350,000  
Student FTE: 5,978  
Allocation Per Pupil: \$226.

For 2018-19, the Capital Reserve Fund budget is \$1,818,255, or \$304 per funded pupil. This allocation would have been higher were it not for several buildings in the district undergoing major renovations or replacements as a result of the ongoing construction program. A large percent of these funds are dedicated to facilities repairs and improvements. These funds may be used for HVAC projects, plumbing, roofing, fencing, painting, and other capital site improvements. Another \$20,000 for repairs and maintenance is found in the Insurance Reserve Fund to cover the cost of uninsured damage property.

The district is not able to budget for Valley View's replacement building in its capital reserve or construction budgets; nor is Mapleton's annual per-pupil funding sufficient to address the district's extensive facility needs while supporting the operating costs of educating students in the district. Currently, the bulk of the capital budget is taken up by ongoing repairs to older building systems that have not yet been addressed by the 2016 bond. However, the current size of our annual capital reserve budget is more than sufficient to maintain and prolong the life of school buildings, especially as our buildings are renovated and/or replaced. Planning future expenditures for routine items such as HVAC maintenance, necessary roof repairs, and periodic upgrades to interior finishes will ensure the new building serves many generations of students.

The new PreK-8 building is an estimated 60,000 square feet upon completion. In order to ensure that the building is properly maintained, the district will create a specific maintenance plan to ensure the long-term viability of the facility (routine inspections, maintenance schedule, etc.). The district's staff includes a groundskeeper, locksmith, plumber, electrician and a designated HVAC technician for the building. The building will also have dedicated custodial staff (staffing is designated per square foot). All staff will be trained on all of the new systems to ensure that staff are able to maintain the facility. Given maintenance costs for the existing facility, the district estimates that it would actually cost less to maintain a new facility. In the current building, most of the systems are failing and the preventative maintenance plan has become nearly irrelevant.

**Describe the condition of the public school facility at the time it was purchased or constructed and, if the facility was not new or was not adequate as a public school facility at that time, provide the rationale for purchasing the facility or constructing it in the manner in which you did:**

## BEST FY2019-20 GRANT APPLICATION SUMMARIES

The facility has been owned and operated by Mapleton Public Schools since its construction in 1959. It was built according to the school construction standards in place at that time; standards have changed significantly over the intervening 60 years. The facility has been used as a public school building since its construction.

**Describe the history of capital improvements made to the facility by the district/charter school in order to make it suitable for students. Include a list of all capital projects undertaken in the affected facility in the last 3 years:**

No major capital projects have been undertaken within the last three years. In 1993 a 2,682 square-foot library was added. In 2001, a modular classroom was added to the east side of the building. In 2004 a detached classroom addition was installed on the west side of the building.

**What options outside of the BEST grant has the applicant investigated or leveraged to address the school's facility needs?**

Mapleton has pursued several options outside of BEST to finance this project. Mapleton has investigated Certificates of Participation (COPS), but does not have property available to collateralize due to previous COPS projects. Mapleton has also pursued forward delivery agreements, but has already taken advantage of such an agreement and therefore cannot do any additional agreements. The district has explored re-financing existing debts. The district has one bond, but it has already been re-financed. Finally, Mapleton will utilize some 2016 bond funds for the Valley View replacement, but cannot finance the whole project using bond funds alone due to pressing needs at other school buildings which are also more than 50 years old. There are not sufficient funds available to address the more than \$220M worth of needs facing the district. After the successful 2016 bond, the district has met its bonding capacity and therefore cannot go after additional funds by passing an additional bond.

**How do you budget annually to address capital outlay needs in your district/charter? Include \$/FTE for the prior fiscal year:**

As referenced above, the district annually allocates dollars to a general fund operations/maintenance budget (5,960,601, or \$953 per pupil in 2018-2019) and to the Capital Reserve Fund ( \$1,818,255 or \$304 per pupil in 2018-2019). These budgets are driven, in part, by 5- and 10-year master plans for larger-scale improvements at all district sites. These improvements include moderate school renovations, roof replacements, bus purchases and HVAC upgrades. Upon its completion, the new Valley View PreK-8 facility will be added to the district's master plan, although the district does not anticipate major system repairs in the first 10 years of the buildings life. Repairs will be funded through the Capital Reserve Budget.

**If relevant to your project, what are your current annualized utility costs, and what amount of reduction in such costs do you expect to result from this project?**

Valley View's current annualized utility cost for the 2017-18 school year was \$63,018.14, or \$1.76 per square foot. If the new school were to use the same outdated mechanical systems and operate with similar inefficiencies we can assume it would cost \$106,128 to cover basic utilities, including gas, electric, water, and telephone. Incorporating sustainable design criteria into the district's construction program is a priority for the Board of Education. The Board has directed staff to ensure that with each new school project consideration is given to sustainable, efficient designs and best practices. Sustainable design offers many benefits, including the energy savings associated with efficient windows, lighting and mechanical systems. Such energy savings are often reflected through utility costs. Using energy model data, we can assume a building designed and constructed using the Collaborative for High-Performance Schools (CHPS) guidelines would see about a 30% reduction in utility costs per square foot.

<b>Grant Request:</b>	\$17,414,793.86	<b>CDE Minimum Match %:</b>	27%
<b>Applicant Match:</b>	\$6,441,088.14	<b>Actual Match % Provided:</b>	27%
<b>Total Project Cost:</b>	\$23,855,882.00	<b>Is a Waiver Letter Required?</b>	No
<b>Affected Sq Ft:</b>	60,000	<b>Contingent on a 2019 Bond?</b>	No
<b>Affected Pupils:</b>	374	<b>Source of Match:</b>	
<b>Cost Per Sq Ft:</b>	\$397.60		November 2016 Bond
<b>Soft Costs Per Sq Ft:</b>	\$68.53	<b>Escalation %:</b>	5%
<b>Hard Costs Per Sq Ft:</b>	\$329.07	<b>Construction Contingency %:</b>	5%

## BEST FY2019-20 GRANT APPLICATION SUMMARIES

<b>Cost Per Pupil:</b>	\$63,786	<b>Owner Contingency %:</b>	5%
<b>Gross Sq Ft Per Pupil:</b>	160	<b>Historical Register?</b>	No
<b>Is a Master Plan Complete?</b>	Yes	<b>Adverse Historical Effect?</b>	No
<b>Who owns the Facility?</b>	District	<b>Does this Qualify for HPCP?</b>	Yes
<b>If owned by a third party, explanation of ownership:</b>			
<b>If match is financed, explanation of financing terms:</b>			

### Financial Data (School District and BOCES Applicants)

<b>District FTE Count:</b>	5,980	<b>Bonded Debt Approved:</b>	\$181,705,000
<b>Assessed Valuation:</b>	\$680,501,770	<b>Year(s) Bond Approved:</b>	10, 16
<b>PPAV:</b>	\$113,787	<b>Bonded Debt Failed:</b>	\$161,165,000
<b>Unreserved Gen Fund 17-18:</b>	\$2,935,808	<b>Year(s) Bond Failed:</b>	08,09,14
<b>Median Household Income:</b>	\$61,742	<b>Outstanding Bonded Debt:</b>	\$143,382,212
<b>Free Reduced Lunch %:</b>	59%	<b>Total Bond Capacity:</b>	\$136,100,354
<b>Existing Bond Mill Levy:</b>	19.468	<b>Bond Capacity Remaining:</b>	(\$7,281,858)
<b>3yr Avg OMFAC/Pupil:</b>	\$4,531.39		



● **Facilities Impacted by this Grant Application** ●

**ADAMS-ARAPAHOE 28J - East MS Remodel and Addition - East MS - 1965**

<b>District:</b>	Auditor - Adams-Arapahoe 28J
<b>School Name:</b>	East MS
<b>Address:</b>	1275 FRASER ST
<b>City:</b>	AURORA
<b>Gross Area (SF):</b>	122,000
<b>Number of Buildings:</b>	7
<b>Replacement Value:</b>	\$36,514,224
<b>Condition Budget:</b>	\$16,061,295
<b>Total FCI:</b>	0.44
<b>Adequacy Index:</b>	0.17



**Condition Budget Summary**

System Group	Replacement Cost	Requirement Cost	SCI
Electrical System	\$4,799,423	\$3,138,759	0.65
Equipment and Furnishings	\$1,322,180	\$1,173,023	0.89
Exterior Enclosure	\$4,712,232	\$1,323,777	0.28
Fire Protection	\$87,683	\$1,029,317	11.74
Furnishings	\$403,351	\$46,800	0.12
HVAC System	\$7,422,335	\$3,182,200	0.43
Interior Construction and Conveyance	\$9,115,920	\$3,076,123	0.34
Plumbing System	\$1,681,357	\$1,305,599	0.78
Site	\$2,902,366	\$2,677,843	0.92
Special Construction	\$454,120	\$94,608	0.21
Structure	\$3,613,258	\$30,000	0.01
<b>Overall - Total</b>	<b>\$36,514,224</b>	<b>\$17,078,049</b>	<b>0.47</b>

# BEST FY2019-20 GRANT APPLICATION SUMMARIES

**Applicant Name:** ADAMS-ARAPAHOE 28J

**County:** Arapahoe

**Project Title:** East MS Remodel and Addition

**Applicant Previous BEST Grant(s):** 5

**Has this project been previously applied for and not funded?** Yes

**If Yes, please explain why:** In sufficient funds in the BEST program to fund our project.

## Project Type:

- |  |   |   |   |
|--|---|---|---|
| <input type="checkbox"/> New School            | <input type="checkbox"/> Roof               | <input type="checkbox"/> Asbestos Abatement | <input type="checkbox"/> Water Systems                |
| <input type="checkbox"/> School Replacement    | <input type="checkbox"/> Fire Alarm         | <input type="checkbox"/> Lighting           | <input checked="" type="checkbox"/> Facility Sitework |
| <input checked="" type="checkbox"/> Renovation | <input type="checkbox"/> Boiler Replacement | <input type="checkbox"/> Electrical Upgrade | <input type="checkbox"/> Land Purchase                |
| <input checked="" type="checkbox"/> Addition   | <input type="checkbox"/> HVAC               | <input type="checkbox"/> Energy Savings     | <input type="checkbox"/> Technology                   |
| <input type="checkbox"/> Security              | <input type="checkbox"/> ADA                | <input type="checkbox"/> Window Replacement | <input type="checkbox"/> Other                        |

## General Information About the District / School, and Information About the Affected Facilities:

Founded in 1885, the Aurora Public School District (APS) is the fifth largest school district in the State of Colorado, covering two counties with a world of diversity. Total enrollment is over 40,000 students. APS celebrates a significantly diverse student population with 55% Hispanic, 15% White, 19% Black, 5% Asian, 1% Native American and 5% other races. APS students come from more than 130 countries and speak more than 160 languages. Seventy percent (70%) of APS students qualify for Free and Reduced Lunch and approximately 58% qualify for Medicaid services. Additionally, approximately 15% of APS families live below the poverty line (Colorado's state average is 11%). Thirty-six percent (36%) of students speak English as a second language and 12% of students attend special education programs.

APS 2020: SHAPING THE FUTURE is based on our community's core beliefs about education. One of those beliefs is that "all students must have equitable access to learning opportunities, technology and environments that support them in reaching their full potential." Aurora's voters have been very supportive of district bond referenda and the district was successful with a bond election in 2016; however, to increase our bonding capacity the question put to voters included the alternate capacity calculation (6% of market value). While this allowed us to request much needed funds for deferred maintenance and student capacity projects, our community pays one of the highest mill overrides in the state. In addition, our ability to complete deferred maintenance and replacement projects in the future will be impacted by the high proportion of bond proceeds required for new schools as Aurora is poised for expansive development along the E-470 corridor.

Although the 2016 program funded less than half of our capital needs, one of the most important projects identified was a major overhaul of East Middle School. East Middle School is a single-story building, originally designed as junior high school. It is composed of multiple buildings partially connected by covered walkways; a popular design in the 1960's referred to as the "California" school design. Our bond project scope proposed a combination of additions and a remodel of the existing building. In 2017, APS selected an architect to work with the school and, after design meetings with school staff and thorough investigation of the existing building, the design team recommended we consider a replacement school instead of a remodel. Our major remodel project are typically budgeted at 30 to 35% of the replacement building cost so we do not have enough funds available in the East MS project budget to afford a replacement school. The district applied for a BEST grant in 2018 to replace the entire building and was unsuccessful. In the last year, we have reexamined the existing building's assets and shortcomings and, in this application, are proposing a partial replacement instead of total replacement. With another year of our 2016 bond program complete, we can increase the funds to contribute to this project and with the help of the BEST program fully fund a new school.

East Middle School is located in a neighborhood that has changed significantly since the building opened. It has a diverse student population with 85% students that qualify for Free and Reduced Lunch. Thirty-nine percent (39%) of students speak English as a second language and 18% of students attend special education programs. The transiency rate is 21%. BEST grant funding would improve the safety and educational environments for EMS students. Safe and secure classrooms, sustainable facilities, and a code-compliant building are best achieved through the demolition of a sizable portion of the existing building and the construction of a large addition. The new school would save energy and operating and maintenance costs over the

# BEST FY2019-20 GRANT APPLICATION SUMMARIES

existing facility.

## **Deficiencies Associated with this Project:**

East Middle School opened in 1965 and was built during a period of rapid expansion in the city of Aurora and the school district. During that period, the federal government provided capital funding for school districts that had a high number of children of federal employees and the district had to access those funds to build East MS. By employing both less expensive building materials and a design approach that decreased or eliminated interior corridors the district was able to house that growth in relatively inexpensive buildings. Regrettably, at East Middle School, this makes it extremely expensive or nearly impossible to fix the school's many safety and security issues.

East Middle School is a single-story building with 113,000 square feet and an additional 9,000 square feet in modular classrooms. The school serves 6th through 8th grade students. The original design of the school included four separate buildings encircling a courtyard and a fifth building, the auditorium, in the middle of the courtyard. All classrooms include doors directly to the exterior and circulation during passing periods relied heavily on moving thru the courtyard or along the perimeter of the building. Interior hallways are narrow and were intended for supplementary circulation. The building was remodeled in 1986 and two of the covered exterior hallways were enclosed and three additions were built.

When the district passed a bond program in 2016 East was designated as the highest priority school for a whole building remodel. In September of 2017, the district created a Design Advisory Group (DAG) made up of the staff, parents and students for the project. The DAG worked with architects to review the educational suitability of the existing building, identify high, medium and low needs for a remodel and determine the best location for building additions. The DAG quickly identified the inability of students to move safely from building to building without going outside as their most important goal for the project. Resolving the movement of students within the existing structure has identified numerous issues with the building that may be impossible to resolve.

The anticipated addition, renovation and repair costs to meet the project goals exceeded the funds available in the bond program. With those costs approaching or exceeding the cost of a replacement building, the district applied for a BEST grant in 2018. Our 2018 application was for a total replacement of the existing campus. In the last year, we have reexamined the areas of greatest need and are proposing a partial replacement instead of total replacement.

The district has identified three buildings on the current campus that do not require extensive renovation and could be incorporated into a new facility. We are proposing to replace approximately two-thirds of the existing building and all the mobiles with new construction. We believe this approach is in the best interest of the community and the best use of funding and, therefore, would commit the 2016 bond funds identified for East Middle School and additional funds from the bond contingency account as a match for a BEST grant.

East Middle School has structural, plumbing and electrical systems that are original to building and are past their service life. These items are explained in greater detail below.

## **STRUCTURE**

East was constructed over 50 years ago and is showing the effects of sub-par construction. Building movement has resulted in cracking floor slabs and shifting walls and doors. As a result, East has a higher percentage of storm water and pest infiltration at than at other schools of a similar age. APS has completed mold abatement projects in 11 classrooms and addressed dozens of rodent complaints in the last 5 years. Cracks in the floors are repaired and reemerge. Walls and door frames have shifted and rain water gets in under the doors. Cracks have emerged at the edges of the classroom windows and rain has penetrated into the wall cavity. We believe our multiple mold responses and pest removals are due to cracks originating in the exterior building envelope.

Last year the district hired a geotechnical engineer to help determine the cause of the settling floor slabs. He has determined that there is a moisture sensitive clay subgrade under the slab on grade floors and the best repair would be to remove the floor slab and 3 feet of soil and pour new slabs on compacted structural fill. A less expensive solution but with a potential for failure would be to mud-jack the floors where they have settled. Both solutions will require replacing doors and the aluminum

## BEST FY2019-20 GRANT APPLICATION SUMMARIES

window system. The geotechnical report is included with our application.

The design effort in 2017 made APS aware of structural issues with the roof of the original buildings. The roof structure is composed of poured gypsum deck on steel bulb tees. This system does not meet current code requirements. While the system met code when installed, the school occupants have noticed additional vibrations from a mechanical system that was replaced in 1998. In some rooms, staff has reported light fixture lenses falling out when the mechanical system is operating at full strength. The structural engineer has reviewed the existing roof structure and concurs that it would be infeasible to retain the bulb tee system if the school were remodeled. The attached report from the structural engineer outlines the structural modifications that would be required with an extensive remodel.

### SAFETY & SECURITY

Safety and security concerns at East include improving entry and courtyard security, correcting exiting problems, providing a safe level of fire separation between the areas of the schools, and the replacement of the inadequate electrical and plumbing systems.

School security receives the highest priority in Aurora Public Schools. The East facility is one of our most serious security concerns primarily for the following reasons:

1. It is impossible to secure the building perimeter to prevent undetected access by an intruder.
2. Movement between classrooms requires use of unsecured exterior doors.
3. Interior corridors are narrow and difficult to monitor.
4. In a "secure perimeter" scenario, students cannot always move to another classroom and the instructional day is interrupted.
5. The school is located in a neighborhood of Aurora that sees a lot of police activity.

There are more than 80 separate exterior doors distributed around the perimeter of the school building, making the supervision and control of visitors and students coming and going difficult. Video surveillance is the main form of monitoring who approaches the main entry. The exterior entries are not protected from forced vehicle entry by bollards or other protection.

The courtyard is dangerous during the winter. Despite aggressive snow removal, areas of slick and icy pavement develop in the courtyard. Since circulation must pass thru the courtyard for some students, slips and falls are not unusual during winter months. Snow tracked into the building thru the numerous doors leads to slippery floors that can be hazardous.

Narrow interior hallways and hidden areas in the courtyard have heightened undesirable student interactions and have created a safety issue. To help with student movement, the school no longer allows students to use the lockers in the building.

There is congestion at the parent drop-off, parking, and bus loading areas. Buses and parents enter from different streets but merge in the parking lot. There is insufficient space to expand the parking / drop-off in its current location therefore site considerations would include reworking the drop-off loops by removing the parent drop-off lane and allowing students to avoid crossing traffic to enter the school.

### ASBESTOS & HAZARDOUS MATERIALS

The school contains the following known asbestos containing building materials: Floor tile and mastic, science room countertops, drywall joint compound, vermiculite in block walls, transite panels and cement soffits. The following materials are presumed to contain asbestos: window caulking, stainless steel sink undercoating, and waterproofing foundation sealant. AHERA drawings are included in the submittal.

Due to a recent mouse infestation, asbestos containing vermiculite has been discovered at the base of CMU walls. We believe that the mice have burrowed into the mortar joints and the vermiculite fill in the CMU cells is being released through those burrows.

## BEST FY2019-20 GRANT APPLICATION SUMMARIES

The school contains the following additional hazardous materials: Lead-containing block, ceramic tile and chalkboards; mercury containing devices such as thermostats and boiler controls; PCB ballasts; fluorescent light bulbs; smoke detectors; and exit signs.

### CODE COMPLIANCE

Restroom fixture counts do not match current code requirements and there are no ADA compliant toilet restrooms.

Emergency lighting does not meet current code.

Fire areas at media center and cafeteria building exceed allowable square footage.

### FIRE SAFETY

Although the fire alarm system is currently working and code compliant, it will need to be replaced if a substantial remodel is undertaken.

### EDUCATIONAL SUITABILITY

Because East Middle School was built as a junior high school with wings designated for subject areas and with some of the circulation intended to be thru exterior doors, the school functions poorly under the current middle school model. It was the intent of the original remodel project to address this issue with strategically placed additions that would also allow the removal of six double classroom modular buildings. However, the condition of the existing building structure will severely limit APS' ability to address this original project goal. The remodel drawings are attached for reference but believe that the large addition project will create a better educational environment.

East MS houses three middle school center-based special educations. The district has become a popular home for military families with special needs children (Buckley Air Force Base and Children's Hospital are both within district boundaries). East MS currently houses those center-based programs in the old science wing. In the middle school model, science is taught as part of the core team and therefore needs to be located with the other core classes. The old science wing became the default location for the special education programs. Space needs for special needs students are different than those used for science labs and in order to warmly accept students moving into the district a new configuration is necessary to create a true center based special needs suite.

Most casework in the school is well past its service life, and is beginning to break down. This is also the case for ceilings and most walls.

The school lacks adequate storage for educational program materials.

The library-media center is centrally located but poorly utilized. The space does not allow for quiet reading or studying.

The cafeteria is poorly utilized. A lack of usable seating area at the existing school cafeteria mandates the use of six lunch periods placing scheduling constraints on the students and staff that are not conducive to learning or teaching.

### FACILITY PLUMBING

All plumbing services, from plumbing fixtures and domestic water to sanitary waste and storm drains, are past their service life. Short of a few restrooms having been brought up to meet ADA guidelines for existing buildings, all of the systems are original to the building and do not meet current codes.

The sanitary sewer line between the school and the city sewer is clay and frequently clogs. In 2017 a substantial portion of the

## BEST FY2019-20 GRANT APPLICATION SUMMARIES

kitchen floor was demolished so that a collapsed section of the sanitary sewer could be replaced.

Due to building movement, the school has reported an uptick in sewer smells. This can take a lot of time for maintenance staff to investigate and most recently has been the result of vent pipes buried in walls that have cracked or separated at joints.

### POOR INDOOR AIR QUALITY

Eleven classrooms have had mold abatement projects. Rainwater enters the building thru cracks in walls, under doors, adjacent to windows and thru roof edges and or joints. We believe this is due to either building movement or the building envelope materials reaching the end or their expected life span.

### SCHOOL SITE

There is congestion at the parent drop-off, parking, and bus loading areas. There is insufficient space to expand the parking / drop-off area with the schools current location on the site.

### **Proposed Solution to Address the Deficiencies Stated Above:**

With these considerations in mind, the district has chosen to pursue a BEST grant to demolish approximately two-thirds of the existing building and build a large addition to the west of the Athletic and Exploratory Classroom buildings. The district would complete demolition of the remaining building shortly after completion of the addition and will develop that area into new playfields.

The existing athletic building would require upgrades to its plumbing system and a restroom remodel but the existing mechanical system could be connected to the new hydronic systems with minimal work. The 1980's exploratory building is in acceptable condition and would only require the interior renovation necessary for the connection to the new addition. The courtyard auditorium building would continue to serve as the middle school performance space (in lieu of a cafetorium) and its new location on the exterior of the new facility would allow for greater use by the community.

This project will provide a new easy-to-maintain facility with a life expectancy of 50 years or more. The project will conform to the Public School Facility Construction Guidelines as follows:

#### CDE 4.1.1 Sound building structures

The new addition will be constructed and maintained with sound structural foundation, floor, wall and roof systems.

#### CDE 4.1.2 Classroom Acoustics

Classrooms will be constructed to address issues of reverberation time and background noise in classrooms per ANSI/ASA S12.60-2010/ Part 1, American National Standard Acoustical Performance Criteria, Design Requirements, and Guidelines for Schools, Part 1: Permanent Schools.

#### CDE 4.1.3 Roofs

The new addition will have a minimum 60 mil EPDM membrane fully adhered roof system

#### CDE 4.1.4 Electrical systems

The new addition will have safe and secure electrical service and distribution systems designed and installed to meet all current and applicable codes. It will also allow for new, energy efficient lighting, adequate technology, and safe amounts and locations of power and data outlets to prevent the use of extension cords and other hazards.

#### CDE 4.1.5 Lighting Systems

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Lighting systems will be designed and installed to achieve appropriate lighting levels utilizing energy-efficient lighting fixtures and energy-saving automatic and manual control systems.

### CDE 4.1.6 Mechanical systems

The new addition will have a safe and energy efficient mechanical system that provides proper ventilation, proper sound levels and maintains the building temperature and relative humidity. The mechanical system will be designed, maintained and installed utilizing current State and Federal building codes, and will conform to all applicable codes. An efficient and easy-to-maintain HVAC system will take the place of the existing, 21-year-old mechanical units which are near the end of their life expectancy and 33-year-old pumps and other miscellaneous components which are a constant headache for district maintenance personnel. The distribution system in the remaining existing building will be reused

### CDE 4.1.7 Plumbing

The new addition will have a potable water source and supply system that complies with all current and applicable codes. The existing school has no ADA compliant restrooms. The remaining existing restrooms will be brought up to ADA accessibility standards.

### CDE 4.1.8 Fire Protection Systems

The existing building fire alarm system has not been updated in the past five years and so would need to be upgraded to include voice evacuation. The new school will provide a fully addressable fire alarm system as well as an automatic fire sprinkler system throughout the facility.

### CDE 4.1.9 Means of Egress

The proposed new addition would be fire sprinkled and within allowable area limits or provided with safe area separations. Several of the fire areas within the existing building exceed the allowable areas for those containing classrooms. The existing corridors are circuitous, relatively narrow and difficult to supervise. The corridor paths of egress in the new building will be clear, evident, and more easily supervised.

### CDE 4.1.10 Facilities with safely managed hazardous materials

The existing building is known to have materials containing asbestos. The proposed project includes appropriate disposal of these materials. The new facility will be constructed without the use of materials containing asbestos or lead based paint and will otherwise comply with all current and applicable codes with regard to hazardous materials.

### CDE 4.1.11 Security

The new school will provide complete video monitoring and P.A. / event notification systems as well as a monitored fire alarm system.

The existing school is comprised of several buildings which in itself require multiple points of access to be secured and monitored. Also, the main building is configured linearly with administrative program components in the middle of the line of typical student circulation forcing students to travel outside to access not only other buildings but also the cafeteria and other classrooms located within the main building. Building the new addition will create a safe and secure building with one or two easily monitored points of access and would eliminate the need for students to travel through unsecured areas to access the various areas within the school.

Electronic access control systems will be utilized on exterior egress doors in order to maintain one or two points of access to the new building and will be alarmed to notify staff of any doors that are open.

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All interior doors that are identified as being significant in establishing a "locked down" and secure facility in the case of an emergency event and all exterior doors will be secured from one of several positions of safety within the building.

The current main entry is not easily recognizable to visitors. The new school will have a clearly-defined main entry with secured access through the admin suite during the day.

The existing layout of the middle school campus creates many blind areas that are not able to be supervised. A new design for the administrative area would provide supervision of both the main entry as well as the school parking lots.

### CDE 4.1.12 Health Code Standards.

The current school has indoor air quality issues due to the aging HVAC components. The issues would be eliminated with a new addition and upgrades to the remaining structures. The new facility will also comply with all current and applicable health codes and standards.

### CDE 4.1.13 Food preparation equipment and maintenance.

The new addition will include required food preparation facilities which will comply with all current and applicable health codes and standards.

### CDE 4.1.14 Health care room

The new addition will include the required separate health care room facilities which will comply with all current and applicable health codes and standards.

### CDE 4.1.15 A site that safely separates pedestrian and vehicular traffic

At the existing middle school, bus loading, parking and parent queuing conflict and are inadequate. Carefully locating the addition will provide the opportunity for adding on-site parking, drop-off lanes and bus staging to all be provided and safely separated.

The existing entry is only protected by a concrete curb and a few planters. There are no bollards at the entry. A new school facility would include a physically protected main entry.

The middle school site is poorly lit which is a safety hazard. New site amenities as proposed would alleviate this danger with adequate site, field, building, and parking lights.

### CDE 4.2 Technology

The new middle school facility will incorporate wired and wireless systems fit to provide necessary individual and classrooms learning environments as well as connectivity and security for the students and staff.

### CDE 4.3 Building site requirements

The existing campus consists of three permanent buildings and temporary modular buildings. Although the permanent buildings measure close to the necessary programmed area, the inefficient configuration of the buildings and the circuitous corridors render a facility that is far short of the necessary usable space. The new school would meet District Educational Specifications, will not be overcrowded, and all grades will be housed in a permanent building.

Currently classrooms vary greatly in terms of square feet/student. Because of the necessity to have more classrooms than the building was originally designed to hold, rooms that were never designed or sized for this purpose are being utilized as classrooms and therefore offer less area per student than required or create inefficient use of space. Some classrooms, due to



## BEST FY2019-20 GRANT APPLICATION SUMMARIES

their location in the building, serve as the only interior means of access to other classrooms or offices. A new classroom addition would consistently provide more space per student in the classrooms along with having a rectangular shape and natural light, creating an environment much more suited to learning. Properly designed corridors would connect the classrooms so that student circulation would be accommodated outside the classrooms but without having to travel outside the building through unsecured or unsupervised areas.

The media center at the existing middle school is poorly equipped and utilized. A centralized, technology-driven library Media Center for the students and community will be provided in the new addition.

The cafeteria will be adequately sized for the new middle school. The lack of usable seating area at the existing school cafeteria mandates the use of six lunch periods placing scheduling constraints on the students and staff that are not conducive to learning or teaching. This condition will be corrected so that there are fewer lunch periods at the new school.

The equipment, casework and storage at the existing middle school science labs are inadequate and in poor condition. There are no demonstration hoods, gas receptacles or science workstations in the building. The proposed replacement project would include new science spaces with all necessary appurtenances.

CDE 4.4 Building performance standards and guidelines for green building and energy efficiency

At the middle school, many of the classrooms have no outside windows. This condition can only be corrected with a replacement facility.

A new facility would be energy and water efficient, have low life cycle costs, healthy for its occupants, and has a low impact on the environment. Pursuing LEED Silver or CHPS Verified would be set as the goal.

### How Urgent is this Project?

#### STRUCTURE

Additional study is necessary to evaluate the impact of the roof structure on a building remodel; however, it will impact the final design of any work done on the existing building. The urgency for correction is high (within 2 years.) The importance factor is high with regards to life safety.

#### SAFETY & SECURITY

The poor entry and courtyard control and supervision is a significant risk. Icy conditions in the courtyard and traffic congestion are also a significant risk. The urgency is high and should be corrected within 2 years. The importance factor is high with regards to life safety.

#### BUILDING CODE

Code issues that are grandfathered in place would need to be corrected during a renovation project. The urgency is low and should be corrected within 5 years. The importance factor is high with regards to life safety.

#### EDUCATIONAL SUITABILITY

The classrooms and open learning spaces should be corrected to address proper use of the middle school model of instruction. A properly design special education suite is also necessary. The urgency is low (corrected within 5 years.) The importance factor is high with regards to educational adequacy.

#### CROWDING

The overcrowded hallways and locker bays are the most urgent crowding issue. Students no longer are given lockers but this is

## BEST FY2019-20 GRANT APPLICATION SUMMARIES

seen as a temporary solution to the student movement problem. The importance factor is high with regards to life safety.

### FACILITY ELECTRICAL

In order to keep up with modern technology demands, the electrical system should be replaced, also to alleviate the unsafe practices with extension cords occurring within classrooms. The urgency is medium and should be corrected within 3 years. The importance factor is high with regards to life safety.

### FACILITY PLUMBING

The plumbing system would need to be corrected during a renovation project. The urgency is high and should be corrected within 1 year. The importance factor is high with regards to life safety.

### POOR INDOOR AIR QUALITY

The mechanical system is at the end of its useful life and will need to be replaced soon. The urgency is medium and should be corrected within 5 years. The importance factor is medium with regards to life safety.

### BOND FUND AVAILABILITY

We would provide a match from our 2016 bond program. Bond funds have spending deadlines and we would be meeting an important spend down requirement if we started the East Middle School program this fiscal year. The urgency to commit funds to this project is high.

**Does this Project Conform with the Public School Facility Construction Guidelines?** Yes

**If not, provide an explanation for the use of any standard not consistent with the guidelines:**

### **How Does the Applicant Plan to Maintain the Project if it is Awarded?**

Management of the requested repairs and improvements will fall under the responsibility of the district's Director of Maintenance and Operations and will be accomplished under our normal facility management processes. Aurora Public Schools operates a full service Maintenance and Operations Department. The department carries out a regular program of routine, preventive, emergency and capital repairs for all district facilities.

The Maintenance Department is comprised of 1) three interdisciplinary teams, 2) exterior operations, 3) electronic and controls group, 4) natural and renewable resource management, and 5) custodial operations. Their goal is to provide a level of building maintenance that promotes and complements learning environments.

The three interdisciplinary teams accomplish general building maintenance for the district. Each team is responsible for maintaining 1.5 to 1.6 million square feet. The teams oversee a variety of building maintenance services including heating, ventilation and air conditioning, electrical, plumbing, carpentry, painting and small construction projects.

Exterior operations is responsible for a variety of site services including: irrigation, turf, tree and shrub maintenance, asphalt and concrete, play grounds, fencing, athletic fields, exterior graffiti, and snow removal.

Electronic and controls team is responsible for district wide support of fire-alarm systems, intrusion-alarm systems, access control, intercom systems, two-way radios, clocks, and scoreboards.

Natural and renewable resources group monitors and optimizes the District's use of energy, water and waste. This is accomplished through the oversight of various software applications, student and staff engagement, incentive programs, and community and business partnerships.

Custodial operations is an interracial part of building and site maintenance. They are responsible for building hygiene, building security, minor maintenance, grounds safety, monitoring building systems, energy and resource management.

The district's annual capital reserve program currently averages approximately \$6 million per year and includes a program of

# BEST FY2019-20 GRANT APPLICATION SUMMARIES

cyclical major facility repairs.

The district carries on a program of periodic district-wide facility condition assessments that form a basis for planning annual capital reserve project programs and bond funded capital construction programs. The most recent of these assessments was completed in spring of 2016.

The district's Long Range Facilities Advisory Committee meets on a regular basis and advises the board of education on facility project needs.

**Describe the condition of the public school facility at the time it was purchased or constructed and, if the facility was not new or was not adequate as a public school facility at that time, provide the rationale for purchasing the facility or constructing it in the manner in which you did:**

The school was built in 1965 using construction standards appropriate for the time and based on a design philosophy that is not considered safe and secure by current school design standards.

**Describe the history of capital improvements made to the facility by the district/charter school in order to make it suitable for students. Include a list of all capital projects undertaken in the affected facility in the last 3 years:**

The only major capital improvement in the last three years was the replacement of a collapsed sanitary sewer line under the kitchen floor. Emergency repairs and mold abatement following intense rain events have been completed when necessary.

**What options outside of the BEST grant has the applicant investigated or leveraged to address the school's facility needs?**

The district has a Grants Department that actively pursues grant opportunities but our experience has been that very few organizations offer funds to school districts for capital projects. The district actively pursues rebates from Xcel Energy on all our large projects. Any rebates on this project would be returned to the project budget.

**How do you budget annually to address capital outlay needs in your district/charter? Include \$/FTE for the prior fiscal year:**

The district maintains a facilities assessment database and generates a capital reserve budget annually. The budget includes funds for emergency and urgent projects as well annual commitments. The Maintenance & Operations department currently has 59 FTE to maintain the districts' physical plant. This equates to approximately 1 FTE per 80,000 SF of building space.

**If relevant to your project, what are your current annualized utility costs, and what amount of reduction in such costs do you expect to result from this project?**

By replacing all the mobiles and approximately two-thirds of the 1965 structure, we believe we will see a 30% reduction in electrical and natural gas costs. (Approximately \$50,000 in 2019 dollars). Replacing the plumbing fixtures with water conserving fixtures should result in a 20% reduction in building water costs.

<b>Grant Request:</b>	\$17,680,732.40	<b>CDE Minimum Match %:</b>	43%
<b>Applicant Match:</b>	\$26,521,098.60	<b>Actual Match % Provided:</b>	60%
<b>Total Project Cost:</b>	\$44,201,831.00	<b>Is a Waiver Letter Required?</b>	No
<b>Affected Sq Ft:</b>	131,000	<b>Contingent on a 2019 Bond?</b>	No
<b>Affected Pupils:</b>	920	<b>Source of Match:</b>	2018 Bond
<b>Cost Per Sq Ft:</b>	\$337.42	<b>Escalation %:</b>	4%
<b>Soft Costs Per Sq Ft:</b>	\$34.86	<b>Construction Contingency %:</b>	4%
<b>Hard Costs Per Sq Ft:</b>	\$302.55	<b>Owner Contingency %:</b>	4%
<b>Cost Per Pupil:</b>	\$48,045	<b>Historical Register?</b>	No
<b>Gross Sq Ft Per Pupil:</b>	142	<b>Adverse Historical Effect?</b>	Undetermined
<b>Is a Master Plan Complete?</b>	Yes	<b>Does this Qualify for HPCP?</b>	Yes
<b>Who owns the Facility?</b>	District		

# BEST FY2019-20 GRANT APPLICATION SUMMARIES

If owned by a third party, explanation of ownership:

If match is financed, explanation of financing terms:

## Financial Data (School District and BOCES Applicants)

<b>District FTE Count:</b>	35,890	<b>Bonded Debt Approved:</b>	\$300,000,000
<b>Assessed Valuation:</b>	\$2,607,966,143	<b>Year(s) Bond Approved:</b>	16
<b>PPAV:</b>	\$72,667	<b>Bonded Debt Failed:</b>	
<b>Unreserved Gen Fund 17-18:</b>	\$20,897,426	<b>Year(s) Bond Failed:</b>	
<b>Median Household Income:</b>	\$52,094	<b>Outstanding Bonded Debt:</b>	\$489,695,000
<b>Free Reduced Lunch %:</b>	66%	<b>Total Bond Capacity:</b>	\$521,593,229
<b>Existing Bond Mill Levy:</b>	23	<b>Bond Capacity Remaining:</b>	\$31,898,229
<b>3yr Avg OMFAC/Pupil:</b>	\$1,893.86		

**● Facilities Impacted by this Grant Application ●**

**WALSH RE-1 - New PK-12 - Walsh Jr/Sr HS - 1960**

District:	Auditor - Walsh RE-1
School Name:	Walsh Jr/Sr HS
Address:	300 CALIFORNIA STREET
City:	WALSH
Gross Area (SF):	54,785
Number of Buildings:	2
Replacement Value:	\$12,830,917
Condition Budget:	\$4,103,226
Total FCI:	0.32
Adequacy Index:	0.22



**Condition Budget Summary**

System Group	Replacement Cost	Requirement Cost	SCI
Electrical System	\$2,204,151	\$1,562,413	0.71
Equipment and Furnishings	\$760,245	\$216,391	0.28
Exterior Enclosure	\$2,779,258	\$37,794	0.01
Fire Protection	\$2,601	\$544,637	209.40
Furnishings	\$559,007	\$87,093	0.16
HVAC System	\$777,477	\$612,929	0.79
Interior Construction and Conveyance	\$1,813,156	\$564,746	0.31
Plumbing System	\$821,887	\$707,732	0.86
Site	\$1,417,115	\$598,031	0.42
Structure	\$1,696,021	\$0	0.00
<b>Overall - Total</b>	<b>\$12,830,917</b>	<b>\$4,931,766</b>	<b>0.38</b>

**WALSH RE-1 - New PK-12 - Walsh ES - 1931**

District:	Auditor - Walsh RE-1
School Name:	Walsh ES
Address:	301 North Poplar Street
City:	Walsh
Gross Area (SF):	35,728
Number of Buildings:	2
Replacement Value:	\$8,455,434
Condition Budget:	\$2,675,132
Total FCI:	0.32
Adequacy Index:	0.12



**Condition Budget Summary**

System Group	Replacement Cost	Requirement Cost	SCI
Electrical System	\$1,230,345	\$695,732	0.57
Equipment and Furnishings	\$348,782	\$218,316	0.63
Exterior Enclosure	\$1,525,539	\$86,254	0.06
Fire Protection	\$1,696	\$353,633	208.48
Furnishings	\$66,568	\$0	0.00
HVAC System	\$649,453	\$90,667	0.14
Interior Construction and Conveyance	\$2,287,712	\$837,344	0.37
Plumbing System	\$509,105	\$362,878	0.71
Site	\$665,272	\$378,277	0.57
Structure	\$1,170,961	\$5,666	0.00
<b>Overall - Total</b>	<b>\$8,455,434</b>	<b>\$3,028,767</b>	<b>0.36</b>

# BEST FY2019-20 GRANT APPLICATION SUMMARIES

**Applicant Name:** WALSH RE-1

**County:** Baca

**Project Title:** New PK-12

**Applicant Previous BEST Grant(s):** 1

**Has this project been previously applied for and not funded?** No

**If Yes, please explain why:**

## Project Type:

- |  |   |   |  |
|--|---|---|--|
| <input checked="" type="checkbox"/> New School | <input type="checkbox"/> Roof               | <input type="checkbox"/> Asbestos Abatement | <input type="checkbox"/> Water Systems     |
| <input type="checkbox"/> School Replacement    | <input type="checkbox"/> Fire Alarm         | <input type="checkbox"/> Lighting           | <input type="checkbox"/> Facility Sitework |
| <input type="checkbox"/> Renovation            | <input type="checkbox"/> Boiler Replacement | <input type="checkbox"/> Electrical Upgrade | <input type="checkbox"/> Land Purchase     |
| <input type="checkbox"/> Addition              | <input type="checkbox"/> HVAC               | <input type="checkbox"/> Energy Savings     | <input type="checkbox"/> Technology        |
| <input type="checkbox"/> Security              | <input type="checkbox"/> ADA                | <input type="checkbox"/> Window Replacement | <input type="checkbox"/> Other             |

## General Information About the District / School, and Information About the Affected Facilities:

Walsh School District is a high-achieving, rural district in Southeast Colorado that serves 168 students in grades Pre-Kindergarten through 12. It is one of five school districts in Baca County. The staff and community place high value on the diverse opportunities provided to students at Walsh School District. College credit is awarded to students at the high school level, and students have the opportunity to participate in a variety of sports, Knowledge Bowl, Science Club, FFA, Student Council, and as members of the Service and Leadership Team.

The District applied for and received a BEST grant in Feb of 2018. This was in response to corroded and leaking buried gas lines at the high school. The grant also included a few limited security upgrades at both schools.

The leaking gas lines served as a wake up call to the district, as it became clear there were many more needs to be addressed. The District chose to apply for a focused grant in 2018 to address immediate concerns and to initiate a larger Facilities Master Planning process to develop a thoughtful long term plan. This 2019 grant application is an outcome of that larger planning effort.

## Deficiencies Associated with this Project:

The issues and concerns facing Walsh School District are the result of the age of the facilities and the way the campus has grown over time. These issues cannot and should not be addressed independently. It would be a misuse of funds to invest significantly into repairing systems deficiencies without addressing the glaring adequacy, security, and operational issues.

All four classroom facilities have significant deficiencies that require investment greater than Walsh School District can provide with current financial resources.

### WALSH ELEMENTARY - The Case For Need

The Walsh Elementary School campus includes the one-story main building, cafeteria, and a modular classroom building. The newer addition (1969) is linked to the two-story 1928 school and 1931 gym. The 1931 gym is used for physical education class and is far from an optimal learning environment. The 1928 building has been largely abandoned, though some storage is taking place in it. This original building is in serious disrepair and is a tremendous liability to the District. The primary deficiencies and issues at the elementary school include: excess space, security of staff and students, electrical and plumbing issues, HVAC and climate for learning.

### -Excess Square Footage:

Realistically, one of the major problems that plagues Walsh School District started with a massive increase in enrollment in the 1960's and 1970's when the communities of Buffalo, Mitchell, Glendale, Stonington, Bartlett and Two Buttes all were forced to close their school doors. All those rural students were then bussed to waiting Walsh School District. At its peak in 1964 Walsh had 579 students. The influx and subsequent building boom that followed left a mark that remains with Walsh SD

## BEST FY2019-20 GRANT APPLICATION SUMMARIES

today. Walsh has too much space, in excess of 35,000 sq. ft. One elementary classroom has over 1600 square feet and houses approximately 12 students. The problem is exacerbated since neither of the two schools has adequate space to accommodate consolidation into one building. Additionally, even if one building accommodated all the students, the cost of renovation needed would be only marginally different than the cost of new construction (facility needs and limitations will be demonstrated throughout the grant application).

### -Security of Staff and Students

Students in grades five and six walk just over one block, back and forth between Walsh Elementary School and Walsh High School for music and sports programs. All elementary students travel from the Elementary School to an adjacent free-standing cafeteria. Their journeys are perilous and sometimes sloppy as they walk on broken sidewalks in areas where there is little to no drainage. In fact, a very active member of the Walsh community tripped on a raised portion of the sidewalk between the Elementary School and cafeteria, and broke out her front teeth and also fractured her shoulder.

There are no cameras to monitor the outside of the buildings, so students are only monitored by the teachers on duty. Students travelling back and forth between campuses are open to the will of nature and the elements of man. A few years ago, a disgruntled former student, thought to be under the influence of drugs, shot a high powered rifle across the street at a former administrator's house. The incident occurred less than a block from the High School campus and football field. Had any bullets strayed during this incident, students and staff could have been seriously injured or killed.

Entry doors continue to provide a challenge at Walsh Elementary School. Because of the shifting of the building, doors fail to close properly and instead must be nudged or slammed to be certain that they stay shut. The worst of these can no longer be securely closed, despite attempts by local contractors and maintenance personnel to repair them. Analysis of the doors demonstrated that they cannot always be corrected by replacing door hardware but rather would require many of the frames be replaced. Not being able to secure doors leads to some doors being open all night. Some of these doors can be opened by simply pulling on them even if they appear locked. Open doors and free access to a school pose a tremendous risk for staff first entering the building in the morning and to the security of staff and students throughout the school day.

The old gym, built in 1931 has the only exterior access for any students, community members, or staff with disabilities. The gym's ramp is mostly used during inclement weather as an entry point for one teacher who is confined to a wheelchair. The district is very concerned about the ability to quickly evacuate the teacher in the event of an emergency since the ramp is a great distance from the teacher's classroom.

"A comfortable workplace makes for a happier, more productive workforce. The same can also be said for schools, colleges and universities....Insufficient natural light and poor air circulation can have a detrimental effect on our concentration levels, and impact our health and wellbeing, too."

Elearning Infographic's Post

### -HVAC and Climate for Learning

Schools built during the 1960s and 1970s were designed and built during a shortage of fuel. They were built to hold the warm air in and keep the cold air out! As a result Walsh Elementary moves little to no air. There are no systems that pump fresh air through the building. Often the air and school become stale. Research is clear, students and staff need plenty of fresh air to be at their best. The lack of adequate fresh air is a serious Mechanical Code Violation and must be addressed.

### -Electrical and Plumbing Issues

Walsh Elementary's electrical system is shaky on the best days. On some occasions the first person to enter the building in the morning cannot get any lights to turn on in the main hallway. At this point, a local electrician must be called to correct the issue. Teachers also complain that blown breakers sometime interfere with instruction. Just this month, a teacher reported to the superintendent that she heard a loud pop in the teacher's workroom, followed by the dimming and surging of the lights. The sanitary lines in Walsh Elementary are in poor condition and are often plugged. The toilets in the boys bathroom frequently run over onto the carpet in the hallway, making for an unsanitary environment that is very difficult to clean. The hallways are carpeted, not tiled as the underlying surface is asbestos containing tile that would require abatement in order to replace it. Sometimes toilets and sinks have to be taken out of service. The CDE 2015 Facility Assessments cited plumbing

## BEST FY2019-20 GRANT APPLICATION SUMMARIES

issues as one of the most troubling deficiencies, as well as one of the most expensive to correct in Walsh Elementary.

WALSH JUNIOR/SENIOR HIGH SCHOOL, VO-AG AND CAFETERIA - the case for need

The Junior/Senior High School campus includes the main building, Vo-Ag classroom building and bus barn. Primary deficiencies and issues at the Junior/senior high school include: excess square footage, security, electrical, plumbing and direct service lines, unsafe site, and HVAC and climate for learning.

### Excess Square Footage:

Walsh Junior/Senior High School was built in a time when over 275 students used the building. Fifty eight years later, the building has excess space that is not used for instruction. Three classrooms are unused and a fourth is rarely used. As consolidation of buildings was considered, the space at Walsh Junior/Senior High School is not adequate or configured to accommodate pre-school to sixth grade. Massive renovation and an addition would need to happen in order to consolidate the two schools. An analysis showed that the cost between renovation and addition was only marginally different due to the significant facility deficiencies present in Walsh Junior / Senior High School.

### Safety and Security:

Security for these buildings is a challenge, just as with Walsh Elementary, as some doors are almost impossible to close. Administration is certain that the building is seldom secure. On more than one occasion when the principal entered his office it was clear that someone has been in the office during early morning hours. Currently secondary students walk just over a block every day to eat lunch at the cafeteria on the elementary school campus. All students move back and forth repeatedly, throughout their school day, between multiple unsecured buildings across the poorly drained, frequently icy, or broken sidewalks. Two city streets without sidewalks lay between the Junior/ Senior High School and the Cafeteria building, putting the children at risk of being hit by motorists. There are no security cameras, and no line of site from the office to the main entrance or any of the additional buildings.

### Electrical Issues:

Frightening is the word that comes to mind when evaluating the electrical service at Walsh Junior/Senior High School. The high school principal talks of sparking light switches in the small gym and continual blowing of the breakers furthering a lack of confidence in the electrical system. These shortcomings create a great life safety concern for staff and students. Local electricians blame faulty install of 'add-ons' and overloading circuits for the problems. One of the most alarming situations is that 220V outlets in the Vo-Ag shop are not secured to the wall so students must hold the outlet while plugging in a welder.

### Plumbing and Fresh Water:

Plumbing issues plague the school and sometimes certain toilets and sinks have to be taken out of service. On more than one occasion, the principal has discovered three inches of raw sewage in the locker rooms. Study of the building shows that some sanitary lines have collapsed while others are on the verge of collapsing. Because of hard water, direct service water lines have also deteriorated and must be replaced if the BEST Grant is not successful

### HVAC and Climate for Learning:

At Walsh Junior / Senior High, each classroom is heated with a through wall gas fired unit original to the building and a free-standing residential style cooling unit. Because of the age, these units are difficult to regulate and rooms are either too hot or cold. These older units have limited air intake capabilities so little fresh air moves through the building. In sufficient levels of fresh air are brought in when the unit is actively running, no fresh air is brought in otherwise. The lack of fresh air has shown to cause students to have a lack of concentration and focus.

## DATA AROUND DISTRICT WIDE DEFICIENCIES

### Operational Inefficiencies:

Energy use and associated annual costs are a burden for the District. Engineers have estimated that a new consolidated school with code required insulation, efficient systems and fixtures could reduce energy use and cost to the District by 25-35% per year



## BEST FY2019-20 GRANT APPLICATION SUMMARIES

The District is currently paying to staff, as well as heating and cooling, in maintaining this excess square footage. By consolidating all four existing buildings into a single consolidated PK-12 school, eliminating redundant offices, classrooms, and other support spaces, the District could reduce their total footprint by over 32,500 square feet.

**Electrical Systems** - The electrical distribution for the campuses is original to the buildings has not been updated and is nearing the end of useful life. They should be replaced in the next 5 years. Most panelboards have no spare capacity for additional branch circuits. Breakers in the VOAG building, home economics classroom and concessions area often trip. There are various locations with exposed wires, increasing the risk of fire. Sets of lights will frequently not turn on. The control panel for lighting is limited in both main buildings, causing additional work and time to maintain the system. Electrical equipment that is original to the school is nearing the end of its useful life and should be replaced in the next 5 years.

**Lighting Systems** - Emergency lighting coverage is not code compliant in most of the buildings.

**Mechanical Systems - Heating, Ventilation, and Air Conditioning (HVAC)** - All four classroom buildings currently have inadequate or non-existent ventilation/ outside air. All existing HVAC units are manually controlled separately, making it hard to efficiently control building systems.

**Plumbing Systems** - The existing plumbing systems are original to the buildings and need to be replaced within the next five years. The domestic water lines have accumulated calcium due to hard water and have caused fixture damage and failure. There are insufficient cleanouts in the sanitary system throughout the district, and backups occur weekly, particularly at the Elementary School toilets. At the Jr/Sr High, there have been instances of sanitary piping collapse, causing back ups. In several instances failures have lead to flooding and further damage to interior finishes. At all four classroom buildings, there is no hot domestic water circulation to maintain water temperature during hand washing. This should be provided to reduce risk of scalding. The water heater at the Elementary School is beyond its lifespan and needs to be replaced.

**Means of Egress** - District wide egress deficiencies include non compliant hardware, non compliant stair landings and ramps, doors swinging against the path of egress, and insufficient number of paths of egress. At both the Junior/ Senior High School and the Elementary School, there is a dead end corridor (greater than 20'). The Auxiliary Gym at the Jr/Sr High School has only one exit, and extensive remodeling would need to occur to create another one. Multiple exterior doors on the Jr/Sr HS do not open easily or properly to allow for proper egress.

**Hazardous Materials** - Asbestos, and other hazardous materials are present in all four buildings in existing deteriorating finishes. Due to the age of the buildings, lead based paints are present. As interior finishes fail due to plumbing and roof leaks, there is danger of students coming in contact with these materials.

**Security** -

**Buildings:** There are multiple entries into both schools / campuses. Many of the doors on the exterior of the building do not close and latch properly, leaving the building open to intrusion unless it is continually monitored. The main entrances of both schools will have card access and iPhones installed by August 2019. However, it is not presently possible to visually monitor any of the entrances to any of the school buildings from the main offices, and neither school has a security camera system. The Jr / Sr High and Elementary School does not have a cafeteria or a kitchen. Currently students walk to the Cafeteria Building, located next to the Elementary School. This is a major security concern for the District and community.

**Sites:** Utilities are located in unsecured and unprotected areas at multiple locations at both campuses. In several instances gas mains are located directly in front of parking areas with no bollards or protective fencing. The roofs at both schools can be accessed easily by climbing on adjacent fences or utilities.

**Site Pedestrian and Vehicular Traffic** - At the both campuses, there is lack of striping at all parking lots, no formal bus area, and no formal parent pick up and drop off area. All modes of transportation are mixed.

In July of 2018, the District had a building assessment conducted by Wold Architects and Engineers, JVA Consulting Engineers

## BEST FY2019-20 GRANT APPLICATION SUMMARIES

and Maxson Engineers in addition to the assessment conducted by the CDE. Due to the deficiencies described above, both the District and the assessment team believe the CDE published FCI does not accurately represent the facilities challenges. A report reviewing the CDE assessment is included in the district's Facilities Master Plan.

### 2015 CDE Assessment FCIs:

Jr/ Sr HS total - 31.7

Jr/ Sr HS site - 77.4

Jr/ Sr HS main - 25.6

Jr/ Sr HS VoAg -48.4

ES total - 52.6

ES site - 42.8

ES main - 54.4

ES Cafeteria- 47.5

### 2018 CDE Assessment FCIs

Jr/ Sr HS total - 30

Jr/ Sr HS site - 40

Jr/ Sr HS main - 29

Jr/ Sr HS VoAg - 25

ES total - 31

ES site - 57

ES main - 28

ES Cafeteria - 31

### 2018 Planning Team revised FCIs

Jr/ Sr HS total - 44

Jr/ Sr HS site - no revision

Jr/ Sr HS main - 46

Jr/ Sr HS VoAg - 34

ES total - 45

ES site - no revision

ES main - 44

ES Cafeteria - 45

### Proposed Solution to Address the Deficiencies Stated Above:

#### ASSEMBLING AND EDUCATING THE PLANNING TEAM

The project started with an alarming beginning when district personnel reported that a furnace had failed to light. Upon further inspection, it was determined that the unit was not getting adequate fuel supply due to a leaking line located at the front of the building. Each classroom at WHS is heated by an individual unit fed by a natural gas line that comes out of the ground and snakes up walls and into the unit. A local plumber was called and the line was immediately repaired and a stern plumber's warning was given to administration about the deterioration of the gas lines. When a new superintendent was hired in June 2017, the board tasked her with seeing if a BEST Grant could assist in the process of replacing the gas lines at the high school. The superintendent wisely called an owner's representative to begin analyzing the gas lines and to develop a strategy to address them. In those discussions with the local plumber and the new owners representative and through study of the building inspections by CDE Facility Assessment engineers from 2015, the district learned that the gas lines were only one of a growing list of looming building deficiencies. It was certainly time to act! With the assistance of an owner's representative, a 2018 BEST Grant was submitted and a RFP for a Facility Master Plan was issued. Soon after an architect and engineering firm was secured to lead the process and a building planning team was selected by the Walsh Board of Education and Superintendent. A district planning team was formed utilizing community and board leaders, teachers and staff, and

# BEST FY2019-20 GRANT APPLICATION SUMMARIES

school and district administration. Early in the process the planning team took the lead. Step one, was education with a focus on two topics:

The current needs of all facilities in the Walsh School District  
Demographic trends and data

\*The District was successful in securing a 2018 BEST Grant to address the gas lines, main and side entrance doors, and some critical electrical and safety concerns.

## BOARD OF EDUCATION DIRECTIVES

During these early phases, the new superintendent was acclimating herself to the district. As part of the Facility Master Plan process, the board gave the superintendent two simple directives for planning (1) make sure that you have strong community input (2) under no circumstance is the word "BOND" ever to be mentioned. Interestingly, early conversations between the Walsh team and new architect and owners reps the word "BOND" was seldom uttered, instead it was only referred to quietly as the "B" word. Most agreed, even a whisper of a bond would not play well in this conservative burg recently economically stunted by severe hail and prairie fires in 2017 and 2018.

## THE CASE FOR NEED AND DEMOGRAPHIC DATA

Architects, engineers and the owner's representative presented a detailed analysis of the needs of the facility. At the planning groups request, repair costs were calculated for each area for major deficiency. In the next few meetings the district facility team began to learn of the deficiencies in all district buildings. After a report of deficiencies, it was generally agreed that although the buildings looked adequate and well-maintained (paint, carpet, cleanliness...) expensive systems and infrastructure were in poor condition. In a word, the leaking gas lines were the "tip of the iceberg." It was during these sessions that a shocked group began to process the enormity of the facility shortcomings and that those issues that were present could no longer be addressed with new carpeting or paint. The "B" word, Bond, entered the room. The planning group also looked at the problem of space, namely having facilities that are approximately 35% more than is needed but complicated by not having one facility that can accommodate all students and programs.

The team next evaluated demographic trends of the Walsh School District beginning in the early 1900's through 2018 so to ascertain the viability of the Walsh School District. Through comprehensive statistical analysis, lead by two members of the team, one a teacher and Baca County Historian and the other a Phd statistician with a CIA background, the group arrived at two crucial factors. First, the student population of the Walsh School District will only ebb and flow slightly over the next twenty or more years. Secondly, forced consolidation for the Walsh School District was highly unlikely. These two factors were critical in the planning process since Walsh schools' population has dropped from a high of over 550 in the 1970s to a low of 155 in 2008. Before any study of facilities could begin, the planning team and community needed reassurance that the student population had stabilized and that the Colorado Department of Education was not going to force another round of school district consolidation.

## DEVELOPING PLANNING CRITERIA AND LISTENING TO THE COMMUNITY

Once the demographic study was completed, through a series of meetings the district planning team developed Planning Criteria that assisted the group in guiding the process. The team focused on district goals, mission and vision, values and priorities as they developed the key elements that would guide the team's decisions.

In keeping with the Walsh Board of Education directives, the first community meeting was held at the Walsh Community Center. Approximately 40 people attended the meeting. The Board of Education President opened the meeting by discussing the purpose of the district planning team and facility master plan. The list of building deficiencies, along with the summary of the CDE Facility Assessment Reports, was presented. The community was divided into small groups to analyze the Planning Criteria and current state of deficiencies in the district. Each group presented their finding to the larger group. The response from the community was both positive and encouraging. After considering community input, the planning group settled on the six major criteria to assist with making a recommendation:

- The plan must address facility deficiencies
- The plan should address long-term cost effective solutions-not short term fixes

# BEST FY2019-20 GRANT APPLICATION SUMMARIES

- Find opportunities to reduce operating costs and maintenance while maintaining appropriate educational spaces
- The plan should assume that the district will continue to exist with NO significant change in enrollment
- Community input is critical
- Maximize State grant opportunities

## COMPREHENSIVE LIST OF OPTIONS CONSIDERED

From the list of needs and with special consideration to the planning criteria and from the community meeting comments and notes, the district planning team developed and studied a comprehensive list of options to address the needs of all facilities. The district planning team then requested that an approximate cost (using estimates from the 2015 CDE Facility Assessment and estimates from other rural Colorado projects) of each option be presented to the team.

- 1 - Repair/Update as possible
- 2 - Repair a couple deficiencies
- 3 - Repair primary deficiencies
- 4 - Repair all deficiencies
- 5 - Low end addition to consolidate
- 6 - Higher end addition to consolidate
- 7 - New K-12 building
- 8 - Consolidate without a significant project

The building team and district administration then hosted a second community meeting to again address planning criteria and facility deficiencies. The list of options was then presented for feedback from the approximate 50 community members in attendance. The planning team was encouraged by the community's positive and thoughtful responses. The feedback was overwhelming for building a new school on the site of the Walsh High School campus.

## MAKING THE DECISION

The planning team met following the second community meeting and reviewed the comments shared and the decisions making matrices that had been filled out by attendees. The Planning Group agreed, the two options that would best satisfy their goals and criteria were consolidating all students under one roof through either a high end addition and renovation of the high school building, or building a new K-12 school.

It was initially felt that all goals could be accomplished effectively by adding on to and renovating the Jr/Sr HS. In analyzing the realities of this option, the group discussed several challenges.

- The HS floor plan is problematic: major ADA challenges, (ramps too steep, bathrooms, etc), size and location of current classroom wings would not align with desired grade level separations when all students are consolidated, and it does not support our current teaching and learning model
- There is not enough room between floor and structure to add in a robust hvac system (no room for ductwork)
- Major systems replacement will require a disruptive gut job
- Total cost of renovation and addition is not significantly less than a clean new build and once completed the district will still have an older facility to maintain.

After further discussion, the group agreed that the current Jr/SR High building has numerous systems issues that would have to be addressed, and even if largely resolved, the building would still not meet the planning criteria of long-term vs short term solutions.

The district planning team then voted unanimously to present the option of seeking assistance from the CCAB through a BEST Grant with support of the Walsh School District community through a bond match to build a new K-12 School. The "B" word now is confidently presented as simply BOND!

## How Urgent is this Project?

## BEST FY2019-20 GRANT APPLICATION SUMMARIES

Based on data from the CDE facilities assessment and that obtained during the development of the facilities master plan, a number of systems and components within district buildings have exceeded their design life and are in critical need of repair or replacement. The condition budget summary indicates that the electrical system, interior doors, sanitary waste, HVAC, and water distribution systems in all facilities need to be replaced within the next 2-5 years. The cost to replace these systems is estimated to be in excess of \$5 million.

A number of issues arise on a weekly basis due to the age of the aforementioned systems. For instance, there are periods of time when the lights in the elementary hallway will not turn on and an electrician must be called to work on the system. On a weekly basis toilets in the elementary and staff bathrooms will not flush properly and overflow into the hallway. At the high school, the drain in the home economics room will not drain at all, and a local plumber indicated that the pipe had collapsed. Furthermore, the shower drains in the guest locker rooms drain very slowly, and despite sporadic use, must be worked on frequently.

Additionally, students are currently being served in four different buildings on two campuses. Students from the secondary campus must cross the street to eat lunch in the cafeteria while students from the elementary must cross the street to go to athletics and music. The road which they must walk along does not have sidewalks, and therefore children are at risk of being struck by motorists.

The sidewalks at both campuses are in need of immediate replacement. They are cracked and elevated in innumerable locations. At one time, a community member fell in such a location and broke her shoulder and knocked out two teeth. The water drainage surrounding the cafeteria is very poor, and when it rains or snows, much of the sidewalk leading up to the cafeteria doors is impassable due to flooding and drifting.

Finally, any renovation to our facilities will be challenging for the district to finance on its own due to the presence of asbestos containing materials. For example, the floor tiles and mastic in the cafeteria, elementary, and high school does contain asbestos. Routine maintenance on these floors has become quite challenging as the tiles are beginning to get loose and come up. The health risks associated with friable asbestos material is well documented in literature.

If this grant is not awarded, the District will have to continue to replace systems and components ranked by priority, as they begin to fail. It is hard to anticipate which of the expired systems will fail first, and with limited funds there is a risk of spending money on one system only to have another need repairs soon after.

During the facilities master planning process, the District held two separate community input meetings, as well as holding six core planning committee meetings. The feedback received during these meetings was clear - the community would prefer to spend bond funds on a new facility rather than spending significant funds fixing known deficiencies in buildings which may have many more unidentified deficiencies found during the renovation process. The community does not want to pass a bond to repair known deficiencies, only to get well into the project and find that additional funds will be needed to address concerns that were previously unidentified.

**Does this Project Conform with the Public School Facility Construction Guidelines?** Yes

**If not, provide an explanation for the use of any standard not consistent with the guidelines:**

**How Does the Applicant Plan to Maintain the Project if it is Awarded?**

An annual capital construction budget of at least \$100,000 for the district will be used to maintain and replace project components upon completion of the grant. The district will use general fund money that is available, in part, due to a voter-approved mill levy override to fund capital construction projects. The district will develop a capital construction and maintenance schedule based on the expected lifespan of project components in accordance with a new facilities master plan.

**Describe the condition of the public school facility at the time it was purchased or constructed and, if the facility was not new or was not adequate as a public school facility at that time, provide the rationale for purchasing the facility or constructing it in the manner in which you did:**

"Our schools were built during a population peak to support an enrollment of 580 students. We are currently holding steady with a typical enrollment of approximately 160. We are living in, operating, and maintaining buildings from an era gone by."

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Stephanie Hund, Superintendent.

Walsh School District RE-1 was originally a single building school constructed in 1928 at the site of what is now the elementary campus. In 1959 the surrounding districts were forced to consolidate to the larger Walsh School District. As a result, the student population ballooned, and so did the need for facilities to house them. An elementary addition was added in 1969. The current high school was built in 1960. Over time, both campuses have had numerous additions and upgrades to meet the changing educational needs of students.

At the time of original construction, all buildings, additions, and sites were in compliance with the building codes of the period.

**Describe the history of capital improvements made to the facility by the district/charter school in order to make it suitable for students. Include a list of all capital projects undertaken in the affected facility in the last 3 years:**

Junior/ Senior High School Campus :

-Junior/ Senior High School is a 42,784 SF building. The main building was constructed in 1960, with an auxiliary gym added in 1972.

New storefront frames were installed in 2004

New storefront and new locks were placed on all existing doors and access control was added at two locations in 2019;

Sprinkler system currently being installed on high school football field

-The VOAG is a metal building that is 5,755 SF and was built in 1969. No significant re-investments have been made since its construction.

-The Bus Barn is a 4,000 SF metal building erected at an unknown date. No significant re-investments have been made since its construction.

2017-2018: insurance claim due to major hail storm paid for new roof installed at the high school and new coating to roofs of VOAG and bus barn; new screens on exterior windows at high school; new LED lights installed at high school football field

2018-2019: new VoIP phone and intercom system installed at both main campuses and all exterior buildings

Elementary School Campus :

-Walsh Elementary is a 40,824 SF building/ The original building was constructed in 1928 The building is currently being used as a storage space. The gym was built in 1931 and connected to the original building with an addition in 1956. The main classroom building was another addition constructed in 1977.

New locks were placed on all existing doors and access control was added at two locations in 2019

New storefront and new locks were placed on all existing doors and access control was added at two locations in 2019;

-The cafeteria building is a metal building built in 1968. No significant reinvestment has been made in the cafeteria.

-There is a modular classroom installed at an unknown date and it is currently being used for storage.

2017-2018 insurance claim due to major hail storm paid for new roof installed on the new portion of the elementary building; new roof coatings on original 1928 building and gym area; seven new AC units installed; 11 new windows installed; new carpet in one classroom

2018-2019 new VoIP phone and intercom system installed at both main campuses and all exterior buildings

**What options outside of the BEST grant has the applicant investigated or leveraged to address the school's facility needs?**

While the district has consistently budgeted for capital construction projects, the facilities deficiencies far exceed the existing school budget. The District addresses larger facility needs as systems begin to fail, and smaller needs as they arise. The community did pass a 10 mill flexible mill levy override to assist the district needs in the presence of the Budget Stabilization Factor. This override backfills missing state funds such that the District to make funds available for capital construction and other costs. As previously mentioned, the District did have an insurance claim in excess of \$1.36 million dollars which repaired and replaced the roof on all buildings within the District, as well as replacing the lights at the football stadium.

The District has pursued other grants, but it is clear that the BEST program offers the only major capital assistance grants.

Recent grants the District has received include:

AIM XL Grant through the Colorado Health Foundation Grant \$76,,000 for developing a comprehensive district health and wellness plan to assist in the following areas:

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student health services  
 health education  
 nutritional services  
 counseling, psychological and social services  
 school environment  
 health promotion for staff  
 family and community involvement

Two Monsanto Grants for \$10,000 each for Math and Technology supplies for K-12 education.  
 Konkel Foundation LLC. grant for \$10,559 to assist with installing sprinkler system on high school football field  
 Rutherford Foundation grant for \$33,000 to purchase a plasma table for the VOAG program  
 Applied for, but did not receive a Bernard C. and Hazel Neil Foundation grant for \$228,000 for capital construction needs within the District

**How do you budget annually to address capital outlay needs in your district/charter? Include \$/FTE for the prior fiscal year:**

The district budgeted \$180,000 in the prior fiscal year for capital construction projects for all district facilities. The amount budgeted per FTE was \$1,290.32. For the current fiscal year the district has budgeted \$328,343, or \$1,522.86 per FTE.

**If relevant to your project, what are your current annualized utility costs, and what amount of reduction in such costs do you expect to result from this project?**

N/A

<b>Grant Request:</b>	\$26,294,374.22	<b>CDE Minimum Match %:</b>	49%
<b>Applicant Match:</b>	\$5,458,233.97	<b>Actual Match % Provided:</b>	17.18987599%
<b>Total Project Cost:</b>	\$31,752,608.19	<b>Is a Waiver Letter Required?</b>	Statutory
<b>Affected Sq Ft:</b>	65,634	<b>Contingent on a 2019 Bond?</b>	Yes
<b>Affected Pupils:</b>	176	<b>Source of Match:</b>	Bond Nov. 2019
<b>Cost Per Sq Ft:</b>	\$483.78	<b>Escalation %:</b>	3.5%
<b>Soft Costs Per Sq Ft:</b>	\$94.00	<b>Construction Contingency %:</b>	3%
<b>Hard Costs Per Sq Ft:</b>	\$389.78	<b>Owner Contingency %:</b>	3%
<b>Cost Per Pupil:</b>	\$180,413	<b>Historical Register?</b>	No
<b>Gross Sq Ft Per Pupil:</b>	373	<b>Adverse Historical Effect?</b>	Undetermined
<b>Is a Master Plan Complete?</b>	Yes	<b>Does this Qualify for HPCP?</b>	Yes
<b>Who owns the Facility?</b>	District		

**If owned by a third party, explanation of ownership:**

**If match is financed, explanation of financing terms:**

**Financial Data (School District and BOCES Applicants)**

<b>District FTE Count:</b>	143	<b>Bonded Debt Approved:</b>	
<b>Assessed Valuation:</b>	\$27,291,174	<b>Year(s) Bond Approved:</b>	
<b>PPAV:</b>	\$190,847	<b>Bonded Debt Failed:</b>	
<b>Unreserved Gen Fund 17-18:</b>	\$2,102,031	<b>Year(s) Bond Failed:</b>	
<b>Median Household Income:</b>	\$41,300	<b>Outstanding Bonded Debt:</b>	\$0

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<b>Free Reduced Lunch %:</b>	56%	<b>Total Bond Capacity:</b>	\$5,458,235
<b>Existing Bond Mill Levy:</b>	0	<b>Bond Capacity Remaining:</b>	\$5,458,235
<b>3yr Avg OMFAC/Pupil:</b>	\$2,035.40		

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Division of Capital Construction

District Statutory Waiver for BEST Grant

A partial / full (circle one) district match waiver is requested due to:

*22-43.7-109(10) (a) C.R.S. A school district shall not be required to provide any amount of matching moneys in excess of the difference between the school district's limit of bonded indebtedness, as calculated pursuant to section 22-42-104, and the total amount of outstanding bonded indebtedness already incurred by the school district.*

A. Applicant required minimum match for this project based on CDE's minimum listed percent (Line items A * C from grant application cost summary)	<u>\$15,191,278.01</u>
B. District limit on bonded indebtedness as calculated in section 22-42-104 C.R.S. (FY2018/19 AV x 20%):	\$5,458,233.97
C. New proposed bonded indebtedness if the grant is awarded:	\$5,458,233.97
D. Current outstanding bonded indebtedness:	<u>\$0</u>
E. Total bonded indebtedness if grant is awarded with a successful 2019 election (Line C+D):	\$5,458,233.97

School District: *Walsh School District RE-1*  
 Project: *New PK-12*  
 Date: *02/20/2019*

Signed by Superintendent: *Stephanie Hurd*  
 Printed Name: *Stephanie Hurd*

Signed by School Board Officer: *Janiese Alton*  
 Printed Name: *Janiese Alton*  
 Title: *Secretary*

When it was initially being discussed whether or not we should build a new school in the Walsh District, several of us were concerned that the longevity issue had to be decided in the affirmative before any action could be taken. Research was conducted to better understand the need for continuing the Walsh system in what may appear to be a hopeless situation of ever declining population. The research showed that this area of eastern Baca County has gone through three distinctive eras. The first era covered the period of 1860-to-1940 wherein the ripple effects of Manifest Destiny brought more than 10,000 people to Baca County. The 1940's and 50's transitioned into a fairly steady decline in population due to what we call the Centralization era wherein many moved to the city to find economic improvement. The family had simply outgrown the ability for the family farm to support the ever increasing size of the family. This second era lasted until the downsizing, actually, rightsizing, stabilized in the 1990's. The research data suggest a stable population condition is currently being enjoyed and should persist until the next economic revolution changes the required mix of machinery and labor. We have labeled this era as Bumpy Flat because the school enrollment statistics suggest a highly deviated pattern (Bumpy) which is statistically without a trend (Flat). The "bumpy" attribute is caused by the stork and its unpredictability. The "flat" attribute is the result of stationary economics. This result makes perfect sense because the Walsh school district supports the agricultural industry that is maintaining farming and ranching of several hundred thousand acres of land.

Dr. Bill Stoner

February 12, 2019

Dear Best Board Members:

It is with concern for the health and welfare of the students at Walsh Elementary and Walsh Jr. Sr. High School that I write this letter. The schools are currently in separate buildings with the school cafeteria located about a block from the jr. sr. high school. Students from both buildings have to go outside to get to the school cafeteria. The cafeteria has a number of issues, and the exit doors on this building are constantly a problem. Dressing small children in warm clothes and getting them ready to brave the adverse weather conditions that often exist in rural Colorado to go to the cafeteria takes away instruction time and creates issues in the lunchroom. Safety issues exist on a good day for elementary students as they go down the sloping sidewalk to the lunchroom.

We live across the street from the high school where the buses run from one school to the other in the morning and the evenings. Students are constantly walking from one building to the other, and this often presents a situation of safety with the traffic from the street. The distances between the buildings provide a number of places for a person to become invisible from staff, and this presents other safety issues. There are no cameras available in either building that would help detect unsafe actions of individuals.

The facilities are aging, and they both present challenges of safety. They are not ADA compliant, and neither building has exit doors that lock adequately. They have been worked on a number of times, but the settling of the buildings over time continues to be an issue. Students are being served in parts of the elementary school that were built as "temporary" structures in the late 1960's when I was a teacher there. It is disheartening to watch a handicapped teacher trying to manipulate the inadequate restroom space and other areas of the building. Handicapped students have also had big challenges attending school there.

The high school floor plan presents issues because of the design. The restrooms are not ADA accessible, and there is a steep ramp leading into the gym that presents problems for wheel chairs and other people with disabilities. Because of the design of the building, there is not adequate space in which to install a proper HVAC system. There is absolutely no room for ductwork. In order to provide a proper HVAC system, a major gut project would need to take place. I feel that the expense and the disruption that this would cause is enough to consider a new building.

The exterior lighting presents a problem when there are activities at the school during the evenings. Not only can you not see walking away from the school on the sidewalks, the parking lots are also very dark. The sidewalks are very uneven and cracked, which presents another huge safety and liability issue.

Both buildings have had roof issues for a number of years, and neither building has adequate wiring to accommodate present teaching and learning environments for today's students.

The total cost of renovation and adding on to the existing high school building would not be far from the cost of a new building, and we would still be in an old building.

Teachers and administrators are shared with both buildings, and it is difficult to be running between the buildings. One building would provide convenience, safety, and be much more energy efficient for our district.

From my experience as Superintendent of Schools for the Holly School for District for twenty years, we spent a number of years trying to renovate, remodel, and make the old buildings safe and inviting places in which to be. After a number of years of addressing safety and mechanical issues and spending a small fortune being poured down a bottomless pit, the BEST grant came to the aid of the district. Today, the Holly School boasts a building that houses Pre-K -12 grades and is a great sense of pride for the community and a wonderful environment for learning.

Please consider funding a new school for our community.

Sincerely,

Carlyn Yokum  
Walsh Community Member

# Walsh Public Schools

Phone 719-324-5632  
FAX 719-324-5426

District RE-1  
Walsh, Colorado 81090  
<http://www.walsh eagles.com>

P. O. Box 68  
301 West Poplar

*"Measuring success, one student at a time."*

February 4, 2019

Dear BEST Board Members:

I am writing this letter in support of Walsh School District RE-1's desire to build a new Pre K-12 building. I have worked for the Walsh School District for the past twelve years. The first nine years was spent as the 7-12 math teacher. I have been the principal for the past three years. During my twelve years at Walsh, I have worn many hats. I have coached football, basketball, and track. I have supervised the concession stand, prom construction, float building, and many other events that take place at our school. I even serve lunch at our cafeteria. I have worked in all parts of our current 7-12 building. I have seen first-hand several safety issues. The basic floorplan of our school prevents us from providing a safe learning environment for our students and staff. I have witnessed failing electrical, plumbing, and heating/cooling systems. Based off of twelve years of experience working in our current 7-12 building, I can say, without hesitation, there is a strong need for a new building.

The basic floorplan of our school prevents us from providing our students with a safe learning environment. We have exterior doors that will not lock. Most of the exterior doors become unlocked after someone exits using one of those doors. The locked door becomes unlocked because the door will not latch properly after someone exits. The exterior door to the principal's office does not latch when someone exits the door. I know of at least three incidents in which someone has broken into the principal's office.

Students have to walk to and from our Vocational Agricultural building. There are several places an intruder could hide and potentially cause harm to our students as they make this trip each period of the day. We prepare our future teachers by allowing them to be teacher's aides at the grade school. Also, the lunchroom is on our grade school campus. Nearly all of our 7-12 students eat lunch at the lunchroom daily. This causes another safety issue as students travel from our high school campus to our grade school campus. There are numerous blind spots and areas for an intruder to hide.

I have witnessed failing electrical issues in our 7-12 building numerous times. We have one light switch in our small gym that we have abandoned because it sparks every time we turn it on. We have a number of electrical outlets throughout the school that do not work. We are constantly tripping breakers due to electrical overloads. Most of our electrical panels are original to the building which was built in 1960. When we hire electricians to solve our problems, they have pointed out that faulty electrical "add-ons" and overloaded circuits are to blame. The wiring in our welding shop is original to the building as well. The electrical outlets are not secured properly to the wall. Students have to hold onto the electrical box to plug in their welders. Our bathrooms, locker rooms, home economics room, and science room need electrical upgrades. Those locations should all have GFI reciprocals. We do not even have grounded reciprocals.

**Stephanie Hund**  
Superintendent  
719-324-5632  
[s.hund@walsh eagles.com](mailto:s.hund@walsh eagles.com)

**Linette Crawford**  
Academic Advisor  
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Athletic Director  
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**Ryan Renquist**  
Principal  
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# Walsh Public Schools

Phone 719-324-5632  
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District RE-1  
Walsh, Colorado 81090  
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*Measuring success, one student at a time."*

Our current electrical system does not support our current educational needs. We have interactive white boards in every classroom and all of our students and teachers have their own Chromebook. This technology is great, however, running computers, charging Chromebooks, running interactive white boards and running projectors often causes an electrical overload on our outdated electrical system.

It is only a matter of time before we have to close school for days, possibly even weeks, due to faulty sanitation lines. On two separate occasions, we have not been able to use the showers in our locker rooms due to sewer lines backing up into our showers. Twice I have walked into our showers and found three inches of sewer in them. When we run our washing machine in the home economics room, sounds can be heard from the drains. This drain backs up nearly every time we use it. We are concerned about our ability to continue to tap into our galvanized steel sanitation lines as problems arise. For example, we recently had an issue with one of our drain lines in the concession stand area. The main sanitation line is encapsulated in a cinderblock wall with only a small portion of it accessible. That portion is rusty and does not look like it will last much longer. When that piece of sanitation line fails us, we will no longer be able to provide fresh water in our concession stand area. Another problem is the fact that we have five hot water heaters located throughout our building. None of them have a drain next to them.

The heating and cooling systems are failing at our school. Our classrooms and other work areas are heated and cooled by independent heating and air conditioning units. The original plan for air circulation within our building no longer works properly as evident by the freezing cold hallways and bathrooms in the winter and the blazing hot hallways and bathrooms in the summer. There is an air flow issue which also raises concern about the amount of fresh air that is being brought into the building.

I have noted throughout my time at Walsh School District RE-1 that our buildings are well maintained and aesthetically pleasing. Our proposal for a BEST grant is a proactive approach to avoiding a major catastrophe. If nothing is done to correct these high dollar issues, a tragedy feels eminent. Through careful planning, we have considered a renovation of our existing high school building. There are just too many issues for this to be a feasible plan. We have major ADA challenges in this building. For example, ramps are too steep and bathrooms are too small to make the necessary changes. There is not enough room between the floor and the structure for ductwork to add in a robust HVAC system. All of our major systems need replaced (electrical, plumbing and heating/cooling). Replacing these systems would require an educationally disruptive gut job. If we did make these upgrades, we would still have an old building with other expiring systems. It is in the best interest of our school district, community, parents, teachers, staff, and students to build a new Pre K-12 building. If I can answer any of your questions or be of any service to you, please do not hesitate to contact me at 719.324.5221.

Sincerely,



Ryan Renquist  
Principal  
Walsh Junior/Senior High School

**Stephanie Hund**  
Superintendent  
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**Ryan Renquist**  
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To the BEST board,

Hello, my name is Todd Randolph and I am a long time school board member and area farmer/rancher at Walsh Colorado. I am sure that when you are faced with the task of deciding how to rank the needs of all Colorado school districts who need capital construction projects funded it is a very difficult task. For this reason I applaud your willingness to serve on this important board. I would like to lay out my thoughts and concerns regarding why I think our school district would be a wise choice.

Our community is very conservative minded and we have historically made good decisions with regards to funding our district. However, due to the way the State has chosen to handle funding it has been a very long time since there has been access to the type of money needed to actually keep our major buildings replaced. We've always done the best we can to keep nice facilities which are up to our communities standards, but like many 50+ year old buildings there comes a time when their useful lives have been depleted. Thanks to our excellent maintenance crew, the outside of our buildings and grounds still look really nice but we are now facing several shortcomings with regards to the bones of our facilities. Outdated electrical, HVAC, and plumbing (including sewer) systems are either close to or at failing stages. Our staff has been very adaptive and I applaud their resourcefulness when it comes to dealing with these troublesome issues.

We have spent serious time investigating the best way to proceed remedying our infrastructure in a fiscally responsible manner. I know that a lot of folks who aren't from rural areas think that quite a few of our small towns will probably just continue to lose people until there is no need for a school at that location. However, thanks to the help of a highly trained community member we have watched several presentations that make us comfortable with realizing that we should have a pretty steady enrollment for well into the future. We did experience a pretty sharp fall off in population back a few decades ago but now we have pretty well evened out at our new lower number. Our district covers a very wide region so consolidation here would be very impractical.

Besides being out of date our current facilities were designed for a time when we had 3 times the number of students we currently serve. The inefficiencies of heating, cooling, and lighting these buildings with several vacant rooms is obvious. Another striking problem is that we have two completely separate locations a block apart which is no longer necessary. The fact that our student body and faculty must walk through part of town to move between buildings as well as eat lunch is unsafe and unnecessary.

We, in the most rural part of Colorado, like to think we can take care of ourselves and try not to impose our problems on folks in the urban areas. However, due to the way our State's education funding system is set up we find ourselves in need of help resolving these most important capital construction issues. We would be thrilled if our staff would not have to worry about inadequate facilities and can get back to the important part of teaching, which is what they do best. If you would agree to help us through this dilemma we promise to go away and not be a problem that you need to deal with for a long time.....haha! Thank you for your serious consideration of our grant proposal.

Sincerely,

Todd C Randolph

School board member  
Proud parent of two Walsh graduates  
Former Walsh graduate (go Class of 84!)  
And local businessman



● **Facilities Impacted by this Grant Application** ●

**NORTH CONEJOS RE-1J - Centauri HS Replacement - Centauri MS/HS - 1965**

<b>District:</b>	Auditor - North Conejos RE-1J
<b>School Name:</b>	Centauri MS/HS
<b>Address:</b>	17889 US Highway 285
<b>City:</b>	La Jara
<b>Gross Area (SF):</b>	128,600
<b>Number of Buildings:</b>	8
<b>Replacement Value:</b>	\$33,990,895
<b>Condition Budget:</b>	\$21,474,259
<b>Total FCI:</b>	0.63
<b>Adequacy Index:</b>	0.28



**Condition Budget Summary**

System Group	Replacement Cost	Requirement Cost	SCI
Electrical System	\$5,433,648	\$5,116,692	0.94
Equipment and Furnishings	\$630,336	\$347,483	0.55
Exterior Enclosure	\$5,498,897	\$2,539,263	0.46
Fire Protection	\$15,781	\$1,194,349	75.68
Furnishings	\$1,445,889	\$989,133	0.68
HVAC System	\$4,077,448	\$4,655,420	1.14
Interior Construction and Conveyance	\$5,563,886	\$3,922,323	0.70
Plumbing System	\$2,239,823	\$1,770,910	0.79
Site	\$4,660,546	\$2,105,984	0.45
Special Construction	\$72,909	\$0	0.00
Structure	\$4,351,731	\$12,532	0.00
<b>Overall - Total</b>	<b>\$33,990,895</b>	<b>\$22,654,089</b>	<b>0.67</b>

# BEST FY2019-20 GRANT APPLICATION SUMMARIES

**Applicant Name:** NORTH CONEJOS RE-1J

**County:** Conejos

**Project Title:** Centauri HS Replacement

**Applicant Previous BEST Grant(s):** 2

**Has this project been previously applied for and not funded?** No

**If Yes, please explain why:**

## Project Type:

- |  |   |  |   |
|--|---|--|---|
| <input checked="" type="checkbox"/> New School         | <input type="checkbox"/> Roof               | <input checked="" type="checkbox"/> Asbestos Abatement | <input type="checkbox"/> Water Systems                |
| <input checked="" type="checkbox"/> School Replacement | <input type="checkbox"/> Fire Alarm         | <input type="checkbox"/> Lighting                      | <input checked="" type="checkbox"/> Facility Sitework |
| <input type="checkbox"/> Renovation                    | <input type="checkbox"/> Boiler Replacement | <input type="checkbox"/> Electrical Upgrade            | <input type="checkbox"/> Land Purchase                |
| <input type="checkbox"/> Addition                      | <input type="checkbox"/> HVAC               | <input type="checkbox"/> Energy Savings                | <input type="checkbox"/> Technology                   |
| <input type="checkbox"/> Security                      | <input type="checkbox"/> ADA                | <input type="checkbox"/> Window Replacement            | <input type="checkbox"/> Other                        |

## General Information About the District / School, and Information About the Affected Facilities:

The North Conejos School District RE-1J is a consolidated school district in La Jara, Colorado, in the central San Luis Valley. A rural area heavily reliant upon agriculture, the District comprises several unique towns, creating a diverse populous. The district resides in Conejos County, provides majestic views of nearby mountain ranges, scattered farms, opportunities for outdoor activities, and creates a valued place for families. The county ranks annually between the second and third poorest counties in Colorado and hence, poverty is more the norm than exception; raising one mil draws \$31,073. Conejos County is in the top 3 counties for opioid abuse. Families do without, yet never allow children to do without necessities as they give money they do not have.

The district currently has 1025 students, enrollment trends are steady. In the last 2 years, the district has experienced a slight increase in students, mainly from outside the school district boundaries. The current F/R lunch % is 72. Demographically, the district is 55% minority, and has a diverse cultural, religious and historical makeup. Graduation rate has remained steady at 98%, attendance rate is just above 94%. Staff turnover is low at 8%, all due to retirement. Centauri High School, academically, is a continual "Performance" rated high school by the Colorado Department of Education, and is an important component in the NCSDE's accreditation rating, a District Accredited with Distinction now an unprecedented three years in a row. Centauri High School has been rated the last decade as US News/World Report's Best High Schools, has an award winning CTE program, and boasts Daniel's Scholarship/ Boettcher scholars steadily.

CHS receives 34% of its students from out of district boundaries. A combination of academic offerings, academic accolades, competitive activities, low staff and administrative turnover, and an atmosphere of safety have attracted students who travel one hour to school. CHS has a stellar AP program, a tremendous relationship with Adams State University, Colorado Western University and Trinidad State Junior College and thus the concurrent enrollment offered allows students to graduate with various levels of coursework completed prior to traditional post-secondary enrollment. Due to our high school staff's educational degrees, many courses are offered on our high school campus. Offering the widest array of CTE courses available in CO, students ICAP's can be planned where employment immediately after high school is a reality. The variance of the high school's offerings is diverse, and is an attractive draw for families.

With respect to activities, the high school offers a large array of clubs and extra-curricular activity, each well-supported by the community, as the school operates as the hub of the community, the only activity center in the area. Various groups utilize the school as a meeting place for community activities, the consolidated nature of the district is the preferred venue for our school district community's attention. All activities witness large crowds, especially in proportion to our student and community population. To exemplify, the attendance at the last 4 home basketball games averaged 956 attendees; a band concert drew 843, and this fall the school saw contests over 1100.

The maintenance programming has demonstrated the ability to support the facility decades past its serviceable life. At 55 years old, the facility owes its longevity to a maintenance routine and dedicated funds. Aided by our county with snow removal, dirt hauling and in-kind help, the school has seen the changes of all other facilities in 55 years, remaining original. No current capital construction has been initiated, and a detailed deficiency of the facility will be addressed elsewhere, the point has been reached where new needs to be sought as the expense of refurbishment is near new pricing.

## Deficiencies Associated with this Project:

## BEST FY2019-20 GRANT APPLICATION SUMMARIES

The existing Centauri High School on the North Conejos School District campus was constructed 54 years ago in 1965. At the time of construction, speed of construction was a priority over longevity of the building itself, and construction techniques were not intended for a long-term life. Because of its age, condition and lack of suitability for up-to-date high school instruction, it is necessary that it be demolished and replaced with a modern facility that can meet the needs for 21st-century instruction.

### SITE

The existing Centauri High School is located south of La Jara, Colorado on US 285, a busy 2-lane highway. The High School shares the site with Centauri Middle School and the District's administration offices. All these facilities share a single access off the highway and the main parking area for the site. This parking also serves the football, track, baseball and practice fields.

### VEHICULAR AND PEDESTRIAN TRAFFIC SAFETY

Because of the single access point to the site, vehicular traffic is congested and confused. The access drive opens onto a single large asphalt parking area, which is unstriped and has no lane markings. During drop-off and pickup times, staff is required to help direct traffic to keep parents, busses and those parking separated. When traffic is leaving the site, in part due to the unprotected left-turn onto the highway towards La Jara, traffic stacks uncontrollably within the site. Any and all deliveries, service vehicles and traffic in addition to parents, student and staff must travel through the same large asphalt parking area to the rear side of the buildings. This traffic is required to cross between the three buildings, across the pedestrian connections of the site. These crossing points have no lanes, and distinct markings or curbs to separate vehicle and pedestrian traffic do not exist.

### BUILDING AGE AND CONDITION

The construction of the building is essentially a pre-engineered metal building system with a masonry (brick) exterior. The roof is corrugated metal that has had a coating applied to attempt to keep it weather-tight. The construction of the building originally was not of a type that would be expected to last 50 years. The CDE Auditor's School Report completed in July 2017, found the facility and most of its systems to be well beyond their useful life. At that time, the Facilities Condition Index (FCI) was calculated to be 0.73, or well into the "critical" category. This conclusion noted that several of the building's systems, such as HVAC, plumbing and electrical, were well beyond their useful life but their life expectancies in the report were extended simply because they were working at the time. In addition, this FCI number does not include the building's boiler systems because it is housed in a separate building, also well beyond its useful life (FCI: 0.81). District personnel note that heating in winter is insufficient, cooling is non-existent, regular plumbing issues and poor lighting in classrooms.

Subsequent to the Auditor's report, the district employed an architectural firm to do additional assessment of issues beyond those in that report. The newer study identified additional deficiencies related to safety, security, accessibility and utilization, resulting in a revised FCI for the building of 0.84 - further supporting the conclusion that the building's replacement is economically supported over any attempt to renovate it.

### BUILDING STRUCTURE

Centauri High School is constructed from a combination of pre-engineered metal building framing and concrete masonry walls. The roof system appears to be metal roof decking supported on light-gage purlins which in turn are supported on steel frames. Concrete masonry walls are also present throughout the structure's footprint. Some masonry walls do not extend up to structural decking. In some locations, the masonry walls have infilled some of the steel frames. It is assumed that at least a portion, if not all, of the masonry walls are contributing to the lateral stability of the building structure.

Most of the footprint of the high school structure is single story; however, there is a two-story portion at the main entry. The second floor is used as library space, and the floor framing appears to be concrete on metal deck supported on wide flange beams and steel columns.

### Exterior Enclosure:

The exterior walls are made up of a combination of brick veneer and metal stud framing, corrugated metal panels attached to the structural steel system of the building, and a large two-story steel framed curtain wall with glazing panels and fiber composite panels. There is also stucco on steel stud framing substrate located above and below the windows in the classroom wings.

In the brick walls, mortar joints throughout show signs of deterioration and require repair in many places. Various bricks around the building have become dislodged, causing damage to the mortar of adjacent brick joints and causing adjacent blocks to become dislodged, allowing moisture to enter the wall cavity.

There are many areas within the masonry - both interior and exterior - where cracks and spalling are present, due to age and settlement of the structure. These areas are unsightly and those on the exterior have allowed water infiltration into the building's construction. Repair of these areas would require removal and replacement in several areas.

## BEST FY2019-20 GRANT APPLICATION SUMMARIES

The corrugated metal panels are in poor condition. Many fasteners are missing, allowing water to enter the wall cavity and leading to further deterioration of the panels and panels becoming dislodged. The finish is deteriorated, exposing the metal beneath to damage from weather. There are many dents on the metal panels and some of the panel edges are bent outward. The steel curtain wall is set inside of the building's structural frame. The joint at the wall frame and the structural steel is not flashed and relies on sealant to prevent air and water leakage. This sealant is severely deteriorated throughout. The glazing panels are heavily stained from weather. They appear to be held in place with sealant. They are not shaded and produce a large amount of solar heat gain in the building entry as well as the second-floor library. The fiber composite panels are also damaged from exposure. The surface is becoming separated from the fiber core exposing the core to moisture damage and subsequent deterioration and failure.

At the exterior walls of the building, there is evidence of concrete erosion along the foundation walls. In several locations, the concrete foundation wall has eroded away so much that brick veneer and/or siding material is no longer fully supported.

### Exterior Openings:

Most of the windows are aluminum clad, double hung, wood, residential style units that were installed in 2000. The remainder are glazing units in hollow metal storefront frames or a large curtain wall at the entry. The clad wood windows are manufactured units with insulated glazing panels that contain horizontal blinds in between the two panes of glass. The finish on the exterior aluminum cladding on most of these units is deteriorated exposing the cladding and the wood to potential damage. The windows are not adequately flashed and rely on sealant to keep water from entering the walls. The sealant is severely deteriorated, allowing air and water to enter the wall cavity as well as allow conditioned air to leak out. Though these units have insulated glazing they still contribute to a large amount of solar heat gain in the summer and heat loss in the winter. The heat gain and heat loss in most classrooms is so great that most staff keep the blinds closed in an effort to improve the comfort of the classrooms.

Other windows are made up of hollow metal steel frames with single pane glazing and awning units. The glazing is weather damaged and in very poor condition. The seal around the glazing is in poor condition and shows signs of damage from moisture intrusion. The awning units do not close well or are not sealed and leak. The hollow metal frames contribute to a significant amount of conditioned air loss. These units also contain doors that are in poor condition.

The facility's exterior doors are uninsulated hollow metal units that have single pane glazing in them, including the doors at the primary building entrance. The doors are original to the building and have had various levels of repair over the years. Most are not able to be repaired further. The steel inner and outer sheets have been welded to the door frames on many occasions. There is damage at the hardware mounting locations causing even further deterioration. The damage is sufficient enough to cause poor operation leading to possible safety issues.

### Roof:

The roof is the original formed metal panels with bent panels for the ridge cap. The roof has several coats of an elastomeric coating. This coating is severely deteriorated allowing water to become trapped between the various layers causing subsequent damage to the lower layers and even the panels themselves. Most of the roof penetrations do not have adequate flashing and rely on heavy coats of sealant to keep water out of the building. The joints in the panels have many fasteners and an excessive amount of sealant under the layers of coating material. Moisture and wind have damaged these areas.

An area of roofing on the southwest corner of the building has become separated from the structure/substrate below due to wind and is currently being held in place with tires as ballasts. There are two satellite dishes located on the roof that are ballasted rather than fastened to the roof. The dishes and the ballasting material are located such that they restrict runoff, causing further damage to the roof coating. Some of the ballasts are bags of concrete that are deteriorated and no longer adequately keep the dish in place.

The roof does not have gutters or downspouts to divert the water away from the base of the wall, such that grade slopes back toward the foundation, leading to heavy ponding. In the winter these areas freeze over and become potential hazards, especially along the north side of the building and inside of the courtyard entry, where there are usually pedestrians.

### Interior conditions:

#### Doors:

The interior doors are mostly hollow metal steel units that are original. The administration suite doors are wood units in hollow metal steel frames. The kitchen serving line has an overhead coiling door.

The hollow metal steel doors are in extremely poor condition. Most have had the two face sheets welded to the frame repeatedly but due to the damage to the frame the steel continues to delaminate. Many of the doors, frames and hardware do not close or are very difficult to close. The condition of the metal doors is poor and could possibly lead to safety and security issues.

## BEST FY2019-20 GRANT APPLICATION SUMMARIES

The door hardware is also original and in very poor condition. Most locksets are loose, non-functioning or damaged beyond repair and require replacement. Door hinges are worn and not repairable.

Ceilings:

The ceilings consist of acoustical tiles set in metal grids and adhered acoustical tiles on a gypsum board suspension system. Few ceilings are gypsum board on framing. The ceiling are all generally in very poor condition. Many tiles are dirty and stained from water leaks, are sagging from age, are missing or damaged. Some grids are sagging from the weight of insulation placed on the ceiling tiles. The adhered ceiling tiles are stained and dirty. There is a patchwork of replacement tiles throughout these ceilings. Ceiling tiles are beyond their service life and cannot be cleaned.

Floors:

The flooring in many classrooms has been replaced with vinyl composite tiles, tested to contain hazardous materials. The corridor tiles are heavily worn and have gaps in the joints, broken or otherwise damaged tiles and a patchwork of newer tiles that have replaced older tiles.

The gymnasium floor is the original hardwood flooring over a wood sleeper system. There is damage to the flooring material, separation at the board joints, cracked and splintered boards, etc. The floor is not fully attached to the substrate resulting in squeaking and creaking. The finish covers floor accessories such as volleyball net cups. The finish will be damaged removing the covers to these accessories possibly creating trip hazards.

Several rooms have carpet that is worn, stained and dated. The carpet in these areas is in very poor condition and has areas of damage that pose tripping hazards. Most is beyond repair and satisfactory cleaning.

The restroom floors are finished with VCT through with some areas that have 2x2 ceramic tiles that appear to not be original. The VCT is in very poor condition with severe staining and large gaps at the joints. Some of the more damaged tiles have been replaced causing a patchwork of tiles in some of the restrooms. The ceramic tile appears to be in good condition though the grout is stained and damaged

Other:

The bathrooms have the original metal partitions. These partitions are in very poor condition with severe damage such as dents and bent doors and braces. Some do not latch correctly and must be held closed. The finish on the partitions is poor and many have been painted over. Partition supports have become separated from the walls and have been replaced or relocated many times leaving damage on the partitions and the walls.

The bathrooms contain accessories such as mirrors, soap dispensers, etc. that are original to the building. The mirrors have patches where the reflective surface has faded or discolored, and the frames are damaged. The other accessories are a mismatched assortment of items that have been replaced or added over the years and are not mounted in accessible locations.

The bleachers in the gymnasium are in disrepair and show signs of damage. Parts for the drive system are no longer available making repairs difficult and sometimes not possible.

Fire extinguishers are located throughout the building and most are in cabinets that are not compliant with the fire code. Building signage is an array of different types, sizes or arrangements that are either not compliant with accessibility codes or do not provide adequate room identification. The mounting locations are not in compliance with fire and building codes.

SAFETY

The existing facility was evaluated using the principles of CPTED (Crime Prevention Through Environmental Design). The concept of CPTED places emphasis on the physical design of the environment and advocates proactive approaches through design to deter unwanted behavior. According to CPTED research, the most important principles are natural surveillance, natural access control, territoriality, and maintenance. Using these principles, the existing facility shows deficiencies in the following areas:

Natural Surveillance - the placement of physical features to maximize visibility and minimize auditory isolation:

- No "eyes-on" parking area and main entry
- Classroom windows are small and provide too much glare to use as a means of surveillance
- A lot of hiding places and blind corners in the corridor and library
- Lack of windows/sidelights from classroom to corridor
- Doors and the configuration of gang restrooms and locker rooms doesn't allow for auditory surveillance
- Lack of exterior lighting in parking lot

Access Control - actual or perceived barriers:

- No lockdown vestibule

# BEST FY2019-20 GRANT APPLICATION SUMMARIES

- Various points of entry that are unmonitored
- No site fencing
- Doors not equipped with proper classroom locking hardware
- Trees are too close to building allowing for easy access to the roof
- Separate entry into kitchen not easily monitored
- No directional signage indicating public vs private

Territoriality - use of physical attributes to delineate space and provide a positive sense of ownership:

- No clear indication of what buildings are public or private
- Unauthorized vehicles can easily drive up to/ into the buildings
- Very little display of school pride or ownership

Maintenance - the repair or replacement and general upkeep of the campus and facilities:

- Aging fixtures are no longer maintainable
- Overall sense of neglect and deterioration

## ACCESSIBILITY

Most of the facility is not accessible. The doorways into classrooms do not have adequate clearances or appropriate hardware that is usable by those with disabilities. The restrooms lack accessible fixtures and other features. The gang restrooms do not contain an accessible stall with grab bars and accessories mounted at the appropriate heights, the lavatories are not mounted at the accessible heights or accessible faucets within appropriate reach ranges. The soap dispensers and air dryers are also mounted in inaccessible locations and heights. There is no means to access the library for those with disabilities. The cafeteria does not have an accessible counter height at the serving line. There is only one accessible exit though it does not connect to an accessible route to the public way. The site does not contain indication of accessible parking or an accessible route to the primary entrance.

Most of these issues would require renovations and modifications beyond simply upgrading current systems, as wall and plumbing configurations do not easily allow for renovation. The scope of changes required to bring the building into compliance with accessibility statutes might fall beyond what is considered "readily achievable", however any significant renovations would likely require complete upgrades which would significantly impact the necessary modifications the building would endure.

## MECHANICAL SYSTEM

The mechanical system consists of hot water boilers in a detached building that feeds heated water to wall mounted fan units for heating and does not have an air-cooling system. There is an air recirculation system in the corridors and public areas. The boilers are original to the building and are beyond their service life. One of the two units is inoperative and is marked with an inspection tag stating "scrapped". Replacement parts for the remaining boiler have become increasingly difficult to obtain and often are very expensive. When parts are not available, costly retrofits or workarounds must be made to keep the system working. The associated piping system is original and requires more frequent and extensive repairs due to the deterioration of the material. Repairs are costly due to incompatibility of materials and lack of available valves and pumps.

The mechanical system is no longer able to maintain a comfortable indoor environment at any time during the year. It has become very costly to maintain in both repairs and labor. The inability of the mechanical system to maintain a comfortable environment has led staff to utilize space heaters that put a large strain on the electrical system components as well as availability of power, an increase in electricity usage, potential fire hazards and increase chance of occupant injury.

## PLUMBING SYSTEMS

The plumbing system is also original to the building. Most of the plumbing fixtures are original. Maintenance staff reports that the system needs regular repair or replacement of leaking pipes and clogged sewer system due to deterioration of the piping system.

Lavatories throughout are stained and have finish damage from many years of cleaning and use. Faucets are all water damaged and have severe finish damage from many years of cleaning and use. Some are leaky and beyond repair causing further damage to the lavatories. The plumbing beneath the lavatories does not have protective covering as required.

Hot water is provided by three gas fired heating units located in the boiler shed. Due to the deterioration of the building itself

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the water heaters must be regularly monitored to ensure that they stay functioning. When functional the water temperature is still inconsistent and often does not get hot enough. The piping has numerous leaks that constantly require repair. The heaters themselves are well beyond their service life and may contain a large amount of mineral deposits reducing their capacity and the ability of the heating element to effectively heat the water.

### ELECTRICAL SYSTEMS

The electrical system including lights, fixtures and devices are original to the building and the service was upgraded in 1985, though it is located away from the building. There is not enough electricity and some classrooms that have computers plugged into the same circuits will lose power or trip the circuit. There is not an adequate number of outlets in most rooms and there are several extension cords and power strips throughout the facility with many located in such a manner as to be hazardous. There are many broken devices, broken or missing face plates, etc. that are potential hazards. The lighting fixtures are original to the building and are inefficient and provide poor lighting. Classroom lighting is uneven and too bright. The system is generally in poor condition and could possibly be determined to be unsafe due to the exposed wires and various other issues.

### NETWORK AND TECHNOLOGY

IT network was upgraded in 2016 and appears to be functional, however all instructors report inadequate capacity and access to computers throughout the facility. Classrooms in general do not have the ability to provide computer access to most students, and the school has two computer labs that are almost constantly scheduled. There is no supervised location for students to do independent computer work. IT staff for the school are overworked and cannot keep up with the needs of the teachers and staff.

### EDUCATIONAL SUITABILITY

The size and configuration of existing classrooms and school spaces is inadequate for current teaching requirements and the Colorado CDE guidelines. Even without inadequate building systems, classroom sizes and configurations hinder the teaching process. Conditions within the school spaces are inadequate in terms of lighting (both natural and artificial) and acoustics.

There are no personalized learning environments, inadequate technology infrastructure, no ability to create learning communities, and no ability for team teaching/interdisciplinary work.

In general, instructors would prefer to teach in an environment that could provide 1:1 computer access for students, but the current facility makes this impossible, due to the lack of building infrastructure, budget for computer hardware/software, and the staff available to maintain the systems.

The school is also currently inadequate for the level of participation by students in sports programs. Each sport provides three teams for each sex, and the ability to accommodate the practices can be difficult to schedule. Particularly for sports such as basketball and volleyball that use the indoor courts, scheduling of both the high school and middle school basketball courts requires that some practices happen late into the evenings. This not only disrupts student and faculty schedules but creates safety concerns where students must drive to and from the campus at night on Highway 285. To help alleviate this safety and scheduling concern, the proposed new school includes a main gym with two full-size cross courts, and an auxiliary gym for additional practice space. In order to be efficient with the size of the school and the funding request, the auxiliary gym is proposed in place of a student commons/dining area, and will function as both.

### HAZARDOUS MATERIALS

Several assessments have been done over the years evaluate the existing structure for the presence of Asbestos Containing Materials (ACMs), most recently in 2012. These assessments were done to satisfy the requirements of the Asbestos Hazard Emergency Response Act (AHERA). This report indicates the presence of ACMs contained in vinyl floor tile throughout the facility, gypsum board with joint compound and tape, vibration joint cloths and exterior cementitious transite panels. While none of these materials are considered friable, they would be required to be abated prior to any significant work - renovation or demolition - on the existing facility. They also impair the ability for maintenance staff to perform some standard repairs to the building. The costs for abatement are included in the estimate of project costs.

### ENERGY PERFORMANCE

The existing facility has very little in the way of considerations for energy performance. There is very little-known insulation within the building, the HVAC system is not of a high-efficiency type and lighting systems are outdated - at the time the building was built, energy efficiency was not a high priority of most construction. Current electrical and gas use is approximately \$52,000 per year for a building of approximately 52,000 sf, or \$1.00/year/sf. This amount can be compared to

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yearly costs of a new, energy-efficient high school in a similar climate, Montezuma-Cortez High School, completed in 2015. This facility achieved LEED Gold certification, a measure of its sustainable design and similar to Colorado's High Performance Certification Program. From October 2015 through September 2016, MCHS used 30 kBtu per square foot of electrical and gas energy, equivalent to \$0.86/sf, or \$0.14 per square foot less than the existing Centauri High School. For the existing building area, that amount would result in a savings of \$7,280 in operational costs each year just for those two utilities, and a total of \$364,000 over the course of a new building's 50-year lifespan.

### **Proposed Solution to Address the Deficiencies Stated Above:**

Due to the high level of deficiencies in the existing Centauri High School, it is recommended that the building be demolished and a new high school of 300 students be constructed on the same site. The capacity of the new school is based on several years of enrollment trends, which have remained relatively flat, and modest potential for growth within the new facility.

#### **SITE**

During construction of the new facility, the existing High School must remain operational. This creates a relatively small area of the site available for construction. Several design schemes were created and evaluated by the school district, and it was ultimately determined that construction should occur in the southeast portion of the site, between the existing high school and the existing baseball field. This area occupies portions of an existing practice field and parking lot. This location for the new school will allow construction to proceed while allowing use of the existing high school, baseball field, football field and track. Once the new facility is complete and students move into the new building, the existing buildings can be demolished and the completion of the new parking, bus drop-off and landscaping can proceed.

This location of the school also provides a coherent design for the overall campus once the work is complete, with a strong pedestrian connection between the high school, middle school and administration building. A part of this coherency is achieved through the creation of positive outdoor spaces between the buildings, landscaped areas that become a place for students, parents, teachers and administrators to arrive, gather and interact.

This proposal for a new school initially considered replacing the entire CTE/shops building to provide additional space and opportunities for students in auto, welding and building trades. In particular, it was desired by the district that these programs have a direct connection to the main school building, so they were not isolated, and so their programs could be visible to all students. As the program and initial costs were developed, it was determined that this portion should be removed from this request, with the intention that these programs be completed in future using funds raised directly by the district. The site location of the new building considers the potential for creating a new CTE program that is a connected part of the campus.

#### **VEHICULAR AND PEDESTRIAN TRAFFIC SAFETY**

The design of the vehicular trafficways begins with consideration of the single point of access to the site. The existing disposition of parking immediately inside the site creates traffic backup when larger groups of vehicles try to leave the site. Left turns onto Highway 285 cause delays in waiting for northbound traffic.

The new design funnels parent drop-off traffic immediately away from any traffic leaving the site, while bus and student traffic are directed around the school to the back of the site. This arrangement eliminates the conflict of arriving and leaving traffic, while providing a very long traffic stacking lane for vehicles leaving the site. This lane is divided to allow separate stacking for northbound and southbound leaving traffic.

Parent and bus drop-off locations are separated to opposite sides of the campus for safety and simplicity of traffic patterns. Each of these drop-offs are equally accessible to all three buildings. An additional bus drop-off is provided next to the track, football and baseball fields for visiting team busses. The west parking lot also provides access to the existing shop building, which will remain in this project. With the vehicular traffic routed to the perimeter of the buildings, pedestrians will be able to move between buildings without crossing any vehicular path.

#### **BUILDING DESIGN AND STRUCTURE**

With the limited site area to build while the existing High School remains in operation, it was determined that a 2-story building was the most feasible solution. The new school provides an entry on each side - facing east and west to avoid build-up of snow and ice. The two entries have been designed to enhance safety and security to the school. The administration area provides a secure vestibule for visitors and the ability to oversee both entries.

The school layout separates the louder athletic and commons functions from the quieter academic areas. Athletics are placed to have easy access to both parking and the fields. This arrangement eliminates the need to provide both athletic and student lockers.

The necessity of providing an auxiliary gym is dictated by the very robust athletic programs of the school. Three teams per sport per sex are provided and embraced by the community. In the current school which does not have a second gym, practices often need to take place until late in the evening due to the high utilization of these spaces - including the middle



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school gym. To help mitigate the costs of the auxiliary gym, it is being proposed that it also serve as the cafeteria eating space and school commons. This arrangement also allows the kitchen to be used as a concessions area during athletic events, eliminating the need for separate concessions space. The kitchen and service area are both connected directly to the aux. gym. An outdoor patio eating/activity space is proposed for student and faculty use.

Also, directly accessible from the lobby are the classrooms, exploratory class labs and science facilities. These are placed in a two-story block that allows teaching neighborhoods and team teaching - a feature requested by faculty members. The library is given a key, central location among the academic areas of the school. The lobby is an open two-story space that provides stairs and elevator access to the second floor. This central space provides gathering and academic collaboration space for all the classrooms.

The construction of the new building will consist of a steel frame, concrete foundation and floors, and durable, low - maintenance exterior materials such as brick, cement plaster and metal panels. There will be ample windows and glass areas, providing needed sunlight and views from within the facility, which will have a positive impact on the learning outcomes for students, and satisfaction of the faculty. The construction standards for the new building will be consistent with providing a 50-year life span of the facility.

### SAFETY

The new facility will be designed using the principles of CPTED (Crime Prevention Through Environmental Design). These principles are outlined in detail in the "Deficiency" portion of this application. Features of the new design that adhere to these principles are:

- Easy surveillance of the parking and main entry from within the school
- Windows that are generous and allow views of the campus
- Elimination of hiding places and blind corners
- Exterior lighting for the parking lot
- A lockdown vestibule at the main entry, requiring admission by administration staff
- Reduction of unmonitored entrances and exits
- Site fencing
- Doors provided with proper lockdown hardware
- Directional signage and clear indication of public vs. private spaces
- Distance separation of vehicles and the school

### ACCESSIBILITY

The new facility will be designed to maintain proper accessibility to all to each space. Elevator access to the second level will be provided for those students who require it, while not allowing unauthorized access for others. All exterior entrances will be at grade without steps or ramps. All restroom facilities will be designed to accommodate those with disabilities. Accessibly parking spaces will be provided near entrances and paths to the building that do not require travel within or over traffic lanes.

### MECHANICAL SYSTEM

The proposed mechanical system will consist of a hybrid ground-coupled heat pump system (HyGCHPs), that combines ground-coupled heat pumps with a supplemental boiler, which is added to improve the economics of the system.

Space heating and cooling will be provided by high efficiency heat pumps located in indoor mechanical rooms and above the ceiling. Low velocity ductwork will connect the heat pumps to the diffusers in the space. Heat will be added to and rejected from the heat pump geo-exchange water loop using an array of vertical piping buried beneath the site.

Ventilation air will be provided by a dedicated outside air handling unit. This unit will be a packaged heat recovery unit located on the roof of the building. The heat recovery unit will use the general building exhaust air to pre-heat and cool the incoming outside air using a rotating heat wheel.

The ground source loop will be a series of vertical wells drilled into the ground to use the earth as an energy source or "heat sink." This closed loop transports energy to and from the ground using the water in the piping.

### PLUMBING SYSTEMS

All plumbing fixtures will be specified using commercial quality materials and will be fully compliant with all applicable accessibility requirements and conservation standards. Plumbing fixtures will be based on well-known brands with readily available replacement parts.

All plumbing fixtures will be connected to a conventional gravity-type sanitary sewer and vent system utilizing cast iron materials and will connect to the main utility systems. Where waste water temperatures within the Kitchen are anticipated to exceed 140°F, cast iron pipe and fittings will be exclusively used up to a point where normalized conditions occur. A grease interceptor will be provided outside the building for the kitchen service.

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Sediment interceptor(s) will be included as appropriate in Arts Rooms. A centralized acid neutralization system (AWN) will be emplaced to serve all science rooms (sinks, fume hoods, emergency equipment) via a dedicated acid-resistant piping system.

### ELECTRICAL SYSTEMS

A new transformer and meter location will be installed within the service yard area. Primary power will be coordinated with the local utility provider. Secondary electrical systems will be distributed from the transformer to the electrical main switchboards and then to sub electrical panels distributed through the building. Sub-metering of the building will be provided as necessary for sustainability and Energy Star requirements.

Walkways, landscaped areas, and building egress areas adjacent to the building will be provided with lighting, using a combination of pole mounted and building mounted luminaries. Overhead, pole-mounted luminaries will utilize cutoff luminaries to not create light pollution and to comply with the Colorado Night Skies Protection Act. Lamp types will be LED for Parking and Roadway areas, and in courtyard and walk way areas.

Interior lighting design will consider ease of maintenance, energy efficiency and suitability for the environment. LED fixtures will generally be used throughout. In classrooms and the library, linear direct/indirect luminaires will be utilized to provide a better teaching and learning environment. In the gym and cafeteria areas, High lumen (T5) output luminaires will be utilized. General-purpose duplex receptacles, in addition to user required outlets, will be provided as follows:

- Corridors - 50 feet on center for cleaning purposes.
- Classrooms - 8-10 feet on center or two per wall with consideration for special or computer use receptacles.
- Offices - One receptacle per wall with consideration for special or computer use receptacles.
- Computer rooms - one duplex receptacle per computer station and additional receptacles for servers, printer, etc.
- Special purpose outlets will be located based on equipment layouts and requirements.
- GFCI receptacles will be used in building exteriors, in restrooms, and within 6 feet of sinks. GFCI receptacles will also be installed within 25 feet of roof or exterior mounted mechanical equipment.
- Dedicated receptacles will be provided for special equipment, i.e., copiers, printers, fax machines, coffee makers, microwaves, etc.

### NETWORK AND TECHNOLOGY

The building will be provided with a Main Communications Equipment Room and multiple Telecommunications Rooms (TR) to service the design. These will be sized and outfitted to support the changes that will happen over the life of the building. The building will be designed with the intent of providing Wi-Fi throughout, and it is anticipated that coverage will be designed utilizing 75' on center coverage for wireless access points. In addition, each classroom will be provided with enough wired data ports for computers, display servers and ceiling or wall mounted projection systems. The design will also consider security systems in the form of access control and surveillance, as determined necessary for the design of the building.

### FIRE SECURITY

A new addressable fire alarm system will be provided that has the following features and equipment:

- Smoke and heat detectors - will be installed in all space per NFPA.
- Pull stations - at all exits
- Horns and strobes - horns in corridors and strobes will be in accordance with ADA requirements. Speaker/strobes will be provided in assembly areas for voice evacuation.
- All external devices such as PIV, and the like, will be connected in the new system.

The existing site's water is provided by wells, and water pressure and flow are not expected to be sufficient for a fire suppression system in the building. None of the existing buildings, including the high school have fire suppression. The design of the new school will be provided with code compliant fire walls as necessary to maintain building areas that are within allowable limits for non-sprinklered buildings. Each separate section of building will have adequate exits and short travel distances for occupants to safely leave the building in the event of a fire.

### EDUCATIONAL SUITABILITY

The new facility will be designed with educational flexibility in mind, allowing accommodation of the school's current pedagogy, while allowing inevitable changes to take place over the long life of the building. The general classrooms and supporting exploratory spaces will be intermixed and distributed on two levels, allowing the development of team-teaching concepts and the integration of multiple disciplines into single paths of the coursework. Within the classrooms themselves, the size and arrangement will allow the use of moveable furniture that can quickly be changed from a lecture format to small group collaboration. Emphasis on the ability for hands-on learning is important. Each classroom will also be designed for generous use of technology, and the eventual desire for 1:1 student to computer application.

Abundant daylight and views will be available in all classrooms and throughout the facility. All exterior openings will be

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considered by their orientation, and properly shaded to eliminate glare within. The main lobby will be an open, inviting space that provides a hub for school activity. The separation of academic spaces and athletic spaces allows both an acoustic separation between the two, but also the ability to lock off the classroom areas during after-hours athletic events.

The new facility can be a source of pride and ownership for the entire community, and this pride can result in better student outcomes, fewer absences and expanded opportunities.

### HAZARDOUS MATERIALS

For the new school, all materials used will be free from asbestos and other hazardous materials, as these are not even available for use. As part of the building's sustainability goals, materials with low Volatile Organic Compounds (VOCs) will also be used. With proper materials selection and a highly filtered, mechanical system, the environment in the school will be a healthy and sustainable one.

### ENERGY PERFORMANCE

The new building's mechanical systems are expected to achieve a cost per square foot for energy usage of about 14% below the existing school, achieving a savings of approximately \$364,000 over the 50-year life of the building, in today's dollars.

### How Urgent is this Project?

#### VEHICULAR AND PEDESTRIAN TRAFFIC SAFETY

While a new high school does not change the fact that the school is located on Highway 85 with only a single access point, the onsite improvements can dramatically change the traffic patterns and safety issues with the existing site. With proper vehicle stacking lanes and the ability to split incoming and outgoing traffic immediately inside the site boundaries, significant safety concerns can be reduced.

#### BUILDING AGE AND CONDITION

The district has made every affordable effort to keep this building operational and educationally valid for more than 50 years. However, the building itself was not originally intended to last that length of time and the need for this project has reached a critical point. As detailed in the Deficiency description, virtually every system of the building has been maintained past its lifetime and could fail at any time.

Parts of its systems are beginning to fail or are on the brink of failure. The CDE school report from July 2017 had already indicated several building systems, most notably heating, were well past their useful life. That report increased the remaining life of the mechanical, electrical, plumbing, exterior and interior doors, block walls, interior partitions, restroom accessories, interior stairs, floor finishes, and many other key systems, merely because they were operational at the time of the report. The report acknowledged, however, that all these systems were beyond their useful life and should be budgeted for replacement.

The current calculated Facility Conditions Index (FCI) for the building - based on the CDE Auditor's Report and a Subsequent Building Assessment - is 0.84, based on the ratio of renovation costs to replacement cost. This places the overall building in the "Critical" category of the FCI rating system. This number can be looked at as a percentage (84%) and anything over 30% is considered "Critical." This building is demonstrably in very poor condition throughout.

For the heating system, one of the two boilers has failed, and the other is in a continual cycle of maintenance/troubleshooting. Because of its age, parts are difficult if not impossible to come by, and when they can be found typically require a waiting time for shipping. This can result in times with no heat available to the building. The district has already experienced one such day this academic year that required students to be sent home early due to a lack of heat and freezing temperatures outside. These situations not only create an academic problem with lost days, but also compound the district's difficult bus schedule. Due to the district's large geographical size and the larger number of out-of-district students it serves, rescheduling the busses for an unplanned, midday dismissal can be very disruptive for students, parents and district personnel.

#### SAFETY

Beyond the direct building condition, there are safety concerns that affect students every day. Given the reality of school shootings that seem to be able to occur anywhere, a building such as this that does not have a controlled entrance or vestibule has a very real possibility of an unwanted intruder. There are also several additional uncontrolled entry points around the school's perimeter, and sight lines inside make it difficult to monitor those doors. The overall site is difficult to monitor from inside the school due to a lack of adequate windows and the office location, and there is a lack of exterior parking lot lighting for nighttime events. All these issues require more modifications than can be reasonably accomplished with a renovation of the existing facility.

#### ACCESSIBILITY

For any student or staff member with a disability, the school is a constant struggle as there are no accessible features as we

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would describe them today. Doors do not have proper clearances, restrooms are almost unusable, and the cafeteria has no wheelchair-height serving line. Because of the way the original building was constructed, many of these problems would require extensive modifications that would be unwarranted due to their high cost. But as long as they remain as-is, the rights of those with disabilities are potentially being violated with the lack of proper accommodation.

### HAZARDOUS MATERIALS

The building has many Asbestos Containing Materials present, particularly in floor coverings and the wall gypsum board. Because of the extent of these materials, abatement would be disproportionately expensive if the attempt was to renovate the building. As long as the materials remain in place, there is a hazard to anyone in the building, and in particular those maintenance staff who make modifications as they attempt to keep the building operational.

### SCHEDULE

A proposed project and construction schedule has been attached to this grant request. It assumes a grant award this year and the requirements for construction of a project of this size. Due to the necessity that the existing high school remains operational during construction, the site development construction cannot take place until after the new building is completed and students move in. This allows the existing building to then be removed and site features completed. This phased construction means that the earliest date students can occupy the new building is the spring 2022 semester, resulting in the need to keep the current systems operational for three more years from this application date. It is likely that more system failures will occur during that time, and any further delay could have profound consequences for the district.

**Does this Project Conform with the Public School Facility Construction Guidelines?** Yes

**If not, provide an explanation for the use of any standard not consistent with the guidelines:**

### How Does the Applicant Plan to Maintain the Project if it is Awarded?

The Board of Education of the North Conejos School District RE-1J has set aside an initial contribution to the capital renewal budget to offset any initial costs prior to the capital renewal budget being funded through annual contributions. This is funding set aside in the event that a need to replace a major school facility system surfaces that yearly contributions cannot cover due to needed years of accumulation. The amount of the contribution, set aside specifically for the small rural funding for fiscal year 2018-19, one-time monies distributed to qualifying school districts. Exactly \$100,000 has been specifically earmarked for such funding to provide the initial savings with the intent of fully funding capital renewal expenditures in addition to the following annual contribution stated below.

The North Conejos School District's minimum contribution is placed at \$100.00 per pupil to be directly input into the new construction's annual capital reserve fund. To exemplify, this fiscal year the October count submitted to the Colorado Department of Education for funding is officially 1,025 students. Seeing steady enrollment figures for the future, making educated judgments of enrollment based off past enrollment figures, and noting the new requests from out of district students for the school year 2019-20 seeing a noted increase, the selected amount is set. However, the district has the instant ability to augment the budget if necessary with SRS Forest Service revenue (\$159,136.35 in 17-18 and a similar amount to be received June of 2019). Thus, \$102,500 is already secured in the current budget, in addition to the \$100,000 the board of education has earmarked for capital renewal, and each subsequent year an additional \$102,500 will be added annually to address scheduled and emergency facility system failures/replacement, outside of normal and routine maintenance and operations. \$202,500 is set for immediate use toward capital needs at the end of this fiscal year, to be added upon in years before the completion of construction completion should this grant be awarded.

The following maintenance plan to be financed by the aforementioned monies, and a listing of routine maintenance and planning will be subsequently illustrated.

#### Centauri High School Maintenance Plan

Priorities of facility maintenance plan:

- >Resource Management
- >Providing a safe and orderly environment for students and staff
- >Creating a physical environment that is conducive to learning

Accountability:

- >The Maintenance Director reports to the Superintendent and Board of Education for the upkeep of grounds, buildings and other school assets, and for approval of the maintenance budget
- >The Maintenance Director is responsible for the development of the Annual Maintenance Plan with direction from the District Accountability Committee, the High School Principal and the Superintendent

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>Recommendations to the Board of Education for major upgrade expenditures are formulated by the superintendent  
>The Superintendent is responsible for all maintenance activities and delegates appropriate tasks and responsibilities to the building principal and Maintenance Director

>The plan is to be reviewed and approved in conjunction with relevant policy and in alignment with workplace health and safety policies and risk management directives

### Responsive Maintenance

Maintenance emergencies requiring immediate action arise and are a part of the expectations of school facilities usage. A maintenance request via the inter-district use of Pink Notes\* will be utilized by staff for documented requests and follow up of actions taken to address all requests.

The school custodians are employed to remove rubbish, cut grass, trim trees, tend gardens and assist with constant upgrading of school grounds, including landscaping. Maintenance of the following, but not limited to this listing, are the responsibilities set forth:

- >Locks, excluding work that must be carried out by a professional locksmith
- >Supply and fitting of light tubes and globes
- >Replacement of castors on chairs
- >Regular inspections of gutters and down pipes
- >Cleaning of silt and acid traps
- >Checks of security equipment, cameras, and minor repairs as required
- >Repainting of appropriate signage and immediate cleanup of graffiti

Movement of furniture, whiteboards, blackboards and notice boards

Minor repairs to class room fans

Classroom comfort features

Additional bells and sirens and repair of insect screens

Minor repairs to furniture and equipment

Minor wall, ceiling and door repairs

Cleaning of minor graffiti immediately it appears

Re-screwing of internal door hinges

Replacement of clock batteries

Minor landscape maintenance

Replacing tap washers

Replacing signs

### Preventative

Protection of the school's assets and safety of school staff and students requires a regular cycle of upkeep of school buildings, grounds, plant and equipment. The Maintenance Coordinator is responsible for arranging the following:

#### Monthly/Annually

Annual checking of electrical equipment by professional tradespeople Annual pest control treatment

Monthly tests of alarm systems and smoke detectors Monthly filter checks and cleaning for air-conditioning units

Annual checking of air-conditioning via maintenance contract with professional tradespeople

Annual inspection of ceilings, floors, paving, plumbing, internal painting, door hinges, hooks, locks

#### Every two years:

Replacement of glass where necessary Powder coated finishes applied where necessary Furniture replacement where necessary

#### Every five years:

Internal painting

#### Every ten years

External painting Replacement of floor coverings Replacement of notice boards Replacement of guttering Replacement of electrical wiring

#### Every twenty-five years

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Roof refurbishment/replacement

## January

Steam cleaning of carpets annually, date

Internal painting as designated in five year cycle annually, each January @ 20% of buildings date

Security system audit annually, each January date

Termite check, upgrade annually, each January date

company and contact details

Garden mulching annually date

Electrical testing and tagging annually date

Tree audit and lopping bi-annually, each January and July date

Cleaning equipment service bi-annually date

Fire equipment and hydrant maintenance and service bi-annually, each January and July date

Playground and outdoor area audit and maintenance 3 monthly, January, April, July, October date

Air conditioner unit servicing 3 monthly, January, April, July, October date, company, contact details

Drink tap and fountains audit and maintenance monthly date

Internal lighting check monthly date

External lighting check and maintenance monthly date

Fire bell maintenance monthly date

## February

Door latch, lock, hinge repairs annually date

Tractor service bi-annually, February and August date, company, contact details

Internal lighting check monthly date

External lighting check and maintenance monthly date

Drink tap and fountains audit and maintenance monthly date

Fire bell maintenance monthly date

## March

Tool audit and maintenance annually date

Fume cupboard maintenance annually date

Internal pest control quarterly, March, June, September, December date, company, contact details

Internal lighting check monthly date

External lighting check and maintenance monthly date

Fire bell maintenance monthly date

Drink tap and fountains audit and maintenance monthly date

## April

Playground and outdoor area audit and maintenance 3 monthly, January, April, July, October date

Air conditioner unit servicing 3 monthly, January, April, July, October date, company, contact details

General lawn/oval maintenance, fertilize, top-dress as needed, aerate as needed, insecticide, herbicide each December, April and August date

fertilizer, chemicals used

Drink tap and fountains audit and maintenance monthly date

External lighting check and maintenance monthly date

Fire bell maintenance monthly date

Internal lighting check monthly date

## May

Servicing and maintenance of garden equipment, whipper snipper, brush cutter etc annually date Internal lighting check monthly date

External lighting check and maintenance monthly date

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Drink tap and fountains audit and maintenance monthly date

Fire bell maintenance monthly date

June

Servicing of plant e.g. ride on mower bi-annually, each June and December date

plant and equipment

Cleaning equipment service bi-annually date

plant and equipment

Internal pest control quarterly, March, June, September, December date, company, contact details

Internal lighting check monthly date

External lighting check and maintenance monthly date

Drink tap and fountains monthly date

Fire bell maintenance monthly date

July

Tree audit and lopping bi-annually, each January and July date

Fire equipment and hydrant maintenance and service bi-annually, each January and July Date company and contact details

Playground and outdoor area audit and maintenance 3 monthly, January, April, July, October date

Air conditioner unit servicing 3 monthly, January, April, July, October date, company, contact details

Internal lighting check monthly date External lighting check and maintenance monthly date

Drink tap and fountains audit and maintenance monthly date

Fire bell maintenance monthly date

August

Tractor service bi-annually, February and August date, company, contact details

General lawn/oval maintenance, fertilize, top-dress as needed, aerate as needed, insecticide, herbicide each December, April and August date

fertilizer, chemicals used

Internal lighting check monthly date

External lighting check and maintenance monthly date

Drink tap and fountains audit and maintenance monthly date

Fire bell maintenance monthly date

September

Internal pest control quarterly, March, June, September, December date, company, contact details

Internal lighting check monthly date

External lighting check and maintenance monthly date

Drink tap and fountains audit and maintenance monthly date

Fire bell maintenance monthly date

October

outdoor area audit and maintenance 3 monthly, January, April, July, October date

Air conditioner unit servicing 3 monthly, January, April, July, October date, company, contact details

Internal lighting check monthly date

External lighting check and maintenance monthly date

Drink tap and fountains audit and maintenance monthly date

Fire bell maintenance monthly date

November

Internal lighting check monthly date

External lighting check and maintenance monthly date

Drink tap and fountains audit and maintenance monthly date

## BEST FY2019-20 GRANT APPLICATION SUMMARIES

Fire bell maintenance monthly date

December

Security and Key access update annually date

Servicing of plant and equipment e.g. ride on mower bi-annually, each June and December date, plant and equipment

General lawn/oval maintenance, fertilize, top-dress as needed, aerate as needed, insecticide, herbicide each December, April and August date

fertilizer, chemicals used

Internal pest control quarterly, March, June, September, December date, company, contact details

Internal lighting check monthly date

External lighting check and maintenance monthly date

Drink tap and fountains audit and maintenance monthly date

Fire bell maintenance monthly date

**Describe the condition of the public school facility at the time it was purchased or constructed and, if the facility was not new or was not adequate as a public school facility at that time, provide the rationale for purchasing the facility or constructing it in the manner in which you did:**

Facility Condition

As few individuals and documentation exists from 1963 when Centauri High School was planned and designed, the information provided is a recapitulation of interviews with those who were directly or indirectly involved. From those, who can verify the following statements, other information was derived from the sparse documentation of the rationale for construction in the manner that we still live with today on a daily basis. It is with the utmost care and consideration for accuracy and respect for the committee whose responsibility it is to make judgements of grant recipients that I convey the following information inasmuch as facts exist or could be secured. Curt Wilson, Superintendent of Schools, NCSD

The idea of forming a consolidated district in Conejos County began to stir discussion as early as 1960, with the districts of Capulin, Manassa and La Jara Consolidated School District 1 agreeing to come together for the purpose of building a unified district and streamlining educational services, transportation, and ability to offer the latest in school programming. Each of these schools were formed individually from a number of other smaller school districts that once existed, and reflect the same reduction efforts in the number of districts that existed in Colorado at one time (2200, now 178). Other small towns involved in the consolidation were Romeo, Richfield, Star, Morgan, Carmel, Los Cerritos, Ephraim, Hot Creek, Nortonville, and a host of others now long forgotten.

The sight of the current facility was chosen and secured as it represented the most available and central local of any possibility to be considered. As with consolidation comes the necessity to find a central point for a transportation hub, and to accommodate students and families and give due consideration to the best means of access. Sewer and water were secured from the town of La Jara, Colorado, and except for a single well that pumps to irrigate grass on the complex, the school is totally reliant upon town utilities.

The three aforementioned districts voted to consolidate with plans for building a new high school in 1963, and in so doing formed the North Conejos School District, and began formulating plans for a combined high school and junior high building (Centauri Jr/Sr High School), utilizing existing schools for elementary facilities. "Centauri" was chosen, after the constellation Alpha Centauri (the triple star system) to name the new tri-town district high school. Plans to open the facility were set for the fall of 1964, but because of confusion with funding and errors in the process, the school design was changed, as it was late in the process given the set timelines, and because of ease, a design known then as an "Arizona" design was adopted. The design has been unpopular as it does not match the needs of a school at 7600 feet of altitude in the highest alpine valley in the US, often one of the coldest spots in the nation, and traditionally is the recipient of multiple community complaints since its inception. A roof not sloped to accommodate heavy snowfall, insufficient insulation with many water bearing pipes in the ceiling, a true lack of any sunlight, insufficient air flow, no ADA compliance: these top the list of complaints.

The design, a steel framed structure wrapped in metal tin with concrete room divisions was adopted for the ease of implementation and construction lagged behind. Thus, the school did not open until January of 1965, causing students and staff to relocate midyear, which presented a long list of difficulties moving during the winter. Some construction continued during the night, as facets of unfinished parts continued through April of 1965. For 55 years, the structure has lasted with many repairs and modifications over time, but a high percentage of the original design has been untouched, and now presents



## BEST FY2019-20 GRANT APPLICATION SUMMARIES

some concerning issues as it is obviously well past its serviceable lifetime. The consolidation efforts have continued as a middle school, shops for CTE programming and a district office has been added to the premises in the continued effort to centralize facilities for the most effective use of instructional programming given the funding provided.

Originally designed to house 7-12, to include an auto shop and a small lecture hall, the facility was converted to 9-12 only in the 70's and has remained in operation as such until this day.

### **Describe the history of capital improvements made to the facility by the district/charter school in order to make it suitable for students. Include a list of all capital projects undertaken in the affected facility in the last 3 years:**

#### General History

Over the last three years, only two capital improvements have been made to Centauri High School. First, the high school was part of a district-wide security BEST grant upgrade (2016). The specifics of the upgrades to the high school were in conjunction and similar to upgrades at all school buildings in the district.

All main and other high traffic entrances to each building received much needed security upgrades. An entrance camera, buzz in system both visual and audio, and key fob programmable entrance system were installed allowing the district for the first time to screen visitors and not allowing direct access to our student populous. Moreover, existing cameras which were inoperable were replaced and each building's system was tied to a central location, the district office, where in emergencies the district office could coordinate emergency services and be made central control until first responders arrive at a given school.

Specific to Centauri High School, some reconfiguring and slight modification to the main office were made to eliminate the ability of visitors to be able to walk in, meld in with students immediately and not pass by any office access door. The previous office access was thirty yards from front door access, creating an imminently dangerous situation to our most valued commodity, students, in today's world where individuals repeatedly seek to do harm.

In addition, the intercom system previously utilized was not functional to all areas of the school, with selected classrooms unserviceable by the system. A new intercom hub, located in the main office, was installed and dysfunctional communication speakers in individual classrooms were replaced or upgraded.

The second capital improvement has been the boiler at Centauri High School. Previously served by a boiler and a backup, both units began to fail during the fall of 2017. Through subsequent attempts to remedy the problem and repeated costs associated with repairs, which became more frequent, a new boiler was ordered. Compounding the issue, the boiler ordered was difficult to find, and only by chance was the district able to secure it, as the matching boiler was original from 1964. At the very week the new boiler arrived, the main boiler failed permanently, and with it the backup failed with the collapse of the first. With the assistance and kindness of local professionals, who dropped all service to other customers because we were a school, the new boiler was installed over a weekend. Although the problems with shutting off in the middle of the night and at other given times continue to this day as the new boiler struggles to operate on an old system leaking glycol by the gallon, we are able to supply heat if monitored daily.

### **What options outside of the BEST grant has the applicant investigated or leveraged to address the school's facility needs?**

The NCSd has sought diligently to utilize local sources, in-kind donations and assistance from our county commissioners, and from the assistance of local businesses and parents to avoid asking the state for grant funding to provide a facility or major renovation for many years. Indeed, the assistance requested now is an absolute necessity, rather than a want, and the fact that for 55 years the district has held together a facility that is debatably marginal from the first year is testament to the district and community's willingness to address school needs. Donations and purchases from neighboring schools when building new has seen us glean used lockers, desks, cafeteria tables and even tin to repair the roof of Centauri High School.

When receiving a BEST district-wide security grant, the matching funds saw the community rally to supply needed radios and other communication items not covered in the grant so the district did not ask the state for extras, only basic needs. So too, with the design and thinking going forth for this project, all things have been kept to basic needs and necessities in order to function as we have with our current half-century old facility. The avoidance of financial options with the current facility rest with the inability to replace large aspects of the facility with the FCI so close in proximity to starting anew, as experience with our previous capital improvement of a heating boiler is demonstrating the difficulty of matching the modern with the outdated.

### **How do you budget annually to address capital outlay needs in your district/charter? Include \$/FTE for the prior fiscal year:**

The NCSd budgets annually to address capital outlay with funding that typically exceeds \$100 per FTE. Since the formation of small rural funding has been practiced in Colorado, those complete funds have been earmarked, dedicated to the capital expense/outlay funds along with any residual monies not spent from the general fund. For example, \$173,430 was dedicated

## BEST FY2019-20 GRANT APPLICATION SUMMARIES

to the capital fund in 18-19, and in 17-18, the funding was \$360,516.55, of which \$175,000 was dedicated strictly for capital outlay. With this given project of replacing the high school and in pursuit of BEST assistance, \$102,500, or exactly \$100 per FTE utilizing this academic year's official October count is earmarked in hopeful anticipation of being a grant recipient, thus starting the specific funds for capital renewal prior to any approval. In addition, the NCS D BOE has additionally dedicated \$100,000 for the initial "startup" funding; this will make an initial startup fund for the project at \$202,500 (equating to \$197.56 per FTE this school year), with subsequent years adding an additional \$102,500 yearly. This funding is specific to the replacement high school sought.

**If relevant to your project, what are your current annualized utility costs, and what amount of reduction in such costs do you expect to result from this project?**

Current annualized electrical and gas use is approximately \$52,000 per year and the current annualized sewer use is approximately \$9,500 per year. Water for the site is provided through two wells, and - other than electricity for pumps and other well equipment, there are no utility costs associated with water use.

The replacement of the school with a newer, modern facility should have net positive effects for the utility usage on site, particularly for electricity and gas. The existing building is approximately 52,000 sf, so the annual usage for those two utilities is about \$1.00/sf/year. This amount can be compared to yearly costs of a new, energy-efficient high school in a similar climate, Montezuma-Cortez High School, completed in 2015. This facility achieved LEED Gold certification, a measure of its sustainable design and similar to Colorado's High Performance Certification Program. From October 2015 through September 2016, MCHS used 30 kBtu per square foot of electrical and gas energy, equivalent to \$0.86/sf, or \$0.14 per square foot less than the existing Centauri High School. For the existing building area, that amount would result in a savings of \$7,280 in operational costs each year just for those two utilities, and a total of \$364,000 over the course of a new building's 50-year lifespan.

Sewer costs for the building are based on a flat-rate charged to the District by the local utility company, and replacement of the existing building with a new facility for a similar number of students is not expected to change the amount charged for sewer service.

<b>Grant Request:</b>	\$24,224,076.15	<b>CDE Minimum Match %:</b>	49%
<b>Applicant Match:</b>	\$6,419,081.85	<b>Actual Match % Provided:</b>	20.94784699%
<b>Total Project Cost:</b>	\$30,643,158.00	<b>Is a Waiver Letter Required?</b>	Statutory
<b>Affected Sq Ft:</b>	73,311	<b>Contingent on a 2019 Bond?</b>	Yes
<b>Affected Pupils:</b>	292	<b>Source of Match:</b>	
<b>Cost Per Sq Ft:</b>	\$417.99		2019 Bond
<b>Soft Costs Per Sq Ft:</b>	\$61.46	<b>Escalation %:</b>	4%
<b>Hard Costs Per Sq Ft:</b>	\$356.53	<b>Construction Contingency %:</b>	10%
<b>Cost Per Pupil:</b>	\$104,942	<b>Owner Contingency %:</b>	9%
<b>Gross Sq Ft Per Pupil:</b>	251	<b>Historical Register?</b>	No
<b>Is a Master Plan Complete?</b>	No	<b>Adverse Historical Effect?</b>	No
<b>Who owns the Facility?</b>	District	<b>Does this Qualify for HPCP?</b>	Yes
<b>If owned by a third party, explanation of ownership:</b>			
<b>If match is financed, explanation of financing terms:</b>			

### Financial Data (School District and BOCES Applicants)

<b>District FTE Count:</b>	997	<b>Bonded Debt Approved:</b>	
<b>Assessed Valuation:</b>	\$32,095,410	<b>Year(s) Bond Approved:</b>	

# BEST FY2019-20 GRANT APPLICATION SUMMARIES

<b>PPAV:</b>	\$32,192	<b>Bonded Debt Failed:</b>	
<b>Unreserved Gen Fund 17-18:</b>	\$3,448,009	<b>Year(s) Bond Failed:</b>	
<b>Median Household Income:</b>	\$38,466	<b>Outstanding Bonded Debt:</b>	\$0
<b>Free Reduced Lunch %:</b>	57%	<b>Total Bond Capacity:</b>	\$6,419,082
<b>Existing Bond Mill Levy:</b>	0	<b>Bond Capacity Remaining:</b>	\$6,419,082
<b>3yr Avg OMFAC/Pupil:</b>	\$728.62		



Division of Capital Construction

District Statutory Waiver for BEST Grant

A partial / full (circle one) district match waiver is requested due to:

22-43.7-109(10) (a) C.R.S. A school district shall not be required to provide any amount of matching moneys in excess of the difference between the school district's limit of bonded indebtedness, as calculated pursuant to section 22-42-104, and the total amount of outstanding bonded indebtedness already incurred by the school district.

- A. Applicant required minimum match for this project based on CDE's minimum listed percent (Line items A \* C from grant application cost summary)      \$ 15,015,147.42
- B. District limit on bonded indebtedness as calculated in section 22-42-104 C.R.S. (FY2018/19 AV x 20%):      \$ 6,419,082
- C. New proposed bonded indebtedness if the grant is awarded:      \$ 6,419,082
- D. Current outstanding bonded indebtedness:      \$ 0
- E. Total bonded indebtedness if grant is awarded with a successful 2019 election (Line C+D):      \$ 6,419,082

School District: *North Conejos School District RE-15*  
Project: *CHS Replacement, Conejos High School*  
Date: *4-10-2019*

Signed by Superintendent:   
Printed Name: *Curt Wilson*

Signed by School Board Officer:   
Printed Name: *Joseph J. Barz*  
Title: *Board President*

● **Facilities Impacted by this Grant Application** ●

**SIERRA GRANDE R-30 - PK-12 Replacement - Sierra Grande K-12 - 1956**

<b>District:</b>	Auditor - Sierra Grande R-30
<b>School Name:</b>	Sierra Grande K-12
<b>Address:</b>	17523 EAST HIGHWAY 160
<b>City:</b>	BLANCA
<b>Gross Area (SF):</b>	94,500
<b>Number of Buildings:</b>	2
<b>Replacement Value:</b>	\$24,707,191
<b>Condition Budget:</b>	\$9,127,454
<b>Total FCI:</b>	0.37
<b>Adequacy Index:</b>	0.40



**Condition Budget Summary**

System Group	Replacement Cost	Requirement Cost	SCI
Electrical System	\$4,094,192	\$2,567,681	0.63
Equipment and Furnishings	\$1,112,007	\$765,281	0.69
Exterior Enclosure	\$4,770,512	\$476,333	0.10
Fire Protection	\$17,333	\$884,613	51.04
Furnishings	\$269,764	\$0	0.00
HVAC System	\$2,775,849	\$256,190	0.09
Interior Construction and Conveyance	\$4,316,627	\$2,873,792	0.67
Plumbing System	\$1,340,404	\$694,198	0.52
Site	\$2,469,323	\$1,463,983	0.59
Structure	\$3,541,179	\$30,000	0.01
<b>Overall - Total</b>	<b>\$24,707,191</b>	<b>\$10,012,071</b>	<b>0.41</b>

# BEST FY2019-20 GRANT APPLICATION SUMMARIES

**Applicant Name:** SIERRA GRANDE R-30

**County:** Costilla

**Project Title:** PK-12 Replacement

**Applicant Previous BEST Grant(s):** 2

**Has this project been previously applied for and not funded?** Yes

**If Yes, please explain why:** The project was placed on the short list for cycle FY 2018-2019; however, there were not sufficient funds to award the grant to this project.

## Project Type:

- |   |   |   |   |
|---|---|---|---|
| <input type="checkbox"/> New School         | <input type="checkbox"/> Roof               | <input type="checkbox"/> Asbestos Abatement | <input type="checkbox"/> Water Systems                          |
| <input type="checkbox"/> School Replacement | <input type="checkbox"/> Fire Alarm         | <input type="checkbox"/> Lighting           | <input type="checkbox"/> Facility Sitework                      |
| <input type="checkbox"/> Renovation         | <input type="checkbox"/> Boiler Replacement | <input type="checkbox"/> Electrical Upgrade | <input type="checkbox"/> Land Purchase                          |
| <input type="checkbox"/> Addition           | <input type="checkbox"/> HVAC               | <input type="checkbox"/> Energy Savings     | <input type="checkbox"/> Technology                             |
| <input type="checkbox"/> Security           | <input type="checkbox"/> ADA                | <input type="checkbox"/> Window Replacement | <input checked="" type="checkbox"/> Other PK-12 School Facility |

## General Information About the District / School, and Information About the Affected Facilities:

The Colorado Children's Campaign considers three San Luis Valley counties to be "persistently poor"; Costilla County is one of them. Students here are consistently some of the most high-need in the state. Our ranching and farming roots, though once prosperous, have not continued as such in recent history. The county's isolation from Denver and Colorado Springs holds back our economic growth and development. Sierra Grande is eligible for Title 1 funding and provides a Free and Reduced-Price lunch program to 100% of the student population; more than 80% qualify. Our community is comprised of many alumni of our District as evidenced in the stories portrayed at the MP public meetings.

The District resides in the northern half of the County at the base of Mount Blanca, the first area of Colorado colonized in the 16th century. The district serves students from Blanca, Fort Garland and surrounding rural areas in the County equaling an area of 560 sq. miles. Students travel as much as an hour each way.

Our original school was built in 1956 with several expansions increasing its footprint by 40%. Additions were designed without a clear vision and its internal layout/adjacencies do not effectively provide for proper education. They were built with inexpensive materials and simplistic design. Though identified by state assessment as 'good structurally', they provide a poor environment with respect to air quality, flexibility and outside connectivity. Additions offered more classroom space, but the spatial layout was not integrated into the building.

In the 90's, Blanca was a community with aggressive double-digit growth supporting the need for more additions. The Tech Wing offered more vocational and elective classes and the community requested a larger focus on CTE classes and other real-world application learning paths. More additions followed with a single use auditorium/library/administrative office infill project. A PK addition was constructed in 2008 filling a critical program need for our community.

Our facility has been a lifeblood for this community. Many of the current students are from families that are graduates of our school. They are proud community members, but often complain that our classrooms are incapable of being divided and have limited interior ceiling heights. During days of inclement weather, we have limited student indoor fitness options. The building layout makes it difficult to offer multiple activities, forcing us to forego certain programs typical of our neighboring districts. Our gymnasium and auditorium have no natural light or little to no adequate ventilation.

Our Facility Master Plan was completed in December 2017, led by A&E professionals and a Design Advisory Group that consisted of administrators, teachers and community members. When compared to school districts of similar size within Colorado, our facility is one of the oldest with numerous deficiencies. The facilities have been well maintained, yet there are numerous deficiencies and non-compliant aspects per current building and energy codes, CDE's guidelines, and the needs of 21st century learning to develop essential skills.

Our district serves 293 students with steady growth increase predictions for the foreseeable future. Fort Garland is referred to as the "Gateway to the San Luis Valley". This hard-working community understands the importance of spending wisely, and the proposed renovations accomplish a balanced solution that provides lasting value while being the most responsible investment of construction funds. We hope to remain an academic contributor to that gateway with quality education and athletics.

Without substantial funding assistance from the BEST Grant, the District cannot remedy unsafe, deteriorating structures and

# BEST FY2019-20 GRANT APPLICATION SUMMARIES

systems which ultimately impair the students' ability to learn.

## Deficiencies Associated with this Project:

In addition to numerous issues regarding life safety and security, health, technology, and the overall learning environment, the facility plan configuration was identified as a major inefficiency for district operations and longevity. The inadequate adjacencies between the building and its additions result in administrative, educational, maintenance, and food service inefficiencies, and the need for amplified safety and security efforts and staffing. Community recreational and educational needs, competition of surrounding districts, and lack of pride in school facilities are also catalysts for change within Sierra Grande School District's facilities. The school lacks collaborative learning, meeting, and breakout areas for students and staff, as well as community centered spaces for after-hours recreation and educational opportunities. These conditions and others hold Sierra Grande students back from current and future essential learning opportunities.

The Sierra Grande PK-12 school requires numerous upgrades to comply with CDE guidelines for safety and security, to meet code requirements for indoor air quality for the health of the occupants, and technological infrastructure enhancements to ensure essential learning and teaching capabilities.

Sierra Grande's school facility needs major upgrades to meet compliance in almost every category of Health, Safety & Security, and Technology. Over the last 60 years, Sierra Grande School has sprawled internally and externally with additions, creating a damaged circulation system that is not only difficult to monitor and secure, but limits the design of its site elements so much so that conditions where student and vehicular traffic cross are impossible to avoid. The sanitary system is original and outdated, asbestos is present in the oldest portion of the school, there are too many points of unsupervised entry and exit, and the athletic facilities are far from meeting the needs of the student athletic programs and indoor play, especially during the long winter season.

A comprehensive list of deficiencies and solutions based on the 2017 CDE assessment and site facility assessments (performed by the design team in 2017) is included in the supplemental materials for reference. A summary of some of the more critical deficiencies is provided as follows:

Sierra Grande PK-12 Building & Site Deficiencies:

1. Roofing: Approximately 40% of the building's roof system was not replaced under the 2012 Project and is failing causing structural concerns, and there is water damage under these parts of the facility. Like the other roof systems, there is no additional structural capacity within the roof structure. Some areas have unprotected wood truss attic conditions.
2. Fire Protection: The facility is neither sprinklered, nor is it compartmentalized with adequate fire walls. Established exit passageways contain numerous unprotected openings and transfer grilles and lack adequate protections for both student and staff.
  - a. Local fire protection districts (Fort Garland and Blanca) are 100% volunteer. A fire event in the building would require multiple municipal resources and equipment; some as far away as Alamosa (also volunteer with a minimum response time of 30-minutes).
  - b. There is no structured water source or hydrant system that would protect this building. The site is unpaved with no structured fire lane(s) or paving composition adequate to support fire-fighting equipment. Portable propane tanks are scattered around the building perimeter and would be compromised (adding a substantial fuel contributor) in the event of a major fire event.
  - c. There are non-compliant fire rated assemblies within this non-sprinklered building surrounding the hallways, area separation walls, and storage (low-hazard) occupancy types such as boiler rooms, furnace rooms, and laboratories, posing a safety threat in the event of a fire.
  - d. Many of the 1956 building's classrooms lack adequate egress protection directly to the exterior. All classrooms lead into an unprotected corridor system which is punctured throughout by non-rated passive exchange vents. There is a small community contingent of volunteers that maintain a local fire protection district. However, in the event of a large fire, the building would be completely vulnerable.
3. Site circulation is poor and unstructured.
  - a. Access to and from the campus for buses, cars, and pedestrians do not have dedicated lanes and there are conflicts between traffic types that create hazardous conditions. Vehicular and pedestrian lanes are not dedicated to specific uses, and adequate, dedicated drop off zones do not exist on the campus.
  - b. Access to the school from Highway 160 is through a single site entry which is shared with the neighboring Rec Center.
  - c. HS students share the same circulation loop road as the buses.
  - d. Public parking shares the same circulation loop and site footprint as bus loading.
  - e. Parent pick-up and drop-off is unpaved and without structure. Parents are often backing out or making U-turns in the area

## BEST FY2019-20 GRANT APPLICATION SUMMARIES

- that student pedestrians are using to access the school building.
- f. The elementary school playground area is shared with major product deliveries to the school building.
- g. Pre-K student drop off is more than 300 feet from the building entrance.
- h. Much of the site circulation is without adequate slope and structure to shed storm water in a reasonable period of time. Often, parking lots are muddy and rutted for days after rainfall.
4. Site accessibility is non-compliant with lack of paved accessible pathways and appropriate slopes.
5. Deficiencies exist in the electrical system. The electrical services/distribution is beyond its expected life cycle, the distribution equipment is not installed in a safe, adequate manner, and the electrical room layout is not up to code and lacks a second egress.
6. Heating and ventilating units are outdated, and there is a complete lack of fresh air systems. The roofing structure is not capable of adding additional service equipment dead load.
7. There is no backup generator in case of power supply failure. The building's primary water source is a deep well served via electrical pump.
8. Exterior lighting in the parking lot and building-mounted lighting is both high-pressure sodium and metal halide and in poor condition with multiple time-clocks currently being utilized for controlling the systems. Site lighting is not consistent throughout; sports lighting (field perimeter) is used to provide site access illumination in and out of sports activities.
9. Emergency lighting systems are outdated, and no emergency generator exists.
10. General communications and lighting systems are deficient.
11. Technology: Network and data access is inadequate. Cable drops and data jacks are insufficient in quantity throughout. Classes are often disrupted with slow or failed data networks. The connection is unreliable and results in frequent inability to communicate at critical moments, such as reporting to State.
12. Bi-Directional Amplification (BDA) signal boosters that enhance in-building signals across a range of frequencies are not in place.
13. The kitchen is not functional due to the limited electrical capacity and the fact that most of the food service equipment is at the end of its service life. There is a limited capacity for food storage, which is not directly accessed from the kitchen. Several years back, there was a sanitary sewer back-up within the kitchen area that was directly related to the age of the sanitary system serving the school site.
14. In the simpler metal panel clad buildings, the exterior walls show signs of structural damage from vehicle or equipment impacts.
15. Asbestos is present in the oldest portions of the school and requires abatement. An updated 2019 asbestos report shows larger potential for ACBM and Abatement. Costs have been identified within the overall project budget.
16. The pre-engineered structural conditions of the gymnasium offer limited height options; Heights are less than 20-feet. This clear height within the gym structure is well below standard, challenging the ability of students to play and practice competitively.
17. An auxiliary gym is not provided. Middle school gymnasium activities utilize the adjacent (off-property) Fort Garland Recreation Center. This is subject to availability with local (non-school) schedule functions. This limits physical education and athletic functions during (and after) school functions.
18. The gymnasium is undersized and cannot be divided into multiple sports areas. Middle school classes often use this as a hallway to access the Tech Wing of the school.
19. The gymnasium and locker rooms lack ventilation, natural light, and make-up air. The areas are often stale and stagnant.
20. Building envelopes do not meet current standards for R-values and continuous exterior thermal insulation. Due to the variety of different types of exterior building shells, upgrading these is not cost-effective.
21. The existing facilities neither comply with LEED or CO-CHPS, nor do they utilize renewable energy strategies. A campus wide energy management plan does not exist.
22. Exterior windows have exceeded their expected life cycle. They are not double pane, thermally broken, or equipped with high performance glazing. This is particularly important in the cold, windy, snowy, and dusty climate commonplace in the San Luis Valley in order to protect the envelope, limit loss of heat, and filter airborne particulates.
23. Classroom areas: Lack of adequate quantity, poor placement, and limited access to restroom facilities.
24. There is limited signage directing visitors on where to enter the building. Wayfinding is generally lacking throughout the campus.
25. Administrative offices do not have a direct line of sight to parking or site entry points and are not immediately adjacent to the main entry vestibule.



## BEST FY2019-20 GRANT APPLICATION SUMMARIES

26. Perimeter fencing and bollards: Continuous perimeter fencing as well as bollards are recommended for security purposes and to protect/control entry points from vehicular and other unwanted intrusions. Many parts of the site are not in compliance.
27. No badge/fob entry management system or visitor management system such as "Raptor" exists, there is limited video entrance control systems at main entries, and staff are unable to monitor existing cameras on a regular basis due to staffing.
28. Restroom fixtures and drinking fountains are original and beyond useful life. Potable water is currently piped with the original galvanized iron pipe that is fragile and contains interior rust conditions. There is no back-up water storage, and in the event of a power outage, school closes after a 60-minute event.
29. There is an inadequate number of plumbing fixtures to accommodate students and staff at locations serving the classroom wings and the overall fixture count is not adequate or ANSI/ADA complaint per Code.
30. Landscaping is not current with CDE requirements. Only a marginal number of these landscaping techniques are followed.
31. Areas of the playground are not ADA Accessible and are not capable of shedding storm water in a reasonable period of time. Outdoor play is cancelled often due to lack of proper site slope and drainage resources.
32. Lighting: There is a significant lack in both quality and quantity of natural light coming from exterior windows into classrooms and learning spaces. Due to poor quality of construction and high volume of unwanted air infiltration many windows are permanently covered, further exacerbating this problem. Many interior spaces (gymnasium, cafeteria, staff offices, labs and several classrooms) have zero natural light contribution.
33. Additions: Most of the additions were low-budget pre-engineered structures. Roll-formed 24-gauge metal panels on both the roof and wall exteriors protect these structures. Windows and doors are not energy efficient or leak tolerant. Even when closed, the local wind conditions penetrate the envelope and allow for cold air and airborne particles to enter the building through these penetrations. Teachers frequently compete to maintain the attention of their students while the interior envelope conditions distract them from learning.
34. Program Adequacy: To access the middle school you must go through the gym meaning that in many cases there are disruptions to PE classes. Elementary classrooms are oversized and ill-proportioned for 21st century learning. These classrooms are rigid in shape and size based on structural layouts; reshaping them for improved learning is not cost-effective. The current middle school classrooms are undersized and isolated from the rest of the school.
35. Athletic Facilities: The football field to the north of the main building is in poor condition, surrounded by a cinder track that is not capable of meeting state sports guidelines. The District cannot host or support larger scale competitions. There is not an accessible path of travel to the fields. Funds have not been available for the District to replace its "non-existent" baseball field, which is a dirt and weed lot in the northeast corner of the site. The baseball field has been identified as an Alternate looking for replacement under a GOCO Grant. The District and its Sponsor (Fort Garland Recreation Center) were not successful in securing a winning GOCO grant.
36. In addition to these the facilities planning team has identified the following areas which are missing from the existing facility and thus are not captured in the assessment. If they were, it would significantly increase our FCI:
- Lack of adequate fire protection. Building has no sprinkler system or code compliant compartmentalization through properly constructed fire walls / area separations. Surrounding agencies / first responders are "all volunteer" and not equipped for immediate response to a significant structures fire.
  - Lack of adequate/quality domestic water distribution. Water source (a well) is without storage and aging galvanized distribution piping (concealed below grade and within wall assemblies) increases level of contaminants within water supply stream.
  - Lack of adequate/quality sanitary sewer distribution. The 60-year old cast iron piping (concealed below slab and grade) must be replaced. Sewer line has already backed up into building.
  - Lack of site paving, structured circulation and parking, compliant site accessibility from site to building and accessible egress from building.
  - Lack of quality building systems for alteration. Much of the building was constructed as pre-engineered metal panel skinned structures. Steel frame cannot support additional loading for MEP systems, nor can the systems be cost-effectively updated to meet current energy codes. Significant alteration would mandate code compliance.
  - Lack of fire separation. The "rated hallways" in the ES wing are littered with non-rated transfer grills and other penetrations leaving no fire protection for classroom occupants through a protected egress way. Most of the classroom spaces can only egress through the corridors.
  - Lack of ventilation. Most spaces have inadequate/compliant mechanical ventilation. Our MEP Team member identified this school as "one of the worst" he's ever seen.

## BEST FY2019-20 GRANT APPLICATION SUMMARIES

- h. Adequate and energy efficient site lighting was only partially addressed in the assessment.
- i. Asbestos - Additional research was performed relative to ACM content within the structure. All load bearing masonry block walls were overlooked in previous AHERA, resulting in an increase more than \$750,000. for additional abatement costs. This would impact renovation/replacement or new construction costs.

### **Proposed Solution to Address the Deficiencies Stated Above:**

The master planning process co-led by our team in conjunction with the District DAG (Design Advisory Group) and the communities of Blanca and Fort Garland has resulted in a solution which rectifies many of the issues plaguing the current facility. The decision-making process was informed by surveys sent to community members, staff, and students in addition to personal interviews with staff and students of the district.

When we began the conceptual design phase of the master plan, we were of the opinion that it would be a renovation project. In fact, two of the three schemes studied were renovation approaches. It was only after a thorough evaluation of program accommodation and the associated cost estimates that it was determined that actual renovation costs were 90% of building new; an FCI of .90. Furthermore, a full facility renovation would displace students and extend (by nearly double) the construction timeline resulting in additional project costs. It was unanimously decided that a new/replacement structure outside the footprint of the existing building was the preferred DAG/District direction.

The priorities of the community and the school district were identified as follows:

1. Limit disruption to school activities and curriculum during construction
2. Provide a comfortable and safe learning environment
3. Offer reliable, low maintenance systems and operations within an efficient footprint
4. Provide updated technology that can help students prepare for their future
5. Provide a 21st century learning experience to develop essential skills
6. Promote a sense of pride for students, staff, and the community

The solution presented utilizes existing land on the north and east sides of the property. The new school would be built north of the current building allowing it to remain open and operational during construction. A single sports season would be interrupted, but the school curriculum can continue. The new school design is laid out in a four-finger scheme with the three academic schools and the single athletic area all connected with a main street type circulation spine. The layout allows for the school to be expanded, while maintaining the organizational and functional integrity of the building, if enrollment spikes. The programmed spaces can serve all activities currently offered at the school with several flexible spaces ready to accommodate alternative classes.

The existing building and site have many deficiencies that can be addressed with a replacement facility and site. A response to those critical deficiencies is provided as follows:

Sierra Grande PK-12 Building & Site Deficiency Solutions:

1. Roofing: A new roof structure would be designed to allow for effective placement of roof mounted equipment for ventilation and air conditioning and provide an opportunity for roof penetrating daylight options. The new roofing assembly would meet current energy codes and offer a high SRI for further energy efficiency.
2. Fire Protection: A new structure (and site system) will offer proper design of a fire protection system that can protect both the building and its occupants from catastrophic fire events. New water storage, pump systems, and building compartmentalization will meet current codes. Students will have proper, reliable, and compliant exit systems in the event of an emergency.
3. Site circulation: Access within and around the site will be controlled and properly segregated to offer safe pedestrian, bus, parent, and public access from the highway to both the building and athletic fields. Proper site grading, storm water management, and paving will offer (for the first time) access through the site that is not subject to dirt or mud.
4. Site accessibility will be corrected with adequately graded and placed sidewalks/pathways and entrances that will comply with current accessibility standards.
5. Replacement of the electrical distribution will alleviate operation problems currently in the facility as well as offer energy compliant lighting throughout the building and site. Reduction in energy loads will result in immediate and continued savings.
6. Heating and ventilating systems will be energy efficient and allow for adequate fresh air ventilation improving both learning and health conditions within the building. Distractions and absenteeism will be improved with an appropriate HVAC system.
7. Installing a backup generator will allow the school to continue learning and protect students in the event of a utility power supply failure. School would remain open for the day rather than be forced to close after 60 minutes.

## BEST FY2019-20 GRANT APPLICATION SUMMARIES

8. The generator will allow continuance of the building's primary water source via electrical pump. A new back-up water storage structure would be implemented to support domestic water continuity.
9. Exterior and interior lights will incorporate energy efficient, long-life LED fixtures, with a single lighting control panel using an astronomical time-clock/photocell, and existing, non-functioning luminaires will be replaced with LED lighting. Compliance with current energy codes and lighting controls will be incorporated at a minimum resulting in additional energy savings. The sports lighting will be LED and offer a higher quality of light for less energy. Access challenges of traversing the site will be eliminated.
10. Emergency lighting will be better planned and activated more quickly to improve overall occupant safety.
11. General communications will improve with a state-of-the-art system that will not rely on repairing with spare parts, but rather on better warranties and a maintenance program.
12. Offering new technology within the building will improve network capability and student learning. Better technology planning will remove the current class disruptions and improve overall education learning. This would include adequate and planned Bi-Directional Amplification (BDA) signal boosters for enhanced in-building signals across a range of frequencies.
13. Food Service: Providing improved kitchen and food service conditions will increase overall student health and nutrition promoting higher levels of learning. New facility design will also offer improved lighting, air quality, and interaction amongst student grades.
14. Improved exterior building material design and selection will offer a greater return on investment than low quality materials.
15. Removal of the hazardous building materials will improve overall occupant health and safety.
16. Construction of a new gymnasium facility will offer a larger choice of right-sized interior athletic options and sports programs, enabling the District to be more competitive with other schools. An auxiliary gymnasium will also increase athletics options within the District. Reliance on the Fort Garland Recreation Center would be limited to aquatic events only.
17. Construction of a new gymnasium would also include replacement of student locker rooms that would offer proper ventilation and fresh air conditions.
18. Envelope replacement would be achieved through compliant design with the current energy code. Durable, hard surfaces would be presented at grade level to remedy the poor-quality materials of the past.
19. The new building would be designed and constructed to achieve at least three Green Globes for efficient design and energy compliance. A new BAS system would be implemented for improved Indoor Air Quality.
20. Exterior windows would be integrated into the new envelope and meet energy efficiency standards. Classrooms will be designed to provide appropriate levels of daylight harvesting and to enhance the learning environment. Exterior windows will consist of high-performance glazing, thermally broken assemblies, and will include operable vents, minimum two per classroom. Continuous insulation and thermal barriers in new exterior walls will be incorporated.
21. Wayfinding with new signage would improve access in and around the site as well as the building. Administrative offices would have improved direct line of sight to parking and site entry points and be located immediately adjacent to the main entry vestibule. The design will incorporate a layered approach to security including creating multiple zones within the school that can be secured in the event of an active shooter/intruder. Safe zones will be created within each of these areas. These secured zones will also allow for more effective and secure community use. There will be visual/passive oversight of the main entry and drop off areas from the administrative offices. Additional entry control will include a secured vestibule and an entry and visitor management screening system (like Raptor) with video control at the main entry. Cameras will be distributed throughout the building's interior and exterior. Video monitors will be provided within the centralized administration area and in the facility manager's office to increase the ability of designated staff to monitor the camera footage. Exterior door sensors will be installed to determine when a door is left ajar. Classrooms and other key student and staff areas will be equipped with interior locking hardware.
22. Offered as a finding allowance is a ground mounted monument sign that can support school and community events.
23. Perimeter fencing and bollards: Along with improved site surface conditions, the addition of perimeter fencing and bollards will improve security and access control.
24. A well-defined building entrance will offer clarity to the newcomers to the school and offer a sense of place to the community. The curved spine of the school main circulation path allows the administration to see all traffic entering the site and the building.
25. Restroom facilities would be located properly throughout the building to serve daily needs and special events. New distribution systems will eliminate aged piping and failing drainage systems.
26. Landscaping is currently non-existent on the site and would be incorporated to improve the learning opportunities of the

## BEST FY2019-20 GRANT APPLICATION SUMMARIES

campus by including outdoor classrooms, raised garden beds, and re-use of the District's greenhouse.

27. Outdoor playgrounds are a must with school children to advance neuro, vestibular, and gross motor skills. Under a new design, site drainage and fall protection would be implemented along with accessibility improvements and multi-sensory learning features.

28. Proper lighting levels and quality of light will, by nature, improve learning opportunities. In addition, there would be an immediate reduction in overall energy consumption. Introduction of natural lighting will also improve learning and energy efforts.

29. Program Adequacy: Simply changing room names and teacher locations will not correct the deficiency of poor planning. Right-size planning and adjacency alignments will be readily achieved in a new school design. The building would be oriented so that the students have access to adequate natural light, proper and adequate ventilation and utility services. This layout supports welcome views towards the natural beauty of the mountains, something that is currently lacking on this site.

30. Athletics is a major part of any school district curriculum. New site development will improve the quality of those outdoor facilities and improve overall student health. The athletic facilities to the North would be CHSAA and ADA code compliant and allow the district to have outdoor facilities they can compete in.

31. New CTE and elective classrooms provide more learning paths for students and will allow the district to offer more adult education courses.

Based on feedback during the last grant cycle we have removed the teacher housing from the grant request scope and will fund this scope by other means. Without quality teachers, there will not be a school. The District competes with surrounding districts and workplace employers that have a larger annual budget that can support a higher teacher salary and that are within communities that offer reasonably priced housing. This site solution proposes to continue the program of supportive, local, and affordable housing stock on-site.

### How Urgent is this Project?

Sierra Grande School District maintains a position of serious concern related to the life safety deficiencies that have been identified and discovered in the recent investigations of the master plan facilities assessments. Health, safety, and welfare of the students and faculty are of highest priority and we support investment in correcting unsafe conditions and deficiencies. Without funding from the BEST Grant, the students and staff will continue to be in a state of daily risk and the facilities will continue to decline resulting in funds allocated as available to deal with emergency situations, thus leaving the district in a reactive state versus striving to achieve the mission of the school through teacher professional development and curriculum improvements. The amount of issues identified overwhelms the district financially and is a burden they cannot overcome. It is not a responsible use of funds to throw money away on a facility that is so far out of compliance.

The inherent bones of the current building are over 60 years old and other aspects of the infrastructure are past the expected useful life. Many systems need replacement and have (in the past) disrupted classes. The extreme nature of the weather in the San Luis Valley suggests that any building solution created should address and withstand the harsh conditions. The current building envelope and systems struggle to create comfortable conditions for staff and students. Deferred maintenance will continue to gouge the limited school budget which already struggles to provide for its students and keep up with modern learning standards.

The students of Sierra Grande deserve an essential-skills learning facility, so that they can prepare for their futures. The current needs of the school are not met on all fronts: athletics, academics, and extracurricular activities are being held back by outdated facilities that don't deliver the opportunities that other staff/students in the area regularly enjoy. Classrooms are uncomfortable learning spaces that aren't scaled to the correct size; some classrooms are constrained while others find the proportions difficult to teach in. The athletic facilities don't have the capability to support a full athletic program serving all grades.

Safety is of the highest importance in schools, and the code deficiencies and significant lack of fire suppression turns the school into an impending disaster. If left untouched the school will soon find itself without adequate funds to replace multiple failing systems or provide the students and staff with a facility that is comparable to surrounding districts which comply with CDE standards.

In the event of a fire or smoke emergency situation, the building is extremely unsafe. The students do not have adequate means of egress and the District will be at risk for loss of life and the potential loss of their only school facility.

Other serious priorities addressed in the proposed solution include:

- Establishing district-wide fire suppression systems and alarms, code compliant egress, and site access for first responders.
- Increasing security and monitored access to the facilities and design of the interior spaces to provide additional safety measures.

# BEST FY2019-20 GRANT APPLICATION SUMMARIES

- Removing barriers for accessible entry and redirecting automobile and bus traffic to provide safer conditions.
- Increased opportunities for teacher and student collaboration.
- More opportunities for indoor athletics (due to longer winters and snow cover).
- Single bus drop-off and pick-up with bus/vehicular and pedestrian safety addressed.
- Consolidation of community use functions with adjacencies of cafetorium and gymnasiums with a dedicated after hours community entrance.

**Does this Project Conform with the Public School Facility Construction Guidelines?** Yes

**If not, provide an explanation for the use of any standard not consistent with the guidelines:**

**How Does the Applicant Plan to Maintain the Project if it is Awarded?**

The Sierra Grande School District has established policy and an approved budgeting process that requires a capital renewal reserve fund for the specific purpose of replacing major facility systems with projected life cycles (i.e. roofs, security systems, electrical systems, heating and controls, ventilation, and air conditioning systems, interior finishes, emergency and pedestrian access/accessible routes). This process enabled each department to create a 3-5-year replacement plan for all capital needs as we can no longer defer maintenance. This budgeting process will allow us to stay aligned to replacement needs and allow us to build reserves for emergencies that may arise unexpectedly.

The Sierra Grande School District will maintain the allocation to the Capital Projects Fund dedicating \$341.00 per student to produce an annual fund balance approx. \$100,000.00 These funds will be used to maintain capital construction improvements upon the completion of the grant.

**Describe the condition of the public school facility at the time it was purchased or constructed and, if the facility was not new or was not adequate as a public school facility at that time, provide the rationale for purchasing the facility or constructing it in the manner in which you did:**

The facilities of Sierra Grande School District are located on a parcel approximately 35 acres in size along Highway 160 in the community of Blanca, CO. The current PK-12 structure is a compilation of additions to the original 1956 structure. The additions were completed between 1976 and 2008; the last offering an isolated pre-school structure.

The original building was built with load-bearing masonry walls for exterior and interior (corridor) systems and includes a wood-framed roof structure. The additions were primarily done with low cost, pre-engineered, metal- skinned shell structures, totaling 40% of the facility footprint.

The compilation of additions made to the building over the past four decades was a result of immediate need and satisfied a spatial necessity; however, they were neither of quality construction, nor were they positioned to accommodate managed education development. In 2017 the District invested in a thorough and thoughtful long-term master plan that will help to guide future improvements.

Support areas on site include a football field with bleachers and a non-regulation / unsanctioned track, a bus barn, an open playground and an enclosed playground, an unusable baseball field, and undeveloped open space. Three apartments for teacher housing are also located on site. The school shares a joint access with the Fort Garland Recreation District as a single access off Hwy. 160 is allowed.

**Describe the history of capital improvements made to the facility by the district/charter school in order to make it suitable for students. Include a list of all capital projects undertaken in the affected facility in the last 3 years:**

The District maintains their facility with the operation funds it reserves annually.

A general history of recent capital improvements is as follows:

- School facilities projects totaled \$141,350 and included replacement of lighting, water fountains, and furniture, purchasing an ice machine, paint sprayer, snow removal equipment, and classroom equipment, and upgrading a furnace, propane tank field and metal screen doors and locks.
- Maintenance projects totaled \$19,000 and were comprised of periodic maintenance items such as maintaining sewer lines, resurfacing the gymnasium floor, replacing lightbulbs and ballasts, reconditioning the walk-in freezer, and reconditioning asphalt, as well as one-time costs of adding safety fencing and replacing fire alarms.
- Food services projects totaled \$15,700, including replacing an exhaust hood, a dishwasher, and cafeteria tables.
- Transportation projects totaled \$284,400. This included the purchase of several buses, service vehicles, tire machines, a pressure washer, a yard mower, an engine scanner, and a tire balancer.

## BEST FY2019-20 GRANT APPLICATION SUMMARIES

- Technology projects totaled \$232,300 and included upgrades to physical infrastructure, data systems, and computers as well as the purchase of new iPads and iPad carts, security systems, and laptops for students.
- Curriculum projects totaled \$100,700 and included the purchase of various curriculum resources for subjects such as science, business, math, and reading along with preschool curriculum resources.

On occasion, we must ask for help from outside contractors. Following the tragedy of the Sandy Hook ES shooting in Connecticut and the increasing growth of both recreational and medical marijuana sales within the District's immediate surroundings, the District submitted and received BEST support for a limited security and surveillance upgrade to the buildings. The work was performed in Summer 2015, but the Grant was not officially closed until YE 2017.

### **What options outside of the BEST grant has the applicant investigated or leveraged to address the school's facility needs?**

Parallel with the BEST Grant process, the District has been working with the Fort Garland Recreation Center in cooperation for a GOCO Grant to facilitate funding for a community baseball/softball field in the northeast portion of the District property. The joint grant effort was not awarded by GOCO in the Fall-2017 cycle; however, the District intends to make a second attempt following submittal of this BEST Grant application. Our District commitment to finding other methods of funding sources that could leverage as many dollars as possible has always been part of our District business model. If awarded the BEST Grant, we would apply for and try to secure as many additional grants as possible that we could qualify for to cover the costs of enhancements as identified below:

- Baseball Field (GOCO)
- Playgrounds (GOCO)
- Upgraded Bleachers (GOCO/DOLA)
- Bleachers at Football Field (GOCO)
- Additional Landscaping / Trees (DOLA)
- Commons / Cafetorium furniture/equipment / acoustical upgrades (DOLA)
- Events restrooms and concessions (GOCO/DOLA)
- Maker Space w/ community access (DOLA)
- A/V/ Stage Lighting enhanced at Cafetorium (DOLA)
- Sidewalk/bike route connectivity and accessibility for community, including Rec Center and School site. (Rails-to-Trails Conservancy, the 2017 Doppelt Fund Grants)

### **How do you budget annually to address capital outlay needs in your district/charter? Include \$/FTE for the prior fiscal year:**

Sierra Grande School District budgets annually for the maintenance and replacement cost of systems that fail or need to be replaced to protect the overall integrity of the facility and its programs. The school district continues to budget \$100,000.00 in the School Building Account which is an estimated average of \$341.00 per student in PK-12.

The School Building Account is used as a Capital Reserve Fund from which all money for the upkeep and maintenance of facilities and programs comes from. Identified systems that are beyond their useful life are maintained rather than replaced as the cost would drain the reserve fund and force the district to concentrate available funds to the area of facilities and not academics.

The Board of Education struggles with tough choices between the overall maintenance and replacement of aging systems in the school and the need for investing in academic programs, technology, and continuing education for teachers to maintain an environment that promotes essential learning skills. The Superintendent and Board of Education realize that inefficient systems that do not promote a healthy learning environment still exist and that steps to a budgeted increase in capital reserves is needed. Going forward, the Board of Education will allocate an additional \$10,000.00 above the previous year's allocation to the Capital Projects Fund.

If awarded, funds from the BEST Grant will provide SGSD with much needed budget relief and remove the current drain on resources directly impacted by our struggle to maintain antiquated systems.

### **If relevant to your project, what are your current annualized utility costs, and what amount of reduction in such costs do you expect to result from this project?**

The inclusion of new construction within a smaller, more efficient building envelope meeting current energy code can only reduce utility costs vs. the continuation of our 60+ year old structure and systems. We anticipate a significant reduction in annual utility costs. It is expected that our new design will offer passive solar and ventilation solutions to further minimize the costs of utilities. However, being a single structure (and site) in a rural community with limited utility services available, the

## BEST FY2019-20 GRANT APPLICATION SUMMARIES

savings would not be as great as a building of similar construction and size within a larger, more urban community that offers greater utility options.

Utility 2018 Costs and Targeted Reductions:

Electricity: \$45,999.11 (targeting a 16% reduction)

Propane: \$63,835.23 (targeting a 10% reduction smaller footprint, energy efficient envelope)

Water / Sanitary: \$22,990.60 (targeting a 30% reduction for domestic and sanitary)

<b>Grant Request:</b>	\$35,213,784.85	<b>CDE Minimum Match %:</b>	27%
<b>Applicant Match:</b>	\$13,779,307.11	<b>Actual Match % Provided:</b>	28.125%
<b>Total Project Cost:</b>	\$48,993,091.96	<b>Is a Waiver Letter Required?</b>	No
<b>Affected Sq Ft:</b>	84,389	<b>Contingent on a 2019 Bond?</b>	No
<b>Affected Pupils:</b>	293	<b>Source of Match:</b>	
<b>Cost Per Sq Ft:</b>	\$580.56	2018 Bond	
<b>Soft Costs Per Sq Ft:</b>	\$76.30	<b>Escalation %:</b>	4%
<b>Hard Costs Per Sq Ft:</b>	\$504.26	<b>Construction Contingency %:</b>	5%
<b>Cost Per Pupil:</b>	\$167,212	<b>Owner Contingency %:</b>	7%
<b>Gross Sq Ft Per Pupil:</b>	288	<b>Historical Register?</b>	No
<b>Is a Master Plan Complete?</b>	Yes	<b>Adverse Historical Effect?</b>	No
<b>Who owns the Facility?</b>	District	<b>Does this Qualify for HPCP?</b>	Yes
<b>If owned by a third party, explanation of ownership:</b>			
<b>If match is financed, explanation of financing terms:</b>			

### Financial Data (School District and BOCES Applicants)

<b>District FTE Count:</b>	263	<b>Bonded Debt Approved:</b>	\$13,780,000
<b>Assessed Valuation:</b>	\$63,918,571	<b>Year(s) Bond Approved:</b>	18
<b>PPAV:</b>	\$243,036	<b>Bonded Debt Failed:</b>	
<b>Unreserved Gen Fund 17-18:</b>	\$709,423	<b>Year(s) Bond Failed:</b>	
<b>Median Household Income:</b>	\$34,135	<b>Outstanding Bonded Debt:</b>	\$13,780,000
<b>Free Reduced Lunch %:</b>	90%	<b>Total Bond Capacity:</b>	\$12,783,714
<b>Existing Bond Mill Levy:</b>	0	<b>Bond Capacity Remaining:</b>	(\$996,286)
<b>3yr Avg OMFAC/Pupil:</b>	\$1,478.91		



# COSTILLA COUNTY BOARD OF COUNTY COMMISSIONERS

*"Where Colorado Began"*

352 Main Street  
PO Box 100  
San Luis, CO 81152

(719) 672-3372  
(719) 672-3962 fax

[www.costillacounty-co.gov](http://www.costillacounty-co.gov)

January 24, 2019

Dear Colorado Construction Assistance Board,

It is with great pride and excitement that I write this letter of support for the building of a new PK – 12 School Facility in the Community of Blanca/Ft. Garland. As a lifelong resident of this Community, I am extremely proud of the accomplishments and support my community has given to the Sierra Grande School District. The passage of the latest ballot initiative is a perfect example of this. The tax liability that is paid for services like Emergency Medical Services (EMS), recreation, and education is much higher in this District than others in the state with similar infrastructure and the willingness of the citizens to approve a new school ballot measure speaks volumes to the local commitment of the community to the School District.

During the Spring Fire, which impacted Costilla County in June and July 2018, the School Facility became the Incident Command Post and Emergency Operations Center. The location of the school is the best location in the northern part of Costilla County for facilitating and staging a large group of fire fighters in the event of a fire in the surrounding area. In fact, it has been used twice already for this purpose in the last 20 years. The school is not only in a good location for staging emergency operations, but the facility is also equipped to handle the other needs of fire emergency personnel such as a cafeteria, conferencing, technology, parking, etc.

Although education is the number one goal, a high-quality school facility means so much more to the success of our community. When you walk through Sierra Grande you see a facility that has been upgraded, remodeled, and very well taken care of, however, that walkthrough will not give you a sense of the failing water system, sewer system, and various other basic infrastructure that is at the foundation of a quality education. As a 1978 graduate I have seen the work and band-aids that have been put into this facility. Please consider this grant as a way of enhancing the investment that has been put forward by this great community in the form of an initiative that was passed in November 2018. This is the reason this BEST Grant is so important to the education of our children in Costilla County.

Thank you for your consideration.

Sincerely,

  
Lawrence Pacheco, Vice-Chair





## COSTILLA COUNTY FIRE PROTECTION DISTRICT



February 4, 2019

Capital Construction Assistance Board  
Colorado Department of Education  
201 East Colfax Avenue  
Denver, CO 80203

Dear CCA Board,

Sierra Grande School District has requested a letter providing information regarding our volunteer fire department and potential challenges in the event of an incident at the current school facility.

The Costilla County Fire Protection District (CCFPD) is a volunteer fire department responsible for covering the entire County which consists of over 1230 square rural miles. The CCFPD has an ISO rating of 4-4X and consists of 35 volunteer members with 4 Stations located in San Luis - Station 1, Fort Garland - Station 2, Garcia - Station 3, and San Pablo - Station 4. Fifteen volunteers are assigned to Station 1 and 4, 15 to Station 2, and 5 volunteers to Station 3. Since the CCFPD is 100% volunteer, all members are required to respond to their respective Station and then to the incident with the majority working full-time jobs that they must leave. To Sierra Grande School response time from Station 2 in Fort Garland is 20+ minutes. Response time from Station 1 and 4 is 25+ minutes and from Station 3 is 35+ minutes. The CCFPD has mutual aid agreements with La Veta FD - response time of 60+ minutes, Costilla/Questa, NM FD - response time of 60+ minutes, and Alamosa FD - response time of 40+ minutes. In addition, the CCFPD has an auto aid agreement with the Colorado Division of Fire Protection and Control - approximate response time of 30 minutes.

Pre-planning for a fire related incident has taken place and current challenges associated with the current facility include multiple additions to the building making it difficult to contain a fire to one building section, the addition of a uniform roof which creates space and layers between roof tops for fire to be difficult to access, and outdated or non-existence fire suppression and control systems. Further, the location of the boiler and exhaust system have created some challenges with past firefighting efforts at the facility. Due to the location of the school, it is currently necessary to shuttle water supply with tender apparatus or to utilize the water located in the swimming pool at the neighboring community center to adequately support firefighting efforts. This method is not as efficient as stand pipe and hydrants located on site.

A new facility with modern fire safety standards, sprinkler systems, and meeting construction codes would greatly improve the ability to contain a fire to a specific area and to provide initial suppression while fire crews are in route. A new facility would enhance public safety for the community, students, employees of the school district, and volunteer firefighters. Feel free to contact me at (719) 588-3429 or [theldonsmith15@hotmail.com](mailto:theldonsmith15@hotmail.com) if you have any questions.

Sincerely,

Theldon Smith  
CCFPD Chief

John Serma, Chair  
Matthew Espinoza, Secretary/Treasurer  
Walter Roybal, Director

Board of Directors:

Matthew Cordova, Vice-Chair  
Gary Pettigrew, Director

P.O. Box 419,  
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● **Facilities Impacted by this Grant Application** ●

**CROWLEY COUNTY RE-1-J - HS-ES Renovation/ MS Addition - Crowley County Jr/Sr HS - 1919**

District:	Auditor - Crowley County RE-1J
School Name:	Crowley County Jr./Sr. HS
Address:	602 Main Street
City:	Ordway
Gross Area (SF):	52,032
Number of Buildings:	2
Replacement Value:	\$11,763,646
Condition Budget:	\$4,917,549
Total FCI:	0.42
Adequacy Index:	0.23



**Condition Budget Summary**

System Group	Replacement Cost	Requirement Cost	SCI
Electrical System	\$1,738,090	\$1,691,219	0.97
Equipment and Furnishings	\$478,898	\$162,381	0.34
Exterior Enclosure	\$1,181,893	\$106,811	0.09
Fire Protection	\$2,470	\$0	0.00
HVAC System	\$3,032,011	\$0	0.00
Interior Construction and Conveyance	\$2,153,844	\$1,597,752	0.74
Plumbing System	\$690,669	\$407,044	0.59
Site	\$1,055,680	\$878,211	0.83
Structure	\$1,430,090	\$74,129	0.05
Overall - Total	\$11,763,646	\$4,917,547	0.42

**CROWLEY COUNTY RE-1-J - HS-ES Renovation/ MS Addition - Crowley County Primary School - 1919**

District:	Auditor - Crowley County RE-1J
School Name:	Crowley County Primary School
Address:	630 Main Street
City:	Ordway
Gross Area (SF):	40,698
Number of Buildings:	1
Replacement Value:	\$16,957,973
Condition Budget:	\$4,629,035
Total FCI:	0.27
Adequacy Index:	0.21



**Condition Budget Summary**

System Group	Replacement Cost	Requirement Cost	SCI
Electrical System	\$1,526,619	\$1,506,541	0.99
Equipment and Furnishings	\$219,724	\$130,014	0.59
Exterior Enclosure	\$2,325,301	\$753,664	0.32
Fire Protection	\$11,978	\$0	0.00
Furnishings	\$168,509	\$0	0.00
HVAC System	\$933,853	\$913,919	0.98
Interior Construction and Conveyance	\$1,656,063	\$531,320	0.32
Plumbing System	\$545,162	\$506,935	0.93
Site	\$692,806	\$286,644	0.41
Structure	\$8,877,958	\$0	0.00
Overall - Total	\$16,957,973	\$4,629,037	0.27

● **Facilities Impacted by this Grant Application** ●

**CROWLEY COUNTY RE-1-J - HS-ES Renovation/ MS Addition - Crowley County Ward Intermediate - 1997**

<b>District:</b>	Auditor - Crowley County RE-1J
<b>School Name:</b>	Crowley County Ward Intermediate
<b>Address:</b>	1001 Main Street
<b>City:</b>	Ordway
<b>Gross Area (SF):</b>	32,692
<b>Number of Buildings:</b>	1
<b>Replacement Value:</b>	\$11,638,300
<b>Condition Budget:</b>	\$6,218,342
<b>Total FCI:</b>	0.53
<b>Adequacy Index:</b>	0.12



**Condition Budget Summary**

System Group	Replacement Cost	Requirement Cost	SCI
Electrical System	\$2,995,775	\$2,410,578	0.80
Equipment and Furnishings	\$136,279	\$138,477	1.02
Exterior Enclosure	\$2,419,917	\$12,666	0.01
Fire Protection	\$1,552	\$0	0.00
Furnishings	\$112,339	\$0	0.00
HVAC System	\$519,501	\$506,419	0.97
Interior Construction and Conveyance	\$860,077	\$411,040	0.48
Plumbing System	\$450,191	\$101,463	0.23
Site	\$3,390,078	\$2,637,699	0.78
Structure	\$752,593	\$0	0.00
<b>Overall - Total</b>	<b>\$11,638,300</b>	<b>\$6,218,342</b>	<b>0.53</b>

# BEST FY2019-20 GRANT APPLICATION SUMMARIES

**Applicant Name:** CROWLEY COUNTY RE-1-J

**County:** Crowley

**Project Title:** HS-ES Renovation/ MS Addition

**Applicant Previous BEST Grant(s):** 2

**Has this project been previously applied for and not funded?** No

**If Yes, please explain why:**

## Project Type:

- |  |  |  |   |
|--|--|--|---|
| <input type="checkbox"/> New School            | <input checked="" type="checkbox"/> Roof               | <input checked="" type="checkbox"/> Asbestos Abatement | <input checked="" type="checkbox"/> Water Systems     |
| <input type="checkbox"/> School Replacement    | <input checked="" type="checkbox"/> Fire Alarm         | <input checked="" type="checkbox"/> Lighting           | <input checked="" type="checkbox"/> Facility Sitework |
| <input checked="" type="checkbox"/> Renovation | <input checked="" type="checkbox"/> Boiler Replacement | <input checked="" type="checkbox"/> Electrical Upgrade | <input type="checkbox"/> Land Purchase                |
| <input checked="" type="checkbox"/> Addition   | <input checked="" type="checkbox"/> HVAC               | <input checked="" type="checkbox"/> Energy Savings     | <input checked="" type="checkbox"/> Technology        |
| <input checked="" type="checkbox"/> Security   | <input checked="" type="checkbox"/> ADA                | <input checked="" type="checkbox"/> Window Replacement | <input type="checkbox"/> Other                        |

## General Information About the District / School, and Information About the Affected Facilities:

For many years, the District has faced many financial obstacles and have done a great job of protecting instruction and preparing students for a competitive global economy. For many years, the District has done its best with limited resources (personnel and money) in the maintenance area. The community, facilities committee, Board, staff and students recognize that now is the time to get our facilities in shape to better prepare students and for staff not to worry about the headaches of an aging facility. In summary, we need help in renovating our existing buildings to create a better learning environment for our students. In summary:

-Address safety concerns due to Courthouse across street from High School and Primary.

-Renovate the High School

-Repurpose the current Primary to better utilize the space. Examples include removing classes (Art and Band) from the upstairs of High School due to fire escape concerns and ADA access for our handicapped students.

-Renovate the Vo. Ag. building to enhance the FFA programs and Vocational Classes that the community wishes for.

-Add 8 classrooms to Ward Building so that one building houses K-6 and the Principal and staff members would not have to split times and duties between the two buildings.

-Eliminate the current Boys locker room and wrestling room and erect a new building to house the two.

-Upgrade the current sports complex to provide safer environment for all and install a track for our student athletes.

-A building or solution to house historical records.

-Maximize opportunities for efficiency.

## Deficiencies Associated with this Project:

The Crowley County Jr./Sr. High School (HS) is a partial 2-story building that was constructed in 1919. The building's FCI is at 39%. The HS shares it's site with the Vo-Ag building as well as Crowley County Primary School (ES). The HS has not had any additions, but has had several renovations to update various systems within the building. However, many of these renovated systems are now approaching the end of their useful lives. The school also has several security problems related to the age and location of the building. For example, there are several exterior entry points and these are difficult for the administration to monitor. The school is also across the street from the courthouse, which has seen an increased criminal presence due to the legalization of marijuana. These factors directly impact the safety and security of the school's students. But these can all be addressed through a renovation of this building. This HS is an important landmark in the town of Ordway, and the school district would like to see it renovated to meet 21st century education standards.

The Vo-Ag building was built in 1963, and is located on the same site as the HS. It houses a metal shop as well as a wrestling room and a boy's locker room. The Vo-Ag building has an FCI of 31%.

The ES was constructed in 1954, but had renovations completed in 1992. The building's FCI is currently at 27%. During this renovation classrooms and heating and cooling equipment were added to the building. In 2014 a new metal roof was added to the building's eastern section. This building suffers from similar age and location-related problems as the HS. It also has multiple exterior points of entry, and many of these are constantly locked to prevent security issues. The ES is also located

## BEST FY2019-20 GRANT APPLICATION SUMMARIES

near the courthouse, which has seen an increase in criminal activity in the last few years. Renovating this space would help the school district address these problems and create a safer environment for its students.

Crowley County Ward Intermediate (Ward MS) was constructed in 1997 and currently has an FCI of 43%. Ward MS provides education for 4th through 6th grade. This building hasn't received any major renovations or additions. The school shares its library with the town of Ordway. Ward MS has six athletic fields, but three of these have been abandoned. Ward MS has had ongoing issues with its HVAC system, which is a residential unit and was not meant to be used in a school building. Parts of this system are located outside of the school building, and create a lot of noise pollution. Ward MS has received many complaints from its neighbors about this noise and the disruption it causes..

These buildings all have have relatively low FCI's, which supports the district and community's desire to renovate these spaces to meet their student's current needs. These buildings are an important part of the community's history, and they deserve a place in the community's future as well.

Crowley County Jr./Sr. High School Building:

Interior:

Code compliance: Several spaces in the HS building are not ADA accessible. In the interior of the building, these include several classrooms/areas (art, band, auditorium, stage) and all of the bathrooms.

Safety issues: There are two staircases that provide access the partial second floor in the HS building. These are the only way to access the second floor, which makes ADA access to this part of the building difficult. These stairs are also relatively narrow and would create a safety hazard during an emergency situation. This system is original to the building, past their useful lives and in need of replacement.

HVAC system: The current HVAC system uses a two pipe changeover system to heat and cool the building. This is a problem because this type of system cannot distribute hot and cold air simultaneously. This works well during seasons that are regularly cold or regularly hot, but does not work as well during seasons with significant temperature variation (i.e. about half of the year). This can make the school's classrooms uncomfortable, and this is not conducive to learning.

Solid brick interior walls: This system is 100 years old and has an expected useful life of 75 years. These walls require almost constant maintenance to keep them in working order.

Plaster walls: This system is past its useful life and is in need of replacement. The plaster throughout the building has serious damage related to age and to water damage. There is also evidence of several locations being repaired with standard drywall compounds instead of plaster repair. Since drywall compounds do not adhere to plaster these repair sites are beginning to show signs of failure.

Mold: Several walls and sections of ceiling show heavy water damage, and a mold test will need to be conducted. If mold is present, this would present a serious health risk to both students and staff.

Interior doors: All of the interior doors are original to the building. They are past their useful lives and in need of replacement.

Carpeting: There is carpeting installed throughout the building hallways, classrooms, library and auditorium. This system is approaching end of its useful life and needs to be budgeted for replacement.

VCT: This type of flooring is found in the building's science labs, computer rooms and restrooms. This system is reaching the end of its useful life and should be budgeted for replacement.

Wood flooring: This flooring is original to the building. The system is currently functioning, but it is past its useful life and in need of replacement.

GWB ceiling: This system is present throughout the building's hallways and offices. In several areas the ceiling is splitting and

## BEST FY2019-20 GRANT APPLICATION SUMMARIES

cracking with noticeable water damage. This system is approaching the end of its useful life and needs to be budgeted for replacement.

Domestic water distribution: This system includes a water heater and a pressure booster pump. These are both approaching the end of their useful lives and should be budgeted for replacement.

Sanitary waste: This system is original to the building, and still functioning. Years remaining have been increased due to being well maintained, but this needs to be budgeted for replacement.

Electrical system: Years remaining have been increased because the system is functioning well, but it is approaching the end of its useful life. The age of this system makes it challenging to find appropriate parts for maintenance and repair work. This system will likely need to be upgraded in the event that changes are made to the school's other systems (e.g. HVAC changes or additional technology). The electrical system will need to be budgeted for replacement in order to meet these new needs.

Intercom system: This system is approaching the end of its useful life and should be budgeted for replacement. Even more concerning is that the intercoms are very inconsistent. There have been multiple instances where a lockdown call has been made over the intercom and the call does not reach all of the school's classrooms. This system also does not connect to the HS gym or to the Vo-Ag building. This presents a serious safety and security risk to the students.

Telephone system: This system was installed in 2012, but is approaching the end of its useful life. It needs to be budgeted for replacement.

Fire alarm system: This system was installed in 2013, and does not include a sprinkler system. This is now approaching the end of its useful life and should be budgeted for replacement.

CCTV security system: The building's CCTV security system monitors points of egress. This is approaching the end of its useful life and needs to be budgeted for replacement.

LAN system: This system was installed in 2008, and is approaching the end of its useful life.

Exit signs: This system is approaching the end of its useful life and should be budgeted for replacement. The school does not have a sufficient number of exit signs installed. The district would also like to replace some of the older models with units that use brighter and more energy efficient LED lights.

Emergency battery pack lights: These emergency lights had new batteries and bulbs installed in 2011. Years remaining have been increased to allow for budgeting for replacement.

Fixed casework: This system was installed in 1975, and is beyond its useful life. This should be budgeted for replacement.

Exterior:

Code compliance: The exterior of the building suffers from similar ADA compliance issues. Most of the school's exterior doors and access pathways are non-compliant.

Concrete footings: This system is original to the building, and has an expected useful life of 75 years. These are past their useful lives and need to be budgeted for repair.

Structural slab on grade: Sections of the slab have settled, which has created noticeable differences in the structural slab elevation. This system is well past its expected useful life, and should be budgeted for repair.

Grade beams - wall footings: This system is original to the building, and is still functioning as designed. However, it is well past its useful life, and should be budgeted for repair.

## BEST FY2019-20 GRANT APPLICATION SUMMARIES

Multi-story wood superstructure: The system is original to the building, and is inconsistently insulated throughout. Remaining years have been increased, but it is still past its useful life and needs to be budgeted for repair.

Solid brick exterior walls: These walls are original to the building, and show varying levels of mortar erosion. Years remaining have been increased, but it is beyond its useful life and should be budgeted for repair.

Main electrical service: The meter for this system was reset and inspected in 1995. The system is approaching the end of its useful life and should be budgeted for replacement.

Crowley County HS Vo-Ag Building:

Interior:

Interior Doors: The Vo-Ag building's interior doors were vandalized at some point and were removed. Years remaining have been decreased due to this removal, and this system needs to be budgeted for replacement.

Concrete floors: This system is currently functioning, but is past its useful life and needs to be replaced. In some areas this flooring has cracked and there are elevation differences.

Water heater: This system is approaching the end of its useful life and needs to be budgeted for replacement.

Sanitary waste: This system is operational and has been well maintained. But it is past its useful life and needs to be budgeted for replacement.

Exterior:

Aluminum windows: These are approaching the end of their useful lives and should be budgeted for replacement.

Electrical distribution system: Part of this system was upgraded in 1990 to accommodate welding equipment, but is approaching the end of its useful life and needs to be budgeted for replacement.

Main electrical supply: The main electrical supply comes from the high school building's meter. This system has been well maintained, but is approaching the end of its useful life and should still be budgeted for replacement.

Branch wiring: All conduits and wiring are surface mounted to the interior and exterior walls. These were replaced in 1990 during the electrical modifications made to accommodate welding equipment. This system is almost past its useful life and needs to be budgeted for replacement.

Fire alarm system: This system is connected to the main fire monitoring station in the HS building. The main issue is this system's inconsistency. During fire drills these alarms will sometimes work, but they do not work every time. The alarms also occasionally sound for no reason. This system is approaching the end of its useful life and needs to be budgeted for replacement.

Crowley County Primary School:

Interior:

Folding partitions: These folding partitions do not effectively block sound between the classrooms. This can cause students to become distracted and is not conducive to a productive learning environment. This system is also approaching the end of its useful life and will need to be budgeted for replacement.

Flooring finishes: The ES has several types of flooring finishes. There is vinyl sheet flooring located in the western bathrooms, and this is ripped/peeling in several places in both bathrooms. Several classrooms have carpeting installed, and VCT flooring is in the cafeteria as well as most of the hallways. In some higher traffic areas, the VCT flooring has become worn with signs of chipping and mildew present. These systems are approaching the end of their useful lives and should be budgeted for replacement.

## BEST FY2019-20 GRANT APPLICATION SUMMARIES

**Water heater:** This water heater is approaching the end of its useful life and needs to be budgeted for replacement.

**Water distribution:** This system is original to the building and has severe water calcium buildup and corrosion. This system is past its useful life-cycle and needs to be budgeted for replacement.

**HVAC system:** Multiple parts of this HVAC system have been identified as approaching the end of their useful lives. These parts constitute the majority of the HVAC system, so this system will need to be budgeted for replacement. This translates into inconsistent temperatures throughout the school. Some classrooms are too cold, while others are too warm. The district's maintenance staff believes the damper system was not properly installed, and that the software to run the entire HVAC system is outdated.

**Electrical system:** This system includes service to the ES building, distribution and interior and exterior wiring. These are all approaching the end of their useful lives and needs to be budgeted for replacement.

**Telephone system:** This system was upgraded in 2009, but is now approaching the end of its useful life.

**Fire alarm system:** This system does not include a sprinkler system. It is also approaching the end of its useful life and needs to be budgeted for replacement. The HVAC system occasionally triggers this system which results in a false fire alarm. Multiple technicians have attempted to repair this, but have been unsuccessful.

**Security system:** The building has a CCTV security system that monitors points of egress. This system also includes card access and a burglar alarm. These systems are all approaching the end of their useful lives and needs to be budgeted for replacement.

**LAN system:** This system no longer meets the school's needs. It is also approaching the end of its useful life and should be budgeted for replacement.

**Emergency lighting:** This system includes exit signs and self-contained battery packs and lights. The years remaining have been increased to reflect the careful maintenance of this system, but this should be budgeted for eventual replacement.

**Exterior:**

**Roof:** The ES has had several roof leaks in various parts of the school. The district has attempted to have this repaired, but none of these attempts have been effective.

**Aluminum windows:** These windows all have double pane low e glass. They are approaching the end of their useful lives and will need to be budgeted for replacement.

**Exterior doors:** The school's exterior doors are past their useful lives and in need of replacement. The automatic openers for these doors are the same age (65 years) and also should be budgeted for replacement. Several of these exterior doors lead directly into classrooms, which presents a safety concern for the students.

**Built up roofing system:** This system is located over the central eastern section of the ES building. This is in better than expected condition, and the observed years have been adjusted to reflect the extended lifespan. But this system should still be budgeted for replacement within the next five years.

**Exterior HID wall packs:** The building's exterior lighting consists of HID wall pack units. This system is near the end of its useful life and needs to be budgeted for replacement.

**Branch wiring:** This includes both interior and exterior branch wiring, devices and utilization equipment. This system is near the end of its useful life and needs to be budgeted for replacement.

**Shared HS, Vo-Ag & ES Site:**

**Water drainage:** There are water drainage issues throughout the district. The HS and ES both have problems with water



## BEST FY2019-20 GRANT APPLICATION SUMMARIES

collecting near the buildings and ponding near surrounding structures (i.e. playground equipment). One of the worst locations for this, however, is the Vo-Ag building. The football office, wrestling room, and locker room all flood during periods of time with heavy snow or rain. These are all problems for the district's maintenance staff, but the flooding in the Vo-Ag building presents a risk to the student's health and safety.

**Pedestrian pavement:** Concrete surrounds the site on three sides and connects sidewalks to walkways at perimeter of the school. This system is approaching the end of its useful life and needs to be budgeted for replacement.

**Football field:** This system is 65 years old and includes grass, grandstand, scoreboard, lighting and irrigation system. Observed years remaining have been extended due to being well maintained, but is a priority 3 requirement.

**Potable water distribution piping:** The HS's system is well past its useful life. The ES's system is approaching the end of its useful life. The observed years remaining have been extended on both systems due to being well maintained, but they both need to be budgeted for replacement.

**Fire protection distribution piping:** This is the ES's system and it includes underground fire protection water piping and fire hydrants. This system has been well maintained, but is still approaching the end of its useful life. It needs to be budgeted for replacement.

**Sanitary sewer:** This is one of the HS's systems, and it is well beyond its expected useful life. Observed years remaining have been extended due to being well maintained, but this system is due for replacement.

**Site Electrical Distribution:** This system is a part of the HS building. It is 65 years old and well past its useful life. Observed years remaining have been extended due to being well maintained, but this system is due for replacement soon.

**Crowley County Ward Intermediate:**

**Interior:**

**Restroom accessories:** The school's restrooms are outfitted with mirrors, grab bars, paper towel dispensers, etc. This system is reaching the end of its useful life and should be budgeted for replacement.

**Flooring finishes:** Several areas in the school have VCT flooring. In many places this flooring is worn out with visible cracking and chipping. This has been replaced on an as needed basis in high traffic areas, but this system is past its useful life and should be replaced. The vinyl flooring in the bathrooms, gymnasium and cooking station are similarly worn, and should also be budgeted for replacement. The school's hallways and classrooms all have carpeting finishes. This system is approaching the end of its useful life and needs to be budgeted for replacement.

**Water heater:** The school's water heater is supplied by an unfiltered water line, and this water has a high sediment content. This causes many maintenance issues, and the unit is in need of replacement.

**HVAC system:** The school's HVAC system has several components that are approaching the end of their useful lives and will soon need to be replaced. This HVAC unit was built for residential use, not commercial use, which creates problems with efficiency and climate control within the building. The system's chiller is located outside the building, and is very loud while it is operating. The district has received multiple noise complaints from the school's neighbors.

**Fire alarm system:** The school's building has a fire alarm system, which includes pull stations, A/V strobes, visual strobes, smokes etc. This system is approaching the end of its useful life and should be budgeted for replacement.

**Solar photovoltaic array:** This system is past its useful life and needs to be immediately replaced.

**Fixed casework:** This includes laminate casework, wall and under-counter cabinets and countertops throughout the school building. This system is approaching the end of its useful life and needs to be replaced.

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**Kitchen equipment:** Ward MS's kitchen is only used to reheat food. The equipment in this kitchen is approaching the end of its useful life and should be budgeted for replacement.

**Exterior:**

**Gutters and downspouts:** The school's roof has a perimeter of aluminum gutters, scuppers and downspouts, which remove and redirect water from the roof to the school's surrounding property. This system is approaching the end of its useful life and should be budgeted for replacement.

**Ward MS Site:**

**Parking lots:** There are two parking lots on the Ward MS site that are approaching the end of their useful lives and should be budgeted for replacement. These parking lots are also in need of refreshed painted pavement markings.

**Pedestrian pavement:** The sidewalks on the school's site are approaching the end of their useful lives and need to be budgeted for replacement.

**Sports fields:** The school's baseball field and tennis courts are both approaching the end of their useful lives and need to be repaired/replaced. The tennis court, in particular, hasn't been used since 2013 due to settling in concrete. This settling has created an uneven surface that presents a tripping hazard for students.

### **Proposed Solution to Address the Deficiencies Stated Above:**

The Crowley County School District and community are committed to renovating these school buildings to meet the needs of 21st century education. This project will include upgrading the district's maintenance shop and addressing landscaping issues around the schools to ensure proper water drainage.

The district would like to renovate both the interior and exterior of the HS. This renovation will include replacing or repairing the HVAC system, replacing the electrical, plumbing, sewer and water line systems, and an update of the school's fire detection systems. This renovation will also address the problems with the HS's interior and exterior brickwork. Part of this project will include updating the football field complex (field, locker rooms, football office/storage).

The HS's Vo-Ag building will also be renovated. The wrestling room will be relocated to the ES, so the new Vo-Ag building will house only the Vo-Ag program and the metal shop. This renovation will also address the building's missing interior doors, poor air circulation, and its flooding issues.

The ES will be renovated as well. This renovation will allow the district to quickly and completely address all of the school's aging systems. This building will ultimately be repurposed to house the district's administrative offices and board room. This will include important storage for historical records, which are currently stored in a modular. The HS's art and band classes will also be relocated to the ES. These classes are currently held on the HS's second floor, which is not ADA accessible and have limited paths for emergency egress. The Vo-Ag building's wrestling room and locker rooms will also be relocated to the ES.

The classes from the ES will be relocated to Ward MS, which will have 8 classrooms added on to the existing building. Ward MS will also be renovated in order to update its HVAC system and to address other maintenance issues. These 8 classrooms are anticipated to each have 850 square feet. This will result in 6,800 additional square feet of program space. Additional restrooms and other support spaces are expected to add an additional 2,380 square feet, so the total addition to Ward MS will be around 9,000-9,500 square feet.

### **How Urgent is this Project?**

Crowley County School District's needs are urgent. The district is dealing with aging systems in all of its facilities. The ongoing repairs these systems require to simply function are a drain on the district's resources that could be better used elsewhere. Even more seriously many of these deficiencies negatively impact the educational opportunities available to Crowley County students.

The HVAC systems in all of the buildings are either past their useful life cycle, or they are inadequately suited for a school building. This results in classrooms and other learning spaces that are uncomfortably warm or cold. This makes it difficult for

## BEST FY2019-20 GRANT APPLICATION SUMMARIES

students to concentrate and learn in these rooms.

Most of the district's schools have problems with water drainage. In the HS, there is water damage in various parts of the school's interior. The ES has issues with water ponding near it's playground equipment as well as collecting near the school's foundations. The Vo-Ag building floods regularly and this affects the wrestling room, locker room, and football office most directly. This issue is pervasive, and causes concern for the health and safety of the students.

Most of the previously listed deficiencies can be solved through an extensive renovation process, and this is the district and community's hope for these buildings. Many of these problems affect the health and safety of all Crowley County students, and needs to be remedied as soon as possible.

**Does this Project Conform with the Public School Facility Construction Guidelines?** Yes

**If not, provide an explanation for the use of any standard not consistent with the guidelines:**

**How Does the Applicant Plan to Maintain the Project if it is Awarded?**

As part of this project, we are asking the architects to help the District develop a Maintenance Checklist. A professionally developed Maintenance Checklist will help the District to ensure monies and resources are available to provide adequate maintenance in a timely manner.

**Describe the condition of the public school facility at the time it was purchased or constructed and, if the facility was not new or was not adequate as a public school facility at that time, provide the rationale for purchasing the facility or constructing it in the manner in which you did:**

The High School was constructed 100 years ago and it met the needs of students and community at that time. Today, the building is a major headache with the amount of repairs needed and it is time to renovate the whole building, inside and out to meet the needs and provide a safe learning environment for our staff and students. The maintenance staff continues to fight multiple issues within the District.

**Describe the history of capital improvements made to the facility by the district/charter school in order to make it suitable for students. Include a list of all capital projects undertaken in the affected facility in the last 3 years:**

There have been numerous projects to repair the building to provide education:

- New Roof
- Repaired major sewer line issues (Multiple times and location)
- Repaired major water lines throughout the District
- Repaired HVAC issues
- Repaired a broken and falling ceiling of auditorium
- Installed LED lights to provide better lighting and reducing energy costs
- Installed Soundboards in Gym
- Renovated Primary School roof and classrooms damaged by water

**What options outside of the BEST grant has the applicant investigated or leveraged to address the school's facility needs?**

The district has investigated other grant options, but most grants do not fund capital projects. The district has also made two bond attempts in previous years, but these both failed. The BEST grant is the district's best chance to completely address it's many facility needs.

**How do you budget annually to address capital outlay needs in your district/charter? Include \$/FTE for the prior fiscal year:**

The Crowley County School District's board determines the budget for capital outlay needs annually. For the current fiscal year, the board has committed \$200,000 to the Capital Improvement/Maintenance line item. The district and the board communicates regularly (3-4 times per year) to ensure that this money is being properly prioritized.

**If relevant to your project, what are your current annualized utility costs, and what amount of reduction in such costs do you expect to result from this project?**

The district's annualized utility costs are \$233,798. This project will address most of the district's aging systems, which heavily contribute to the district's utility costs. The district plans to replace this equipment with new, more energy efficient models. Since this project is still in it's planning stages, it is impossible to give an exact number for this reduction, but the savings are

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expected to be significant.

<b>Grant Request:</b>	\$54,136,741.57	<b>CDE Minimum Match %:</b>	39%
<b>Applicant Match:</b>	\$5,500,000.00	<b>Actual Match % Provided:</b>	9.2225025%
<b>Total Project Cost:</b>	\$59,636,741.57	<b>Is a Waiver Letter Required?</b>	Yes
<b>Affected Sq Ft:</b>	149,422	<b>Contingent on a 2019 Bond?</b>	Yes
<b>Affected Pupils:</b>	437	<b>Source of Match:</b>	\$5.0 Mil Bond Nov. 2019, \$500,000 Contingency Fund
<b>Cost Per Sq Ft:</b>	\$399.12	<b>Escalation %:</b>	6%
<b>Soft Costs Per Sq Ft:</b>	\$36.69	<b>Construction Contingency %:</b>	5%
<b>Hard Costs Per Sq Ft:</b>	\$362.43	<b>Owner Contingency %:</b>	5%
<b>Cost Per Pupil:</b>	\$136,469	<b>Historical Register?</b>	No
<b>Gross Sq Ft Per Pupil:</b>	342	<b>Adverse Historical Effect?</b>	No
<b>Is a Master Plan Complete?</b>	Yes	<b>Does this Qualify for HPCP?</b>	Yes
<b>Who owns the Facility?</b>	District		
<b>If owned by a third party, explanation of ownership:</b>			
<b>If match is financed, explanation of financing terms:</b>			

## Financial Data (School District and BOCES Applicants)

<b>District FTE Count:</b>	420	<b>Bonded Debt Approved:</b>	
<b>Assessed Valuation:</b>	\$42,779,045	<b>Year(s) Bond Approved:</b>	
<b>PPAV:</b>	\$101,734	<b>Bonded Debt Failed:</b>	\$5,700,000
<b>Unreserved Gen Fund 17-18:</b>	\$1,361,666	<b>Year(s) Bond Failed:</b>	16
<b>Median Household Income:</b>	\$32,788	<b>Outstanding Bonded Debt:</b>	\$0
<b>Free Reduced Lunch %:</b>	73%	<b>Total Bond Capacity:</b>	\$8,555,809
<b>Existing Bond Mill Levy:</b>	0	<b>Bond Capacity Remaining:</b>	\$8,555,809
<b>3yr Avg OMFAC/Pupil:</b>	\$2,157.06		

## BEST School District and BOCES Grant Waiver Application

The BEST grant is a matching grant and each applicant is assigned a unique minimum matching requirement, pursuant to 22-43.7-109(9) C.R.S., to identify their financial capacity. An applicant may apply to the Capital Construction Assistance Board for a waiver or reduction of the matching moneys requirement for their project if the applicant determines their minimum match is not reflective of their current financial capacity, pursuant to 22-43.7-109(10) C.R.S.

Waiver applications are reviewed independent of the grant application. Upon review of the waiver application, the Capital Construction Assistance Board will make a motion to approve or deny the applicant’s waiver request.

The Capital Construction Assistance Board shall seek to be as equitable as possible by considering the total financial capacity of each applicant pursuant to 22-43.7-109(11) C.R.S.

### Instructions

Be specific when answering the questions and explaining the issues and impacts. Your response should include dollar amounts and specific ways in which such issues and impacts make it impossible for the applicant to make its full matching contribution. Please submit meeting minutes, award/non-award letters, official communications, budget documents, or other relevant documentation to support the responses provided.

Question 2, subsections A-H are related directly to the factors used in calculating the matching percentage. Only respond in detail to the factors which you believe inaccurately or inadequately reflect financial capacity. For those factors which you believe accurately or adequately reflect financial capacity, please leave the response blank or type “Agreed”.

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1. Please describe why a waiver or reduction of the matching contribution would significantly enhance educational opportunity and quality within your school district or BOCES, or why the cost of complying with the matching contribution would significantly limit educational opportunities within your school district or BOCES.

The District has tried unsuccessfully tried to push for a Bond and Mill Levy Override in November of 2016 and 2017 for \$3million dollars. Please note that November 2017 Mill Levy Override was successful to help out the General Fund. The School District’s Community Facilities Committee with the support of the School Board is pushing forth a Bond for \$5 million as a Match for the BEST grant. The School Board has designated \$500,000 from its General Fund Contingencies to support this grant. The Board and the Committee have carefully deliberated what can the community afford and it was determined from the historical failures of Bonds and understanding the community’s financial status that \$5million is the best we can ask for from the community.

2. Please describe any extenuating circumstances which should be considered in determining the appropriateness of a waiver or reduction in the matching contribution.

Statically, Crowley County has always ranked within the top 8 in the state of Colorado as the poorest county. Our Free and Reduced Lunch numbers is always above 73%. Crowley County has always been a very Conservative County in regards to taxes and tend to vote “NO” on any type of a tax increase.

*\*The following are factors used in calculating the applicant's matching percentage. Only respond to the factors which you feel inaccurately or inadequately reflect financial capacity. Please provide as much supporting detail as possible.*

A. Per Pupil Assessed Valuation relative to the statewide average – The higher the Per Pupil Assessed Value the higher the match.

Applicant's PPAV: \$101,733.76

Weighted Rank: 1.49% of 5% max

B. The district's median household income relative to the statewide average – The higher the median household income, the higher the match.

Applicant's Median Household Income: \$32,788.00

Weighted Rank: 0.67% of 15% max

C. Percentage of pupils eligible for free or reduced cost lunch relative to the statewide average – The lower the percentage for free and reduced cost lunch, the higher the match.

Applicant's FRED Percent: 73.0%

Weighted Rank: 2.47% of 20% max

D. Bond Election failures and successes in the last 10 years – The more attempts the school district has made, the lower the match.

Applicant's Bond Elections: 1

Adjustment: -1% (-1% per attempt)

It should be noted that the District has held Two Bond Elections and Two Mill Levy Elections within the last 5 years and should be corrected credited.

E. Bond mill levy relative to the statewide average – The higher the bond mill levy, the lower the match.

Applicant's Bond Mill Levy: 0.00

Weighted Rank: 20% of 20% max

F. The school district's current available bond capacity remaining. - The higher the bond capacity, the higher the match.

Applicant's Remaining Bond Capacity: \$8,555,809

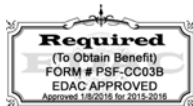
Weighted Rank: 8.88% of 20% max

The district has utilized the Committee for Facilities and based upon feedback since 2016 and meeting with community have determined that our maximum support for a Bond is \$5 million dollars.

G. The school district's unreserved fund balance as it relates to their overall budget.

District's Unreserved General Fund: \$1,361,666

Weighted Rank: 6.74% of 20% max



Please note that the School Board is willing to use \$500,000 towards this project.

H. Other unusual financial burdens not reflected in the match calculation (ie. underfunded mandates, unexpected expenses, self-funded programs).

3. What efforts have been made to coordinate the project with local governmental entities, community based organizations, or other available grants or organizations to more efficiently or effectively leverage the applicant's ability to contribute financial assistance to the project? Please include all efforts, even those which may have been unsuccessful.

The district has utilized the Committee for Facilities and based upon feedback since 2016 and meeting with community have determined that our maximum support for a Bond is \$5 million dollars towards the Renovation project and Add-ons of Ward.

4. **Final Calculation:** Based on the above, what is the actual match percentage being requested? 9.2225025%

CDE Minimum Match Percentage: 39%



● **Facilities Impacted by this Grant Application** ●

**Expeditionary BOCES - RMSEL Building/Safety Upgrades/Addition - Rocky Mountain School of Expeditionary Learning - 1946**

<b>District:</b>	Auditor - Expeditionary BOCES
<b>School Name:</b>	Rocky Mountain School of Expeditionary Learning
<b>Address:</b>	1700 South Holly Street
<b>City:</b>	Denver
<b>Gross Area (SF):</b>	48,165
<b>Number of Buildings:</b>	2
<b>Replacement Value:</b>	\$14,721,701
<b>Condition Budget:</b>	\$6,074,134
<b>Total FCI:</b>	0.41
<b>Adequacy Index:</b>	0.29



**Condition Budget Summary**

System Group	Replacement Cost	Requirement Cost	SCI
Electrical System	\$1,699,106	\$833,618	0.49
Equipment and Furnishings	\$185,858	\$115,354	0.62
Exterior Enclosure	\$1,441,862	\$382,153	0.27
Fire Protection	\$452,915	\$0	0.00
Furnishings	\$80,735	\$0	0.00
HVAC System	\$2,791,423	\$2,160,657	0.77
Interior Construction and Conveyance	\$3,358,446	\$1,569,105	0.47
Plumbing System	\$683,177	\$614,533	0.90
Site	\$946,289	\$408,474	0.43
Special Construction	\$80,062	\$0	0.00
Structure	\$3,001,826	\$42,693	0.01
<b>Overall - Total</b>	<b>\$14,721,701</b>	<b>\$6,126,587</b>	<b>0.42</b>



# BEST FY2019-20 GRANT APPLICATION SUMMARIES

**Applicant Name:** Expeditionary BOCES

**County:** Denver

**Project Title:** RMSEL Building/ Safety Upgrades/ Addition

**Applicant Previous BEST Grant(s):** 0

**Has this project been previously applied for and not funded?** No

**If Yes, please explain why:** N/A

**Project Type:**

- |  |  |  |   |
|--|--|--|---|
| <input type="checkbox"/> New School            | <input checked="" type="checkbox"/> Roof               | <input checked="" type="checkbox"/> Asbestos Abatement | <input checked="" type="checkbox"/> Water Systems |
| <input type="checkbox"/> School Replacement    | <input type="checkbox"/> Fire Alarm                    | <input checked="" type="checkbox"/> Lighting           | <input type="checkbox"/> Facility Sitework        |
| <input checked="" type="checkbox"/> Renovation | <input checked="" type="checkbox"/> Boiler Replacement | <input checked="" type="checkbox"/> Electrical Upgrade | <input type="checkbox"/> Land Purchase            |
| <input checked="" type="checkbox"/> Addition   | <input checked="" type="checkbox"/> HVAC               | <input checked="" type="checkbox"/> Energy Savings     | <input checked="" type="checkbox"/> Technology    |
| <input type="checkbox"/> Security              | <input type="checkbox"/> ADA                           | <input type="checkbox"/> Window Replacement            | <input type="checkbox"/> Other                    |

**General Information About the District / School, and Information About the Affected Facilities:**

The Expeditionary BOCES 9130 consists of five partner school districts operating The Rocky Mountain School of Expeditionary Learning (RMSEL). RMSEL was founded in 1993 and recently celebrated our 25th anniversary as one of five founding Expeditionary Learning Outward Bound Schools. RMSEL was selected as one model for the RAND Corporation - New American Schools Innovation sites in 1993 to pilot a new learning model. RMSEL serves a K-12 student population of up to 400 students annually, which is a capped enrollment and will not expand. As a K-12 learning community, RMSEL has been Accredited with Distinction by the Colorado Department of Education (CDE) for the past three years. The Expeditionary Learning (EL) instructional framework is implemented with fidelity across 13 grade levels in which teachers design integrated multidisciplinary units to connect content and engage students. An integral part of the EL instructional framework is the integration of off & on campus fieldwork opportunities for students to work with industry professionals to deepen their understanding of a topic. As a capstone experience, students engage in an Outward Bound style adventure experience connecting his / her final products to the local and global community. Each Learning Expedition provides students with the mastery of Colorado Academic Standards (CAS) as demonstrated annually through our School Performance Framework (SPF). The success of Expeditionary BOCES operating The Rocky Mountain School of Expeditionary Learning is a model program for the demonstration of success in small district governance, growth, and student achievement over the past 25 years. Currently, the Expeditionary BOCES is limited by the design that has provided our platform for success in that we are unable to extend a vote to the residents of the BOCES for Capital Improvement Bond and/or Mill Levy Override for operating expenses. This limitation results in the district continuously looking for alternative solutions to failing mechanical systems and structural facility failures. Based on the diversity of our program, the affected facilities that impact operation are restricted to providing classrooms for secondary age students in an elementary school campus as detailed in the Project Description. 6th-12th grade teachers are attempting to implement instructional experiences for students in classrooms designed to support intermediate and primary age students. In addition, facility space outlined in the attached program requires space that is not present in the existing facility and impacts the health and safety of all faculty and students. Since our inception in 1993 as a model for school choice nationally and a pilot model for the adoption of the Expeditionary Learning Outward Bound instructional framework, we have incrementally grown in alignment with our commitment to excellence. In 1994, while campus sharing in a neighboring elementary school, we graduated our first four students. One of these students now has two RMSEL students of her own attending our school. As we have grown, our commitment to academic achievement and growth has been documented through our annual District Performance Framework. Currently, our Primary, Special Education (IEP/504), and Secondary Students (6th-12th) are limited by the facility failures of our campus. In addition to the failing mechanical systems and concurrent structures, the absence of facilities to push student achievement is limiting to the growth potential our district has demonstrated over the past 25 years. RMSEL is seeking adequate facilities, not additional facilities, to accommodate for the current population of students and continue to support our continued performance. The provided plan outlines solutions for failing mechanical systems as well as adequate space to accommodate student learning; however, we cannot make the changes we need to without the help of the BEST program.

**Deficiencies Associated with this Project:**

Based on the reports prepared by qualified engineers, the CDE school assessment, as well as the day to day experiences of the

## BEST FY2019-20 GRANT APPLICATION SUMMARIES

staff and students of RMSEL, the building systems are woefully inadequate for current use.

The existing boiler room has a number of asbestos-containing materials, which are in such a deteriorated condition that this is a recognized Asbestos Containing Material spill. Additionally, due to the ACM pipe insulation throughout the building, any additional failures which result in pipe breakages or leaks release ACM hazards into student and staff areas.

The HVAC system consists of a 2-pipe hydronic system that is original to the 70-year-old building. The piping is failing and does not provide adequate heat to the building, and the existing boilers are beyond their useful life. The current heat exchanger and steam boiler has exceeded its serviceable life span and has exhibited several signs of failure with leaks both at the boiler plant and throughout the distribution system. This antiquated heating system is expensive to operate and maintain to a barely functional level of operation. As a separate issue, the school has reported that occasional off gassing from the natural gas regulator occurs during cold weather. This gas gets drawn into the building and is disruptive to occupants. The building utilizes existing unit ventilators with hydronic heat for distribution. The combination of the current heating plant, aging ventilators and partial pneumatic and DDC control systems has resulted in a number of operations and maintenance issues - specifically system leaks - for the building that have caused various areas of the school (including classrooms) to be closed for use until clean up and repairs can be made. Unresolved conditions may result in mold; and damage to other areas including walls, ceilings, finishes, and educational equipment are a constant risk.

The original pneumatic controls are failing, including the compressor. The partial implementation of DDC attempted to provide some operational upgrades to the system. However, incompatibilities with the unit ventilators has triggered uncontrolled operation of these units resulting in significant hydronic leaks from the ventilators. Ball valves have been installed by the BOCES at the ventilators to provide a quick shut-off option, but leaks must be first observed, and the valves offer no protection during off hours.

The existing atmospheric tank-type water heater is 15-20 years old. The integral pressure release valve intermittently discharges, an early sign of failure. The main recirculation pump is in poor condition with long hot water response time across the building. No mixing valves were observed in our engineering assessments. If a kitchen is added to the project, the absence of which is a separate deficiency, the existing hot water plant will be insufficient for this use. Hot water for "domestic" use should be stored at 120F for regular use, and 140F for kitchen use. The higher temperature is recommended to reduce the potential for Legionella contamination. Additionally, there are not enough toilet fixtures present in the existing building for the student and staff population. Due to the extensive nature of the required renovations, additional fixtures will be required to meet code. No additional capacity space is planned, so only the fixtures needed to meet current occupancy are required. The main electric service panel dates from 1959. This panel and its associated breakers have reached the end of their serviceable life. As the school has grown and service capacity has been added, there is no room for additional service capacity to be added for future loads. Branch wiring has been observed to be original or added on to over the years as educational needs have been adapted to. Once in classrooms, surface mounted raceways and EMT have been added to provide additional outlets, but the quantity is insufficient for current standards. As a result, plug strips and extension cords have been used to bring power to meet various classroom needs. This presents a safety risk, overloading an already outdated electric service and distribution system. Additionally, because of the limited electrical and low voltage capacity as well as the space restrictions detailed below, students are not able to use the technology necessary for their daily educational needs. There is no space within the current building that can be adequately used as a tech lab. Students currently use an undersized library space for research media, technology, intervention, and instructional learning. iPads and other hardware are housed in a closet off the library, which is unsecure. Also, there is limited capacity within the classrooms for overhead projectors, teacher amplification devices, integrated technology, etc. The needs of 21st century learners cannot be met with the outdated technology provisions currently in use.

The current classroom floor plan does not include access for technology integration, as the electrical systems are not present for connection. For example, overhead projectors and/or SMART technology integration is generally not possible as wiring and electrical outlets are not present or significantly inadequate in quantity. Current hardware provides wireless and/or Bluetooth connectivity; yet, the current conduit and wiring is inadequate to provide power supply and full use of the hardware. Each classroom should provide ample and properly placed power sources. RMSEL is committed to providing technology hardware with appropriate connections for delivery of instruction.

Inadequate light levels, or the inability to adjust light levels for audio-visual presentation (or computer usage), impacts all students, particularly those who are visually impaired. Older lighting technology and controls are also less energy efficient. The older fixtures require more power to operate than comparable LED fixtures, and parts are failing and have become obsolete, making the replacement of fluorescent bulbs costly and requiring consistent attention from maintenance staff. Based on the CDE assessment and review by professionals, the main roof is at its useful life, with leaks routinely occurring.

## BEST FY2019-20 GRANT APPLICATION SUMMARIES

These leaks result in damage to classroom ceiling tiles and soffits, most of which contain asbestos pipe fittings or insulation, which results in an exposure hazard to students and staff. Additionally, the roof is stressed due to minimal slope and less than optimally-located interior roof drains. These conditions result in frequent maintenance attention to maintain minimal function of the roof coverings, drains, scuppers, other penetrations and associated accessories. Multiple failure points have been observed along with other areas of deteriorating conditions.

During heavy rain and snow melt/runoff, water infiltration into the basement has occurred. The foundation walls on the north side of the basement have been observed to be wet at the same time. The grade on the north side of the school does not provide drainage away from the foundation system, likely being one of the contributing causes. Water intrusion may lead to corrosion that ultimately impacts structural safety of the building as well as the potential of damaging other critical building systems. Left untreated it can also be a contributing source of mold.

The quality of RMSEL's educational program belies the unsuitable nature of its facilities. RMSEL is currently providing educational services and programs to students K-12, in a facility that was originally designed in 1947 for K-5 students. Based on this configuration, aspects of facilities to support our program and instruction delivery are not present. The current absence of adequate space as associated with the program can also be directly correlated to the concern for health and safety:

- Food storage and preparation space is not present in the current facility. Food is prepared off-site, delivered, and attempted to be kept at the required temperatures. The current electrical footprint of the multi-purpose room / cafeteria has been modified to support the additional equipment. The installation of equipment required additional circuits to be removed to ensure that our outdated electrical system is not overloaded. Because of the multiple handling points, our food delivery system runs the risk of not meeting health department standards for temperature, containment of exposure to air, etc. This poses a significant health hazard to our students and staff.

- High School Science is currently being taught in a classroom designed for elementary students. The room is absent of gas connections and/or proper shut-offs. The school has obtained a propane use permit with Denver Fire to assist with the ability to teach some chemistry lessons, which is a less than adequate fix. The absence of adequate facility resources creates a risk to student safety in attempting to teach CAS as outlined. The classroom is also absent of a chemical storage closet with ventilation which creates an exposure risk to faculty and students. Finally, the room is absent of sufficient electrical outlets, resulting in additional supplemental extension cords which are identified as a fire risk.

- The kindergarten classroom location currently rotates on a yearly basis based on scheduling needs and availability of rooms. The designated rooms are not of a size consistent with current CDE guidelines, and do not offer age appropriate facilities. Further, there are no kindergarten restrooms adjacent to any classrooms in the school, creating a health and safety issue for these students.

- Special Education and Intervention learning spaces are not present and are currently being taught in retro fitted storage closets throughout the facility. These rooms are not designed for occupancy and do not provide air control systems, proper egress or occupancy provisions, or fire protection.

- Every student participates in daily movement based fitness in the first hour of the school day, which has a direct increase to student performance. No locker rooms are present for management of student hygiene.

- The RMSEL Adventure Program which stores dry food, equipment (rafts, backpacks, sleeping bags, tents, bicycles, climbing equipment, etc.), vehicles, laundry, dishwasher, and tools is not present in a single location. The RMSEL Adventure Program supplies and trip programs are not funded from PPR but supplemental student fees and are an integral part to this award-winning program.

- High school students are in modular classrooms, which presents a significant security risk. Students must go outside the building during passing periods, and there are no additional security measures in place to monitor activity in the back of the building.

### **Proposed Solution to Address the Deficiencies Stated Above:**

Due to the significant amount of health and safety concerns at the existing building, a two-part approach is required. Existing systems will be replaced as needed, and space will be re-programmed to address the health and safety needs that exist because of inadequate teaching areas.

Asbestos mitigation will occur in all areas affected by this renovation. Funds for testing and abatement have been included in the BEST grant.

The entire HVAC system has been evaluated by a professional engineer, with a proposed solution of replacing the heating plant with a high-efficiency, direct water heating system that includes direct to exterior ventilation, and condensing boilers with new variable frequency recirculation pumps. The unit ventilators will be replaced, including a new hydronic distribution network, and a new fully DDC system will be installed. As a result of these required replacements, classroom ceilings must be

## BEST FY2019-20 GRANT APPLICATION SUMMARIES

removed and replaced, to account for new ductwork. Existing interior lighting systems will be replaced with new dimmable LED light fixtures with color rendering appropriate for education environments. A new code compliant lighting control system will be added, including vacancy/occupancy sensors and daylight dimming.

The hot water system solution includes replacing the existing system with a new direct venting, high efficiency, condensing water heater. Installation of a new recirculation pump connected to the new DDC control system is also included. Ball type isolation valves will be installed for maintenance, as well as new thermostats and new thermostatic mixing valves.

In order to account for these additional electrical loads demanded by today's technological needs, we will replace the existing electric service equipment and increase the load capacity to meet current and future needs. Repair or replacement of damaged raceways and conduits, and providing new branch circuits to enhance safety and support the learning environment, are also anticipated.

The existing roof will be replaced with a new roof system, substrate insulation and associated accessories across the entire building with a dependable warranted membrane roof system. Since the existing roof structure was constructed with minimal slope, the new roof membrane will be placed on tapered (min1/4" per ft. at valleys) insulation and with roof crickets that more adequately direct drainage flow toward new roof drains and new overflow drain (or scupper) locations. Roof hatches will also be replaced as needed, to allow for a better weather protection system. As part of this roof replacement, new RTU curbs will also be replaced, which is important to the operation of the new HVAC system.

The foundation water intrusion will be solved by excavating along the foundation wall and installing perimeter drainage. Fluid applied damp-proofing will be applied to the foundation wall. New appropriate fill layers will be installed to grade away from the building as much as possible.

In order to provide students with learning spaces that do not put them in danger (i.e, teaching in closets), space reconfiguration is required, which results in additional classroom space needed. All existing students will be served in these new spaces, without an increase in enrollment. SPED and Instructional Coach learning will be accommodated in half-size classrooms within the existing building, resulting in relocation of two standard size classrooms. Students in modular classrooms will be brought into the building, reducing their exposure to unsafe passing periods. Because there is no technology lab, which is currently inadequately shared with the library in an undersized space, a classroom will be repurposed for this programming need as well. RMSEL's top-rated fitness education program requires locker rooms for student hygiene, which will be built in what is currently the music room, allowing for adjacency to the gym and the outdoors. The music room will be relocated south of the existing multipurpose room, resulting in a relocation of an elementary classroom. These modifications result in the need for a small addition to provide spaces for our existing students in a manner that meets current code and educational guidelines.

Additionally, construction of a kitchen with appropriate food preparation and sanitization facilities will allow RMSEL to provide food service to their students which reduces the risk of contamination of food during transit, or inadequate holding temperatures. RMSEL is currently unable to meet all required health code regulations, due to the lack of appropriate facilities.

### **How Urgent is this Project?**

As noted previously, the mechanical systems at RMSEL are long past their useful life, and continuing to deteriorate even more rapidly due to their advanced age. RMSEL has continued to instigate routine and preventative maintenance to the best of our ability; however, the current systems are antiquated beyond reasonable expectations for maintenance. Imminent failure is an ongoing concern with multiple building systems currently exhibiting signs of failure.

When a mechanical system fails it causes a direct impact to student learning as students are displaced from a classroom, requiring them to be absent from class or work in a temporary space such as the gymnasium with cafeteria tables. As noted in the mechanical deficiencies and failures, our heating system is beyond the usable lifespan. The system is partially connected to a digital control, which in turn is connected to the source unit ventilator units in the classroom. While portions of the control system are modern, the source system is beyond the usable life, resulting in failure. As the system is water based, when it fails it floods a classroom. In the event the system fails on the second floor, it floods two levels, as the system is not connected to source shut-offs. The entire building has to drain down to repair the source unit. The most recent failure resulted in the displacement of two classes of students as the source unit failed on the second floor and the lower level classroom was flooded until the main water source could be isolated. The ceiling collapsed and two weeks of class were impacted. RMSEL has worked each time to provide temporary solutions. Previously, independent shut-offs were installed in the dated source unit ventilators to provide an isolation point. However, this only mitigates the immediate failure issue and does not address the underlying failure points.

The absence of power sources per fire code for the installation of technology hardware limits the integration of 21st century standards into the design of each learning expedition. As shared previously, we are fortunate that modern technology is not

## BEST FY2019-20 GRANT APPLICATION SUMMARIES

limited by the connection of wired devices but by access to power. Additionally, the current IDF/ MDF closet is an 80 sq. ft. closet, which has inadequate temperature control and ventilation, and an inability to maintain the network to support any additional installation of hardware. Access to adequate electrical sources provides increased accessibility with an accompanying IDF/ MDF system to support increased device use.

The urgency related to our missing learning spaces could not be more extreme. Our crew leaders (teachers and staff) are unable to provide our students with sufficient learning experiences due to the environment they are constrained by. Our middle school and high school science experiments are necessarily restricted due to safety concerns because of inadequate classroom provisions. When our intervention teams must interact with students in hallways, closets, or already utilized classrooms, their impact on students necessarily suffers. Additionally, the provision of high school science classrooms through the use of propane tanks is a tenuous solution. Previous propane leaks have resulted in narrow avoidance of a dangerous situation. The inability to properly ventilate chemicals or safely conduct experiments is also a significant safety hazard.

**Does this Project Conform with the Public School Facility Construction Guidelines?** Yes

**If not, provide an explanation for the use of any standard not consistent with the guidelines:**

**How Does the Applicant Plan to Maintain the Project if it is Awarded?**

As outlined in the First Amendment to Lease with Denver Public Schools, the Lessee (RMSEL) agrees to the operating and maintenance cost as outlined:

- Domestic water charges
- Sewer fees
- Electricity
- Natural gas
- Telephone and computer access (actual monthly service plus long distance charges)
- Actual cable charges (if any)
- Custodial services, supplies and all costs associated with facility managers for the premises.
- Site maintenance including grass cutting, shrub and tree trimming, including servicing of the lawn sprinkler system, including head and pipe replacement.
- Snow removal
- Trash removal
- Scheduled service of all mechanical equipment including filters and parts (service, filters and parts to be provided by the Lessor at Lessee's sole cost and expense)
- All routine maintenance costs associated with the Premises (which include but is not limited to: (1) repair to all plumbing fixtures located outside walls or above foundation (includes unplugging back up in plumbing fixtures); (2) repair of all electrical fixtures mounted on the walls or above the foundation; (3) repainting or repair of damaged surfaces; (4) repair of broken glass; and (5) all other minor repairs to walls, floor, coverings, ceilings due to wear and tear from use of the building during the term of this Lease).

RMSEL maintains an annual general construction budget of \$102,544 for the upkeep of the capital assets in addition to custodial services, and supplies.

**Describe the condition of the public school facility at the time it was purchased or constructed and, if the facility was not new or was not adequate as a public school facility at that time, provide the rationale for purchasing the facility or constructing it in the manner in which you did:**

The property located at 1700 S. Holly St. was constructed in 1948 as the Ash Grove Elementary school serving families in the Virginia Village Community as a neighborhood school of residence. Denver Public Schools has retained property ownership rights since original construction. The Ash Grove Elementary School was closed due to a decline in enrollment and the campus was converted to a Senior Community Center and later uninhabited. The Expeditionary BOCES 9130 elected to lease the campus in 2000 for a term of twenty-two years ending on October 31, 2022. An additional 30-year lease has since been negotiated.

RMSEL has been and continues to be responsible for all lease capital improvements and works in conjunction with Denver Public Schools to maintain the facility and assets as outlined in the terms of the lease agreement.

**Describe the history of capital improvements made to the facility by the district/charter school in order to make it suitable for students. Include a list of all capital projects undertaken in the affected facility in the last 3 years:**

## BEST FY2019-20 GRANT APPLICATION SUMMARIES

The initial renovation of the Ash Grove Campus, returning it from a Senior Community Center to a school campus prior to inhabitation and operation in 2000, included demolition of a portion of the building and related wall replacement, addition of an elevator, a new entry, and a revised parking lot. Since then, the Expeditionary BOCES has allocated \$1,292,901.82 in total lease capital improvements to the facility. The Expeditionary BOCES maintains an annual general construction budget ranging between \$50-150K annually. In the past three years, Expeditionary BOCES has completed the following capital improvements.

- Cisco CME Phone System - Safety and Security
- Parking Lot Asphalt Patch / Recoat - Exterior Facility
- Gym Floor Refinishing - Programming
- Schoolwide Classroom / Office Carpeting - Classroom / Programming
- Auxiliary Sports Field Installation - Programming
- East School Yard Installation - Exterior Facility
- Basketball / Four Square Court Patch / Recoat - Exterior Facility
- Schoolwide Classroom Sink & Cabinetry - Classroom
- Lockers - Interior Facility
- Stage/Theater Arts - Programming
- Carpet, Painting & Toilet Partitions (K/1) - Classroom
- Stainless Steel Sink - Food Serving Requirement

The Expeditionary BOCES has also completed three additional large-scale capital improvements outside the three-year window for documentation. Surveillance System (5/22/2007), Air Conditioning Building-Wide (12/31/2007), and Modular Unit (2/21/2008). The surveillance system to assist with any campus emergency was installed and subsequently upgraded as outlined above with the addition of the Cisco CME Phone System and Video Entrance System. Based on the age and condition of the facility, no air conditioning was present; while this is mitigated in other schools and programs with calendar adjustments, RMSEL is not able to start or end the school year outside of our current calendar based on the number of weeks required to ensure week-long adventure travel experiences for students. The installation of the modular units was to provide adequate space for high school students that were classroom sharing throughout the campus. RMSEL is not seeking additional spaces for expansion as our maximum student population is 400 students annually, per the terms of our agreements with the Districts who partner with us.

### **What options outside of the BEST grant has the applicant investigated or leveraged to address the school's facility needs?**

RMSEL has engaged Denver Public Schools as the facility owner to include a campus wide renovation in previous bond assessments. As a BOCES consisting of five partner districts in which Denver Public Schools is a single entity, our request for complete renovation was not granted. Denver Public Schools has included the facility in district wide bond approvals for windows and common space flooring (hallways, multi purpose room, etc.) Since the BOCES is operating as an independent school district as recognized by CDE, it is resolved that facility renovation is the responsibility of the district and not of the five partner districts. While recognized as a district, the BOCES does not have the power of board in which to propose a Bond for capital improvement and/or mill levy for operational expenses to the residents of the BOCES as they are already taxed within their respective district of residence. RMSEL continues to maintain the asset as outlined in section: Facility Condition, however, we are requesting assistance to provide adequate facilities for the students of our district.

The RMSEL parent community is supportive of this project and, to offset program impacts or positions to serve the debt capacity of the match percentage, approved a fee increase of \$400 per child annually to support the pursuit of the BEST grant and facility renovation proposal.

### **How do you budget annually to address capital outlay needs in your district/charter? Include \$/FTE for the prior fiscal year:**

In addition to regular maintenance costs, the BOCES budgets for furniture, fixtures and equipment replacement costs, classroom renovations, buses and technology. For the 2017-2018 school year, the BOCES general fund contributed \$111,681 toward these expenses, which is equal to \$295 per funded student. Although the BOCES does not anticipate major system repairs in the first 10 years after the completion of the building renovation or addition, the capital costs will continue to be funded through the building capital expenditures.

### **If relevant to your project, what are your current annualized utility costs, and what amount of reduction in such costs do you expect to result from this project?**

The annualized utility cost for gas, electric, water, sewer, waste removal, telecommunications and internet services for the

## BEST FY2019-20 GRANT APPLICATION SUMMARIES

2017-2018 school year was \$94,219 or \$2.31 per square foot. If the new renovation were to use the same outdated mechanical systems and operate with similar inefficiencies, it would cost at least \$127,743 to cover the above basic utilities, which RMSEL is prepared to cover in the new building. The BOCES has directed that the renovation project incorporate sustainable, efficient designs and best practices.

<b>Grant Request:</b>	\$4,404,556.22	<b>CDE Minimum Match %:</b>	63%
<b>Applicant Match:</b>	\$7,499,649.78	<b>Actual Match % Provided:</b>	63%
<b>Total Project Cost:</b>	\$11,904,206.00	<b>Is a Waiver Letter Required?</b>	No
<b>Affected Sq Ft:</b>	59,900	<b>Contingent on a 2019 Bond?</b>	No
<b>Affected Pupils:</b>	379	<b>Source of Match:</b>	30 year term, fixed rate, tax-exempt bond (Is not a school bond)
<b>Cost Per Sq Ft:</b>	\$198.73	<b>Escalation %:</b>	7.5%
<b>Soft Costs Per Sq Ft:</b>	\$30.17	<b>Construction Contingency %:</b>	5%
<b>Hard Costs Per Sq Ft:</b>	\$168.56	<b>Owner Contingency %:</b>	5%
<b>Cost Per Pupil:</b>	\$31,410	<b>Historical Register?</b>	No
<b>Gross Sq Ft Per Pupil:</b>	158	<b>Adverse Historical Effect?</b>	No
<b>Is a Master Plan Complete?</b>	No	<b>Does this Qualify for HPCP?</b>	Yes
<b>Who owns the Facility?</b>	3rd Party		

**If owned by a third party, explanation of ownership:**

The Expeditionary BOCES 9130 has procured a thirty-year lease with Denver Public Schools through 2050.

**If match is financed, explanation of financing terms:**

Under current market conditions SPFI believes the School's bonding capacity for a long-term (30 year term), fixed rate, tax-exempt bond is \$7.5 million.

### Financial Data (School District and BOCES Applicants)

<b>District FTE Count:</b>	247,266	<b>Bonded Debt Approved:</b>	
<b>Assessed Valuation:</b>	\$6,760,727,263	<b>Year(s) Bond Approved:</b>	NA
<b>PPAV:</b>	\$123,712	<b>Bonded Debt Failed:</b>	
<b>Unreserved Gen Fund 17-18:</b>	\$45,726,542	<b>Year(s) Bond Failed:</b>	NA
<b>Median Household Income:</b>	\$76,971	<b>Outstanding Bonded Debt:</b>	\$754,005,553
<b>Free Reduced Lunch %:</b>	39%	<b>Total Bond Capacity:</b>	\$1,352,145,453
<b>Existing Bond Mill Levy:</b>	11.8824	<b>Bond Capacity Remaining:</b>	\$598,139,900
<b>3yr Avg OMFAC/Pupil:</b>	\$431.15		



February 25, 2019

BEST Grant Board  
Colorado Department of Education  
201 East Colfax Avenue  
Denver, Colorado 80203

Dear BEST Board Members,

Today you received a grant application from the Rocky Mountain School of Expeditionary Learning (RMSEL). As the school body that focuses on planning and implementation processes for school improvement, the RMSEL District Accountability Committee wants to take this opportunity to convey its support for this grant application.

Pursuant to our role as defined by the Colorado Department of Education, the RMSEL District Accountability Committee continually reviews the school's infrastructure and analyzes its state to determine whether it supports or impedes the implementation of the school's performance plan. Over the course of three years, our study of the school's infrastructure has revealed several health and safety issues with the school's current building and campus.

RMSEL is an innovative K-12 school that is housed in an aging 1940s era building and campus that require modernization. These issues range from antiquated building infrastructure and roofing systems to modular facilities that are not, and cannot be, secured against threats. These and many other concerns are described in detail in the grant application. Our goal in requesting your assistance is to rectify these areas to improve health and safety.

The issues with the RMSEL building and campus prompted our team to analyze ways to fund school refurbishment. As a small school of 400 K-12 students from approximately 335 families, an entirely school-led capital campaign would take decades to complete—time that we do not have given the condition of the current building. We believe the BEST grant process provides us with the best opportunity to modernize.

Mindful of the likelihood of a grant match requirement, our team looked at several strategies for raising match funds. For a small school like ours, obtaining \$7M as a match to the BEST grant is a tall order. Because our school has no means to obtain bond or mill levy money, we must look to our community for support. We conducted an extensive survey of our school families to gauge their support for this grant request as well as a new school fee to help defray the cost of servicing the debt on a loan. We are proud to report that our families whole-heartedly endorse the grant effort, including support for a significant (\$400) per-student fee per school year. Although this fee will only pay for half of the annual loan payments, it will allow us to contribute to the refurbishment process and offset enough of the financial burden so that we do not have to sacrifice staff or educational programs to move forward.

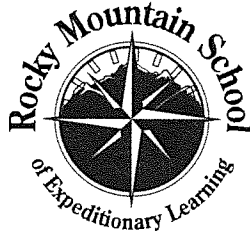
In closing, I'd like to thank you for your time and consideration. We believe that an award of a grant of this stature will make a significant difference in the daily lives of our students and staff.

Sincerely,

A handwritten signature in cursive script that reads 'Margaret S. Bierman'.

Margaret S. Bierman  
Chair, RMSEL District Accountability Committee





February 25, 2019

BEST Board of Directors  
Colorado Department of Education  
201 East Colfax Avenue  
Denver, CO 80203

Dear BEST Board of Directors,

The Expeditionary BOCES – 9130 composed of five district members partner, Adams-Arapahoe 28 J, Arapahoe Public School District No. 6, Cherry Creek School District No. 5, School District No. 1 in the City and County of Denver, and Douglas County School District RE-1, unanimously supports the application submitted for capital improvement for the Rocky Mountain School of Expeditionary Learning (RMSEL).

The Expeditionary BOCES – 9130, was organized in 1994 to launch an innovative school program pioneering the Expeditionary Learning Instructional Framework and setting forth an exemplary model for school choice in the State of Colorado. In 1994, RMSEL graduated it's first four students, and today now serves a total enrollment of 379 students. RMSEL continues to demonstrate excellence in education as demonstrated through the annual Colorado Department of Education District & School Performance Framework in which the school is Accredited with Distinction.

The academic success, model for school choice, and excellence in multi-district governance is established through the BOCES model. The district remains limited in capacity to provide adequate facilities and resources to ensure the district and school continue to thrive. Based on the organization as a BOCES, the district does not have the capability to establish a bond of its constituents to raise capital for construction or issue a mill levy for supplemental operational revenue. The district does maintain a significant capital reserve based on sustained fiscal management over the past 25 years; however, the reserve does not substantiate the access to capital to address the failing mechanical systems and infrastructure to the current facility constructed in 1948.

While RMSEL maintains a significant annual waitlist through the lottery system for application, the population of the school is capped at 400 students based on the Intergovernmental Agreement with our five-partner districts. The project as outlined in the grant is to provide proper functionality to failing mechanical systems and structures and addressing educational sustainability. The project includes additional space for access to classrooms for students as identified with learning disabilities and secondary programs operating in elementary school spaces. This project and program update is not an expansion of program for growth.

We appreciate your consideration and review for inclusion for BEST grant allocations in the current 2019 cycle. We believe that grant provides access to capital funding that would otherwise be inaccessible to a BOCES. RMSEL has demonstrated a commitment to excellence over the past 25 years and looks to continue this tradition into the future.

Sincerely,

A handwritten signature in black ink that reads "Kelly Perez".

Kelly Perez  
Chair, Expeditionary BOCES - 9130

● **Facilities Impacted by this Grant Application** ●

**LA VETA RE-2 - PK-12 Building Replacement - La Veta ES/MS - 1952**

District:	Auditor - La Veta RE-2
School Name:	La Veta ES/MS
Address:	126 East Garland Street
City:	La Veta
Gross Area (SF):	33,133
Number of Buildings:	1
Replacement Value:	\$7,654,010
Condition Budget:	\$3,852,876
Total FCI:	0.50
Adequacy Index:	0.39



**Condition Budget Summary**

System Group	Replacement Cost	Requirement Cost	SCI
Electrical System	\$1,307,832	\$890,564	0.68
Equipment and Furnishings	\$157,081	\$196,351	1.25
Exterior Enclosure	\$899,704	\$418,158	0.46
Fire Protection	\$128,711	\$146,364	1.14
Furnishings	\$101,105	\$0	0.00
HVAC System	\$876,731	\$247,684	0.28
Interior Construction and Conveyance	\$2,143,125	\$1,394,918	0.65
Plumbing System	\$385,667	\$340,005	0.88
Site	\$718,360	\$218,829	0.30
Structure	\$935,694	\$0	0.00
<b>Overall - Total</b>	<b>\$7,654,010</b>	<b>\$3,852,873</b>	<b>0.50</b>

**LA VETA RE-2 - PK-12 Building Replacement - La Veta HS - 1911**

District:	Auditor - La Veta RE-2
School Name:	La Veta HS
Address:	126 EAST GARLAND
City:	LA VETA
Gross Area (SF):	33,562
Number of Buildings:	3
Replacement Value:	\$11,154,180
Condition Budget:	\$2,917,334
Total FCI:	0.26
Adequacy Index:	0.34



**Condition Budget Summary**

System Group	Replacement Cost	Requirement Cost	SCI
Electrical System	\$1,163,374	\$835,272	0.72
Equipment and Furnishings	\$159,905	\$34,654	0.22
Exterior Enclosure	\$2,100,901	\$524,122	0.25
Fire Protection	\$251,217	\$0	0.00
HVAC System	\$1,581,031	\$177,500	0.11
Interior Construction and Conveyance	\$1,476,652	\$353,481	0.24
Plumbing System	\$520,642	\$232,504	0.45
Site	\$1,536,864	\$609,232	0.40
Structure	\$2,363,594	\$150,571	0.06
<b>Overall - Total</b>	<b>\$11,154,180</b>	<b>\$2,917,336</b>	<b>0.26</b>

● **Facilities Impacted by this Grant Application** ●

**LA VETA RE-2 - PK-12 Building Replacement - La Veta Pre-K/Kindergarten - 1983**

<b>District:</b>	Auditor - La Veta RE-2
<b>School Name:</b>	Pre-K/Kindergarten
<b>Address:</b>	126 East Garland
<b>City:</b>	La Veta
<b>Gross Area (SF):</b>	2,379
<b>Number of Buildings:</b>	1
<b>Replacement Value:</b>	\$360,185
<b>Condition Budget:</b>	\$165,541
<b>Total FCI:</b>	0.46
<b>Adequacy Index:</b>	0.42



**Condition Budget Summary**

System Group	Replacement Cost	Requirement Cost	SCI
Electrical System	\$15,240	\$19,051	1.25
Equipment and Furnishings	\$31,203	\$0	0.00
Exterior Enclosure	\$5,866	\$0	0.00
Fire Protection	\$113	\$0	0.00
Interior Construction and Conveyance	\$25,452	\$0	0.00
Site	\$147,627	\$55,995	0.38
Special Construction	\$72,397	\$90,496	1.25
Structure	\$62,287	\$0	0.00
<b>Overall - Total</b>	<b>\$360,185</b>	<b>\$165,542</b>	<b>0.46</b>

# BEST FY2019-20 GRANT APPLICATION SUMMARIES

**Applicant Name:** LA VETA RE-2

**County:** Huerfano

**Project Title:** PK-12 Building Replacement

**Applicant Previous BEST Grant(s):** 3

**Has this project been previously applied for and not funded?** Yes

**If Yes, please explain why:** The Pk-12 new school project received recommendation to be placed on the short list in 2018. However, the cumulative committee scores were not sufficient to place it high enough on the project list to be eligible for funding. Review of the committee score

## Project Type:

- |  |   |  |  |
|--|---|--|--|
| <input checked="" type="checkbox"/> New School         | <input type="checkbox"/> Roof               | <input checked="" type="checkbox"/> Asbestos Abatement | <input type="checkbox"/> Water Systems   |
| <input checked="" type="checkbox"/> School Replacement | <input type="checkbox"/> Fire Alarm         | <input type="checkbox"/> Lighting                      | <input checked="" type="checkbox"/> Facility Sitework  |
| <input type="checkbox"/> Renovation                    | <input type="checkbox"/> Boiler Replacement | <input type="checkbox"/> Electrical Upgrade            | <input type="checkbox"/> Land Purchase   |
| <input type="checkbox"/> Addition                      | <input type="checkbox"/> HVAC               | <input type="checkbox"/> Energy Savings                | <input type="checkbox"/> Technology  |
| <input type="checkbox"/> Security                      | <input type="checkbox"/> ADA                | <input type="checkbox"/> Window Replacement            | <input checked="" type="checkbox"/> Other Demolition of three buildings on current campus. Improvements to athletic field. |

## General Information About the District / School, and Information About the Affected Facilities:

La Veta Re2 is a rural district that provides educational programming for 215 students in pre-school through 12th grade. District activities are designed to maximize available resources in support of the mission to "Graduate lifelong learners and productive citizens." A primary objective of academics is to provide students the rigor and engagement that culminates in their growth in knowledge and development of personal goals and objectives. Success begins with the introduction of education at the earliest opportunity with a district managed pre-school and full day funded kindergarten. Music, art, and physical education reinforce engaging core content subjects presented to elementary students. The elementary program received recognition from CDE with the Governor's Distinguished Improvement Award for the growth demonstrated by students on the CMAS assessments in 2017 and 2018. Junior high and high school students receive support in their exploration of career and educational interests through availability of college credit in concurrent enrollment and dual credit classes, vocational classes with focus in Agra and conventional business activities, work/study, rigorous core content curriculums, and engaging elective courses. Academic success is demonstrated in a 95% graduation rate and student academic focus demonstrated by Knowledge Bowl, FFA and FBLA regional, state and national success. Athletic programs have experienced similar success on their fields of choice with regional and state qualified individuals or teams. An overarching theme of the district is to meet the needs of the whole child including the areas of social/emotional learning and physical health.

The District has elected to participate in an accountability project that is independent of the current state DPF system. The Student-Centered Accountability Project (S-CAP) review, completed in fall 2018, identified the academic endeavors and learning dispositions of the district to be stellar. However, the review also illustrated challenges and limitations presented by aged facilities, and highlighted safety concerns posed by the inability to secure the campus because of the need to mobilize students between and among buildings by crossing a public street. The review committee cited the inherent fears of a variety of stakeholders as a barrier to rating the district at the highest level attainable in the area of learning climate. With the damaging effects of the Spring Fire now coming to light, emergency preparedness has become a concern, especially regarding the possibility of flood inundation from storm water drainage. The community and district are not considering if flooding will occur but to what level and extent.

The district campus is comprised of seven buildings in the middle of the Town of La Veta. Educational facilities are positioned on both sides of Garland Street, a public thoroughfare. Ages of the buildings range from the 1911 high school building to the gymnasium/junior high addition completed in 1985. Facility age, diversity of construction type, and use of materials presents challenges with developing effective maintenance practices and identification of repair priorities. General fund allocations for day-to-day maintenance were \$361,274 in 18/19, \$383,296 in 17/18, and \$335,808 in 16/17. Operational/utility related expenditures average \$145,000 annually. High cost maintenance issues correlated with aging buildings exceed the ability of the District to budget or reserve financial resources to meet those demands. The identified solution of limited capital has been

## BEST FY2019-20 GRANT APPLICATION SUMMARIES

to leverage resources with grant dollars. Nearly \$2 million dollars in capital construction projects have been completed in the past five years, utilizing funds from DOLA, CDOT, USDA, and BEST. A comprehensive Facility Master Plan completed in January 2018 was intended to be and been used to identify long-term solutions to facility issues.

### Deficiencies Associated with this Project:

Increased age of facilities and infrastructures combined with the demands of daily student and staff use have forced the district to pursue a BEST Grant. The most effective means for discussing existing conditions and prevalent deficiencies of district facilities is to focus on district-wide conditions while considering those specific to each building.

District concerns: Site Analysis.

Flooding is a huge concern for the community. The Sangre De Cristo Mountains, due west of the Town of La Veta, experienced a catastrophic fire during the summer of 2018. The Spring Fire consumed a total of 108,405 acres in Costilla and Huerfano counties with 82,067 of those acres in Huerfano. Structures lost in Huerfano County totaled 155. Among those 69 were dwellings, four were commercial buildings, and the balance were outbuildings. Ninety percent of these structures were located within the La Veta Re 2 school district boundaries. Quantifying this loss of acreage and structures occurred soon after the event was fully contained. What has now emerged however, is a dynamic, frightening potential that the community could be inundated by flood waters and debris flows from the burn scar in the mountain drainages. Late summer and fall rains have already provided previews of the destructive capability of this type of event. Other residences and outbuildings have been damaged and county officials have calculated over \$2,00,000 in road damage as of November 2018. Preliminary studies completed by the National Resources Conservation Service (NRCS) have identified that the existing campus would have anywhere from two to four feet of water, depending upon the level of rainfall during any event. Rainfall in the amount of 1.8 inches with a 50% probability of exceedance would have a potential two foot impact where a 4.4 inch event with a one percent probability could correlate to four feet of water. Current structures are predominantly slab on grade that are below existing street level. This situation allows the hard surface of both Garland and Main Streets to serve as a conduit for water flow into and around the buildings. Historical concerns with storm water drainage have now elevated to a level of disaster preparedness that incorporates measures to shelter in place on the second floor of the high school and/or evacuation to a designated high point within the community. Unfortunately, there is little that can be done to mitigate or minimize the water impact without potentially adding to debris flows or further jeopardizing the community. It is anticipated that the first inundation event could occur as early as April with the opportunity of snow melt and rainfall occurring simultaneously and continue through the summer and fall with monsoon season and periods of heavy rainfall.

Drainage: Under normal storm-water conditions the campus and specific buildings experience some flooding based upon the location and prevailing drainage issues within the community. The Town of La Veta does not have a storm drainage system but relies solely upon natural flow during storm events. Not only does the Cuchara River flow through the town, but in the event of heavy rain or snow melt multiple little rivers run through the community as the water seeks its natural channel. Location of the campus at the bottom of a hill further complicates drainage issues by allowing storm drainage to flow to the face of the high school and the Science Annex buildings. Some measures to address issues of surface water/storm water drainage occurred during a site renovation completed in 2014. Identifying the source of underground water has eluded the district. Removing significant amounts of water from the basement of the high school occurs with the use of a sump pump and two-inch fire hose system. Discharge of the water is in front of the building in an open commons area. The amount of water has caused significant damage to the high school foundation, deterioration of exterior sandstone blocks, staining of stone from water transpiration and erosion of mortar joints. (An engineering report on foundational conditions has been included as an addendum.)

Corrections to the site conditions of the campus in 2014 included the re-grading and paving of Garland Street. Grading was designed to allow storm water to sheet flow down the street from west to east to reach drain pans on Birch Street. This plan has proven effective. However, the volume of water that is being introduced from high ground and Main Street to the south has exceeded the capacity of the grading. The result has been the storm water pooling in low lying areas that now include the entry ways of the elementary and junior high building on the north side of the street. Slab on grade construction of the buildings below the street level prohibit much remediation. The tactic for the district has been to try to redirect some water away from these areas or wait for the event to dissipate and move the water with pumps and brooms when necessary.

Security: Re2 campus is comprised of six buildings utilized for educational programming. A public street divides the campus in half with elementary and junior high classrooms, cafeteria/kitchen and gymnasium on the north side of the street. The south side includes high school classrooms, VoAg building, Science and district library building, preschool/kinder building, and the maintenance shop. All students, prek-12th grade, are required to cross the street at multiple times throughout the day to

## BEST FY2019-20 GRANT APPLICATION SUMMARIES

access different programs or activities. Anyone wishing to cause harm would not have to breach a building to gain access to students, as their regular movement outside provides open access. There are over twenty exterior entrances in the six different buildings. It is not feasible to lock entryways with fidelity and still afford access to students and staff. The number and location of doors make monitoring and control exceptionally difficult. Security cameras have been a consideration, but the complexity of the campus and distance from law enforcement response would serve to document rather than prevent an event.

**Safety:** The campus is located in the middle of La Veta and is bisected by a public street. Street surface and drainage improvements completed in 2014 allowed the traffic flow to change from two way to a one-way designation. Garland Street remains a thoroughfare for residents and commercial traffic accessing homes and businesses located east of the campus. Mingling of vehicular traffic with a constant flow of student pedestrians poses safety concerns when the variety of student age and unsupervised nature of their mobility is calculated into the equation. There is no separation of parent drop off, parking and bus drop off.

**Accessibility:** Ramps provide accessibility to the main entrance of each building and connect to accessible sidewalks along Garland Street. Garland is the main paved area in front of the facilities. The rest of the site is rough, with minimum development and ADA access.

**Site Limitations:** Over the past 100 years, school facilities have expanded to encompass all available space. The district is landlocked, with no opportunity for additions without the removal of existing structures. The current location is too small to accommodate needed outdoor facilities. There are currently two playgrounds on the site, both of which present limitations. The preschool has a play area adjacent to the building that provides controlled access and age appropriate equipment. Age and condition of the equipment demonstrate they have exceeded useful life. Licensing agencies have recommended removal and replacement. The playground at the elementary has upgraded equipment with approved fall material. Deficiencies with the current playground area includes a lack of surface material in open space that encourages play activities that meet Colorado school standards and spaces designed to attract the middle and high school students.

**Suitable use of Space:** Evolution of educational programming and administrative functions have forced the district to make the best use of available space. The result of that effort has only increased the mobility of students and staff. Elementary, middle and high school programs share space in multiple buildings rather than consolidation to one location. Elementary shares art and PE areas with junior high and high school programs. Junior high students cross the street to the high school for English, library and computers. All students have to access the elementary school for food service. Distribution of programs and student groups to various buildings do not allow for proximal collaboration among educators. This increases the difficulty of student supervision. Because of space limitations, administrative offices are inefficiently dispersed in various buildings. The front office is housed in the elementary building. Business offices are in both the junior high and high school. Administrative support offices are in the maintenance building and junior high. This distribution makes it difficult to function and difficult for the public to locate the appropriate office.

### **Building Conditions.**

Construction dates for district facilities range from 1910 to 1985. The building structures and choice of materials are as varied as the ages of the buildings, with most comprised of various types of CMUs. Adherence to construction codes reflect the period of construction.

**Elementary building:** The failing utility infrastructure is a primary concern. Electrical systems consist of original cloth wire, buss fuse boxes, and or breaker panels that are outdated and irreplaceable. Limited availability of duplex receptacles in classrooms minimizes, and in some cases, prohibit, the use of most technology. Plumbing is a combination of galvanized drain and supply lines, and copper pipes. Scaling, pressure limitations, and age of fixtures, such as water fountains, prohibit use. Water volume in other areas is consistent enough to allow adequate use of water closets and sinks but require frequent monitoring for potential clogs. The majority of the fixtures, as well as underground water piping, are beyond their useful life. Heating and ventilation systems were remediated in 2008. However, the effectiveness of these systems is compromised by exterior walls and ceiling plenums that either have no insulation or insulation with little R-value. Recent audits identified that outside air controls on furnace units presented issues with efficiency and energy code compliance. Single pane glazed, aluminum windows provide adequate light, but also allow for the penetration of extreme weather conditions, magnifying both cold and hot temperatures. This facility has a monitored, smoke/ fire detection system, but does not have a fire suppression system.

**High School:** The age of the building and limitations posed by design and space allocations are the primary deficiencies of the high School. Sandstone exterior has been compromised by continued exposure to water. This has deteriorated the stone surface, eroded mortar joints, stained the stone surface by water transpiration and penetrated concrete finishes causing failure and release from the surface area. The lack of temperature control and absence of any cooling system are the central

## BEST FY2019-20 GRANT APPLICATION SUMMARIES

issues with the mechanical systems. South facing rooms, including classrooms, computer lab and office space experience heat extremes that require vacating the space in late afternoons. Ventilation is only available through windows that are, in most cases, no longer operable, have failed seals causing condensation to build between glass, and serve to magnify sun exposure rather than temper direct light. Renovation and replacement of plumbing fixtures and piping in 2003 provided needed upgrades to bathroom facilities. The availability and access to gender toilets is still inadequate. There is one men's restroom on the first floor with three fixtures and one women's restroom on the second floor with three fixtures.

**Vocational Agricultural Shop:** This building is a rectangular structure with CMU perimeter walls supporting a precast concrete roof. Classroom space originally existed in an elevated second floor area on the north side of the building. An inability to provide an alternative point of egress from this second floor, as required by code, and the identification of the space as a mezzanine caused the area to be abandoned. A classroom was constructed on the first floor minimizing the space available for project-based activities and vocational programs. Corrosion of embedded angles led to cracks in CMU mortar joints over the roll-up door openings. The cause of the fracturing of the block on the north side of the elevation requires further investigation as to its origin, and at a minimum block replacement and grouting. Blocks located at parapets require repointing of joints and replacement of failed coatings. Mechanical and utility deficiencies include: inadequate ventilation in the shop area to meet current mechanical code, unit heater in shop area inadequate for space and at the end of its useful life, plumbing fixtures beyond useful life and in need of replacement, no fire protection systems, electrical systems with inadequate disconnects, no surge protective devices, services at the end of useful life, and in need of replacement with commercial panel boards sized to accommodate current load and future projects. This structure has been identified for demolition if the district constructs a new facility on the football field site. Demolition permits require extensive testing on interior and exterior materials to determine any presence of asbestos containing material (ACM). Interior spaces were cleared of materials during a remodel project completed in 2017. Exterior surfaces were sampled and tested in December of 2018. Results from the material test show that the exterior surface were clear of asbestos material with the exception of some roof materials. The report states that the material will not pose a threat or friable potential during demolition.

**Science Building:** Deficiencies in the mechanical and utility infrastructure identified in this building are consistent with those detailed in previous building descriptions. The majority of the building areas do not comply with the current energy code. The furnace does not provide full outside air, actuators and controls need to be replaced, and areas share thermal zones.

Temperature control wiring has failed throughout the building. This will require the replacement of the wire or installation of individual thermostat controls. There is no cooling available in the building. This condition is further aggravated by heat generated by technology in classrooms, and the district server room. Box fans are required to move air to keep data system equipment from overheating in the server room. The age of fixtures, faucets and backflow device exceed the definition of a useful life. The recommendation is to replace all equipment. The building does have a monitored alarm system but no sprinklers. Electrical service is lacking surge protective devices and is at the end of useful life. It should be replaced with commercial panel boards sized to accommodate the current load. Science classrooms are not conducive to STEM and STEAM programs due to size, antiquated plumbing and ventilation, and isolation of classrooms from other subject content areas.

**Junior High School/Gymnasium:** Classrooms in the junior high are inadequate in size and do not provide an educational setting conducive to 21st-century teaching techniques. These second floor classrooms have little natural light. They lack views to the exterior and access to outside air. The failure of temperature control wiring is a mechanical system deficiency. This eliminates the ability to provide heat or return air as needed. Other deficiencies include inoperable window air conditioners in the classrooms; unit heaters and exhaust fans in central restrooms at the end of their useful life; and multiple office spaces that share the same heat and cooling systems. Recent renovations to the gymnasium space remediated heating/ventilation concerns and unsafe, inaccessible spectator seating.

**Preschool/Kindergarten building:** Preschool and kindergarten programs are located in a modular building at the far west end of the campus. Classroom sizes have been inadequate for the number of students enrolled in the program in recent years. When this situation occurs the preschool program has had to split into two sessions limiting each student to a half day of instruction. Kindergarten has retained a full day program but instructional activity areas have been lost to accommodate individual student space of desks and chairs. Mechanical deficiencies include a propane fired water boiler that is the sole source of heat for the building which is at the end of its useful life. The domestic water heater, lavatories, water closets, utility sinks and classroom sinks have the same age constraints and concerns. A monitored fire alarm system is in place, but the building does not have a sprinkler system. Both the kindergarten and preschool classrooms have a primary entrance that opens onto Garland Street. These access points remained locked at all times limiting access to approved entry. Instructors in both programs operate in educational isolation. The opportunity to collaborate professionally with colleagues is limited due to distance and time. For students to participate in PE, music, art, or the school lunch program requires that they must cross the

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campus.

## Proposed Solution to Address the Deficiencies Stated Above:

Financial limitations, increased costs for maintenance and repair and the exponential growth of identified deficiencies and potential infrastructure failures contribute to the district's inability to address facility maintenance needs. In January 2017, administrators, teachers, and community leaders convened as a task force to engage in a Facility Master Planning process. Contracting with a design team from Bennett Wagner Grody (BWG, now Cannon Design/GE Johnson) provided facilitators to guide and assist the district in that planning process. The goal of the process was to determine the educational vision of all stakeholders and their capacity or desire to achieve that vision. BWG and district personnel engaged the public in four separate community meetings. The agenda of each was to inform and educate as to the process, receive input and direction that would shape options, and ultimately to receive consensus on and support for the solution. During the course of the planning process, the Facility Task Force members toured new educational facilities to gain a better understanding of the look and feel of 21st century educational facilities. They worked collaboratively with BWG on shaping stakeholder's priorities for educational facilities into four separate options to remediate or replace existing facilities. Before options could be explored, BWG, district personnel and engineers re-evaluated structural, mechanical, and utility components of facilities to establish an accurate assessment of the situation. This data shaped options for renovation/construction and development of associated cost estimates. Of the four options evolving from discussions and meetings, three involved staying on the existing site to complete a remodel/new construction project. A fourth option took into account the availability of a 34-acre site the district owns on the north end of town. This site was purchased in the mid 90's to allow construction of a new football field. Further development of the site has not occurred, so it provides a blank slate for design. Under the direction of BWG, a construction team from GE Johnson developed cost estimates for each option. Cost estimates and construction timelines would further inform the decision. The responsibility of the task force was determining which options best supported a comprehensive solution responsive to the educational vision of stakeholders and which should be considered and then presented as a viable way forward for the school and community. The four options were pared down to just two that included a comprehensive remodel/new construction on the existing site and the exclusively new construction at what is referred to as the "Green Field." Both solutions incorporated improvements to the current athletic field.

Presentation of the two final options and related costs were given to all district personnel and then to the public on January 8, 2018. Task force members presented an overview of the process and then detailed each option with a narrative as to budget expenditures. Straw polls of both meetings resulted in the unanimous decision by staff to support the new construction "Green Field" option and the community/stakeholder group were in support of the same decision by a margin of 4-1. Reasons given for the support of the new construction were:

- Cost: new construction represented less expenditure and better "bang for the buck"
- Educational vision: new construction allows the greatest opportunity to achieve all aspects of the educational vision defined by stakeholders at the onset of the Facility Master Plan process
- No impact to the educational process: construction on a remote site allows education to continue unimpeded, whereas a remodel on campus would be a distraction and a challenge in terms of student supervision. The remodel would also result in the loss of the cafeteria and food service program for the second academic year and final year of construction.
- Timeline: new construction estimates were 14 months, remodel a minimum of 24.
- Site: relocation provides the opportunity for future expansion and consolidation of all facilities
- Safety and security: new construction would readily incorporate current safety standards including central point of access, locked vestibules, camera and communication systems and a controlled access campus.

Discussion and a consensus decision on which option to present to the school board for approval occurred on January 15, 2018. Collectively, the group determined that the best course of action was to concur with the choice made by the previous groups and present that recommendation to the school board on January 22. Response to the task force recommendation was unanimous approval by the school board to proceed with constructing a new school at the "Green Field" site and to direct staff to prepare a BEST application to obtain necessary funding.

The identified comprehensive solution to address the deficiencies of educational facilities is to construct a new pre-kindergarten through 12th grade building at the football field site owned by La Veta Re2.

A BEST application was subsequently submitted in February 2018 for \$41,689,759. CDE identified a minimum match required from the district of 37% of the budget cost. Statutory limitations placed on school district's ability to levy taxes, limited the funding the district could raise to \$6,213,408 or 14% of the projected cost of construction. If the project received approval for



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funding, the district proposed to place a bond question on the November 2018 ballot to obtain the \$6.2 million required by the state. The outcome of the BEST application, while favorable for placement on the short list, did not receive sufficient points to raise the project high enough on the priority list to receive funding approval.

After receiving the decision by the BEST Board it was the full intention of the district to proceed with the bond question in November, utilize the summer to resolve concerns, and reapply in February of 2019. What was not anticipated was a fire that would ultimately consume over 108,000 acres, 150- plus structures, and the energy, economics and vision of an entire community. La Veta, its citizens, our district and all of our stakeholders were reeling, some from personal loss but all from the emotional, physical demands the event placed on the population.

The Board of Education, after a great deal of discussion and receipt of community input, voted to place a bond question on the November ballot to raise funding to meet matching requirements of a BEST application. Extensive calculations of the effect on assessed valuation from the loss of structures and property in the Spring Fire led the district to seek \$5.5 million from bond revenue, an amount just short of statute limitations. On November 6, 2018, the La Veta community voted to approve the bond by a vote of 543 (yes) to 366 (no). Bonds are to be issued and revenue levied upon successful completion of a BEST application and funding approval for the balance of construction costs.

Due diligence in anticipation of project approval.

Demolition Concerns :AHERA.

The current AHERA plan was reviewed for all structures located on the La Veta Re2 campus. Copies of the three year Asbestos Re-Inspection reports for the high school & annex, pre-school & kindergarten building and the elementary/jr high building have been included with this application. All three documents confirm that any asbestos-containing materials (ACM) are non-friable and in good condition. With the abatement of floor tile in Vo-ag in 2017 this building is now considered asbestos free by the State of Colorado. The re-inspection completed in 2015 for the elementary/junior high building observed additional materials that had not been identified as possible ACM in previous inspections. The list of materials identified were assumed to contain asbestos and required random sample testing to determine validity of assumptions. The testing report cites the results for asbestos bulk sample for several materials that were all deemed clear. Similar citing occurred in the pre-school/kindergarten building.

Additional investigation and analysis of suspected ACM has been completed several times over the course of the past 15 years. The most recent analysis occurred after a re-inspection of the elementary in late fall of 2015 observed the presence of materials that had not been identified as suspect in previous reports. None of the materials identified as suspect had confirmed level of asbestos. The analysis report from CA Labs has been included with this application

Advantage Environmental Safety has a contract with the district to provide certified asbestos inspections of district buildings. The district requested the firm review reports to clarify any concerns or potential issues that might arise in light of the district plans to potentially demolish or repurpose structures. The conclusion, is that testing is required to determine the possibility of ACM materials in both the elementary and VoAg buildings. The exterior envelopes of both structures have never been tested as that was not a requirement of AHERA reporting. The complete document has been attached to this application.

The district contracted with LTS Resource in December 2018 to follow up on the concerns with exterior finishes on the maintenance, VoAg, and elementary buildings identified for demolition. Extensive sampling and testing was completed on all three buildings. The results identified ACM present in the tape and drywall mud material utilized in the part of the finished interior of the maintenance shop. All other materials were deemed to not have sufficient quantities to require remediation or were not a material that required special handling in a demolition process. The budget for this process contains a line item of \$80,000 for the abatement of the ACM in the maintenance shop.

Design/Construction Process:

Preliminary research on the most effective manner of project management has the district looking closely at Construction Manager At Risk (CMAR) versus the conventional Design-Bid-Build or Design Build formats. Initial thoughts are that might be a better fit for the type of project, timeline and complexities. It is critical that managing costs will be particularly important. By utilizing the CMAR approach the contractor has a better opportunity to provide cost feedback during the design phase. With the contractor present as early as design, the district, owners representative, and architects can build a collaborative relationship and the contractor is afforded additional time to grasp the scope and details of the project.

A decision will not be made until the owner' representative has been brought on board and fully briefed on the project. Their background, experience and ability to operate within each method will be critical to the selection.

High Performance Certification Program (HPCP):

The scope of this project requires that the district select guidelines that meet the High Performance Certification Program (HPCP) requirements as established by state statute C.R.S.24-30-1305.05.5. GE Johnson Construction Company has assisted

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the district throughout the Master Planning and grant process with cost analysis and project recommendations. The district turned to GE Johnson to assist with the evaluation of the state recommendations on certification programs. A sustainability specialist analyzed the three programs and utilized each scoring rubric as it related to the school project and capability of the school and community to implement or sustain the programs. A brief summary analysis of each program is as follows:

**LEED Gold.** Preliminary scores for the program rated a 61 with a 65 required for Gold certification. Attaining that Gold status would be challenging due to the rural location, limitations with utilities and projecting consumptive use, energy resources, and waste management. Additional deterrents for pursuing this program are the inflexibility in the point system, and concerns with the unidentified costs of achieving this program that could drive a budget into shortfall.

**Collaborative for High Performance Schools (CHPS).** To receive Verified leader status in this program requires a minimal score of 160. Using the known components within this initial project design made it possible to achieve a preliminary score of 171. Attributes of this particular program are the ability to find cost savings within some of the identified credits and less stringent energy requirements than found in the LEED program. Flexibility afforded in the pursuit of energy credits affords a better fit for a rural district with limited community resources and expertise. This program does require more commitment from the School District on the operations side.

**Green Globes.** This program was difficult to fully appraise due to the complexity of the credit evaluation system and the lack of disclosure of certification requirements until the district registers and pays associated fees. The specialist was able to identify 55% of the credits as being achievable however to achieve the 70-84% 3 Globe status as required by BEST would require hiring a MEP Manager to vet the extensive MEP credits. Not being able to determine potential credit status during an early junctures of a design process and concerns over whether this program promotes sustainability best practices as thoroughly as the other options make this program unlikely to fit the needs of the district.

After careful examination of the three guideline options the CHPS guidelines appear to provide the best fit for the district. The key to implementation necessitates early integration of the certification requirements within the design so a sustainability consultant would be a key component of any design team. The consultant would also need to work collaboratively with the district during early design to determine if the district has the capacity to commit to the procedures of the operational credits of the CHPS program. Regardless of which program is selected the certification approach has to include an excess of credit opportunity in the event or possibility that district capacity is limiting and results in reduction of points in any one section.

**Ownership Report/Property Survey:**

Dotter Abstract was contracted by the district to research and prepare an Ownership Report on the football field property being proposed for the school site. This was done to define the acquisition process and any ensuing easements that may have been filed that would or could impact the project. The entire report has been included as an addendum to this application. In summary, it established the legal description of the property, an acquisition date, including acquisition of an access easement and subsequent purchase of that access and a utility easement. There is nothing in the report that would cause concern or jeopardize the ability of the district to establish clear title. It did establish that the survey of the property was completed in 1999.

It was decided that it would be beneficial to the district to update the survey and utilize the availability of services to re-establish corners and provide some contour elevations that would be helpful to engineers in site development and flood plain definitions. BH2 completed the scope of work in February 2019. The updated survey has been included as an addendum.

**Flood Plain:**

Rule 6 of the Rules & Regulations for Regulatory Flood Plains in Colorado, adopted by the Colorado Water Conservation Board (CWCB) classifies schools as a critical facility under at-risk population facilities. This designation requires that a school located within the 100-year floodplain be protected either by location outside a regulatory floodplain, by elevation or by flood-proofing of the structure so that it is protected to the level required in the regulation.

The proposed site for the new school is within a regulated floodplain, especially in the aftermath of the -Spring Fire. The Town of La Veta is substantially in this same flood plain, so removing the school to a site outside of it presents other challenges, from the availability of services to identifying an area large enough to support development. Option two of elevating and flood proofing the structure are design and engineering solutions to resolve the issue. Until the summer of 2018 floodplain maps that informed community decisions on construction requirements utilized Flood Insurance Rate Maps (FIRM) developed in the mid 80's. After the Spring Fire, local, state and federal agencies have been challenged to quantify the potential impacts of storm water drainage and accompanying debris flows on La Veta. NRCS and the Army Corps of Engineers are working on hydraulic assessments and hydrological modeling for the Cuchara River and drainage tributaries that incorporate over 75% of the burn area in Huerfano County. These reports will replace the flood map information from the 80's but will not be complete and available for public scrutiny until mid to late March 2019.

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Grant deadlines and the need to develop construction budgets forced the district to contract with two firms to develop floodplain information that would model post-fire hydrology and could be used by engineers to establish flood mitigation measures to protect the potential school. River Science, a water resource conservation firm, was tasked with establishing hydraulic assessments that could be used to model potential flow patterns that would affect the "Green Field", school site on the north side of town. Once the course, volume and speed of the water were established, a new base flood elevation could be determined and defined as 100 or 500 year events. The next step in the equation was for Davis Engineering, a civil engineering firm, to take the base elevations and determine what would be required to obtain both a gain in elevation and to define methods or techniques necessary for flood proofing. Establishing the site development costs for those measures then fell to the estimating team at GE Johnson Construction.

The completed hydrological study established the clear water cubic feet per second (cfs) for both 100 and 500 year events. Cuchara River estimates were for 5,271 cfs in a 100 and 8,170 cfs in 500 year events. Of greater concern is the Middle Creek drainages that incorporate flows from Abeyta Creek and Indian Creek. Calculations for a 100 year event is 33,128 cfs and 55,681 cfs for a 500 year event. Flood water in burn scar areas do not retain clear water status for long as it travels through area that are impermeable and devoid of material that otherwise would allow soil retention. Bulk debris calculations were added to clear water calculations to allow for sediment and debris impacts. Cuchara River volumes were increased by a factor of 1.2 to 6,325 cfs 100 year and 9,804 cfs for 500 year. What has been titled Middle Creek was bulked by a factor of 2, increasing that volume to 66,256 cfs for a 100 year and 111,362 cfs for a 500 year. Singularly, any one of these numbers are sobering but it is not until they are modeled on maps to show flow patterns and depths as it moves through an area is the picture complete. Fortunately, the models completed for the school site show that even in a 500 year event there is only 1.25 feet of water that drains through the site with a substantial portion of the site free of flood water. The district has made some modifications to the school site to place the building in a location that best utilizes the topography already free of water or would require the least amount of fill. It is anticipated that the site of the building will require from 2 to 3.5 feet of fill material to meet the 2 feet of freeboard required by floodplain regulations. Costs associated with this site preparation have been reflected in the budget.

It should be noted that the hydrology calculation and hydraulic modeling completed for the district by River Science parallel the very preliminary studies completed by NRCS in September. River Science numbers are slightly less than NRCS and it is anticipated that as more data becomes available and additional studies completed that the numbers could continue to decline slightly. The worst case scenarios from River Science were used to calculate cost for this grant application. It is anticipated that the report to be completed by the Corps will be more detailed and specific and provide an opportunity to revisit site fill requirements of the project that could result in some reductions in quantity and cost. Scope for the Corps report does not include Flood Map modifications. However, the engineers have indicated that the information will be sufficient in nature and in a format that can be submitted to support a Conditional Letter of Map Revision (CLOMR) and eventually a Letter of Map Revision (LOMR). If the Corp Report is available as scheduled, the district will evaluate the site design and budget for possible areas of reduction by the May presentation to the Committee.

Access: Railroad & CDOT .

Initial acquisition of the football field site included purchasing an easement to provide access to the isolated lot. The property associated with that access easement was later purchased outright to insure the district would have the right to convey the access to the town upon completion of annexation. That access is 60 feet in width and approximately 350 feet in length from Hwy 12 to the western boundary of the property. Colorado Department of Transportation granted a 35 foot ROW point of access from Hwy 12 in 1995. The district has been in communication with CDOT over the course of the past 12 months regarding the potential additional use of the football field site and impact to traffic patterns on Hwy 12. Until the district is in a position to begin the construction process and submit an application for modifying access the department will not commit as to design or requirements for the access. What has been established is that the department will relocate the flashing beacon located on Main Street in the proximity of the current campus to a location north of town in proximity to the school access. They have also approved reduction of the speed limit to meet school zone requirements. Preliminary vehicular traffic data has been provided to the department for their review. Early indications have been that turn lanes may be required due to estimated volume. Limitations with the width of Highway 12 and the presence of existing structures may limit the ability to accomplish these road configurations. It was confirmed that any cost associated with highway modifications is the responsibility of the permit applicant, in this case, the school district. In short, CDOT will make a full determination of access requirements once the owner submits an application for permit.

This existing access is the sole point of ingress and egress to the school site. With extensive post-fire flooding possible, the district does not want to create a situation that jeopardizes the safety of students and staff. Conversations with Iowa Pacific

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Holdings have been initiated to explore constructing an emergency point of egress over the railroad tracks on the southern boundary of the property. The intent would be to limit access to emergencies only, not allow a public thoroughfare which then permits the access is be considered a private point. Permission or an easement lies within the jurisdiction of the railroad rather than the Public Utility Commission (PUC). Connecting this emergency egress with Moore Street within the Town of La Veta will require Huerfano County to grant permission to cross land they own (currently utilized as the County 4-H Fair Grounds). Both Iowa Pacific and the Board of County Commissioners are working collaboratively with the district in the development of this egress. Final details on the egress solution were not available for the grant submission but is expected to be completed by presentations in mid-May.

Utilities/Annexation Town of La Veta:

The proposed school site that includes the football field was annexed into the Town of La Veta in 1995. During the initial annexation process one of the joint agreements was the site would be included in the town limits as an athletic field. If or when the district would make the decision to change or expand the use of the property, then the original annexation agreement would have to be amended and all requirements associated with the new use would have to be met.

District officials have had several conversations with the Town to determine annexation requirements and utility availability to the site. Annexation requirements are defined and would still be applicable for an amended process. Many of the components that were developed for this BEST application will be used for documentation of the annexation amendment application including the updated survey, floodplain reports and the plan for a secondary easement.

Determining the cost for the Town to be able to provide water and sewer connections has proven a challenge for the Town and the district. The difficulty has been in the inability of the district to provide the Town with a design, site maps, construction documents and estimates on water and sewer requirements. This data cannot be provided until the district has the finances available to retain a design team. Conversely, the Town cannot provide the district with development costs and availability of utility connections until design is complete. This has truly become a case of what comes first the "chicken or the egg." Town Board has repeatedly stated their desire to work with the school district, but feel their hands are tied until the district can provide a full design and utility requirements. For the purpose of this application, the district has calculated annexation and utility development costs utilizing what limited information is available in ordinances and general costs of development reflected in communities of like size.

### How Urgent is this Project?

School district and community representatives spent a year in a complete study of district facilities and their ability to meet the needs and demands of the educational programs, students, staff and community of La Veta. The recognized deficiencies and limitations of the existing facilities are so extensive and varied that it is virtually impossible to establish a timeframe for resolving a deficiency before failure occurs. Completion of the master plan has instead allowed us to identify a comprehensive solution that addresses all deficiencies. The tradeoff with this solution is the understanding that the district will be required to operate in the current facilities for another three years. This lapse allows for the completion of funding, design, and construction of a new facility. The critical, urgent, and immediate, need is to obtain BEST funding to:

Utilize the approved bond initiative for funding. The voting community was assured that the tax would not be collected unless the district was successful in obtaining funding through a BEST application. Approval of the bond introduced a timeline that drives introduction of the tax in 2020. If the BEST application is not successful, it is unclear whether the voter approval could be carried to the next grant cycle. It may require a return to an election for community bond support. Therefore, it is imperative to utilize the bond approval in this funding cycle.

Obtain a solution to flood inundation. The district has no ability to remediate the existing campus facilities in the circumstance of flood conditions. Site limitations serve to increase flood impacts by channeling water through the campus. The slab on grade construction, of most buildings, allow water penetration due to floor levels at or below street grades. New construction at the "Green Field" site allows for complete engineering of the site and building structure to prevent flood damage.

Maintain the momentum achieved through the planning process, acknowledge the commitment by the community to support the district as demonstrated by the bond approval, and rejuvenate a flagging economy and community spirit compromised by the Spring Fire.

**Does this Project Conform with the Public School Facility Construction Guidelines?** Yes

**If not, provide an explanation for the use of any standard not consistent with the guidelines:**

**How Does the Applicant Plan to Maintain the Project if it is Awarded?**

Availability of funding, expertise and the development and implementation of facility maintenance plans and schedules

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determines how successful long-term maintenance of facilities can be. Re2 addresses the financial component of maintenance with general fund budget line items developed to offset escalating costs to maintain aging buildings. The maintenance budget includes expenditures for personnel, utilities including water/sewer, disposal, heating fuel, electricity, purchased professional services, supplies differentiated into custodial and maintenance, equipment rental, purchased maintenance service and acquisition of non-capital equipment. Technology costs including telephone and internet services are included in purchased professional for the district rather than in the maintenance sub-category. Maintenance costs have experienced a continued increase over the past six years. Total budget during 2012/2013 was \$287,505. The same line items for the current fiscal year total \$361,274. Increases in the cost for maintenance personnel and purchased services contributed to budget escalations. This includes man hours needed to maintain the facilities and repair services that are out of the scope and expertise of district personnel. Preparation of the annual budget requires a review of historical cost data and calculations of potential effects of price increases, projected repair, or replacement of identified facility priorities and the availability of anticipated revenue in light of other program demands. One positive aspect of budget development is that utility costs have remained relatively static during this same period. Total maintenance costs represent 9.9% of the \$3,628,834, general fund budget.

In order to address capital project priorities, the district has maintained a capital project budget. The amount allocated has averaged between \$30,000 and \$40,000 over a five-year period. While this has not been hugely significant or provided the sole financial means to complete renewal projects it has represented the district's financial commitment and provided the means to meet matching fund requirements for grant applications. Identifying which grant applications will be submitted and the anticipated expenditure of this fund occurs during the process of preparing the annual budget and includes input from district administrators on priorities and needs. Commitment to the continued funding of the capital project budget is a priority. To meet the \$100 per pupil allocation required by the Capital Renewal assurance would require the district to budget an additional \$22,000 to \$25,000 on an annual basis. The intent is to increase this reserve by maintaining the \$40,000 a year commitment specifically for capital projects and funding the renewal budget by retaining general fund maintenance costs savings for this purpose. Submission of the application and the Board of Education's agreement to meet the required assurances further support that commitment.

District maintenance personnel are committed and skilled in patching, repairing and polishing aged structures with minimal resources. Independent professional resources are contracted when the skills and knowledge for repair and/or replacement projects exceed those of district personnel. This is the most cost effective means to maintain facilities in small, rural communities with limited personnel.

Opportunities to work closely with contractors during construction of a new building provides the opportunity to begin with a "clean slate", document the life span of building components, detail and train on maintenance and repair of infrastructures, and implement an effective and efficient maintenance plan upon occupancy of the completed building. Maintenance personnel are utilizing the "Planning Guide for Maintaining School Facilities" from the National Forum on Education Statistics to shape the conversation and develop a facility maintenance plan. Maintenance begins with the design process and the selection of equipment, products and construction components that retain qualities that are durable, efficient, and standardized throughout the facilities and maintainable with minimal time, effort, equipment and manpower. Introduction of maintenance personnel in the earliest phase of the project allows them to identify which level of maintenance is required at specific points in the life span of the building. Routine plans are those activities that occur on a regular basis to insure the cleanliness, order and safety of the building. Preventative maintenance are those tasks required for the efficient operation of building components such as heating, ventilation, and air conditioning. Predictive are the projects expected to be required because the component is approaching the end of its operational life, is beginning to demonstrate inefficient qualities due to age of use or requiring increased expenditures to continue operation. Effective use of these three identified types of maintenance should minimize the need for the fourth type, emergency maintenance, and ultimately decrease all the costs associated with facility use and operation.

The final component of the maintenance plan incorporates the expertise of the project manager who is charged with the management of the construction project. In the proposed scope of work for the project manager are specific tasks designed to assist the district in the long term management and maintenance of the new facility. Tasks associated with this purpose may include but not be limited to:

- Assisting the district with the outline of a capital reserve budget program that addresses the life cycle of equipment and systems.
- Review product selections and specifications for ease of maintenance/warranties/environmentally responsible products and solicit input from maintenance personnel to standardize equipment and construction materials.
- Assist the district in further development of a maintenance plan based on approved design specifications, including

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environmentally responsive housekeeping plan to support any high performance certification requirements.

- Coordinating and assisting with the training of district staff on all systems including mechanical, lighting, new equipment etc.
- Execute monitoring and building performance evaluation at the 11th and 23rd months after completion and assist the district with operations as needed during the first 24 months.

**Describe the condition of the public school facility at the time it was purchased or constructed and, if the facility was not new or was not adequate as a public school facility at that time, provide the rationale for purchasing the facility or constructing it in the manner in which you did:**

La Veta School District facilities were designed and built to the standards and codes required at the time of construction. There are seven buildings that currently comprise the campus and educational facilities for the district. The earliest construction took place in 1910. The most recent was 1985. A detailed evaluation of the condition of these structures has revealed aged and aging infrastructures that require extensive, costly repairs or replacement. Spaces no longer meet current educational standards for size, lack design or systems to support educational methods and devices, and are deficient in the current standards for safety/security measures. During an exhaustive Master Plan process conducted in 2017 the community determined that the best and most cost effective solution for improving school facilities was to build a new pre-kinder -12th grade facility on district-owned property just north of the current campus.

**Describe the history of capital improvements made to the facility by the district/charter school in order to make it suitable for students. Include a list of all capital projects undertaken in the affected facility in the last 3 years:**

Capital projects completed in the last three years.

A devastating hail storm in August 2018 led to the replacement of roof systems on the high school and repairs and the application of elastomeric coating to the metal roof of the gymnasium. Extensive damage to the entry door and window system of the Science building resulted in replacement with a new aluminum bronze system. Loss was covered by the district insurance with the deductible covered under the district general fund dollars.

Funding to resolve health and safety code violations identified with the heating/ventilation system and stadium seating in the gymnasium was obtained through a BEST application in 2017. In 2015 a site improvement project was completed utilizing funding from CDOT Transportation Enhancement (\$450,000), DOLA Energy Impact (\$300,000), USDA Rural Development (\$25,000) BEST (\$45,000), Town of La Veta (\$35,000) and district matching funds (\$34,000). The project included correcting drainage on Garland Street, concrete surfacing, curb and gutter, replacement of building entries for ADA compliance, storm water drainage measures at the back of the high school, and replacement of a deteriorated fire escape on the High School.

**What options outside of the BEST grant has the applicant investigated or leveraged to address the school's facility needs?**

Over the past seven years the district has aggressively sought and been successful in obtaining funding from Federal, state, local and philanthropic organizations for the specific purpose of repairing and improving district facilities. At this particular time, that approach has not been incorporated into this project as the timing of the decision and the grant application has not been conducive to effectively pursuing this option. The district has however, identified some funding opportunities that could be used to enhance this project. These would be independent of bid, construction or management scope. These opportunities include:

Great Outdoors Colorado. This organization has local government funding opportunities as well as a playground initiative. School districts are not eligible entities to apply for these funds, however we have been successful with partnering with the County Parks and Recreation District to represent our interests and submit as the fiscal agent on our behalf.

Department of Local Affairs (DOLA) Mineral and Energy Assistance Program. DOLA will fund projects with school districts as long as the project has a direct correlation with the community as a community facility. We have been successful with DOLA opportunities and intend in working with them in the August 2019 funding cycle after notification of success with a BEST application.

CDOT Safe Routes to School. Funding is available for both infrastructure and educational grants. The district is currently funded for two years for an educational program. We would be eligible to submit for an infrastructure grant and will be looking to see what components best fits the objective of Safe Routes to School. Traditionally this is an October submission.

CDOT Transportation Enhancement Grant. The district has utilized this funding in the past for site/street improvements on the existing site. There is a possibility that these funds might be available during the course of the building construction.

USDA Rural Development-Community Programs. This is a federal funding opportunity that is contingent upon funding allocations and priority ratings within the state. Traditionally Huerfano County has been identified as a priority county based upon needs and demographics. The district has been able to utilize these funds for equipment and will continue to monitor

## BEST FY2019-20 GRANT APPLICATION SUMMARIES

program status and availability. Grant funding is generally limited to \$25,000 requiring a match of 25%. To meet cash match requirements for grant applications the district has leveraged multiple resources from local and school district funds. Examples of local entities that have supported district projects include Huerfano Parks & Recreation District and the Huerfano County Mineral Lease District.

### How do you budget annually to address capital outlay needs in your district/charter? Include \$/FTE for the prior fiscal year:

The District has chosen to maintain a Capital Reserve Capital Projects Fund even though this fund is no longer required. Retaining this account allows the district to budget specific funds intended to be either set aside or expended in projects that adhere to the original limitations defined by the fund. These projects or expenditures have included facility renovations, transportation acquisition, and equipment. This fund is established at the district level and is neither associated with a specific building or program. Historical fund transfers to this account were \$40,000 in 2013, \$25,000 in 2014, \$40,000 in 2015 and just under \$38,000 in 2016. The budgeted transfer for this current fiscal year 2017/2018 is \$50,000. This amount equates to a reserve equivalent to \$220. per pupil when utilizing the October 1 student count of 227. If the historical average transfer of \$40,000 is used in the formula, then the per pupil allocation is just over \$176. Both are well above the \$100 established in the Capital Renewal requirement. It is the full intent of the district to continue the practice of maintaining the reserve at a minimum of the historical level.

### If relevant to your project, what are your current annualized utility costs, and what amount of reduction in such costs do you expect to result from this project?

District expenditures for utility costs in 2016/2017 were \$146,101 for water/sewer, electricity, propane, internet, telephone and disposal services. Anticipated costs for the same service in 2017/2018 have been budgeted at \$158,000. Consolidation of seven separate structures into one new building designed under a high performance certification program should result in a reduction of utility associated expenditures. An example of reduction in use has been calculated for potable water. The district currently uses and is allocated 11 Equal Quantity Ration (EQR) at a rate of 230 gallons a day per EQR. Engineers have calculated that the EQR required for the proposed new structure would 3.4 for a potential reduction and associated cost of 7.6 EQR. A conclusion appearing in the facility master plan identifies the opportunity for a 50% reduction in these costs. While that reduction would be the ideal, it is a conclusion the district feels is aggressively optimistic. A reasonable expectation would be 25% knowing that the district would be adding specifically cooling functions that are currently not in use or available in the facilities. District personnel are identifying additional strategies to assist with cost savings such as the bulk purchase of heating fuel during the traditionally less expensive, least demand periods of spring and summer. A 25% reduction in utility costs equates to just under \$40,000 in savings. An additional strategy of the district is to set aside these savings into a capital reserve fund that would be earmarked specifically for the renewal of facility infrastructure.

<b>Grant Request:</b>	\$35,978,780.88	<b>CDE Minimum Match %:</b>	27%
<b>Applicant Match:</b>	\$5,499,999.12	<b>Actual Match % Provided:</b>	13.25979%
<b>Total Project Cost:</b>	\$41,478,780.00	<b>Is a Waiver Letter Required?</b>	Yes
<b>Affected Sq Ft:</b>	74,185	<b>Contingent on a 2019 Bond?</b>	No
<b>Affected Pupils:</b>	215	<b>Source of Match:</b>	Bond November 2018
<b>Cost Per Sq Ft:</b>	\$559.13		
<b>Soft Costs Per Sq Ft:</b>	\$73.39	<b>Escalation %:</b>	4.25%
<b>Hard Costs Per Sq Ft:</b>	\$483.74	<b>Construction Contingency %:</b>	8%
<b>Cost Per Pupil:</b>	\$192,925	<b>Owner Contingency %:</b>	5%
<b>Gross Sq Ft Per Pupil:</b>	345	<b>Historical Register?</b>	No
<b>Is a Master Plan Complete?</b>	Yes	<b>Adverse Historical Effect?</b>	No
<b>Who owns the Facility?</b>	District	<b>Does this Qualify for HPCP?</b>	Yes
<b>If owned by a third party, explanation of ownership:</b>			

# BEST FY2019-20 GRANT APPLICATION SUMMARIES

If match is financed, explanation of financing terms:

## Financial Data (School District and BOCES Applicants)

<b>District FTE Count:</b>	199	<b>Bonded Debt Approved:</b>	\$5,500,000
<b>Assessed Valuation:</b>	\$32,517,007	<b>Year(s) Bond Approved:</b>	18
<b>PPAV:</b>	\$163,402	<b>Bonded Debt Failed:</b>	
<b>Unreserved Gen Fund 17-18:</b>	\$739,272	<b>Year(s) Bond Failed:</b>	
<b>Median Household Income:</b>	\$38,077	<b>Outstanding Bonded Debt:</b>	\$5,910,000
<b>Free Reduced Lunch %:</b>	59%	<b>Total Bond Capacity:</b>	\$6,503,401
<b>Existing Bond Mill Levy:</b>	2.574	<b>Bond Capacity Remaining:</b>	\$593,401
<b>3yr Avg OMFAC/Pupil:</b>	\$2,736.29		



## BEST School District and BOCES Grant Waiver Application

The BEST grant is a matching grant and each applicant is assigned a unique minimum matching requirement, pursuant to 22-43.7-109(9) C.R.S., to identify their financial capacity. An applicant may apply to the Capital Construction Assistance Board for a waiver or reduction of the matching moneys requirement for their project if the applicant determines their minimum match is not reflective of their current financial capacity, pursuant to 22-43.7-109(10) C.R.S.

Waiver applications are reviewed independent of the grant application. Upon review of the waiver application, the Capital Construction Assistance Board will make a motion to approve or deny the applicant's waiver request.

The Capital Construction Assistance Board shall seek to be as equitable as possible by considering the total financial capacity of each applicant pursuant to 22-43.7-109(11) C.R.S.

### Instructions

Be specific when answering the questions and explaining the issues and impacts. Your response should include dollar amounts and specific ways in which such issues and impacts make it impossible for the applicant to make its full matching contribution. Please submit meeting minutes, award/non-award letters, official communications, budget documents, or other relevant documentation to support the responses provided.

Question 2, subsections A-H are related directly to the factors used in calculating the matching percentage. Only respond in detail to the factors which you believe inaccurately or inadequately reflect financial capacity. For those factors which you believe accurately or adequately reflect financial capacity, please leave the response blank or type "Agreed".

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1. Please describe why a waiver or reduction of the matching contribution would significantly enhance educational opportunity and quality within your school district or BOCES, or why the cost of complying with the matching contribution would significantly limit educational opportunities within your school district or BOCES.

La Veta Re2 is requesting a partial waiver or reduction of the matching contribution for a BEST application. The District recognizes the importance of establishing fiscal commitment for the project but struggle with establishing a full cash match in lieu of maintaining academic programming. To balance BEST Match requirement with funding opportunities the district is maximizing financial and resource capabilities with a commitment of \$5,500,000 (13.259% of total required match) and requesting a waiver of the remaining \$5,699,270.60.

The District has maintained high academic standards and student success as evidenced in the full accreditation by the State. Sustaining these standards requires a district commitment to recruiting, retaining and supporting the instructional staff charged with insuring student success. In a district that commitment is predominantly defined monetarily through salaries, benefits, curricular materials and opportunities for professional development. In a small, rural district that commitment is represented in the general fund budget where just the instructional expenditures are 42% of total costs. Voter approval of the \$5.5 million dollar bond issue utilizes substantially, all of the bonding capacity of the district allowed by state statute.

2. Please describe any extenuating circumstances which should be considered in determining the appropriateness of a waiver or reduction in the matching contribution.

The decision by the Board of Education to only seek a bond just under the district capacity was calculated to account for changes in the residential percentage rates and the loss of residential property in the Spring Fire. Currently, the residential property rate is 7.2 percent of actual. The information this fall was that the rate would drop from 7.2 to 6.11 percent. This reduction will equate to a decrease of \$2,703,313 in assessed value and a direct reduction of \$540,662 in bonding capacity. The district would then have the ability to bond for \$5,967,328. That leaves a small cushion of \$182,328 over the \$5,785,000 required for bond obligations. In addition to the impact of the reappraisal, there were twenty-five residential homes, eight outbuildings and 1 commercial property destroyed in the fire. The total value of these improvements were \$2,829,108 that could equate to another reduction of \$565,821 in bonding capability. Counter balancing some of the reductions will be increases in residential property valuation as a result of the May 2019 reappraisals. However, it is unlikely that the reappraisal will be able to makeup for the two shortfalls.

*\*The following are factors used in calculating the applicant's matching percentage. Only respond to the factors which you feel inaccurately or inadequately reflect financial capacity. Please provide as much supporting detail as possible.*

A. Per Pupil Assessed Valuation relative to the statewide average – The higher the Per Pupil Assessed Value the higher the match.

Applicant's PPAV: \$163,402.05

Weighted Rank: 2.58% of 5% max

B. The district's median household income relative to the statewide average – The higher the median household income, the higher the match.

Applicant's Median Household Income: \$38,077.00

Weighted Rank: 2.02% of 15% max

C. Percentage of pupils eligible for free or reduced cost lunch relative to the statewide average – The lower the percentage for free and reduced cost lunch, the higher the match.

Applicant's FRED Percent: 59.3%

Weighted Rank: 5.84% of 20% max

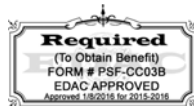
D. Bond Election failures and successes in the last 10 years – The more attempts the school district has made, the lower the match.

Applicant's Bond Elections: 1

Adjustment: -1% (-1% per attempt)

From 1981-2018 the District has had three successful Bond Elections. The first in 1984 was used to construct the gymnasium/cafeteria/junior high classrooms. The second was a bond issue, in November 2002, approved for \$1,000,000.00 by a rather large margin 503-For and 170-Against. The bond money had been identified for use in the renovation of the High School. The most recent bond approval was November 2018. The \$5.5 million dollars represents a near maximum bonding capacity of the district. Funds are to be used to match a BEST application for money to construct a new Prek-12<sup>th</sup> grade building.

The district has not requested voter approval of a mill levy override for the period of 1999 through 2018.



E. Bond mill levy relative to the statewide average – The higher the bond mill levy, the lower the match.

Applicant’s Bond Mill Levy: 2.57

Weighted Rank: 13.82% of 20% max

Re2 has an outstanding principal balance due of \$285,000 on a Bond Redemption as of January 1, 1019. The original bond debt of \$1,000,000.00 was approved by property owners in November of 2002 and is scheduled to be retired in 2022. The Bond Redemption mill levy certified by the County Treasurer in December of 2018 was for 2.509 mills to generate approximately \$84,747 assuming a full funding.

The General Fund program was certified at 26.312 with an additional 0.162 for Abatements. Total General Fund Mill Levies were for 26.474 mills. Total mills, including Bond Redemption, were 28.963. Approval of a \$5.5 million dollar bond in November 2018 has been calculated to require 13.08 mill levy for repayment without any adjustments for reappraisal or abatements.

F. The school district's current available bond capacity remaining. - The higher the bond capacity, the higher the match.

The District’s bond capacity is reflected below at \$593,401. The District has calculated reductions in bonding capacity due to a reduction in the residential property rate and a drop in property improvement values due to losses from the Spring Fire. Reducing the property rate from the current 7.2 percent to an estimated 6.11 percent will reduce residential assessed valuation by \$2,703,313 and bonding capacity by \$540,662. Loss of property in the Spring Fire could reduce assessed value by an additional \$2,829,108 and capacity by \$565,821. The Spring Fire impact is currently, only calculations, as all assessments have not be completed and quantified.

Applicant’s Remaining Bond Capacity: \$ 593,401

Weighted Rank: 1.57% of 20% max

G. The school district's unreserved fund balance as it relates to their overall budget.

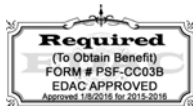
District’s Unreserved General Fund: \$739,272

Weighted Rank: 2.58% of 20% max

H. Other unusual financial burdens not reflected in the match calculation (ie. underfunded mandates, unexpected expenses, self-funded programs).

3. What efforts have been made to coordinate the project with local governmental entities, community based organizations, or other available grants or organizations to more efficiently or effectively leverage the applicant’s ability to contribute financial assistance to the project? Please include all efforts, even those which may have been unsuccessful.

Over the past seven years the district has aggressively sought and been successful in obtaining funding from Federal, state, local and philanthropic organizations for the specific purpose of repairing and improving district facilities. At this particular time, that approach has not been incorporated into this project as the timing of the decision and the grant application has not been conducive to effectively pursuing this option. The district has however, identified some funding opportunities that could be used to enhance this project. These would be independent of bid, construction or management scope. These opportunities include:



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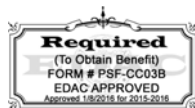
To meet cash match requirements for grant applications the district has leveraged multiple resources from local and school district funds. Examples of local entities that have supported district projects include Huerfano Parks & Recreation District and the Huerfano County Mineral Lease District.

4. **Final Calculation:** Based on the above, what is the actual match percentage being requested?

13.25979%

CDE Minimum Match Percentage:

27%



Edward R. Garcia, Chairman  
Max Vezzani, Commissioner  
Gerald Cisneros, Commissioner



## Board of County Commissioners

February 19, 2019

Colorado Department of Education  
Division of Capital Construction  
Capital Construction Assistance Board  
1580 Logan St., Suite 310  
Denver CO 80203

Dear Board Members and Staff,

The Huerfano County Board of County Commissioners (HCBOCC) would like to take this opportunity to support the La Veta School District RE-2 in their efforts to improve their educational facilities. The District has undertaken a diligent master planning process that spanned all of calendar year 2017 and incorporated input and feedback from the community. The District has also conducted a successful bond campaign and obtained voter approval to collect \$5.5 million to match with BEST grant funding, representing what is essentially the maximum amount of funding available to the District.

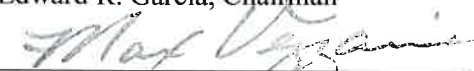
The Spring Fire that affected Huerfano County in the summer of 2018 continues to present challenges as the County, Town of La Veta, and School District face the task of comprehensive recovery intended to shape a prosperous future. The magnitude of the District's proposed building project will positively support a local economy that has experienced major disruption and loss of revenue in the past year. It will also provide a hopeful outlook on which the community can focus its emotional and psychological recovery. Finally, we acknowledge and appreciate that the District's will design its project to withstand the long-term effects posed by the potential for flooding resulting from the after effects of the Spring Fire.


This project is significant and adds value to our community. As such, the HCBOCC approves the conceptual design of this project and is committed to assisting with resolving design issues when and if they materialize. We are confident in the project's merit and believe it is deserving of funding. Please carefully consider La Veta's BEST Grant Application for its benefit to the students of the La Veta School District and the families of Huerfano County.

Thank you for your consideration.

BOARD OF COUNTY COMMISSIONERS  
OF HUERFANO COUNTY, COLORADO

  
Edward R. Garcia, Chairman

  
Max Vezzani, Commissioner

  
Gerald A. Cisneros, Commissioner

401 Main Street, Suite #201 Walsenburg, Co 81089  
Office: 719-738-3000 Ext. 200 Fax: 719-738-3996



TWO  
PEAKS **fitness**

PO Box 905 La Veta CO 81055

January 28, 2019

Colorado Department of Education  
201 E Colfax Ave  
Denver CO 80203-1799

To Whom It May Concern:

Please accept this letter as evidence for our enthusiastic support for the application by the La Veta RE-2 School District for a BEST grant.

Two Peaks Fitness Inc., a 501(c)(3) non-profit company, looks forward to working with the La Veta RE-2 School District to repurpose the Roger Brunelli gymnasium for community use as a recreation center as the school moves to its new campus, hopefully with the assistance of this grant.

Two Peaks Fitness was established in 2011 by a small group of Huerfano County citizens who donated a small amount of money to acquire equipment from a failed for-profit-center fitness center in La Veta. It is the only organized fitness program open to all residents in La Veta, providing exercise classes and equipment to its members without initiation fees or contracts.

We are eager to expand our services for our town through the creation of a recreation center, and also plan to use the classrooms in the building for educational purposes.

While we understand that the move to the new campus is 2 ½ to 3 ½ years out, during the interim we plan to start our collaborative relationship with the school by utilizing the gymnasium for events and activities. These experiences will help us to develop a Memorandum of Understanding for use of the building.

We hope you will give extra consideration to this BEST application. Huerfano County is among the poorest counties in Colorado, with a 17.1% poverty rate and median household income of \$33,257 (DataUSA). 20% of our children live in poverty. Your investment profoundly will help a community.

Thank you sincerely for your consideration.

Kerrie Meyler  
President and Chair



P.O. Box 202, La Veta, CO 81055  
(719) 890-4071 [www.lavetrails.org](http://www.lavetrails.org)

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February 18, 2019

John Albright, President  
La Veta RE-2 School District Board  
126 East Garland St.  
La Veta, CO 81055

Dear President Albright:

On behalf of the La Veta Trails Board of Directors, I am writing to express our firm support of the La Veta RE-2 School District's application for a critically needed BEST grant. The grant would allow RE-2 to build a state-of-the-art school complex that would not only meet the educational needs of students but also offer them the most outstanding educational experiences possible. La Veta Trails is honored to accept the School Board's generous offer to sell the science building, known as "the annex," to our organization. La Veta Trails is committed to being an active partner in repurposing the annex in a way that will maximize community benefit, contribute to all residents' quality of life, the community's vitality, and region's economy.

The annex building currently houses science classrooms, a large collection of Colorado mammal, bird and reptile specimens, and the school library. The structure is conveniently located next to a 3-acre School Nature Trail that is cared for by the La Veta Trails organization. The School Nature Trail was built in 1999 by a La Veta High School science teacher to serve as an outdoor environmental laboratory for students, teachers, residents, and visitors. The La Veta Trails Board understands that both environmental preservation and lifelong learning are highly important to the residents of this region. La Veta Trails is committed to continuing the educational essence of the annex and its contents. The current use of the annex to teach Natural Sciences is conducive to its conversion to an environmental education and outdoor center that would serve the southcentral region of Colorado. The annex structure has many benefits that could easily transition to its use as an ecological center including numerous specimen display cases, an ADA compliant entrance and public restrooms, flexible spaces for many uses, adequate parking, and recent upgrades to fiber optics, mechanical, HVAC, and electrical systems.

While La Veta Trails recognizes there will likely be a lengthy period before the annex is ready for occupation, it gives our organization ample time to prepare, plan, and fundraise for this exciting time. The timeframe for the construction of the new school dovetails perfectly with other important town initiatives. In partnership with the Town and the RE-2, La Veta Trails received a 2019-2020 planning grant to conduct a community input project to develop a master plan for parks, open space, and trails in the community. This planning process provides a timely opportunity to tie the annex, the

other re-purposed school buildings, and the proposed site of the new school into this comprehensive community recreational vision. Currently, La Veta Trails and the School are working on a joint “active living assessment” of the region with students acting as the research team. The students are assessing the condition of existing recreational amenities, identifying new amenities that could meet the needs of residents of all ages and abilities, and preparing recommendations for school and town leaders. The results of the student’s research will be incorporated into the master plan.

The La Veta Trails Board of Directors would like to express our gratitude to the RE-2 School Board. It is an honor to be considered for this offer and, in receiving the annex, to carry on the spirit of environmental stewardship in this space. Occupying the annex will allow La Veta Trails to continue to better serve the region for many years to come. We strongly urge the Capital Construction Assistance Board to fund the La Veta School Board’s Best grant application.

Sincerely,

A handwritten signature in blue ink that reads "Marilyn Russell". The signature is fluid and cursive, with the first name being more prominent than the last.

Marilyn Russell, President  
La Veta Trails Board of Directors



## ● Facilities Impacted by this Grant Application ●

## Animas High School - New HS - Animas HS - 2013

District:	Auditor - Charter School Institute
School Name:	Animas HS
Address:	271 Twin Buttes Avenue
City:	Durango
Gross Area (SF):	24,600
Number of Buildings:	2
Replacement Value:	\$5,513,452
Condition Budget:	\$1,009,677
Total FCI:	0.18
Adequacy Index:	0.50



## Condition Budget Summary

System Group	Replacement Cost	Requirement Cost	SCI
Electrical System	\$891,815	\$410,288	0.46
Equipment and Furnishings	\$95,097	\$0	0.00
Exterior Enclosure	\$733,752	\$0	0.00
Fire Protection	\$210,653	\$0	0.00
HVAC System	\$282,936	\$253,866	0.90
Interior Construction and Conveyance	\$731,544	\$314,848	0.43
Plumbing System	\$279,070	\$24,554	0.09
Site	\$652,325	\$6,123	0.01
Special Construction	\$1,365,059	\$0	0.00
Structure	\$271,200	\$0	0.00
Overall - Total	\$5,513,452	\$1,009,679	0.18

# BEST FY2019-20 GRANT APPLICATION SUMMARIES

**Applicant Name:** Animas High School

**County:** La Plata

**Project Title:** New HS

**Applicant Previous BEST Grant(s):** 0

**Has this project been previously applied for and not funded?** Yes

**If Yes, please explain why:** Animas High School did not receive enough points to be in the top awarded schools.

## Project Type:

- |  |   |   |  |
|--|---|---|--|
| <input checked="" type="checkbox"/> New School | <input type="checkbox"/> Roof               | <input type="checkbox"/> Asbestos Abatement | <input type="checkbox"/> Water Systems     |
| <input type="checkbox"/> School Replacement    | <input type="checkbox"/> Fire Alarm         | <input type="checkbox"/> Lighting           | <input type="checkbox"/> Facility Sitework |
| <input type="checkbox"/> Renovation            | <input type="checkbox"/> Boiler Replacement | <input type="checkbox"/> Electrical Upgrade | <input type="checkbox"/> Land Purchase     |
| <input type="checkbox"/> Addition              | <input type="checkbox"/> HVAC               | <input type="checkbox"/> Energy Savings     | <input type="checkbox"/> Technology        |
| <input type="checkbox"/> Security              | <input type="checkbox"/> ADA                | <input type="checkbox"/> Window Replacement | <input type="checkbox"/> Other             |

## General Information About the District / School, and Information About the Affected Facilities:

Located in Durango, CO, Animas High School opened in the fall of 2009 to offer rigorous, individualized college preparation based on the design principles of nationally acclaimed High Tech High. Animas High is a public charter school serving 250 students in grades 9-12, chartered through the Colorado Charter School Institute. The vision 10 years ago, which continues to this day, was to create a small school that embodies educational leadership through innovative programs that raise the bar for public education. This is accomplished through preparing all students for college and postsecondary success by creating critical thinkers and engaged citizens through an innovative, student-centered, project-based curriculum.

When the school opened, options for a school location were limited, and leasing space in a strip mall was the best option. As many charters do, the school converted this unconventional space into a home that, from the beginning, was riddled with safety and security issues. As a way of making light of the situation, holes and other imperfections in the inadequate facility were labeled with such signs as "ninja exit"; students and staff would hide when the fire inspector came so as to not expose code violations and risk being shut down. In 2013, the City of Durango, Durango Fire Department and CDOT requested the school relocate to a more suitable site. That same year, Animas High applied for a BEST grant for a permanent facility and to avoid another temporary location. The school secured land for a permanent site in the Twin Buttes development and settled into a second temporary home. The modular buildings were always intended to be temporary, and timeframe to vacate the current location is closing quickly. The school is now in a position where it must either find yet another temporary location or start building a new facility immediately.

In spite of the temporary location and less than ideal facilities, Animas is successfully fulfilling its mission. Over the last decade, Animas has become a well-established, respected educational choice in the Southwest Colorado community. Though chartered through CSI, Animas High has developed a collaborative relationship with Durango School District 9-R, even joining forces in a successful MLO for education in 2016, the state's first such collaboration between CSI schools and a local school district. The school has partnered with 9-R on numerous initiatives such as the American Indians Measures of Success and the Education Initiative sponsored by Civic Canopy, Gates Family Foundation, and Wend Ventures. As a community, we are now comfortable with talking about "fit" in schools, rather than seeing charters as a threat to traditional public schools. This was the dream of the school's founders and it has taken a tremendous amount of collaboration, humility and hard work to get here. Animas High has been rated by CDE as a performance school every year of its existence. 100% of Animas students are accepted into a college and the college retention rate is 89%. Animas is one of 8 schools across Colorado recognized with an ICAP award last year because its college and career program is one of the best in the state. As the school has grown, the demographics have shifted. Animas' demographics mirror Durango High School's in most areas but serves a higher percentage of students with 504s and ALPs.

Building a new school will alleviate urgent safety and security concerns such as hazardous traffic conditions, danger to pedestrians, poor emergency services access, lack of secure safe haven areas, and overcrowding. Additionally, the new facility will truly match the school's mission, vision and values, and will support effective delivery of innovative, rigorous, personalized secondary education to young adults in a building and campus that reflects the excellence of the school's teachers and

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programs.

## Deficiencies Associated with this Project:

**SCHOOL SITE CONSTRAINTS:** Animas High School is currently located on a temporary site that is severely constrained and is not suitable for continued use as a school site. The site is bordered on the south side by US Highway 160 (a busy four lane highway less than 50 feet away) and Lightner Creek (with a FEMA 100 year flood plain designation approximately 30 feet away), bordered on the north side by steep slopes, and bordered on the east side by a liquor store. Due to the numerous and substantial site constraints, authorization to use the site as a school was limited to a 7 year lease by authorities and the developer. In order to meet its obligations outlined in the land exchange agreements, the schedule calls for Animas High School to relocate from its current temporary property by fall 2018 to allow sufficient time for removal and disposition of the current modular facilities and reconditioning of the property to its original condition by the end of 2020. The school is working with the Twin Buttes property owners to extend the deadline and they are supportive of the application for the BEST grant. (See attached letter)

Animas High School has numerous deficiencies/constraints that are enumerated below in rank and order through the sections Safety, Security, Fire, Health, Education Suitability, and Crowding:

**SAFETY & SECURITY** - There are numerous deficiencies with Safety and Security, including:

1. Two Building Campus - Operating in two separate modular buildings limits the amount of security and monitoring that can happen as students move outside between buildings. A security door was installed at the entrance of each building this past summer. Students have access cards to enter each building as they move between the two. In theory the doors are locked 24/7, however students frequently open the doors for others. Due to ice buildup beneath the access ramps, the doors remain open during the winter unless someone pulls them shut. When students do not report their lost keys on a timely basis, the general public potentially has access to the school. To facilitate ease of student movement, the doors are unlocked for 30 minutes before and after school and during lunch. The convenience comes with an obvious security trade-off. Finally, there is no direct line of sight to each school entrance and only one entrance has a direct monitoring camera with "buzz-in" capability.

2. Lack of Safe Evacuation Routes -The school site is flanked by an access road on top of a steeply sloped hill to the north, plus a creek and Highway 160 to the south, wooded hills with difficult topography to the west and the only site access road to the east. In the event of an active shooter at the school, there is no viable escape route for students without being put in a vulnerable position. Students would need to walk a quarter mile along the road or the path to reach one of the school's emergency evacuation staging areas. In one direction is the everyday path that our students walk from the remote parking lot, which depending upon the time of year may not be passable. The other direction utilizes a single file dirt path that is not usable for most of the school year.

3. Lack of Suitable Public Address System - There is no public address system within the building, making it impossible to alert the entire school of an emergency at one time. Animas High School is unable to install a PA system because of the split campus and prohibitive cost. All rooms have a phone that can be used as an intercom, but its maximum volume is insufficient to be heard over background classroom noise and Animas High School is unable to install an adequate system. Additionally, there is no audio service to the common areas, several student work spaces, or the exterior of the building.

4. Transit Between Remote Parking Lot and School - Students who park in the remote soft-surface lot, which is roughly a quarter mile away on the other side of a hill, access the school by taking the intended route, walking along a soft-surface path below the road and adjacent to the creek. Depending upon the weather, the path may not even be usable. With precipitation, the path can become too muddy, too deep in snow, or too icy, making the path impassable. Students then have no other choice than to walk on the road alongside cars on a narrow road with no sidewalk and limited shoulders. Every day a large percentage of students choose the road because it is more level and even than the path. Vehicles often stop to pick up students along the road, creating traffic hazards and exposing students to oncoming traffic when they walk around a vehicle to open a door. Safety is further compromised during the winter months when plowed snow piles up against guardrails and retaining walls further reducing the width of the road both for cars and students on foot.

The school site is at the entrance to a new housing community, Twin Buttes. As growth of Twin Buttes accelerates, the access road to the school is also being utilized for construction access. Thus there are construction vehicles, student vehicles, parent

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vehicles, and pedestrians all sharing a narrow two lane road without sidewalks. Parents have expressed significant dissatisfaction with this safety hazard through emails and survey responses.

Students often act as shuttle drivers for each other to and from the remote parking lot. There is concern that not all students have seat belts and drivers are distracted by having a large number of passengers.

5. Drop-off/Pick-up Location -The paved drop-off/ pick-up area is immediately between the two modular buildings and conflicts with the highest traffic pedestrian area. Drivers must drive through the crosswalk twice as part of the drop-off loop. This area is also used as the outdoor learning lab/recreation area, resulting in a congested area with risky vehicle/pedestrian conflicts when vehicles arrive during normal class time. Safety of pedestrians is further compromised by the presence of emergency vehicles, commercial delivery vehicles, etc. In the afternoon, parents line up in the parking lot so that it is impossible for emergency services to enter the facility from 3:15-3:40.

6. Inadequate Supervision of Parking Lot, Bus Stop and Trail - Due to the limited number of parking spots at the school site, only 10 students' cars can park at the school at any given time. This means that 60 to 100 students park at the remote soft-surface lot. The school is separated from the remote lot by approximately a quarter mile and the intervening topography impedes all visibility. The path leading from the student parking lot to the school takes students on average 5-10 minutes to walk. While at the parking lot and anywhere on the path, students are not visible from the school. Animas High School does not have cameras or staff who are able to monitor the parking lot or path on a regular basis, therefore many student behavioral issues occur either in the lower parking lot or on the path. There is also concern that this path is next to a national forest and parallel to a wildlife corridor, which has caused some bear encounters in the past. This off site student parking lot is also shared by the community on a regular basis. Truckers utilize the lot for overnight parking and wake up to a full lot of students, trail riders change clothes next to their cars in order to be properly equipped for mountain biking, carpoolers meet and leave cars as this is the last parking lot out of town, and other such novelties that most high schools do not encounter.

7. Traffic Hazards with Accessing Campus - The Colorado Department of Transportation has expressed concern with the Animas High School's location as it relates to the highway and recommends relocation to a more suitable site as soon as possible (see attached CDOT Letter of Support). Animas High School is accessed by a highway that has no signalization, no reduced speed limit, no dedicated turn lane and no crosswalk signals or traffic signage acknowledging the school's presence. Our traffic volume at peak use times is too large for the design of the intersection. At the end of the school day traffic turning onto the highway often backs up, leading to a sense of urgency often compelling students to pull out into traffic when there is insufficient space.

8. Safety Risks with Proximity to Highway - Additional non-traffic concerns with this location include the risk of exposure to students in the event of a hazardous materials spill due to an accident on the highway, motorists losing control of vehicles and crashing into the creek bordering our campus where students eat lunch, and students walking along the highway in transit between the remote parking lot and campus.

9. Soft-Surface Unmaintained Remote Parking Lot - Because the remote student parking lot is not a hard surface with appropriate drainage, the ability to safely park varies dramatically with the weather. After significant precipitation events or during 'mud' season when the snow is melting, the parking lot becomes nearly unusable. Student vehicles have become stranded or have required unsafe rapid acceleration to escape the mud. Similarly, snowy and icy conditions are exacerbated by the soil surface because it is more difficult to remove snow. Finally, the lack of designated parking spots and traffic flow patterns increases the risk of accidents. Fortunately, all accidents that have occurred up to now have only involved vehicle damage.

10. Winter Weather Hazards - The campus is situated in such a manner that there is minimal direct sunlight during the winter. This causes many safety concerns. The first is that a portion of the staff and visitor parking lot is prone to deep snow piles or ice that needs daily "ice melt." The minimal direct sunlight lengthens the time of snow melt on the road and parking lots, extending unsafe winter conditions on the campus. Because students must regularly walk between buildings for classes, they are exposed to the risks posed by the ice multiple times a day. Students in wheelchairs or on crutches are at an elevated risk in this environment. Because of the tremendous amount of transit between the buildings, the interior front entrances become a slipping hazard with the constant wet conditions throughout a wet day. Students without proper winter gear get overly cold

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or wet on the walk between buildings. Because the school utilizes 1-to-1 computing, vital educational technology is constantly at risk of being damaged in the walk between buildings. There have been several vehicle accidents in the school parking lot due to icy conditions. The slope of the school parking lot, with the lowest elevation receiving the least direct light, has resulted in upslope meltwater forming an icy build up on the shady downslope slide. Finally, the access road to campus is severely sloped and involves a sharp turn at the bottom and regularly ices over in storm events. Over the years, this has caused numerous accidents with cars sliding into the guard rails as well as into the cars parked at the bottom of the ramp.

11. Flood Risk - The current school site lies within 30 feet of a FEMA 100 year floodplain. Given the close proximity of one of the modular facilities to Lightner Creek, the building foundation could be undermined in a severe flood event.

12. Exposed Electrical Panels - All electrical panels and utility meters are in full view on the building's exterior and are not secured. Students could accidentally hurt themselves by accessing them or building operations could be willfully disrupted.

13. Segregation of Administration - School administrators are housed in one building, thus making the response time to the other building a barrier. In the event of a student issue, a teacher must either leave their class or send a student between buildings to seek help.

14. Limited Parking for School-wide Events - The school does not have enough parking in either of its lots to accommodate parents and community members during school related on-campus events. These events are an integral part of the curriculum. Once the parking lots fill up, parents and visitors park along the access road. This essentially creates a one-way street with parents and students walking on the busy road as cars pass them. This poses a hazard for emergency vehicles to access the school.

15. Limited Cell Service - Due to the school's location in a narrow valley, cell phone coverage is inconsistent which creates additional challenges in the case of a school-wide emergency.

16. ADA Non Compliant Entrances - The slope of the entrances' ramps to the school are steeper than ADA requirements, posing access and safety risks for students in wheelchairs. Additionally, the door clearance on all entrances also falls to meet ADA requirements.

### FIRE SAFETY

There are numerous deficiencies with Fire Safety, including:

1. Lack of Evacuation and Simultaneous Emergency Access - Durango Fire Protection District (DFPD) stated there is not adequate outdoor space to evacuate all the students from the buildings and at the same time provide emergency vehicle access (see Letter of Support from DFPD).

2. Lack of Designated Emergency Access Lane - There is insufficient space for a designated emergency vehicle access lane/loop, which results in the parking lot being frequently blocked by cars in the pick-up queue.

3. Lack of Adequate Turning Radius for Emergency Vehicles - Fire trucks that respond to an emergency do not have an adequate turn around space so they are forced to backup on a sweeping curve up a steep hill to turn around. During winter months the inability to remove or relocate snow on campus leads to snow buildup which further hinders site access.

4. Separate Fire Alarm Systems - The fire alarm systems for the two modular buildings are not linked, therefore creating two separate fire alarm and suppression systems. In the event of a fire, both buildings should be evacuated but currently the alarm in one building doesn't trigger the alarm in the second building, which will delay the evacuation of the second building

5. School Exits - The currently facility only has two exits per building and these exits are narrow ramps. The ramps are only wide enough to allow a single wheelchair passage and are steeper than ADA requirements thus limiting egress.

### HEALTH

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There are numerous deficiencies with Health Safety, including:

1. Rodent & Pest Issues - Animas High School has addressed numerous rodent, pest, and wildlife issues at its current location. This fall, the school went on lock-out because of a bear being on campus, while trying to access the creek. The school has an ongoing problem with mice. Due to the small "cafeteria" space at the school, students eat lunch throughout the buildings which further exacerbates the rodent problem. The nature of modular construction, with gaps in between buildings and gaps in door jambs, makes them more susceptible to rodent infestation. The concern with mice is the risk of hantavirus exposure which occurs in southwest Colorado and has a high mortality rate.

Students often eat outside in a dispersed manner which also increases risk of pests and bear encounters. Skunks have been continuously persistent and problematic, often occupying the crawl space under the East building, leaving an aroma that was often mistaken for cannabis. Pest control experts were unable to extricate them.

2. HVAC Limitation-

2A. Proper Ventilation Design and Capacity - HVAC design and capacity is insufficient for educational programming. The current system does not exchange air at sufficient rates for specialty rooms including science rooms, the shop/makerspace, and studio art room. With only one window per classroom and insufficient ventilation, teachers must either elect to expose students to high levels of undesirable fumes, have students work outside, or forego certain educational activities. Currently restricted substances, like chemistry supplies, paint and other solvents, are stored in locked cabinets within classrooms instead of in designated storerooms with proper ventilation, further compounding challenges of the limited HVAC system.

2B. Universal Air Circulation and Efficiency - Because each modular is run on an individual loop, the overall air does not circulate. The modular facilities are oriented such that the two rooms sharing HVAC have northern and southern exposure respectively. In practice this means is that one room may have a window open because it is too hot while the room across the hall will have a heater on because it is too cold.

2C. Lifespan - The current systems have a manufacturer's recommended 12 year life cycle. The school is currently halfway through that life cycle, at 6 years.

3. Restrooms

3A. Non-ADA Compliant Restrooms - Animas High School's restrooms are not ADA compliant. They lack appropriate support rails and clear floor space dimensions

3B. Number of Bathrooms - The bathroom facilities are inadequate to meet the health needs of our students. In total, there are only six toilets and three urinals in the male bathrooms, only eight toilets in the female bathrooms and two additional single use bathrooms. On a regular basis, students wait in line to use the toilets, making them late to class or forced to skip the bathroom entirely in order to get to class. This issue is compounded when one or more toilets is clogged, which happens more frequently as the plumbing ages.

3C. Maintenance - The school restrooms not only have an unappealing aesthetic, but more importantly are unsanitary. The floor material over the years has been well kept, but is starting to show its usage with many urine stains and a permanent smell. The janitorial staff have hand scrubbed and stripped the floors to no avail.

3D. Ventilated - Each bathroom also only has one ventilation fan, which at this point only makes loud noises without really circulating air. The ventilation system is set up in a way that it would not be cost effective to replace nor would this solve the problem of air circulation as it would still only be one fan.

3E. Designed for a School Setting - The restrooms were not designed for a school setting. When the doors are propped open to deter student behavior problems and substance abuse issues in the bathrooms, a potential liability issue in terms of privacy is created.

4. Power Management - The school's power is not adequate for an educational setting and poses a significant health/safety

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concern. Students and staff have to plan educational activities and lunch needs based on wattage constraints with the current system. These workarounds inhibit learning by only allowing a limited number of electrical uses at any given time. When that limit is exceeded, which occurs frequently, lessons are interrupted until a tripped circuit breaker can be reset and electrical use coordinated. This happens on a regular enough basis that our staff and even many students have become accustomed to resetting circuit breakers, which are located in unlocked boxes on the exterior of the buildings. The Animas High School curriculum relies heavily on technology. Routinely, there are too many computers, projectors, lights, and other electricity-dependent items in use at once, that a classroom circuit will trip. Again, students and staff know which circuit breakers are aligned with which classrooms and fix the problem so lessons can continue. The circuit breakers are unprotected because of the frequent need for them to be reset. This poses a serious health/safety concern for all occupants of the school. Students and staff resetting the circuit breakers creates risk for the school, however the need to reset circuit breakers on a regular basis necessitates those closest to the situation to solve the problem.

### 5. Deteriorating Roof Conditions, Pooling Water, Leaks and the Potential for Mold

The EPDM roofing membrane is in need of immediate repair and is currently allowing direct intrusion of water through seam separations in multiple areas which in turn can be seen throughout the interior of the building. As water has infiltrated below the membrane it has caused warping of the wood decking which in turn has torn through the roofing membrane resulting in a continuous rip/ warp/ repair cycle. There are multiple areas which are showing signs of ponding. It is likely that this is being caused by sagging within the roof decking. Also, it is clear that moisture has migrated below the EPDM membrane with "bubbling" visible throughout the majority of the roof. Although there is no current evidence of mold, the leaks have the potential to generate this health hazard. Additionally, water leaks into classrooms disrupt educational programming and have the potential to pose additional safety risks and dramatically increase maintenance costs.

### EDUCATIONAL SUITABILITY

The school's current site and buildings limit curriculum delivery in several areas:

1. Modular Construction Limits Delivery of College Prep Science Curriculum - The construction type for the existing science classrooms does not meet minimum standards as per the determination of the DFPD. There is a lack of water, gas and electrical supply. Equally importantly, there is a lack of safety equipment including fume hoods and safety showers and the current buildings cannot be modified to include these features. The ad hoc ways of getting water to the classrooms has created a constant battle with the DFPD about code enforcement. Thus, students are transported several miles away to Fort Lewis College for some science labs. Bussing of students presents a myriad of logistical, safety, security, financial, and other issues.
2. Lack of Properly Ventilated Shop and Art Space Restricts Curriculum - The lack of dedicated and properly ventilated shop and art room spaces limits the number of students who can safely work on projects at a given time. Currently the shop has an aftermarket dust suppression system manufactured by students using a shop-vac. These facility limitations compel students to work outside, for which, as addressed later, there is limited space.
3. Modular Facilities Do Not Meet State Standards for HVAC, Light, and Acoustic Efficiencies - The current modular classrooms do not meet State high-performance standards for daylighting, acoustics or HVAC efficiency, and it is not viable to do so. Fostering and advocating sustainability is a central tenet of the school's values. Animas High School is not able to incorporate the existing facilities as a teaching tool in terms of sustainability. In addition, the lighting is so poor that teachers and staff have brought in personal lamps or filters for the fluorescent lights in order to foster a more productive learning environment. The acoustics of the modular facilities amplifies noise, and teachers and staff close their doors, which is counter to the culture of inclusivity, collaboration and transparency. It also means there are fewer eyes on students in the hallways. While any of these independently do not have a significant deleterious impact on the every-day education environment, together their compounded impact is enormous.
4. Limited Small Group and Breakout Rooms for ESS and Individualized Services - The lack of small group rooms and breakout spaces makes it difficult to effectively serve all students but especially special education students and other students needing quiet and individualized services.

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5. Learning Environment Adversely Affected by Proximity to Highway - The close proximity of Highway 160 adversely affects the learning environment due to noise and even occasional vibration issues. This makes conducting educational activities outside very difficult. In practice, it also prevents the classrooms with southern exposure from opening their windows compounding HVAC issues previously highlighted.
6. Classroom Size in Modular Facilities Limits Effectiveness of Project-Based Model - As noted in CDE guidelines, Expeditionary Learning style schools, which Animas High School's project-based model most closely resembles, require more space in the classrooms than traditional schools. The CDE recommended area per student is 200sf and Animas High School is currently operating with 97sf per student. The current classrooms and work spaces are too small to provide the various types of learning environments needed to properly carry out project-based learning.
7. Lack Permanent Exhibition Space Impacts Curriculum - Animas High School is a project-based learning school. An integral part of our curriculum centers around students constructing a variety of products. Whether this is an art piece, an engineered structure, or other various products we know that students create a more professional product when that product will be exhibited publicly and when they can see exemplars from past students. However, the current space does not allow for the display of most of our student work, thus hampering a central tenet of project based learning: public displays of student work. Additionally, Animas High School currently does not have any permanent exhibition space for its constant stream of exhibitions. Thus, most of the exhibitions are held off campus, which minimizes the ability of students to truly transform a space for their needs. When the school is used for an exhibition space, it compromises other programming such as the need for a quiet study space. If the "commons" is used for exhibition space, lunch must be served either in the hallway, violating egress codes, or outside.
8. Split Campus Limits Collaboration - The division between two modular buildings inhibits communication between portions of the school. Animas High School's culture of collaboration and support between faculty and students no matter the grade level is compromised when the classes are located in two separate buildings. Due to the interdisciplinary nature of project-based learning, same-grade-level classrooms need to be close together to enable sharing of resources. With the configuration of the current facility, collaboration is difficult at best.
9. Limited Space for Large Scale Student Projects - There is a lack of indoor and outdoor learning and construction space for large scale project-based assignments, which are critical to the curriculum. This construction space is further limited in winter weather when snow is on the ground or students cannot comfortably work outside.
10. Limited Recreation Options - The lack of recreation space is inconsistent with the school's mission, vision, and values. Because most of the PE classes occur off campus, the cost of transportation creates a financial strain on the school. The school covers as much space rental as possible, but often passes along those costs to families who can afford to pay. Though bus transportation is offered, students also drive themselves and/or their classmates to their PE classes. This is not the safest option and creates a huge liability risk.
11. Thin Walls Interfere with Curriculum Delivery - The lack of properly designed and equipped spaces for music, specifically with acoustical separation, results in music classes disrupting other classes in nearby classrooms. The lack of a special designated music space also creates issues with secure storage of equipment and forces the music classes to use a portion of every period setting up and breaking down equipment.
12. Lack of Storage Impedes Project-Based Curriculum - An integral part of Animas High School's project-based curriculum centers around students constructing a variety of products. Creating exhibit worthy work requires students have the space to modify their creations and the current facility is very limited on storage and construction space, limiting students physical and temporal work windows.
13. Site Constraints Prohibit Additional Improvements of Modular Facilities - It should be noted that any further investment in the current modular facilities, if otherwise feasible, would still leave the school in a location that is only temporarily approved by CDOT and City of Durango variance, and a limited-term landowner lease.



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## CROWDING

There are numerous deficiencies with Crowding, including:

1. Inadequate Square Footage per Student - At 24,490 gross square feet, the 2 modular buildings' combined area provides approximately 97 square feet per student, which is limiting for a high school facility. The current building accommodates 21 classrooms for 252 students. Although the classroom sizes are varied and adequate for the current enrollment, they are still less than half the size recommended by CDE for an expeditionary learning type school. While classroom sizes are mostly adequate, the current classrooms are too small for science and industrial science classes. There is limited outdoor space for recreation or for project construction or storage. CDE recommends a 1:1 parking ratio for staff and a 1:3 ratio for students. Under these requirements, the school would currently need approximately 113 parking spaces. The current site provides 54 on-site parking spaces plus approximately 60-100 remote-lot spaces (unmarked). The school has recently been required to apply for a parking variance annually through the City of Durango Planning Office. The current offsite parking requires students to walk a path that, depending upon weather, might be impassable (i.e. too muddy, too much snow, or too much ice), which means that students walk along a hilly and high-traffic access road without sidewalks.
2. No Room for Expansion/Right Sizing - There is absolutely no room for expansion on the site. The current building provides only 97 square feet per high school student, which is well below the 200 square feet per student that CDE recommends for Expeditionary Learning type environments.

## Proposed Solution to Address the Deficiencies Stated Above:

### SCHOOL SITE

Below is an overview of the proposed site and design for Animas High School. All specifically cited deficiencies will be addressed individually in subsequent sections:

1. The new Animas High School facility will comply with the CDE School Facility Construction Guidelines. It will incorporate new building systems to alleviate the concerns involving general safety, security, fire safety, congestion and crowding, and educational suitability. The school will serve approximately 350 students, which is the projected full enrollment of the school. The building will total 46,000 gross square feet with 22 classrooms housing humanities, science, math, foreign language, and art. There are 4 shared rooms that house maker spaces, laboratories, and music. In addition to formal teaching areas, breakout spaces varying in size have been located throughout the building, which provide collaboration opportunities as well as access to educational resources typically found within the library. The large multi-use commons area serves the school's dining hall and auditorium functions. These multi-use spaces combined with the opportunities being provided by the Twin Buttes development allow for a reduction in building area while still creating a fully programmed high school.
2. The permanent site is also located within the Twin Buttes development roughly five minutes away from the current location. The permanent site was selected as the best fit for a permanent campus through a Master Planning process in 2012. Animas High School evaluated seven different sites on 19 criteria using a 1-5 point ranking system. At the conclusion of this evaluation, Twin Buttes was the second highest scoring site. The planning team ultimately recommended the Twin Buttes site for four primary reasons. Firstly, Twin Buttes was willing to accommodate a temporary campus of modular buildings (the current location) while Animas High School sought funding and underwent construction. Secondly, the developer committed a parcel of land to development for an educational facility and is willing to assist with providing access and utilities to the site, thus making land acquisition more affordable with this option. Thirdly, the Twin Buttes development is relatively central to the Durango community. Finally, the integrated nature of the Twin Buttes development would provide the school site with a neighborhood feel and access to many desirable amenities that enhance educational opportunities and reduce needed expenditures. Animas High School's 2019 Master Planning process builds upon this previous work. Twin Buttes is still the best location for Animas High School's permanent campus for the reasons cited above and in scoring rubric.
3. The proposed site is located on a larger plot of land with: adequate room for on-site parking, safe pedestrian access, improved capacity for non-emergency and emergency vehicle access and circulation, room for expansion, adequate space to support on-site experiential learning and space for outdoor recreation. The permanent site, roughly 4 acres, has been gifted to Animas High School, which also includes a promise from the developer to bring utilities and accessibility to the site. The Twin Buttes development has created a master plan, in coordination with the City of Durango, for numerous amenities that will surround Animas High School such as: park and open space, trails, a community garden program, and a

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community/recreation center located adjacent to the proposed site. These features make it possible for Animas High School exclude a gym, large green space, and other amenities that will save us money and space. Currently within walking distance of our future site, there is a city park with amphitheater, green space, community garden, and access to the Twin Buttes trail system with approximately 12 miles of trails designed for hiking and mountain biking. The proposed new site would ultimately provide more of a neighborhood school setting, away from the creek and the wildlife corridor, the busy highway, the adjacent liquor store, and the community parking, all of which currently surround the students. Once the Twin Buttes development is completely built out, the school site will be in the center of a sustainable residential and commercial mixed-use community in Durango. The school site is accessed from a new entrance on the other side of the development, which currently has speed restrictions and barriers, a traffic light and designated turning and merging lanes. The site will also have sidewalks that connect to the rest of the development and many trails. In terms of emergency services, we will be within the DFPD's requirements. The school site is located on a hillside with southern exposure, allowing for ample sunlight, thus reducing the difficulty addressing winter conditions. Thoughtful design of the building and parking lot will further reduce challenges dealing with winter weather. Finally, the new location allows the school to meet much of its energy needs through passive and active solar design.

### SAFETY & SECURITY

1. Single Building Campus - Through the creation of our new building, we will no longer have two separate buildings that cause students to walk between them, eliminating traffic pedestrian conflicts and the safety hazards that came with traversing an open space in inclement weather conditions. The main entry will be secured by a vestibule leading through the administrative suite, and the remaining entries will be secured during the day. This single secured entrance eliminates the need for student access cards and the associated risk of lost or stolen access cards allowing unsanctioned building entry. The administration will be situated at the main entry with clear line-of-sight to the front doors, the parking lot, and to the site entrance drive, with adequate windows for supervision. The new facility will provide a school-wide emergency notification intercom, full sprinklers and fire alarm, building security system, "Columbine" hardware at classroom doors for lockdown situations, secured and segregated utilities, and an electronic visitor check-in system. A single building will allow administration to be more responsive to student emergencies. We will also have more glass interior windows providing more visibility of student interactions.

2. Safe Evacuation Routes - The site will be located at the top of a new development that allows multiple ways of evacuating in case of an active shooter. There will also be a nearby staging area to be used for other types of emergencies that can be safely accessed by evacuating students while simultaneously enabling emergency services vehicles access to the building.

3. Public Address System - The single building will enable Animas High School to have a universal public address system that the student body and staff will be able to clearly hear and understand throughout the building and in the immediate outdoor vicinity.

4. Transit Between Student Parking and Building - The close proximity of the parking lot will allow students to easily walk from their cars to the building, thus alleviating the need to walk a sometimes impassable path or dangerous street.

5. Drop-off and Pick-up - The pick-up/drop off lane will be one-way, have increased visibility and signage to minimize potential pedestrian and traffic conflicts. There will be two lanes, allowing simultaneously for a pick-up queue and emergency vehicle access. Additionally, there will be dedicated outdoor learning spaces and recreation spaces that are separated from the parking lot and driveway.

6. Adequate Supervision of Parking Lot - At the new campus, the parking lot will be within line of sight of the administration suite and multiple classrooms. The tiered parking lot in the permanent location will allow for visibility of the entire parking lot either in person or with cameras.

Our exterior facing windows will have glazing and protective film. This will enable natural light into the classrooms while making it difficult to see into the classrooms. The protective film will enable a deeper connection to nature while also providing a level of protection.

7. Traffic Hazards with Accessing Campus - The school site will be accessed from a new entrance on the other side of the Twin Buttes development. This entrance and intersection currently has speed restrictions and barriers, a traffic light and designated

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turning and merging lanes, reducing safety risks associated with students driving to and from school.

8. Safety Risks with Proximity to Highway - The new school site is located away from the busy highway. This creates a sizable distance from the highway so that sound, accidents, and vibrations from the highway would not impact students and learning at Animas High School. This would effectively eliminate any safety hazards caused by the highway.

9. Soft-Surface Unmaintained Remote Parking Lot - The parking lot is designed to provide 140 spots and it will be a hard surface lot with intentional traffic flow patterns and designated snow removal locations. This eliminates all of the safety concerns associated with parking and driving in the variable and unpredictable environment of a soft surface and unmaintained parking lot.

10. Winter Weather - The new site will be situated in a manner that receives optimal sunlight, as it is at the top of a hill, eliminating the snow and ice buildup in the parking lots or sidewalks. Proper parking lot and site drainage will prevent icy build-up.

11. No Flood Risk - The new site is not in a floodplain and the foundation will be secure as compared to the modular site.

12. Secure Electrical and Mechanical - The new site will have a specifically designed and secured electrical and mechanical room.

13. Centralized Administration - The new site will have a centrally located administration suite that is equal distance from various parts of the school.

14. Sufficient Parking - The new site will have sufficient parking on site for the frequent on-campus parent and community events. The Twin Buttes development will have nearby overflow parking areas that will not present safety hazards.

15. Improved Cell Service - The new location will be at a higher elevation, out of the valley, allowing a direct line of sight connection with the cell towers on Smelter Mountain.

16. ADA Compliance - The new campus will be entirely ADA compliant.

### FIRE SAFETY

1. Evacuation and Simultaneous Emergency Access - The new facility will provide Animas High School adequate outdoor space to evacuate all students from the building and at the same time provide emergency vehicle access.

2. Designated Emergency Access Lane - The new facility will have a designated emergency vehicle access lane independent of a drop-off and pick-up parent queue.

3. Adequate Turning Radius for Emergency Vehicles - The new facility will have a fire lane that will reach with a full turn loop for fire apparatus, providing adequate coverage with hose lengths to satisfy Durango Fire & Rescue requirements.

4. Single Fire Alarm System - The new building will have a single, universal fire alarm system and single suppression system.

5. School Exits - There will be more egress exits in the event of an evacuation and many main-level classrooms will have evacuation doors reducing congestion in hallways, thus reducing evacuation times. The building will be designed with adequate egress and fire separations throughout. Corridors and doorways will be properly sized and constructed for building and evacuation safety. Sidewalks and pathways on the exterior of the school will allow safe passage for all students, including students in wheelchairs, away from the building.

6. Improved Fire Safety Through Construction Materials - The new building will be largely non-combustible and fully sprinkled, a safety improvement over the current combustible type V modular construction.

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7. Improved Fire Safety Through Safety Equipment - Special spaces like science labs, maker spaces, art rooms, etc., will include appropriate fire safety equipment and be served by appropriate ventilation to reduce risks of fire.

### HEALTH

1. Rodent & pest issues - The construction of the permanent facility will eliminate pest issues and radically reduce undesirable wildlife encounters. Mouse infestation will be virtually eliminated by a tighter building envelope that comes from a permanent foundation and better construction. Moving the school site away from the creek onto a hilltop will reduce bear encounters by moving out of the wildlife corridor. The risk of animals being attracted to food waste will be eliminated by concentrating student food consumption in the commons and designated outdoor areas. Animas High School will have a management plan for food waste. A permanent facility without an easily accessible crawl space will eliminate skunk issues.

### 2. HVAC limitations

2A. Design and Capacity - HVAC system will be designed to allow for complete educational programming by providing suitable ventilation and air exchange for science, studio art and makerspace facilities and storage of necessary supplies and chemicals for those programs.

2B. Universal Air Circulation and Efficiency - HVAC provide optimal climate control in all seasons and throughout the building. The HVAC system will be more energy efficient through centralized distribution and control systems.

2C. Lifespan - Our new site will restart our HVAC lifecycle and will also enable us to purchase an HVAC system that is able to last longer than 12 years.

### 3. Restrooms

3A. ADA Compliant Restrooms - Each floor will have an accessible ADA compliant bathroom.

3B. Ample Number of Bathrooms - The number of bathrooms in the new building will be based on a possible occupancy of 350 students and they will be distributed throughout the school.

3C. More Easily Maintained - Restrooms will be constructed with more durable and easily cleaned surfaces. All necessary sanitary equipment will be integrated.

3D. Adequately Ventilated - New construction will allow restrooms to be adequately ventilated.

3E. Designed for a School Setting - The restrooms will be designed to allow for needed privacy while maintaining an openness that discourages congregation and substance use.

4. Power Management: There will be more electrical outlets throughout the school and they will be located to minimize the need for extension cords and power strips. The electrical system will be appropriately designed and constructed to meet or exceed anticipated demand and allow for future growth. Circuit breakers will not be located in an area where students or the public can access them.

### 5. Improved Roof Design and Construction

The design and construction of the roof for the permanent facility meet all appropriate building codes and best construction practices. The uniform foundation will result in less settling, pooling and stress on the roofing material. Appropriate drainage will also be incorporated into the roof design and construction. The watertight roofing envelope will eliminate leaks and the risk of mold.

### EDUCATIONAL SUITABILITY

1. Delivery of College Prep Science Curriculum - New science classrooms and lab spaces will be designed and equipped to allow for all typical high school science activities and meet all applicable safety requirements, building and fire codes. These facilities will allow for more frequent and varied hands-on learning experiences in each of these content areas and will facilitate a broader scope of project-based work across all disciplines. They will be served by all necessary utilities including

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water, gas and electrical supply. There will be permanent safety infrastructure including fume hoods, safety showers, eye wash stations and emergency shut-offs for utilities. The lab spaces and connected storage rooms will be properly ventilated to meet air exchange requirements. Ample storage for tools, equipment, chemicals, supplies, etc., will be built into these rooms and the construction materials used in the rooms will be appropriate for safety and durability.

2. Proper Ventilation for Lab Shop and Art Spaces - Art and shop rooms will have appropriately designed ventilation systems that will vent fumes, allow for the storage of needed educational supplies and chemicals, and safely deal with dust.
3. Permanent Facility will Meet State Standards for HVAC, Light, and Acoustic Efficiencies - New classrooms will have plenty of daylight, sufficient acoustical separation, beneficial indoor air quality and ease of access to the outdoors for a learning environment. Classrooms will also include instructional technology and flexible furniture to encourage movement and facilitate diverse learning modalities.
4. Small Group and Breakout Rooms for ESS and Individualized Services - The new school will have numerous small group rooms and breakout spaces of varied size, privacy and design intentionally distributed throughout the school to accommodate a variety of learners and instructional activities.
5. Learning Environment Not Adversely Affected by Proximity to Highway - The new building site will have a neighborhood feel due to its location in the planned community of Twin Buttes. There will be minimal traffic noise and vibrations from traffic will be nonexistent due to the increased distance of separation from the highway.
6. Increased Classroom Size and Flexibility will Enhance Effectiveness Project-Based Model - Flexibility and adaptability are key design principles in the new school. In addition to the integrated small group/breakout spaces, several of the walls between classrooms will be movable, allowing us to bring classes or grade levels together for integrated lessons or assemblies or to create exhibition spaces.  
The school will be equipped with a variety of robustly designed and constructed pieces of flexible furniture. This furniture will be selected to promote student movement, which is linked to positive educational outcomes, and to allow for restructuring classrooms to meet the needs of educational activities. The combination of flexible spaces and furniture is to effectively 'create' more space and to allow the 46,000 SF to be utilized more effectively. Additionally, it will provide adaptability into the future as the needs of an educational environment change in potentially unforecastable ways.
7. Permanent Exhibition Space Enhances Curriculum - The design of the new building will dramatically enhance our educational programming because its layout and construction will be aligned with our values. Classroom activities will always be on public display, which passively invites onlookers into the classroom and encourages all teachers and students to 'elevate' their work. The taller ceilings and integrated curation elements will provide more opportunities for our students to display their projects. The display of remarkable student projects increases the quality of future student work because it serves as an exemplar and a benchmark to meet and exceed. Additionally, we intend to celebrate our sustainability and connection to the natural world by showcasing aspects of our resource use (energy, carbon emissions, etc.) in real time through energy use and production monitoring systems.
8. Integrated Campus Promotes Collaboration - Housing all staff and students in a single building with intentionally designed shared common spaces like the commons, breakout spaces, outdoor work spaces and shared teacher offices will promote a culture of collaboration, which is a key value for Animas High School. Additionally, ample interior windows will further our belief in transparency and collaboration.
9. Increased Indoor & Outdoor Learning Space for Large Scale Student Projects - The school design includes increased indoor and outdoor space for project work. The outdoor work space is in a no traffic environment and adjacent to the indoor work space. The location of the Universal Shop on the main level, adjacent to a service road and with a large garage door opening, allows oversized materials and projects to move easily in and out of the school. These design elements will promote larger scale building projects and support current student endeavors like the Solar Car team.
10. Limited Recreation Options - The site layout and school design will enhance the ability for recreation on campus. The

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larger breakout and commons spaces including outdoor breakout spaces and the large green space at the front of the building will provide more dispersed recreation opportunities like yoga and other workout classes. The school site is within walking distance of a park in the Twin Buttes development and will be connected to the park and the rest of the 13 mile trail system by a trail spur. The school site is close to the planned recreation center in the Twin Buttes development.

11. Improved Acoustical Separation - The music room will be designed for optimal internal acoustics and for acoustical separation from adjacent spaces through material selection and room shape. Additionally, the music room will allow for the secure storage of instruments and allow the music equipment like drum sets and speakers to remain set up in between classes, effectively increasing the amount of class time.

12. Ample Storage Supports Project-Based Curriculum - The new school will include significantly more storage space both for teaching supplies and for student projects. The Universal Shop has a large storage space for raw materials and student projects. An essential element for project-based learning is to give students a place to securely store their projects so that they have time to refine them and so they are not constantly transporting them to and from the school.

13. Secure Exterior Breakout Space - The new site and building will provide ample secure exterior breakout spaces due to the building's orientation with the topography.

14. Shared Community Spaces - The commons area within the new facility is intended to allow us to live Animas High School's Mission and Values and further integrate with the community. All of the classroom wings can be secured after hours, which will allow the commons area, conference room, and outdoor spaces to be open to community organizations for a broad range of after school events.

15. Building Efficiency and Integration - The new school will meet the requirements of the LEED Gold or the High Performance Certification Program, providing a new, easy-to-maintain, energy efficient, low-cost facility with a life expectancy of 50 years or more. The facility will live Animas High School's sustainability values: minimizing environmental impacts, integrating with the natural surroundings and, most importantly, providing a physical environment conducive to learning. The new facility will be an example of innovative learner-centered school design and serve as model for future local school buildings. The new facility will be fully ADA accessible.

### CROWDING

1. Adequate Square Footage Per Student - The proposed permanent facility would improve the square feet per student ratio from 97 square feet per student to a more reasonable 182 square feet per student (at the current size) and from 63 square feet per student to 131 square feet per student (at capacity). This is more comparable to a typical school facility, yet not as generous as many. We have included all necessary classroom and support spaces to support 350 students without any of the challenges that accompanied our previous, larger student population in a facility that was only 63% the size of the proposed facility.

2. Right Sizing - Our community over the last 10 years has stated that they value Animas High School as a small school option. This small school environment enables us to have close student-teacher relationships and small class sizes that average 13 students. At 250 students and roughly 13 students per class, our new building allows us to get close to the state recommended sq ft per student. However, Durango has grown by 9.5% over the past seven years and as our community continues to grow, our school has the ability to accommodate up to 350 students without needing a new facility through an average class size increase of up to 18 students per class. Therefore, in order to help the community meet future educational needs, we plan to build for 350 students.

### How Urgent is this Project?

School Constraints - It should be noted that Animas High School is doing its due diligence to maintain the current facility, mitigate risks to student health, safety and security and provide the best possible education to its students. However, as our facility assessment will demonstrate, the current facility is not adequate and in many cases it exposes students, staff, and parents to high degrees of risk. Animas High School is unable to mitigate the listed deficiencies while in its current location due to physical site constraints and or prohibitive cost. As the modular facilities continue to age and deteriorate it is anticipated that new health and safety risks will arise and that many of the deficiencies listed will become more severe.

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Animas High School has numerous urgent deficiencies/constraints that are enumerated below in rank and order through the sections Safety, Security, Fire, Health, Education Suitability, and Crowding:

### Safety and Security -

1. Two-Building Campus - It is physically impossible to correct the safety and security risks that are associated with a two-building campus while Animas High School is in its current location. Although there is no predictable timeline for when this security risk could lead to student harm, everyday poses a small but non-negligible security risk that could have grave consequences.
2. Lack of Safe Evacuation Routes - Due to the topography and physical boundaries of the current school site it is physically impossible to provide additional safe evacuation routes while Animas High School is in its current location. This leaves students, staff, and parents at a daily risk when it comes to being able to safely evacuate our school if faced with an active shooter, fire, or other emergency. Although the risk of an emergency requiring a campus evacuation is small, the consequences of being unable to safely evacuate campus would be severe.
3. Lack of Suitable Public Address System - It is cost prohibitive to to mitigate the lack of public address system while in the current separated modular facilities. The magnitude of the expense is unjustifiable in light of the lease agreement to vacate the site by October 2020. The school has needed to go into lockdown approximately once per year, making the inability to effectively communicate with the entire school a real risk to student safety.
4. Transit Between Remote Parking Lot and School - Due to the topography and physical boundaries of the current school site and the extreme cost that would be associated with paving a 1/4 mile long trail between the remote parking lot and the school it is impossible to mitigate the risks associated with student moving between our student parking and the building in the current site. Every day students are at risk of getting hit by a car or construction vehicle on the road, and students are continually at risk of something occurring on the trail while being unsupervised.
5. Drop-off/Pick-up Location - Due to the shape and size of its current size, Animas High School is physically incapable of correcting the pedestrian/car interactions with the two building campus' while Animas High School is in the current location. There is an everyday risk of a car-pedestrian accident because of the amount of students walking between buildings and cars passing through the crosswalk on our campus.
6. Inadequate Supervision of Parking Lot, Bus Stop and Trail - Animas High School is unable to mitigate the risks of inadequate supervision of the remote student parking lot, bus stop, and trail while in the current location due to the prohibitive cost of hiring additional staff or adding temporary surveillance technology on land that is owned by another party. Although no major student injuries and few behavioral incidents have occurred, there are frequent rumors of unsanctioned student behavior and substance use happening due to lack of supervision. We will continue to fail to provide a safe, protected, secure site for our students to park, wait for a bus, and transit between student parking and our school until these spaces can be consolidated on a more compact campus..
7. Traffic Hazards with Accessing Campus - Animas High School is unable to reduce the traffic safety risks associated with entering and leaving campus directly from Highway 160 without proper turn lanes, speed controls or a traffic light while in its current location. CDOT does not intend to upgrade the intersection because the alternative entrance to the Twin Buttes development, that will be used to access the planned future school site, has already received these upgrades. There is a daily risk of a significant accident involving student drivers happening at this inadequately designed intersection.
8. Safety Risks with Proximity to Highway - The small but non-negligible risks of a hazardous waste spill on the adjacent highway or a vehicle crashing on to campus will continually pose a safety risk to Animas High School students until we are relocated. The likelihood of an event is small, but the effects could be catastrophic.
9. Soft-Surface Unmaintained Remote Parking Lot - Animas High School is unable to reduce or mitigate the risk of human or property injury posed by the use of an unmaintained and unmarked soft-surface parking lot while Animas High School is in its

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current location because the parking area is not owned by Animas High School and even if it were, the cost to pave it would be prohibitive particularly in consideration of the site lease that is ending in 2020. Icy, snowy and muddy conditions inherent with this type of parking lot along with a lack of signage or designed traffic flow patterns will continue to contribute to vehicular accidents which historically have happened several times per academic year.

10. Winter Weather Hazards - The winter weather hazards associated with minimal direct sunlight in the winter and the lack of a snow removal location due to the confined site will continue as long as Animas High School is in its current location. It is physically impossible to change the amount of sunlight received and would be cost prohibitive to regrade and repave the parking area. This affects students, staff, and parents every winter and in most years has resulted in at least one vehicular accident.

11. Flood Risk - We will not be able to mitigate the dangers of being in a floodplain while in the current location. Although the risk of an event must be considered small because the FEMA designation is a 100 year floodplain, the costs and disruption to learning associated with an event would be enormous. Additionally, there is still a significant safety risk to students if Lightner Creek were to rise to high flows while remaining in its banks because Lightner Creek is typically very turbid and it has many potential snags and entrapments that could ensnare a student who was caught in the current.

12. Exposed Electrical Panels - Animas High School will not be able to fully alleviate the risk of exposed electrical panels while in its current facility because there is no reasonable way to relocate or secure the panels. Although Animas High School is taking steps to add locks to all panels to enhance safety and security, the fact that all electrical panels are in plain sight on the exterior of the building does still expose the school to risk of intentional tampering. These unsecurable panels present a small but non-negligible daily risk to student safety and security. The frequency of needing to access the electrical panels also potentially makes it infeasible to securely lock the panels.

13. Segregation of Administration - Animas High School is unable to mitigate the safety and security risks posed by delayed incident response time due to the concentration of administration staff in one building while Animas High School is split into two modular facilities. Although administration staff could be split between the two modular facilities, the resultant loss of communication and ability to work jointly on student discipline issues would create more safety and security risks than would be alleviated. The only viable solution is a single building.

14. Limited Parking for School-wide Events - Due to the topography and physical boundaries of the current school site Animas High School is unable to mitigate the problem of parents parking on our access road during all school events. These events occur between 3 and 8 times an academic year. On the nights of these events the risk of accidents resulting in injury to property or persons is dramatically increased as the parked cars shrink an already narrow roadway and the parking lot is overflowing with cars parked in unintended locations obscuring visibility.

15. Limited Cell Service - Animas High School will not be able to mitigate the risk of limited or no cell service while in the current location; permanently hampering our communication capabilities during an emergency which could have significant consequences. Although cell providers control the location and strength of signal towers, it is exceptionally unlikely new towers would be located with a line of sight to our current campus.

16. Ramps - It is impractical and cost prohibitive to adjust the slope of the entrance ramps because of the placement of sidewalks and building foundation, thus leaving Animas High School out of ADA compliance for as long as we are at this site. Although we do not currently have students in wheelchairs, this may be a reason students are not choosing our school and it could impact school visitors on any given day. Losing control on one of these ramps could lead to serious bodily harm.

### FIRE SAFETY:

1. Lack of Evacuation and Simultaneous Emergency Access - Due to Animas High School's current site size, layout and the surrounding topography Animas High School is unable to mitigate the inability to safely evacuate the building and provide a congregation site for students while also providing access to emergency services. Although the risk of an emergency requiring a campus evacuation and the attention of emergency services is small, the consequences of being unable to safely evacuate students while allowing emergency services vehicle access to the campus is potentially grave.



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2. Lack of Designated Emergency Access Lane - Due to Animas High School's current site size, layout and the surrounding topography Animas High School is unable to provide an emergency access lane for emergency services. This safety risk is exacerbated at the beginning and ending of the school day due to the increased volume of parent traffic and the pick-up queue that forms starting at 3:10 on a daily basis. It is only a matter of time before Animas High School has an on-campus emergency during a window of time when the access and egress from the campus is impeded with potentially significant consequences.

3. Lack of Adequate Turning Radius for Emergency Vehicles - Due to Animas High School's current site size, layout and the surrounding topography Animas High School is unable to provide adequate space for a firetruck to turn around without the need to backup. Although the risk of an emergency requiring fire trucks to access campus is small, it is unacceptable to subject the first responders to additional risk that could be alleviated by a new school site. This is one of the many reasons DFPD has written a letter of support for a new school site.

4. Separate Fire Alarm Systems - Due to technical challenges with the design of the fire alarm and suppression systems, Animas High School is unable mitigate the risk of delayed evacuation from having two separate fire alarm and suppression systems. Although the risk of an emergency requiring a campus evacuation is small, delaying the evacuation of one building could have significant consequences for student safety.

5. School Exits - Due to the design and construction of the modular facilities, Animas High School is unable to mitigate the risk of the narrow and limited school exits in its current location. Although the risk of an emergency requiring a building evacuation is small, in that instance, seconds matter, and there is a significant risk to student safety and health posed by our constricted egress.

### Health

1. Rodent & Pest Issues - Animas High School is unable to eliminate the pest and rodent issues in its current location. Measures already taken such as setting traps and hiring pest control services have decreased but not eliminated issues. The interaction with pests and rodents is a frequent occurrence for our students and staff. The nature of construction of the modular buildings results in rodents having indefinite access to the school and there is no reasonable cost solution to secure the building to rodents. Furthermore, as the modular facilities continue to age and settle more and larger points of entry will become available. While dead rodents, lurking skunks, and roaming bears do not immediately affect our educational programming, they do pose a daily and potentially significant health and safety risk.

### 2. HVAC

2A. Proper Ventilation Design and Capacity - Animas High School is currently mitigating risk posed by insufficient HVAC by reducing educational programming. Nonetheless, some art supplies and chemicals are used and stored on campus that pose small and ever present respiratory health risks.

2B. Universal Air Circulation and Efficiency - Animas High School is unable to create school-wide air circulation in the current facility. A lack of uniform air circulation and classroom temperatures negatively impacts the learning environment.

2C. Lifespan - Animas High School will need to replace its current HVAC systems within the next 6 years and/or increase maintenance costs, which will dramatically affect our educational offerings.

### 3. Restrooms

3A. Non-ADA Compliant Restrooms - Animas High School is unable to create ADA compliant bathrooms in the current facility because of the costs associated with rerouting the plumbing and re-positioning bathroom stalls. Additionally, the needed area to bring the stalls into ADA compliance would come at the cost of shrinking other stalls to a point where they cannot effectively be used. This need is urgent for educational equity and accessibility.

3B. Number of Bathrooms - Animas High School is unable to mitigate the lack of sufficient number of toilets because the school is already undersized. Even if there were sufficient funds to pay for new restrooms, there is nowhere in the buildings to

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locate them. This need is somewhat urgent for the well-being of our students and for educational programming.

3C. Maintenance - Animas High School is unable to fully mitigate the sanitation issues that stem from lack of school-appropriate, institutional-grade construction materials needed for bathrooms while in its current location. It would be cost prohibitive to remodel the bathrooms. This need is somewhat urgent for educational programming and health.

3D. Ventilated - Animas High School is unable to mitigate the risk of having not properly ventilated bathrooms in its current location because it would be cost prohibitive to remodel the bathrooms. This need is somewhat urgent for health.

3E. Designed for a School Setting - Animas High School is unable to mitigate the risk of substance abuse and violations of personal privacy that accompany the inappropriately designed bathrooms in the current facility. There is no practical way to remodel the bathrooms given the constraints of the building construction. This need is somewhat urgent for educational programming and health.

4. Power Management - Animas High School is unable to provide sufficient and safe power needs in its current facility. This problem will continue to increase as Animas High School stays longer in these facilities and technology needs increase. This need is urgent for safety, security and educational programming. Solutions taken to limit access to the electrical panels on the exterior of the building will make the educational disruptions of tripped circuit breakers more significant.

5. Deteriorating Roof Conditions, Pooling Water, Leaks and the Potential for Mold

The roof is in immediate need of repair. However, due to the nature of modular construction, the roofing issues will continue to get worse as the buildings settle, even with ongoing maintenance. Water leaks have been a continuous problem since Animas High School moved into the modular facilities, and they will continue to get worse as the buildings age. The cost of repair and maintenance to the roof and the damaged interior structures will continue to increase over time. Although there is no current evidence of mold in the buildings, this is an ever present health risk with the water intrusion. The only viable solution is a new permanent facility with a better designed and constructed roof.

### EDUCATIONAL SUITABILITY

1. Modular Construction Limits Delivery of College Prep Curriculum - The modular classrooms and learning spaces are insufficient for project-based curriculum. The urgency is low as Animas High School is currently delivering an excellent education, as demonstrated by performance ratings, in spite of the modular facilities. The importance factor is high with regard to educational adequacy. The current site limits the ability to provide a first-class education and also presents safety concerns with regard to outdoor activities. The lack of minimally adequate science classrooms, as defined by Durango Fire Protection District, will not be mitigated in the current location due to building and prohibitive costs.

2. Lack of Ventilated Shop and Art Space Restricts Curriculum - The lack of properly ventilated industrial science (Shop) and studio art spaces will not be mitigated in Animas High School's current location due to building and prohibitive costs. Students and staff will continue to inhale noxious fumes from equipment and material used throughout our school, but especially in the industrial science and art classrooms. This need is urgent for health and educational programming.

3. Modular Facilities Do Not Meet State Standards for HVAC, Light, and Acoustic Efficiencies - Animas High School is unable to meet the state's definition of high-performing building standards in the current facility due to the construction of the buildings. The school will continue to provide an excellent education in spite of the facilities instead of with the help of our facilities.

4. Limited Small Group and Breakout Rooms for ESS and Individualized Services - The lack of small breakout spaces will not be mitigated while Animas High School is in its current location. There is a high degree of risk here in that many non-instructional staff have legally confidential conversations with students where others can hear.

5. Learning Environment Adversely Affected by Proximity to Highway - The proximity to the highway will not be mitigated in the current location. Animas High School will continue to fail to provide a safe environment away from car exhaust pollution, loud highway traffic noise, vibrations associated with tractor trailers passing, and the inability to have a conversation outside.

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The urgency is low.

6. Classroom Size in Modular Facilities Limits Effectiveness of Project Based Model - The lack of meeting CDE's recommended space requirements for Expeditionary Learning type schools will not be mitigated in the current location. Animas High School is currently at 97 sq ft per student and has been as low as 63 sq ft per student.
7. Lack of Permanent Exhibition Space Impacts Curriculum - The lack of space for student work displays will not be mitigated in the current location. Animas High School is failing to provide an essential element of project based learning: demonstration and display of student work as exemplars. The urgency is low.
8. Split Campus Limits Collaboration - The separation of the two buildings will not be mitigated while Animas High School is in the current facility. The physical distance, as well as the physiological effect of needing to traverse inclement weather in order to collaborate hampers teachers and students from truly fulfilling our mission, vision, and values. The urgency is low.
9. Limited Indoor and Outdoor Learning Space for Large Scale Student Projects - The lack of outdoor learning spaces will not be mitigated while in the current location. The urgency is moderate because some projects, like the solar car, are currently being stored outside and could present safety and health hazards when electrical elements are left exposed to winter conditions.
10. Limited Recreation Options - The lack of large-scale recreation areas will not be mitigated while in the current location. While Animas High School does not anticipate including a gymnasium or single-use cafeteria/auditorium in the permanent facility, the abundant breakout spaces, larger commons, proximity to green space and planned facilities within the Twin Buttes development will enable Animas High School to mitigate this problem in the new facility.
11. Thin Walls Interfere with Curriculum Delivery - The lack of properly designed music spaces and recording spaces will not be mitigated in the current location. Animas High School's music classes will continue to interrupt other classes, and students will continue to need to displace non-instructional staff for the recordings that are needed in their projects. Because this is a daily disruption, the urgency is moderate but there is no health or safety risk.
12. Site Constraints Prohibit Additional Improvements of Modulares - The ability to meet CDOT, CDE, City of Durango, and Durango Fire site recommendations and requirements will not be mitigated in the current location. Animas High School will continue to put students at risk by only adhering to the bare-minimum requirements set by local, regional, and state agencies.
13. Lack of Adequate Central Gathering Space - The lack of a kitchen space and large enough commons area has been something that Animas High School has dealt with for 10 years and is unable to mitigate in its current location. In a day-to-day operations aspect, it creates a risk of monitoring students across the entire campus instead of in a central location during lunch. The lack of a kitchen means that Animas High School either utilizes equipment not suitable to the facilities (i.e. camping stoves or hot plates) or transports students to a facility that has proper kitchen facilities.

### CROWDING

1. Inadequate Square Footage per Student - Animas High School is unable to meet CDE's recommendation for square footage per student, parking and other crowding issues in its current site. The current site is inundated with pedestrian traffic made up of students walking between modular facilities, students walking from the remote lot, and students having outdoor time in the parking lot. Combined with vehicle stacking, access road traffic, service delivery trucks, trail riders, and emergency vehicle loops, it is only a matter of time before there is a pedestrian-vehicle accident. It is extremely urgent that the school find a permanent location that provides adequate separation of students, their outdoor projects, and vehicles so as to remain a viable choice in our community.
2. No Room for Expansion/Right Sizing - Animas High School is currently stable as a population, but the local school district and city have projected an increased student population over the next decade. This facilitates a need to accommodate the growing population at the current facility as well as the local comprehensive high school, as they are both nearing capacity.

**Does this Project Conform with the Public School Facility Construction Guidelines?** Yes

# BEST FY2019-20 GRANT APPLICATION SUMMARIES

**If not, provide an explanation for the use of any standard not consistent with the guidelines:**

## **How Does the Applicant Plan to Maintain the Project if it is Awarded?**

Animas High School plans to set aside the recommended PPR for maintenance. The culture of the school is one in which students and staff take on some of the responsibilities of janitorial staff during the day. The school will continue to contract a janitorial team for every-day cleaning and maintenance. Animas High School will also continue to contract with local handymen and other needed specialists for major maintenance needs. Animas High School also has a relationship with the local school district (Durango 9-R) for emergency repairs. All of these various contractors enable the school to provide exceptional cleaning and maintenance at a fraction of the price of a full-time employee.

## **Describe the condition of the public school facility at the time it was purchased or constructed and, if the facility was not new or was not adequate as a public school facility at that time, provide the rationale for purchasing the facility or constructing it in the manner in which you did:**

Animas High School was founded 10 years ago and began operating in a strip mall located on the north end of Main Street in Durango, Colorado. Each year the school grew by a grade level and progressively expanded into the entire strip mall. As the student population grew, the facility became too small and the school was asked to vacate the location by the City of Durango and the Durango Fire Protection District. Animas High School applied for a BEST grant in 2013 at the end of a Master Planning process and was denied a grant.. The school's current campus is in a temporary location until funding is secured for a permanent facility on a nearby plot of land. Animas High School is in the sixth year of a seven year lease on the current site.

Before relocating to its current location in 2013, Animas High School exhaustively evaluated existing facility options in its small rural, Durango community. None of the existing options were viable or affordable. With limited funding for capital construction costs, Animas High School was forced to adopt several modular units for its current facility, while addressing the facility's shortcomings, like transporting Chemistry students to the local college for lab work, in order deliver its college-prep curriculum.

This current campus is roughly 24,000 square feet in two buildings that are each made up of 7 modulares. The modulares were new at the time of purchase. Within these two buildings are 20 classrooms, a commons area which is approximately the size of three classrooms, special education space, and administration spaces. There are 2 sets of bathrooms, 54 parking spaces on site, a remote soft-surface parking lot with an additional 60-100 spaces and a trail connecting the remote parking lot and bus drop-off location within the campus. Currently the school does not have science lab space; properly designed and equipped art, shop and music spaces; flexible breakout educational spaces; or many other amenities typically found in a high school. The building is surrounded by steep hills and a creek then a highway on another side. The site is a boxed-in valley that rarely gets sunlight during the winter. The school had to fund infrastructure improvements such as an intersection to a widely used highway. The lease on the modulares, along with the highway improvements, has saddled the school with debt. Nearly 15% of the school's budget is facility expenses, leaving very little for items that directly serve students.

## **Describe the history of capital improvements made to the facility by the district/charter school in order to make it suitable for students. Include a list of all capital projects undertaken in the affected facility in the last 3 years:**

The initial significant capital improvements took place 6 years ago when the school moved to the current location, amounting to roughly \$3,000,000.

Over the last 3 years, the school has maintained the modulares, addressing typical repairs and repairs unique to modular construction.

In addition to annual maintenance, the school spent approximately \$20,000 this past year on safety and security upgrades to create a controlled access system and install additional cameras throughout the two buildings. Despite these significant safety improvements, the nature of a split campus still seriously inhibits the school's ability to control access and ensure student safety.

## **What options outside of the BEST grant has the applicant investigated or leveraged to address the school's facility needs?**

Animas High School has partnered with the local school district (Durango 9-R) on a mill levy override in 2016 that has helped to solidify the operational budget. Animas High School is currently in talks with local banks about alternative financing options as a contingency plan in case the bond vote is delayed or not approved.

# BEST FY2019-20 GRANT APPLICATION SUMMARIES

**How do you budget annually to address capital outlay needs in your district/charter? Include \$/FTE for the prior fiscal year:**

Animas High School receives capital construction funding from the state's Department of Education as a "qualified charter school." The 2017-2018 allocation for Animas High School was \$68,053. The per pupil operating revenue was \$7,509.46. Animas High School spent \$319,345 during the 2017-2018 school year on facilities and maintenance with \$31,348 devoted to maintenance.

**If relevant to your project, what are your current annualized utility costs, and what amount of reduction in such costs do you expect to result from this project?**

NA

<b>Grant Request:</b>	\$20,072,474.44	<b>CDE Minimum Match %:</b>	26%
<b>Applicant Match:</b>	\$1,056,446.02	<b>Actual Match % Provided:</b>	5%
<b>Total Project Cost:</b>	\$21,128,920.46	<b>Is a Waiver Letter Required?</b>	Yes
<b>Affected Sq Ft:</b>	46,500	<b>Contingent on a 2019 Bond?</b>	No
<b>Affected Pupils:</b>	252	<b>Source of Match:</b>	Capital Campaign Fund
<b>Cost Per Sq Ft:</b>	\$454.39	<b>Escalation %:</b>	3%
<b>Soft Costs Per Sq Ft:</b>	\$71.86	<b>Construction Contingency %:</b>	9%
<b>Hard Costs Per Sq Ft:</b>	\$382.53	<b>Owner Contingency %:</b>	5%
<b>Cost Per Pupil:</b>	\$83,845	<b>Historical Register?</b>	No
<b>Gross Sq Ft Per Pupil:</b>	185	<b>Adverse Historical Effect?</b>	No
<b>Is a Master Plan Complete?</b>	Yes	<b>Does this Qualify for HPCP?</b>	Yes
<b>Who owns the Facility?</b>	Charter School		
<b>If owned by a third party, explanation of ownership:</b>			
<b>If match is financed, explanation of financing terms:</b>			

## Financial Data (Charter Applicants)

<b>Authorizer Min Match %:</b>	25%	<b>CEFCA or financing attempts:</b>	0
<b>&lt; 10% district bond capacity?</b>	NA	<b>Enrollment as % of district:</b>	NA
<b>Authorizer Bond Attempts:</b>	NA	<b>Free Reduced Lunch %</b>	12.4%
<b>Authorizer MLO Attempts:</b>	NA	<b>% of PPR on Facilities:</b>	11.8%
<b>Non-BEST Capital Grants:</b>	0	<b>Unreserved Gen Fund % Budget:</b>	4.07%
<b>FY18-19 CSCC Allocation*:</b>	\$64,586.43	<b>3yr Avg OMFAC/Pupil:</b>	\$1,363.49

\*CSCC Allocation figures are based on a \$25M statewide appropriation. Pending legislation may to revise to \$29.25M

**Who will facility revert to if school ceases to exist?** The facility will move ownership from Animas High School to the Durango 9-R School District.

## BEST Charter School Grant Waiver Application

The BEST grant is a matching grant and each applicant is assigned a unique minimum matching requirement, pursuant to 22-43.7-109(9) C.R.S., to identify their financial capacity. An applicant may apply to the Capital Construction Assistance Board for a waiver or reduction of the matching moneys requirement for their project if the applicant determines their minimum match is not reflective of their current financial capacity, pursuant to 22-43.7-109(10) C.R.S.

Waiver applications are reviewed independent of the grant application. Upon review of the waiver application, the Capital Construction Assistance Board will make a motion to approve or deny the applicant's waiver request.

The Capital Construction Assistance Board shall seek to be as equitable as practicable by considering the total financial capacity of each applicant pursuant to 22-43.7-109(11) C.R.S.

### Instructions

Be specific when answering the questions and explaining the issues and impacts. Your response should include dollar amounts and specific ways in which such issues and impacts make it impossible for the applicant to make its full matching contribution. Please submit meeting minutes, award/non-award letters, official communications, budget documents, or other relevant documentation to support the responses provided.

Question 2, subsections A-H are related directly to the factors used in calculating the matching percentage. Only respond in detail to the factors which you believe inaccurately or inadequately reflect financial capacity. For those factors which you believe accurately or adequately reflect financial capacity, please leave the response blank or type "Agreed".

---

1. Please describe why a waiver or reduction of the matching contribution would significantly enhance educational opportunity and quality within your charter school, or why the cost of complying with the matching contribution would significantly limit educational opportunities within your charter school.

Animas High School has a 7 year agreement with Twin Buttes of Durango for our current location. Animas spent the last several years trying to renegotiate that term and finally this past fall exhausted our last attempt at a compromise. What this means is that unless something changes, Animas High School will need to vacate our current location by October 2020. Our current buildings will not survive the move from our temporary location to the permanent location or any other site, thus Animas High School needs to build a new facility. Animas High School currently utilizes roughly 11% of the budget towards current facilities. The League of Charter Schools recommends that schools spend no more than 15% of their budget on facilities. Without the ability to go to our community for a bond measure, the only way to meet the 27% match for a new facility would be a combination of donors and loans. This would most certainly mean that we would go above the 15% recommended amount of operating expenses diverted towards facilities. It would then mean not being able to provide the education model that exists at Animas High School because too much of the budget would be devoted to facilities, which would potentially close our doors. Animas High School is asking for a waiver so that we can show Twin Buttes movement in the building of a permanent site and thus extend the agreement long enough to build the permanent site. Animas is also asking for the waiver because there is no plausible way of raising the matching funds and we have run out of other options for facilities.

2. Please describe any extenuating circumstances which should be considered in determining the appropriateness of a waiver or reduction in the matching contribution.

The extenuating circumstance involves failed negotiations with Twin Buttes of Durango for an extension of our current location. This means that we need to be out of our current location or in the process of moving by October 2020. Animas High School does not have the ability to raise 27% or roughly \$6 million dollars in order to meet the matching contribution by the required deadlines. Animas High School acts as both an education choice in Durango and a student population diversion for Durango High School. Currently Durango High School will have roughly 1270 students next year with the capacity for 1400 students. Should Animas High School suddenly close because we are not able to secure a new site, Durango High School would not be able to absorb our student population and thus put the Durango community in a precarious situation of an overcrowded high school. Animas High School closing would also mean no other high school choice in Durango, something our community has shown through a mill levy override that they value.

*\*The following are factors used in calculating the applicant's matching percentage. Only respond to the factors which you feel inaccurately or inadequately reflect financial capacity. Please provide as much supporting detail as possible.*

A. Weighted average of district matches which comprise the student population.

Applicant's Weighted Average: 25%

La Plata County has three charter school's within it's boundaries with the rest of the schools district run schools that have the ability to ask the community for bond money. Two of those charter schools are BCDorado Charter School Institute schools that have no ability to ask voters for a tax increase. The other CSI school received a facilities donation that paid for a majority of it's building, thus putting it on par with district erun schools in terms of paying for it's facilities. The four corners as a whole has 6 charter school, with all but s two of those (Animas High School and Mountain Middle School) chartered through the district. This means that most of the schools in this calculation have the ability to utilize bond money for a matches while also not t needing to divert money towards a facilities loan. Animas High School is minimally staffed (with 53% of our h budget towards Instructional staff and 31% towards non-instructional) and a minimal amount towards non- classroom related expenses (5% for state fees, marketing, and instructional materials and 11% towards facilities). We are instead seeking a match of 5% or \$1,056,446.02 of the overall project cost a (\$21,128,920.46). Animas High School currently has a \$500,000 pledge from a community donor and believes that it can leverage that amount for another \$560,000 in to obtain a 5% match. The logic behind this narrative t is that Animas High School received a facilities pledge totaling \$720,000 when it moved to the current h location as well as annually raises between \$120,000 and \$200,000 for operations. Our community is p generous and has the ability to help close that final \$560,000 gap.

r  
izing district have 10% or less bonding capacity remaining?

Applicant's Response: N/A (CSI)

Adjustment: N/A

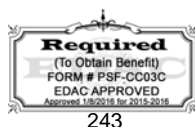
Empty rectangular box for response.

C. Is the charter school in a district owned facility?

Applicant's Response: N/A (CSI)

Adjustment: N/A

Empty rectangular box for response.



D. How many times has the charter school attempted or attained bond proceeds from an authorizer's ballot measure for capital needs?

Applicant's Total: N/A (CSI)

Adjustment: N/A

E. How many times has the charter school attempted to do a special mill levy override pursuant to 22-30.5-405 for capital needs?

Applicant's Total: N/A (CSI)

Adjustment: N/A

F. How many times has the charter school attempted or attained grant funding through a non-BEST source for capital needs?

Applicant's Total: 0

Adjustment: 0% decrease of max 5%

G. How many times has the charter school attempted or attained funding through CECFA or another type of financing?

Applicant's # Attempted: 0

Adjustment: 0% (3% decrease for attempted)

Applicant's # Attained: 0

Adjustment: 0% (5% decrease for attained)

H. Charter school enrollment as a percent of district enrollment.

Applicant's Enrollment: N/A (CSI)

Adjustment: N/A

I. Free/reduced lunch percentage in relation to the statewide average charter school free/reduced lunch percentage?

Applicant's FRED: 4%

Adjustment: +4%

J. Percentage of PPR spent on non M&O facilities costs.

Applicant's % PPR: 11.80%

Adjustment: +1%

K. Unreserved fund balance as a percent of budget.





Applicant's % of Budget: 4.07%

Adjustment: -4%

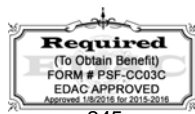
3. What efforts have been made to coordinate the project with local governmental entities, community based organizations, or other available grants or organizations to more efficiently or effectively leverage the applicant's ability to contribute financial assistance to the project? Please include all efforts, even those which may have been unsuccessful.

Animas High School has partnered with Durango 9-R on a mill levy override, which has enabled our operational budget to be more sustainable. Animas High School has been involved in the long range planning committee for the local school district in order to gauge if and when a bond measure would be appropriate. Unfortunately, the timing for a potential bond will be fall of 2020. This timing is past our deadline with Twin Buttes and would leave us without land or a facility to provide an education.

We have also sat down with several banks in town with no success. First Southwest Bank is our current loan holder and has become a CDFI bank, thus enabling it access to funds that other banks do not have access. However, currently First Southwest Bank has not been able to find loan options that would enable us to fully meet our match.

4. **Final Calculation:** Based on the above, what is the actual match percentage being requested?

CDE Minimum Match Percentage:





*Durango Fire Protection District • Fire Prevention Bureau*

142 Sheppard Drive • Durango, Colorado 81303 • 970/382-6000 • Fax 970/382-6028

January 28, 2019

Sean Woytek  
Head of School Animas High School  
271 Twin Buttes Avenue  
Durango, Colorado 81301  
[Sean.woytek@animashighschool.com](mailto:Sean.woytek@animashighschool.com)  
970-247-2474

Dear Mr. Woytek,

Durango Fire Protection District is pleased to provide a letter of support for Animas High School to construct a new school. We support the construction of a new facility for the following reasons:

1. The existing school is located along a busy stretch of Highway 160.
2. There is a sub-standard parking lot at the existing school with overflow parking at a site that requires students to walk along a sub-standard street with no sidewalk.
3. There are no evacuation sites close to the existing facility.
4. The existing facility has limited capability for science labs and/or chemical storage.
5. The existing structures are pre-fabricated modular units that were intended to last 5 years in 2012.
6. Emergency Response to the existing site is sub-standard due to access constraints, site design and topography.

Durango Fire Protection District performs annual fire inspections on the existing facilities. We continually discuss the fact that the buildings are failing to meet the needs of the students from a safety stand point. The Animas High School administration has provided a preliminary site plan for the proposed new facility. We have made comment on the preliminary site plan to ensure adequate access to the site and will review the construction documents for fire code compliance.

We are supportive of the construction of a new facility, constructed under current codes and designed to support the community for a significant length of time. Should you have any questions or concerns, please call me at (970)382-6023

Respectfully,

Karola J. Hanks  
Fire Marshal DFPD



Community Development

January 25, 2019

Andy Stine, Director  
Division of Capital Construction  
Colorado Department of Education  
1580 Logan St, Suite 310  
Denver, CO 80203

**RE:** Animas High School in Twin Buttes Development (Durango, CO)

Dear Mr. Stine,

The City of Durango would like to express our support for the proposed BEST grant for the relocation of Animas High School (AHS) away from its temporary location to a permanent location.

Since AHS moved to its temporary location on US Hwy 160 West, the City has had major concerns with Animas High School being located at its current location for many reasons. The location itself, the proximity to the highway, the unwieldy student drop-off logistics, and parking are all major concerns. Although AHS has now been at its current location for several years, the location was never intended to be permanent. The following concerns make relocation to a permanent, well-designed site a high priority for the City:

1. The school is located along US Highway 160 West, which is one of the busier stretches of highway in La Plata County. This is an area where speed limits change, creating greater propensity for accidents and traffic congestion.
2. There is currently no safe access to outdoor recreation areas for the students. The site is significantly constrained by the highway, a creek, steep slopes, and construction traffic on its primary access/connector road.
3. The majority of parking is located at a remote parking lot which forces staff, students, and parents to walk along a connector road which does not currently have sidewalks.
4. The modular classroom buildings are located very close to the boundaries of a FEMA designated 100-year floodplain, only a few feet from Lightner Creek which runs along the property's frontage.

The Twin Buttes development has set aside an internal site for the school. This designated location has none of the problematic issues cited above. The proposed school location will anchor a mixed-use and residential area. AHS will also be a neighbor of a future elementary school, creating a unique new neighborhood.

For all these reasons the City is very supportive of Animas High School relocating its campus to a better, safer, and more suitable property for a high school.

Should you need additional information, please contact Planner Mark Williams at [Mark.Williams@durangogov.org](mailto:Mark.Williams@durangogov.org) or by phone at 970-375-4854.

Sincerely,

A handwritten signature in black ink, appearing to read 'K. Hall', written over a light blue horizontal line.

Kevin Hall, AICP  
Assistant City Manager/Community Development Director

CC: Ron LeBlanc, City Manager  
Scott Shine, Planning Manager  
Mark Williams, Planner II  
Project File



## COLORADO

Department of Transportation

Region 5

Traffic & Safety

3803 N. Main Avenue, Suite 100

Durango, CO 81301

January 28, 2019

Sean Woytek  
Head of School  
Animas High School  
PO Box 3496  
Durango, CO 81302

Dear Sean,

This letter is to support your efforts to relocate the Animas High School at 271 Twin Buttes Ave., Durango, CO 81301 to the interior of the Twin Buttes Development.

CDOT issued Access Permit 515077 on May 13, 2016 to Twin Buttes. The Permit grants access to the School to the parking area for the existing modular classroom buildings. At that time, it was understood that the school would work to find a more suitable site for the school in the interior of the Twin Buttes Development. We are pleased that the School has finally located a proposed new site. Construction of the final configuration of the US 160 access location for Twin Buttes, which the school will use, is already completed and in use. The School will continue to use the same access location and therefore will not impact current levels of traffic.

CDOT perceives that this new site is much safer than the existing site. The traffic volumes at the current location, which is near a very busy highway, are high. The current student parking location, which is remote to the school, is too small and too close to the highway. Also, some parents drop off their kids at an unsafe location on the highway despite signs on the highway prohibiting this drop off location. School Staff have done a wonderful job implementing a student drop-off/pick-up circulation plan, but some parents disregard this plan.

Overall, moving the school to the interior of the Twin Buttes Development and farther from the highway will alleviate these safety concerns.

CDOT fully supports the proposed new school. Please contact me if you have any questions.

Julie Constan, PE III  
970-385-1449 desk

Representative Barbara McLachlan  
200 East Colfax Avenue  
Room 307  
Denver, CO 80203

February 21, 2019

Dear BEST Committee:

I am so proud to represent La Plata County in Denver, as well as the excellent students, teachers, and staff of Animas High School. As a former teacher at Durango High, I have watched this neighboring school grow, move to larger spaces, grow, and move to larger spaces again. They are so deserving of a BEST grant to continue the academic success they have nurtured for the last ten years.

During all the moves, the students have continued to succeed, bringing project-based learning into the educational conversation, where it never was before. The school offers a positive alternative for high school students in Durango, and will continue to do so.

I toured the school recently after speaking to a group of parents, teachers, and students, and saw exactly why they need a new building. The current version has two modular units, and though they are decorated and furnished, they are not conducive to the large-project learning the students enjoy. The students and staff need a permanent and safe space where they can thrive. Their current site provides unnecessary risk, whereas the new one has been designed to both provide safe spaces to learn and ample space to park away from the highway.

Animas High has been growing into becoming the epitome of a prominent 21<sup>st</sup> Century school, and a new building with thoughtfully crafted classrooms, flexibility, and functional design gives them the opportunity to do even more.

School District 9R and Animas High have developed a positive relationship as they support each other's endeavors. Animas students are involved in the community and Durango High activities, and we all hope they have a permanent space to call home for years to come. I hope BEST sees the value in investing in Durango's vibrant educational system.

Very sincerely,

Barbara McLachlan



Dan Snowberger  
Superintendent of Schools

January 29, 2019

Division of Capital Construction Assistance  
Colorado Department of Education  
1580 Logan St, Suite 310  
Denver CO 80203

Subject: Letter of Support for Animas High School's Application for BEST Funds

Dear Board of Directors:

I am writing in strong support of Animas High School and its need for a permanent, safe location for the quality education it provides to our region's youth. Their enormous success, while operating out of a modular, temporary campus has been nothing short of amazing. The model offered at Animas High School provides one more choice for students in Durango and fits well with our strong community desire for educational choice in our community. We are fortunate to have them as partners in Durango. The district remains interested in supporting Animas with funding support through a future bond initiative to ensure its successful completion of a building.

Animas High has done its due diligence in planning and has acted to find the most affordable and appropriate location for its permanent school. Through local support, Animas High has undertaken a master planning process, site selection process, and funding assessment. Funding from the BEST program will enable the small community of Durango to offer its students a quality education in a safe and suitable building. We are excited to have Animas as a partner in serving our students within the Durango Community.

I urge your support of Animas High's proposal. Please do not hesitate to contact me should I be able to provide further information. Thank you for your consideration.

Sincerely,

Dan Snowberger  
Superintendent

● **Facilities Impacted by this Grant Application** ●

**LAKE COUNTY R-1 - West Park PK-2 ES Replacement - Westpark ES - 1962**

<b>District:</b>	Auditor - Lake County R-1
<b>School Name:</b>	Westpark ES
<b>Address:</b>	130 W 12th St
<b>City:</b>	Leadville
<b>Gross Area (SF):</b>	41,019
<b>Number of Buildings:</b>	1
<b>Replacement Value:</b>	\$11,975,059
<b>Condition Budget:</b>	\$7,667,431
<b>Total FCI:</b>	0.64
<b>Adequacy Index:</b>	0.16



**Condition Budget Summary**

System Group	Replacement Cost	Requirement Cost	SCI
Electrical System	\$1,702,282	\$1,715,425	1.01
Equipment and Furnishings	\$401,757	\$502,196	1.25
Exterior Enclosure	\$2,135,538	\$1,428,761	0.67
Fire Protection	\$11,982	\$400,015	33.38
HVAC System	\$1,066,506	\$122,609	0.11
Interior Construction and Conveyance	\$2,876,591	\$2,186,664	0.76
No System Group	\$658,344	\$622,436	0.95
Plumbing System	\$633,220	\$636,183	1.00
Site	\$1,050,768	\$420,479	0.40
Structure	\$1,438,072	\$18,091	0.01
<b>Overall - Total</b>	<b>\$11,975,059</b>	<b>\$8,052,859</b>	<b>0.67</b>



# BEST FY2019-20 GRANT APPLICATION SUMMARIES

**Applicant Name:** LAKE COUNTY R-1

**County:** Lake

**Project Title:** West Park PK-2 ES Replacement

**Applicant Previous BEST Grant(s):** 6

**Has this project been previously applied for and not funded?** No

**If Yes, please explain why:**

## Project Type:

- |  |   |  |  |
|--|---|--|--|
| <input type="checkbox"/> New School                    | <input type="checkbox"/> Roof               | <input checked="" type="checkbox"/> Asbestos Abatement | <input type="checkbox"/> Water Systems   |
| <input checked="" type="checkbox"/> School Replacement | <input type="checkbox"/> Fire Alarm         | <input type="checkbox"/> Lighting                      | <input type="checkbox"/> Facility Sitework   |
| <input type="checkbox"/> Renovation                    | <input type="checkbox"/> Boiler Replacement | <input type="checkbox"/> Electrical Upgrade            | <input type="checkbox"/> Land Purchase   |
| <input type="checkbox"/> Addition                      | <input type="checkbox"/> HVAC               | <input type="checkbox"/> Energy Savings                | <input type="checkbox"/> Technology  |
| <input type="checkbox"/> Security                      | <input type="checkbox"/> ADA                | <input type="checkbox"/> Window Replacement            | <input checked="" type="checkbox"/> Other Demolition of existing West Park ES on same site |

## General Information About the District / School, and Information About the Affected Facilities:

Lake County School District formed in 1877 and its boundary area is 384 square miles. The mission of the district is: "LCSD challenges students to reach their fullest potential through personal, engaged and rigorous learning in the classroom and beyond." LCSD serves all of Lake County and the county seat of Leadville, America's highest incorporated city at 10,200 feet in elevation. Economic drivers in our district include mining and tourism, both of which are subject to cyclical economic booms and busts. Lake County serves as a bedroom community for neighboring resort communities; approximately 70% of Lake County residents commute out of the county for work. Hispanic students account for 70% of the student population. English language learners are 43% of our students (in the top 3% in Colorado). The percentage of our students to qualify for free and reduced lunch is 64% (in the top 20% in Colorado).

LCSD serves approximately 1,000 students with approximately 200 staff. The district maintains over 350,000 square feet of facilities. Our maintenance program is led by facilities staff equipped with HVAC, electrical, carpentry and general maintenance skills. Four employees handle maintenance duties across the district. The district is committed to keeping our assets in the best possible condition for our students, staff and community. Our facilities staff works diligently on prioritizing facilities maintenance projects and works to be as proactive as possible with limited funds.

LCSD has been fortunate in the past to have been awarded several BEST grants. In 2012, we were awarded an emergency BEST grant to repair failing heating system components at West Park. Also in 2012, we were awarded a BEST grant to renovate and add onto our existing high school and move the 7th and 8th grade students into this updated facility. In 2014 and 2015, we were awarded BEST grants for our Intermediate School to address a leaking roof beyond its life and to abate the mercury flooring in our gym. All of our BEST grant projects were completed on time and on budget. Additionally, our High School project included an extensive and inclusive community input process, something we would replicate if awarded this application.

The district struggled with academic performance for many years and had schools on the accountability clock. By 2017, all of the district schools were off the accountability clock and received state ratings of "performance." This turnaround can be attributed to a shift in instructional strategy and a partnership with EL Education (formerly Expeditionary Learning), as well as a commitment to educating the whole child through programs to support behavioral and physical health as well as increased physical activity and learning in the outdoors. In a video produced in 2018 by CDE about our district's successful turnaround, the BEST/bond program that enabled the renovation and expansion of our high school facility was highlighted as a key turning point in building the momentum for positive change in the district.

West Park Elementary serves 200 students in grades K-2. LCSD was excited to announce the transition of this school to an Expeditionary Learning (EL) curriculum and instructional model starting in 2014. Academic achievement at West Park has been steadily improving as measured by state reading assessments; at the middle benchmark of 2018-19, the school saw an 8%

## BEST FY2019-20 GRANT APPLICATION SUMMARIES

increase in students reading on grade level from a year prior.

The Center Early Childhood Programs at Pitts Elementary School is LCSD's pre-kindergarten program. It serves 90-100 students ages 3-5 years through a blended funding model utilizing Head Start, Colorado Preschool Program, special education, private foundation and tuition funding. Our district's youngest learners are currently located in Pitts Elementary School, but if successful with this BEST grant application and a 2019 bond, they will move into a new West Park facility.

### Deficiencies Associated with this Project:

#### West Park Elementary School

CDE completed the facility assessment for West Park Elementary School (WPE) in July of 2017. Per this report, the FCI of the building was rated at 0.64. Based on information from the facility assessment program, this FCI was tied for 12th in the state of highest FCI. However, five of the schools with higher FCIs have been funded for replacement through a BEST grant and/or bond, moving WPE up to #7 in the state with highest FCI of all school facilities assessed to date.

Upon receiving the assessments from CDE, LCSD decided they needed to act quickly and thoughtfully to address the deficiencies at this facility. They engaged in a master planning process in late 2017 and through a competitive procurement, selected a master planning firm comprised of architects, engineers and a general contractor for cost estimating. The district engaged an owner's representative and an environmental consultant to round out the master plan team. The master plan team undertook a thorough facilities assessment and planning process to provide more detail to the work done by CDE staff.

Deficiencies at WPE are critical and need to be addressed. These issues include, security, hazardous materials, water supply, sewer service & plumbing systems, indoor air quality, heating system, structural systems, electrical systems, roof and building envelope, traffic safety, accessibility and interior systems:

**Security:** schools built in WPE's vintage did not design security into the facilities. WPE is lacking a safe and secure entry vestibule, access control system, integrated panic button, visibility to see who is approaching the building. The bell and PA system are original to the building and in the event of an emergency, the ability to reach all classrooms with an announcement is not reliable, putting students and staff at risk. The school's fire alarm has old horn strobes, but no communication functionality with speakers. The district does the best they can with the facility by having a doorbell camera and locking exterior doors during the school day, however this school is lacking modern security and safety features that would be a necessity in any new school project.

**Hazardous Materials:** LCSD worked with an environmental consultant to test all suspected areas of hazardous materials in WPE. The test results came back staggering as almost all of the rooms have at least one building material containing asbestos. There is asbestos containing materials (ACM) in the wall plaster, drywall texture, floor tile, sheet flooring, floor mastic, cove base mastic and block filler on the CMU walls that comprise of the walls for almost every interior room in the building. The ACM abatement has been budgeted through an abatement contractor familiar with working in Leadville.

**Water Supply:** As noted in the CDE assessment and confirmed by the master plan Civil Engineer, the water service to the building is beyond its useful life. Failure of this service would cause the school to shut down until costly repairs are made. If the service line were to fail in the winter could cause a longer school shut down as repairs would take longer in the freezing temperatures. There is concern that if the supply line continues to deteriorate, the safety of the drinking water at the school could be in jeopardy.

**Sanitary Sewer and Plumbing Systems:** As noted in the CDE assessment and confirmed by the master plan Civil Engineer, the sewer service to the building is beyond its useful life. The line has experienced several failures over the past few years resulting in raw sewage backing up into the school, causing portions of the building to be shut down for costly repairs and students did not have access to one half of the toilet facilities. Images from a robotic camera in the sanitary service line showed roots from plants growing through into the areas where the clay tile pipe has failed. This line is in need of full replacement. In early February, 2019, a domestic water pipe failed from freezing and caused water damage inside a classroom.

The sanitary interior plumbing system throughout the building is original and beyond its useful life. The maintenance staff does its best to keep up with pipe repairs as needed, but the frequency of these repairs is increasing.

## BEST FY2019-20 GRANT APPLICATION SUMMARIES

**Fire Sprinkler:** WPE has no fire sprinkler system in any areas of the facility.

**Heating Systems:** The school is heated through hydronic heating water boilers. The four boilers serving the system were installed in 1997-1999, so are beyond their intended life. Currently one boiler is completely down and one is partially functioning. If one more ceases to work properly, the school would have no redundancy. With the cold temperatures in Leadville, the school would have to shut down if the boiler system failed for emergency repairs.

**Structural Systems:** The school was constructed in 1962. It is unknown under which building code the project was constructed, however the consultants have noted since that era, the snow load design code in Leadville has increased substantially. The roof structural system is a wood frame 2x10 joist system that would not be considered an appropriate structural construction today for a school. The majority of the walls in the facility are concrete masonry units (CMU). Several years ago, a commercial building in Leadville collapsed after a heavy snow storm. After that building failure, concerned parents contacted the district about snow accumulation on WPE's roof. The district implemented that whenever snow accumulates more than 24" (a common occurrence at an elevation of 10,000'), maintenance staff shovels all the snow off the roof. This task typically takes the four maintenance staff three to four days to clear. This is an inefficient use of the staff's time as they could be tending to other critical facilities needs during these hours instead of shoveling snow.

**Electrical System:** With the exception of some distribution equipment, the electrical system is original to the building. As time has passed, the facilities director has a more difficult time to find replacement parts for a system of this age. The system is beyond its useful life and the facilities director fears he will be unable to source parts, leading to difficulty keeping the school open when electrical systems fail. The classrooms still have fluorescent light fixtures, installed in 1990, in which studies have shown can contribute to poor learning performance. The exterior lighting is inadequate and unsafe in the dark. We fear someone could be injured by not having adequate lighting at the exterior and parking lot.

**Indoor Air Quality:** Radon is the second leading cause of lung cancer per the American Cancer Society and World Health Organization. Over the years, WPE found radon present in the building over the suggested limit from the United States Environmental Protection Agency (EPA). Radon levels can fluctuate in buildings throughout the day and the season. The last testing, in 2016, found 10 rooms in WPE and 8 rooms in Pitts either exceeding or very close to EPA limits considered hazardous. These rooms were mostly classrooms, along with cafeterias, gyms and other learning environments.

**Roof and Building Envelope:** The TPO roof is beyond its useful life and was installed in 1990. While there are no current active interior roof leaks, thanks to a rigorous maintenance plan, the roof scuppers are beginning to fail, allowing water to infiltrate into the exterior building envelope. We are also concerned about snow and ice shedding from the roof causing a risk of injury. The Mechanical Engineer on the master plan team noted the building envelope is in poor condition and not compliant with current energy codes. The windows are mostly original and not energy efficient. Some window latches have broken over time and are a security hazard.

**Traffic Safety:** When the school was originally designed and constructed, most students used the bus for transportation. Today, more parents drop off their students than when the school was built, causing traffic and safety concerns in the neighborhood. While buses drop students off at the back of the school, the single parent drop off lane in front of the school has become congested and dangerous. This lane is adjacent to the street and does not allow for queueing off street for parents who drop off their children. This causes an unsafe condition on the street with potential vehicular accidents that could cause injuries. In addition, parents who park and walk their children into school have limited parking options, have to cross the street without adequate crosswalks, and also have to navigate the congested drop off lane. For several years the Lake County Sheriff's Office supplied a deputy to observe and monitor parent drop off due to these hazards; this is no longer common practice due to short staffing.

**Accessibility:** The master plan team noted the site does not meet ADA compliance. In addition, the interior also does not meet ADA in any of the bathrooms nor handrails. While we do not currently have a student or staff member who uses a wheelchair, last year a student broke his leg and had to use a wheelchair. He could not close the stall door for privacy in the bathroom and a staff member had to stand outside while he was using the facilities. This was an embarrassing situation for the student with

## BEST FY2019-20 GRANT APPLICATION SUMMARIES

a temporary injury. We are unsure what accommodations we could make for a student or staff member who relied on a wheelchair everyday.

Interior Systems: The CDE assessment noted that almost all interior systems such as casework, flooring, windows and plumbing fixtures are beyond their useful life. These items were confirmed by the master plan team and replacement was recommended. In addition, our technology infrastructure within the school is antiquated and in desperate need of updating for 21st century learning; several connections in the school are still over Cat 3 cable, which has not been commonly in use since the 1990s. Very thick walls also make adequate wireless coverage and access a constant challenge.

The majority of the deficient systems discussed above were noted in the CDE assessment recommending replacement by 2021. This school has urgent needs based on information from the professionals at CDE and our hired consultant team. If this grant application were awarded and the district were to have a successful 2019 bond measure, the new school would be opened by the 2021 school year.

### Margaret J. Pitts Elementary

CDE completed the facility assessment for Margaret J. Pitts Elementary School (Pitts) in July of 2017. Per this report, the FCI of the building was rated at 0.67. Based on information from the facility assessment program, this FCI was tied for 10th in the state of highest FCI. However, five of the schools with higher FCIs have been funded for replacement through a BEST grant and/or bond, moving Pitts up to #5 in the state with highest FCI.

After receiving the report from CDE, district administration also focused on the Pitts facility as it currently holds the pre-kindergarten program in one wing of the building. It was apparent that the pre-kindergarten learning environment needed to be addressed urgently. The master plan team that was procured was tasked with evaluating all facilities in the district to identify deficiencies district-wide. Through our master planning process, the district believed the best solution was to move the pre-kindergarten children into a new facility with the K-2 students. We are not asking for BEST Grant funding to address Pitts because we would move students into the new WPE, however we wanted to make sure the CCAB was aware of the poor condition of our existing facility housing Pre-kindergarten students.

The most deficient systems in Pitts are similar to those at WPE: security, water supply, sewer service & plumbing systems, electrical systems, roof and building envelope, accessibility and interior systems. Almost all of these systems are original from 1955, or have had some renewal between 1985-1995 (24-34 years ago). Similarly to WPE, the CDE report shows most systems as needing replacement by 2021 if it were to continue to operate as a school facility.

The pre-kindergarten program occupies one of two classroom wings in Pitts. In the summer of 2018, the district administration moved their offices into the other classroom wing at Pitts. The previous district office building was a pre-manufactured metal building that was retrofitted into offices many decades ago. The building was not conducive for the district business offices for many reasons, but here are some highlights: the roof in that building constantly leaked, requiring garbage cans to be set up in strategic locations to catch the dripping water; the concrete floor settled so much that office chairs on wheels would roll from one side of the building to the other; and the location was not central to other school buildings nor the town. Moving the district administrative staff employees into Pitts solved the problems with the former district office building. One former classroom is the Board of Education meeting room and allows for a more central location for people living in Leadville to attend meetings. The former district office building is now used as cold storage.

### **Proposed Solution to Address the Deficiencies Stated Above:**

#### District's Master Plan Process

Prior to 2018, the district's last facilities master plan was completed in 2011. The 2011 plan primarily addressed urgent needs related to Lake County High School, which was renovated and expanded through a BEST grant awarded in 2012. It was important to undertake a new master plan process to evaluate and prepare to meet the rapidly expanding needs of our elementary schools. Through a procurement process, the district hired TreanorHL to lead and complete the new master plan, which was approved by the Board of Education in January 2019.

The district formed a visioning team to guide the master plan process. The visioning team included 12 members from a variety of stakeholder groups, including LCSD staff, students, parents and community leaders. Meeting between March and

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December 2018, the visioning team established core values for the master plan; oversaw the facility assessment process and demographics study; evaluated options for the master plan; and established the final priorities. The core values for our facilities, used throughout the master plan were:

- Safe, secure and promoting healthy development;
- Equitable for all learners;
- Engaging and inspiring;
- Right-sized, located appropriately, and flexible;
- Technology-rich and preparing students for a wide-range of post-secondary options and careers;
- Community-oriented;
- Energy-efficient and in tune with our natural environment.

Working alongside the visioning team was an executive committee made up of the superintendent, finance officer, operations and maintenance director, school board member and representatives from TreanorHL and NV5, our owner's representative. The district has also been keeping the larger Lake County community informed about the process through press releases and local media coverage.

LCSD convened a community meeting in October 2018 to share progress on the master plan and solicit input on setting project priorities. Fifty community members attended. At the end of the meeting, the vast majority of attendees rated the district's facilities needs as "very urgent." Attendees were also asked to help prioritize master plan projects. The visioning team, executive committee and community meeting all attendees were all in agreement that the top priority for the district should be the replacement of learning environments for PK-2 students.

Given the identification of this top priority, the district engaged the current West Park principal and the current director of The Center Early Childhood Programs in discussions about the needs of their schools from a student safety and academic program perspective. These two school leaders joined the executive committee in touring three different elementary/pre-K schools in the Eagle and Roaring Fork valleys to continue to refine the vision for a new PK-2 school in Lake County.

Facility Solution: The visioning team and executive committee looked at several options to best serve the needs of the students in PK-2. A renovation of both schools was reviewed and estimates were established. A renovation of WPE with a PK addition was studied for the existing WPE site and estimates were established. A new PK-2 school was studied and estimated at two different sites: the WPE site and at school-district owned property adjacent to the Intermediate School.

The costs of the WPE and Pitts renovation were found to be more costly than building a new PK-2 school at the WPE site. A new school at the Intermediate School site was found to be a little more expensive because the land is sloped and heavily wooded.

The visioning team analyzed the cost and site information and recommended the district build a new PK-2 school at the WPE site and move the PK students from Pitts into the new facility. Contributing to this recommended site, in addition to the Intermediate site being more costly, was the following: the Intermediate site would move all 1,000+ Lake County School District students within a city block and concerns about traffic weighed heavily on the team; the Intermediate site does not receive much sun and there were concerns about long term maintenance because of the exposure; the Intermediate site would also place the youngest students in the district in close proximity to a busy road and there were concerns about safety. Pros for the WPE site included an existing site with flat topography and existing utilities; WPE is in an area of Leadville that is close to the public library and senior citizens home; the district students and the surrounding neighborhood enjoy their new play yard and wanted to keep it as part of the school. Ultimately a new PK-2 school at the WPE site was the favored site from the visioning team and executive committee.

Once the recommendation was made by the visioning team, TreanorHL worked with the executive committee and school principals to refine a space program for the new PK-2 school at the WPE site. The new school will serve all of our PK-2 students and will be 58,459 SF. The new school will be designed for modern security, energy efficiency, free of hazardous materials, conducive to 21st century learning, provide for teacher and student collaboration space and allow for all of our PK-

## BEST FY2019-20 GRANT APPLICATION SUMMARIES

2 students to learn under one roof. The site plan provides for an expanded, off-street parent drop off lane to allow for on-site queuing of vehicle traffic, moving the unsafe backup of cars off of the street during drop-off and pick up. Technology deficiencies will also be addressed with updated modern infrastructure with new servers, switches and wireless access points throughout the new facility, as well as new end-user devices for students.

The district will analyze options as it relates to pursuing LEED, CO-CHPS or Green Globes and commits to pursuing one of these programs and targeting the certification level required by BEST.

In addition to addressing the critical deficiencies identified of security, hazardous materials, water supply, sewer service & plumbing systems, heating system, structural systems, electrical systems, roof and building envelope, traffic safety, accessibility and interior systems at WPE that a new building would address, the visioning team recommended two program components they would like to see included in the new school: plan for future expansion and a larger gym space.

Plan for the future: The recommendation of the visioning team was to plan thoughtfully for the future. They realize that in the next few decades, the Intermediate School (grades 3-6) will be nearing its end of life. The visioning team asked TreanorHL to plan a location for a future addition for grades 3-6 onto the new PK-2, so eventually the new PK-2 school could be converted into a PK-6 twenty or so years from now. The group felt having larger common spaces to accommodate the future addition was a fiscally responsible approach for this phase of the school construction. Adding onto common spaces would be more difficult and costly in the future.

Gym Space: As part of the master plan, it was determined that the district did not have sufficient gym space to accommodate indoor events for students across the district. Because it can snow every month of the year in Leadville and temperatures can be below freezing much of the school year, the climate at 10,000' above sea level forces students to have recess time inside for the majority of the school months. A larger gym was recommended for both indoor recess programming and district wide use for students in grade levels PK-12. It was also thought that the community would be more likely to pass a bond if there was additional gym space that is in short supply in Leadville. Finally, to honor the recommendation of thoughtfully planning for the future, a larger gym space could accommodate a PK-6 school in the future without triggering an expensive expansion.

With a successful BEST grant and 2019 bond, design would commence in the fall of 2019, construction would start in the summer of 2020 and students would be able to use their new facility by the 2021-2022 school year. Students would continue to use WPE and Pitts for the 2019-2020 and 2020-2021 school years. WPE would then be abated and demolished in the summer/fall of 2021. Pitts will continue to be used as district office space. Currently, a few local non-profits use classrooms as office space. The district would consider allowing other non-profit or local governmental entities to utilize the current pre-kindergarten wing at Pitts as office space once those students move to a new West Park facility.

### How Urgent is this Project?

We do not have bonding capacity to fully fund a new school or the extensive and costly renovations that are desperately needed, therefore our students would continue to attend school in this building. If the boiler, water service or sewer fail, then we would have a crisis without adequate space to educate our students who attend WPE or pre-kindergarten at Pitts. Outside of the BEST Grant program, we would be unable to fund raise the large amount of funding needed to address band-aid solutions nor build a new facility.

We want to reiterate that the two schools that currently serve our PK-2 students are #5 and #7 on the state's list of schools with the highest FCI. We live in constant fear of a major systems failure in one or both of these schools, which would require us to divert limited resources to what would ultimately be a band-aid fix. Though these schools have served Leadville/Lake County students for more than 50 years, it is time for a new solution. We long for the ability to focus all of our energy on the educational program for our youngest learners--rather than on worrying about their educational environment.

**Does this Project Conform with the Public School Facility Construction Guidelines?** Yes

**If not, provide an explanation for the use of any standard not consistent with the guidelines:**

### How Does the Applicant Plan to Maintain the Project if it is Awarded?

LCSD prioritizes and commits to regular maintenance of our facilities to extend their value to our students, staff and

## BEST FY2019-20 GRANT APPLICATION SUMMARIES

community for as long as possible. A new school will first be under warranty by the general contractor and then maintained according to our regular schedules. The contractor will also provide training and operation/maintenance information to our maintenance department for all new components such as doors, hardware, windows and flooring. IT software upgrades will be the responsibility of the district over time, and hardware and software costs over time will be budgeted by the district. Having gone through this process since the renovation and expansion of Lake County High School, we understand the needs that arise to maintain a new facility and to plan for replacement of equipment that reaches end of life.

Maintenance of a new school will be budgeted appropriately as part of the district's annual operating budget. Renewal and replacement of equipment will be funded through the district capital projects fund. The district annually transfers money into the capital projects fund from the general fund. The current amounts (2018-19) budgeted are \$270 per pupil. These transfers may increase as needed depending on the projects required each year.

**Describe the condition of the public school facility at the time it was purchased or constructed and, if the facility was not new or was not adequate as a public school facility at that time, provide the rationale for purchasing the facility or constructing it in the manner in which you did:**

West Park Elementary was originally constructed in 1962 as a neighborhood elementary school to serve the students of the Lake County School District. Funding for this school was made available through local tax revenue sources.

Margaret J. Pitts Elementary was originally constructed in 1955 as a neighborhood elementary school to serve the students of Lake County. Funding for this school was made available through local tax revenue sources. While we are not applying for improvements to this facility, it currently houses our pre-kindergarten program, district offices and non-profit offices. We intend to move the pre-kindergarten program into the new West Park Elementary site.

**Describe the history of capital improvements made to the facility by the district/charter school in order to make it suitable for students. Include a list of all capital projects undertaken in the affected facility in the last 3 years:**

In 2012, the school was awarded an emergency BEST grant for \$1.8M, which included abatement of plumbing fittings and pipes serving the heating system and domestic water throughout the school.

In 2015, through multiple grant funding sources such as GOCO, DOLA and Gates Family Foundation, in addition to small community contributions, we were able to improve our Play Yard. We intend to keep our play yard as part of our new program, which will save costs of a new elementary play yard.

In 2017, we replaced the classroom doors and door hardware at West Park to be compliant with safety regulations, at a cost of \$25K. We plan to repurpose the doors and hardware to the extent possible into the new West Park project if awarded.

Because of the age of the facility, we contacted History Colorado several months ago and submitted information to them about our facility. They have noted our plan outlined below is acceptable and we are waiting on their final signed letter about our facility.

**What options outside of the BEST grant has the applicant investigated or leveraged to address the school's facility needs?**

The district has addressed the emergency facility needs at West Park that our capital budget could support, including technology and safety/security investments such as replacing the doors and door hardware. In addition, the district was a key player in the community-organized effort to fund improvements to the West Park play yard. The deterioration of major systems in the building are now of a scope that our current funding sources are insufficient to address them. In addition, we face issues--such as the snow load capacity of the roof--that cannot be retrofit or repaired at a cost below complete replacement.

The district has carefully considered its request for a BEST grant. The district's bonding capacity is currently insufficient to fund a school replacement through local dollars alone. In addition, our community does not have a history of passing bond initiatives; the passage of our 2012 bond to support the expansion and renovation of LCHS was the first successful bond in 30 years. We believe that the fact that the district had secured a BEST grant prior to the 2012 election was absolutely key to the initiative passing. For both of these reasons, it would not be possible from a funding perspective, or pragmatic from a community perspective, to go to our voters with a bond initiative for a new PK-2 school without securing a BEST grant prior to a bond election.

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**How do you budget annually to address capital outlay needs in your district/charter? Include \$/FTE for the prior fiscal year:**

Maintenance of a new school will be budgeted appropriately as part of the district's annual operating budget. Renewal and replacement of equipment will be funded through the district capital projects fund. The district annually transfers money into the capital projects fund from the general fund. The current amounts (2018-19) budgeted are \$270 per pupil. These transfers may increase as needed depending on the projects required each year.

**If relevant to your project, what are your current annualized utility costs, and what amount of reduction in such costs do you expect to result from this project?**

For 2015-17, West Park Elementary averaged \$40,000 in annual utility costs for electric (\$17,000) and natural gas (\$23,000). Over the same three-year period Pitts averaged \$32,000 in annual utility costs for electric (\$15,000) and natural gas (\$17,000).

We expect our energy and water usage to be reduced with a replacement school. The mechanical and electrical engineers have projected that we will see a savings of about 30% of our existing utility costs.

<b>Grant Request:</b>	\$20,805,668.40	<b>CDE Minimum Match %:</b>	47%
<b>Applicant Match:</b>	\$13,870,445.60	<b>Actual Match % Provided:</b>	40%
<b>Total Project Cost:</b>	\$34,676,114.00	<b>Is a Waiver Letter Required?</b>	Yes
<b>Affected Sq Ft:</b>	58,495	<b>Contingent on a 2019 Bond?</b>	Yes
<b>Affected Pupils:</b>	299	<b>Source of Match:</b>	2019 Bond
<b>Cost Per Sq Ft:</b>	\$592.80	<b>Escalation %:</b>	9%
<b>Soft Costs Per Sq Ft:</b>	\$97.74	<b>Construction Contingency %:</b>	9%
<b>Hard Costs Per Sq Ft:</b>	\$495.06	<b>Owner Contingency %:</b>	9%
<b>Cost Per Pupil:</b>	\$115,974	<b>Historical Register?</b>	No
<b>Gross Sq Ft Per Pupil:</b>	196	<b>Adverse Historical Effect?</b>	No
<b>Is a Master Plan Complete?</b>	Yes	<b>Does this Qualify for HPCP?</b>	Yes
<b>Who owns the Facility?</b>	District		
<b>If owned by a third party, explanation of ownership:</b>			
<b>If match is financed, explanation of financing terms:</b>			

**Financial Data (School District and BOCES Applicants)**

<b>District FTE Count:</b>	934	<b>Bonded Debt Approved:</b>	\$11,396,980
<b>Assessed Valuation:</b>	\$196,510,332	<b>Year(s) Bond Approved:</b>	12
<b>PPAV:</b>	\$210,284	<b>Bonded Debt Failed:</b>	\$15,500,000
<b>Unreserved Gen Fund 17-18:</b>	\$2,472,417	<b>Year(s) Bond Failed:</b>	11
<b>Median Household Income:</b>	\$46,176	<b>Outstanding Bonded Debt:</b>	\$9,619,515
<b>Free Reduced Lunch %:</b>	67%	<b>Total Bond Capacity:</b>	\$39,302,066
<b>Existing Bond Mill Levy:</b>	4.021	<b>Bond Capacity Remaining:</b>	\$29,682,551
<b>3yr Avg OMFAC/Pupil:</b>	\$1,828.54		



## BEST School District and BOCES Grant Waiver Application

The BEST grant is a matching grant and each applicant is assigned a unique minimum matching requirement, pursuant to 22-43.7-109(9) C.R.S., to identify their financial capacity. An applicant may apply to the Capital Construction Assistance Board for a waiver or reduction of the matching moneys requirement for their project if the applicant determines their minimum match is not reflective of their current financial capacity, pursuant to 22-43.7-109(10) C.R.S.

Waiver applications are reviewed independent of the grant application. Upon review of the waiver application, the Capital Construction Assistance Board will make a motion to approve or deny the applicant’s waiver request.

The Capital Construction Assistance Board shall seek to be as equitable as possible by considering the total financial capacity of each applicant pursuant to 22-43.7-109(11) C.R.S.

### Instructions

Be specific when answering the questions and explaining the issues and impacts. Your response should include dollar amounts and specific ways in which such issues and impacts make it impossible for the applicant to make its full matching contribution. Please submit meeting minutes, award/non-award letters, official communications, budget documents, or other relevant documentation to support the responses provided.

Question 2, subsections A-H are related directly to the factors used in calculating the matching percentage. Only respond in detail to the factors which you believe inaccurately or inadequately reflect financial capacity. For those factors which you believe accurately or adequately reflect financial capacity, please leave the response blank or type “Agreed”.

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1. Please describe why a waiver or reduction of the matching contribution would significantly enhance educational opportunity and quality within your school district or BOCES, or why the cost of complying with the matching contribution would significantly limit educational opportunities within your school district or BOCES.

Our community has passed only one school bond in 30 years. Passage took two attempts, and we were finally successful in 2012. This was an \$11M bond, which was used in combination with a \$15M BEST grant to expand and renovate our high school. Considering how difficult the bond passage environment is in our financially stressed and conservative community, we are very concerned about our ability to pass the \$16M bond that this project would require at our full match. We recognize that our community must step forward to support school replacement, which is why we are only asking for a slight reduction in our match percentage. However, even this small reduction would make a difference in our ability to sell this project to our community as a reasonable investment.

2. Please describe any extenuating circumstances which should be considered in determining the appropriateness of a waiver or reduction in the matching contribution.

There are two extenuating circumstances that we request be considered. The first is that the cost of living in our community is rapidly outpacing income. Many residents are struggling to find housing. Many others are shocked by the rise in the assessed valuation of their homes—and the ensuing rise in property taxes. According to the Lake County Housing Needs Assessment, the average sales price for a home in Lake County for 2008-2013 was \$173,300. From 2015 to February 2018, the average was up to \$238,500. At the time, the median income in Lake County of \$46,000 would have only made affordable the purchase of a house at \$194,000. With home values skyrocketing and income not keeping pace, residents are already feeling a property tax crunch that will make a large new bond initiative unpalatable for many.

The second factor is that our assessed valuation is disproportionately skewed by the presence of one large taxpayer: the Climax Mine. Leadville is keenly aware that mining is a volatile industry. When the mine closed in 1986, it had a devastating economic impact on the town. Our current assessed valuation presents the appearance of a low bond burden on our community and a high level of confidence about our economic future, however neither represent the entire picture.

*\*The following are factors used in calculating the applicant's matching percentage. Only respond to the factors which you feel inaccurately or inadequately reflect financial capacity. Please provide as much supporting detail as possible.*

A. Per Pupil Assessed Valuation relative to the statewide average – The higher the Per Pupil Assessed Value the higher the match.

Applicant's PPAV: \$210,283.93

Weighted Rank: 3.17% of 5% max

As described above, the Climax Mine has an outsized influence on our assessed valuation. In 2017, it accounted for \$93M of the county's total AV of \$196M, or 49%. If we subtract the Climax portion of the AV, our PPAV would be much lower. We therefore request consideration for a 2% reduction of our weighted rank for this factor.

B. The district's median household income relative to the statewide average – The higher the median household income, the higher the match.

Applicant's Median Household Income: \$46,176.00

Weighted Rank: 4.80% of 15% max

C. Percentage of pupils eligible for free or reduced cost lunch relative to the statewide average – The lower the percentage for free and reduced cost lunch, the higher the match.

Applicant's FRED Percent: 67.2%

Weighted Rank: 3.60% of 20% max

D. Bond Election failures and successes in the last 10 years – The more attempts the school district has made, the lower the match.

Applicant's Bond Elections: 2

Adjustment: -2% (-1% per attempt)

E. Bond mill levy relative to the statewide average – The higher the bond mill levy, the lower the match.

Applicant's Bond Mill Levy: 4.02

Weighted Rank: 12.36% of 20% max

Our low bond mill levy is a factor of our county's overall assessed valuation, which is once again heavily influenced by the presence of the Climax Mine. Without the mine, our AV would be much lower, and the bond mill levy would be higher. We therefore request consideration for a 2% reduction in this factor.



F. The school district's current available bond capacity remaining. - The higher the bond capacity, the higher the match.

Applicant's Remaining Bond Capacity: \$29,682,551

Weighted Rank: 13.48% of 20% max

G. The school district's unreserved fund balance as it relates to their overall budget.

District's Unreserved General Fund: \$2,472,417

Weighted Rank: 11.57% of 20% max

As a percentage of our overall budget, our unreserved general fund balance may seem high. However, economy of scale is a significant issue for districts our size that often requires us to carry a higher percentage in our reserves. If the boiler were to fail in West Park Elementary or Pitts Elementary (those schools with a very high FCI that we are addressing in our BEST grant application), replacement would require up to \$600,000. This is a significant factor we have to plan for in the size of our unreserved general fund balance. While the percentage may seem high, the actual dollar amount of \$2.5M is not very high when considering the size of the expenditures we might need to absorb. We therefore request a 3% reduction in this factor.

H. Other unusual financial burdens not reflected in the match calculation (ie. underfunded mandates, unexpected expenses, self-funded programs).

3. What efforts have been made to coordinate the project with local governmental entities, community based organizations, or other available grants or organizations to more efficiently or effectively leverage the applicant's ability to contribute financial assistance to the project? Please include all efforts, even those which may have been unsuccessful.

We have worked with local non-profit partners and community volunteers to completely renovate the play yard at West Park Elementary School. Because of this community effort, a new play yard is not part of our BEST grant or associated bond request—a \$400,000-500,000 savings. Beyond this project, the costs of constructing a new school are so significant—and our local capacity so limited—that we believe a BEST grant and local bond are our only realistic funding sources.

4. **Final Calculation:** Based on the above, what is the actual match percentage being requested?

CDE Minimum Match Percentage:

● **Facilities Impacted by this Grant Application** ●

**HOEHNE REORGANIZED 3 - Vocational Agriculture Building Replacement - Hoehne ES/Jr/Sr HS - 1922**

<b>District:</b>	Auditor - Hoehne Reorganized 3
<b>School Name:</b>	Hoehne ES/Jr/Sr HS
<b>Address:</b>	19851 COUNTY ROAD 75. 1
<b>City:</b>	TRINIDAD
<b>Gross Area (SF):</b>	85,161
<b>Number of Buildings:</b>	1
<b>Replacement Value:</b>	\$20,900,018
<b>Condition Budget:</b>	\$7,170,370
<b>Total FCI:</b>	0.34
<b>Adequacy Index:</b>	0.30



**Condition Budget Summary**

System Group	Replacement Cost	Requirement Cost	SCI
Electrical System	\$2,966,759	\$648,148	0.22
Equipment and Furnishings	\$341,876	\$245,310	0.72
Exterior Enclosure	\$2,774,362	\$187,939	0.07
Fire Protection	\$33,157	\$447,916	13.51
Furnishings	\$313,435	\$151,519	0.48
HVAC System	\$4,688,221	\$2,558,800	0.55
Interior Construction and Conveyance	\$4,036,438	\$1,582,502	0.39
Plumbing System	\$1,469,490	\$586,259	0.40
Site	\$1,548,648	\$1,181,034	0.76
Structure	\$2,727,633	\$145,281	0.05
<b>Overall - Total</b>	<b>\$20,900,018</b>	<b>\$7,734,708</b>	<b>0.37</b>

# BEST FY2019-20 GRANT APPLICATION SUMMARIES

**Applicant Name:** HOEHNE REORGANIZED 3

**County:** Las Animas

**Project Title:** Vocational Agriculture Building Replacement

**Applicant Previous BEST Grant(s):** 1

**Has this project been previously applied for and not funded?** No

**If Yes, please explain why:**

## Project Type:

- |   |   |   |   |
|---|---|---|---|
| <input type="checkbox"/> New School         | <input type="checkbox"/> Roof               | <input type="checkbox"/> Asbestos Abatement | <input type="checkbox"/> Water Systems  |
| <input type="checkbox"/> School Replacement | <input type="checkbox"/> Fire Alarm         | <input type="checkbox"/> Lighting           | <input type="checkbox"/> Facility Sitework  |
| <input type="checkbox"/> Renovation         | <input type="checkbox"/> Boiler Replacement | <input type="checkbox"/> Electrical Upgrade | <input type="checkbox"/> Land Purchase  |
| <input type="checkbox"/> Addition           | <input type="checkbox"/> HVAC               | <input type="checkbox"/> Energy Savings     | <input type="checkbox"/> Technology   |
| <input type="checkbox"/> Security           | <input type="checkbox"/> ADA                | <input type="checkbox"/> Window Replacement | <input checked="" type="checkbox"/> Other Construction of a new building for Hoehne school district's vocational agriculture program. |

## General Information About the District / School, and Information About the Affected Facilities:

Hoehne School District has grown from a one room school over a span of about 95 years to a K-12 school of distinction that excels in academics, athletics and academic electives such as speech, future business leaders of america, future farmers of america and robotics. Hoehne school has always been well known for it's athletics and academics and the district is well supported by the surrounding community. Several titles have been won in football, track and volleyball. In fact this last year the football team finished second in 8-man football.

In November of 2010, the school board and superintendent were faced with a short fall in funds due to overspending. Since this downfall, the board and administration have raised the financial capabilities of the district by monitoring and limiting spending. Even with this downfall in finances, the number of students increased due to the academic and athletic excellence that Hoehne is well known. This year the district decided to add another kindergarten class to allow more students to attend Hoehne school district, which also opened up another teacher position. Hoehne school has a waiting list for most of its elementary grades and more students seem to be applying. In 2016 and 2018, Hoehne school was designated by the Colorado Department of Education as being a credited school with distinction. Hoehne school district has set forth a curriculum that is individualized for each student. Many students that graduate from Hoehne school district also will completed several college class taken at the local junior college.

Even though the district had financial problems in 2010, money was always made available for the maintenance and operation of functional buildings. The one building that needs major renovations is the vocational agricultural (vo ag) building.

## Deficiencies Associated with this Project:

Existing historic gymnasium structural issue.

The south wall of the historic straw and adobe structure is cracked and has exposed rebar. A structural engineer has visited the property and evaluated the structural soundness of the existing gymnasium. Please see attached letter from the structural engineer. The south wall is not a load bearing wall but it appears an overlapped rebar condition has separated within the wall cavity. The wall requires structural repair per the attached letter from the structural engineer.

Structural issues with the existing vocational building addition attached to the existing school.

In addition, the structural engineer evaluated the existing vocational education building. The vocational building has significant structural issues including movement of the roof framing and sheathing. The district has installed temporary pipe columns and beams in the building in the past to improve the conditions. Subsequently those structural members have been modified in the field and have compromised the structural integrity of the temporary structural repairs. The west wall of the building shows continued signs of structural problems and out of plumb. Please see the attached letter from the structural

## BEST FY2019-20 GRANT APPLICATION SUMMARIES

engineer. In addition to the structural issues the building is a wood framed structure without fire protection and does not meet building code for construction type, exiting, accessibility, or fire separation to the existing school facility. Drainage around the perimeter of the building is poor and appears to be contributing to the structural issues. The structural engineer has indicated the building should not be occupied if significant snow or ice is present on the existing roof.

### **Proposed Solution to Address the Deficiencies Stated Above:**

The district is working with a owner's representative and architectural firm with more than 20 years of experience design K-12 educational environments. The firm performed a district wide assessment of all district facilities (exterior, interior, code compliance, and site conditions). The firm photo documented and ranked each item based on three criteria. 1) What is the problem or concern? 2) Failure Expectancy - When is the problem likely to occur? 3) Consequence - What happens when failure occurs? Each item and the corresponding score were reviewed with the district to confirm the findings. Scores for each item can range from 1 to 500 or more with the lower score items (closer to a score of 1) being more significant problems which have already failed or will fail in the next three years which will affect the building occupants. After review of those items the district prioritized the most pressing issues to determine the list of items below.

#### 1) Existing historic gymnasium structural issue.

The south wall of the historic straw and adobe structure is cracked and has exposed rebar. A structural engineer has visited the property and evaluated the structural soundness of the existing gymnasium. Please see attached letter from the structural engineer. The south wall is not a load bearing wall but it appears an overlapped rebar condition has separated within the wall cavity. The wall requires structural repair per the attached letter from the structural engineer.

#### 2) Structural issues with the existing vocational building addition attached to the existing school.

In addition, the structural engineer evaluated the existing vocational education building. The vocational building has significant structural issues including movement of the roof framing and sheathing. The district has installed temporary pipe columns and beams in the building in the past to improve the conditions. Subsequently those structural members have been modified in the field and have compromised the structural integrity of the temporary structural repairs. The west wall of the building shows continued signs of structural problems and out of plumb. Please see the attached letter from the structural engineer. In addition to the structural issues the building is a wood framed structure without fire protection and does not meet building code for construction type, exiting, accessibility, or fire separation to the existing school facility. Drainage around the perimeter of the building is poor and appears to be contributing to the structural issues. The structural engineer has indicated the building should not be occupied if significant snow or ice is present on the existing roof. The existing vocational addition to the building should be demolished and replaced with a free-standing vocational building of approximately 8,000 square feet. Based on the existing vocational program the new facility should include the following spaces: Classroom for 20 students (750 sq ft), teacher office (100 sq ft), equipment storage (250 sq ft), restrooms (300 sq ft), vocational space (6,600 sq ft). The vocational space will include wood working, welding, agricultural equipment repair, and small engine repair. The space will be sub-divided for wood working and welding per current building code requirements.

#### 3) Security Systems

**Main Entry Access Control:** The existing access control system is continuous locked condition which requires activation of motion sensor at 5' above finish floor. The door will not open unless the motion sensor is tripped. This installation is a code violation and should be removed. The door hardware should be replaced with electronic strike door hardware to provide for a controlled access from the exterior and free exiting from the interior.

The cost of work described above was included in the original assessment by the architectural firm. The firm used recent school projects and historical data to develop the initial cost of each item on the list. After district prioritization of the list a regional general contractor evaluated the construction cost independently to valid the cost of construction.

### **How Urgent is this Project?**

The Hoehne Board of Directors, and administration, with input from the vocational agricultural board, local and out of area engineers, community members and the staff and students of Hoehne School District, have all agreed that our facility deficiencies have risen to a level where safety and health are being compromised and should be considered immediate! Time will not fix the failing building that houses our vocational agricultural programs.

Considering the recent reports from various agencies and community members, the safety and security of our students are of the utmost importance. Our students are one of the highest performing students in the state of Colorado and they should

## BEST FY2019-20 GRANT APPLICATION SUMMARIES

have a high performing facility.

The life safety deficiencies are too great to ignore or delay any further. As a community school it is our responsibility to provide a safe learning environment for our students and staff and we believe our only hope lies in being awarded a BEST Grant. Hoehne school district cannot wait another year! Further delay will cause more financial hardships for the school, by throwing good money out to band-aid the situation.

The vocational building structural concerns can be addressed in the short term with additional temporary structural supports recommended by the structural engineer. However, the building is not fit for long term occupation based on the current conditions. A temporary location of the program will be considered for the program and the building should be replaced.

If Hoehne school district does not receive the BEST grant, then we would be forced to increase our debt services, decrease our reserve fund, increased maintenance and utility costs for a longer period of time; with no real means for the district to increase its revenue to keep pace with the needs is not an option.

In January of 2019, a structural engineer inspected the buildings that make up Hoehne school district. Two areas of concern were identified. One being the condition of the vocational agricultural shop and classroom. It was reported that the building was in need of major repairs. The report stated that the roof could be compromised by 4 inches of snow or high winds and that a solution and fix needs to be in the works. This is urgent since the building contains the classroom and shop that is used up to 6 hours a day.

If this project is not awarded the funds to demolish the existing vo ag building and erect a new 8,000 sq ft building, money will have to be spent on fixing the walls and roof of the building or suspend the vocational agricultural classes due to lack of facilities. In other words, money will have to be budgeted to fix a building that will eventually be deemed unsafe. Money that could be used to help support a new building and/or support a school of academic excellence would have to be spent on costly repairs to make the building temporarily safe.

**Does this Project Conform with the Public School Facility Construction Guidelines?** Yes

**If not, provide an explanation for the use of any standard not consistent with the guidelines:**

**How Does the Applicant Plan to Maintain the Project if it is Awarded?**

Hoehne school district has developed a capital replacement plan that sets aside and earmarks funds for the purpose of replacement of each of the major systems in the new facility as they reach the end of their service life. The district acknowledges that replacement costs may take an unexpected path over the coming years and decades, as the economy and school funding priorities vary from year to year. We also understand that constant analysis of the components and systems through the facilitation of the maintenance plan will help keep capital replacement costs lower than normal, perhaps over a longer period of time. In preparation of this replacement plan, Hoehne school district determined for each of the categories an estimated replacement cost and an annual amount based on a straight-line method to be earmarked in capital reserves in order to cover the expenses of replacement.

- A maintenance schedule: The plan should extract timelines from manufacturers' maintenance manuals and create schedules for the frequency of preventive maintenance, including dates of occurrence and projected cost.

- Operations manuals: Maintenance and operations manuals containing maintenance procedures for scheduled tasks and descriptions of properly operating systems will be created for each system, component, or product scheduled to be maintained. The manuals will contain repair standards and work order procedures should they be necessary.

- Commissioning: After installation, it is important to have professionals verify that building systems/components, as well as their functionality and operations, meet the intent of owners and designers. Final adjustments should be carefully documented and consulted if changes need to be made.

- Records: Over time, actual maintenance on the various systems should be accurately tracked including both the date of occurrence and cost. These records will be used to predict the accuracy of future projections and costs.

## BEST FY2019-20 GRANT APPLICATION SUMMARIES

The key building systems and their integral components that will part of the plan include, but are not limited to:

- Heating system: All mechanical systems/HVAC should be inspected and maintained regularly; performance is to be maximized through proper maintenance.
- Air handling equipment: Fans, duct-work, dampers, and louvers should be inspected and maintained regularly; performance is to be maximized through proper balancing.
- Roof system: Surfaces should be inspected regularly, with proper removal of snow and water; leaks should be repaired upon discovery.
- Plumbing system: Sprinkler systems, water fountains, pumps, expansion joints, and drains should be regularly inspected.
- Electrical system: Regularly scheduled analysis by professional engineers and electricians, with thermographic scanning and motor current analysis used to identify common faults.
- Fire alarm and public address system: Regular testing and maintenance.
- Finishes: Painting should be done on a regular schedule and to avoid disturbances of planned occupancy of the school, flooring is to be cleaned, waxed and/or sealed regularly, depending on the materials and location in the school, whether classroom or bathroom.

The following forecasted maintenance spreadsheet describes the frequency of anticipated maintenance per year, the estimated cost for each occurrence and the total estimated annual maintenance cost for each system.

Annual maintenance is anticipated to be in the estimated amount of \$2.50 per square foot based on approximately 8,000 square feet for a total of \$20,000. This information was based on information gathered from local contractors and it is believed to be feasible. However, better projections can be determined after specific systems and materials are specified in the final plans, and actual operating information becomes available.

The following forecasted maintenance describes the frequency of anticipated maintenance per year, the estimated cost of each occurrence and the total annual maintenance cost for each system. Hoehne has a facilities manager that performs most of the onsite maintenance, plumbing, janitorial, internal repairs, and grounds repairs. Major problems that extend beyond his skill set are contracted out to local vendors.

Below is a list of systems/components and the estimated cost per year of maintenance: Total = \$15,000

- HVAC = \$4,000
- Plumbing = \$4,000
- Electrical = \$500
- Building Shell = \$1,000
- Internal Repairs = \$2,000
- Janitorial Supplies = \$2,000
- Grounds Repairs = \$1,500

Hoehne school district acknowledges that maintenance numbers during the initial years of the new school will be lower than the following years. This proves to be true based on our analysis of the actual repair costs for certain other schools for which we obtained information.

### CAPITAL REPLACEMENT PLAN

Hoehne's capital replacement plan is to set aside and earmark funds for the purpose of replacement of each of the major systems of the new building as they reach the end of service lives. Foreseeing the expenditures that will ultimately be required to replace these major systems will allow the school to plan for the future and be prepared as capital expenses arise. Hoehne



## BEST FY2019-20 GRANT APPLICATION SUMMARIES

school district plans to allocate approximately \$15,000-\$17,500 annually in a separate capital reserve account based on the Capital Replacement Plan.

### FINANCIAL RESPONSIBILITY FOR MAINTENANCE AND CAPITAL REPLACEMENT PLAN

The total annual estimated amount for costs under the maintenance plan and capital plans as described above is approximately \$15,000. In order to assure that the district can be financially responsible for these amounts, the district has been allocating between \$200,00 and \$500,000 every year for capital improvements and this amount has been sustainable within our budget. Thus, Hoehne School District is confident that we can financially support the maintenance and capital replacement plan.

**Describe the condition of the public school facility at the time it was purchased or constructed and, if the facility was not new or was not adequate as a public school facility at that time, provide the rationale for purchasing the facility or constructing it in the manner in which you did:**

The Hoehne Reorganized School District No. 3 is located twelve miles northeast of Trinidad, Colorado in southern Colorado. In 1922 the district built its first building. The building was a two story structure that housed eight classrooms upstairs and two classrooms on the ground floor along with restrooms, offices, a library and an auditorium. This first building is still in use today and it now houses most of the secondary classrooms, admin and business offices. In 1937, the Federal Works Projects Administration built a two story building that housed a gymnasium on the second floor and a cafeteria and seven classrooms on the ground floor. This addition made it possible for basketball practice to move from the outdoor graveled courts to inside. The high school classrooms were moved to this addition. Again this building to date is used as a cafeteria, basketball and volleyball courts and locker rooms for student athletes. In 1957, Hoehne School District was reorganized and it provided education for grades one through twelve. In January of 1968, a kindergarten class was added. Extra curricular activities have always been an important part in school. A football field and track was constructed along with two tennis courts. Students could participate in activities including football, basketball, baseball and track. School clubs of Future Homemakers of America, Future Farmers of America, Spanish club and rodeo clubs were offered to supported the academic community. In 1978, a bond of \$1.2 million was floated to build and furnish a new facility and remodel the older buildings as deemed necessary. This new building would house mostly elementary classes (K-6) and a few secondary classrooms. All of the buildings stated above are still in use today. These three buildings to this date house the K-12 classrooms as well a cafeteria, gymnasium, auditorium, and business and admin offices. Then lastly in 1997, a bond was floated to remodel the 1922 building along with the addition of a new gymnasium, locker rooms, bathrooms, and corridor that connected the various buildings.

**Describe the history of capital improvements made to the facility by the district/charter school in order to make it suitable for students. Include a list of all capital projects undertaken in the affected facility in the last 3 years:**

The following is a list of capital improvements made to the facility over the past decade, with the year the improvements were made and approximate dollar amounts spent on the repairs/upgrades.

- >HVAC and lighting repairs and upgrades, 2007-8=\$100,000
- >Computer surveillance and security system was installed, 2007-8=\$20,000
- >Roof repairs, paved parking lots and the 1922 building renovation that included installing drop ceilings and new lighting, 2008=\$100,000
- >A leach field was constructed and fiber optics were upgraded, 2008=\$165,000
- >Water Waste Treatment facility was constructed, 2010=\$773,178
- >Roof installation over north part of building,2009=\$100,000
- >Windows and doors were replaced or repaired on the entire facility, 2010=\$81,465
- >Water damage and asbestos removal and replace ceiling in vo ag shop and tech shop, 2014=\$200,260
- >Replace Tcom panel, repair HVAC unit, replace fire alarm control panel, and two servers,2014=\$42,502
- >New carpet in 1922 building, 2014=\$39,216
- >Replace old HVAC unit above locker rooms, 2107=\$11,014
- >Resurface roof above new gym, locker rooms, music room and stage and commons area,2018=\$375,000

**What options outside of the BEST grant has the applicant investigated or leveraged to address the school's facility needs?**

## BEST FY2019-20 GRANT APPLICATION SUMMARIES

Hoehne school district has continually tried to find monies available to help with capital improvement. DOLA grants and a BEST grant have been awarded in the past for much need renovations and required improvements. Several open discussions with community members and local county assessor have taken place to study if a bond or mill levy would be best for this project. Bonds and mill levy's are difficult since over 60% of the student body comes from a neighboring school district. Budgeting is always an option but due to other needs of the school, funds are limited. Hoehne school district is in the process of finding money to replace the entire HVAC system for the school. Boilers in use today were built in 1988 and many of the HVAC units are past their life expectancy. If a BEST grant is awarded, our match is 64%--sixty-four percent. The matching money would have to come from a bond or mill levy or money reserved for capital improvement.

**How do you budget annually to address capital outlay needs in your district/charter? Include \$/FTE for the prior fiscal year:**

Hoehne school district has maintained a maintenance budget of approximately \$445,000 per year, which amount constitutes approximately 7.5% of the general fund budget. The District currently employees 3 full time maintenance staff dedicated to maintenance, cleanliness, repairs, and minor construction both inside and outside the buildings. We have been fortunate and have approx. \$500,000 in capital reserve for potential future issues. We are currently spending the majority of our maintenance budget on plumbing, heating, and electrical issues.

Capital outlay is funded annually through the school districts general funds. The figures for this amount for FY 2018/19 is \$99,675 / 371 (FTE) = \$268 as a base starting figure for the entire school district. Due to emergency repairs, that figure has been increased over the past two years on as an "as needed" amount.

We plan to have a detailed preventative maintenance schedule in place, however current conditions make these tasks difficult, and will implement the preventative maintenance plan with the approval of a new facility. The plan includes: daily, weekly, monthly, 3 and 6 month, and annual inspection/maintenance/repair items. We will prepare and maintain an inventory of building components and their conditions so that we can better track needs and determine next steps, including costs, of equipment. We understand that organization and a carefully planned preventative blueprint will offer the best chance for maintaining and keeping ahead of long term problems. Training will be provided on all machines and equipment to assists with developing long term maintenance goals and budgets.

**If relevant to your project, what are your current annualized utility costs, and what amount of reduction in such costs do you expect to result from this project?**

The following is a list of utility bills. The amount is over a 17 month period totaling \$276,901.06 or \$16,288 per month for utilities.

Electric San Isabel Electric \$131,314.26  
 Propane High Plains LP Services \$62,987.53  
 Water El Moro/Hoehne Pipeline \$25,516.99  
 Sewer Little Stinker Septic \$8,000.00  
 Trash Right Way Disposal \$1,650.00  
 Trash Twin Enviro \$1,650.00  
 Phone New Cloud Networks \$13,089.05  
 Eaglenet Zayo Group \$9,374.70  
 Fuel Acorn Petroleum \$41,815.31  
 WWTP Ramey Environmental \$38,603.49

<b>Grant Request:</b>	\$1,775,689.27	<b>CDE Minimum Match %:</b>	64%
<b>Applicant Match:</b>	\$3,156,780.93	<b>Actual Match % Provided:</b>	64%
<b>Total Project Cost:</b>	\$4,932,470.20	<b>Is a Waiver Letter Required?</b>	No
<b>Affected Sq Ft:</b>	8,000	<b>Contingent on a 2019 Bond?</b>	Yes
<b>Affected Pupils:</b>	371	<b>Source of Match:</b>	
<b>Cost Per Sq Ft:</b>	\$616.56	Bond November 2019	

## BEST FY2019-20 GRANT APPLICATION SUMMARIES

<b>Soft Costs Per Sq Ft:</b>	\$160.44	<b>Escalation %:</b>	5%
<b>Hard Costs Per Sq Ft:</b>	\$456.12	<b>Construction Contingency %:</b>	5%
<b>Cost Per Pupil:</b>	\$13,295	<b>Owner Contingency %:</b>	10%
<b>Gross Sq Ft Per Pupil:</b>	240	<b>Historical Register?</b>	No
<b>Is a Master Plan Complete?</b>	No	<b>Adverse Historical Effect?</b>	No
<b>Who owns the Facility?</b>	District	<b>Does this Qualify for HPCP?</b>	Yes
<b>If owned by a third party, explanation of ownership:</b>			
<b>If match is financed, explanation of financing terms:</b>			

### Financial Data (School District and BOCES Applicants)

<b>District FTE Count:</b>	356	<b>Bonded Debt Approved:</b>	
<b>Assessed Valuation:</b>	\$45,381,850	<b>Year(s) Bond Approved:</b>	
<b>PPAV:</b>	\$127,298	<b>Bonded Debt Failed:</b>	
<b>Unreserved Gen Fund 17-18:</b>	\$2,016,386	<b>Year(s) Bond Failed:</b>	
<b>Median Household Income:</b>	\$56,750	<b>Outstanding Bonded Debt:</b>	\$0
<b>Free Reduced Lunch %:</b>	38%	<b>Total Bond Capacity:</b>	\$9,076,370
<b>Existing Bond Mill Levy:</b>	0	<b>Bond Capacity Remaining:</b>	\$9,076,370
<b>3yr Avg OMFAC/Pupil:</b>	\$1,116.44		

● **Facilities Impacted by this Grant Application** ●

**TRINIDAD 1 - Trinidad MS Building System/ Safety Upgrades - Trinidad MS - 1909**

<b>District:</b>	Auditor - Trinidad 1
<b>School Name:</b>	Trinidad MS
<b>Address:</b>	614 PARK STREET
<b>City:</b>	TRINIDAD
<b>Gross Area (SF):</b>	118,580
<b>Number of Buildings:</b>	1
<b>Replacement Value:</b>	\$29,525,740
<b>Condition Budget:</b>	\$16,976,901
<b>Total FCI:</b>	0.57
<b>Adequacy Index:</b>	0.32



**Condition Budget Summary**

System Group	Replacement Cost	Requirement Cost	SCI
Electrical System	\$3,811,207	\$3,886,149	1.02
Equipment and Furnishings	\$415,226	\$434,296	1.05
Exterior Enclosure	\$6,599,764	\$3,606,261	0.55
Fire Protection	\$969,035	\$296,403	0.31
Furnishings	\$201,984	\$0	0.00
HVAC System	\$4,092,176	\$4,221,727	1.03
Interior Construction and Conveyance	\$6,365,347	\$2,198,245	0.35
Plumbing System	\$1,997,214	\$1,744,595	0.87
Site	\$1,531,449	\$1,149,237	0.75
Structure	\$3,542,337	\$232,787	0.07
<b>Overall - Total</b>	<b>\$29,525,740</b>	<b>\$17,769,700</b>	<b>0.60</b>

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**Applicant Name:** TRINIDAD 1

**County:** Las Animas

**Project Title:** Trinidad MS Building System/ Safety Upgrades

**Applicant Previous BEST Grant(s):** 2

**Has this project been previously applied for and not funded?** Yes

**If Yes, please explain why:** This is a two-part question with two-part answer. Yes, the project was previously applied for, and Yes, the project was previously awarded. The district was not initially awarded funding in the FY201819 grant cycle, but were eventually given the opportunity

## Project Type:

- |  |  |  |   |
|--|--|--|---|
| <input type="checkbox"/> New School            | <input type="checkbox"/> Roof                  | <input checked="" type="checkbox"/> Asbestos Abatement | <input checked="" type="checkbox"/> Water Systems     |
| <input type="checkbox"/> School Replacement    | <input checked="" type="checkbox"/> Fire Alarm | <input checked="" type="checkbox"/> Lighting           | <input checked="" type="checkbox"/> Facility Sitework |
| <input checked="" type="checkbox"/> Renovation | <input type="checkbox"/> Boiler Replacement    | <input checked="" type="checkbox"/> Electrical Upgrade | <input type="checkbox"/> Land Purchase                |
| <input type="checkbox"/> Addition              | <input checked="" type="checkbox"/> HVAC       | <input type="checkbox"/> Energy Savings                | <input checked="" type="checkbox"/> Technology        |
| <input checked="" type="checkbox"/> Security   | <input checked="" type="checkbox"/> ADA        | <input checked="" type="checkbox"/> Window Replacement | <input type="checkbox"/> Other                        |

## General Information About the District / School, and Information About the Affected Facilities:

### DISTRICT OVERVIEW

The Trinidad School District was established in 1866 (ten years before Colorado was granted Statehood) and is the oldest school district in the State of Colorado. From 1872-1932, the Trinidad School District 1 ("TSD1") was just one among the 131 other school districts in Las Animas County. Despite the breadth of other school districts in Colorado, Trinidad School District 1 was the first school district in the state of Colorado to be accredited by the North Central Association of Secondary Schools. At present, the district has one K-1 elementary school, one elementary school housing grades 2-5, one middle school housing grades 6-8, and one high school housing grades 9 -12, with a total enrollment of 953 students.

### ACADEMICS AND EDUCATIONAL PROGRAMMING

Trinidad School District 1 helps K-12 students develop life skills relevant to their community and the world. The district prepares students to enjoy and excel in academics, arts, and extracurricular activities, while recognizing their civic responsibilities. Along with providing a well-rounded and diverse education, the district provides the support needed for each student to reach his or her highest academic, social, and leadership potential.

### AFFECTED FACILITIES

The Trinidad Middle School building (which presently includes all past additions detailed in Question #5) has years of deferred maintenance and aging infrastructure; the holistic renovations detailed in this application will ensure that its students have a modern educational environment that propels them towards success, while keeping them healthy, safe, and comfortable. This BEST Grant Application focuses on the Trinidad Middle School building for one simple reason: Conditions are incompatible with the district's and the state's mission to provide all students with safe, healthy learning environments where they can reach their academic and leadership potentials.

### HISTORICAL SIGNIFICANCE

Trinidad Middle School, specifically the original 1911 building is a part of Trinidad's history and will remain a viable facility within the district.

Our district's history is embedded in famous "Trinidad Brick" walls of the middle school. It sits atop a hill in the heart of Trinidad, CO, contributing to the character of our city as much as cobblestone streets and Victorian-style architecture that has remained here for over a century. This building has served the generations of Trinidad Miners for over a century, and this renovation will make certain it will serve as the foundation for next era of Trinidad School District 1.

### CURRENT MAINTENANCE PROGRAM

TSD1 employs two full-time maintenance staff with support by a nine full-time custodial staff to manage the operations and maintenance in the district. This dedicated maintenance team, although understaffed, is led by TSD1's Facilities Director Jeff Roybal who himself is a native of Trinidad, CO, a graduate of TSD1's Class of 1995, and the devoted parent to two current

# BEST FY2019-20 GRANT APPLICATION SUMMARIES

TSD1 students.

The general responsibilities of the district's maintenance team include performing routine maintenance on the interior and exterior of each building, maintaining athletic facilities and preparing for athletic events, and seasonal mowing and snow removal at each school campus. The district operates on a "Work Order/Request for Supplies Needed" system, meaning building administrators initiate a request for specific work and/or request replenishment of supplies. This procedure assures timely response and control of supplies and is tracked through an organized recording system for inventory control and tracking as supplies are purchased and used.

The district also manages an annual equipment and facility maintenance program that includes general servicing of HVAC systems such as changing out of filters, replacing parts, and thorough inspection in accordance with manufacturers' recommendations.

## **Deficiencies Associated with this Project:**

The deficiencies outlined in this application describe the highest priorities of current deferred maintenance challenges we must undertake. The corresponding solutions to these challenges reflect our vision, and nearly two years of detailed strategic planning for a complete restoration of Trinidad Middle School.

### **I. RELEVANT HEALTH ISSUES**

#### **1) INDOOR AIR QUALITY MEASUREMENTS**

As part of our comprehensive facilities assessment, sensors that measure indoor air quality were placed in various classrooms throughout the middle school specifically to quantify levels of carbon dioxide (CO<sub>2</sub>) in the building. The sensors were placed in four rooms and recorded CO<sub>2</sub> levels every 15 minutes from Dec. 11, 2017 to Jan. 3, 2018.

CO<sub>2</sub> concentrations are measured in parts per million (PPM), or the number of CO<sub>2</sub> molecules found in one million molecules of air. For context, CO<sub>2</sub> concentration levels that match ambient outdoor conditions are typically around 450 PPM, and concentrations of CO<sub>2</sub> at or below 600 PPM are considered good indoor air quality.

Per the standards set by OSHA and ASHRAE, the maximum allowed concentration of CO<sub>2</sub> that can be designed for supplying ventilation is steady-state 1,000 PPM in classrooms. Other spaces such as gymnasiums, cafeterias, and auditoriums have generally higher acceptable conditions. At concentrations in the learning environment above this level, students can begin to experience decreased levels of cognitive function leading to decreased performance, concentration, and productivity. In addition, temporary physical symptoms can include headaches, drowsiness, and eye or throat irritation. These symptoms do generally resolve quickly after being removed from the exposure.

The peak CO<sub>2</sub> levels recorded in the sample rooms at Trinidad Middle School were as follows:

- 763 PPM - Room 117 (classroom)
- 931 PPM - Room 217 (classroom)
- 2056 PPM - Room 224 (classroom)
- 1162 PPM - Room 227 (classroom)

These results demonstrate, definitively, that on nearly every day of occupation, Trinidad Middle School is not receiving adequate fresh-air ventilation to maintain even the minimal standards of acceptable indoor air quality levels, or code-required amounts of fresh air. This is a direct result of the absence of mechanical ventilation in this portion of the middle school and exacerbated by the reliance on consistently defective operable windows.

Classroom observation and sensor data explain the issues further:

- 1) The rooms whose teachers are able to prop their windows open measured CO<sub>2</sub> concentrations that were at least close to or within acceptable standards.
- 2) Conversely, rooms whose teachers do not open windows consistently, due to sensitivity or discomfort from outside air temperature, and are the rooms that have notably worse air quality measurements.

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Another method for improving indoor air quality for the upper floors specifically, is to open the southeast windows of the building, and then to turn on large louvered ventilation fans located on the northwest side to manually exchange the air. The challenge with this strategy is that it is not possible when the building is occupied or when outdoor weather conditions are unfavorable.

## CONCLUSION

It is problematic to rely on defective windows and the discretion of individual room occupant's comfort preferences to ensure all occupants are breathing healthy indoor air quality. Improving ventilation by mechanical means in the classrooms is a significant health priority in the middle school and should be addressed immediately.

## 2) DEFECTIVE HVAC SYSTEM, NO COOLING OR MECHANICAL VENTILATION

Trinidad Middle School does not have cooling, mechanical ventilation, or effective automation or control, and overall, the current HVAC system is wholly inadequate, ineffective and fundamentally defective.

The absence of cooling in the Middle School is the primary source of thermal comfort issues, and it makes the building very uncomfortable for all occupants. Students and teachers simply cannot perform to their best in the learning environment when they are uncomfortable, relative to standards of expected comfort conditions.

As previously mentioned, the classrooms have no mechanical ventilation, nor are they receiving the code-required amount of fresh air through their passive/natural design due to difficulties associated with operable windows in the climate area. Poor air quality is a major concern in these classrooms, and it is imperative to bring the school up to modern comfort and indoor air quality standards.

The Middle School is served by a number of different heating-only systems, each varying in vintage, and each with a varying set of deficiencies. A summary of each system, and the area of the building they serve, is provided below.

The original 1911 building, where most classrooms are located, is served by hot water baseboard convectors located around the perimeter walls; which are largely ineffective. The mechanical room providing hot water to this area is located adjacent to the 1993 gym, and it contains very low-efficiency natural-draft hot water boilers.

The 1922 auditorium is conditioned by a large 1993 rooftop heating & ventilation unit (HVU) with natural gas furnace. At 26 years old, it is well past its ASHRAE recommended lifespan of 15-years and in need of replacement. This unit does not provide cooling, making the space very uncomfortable during performances with large audiences and due to the use, the high-powered stage lights. In addition, the 1993 rooftop furnace is not designed to supply adequate outside air to the space when the auditorium is full, which means that indoor air quality can degrade quickly during a performance.

The 1993 addition includes a gymnasium and cafeteria that are conditioned by large rooftop H&V furnaces installed in 1993. The classrooms in this area use hot water cabinet heaters and fan coil units and are unfortunately subject to the cooling, ventilation, and control problems that plague the rest of the facility.

The 1964 addition, formerly Park Street Elementary, is conditioned by hot water baseboard convectors installed in 1993. It also does not have cooling and relies on very difficult-to-open windows for ventilation air.

A Johnson Controls building automation system (BAS) was installed during the 1993 renovation, but it is antiquated, no longer supported, and the maintenance staff cannot currently access it. As a result, all heating equipment operates 24/7 during the winter and is still consistently ineffective.

It should be noted that since 2009, the climate zone cooling design conditions have increased a full 1°F from 92.9 to 93.9°F. On a micro-level, the number of Cooling Degree Hours (CDH), or the measure of cooling capacity needed over a base of 80°F, has increased over 14% since 2009. Politics aside, the local climate where these schools reside is becoming

# BEST FY2019-20 GRANT APPLICATION SUMMARIES

increasingly warmer and, coupled with more heat generating technology, is increasing the need for cooling.

## 3) WINDOWS

The windows in the 1911 and 1922 areas were replaced in roughly 1993-1994 with aluminum framed double-pane glass, though despite their age and relatively modern specifications, they have become a continuous source of maintenance issues, including general inoperability, air and water infiltration, and perpetual maintenance costs. Unfortunately, they are also the only current source of outdoor air ventilation, which is ineffective.

The windows were replaced with low-quality stock windows, with the original window openings being framed in to accommodate the slightly smaller window size. These spaces around the windows are not properly sealed or insulated, resulting in significant air infiltration, and subpar thermal performance. Many of the windows cannot lock open and must be propped open (commonly with a stack of books) when students and teachers are trying to compensate for the lack of cooling, the ineffective HVAC system, or if they require some fresh air ventilation.

The 1964 addition of classrooms have original single-pane aluminum framed windows below a large area of glass block along the exterior walls. Although great for natural light, the glass block and single paned windows only add to the lack of thermal comfort in the spaces.

## 4) HAZARDOUS MATERIALS

Based on the district's last annual report, Asbestos Containing Material, or ACM, can be found (or is suspected) in many instances throughout most portions of the Middle School, specifically in the following materials and locations:

1. The corrugated pipe insulation on the old low-pressure steam piping throughout the 1911 and 1922 portions of the building.
2. The debris and contaminated soil in the crawlspaces beneath the 1911 and 1922 portions of the building.
3. The cement board in the fume hood in room 219.
4. The white, woven electrical wiring insulation on the stored stage lights in the prop room of the auditorium.
5. The acoustical plaster on the ceilings and walls throughout much of the 1964 addition.
6. The 12-inch by 12-inch floor tiles in the restrooms of the 1964 addition.
7. The 9-inch by 9-inch floor tiles throughout much of the 1964 addition, where it is exposed in some cases and under carpet in others.
8. The reflector paper in the light fixtures of the North entryway, restrooms, and principal's room of the 1964 addition.
9. The gypsum wallboard of the walls and ceilings throughout much of the 1964 addition.
10. The cement panels on the exterior, above the windows, on the east side of the 1964 addition.

## II. SAFETY, SECURITY & ACCESSIBILITY DEFICIENCIES

### 1) SECURED ENTRY & MONITORING

The main entrance to Trinidad Middle School is located at the lower level of the 1911 portion of the building. It uses a locked double entry door, which is controlled from the reception desk in the school office. The office is located across a main corridor from the entry door, with no direct visual control of the entry. Once the door is unlocked, the visitor is admitted into a main corridor of the building with unrestricted access to the entire building.

The need for a secured vestibule with a security camera, and a direct, secure passthrough window into the school office is of the highest priority for the administration and staff. This would allow greater control over people entering the building and provide the ability to contain someone within the vestibule in the event of a threat.

The external security cameras are insufficient in their ability to provide views of all possible entry points into the building. The security camera system was designed for small building applications and cannot meet the needs of a school building. Further, the system is not on a dedicated computer system that would allow continuous live monitoring. The cameras live feeds can be checked on one of the school administrator's computers, and there is a DVR system capable of recording a certain number of



hours of footage to be reviewed later.

## 2) EGRESS VULNERABILITY

Over time, the warping, settling, and aging hardware has resulted in exterior doors that do not properly close and secure on their own. To overcome this issue, a majority of exterior doors are held shut with removable bars to prevent the doors from opening on their own. When the doors are opened, however, they need to be manually pulled shut to latch. The bars are left in place to prevent students from exiting through the doors and inadvertently leaving them ajar.

The inconsistent operability and the frequency of uncontrolled access of the exterior doors creates a serious security vulnerability, severely inhibits egress in case of an emergency, and violates the fire code.

## 3) FIRE PROTECTION

There is currently a wet-pipe fire suppression system that was installed in 1992, however, only in the 1911 and 1922 portions of the building. There is a dry-pipe system in the unconditioned attic of the 1911 building, although the dry valve is broken making the system unreliable for fire protection.

At one time there were smoke evacuation vents on the roof above the stage, but they have since been covered by the roofing system. It is unknown if the system would still function if the vents were uncovered. The roof vents should be uncovered to test the functionality of the system. If the vents no longer function as designed, system replacement is essential.

The current fire alarm system throughout the building consists of buzzers and strobes. If possible, the entire building should be brought up to modern standards by adding voice evacuation to the fire alarm system.

## 4) ADA ACCESSIBILITY

There are several elements throughout the building that pose an accessibility challenge or safety hazard. Over the years, proactive efforts have been made to provide accessible restrooms throughout the building, including newer fixtures and larger stalls. However, the restrooms in the building are still notably deficient from the current ADA standards and require extensive remodeling to meet these standards. In many cases, this includes replacing toilets, toilet partitions, grab bars, lavatories, faucets, toilet accessories, doors and door hardware, and adequate signage. Each restroom should be modified to provide an accessible stall and lavatory for at least one boy and one girl.

The two main stairwells in the 1911 portion of the building have handrails and guardrails at insufficient heights, and the ramp in the center of the building lacks sufficient handrail extension at the top and bottom of the ramp. Several interior doors throughout the building have knob-type hardware and should be replaced with ADA-complaint lever-type hardware. Existing interior door closers should be replaced to comply with ADA push/pull forces.

On the exterior, the south parking lot includes a pair of designated accessible parking stalls, although the building lacks an adequately accessible route from those parking spaces into the building. There are no other accessible egress routes from the building, and all egress points either have stairs or ramps with too much slope, or insufficient handrails or guardrails.

Additional areas of refuge should be located at exit doors to allow for rescue in the event of a fire. At a minimum, a new accessible route, including an ADA-compliant ramp, should be added to the lower level entrances of the 1911 and 1964 portions of the building.

The main entrance to Trinidad Middle School is locked, with entry controlled by the office staff. There is an ADA-accessible push-button operator for one of the double doors, but this door cannot be remotely unlocked by office staff. Further detail of these concerns and corresponding solutions are described in the Security Concerns section below.

## III. BUILDING ENVELOPE, INFRASTRUCTURE & SITE DEFICIENCIES

As to be expected with a building that was constructed in the early 20th century, and a property that has been actively used

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for more than 100 years, there are a number of interiors, exteriors, and general site issues that are due to be addressed. The following deficiencies are not independent of one another; as one commonly affects the other, in terms of both deterioration and restoration. For instance, the building's deficient foundational vapor barriers, water infiltration, storm water drainage, and parking lots all interact and could be best addressed through a holistic approach to facility improvement.

### 1) MORTAR JOINTS ON EXTERIOR facade

The exterior walls of the 1911 and 1922 construction are original red brick, and given its age, some of the mortar joints have deteriorated due to weathering. In general, the mortar joints and brickwork appear structurally sound and exhibit weather-related erosion consistent with a building of this vintage. Previous repointing campaigns appear to have closely matched the original red tint mortar. Where the first-floor brick has decorative projecting brick bands, the mortar joint weathering is more advanced than at the upper floors, due to a combination of the projecting bands (which catch rain water) and the proximity to irrigation sprinklers at grade.

### 2) WINDOW LINTELS & SANDSTONE SILLS

Steel angle lintels support the brick above window openings at the 1911 building. At several brick bearings, step cracking is present, a result of the steel lintel corroding, and rust jacking forces caused by the expansion of the corroded steel within the brick walls. This is typically from corrosion of the angle, and it is cracking the brick in some areas.

The condition assessment by a professional structural engineer indicates that structural integrity of the window lintels is not a concern, nor do they appear to have such severe distress as bowing or rust holes through the metal - The condition of the embedded portions of the angles, however, cannot be reviewed without making exploratory openings at the bearings. If the lintels are not addressed, additional corrosion of the lintels over time may result in reduced capacity of the lintels to support the brick above them.

There are numerous stone window sills that are eroded/delaminating, primarily located on the lower level exteriors. While age and exposure of the sills contribute to this, the process is exacerbated by moisture exposure from years of nearby irrigation systems.

In general, the sandstone exhibits natural weathering consistent with its age, and exfoliation of layers of sedimentary stone was noted. Most of the weathered areas occur at the first-floor window sills. Many of these low sills have been previously patched with a cementitious patch material that is now failing. The upper elevation sandstone appears to be better protected from the weather and is in fair to good condition, but mortar joints are typically eroded between the stone units.

### 3) VAPOR BARRIER IN BELOW GRADE WALLS

The 1911 and 1922 building portions are built on concrete footings with a crawlspace under the structure. The building site slopes to the southeast, so the northwest interior wall of the lower level of the building is a concrete foundation wall with an assumed plaster parge coat applied directly over the concrete. When the building was constructed in the early 1900s, there was no visible water-proofing/vapor barrier applied to these below grade walls.

There does not appear to be any serious structural water damage to the foundation wall, as visible in the limited area of the crawlspace through an access trapdoor in one of the classrooms in the southeast corner of 1911 portion of the building, there are eroded mortar joints that should be repointed. However, on all below-grade walls along the northwest side of this original building, along with the below-grade walls beneath the auditorium stage, there is extensive evidence of water infiltration and water damage to the interior plaster surfaces.

Remediation has already been performed on one portion of such walls on the northwest side of the first-floor computer rooms, by excavating on the outside of this wall and installing a moisture barrier. The interior of this wall also had a partial framed wall added to hide the moisture damage that had already occurred.

The top of the concrete foundation wall of the auditorium is exposed and exhibits freeze-thaw deterioration consistent with its age and exposure. No significant signs of structural deterioration or step cracks from differential settlement were observed. The surfaces of the concrete water table are craze cracking. These shallow cracks are not structurally significant at

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this time, but freeze-thaw delamination is likely if additional water is allowed to enter into the concrete.

In many areas, hard surface paving is located up against the building wall, either sloping toward the building or insufficiently sloping away from the building. This directs water toward the foundation wall, exacerbating the infiltration issues on the below-grade walls.

### 4) INTERIOR FLOORING

The subfloors in select rooms of the first floor of the 1911 portion of the building show noticeable sagging, and deteriorated plywood is visible in some closets and storage rooms. The cracking and delaminating vinyl floor tiles appear to be failing due to moisture issues emanating from the crawlspace below. The crawlspace lacks a vapor barrier over its earthen floor and exhibits efflorescence, a sign of water infiltration, on the inside face of the brick foundation walls. The vinyl floor tiles are glued to an OSB floor sheathing over wood floor joists. The OSB underlayment appears to have been installed over the original diagonal board floor sheathing.

The vinyl floor tiles are relatively vapor impermeable, and it is likely that moisture from the basement level migrates to the underside of the tile and is blocked at the tile's glue-line, resulting in glue de-bonding. The cracking of the floor tiles is at approximately 4 ft. on center lines that likely align with the joints between OSB floor panels. The rigid floor tiles cannot accommodate the moisture related expansion and contraction of the OSB panels across the floor joint.

Floor tiles throughout the two higher floors of the 1911 portions of the building need to be replaced with a more flexible flooring system suitable for the plywood subfloors used on these stories. A limited structural review of the floor joists in the crawlspace did not reveal such significant signs of structural overstress as sagging or fractured floor joists, but joists may need to be replaced if areas of water damage are found when replacing the floor tile.

### 5) EXTERIOR DRAINAGE

Storm water drainage from the roof of the auditorium is directed out scuppers or partial downspouts that are not properly directed away from the building face. There is evidence of water damage in several locations from water running down the face of the brick, particularly on the southeast facade. If left untreated, this will lead to further, severe deterioration of the brick facade on this part of the building and contribute to moisture issues in the basement crawlspace.

In locations where downspouts carry water to the ground level, there is insufficient slope to carry the water away from the foundation. Roof drainage should be reevaluated, and sufficient scuppers and downspouts should be added. Downspouts should be directed to a splash block or swale that will direct the water away from the building.

### 6) PARKING LOTS, SIDEWALKS & ROADS

The Middle School campus has two distinct parking lots, one at the front of the main entrance, and another behind the school on the west side. Each parking lot has handicap accessible parking spots, although limited and somewhat indistinguishable. The primary access road runs along the east of the facilities and is accessible via Park Street.

Drainage around the Middle School and High School properties is a significant issue. Water runoff drains and gathers in the area between Trinidad Middle School and Trinidad High School, and over time has contributed to the extensive deterioration of the parking lots, sidewalks and roadways, as well as the immediate areas surrounding the school.

The deterioration includes severe cracking and settlement of the asphalt parking lot and drive lanes, as well as the concrete sidewalks. This deterioration causes a safety hazard for students and pedestrians and compromises the accessible route to the school. The poor condition of these parking lots and concrete roads necessitates a comprehensive replacement.

### 7) ELECTRICAL DISTRIBUTION

The 1964 addition uses the electrical system original to its construction. This system is still functioning correctly, but the electrical needs of this portion of the building have exceeded its capacity, making it due for a comprehensive upgrade.

There is a backup generator located at the northwest corner of the 1993 gym, but it only powers an emergency lighting and

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fire suppression system, and it usually does not work when there is a power outage. The only server room for the entire district is also located in this building; its only backup power source are some UPSs that cannot provide service for a sufficient length of time.

The 1911 and 1922 portions received an electrical upgrade to a modern main distribution panel, sub-panels, and wiring at the time of the 1993 renovation. The system meets modern building codes and is safe to operate; unfortunately, many classrooms in these wings lack the appropriate number of outlets for a modern classroom.

#### IV. TECHNOLOGY DEFICIENCIES

Today's standards for student learning include not only a safe, secure, and healthy facility for all teachers and students, but also the opportunity for those students and teachers to have access to a minimum standard of advanced educational technology. District leaders recognize this critical shortfall and have identified it as critical to the future success of our district's students. These advancements not only make for a positive learning environment, but also provide new opportunities for student engagement and interactive learning. Foundational deficiencies that need immediate attention are outlined below:

1. The network equipment in Independent Distribution Facility (IDF) across the district are at minimum 15 years old. The core switch located in the high school facility is inadequate to meet the current and future needs of the building. The majority of the network equipment district wide does not support PoE (Power over Ethernet), which is used to power everything from wireless access points, to security cameras and door locks to name just a few. More and more life safety devices are utilizing this method and the district is currently unable to take advantage of these types of devices. Alternative methods for powering them is much more costly and labor intensive.

2. Wireless connectivity is another serious issue in need of a solution. Strong and reliable wireless connectivity should be available in every classroom with the ability to accommodate not only district-owned devices, but allowing for Bring Your Own Device, or BYOD connectivity to visitors. Currently all connections from the Main Distribution Facility (MDF) and building level IDFs is CAT5 copper wire, limiting the speed of connectivity, as well as system stability between the edge of the network and the internet and/or data center.

3. The district is currently utilizing a Cisco ASA 515 firewall that has reached its end-of-life and end-of-service. Combined with other firewall issues, these factors leave the district vulnerable to ever-increasing cyber threats that exist in today's global environment. The same can be said for the existing Content Filter, which prevents access to unauthorized web sites as required by the Federal Government and is required by law to prevent access to age inappropriate content.

#### **Proposed Solution to Address the Deficiencies Stated Above:**

##### I. HEALTH SOLUTIONS (INDOOR AIR QUALITY, THERMAL COMFORT, MECHANICAL & VENTILATION SYSTEM)

###### 1) NEW HVAC SYSTEM & BUILDING AUTOMATION SYSTEM

Several options for a replacement HVAC system have been considered to effectively address lack of cooling, poor ventilation, deteriorating equipment, and on-going maintenance costs. Three systems - Ground-source Heat Pumps (GSHP), Air-Source Variable Refrigerant Flow (VRF), and Four-Pipe Hydronic (4-pipe) - represent the best qualitative fit and then were quantitatively analyzed through a Life-Cycle Cost Analysis (LCCA) exercise. An LLCA accounts for such factors as annual maintenance and energy costs, in addition to the first-cost. This analysis created an overall picture of the true "cost of ownership" and operating each system, not just installed first cost.

After careful review, the district is confident that the implementation of an Air-Source Variable Refrigerant Flow (VRF) along with a Dedicated Outdoor Air System (DOAS) will provide the best long-term solution to the middle school facility.

VRF system are large-capacity, sophisticated versions of ductless multi-split air-conditioning or heat pump systems, which include multiple indoor evaporators connected to a single condensing unit containing one or multiple inverter-driven (variable-speed) compressors. VRF systems have the additional capability of connecting ducted style fan coil units, among many indoor unit styles.

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The term variable refrigerant flow refers to the ability of the system to control the amount of refrigerant flowing to each of the evaporators, enabling the use of numerous evaporators of differing capacities and configurations, individualized comfort control, simultaneous heating and cooling in different zones, and heat recovery from one zone to another. Refrigerant has the highest carrying capacity of any HVAC fluid due to phase change ability over water and air, thus making it the most energy efficient option and most feasible when applying to an existing facility renovation.

Each condensing unit uses multiple variable speed compressors. The inverter-driven compressors, coupled with efficient indoor unit fan operation, result in heating and cooling efficiencies that exceed high-efficiency water-cooled systems. A dedicated outdoor air system (DOAS) will be installed with the VRF equipment to provide exceptional fresh air ventilation in all areas of the Middle School, which represents the most efficient method to deliver effective indoor air quality.

The gymnasiums, auditorium, and cafeteria will be served by new packaged gas/DX rooftop units (RTUs) that can provide cooling, are easily scheduled, and use demand control ventilation to ensure the proper amount of ventilation air is always received in the space. With current ducting in place, we can effectively reduce the required size of the condensing units and capital costs of the new VRF system. A VRF system is inherently not as effective at serving larger more densely-occupied spaces.

A new BAS will be installed in conjunction with the new HVAC system at the Middle School. These systems can be controlled from a central interface and will have mobile accessibility for authorized staff. Equipment will be scheduled to setback the space temperature, where most utility-cost-effective, and close outside air dampers to reduce heat loss and usage during unoccupied periods. More advanced control sequences will be implemented, such as demand controlled ventilation (CO2 control), variable volume pumping, supply air temperature reset, static pressure reset, and optimal start. These strategies and sequences are aimed at optimizing comfort, ventilation, and efficiency of the new system.

Lastly, the new HVAC and control systems will undergo a rigorous 3rd party commissioning process, which ensures the adherence of the work to the design intent and acts as a method of quality control. In general, projects which are commissioned use 16% less energy, result in a more comfortable building, and have far fewer issues after construction.

This design solution represents the most cutting-edge HVAC system to provide the industry best comfort control, indoor air quality and energy and utility cost efficiency.

### 2) REPLACE WINDOWS & DOORS TO SOLVE VENTILATION, THERMAL COMFORT, SECURITY, EGRESS & ENVELOPE DEGRADATION

The need to replace all exterior windows and doors will be addressed in conjunction with the secured vestibule, HVAC renovation, replacement of window lintels and sills, and egress deficiencies. Modern window and door systems have better thermal performance than older systems, because of double panes, thermal-break technology in their frames, and low-emissivity coatings on glass. A thermal break means that there is no contiguous metal conductor to carry heat from one side of the building envelope to the other.

These changes improve the indoor air quality, address safety concerns, and make the temperature within the building more comfortable for building occupants. Moreover, these changes translate into a new HVAC system that is more appropriately sized and designed to serve only the thermal loads that are intrinsic to the building and its occupants, not those that are wasted on unnecessary infiltration and the heat gains and losses due to poor insulation.

All the exterior doors, frames, and associated hardware throughout the building will be replaced. The solutions include:

1. Adding door closers that are designed to handle the air/wind pressures around the building.
2. Adding code-compliant panic hardware to all egress doors throughout the building.

### 3) ABATEMENT HAZARDOUS MATERIALS

The following areas will be abated in conjunction with facility improvement project scope:

1. Steam pipe insulation, debris and soil contamination demolition in 1911 crawlspace.

# BEST FY2019-20 GRANT APPLICATION SUMMARIES

2. Cement board in the fume hood in room 219.
3. White, woven electrical wiring insulation on the stored stage lights in the prop room of the auditorium.
4. Acoustical plaster on the ceilings and walls in the 1964 addition.
5. 12x12 inch & 9x9 inch floor tiles in the 1964 addition.
6. Reflector paper in the light fixtures of the North entryway, restrooms, and principal's room of the 1964 addition.
7. Gypsum wallboard of the walls and ceilings in the 1964 addition.
8. Cement panels on the exterior, above the windows, on the east side of the 1964 addition.

## II. SAFETY, SECURITY & ACCESSIBILITY SOLUTIONS

### 1) SECURITY SOLUTIONS

A secured (enclosed) vestibule will be added to the lower level main entry. The existing exterior wall will remain, and the double entry doors will be replaced with doors that have secure and accessible door hardware. The secure vestibule will be created by adding a new interior wall with a second set of double (secured) doors to the main hallway. The new vestibule will be equipped with a security camera, and a direct, secure pass-through window into the school office.

The school office will be relocated from its current location across the main corridor east of the main entrance, allowing direct visibility of the new vestibule. The new office location would require the relocation of the existing Nurses Station and two classrooms. The Nurse would be moved farther to the north to maintain a central location, as well as close proximity to the School Office and main entry.

The pass-through window will allow a staff person in the school office to be able to talk to visitors face to face, without automatically allowing visitors access to the school, a substantial safety improvement from the current design. The school staff will have the ability to remotely lock/unlock both sets of doors to the secure vestibule, allowing greater control over who enters the building and providing the ability to contain someone within the vestibule in case of a threat.

The district administration offices would relocate to either the existing school office or west of the secured vestibule. If relocated to the west of the secured vestibule, a secure pass-through window and door could be added from the vestibule for visitors to access the District Office without having to enter the main hallway of the school.

To properly secure the Middle School access via Park Street, new entry doors and security access controls will be installed, allowing access only to approved district staff.

### 2) EGRESS SOLUTIONS

Detailed above as "Replace Windows & Doors to Solve Ventilation, Thermal Comfort, Security, Egress & Envelope Degradation."

### 3) FIRE PROTECTION SOLUTIONS

Fire Protection issues detailed in the deficiency section will be adequately resolved by:

1. Replacing the dry-valve to the attic of the 1911 portion and testing for functionality of the existing system.
2. Uncovering the roof vents above the stage and testing the system for functionality. If not working properly, the system will be replaced.
3. Upgrading the entire fire alarm system, to include voice evacuation.

### 4) ACCESSIBILITY SOLUTIONS

Scope details for the renovation of restrooms for ADA compliance throughout the building include:

1. New accessible fixtures and signage in the restrooms on all three levels of the 1911 building.
2. New accessible fixtures and signage in the restrooms in the north end of the lower level of the 1911 building.
3. New accessible fixtures and signage in the restrooms on the second level of the 1911 building.
4. New accessible fixtures and signage in the restrooms on the third level of the 1911 building.
5. Remove one toilet, add accessible stalls, and add new accessible fixtures and signage in both restrooms in the corridor of

the 1993 addition.

6. Replace door hardware on restrooms of 1993 locker rooms.
7. New accessible fixtures, signage, door hardware, and remove old plumbing connections from the restrooms in the upper level of the Park Street building.
8. Retrofit the existing urinals with 0.5 gpf valve diaphragms or replace the entire fixture with 0.25 or 0.13 gpf fixtures.
9. Upgrades to ADA Compliance & Modern Safety Standards include:
10. New handrails and higher guardrails on all stairwells in the 1911 building.
11. New handrails with compliant top and bottom extensions on accessible ramp in 1993 addition.
12. Replace all door knobs throughout the Park Street building with accessible lever-type door hardware.
13. In conjunction with exterior excavation and replacing parking lots and sidewalks, improve marking and signage of accessible parking space and re-pave path to accessible entrance.
14. In conjunction with exterior excavation and replacing parking lots and sidewalks, replace accessible ramp, handrails, and guardrails to main entrance of 1911 building.
15. New accessible ramp for upper-level entrance via Park Street.
16. Block access to unsafe stairs and elevated track in 1922 gym.

### III. BUILDING ENVELOPE, INFRASTRUCTURE & SITE SOLUTIONS

#### 1) REPOINT EXTERIOR facade

All elevations in the 1911 and 1922 auditorium exteriors need repointing of the eroded mortar joints. This includes grinding out the existing joint to a minimum depth of 3/4", or until sound mortar is encountered, and installing new pointing mortar in 1/4" deep lifts.

A mortar analysis will be performed to determine an appropriate compatible repair mortar and color mockups will be performed prior to work. The entire entry elevation shall be repointed, with spot repointing of approximately 20% of the side and rear elevations where the mortar has eroded. All window opening jamb brick joints will be repointed during proposed window replacement. This will allow the new window perimeter sealants to be bonded to new, sound mortar.

#### 2) REPLACE WINDOW LINTELS & LOWER-LEVEL SANDSTONE STILL

Simultaneous resolution of the corroded lintels and sandstone sills is essential to properly and effectively replacing the windows and addressing exterior facade issues. This typically includes exposing, cleaning, painting, and flashing them - or replacing corroding lintels with new galvanized steel angles.

Exploratory openings at several of the more severely cracked window heads will be performed to determine if replacement of the corroding angles with new support angles is needed. An estimated 14 lintels will require replacement; a conceptual lintel repair sketch is included in the supplemental structural analysis of the Middle School.

Bonding new window perimeter sealants to failing stone would be a poor investment; instead, the severely deteriorated sandstone sills will be replaced during any window replacement program, patching any sills that are salvageable.

Repairing or replacing deteriorated sandstone sills prior to installing new windows will provide a sound substrate for the new window perimeter sealants to be bonded to. Also, a more compatible stone patch material will be identified for this soft stone. This will likely be a latex modified repair mortar, rather than the portland-cement based material that appears to have been used unsuccessfully in the past. Many of the first-floor sills appear deteriorated to the point where replacement with new carved stone sills will be more economical than repairing widespread delamination and stone section loss.

Maintenance of mortar joints is a key element to slowing the natural weathering process of the sandstone. Deteriorated joints on skyward facing elements could be repaired with a non-staining (non-bleed) silicone or urethane to provide a more durable sealant joint between stone units.

#### 3) REMEDIATE & INSTALL PROPER VAPOR BARRIER IN BELOW GRADE WALLS

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Proper vapor protection will be installed around all below-grade walls, requiring some excavation around the building perimeter to apply the waterproofing, and then regraded to provide proper slope away from the building. The site drainage from downspouts and irrigation will be addressed by moving or modifying items that focus rain water against the exterior face of the foundation walls.

On the interior, there will be repointing of the eroded mortar joints in the crawlspace. During the brick repointing, several of the bricks will be removed where signs of water penetration are most severe, to inspect the wood joist ends for decay. If significant wood decay is encountered, floor joists may require supplemental bearing support, such as a pressure-treated wood ledger epoxy bolted to the brick wall. This is not anticipated to be a widespread issue, but local joist bearing repairs should be anticipated.

After this construction, there will be periodic monitoring of the crawlspace to identify localized leaks and use repairs and installations, such as an injected blind side chemical grout waterproofing, as needed. This is done by drilling holes from the crawlspace, or by locally exposing the outer face or the foundation walls by excavation, in order to install waterproofing.

The exposed portions of the concrete foundation wall of the auditorium will be protected with a clear penetrating sealant, and the joint between the foundation wall and sidewalk will be sealed.

This solution is an iterative process, possibly requiring a second sealant application in some areas to ensure a complete waterproofing, and typically comes with a 2-year installer's warranty and a 10-year manufacturer's warranty.

#### 4) REPLACE INTERIOR FLOORING

To address the crawlspace moisture issues, we will install a vapor barrier and vent the crawlspace, or install a floor covering that can accommodate the moisture drive issues, such as carpet with a moisture resistant glue. The solution for complete replacement of the failing floor tiles in the 1911 building will include:

1. Removal and demolition of current failing tile floors.
2. During the floor-replacement, identification and replacement of all failed subfloors.
3. Replacement of the water-damaged flooring and subfloor in the science storage room and installation of a proper mop sink for cleaning use.
4. Installation of a new building-wide flooring system.
5. On the water-damaged ceiling joists above the light booth in the auditorium, repair of any structurally-significant water damage, and replacement of the affected decorative ceiling tiles as necessary.

#### 5) IMPROVED DRAINAGE

Sufficient scuppers and downspouts will be added around the Auditorium to improve drainage around this section of the building. Those downspouts will be directed to a splash block or swale to direct the water away from the building.

#### 6) REPLACE SITE PARKING LOTS, ROADS & SIDEWALKS

The district has multiple opportunities for economies of scale, due to the degraded site conditions at Trinidad Middle School and anticipated exterior excavation, new entrance ramps, additional accessible parking, and site draining improvements. A complete replacement of parking lots, sidewalks and roadways simply makes sense. This scope summary includes:

1. Scarify and recompact base
2. New asphalt & new pavement
3. Cast-in-Place concrete curbing and barriers
4. Paved sidewalks
5. Proper slopes for site drainage

#### 7) ELECTRICAL DISTRIBUTION SYSTEM UPGRADES

Upgrades are needed to improve electrical system deficiencies, expand the current electrical infrastructure and support classroom needs. These consist of the following improvements:



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1. Replace Electrical System in 1964 Addition - This includes new electrical service and distribution, circuit breakers, safety switches, panelboards, branch wiring, switchgear and grounded receptacles. New components and construction will satisfy all code requirements, while improving safety with ground fault circuit interruption, arc flash mitigation, and surge protection.
2. Replace Generator & Add Servers to Back-up Circuit - An appropriately-sized standby generator will be installed with an automatic transfer switch. This transfer switch will detect an interruption to the utility electric service and automatically start the standby generator. Computer servers, refrigerators, freezers, and other equipment will be added to the standby power system to maintain essential building functions during power outages.
3. Add Outlets in Classrooms - Receptacles will be added to classrooms to provide room layout flexibility, reduce circuit overloading, and provide the ability to install new projectors, battery chargers, smart boards, and computers, in each classroom.
4. LED Lighting & Occupancy Sensor Upgrade - This solution includes replacing all T8 32-watt lamps and ballasts with the latest and most efficient product in lighting technology - LED lamps. These are 50%+ more efficient than T8s and do not require ballasts to operate.

## V. TECHNOLOGY SOLUTIONS

Trinidad School District recognizes that meaningful improvements to the classroom educational environment go beyond improvements to thermal comfort and proper ventilation. District leaders also seek to create a modern technological foundation to support educational advancement and innovation. To lay the foundation to support future expansion of technology, the district plans to move forward with three key priority projects:

### 1) TECHNOLOGY INFRASTRUCTURE UPGRADES

- a. Replace all switches districtwide with newer, faster, and more scalable models to improve connection speeds.
- b. Increase intra-building speeds and the internet connection to better handle and allow for faster Internet access.
- c. Replacement of the CAT5e connections from the building MDFs to closet IDFs with Fiber Optic connections. This allows for faster connection speed, more connections, and less traffic congestion, and it supports a school environment that is equipped for future technology needs.

### 2) UPGRADE TO MODERN DATA CENTER

Critical to this project is a new data center with new servers, premise backup, and server redundancy along with cloud-based back-ups. Equipment additions and upgrades include new servers, as well as SAN (storage for user files), core switches, fiber connectivity, firewall/content filter, self-contained cooling equipment racks, data backup/recovery, uninterruptible PowerSource, cabling, and software licenses. These improvements will ensure the district is at the leading edge of advanced IT infrastructure for the foreseeable future.

### 3) SMART CLASSROOM IMPLEMENTATION

A total of 30 classrooms spaces in the Trinidad Middle School will be retrofitted with new equipment and infrastructure to meet the current standards for a SMART classroom. Those components include dedicated workstation/lectern, current PC configuration, monitors to allow for digital inking and instructional interaction, ceiling mounted speakers, a sound system capable of handling multiple audio sources, and a HD projection unit.

## How Urgent is this Project?

If Trinidad School District is unable to adequately fund the needed improvements to Trinidad Middle School, these major deficiencies will continue their day-to-day negative impact on the health, safety, and overall educational experiences of our students. The District is past the point where interim improvements can have a positive effect on these system's operation or effectiveness. The continued reactive upkeep is no longer fiscally wise to pursue, nor is it responsible in our role as custodian of taxpayer money.

Many of these systems are interdependent, making it nearly impossible to single out any one need as more important than the others. All of these improvements, in one way or another, impact the health and safety of our students - as well as the

# BEST FY2019-20 GRANT APPLICATION SUMMARIES

learning of our students - and all improvements must be addressed immediately and comprehensively.

The time has never been better to resolve the critical deficiencies described in this application. Trinidad leaders are at a critical juncture to avoid the expected or imminent failure of many of the building systems and infrastructure issues. In some cases, in fact, system failures have already occurred.

As the facility stands today, the following areas have already reached a point of failure:

1. Mechanical HVAC System
2. Window Systems
3. Secured Egress (Exterior Doors)
4. Fire Protection Systems
5. ADA Accessibility
6. Site Drainage
7. Interior Flooring
8. Educational Technology Adequacy

Systems on a path of expected or imminent failure, if not immediately addressed include:

1. Safety & Security Inadequacies
2. Mortar Joints & Window Lintels
3. Vapor Barrier Deficiencies
4. Plumbing & Electrical Systems
5. Parking Lots & Roadways

## ECONOMIES OF SCALE

Although addressing the entirety of Trinidad Middle School constitutes a significant financial investment by the district, the Trinidad community, and the BEST Program, it eliminates the quantitative costs inherent in a multi-phased approach. Overall budget and timeliness of projects can be maximized by avoiding such additional factors as the annual inflation of construction costs, availability of qualified contractors, the remobilization of major trades, one-off project developments of professional services such as design and construction management, gaps in project management, changes in district leadership, and changing economic conditions. Streamlining these many interrelated projects ultimately delivers the highest value and return on investment.

Most importantly, however, the district's ability to wholly address Trinidad Middle School allows us to continue the pursuit of the strategic plan of the Facility Maintenance Master Plan and focus on other Tier I and Tier II projects, most notably, the facility needs of Trinidad High School.

Synergies and economies of scale are apparent in architectural and engineering design, contractor trades, pricing, mobilization, and construction management. Project scopes that are developed, bid and implemented in conjunction with one another will result in a better project outcome - and a lowest first cost. It is the best path for ensuring that Trinidad Middle School is brought up to the standards of a modern education facility, without leaving critical improvements to an unknown timeline. It is what our students need, and what our community deserves.

**Does this Project Conform with the Public School Facility Construction Guidelines?** Yes

**If not, provide an explanation for the use of any standard not consistent with the guidelines:**

**How Does the Applicant Plan to Maintain the Project if it is Awarded?**

## CAPITAL RENEWAL BUDGET

The district will include a minimum of \$225 per student per year in new funding allocated to district's Capital Renewal Budget, which is estimated to be \$250,000 in increased funds. Of these new funds, \$75,000 will be earmarked and dedicated specifically towards the preventative maintenance of the projects and major components at Trinidad Middle School. This budget will maximize the life of the project and ensure funding for future replacement costs, which, according to ASHRAE and manufacturer data is approximately 20-25 years for major equipment.

## PREVENTATIVE MAINTENANCE PLAN

## BEST FY2019-20 GRANT APPLICATION SUMMARIES

We have detailed reactive O&M spending on the maintaining, band-aiding, and emergency repairing of defective systems in the middle school over the previous two fiscal years. On average, we have committed \$46,699.29/yr. of O&M budget funds towards the deficiencies outlined in this application, none of which has actually improved our situation.

As these deficiencies would be due for comprehensive replacement as a result of this project, the district can conservatively anticipate an immediate reduction in annual maintenance expenditures of approximately \$40,000 at Trinidad Middle School by completing of this project.

We have submitted as a supplemental document the details anticipated maintenance expenditures for proactive upkeep, both professionally and in-house, of this project's major systems. This has been used during our financial planning to this point as a basis for a Preventative Maintenance and Capital Renewal Plan. Based on this due diligence, the district is planning for committed annual expenditures of \$26,829.66/yr., conservatively, specifically towards these major systems.

By eliminating the current reactive, sunk-cost spending at the middle school, and dedicating time and resources to preventative maintenance, we would conservatively net \$13,170.34/yr. in available operating budget funds as a result. These funds, and any others realized in diligent tracking, will remain committed to the district's operations and maintenance budget, and be applied directly to utility costs to help offset the expected increases resulting from the new cooling system. Local funding also would be increased to offset costs of additional utility expenses and provide for outside professional service support, proper warranty coverage and seasonal service programs.

### TRAINING

We will ensure our staff receives dedicated support and on-boarding by requiring design professionals and installing trade contractors to provide onsite hands-on training and education throughout the project. Schedules and training programs will be developed for relevant scopes and approved by our Director of Facilities and district administration.

Periodic training will be provided throughout the construction process, as this affords staff our greatest opportunity to learn the intricacies of the systems. Formal training sessions will be provided after construction and commissioning is completed and systems are fully operational, at which point the staff has gained initial familiarity with the installed measures.

On-going post-project training and support will be required for as long as needed to ensure that our staff receive the proper knowledge for turnover of the systems and operations, maintenance, repairs and replacement responsibilities. This will include formal refresher training and informal on-the-spot training.

### SUMMARY

Should this district be awarded this grant and complete this project, the pressure on our current maintenance program would be relieved. We would eliminate substantial sums of reactive expenditures currently used to simply maintain. Additional funding would then be designated in annual appropriations for maintenance and upkeep, incorporating manufacturer's recommendations for proper service and maintenance, as well as a determination of the need for supplemental staff support.

By reallocating budget funds and the time and labor of our staff from reactive to proactive, we are confident in our ability to sustain the life of this shared investment for years to come. Preventative maintenance will be carried out and logged throughout the lifetime of the new systems and equipment and include appropriate monthly and seasonal inspections, and routine in-house responsibilities like filter changing, balancing and cleaning.

**Describe the condition of the public school facility at the time it was purchased or constructed and, if the facility was not new or was not adequate as a public school facility at that time, provide the rationale for purchasing the facility or constructing it in the manner in which you did:**

The original portion of the modern-day Trinidad Middle School facility was constructed in 1911 as the district's new high school facility and served as such until 1972 when it became Trinidad Middle School. Over its 108-year history, the facility has been expanded to over 116,00 square feet through the completion of four major additions, the latest in 1993.

**Describe the history of capital improvements made to the facility by the district/charter school in order to make it suitable for students. Include a list of all capital projects undertaken in the affected facility in the last 3 years:**

# BEST FY2019-20 GRANT APPLICATION SUMMARIES

## HISTORY OF RELEVANT CAPITAL IMPROVEMENTS TO TRINIDAD MIDDLE SCHOOL

1922 - Two new additions were added to the facility, which at the time served as Trinidad High School. The addition to the east included an 800-seat auditorium with a stage and a lower-level dressing room. The addition to the west\* included a gymnasium with elevated track, locker rooms, an indoor swimming pool, and an upper-level band room.

\*Please Note: The west addition which includes the pool, band room and original gym is not included in this request funding in application.

1927 - The district constructed Miner Stadium, an athletic field and track beside the facility.

1964 - Park Street Elementary School ("Park Street") was constructed as a new facility, adjacent to the 1911 facility and was converted into an addition to the building as part of a 1993 expansion.

1972 - The facility officially becomes Trinidad Middle School as it stands today when construction was completed on new Trinidad High School.

1993 - Trinidad Middle School completed the largest additions to the facility, including a new gymnasium, cafeteria, classrooms and an atrium which connected Park Street as part of the facility. This project was funded by a Colorado Association of School Boards Lease-Purchase Program, utilizing the district's own financial reserves to subsequently pay off the Lease-Purchase obligation.

## LAST THREE YEARS

2015 - Upgrades to lighting, interior security camera, access controls, and security fencing to protect students on playgrounds. The district has also secured grant funding for the updating of kitchen equipment at all cafeterias including cooking equipment, cafeteria seating equipment, refrigeration equipment, etc., through the Wellness Program.

## **What options outside of the BEST grant has the applicant investigated or leveraged to address the school's facility needs?**

Trinidad School District 1 has explored all available, and impactful options for funding regarding these necessary capital improvements including lease-purchase financing and voter-approved mill levy overrides, neither of which are possible at this time.

Moreover, as an integral part of our strategic planning over the past two years, the administration and Board of Education have explored (and will continue to strongly consider) reducing the district's annual operating costs through facility consolidation in order to more accurately reflect our space needs. With the help of the professionals in our development team, a space utilization study was created and revised to help us in our near-term decision making.

It is clear at this time, though, that without the assistance of a significant funding source like a BEST Grant, we will quickly run out of the funding sources needed to help put our district's deferred maintenance/budget issues back on solid footing.

Nevertheless, the district plans to pursue a General Obligation Bond for at least some of the critical capital improvement projects outlined in this application and our Facility Maintenance Master Plan. These replacements, and others, are paramount for the health, safety, and security of students and teachers within the Trinidad School District 1.

## **How do you budget annually to address capital outlay needs in your district/charter? Include \$/FTE for the prior fiscal year:**

During 2017-2018 Fiscal Year, approximately \$225/FTE was spent by the district towards capital outlay projects, which were primarily made up of emergency repairs and reactive upkeep of current systems. To best prepare for the upcoming year's capital projects and facility needs, the district collaborates with our Head of Facilities and maintenance personnel, administrators, principles, and school board members on how to best prioritize and commit towards anticipated capital outlay projects.

## **If relevant to your project, what are your current annualized utility costs, and what amount of reduction in such costs do you expect to result from this project?**

The City of Trinidad is the provider of utility services including water, wastewater, natural gas, and electricity within the City.

## BEST FY2019-20 GRANT APPLICATION SUMMARIES

During the most recent fiscal year, this district incurred a total cost of \$324,957.12 for those utility services.

The addition of mechanical cooling in all areas of Trinidad Middle School creates a new source of electrical energy usage and will result in an increase in the middle school's associated utility costs. This was discussed at length between the district and engineering team during the preliminary engineering audit in 2017, and we have been financially planning for the increased utility costs.

A majority of the increased usage will be offset by immediate reductions in energy use and utility costs resulting from the other extensive energy efficiency measures in this project, specifically, the LED lighting, modern building automation system, controls sequences, operations strategies, high-efficiency mechanical equipment, new windows and a proper seal to the building's envelope.

As part of the Capital Renewal Plan detailed earlier in this application, we have factored in these increased costs into the increased FTE and are dedicating portions of the expected increase in annual O&M savings. We are confident that our goal of achieving a financially net-neutral impact to Trinidad Middle School's operations budget is attainable.

<b>Grant Request:</b>	\$11,040,260.73	<b>CDE Minimum Match %:</b>	34%
<b>Applicant Match:</b>	\$4,509,402.27	<b>Actual Match % Provided:</b>	29%
<b>Total Project Cost:</b>	\$15,549,663.00	<b>Is a Waiver Letter Required?</b>	Yes
<b>Affected Sq Ft:</b>	100,973	<b>Contingent on a 2019 Bond?</b>	Yes
<b>Affected Pupils:</b>	232	<b>Source of Match:</b>	
<b>Cost Per Sq Ft:</b>	\$154.00		Bond November 2019
<b>Soft Costs Per Sq Ft:</b>	\$15.60	<b>Escalation %:</b>	6%
<b>Hard Costs Per Sq Ft:</b>	\$138.40	<b>Construction Contingency %:</b>	12%
<b>Cost Per Pupil:</b>	\$67,024	<b>Owner Contingency %:</b>	5%
<b>Gross Sq Ft Per Pupil:</b>	435	<b>Historical Register?</b>	No
<b>Is a Master Plan Complete?</b>	Yes	<b>Adverse Historical Effect?</b>	No
<b>Who owns the Facility?</b>	District	<b>Does this Qualify for HPCP?</b>	Yes
<b>If owned by a third party, explanation of ownership:</b>			
<b>If match is financed, explanation of financing terms:</b>			

### Financial Data (School District and BOCES Applicants)

<b>District FTE Count:</b>	901	<b>Bonded Debt Approved:</b>	
<b>Assessed Valuation:</b>	\$118,525,990	<b>Year(s) Bond Approved:</b>	
<b>PPAV:</b>	\$131,549	<b>Bonded Debt Failed:</b>	\$4,750,000
<b>Unreserved Gen Fund 17-18:</b>	\$1,209,970	<b>Year(s) Bond Failed:</b>	18
<b>Median Household Income:</b>	\$37,064	<b>Outstanding Bonded Debt:</b>	\$1,960,000
<b>Free Reduced Lunch %:</b>	75%	<b>Total Bond Capacity:</b>	\$23,705,198
<b>Existing Bond Mill Levy:</b>	4.64	<b>Bond Capacity Remaining:</b>	\$21,745,198
<b>3yr Avg OMFAC/Pupil:</b>	\$1,196.86		

## BEST School District and BOCES Grant Waiver Application

The BEST grant is a matching grant and each applicant is assigned a unique minimum matching requirement, pursuant to 22-43.7-109(9) C.R.S., to identify their financial capacity. An applicant may apply to the Capital Construction Assistance Board for a waiver or reduction of the matching moneys requirement for their project if the applicant determines their minimum match is not reflective of their current financial capacity, pursuant to 22-43.7-109(10) C.R.S.

Waiver applications are reviewed independent of the grant application. Upon review of the waiver application, the Capital Construction Assistance Board will make a motion to approve or deny the applicant’s waiver request.

The Capital Construction Assistance Board shall seek to be as equitable as possible by considering the total financial capacity of each applicant pursuant to 22-43.7-109(11) C.R.S.

### Instructions

Be specific when answering the questions and explaining the issues and impacts. Your response should include dollar amounts and specific ways in which such issues and impacts make it impossible for the applicant to make its full matching contribution. Please submit meeting minutes, award/non-award letters, official communications, budget documents, or other relevant documentation to support the responses provided.

Question 2, subsections A-H are related directly to the factors used in calculating the matching percentage. Only respond in detail to the factors which you believe inaccurately or inadequately reflect financial capacity. For those factors which you believe accurately or adequately reflect financial capacity, please leave the response blank or type “Agreed”.

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1. Please describe why a waiver or reduction of the matching contribution would significantly enhance educational opportunity and quality within your school district or BOCES, or why the cost of complying with the matching contribution would significantly limit educational opportunities within your school district or BOCES.

The reduction in local match percentage would free up a corresponding amount of \$700,000. This will allow the revitalization of deteriorating infrastructure enhancing learning opportunities through objectives such as information technology, student safety and security and healthy environment.

This request is made because this district has one and one-half years of time remaining for repayment of its current outstanding bonded indebtedness. In 2000, this district undertook a bond issue for a twenty-year period of time for the construction of a new elementary school and the renovation of another elementary school. As permitted by law, that bond issue was refunded in 2010, realizing a lower interest rate thereby reducing the overall amount of interest for payoff of the issue. The refunding issue was for a ten-year period of time concluding in the year 2020.

This district is seeking a 20-year General Obligation Bond to generate the funds necessary to meet its local match requirement for a BEST grant. Additionally, the voters will be informed that this district will terminate its special mill levy of approximately five mills for bond debt payment following the 2020 year payoff.

2. Please describe any extenuating circumstances which should be considered in determining the appropriateness of a waiver or reduction in the matching contribution.

This district has been impacted by a reduced assessed valuation resulting from the decline of the natural gas extraction industry which had provided a significant number of jobs and supported the local economy. From 2012 through 2018, this district's Assessed Valuation declined from \$122,213,490 to \$118,364,060. Due to TABOR, this district's mill levy remains constant; however, as applied against a reduced Assessed Valuation, the net amount of revenue has proportionately reduced as well.

*\*The following are factors used in calculating the applicant's matching percentage. Only respond to the factors which you feel inaccurately or inadequately reflect financial capacity. Please provide as much supporting detail as possible.*

A. Per Pupil Assessed Valuation relative to the statewide average – The higher the Per Pupil Assessed Value the higher the match.

Applicant's PPAV: \$131,549.38

Weighted Rank: 2.08% of 5% max

**2A. Per Pupil Assessed Valuation**

Per CDE, the FY19 assessed valuation per pupil \$9,437.99

B. The district's median household income relative to the statewide average – The higher the median household income, the higher the match.

Applicant's Median Household Income: \$37,064.00

Weighted Rank: 1.77% of 15% max

**2B. Median Household Income**

The median household income amount for this district is \$37,064.00.

C. Percentage of pupils eligible for free or reduced cost lunch relative to the statewide average – The lower the percentage for free and reduced cost lunch, the higher the match.

Applicant's FRED Percent: 75%

Weighted Rank: 2.25% of 20% max

**2C. Pupils Eligible for Free and Reduced Meals**

The percentage of pupils eligible for Free and Reduced Meals within this district is 75%.

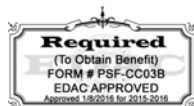
D. Bond Election failures and successes in the last 10 years – The more attempts the school district has made, the lower the match.

Applicant's Bond Elections: 1

Adjustment: -1% (-1% per attempt)

**2D. Bond Election Failures & Successes**

This district failed one MLO election in 2016 and one bond election in 2018. The last successful bond election occurred in 1999 wherein voters approved a bond issue to fund the construction of a new elementary school and remodeling of another elementary school.



E. Bond mill levy relative to the statewide average – The higher the bond mill levy, the lower the match.

Applicant’s Bond Mill Levy: 4.64

Weighted Rank: 11.69% of 20% max

**2E. Bond Mill Levy**

To meet its local match requirement, this district contemplates requesting voter authorization for a General Obligation Bond with the revenues committed to satisfying the BEST grant requirements and any remainder committed to meet other capital improvement needs. If voters approve the GO Bond, the Mill Levy will be approximately 4.64 mills.

F. The school district's current available bond capacity remaining. - The higher the bond capacity, the higher the match.

Applicant’s Remaining Bond Capacity: \$21,745,198

Weighted Rank: 12.13% of 20% max

This district’s current available bond capacity remaining is \$21,745,198.

G. The school district's unreserved fund balance as it relates to their overall budget.

District’s Unreserved General Fund: \$1,209,970

Weighted Rank: 5.39% of 20% max

**2G. Unrestricted General Fund**

This district has a \$1,209,970 unreserved fund balance available in its general fund account.

H. Other unusual financial burdens not reflected in the match calculation (ie. underfunded mandates, unexpected expenses, self-funded programs).

**2H. Unusual Financial Burdens**

Located within our community is an online school with a student count of approximately 300 students. Since the majority of those students reside within this district/s boundaries, this district is obligated to permit such students to participate in its co-curricular activities including athletic programs, band, student debate, etc. at no cost to such students. This places an additional financial burden on this district to accommodate the needs of such online students without any supplemental financial support.

3. What efforts have been made to coordinate the project with local governmental entities, community based organizations, or other available grants or organizations to more efficiently or effectively leverage the applicant’s ability to contribute financial assistance to the project? Please include all efforts, even those which may have been unsuccessful.

**3.Coordination Efforts**

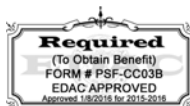
To assure complete coordination of this district’s planned improvements to be accomplished with BEST grant assistance, this district has engaged the professional services of Willdan Group. This company accomplished the updating of this district’s Master Plan and corresponding capital improvements needs assessment.

4. **Final Calculation:** Based on the above, what is the actual match percentage being requested?

29%

CDE Minimum Match Percentage:

34%





● **Facilities Impacted by this Grant Application** ●

**JUNIPER RIDGE COMMUNITY SCHOOL - New K-8 School - Juniper Ridge Community School - 1996**

<b>District:</b>	Auditor - Mesa County Valley 51
<b>School Name:</b>	Juniper Ridge Community School
<b>Address:</b>	640 24 1/2 Road
<b>City:</b>	Grand Junction
<b>Gross Area (SF):</b>	15,748
<b>Number of Buildings:</b>	7
<b>Replacement Value:</b>	\$1,532,134
<b>Condition Budget:</b>	\$59,887
<b>Total FCI:</b>	0.04
<b>Adequacy Index:</b>	0.37



**Condition Budget Summary**

System Group	Replacement Cost	Requirement Cost	SCI
Electrical System	\$73,427	\$0	0.00
Interior Construction and Conveyance	\$143,829	\$0	0.00
Site	\$435,946	\$0	0.00
Special Construction	\$770,107	\$0	0.00
Structure	\$108,825	\$59,886	0.55
<b>Overall - Total</b>	<b>\$1,532,134</b>	<b>\$59,886</b>	<b>0.04</b>

# BEST FY2019-20 GRANT APPLICATION SUMMARIES

**Applicant Name:** JUNIPER RIDGE COMMUNITY SCHOOL

**County:** Mesa

**Project Title:** New K-8 School

**Applicant Previous BEST Grant(s):** 0

**Has this project been previously applied for and not funded?** No

**If Yes, please explain why:**

## Project Type:

- |  |  |  |   |
|--|--|--|---|
| <input checked="" type="checkbox"/> New School         | <input checked="" type="checkbox"/> Roof       | <input type="checkbox"/> Asbestos Abatement  | <input checked="" type="checkbox"/> Water Systems     |
| <input checked="" type="checkbox"/> School Replacement | <input checked="" type="checkbox"/> Fire Alarm | <input checked="" type="checkbox"/> Lighting | <input checked="" type="checkbox"/> Facility Sitework |
| <input type="checkbox"/> Renovation                    | <input type="checkbox"/> Boiler Replacement    | <input type="checkbox"/> Electrical Upgrade  | <input type="checkbox"/> Land Purchase                |
| <input type="checkbox"/> Addition                      | <input checked="" type="checkbox"/> HVAC       | <input type="checkbox"/> Energy Savings      | <input checked="" type="checkbox"/> Technology        |
| <input checked="" type="checkbox"/> Security           | <input type="checkbox"/> ADA                   | <input type="checkbox"/> Window Replacement  | <input type="checkbox"/> Other                        |

## General Information About the District / School, and Information About the Affected Facilities:

Juniper Ridge Community School's (JRCS) charter was approved by Mesa County Valley School District 51 and opened for the 2012-2013 school year in Grand Junction. JRCS began with grades 1-6 and 150 students and currently enrolls 330 students with grades K-8. JRCS will reach maximum capacity of 434 students; double tracking grades 1-8 and 3 kindergartens, by the 2021-2022 school year. JRCS currently operates out of 7 modular buildings on its original, leased campus. The original campus is now too small and JRCS will be moving the modulares to the 28-acre permanent campus for the 2019-2020 school year, as well as constructing Phase 1 (4 classrooms, administrative offices, and multi-purpose room). JRCS is asking the BEST Grant to assist in replacing the unsafe and unsecured modular buildings, which is Phases 2 & 3, consisting of 20 newly constructed classrooms on our permanent campus.

JRCS brings a culturally-rich education, weaving together the arts, academics, and movement for the developing student, while cultivating a passion for lifelong learning. This style of education is unprecedented in the rural location of Mesa County. With an emphasis on Waldorf education, each student is taught art each day and students begin learning a second language in 1st grade and take violin lessons in 3rd grade. Backed by research, learning through the arts with hands-on methods allows for optimum success for the students to think critically and problem solve. This school offers teachers the ability to be creative in their lessons while having an intentional, thoughtful approach in meeting the child's age/grade and development.

Traditionally, this style of education is offered in a private-school setting, and is not attainable to the general public, however JRCS is 1 of 4 public charter Waldorf-inspired schools in Colorado.

JRCS has had success in achieving Performance status in the State Standardized Testing in year four. As history has shown, new charter schools, specifically art-focused, Waldorf-inspired, takes a few years to unify the students and get them on track with a new approach to learning. JRCS is proud of the growth seen on the State Testing. It has been a priority to align the Waldorf curriculum with the common core curriculum to ensure success in the eyes of the state for each student.

JRCS continues to have waitlists each year, and the continued annual growth year over year, is a reflection of the success and desire for this education. Mesa County, where oil and gas, farming, and health industries are prominent, along with a budding outdoor enthusiast sector, is hungry for this deeply artistic, academically rigorous, experimental, well-rounded education which is unlike any other educational program on the Eastern Slope. JRCS is an asset to Mesa County, offering a culturally-rich, artistic quality that can be used to enhance the local community's educational system and draw a diverse demographic to the area.

The child-centered approach of the Waldorf curriculum requires specific classrooms and facilities. Classrooms are designed with the child's well-being in mind, incorporating natural components, soft colors and familial tones that reinforce the safety of the child's learning environment. There is a strong out-of-doors component to the education and students' have significant frequent access to the outside where the security of the facility is of utmost importance. At this point, the existing modular classrooms are not adequate in providing a safe and secure Waldorf experience.

JRCS was presented with the opportunity for the Certificate of Participation (COP) with D-51 in June of 2018 and the financing was completed in November of 2018 for the building of Phase 1, and JRCS did not consider applying for the BEST Grant in years prior due to no construction funding projections.

Again, JRCS is asking BEST to support JRCS in replacing the 7 run-down, unsafe modulares with 20 new, permanent classrooms (Phases 2 & 3).

# BEST FY2019-20 GRANT APPLICATION SUMMARIES

## Deficiencies Associated with this Project:

JRCS is asking for the BEST Grant to replace the existing 7 run-down modular buildings with a brick and mortar building to provide a safe and secure school for the students of JRCS.

The deficiencies are two fold:

(1) It is not an option to continue to repair these old, dilapidated, modulares who have met their life expectancy and  
(2) given today's society with targeted school campuses, it is unacceptable to have students in 7 separate modular buildings with 13 entrances and exits.

Deficiencies of the 7 modulares include the following:

(1.a) Building B is our largest of our units and holds the most classrooms. Some of the ongoing maintenance, safety, and security issues are;

- The roof has reached its end. It is cracked and we experience frequent leaks in both the roof itself and has become warped and irreparable around the roof drains which also causes leaking.
- The building does not sit on a permanent foundation which causes issues from settling with our ability to divert rainwater.
- The interior ceiling has incurred damage from the frequent leaks coming from the roof. Ceiling tiles are constantly needing replacing and the tracking system has become worn and is failing in numerous places.
- All windows in this building are original to its construction. They are inefficient and are quite often in need of repair in order to latch correctly and keep the building secure.
- Building B's exterior siding is worn out and we battle keeping its warping from affecting the ability of the roof's downspouts from operating appropriately. It is also in need of painting
- Exterior doors have become warped and worn from use and from the settling of the building into soil. We have spent many dollars on replacing door mechanisms and re-setting.
- Lighting fixtures (fluorescent panels) are inefficient and in need of repair and replacement.
- Downspouts are in need of replacement and replacement with more durable materials.
- Many of the classrooms are missing trim and moulding which need replacing and repair.
- Flooring tiles throughout the building have reached their end. Many are missing or coming apart which is creating tripping hazards, require constant maintenance, and are creating unsanitary conditions.
- Interior classroom carpeting is solid (not carpet tiles) and is worn, stained, and and torn in some instances.
- Bathroom privacy stall have become warped and dented which causes difficulties in latching.
- Lack of solid foundation creates an opportunity for mice and prairie dogs to nest under and enter the building creating a safety and sanitary hazard. Student's eat their meals in their classrooms.

(1.b) Building C currently houses one kindergarten classroom and our music room

- All exterior windows are original to the building's construction. They are worn and inefficient.
- Exterior aluminum siding has begun to warp, rust, and and need repairs.
- This building does not sit on a permanent foundation and experiences settling and warping to the frame and siding.
- Interior wall separating the two classrooms is in disrepair, lacks acoustical barrier qualities (which makes it difficult for the classrooms to operate effectively), and is unstable.
- There is missing trim and moulding in both classrooms in this building which need repair and replacing.
- The lighting (overhead fluorescent bar fixtures) is old and inefficient.
- Exterior doors have become warped due to building settling and do not latch consistently which causes a safety concern.
- Gutters and downspouts have become worn out and need repair.
- Carpet is solid (not carpet tiles), worn, stained, and old.
- The building's thresholds need repairs due to building settling.
- Insulation is old and inefficient and there has been a risk of damaging children's instruments due to the fluctuation in temperatures and humidity.

-Drop ceiling tiles are worn, cracked, and need replacing.

-Lack of solid foundation creates an opportunity for mice and prairie dogs to nest under and enter the building creating a safety and sanitary hazard. Students eat their meals in their classrooms.

-There is only one bathroom facility for two classrooms.

(1.c) Building D is a two classroom modular which current houses two kindergarten classrooms.

-Building D's roof has lost many roofing tiles in windstorms which have needed replacement. The entire roof needs replacing.

## BEST FY2019-20 GRANT APPLICATION SUMMARIES

- The interior ceiling track system needs replaced as it has become worn, warped, and the acoustic tiles need replacing due to warping, cracking, and damage from mice and old age.
  - The metal siding on this building is worn and has become warped and bent due to the building settling. It does not sit on a permanent foundation and experiences settling.
  - Exterior doors are inefficient and have become warped due to settling. This causes the doors to not latch consistently causing a security issue.
  - Carpet is solid (not carpet tiles), worn, stained, and needs replacing.
  - Windows are leaky.
  - As this building does not sit on a permanent foundation it has become susceptible to both mice and prairie dogs nesting under and entering the building. As children eat their meals in the classrooms this has caused a serious sanitation issue.
  - Tiles in entryways and restrooms are beginning to crack.
  - Fluorescent light fixtures are inefficient.
- (1.d) Building E currently is a two classroom modular which houses our 6th grade and before/aftercare program
- This building does not sit on a permanent foundation and experiences settling.
  - Our accessibility ramp and stairs do not meet ADA code standards and need replacing.
  - The entire building needs gutters installed as drainage is a constant issue, creating unsafe entryways due to leaking water and also causes windows to experience leaks.
  - Windows and exterior doors are experiencing warping from building settling and wear and tear.
  - Windows and exterior doors are inefficient and do not latch consistently causing a security issue.
  - There is trim and moulding that needs repair and replacing throughout the building.
  - Drinking water (which is plumbed in) is not available in this building. This has been a sanitation issue.
  - Drywall has become damaged from normal wear and tear and needs repairing throughout building.
  - Fluorescent lighting are inefficient and need updating.
  - Drop ceiling system has become old and warped over time. It needs replacing of the metal tracking, as well as, of many of the acoustic ceiling tiles.
  - Mice and prairie dogs have nested under and entered the building due to the lack of permanent foundation. This is a serious sanitation issue as children eat their meals in the classroom.
  - Floor tiles at entryway and in the bathrooms are beginning to become worn and need replacing.
  - There are many carpet tiles that need replacing due to stains and wear.
- (1.e) Building F is where our current 7th and 8th grade classrooms are housed and it is a two-classroom modular.
- Building F's roof is experiencing leaks and warping due to building settling.
  - The metal siding on this building is experiencing both normal wear and tear but also warping from building settling. This needs to be both repaired/replaced and painted.
  - Gutters need to be completely replaced as they are contributing to leaks in the roof from not draining effectively.
  - Windows and exterior doors are inefficient and do not latch efficiently which is causing a security issue.
  - Drywall in this building has experienced some damage due to age and needs repair and replacing.
  - Tile flooring in bathrooms is beginning to need replacing due to cracking and staining.
  - Carpet is solid (not carpet tiles) and has become stained, worn thin, and torn due to age. This needs to be replaced.
  - Overhead Fluorescent lighting is inefficient.
  - Mice have nested under and entered the building which is a serious sanitation issue as children eat their meals in the classroom.
  - The drop ceiling system is experiencing failures and both the track and the tiles need constant repair.
- (1.f) Building G is the home of our SPED department. It is one large room which is utilized by many adults and children throughout the day,
- This building is not plumbed which is a health issue. There is not plumbed drinking water nor bathroom facilities in this building.
  - Building G is not on a permanent foundation which causes the same settling, warping, and rodent issues as our other modular buildings.
  - Windows and exterior doors are inefficient.
  - Fluorescent lighting fixtures are outdated and inefficient and need replacing.
  - Flooring tiles throughout this building are needing replaced due to cracking and breaking.
- (1.g) Building H is a two classroom modular which houses both 5th grade classes.

## BEST FY2019-20 GRANT APPLICATION SUMMARIES

- This building does not have a gutter system and this lack of drainage causes leaking around doors and gutters and pooling on the roof.
- There is no plumbed drinking water in this building which is a sanitation and health issue.
- Siding is becoming warped and worn needing both repair and replacing.
- This building does not sit on a permanent foundation which causes issues with settling and warping.
- Mice and prairie dogs have nested under and entered the building causing a serious sanitation and health issue as children eat their meals in their classrooms.
- Doors and windows are inefficient and worn. They do not latch consistently which is a security issue.
- Overhead lighting is inefficient.
- Tile at entryway and in bathrooms is beginning to show wear and tear and needs replacing.
- The drop ceiling system needs immediate repair. The track system is falling apart, tiles are dropping, breaking, and needing replacing.
- The drywall is becoming damaged and needing repairs and painting.
- There is a section of subflooring in the bathroom that is rotten. This is under the toilet and is causing both safety and sanitation concerns.
- As you can see from the detailed lists above our modular buildings pose real and immediate issues in areas of health, safety, and security. They are simply outdated and worn and the cost of continue maintenance and repair is outweighing the lifespan of these buildings.

Other:

- \*All buildings pose a safety concern in the area of a fire safety system as none of them possess a fire sprinkler system.
- \*All buildings experience frequent and necessary repairs to our outdated HVAC systems. They are loud and do not regulate the temperature well throughout the building. Typically, the west side of the building is too hot and the east is too cold.
- \*The lack of electrical service has limited our ability to implement our science program to the fullest.
- \*A few areas of inadequacy not outlined above lie in the realm of appropriate access to 21st century communication and technology systems.
- \*Compromised Vision, we do not have the capabilities of a 21st Century School.

(2) With the 7 modular complex, there are 13 entry and exits and pose unnecessary risk. Items include:

- (2.a) Creating a single-building school containing one entrance/exit would allow JRCS staff to manage students and visitors at a single entry/exit point, to monitor all activity.
- (2.b) A new school-wide intercom system would be instrumental in providing immediate communication in the event of an emergency situation.
- (2.c) During the winter months, ice and snow can easily accumulate in the shadows of the buildings. Because of the multiple entrances and exits, students must always leave their classroom building for any activities and this poses a safety risk for students slipping and falling.

### **Proposed Solution to Address the Deficiencies Stated Above:**

Given the stated deficiencies, the only possible remedy is to replace the modular classrooms with brick and mortar construction with a secure entrance including a vestibule outfitted with all of the latest technology to keep the students safe and secure. This replacement request is Phase 2 & 3, which would complete the total school buildout of the Master Plan and eliminate all modular classrooms.

Phase 1 is scheduled for January 2019 through September 2019 of the Master Plan and includes administrative offices, 4 classrooms, and a multi-purpose room as well as transporting the 7 run-down modular buildings. The Phase 1 building is a single structure designed to have Phases 2 and 3 added on to it. If awarded the BEST grant, JRCS will simultaneously commence construction of Phases 2 & 3 in May of 2019.

Phase 2 consists of relocating the modular buildings on the new campus. The current locations of the modular buildings will need to be relocated in order to construct the next two phases. This would happen in late May/early June before the modulars are moved from the leased premises. Phase 2 also consists of the construction of 10 classrooms, grades 1-5, double tracked, bathrooms, as well as an area designated for a future kitchen; all attached to the northside of Phase 1.

Phase 3 consists of grades 6-8, double tracked, and 4 elective classrooms, and bathrooms; all attached to the southside of Phase 1.

## BEST FY2019-20 GRANT APPLICATION SUMMARIES

In order to bring these deficiencies to resolution, JRCS is pursuing the BEST grant to provide a safe, permanent building for students. The JRCS committee evaluated all of the options with the following criteria in mind:

- Safety and security of the students and staff
- Life safety and code violations
- Educational program inadequacies and deficiencies as it relates to the existing facilities
- Immediate and anticipated maintenance and repairs needed for each building
- Facility maintenance and operations costs
- Efficiency of the buildings: energy, LED lights, etc.

A new permanent facility that replaces all the modular units will solve the following problems:

### STRUCTURE

Creating a permanent concrete foundation system will provide for a long-term stable structure environment along with structural steel frame meeting and exceeding codes for the safety of the occupants. A solid structure eliminates alignment issues, gaps, and settlement problems with the doors and seam gaps in the flooring, as well as needing to replace ceiling tiles regularly.

### SAFETY AND SECURITY

A new facility would eliminate the 13 entry and exit points that cannot be sufficiently controlled. A new building would create one secure entry point and provide greater security, eliminating much of the need for students to travel outside between the buildings. One building would allow security cameras to be used more efficiently and effectively. Restrooms for staff and students would be separate, increasing the level of student safety facility wide.

### FIRE SAFETY

A new facility would be fire code compliant with a sprinkler system ensuring that the building is compliant with fire sprinklers, alarm horn/strobes in the corridors, smoke detectors, and fire extinguishers in all the classrooms. It would also ensure that our outlets are code compliant within the entire school.

### ENVIRONMENTAL HEALTH AND SAFETY

New mechanical systems would eliminate poor ventilation, lack of air filters, and permeable doorways and windows. It would decrease dust and allergens, leading to higher quality of health. A new mechanical system in a new building would eliminate individual HVAC units and provide a high quality system for everyone.

### BUILDING INTERIOR

BEST grant funds would install updated and long-lasting components such as windows, fixtures, carpet, 21st Century learning classroom furniture, plumbing, HVAC and LED lighting with energy usage and costs for maintenance in mind

### COMMUNICATION /TECHNOLOGY

Construction of a new facility will allow for upgrading current technology to provide for 21st century learning including cabling, projectors, internet band-width, wireless connections, and Public Address systems.

### How Urgent is this Project?

JRCS has outgrown its original, leased location and is moving to its new, permanent location. As a public charter school, the funds required to build the Master Plan were not sustainable, so the decision was made to continue to use the modular classrooms in Phase 1 and construct only the administration, 4 classrooms and multipurpose room.

Given the age and current status of the 7 modular buildings, consisting of 18 modular classrooms it is imperative they are replaced soon. They are at the end of the service life, where structural integrity has diminished greatly and building climate systems and materials are severely worn inside and outside; all of which are driving up maintenance costs annually.

Lastly, the safety component of using modulares with so many unsecured entrances and exits. Being a Waldorf School with students constantly frequenting the out-of-doors this remedy is a necessity.

This is an extremely urgent project and the opportunity is now to continue to build Phases 2 & 3, the 20 classrooms, as the building of Phase 1 will be underway and completed by September 2019.

If the project is not awarded, JRCS will continue to operate out of the 7 run-down modular buildings with the 13 unsecured entrances/exits.

**Does this Project Conform with the Public School Facility Construction Guidelines?** Yes

**If not, provide an explanation for the use of any standard not consistent with the guidelines:**

# BEST FY2019-20 GRANT APPLICATION SUMMARIES

## How Does the Applicant Plan to Maintain the Project if it is Awarded?

JRCS's maintenance plan for the proposed new addition will be based on best practice of "predictive" maintenance with the goal of avoiding the practice of "breakdown and emergency" maintenance. The predictive maintenance plan will include:

- A maintenance schedule: The plan should extract timelines from manufacturers' maintenance manuals and create schedules for the frequency of preventive maintenance, including dates of occurrence and projected cost.
- Operation manuals: Maintenance and operations manuals containing maintenance procedures for scheduled tasks and descriptions of properly operating systems will be created for each system, component, or product scheduled to be maintained. The manuals will contain repair standards and work order procedures should they be necessary.
- Commissioning: After installation, it is important to have professionals verify that building systems/components, as well as their functionality and operations, meet the intent of owners and designers. Final adjustments should be carefully documented and consulted if changes need to be made.
- Records: Over time, actual maintenance on the various systems should be accurately tracked including both the date of occurrence and cost. These records will be used to predict the accuracy of future projections and costs.
- On-site, full-time maintenance manager. JRCS employs a full-time maintenance person who oversees all mechanical systems and provides regular testing and checks to ensure fully functioning performance as well conduct day-to-day repairs to eliminate risk of long-term damage and costs.

The key building systems and their integral components that will be part of the plan include, but are not limited to:

- Air handling equipment: Fans, ductwork, dampers, and louvers should be inspected and maintained regularly; performance is to be maximized through proper balancing.
- Roof system: Surfaces should be inspected regularly, with proper removal of snow and water; leaks should be repaired upon discovery.
- Plumbing system: Sprinklers systems, water fountains, pumps, expansion joints, and drains should be regularly inspected.
- Electrical systems: Regularly scheduled analysis by professional engineers and electricians, with thermographic scanning and motor current analysis used to identify common faults.
- Fire alarm and public address system: Regularly testing and maintenance.
- Finishes: Painting should be done on a regular schedule and to avoid disturbances of planned occupancy of the school, flooring is to be cleaned, waxed and/or sealed regularly, depending on the materials and location in the school, whether classroom or bathroom.

Annual maintenance is anticipated to be in the estimated amount of \$2.40 per square foot based on approximately 29,400 square feet for total of \$97,020.00. For the proposed grant SF (excluding Phase 1) This information was based on information gathered from local contractors and it is believed to be feasible. However, better projections can be determined after specific systems and materials are specified in the final plans, and actual operating information becomes available.

The following forecasted maintenance describes the frequency of anticipated maintenance per year, the estimated cost of each occurrence and the total annual maintenance cost for each system.

Below is a list of systems/components and the estimated cost per year of maintenance: Total = \$70,000.00

HVAC = \$25,000  
Plumbing (LEED) = \$5,000  
Electrical = \$5,500  
Building Shell = \$3,000  
Internal Repairs = \$2,500  
Janitorial Supplies = \$25,000  
Ground Repairs = \$7,500  
Low Volt / IT Maintenance = \$1,500

JRCS acknowledges that maintenance numbers during the initial years of the school will be lower than the following years. This proves to be true based on our analysis of the actual repair cost from other charter schools for which we obtained information. JRCS believes the estimates are feasible.

**Describe the condition of the public school facility at the time it was purchased or constructed and, if the facility was not new or was not adequate as a public school facility at that time, provide the rationale for purchasing the facility or constructing it in the manner in which you did:**

## BEST FY2019-20 GRANT APPLICATION SUMMARIES

Juniper Ridge Community School (JRCS) opened its doors in 2012 on 5 acres of leased land and the purchase of 3 used modular units: 2 units each having 2 classrooms, and 1 large unit of 8 classrooms. Over the last 4 years, JRCS has acquired an additional used modular building consisting of 2 classrooms each, annually, to support the school's growth. JRCS now operates out of 7 used modular units containing 18 classrooms and 1 SPED classroom.

The units include:

Building B, year built 2001, installed 2012, 8-classroom modular; currently grades 1-4, double tracked: 128'x55'; 7,040 sqft (bathrooms- girls-3 stalls, boys-2 stalls, 2 urinals)

Building C, year built 1996, installed 2012, 2-classroom modular; Kinder & Music: 60'x24'; 1,440 sqft (one bathroom in Kinder)

Building D, year built 2002, installed 2012, 2-classroom modular; Kinder- 2 classes: 60'x24'; 1,440 sqft (two bathrooms- one in each classroom)

Building E, year built @2000, installed 2015, 2-classroom modular; grade 6 & after care: 60'x23.5'; 1,410 sq ft (2 bathrooms)

Building F, year built @2000, installed 2016, 2-classroom modular; grades 7&8: 60'x23.5'; 1,410 sq ft (2 bathrooms)

Building G, year built @2000, installed 2017, 2-classroom modular; SpEd/Intervention: 60'x23.5'; 1,410 sq ft (no wall between classrooms, no bathrooms)

Building H, year built @2000, installed 2018, 2-classroom modular; Two classes of Grade 5: 60'x23.5'; 1,410 sq ft (2 bathrooms)

It is never ideal to operate a school out of modular units, especially old, dilapidated units that are in constant need of costly maintenance and an unsafe layout with multiple entrances and exits. The reason we purchased these used modular units was because it was all that JRCS could afford. Three of the modulares are leased and pay monthly on them (roughly \$1,000/month each). JRCS was fiscally responsible and only purchased/leased additional classrooms needed each year, however knowing the site location was only temporary and in the future there were plans to purchase land and build a permanent structure. JRCS was not able to finance the additional modulares, so each year the modular purchase and installation was taken from our operating budget, which for a start-up school, is very tight.

These 7 modular units will be moved this summer to the new campus which was purchased last year. Given the age of the modulares and the deconstructing and reassembly process needed to move them, we are concerned the move will damage the units even further and will add to the already expensive annual upkeep.

### **Describe the history of capital improvements made to the facility by the district/charter school in order to make it suitable for students. Include a list of all capital projects undertaken in the affected facility in the last 3 years:**

With JRCS year over year growth, it was necessary to acquire 2 new classrooms each year (or 1 modular building).

One modular unit was installed in 2016 (Building F) which included accessibility ramps, concrete pathways, sewer extension, plumbing, technology, phone lines, moving fees, security upgrade, and electricity for a cost of \$34,882.

One modular unit (Building G) was installed in 2017 which included accessibility ramps, concrete pathways, and technology, phone lines, moving fees, and security upgrade for a cost of \$17,693.

One modular unit (Building H) was installed in 2018 which included accessibility ramps, concrete pathways, sewer extension, plumbing, technology, phone lines, electricity, moving fees, and security upgrade for a cost of \$46,818.

Other areas of improvement or repair for the last three years across the school and not pertaining to new modular installations include:

Sewer/plumbing repairs or improvements: \$7,005.34

Technology improvements/repairs: \$5,410.19

Structural/Interior repairs or improvements: \$13,811.75

Security and safety improvements/repairs: (rekeying, exterior lighting, security & fire system): \$5,496.06

HVAC repairs and improvements: \$3,082.30

Lighting/Electric repairs or improvements: \$2,816.21

Landscape maintenance: \$7,526.44

Pest/Rodent control: \$1,309.38

Tool Shed: 2,000

Storage shed: \$2,500

Other building needs such as our garden and woodworking facilities- \$270.00 for woodworking expansion in 2016

The totals of modular additions and modular repairs were in excess of \$150,000 over the past 3 years, which roughly equated to an additional 2% expenditure of the operating budget.

In 2017, JRCS had the fortunate opportunity to purchase a centrally-located, 28-acre parcel of land for its permanent campus in the amount of \$865,000.00. Furthermore, local bank financing was available to assist in the purchase. This more than



## BEST FY2019-20 GRANT APPLICATION SUMMARIES

doubled the debt payment for JRCS, increasing the occupancy costs for the year.

In 2018, JRCS was again very fortunate to receive a Certificate of Participation (COP) from School District 51, our authorizer. A COP is the District borrowing funds through private bonding and leveraging collateral on behalf of a charter school. JRCS received a \$7,565,000 loan from District 51 to refinance debt from the land purchase and to build Phase 1 of the 3-Phase project. Phase 1 includes constructing; 4 classrooms, administrative offices, and a multi-purpose room, as well as relocating all 7 modulars to the new campus. This significantly increased the debt service for the school.

The goal of JRCS is to have a beautiful, safe, and secure permanent campus and the steps taken over the past 3 years have all been in alignment with this goal.

### **What options outside of the BEST grant has the applicant investigated or leveraged to address the school's facility needs?**

Juniper Ridge Community School initially explored funding the entire project through private bond financing, however it was clear the school could not carry the debt on such a large project. Since JRCS focuses on a community feel, the school does not have desires to grow enrollment past the maximum capacity of 434 students (24 students/class), which will only allow a certain amount of debt to be carried by the school.

JRCS sought funding through a COP with District 51 for Phase 1. JRCS is asking for funding from BEST for Phases 2&3 which would complete the campus Master Plan.

In addition to BEST, JRCS has reached out to the League of Charter Schools to inquire about additional capital campaign funding. JRCS is exploring the Gates Family Foundation who prioritize capital projects in rural communities and the El Pomar Foundation.

JRCS plans to approach District 51 if a bond measure and/or mill levy override is approved as a ballot measure, to assist in the building of the new campus.

A capital campaign for the new campus is in the works and will be unveiled shortly.

### **How do you budget annually to address capital outlay needs in your district/charter? Include \$/FTE for the prior fiscal year:**

JRCS has developed a capital replacement plan that sets aside and earmarks funds for the purpose of replacement of each of the major systems in the new facility as they reach the end of their service life. JRCS acknowledges that the replacement costs may take an unexpected path over the coming years and decades, as the economy and school funding priorities vary from year to year. We also understand that constant analysis of the components and systems through the facilitation of the maintenance plan will help keep capital replacement costs lower than normal, perhaps over a longer period of time. In preparation of this replacement plan, JRCS determined for each of the categories an estimated replacement cost and an annual amount based on a straight-line method to be earmarked in capital reserves in order to cover the expenses of replacement.

JRCS's capital replacement plan is to set aside earmark funds for the purpose of replacement of each of the major systems of the new school as they reach the end of service lives. Foreseeing the expenditures that will ultimately be required to replace these major systems will allow the school to plan for the future and be prepared as capital expenses arise. JRCS plans to allocate approximately \$40,000-\$50,000 annually in a separate capital reserve account based on the Capital Replacement Plan, with a portion of this reserve held by their District 51 Authorizer.

To prepare the capital replacement plan. JRCS determined for each category the estimated service life of the item, the estimated replacement cost, and the annual amount based on straight-line method to be set aside in capital reserves in order to pay for the cost of replacing the item at the end of its useful life. The information set forth below.

Roofing has a 30-year life span or a total cost of \$500,000 and an annual cost of \$18,660.

Air Handlers have a 25-year life span for a total cost of \$65,000 and annual cost of \$2,600.

VAV's have a 20-year life span for a total cost of \$25,000 and an annual cost of \$1,250.

Miscellaneous Plumbing has a 25-year life span for a total cost of \$20,000 and an annual cost of \$700.

Lighting Fixtures have a 15-year life span for a total cost of \$20,000 and an annual cost of \$1,500.

Painting has a 10-year life span for a total cost of \$35,000 and an annual cost of \$1,750.

Flooring has a 15-year life span for a total cost of \$150,000 and an annual cost of \$10,000.

Landscaping/irrigation has a 20-year life span for a total cost of \$5,000 and an annual cost of \$250.

Hardscapes have a 25-year life span for a total cost of \$20,000 and an annual cost of \$800.

Joint Sealant/weather strip has a 10-year life span for a total cost of \$3,000 and an annual cost of \$300.

Smart boards/projects have a 10-year life span for a total cost of \$78,000 and an annual cost of \$3,000.

Low Voltage Cabling/Equip has a 20-year life span for a total cost of \$35,000 and an annual cost of \$1,500.

## BEST FY2019-20 GRANT APPLICATION SUMMARIES

Doors and hardware have a 30-year life span for a total cost of \$15,000 and an annual cost of \$750.  
 Windows /Glazing have a 30-year life span for a total cost of \$30,000 and an annual cost of \$1,000.  
 Fire Sprinklers have a 50-year life span for a total of \$40,000 and an annual cost of \$1,750.  
 The total costs of all the above systems and components are \$1,041,000 and annual costs totaling \$45,810.00.  
 Based on our analysis, JRCS feels setting aside these amounts is more than adequate to have funds available when replacement is necessary, without taking into account the idea that rehabilitation will be a possible solution instead of replacement with respect to many of the components under this plan. Of course, this capital replacement plan will need to be modified for the actual systems, which are specified in the actual construction of the school.

### FINANCIAL RESPONSIBILITY FOR MAINTENANCE AND CAPITAL REPLACEMENT PLAN

The total annual estimated amount for costs under the maintenance plan and capital plans as described above is approximately \$45,000. In order to assure that JRCS can be financially responsible for these amounts, JRCS analyzed its historical and projected sources of revenue. JRCS has been allocation between \$40,000 - \$50,000 every year for capital improvements and this amount has been sustainable within our budget. Thus, JRCS is confident that we can financially support the maintenance and capital replacement plan.

### If relevant to your project, what are your current annualized utility costs, and what amount of reduction in such costs do you expect to result from this project?

Our annualized utility costs are listed below for 2018:

Sewer is paid to the City of Grand Junction:

\$3,655.68

Internet and phone is paid to Charter:

\$3,679.67

Trash and recycling services paid to Commercial Refuse:

\$1,854.80

Water is paid to Ute Water:

\$3,135.65

Electricity and Gas is paid to XCEL:

\$35, 996.32

JRCS anticipates some of these categories decreasing due to energy efficient updating. For example, electricity and gas is anticipated to have a 25-35% reduction based on industry averages.

<b>Grant Request:</b>	\$14,231,499.53	<b>CDE Minimum Match %:</b>	54%
<b>Applicant Match:</b>	\$440,149.47	<b>Actual Match % Provided:</b>	3%
<b>Total Project Cost:</b>	\$14,671,649.00	<b>Is a Waiver Letter Required?</b>	Yes
<b>Affected Sq Ft:</b>	29,400	<b>Contingent on a 2019 Bond?</b>	No
<b>Affected Pupils:</b>	335	<b>Source of Match:</b>	Capital Reserve Funds
<b>Cost Per Sq Ft:</b>	\$499.04	<b>Escalation %:</b>	5%
<b>Soft Costs Per Sq Ft:</b>	\$110.01	<b>Construction Contingency %:</b>	11%
<b>Hard Costs Per Sq Ft:</b>	\$389.02	<b>Owner Contingency %:</b>	9%
<b>Cost Per Pupil:</b>	\$43,796	<b>Historical Register?</b>	No
<b>Gross Sq Ft Per Pupil:</b>	139	<b>Adverse Historical Effect?</b>	No
<b>Is a Master Plan Complete?</b>	Yes	<b>Does this Qualify for HPCP?</b>	Yes
<b>Who owns the Facility?</b>	District		

# BEST FY2019-20 GRANT APPLICATION SUMMARIES

If owned by a third party, explanation of ownership:

If match is financed, explanation of financing terms:

## Financial Data (Charter Applicants)

<b>Authorizer Min Match %:</b>	57%	<b>CEFCA or financing attempts:</b>	0
<b>&lt; 10% district bond capacity?</b>	No	<b>Enrollment as % of district:</b>	2.00%
<b>Authorizer Bond Attempts:</b>	1	<b>Free Reduced Lunch %</b>	36.3%
<b>Authorizer MLO Attempts:</b>	1	<b>% of PPR on Facilities:</b>	15.4%
<b>Non-BEST Capital Grants:</b>	0	<b>Unreserved Gen Fund % Budget:</b>	18.5%
<b>FY18-19 CSCC Allocation*:</b>	\$79,938.55	<b>3yr Avg OMFAC/Pupil:</b>	\$1,333.84

\*CSCC Allocation figures are based on a \$25M statewide appropriation. Pending legislation may to revise to \$29.25M

**Who will facility revert to if school ceases to exist?**

Mesa County Valley School District 51 (D-51) owns the property and will continue to have ownership.

## BEST Charter School Grant Waiver Application

The BEST grant is a matching grant and each applicant is assigned a unique minimum matching requirement, pursuant to 22-43.7-109(9) C.R.S., to identify their financial capacity. An applicant may apply to the Capital Construction Assistance Board for a waiver or reduction of the matching moneys requirement for their project if the applicant determines their minimum match is not reflective of their current financial capacity, pursuant to 22-43.7-109(10) C.R.S.

Waiver applications are reviewed independent of the grant application. Upon review of the waiver application, the Capital Construction Assistance Board will make a motion to approve or deny the applicant’s waiver request.

The Capital Construction Assistance Board shall seek to be as equitable as practicable by considering the total financial capacity of each applicant pursuant to 22-43.7-109(11) C.R.S.

### Instructions

Be specific when answering the questions and explaining the issues and impacts. Your response should include dollar amounts and specific ways in which such issues and impacts make it impossible for the applicant to make its full matching contribution. Please submit meeting minutes, award/non-award letters, official communications, budget documents, or other relevant documentation to support the responses provided.

Question 2, subsections A-H are related directly to the factors used in calculating the matching percentage. Only respond in detail to the factors which you believe inaccurately or inadequately reflect financial capacity. For those factors which you believe accurately or adequately reflect financial capacity, please leave the response blank or type “Agreed”.

---

1. Please describe why a waiver or reduction of the matching contribution would significantly enhance educational opportunity and quality within your charter school, or why the cost of complying with the matching contribution would significantly limit educational opportunities within your charter school.

Juniper Ridge Community School’s desire is to cap enrollment at 434 students (24 students/class), to have a tight-knit, community feel and maintain the high-quality, student-centered approach, which is the foundation of the school’s curriculum.

The classroom modular classrooms are small and dingy, and do not lend themselves to the Waldorf curriculum. The curriculum calls for movement, instruments, and space for students to express themselves.

The School’s annual operating budget of approximately \$3,000,000 does not allow a capital reserve fund of \$7,000,000, no matter how much JRCS has saved over the past 7 years.

JRCS received a Certificate of Participation (COP) from School District 51, our authorizer. (A COP is the District borrowing funds through private bonding and leveraging collateral on behalf of a charter school. ) JRCS received a \$7,565,000 loan from District 51 to refinance debt from the land purchase and to build Phase 1 of the 3-Phase project. The annual principal and interest payment is nearly \$500,000, which is double that of our previous loan and lease

payments combined. It would not be financially prudent to acquire any additional debt. With this BEST waiver opportunity, it would provide the means to safety and security for all of our students without compromising our school culture and programs.

2. Please describe any extenuating circumstances which should be considered in determining the appropriateness of a waiver or reduction in the matching contribution.

Juniper Ridge Community School operates within Mesa County Valley School District 51 which is one of the lowest Per Pupil Revenue funded Districts in the State of Colorado; funded well below the State average. While District 51 is the 10th largest school district in Colorado, the County is large and expansive sitting on the western border. Located 250 miles from the Denver/metro area and requiring long and difficult travel, this creates an isolated environment not allowing useful, necessary resources available to most school districts in Colorado. Networking is a challenge given the distance and often we are unaware of resources available.

*\*The following are factors used in calculating the applicant's matching percentage. Only respond to the factors which you feel inaccurately or inadequately reflect financial capacity. Please provide as much supporting detail as possible.*

A. Weighted average of district matches which comprise the student population.

Applicant's Weighted Average: 57%

Agreed.

B. Does the authorizing district have 10% or less bonding capacity remaining?

Applicant's Response: No Adjustment: No – No Change

Agreed.

C. Is the charter school in a district owned facility?

Applicant's Response: Yes Adjustment: Yes – 5% Increase in Match

While District 51 owns Juniper Ridge Community School's facility, it is because it was used as collateral for the Certificate of Participation where the District borrowed funds on JRCS's behalf to build Phase 1 of the new campus. The annual principal and interest payment is nearly \$500,000, which is double that of our previous loan and lease payments combined, of a \$3,000,000 operating budget.

D. How many times has the charter school attempted or attained bond proceeds from an authorizer's ballot measure for capital needs?

Applicant's Total: 2 Adjustment: -2% decrease of max 5%

This year District 51 agreed to share Bond proceeds with the district-authorized charter schools. This amount was minimal and was restricted to specific areas, such as 5 increased school days.

E. How many times has the charter school attempted to do a special mill levy override pursuant to 22-30.5-405 for capital needs?

Applicant's Total: 2

Adjustment: -2% decrease of max 5%

This year District 51 agreed to share mill levy funds with the district-authorized charter schools. This amount was minimal and was restricted to specific areas, such as 5 increased school days.

F. How many times has the charter school attempted or attained grant funding through a non-BEST source for capital needs?

Applicant's Total: 0

Adjustment: 0% decrease of max 5%

Given the fact that JRCS was presented with the opportunity for the Certificate of Participation (COP) with D-51 in June of 2018 and the financing was completed in November of 2018 for the building of Phase 1, JRCS's time frame was limited.

G. How many times has the charter school attempted or attained funding through CECFA or another type of financing?

Applicant's # Attempted: 0

Adjustment: 0% (3% decrease for attempted)

Applicant's # Attained: 0

Adjustment: 0% (5% decrease for attained)

Given the fact that JRCS was presented with the opportunity for the Certificate of Participation (COP) with D-51 in June of 2018 and the financing was completed in November of 2018 for the building of Phase 1, JRCS's time frame was limited.

H. Charter school enrollment as a percent of district enrollment.

Applicant's Enrollment: 2%

Adjustment: -5%

Agreed.

I. Free/reduced lunch percentage in relation to the statewide average charter school free/reduced lunch percentage?

Applicant's FRED: 36.3%

Adjustment: +1%

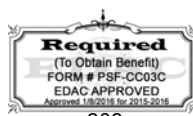
Agreed.

J. Percentage of PPR spent on non M&O facilities costs.

Applicant's % PPR: 15.4%

Adjustment: -1%

For Phase 1, the facilities costs on the permanent campus will be nearly \$500,000 annually, which is double that of our previous loan and lease payments combined. This is a significant increase given an annual operating budget of just over \$3,000,000. Also, considering the increase in square footage, there will be significant maintenance cost increases affecting the budget.



K. Unreserved fund balance as a percent of budget.

Applicant's % of Budget: 18.5%

Adjustment: +1%

JRCS acted fiscally responsible and contributed to reserves annually of at least 3% of the operating budget. While, this is a sizable amount, it is of course nowhere near \$7,000,000 needed to match this grant.

3. What efforts have been made to coordinate the project with local governmental entities, community based organizations, or other available grants or organizations to more efficiently or effectively leverage the applicant's ability to contribute financial assistance to the project? Please include all efforts, even those which may have been unsuccessful.

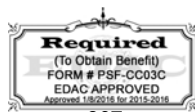
Juniper Ridge Community School is inquiring to District 51 to be included in the next Bond/Mill Levy ballot measure. JRCS is also exploring the Gates Family Foundation, whose focus is on rural education facilities as well as the El Pomar Foundation, and other charter specific opportunities. JRCS contributes annually to a Capital Reserve Fund and desires to build up reserves to a significant amount. JRCS is also embarking on a Capital Campaign with the building of Phase 1.

4. **Final Calculation:** Based on the above, what is the actual match percentage being requested?

3%

CDE Minimum Match Percentage:

54%



March 2019

BEST Grant  
Colorado Department of Education

RE: Letter of Support for Juniper Ridge Community School, a Mesa County Valley School District 51 Charter School

To Whom It May Concern,

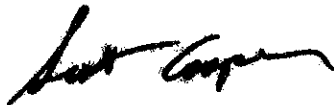
In 2012, Juniper Ridge Community School was granted its charter by District 51 and became the 2nd charter school of D51 and 3rd charter school in Mesa County. Juniper Ridge was able to come in and fill a much needed gap with an emphasis on arts and music and still holds this niche today.

Juniper Ridge has shown determination and resilience by securing financing for their initial property and modulars, and has showed steady growth and fiscal soundness over the past 6 years. Juniper Ridge and D51 have grown together, as a new charter school and as a District who in the past had not had a lot of experience with Charter Schools. D51 is excited for the opportunity for Juniper Ridge to secure funding to build out Phase 2 and Phase 3 of their school location. D51 is in strong support, in part, due to the lack of safety and security the modulars have on their new location.

D51 has shown support most recently by granting Juniper Ridge a Certificate of Participation to the tune of \$7.5 million dollars, which means, D51 received private bonding (borrowed funds) on behalf of Juniper Ridge and Juniper Ridge will pay it back over a 20 year period.

D51 is in full support of Juniper Ridge's success and dedication to the Waldorf Curriculum which provides yet another much-needed educational alternative focusing on academics through a rich art and music curriculum to the students of Mesa County.

Thank you,



Mesa County Valley School District 51



● **Facilities Impacted by this Grant Application** ●

**MESA COUNTY VALLEY 51 - Grand Junction HS Replacement - Grand Junction HS - 1954**

<b>District:</b>	Auditor - Mesa County Valley 51
<b>School Name:</b>	Grand Junction HS
<b>Address:</b>	1400 N 5TH ST
<b>City:</b>	GRAND JUNCTION
<b>Gross Area (SF):</b>	213,963
<b>Number of Buildings:</b>	6
<b>Replacement Value:</b>	\$71,826,994
<b>Condition Budget:</b>	\$29,793,675
<b>Total FCI:</b>	0.41
<b>Adequacy Index:</b>	0.36



**Condition Budget Summary**

System Group	Replacement Cost	Requirement Cost	SCI
Electrical System	\$11,863,655	\$6,649,763	0.56
Equipment and Furnishings	\$3,271,071	\$2,060,917	0.63
Exterior Enclosure	\$10,556,990	\$3,301,289	0.31
Fire Protection	\$317,368	\$1,468,252	4.63
Furnishings	\$1,580,383	\$197,229	0.12
HVAC System	\$9,765,054	\$1,827,927	0.19
Interior Construction and Conveyance	\$12,533,864	\$9,609,396	0.77
Plumbing System	\$3,237,319	\$2,443,819	0.75
Site	\$7,455,796	\$3,580,297	0.48
Structure	\$11,245,494	\$145,174	0.01
<b>Overall - Total</b>	<b>\$71,826,994</b>	<b>\$31,284,063</b>	<b>0.44</b>

# BEST FY2019-20 GRANT APPLICATION SUMMARIES

**Applicant Name:** MESA COUNTY VALLEY 51

**County:** Mesa

**Project Title:** Grand Junction HS Replacement

**Applicant Previous BEST Grant(s):** 1

**Has this project been previously applied for and not funded?** No

**If Yes, please explain why:**

**Project Type:**

- |  |  |  |   |
|--|--|--|---|
| <input type="checkbox"/> New School                    | <input checked="" type="checkbox"/> Roof               | <input checked="" type="checkbox"/> Asbestos Abatement | <input checked="" type="checkbox"/> Water Systems     |
| <input checked="" type="checkbox"/> School Replacement | <input checked="" type="checkbox"/> Fire Alarm         | <input checked="" type="checkbox"/> Lighting           | <input checked="" type="checkbox"/> Facility Sitework |
| <input type="checkbox"/> Renovation                    | <input checked="" type="checkbox"/> Boiler Replacement | <input checked="" type="checkbox"/> Electrical Upgrade | <input type="checkbox"/> Land Purchase                |
| <input type="checkbox"/> Addition                      | <input checked="" type="checkbox"/> HVAC               | <input checked="" type="checkbox"/> Energy Savings     | <input checked="" type="checkbox"/> Technology        |
| <input checked="" type="checkbox"/> Security           | <input checked="" type="checkbox"/> ADA                | <input checked="" type="checkbox"/> Window Replacement | <input type="checkbox"/> Other                        |

**General Information About the District / School, and Information About the Affected Facilities:**

Grand Junction, the largest city in Mesa County, has history dating back 140 years. In 1881, the area experienced a land rush settlement and established a town, first named Ute, then West Denver and then was re-named Grand Junction, for its location at the confluence of the Gunnison and Colorado Rivers. At the turn of the century, irrigation transformed the area to an agricultural region. DOLA projects that Mesa County's population will grow to 224,820 by 2025 (92.3% growth from 2000). The District is the largest employer, with 2,789 full-time, and 864 part-time or substitute employees. Similar to other Western Slope communities, the economy relies on cyclical industries such as energy and tourism.

Mesa County Valley School District 51 was consolidated in 1951 from smaller school districts to provide k-12 education to those who reside within the 2,000 square mile boundaries. The District vision is "engage, equip, and empower our learning community today for a limitless tomorrow". The District will serve approximately 22,082 students during the 2018-19 school year and is comprised of 24 elementary schools, 8 middle schools, a 8/9 school, 5 high schools, 1 career center, 2 alternative schools, 3 charter schools and 1 remote K-12 school. 43.48% qualify for free and reduced lunch.

The maintenance department operates work orders on School Dude software. There are 41 employed maintenance staff members, and 17 employees on the grounds crew. The maintenance staff maintains almost 3 million SF of facilities.

One of the five traditional high schools in the District, Grand Junction High School (GJHS), serves between 1500 and 1600 students every year with the highest enrollment to date of 1700 students in 2012. Free and Reduced lunch rate is 44%. There are 171 staff members at GJHS.

GJHS is a comprehensive high school that is moving to become an Academy Model high school in order create small learning communities. Students are enrolled in 8 classes every semester with an open-campus lunch. Students can access academic options at Career Center, Valley, and Western Colorado Community College. GJHS graduation rate is 83% for 4 years; 89% for 7-year completer rate. The matriculation rate is 57.8%, with 55% attending a 4-year college.

GJHS is considered a flagship school for the school district, being 100 years in existence and economic diversity of student populations. The high school's academic team has won the state championship 20 times and 2 national championships. GJHS athletic programs include football, volleyball, soccer, golf, tennis, cross country, basketball, wrestling (2018 state champion), swim and dive, lacrosse, softball, baseball, track and field and cheer/poms.

GJHS Theatre program is CTE certified, including band, choir, orchestra and theatre arts. GJHS' theater and music programs have received numerous awards for outstanding performances over the past few years. Notably, GJHS has won Colorado Bandmasters Association Exemplary Band award every year since 2007. One of our staff members was nominated as a quarter-finalist for the 2019 Grammy Music Educators Award.

GJHS' Journalism program uses Adobe Creative Suite and Trello. The business department offers a technology program with a

## BEST FY2019-20 GRANT APPLICATION SUMMARIES

host of software and internet platforms. The Technology Education program includes courses designed for students with hands-on, project based learning that builds on college and workforce readiness skills.

From our previous master plan, completed over 15 years ago, over \$500M in capital needs in our facilities were identified. In 2017, our voters supported a bond measure of \$118M to replace Orchard Mesa MS and various safety, security, deferred maintenance and small additions across the district. We were fortunate to be awarded a BEST grant to fund a portion of OMMS to stretch these dollars further towards security and safety deficiencies in other buildings.

### **Deficiencies Associated with this Project:**

GJHS has been operating for over 63 years. Since then, continuous repairs have to be made on the substructure and structure to keep the facility functioning; however, many of these repairs address the bare minimum requirements needed and are only short-term solutions.

CDE completed the facility assessment for GJHS in July 2018. Per this report, the total FCI of the campus was rated at 0.39. However, certain areas of GJHS are in notably worse condition, such as the Site, Math Building, and 300 Building addition, which have reported FCI values ranging from 0.48-0.56.

In 2018, the District also initiated a comprehensive facility master plan process for all school buildings and through a competitive procurement, selected the team of Cuninghame Group Architecture and Chamberlin Architects to lead the process. As part of the master plan, facility condition assessments were completed by the consultant team at GJHS in November of 2018. The findings of this assessment recommended the building to be replaced, as it has a projected remaining life expectancy of 0-5 years.

Critical deficiencies identified at GJHS include the following: structural longevity, safety and security, hazardous materials, roofing and building envelope, mechanical, electrical, plumbing (MEP) systems, ADA accessibility, special education spaces, interior systems (including equipment and furnishings) and overcrowding challenges. Additionally, the campus does not have a Career and Technical Education space located at the facility needed to help support current student's academic/personal growth and career development. A detailed description of all critical building systems deficiencies that need to be addressed is provided below.

#### **Structural Longevity:**

The structural systems of the existing GJHS facility are compromised because of continued differential settlement on volatile soils conditions, and the relatively poor quality of construction of the facility. As the GJHS building components settle at different rates over time in relation to each other, District maintenance staff and resources are challenged to maintain the buildings functionality. The entire Slab on Grade system requires constant attention in maintenance to allow doors and other systems to be functional. For example, to maintain the functionality of the doors in key locations throughout the school, the slab on grade at both interior and exterior doors have to be modified consistently to provide accessible circulation through the school. The findings from the master plan facilities assessment estimated the GJHS substructure to be past its effective years of services life, with their findings indicating the Slab on Grade system as 'failing' and the standard foundation as, 'in need of substantial improvement.'

While much of the structural condition of GJHS is due to volatile substrate soils, the facility was originally constructed from 1954-1956 with a limited level of quality control. The masonry bearing walls were constructed with a random mix of (3) different types of structural masonry units, which have varying strengths and degrees of structural capacity. Their varied parameters also perform differently in permeability and resistance to the elements and temperatures. Additionally, the varied materials and layup patterns suggest some walls are not structurally reinforced; however, adding reinforcement in these areas would be very difficult and costly. The walls were also constructed without an air gap cavity or tested weather barrier, so the varied blocks may hold moisture or expand/contract with temperature changes at different rates. The November 2018 Facility Assessment found gaping cracks in the exterior wall and foundation systems of GJHS, and emphasized the weaker portions of the masonry bearing walls are bound to crack and fail.

Compounded with the differential settlement of the soils conditions, introduction of non-uniform soils capacities, and diverse loading patterns, the assessment ultimately concluded it would be impossible to project the useful life of the structure and/or

## BEST FY2019-20 GRANT APPLICATION SUMMARIES

prevent its failure without expending large sums of money. Due to the constant movement of the building's exterior walls, the structural stability of rails and other egress components require consistent attention and periodic repair. Overall, the structural integrity of the existing GJHS facility is limited and presents hazards associated with safety, security, accessibility. The current District maintenance staff and resources are significantly challenged to make these conditions passable.

### Safety and Security:

Similar to other schools constructed in the 1950's, GJHS did not have security designed into the facility that would be common today. The GJHS campus currently lacks a controlled and secured entry vestibule, a secure site perimeter, fire protection systems in the majority of the building, emergency voice evacuation system, and an integrated panic button.

The school lacks an access control system and has limited security cameras. There are some main points of entry that are equipped with automated key card access and a few doors that have door lock intrusion detection. However, many of the exterior points of entry do not have the system installed. Most of the doors and door hardware were installed with the original construction of each building, which have not been updated to align with current accessibility codes (ANSI 117.1 or ADA). Nor do they address CDE's Public School Facility Construction Guidelines for classroom doors to be lockable from the inside of the classroom without a key, presenting a significant risk in the event of a lockdown. Occupants can gain access to the interior of the high school through approximately 55 separate exterior points of entry into the different buildings making it an extremely challenging task to monitor and control campus entry/exit, and provide a secure perimeter.

It is apparent that unauthorized individuals can gain access to restricted areas for authorized District-personnel only. For example, the assessment team noted evidence of unauthorized access on the library roof and damage to the sun shades. The district is faced with a significant amount of risk and increased liability due to their susceptibility to vandalism, intruders, and minimal campus security. In the event of a lock down, it would be extremely difficult to track the comings and goings of students, staff, and visitors. The security and safety of the facility is compromised because of the outdated interior doors, door hardware, and lack of site security risking GJHS students and staff safety in the event of an emergency or lockdown.

In addition to the deficiencies' discussed above, GJHS also has a lot of inherent safety and health hazards due to the building conditions caused by differential settlement from volatile soils. Tripping hazards along interior walkways, column lines, and at concrete edges are noted throughout the facility and the surrounding area due to heaving slabs (caused by differential settlement), cracks in concrete, and trench grate gaps. Most of railings, bleachers, and steps throughout the facility are noted to be non-compliant with current ADA Standards or building code. Some of the entrances into the building are missing crosswalks and have drainage flows into pedestrian areas raising concerns for slipping and/or struck-by hazards.

### Site Safety

While there are clear points of vehicular access to GJHS, its perimeter does not have a hard boundary to direct pedestrians to designated entry points. The main entrance to the facility is hard to locate from the parking lots and would require some previous knowledge as to its location.

The line of sight for certain areas of the buildings are impeded for the occupants and local law enforcement. The landscaping does not restrict unauthorized access to windows, roofs, or other areas of the site.

The GJHS campus site contains additional improvement including sports field, tennis courts, storage sheds, and bleachers. Despite these improvements, the CDE report indicated the GJHS Site to have an FCI of 0.48. Some of the parking lots, roadway base course, and flexible pavement located around the site in various areas were installed in 1954 and have aged beyond their expected useful life of 65 years. The CDE observed years remaining were increased for most of the facility's parking lot and roadway system (curbs, rails, barriers, paving, and surfacing systems) because the systems are currently functioning; however, these systems are almost 25 years beyond their useful life and are in need of repair/replacement. Trip and fall hazards are found throughout the site from heaving walkways to deteriorating asphalt.

For vehicles and pedestrians on campus, the GJHS site is hard to navigate because of the few signs or way-finding features directing traffic and pedestrians to the correct location. Currently, the service delivery area on the campus is not independent or separated from pedestrian traffic and significant conflicts exist. GJHS needs to have an independent service delivery area to

## BEST FY2019-20 GRANT APPLICATION SUMMARIES

ensure the safety and health of its students, staff, and visitors.

Additionally, the general classrooms are spread between multiple buildings, which causes safety concerns because all students are not under one roof and travel between buildings. Multiple buildings on campus also applies stress on the students and staffs time-sensitive schedules.

### Hazardous Materials:

Routine maintenance and building upgrades are typically more complicated in facilities constructed in the 1950's due to the presence of Asbestos Containing Material (ACM) and other harmful components such as Lead found in paints and tile glazes. During the 1950's, in Western Colorado and Utah, it was common practice to use the sand from uranium mill tailings in masonry and concrete. From original construction until 2009, the soil under the school site was plagued by decayed uranium that eventually turns into radon gas. This has been typical of many educational facilities on the Western Slope as there is a rich history of uranium, uranium mining, and using the tailings in the foundations of buildings, like schools. Colorado instated a law that schools have to test for radon, so in 1989 the District facilities tested for radon. Previous abatement methods were attempted at GJHS to remove the radioactive decay products without impacting the facility's structural integrity; however, mill tailings still remain under portions of the foundational slabs of the building additions.

The results of the Hazmat and AHERA reports indicate GJHS has many types of Asbestos Containing Material (ACM) in acoustic ceiling (57,500 SF), floor tiles and mastic (55,500 SF), drywall system (21,000 SF), pipe fittings, pipe insulation and transite panels. Past renovation and upgrade projects have minimized any increased construction costs by avoiding modification to areas that encapsulate or contain ACM. This approach has required upgraded electrical, plumbing, and mechanical systems to be re-routed through areas without ACM, which meant mounting them onto the roof and building exterior. Although each improvement project saved the cost of routing these systems through ACM contaminated areas, this most likely resulted in other potential issues and costs. Supports and fasteners required for mounting these systems have become weather barrier penetrations that result in moisture penetration and uncontrolled ventilation. This approach has also resulted in increased maintenance costs and/or deferred costs as the ACM must be carefully removed at a premium, even once the building is demolished.

### Roof and Building Envelope:

Based on the assessment reports, the GJHS exterior wall systems appears to be failing, as they require constant attention in maintenance to seal openings for protection from the elements. These exterior elements are considered to be past their effective years of service life due to the constant movement in bearing soils under the slabs and consistent maintenance required to properly function in keeping the weather (drafts and moisture) out. For buildings that are more than 30 years old, the exterior window system's age is beyond expected life with performance projections that are far less than optimal. The current system may be in service and functioning, but any exterior window in the buildings constructed before 1988 should be replaced. Similarly, the exterior door and hardware systems were installed with the original construction of each building and have not been upgraded to align with current accessibility codes. These building elements are also considered to be beyond their expected life and are projected to have performance that is far less than optimal. The system may be in service and functioning, but it is recommended for replacement due to probable increased condition budget needs, the potential failure of its components, or in order reduce operational cost and improve performance.

The roof covering a large portion of GJHS building was installed in 1986 and is a ballasted built-up roofing (BUR) system with deck insulation. Similar to other roofs on the GJHS campus, this roof was observed to have (3) remaining years, however, the system is beyond its 20-year useful life and in need of repair/replacement. Although the roof construction of the GJHS is considered to be performing adequately, minor cracking was observed in the second floor interior walls potentially from relative movement of the roof and floor structures. In addition, the expansion joints in the roof were observed as brittle and cracking in multiple locations. The failing expansion joints could be a reason for water leaks in certain areas adjacent to the joints.

The buildings' roof covering systems are more than 20 years old, which is considered beyond their useful life and projected to be failing with performance far less than optimal. Similarly, the roof openings and accessories are beyond their useful life and are more than 20 years old. Multiple water stains were observed on the ceiling tile throughout the building. GJHS has leaks

## BEST FY2019-20 GRANT APPLICATION SUMMARIES

from roofing penetrations or plumbing leaks above the ceiling. As discussed in other sections, piping, HVAC and electrical conduit has been mounted onto the roof to avoid ACM contaminated areas during past improvement projects. The master plan consultants observed a lack of defined maintenance access pathways and roof ladders for the GJHS facility, resulting in increased wear and tear on parapets and dangerous conditions for maintenance staff.

### Mechanical:

The cooling generating systems throughout GJHS include a chiller and TRANE rooftop HVAC units. The rooftop HVAC units are beyond the average operating life of 15-years. The rooftop units are generally constant air volume and are less efficient than new units.

As noted in the CDE report, there are concerns over the air quality in the facility. Ventilation throughout the original building is an issue and there has been reported concern due to odor.

### Electrical:

GJHS building does not have sufficient electrical capacity to support their current program needs and frequently experience tripped breakers throughout various sections of the building when demand is too high. Currently, the facility has 1600amp 480Y/277 3 phase 4 wire electrical system installed. The electrical system in its existing configuration, from the transformer to the panel, does not have room for additional electrical capacity to accommodate current or future electricity demands. As noted in the CDE assessment, the school's backup generator is not sized correctly to supply power to all the emergency lighting throughout the buildings, which presents a safety risk to students, staff, and visitors on the campus in the case of an emergency.

The 208V distribution switchboard is nearing the end of its useful life. Some branch circuit panels have little to no spare capacity and are near the end of their useful life. In addition, the electronic ballasts are nearing the end of their useful life and GJHS staff has already experienced some ballast failures. These features are in need of updating to meet current and future demands.

To avoid ACM associated challenges and costs, infrastructure for past update/upgrade projects have been routed to less than ideal locations. Roof mounted piping, HVAC, and electrical conduit had a lower first cost; however, it presented the following challenges: Additional maintenance attention to verify weather tight duct, pipe, and conduit connections, exposure to vandalism, thousands of additional locations for roof leaks resulting from supports and fasteners on/through roof system and tripping hazards for maintenance staff.

### Plumbing:

The plumbing fixtures are in large part from the original construction of the building in 1954. The CDE report noted the school does not have adequate plumbing to meet the program requirements. The waste water piping system includes underground waste water drainage piping. The main sanitary sewer line travels east from N. 5th St. to the building and enters in multiple areas. The current system is 64-years old and beyond its useful life and is in need of replacement. The fixtures throughout the facility are generally in functional condition; however, they have exceeded their useful service life of 30-years. Parts replacements and repairs are difficult and expensive. There are long stretches of hallways without drinking fountains or restrooms and the auditorium has small restrooms that are not adequate for program needs. Many of the water coolers in the facility are also beyond their average service life, although some have been replaced due to failure. The district needs to replace all fixtures with low flow type in accordance with current codes. Providing new fixtures will have multiple benefits including reducing the maintenance and repair costs, while also reducing water usage and providing savings on water utility bills.

The domestic water distribution system is composed of old steel water lines that are in danger of catastrophic failure due to age. Facilities personnel have noted that past failures have led to boiler damage and switchgear damage due to flooding from ruptured lines. The domestic water piping is 64-years old, which is 34-years beyond the average service life of 30-years. Domestic water piping systems that are beyond their useful service life have high incidences of leaks, diminished flow due to corrosion and build-up of mineral deposits, and will experience increased failures. Therefore, GJHS and the district needs to replace the failing domestic water distribution systems including all cold and hot water piping.

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GJHS facility has a sanitary waste piping system that is 34-years beyond its average service life of 30-years. Sanitary waste piping systems that are beyond their average service life experience similar failure to domestic water piping systems described above. Facility staff frequently experience failures of the sanitary piping, such as clogged lines and slow drainage flow.

The storm water piping was installed at the same time as the sanitary waste piping system and is considered to be 34-years beyond its average service life of 30-years. Storm water piping systems that are aged beyond their useful life have a higher incidence of leaks and will experience increased failures. Ponding of excess storm water can lead to slipping hazards for GJHS students, staff, and visitors. Similar to the recommendations put forth for the sanitary waste piping system, the district needs to replace all horizontal sections of piping and replace vertical sections of piping as renovations are completed on the building.

### Fire Alarm System and Fire Sprinkler:

Generally, there are no fire protection or fire suppression systems in the majority of GJHS. Most of the facilities were designed without a sprinkler system installed. There is a small sprinkler system located in the auditorium of the main building; however, fire protection sprinkler systems are needed for all areas of the facility. There are several fire hydrants located on the site in various areas, which were installed in 1954. The fire alarm system has zones throughout the building, but is not equipped with voice alarm in the event of a security breach.

### Accessibility:

An student, staff, or visitor with accessibility needs would find navigation of GJHS campus difficult and lacking. The facility elevator is not in operation to provide a path of egress for the disabled on the second floor. There are a few ramps at the main egress points throughout the building; however, some of the stairs and ramps are not equipped with handrails, guard rails, or landings that conform to current standards and there are thresholds that exceed allowable vertical dimensions. Many locations throughout the facility have doors that do not have the physical dimensions to allow a wheelchair bound individual to gain access to or egress from a room. Access to the upper level of the classroom wings are not compliant with current accessibility standards (ADA & ANSI 117.1). The facility is far from compliant with current accessibility standards and accommodation for accessibly challenged individuals is not feasible without major improvements. For example, one in seven group restroom water closets must be compliant, but none were found in compliance with current standards. There is not a single occupant restroom facilities compliant with current accessibility standards on site.

### Special Education Spaces:

The existing Special Education space is not large enough to adequately support any increase in special need students and their program will not be adequately supported. Currently, the special education spaces do not have enough equipment, storage space, kitchen appliances, and a dark room to support the severe needs of students currently enrolled.

### Interior Systems and Finishes:

Interior partitions in the existing facility are composed of CMU, Glazed Block, and/or wood/metal stud framing with plaster or gypsum board cladding. In general, they are projected to have a 40-year life. The interior partitions throughout GJHS are functioning as intended, but could be materially improved or reconfigured to accommodate current code standards, contemporary teaching methods, and varied styles of learning. There are numerous restroom toilet partitions, towel/hand-dryers, and soap dispensers missing or not operational throughout the building.

Many of the doors and much of the hardware was installed with the original construction of each building, which has not been updated to align with current accessibility codes nor do they address CDE's Public School Facility Construction Guidelines for classroom doors to be lockable from inside the classroom without a key. Besides the accessibility issues, there are significant concerns associated with the classroom doors not being adequately equipped with push button lock hardware in the event of a lock down or emergency.

GJHS has interior casework throughout the buildings that are beyond their useful life of 20-years and are projected to have far less than optimal performance. The casework systems in this facility are composed of finished wood, plastic laminate, and melamine cabinets with plastic laminate or chemical resistant countertops.

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There are minimal to no acoustical materials between the classrooms and academic spaces, so noise disturbances are common during class-time.

### Overcrowding Challenges:

As noted in the CDE report and confirmed by the master plan consultants, GJHS student population fluctuates; however, the school program currently exceeds the classroom spaces required to adequately support the program needs as recommended in the CDE Construction Guidelines 4.3.

The cafeteria has a capacity of 226 students, which is not large enough to support the current student population. Facility staff noted that it is extremely loud during lunch periods and they feel that the space does not invite students to eat on campus. Additionally, the high school coaches and grounds crew feel the practice fields are deficient and suffers from overcrowding issues. The fields do not meet the program needs because there are not enough fields to support all of the athletic programs at this facility. They are currently in use so heavily that there is no time between practices for the fields to receive the necessary maintenance.

In summary, GJHS has critical deficiencies for an operating high school serving many students. It should be noted that the majority of the items discussed above were the items noted within the CDE assessment that should be replaced immediately or in the near future. This school has urgent needs based on information from the professionals at CDE and our hired consultant team. If this grant application were awarded and the district were to have a successful 2019 bond measure, the new school would be opened by the 2022 school year.

### Proposed Solution to Address the Deficiencies Stated Above:

In May 2018, The District established a Steering Committee / Long Range Planning (LRP) Committee to provide guidance throughout the master plan process. Next, they coordinated an effort to recruit a large group of stakeholders from each of the communities, all school levels, local businesses and governments, as well as staff and students. This group of approximately 65 people have actively participated in a series of three interactive workshops led by Cuningham/Chamberlin to provide input and guidance to the District. First, they created a Shared Vision statement for how facilities support the District's Learning Model, and have established Principles and Standards by which to measure their school facilities. District educational leaders participated in a "gap analysis" that was complete by all school Principals, measuring the gap between their current facilities and what they wish to see to better support their educational model. The community Workshops were held in September, October, and November 2018, resulting in the creation of a 10-year view of the District, which included improvements to all high schools and specifically replacement of Grand Junction High School. The district-wide Master Plan process is anticipated to conclude by late Spring 2019.

Although replacement of Grand Junction High School was not a new idea in the District, the community representatives in the Master Plan Workshops made it clear that it is a near-term priority. As a result, the LRP and the Board of Education supported programming and planning for a replacement facility in support of pursuing of a BEST Grant. A first step was for several GJHS staff members to visit other high school facilities. Alexandria Area High School in Alexandria, MN is a high school that was recently replaced and serves a similar target capacity as GJHS. Several representatives from GJHS toured AAHS and met with the Principal to learn about their process to achieve a community-focused design process and school culture.

The District Master Plan process and the facility tours enabled the LRP and key GJHS staff to efficiently engage in two sessions over two days to finalize a Program List of Spaces, drawing upon the existing GJHS space utilization and the CDE Guidelines; explore initial design concepts in small groups; and ultimately create a concept layout for the replacement of Grand Junction High School.

The CDE Statewide Facility Assessment and the Cuningham/Chamberlin Team's Facility Assessment documentation clearly illustrates the significant problems with the existing facility and its deficiencies. The proposed solution to replace GJHS came directly from the guidance and feedback of the LRP and GJHS staff members and focused on addressing the most critical issues and concerns.

GJHS currently is comprised of eight separate buildings, with seven on the main campus and one across North 5th St. School.



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District leadership has been vocal about the ongoing safety and attendance problems that result from having many entry points that cannot effectively be supervised or secured. The replacement school will consist of one contiguous building located on the main campus, which will enable GJHS to have a secure campus and build a better sense of community. With a single new building, the school can achieve its goal of having one main entry point that can be controlled by the Administration and the opportunity for a closed campus. This would significantly improve the current campus conditions, which is lacking in safety and site security.

The new school will be designed specifically around the District's Learning Model, which focuses on individualized, performance-based learning. This approach will allow for a variety of learning styles, including group work, individual learning, and traditional methods of teaching. Unlike the existing disparate buildings that do not share circulation or provide informal spaces for students to work together or study, the replacement facility is planned to have compact three-story learning communities arranged around a central core space that can enable a greater sense of community and connectivity. The learning communities will be better able to support the District's learning model and the opportunity to consider an academy model of educational delivery. Instructional space will be utilized in a way that compliments the learning model. As such, each student will have the opportunity to thrive in a safe and secure environment that caters to his or her learning abilities and needs. The central, open, social commons or heart to the school will further emphasize GJHS as a community school while efficiently supporting multiple program functions such as dining, gathering, study space, and the central circulation for the building. It will also serve as the pre-function area with concessions and support for the adjacent Auditorium and Gymnasium spaces, which are positioned for easy access from the Main Entry and public parking, which is critical for the many community uses that depend on GJHS today.

The more compact replacement facility allows for the current practice and competition athletic areas on the campus to be reconfigured after the existing buildings are removed, as well as a safer separation of student, visitor, staff, and bus vehicular circulation on campus. Having a new school for these students is imperative.

### **How Urgent is this Project?**

Based on reports from our master planning team, many of the structures and systems at GJHS have a life expectancy of 0-5 years, indicating critical and urgent need for solutions. If we were to have a catastrophic failure of these systems, we would not be able to provide a facility for 1,600 students and 171 staff members. We do not currently have capacity at our other high schools to absorb this many students. We must act now to address this failing facility.

The District is submitting BEST grant this year, in the hopes of leveraging the support to engage a reluctant voting base and assist with the critical needs for a school replacement for Grand Junction high school students. Award of the grant funding will greatly assist in demonstrating the need at this facility and fiscal responsibility of the District.

**Does this Project Conform with the Public School Facility Construction Guidelines?** Yes

**If not, provide an explanation for the use of any standard not consistent with the guidelines:**

### **How Does the Applicant Plan to Maintain the Project if it is Awarded?**

The District prioritizes and commits to regular maintenance of District facilities to extend their value to their students, staff and community for as long as possible. The District's Maintenance Department has an operating budget of \$3,201,466. This includes department staff of licensed HVAC technicians, fire alarm technicians, plumbers, and electricians; as well as non-licensed carpenters, painters, roofer and grounds keepers.

The District will maintain the capital construction project upon completion of the grant, through implementation of a preventative and proactive maintenance program. Staff at all of the District buildings (44 total) send in electronic work orders for trouble calls. The Maintenance Department generates the majority of the work orders as part of a preventative maintenance program aimed to maximize the life of their buildings. The maintenance staff performs the required fire alarm inspections, services the plumbing systems, programs and monitors the building automation systems, and follows the recommended filter replacement and cleaning schedule on the HVAC equipment. The Maintenance Department contracts with qualified vendors for inspection and maintenance services on the fire suppression systems, elevators, emergency generator systems, gym floors, and roofing systems that are under warranty. The buildings are painted on an average of every six years. The average age of the District schools is 43 years old. The Maintenance Department has demonstrated over the

## BEST FY2019-20 GRANT APPLICATION SUMMARIES

years that it maintains our District's facilities in a clean, healthy, and comfortable condition. The District's newer facilities take a lower proportion of their resources to maintain in good condition, but they are cared for with the goal of keeping them in a "like new" condition. The annual fire department and health department inspections of the District's facilities typically find few, if any, violations with the buildings or systems at our schools.

A new school will first be under warranty by the general contractor and then maintained according to the District's regular schedules. The contractor will also provide training and operation/maintenance information to the District's Maintenance Department for all new components such as doors, hardware, windows and flooring. IT software upgrades will be the responsibility of the District over time, and hardware and software costs over time will be budgeted by the District.

Maintenance of a new school will be budgeted appropriately as part of the District's annual operating budget. Renewal and replacement of equipment will be funded through the District capital projects fund. The District annually transfers money into the capital projects fund from the general fund to budget appropriately for the funding required for replacement of buildings at the end of their useful life. The current amounts (2018-19) budgeted are approximately \$100 per pupil. These transfers may increase as needed depending on the projects required each year. The Maintenance Department's preventative approach to maintenance demonstrates the District's ability to maximize the life of the new school.

**Describe the condition of the public school facility at the time it was purchased or constructed and, if the facility was not new or was not adequate as a public school facility at that time, provide the rationale for purchasing the facility or constructing it in the manner in which you did:**

The current High School, on 5th Street, was constructed to replace the first Grand Junction High School building at 9th Street and Chipeta Avenue. The old Grand Junction High served on that site from 1911-1955 and remained in partial use by the District until 1971. The site was later converted to the Chipeta Elementary School. The current Grand Junction High School building opened in its location at 1400 North 5th Street in 1956 and, with a few modifications, it serves in this location today. It is believed the construction of Grand Junction High School was funded through community taxes.

**Describe the history of capital improvements made to the facility by the district/charter school in order to make it suitable for students. Include a list of all capital projects undertaken in the affected facility in the last 3 years:**

The existing Grand Junction High School facility, opened in 1956, has undergone several capital improvements in order to make it suitable for students. It received two small additions in 1969 and 1972, Building "C" and Vo-Tech. From 1982-85 the library, weight room and Building "D" were added. In 1998 the Math Building was constructed. The most recent significant capital improvement to the facility occurred 13-15 years ago, from 2004-06, when the Arts/Technology and auxiliary gym were constructed.

Outside of some cosmetic updates of carpeting, cove base and painting, GJHS has not had any significant capital improvements in the past three years.

**What options outside of the BEST grant has the applicant investigated or leveraged to address the school's facility needs?**

Given the cost of a replacement high school needed to serve our student population, a BEST Grant application was one of the avenues knew we needed to pursue for a replacement GJHS. With a successful BEST grant, we feel we can leverage the awarded grant funding into a successful 2019 bond.

In this application, we are requesting drastically less funding from BEST than we could ask from the program based on our match %. We are requesting 8% of our total project cost instead of 43% that we could request. We feel the amount of 8% being awarded by BEST will go a long way with our community support to replace GJHS.

If awarded BEST and in the event of a successful 2019 bond, we will look at other grant funding programs to leverage those dollars.

**How do you budget annually to address capital outlay needs in your district/charter? Include \$/FTE for the prior fiscal year:**

The District budgets annually through the Capital Projects Fund to address the facility's capital outlay. The District funds are allocated from the General Fund for Capital requirements:

Capital Expenses  
FY12-13 \$983,838

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FY13-14 \$1,892,663  
 FY14-15 \$2,230,336  
 FY15-16 \$800,596  
 FY16-17 \$2,483,479  
 FY17-18 603,941  
 FY18-19 \$1,200,000 (budgeted)

**If relevant to your project, what are your current annualized utility costs, and what amount of reduction in such costs do you expect to result from this project?**

The average annual utility cost for gas and electric at GJHS was \$158,277 in 2016, \$182,462 in 2017 and \$156,879 in 2018.

We anticipate seeing a reduction in energy and water utility costs with a replacement school. Estimates are a reduction of 25%-35% of these costs on average.

<b>Grant Request:</b>	\$9,920,438.56	<b>CDE Minimum Match %:</b>	57%
<b>Applicant Match:</b>	\$114,085,043.44	<b>Actual Match % Provided:</b>	92%
<b>Total Project Cost:</b>	\$124,005,482.00	<b>Is a Waiver Letter Required?</b>	No
<b>Affected Sq Ft:</b>	261,200	<b>Contingent on a 2019 Bond?</b>	Yes
<b>Affected Pupils:</b>	1,534	<b>Source of Match:</b>	2019 Bond
<b>Cost Per Sq Ft:</b>	\$474.75	<b>Escalation %:</b>	10%
<b>Soft Costs Per Sq Ft:</b>	\$54.73	<b>Construction Contingency %:</b>	7%
<b>Hard Costs Per Sq Ft:</b>	\$417.32	<b>Owner Contingency %:</b>	8%
<b>Cost Per Pupil:</b>	\$80,838	<b>Historical Register?</b>	No
<b>Gross Sq Ft Per Pupil:</b>	170	<b>Adverse Historical Effect?</b>	Undetermined
<b>Is a Master Plan Complete?</b>	Yes	<b>Does this Qualify for HPCP?</b>	Yes
<b>Who owns the Facility?</b>	District		
<b>If owned by a third party, explanation of ownership:</b>			
<b>If match is financed, explanation of financing terms:</b>			

### Financial Data (School District and BOCES Applicants)

<b>District FTE Count:</b>	20,488	<b>Bonded Debt Approved:</b>	\$118,500,000
<b>Assessed Valuation:</b>	\$1,685,347,113	<b>Year(s) Bond Approved:</b>	17
<b>PPAV:</b>	\$82,262	<b>Bonded Debt Failed:</b>	
<b>Unreserved Gen Fund 17-18:</b>	\$11,854,293	<b>Year(s) Bond Failed:</b>	
<b>Median Household Income:</b>	\$51,803	<b>Outstanding Bonded Debt:</b>	\$73,210,000
<b>Free Reduced Lunch %:</b>	51%	<b>Total Bond Capacity:</b>	\$337,069,423
<b>Existing Bond Mill Levy:</b>	10.14	<b>Bond Capacity Remaining:</b>	\$263,859,423
<b>3yr Avg OMFAC/Pupil:</b>	\$1,299.30		

● **Facilities Impacted by this Grant Application** ●

**MANZANOLA 3J - PK-12 Addition and Renovation - Manzanola ES - 1975**

District:	Auditor - Manzanola 3J
School Name:	Manzanola ES
Address:	200 S CANAL ST.
City:	MANZANOLA
Gross Area (SF):	22,807
Number of Buildings:	1
Replacement Value:	\$4,621,112
Condition Budget:	\$2,544,061
Total FCI:	0.55
Adequacy Index:	0.29



**Condition Budget Summary**

System Group	Replacement Cost	Requirement Cost	SCI
Electrical System	\$680,255	\$744,568	1.09
Equipment and Furnishings	\$94,279	\$117,849	1.25
Exterior Enclosure	\$463,683	\$418,121	0.90
Fire Protection	\$1,083	\$0	0.00
HVAC System	\$472,242	\$96,807	0.20
Interior Construction and Conveyance	\$911,075	\$406,845	0.45
Plumbing System	\$365,940	\$272,415	0.74
Site	\$514,794	\$487,456	0.95
Structure	\$1,117,761	\$0	0.00
<b>Overall - Total</b>	<b>\$4,621,112</b>	<b>\$2,544,061</b>	<b>0.55</b>

**MANZANOLA 3J - PK-12 Addition and Renovation - Manzanola Jr/Sr HS - 1925**

District:	Auditor - Manzanola 3J
School Name:	Manzanola Jr/Sr HS
Address:	301 SOUTH CATALPA
City:	MANZANOLA
Gross Area (SF):	53,835
Number of Buildings:	4
Replacement Value:	\$10,493,294
Condition Budget:	\$6,376,904
Total FCI:	0.61
Adequacy Index:	0.31



**Condition Budget Summary**

System Group	Replacement Cost	Requirement Cost	SCI
Electrical System	\$2,168,539	\$1,938,054	0.89
Equipment and Furnishings	\$172,714	\$215,892	1.25
Exterior Enclosure	\$888,691	\$557,627	0.63
Fire Protection	\$2,378	\$945,065	397.42
HVAC System	\$1,098,415	\$1,219,344	1.11
Interior Construction and Conveyance	\$2,361,871	\$1,109,190	0.47
Plumbing System	\$719,090	\$504,679	0.70
Site	\$929,810	\$758,112	0.82
Structure	\$2,151,784	\$96,209	0.04
<b>Overall - Total</b>	<b>\$10,493,294</b>	<b>\$7,344,172</b>	<b>0.70</b>

# BEST FY2019-20 GRANT APPLICATION SUMMARIES

**Applicant Name:** MANZANOLA 3J

**County:** Otero

**Project Title:** PK-12 Addition and Renovation

**Applicant Previous BEST Grant(s):** 0

**Has this project been previously applied for and not funded?** No

**If Yes, please explain why:**

## Project Type:

- |  |  |  |  |
|--|--|--|--|
| <input type="checkbox"/> New School                    | <input checked="" type="checkbox"/> Roof       | <input checked="" type="checkbox"/> Asbestos Abatement | <input type="checkbox"/> Water Systems                         |
| <input checked="" type="checkbox"/> School Replacement | <input checked="" type="checkbox"/> Fire Alarm | <input checked="" type="checkbox"/> Lighting           | <input checked="" type="checkbox"/> Facility Sitework          |
| <input checked="" type="checkbox"/> Renovation         | <input type="checkbox"/> Boiler Replacement    | <input type="checkbox"/> Electrical Upgrade            | <input type="checkbox"/> Land Purchase                         |
| <input checked="" type="checkbox"/> Addition           | <input checked="" type="checkbox"/> HVAC       | <input type="checkbox"/> Energy Savings                | <input checked="" type="checkbox"/> Technology                 |
| <input checked="" type="checkbox"/> Security           | <input checked="" type="checkbox"/> ADA        | <input type="checkbox"/> Window Replacement            | <input checked="" type="checkbox"/> Other Campus consolidation |

## General Information About the District / School, and Information About the Affected Facilities:

Manzanola is located in Otero County, on the Arkansas River, 50 miles East of Pueblo. Total population of Manzanola in 1910 was 428, it rose to a peak of 578 in 1930, came back down in the 1970s, and has been steady around 400 since. In 2015 the population was 421.

The area is agricultural, dependent on the river for irrigation, and of modest means. 2015 Per Capita Income for Otero County was \$34,590. For comparison, 2015 Per Capita Income for Denver County was \$68,299, and for the State it was \$50,899.

The District has a 2018-19 student enrollment of 141 students and conducts classes in seven different buildings on two separate campuses. The District owns and operates 81,781 square feet of academic and administrative space, or 580 square feet per student.

Manzanola has traditionally suffered from a community identity crisis which, unfortunately, sometimes comes as a result of a high percentage of students of color and students who live in poverty. In one community meeting, a tearful woman claimed that for years there has been a saying in the Arkansas Valley, "Take it to Manzanola" She translated this later as meaning "Go to Hell". This perception not only comes from outside the district but also permeates from some of the community's own residents. As the Manzanola Board has learned again and again--those perceptions die slowly even though students and staff in the district are doing amazing things. The condition and deterioration of both schools only adds to the negative perception. Both buildings exude poverty and do not contain high quality learning environments.

Despite these internal and external perception problems, both schools are realizing tremendous academic gains. The community is proud that the 2017 DPF scores ranked Manzanola as the highest scoring district along the Arkansas River Valley. The district is highly supportive of their Destination Imagination Team (national tourney qualified), robotic, CNA licensure program, and competitive Vo-Ag and FFA teams.

## Deficiencies Associated with this Project:

This project would consolidate the District's seven aging academic buildings into one secure 21st century facility. This would reduce total District footprint by more than 20%, significantly increasing operational and programmatic efficiency.

All seven classroom facilities have significant deficiencies that require investment greater than Manzanola can provide with current financial resources. The District's Facilities Master Plan Update was conducted in 2016/17 using the state facility assessments, dated March 16, 2015. Since that update, another state assessment was published dated January 28, 2018. These reports indicate:

2015 CDE Assessment FCIs:

Jr/ Sr HS - 0.43

ES - 0.64

## BEST FY2019-20 GRANT APPLICATION SUMMARIES

Total - 0.51

2018 CDE Assessment FCIs

Jr/ Sr HS - 0.46

ES - 0.55

Total - 0.49

Deficiencies pose real threats to the safety of students and staff. There have been several incidents in recent years where areas of the Jr/ Sr High School have been shut down due to ceiling collapses, flooding from roof leaks, and flooding associated with failed plumbing fixtures and backed up sanitary lines. The FCI# for the Main Jr / Sr High building does not accurately reflect these safety concerns or interruptions to school operations. It has the lowest FCI of all the District buildings, yet it demands 60-70% of annual maintenance costs.

In the past three years, there have been five facilities-related insurance claims; three for roof issues at the Jr / Sr High, one for a fire in the gym boiler room caused by an electrical problem, and one for an issue with the water heater in the elementary school kitchen.

Currently secondary students walk across town every day to eat lunch at the elementary school. All students move back and forth repeatedly, throughout their school day, between multiple unsecured buildings across the poorly drained, frequently icy, deteriorating staff parking area. There are no security cameras, and no line of site from the office to the main entrance or any of the additional buildings. In addition, more than one disabled student has been forced to attend school in another district due to the inaccessibility of the sites and facilities. The citizens of Manzanola are acutely aware of a rise in the number of men and women that arrive in Manzanola on foot, with no money, and no living accommodation. These individuals, believed to be drifting in on Hwy 50, pose immediate danger to students and staff that must walk between the buildings. In 2018 district administration found one of these homeless gentlemen living on the roof of the Elementary School. Manzanola Police were notified and he was immediately evicted and escorted out of town. Administration is unsure of how long he had held residence on the roof.

An additional concern and limiting factor for the elementary school is the size of the site. The building sits on a 2-acre parcel with no parking lot, no receiving area, no parent drop off area, no bus area, and no room to add any of these. These limitations place students at risk during drop off and pick up times.

The issues and concerns facing Manzanola School District are the result of the age of the facilities and the way the campus has grown over time. These issues cannot and should not be addressed independently. It would be a misuse of funds to invest significantly into repairing systems deficiencies without addressing the glaring adequacy, security, and operational issues.

As options for renovation, consolidation through expansion, and replacement have been considered, both the Jr / Sr High School and elementary campuses were discussed extensively. When considering the elementary building alone, it seems that updating the building may have been appropriate, but when considered in the larger context, and evaluated against the planning priorities and criteria, it became clear this building cannot be improved to meet the District's goals. In the end, consolidating District facilities at the Jr / Sr High School through renovation of the Jr / Sr High School and building an elementary addition were identified as the priorities by the Building Planning Team and the Manzanola School District Board of Education.

Primary District-wide Facilities Deficiencies - Described here in reference to the 2016 Adopted Construction Guidelines:

4.1.1 Sound Building Structures - Both main buildings have significant structural cracks due to settling. At points, these cracks go all the way through the single wydth block up to an inch wide. Though the cracks have not grown in recent years and do not appear to represent immediate danger of collapse, they represent a major concern and must continue to be monitored, and filled with sealant to keep out wind and water. Changes and movement are noticed when there are significant changes in soil moisture levels. Staff who have been in the District for several decades indicate that movement occurs when the area goes through prolonged periods of drought or unusually high precipitation.

4.1.2 Classroom Acoustics - Classrooms in the Elementary school do not have acoustic ceilings. concrete tees are exposed, and

## BEST FY2019-20 GRANT APPLICATION SUMMARIES

floor surfaces are hard. Teachers report difficulty due to poor acoustics.

4.1.3 Roofs - Portions of the high school have been replaced since the 2010 facilities assessment, but work is incomplete. Damage to the interior has occurred and continues due to leaks. Ceiling collapses have occurred, and areas of the school building have had to be shut down until repairs were completed.

4.1.4 Electrical Systems - The electrical service to the Main Jr/Sr High was upgraded in 2003 and is of adequate size, but branch circuit panelboards downstream of the main service within the buildings have not been updated and are nearing the end of useful life and should be replaced in the next 5 years. Most panelboards have no spare capacity for additional branch circuits. The main service for the Elementary School is undersized. Panels in both buildings have 2 pole circuit breakers in single pole spots as additional circuits have been added over the years. Electrical equipment that is original to the school is nearing the end of its useful life and should be replaced in the next 5 years.

4.1.5 Lighting Systems - At the Elementary School, light fixtures are in fair to poor condition. Emergency lighting coverage is not code compliant, and some exit signs are not backed-up with batteries. At the Jr/Sr High, light levels in the gym are poor. Emergency lighting coverage is not code compliant, and some exit signs are not backed-up with batteries. - All District buildings and campuses have insufficient or no exterior lighting.

4.1.6 Mechanical Systems - Heating, Ventilation, and Air Conditioning (HVAC) - Both the Elementary school and the Jr/ Sr HS currently have inadequate ventilation/ outside air. Both buildings have areas where the current systems are not capable of maintaining appropriate indoor temperatures.

4.1.7 Plumbing Systems - The water in Manzanola is very hard and has elevated levels of both radium and uranium with levels consistently above EPA standards, and additional water treatment is advised. There are insufficient cleanouts in the sanitary system throughout the district, and backups occur frequently, particularly in the gymnasium and the elementary school modular building. At the Jr/Sr High, hard water has led to ongoing issues with plumbing fixture damage and failure. In several instances failures have led to flooding and further damage to interior finishes. Galvanized piping was observed in the building and is in need of replacement per code requirements. At the Elementary, fixtures are original to the building and there are no mixing valves at the faucets to reduce temperature during hand washing. These should be replaced to reduce risk of scalding. Replacement of water heater is suggested with sealed combustion air to avoid flame out from high winds.

4.1.8 Fire Protection Systems - The fire alarm system in all buildings are manual systems with no smoke or heat detection. Visual notification devices are deficient in many areas. The fire alarm system is obsolete and is not compliant with current codes and should be replaced. None of the buildings have a fire protection system

4.1.9 Means of Egress - District wide egress deficiencies include non compliant hardware, non compliant stair landings and ramps, and insufficient exit signs. There is a dead end corridor (greater than 20') at the elementary school, and a need for reconfiguration of doors at the Science/ Accounting Building for code compliance.

4.1.10 Hazardous Materials - Asbestos and other hazardous materials are present in both buildings in existing deteriorating finishes and mechanical systems that have been abandoned in place. At the elementary school, exposed concrete roof "T"s have been sprayed with a coating that contains asbestos. This coating is not encapsulated, and comes down in flakes and dust when contacted. Due to the age of the buildings, lead based paints are present. As interior finishes fail due to plumbing and roof leaks, there is danger of students coming in contact with these materials. As mentioned previously, town water has elevated levels of both radium and uranium with levels consistently above EPA standards, and additional water treatment is advised.

4.1.11 Security -

Buildings: There are multiple entries into both schools / campuses. Due to the fact that classes are currently held in seven different buildings, many of these exterior doors must remain unlocked throughout the school day. Neither school has a secure entrance, and in both cases the main office is located away from the main entrance. It is not possible to visually monitor any of the entrances to any of the school buildings from the main offices, and neither school has a security camera system. There is not a card reader/ electronic access system. Calls for lockdown occur through a PA system run through the phone system. The phones are in turn run through the computer system. If either the phones go down or the computers, the PA system does not function. In addition there is no PA broadcast to the exterior, so if a student is outside, they will not be alerted to the lock down situation. The Jr / Sr High does not have a cafeteria or a kitchen. Currently students walk across town to eat lunch at the elementary school. This is a major security concern for the District and community.

Sites: Utilities are located in unsecured and unprotected areas at multiple locations at both campuses. In several instances gas mains are located directly in front of parking areas with no bollards or protective fencing. The roofs at both schools can be accessed easily by climbing on adjacent fences or utilities, and there is insufficient perimeter and pathway lighting.

4.1.15 Site Pedestrian and Vehicular Traffic - At the both campuses, there is no formal or structured parking lot, no formal bus

## BEST FY2019-20 GRANT APPLICATION SUMMARIES

area, and no formal parent pick up and drop off area. All modes of transportation are mixed. Students park their cars on the adjacent County road. Event parking is problematic and also takes place informally on the adjacent County road. Existing sites are significantly smaller than what would be required to accommodate improvements to these issues. Even if funds were available, there is not room.

### Accessibility & Safety

The Main Jr / Sr High is a two (2) story building with a basement. All three levels are used for instruction, and the school does not have an elevator. There is a ramp connecting the main entrance to the main level that is steeper than code, and there is not room for the length of ramp needed to correct this. On any given day, one can witness the gut-wrenching activity of two men moving an occupied, heavy wheelchair down that steep ramp. One misstep and the wheelchair and its occupant will careen through a double glass door. This situation is an accident waiting to happen!

The accessible path into the auditorium requires leaving the building and entering from the outside. If a student, staff or community member, who is confined to a wheelchair, needs to use the restroom while attending an event in the auditorium, they must exit the building to the outside and travel about 1/2 of a city block to the football field restroom. The classrooms are no better, since they require a step up or down to enter them. There is not an accessible restroom for students - the only accessible restroom is located in the staff room. In years past the lack of accessibility forced many students with physical limitations to choose to leave the district. That trend has changed as families of these students have, and rightfully so, begun to demand a safe, healthy and accessible environment for their children.

The Elementary School is generally accessible but most restroom facilities are not.

### Operational Inefficiencies

Energy use and associated annual costs are a burden for the District. Both main school buildings have uninsulated exterior walls, and the elementary school has the original single pane windows. Engineers have estimated that a new consolidated school with efficient systems and fixtures could reduce energy use and cost to the District by 25-35% per year

The District is currently paying to staff, heat, cool, and maintain excess square footage. By consolidating all seven existing buildings into a single consolidated PK-12 school, eliminating redundant offices, classrooms, and other support spaces, the District could reduce their total footprint by nearly 20,000 square feet.

### Proposed Solution to Address the Deficiencies Stated Above:

#### Planning Context and Previous Efforts:

In an attempt to create a thoughtful plan for how to address the District's significant facilities needs, Manzanola School District has gone through a facilities planning process multiple times; in 2003 , 2010, 2016-17, and in 2017-18. The existing Facilities Master Plan is the product of these four efforts. Options for school replacement(s), additions, and major renovations have been considered each time.

At the conclusion of the 2003 and 2010 evaluations, the District decided to make some minimal updates to their facilities, but not to make significant investment in facilities due to insufficient funding. The District was not confident that the community would support a bond referendum.

At the conclusion of both the 2017 and 2018 efforts, BEST grant applications were submitted for a major consolidation project. In both cases the grant was awarded, and in both cases the District was unable to successfully pass a bond election.

Manzanola's Board of Education was devastated by the November 2018 election loss, the second loss in as many years. Despite an active pro-campaign team, a series of community meetings, engagement with staff and students, the Bond referendum failed, 262-192.

Unlike most campaigns in rural Colorado communities, Manzanola School District encountered a well-funded opposition mostly spearheaded by a handful of affluent farmers who harbor resentment for the district and Colorado's tax structure. Large opposition signs were posted, at least three opposition mailers were sent to each box-holder, district led meetings were



## BEST FY2019-20 GRANT APPLICATION SUMMARIES

disrupted, negative postings appeared on social media, letters in opposition appeared with regularity in neighboring newspapers, and a door to door "say hell no" campaign was launched. It is worth noting that many farmers in the area send their children to neighboring districts-thus enjoying the benefit of paying the lowest taxes in the area while their children attend school in districts whose taxes are almost double that of what residents are assessed in the Manzanola School District.

Even when faced with the pictures and anecdotes of crumbling, unsafe schools, opposition leaders retorted that they didn't really care! Couple the opposition campaign with the lack of financial resources, especially in a large senior citizen population, and a median household income of \$31,000 (44% of the Colorado average) and unfortunately, the referendum was and is doomed from the start. The opposition proudly state that they were successful in crushing it in 2017, and 2018...and would proudly defeat the election in subsequent years. Worthy of note is that the Manzanola School District Performance Framework scores for 2017 rated Manzanola's as the highest scoring district when compared to neighboring districts in the Arkansas Valley.

Following the second bond election defeat, the Board of Education, through conversation with the citizens, ascertained that the community was in favor of the plan that was presented in 2018. Basically, the problem was NOT the plan but rather local politics. From these stinging defeats and subsequent discovery the Manzanola Board of Education has determined that floating another bond will not only be sure defeat but also anger the opposition and continue to fragment the community. Because of these factors, the Board of Education will be requesting a waiver for the \$2M match. Additionally, the Board of Education voted at a Special Meeting to commit \$200,000 of general fund reserves in lieu of the required match.

The proposed project and the process leading up to it are described below:

In 2016, the District formed a Building Committee of community members and staff to review and update the master plan and to make a new recommendation to the Board. Architects & engineers inspected all buildings to verify what had changed since previous assessments.

- The group reviewed and discussed existing deficiencies and needs.
- The group generated a list of planning criteria to inform their recommendation.
- The group compared the planning criteria to multiple options that had been previously considered.

The 2017 Facilities investment plan - Final Recommendation:

The building committee reviewed and updated the master plan and made the following recommendations to the Manzanola Board of Education.

- Demolish the Elementary School facilities and clear the site for sale and future development
- Decommission and mothball the Main Jr / Sr High School facility and seek a buyer who can repurpose the building.
- Demolish all other outbuildings and facilities at the Jr / Sr High School campus and clear the site
- Purchase new land adjacent to town to support a new consolidated school.
- Build a new consolidated PK-12 facility

A BEST Grant was received to support this plan and a bond election was held in November of 2017 to raise the District's matching funds. The referendum did not pass.

The 2018 Facilities investment plan - Final Recommendation:

The 2018 Plan followed the November 2017 election, when three new Board of Education members were elected. The Board became more involved in the review of the master plans and also added two members of the board to sit on the building committee.

- Reviewed and discussed existing deficiencies and needs identified in the previous planning effort.
- Reached out to the community through an electronic survey and reviewed all previous community input and sentiment that

## BEST FY2019-20 GRANT APPLICATION SUMMARIES

was gathered over the previous 18 months

- Generated a revised list of planning criteria to inform a new facilities plan.
- Compared the revised criteria to multiple options that had been previously considered, and a new plan was developed.

Revised Planning Criteria:

- Support shared community use
- Safe, Secure, handicapped accessible, & welcoming sites & facilities
- Plan for a financially sustainable facility
- Plan for innovative programs that meet the needs of all students
- Continue to use the MS/HS
- Separation of ES students from MS/HS students is important
- Maximize community support of the plan
- Improved gym(s) that meets our program and community needs
- Minimize disruption of school operations during construction

Options Considered:

- Wait, Repair and Update as Possible
- Build a new consolidated PK-12 school on a new site
- Addition to Jr/Sr HS to consolidate, new gym
- Addition to Jr/Sr HS to consolidate, preserve existing gym

Through discussion, consolidation through addition was identified as the most appropriate plan. A matrix was used to compare those two options against the revised criteria. The Group discussed further the options, the criteria, and defined a new plan.

The 2018 Facilities investment plan:

- Seek a buyer for the Elementary School facilities. If no buyer comes forward with a plan that is agreeable to the town and the District after one year, the facilities will be demolished, the site cleared and put up for sale and future development
- Demolish all other outbuildings and facilities at the Jr / Sr High School campus and clear the site
- Build a major addition to the 1925 Jr / Sr High School building to create a new consolidated K-12 school.
- Modify the site to support consolidated District programs and support safe and secure vehicular and pedestrian circulation

A BEST Grant was received to support this plan and a bond election was held in November of 2018 to raise the District's matching funds. The referendum did not pass.

The 2019 Facilities investment plan - Final Recommendation:

An effort was made by the District and Board to understand why the bond did not pass. This was done formally through evaluating the community survey and informally through countless one on one conversations. In a town of this size, much of this community work takes place face to face, in conversations in living rooms, on porches, etc. The primary issues identified were once again: anti-tax sentiment, number of more affluent farmers sending their children to neighboring districts, and existence of a well funded "No" campaign.

The Manzanola School Board met in public session to discuss submission of the BEST Grant in 2019. From that discussion it was determined (1) that the majority of Manzanola School District voters would not support a bond issue (2) that the facility needs of the district have not gone away and will only continue to become more dire as time passes.

In December of 2018, members of the Manzanola Board of Education attended the CASB Winter Conference where they began to hear from other board members from across the state about the plight of Manzanola's schools and the subsequent failed elections. It was from those conversation that Board members first heard the suggestion of a waiver of the \$2M, and, instead, supplementing with a general fund cash contribution. Couple those conversations with an extensive Denver Post article published on 12/30/18 highlighting the deterioration of Manzanola's facilities, and Board President, Tommy Reyes, was

## BEST FY2019-20 GRANT APPLICATION SUMMARIES

convinced it was time to bring the issue to the full board. The possibility of the the waiver request and subsequent cash contribution discussed. The group agreed to present to the BEST Board with a 2019 BEST Grant application utilizing the 2018 Plan and Design with a waiver request. President Tommy Reyes, invited public comment from the floor. The dozen or so members of the the community agreed (1) attempting a bond election is futile (2) the facility needs are great and growing (3) the Board should be commended for moving forward with this unique approach. The motion passed unanimously.

The 2019 Facilities investment plan (originally 2018 plan)

- Seek a buyer for the Elementary School facilities. If no buyer comes forward with a plan that is agreeable to the town and the District after one year, the facilities will be demolished, the site cleared and put up for sale and future development
- Demolish all other outbuildings and facilities at the Jr / Sr High School campus and clear the site
- Do a major addition to the 1925 Jr / Sr High School building to create a new consolidated K-12 school.
- Modify the site to support consolidated District programs and support safe and secure vehicular and pedestrian circulation

### How Urgent is this Project?

The two main buildings and the entire campus present clear and immediate danger to the students that attend Manzanola School District. The problems are far beyond the ability to provide an adequate learning environment i.e. plenty of fresh air, great acoustics, adequate heating and cooling, sewage that reaches an acceptable target...but rather extend to serious life safety concerns. The four most urgent and notable (of many) concerns are ceilings that are ready to crash in on students, exposed high voltage lines that are literally in reach of students, boilers that have caught on fire, and friable asbestos areas, marked with large "KEEP OUT" signs present throughout all the district buildings.

If this project is not awarded the district could quite possibly 'nickel and dime" itself into insolvency. Without the support of the CCAB, the district will be forced to make some crucial and dire decisions. One such decision (1/2019) was the district's decision to spend upwards of \$100,000 to install a stair lift to assist a student, who suffers severe physical limitations, to have the ability to navigate the Jr / Sr High School's five different elevations.

Given the age of the buildings, large ticket repair items will be coming with greater frequency and severity. The District does not have the financial means to address even a fraction of the facilities limitations and will be forced into choosing between support for lowest paid teachers in Otero county, at \$33,000 average., or sinking scarce resources into crumbling buildings.

**Does this Project Conform with the Public School Facility Construction Guidelines?** Yes

**If not, provide an explanation for the use of any standard not consistent with the guidelines:**

### How Does the Applicant Plan to Maintain the Project if it is Awarded?

Over the past several years, the District has invested an average of approximately \$230,000.00 per year, representing approximately 11% of the total program budget, on custodian repairs, supplies and utilities. Buildings are old, outdated, uncomfortable, and inefficient. We are currently spending the majority of our maintenance budget on roofing, plumbing, heating, and electrical issues.

The District plans to have a detailed preventative maintenance schedule in place, however current conditions make these tasks difficult, and will implement the preventative maintenance plan with the approval of the project. The plan includes: daily, weekly, monthly, 3 and 6 month, and annual inspection/maintenance/repair items. We will prepare and maintain an inventory of building components and their conditions so that we can better track needs and determine next steps, including costs, of equipment. We understand that organization and a carefully planned preventative blueprint will offer the best chance for maintaining and keeping ahead of long term problems. Training will be provided on all machines and equipment to assists with developing long term maintenance goals and budgets.

If we are awarded the BEST grant, the District would update our current plan to meet the needs of the new school. The District is planning on setting aside \$40,000-\$50,000 per year that was going to replacement and repairs of old, faulty equipment and fixing health and safety concerns to add to capital reserves for future maintenance issues while everything is under warranty. As always, it is our goal to be financially prudent with taxpayer monies.

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**Describe the condition of the public school facility at the time it was purchased or constructed and, if the facility was not new or was not adequate as a public school facility at that time, provide the rationale for purchasing the facility or constructing it in the manner in which you did:**

Manzanola School District owns and occupies seven different academic buildings. All of these were built by the District, and as such, were new and in good condition when purchased. This project pertains to all of them. Each of the seven buildings was added to meet a programming need in the district. With the exception of the JR / SR High School, the buildings were envisioned, designed and created in the least expensive way possible so as the buildings aged, more problems began to appear.

**Describe the history of capital improvements made to the facility by the district/charter school in order to make it suitable for students. Include a list of all capital projects undertaken in the affected facility in the last 3 years:**

Over the past several years, the District has invested an average of approximately \$230,000.00 per year, representing approximately 11% of the total program budget, on custodian repairs, supplies and utilities. Buildings are old, outdated, uncomfortable, and inefficient. The District is doing all that it can to maintain its facilities, but this annual maintenance expense has become a burden. The District does not have the financial means to increase this investment without significantly impacting instructional programs. At this rate of investment, it is not possible to keep up with or ever correct all deficiencies and inadequacies.

Manzanola School District has submitted two successful BEST Grants, one in 2017, and 2018. When the measure was put before the Manzanola School District voters, the referendums were soundly defeated by large margins. Without assistance from the CCAB and support from the local voters, the district will most likely be unable to maintain their current facilities. More and more systems will begin to fail and the \$230,000 will be a "drop in the bucket" when compared to the needs that will have to be addressed in the next five to ten years. (additional detailed information regarding the failed elections will appear in the "Planning Context and Previous Efforts" section)

Elementary School:

- The main building was built in 1975, on-going maintenance and repairs are taking place, no significant re-investments have been made in this building since its construction
- The modular building was built in 1963, on-going maintenance and repairs are taking place, no significant re-investments have been made in the facility since its construction.

Jr / Sr High Building

- The Main building was built in 1925. This is an attractive building designed by Temple Buell. The community values the building and the District has been doing on-going maintenance and repairs every year. The building exterior was repaired / tuck-pointed in 2002, and an interior remodel was done in 2003 to update restrooms and other interior areas. The HVAC system was partially updated in 2010, though thermal issues, ventilation inadequacies, and acoustical challenges continue. Portions of the roof have been repaired since 2010.
- The Gym was built in 1963. An accessible restroom was added in 2010, but no other significant re-investments have been made in the facility since its construction. It is worth noting that the accessible restroom, added in 2010, is the only accessible restroom on the Jr / Sr High School campus.
- Bus Barn / Welding Facility was built in 1963. No significant re-investments have been made in the facility since its construction.
- Industrial Arts building was built in 1993. No significant re-investments have been made in the facility since its construction.
- Science / Accounting building was built in 1998. No significant re-investments have been made in the facility since its construction, condition is good.

A chairlift system, estimated at \$100,000 will be added in the spring of 2019 to make the five different levels of the Jr / Sr High School somewhat accessible.

**What options outside of the BEST grant has the applicant investigated or leveraged to address the school's facility needs?**

The District has recently received a GOCO grant for site improvements to the fields. The District has received a grant from the Colorado Trust for the most recent review and update to their facilities master plan, and for support in submitting this grant application.

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**How do you budget annually to address capital outlay needs in your district/charter? Include \$/FTE for the prior fiscal year:**

The District is willing and able to set aside \$50,000 / year into a fund that will grow over time and can be used to make repairs later down the road as the building begins to age.

**If relevant to your project, what are your current annualized utility costs, and what amount of reduction in such costs do you expect to result from this project?**

Over the past five years the annual utility costs for the School District have averaged \$155,000 to \$160,000. The current operational square footage is 81,781. The planned total square footage is 64,429, which is a 21% decrease in SF. Designed as a high-performance facility, the planned renovation / addition will be more energy efficient. Therefore, with less square footage and a high performing facility, the District anticipates a 25% to 35% drop in annual utility costs.

<b>Grant Request:</b>	\$31,386,774.74	<b>CDE Minimum Match %:</b>	31%
<b>Applicant Match:</b>	\$200,000.00	<b>Actual Match % Provided:</b>	0.63317640%
<b>Total Project Cost:</b>	\$31,586,774.74	<b>Is a Waiver Letter Required?</b>	Yes
<b>Affected Sq Ft:</b>	67,500	<b>Contingent on a 2019 Bond?</b>	No
<b>Affected Pupils:</b>	141	<b>Source of Match:</b>	School District Reserves
<b>Cost Per Sq Ft:</b>	\$467.95	<b>Escalation %:</b>	8.5%
<b>Soft Costs Per Sq Ft:</b>	\$106.02	<b>Construction Contingency %:</b>	6%
<b>Hard Costs Per Sq Ft:</b>	\$361.93	<b>Owner Contingency %:</b>	5%
<b>Cost Per Pupil:</b>	\$224,020	<b>Historical Register?</b>	No
<b>Gross Sq Ft Per Pupil:</b>	479	<b>Adverse Historical Effect?</b>	No
<b>Is a Master Plan Complete?</b>	Yes	<b>Does this Qualify for HPCP?</b>	Yes
<b>Who owns the Facility?</b>	District		
<b>If owned by a third party, explanation of ownership:</b>			
<b>If match is financed, explanation of financing terms:</b>			
The district will not be utilizing any performance contracting as part of this project.			

**Financial Data (School District and BOCES Applicants)**

<b>District FTE Count:</b>	137	<b>Bonded Debt Approved:</b>	
<b>Assessed Valuation:</b>	\$10,220,042	<b>Year(s) Bond Approved:</b>	
<b>PPAV:</b>	\$74,599	<b>Bonded Debt Failed:</b>	\$3,976,153
<b>Unreserved Gen Fund 17-18:</b>	\$1,123,716	<b>Year(s) Bond Failed:</b>	17, 18
<b>Median Household Income:</b>	\$34,917	<b>Outstanding Bonded Debt:</b>	\$0
<b>Free Reduced Lunch %:</b>	70%	<b>Total Bond Capacity:</b>	\$2,044,008
<b>Existing Bond Mill Levy:</b>	0	<b>Bond Capacity Remaining:</b>	\$2,044,008
<b>3yr Avg OMFAC/Pupil:</b>	\$2,492.07		

## BEST School District and BOCES Grant Waiver Application

The BEST grant is a matching grant and each applicant is assigned a unique minimum matching requirement, pursuant to 22-43.7-109(9) C.R.S., to identify their financial capacity. An applicant may apply to the Capital Construction Assistance Board for a waiver or reduction of the matching moneys requirement for their project if the applicant determines their minimum match is not reflective of their current financial capacity, pursuant to 22-43.7-109(10) C.R.S.

Waiver applications are reviewed independent of the grant application. Upon review of the waiver application, the Capital Construction Assistance Board will make a motion to approve or deny the applicant’s waiver request.

The Capital Construction Assistance Board shall seek to be as equitable as possible by considering the total financial capacity of each applicant pursuant to 22-43.7-109(11) C.R.S.

### Instructions

Be specific when answering the questions and explaining the issues and impacts. Your response should include dollar amounts and specific ways in which such issues and impacts make it impossible for the applicant to make its full matching contribution. Please submit meeting minutes, award/non-award letters, official communications, budget documents, or other relevant documentation to support the responses provided.

Question 2, subsections A-H are related directly to the factors used in calculating the matching percentage. Only respond in detail to the factors which you believe inaccurately or inadequately reflect financial capacity. For those factors which you believe accurately or adequately reflect financial capacity, please leave the response blank or type “Agreed”.

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1. Please describe why a waiver or reduction of the matching contribution would significantly enhance educational opportunity and quality within your school district or BOCES, or why the cost of complying with the matching contribution would significantly limit educational opportunities within your school district or BOCES.

*The seven academic buildings in the Manzanola School District are a tremendous financial burden and without this waiver, the District will never be able to complete this project.*

*Manzanola School District is faced with an unbelievable challenge as all the academic buildings are in serious decline. Currently Manzanola School District is spending 11% of their total program budget to repair, heat, and maintain the properties. The board and administration also recognize that due to the age of the facilities, more and more systems are beginning to fail. Recently, the Board had to approve a chairlift, estimated at \$60,000 installed, to allow a student with disabilities access to portions of Manzanola High School. Manzanola is at the point where the quality of academic and co-curricular offerings, and of the staff that can be recruited and retained are likely to diminish as the choice between high dollar repairs and programs will have to be decided. It is worthy of note that Manzanola average teacher compensation is \$4,000-\$5,000 below the average of teacher salaries in neighboring district. The waiver will allow the Manzanola District the ability to continue to support the continuation of high quality programs for the student in the Manzanola School District.*

2. Please describe any extenuating circumstances which should be considered in determining the appropriateness of a waiver or reduction in the matching contribution.

*Twice the district has tried to pass bond issues to support the Best Grant and were soundly defeated on each attempt. It is clear that the district will not be able to pass a bond. Here is why...*

*Unlike most bond referendum campaigns in rural Colorado communities, Manzanola School District encountered a well-funded opposition mostly spearheaded by a handful of affluent farmers who harbor resentment for the district and Colorado’s tax structure. Large opposition signs were posted, at least three opposition mailers were sent to each box-holder, district led meetings were disrupted, negative postings appeared on social media, letters in opposition appeared with regularity in neighboring newspapers, and a door to door “say hell no” campaign was launched. It is worth noting that many farmers in the area send their children to neighboring districts—thus enjoying the benefit of paying the lowest taxes in the area while their children attend school in districts whose taxes are almost double that of what residents are assessed in the Manzanola School District.*

*Even when faced with the pictures and anecdotes of crumbling, unsafe schools, opposition leaders retorted that they didn’t really care! Couple the opposition campaign with the lack of financial resources, especially in a large senior citizen population, out of 354 towns in the State of Colorado Manzanola’s per capita income is #346. According to the (2010 US Census), the median income for a household in the town was \$10,196, and the median income for a family was \$11,250 and unfortunately, the referendum was and is doomed from the start. The opposition proudly state that they were successful in crushing it in 2017, and 2018...and would proudly defeat the election in subsequent years.*

*Worthy of note is that the Manzanola School District Performance Framework scores for 2017 rated Manzanola’s as the highest scoring district when compared to neighboring districts in the Arkansas Valley.*

*\*The following are factors used in calculating the applicant’s matching percentage. Only respond to the factors which you feel inaccurately or inadequately reflect financial capacity. Please provide as much supporting detail as possible.*

A. Per Pupil Assessed Valuation relative to the statewide average – The higher the Per Pupil Assessed Value the higher the match.

Applicant’s PPAV: \$74,598.85

Weighted Rank: 0.73% of 5% max

B. The district’s median household income relative to the statewide average – The higher the median household income, the higher the match.

Applicant’s Median Household Income: \$34,917.00

Weighted Rank: 1.01% of 15% max

C. Percentage of pupils eligible for free or reduced cost lunch relative to the statewide average – The lower the percentage for free and reduced cost lunch, the higher the match.

Applicant’s FRED Percent: 70.1%

Weighted Rank: 2.70% of 20% max

D. Bond Election failures and successes in the last 10 years – The more attempts the school district has made, the lower the match.



Applicant's Bond Elections: 2

Adjustment: -2% (-1% per attempt)

[Empty box]

E. Bond mill levy relative to the statewide average – The higher the bond mill levy, the lower the match.

Applicant's Bond Mill Levy: 0.00

Weighted Rank: 20% of 20% max

[Empty box]

F. The school district's current available bond capacity remaining. - The higher the bond capacity, the higher the match.

Applicant's Remaining Bond Capacity: \$2,044,008

Weighted Rank: 3.15% of 20% max

[Empty box]

G. The school district's unreserved fund balance as it relates to their overall budget.

District's Unreserved General Fund: \$1,123,716

Weighted Rank: 4.94% of 20% max

[Empty box]

H. Other unusual financial burdens not reflected in the match calculation (ie. underfunded mandates, unexpected expenses, self-funded programs).

[Empty box]

3. What efforts have been made to coordinate the project with local governmental entities, community based organizations, or other available grants or organizations to more efficiently or effectively leverage the applicant's ability to contribute financial assistance to the project? Please include all efforts, even those which may have been unsuccessful.

*Historically, Colorado Trust awarded the district \$17,000 to hire a firm to provide a facility assessment and do an update to the existing Facility Master Plan. This grant was a springboard to move the process forward to improve the quality of Manzanola facilities.*  
  
*The Board of Education, District Financial Director and Superintendent, met to discuss how much the district could commit from reserves. After considering that the district has not purchased a new bus since 2009 and has an aging fleet and with the capital purchase of the chair lift at Manzanola High School. The district has agreed to contribute a match of \$200,000. The \$200,000 would be in lieu of holding a bond referendum which by all accounts has no potential to pass no or in the future.*

4. **Final Calculation:** Based on the above, what is the actual match percentage being requested?

0.6331764%  
(\$200,000)

CDE Minimum Match Percentage:

31%





Dear BEST Grant Committee Members,

I am writing this letter on behalf of the Manzanola Board of Education because we need your help. We are asking the BEST Grant Board to waive all of the match with the exception of \$200,000 which we plan to appropriate from reserves in the general fund. Our current building situation threatens the basic safety of the precious children of our community.

In 2017 and 2018 Manzanola submitted BEST grant proposals, which were approved by the BEST Board. It is apparent that the BEST Board recognizes the tremendous facility needs. In both years, we tried to pass the bond and we failed. Please know, in both 2017 and 2018, the board of education and community worked hard to help pass the bond issue. A "Say Yes" Committee was formed, money was raised, weekly meetings were held, many miles were walked going door to door, mailers were sent, newspaper articles published, cars were painted...I think you get the gist. People worked hard. But both times the measures were soundly defeated. The defeat left us shattered and heartbroken for the children in this community.

When you live in a small town, you want to believe your town is a version of Mayberry, but in reality in our town we have a very high population of low income, senior and/or disabled people living in older homes that need plumbing, heating, roofs, and foundation repair... just like our school facilities.

Our community is diverse in so many ways, which has added to the equation for not being able to pass a bond issue. We are diverse in our demographics with almost 60% of our students being minorities. We are diverse economically with a median household income of only 40% of the state average. Out of 354 locations ranked per capita income in the State of Colorado, Manzanola is ranked 8<sup>th</sup> from the lowest at 346 (US Census 2010). We have a per capita income of \$10,196. Citizens on the "Say Yes" team spoke to a senior who is surviving on a mere \$450 per month. They also spoke with many retirees that were living on \$450 to \$850 per month. It is not that our property owners don't see the needs in our school facilities... It is they just cannot afford repairs in their own homes for heating, electrical, plumbing, roof, etc., let alone pay even a few dollars more in higher taxes to repair/ replace our school facilities.

Another driving force for the defeat of the bond measure was the farmers and small businesses. Though some are more affluent community members, they would also bear the brunt of the tax increase. The bond election taught us just how much influence they have. Many farmers and their families have vowed to crush any attempt to pass a bond for our school. We have come to the sad realization that a bond will not pass in our community.

As Board President, I lay awake at night worried about our students. I see old plaster ceilings with sagging ridges...ready to collapse. I see HVAC units throughout the buildings that even a slumlord wouldn't consider placing in their rentals, I see exposed electrical wires that could cause grave injury to students ...my list could go on and on! Our old school is quickly moving from deteriorating to a dangerous.

It is from the bottom of my heart that I say, please help us solve this problem that threatens our student and staff safety as I don't see a way out.

Sincerely,



Thomas Reyes, Manzanola School Board President

● Facilities Impacted by this Grant Application ●

**MEEKER RE1 - HS Renovation & Addition - Meeker HS - 1956**

District:	Auditor - Meeker RE-1
School Name:	Meeker HS
Address:	550 SCHOOL STREET
City:	MEEKER
Gross Area (SF):	98,764
Number of Buildings:	1
Replacement Value:	\$27,709,854
Condition Budget:	\$16,007,156
Total FCI:	0.58
Adequacy Index:	0.52



**Condition Budget Summary**

System Group	Replacement Cost	Requirement Cost	SCI
Electrical System	\$3,147,116	\$2,987,666	0.95
Equipment and Furnishings	\$529,680	\$577,271	1.09
Exterior Enclosure	\$5,871,929	\$2,234,051	0.38
Fire Protection	\$4,732	\$791,742	167.33
Furnishings	\$1,152,307	\$1,097,936	0.95
HVAC System	\$4,284,715	\$1,726,666	0.40
Interior Construction and Conveyance	\$3,790,853	\$3,299,548	0.87
Plumbing System	\$1,630,453	\$1,801,070	1.10
Site	\$2,973,791	\$2,253,700	0.76
Structure	\$4,324,278	\$24,281	0.01
<b>Overall - Total</b>	<b>\$27,709,854</b>	<b>\$16,793,931</b>	<b>0.61</b>

# BEST FY2019-20 GRANT APPLICATION SUMMARIES

**Applicant Name:** MEEKER RE1

**County:** Rio Blanco

**Project Title:** HS Renovation & Addition

**Applicant Previous BEST Grant(s):** 0

**Has this project been previously applied for and not funded?** Yes

**If Yes, please explain why:** The BEST FY2018-19 grant cycle was highly competitive. Members of the BEST board have acknowledged that Meeker High School needs to be renovated and/or replaced. The questions on the scoring rubric where this project scored the lowest in May of 2018 were:

## Project Type:

- |  |  |  |   |
|--|--|--|---|
| <input type="checkbox"/> New School                    | <input checked="" type="checkbox"/> Roof               | <input checked="" type="checkbox"/> Asbestos Abatement | <input checked="" type="checkbox"/> Water Systems     |
| <input checked="" type="checkbox"/> School Replacement | <input checked="" type="checkbox"/> Fire Alarm         | <input checked="" type="checkbox"/> Lighting           | <input checked="" type="checkbox"/> Facility Sitework |
| <input checked="" type="checkbox"/> Renovation         | <input checked="" type="checkbox"/> Boiler Replacement | <input checked="" type="checkbox"/> Electrical Upgrade | <input type="checkbox"/> Land Purchase                |
| <input checked="" type="checkbox"/> Addition           | <input checked="" type="checkbox"/> HVAC               | <input checked="" type="checkbox"/> Energy Savings     | <input checked="" type="checkbox"/> Technology        |
| <input checked="" type="checkbox"/> Security           | <input checked="" type="checkbox"/> ADA                | <input checked="" type="checkbox"/> Window Replacement | <input type="checkbox"/> Other                        |

## General Information About the District / School, and Information About the Affected Facilities:

The Meeker School District is a small rural district in the northwest corner of Colorado. The school district incorporates the majority of the eastern half of Rio Blanco County and covers approximately 2,200 square miles. The town of Meeker was founded in 1883 with the school district formed at approximately the same time. Like many rural school districts, the current district resulted from the reorganization of several one-room school house districts in the 1950s and 1960s. As of the 2010 Census, the Town of Meeker's population was 2,475. The School District's enrollment was 756 PK-12 students on 10/1/2018 and has increased by 8% since 2012.

The agrarian roots of the community are still present with numerous sheep and cattle ranches. Many ranching families are multi-generational. It is not uncommon for residents to be the fourth or fifth generation Meekerites. Annual events such as the sheepdog trials are an outpouring of the sheep and cattle ranching upon which the community is founded. "Traffic jams" due to mobilization of cattle and sheep herds through downtown are a normal part of life for Meeker residents.

Coal, oil, and natural gas industries remain important to the local economy, with recent efforts for diversification through aviation, niche manufacturing, and tourism. The White River National Forest and Flat Tops Wilderness area are easily accessible with world class hiking, fishing, hunting, and OHV trails.

The Meeker School District's vision statement, "Excellence in All We Do" has been achieved in many areas, including strong academic performance for several years. The school district been "Accredited with Distinction" by the Colorado Department of Education in 2016, 2017, and 2018. Meeker Elementary School and Barone Middle School have earned the Governor's Distinguished Improvement award in 2016, 2017, and 2018. These accolades, based primarily on state assessments, have been earned while the district offers expanded and balanced curriculum.

Meeker High School serves approximately 200 students and is expected to grow to 230 students within three years. The current graduation rate is 100% and drop-out rate is 0%. High school elective offerings include: art, industrial arts, agriculture education, physical education, band, choir, foreign language, family and consumer sciences, public speaking, and creative writing. Basic graduation requirements for all students are offered in literacy, mathematics, science, and social studies, plus multiple concurrent enrollment or Advanced Placement offerings available for students with strong aptitudes in these subject areas. The concurrent enrollment offerings have positioned some students to earn an associate's degree while they earn their high school diploma.

A variety of extracurricular and cocurricular activities with an outstanding tradition of success are offered for students. Many of these activities cause the high school to act as a hub for the community. The school district maintains a strong Future Farmers of America chapter, Family Community and Career Leaders of America chapter, and a rich tradition in interscholastic athletics. Currently, the school district is exploring the option of expanding STEM offerings. Unfortunately, the physical layout

## BEST FY2019-20 GRANT APPLICATION SUMMARIES

of the high school creates obstacles to implementing a complete STEM program.

The school district operates and maintains approximately 230,000 square feet of facilities. Our maintenance program is led by facilities staff equipped with HVAC, electrical, carpentry and general maintenance skills. Facilities staff is comprised of 6 full time employees who handle maintenance and custodial duties across the district. Three of these individuals work at the high school. Our facilities staff diligently prioritizes facilities maintenance projects and works to be as proactive as possible with limited funds.

### **Deficiencies Associated with this Project:**

CDE completed the facility assessment for Meeker High School (MHS) in August of 2017 with an update in March of 2018. Per this report, the FCI of the building was rated at 0.56. Even prior to the updated CDE assessment report, the district recognized they had an urgent need to address the high school and already engaged in a master plan process focusing on the high school campus.

From a combination of the master plan consultant reports, the district's knowledge of the facility, and CDE's assessment, critical deficiencies were identified in the following areas or systems: security, building safety, traffic safety, roofing, hazardous materials, electrical, mechanical, plumbing, fire protection, ADA accessibility, indoor air quality, and interior finishes.

**Security:** Schools constructed in the 1950's did not design security into the facilities. MHS is lacking a safe and secure entry vestibule, security alarm, integrated panic button, and visibility to see who is approaching the building. It is difficult to find the main entry of the high school building for visitors. The bell and PA system are original to the building and do not effectively reach all classrooms and learning spaces in the event of a lock down. The school has 39 exterior doors that are not monitored by an access control system. Only a limited number of security cameras monitor these access points. While we try our best to make sure the exterior doors are locked, it is nearly impossible to monitor them at all times. Our classroom doors are not appropriately equipped with push button lock hardware in the event of a lock down. We currently use the Standard Response Protocol for emergency situations, but the ineffective communications can put students and staff at risk in the event of an emergency. MHS is lacking modern security and safety features that would be a necessity in any new school project.

**Building Safety:** The fire alarm system is beyond its useful life and in desperate need of upgrading. The school's fire alarm has old horn strobes, but no communication functionality with speakers. It needs voice evacuation speakers to be in compliance with existing code. The current gymnasiums do not maintain sufficient clearance. Two years ago a grandparent broke her nose when she tripped and fell because of insufficient clearance space between the bleachers and a wrestling mat. Our gym and band room have single pane plexiglass inserted into window openings. These plexiglass panels have blown into learning spaces during wind storms. The auditorium is lacking in appropriate egress lighting in the event of an evacuation. The stage rigging cables are original and fraying making the use unsafe. The rigging fell several years ago when students were on the stage. Parking lots do not have adequate lighting. Last winter, a grandparent tripped in the dark parking lot because she did not see the trip hazard and broke her wrist.

**Traffic Safety:** The existing site traffic flow was not designed for the vehicular traffic we have today. There is a dangerous 2 way stop at a three way intersection that runs a high risk of a vehicular accident for our high school students driving to school or parents dropping off their children. Traffic backs up in the mornings onto Garfield Street and a more modern traffic flow design will reduce the risk of traffic accidents and resulting injuries.

**Roofing:** The majority (86,000 SF) of the MHS roof is a built-up-roof (BUR) system installed in 1980. It is 39 years old and its useful life was estimated at 20 years. The gutters and downspouts were also installed in 1980 and are beyond their useful life. The school has experienced roof leaks over the years, resulting in interior damage that had to be repaired. Some limited 'band-aid' patches have been done by applying a coating to approximately 9,000 SF, but the majority of the roof is in poor condition and needs replacement.

**Hazardous Materials:** The school district has engaged an environmental consultant to test all suspected areas of hazardous materials in Meeker High School. The test results came back with much more asbestos containing material (ACM) than previous AHERA reports documented. ACM can be found in almost all of the rooms at MHS. The building materials containing

## BEST FY2019-20 GRANT APPLICATION SUMMARIES

ACM are: sprayed acoustical ceiling, all drywall, texture and joint compound (over 70,000 SF) on walls and above ceilings, over 100 pipe fittings, floor tile and mastic (over 30,000 SF), all older window glazing, chemistry tables and sinks, chalkboards, science fume hoods, transite panels at exterior entries and all windows, fire doors and the vault. In addition, it was discovered that all the block filler on CMU walls throughout the building has ACM. This includes almost all classrooms, locker rooms, auxiliary gym, main gym, shop, art, weight room, library and the wrestling room. The environmental consultant also tested flooring for mercury containing materials. Flooring in the locker rooms, cafeteria, auxiliary gym and hallway between the cafeteria and gym all tested positive for mercury.

Electrical: Much of the electrical system throughout the building was installed between 39 - 43 years ago. The main electrical service was installed in 1980 and is beyond its useful life. There is no room for additional capacity in the existing panels which are in need of updating to meet current and future demands. The branch wiring and devices were installed between 1975-1980 and beyond their useful life. The classrooms still have fluorescent light fixtures installed in 1980 that are not conducive to learning environments nor energy efficiency.

Mechanical: The boiler system was installed in the late 1990's and per the mechanical consultant the system is near the end of its life and should be replaced. Additionally, the classroom wing mechanical system was identified by the mechanical engineer as end of life and should be replaced in total. This includes terminal units, piping, ductwork and controls. One student stated that she wears her coat all winter because the building never warms to a comfortable level.

Plumbing: As noted in the CDE assessment and confirmed by the master plan consultants, the waste and vent piping system, the domestic water piping system, the water heaters, all plumbing fixtures are beyond end of life and should be replaced. The sanitary line at the site is original and over 64 years old. Raw sewage back ups into the school occur several times per year from this sanitary line. The sanitary line must be replaced.

Fire Sprinkler: MHS has no fire suppression system.

Accessibility: The master plan team noted the building does not meet ADA compliance. There is one restroom that may meet ADA and it is located near the gym and not near the classroom wing. During events this one ADA compliant restroom is used for the referee changing room and is locked during events. If an attendee of the event needed to use the ADA restroom, they need to track down an administrator to unlock the room. When entering into the front door, there is no compliant path to get to the learning areas nor the auditorium. The community has parents and grandparents who are unable to access the learning areas for school programs. Currently, there are no students or staff members who utilize a wheelchair. However, the district would have many challenges accomodating a wheelchair if a student or staff member needed ADA accessibility.

Indoor Air Quality: The district has tested indoor air quality inside the classrooms. Based on these results, it was determined the carbon dioxide levels were regularly higher than 1000 ppm for indoor air and over 2000 ppm in some cases. Carbon dioxide in excess of 1000 ppm is generally considered as unhealthy. It is suspected the deficient ventilation system exchanging with outside air is contributing to these unhealthy concentrations.

Interior Finish Systems: The CDE assessment noted that almost all interior systems such as casework, flooring, windows and plumbing fixtures are beyond their useful life. These items were confirmed by the master plan team and replacement was recommended.

It should be noted that the majority of the items discussed above are items in CDE assessment indicated should be replaced by 2020. This school has urgent and desperate needs based on information from the professionals at CDE and our hired consultant team. We are on track to having these much needed systems addressed with our project plan to be ready by the late fall of 2020.

### **Proposed Solution to Address the Deficiencies Stated Above:**

Process: The district competitively procured design teams to lead the master plan process and selected Cannon Design (formerly Bennett Wagner Grody Architects) in the Spring of 2017. Cannon Design formed a master plan advisory committee

## BEST FY2019-20 GRANT APPLICATION SUMMARIES

of 21 individuals. The committee was comprised of parents, students, community members, staff, and Board of Education members. Cannon Design worked with the committee over the course of 10 months to review eight different solution scenarios for the high school deficiencies. The scenarios ranged from a full high school replacement relocated to a vacant school district owned property to renovation of the existing high school. Haselden Construction was a member of the master plan team and was able to provide construction cost estimates for the scenarios. Ultimately the preferred scenario included renovating the common spaces of the school, demolition of existing learning spaces and new construction of classroom wings. The advisory committee strongly felt the high school should stay in its current location - which is located close to the elementary and middle schools, renovate the areas that can be reused, and provide for 21st century learning areas for the students.

It was upon this recommended scenario from the master plan that the BEST grant application submitted last cycle was based. The Meeker High School BEST application was not awarded in FY18-19. Nevertheless, the district formed a citizen's task force, comprised of some of the master plan advisory committee members plus additional community members, to explore the option of placing a bond measure on the ballot. Based on results of a community survey and feedback from the CCAB, the citizen's task force employed assistance from Cannon Design and came forward with a final iteration of the high school program that was placed on the ballot for a bond vote. The bond measure was successful with 64% support from the voters which is considered a large margin of victory in our conservative community. The district committed through the ballot language that a BEST grant would be pursued to offset local tax impact. Additionally, the BEST grant will greatly help with larger than expected abatement costs and the steeply rising construction cost escalation experienced on the Western Slope.

Leading up to the successful bond measure, the district competitively procured an Owner's Representative and selected NV5. Just after the successful bond, the district competitively procured and selected TreanorHL as the design team and Haselden Construction as the CM/GC. Additionally, the district has selected, through a competitive procurement process, the following consultants: commissioning agent, environmental consultant, abatement contractor, geotechnical engineer, construction material testing firm, and surveyor. The district will competitively procure a moving company and a furniture, fixtures and equipment (FF&E) vendor. A decision making committee, the executive committee, has been established and is comprised of the superintendent, two board of education members, the business manager, the high school principal and the facilities manager. A series of Design Advisory Group meetings, community information meetings, and school tours of new k-12 facilities in surrounding districts have been completed. Schematic Design is complete and Design Development is in progress. Based on feedback from the unsuccessful BEST grant application, a new look at the program from the selected design team, constructability reviews from the CM/GC, and feedback from our staff and community, the design plan has evolved into a more efficient layout in which has generated much excitement for the project from our stakeholders.

Facility Solution: The proposed project solution is a combination of renovation to the existing "heart of the school", demolition of the north and south inefficient classroom wings, and new construction of a consolidated classroom wing, new main gym and administration area. New CTE learning areas will be realized through a combination of new construction and renovation of the current auxiliary gym. Site improvements are also planned. The renovation will address all remaining identified deficiencies identified by CDE and/or the master plan consultant team.

The renovation areas will improve the auditorium space, current gym and convert the existing auxiliary gym into adequate CTE spaces as well as the wrestling room and weight room that are currently in spaces that are not code compliant. The main gym will become an auxiliary gym with the plexiglass windows replaced and sufficient clearance added near the seating areas. All hazardous materials will be abated in the areas being renovated. Security, building safety, traffic safety, roofing, electrical, mechanical, plumbing, fire protection, ADA accessibility, indoor air quality, and interior finishes will all be addressed and implemented to current codes in the renovated spaces. Systems identified as near or beyond their useful life will be replaced.

The demolition areas will include the following: north classroom wing, south CTE classroom spaces and the cafeteria. All areas will include hazardous material abatement and proper disposal.

The new construction addition areas will include the following: new classroom wing at south and west, new administration area with main entry and secure vestibule at the north west and a new main gym at the north side.

## BEST FY2019-20 GRANT APPLICATION SUMMARIES

**New Classroom Addition:** This will provide for a consolidated learning space with modern, 21st century learning opportunities. There will be a learning/information commons with breakout spaces for individual study and learning. All the learning spaces will be in close proximity, allowing our teachers to collaborate and interact with each other throughout the day. The systems will be new and compliant with current codes addressing security, building safety, traffic safety, roofing, hazardous materials, electrical, mechanical, plumbing, fire protection, ADA accessibility, indoor air quality, and interior finishes.

**New Admin Area:** The new main entry will allow one point in and one point out for visitors, students and staff. The main entry will be visible for visitors to know where the main entry is located. The main entry will allow for visibility for administrative staff to see who is approaching the building. New bell, PA, security, and fire alarm systems will be installed throughout the building as well as a panic button for emergency situations.

**New Gym:** The master plan advisory committee identified a new main gym as an important component to the new program. The existing main gym was built in 1955 and will be repurposed as an auxiliary gym. Physical Education classes are popular at MHS, and the ability to have more modern gym space for this program was identified by the staff and community. The community and school district greatly value the learning opportunities associated through robust extracurricular activities, for which appropriate gym space is required. Most years, our winters are harsh and our students need space for physical activity indoors. In addition, MHS is the only facility within 40 miles in any direction that has a gym space. In small, tight-knit communities like ours, the gym is a community asset and a place where people gather for celebrations, athletic events, memorial services and other events to connect with their neighbors. Building a new main gym was essential to assemble community support to push the bond measure into the success column.

**Site Improvements:** Site improvements will address ADA deficiencies around the building for access based on current codes. Also new traffic configurations and parking lots will be constructed to reduce traffic backup on Garfield Street and minimize the risk of a vehicle accident at the 2 way stop by allowing more length for vehicles to queue off of the main streets in Meeker.

### **How Urgent is this Project?**

Based on the building investigations through CDE and our master plan team, the majority of the systems in our school are either beyond useful life or nearing it in the early 2020's. The safety, security and hazardous materials deficiencies are of critical importance and impact the health and safety of over 200 children and 15 staff members each day in addition to the numerous elementary students, middle school students, and community members who utilize the facility.

Our district has identified these issues at MHS of urgent, critical nature and have taken steps to address them with our community. If the project is not awarded, we will be unable to fully provide all scope as desired. We have received contractor pricing of the schematic design and know we will have to go through a difficult value engineering process (scope cut) because of rapidly escalating construction costs and unforeseen abatement costs. In order to address these costs, we have cut program spaces significantly, but are still looking at a budget shortfall. Without a grant, we will need to further cut programming which will have a detrimental impact on academic offerings

**Does this Project Conform with the Public School Facility Construction Guidelines?** Yes

**If not, provide an explanation for the use of any standard not consistent with the guidelines:**

### **How Does the Applicant Plan to Maintain the Project if it is Awarded?**

The Meeker School District prioritizes and commits to regular maintenance of our facilities to extend their value to our students, staff and community for as long as possible. A new school will first be under warranty by the general contractor and then maintained according to our regular schedules. The contractor will also provide training and operation/maintenance information to our maintenance department for all new components such as doors, hardware, windows and flooring. IT software upgrades will be the responsibility of the district over time, and hardware and software costs over time will be budgeted by the district. Having gone through this process since the construction of the new Meeker Elementary School 10 years ago, we understand the needs that arise to maintain a new facility and to plan for replacement of equipment that reaches end of life.

The school district currently employs three individuals responsible for custodial and maintenance work at the high school,

## BEST FY2019-20 GRANT APPLICATION SUMMARIES

with a lead individual responsible for all maintenance and custodial work. This employment structure would continue if the district were awarded a BEST grant. The lead individual reports directly to the high school principal and maintains consistent contact with the superintendent regarding capital renewal needs.

Maintenance of a new school will be budgeted appropriately as part of the district's annual operating budget. The district currently allocates approximately \$182,500 to maintenance and operations for the high school. This equates to approximately \$900 per student. This general budget amount will remain in the operations and maintenance for a new facility with a portion allocated to standard capital renewal and preventative maintenance costs.

Though no longer required by Colorado statute, the district continues to maintain a Capital Reserve fund. Renewal and replacement of larger equipment will be funded through the district's capital reserve. At minimum, the district would commit to ensuring funds exceeding minimums required by the Capital Construction Assistance Board are transferred to this account on an annual basis as a Capital Renewal Reserve. At \$100 per pupil with an approximate FTE of 200 at Meeker High School, this would amount to a minimum of \$20,000 transferred from the district's General Fund to this account on an annual basis. These transfers may increase as needed depending on the projects required each year.

**Describe the condition of the public school facility at the time it was purchased or constructed and, if the facility was not new or was not adequate as a public school facility at that time, provide the rationale for purchasing the facility or constructing it in the manner in which you did:**

Meeker High School was built as a new facility with construction completed in September of 1955. At the time of construction, it was considered to be an outstanding facility and was a catalyst to consolidate several rural schools in eastern Rio Blanco County.

**Describe the history of capital improvements made to the facility by the district/charter school in order to make it suitable for students. Include a list of all capital projects undertaken in the affected facility in the last 3 years:**

Like many school facilities in small rural districts, Meeker High School has undergone several renovations and improvements over the course of its 64 years of existence. Additional classrooms and CTE spaces were constructed in 1975 and a cafeteria, auxiliary gym, and locker room spaces were added in 1978. HVAC/electrical system upgrades were completed 2008. Most areas and systems of the building are still original construction. The stage floor in the auditorium was replaced in the spring of 2017 after a roof leak damaged the flooring material beyond repair. The section of roof over the stage was patched in the summer of 2017 to prevent further leaking. The football field and track were renovated in the summer of 2016. Three small sections of concrete, totalling less than \$10,000 were replaced in the summer of 2017.

**What options outside of the BEST grant has the applicant investigated or leveraged to address the school's facility needs?**

While the original 1955 building comprises the majority of Meeker High School, some additions and capital projects have been conducted on the building. In 1975, additional classrooms and the industrial arts shop were added. In 1978, a capital construction project was initiated to add an auxiliary gym, locker rooms, and cafeteria. Some HVAC/electrical upgrades were made in 2008. Roof repairs have been completed at a variety of points over the life of the building, with the most recent of these repair occurring in 2017. Nonetheless, in excess of 85% of the roofing materials are over 10 years old, with some portions at least 30 years old. Much of the building is still original 1955 construction.

In 2008 the school district used revenues from the successful bond election intended primarily for a new elementary school, but also for mechanical systems upgrades throughout the district, to upgrade HVAC and electrical systems at Meeker High School. Unfortunately, these upgrades are not longer to code and/or are not functioning as intended. Only portions of the HVAC system were replaced, current air handlers are not functioning properly, electrical upgrades were completed haphazardly, and the fire alarm system no longer meets code. Furthermore, these upgrades did not address some of the more severe health and safety concerns such as air quality and presence of hazardous materials.

When applicable, the district has leveraged insurance payments to complete capital improvement projects. The district has also been successful in securing grants to upgrade portions of the facility, specifically the football field/track and auditorium. The majority of funds donated for auditorium upgrades have been held in reserve as the plan for improvements was not well developed or appropriately prioritized.

The scope of the needs associated with Meeker High School require revenues from a bond sale, with or without a BEST grant.



## BEST FY2019-20 GRANT APPLICATION SUMMARIES

Because of the successful bond election in the fall of 2018, the Meeker community has committed to providing these funds. While this commitment is greatly appreciated, it is likely to fall short of what is required to completely address all the needs given high construction escalation costs on the Western Slope and greater than anticipated quantities of hazardous materials present.

As noted above, due in part to the successful bond election, the school district is bringing to this grant application a larger share of their own dollars than our match percentage calculated by the BEST Grant Program. We have increased our match from 69% to 81%.

The district has corresponded with History Colorado to determine if the high school upgrades would be eligible for grant monies through the State Historical Fund. Meeker High School is not considered to be a building of historical significance by History Colorado.

We have received funding through the School Security Disbursement Grant which will provide funding for systems such as fire alarms, door hardware, security cameras, and door monitoring software. The total amount for these systems is estimated at \$875,500. The school district has pledged \$311,125 through bond funds as matching money. The grant is providing \$564,375.

The school district is pursuing additional funding through the Colorado Department of Local Affairs' Energy/Mineral Impact Assistance Fund grant. The school district has also engaged community partners about donations for certain portions of the facility. We will also pursue grants from philanthropic organizations with missions that align with Meeker School District's capital construction needs. The funds available through grants and donations, while helpful if awarded, are a fraction of the funds available to school districts through the BEST grant program.

We will also pursue any energy utility rebates post-construction after delivering a more energy efficient building.

### **How do you budget annually to address capital outlay needs in your district/charter? Include \$/FTE for the prior fiscal year:**

The school district keeps an ongoing, prioritized list of capital construction needs throughout the school district. Because of the age and condition of Meeker High School, many of the projects on this list are at the high school.

Though no longer required by state statute, the Meeker School District maintains a Capital Reserve Fund to address facility needs. Over the past several years, the school district has liquidated a variety of unused properties and has supplemented the Capital Reserve Fund with those revenues. Currently the Capital Reserve Fund has a balance of \$317,000, or approximately \$466 per FTE (October 1, 2018 FTE = 680). In addition to the liquidated properties, the district has also transferred \$275,000 from the General Fund to the Capital Reserve Fund, since July 1, 2015. This equates to approximately \$105 per student per year for the cumulative FTE totals of FY15, FY17, FY18, and FY19. These funds were transferred as a result of actual expenses lower than budgeted and revenues higher than budgeted.

### **If relevant to your project, what are your current annualized utility costs, and what amount of reduction in such costs do you expect to result from this project?**

We anticipate savings related to energy use. The current schematic design has provided rough order of magnitude estimates for a facility with a carbon neutral footprint. While this effort may be an unlikely goal, the district is committed to utilizing renewables for electricity and to constructing and maintaining a highly efficient building. We anticipate, at minimum, our energy consumption will be reduced by 30%-50% of current consumption.

Electric costs for Meeker High School were \$27,284.37 in 2015, \$26,348.67 in 2016, \$20,516.92 in 2017, and \$19,636.35 in 2018. The school district entered a partnership with White River Electric Association in the summer of 2016 to construct a solar garden on school property. In return for the use of the land, WREA offers solar electricity production credits to the school district that total approximately \$8,000 to \$9,000 per year. The reduction in electric costs for 2016 are reflective of this credit.

Natural Gas costs for Meeker High School were \$17,430.97 in 2015, \$18,489.17 in 2016, \$17,370.38 in 2017, and \$19,550.22 in 2018.

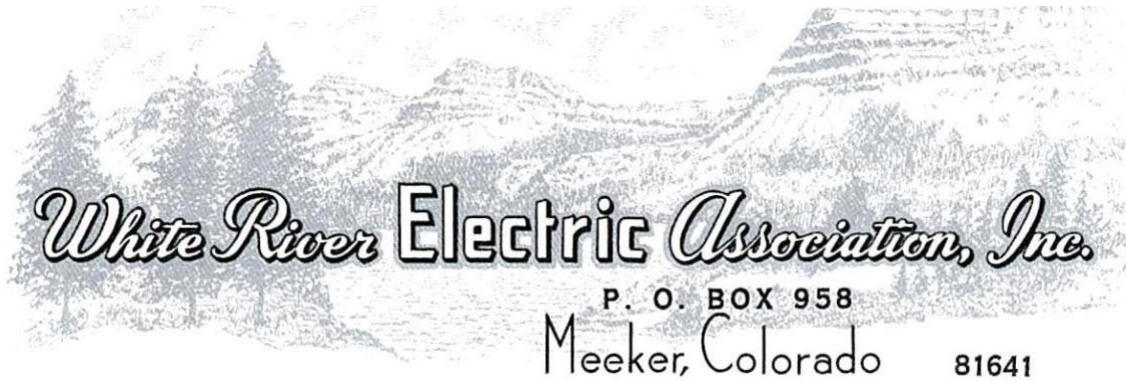
## BEST FY2019-20 GRANT APPLICATION SUMMARIES

We anticipate a reduction in water usage, but do not anticipate savings in the areas of waste removal, telecommunications, or internet.

<b>Grant Request:</b>	\$7,529,595.31	<b>CDE Minimum Match %:</b>	69%
<b>Applicant Match:</b>	\$32,099,853.69	<b>Actual Match % Provided:</b>	81%
<b>Total Project Cost:</b>	\$39,629,449.00	<b>Is a Waiver Letter Required?</b>	No
<b>Affected Sq Ft:</b>	86,632	<b>Contingent on a 2019 Bond?</b>	No
<b>Affected Pupils:</b>	204	<b>Source of Match:</b>	2018 Bond
<b>Cost Per Sq Ft:</b>	\$457.45		
<b>Soft Costs Per Sq Ft:</b>	\$76.96	<b>Escalation %:</b>	2%
<b>Hard Costs Per Sq Ft:</b>	\$380.48	<b>Construction Contingency %:</b>	4%
<b>Cost Per Pupil:</b>	\$194,262	<b>Owner Contingency %:</b>	8%
<b>Gross Sq Ft Per Pupil:</b>	425	<b>Historical Register?</b>	No
<b>Is a Master Plan Complete?</b>	Yes	<b>Adverse Historical Effect?</b>	No
<b>Who owns the Facility?</b>	District	<b>Does this Qualify for HPCP?</b>	Yes
<b>If owned by a third party, explanation of ownership:</b>			
<b>If match is financed, explanation of financing terms:</b>			

### Financial Data (School District and BOCES Applicants)

<b>District FTE Count:</b>	682	<b>Bonded Debt Approved:</b>	\$39,700,000
<b>Assessed Valuation:</b>	\$585,955,630	<b>Year(s) Bond Approved:</b>	18
<b>PPAV:</b>	\$859,803	<b>Bonded Debt Failed:</b>	
<b>Unreserved Gen Fund 17-18:</b>	\$4,101,085	<b>Year(s) Bond Failed:</b>	
<b>Median Household Income:</b>	\$52,113	<b>Outstanding Bonded Debt:</b>	\$55,725,000
<b>Free Reduced Lunch %:</b>	35%	<b>Total Bond Capacity:</b>	\$117,191,126
<b>Existing Bond Mill Levy:</b>	3.843	<b>Bond Capacity Remaining:</b>	\$61,466,126
<b>3yr Avg OMFAC/Pupil:</b>	\$1,489.20		



February 22, 2018

Division of Public School Capital Construction Assistance  
Attn: Capital Construction Assistance Board  
1580 Logan Street, Suite 310  
Denver, CO 80203

Re: Meeker School District

To Whom It May Concern:

Please accept this letter on behalf of White River Electric Association, Inc. ("WREA"), and in support of the Meeker School District's effort to secure a BEST grant for a major construction and renovation project at the Meeker High School.

As a rural electric cooperative, WREA strives to provide safe, reliable and affordable electric service to its members, including the Meeker High School. Due to its size and usage patterns, Meeker High School consumes consistently large amounts of electricity. Over the years, we have worked to find ways for the school to be more efficient in its energy consumption. Unfortunately, due to the age and condition of the building, there are no practical options available to increase efficiencies and reduce electric costs. With that, WREA supports the District's effort to acquire grants in support of the proposed construction and renovation project at the high school.

WREA appreciates its strong working relationship with the Meeker School District. The District is governed by an engaged School Board and administered by a skilled Superintendent. Our community is also very proud of its dedicated and professional teaching staff. WREA and the District most recently worked together to coordinate resources for Meeker's first solar garden. The WREA Solar Garden leases land from the District in exchange for production credits from one-half of its solar panels. The WREA Solar Garden sits adjacent to the High School and provides enhanced learning opportunities for the students. Annually, WREA puts on electric safety demonstrations that engage kids from kindergarten all the way through high school. We are also pleased with WREA's *Story Behind the Switch* program which is presented in several classrooms. The *Story Behind the Switch* engages the kids in hands on learning as well as provides information on electric efficiencies and renewable energy.

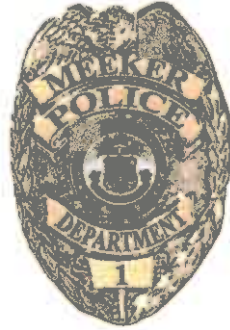
Thank you in advance for your consideration of the District's application. Please do not hesitate to contact us for additional information.

Sincerely,

*Alan J. Michalewicz*

Alan J. Michalewicz  
General Manager / CEO

OFFICE OF  
**PHILLIP STUBBLEFIELD**  
CHIEF OF POLICE



**MEEKER POLICE DEPARTMENT**  
345 MARKET STREET  
MEEKER COLORADO 81641  
970.878.5555

February 20, 2018

Capital Construction Assistance Board:

The Meeker Police Department is writing this letter in support of the Meeker School District's efforts to secure a BEST grant for major construction and renovation at Meeker High School.

Meeker High School is not a secure building. Multiple entrances exist that allow for access to the building by unauthorized individuals. Though the school district prioritizes safety of students, the physical layout of the building creates insurmountable challenges around limiting access. Furthermore, the layout of the building creates significant barriers to securing the facility should an event occur which requires response from law enforcement. There are several areas in the building that are difficult, if not impossible, to efficiently and effectively secure in an emergency.

Because the school was built in 1955, many of these concerns were not considered with the original construction. Any major renovation or new construction similar to that which is outlined in the school district's BEST grant application would ensure implementation of today's construction standards which hold student safety as a top priority.

Sincerely,

A handwritten signature in black ink, appearing to read "Phil Stubblefield". The signature is written in a cursive, somewhat stylized font.

Phil Stubblefield  
Chief of Police  
Meeker Police Department

# RIO BLANCO FIRE PROTECTION DISTRICT



## **MEEKER FIRE & RESCUE**

236 7<sup>th</sup> Street, Post Office Box 737  
Meeker, CO 81641  
(970) 878-3443



February 20, 2018

Capital Construction Assistance Board:

Meeker Fire and Rescue is writing this letter in support of the Meeker School District's efforts to secure a BEST grant for major construction and renovation at Meeker High School.

Meeker High School currently operates a fire alarm system that is past its useful life. Requirements for new fire alarm systems are present as they have been determined as useful components for any fire alarm system to ensure quick detection and evacuation in the event of a fire. These components are missing and Meeker High School and are vital to provide a safe learning environment. Furthermore, Meeker High School contains no fire suppression systems. In the event a fire was to occur in the building, significant damage may occur prior to the arrival of firefighters.

Because the school was built in 1955, many of these concerns were not considered with the original construction, nor was the ability to construct the building in a manner to allow for adaptation to new codes. Any major renovation or new construction similar to that which is outlined in the school district's BEST grant application would ensure implementation of today's construction standards which hold student safety as a top priority.

Sincerely,

A handwritten signature in black ink, appearing to read 'Terry Skidmore'. The signature is stylized and somewhat cursive.

Terry Skidmore

Chief/EMS Director

Meeker Fire and Rescue

**Sheriff Anthony Mazzola**  
anthony.mazzola@rbc.us



**Undersheriff Brice Glasscock**  
brice.glasscock@rbc.us

February 20, 2018

Capital Construction Assistance Board:

The Rio Blanco County Sheriff's Office is writing this letter in support of the Meeker School District's efforts to secure a BEST grant for major construction and renovation at Meeker High School.

Meeker High School is not a secure building. Multiple entrances exist that allow for access to the building by unauthorized individuals. Though the school district prioritizes safety of students, the physical layout of the building creates insurmountable challenges around limiting access. Furthermore, the layout of the building creates significant barriers to securing the facility should an event occur which requires response from law enforcement. There are several areas in the building that are difficult, of not impossible, to efficiently and effectively secure in an emergency.

Because the school was built in 1955, many of these concerns were not considered with the original construction. Any major renovation or new construction similar to that which is outlined in the school district's BEST grant application would ensure implementation of today's construction standards which hold student safety as a top priority.

Sincerely,

Anthony Mazzola  
Sheriff  
Rio Blanco County

Meeker Office:  
355 4th Street  
P.O. Box 1460

Meeker, Colorado 81641  
970.878.9620  
Fax: 970.878.3127

Rangely Office:  
209 East Main Street

Rangely, Colorado 81648  
970.878.9625



February 20, 2018

Capital Construction Assistance Board:

The ERBM Recreation and Park District is writing this letter in support of the Meeker School District's efforts to secure a BEST grant for major construction and renovation at Meeker High School.

The Meeker School District and ERBM collaborate on a number of activities which provide opportunities for children in Meeker to engage in healthy lifestyles. Our organizations have an extensive Reciprocal Services Agreement in place that allows us to utilize each other's facilities for activities in which our individual organizations do not have adequate facilities. Safety concerns exist with the gymnasiums at Meeker High School. Bleachers and/or walls are too close to the playing area to ensure the safety of children. The southeast corner of the auxiliary gym at Meeker High School is noticeably settling and could potentially become unusable. New facilities would ensure the continuation of the facilities sharing between our organizations that provide many wonderful opportunities for the children in our community.

The ERBM Board of Directors support this BEST Grant application and look forward to working with the Meeker School District as they plan for this critical facility improvement project.

Sincerely,

Sean VonRoenn

Executive Director

ERBM Recreation and Park District

● **Facilities Impacted by this Grant Application** ●

**JOHNSTOWN-MILLIKEN RE-5J - Letford ES Replacement School - Letford ES - 1957**

<b>District:</b>	Auditor - Johnstown-Milliken RE-5J
<b>School Name:</b>	Letford ES
<b>Address:</b>	2 NORTH JAY AVENUE
<b>City:</b>	JOHNSTOWN
<b>Gross Area (SF):</b>	49,800
<b>Number of Buildings:</b>	3
<b>Replacement Value:</b>	\$12,590,311
<b>Condition Budget:</b>	\$8,380,525
<b>Total FCI:</b>	0.67
<b>Adequacy Index:</b>	0.15



**Condition Budget Summary**

System Group	Replacement Cost	Requirement Cost	SCI
Electrical System	\$1,896,532	\$2,024,118	1.07
Equipment and Furnishings	\$294,688	\$326,659	1.11
Exterior Enclosure	\$1,549,095	\$865,581	0.56
Fire Protection	\$12,288	\$491,548	40.00
Furnishings	\$142,167	\$20,548	0.14
HVAC System	\$2,364,171	\$2,127,934	0.90
Interior Construction and Conveyance	\$2,701,217	\$1,354,919	0.50
Plumbing System	\$527,943	\$444,271	0.84
Site	\$1,080,587	\$989,736	0.92
Special Construction	\$156,199	\$195,250	1.25
Structure	\$1,865,423	\$18,951	0.01
<b>Overall - Total</b>	<b>\$12,590,311</b>	<b>\$8,859,515</b>	<b>0.70</b>



# BEST FY2019-20 GRANT APPLICATION SUMMARIES

**Applicant Name:** JOHNSTOWN-MILLIKEN RE-5J

**County:** Weld

**Project Title:** Letford ES Replacement School

**Applicant Previous BEST Grant(s):** 0

**Has this project been previously applied for and not funded?** No

**If Yes, please explain why:** This is Weld RE-5J's first application for a BEST Grant.

## Project Type:

- |  |  |  |   |
|--|--|--|---|
| <input checked="" type="checkbox"/> New School         | <input checked="" type="checkbox"/> Roof       | <input checked="" type="checkbox"/> Asbestos Abatement | <input checked="" type="checkbox"/> Water Systems     |
| <input checked="" type="checkbox"/> School Replacement | <input checked="" type="checkbox"/> Fire Alarm | <input checked="" type="checkbox"/> Lighting           | <input checked="" type="checkbox"/> Facility Sitework |
| <input type="checkbox"/> Renovation                    | <input type="checkbox"/> Boiler Replacement    | <input checked="" type="checkbox"/> Electrical Upgrade | <input type="checkbox"/> Land Purchase                |
| <input type="checkbox"/> Addition                      | <input checked="" type="checkbox"/> HVAC       | <input checked="" type="checkbox"/> Energy Savings     | <input checked="" type="checkbox"/> Technology        |
| <input checked="" type="checkbox"/> Security           | <input checked="" type="checkbox"/> ADA        | <input checked="" type="checkbox"/> Window Replacement | <input type="checkbox"/> Other                        |

## General Information About the District / School, and Information About the Affected Facilities:

Weld County RE-5J School District is a rural school district in northern Colorado, located in both Weld and Larimer counties. Our schools serve 3,800 students in the towns of Johnstown and Milliken, and also small portions of the town of Berthoud and the city of Greeley.

Weld County RE-5J School District places a strong emphasis on educating the whole child and inspiring our students to be lifelong learners. From kindergarten through high school, our students are empowered to be involved in their learning and to own their educational experience. We are committed to ensuring every student reaches their full potential and is prepared for college or a career when they graduate from high school. The pride of being a Roosevelt High School "Rough Rider" is instilled at all grade levels and allows our growing community to maintain a sense of pride and ownership in their schools.

Weld County RE-5J School District consists of students that are 28% Hispanic, 68% White and 4% from a variety of other ethnicities. Across the district nearly 28% of students receive free or reduced lunch. In regard to students with specific needs, just over 6% of students are English Language Learners, 9% of students have an Individualized Educational Plan, and 3% of students are identified as Gifted and Talented.

As a primarily residential community with only a 5% of our assessed value coming from commercial (excluding volatile Oil and Gas valuation), Johnstown and Milliken are bedroom communities supporting the fast growth in Northern Colorado. To meet the needs of a growing work force demand and population growth we have been working on Master Planning for the past several years to not only address the needs of today, but to prepare for the future. This 2019 BEST Grant application is one important step in preparing for that future. As you review our application we have also submitted additional information in the form of our Facilities Master Plan, Demographics Report, Capacity Plans, Educational Program Plans, Site Study Plans, existing facility floor plans, and Asbestos Survey information. We hope that you will come to the same conclusion as our Board of Education and community, that Weld RE-5J has a clear need for the partnership and support of BEST and plan for the future that will provide safe and exceptional learning opportunities to every Rough Rider.

## Deficiencies Associated with this Project:

### Deficiencies Specific to Letford Elementary

An assessment of the facility conditions at Letford Elementary in April 2017 estimated a cost for capital renewal of \$17,161,425, which did not take into consideration the feasibility that the existing core and shell could be updated to meet current structural codes. Additionally, the current 47,200 square foot facility does not support the educational program and capacity for a full day Kindergarten program and other District educational priorities, again without taking into consideration the (un)feasibility of constructing a fourth series of additions onto the 6.1 acres site. A detailed breakdown of the items identified are included in the Facilities Master Plan submitted as part of this application. A summary of the most blatant deficiencies are described below.

Site

## BEST FY2019-20 GRANT APPLICATION SUMMARIES

The school site is approximately 6.1 acres with 20 parking spaces. The parent drop-off loop allows at most four cars to stack creating safety issues for access to the school during morning start and afternoon pickup periods. Consequently, parents are forced to use the surrounding streets and neighborhood for getting their children to/from school. Given the proximity of the school entry to Jay Avenue, it is not feasible to provide additional safe site circulation for pedestrian and vehicle access to the site. Furthermore, with the District's commitment to Early Childhood Education and Preschool being offered at Letford ES, there is no separate parent parking available to be able to escort preschoolers into the building. There is no bus drop off loop. To exacerbate the site circulation / pedestrian safety issues, the main entry to Letford ES is on a radiused street corner with several streets converging into the entry. During the early history of the campus most students were able to walk / bike to the school. As the neighborhood has aged fewer students walk to school and the majority of students are now being transported from newer developments on the west side of Johnstown. With this change in traffic pattern the site access problems are compounding. Site sidewalks, access grades, and playground surfaces are not ADA compliant. Building drainage is not controlled away from the facility creating foundation damage to the existing building structure.

### Safety / Security

The building design is based on 2 straight academic corridors surrounded by numerous security breaches. With twenty (20) points of entry, including rotted hollow metal doors that swell and cannot be closed with afternoon sun, the building is difficult to secure. None of the doors are monitored with door occupancy sensors and given the classroom architecture with demountable partitions, the ability to shelter in place in case of an emergency is significantly compromised. There are no provisions for a lock down button and there is no public safety or radio coverage available within the building. The fire alarm is addressable in only four classrooms and the balance of the system is not monitored. Interior corridors are not fire rated and the building does not have fire sprinklers. Considering that the roof frame and structure are primarily constructed of flammable wood products this is an extremely frightening situation for a facility with Preschool and Kindergarten age children. The Main Administration area is situated such that there is currently no secure entry vestibule and visitors go past the cafeteria / gym entry before coming to the reception window.

### Structure

The existing roof structure for the original 1950's building consists of wood deck on dimensional lumber joists that are supported by multi-wythe masonry bearing walls. When the south academic wing courtyards were infilled with classroom additions, the roof drainage created ponding and drainage problems throughout the building. The low slope roof pitches combined with the piecemeal additions have created significant moisture infiltration problems for the building structure. There is evidence of building movement which would be expected from a building of this age, but when compared to the code requirements for 1950's school construction the building is sound. The building structure most certainly does not meet current code. If a renovation were to be considered, a forensic structural analysis would be required and as noted by the structural engineer who participated in the Master Plan Facility Assessment there is "significant concern for the existing roof diaphragm and connections to the shear walls meeting the current code".

### Architecture / Educational Adequacy

The infill of the south academic courtyards eliminated daylighting to over half of the academic spaces in the building. Internal ramping in the Academic corridor does not meet ADA as well as restrooms and sinks in classrooms. Interior flooring is asbestos containing vinyl floor tile and asbestos is also present in pipe insulation, window caulking, and transite panels. Exterior building envelopes have moisture infiltration both in the wall and the crawlspace / utility tunnels throughout the building. Corridors are not rated for fire separation with un-labelled doors / frames, wire glass, and multiple fire penetrations into the nonsprinkled egress corridors. Letford Elementary was not designed for modern instructional use. There are no spaces for small group intervention, teacher collaboration, or the expansion of Kindergarten. Classrooms suffer from poor lighting, improper ventilation, inadequate acoustical treatment from demountable partition walls, and compromised instructional technology from a lack of electrical infrastructure.

### Roofing

The built-up roof and ballasted epdm roof systems are well beyond their 20 year life cycle and show the effects of wear and tear. The roof shows signs of multiple patches, ponding, cracked flashings, and loose parapet cap flashing. The exterior gutters and downspouts discharge to sidewalks creating icing and safety concerns. Roof insulation values do not meet current 2015 IEBC requirements. Evidence of the failing roof can be clearly seen in the significant number of damaged and stained ceilings

## BEST FY2019-20 GRANT APPLICATION SUMMARIES

throughout the building.

### Mechanical

The building mechanical systems are "controlled" by an outdated and failing pneumatic controls system. Classroom heating and ventilation is provided using exterior wall mounted cabinet unit heaters where the "fresh air source" is near grade with evidence of moss / mold growth and routinely blocked with snow drifts. While a test and balance retro-commissioning of the systems has not been completed due to the feasibility of such tests, it is highly unlikely that the code required air changes are being met thru this antiquated and worn out system. Cooling has been retrofitted to several of the classrooms thru highly inefficient stand alone dx cooling units and the costs for maintenance and repair of the mechanical systems have grown beyond the District's ability to maintain.

### Electrical

The existing electrical service is beyond it's expected service life with the main switchgear located outside the building with fusible switches and sub-distribution panels that are from the original 1957 construction (well beyond their expected service life). Lighting is provided with fluorescent type fixtures with lighting levels noted as low throughout the building. Like most older schools there is inadequate power supply / distribution for today's high performing classrooms / technology needs. In order to upgrade lighting, power density, and mechanical systems a complete new electrical supply and distribution system is necessary. In a world where student access to instructional technology is a necessity, such limitations make it impossible to set up labs or even recharge Chromebooks to support one-to-one devices. Addressable fire alarms are only present in the 4 classroom 2002 addition and corridors, the rest of the building is not tied into this system. Restrooms do not have any fire alarm notification devices.

### Technology

Because of the original date of construction there were no building provisions for technology equipment or infrastructure. The current MDF resides in the teacher workroom above a series of storage cabinets where it is routinely subject to damage from roof leaks, overheating, and cabinet doors pinching cables. The limitations of the technology infrastructure not only impact the learning environment, but the safety of the occupants with the inability to provide reliable emergency response notification, security camera coverage, and intrusion detection / monitoring in the case of an incident.

In summary, Weld RE-5J has a much beloved campus at Letford Elementary that has exceeded its originally expected service life, is undersized both in program area and site size to meet the capacity demands for the community it serves, has significant safety and security problems intrinsic to the design, and is just plain worn out.

### **Proposed Solution to Address the Deficiencies Stated Above:**

#### General Overview

As a District, 4 of our 5 facilities are over fifty years old with Letford Elementary School our oldest and in the most need at 60 years. Each of these four facilities have significant building code deficiencies, safety / security challenges, energy efficiency, health, building performance, and educational suitability problems that would make them worthy of consideration for a BEST Grant. Compounding the facility issues, since the last significant capital construction project (fifteen years ago) the District has seen a 98% growth in student population with large developments planned that could see student population double again in another 15 years. The need for a comprehensive facilities master plan was obvious with the District taking steps in 2016 to update the facilities assessment, engage a firm in Master Planning, and begin the process of engaging the community on the future of Weld RE-5J. In the Spring of 2018, with a decision needed to move forward for a November 2018 Bond Election, the Board of Education decided to step back and make sure that the solution presented to the voters addressed the Educational Program and Facilities needs for the community and prepared the District for long term success. This meant creating a better understanding of the educational vision, strategic plan, and partnerships necessary for both a successful capital construction program in 2019 and to build a foundation for future support and improvements. Weld Re-5J understands that as a School District and community, we are at a tipping point where the old model of "break fix" and "build another classroom addition" will not support success in the future. To implement the facilities master plan vision, and to create safe collaborative learning environments district-wide, we need the support of the community to pass a series of construction bonds. As part of earning the support of the electorate we need to demonstrate partnerships to leverage the community's investment in their facilities. We are pursuing a BEST Grant and partnership with CDE CCAB for the replacement of Letford Elementary to help offset the costs of a Bond and to begin to address other needs in the District, setting the ground work for improving all our facilities.

## BEST FY2019-20 GRANT APPLICATION SUMMARIES

Multiple options were discussed over the past couple of years to address the deficiencies at Letford Elementary, but the right solution has always been very clear, a new replacement facility on an adequately sized campus is required. The key factors that led to this conclusion are the estimated cost for deferred maintenance / capital renewal of the existing building, capacity to support the Weld RE-5J Elementary School model (4 track PK-5 with Full Day K), and school site too small to allow for additions to meet the expansion. Specifically, the estimated cost for capital renewal of the existing campus is \$17.1 million (assumes the wood structure could meet current codes - highly unlikely), an addition of 23,000 sf for program capacity and educational suitability at \$9.6 million (assumes the addition would fit on the existing site - it won't), and maintaining a neighborhood Elementary in a location where the majority of the students no longer reside. The final variable considered in the evaluation to renovate with additions versus replacement came from the impacts of construction on the school during a renovation. It was ironic to consider that a temporary school would have to be constructed (estimated at over \$2.0 million) in order to renovate as opposed to replacing the facility with a new safe, energy efficient, project-based learning facility.

In determining the best location for a replacement facility, Weld RE-5J conducted solicitations in late 2018 for an Owner's Representative and AE team to help identify facility solutions. In working with the community and local municipalities, a 10.0-acre site has been identified in Johnstown that was originally dedicated for an Elementary School. This site is in a currently developed subdivision within walking distance for a significant number of students and centrally located near several recently approved residential developments. The school staff and administration have been on multiple school tours in the front range area and have been working closely with our Master Planning team to develop an educational program plan and vision for the new Elementary. The program plan has also been directed by the Board of Education which recently committed to Full Day Kindergarten throughout the District and set standards for school capacity and classroom sizes to guide the Master Plan school feeder system. Using the program information and direction from the District on school models, the District architect has developed a program plan and site fit study for the Letford ES replacement school which is attached to this Grant application. The program plan, site study, and representative building systems / finishes (BVSD Emerald Elementary) were then provided to a Colorado based school General Contractor for a cost estimate for the new site development and construction of the facility. These cost estimates are the basis for the Letford ES BEST Grant and were supplemented by soft cost estimates based on the recently constructed Eagle Valley Elementary in Eagle County.

A new Elementary School to replace the worn out Letford Elementary facility will resolve all of the deficiencies noted above. With the support of a BEST Grant and the community the new facility can be ready to welcome students in August 2021.

### **How Urgent is this Project?**

Considering the condition of the existing life safety, security, mechanical systems, electrical systems, building envelope, and energy efficiency Letford Elementary has already past the threshold of failure. The single criteria that is still working is the functional use of the school, which is more of a conditioned response over time than an acceptable classroom environment that supports student success. The urgency to replace the Letford Elementary campus is focused on safety and being good stewards of the funds entrusted the District by the community. Weld RE-5J will be forced to invest money into the Letford ES campus this summer to address safety issues with heaving sidewalks, mechanical patches, and roof repair, all of which will not be recovered in a life cycle cost. The need is great across all of our facilities and to be investing in a facility that has no long-term value for our programs, replacing Letford ES with the support of BEST cannot come soon enough.

We hope that you will agree with our assessment that the deficiencies and solution presented for Letford ES are critical in nature and worthy of support. It is important to understand the relationship of this project to addressing the other critical and urgent needs in Weld RE-5J. As a School District with aging facilities and growing demands for capacity and programs, the Board of Education has taken the opportunity of Master Planning to truly plan and strategize for the future. Milliken Elementary, Milliken Middle School, and Roosevelt High School are also in urgent need of capital renewal and safety upgrades. Our application focused on Letford ES since it is the most dire and clear cut BEST Grant in our opinion. The Bond that is envisioned for November 2019 includes a new replacement facility for Milliken Middle School and a conversion of the existing Milliken Middle School into an Intermediate (3-5) School. This will allow the District to adjust programming at Milliken Elementary to be a Primary (PK-2) expanding our space to be able to provide full day Kindergarten and allow for growth in capacity at the Elementary levels between the Milliken Schools and a replacement Letford ES. To address the safety and security needs at all schools, we applied and recently were awarded a Colorado Department of Homeland Security School Security and Disbursement Grant (SSD). The SSD Grant was awarded for Roosevelt High School and Milliken Middle School and

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will provide funds to provide access control, security cameras, door monitoring, intrusion detection, emergency notification, and training. By partnering with Colorado DHS and taking this first step with a new high performing elementary in Johnstown and middle school in Milliken, we are preparing the community for the future. With the condition and site limitations (26 acres) of Roosevelt High School, the need for a new replacement High School will need to come to the voters within the next decade. Our planning foresees a new High School facility and the conversion of Roosevelt High School with renovation / partial demolition / additions into a Middle School in Johnstown. This vision to raise the standards of safety and performance across the entire District is a long-term goal that is predicated on being able to take the first step. The urgency for the replacement of Letford Elementary is that it represents that first step and the support and partnership of a BEST Grant will go a long way in building the community support for Weld Re5J to take that journey to have facilities that are safe and support our students' success.

**Does this Project Conform with the Public School Facility Construction Guidelines?** Yes

**If not, provide an explanation for the use of any standard not consistent with the guidelines:**

**How Does the Applicant Plan to Maintain the Project if it is Awarded?**

The school district will budget funds each year into the capital reserve account to provide adequate reserves for supporting maintenance needs as well as creating a reserve for future roof replacements and contingencies. The capital renewal budget is established such that there will be an increasing level of contribution to the capital renewal budget as the facilities age. For example in the case of roof replacement based on a 15-year life expectancy, the capital renewal fund contribution schedules such that over the 15-year span sufficient dollars would be set aside to fund the roof replacement.

As part of the maintenance of new and existing facilities, the District will:

1. Develop a facility maintenance plan for preventative maintenance. This will involve routine maintenance of the building from mechanical, to electrical, to caulking inspections, roof inspections, exterior wall inspections, inspections of interior walls, ceilings, floors, door/hardware inspections, testing of fire alarm and intercom systems, testing of fire suppression systems, etc. Periodic inspections will be performed and reports prepared at intervals appropriate to the facility component. Some, like mechanical, will require quarterly inspections and adjustments, and others like electrical switchgear would require bi-annual inspections.
2. The plan will also address routine inspection of alternative energy systems built into the building including periodic adjustments to control systems as required to optimize efficient performance.
3. Develop a painting program to repaint/touch-up the interior and exterior of the building on a ongoing, revolving basis.
4. Do infrared inspections of the building after it is completed and then annually to compare against the completed original structure to identify changes and maintenance needed.
5. Seek to develop staffing based on the International Facilities Management Association recommendations.
6. As part of the original construction, establish a scope and obtain bidding for the mechanical, electrical, and other appropriate sub-contractors to perform service contracts at regular intervals. We will identify District personnel at each campus with our Facilities Management team at Sodexo to oversee these contractors.
7. Any major, non-emergency repairs of mechanical systems or other maintenance affecting school operation would be scheduled over summer breaks.
8. Inspections would be established by a predetermined schedule and would be performed with the goal of establishing 5 year plans for maintenance and repairs. This would help establish budgets for the District well in advance of work occurring, resulting in a planned effort to replace/repair different items in the buildings rather than performing maintenance in a reactive mode.

In addition to the Facilities fund, the District maintains a reserve for facilities in the average of \$650,000. Recognizing the need for improvements in our facilities maintenance and the limitations of our resources, Weld RE-5J engaged Sodexo to assume the responsibilities for facilities maintenance in our District. We have attached a copy of the facilities maintenance agreement to this grant as additional information on the services provided to Sodexo. By engaging a professional Facilities Manager to direct our maintenance operations we are expecting to receive significant benefits in our ability to maintain and plan for capital renewal needs. As part of our approximately \$1.7 million service contract funded thru our General Fund for maintenance in the form of salaries, benefits, maintenance supplies, and repair fees there is a specific allocation of \$850,000 for maintenance needs. Looking to the future, Sodexo's facilities assessment and planning services will help us to better plan

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for our capital renewal needs. To replace the new Elementary planned that would be funded by this 2019 grant at the end of its life-cycle, it is not practical for the District to save enough through capital reserve and general fund and we would look to a Bond for that funding (in 2090?).

As a percentage of District student capacity, Letford ES serves 14% of our student population. Using this percentage, it is appropriate to commit that \$237,000 thru General Fund a year will be allocated to the maintenance of a new Letford Elementary School with \$120,000 of those funds dedicated to facility repair. In addition, \$165,000 a year will be dedicated to capital renewal from the district level maintenance capital reserve (budget indicator 710), further described in our response to item Y of this grant.

**Describe the condition of the public school facility at the time it was purchased or constructed and, if the facility was not new or was not adequate as a public school facility at that time, provide the rationale for purchasing the facility or constructing it in the manner in which you did:**

Letford Elementary School was constructed new in 1957 as the surrounding neighborhood near downtown Johnstown was being developed. Approximately 20 years after opening, a north classroom addition was built changing the academic wing from a single loaded classroom corridor to a double loaded corridor design and removing daylight. A similar addition was constructed south of the original classroom wing in 1984. This change in design approach over time eliminated the courtyards along the south face of the two academic wings and essentially built an enclosed classroom box. The construction of Letford Elementary School coincides with the reorganization of the District when the communities of Johnstown and Milliken joined together to form Weld RE-5J. Over the years there have been several additions constructed to address capacity needs in the area as Johnstown continued to grow. For the past sixty years, Letford Elementary School has served well as a neighborhood school for the Johnstown area. It is currently sited in one of the oldest neighborhoods of Johnstown and has become a community icon for residents who can point to several generations of family members that have graduated as "Mighty Colts". While the building has a long history of serving the community needs, the building condition and site constraints make it unsustainable for future generations. Following the tradition of building neighborhood schools to support community growth and the Weld RE-5J educational vision, the District has partnered once again with Johnstown to select a site for a replacement facility that will serve the community for the next generations of "Mighty Colts".

**Describe the history of capital improvements made to the facility by the district/charter school in order to make it suitable for students. Include a list of all capital projects undertaken in the affected facility in the last 3 years:**

No significant capital improvements have been made to Letford Elementary School within the last sixteen years due to limitations in funding. Like most rural schools in Colorado, Weld RE-5J has been forced to operate in a "break fix model" for the last decade with the majority of any capital construction focused on additions to accommodate growth in student population. In 2002, a four classroom addition was built on the east end of the central academic corridor and since that time we have seen our district wide student population increase by 98%. Similar smaller additions were built in 1976, 1984, and 1996 to meet the growing demand for additional capacity on the constrained 6.1 acres site. In 2017, the District completed a Facilities Master Plan which raised significant concerns about the long term-usefulness of the facility. The investigation identified wood frame joist and decking on double wythe masonry bearing walls that would be cost prohibitive to attempt to bring up to current code for wind loading, fire protection, and roof load capacities. The two academic additions in 1976 and 1984 infilling the courtyards create drainage valleys in the roof plan that has exacerbated the moisture infiltration on the building. The effects of the moisture damage are clearly visible with damaged and stained ceilings, mold / moss growth, and deteriorated concrete foundations.

A complete list of deficiencies is listed in our application and 2017 Facilities Master Plan.

After hosting numerous community engagement sessions, conducting surveys, commissioning demographic studies of enrollment, inviting public comment at School Board meetings, and developing an Educational Plan and Vision for our District, our community has determined that the best path forward is to replace Letford Elementary with a new high performing PK-5 on a new site and demolishing the old school.

**What options outside of the BEST grant has the applicant investigated or leveraged to address the school's facility needs?**

Weld RE-5J submitted a Colorado Homeland Security School Security Disbursement Grant in January 2019 to help fund Districtwide improvements in access control, security cameras, door monitoring, intrusion detection, and emergency response communication. We were notified that we have been awarded partial funding (\$ 334,800) for improvements to Roosevelt

## BEST FY2019-20 GRANT APPLICATION SUMMARIES

High School and Milliken Middle School. Funds for Letford ES, Milliken ES, and Pioneer Ridge were not awarded due to demand and a lack of funding. It is our intent to resubmit for funding next year, though approval of this replacement Letford ES BEST Grant would accomplish the security improvements for the LES campus. Our District is also actively working with local businesses and developers to secure future school sites and establish Career Pathways programs with integration at all grade levels. For the replacement Letford ES project we have worked with the Town of Johnstown to have the land for the new Letford Elementary School site transferred to the District at no cost (estimated value of \$800,000). We are actively pursuing other grants in cooperation with the local municipalities for playground improvements and Safe Routes to Schools development. As a portion of 2019 Bond election we are also targeting Districtwide Energy Performance upgrades to improve classroom lighting efficiency and effectiveness with new led dimmable classroom lighting. We calculate a three year payback for the electrical and building automation upgrades in addition to energy rebates estimated at \$150,000. A large portion of Weld RE-5J's assessed value is built on residential property values with median home prices below our neighbors. As such, we understand the burden and difficulty the local community will have supporting a General Obligation Bond tax increase and are committed to leveraging the communities support for our District with additional grants and partnerships.

### How do you budget annually to address capital outlay needs in your district/charter? Include \$/FTE for the prior fiscal year:

The Weld RE-5J School District consists of five (5) school campuses (serving just over 3,800 students), a District Office, and Maintenance / Transportation facility. We also have a K-8 Charter School that manages and maintains its own facility. Weld RE-5J Schools capital renewal budget allocation for the past five fiscal years for building facilities, equipment and fixtures were as follows:

2014-15 = \$1,028,234  
 2015-16 = \$1,345,023  
 2016-17 = \$ 489,948 (Bus purchases were made this year)  
 2017-18 = \$ 564,792  
 2018-19 = \$1,180,360 (includes costs for a modular at RHS at \$434,195)

Because Letford ES serves about 14% of our student population it is safe to say at least \$165,000 of the current \$1,180,000 budget is available for building improvements at Letford ES on an annual basis. This amounts to roughly \$327 per student.

### If relevant to your project, what are your current annualized utility costs, and what amount of reduction in such costs do you expect to result from this project?

In an audit of our utility costs for the past year, Weld Re5J currently spends \$68,954 for water/sewer (City of Johnstown), gas (Center Point Energy), electric (Xcel) at Letford ES. We have excluded costs for telecom / internet since they are District-wide expenses and we do not expect any significant cost reductions with the building of a new school. Using the combined total utility costs and our current building square footage (47,200) Letford ES currently costs approx. \$ 1.46 / sf for service. With a new high performing facility after consultation with our project team we would expect the utility costs to run approximately \$0.92 / sf with a reduction in our utility costs by over a third. We would also plan to pursue the one time energy rebates from the local utility providers for the efficiency upgrades moving to a new facility. Those savings will be reinvested into the District's capital renewal budgets creating additional savings and improvements going forward.

<b>Grant Request:</b>	\$8,366,653.25	<b>CDE Minimum Match %:</b>	75%
<b>Applicant Match:</b>	\$25,099,959.75	<b>Actual Match % Provided:</b>	75%
<b>Total Project Cost:</b>	\$33,466,613.00	<b>Is a Waiver Letter Required?</b>	No
<b>Affected Sq Ft:</b>	75,000	<b>Contingent on a 2019 Bond?</b>	Yes
<b>Affected Pupils:</b>	496	<b>Source of Match:</b>	
<b>Cost Per Sq Ft:</b>	\$446.22		2019 Bond Election
<b>Soft Costs Per Sq Ft:</b>	\$71.96	<b>Escalation %:</b>	6%
<b>Hard Costs Per Sq Ft:</b>	\$374.26	<b>Construction Contingency %:</b>	5%

## BEST FY2019-20 GRANT APPLICATION SUMMARIES

<b>Cost Per Pupil:</b>	\$67,473	<b>Owner Contingency %:</b>	6%
<b>Gross Sq Ft Per Pupil:</b>	151	<b>Historical Register?</b>	No
<b>Is a Master Plan Complete?</b>	Yes	<b>Adverse Historical Effect?</b>	No
<b>Who owns the Facility?</b>	District	<b>Does this Qualify for HPCP?</b>	Yes

**If owned by a third party, explanation of ownership:**

**If match is financed, explanation of financing terms:**

We are not financing our match for this grant.

### Financial Data (School District and BOCES Applicants)

<b>District FTE Count:</b>	3,716	<b>Bonded Debt Approved:</b>	
<b>Assessed Valuation:</b>	\$554,507,013	<b>Year(s) Bond Approved:</b>	
<b>PPAV:</b>	\$149,201	<b>Bonded Debt Failed:</b>	
<b>Unreserved Gen Fund 17-18:</b>	\$3,002,785	<b>Year(s) Bond Failed:</b>	
<b>Median Household Income:</b>	\$83,113	<b>Outstanding Bonded Debt:</b>	\$9,010,000
<b>Free Reduced Lunch %:</b>	29%	<b>Total Bond Capacity:</b>	\$110,901,403
<b>Existing Bond Mill Levy:</b>	4.8	<b>Bond Capacity Remaining:</b>	\$101,891,403
<b>3yr Avg OMFAC/Pupil:</b>	\$964.57		



**● Facilities Impacted by this Grant Application ●**

**YUMA 1 - HS Addition/Renovation and MS Renovation - Yuma HS - 1958**

District:	Auditor - Yuma 1
School Name:	Yuma HS
Address:	1000 SOUTH ALBANY
City:	YUMA
Gross Area (SF):	99,695
Number of Buildings:	2
Replacement Value:	\$21,669,775
Condition Budget:	\$9,737,690
Total FCI:	0.45
Adequacy Index:	0.12



**Condition Budget Summary**

System Group	Replacement Cost	Requirement Cost	SCI
Electrical System	\$3,983,072	\$2,213,877	0.56
Equipment and Furnishings	\$890,594	\$457,792	0.51
Exterior Enclosure	\$2,380,266	\$462,817	0.19
Fire Protection	\$40,221	\$802,312	19.95
Furnishings	\$88,575	\$0	0.00
HVAC System	\$3,212,625	\$1,898,318	0.59
Interior Construction and Conveyance	\$3,660,361	\$2,141,399	0.59
Plumbing System	\$1,597,410	\$644,178	0.40
Site	\$2,697,873	\$1,885,463	0.70
Structure	\$3,118,778	\$21,291	0.01
<b>Overall - Total</b>	<b>\$21,669,775</b>	<b>\$10,527,447</b>	<b>0.49</b>

**YUMA 1 - HS Addition/Renovation and MS Renovation - Morris ES/Yuma MS/Little Indians Preschool - 1954**

District:	Auditor - Yuma 1
School Name:	Morris ES/Yuma MS/Little Indians Preschool
Address:	500 SOUTH ELM
City:	YUMA
Gross Area (SF):	124,910
Number of Buildings:	2
Replacement Value:	\$29,842,900
Condition Budget:	\$7,850,980
Total FCI:	0.26
Adequacy Index:	0.11



**Condition Budget Summary**

System Group	Replacement Cost	Requirement Cost	SCI
Electrical System	\$5,363,400	\$329,353	0.06
Equipment and Furnishings	\$455,270	\$181,256	0.40
Exterior Enclosure	\$4,573,863	\$0	0.00
Fire Protection	\$511,623	\$592,342	1.16
Furnishings	\$626,289	\$0	0.00
HVAC System	\$4,953,472	\$4,314,942	0.87
Interior Construction and Conveyance	\$4,496,832	\$2,208,812	0.49
Plumbing System	\$1,828,202	\$463,909	0.25
Site	\$3,092,271	\$684,580	0.22
Structure	\$3,941,676	\$0	0.00
<b>Overall - Total</b>	<b>\$29,842,900</b>	<b>\$8,775,194</b>	<b>0.29</b>

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**Applicant Name:** YUMA 1

**County:** Yuma

**Project Title:** HS Addition/Renovation and MS Renovation

**Applicant Previous BEST Grant(s):** 3

**Has this project been previously applied for and not funded?** No

**If Yes, please explain why:**

## Project Type:

- |  |  |  |   |
|--|--|--|---|
| <input type="checkbox"/> New School            | <input type="checkbox"/> Roof                          | <input checked="" type="checkbox"/> Asbestos Abatement | <input type="checkbox"/> Water Systems                |
| <input type="checkbox"/> School Replacement    | <input checked="" type="checkbox"/> Fire Alarm         | <input checked="" type="checkbox"/> Lighting           | <input checked="" type="checkbox"/> Facility Sitework |
| <input checked="" type="checkbox"/> Renovation | <input checked="" type="checkbox"/> Boiler Replacement | <input checked="" type="checkbox"/> Electrical Upgrade | <input type="checkbox"/> Land Purchase                |
| <input checked="" type="checkbox"/> Addition   | <input checked="" type="checkbox"/> HVAC               | <input type="checkbox"/> Energy Savings                | <input checked="" type="checkbox"/> Technology        |
| <input checked="" type="checkbox"/> Security   | <input checked="" type="checkbox"/> ADA                | <input checked="" type="checkbox"/> Window Replacement | <input type="checkbox"/> Other                        |

## General Information About the District / School, and Information About the Affected Facilities:

Yuma School District is located in Yuma County in beautiful Northeastern Colorado and serves approximately 865 students Preschool through 12th Grade. Morris Elementary provides a complete elementary program for approximately 310 students and 30 staff members Kindergarten through 4th Grade. Yuma Middle School provides a complete middle school education and extra curricular program for approximately 260 students and 30 staff members grades 5th through 8th. Although the two are separate schools, the facilities are connected. The original middle school building was built in 1954 with a significant addition in 1992 completed through a community supported bond. In 2005, an elementary addition was added to the 1954 structure, but is run as a separate school. This project was also completed through the passage of a bond. The bond provided for some minimal system upgrades throughout the existing 1954 and 1992 structures.

Yuma High School serves approximately 230 students 9-12 and 38 staff members. Enrollment and population trends remain steady. The current Yuma High School was built in 1976 with the original gymnasium (known as "The Pit") built in 1958 which remains today. Yuma High School provides a complete high school program with competitive co-curricular and extra-curricular activities. Our district goals include providing robust and real world career and tech programming specifically with focus on Agriculture, Business and Family Consumer Sciences. We boast one of the few and first STEM diploma certifications provided in Colorado and are very proud of what our staff and students accomplish with the limited facility resources we have.

We are proud of the many years of focused maintenance to enable our buildings to function well beyond their expected useful life. In the past few years we have expanded our custodial and maintenance staff to support our facility maintenance. We budget to employ two full-time custodians at YHS and two full-time custodians at YMS and two full-time custodians at MES. Additionally, we employ two full-time maintenance staff. In the summers, we add 3-4 additional staff members to maintain our exterior grounds.

We are resourceful. We continue to look at methods to leverage funds to do more with less. Our students and organizations fundraise for materials and equipment that our budget cannot accommodate. We apply for and receive numerous grants annually to offset costs.

Yuma School District-1 has a wonderful history of community support and tradition. We are proud of the educational programming we provide and continue to seek resources to provide more opportunities for all students. We believe that just because we have limited resources geographically our students should have every opportunity for individual growth as is possible.

## Deficiencies Associated with this Project:

Yuma's high school was completed as the first Stretch Armstrong toy was released in 1976. Like the action figure, we have stretched and adjusted our high school to accommodate new technology, courses, and safety concerns. We are also constantly digging to identify and fix what's inside our school mechanical, electrical, and plumbing systems, which is probably more confusing than what makes Stretch Armstrong stretch. While there are many concerns at the high school, there are also

## BEST FY2019-20 GRANT APPLICATION SUMMARIES

some concerns at the elementary and middle school. The core of our middle school was built in 1954 and has good bones but has systems and spaces well-beyond a useful life.

### OVER-EXTENDED ELECTRICAL SYSTEM AND ELECTRICAL FIRES

Multiple electrical fires, an unreliable wheelchair lift, burnt wires, sparking, zones without working outlets, blown breakers, lost teaching time, evacuations, and fire department visits are outcomes from our inadequate high school electrical system. There is significant safety risk from the over-extended electrical system including fires and the unreliable wheelchair lift (which requires staff to carry the student up/down stairs). Beyond the electrical service shortages, the number of outlets constricts computer quantities and fosters a maze of extension cords and data drops in classrooms. The consumer family studies, band, wrestling, auditorium, and tech classrooms have all been closed during teaching time due to electrical fires and shortages.

We evacuated the school during an evening student council event where most students were present due to an electrical fire that occurred in the underground physical education space set off the fire alarms. We were forced to vacate the band/art/English wing due to a wiring fire in the VAV fan motor box. Classes were held in the commons area for several days until alternative heat sources were brought in from the Front Range. The wires were melted together which in turn caused the heat to quit working again. After returning the temporary heat units from the Front Range, the second electrical issue caused a second failure and the rooms were uninhabitable due to temperatures being in the 50-60 degree range. Classes were returned to the commons area once again for the repairs.

Additionally, there was a wire fire issue that occurred in the FCCLA room where the spark caused melting of the wires and scorching of the wood cabinets. The breaker was tripped in this scenario and the classroom was without any electricity for several days while the breaker was traced and found.

It is concerning that these significant fire issues are widespread across the building. The cafeteria is another area of sparking and breakers being blown, leaving scorched outlets and significant fire hazards.

The main distribution panel at our middle school lacks a cover which is unsafe however it's so old that we cannot but new parts to maintain it.

### STRETCHED SCHOOL SAFETY AND MULTIPLE BUILDINGS

When you come to all three of our schools, pedestrians from the neighborhood cross the backed-up drop-off lane then walk across heaving sidewalks to enter our building, add icy conditions during the winter. Then, as you enter the front door, the camera is the only eye that sees you. High School visitors walk across the entire cafeteria before reaching the main office or any regular staff.

Our ability to lock and lockdown the high school is restrained by physically-separated buildings; doors that don't shut from swelling and hardware issues; no automatic locks; and a non-functional intercom system. This problem was recently exacerbated with multiple complaints from students of a suspicious, large SUV lurking as students walked outside to vocational classes, the police were called but were unable to find the vehicle. As the area lacks visual control, no staff would have known if students hadn't alerted us to the creepy SUV. Students have also been caught on the school roof by neighbors who then call the police.

### 38% OF HS STUDENTS VULNERABLE DURING DAILY TREK OUTSIDE FOR VOCATIONAL CLASSES

Vocational education is essential for our students in Yuma. With 75-90 kids making the 430-foot (approximately 1.5 football fields) daily trek to the vocational building, we have significant risks for safety and security. This unpaved path is particularly challenging for our students in wheelchairs and those with physical limitations. The separate location isolates the vocational teachers and curriculum from overlapping to build more robust programs in partnership with agricultural, science, and art education. The detached vocational building lacks adequate phone service for reliable fire panel notifications.

This constraint of this building prevents us from partnering with Northeastern Junior College for a concurrent certificate program, in addition to offering auto tech and other vocational training which are highly-desired by our student population.

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"Recently, Northeastern Junior College, located in Sterling, Colorado, announced its intentions to start a satellite campus in Yuma, Colorado... Currently, we anticipate offering a variety of Welding courses that can be taken for certificate credit by high school students. Students will be able to work on specific certifications with the intention of giving them a certificate that they can receive along with their diploma. A student who is particularly interested in earning multiple certificates could even stack these in such a manner that it results in an Associate of Applied Science in Welding (along with the individual certificates). This is just the first CTE door that we want to open. We are also interested in partnering with the district to offer Auto, Diesel, and Agriculture courses along with the possibilities of Health Science fields such as Medical Assistant or EMT Basic." -Danan Jobe, Vice President of Instruction at Northeastern Junior College

### LACK OF ADA ACCESSIBILITY

There are major problems with ADA access including stoops at exterior doors, unreliable lifts, only one accessible restroom for each gender, no accessible drinking fountains, lack of parking lot access, and long paths to access the auditorium, weight room, and gym for classes. There's no ability to access the locker rooms.

### ADDITIONAL SAFETY CONCERNS

-High school science classrooms have complicated gas shut-off valves and along with the eyewash station, don't meet code because they aren't easily accessible by students and staff in the main classroom.

-There are no supervisable sight lines to locker rooms, wrestling room, and gym for classes at the high school. Recently a male student was suspended for entering a female locker room. The locker rooms are in a non-accessible location of the school.

-We don't have any light poles in the high school parking lot and minimal exterior lighting which makes the outsides of our school very dark in the evenings. The main parking lot is gravel which is not ADA accessible.

-Of the 936 times emergency services were involved at the district in the last 4 years, 100 of these cases required a case number and 71 required police, ambulance and the fire department's involvement. Six of these incidences were visits from the Police Department for an "open door" at YHS. There were more than 35 traffic incidences that include accidents and parking violations.

### HEALTH CONCERNS IN OUR SCHOOLS THAT LIMIT LEARNING

The high school has numerous areas with asbestos, it is currently in a safe-state. The building's water has an off-taste and there are very few functional drinking fountains. At times, we have issues with snakes and mice entering the schools due to doors that don't close properly. The mechanical systems in the middle and high schools have very poor temperature control in the areas that weren't repaired with our recent mechanical system BEST grants, students bring blankets to certain classrooms. The middle and high schools have interior classrooms, libraries, and corridors that lack adequate windows and natural light. At the middle school, the old cooking kitchen was converted into a warming kitchen and poses major health issues with cracking asbestos tiles, leaks, permeable wood cabinetry, and porous brick.

### INFLEXIBLE SCHEDULING FOR GYM CLASSES AND SPORTS

"The Pit" is the original stand-alone 1958 high school gymnasium which was saved when the original 1921 high school was replaced 18 years later. This historic space isn't a functional teaching space but would work for auxiliary and competition functions. The Pit lacks safety railings above the bleachers and in the balcony. It also lacks handrails leading up and down the concrete bleachers. A portion of the balcony is used as a wrestling room although it doesn't accommodate full mats which is a safety concern. Yuma is one of the communities in Colorado with both boys and girls wrestling teams which further strains the under-sized space.

We are forced to split high school practices and competitions between the middle school and high school gymnasiums. Students must carpool across town from the high school to middle school every day for sports practices. Earlier this month, two students from Chase County's JV team were left at our middle school. The lost students didn't have any cell reception (which is common in Yuma) and couldn't access WiFi to contact their teams or coaches. Fortunately, the students were eventually found by our athletic director as he performed a building check and the parents sent us a nice note of appreciation.

# BEST FY2019-20 GRANT APPLICATION SUMMARIES

Lack of adequate gym space results in students often conducting practice in pre-dawn hours before school and after sunset in late evening hours. The time schedules cause health and safety issues for our students resulting from lack of sleep and impaired study time. Similar issues affect attendant coaches and teachers and impair their effectiveness in classrooms.

## TECHNOLOGY REDUCES EDUCATIONAL TIME AND OPPORTUNITY

Beyond the gross electrical safety issues, the quantity of outlets and electrical service hampers our ability to use computers and provide a modern education. Wireless hot spots are used to boost connectivity throughout the middle and high school but are still insufficient for a modern education. You see a constant buzz from high school students in the library hallway because it's the best place to connect laptops to the internet, they walk back to class once they get WiFi access. Despite focused capital allocations in this domain technology access remains inadequate.

## Proposed Solution to Address the Deficiencies Stated Above:

Since our high school was completed in 1976, we continue to have tremendous pride for the school. We have a long-tradition of making do and taking care of what we have. Our school is not an everlasting Stretch Armstrong toy, so certain systems and spaces are no longer safe or viable.

Through our master planning process, with our community, staff, board, and school facility experts, we identified a sustainable long-term plan that weaves the best of our current facilities with new spaces and systems. This project is Phase One of the master plan which addresses all major health and safety deficiencies identified. Future phases of work will address the next priority items of ageing systems and educational suitability issues. This project addresses the current needs of safety and middle school classrooms without spending money on portions of the building that may be demolished in the future.

The proposed work includes a high school addition, high school remodel spaces, middle school remodel, and traffic safety improvements at both school sites. The addition to the high school building will replace the separate and aging vocational shop building, provide better entry security and admin supervision, and provide safe and accessible physical education spaces. Remodel work to the high school reconfigures classroom space to right-size rooms, improve classroom conditions, and reduce safety concerns. Remodel at the middle school improves classroom condition and fixes kitchen health concerns.

Importantly, because we recognize that this is a large project with extensive remodeling, renovation, and addition of a new wing to the high school, we have made the decision to contribute more than our required match. Rather than the required minimum of 46%, Yuma School District will contribute 50%, or approximately \$1,200,000 extra to the project. Through our master planning process, we know that our community strongly supports our students, academically and athletically, the district has adequate bonding capacity to meet a higher match, and we are confident of bond approval in 2019. By increasing our match, if awarded, we will free-up BEST funds to be awarded to other projects.

## SCOPE OF WORK INCLUDES:

Construction of 41,700 square foot of addition at High School including

- Replacement CTE classrooms for grades 9-12
- School administration offices to increase building supervision
- Secure main entry
- Auxiliary gymnasium

HS: Renovation of 21,000 square feet of high school classroom space

- Includes general classrooms, special education, science, art, band, and STEM/tech room
- Add windows and skylights for existing classrooms that need natural light
- Asbestos abatement

HS: ADA upgrades to existing gymnasium including balcony and bleacher railing upgrades

HS: Electrical distribution, electrical panels, HVAC, and lighting replacement for all classroom spaces in the existing 1976 building

# BEST FY2019-20 GRANT APPLICATION SUMMARIES

HS: New main entry drop-off and parking at the new, secure and accessible front entry for the building

HS: Relocate practice field after building addition on existing field

Demolition of "maintenance depot" building

Elem/MS: renovation of 15,000 square feet of middle school classroom space and improved entry security

-New windows for general classrooms to bring adequate natural light, replace paint and flooring as needed from window additions

-Upgrade sinks and power for science room

-Renovation of kitchen for health and safety needs and asbestos abatement

Elem/MS: new main distribution panel will be installed outside so it can be re-used for future master plan phases

Elem/MS: reconfiguration of parent drop-off and front entry site drainage

-Revise visitor parking and parent drop off configuration

## How Urgent is this Project?

Our schools have been stretched too far and the immediate hazards must be addressed. The multitude of electrical fires is the manifestation of a problem that cannot be repaired with diligent maintenance. These fires pose significant risk to our students and staff. The electrical system is beyond its useful life, restricts technology, poses safety hazards, and cannot be patched together anymore.

Pedestrian safety is constantly in jeopardy at our three schools. The daily entrance and exiting of our schools is dangerous, inefficient and relies on competent drivers who are paying attention. Once pedestrians cross the drop-off lanes, they enter schools without entryway visual control. According to Jonathon Lynch, Yuma Chief of Police, "Currently a camera system is used to observe who is trying to gain access to Yuma High School when school is in session. This is better than an open-door policy, but cameras can have limited field of view so the person can easily conceal other people, weapons, and several other items from the camera. The main doors to YHS are approximately 40 yards away from the office." he goes on, "There are 90 students who are exposed to danger daily going to and from the agriculture education classrooms and shop. Doors to the main building are unlocked or opened during the passing periods to allow students and staff to move."

Our high school constricts opportunities for learning from accessibility obstacles to technology issues and unregulated temperatures. Dark interior spaces suppress education and a maze of hallways create additional challenges. Jonathon Lynch, the Yuma Chief of Police expands, "An added area of concern is the podded classrooms. These are areas where an unwanted subject could hide and cause disturbance in several different classrooms at once and move freely through several different parts of the school without using the hallways. This design makes it difficult for the staff or police to search the school for trespassers and other threats if such a situation arises."

Yuma has no possible way of funding a long-term school solution on its own. With our bonding capacity, the best we can do is triage our schools. If the project is not funded, the school would be forced to continue to maintain our existing unsafe and inaccessible facilities. Every year, we devote more time and money to improve safety and make immediate repairs to major systems without fixing the root problems.

**Does this Project Conform with the Public School Facility Construction Guidelines?** No

**If not, provide an explanation for the use of any standard not consistent with the guidelines:**

This project is an addition to and remodel of a portion of the existing high school, and remodel of portions of the existing middle school for Yuma School District. The scope of the project closely conforms to CDE Public School Facility Construction Guidelines 1 CCR 303(1) for traditional MS and traditional HS models. The following is 1) evaluation of the remaining space that is not part of the scope of work and 2) explanation of the total square footage for the district.

# BEST FY2019-20 GRANT APPLICATION SUMMARIES

1) Evaluation of the remaining space that will not be part of the scope of work is as follows:

- 4.1.1. Sound building structures: The remaining existing buildings have no visible structural concerns.
- 4.1.2 Classroom Acoustics: MS classrooms in the '50s and '60s portion of the MS do not meet current standards for acoustics, but are not a high priority concern and planned to be addressed in a future phase.
- 4.1.3 Roofs: The remaining existing buildings have adequate roofing with recent replacements.
- 4.1.4 Electrical and distribution systems: Upgrades to the existing buildings electrical systems are included as part of this scope.
- 4.1.5 Lighting Systems: adequate
- 4.1.6 Mechanical Systems: adequate
- 4.1.7 Plumbing Systems: adequate. Systems in the '50s and '60s portion of the MS are nearing the end of their lifespan and will be addressed in a future phase.
- 4.1.8 Fire Protection Systems: The existing buildings do not have a fire sprinkler but meet code requirements.
- 4.1.9 Means of Egress: adequate
- 4.1.10 Facilities with safely managed hazardous materials: adequate
- 4.1.11 Security: adequate
- 4.1.12 Health Code Standards: adequate
- 4.1.13 Food preparation equipment and maintenance: adequate
- 4.1.14 Health Care Room: adequate
- 4.1.15 Site Safety: adequate
- 4.1.16 Severe Weather Preparedness: The school does not have a designated emergency shelter.

2) Explanation of the total square footage for the district:

The total education facility square footage is higher than median gross square footages provided by CDE construction guidelines.

132,345 sq ft, 153 sf/pupil - interpolated minimum Median GSF and sf/per pupil from CDE chart (including preschool.)

220,100 sq ft, 254 sf/pupil - The current education facilities.

244,680 sq ft, 283 sf/pupil - Proposed total education facilities.

The major reason for the increase in square footage is the requirement for an auxiliary gym at the high school without removing the existing gym. The master plan has a 10 year plan to reduce the educational facilities back down to its current amount of 220,100 square feet.

There are four main justifications for the square footage need:

- 1) Yuma is a rural school district and the square foot needed per student is higher than urban schools. The district provides the same classrooms and specialized education spaces required in an urban district but the student count is much lower. For example, at high school level the auditorium space, kitchens, cafeterias, gym space, special needs classrooms, and Vo/Ag space are all still required even though there are only 224 students. The school district also provides two classrooms for preschool.
- 2) The high school has a historical gymnasium, "The Pit," that is not large enough for practice space and not accessible. Functionally one larger gym could serve the school adequately but The Pit is so loved by the community that it would be a detriment to passage of a bond if demolished. An auxiliary gym is in the program to provide accessible PE and practice space.
- 3) The district has large existing spaces that provide value and would be counterproductive to remove: a full-size gym at the middle school, a full-size auditorium, a large central lunch room. These existing spaces cause a high square foot/student. These spaces would likely not be part of the program if the project were a full replacement.

## BEST FY2019-20 GRANT APPLICATION SUMMARIES

4) The middle school is currently oversized. In the district's master plan, the oldest portions of the middle school building will be demolished and replaced with a right-sized addition. Replacement of this portion of the building would reduce the district square footage back down to its current amount of 220,100 square feet. Funding is not available for replacement right now. The older portion does not have significant health and life safety issues but is at the end of its useful life and does have educational deficiencies. This phase will happen within the next 10 years after bond debt is reduced.

Also, because the high square footage is partially due to the community's choice of maintaining certain spaces of value, the district is searching for other sources of funding to help pay for physical education spaces. The district tried to secure a DOLA grant, but was not able to. The district will provide a higher percentage (50%) of the project cost above the standard district match (46%).

### **How Does the Applicant Plan to Maintain the Project if it is Awarded?**

We would like to reiterate that the majority of our district facilities are over 25 years old with many being over 40 years. Although these facilities lack specific health and safety standards due to their age, we as a district have done well in maintaining these facilities. On average we have invested \$370,000 annually and pay 12 staff members to clean, maintain, and manage our facilities. With the completion of the proposed district safety upgrades, we anticipate maintenance savings and will continue to build our capital renewal budget. We intend to deposit at least the minimum of \$80,000 annually into our capital renewal budget.

In recent years, YSD-1 has reorganized our staffing patterns regarding maintenance and specifically our HVAC systems. Due to our rural location and lack of local servicing, we have begun training programs for our maintenance staff and are working with Rasmussen Mechanical Services to solidify maintenance and troubleshooting procedures for the recently added HVAC systems that have been updated throughout the district and to ensure the systems are working as efficiently as possible. We have implemented training on the updated Honeywell Control system (which was installed summer of 2017) and have also begun training on the Lochivar systems that have been added this year in other district sites. We should not need significant funding to maintain the effectiveness of the control system and boilers over its useful life. Periodically, Lochivar trainings to keep the system up to date and functioning properly.

We believe with our track record and maintenance of our older buildings, we have personnel in place to extend the life of the new renovated buildings as we have the old.

### **Describe the condition of the public school facility at the time it was purchased or constructed and, if the facility was not new or was not adequate as a public school facility at that time, provide the rationale for purchasing the facility or constructing it in the manner in which you did:**

Our schools were all constructed to be schools and have had no other uses. The original middle school building was built in 1954 with a significant addition in 1992 completed through a community supported bond. In 2005, an elementary addition was added to the 1954 structure, but is run as a separate school. The current Yuma High School was built in 1976 with the original gymnasium (known as "The Pit") built in 1958 which remains today.

### **Describe the history of capital improvements made to the facility by the district/charter school in order to make it suitable for students. Include a list of all capital projects undertaken in the affected facility in the last 3 years:**

YSD-1 has budgeting long term to increase reserves in anticipation of the need to update the HVAC system. We have used our capital outlay to address a variety of needs across the district, while planning for reserves in anticipation HVAC system replacements. Our historical annual budgets for capital outlay over the past few years have been: 13-14 \$364,000 14-15 - \$281,468 15-16 \$180,969. During the 17-18 school year, smaller HVAC systems have failed. We met those needs out of our capital plans at a cost of \$13,000 for the boiler replacement in the High School Gymnasium, \$140,000 for boiler replacement in the newer wing of the Middle School and replaced a \$3000 bladder in the Elementary System.

Approximate Expenditures for Total District Wide Capital:

16-17 \$175,000

17-18 \$711,000

18-19 \$850,000

### **What options outside of the BEST grant has the applicant investigated or leveraged to address the school's facility needs?**



## BEST FY2019-20 GRANT APPLICATION SUMMARIES

We explored the potential of applying for a DOLA grant, however, after reviewing what type of school projects are funded, and considering that the City of Yuma has accessed DOLA grant funds for the community center, it was determined we would not be a good candidate for a DOLA grant. Without a BEST grant, we will not be able to complete the needed health and safety renovations.

Although our access to large funds is limited, YSD-1 has sought out various grants as available to help free up funds that could be allocated to the facility repair needs.

In 15-16, we were awarded an Early Literacy Grant that equaled \$329,000 over 3 years to support professional developments, curriculum and salaries; in 14-15 we received a grant to update our elementary playground in the amount of \$155,000; in 15-16, after analyzing our technology infrastructures we applied for and received an E-Rate grant in the amount of \$96,000 to upgrade our network switches. In November of 2016, we placed on the ballot a bond question in the amount of \$17 million to update the high school facility. This bond failed by a very small number.

For School Year 18-19, we have received an Elementary Music Playground grant totaling \$102,000, and additional grants totaling \$21,301 in from National FF/TSC grant; Dupont-Pioneer Grant (two separate grants) Boettcher Foundation, American Chemical Society/ACS; Rocky Mountain Best; Yuma Community Foundation; Target.

We also partner with Northeastern Junior College to provide low or no cost concurrent enrollment courses to support approximately 6 courses per year that impact roughly 60 students each year. We are exploring options to extend opportunities to students to receive career and technical credentials such as Welding Industrial Certification programs where as we will be able to access Perkins funding through the NJC partnership that will assist with equipment and curriculum materials. Our hope is to expand our offerings not only to our YSD-1 students but also students in nearby districts.

### How do you budget annually to address capital outlay needs in your district/charter? Include \$/FTE for the prior fiscal year:

YSD-1 has budgeting long term to increase reserves in anticipation of the need to update the HVAC system. We have used our capital outlay to address a variety of needs across the district, while planning for reserves in anticipation HVAC system replacements. Our historical annual budgets for capital outlay over the past few years have been: 13-14 \$364,000 14-15 - \$281,468 15-16 \$180,969. During the 17-18 school year, smaller HVAC systems have failed. We met those needs out of our capital plans at a cost of \$13,000 for the boiler replacement in the High School Gymnasium, \$140,000 for boiler replacement in the newer wing of the Middle School and replaced a \$3000 bladder in the Elementary System.

Approximate Expenditures for Total District Wide Capital:

16-17 \$175,000

17-18 \$711,000

18-19 \$850,000

### If relevant to your project, what are your current annualized utility costs, and what amount of reduction in such costs do you expect to result from this project?

Utility costs (including electric, gas, water, sewer and trash) for the past calendar year totaled \$395,067.66. The High School site total utility expenses were \$167,793.35; \$107,249.46 were to the City of Yuma and included electric, water, sewer and trash services and \$60,543.89 were to Black Hills Energy for gas services. We're renovating the spaces with the highest daily use with new heating, cooling, and lighting so we should see reduction in the overall utility costs.

<b>Grant Request:</b>	\$15,968,229.00	<b>CDE Minimum Match %:</b>	46%
<b>Applicant Match:</b>	\$15,968,229.00	<b>Actual Match % Provided:</b>	50%
<b>Total Project Cost:</b>	\$31,936,458.00	<b>Is a Waiver Letter Required?</b>	No
<b>Affected Sq Ft:</b>	79,230	<b>Contingent on a 2019 Bond?</b>	Yes
<b>Affected Pupils:</b>	801	<b>Source of Match:</b>	Bond Election
<b>Cost Per Sq Ft:</b>	\$403.09		
<b>Soft Costs Per Sq Ft:</b>	\$47.51	<b>Escalation %:</b>	5%
<b>Hard Costs Per Sq Ft:</b>	\$355.57	<b>Construction Contingency %:</b>	5%

## BEST FY2019-20 GRANT APPLICATION SUMMARIES

<b>Cost Per Pupil:</b>	\$39,871	<b>Owner Contingency %:</b>	5%
<b>Gross Sq Ft Per Pupil:</b>	305	<b>Historical Register?</b>	No
<b>Is a Master Plan Complete?</b>	Yes	<b>Adverse Historical Effect?</b>	No
<b>Who owns the Facility?</b>	District	<b>Does this Qualify for HPCP?</b>	Yes
<b>If owned by a third party, explanation of ownership:</b>			
<b>If match is financed, explanation of financing terms:</b>			

### Financial Data (School District and BOCES Applicants)

<b>District FTE Count:</b>	776	<b>Bonded Debt Approved:</b>	
<b>Assessed Valuation:</b>	\$110,046,120	<b>Year(s) Bond Approved:</b>	
<b>PPAV:</b>	\$141,721	<b>Bonded Debt Failed:</b>	\$17,000,000
<b>Unreserved Gen Fund 17-18:</b>	\$5,576,152	<b>Year(s) Bond Failed:</b>	16
<b>Median Household Income:</b>	\$43,578	<b>Outstanding Bonded Debt:</b>	\$4,190,000
<b>Free Reduced Lunch %:</b>	62%	<b>Total Bond Capacity:</b>	\$22,009,224
<b>Existing Bond Mill Levy:</b>	6.469	<b>Bond Capacity Remaining:</b>	\$17,819,224
<b>3yr Avg OMFAC/Pupil:</b>	\$1,775.07		



# YUMA POLICE

P.O. BOX 291 • 216 E. 3RD AVE. • YUMA, COLORADO 80759 • PHONE 970-848-5441 • FAX 970-848-0106

To: Yuma School Board  
Yuma School District 1  
418 South Main  
Yuma, Colorado 80759

Student and staff safety:

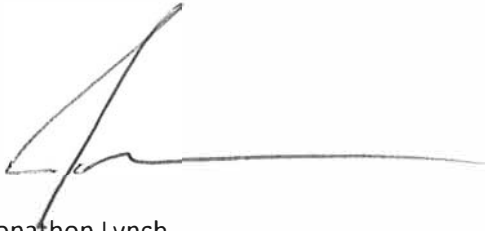
To whom it may concern,

The administrative offices of Yuma High School, for the safety of the students and staff, needs to be moved to the main point of entry for the school so the staff has clear line of sight to who is coming and going. Currently a camera system is used to observe who is trying to gain access to Yuma High School when school is in session. This is better than an open-door policy, but cameras can have limited field of view so the person can easily conceal other people, weapons, and several other items from the camera. The main doors to YHS are approximately 40 yards away from the office. Unless staff is posted by the entryway, there is no possible way to make sure who is coming and going from the school because people leaving or entering the school could open the door for an unknown person standing by the door, possibly letting an unwanted person into the building.

There are currently 40 external doors to Yuma High School to enter and exit. Staff of YHS must remain diligent to make sure the doors are secure at all times. Nine of those doors are keyed entry points. Several of the doors are equipped with alarms but the alarms are only localized by an auditory alarm and the alarm is not transmitted to the administrative office. As a result, nearby staff is used to investigate the nature of the alarm.

There are 90 students who are exposed to danger daily going to and from the agriculture education classrooms and shop. Doors to the main building are unlocked or opened during the passing periods to allow students and staff to move. Again, unless staff is posted by the door during the bell schedule, there is no way to make sure the correct students and staff are entering or leaving the school or what unknown items may be being brought into the school.

An added area of concern is the podded classrooms. These are areas where an unwanted subject could hide and cause disturbance in several different classrooms at once and move freely through several different parts of the school without using the hallways. This design makes it difficult for the staff or police to search the school for trespassers and other threats if such a situation arises.

A handwritten signature in black ink, appearing to read 'Jonathon Lynch', with a long horizontal stroke extending to the right.

Jonathon Lynch  
Chief of Police  
Yuma, Colorado 80759  
j.lynch@yumacolo.org

**Danen Jobe**  
**Vice President of Instruction**  
100 College Avenue  
Sterling, Colorado 80751  
(970) 521-6650

Dear Best Grant Committee,

Recently, Northeastern Junior College, located in Sterling, Colorado, announced its intentions to start a satellite campus in Yuma, Colorado, about an hour away. One of our reasons for doing so was the availability of a building directly across the campus of Yuma High School. At NJC, we've had a great desire to increase both General Education and Career and Tech Education (CTE) offerings in our districts outside of Sterling. This sudden availability paired with the Yuma district's desire for innovative and effective instruction greatly influenced our decision to move in this direction. We anticipate many years of expanding offerings that will change the way college courses are offered in the Yuma area.

In particular, it will allow us to utilize CTE workshop space that can be provided by Yuma High School. Currently, we anticipate offering a variety of Welding courses that can be taken for certificate credit by high school students. Students will be able to work on specific certifications with the intention of giving them a certificate that they can receive along with their diploma. A student who is particularly interested in earning multiple certificates could even stack these in such a manner that it results in an Associate of Applied Science in Welding (along with the individual certificates). This is just the first CTE door that we want to open. We are also interested in partnering with the district to offer Auto, Diesel, and Agriculture courses along with the possibilities of Health Science fields such as Medical Assistant or EMT Basic. We also know that the location of Yuma allows us to offer these courses to students in such nearby towns as Wray, Akron, and Otis. We anticipate this collaboration resulting in a "hub" to help fill needed career fields and give students an opportunity for college courses as they are ready and able to take them.

Please feel free to reach out to me for more information on our partnership. We look forward to working with the Yuma School District on this collaboration, and wish to support them in any way that we can in obtaining a grant that is beneficial for them, us, and, most importantly, the students and community of Yuma. Thank you for your consideration.

Best Regards,



Danen Jobe, Vice President of Instruction, Northeastern Junior College

● **Facilities Impacted by this Grant Application** ●

**JOHNSTOWN-MILLIKEN RE-5J - Milliken ES Roof Replacement - Milliken ES - 1977**

<b>District:</b>	Auditor - Johnstown-Milliken RE-5J
<b>School Name:</b>	Milliken ES
<b>Address:</b>	100 BROAD STREET
<b>City:</b>	MILLIKEN
<b>Gross Area (SF):</b>	56,600
<b>Number of Buildings:</b>	3
<b>Replacement Value:</b>	\$13,674,516
<b>Condition Budget:</b>	\$8,738,019
<b>Total FCI:</b>	0.64
<b>Adequacy Index:</b>	0.11



**Condition Budget Summary**

System Group	Replacement Cost	Requirement Cost	SCI
Electrical System	\$2,225,452	\$1,735,505	0.78
Equipment and Furnishings	\$345,269	\$431,585	1.25
Exterior Enclosure	\$2,019,436	\$1,148,550	0.57
Fire Protection	\$12,679	\$575,117	45.36
HVAC System	\$2,883,363	\$2,517,691	0.87
Interior Construction and Conveyance	\$2,541,113	\$1,450,944	0.57
Plumbing System	\$757,226	\$262,394	0.35
Site	\$1,066,329	\$1,081,162	1.01
Special Construction	\$78,100	\$97,625	1.25
Structure	\$1,745,549	\$0	0.00
<b>Overall - Total</b>	<b>\$13,674,516</b>	<b>\$9,300,573</b>	<b>0.68</b>

# BEST FY2019-20 GRANT APPLICATION SUMMARIES

**Applicant Name:** JOHNSTOWN-MILLIKEN RE-5J

**County:** Weld

**Project Title:** Milliken ES Roof Replacement

**Applicant Previous BEST Grant(s):** 0

**Has this project been previously applied for and not funded?** No

**If Yes, please explain why:**

## Project Type:

- |   |   |   |  |
|---|---|---|--|
| <input type="checkbox"/> New School         | <input checked="" type="checkbox"/> Roof    | <input type="checkbox"/> Asbestos Abatement | <input type="checkbox"/> Water Systems     |
| <input type="checkbox"/> School Replacement | <input type="checkbox"/> Fire Alarm         | <input type="checkbox"/> Lighting           | <input type="checkbox"/> Facility Sitework |
| <input type="checkbox"/> Renovation         | <input type="checkbox"/> Boiler Replacement | <input type="checkbox"/> Electrical Upgrade | <input type="checkbox"/> Land Purchase     |
| <input type="checkbox"/> Addition           | <input type="checkbox"/> HVAC               | <input type="checkbox"/> Energy Savings     | <input type="checkbox"/> Technology        |
| <input type="checkbox"/> Security           | <input type="checkbox"/> ADA                | <input type="checkbox"/> Window Replacement | <input type="checkbox"/> Other             |

## General Information About the District / School, and Information About the Affected Facilities:

Weld County RE-5J School District is a rural school district in northern Colorado, located in both Weld and Larimer counties. Our schools serve 3,800 students in the towns of Johnstown and Milliken, and also small portions of the town of Berthoud and the city of Greeley.

Weld County RE-5J School District places a strong emphasis on educating the whole child and inspiring our students to be lifelong learners. From kindergarten through high school, our students are empowered to be involved in their learning and to own their educational experience. We are committed to ensuring every student reaches their full potential and is prepared for college or a career when they graduate from high school. The pride of being a Roosevelt High School "Rough Rider" is instilled at all grade levels and allows our growing community to maintain a sense of pride and ownership in their schools.

Weld County RE-5J School District consists of students that are 28% Hispanic, 68% White and 4% from a variety of other ethnicities. Across the district nearly 28% of students receive free or reduced lunch. In regard to students with specific needs, just over 6% of students are English Language Learners, 9% of students have an Individualized Educational Plan, and 3% of students are identified as Gifted and Talented.

As a primarily residential community with only a 5% of our assessed value coming from commercial (excluding volatile Oil and Gas valuation), Johnstown and Milliken are bedroom communities supporting the fast growth in Northern Colorado. To meet the needs of a growing work force demand and population growth we have been working on Master Planning for the past several years to not only address the needs of today, but to prepare for the future. This 2019 BEST Grant application is one important step in preparing for that future. As you review our application we have also submitted additional information in the form of our Facilities Master Plan, Demographics Report, Capacity Plans, and Educational Program Plans. We hope that you will come to the same conclusion as our Board of Education and community, that Weld Re5J has a clear need for the partnership and support of BEST and plan for the future that will provide safe and exceptional learning opportunities to every Rough Rider.

## Deficiencies Associated with this Project:

The roofs that we are proposing to replace on the school range from 20 to 25 years old and are past their useful lives and there are ongoing leaks throughout the school which is negatively affecting the learning environment. The EPDM flashings are shrinking and pulling away from the walls and mechanical curbs in multiple locations. There are holes in the flashings in several locations due to the shrinking membrane. When EPDM roofs show these signs of deterioration repairing the roofs is temporary at best and requires ongoing maintenance. This ongoing maintenance nuisance strains the school district's resources that are already stretched thin. The built up roofs we are proposing to replace are near the end of their useful lives and are due for replacement based on age. Replacing the EPDM roofs and the built up roofs at the same time makes sense both for ease of construction and cost savings realized with a greater volume of work at one time versus piecemeal over several years. Finally the asphalt shingles that are currently in place on the vertical mansards are aged and loose which make them susceptible to wind blow off. The mansards should be replaced as well as part of the overall roofing project.

# BEST FY2019-20 GRANT APPLICATION SUMMARIES

## Proposed Solution to Address the Deficiencies Stated Above:

Based upon our inspection of the roofs and archive research, we recommend that the roofs on Milliken Elementary School be replaced within a year. We recommend replacing the existing roofing with graveled built up roofing. The school district prefers this type of system for its longevity, durability and limited maintenance that it requires. Replacement will include new insulation (to supplement existing in some cases), new membrane, new sheetmetal and new roofing accessories. On roofs that we are able, the existing insulation will be reused on this school but will need to be supplemented with new insulation. Reusing existing insulation reduces the overall reroofing cost. The mansard shingles will be replaced with pre-finished metal siding which is more appropriate for the vertical condition and will add a modern look to the school.

New roofing will need to comply with the International Building Code, School Construction Guidelines and BEST Grant policies. Provisions include, but are not limited to:

- Structural analysis of each roof section by a State of Colorado licensed Structural Engineer.
- Installation of ladders where roof to roof transitions exceed 30".
- Energy requirements for roofs.
- Compliance with minimum roof slope requirements.
- Limitations on ballast which is dependent on local adopted wind speeds.
- Guard rails at HVAC units within ten feet of roof edges.
- Guard rails at roof hatches within ten feet of roof edges.

## How Urgent is this Project?

The roofing systems we are proposing to replace are past or nearing the end of their useful lives and are no longer serviceable and should be replaced within the next year. Apart from safety concerns, continued leaks can cause damage to the school's structure, interior and educational materials. Furthermore, continued leaking can be a distraction to the learning environment as school resources have to be refocused to managing the ongoing leaks.

**Does this Project Conform with the Public School Facility Construction Guidelines?** Yes

**If not, provide an explanation for the use of any standard not consistent with the guidelines:**

## How Does the Applicant Plan to Maintain the Project if it is Awarded?

The school district will budget funds each year into the capital reserve account to provide adequate reserves for supporting maintenance needs as well as creating a reserve for future roof replacements and contingencies. The capital renewal budget is established such that there will be an increasing level of contribution to the capital renewal budget as the facilities age. For example in the case of roof replacement based on a 15-year life expectancy, the capital renewal fund contribution schedules such that over the 15-year span sufficient dollars would be set aside to fund the roof replacement.

As part of the maintenance of new and existing facilities, the District will:

1. Develop a facility maintenance plan for preventative maintenance. This will involve routine maintenance of the building from mechanical, to electrical, to caulking inspections, roof inspections, exterior wall inspections, inspections of interior walls, ceilings, floors, door/hardware inspections, testing of fire alarm and intercom systems, testing of fire suppression systems, etc. Periodic inspections will be performed and reports prepared at intervals appropriate to the facility component. Some, like mechanical, will require quarterly inspections and adjustments, and others like electrical switchgear would require bi-annual inspections.
2. The plan will also address routine inspection of alternative energy systems built into the building including periodic adjustments to control systems as required to optimize efficient performance.
3. Develop a painting program to repaint/touch-up the interior and exterior of the building on a ongoing, revolving basis.
4. Do infrared inspections of the building after it is completed and then annually to compare against the completed original structure to identify changes and maintenance needed.
5. Seek to develop staffing based on the International Facilities Management Association recommendations.
6. As part of the original construction, establish a scope and obtain bidding for the mechanical, electrical, and other appropriate sub-contractors to perform service contracts at regular intervals. We will identify District personnel at each



## BEST FY2019-20 GRANT APPLICATION SUMMARIES

campus with our Facilities Management team at Sodexo to oversee these contractors.

7. Any major, non-emergency repairs of mechanical systems or other maintenance affecting school operation would be scheduled over summer breaks.

8. Inspections would be established by a predetermined schedule and would be performed with the goal of establishing 5 year plans for maintenance and repairs. This would help establish budgets for the District well in advance of work occurring, resulting in a planned effort to replace/repair different items in the buildings rather than performing maintenance in a reactive mode.

In addition to the Facilities fund, the District maintains a reserve for facilities in the average of \$650,000. Recognizing the need for improvements in our facilities maintenance and the limitations of our resources, Weld RE-5J engaged Sodexo to assume the responsibilities for facilities maintenance in our District. We have attached a copy of the facilities maintenance agreement to this grant as additional information on the services provided to Sodexo. By engaging a professional Facilities Manager to direct our maintenance operations we are expecting to receive significant benefits in our ability to maintain and plan for capital renewal needs. As part of our approximately \$1.7 million service contract funded thru our General Fund for maintenance in the form of salaries, benefits, maintenance supplies, and repair fees there is a specific allocation of \$850,000 for maintenance needs. Looking to the future, Sodexo's facilities assessment and planning services will help us to better plan for our capital renewal needs. To replace the new Elementary planned that would be funded by this 2019 grant at the end of its life-cycle, it is not practical for the District to save enough through capital reserve and general fund and we would look to a Bond for that funding (in 2090?).

As a percentage of District student capacity, Milliken ES serves 17% of our student population. Using this percentage, it is appropriate to commit that \$289,000 thru General Fund a year will be allocated to the maintenance of a new Letford Elementary School with \$144,500 of those funds dedicated to facility repair. In addition, \$200,600 a year will be dedicated to capital renewal from the district level maintenance capital reserve (budget indicator 710), further described in our response to item Y of this grant.

**Describe the condition of the public school facility at the time it was purchased or constructed and, if the facility was not new or was not adequate as a public school facility at that time, provide the rationale for purchasing the facility or constructing it in the manner in which you did:**

Milliken Elementary is a single story building located at Broad Street and Quentin Avenue in Milliken, Colorado, constructed in 1972. The building was constructed new in a developing residential neighborhood and has served the community well over the past forty five years. The building was built using construction standards and materials typical of the early 1970's.

**Describe the history of capital improvements made to the facility by the district/charter school in order to make it suitable for students. Include a list of all capital projects undertaken in the affected facility in the last 3 years:**

No significant capital improvements have been made to Milliken Elementary School within the last two decades due to limitations in funding. Like most rural schools in Colorado, Weld RE-5J has been forced to operate in a "break fix model" for the last decade with the majority of any capital construction focused on additions to accommodate growth in student population. In 2002, a detached modular was placed on the school site and since that time we have seen our district wide student population increase by 98%. Twelve years after the original construction, a classroom addition was built on the south side of the facility. The 1984 addition appears to consist of wood roof deck, open web joists with wood chords and pin-connected steel webs, multi-wythe masonry bearing / shear walls, slab on grade first floor and spread footings. In 1996 a classroom addition was built on the west side of the existing building. The 1996 addition is built with steel joists supporting a steel roof deck that bears on multi-wythe masonry bearing / shear walls.

**What options outside of the BEST grant has the applicant investigated or leveraged to address the school's facility needs?**

Weld RE-5J submitted a Colorado Homeland Security School Security Disbursement Grant in January 2019 to help fund Districtwide improvements in access control, security cameras, door monitoring, intrusion detection, and emergency response communication. We were notified that we have been awarded partial funding (\$ 334,800) for improvements to Roosevelt High School and Milliken Middle School. Funds for Letford ES, Milliken ES, and Pioneer Ridge were not awarded due to demand and a lack of funding. Our District is also actively working with local businesses and developers to secure future school sites and establish Career Pathways programs with integration at all grade levels. We are actively pursuing other grants in cooperation with the local municipalities for playground improvements and Safe Routes to Schools development at Milliken ES. As a portion of 2019 Bond election we are also targeting Districtwide Energy Performance upgrades to improve classroom

## BEST FY2019-20 GRANT APPLICATION SUMMARIES

lighting efficiency and effectiveness with new led dimmable classroom lighting. We calculate a three year payback for the electrical and building automation upgrades in addition to energy rebates estimated at \$150,000. A large portion of Weld RE-5J's assessed value is built on residential property values with median home prices below our neighbors. As such, we understand the burden and difficulty the local community will have supporting a General Obligation Bond tax increase and are committed to leveraging the communities support for our District with additional grants and partnerships.

### How do you budget annually to address capital outlay needs in your district/charter? Include \$/FTE for the prior fiscal year:

The Weld RE-5J School District consists of five (5) school campuses (serving just over 3,800 students), a District Office, and Maintenance / Transportation facility. We also have a K-8 Charter School that manages and maintains its own facility. Weld RE-5J Schools capital renewal budget allocation for the past five fiscal years for building facilities, equipment and fixtures were as follows:

2014-15 = \$1,028,234  
 2015-16 = \$1,345,023  
 2016-17 = \$ 489,948 (Bus purchases were made this year)  
 2017-18 = \$ 564,792  
 2018-19 = \$1,180,360 (includes costs for a modular at RHS at \$434,195)

Because Milliken ES serves about 17% of our student population it is safe to say at least \$200,600 of the current \$1,180,000 budget is available for building improvements at Milliken ES on an annual basis. This amounts to roughly \$326 per student.

### If relevant to your project, what are your current annualized utility costs, and what amount of reduction in such costs do you expect to result from this project?

As part of this project roof insulation will be brought up to current codes saving the District in natural gas consumption. Without a full mechanical and electrical upgrade it is difficult to estimate the impact of the added roofing insulation. Improvements made as part of this project will generate direct savings on the building utility consumption and improve occupant comfort.

<b>Grant Request:</b>	\$303,436.00	<b>CDE Minimum Match %:</b>	75%
<b>Applicant Match:</b>	\$910,308.00	<b>Actual Match % Provided:</b>	75%
<b>Total Project Cost:</b>	\$1,213,744.00	<b>Is a Waiver Letter Required?</b>	No
<b>Affected Sq Ft:</b>	38,800	<b>Contingent on a 2019 Bond?</b>	No
<b>Affected Pupils:</b>	604	<b>Source of Match:</b>	
<b>Cost Per Sq Ft:</b>	\$31.28	2019 Bond Election or General Fund	
<b>Soft Costs Per Sq Ft:</b>	\$1.83	<b>Escalation %:</b>	5%
<b>Hard Costs Per Sq Ft:</b>	\$29.45	<b>Construction Contingency %:</b>	8%
<b>Cost Per Pupil:</b>	\$2,010	<b>Owner Contingency %:</b>	1%
<b>Gross Sq Ft Per Pupil:</b>	102	<b>Historical Register?</b>	No
<b>Is a Master Plan Complete?</b>	Yes	<b>Adverse Historical Effect?</b>	No
<b>Who owns the Facility?</b>	District	<b>Does this Qualify for HPCP?</b>	No

**If owned by a third party, explanation of ownership:**

**If match is financed, explanation of financing terms:**

### Financial Data (School District and BOCES Applicants)

<b>District FTE Count:</b>	3,716	<b>Bonded Debt Approved:</b>	
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## BEST FY2019-20 GRANT APPLICATION SUMMARIES

<b>Assessed Valuation:</b>	\$554,507,013	<b>Year(s) Bond Approved:</b>	
<b>PPAV:</b>	\$149,201	<b>Bonded Debt Failed:</b>	
<b>Unreserved Gen Fund 17-18:</b>	\$3,002,785	<b>Year(s) Bond Failed:</b>	
<b>Median Household Income:</b>	\$83,113	<b>Outstanding Bonded Debt:</b>	\$9,010,000
<b>Free Reduced Lunch %:</b>	29%	<b>Total Bond Capacity:</b>	\$110,901,403
<b>Existing Bond Mill Levy:</b>	4.8	<b>Bond Capacity Remaining:</b>	\$101,891,403
<b>3yr Avg OMFAC/Pupil:</b>	\$964.57		

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● **Facilities Impacted by this Grant Application** ●

**SHERIDAN 2 - ECC/SOAR Academy Roof Replacement - ECC/SOAR Academy - 1952**

<b>District:</b>	Auditor - Sheridan 2
<b>School Name:</b>	ECC/SOAR Academy
<b>Address:</b>	4107 South Federal Boulevard
<b>City:</b>	Englewood
<b>Gross Area (SF):</b>	57,756
<b>Number of Buildings:</b>	1
<b>Replacement Value:</b>	\$17,870,172
<b>Condition Budget:</b>	\$4,534,887
<b>Total FCI:</b>	0.25
<b>Adequacy Index:</b>	



**Condition Budget Summary**

System Group	Replacement Cost	Requirement Cost	SCI
Electrical System	\$3,749,630	\$105,640	0.03
Equipment and Furnishings	\$470,909	\$0	0.00
Exterior Enclosure	\$1,295,885	\$1,112,454	0.86
Fire Protection	\$604,916	\$0	0.00
Furnishings	\$112,285	\$0	0.00
HVAC System	\$1,586,190	\$99,729	0.06
Interior Construction and Conveyance	\$3,383,530	\$198,667	0.06
Plumbing System	\$1,019,975	\$681,995	0.67
Site	\$3,445,363	\$2,336,401	0.68
Structure	\$2,201,489	\$0	0.00
<b>Overall - Total</b>	<b>\$17,870,172</b>	<b>\$4,534,886</b>	<b>0.25</b>

# BEST FY2019-20 GRANT APPLICATION SUMMARIES

**Applicant Name:** SHERIDAN 2

**County:** Arapahoe

**Project Title:** ECC/SOAR Academy Roof Replacement

**Applicant Previous BEST Grant(s):** 4

**Has this project been previously applied for and not funded?** No

**If Yes, please explain why:**

## Project Type:

- |   |   |   |  |
|---|---|---|--|
| <input type="checkbox"/> New School         | <input checked="" type="checkbox"/> Roof    | <input type="checkbox"/> Asbestos Abatement | <input type="checkbox"/> Water Systems     |
| <input type="checkbox"/> School Replacement | <input type="checkbox"/> Fire Alarm         | <input type="checkbox"/> Lighting           | <input type="checkbox"/> Facility Sitework |
| <input type="checkbox"/> Renovation         | <input type="checkbox"/> Boiler Replacement | <input type="checkbox"/> Electrical Upgrade | <input type="checkbox"/> Land Purchase     |
| <input type="checkbox"/> Addition           | <input type="checkbox"/> HVAC               | <input type="checkbox"/> Energy Savings     | <input type="checkbox"/> Technology        |
| <input type="checkbox"/> Security           | <input type="checkbox"/> ADA                | <input type="checkbox"/> Window Replacement | <input type="checkbox"/> Other             |

## General Information About the District / School, and Information About the Affected Facilities:

Sheridan School District is 2.2 square miles in size, south of Denver and home of the Ft. Logan National Cemetery and historic military post. Industrial/commercial zones along S. Santa Fe Drive between Hampden Ave., Oxford Ave. and along Federal Blvd across the street from this facility. Residential neighborhoods are dispensed in between and around the District owned properties. The population is 6,098 and the District serves 1,420 PK-12 students; 1,266 are FTE. There are 5 school programs located in 4 buildings: Sheridan Early Childhood Center/SOAR Academy-Alternative High School, Alice Terry K-2 Elementary, Ft. Logan Northgate 3-8 and Sheridan High School. The School District offers and supports full day kindergarten. Average enrollment over the past ten years has been around 1,400 students. Sheridan is geographically landlocked, with minimal potential for redevelopment that would increase housing options or student enrollment. This is a contributing factor to why economic growth and investment has bypassed Sheridan. Compared to neighboring communities, the area has drastically lower income and higher rates of unemployment and minority residents. As a result, we have a very high-need student population. 1 out of 4 students in Sheridan is considered homeless, this year 89% of our students qualify for free or reduced lunch. District-wide, 87% of Sheridan's students identify as minorities and 702 (49%) students are English-language learners. Funding is the greatest of Sheridan's challenges. Though funding for public schools is a well-known crisis, these challenges are compounded by the needs of the student population and implications of Sheridan's location. One example of this is Special Education services. Sheridan's percentage of social emotional Special Ed. students is 13% (students w/ IEP). These numbers are Special Education with IEP only and does not include all of the social emotional, threat assessments and other services district staff provides. Median family income - Sheridan \$40,089, Denver \$71,913, Colorado \$77,130. Families below federal poverty line - Sheridan-21.5%, Denver 12.2%, Colorado-8.1%. Unemployment rate - Sheridan-10%, Denver-5.4%, Colorado-6%. Median home value - Sheridan \$155,500, Denver \$292,700, Colorado \$264,600. Median rent - Sheridan-1,077, Denver-1,035, Colorado-1,057. Hispanic/Latino - Sheridan-42.8%, Denver-30.8%, Colorado-21.1%. Information according to 2016 US Census, 2012-2016 American Community Survey 5-Year Est.. Because Sheridan is small, many students will attend all of the district schools. There is therefore a great sense of pride and family throughout this community. Dedicated staff provide a broad net of social support to students and families, bolstering their academic pursuits and offering guidance throughout their education. Yet each year, the district struggles to make choices between programs, personnel and operational support, to provide the best we can for our kids. In terms of academic growth and performance, Sheridan has improved two categories since 2009 on State accountability and is currently accredited at the "improvement" level. Since 2010 we have used a facility master plan to prioritize facility planning decisions, increase efficiency of operations and improve the environment for students. This has resulted in more safe and efficient facilities: -Safety/security improvement at Alice Terry K-2 Elementary and Sheridan High School,- Removal of 9 modular buildings and 2 aging school buildings (79,535 SF),- Construction of a 3-8 school to consolidate two schools, moving middle school students to a safer location and reducing operational costs by 11%, - Renovation of one facility to house the Early Childhood program and SOAR Alternative High School. The master plan was updated in 2011 to understand the condition and adequacy needs of all buildings and again in 2018.

## Deficiencies Associated with this Project:

ECC/SOAR ACADEMY ROOF

The roofing systems on this School are of four different types. The newest roofs are about 7 years old and consist of adhered

## BEST FY2019-20 GRANT APPLICATION SUMMARIES

TPO roof systems. There are also metal and modified bitumen roofs that are about 10 years old. These newer roofs are in good shape and other than requiring a few simple repairs will have service lives of 10 to 15 years. There are several other roof areas, that comprise about 65% of the schools roofing, that are in badly deteriorated condition. These roof areas are covered with 25 plus year old modified bitumen roof systems. The school has a total roof area of 62,290 sf. The deteriorated roof systems cover an area of 42,108 sf.

The modified bitumen roof systems are deteriorated to the point where they are covered with multiple patches and roof repairs. The repairs have been needed because of broken blisters and failed sheet seams. About half of these roof areas have slope built into the roof deck which is sufficient to provide positive drainage. The balance of the areas are installed on roof decks that are basically flat. These decks tend to pond water and this ponding water has accelerated the roofing deterioration. When the deteriorated roof areas are replaced, tapered insulation will be needed to provide the code required "positive drainage".

The District has been repairing the deteriorated roof areas yearly. These patches vary in size from small 1'x 1' spots to relatively large 10' x 20' areas. For the most part, the installed repairs have helped mitigate interior leakage. The roof has deteriorated to the point however where any new patches have limited effect as the modified bitumen roof has become very brittle due deterioration that the patches don't seal well to the old roofing. During the interior site visit by the roof consultant leaks were found scattered around the classrooms, hallways and administrative portions of the school. Garbage cans used to collect leakage water were observed throughout the school under the old modified bitumen roof areas.

The District is committed to providing safe, well maintained facilities for its student learning environments. The failing roof leakage problems not only detract from that goal. The scope of the project and sudden urgency it presents have left the School District in a position where though some funds are available to address these concerns, they are not sufficient in dollar value to cover the roofing replacement work needed.

### **Proposed Solution to Address the Deficiencies Stated Above:**

The school was visited by the roof consultant in order to gather information about the roof systems. Record documents were not used for this purpose. During the site visit, the roofs were visually inspected and photographed. Roofing areas needing replacement were identified. The roof was also measured so that a roof plan could be developed. This roof plan was used to provide basic roof take-off information that was also given to the roofing contractors that prepared pricing for the Grant. The roof plan with service life information has been included in the Grant attachments.

All of the existing roof decks identified as needing replacement were cored in order to determine the existing roofing construction. These existing roof systems were given to the roofing contractors preparing the cost estimates so that they were aware of the demolition scope. The slopes for all of the roof areas to be addressed were checked to see if the roof decks provide the slope needed for the code required positive drainage. If the decks lacked sufficient slope, the roofing contractors were required to provide pricing for tapered insulation that would provide the needed roof slope.

The roof cores were not provided to a testing lab for ACM PLM testing. This was done as though ACM roofing material abatement can be performed by the roofing contractor if required. Should ACM abatement be required that would add about \$1.50/sf to the demolition costs. We wanted to make sure that cost would be covered if positive results were obtained. The result for this school showed no signs of ACM in the submitted samples.

### **NEW ROOF SYSTEM**

The proposed project provides for new roofing over the portions of the building identified on the roof plan and described in the "Project Description" portion of this grant application. The stated new roof system will meet all requirements of the 2015 I Series codes. Specifically, all requirements of the 2015 IBC, IEBC and IECC will be met by the new roof system. A description of the major work items follows.

1. The existing roof systems will be removed to the surface of the wood and lightweight concrete fill decking. Flashings and sheet metal trim will also be removed to the wall, curb and deck substrates. The existing insulation can't be salvaged and reused due to saturation from numerous leaks.

## BEST FY2019-20 GRANT APPLICATION SUMMARIES

2. At the wood deck roof areas, a layer of 5/8" Type X gypsum board will be laid out loose over the decking. This thermal barrier is required by code.
3. At the lightweight concrete fill decks, an underlayment felt will be set over the decking as insulation can't be attached directly to this deck type.
4. The code required R-30 isocyanurate foam insulation system will be installed over the base layer of gypsum board and the underlayment felt. The foam insulation and gypsum board thermal barrier will be simultaneously fastened to the wood deck with FM Approved insulation fasteners. At the lightweight concrete fill deck areas, the insulation will be secured with low rise foam adhesives or moppings of hot asphalt.
5. At Decks 1-4 and Decks 15-17, the base layers of foam insulation will be covered with a tapered insulation system in order to provide slope to drainage. Tapered insulation crickets will also be placed at all roof decks between the roof drains to help better direct water to them. The tapered insulation boards will be set in low rise foam adhesives or moppings of hot asphalt.
6. Once all of the foam insulation is installed, the insulation systems will be covered with a layer of 0.5" thick gypsum cover board. The boards will be set in low rise foam adhesives or moppings of hot asphalt.
7. A fully adhered 60 mil fire rated EPDM roofing system will be installed over the cover board. Cured and uncured EPDM flashings will be installed.
8. Sheet metal counterflashings and flashings will be installed to join the new roofing to the structure.
9. The finished roof will carry a 20 year manufacturer's labor and material warranty. A two-year contractor's leak free warranty will also be required.

### How Urgent is this Project?

#### ECC-SOAR ACADEMY ROOF

The modified bitumen roofing to be replaced is in very poor condition. The roof membrane is becoming brittle from oxidation of the asphalt in the ply sheets. This has resulted in split flashings and open seams in the field of the roof. The surface of the sheet is so deteriorated that it is difficult at best to try to get repair patches to adhere to it. Roofs of this type have typical lives of about 20 years. This roof appears to be older than that.

Even with the School District's continual repair efforts, leaks still exist throughout the school areas below the roofing. Warning cones and buckets can be found in the hallways, classrooms and administrative areas cautioning students and staff about slick floors from leakage wet spots. Portions of classrooms, hallways and office are not functional as a result of the roof leakage. The roofs also need to be replaced before lightweight concrete fill and wood decking is lost to water damage. If this decking is damaged, it will drastically increase the cost of the roof replacement project.

**Does this Project Conform with the Public School Facility Construction Guidelines?** Yes

**If not, provide an explanation for the use of any standard not consistent with the guidelines:**

### How Does the Applicant Plan to Maintain the Project if it is Awarded?

#### ECC-SOAR ACADEMY ROOF

The primary protection plan will be from a manufacturer's 20 yr. warranty on material & labor in a leak free state at a no-dollar-limit. This will add ~\$.20/sf to the cost of the new roof system. The warranty will take care of any noted leakage that is the direct result of either material failure of misapplication of material by the Contractor.

Besides this level of protection there will also be periodic random onsite QC visits from the design team. The best insurance for the performance of a new roof is to make sure that it is installed properly. We would anticipate three visits a week with a weekly meeting during one of the visits.

## BEST FY2019-20 GRANT APPLICATION SUMMARIES

Besides the manufacturer's and designer 's participation during construction, the District Staff will also help to make sure the new roof system sees out its 20-year life. The roof will be walked every spring and fall. Any items that may affect the life of the roofing system will be noted. If they are covered by the warranty, the manufacturer will be notified. If they are not warranty covered items, the District will arrange to have proper repairs made. Also, a repair fund of \$.10/sf will be set aside for preventative maintenance repairs about year 10.

**Describe the condition of the public school facility at the time it was purchased or constructed and, if the facility was not new or was not adequate as a public school facility at that time, provide the rationale for purchasing the facility or constructing it in the manner in which you did:**

The ECC (Early Childhood Center)/SOAR Academy (Alternative High School) was a new build and opened in 1952 and it has been in use since. It was the original Sheridan Union High School. In the early 1970's the school district was growing and passed a bond to build a new high school to support the number of students in the Sheridan School District. They held split schedules with high school students attending from 6 a.m. to noon and middle school students attending from noon to 6 p.m. and once the new building was complete in 1972 the high school students moved into what is now known as Sheridan High School and the original 1952 building became home to Sheridan middle school students grades 6-8. The building was used in this capacity until January 2015 when Fort Logan Northgate was opened and the middle school students were moved to their new location. The building was re-purposed once again to house our youngest learners ages 3 to 5 years in the west wing and support our students ages 14-21 that perform better with alternative ways of learning and growing in the east wing. The Sheridan health clinic is located in the south wing of this building and has been part of our District community for over 20 years.

**Describe the history of capital improvements made to the facility by the district/charter school in order to make it suitable for students. Include a list of all capital projects undertaken in the affected facility in the last 3 years:**

In 2015 the facility experienced an extensive renovation to the west wing in order to receive our preschool students, adding restrooms to classrooms, converting the original library into offices, adding a laundry facility and general renovation of classrooms replacing flooring, multiple roof repairs and adding three playground areas. The east wing of the building was given a face lift the same year with new flooring, painting, patching and new furniture to support the alternative high school. During the school year of 2017-2018, a large canopy was added providing cover over the bus staging area for the preschool students located at the southwest side of the building (\$89,000). The booster pump and duplex booster were replaced (\$17,300). The parking lots were repaired and painted (\$12,660), roof repairs (\$3,600) and intercom and camera repairs were made (\$5,657).

**What options outside of the BEST grant has the applicant investigated or leveraged to address the school's facility needs?**

Sheridan School District is continually searching for opportunities to leverage funds so that more can be spent in the classrooms to enhance learning opportunities. The following are some ways we have been able to support our schools outside of the traditional funding stream:

GOCO Grant awarded December 2017, \$93,881- Alice Terry Elementary - Nature Play Experience

GOCO Grant awarded December 2017, \$153,477- Fort Logan Northgate - Nature Play and Outdoor learning.

GOCO Grant awarded December 2017, \$12,630 - Programming and Equipment - Venture Club encourages and inspires students 7th-12th grade to venture into the outdoors. This grant provides funding for outdoor equipment to support the students and will also provide funding for a student assistant to help the teacher-leader with the increased number of participants and activities the club member participate in each year.

Bullying Prevention and Education Grant 17/18 school year, \$40,570 - Provides funding to reduce the frequency of bullying incidents, by implementing prevention practices, involving families and community and adopting specific prevention strategies.

Gifted & Talented Universal Screening Grant 17/18 school year, \$20,554 - Provides Gifted & Talented instruction and supplies.

Head Start Grant/Funding 18/19 school year, \$2,431,145 - Provides funding to promote school readiness of low-income children by enhancing their cognitive, social and emotional development. Sheridan School District 2 is the delegate for the grant funds that support Sheridan School District 2, Littleton, Englewood and Cherry Creek School District head start programs.



## BEST FY2019-20 GRANT APPLICATION SUMMARIES

Library Grant 18/19 school year, \$4000 - Provides funding for educational resources to school libraries, that otherwise are unaffordable.

School Counselor Grant 18/19 school year \$160,000 - Provides funds to increase the level of school counseling services to improve the graduation rate and preparedness into post secondary education.

Tobacco Policy Grant 18/19 school year \$15,000 - Provides assistance to high risk students who wish to quit smoking and using other tobacco products.

Comprehensive EASI Grant 18/19 school year \$175,548 - Provides funding to support the alternative pathways model.

EARSS Grant 18/19 school year \$312,230 - Expelled and At Risk Student Services

Gifted & Talented Universal Screening Grant 18/19 school year \$31,594

Bullying Prevention Grant 18/19 school year \$40,000

Improving Student Health and Academic Achievement through nutrition grant \$17,000 18/19 school year

School Access for Emergency Response Grant 18/19 school year \$361,684

School Security Development Program 18/19 school year \$1,102,361.72

Mil levy override passed in November 2018 for 3 mils to support the improvement of safety and security infrastructure and operations to be able to maintain safer buildings for students and staff. Repair leaking roofs and other district facilities and provide general maintenance in school buildings. Improve and upgrade technology infrastructure and operations in schools to support 21st century learning opportunities and achievement for Sheridan students. Make salaries and wages of District personnel competitive with those of other school districts in the Denver metropolitan area.

### **How do you budget annually to address capital outlay needs in your district/charter? Include \$/FTE for the prior fiscal year:**

The School District will continue to be a good steward of funding received. We currently allocate \$400,000 annually to capital projects with \$57,500 or \$100 per FTE going directly to the capital renewal reserve for Fort Logan Northgate. The remaining \$342,500 is used District wide.

The District has an active preventative maintenance schedule for all mechanical equipment. We utilize an effective work order system which allows us to track items of repair and/or replacement including time and material cost for each work order. Through the work order system we have been able to pin point potential problems and take care of them before they become bigger issues that we may not be able to resolve in house with District maintenance staff.

Because of this proactive approach we have been able to preserve mechanical and building components thus extending their life. We have original equipment in many of the buildings that is still in use and relied upon daily to provide heat, cooling and air exchange. The District will continue to budget for maintenance and repair through the District wide facilities budget in addition to the capital projects transfer annually.

### **If relevant to your project, what are your current annualized utility costs, and what amount of reduction in such costs do you expect to result from this project?**

N/A

<b>Grant Request:</b>	\$930,876.66	<b>CDE Minimum Match %:</b>	37%
<b>Applicant Match:</b>	\$546,705.34	<b>Actual Match % Provided:</b>	37%
<b>Total Project Cost:</b>	\$1,477,582.00	<b>Is a Waiver Letter Required?</b>	No

## BEST FY2019-20 GRANT APPLICATION SUMMARIES

<b>Affected Sq Ft:</b>	42,108	<b>Contingent on a 2019 Bond?</b>	No
<b>Affected Pupils:</b>	274	<b>Source of Match:</b>	Capital Reserve
<b>Cost Per Sq Ft:</b>	\$35.09		
<b>Soft Costs Per Sq Ft:</b>	\$2.30	<b>Escalation %:</b>	3%
<b>Hard Costs Per Sq Ft:</b>	\$32.79	<b>Construction Contingency %:</b>	10%
<b>Cost Per Pupil:</b>	\$5,393	<b>Owner Contingency %:</b>	5%
<b>Gross Sq Ft Per Pupil:</b>	227	<b>Historical Register?</b>	No
<b>Is a Master Plan Complete?</b>	Yes	<b>Adverse Historical Effect?</b>	No
<b>Who owns the Facility?</b>	District	<b>Does this Qualify for HPCP?</b>	No
<b>If owned by a third party, explanation of ownership:</b>			
<b>If match is financed, explanation of financing terms:</b>			

### Financial Data (School District and BOCES Applicants)

<b>District FTE Count:</b>	1,206	<b>Bonded Debt Approved:</b>	\$6,500,000
<b>Assessed Valuation:</b>	\$200,249,882	<b>Year(s) Bond Approved:</b>	12
<b>PPAV:</b>	\$166,114	<b>Bonded Debt Failed:</b>	\$6,900,000
<b>Unreserved Gen Fund 17-18:</b>	\$4,604,367	<b>Year(s) Bond Failed:</b>	11
<b>Median Household Income:</b>	\$43,151	<b>Outstanding Bonded Debt:</b>	\$20,748,249
<b>Free Reduced Lunch %:</b>	91%	<b>Total Bond Capacity:</b>	\$40,049,976
<b>Existing Bond Mill Levy:</b>	9.2	<b>Bond Capacity Remaining:</b>	\$19,301,727
<b>3yr Avg OMFAC/Pupil:</b>	\$1,992.85		

**● Facilities Impacted by this Grant Application ●**

**ST VRAIN VALLEY RE 1J - District Wide Roofing Repair & Replacement - Central ES - 1878**

District:	Auditor - St Vrain Valley RE-1J
School Name:	Central ES
Address:	1020 4TH AVENUE
City:	LONGMONT
Gross Area (SF):	56,057
Number of Buildings:	1
Replacement Value:	\$17,517,403
Condition Budget:	\$13,190,180
Total FCI:	0.75
Adequacy Index:	0.11



**Condition Budget Summary**

System Group	Replacement Cost	Requirement Cost	SCI
Electrical System	\$2,689,039	\$2,273,993	0.85
Equipment and Furnishings	\$588,586	\$735,732	1.25
Exterior Enclosure	\$2,267,120	\$1,476,309	0.65
Fire Protection	\$118,525	\$175,767	1.48
HVAC System	\$3,688,676	\$4,159,186	1.13
Interior Construction and Conveyance	\$3,547,678	\$2,236,969	0.63
Plumbing System	\$678,855	\$441,710	0.65
Site	\$1,821,959	\$1,743,255	0.96
Structure	\$2,116,966	\$110,472	0.05
<b>Overall - Total</b>	<b>\$17,517,403</b>	<b>\$13,353,393</b>	<b>0.76</b>

**ST VRAIN VALLEY RE 1J - District Wide Roofing Repair & Replacement - Sanborn ES - 1984**

District:	Auditor - St Vrain Valley RE-1J
School Name:	Sanborn ES
Address:	2235 VIVIAN STREET
City:	LONGMONT
Gross Area (SF):	49,804
Number of Buildings:	2
Replacement Value:	\$15,777,214
Condition Budget:	\$7,116,575
Total FCI:	0.45
Adequacy Index:	0.04



**Condition Budget Summary**

System Group	Replacement Cost	Requirement Cost	SCI
Electrical System	\$2,569,704	\$1,355,158	0.53
Equipment and Furnishings	\$556,391	\$475,700	0.85
Exterior Enclosure	\$1,929,001	\$1,882,507	0.98
Fire Protection	\$38,588	\$388,030	10.06
Furnishings	\$2,668	\$0	0.00
HVAC System	\$3,885,176	\$739,773	0.19
Interior Construction and Conveyance	\$2,740,394	\$709,881	0.26
Plumbing System	\$758,419	\$430,394	0.57
Site	\$1,787,946	\$1,490,373	0.83
Special Construction	\$77,880	\$0	0.00
Structure	\$1,431,047	\$0	0.00
<b>Overall - Total</b>	<b>\$15,777,214</b>	<b>\$7,471,816</b>	<b>0.47</b>

● **Facilities Impacted by this Grant Application** ●

**ST VRAIN VALLEY RE 1J - District Wide Roofing Repair & Replacement - Westview MS - 1991**

<b>District:</b>	Auditor - St Vrain Valley RE-1J
<b>School Name:</b>	Westview MS
<b>Address:</b>	1651 AIRPORT ROAD
<b>City:</b>	LONGMONT
<b>Gross Area (SF):</b>	104,631
<b>Number of Buildings:</b>	1
<b>Replacement Value:</b>	\$29,595,037
<b>Condition Budget:</b>	\$24,677,742
<b>Total FCI:</b>	0.83
<b>Adequacy Index:</b>	0.08



**Condition Budget Summary**

System Group	Replacement Cost	Requirement Cost	SCI
Electrical System	\$5,017,745	\$5,495,328	1.10
Equipment and Furnishings	\$628,265	\$785,331	1.25
Exterior Enclosure	\$3,301,198	\$1,188,253	0.36
Fire Protection	\$987,680	\$17,817	0.02
Furnishings	\$68,920	\$0	0.00
HVAC System	\$5,738,862	\$7,156,918	1.25
Interior Construction and Conveyance	\$4,363,578	\$3,101,662	0.71
Plumbing System	\$1,651,614	\$984,465	0.60
Site	\$5,812,473	\$5,947,970	1.02
Structure	\$2,024,703	\$0	0.00
<b>Overall - Total</b>	<b>\$29,595,037</b>	<b>\$24,677,744</b>	<b>0.83</b>

# BEST FY2019-20 GRANT APPLICATION SUMMARIES

**Applicant Name:** ST VRAIN VALLEY RE 1J

**County:** Boulder

**Project Title:** District Wide Roofing Repair & Replacement

**Applicant Previous BEST Grant(s):** 4

**Has this project been previously applied for and not funded?** No

**If Yes, please explain why:**

## Project Type:

- |   |   |   |  |
|---|---|---|--|
| <input type="checkbox"/> New School         | <input checked="" type="checkbox"/> Roof    | <input type="checkbox"/> Asbestos Abatement | <input type="checkbox"/> Water Systems     |
| <input type="checkbox"/> School Replacement | <input type="checkbox"/> Fire Alarm         | <input type="checkbox"/> Lighting           | <input type="checkbox"/> Facility Sitework |
| <input type="checkbox"/> Renovation         | <input type="checkbox"/> Boiler Replacement | <input type="checkbox"/> Electrical Upgrade | <input type="checkbox"/> Land Purchase     |
| <input type="checkbox"/> Addition           | <input type="checkbox"/> HVAC               | <input type="checkbox"/> Energy Savings     | <input type="checkbox"/> Technology        |
| <input type="checkbox"/> Security           | <input type="checkbox"/> ADA                | <input type="checkbox"/> Window Replacement | <input type="checkbox"/> Other             |

## General Information About the District / School, and Information About the Affected Facilities:

St. Vrain Valley Schools is the seventh largest district in the state, serving 33,000 students across 411 square miles, four counties, and 13 communities. The district's student body is diverse; 37% of students are ethnic minorities and 31% are eligible for free or reduced price lunch. All of St. Vrain's schools, including Central, Sanborn, and Westview, use a rigorous PK-12 district-wide curriculum, with each school customizing additional instructional resources as necessary to meet the needs of their school community. Because the district uses the same curriculum at all schools, the district can align staffing, professional development, instructional resources, and assessment to ensure exceptional quality at every school. As a result, St. Vrain students outperformed the state on 79% of state assessments last year and also showed increases in SAT results, graduation rates, and other indicators.

Central Elementary School is one of the oldest elementary schools in the District, located in one of the original Longmont neighborhoods. The original school building was constructed in 1878 and there have been several major additions since then. The school serves 348 pre-kindergarten through fifth grade students, 34% of whom receive free or reduced lunch and 26% of whom are ethnic minorities. Past capital construction projects have been included in the facility condition section of the application.

In the past three years Central Elementary School has received capital improvements including the installation of a gym audio system, service drive asphalt replacement, and a building-wide upgrade from fluorescent to LED lighting.

Sanborn Elementary School was built in 1984 and is located in the northern part of Longmont. The school serves 426 pre-kindergarten through fifth grade students, 55% of whom receive free or reduced lunch and 39% of whom are ethnic minorities. Sanborn has a very "small school" atmosphere and prides itself on knowing each student deeply. Sanborn provides a standards-based environment, where teachers use data to drive instruction, monitor progress and collaborate to meet the individual needs of students. In 2018, Sanborn was accredited at the "Improvement" rating, the middle level of accreditation for schools in the state.

In the past three years Sanborn ES has received capital improvements including a new sink, new EWF at the playground, and new high performance ceiling tiles in the cafeteria.

Westview Middle School was built in 1991 and serves 755 sixth through eighth grade students, 27% of whom receive free or reduced lunch and are ethnic minorities. Westview is a STEM focus school rooted in design-thinking, where students learn how to problem-solve by empathizing, ideating, prototyping, testing, and refining solutions to real-world problems. Students connect learning beyond the walls of the classroom through the use of technology and construct meaning through project-based learning to be prepared for success in a digital and global society. Westview has achieved a "Performance" rating for state accreditation, the highest level available, for the past two years.

Most of the capital improvement work in the past three years at Westview MS has focused on settlement stabilization and

# BEST FY2019-20 GRANT APPLICATION SUMMARIES

asphalt repair.

Each of the three schools is served by the district's robust maintenance program. Day to day cleaning and upkeep are managed by the District custodial services which places a head custodian at each facility. Larger scale maintenance is performed by District maintenance staff. SVVSD maintenance staff is organized by trade/craft and both preventative maintenance and repair response is managed by Schooldude facility management software and the District's capital asset manager.

## Deficiencies Associated with this Project:

In 2016 the District engaged the consulting services of Garland Roofing to assist in the development of a roof asset management system. In that year Garland performed research and inspections for all District school facilities (the full report for the three schools included in this application is attached). These findings were incorporated into a system which identifies the highest risk roofs and suggested remedies. The District is prioritizing work on the highest need projects, particularly facilities with failures reported in the inspections. The three schools included in this application all exhibit failure of one or more major components of the roofing system.

These failures have produced roof leaks and will likely lead to more severe leaking if not repaired or replaced soon. In the past three years the District has spent \$14,838 on miscellaneous roof repairs on these three schools. Roof failure and leakage can lead to damage of building materials and may support mold growth and other health and safety concerns.

### Central Elementary School

The roof of Central Elementary School is divided into several major portions by varying roof heights, types, and parapet walls. The majority portion of the roof is also the oldest and is a 4 ply BUR (20 mils thick felts x 4= 80 mils thick & 160 lbf tensile strength) with gravel surfacing. At an age of approximately 29 years, any warranties have expired. There are visual failures in flashing and penetration details and a core sample inspection revealed aged and deteriorating materials.

### Sanborn Elementary School

The roof at Sanborn Elementary consists of gravel-covered BUR on all low-slope portion and standing seam metal panel at pitched roofs. This portion of the roof is a Tamko BUR and was installed in 2003 with a 10 year warranty that expired in 2013. The flashing and penetrations details have deteriorated and failed at many locations. Numerous spot repairs have been applied in several of these locations, but the extent of deterioration and failure requires a complete restoration to maintain a water tight roof.

### Westview Middle School

The majority of the roofing at Westview Middle School is low slope gravel surfaced BUR in various sections installed between 2007 and 2009 with current warranties. However, the pitched portions of the roof are clad in a standing seam metal roof panel and were found to be in poor condition at the time of the 2016 inspection. Open details at flashing, penetrations, and knee joints have resulted in leaks and need to be replaced to create a watertight system.

## Proposed Solution to Address the Deficiencies Stated Above:

### Central Elementary School

At Central Elementary School the oldest portion of BUR roof will be removed and replaced with a new BUR system. All layers of the existing roofing will be removed, exposing the existing insulation. An additional layer of mechanically fastened R-15 polyisocyanurate insulation will be added before placing a new modified BUR which consists of 2 plies of felts and a cap sheet (20 Mils x2 + 80 Mil cap sheet= 120 Mil thick and 308 lbf tensile strength with gravel surfacing. All flashings and penetrations will be new as well. The scope of roof replacement at CES will include approximately 24,550 sf of roof area. The roofing replacement at Central ES will provide a 30 year warranty.

### Sanborn Elementary School

At Sanborn Elementary School the existing BUR roof will be restored. The gravel will be removed and a new cold process restoration coating will be applied as well as a reworking of all flashing and penetration details. The scope of roof replacement at CES will include approximately 40,000 sf of roof area. The roofing restoration at Sanborn will provide a 15 year warranty.

# BEST FY2019-20 GRANT APPLICATION SUMMARIES

Westview Middle School

At Westview Middle School the existing standing seam metal roofing panels will be removed and replaced with new panels and new flashing, penetration and knee joint detailing. The scope of roof replacement at WMS will include approximately 26,500 sf of roof area. The roofing replacement at Westview will provide a 30 year warranty.

## How Urgent is this Project?

For all three of the schools included in this application failures and/or leaks have already occurred. Numerous repairs have been made in the past, however, to properly address these issues and prevent future damage and impact to the interior environment, these roof systems must be replaced. If this work is not completed the risk of leakage, increasing in frequency and magnitude, is anticipated.

**Does this Project Conform with the Public School Facility Construction Guidelines?** Yes

**If not, provide an explanation for the use of any standard not consistent with the guidelines:**

## How Does the Applicant Plan to Maintain the Project if it is Awarded?

The District maintains an annual budget of approximately \$4.5M for both capital renewal and general ongoing building maintenance. The amount allocated to each facility each year varies in response to capital planning and highest priority needs. Each year internal facility audits are performed, which along with other sources (i.e. the District's Roof Asset Management Program) to inform a database of facility needs. A capital forecasting software program is used to organize and prioritize each item. A rubric style system has been developed to analyze priorities and to select which projects can be funded each year.

Roofing preventative maintenance, restoration, and replacement based on roof installation date or visual inspections generate needs in the capital planning database. The installation and warranty expiration dates will be posted into the system and will establish the replacement schedule for this roofing for inclusion in future capital reserve budgeting.

**Describe the condition of the public school facility at the time it was purchased or constructed and, if the facility was not new or was not adequate as a public school facility at that time, provide the rationale for purchasing the facility or constructing it in the manner in which you did:**

Central Elementary

1878 - Original Construction as an elementary school.

1949 - Stand-alone new elementary built (not sure how the original building was used)

1991 - Addition to connect the 1878 and 1949 building into a single school. Additionally, the cafeteria and a new kitchen were added.

Sanborn Elementary

1984 - Original construction as an elementary school building.

2014 - Remodel, updating school building

Westview Middle School

1991 - Original construction as a middle school building.

2003 - Administration Remodel

2011-2012- Remodel, updated technology in the school.

**Describe the history of capital improvements made to the facility by the district/charter school in order to make it suitable for students. Include a list of all capital projects undertaken in the affected facility in the last 3 years:**

Central Elementary

Since its original construction in 1878 there have been two major additions to Central Elementary School, primarily to increase capacity. More recent capital improvements have focused on repairing or replacing aging materials and systems.

2015 - Gym Sound System

2018 - Asphalt replacement, north service drive

2018 - Lighting upgrade installation

Sanborn Elementary

## BEST FY2019-20 GRANT APPLICATION SUMMARIES

Sanborn was originally designed and constructed as an Elementary School in 1984. Since that time capital improvements have focused on building preservation when necessary.

2017 - Install new sink to allow kindergarten in a standard classroom.

2018 - Install engineered wood fiber surfacing at the playground.

2018 - Replaced cafeteria ceiling tiles to a high performance product to reduce noise levels.

Westview Middle School

Westview was originally designed and constructed as a middle school in 1991. Since that time capital improvements have focussed on building preservation when necessary.

2015 - Concrete slab stabilization

2016 - Asphalt, repairing the parking lot

2018 - Settlement Stabilization-Lifting, concrete slab

### **What options outside of the BEST grant has the applicant investigated or leveraged to address the school's facility needs?**

Outside of potential BEST grant funding, this project will utilize bond funding secured with the 2016 Bond. The award of BEST grant funding to this project will increase the District's capacity to remedy other facility deficiencies which were identified in initial Bond planning but ultimately placed on the backlog for future funding.

### **How do you budget annually to address capital outlay needs in your district/charter? Include \$/FTE for the prior fiscal year:**

The District maintains an annual Capital Reserve account for capital renewal as well as a General Fund account for ongoing facility maintenance. The combined funding of those two accounts was approximately \$149 per FTE (\$4.5M / 30,189.4) for the 2018-2019 school year. This money is allocated per the audit priority matrix.

### **If relevant to your project, what are your current annualized utility costs, and what amount of reduction in such costs do you expect to result from this project?**

The primary goal of this project is to replace or restore existing roofing systems in order to maintain a water tight envelope and prevent building damage and the potential for interior environmental concerns. The roofing scope at Central Elementary includes the placement of an additional layer of insulation providing an insulation value of approximately R-15. However, this is only for a portion of the building. While some reduction in utility costs should be expected, calculations have not been performed to estimate the magnitude of this reduction.

FY18 Utility Costs:

Central

Electricity - \$35,892

Natural Gas - \$12,233

Water - \$12,263

Sewer - \$4,230

Sanborn

Electricity - \$31,980

Natural Gas - \$,8664

Water - \$4,815

Sewer - \$3,452

Westview

Electricity - \$67,052

Natural Gas - \$17,594

Water - \$5,585

Sewer - \$12,081



## BEST FY2019-20 GRANT APPLICATION SUMMARIES

<b>Grant Request:</b>	\$667,566.72	<b>CDE Minimum Match %:</b>	68%
<b>Applicant Match:</b>	\$1,418,579.28	<b>Actual Match % Provided:</b>	68%
<b>Total Project Cost:</b>	\$2,086,146.00	<b>Is a Waiver Letter Required?</b>	No
<b>Affected Sq Ft:</b>	79,100	<b>Contingent on a 2019 Bond?</b>	No
<b>Affected Pupils:</b>	1,543	<b>Source of Match:</b>	
<b>Cost Per Sq Ft:</b>	\$26.37	2016 Bond	
<b>Soft Costs Per Sq Ft:</b>	\$0.00	<b>Escalation %:</b>	0%
<b>Hard Costs Per Sq Ft:</b>	\$26.37	<b>Construction Contingency %:</b>	0%
<b>Cost Per Pupil:</b>	\$1,352	<b>Owner Contingency %:</b>	10%
<b>Gross Sq Ft Per Pupil:</b>	138	<b>Historical Register?</b>	No
<b>Is a Master Plan Complete?</b>	No	<b>Adverse Historical Effect?</b>	No
<b>Who owns the Facility?</b>	District	<b>Does this Qualify for HPCP?</b>	No
<b>If owned by a third party, explanation of ownership:</b>			
<b>If match is financed, explanation of financing terms:</b>			

### Financial Data (School District and BOCES Applicants)

<b>District FTE Count:</b>	29,782	<b>Bonded Debt Approved:</b>	\$260,000,000
<b>Assessed Valuation:</b>	\$3,440,048,843	<b>Year(s) Bond Approved:</b>	16
<b>PPAV:</b>	\$115,506	<b>Bonded Debt Failed:</b>	
<b>Unreserved Gen Fund 17-18:</b>	\$38,342,682	<b>Year(s) Bond Failed:</b>	
<b>Median Household Income:</b>	\$78,173	<b>Outstanding Bonded Debt:</b>	\$555,565,000
<b>Free Reduced Lunch %:</b>	31%	<b>Total Bond Capacity:</b>	\$688,009,769
<b>Existing Bond Mill Levy:</b>	17.55	<b>Bond Capacity Remaining:</b>	\$132,444,769
<b>3yr Avg OMFAC/Pupil:</b>	\$2,500.23		

● **Facilities Impacted by this Grant Application** ●

**DOUGLAS COUNTY RE 1 - Trailblazer ES Roof Replacement - Trailblazer ES - 1997**

<b>District:</b>	Auditor - Douglas County RE-1
<b>School Name:</b>	Trailblazer ES
<b>Address:</b>	9760 SOUTH HACKBERRY
<b>City:</b>	HIGHLANDS RANCH
<b>Gross Area (SF):</b>	52,460
<b>Number of Buildings:</b>	2
<b>Replacement Value:</b>	\$15,732,427
<b>Condition Budget:</b>	\$6,868,341
<b>Total FCI:</b>	0.44
<b>Adequacy Index:</b>	0.16



**Condition Budget Summary**

System Group	Replacement Cost	Requirement Cost	SCI
Electrical System	\$2,205,576	\$1,132,419	0.51
Equipment and Furnishings	\$255,065	\$258,338	1.01
Exterior Enclosure	\$1,805,119	\$962,578	0.53
Fire Protection	\$22,102	\$697,272	31.55
HVAC System	\$3,419,511	\$2,306,935	0.67
Interior Construction and Conveyance	\$2,448,885	\$1,089,536	0.44
Plumbing System	\$758,627	\$50,087	0.07
Site	\$1,648,520	\$1,055,887	0.64
Special Construction	\$75,687	\$0	0.00
Structure	\$3,093,335	\$0	0.00
<b>Overall - Total</b>	<b>\$15,732,427</b>	<b>\$7,553,052</b>	<b>0.48</b>

# BEST FY2019-20 GRANT APPLICATION SUMMARIES

**Applicant Name:** DOUGLAS COUNTY RE 1

**County:** Douglas

**Project Title:** Trailblazer ES Roof Replacement

**Applicant Previous BEST Grant(s):** 1

**Has this project been previously applied for and not funded?** No

**If Yes, please explain why:**

## Project Type:

- |   |   |   |  |
|---|---|---|--|
| <input type="checkbox"/> New School         | <input checked="" type="checkbox"/> Roof    | <input type="checkbox"/> Asbestos Abatement | <input type="checkbox"/> Water Systems     |
| <input type="checkbox"/> School Replacement | <input type="checkbox"/> Fire Alarm         | <input type="checkbox"/> Lighting           | <input type="checkbox"/> Facility Sitework |
| <input type="checkbox"/> Renovation         | <input type="checkbox"/> Boiler Replacement | <input type="checkbox"/> Electrical Upgrade | <input type="checkbox"/> Land Purchase     |
| <input type="checkbox"/> Addition           | <input type="checkbox"/> HVAC               | <input type="checkbox"/> Energy Savings     | <input type="checkbox"/> Technology        |
| <input type="checkbox"/> Security           | <input type="checkbox"/> ADA                | <input type="checkbox"/> Window Replacement | <input type="checkbox"/> Other             |

## General Information About the District / School, and Information About the Affected Facilities:

Douglas County School District (DCSD) is currently the third largest school district in the State of Colorado. DCSD covers a geographical area of approximately 890 square miles. Within these boundaries are 48 elementary schools, 9 middle schools, 9 high schools, 5 alternative schools and 18 charter schools. In addition to the permanent structures, there are multiple modular buildings associated with these sites. Our remaining buildings house administration, alternative programs and support service functions; approximately 67,000 students and 8,700 staff members occupy these buildings year round, in most cases. Prior to 2018, DCSD had not passed a bond since 2006, resulting in years of deferred maintenance. With the successful passage of a bond in 2018, DCSD is able to start to address the years of needs that have accumulated in the District. However, with such a large district, the current funding is inadequate to meet all needs at all schools. Based on the 2018-2019 Master Capital Plan prepared by the District, there are over \$350 million of unmet capital needs in the district, which does not include over \$250 million of unmet new construction needs. Although DCSD has one of the highest income levels in the State, our school district still struggles to meet all the needs of our very large district.

## Deficiencies Associated with this Project:

The existing roof has a 1/4"/Ft roof slope and consists of a ballasted EPDM roof over 3" polyiso insulation over metal deck. The roof is 21 years old and is out of warranty. The roof has exhibited multiple points of failure over the years, including ongoing roof leaks into classrooms and other student spaces. Per the assessment from Bluefin, deficiencies include: damaged walkway pads which is causing damage to the membrane, deterioration of the flashing seams which is resulting in water penetration, insufficient previous patching attempts, and damaged membrane surface (holes, cuts). Additionally, the entire roof surface was noted by Bluefin as degraded.

## Proposed Solution to Address the Deficiencies Stated Above:

The existing EPDM surface and ballast will be removed, to the existing insulation. New mechanically fastened 2" polyiso insulation will be installed, below 1/2 densdeck set in low-rise adhesive, below a new fully adhered 60-mil EPDM roof covering. New sheetmetal flashing and parapet caps will be installed. Overflow and roof drains will be replaced at the roof surface as needed. New walk pads will be installed where required. New roof ladders will be installed as needed. Structural modifications will also be included as needed, due to the removal of ballast.

## How Urgent is this Project?

Multiple points of roof failure continue to occur at Trailblazer Elementary, most recently in February 2019, due to the continued failure of this aged system. Water leaks into classrooms or other sensitive areas of the building, and also stays in ceiling spaces. These continued leaks damage other property, and also pose a risk of mold in confined spaces. The roof is no longer able to be reasonably repaired, and a continued approach of putting patches on a deteriorated system is not a responsible use of taxpayer money.

**Does this Project Conform with the Public School Facility Construction Guidelines?** Yes

**If not, provide an explanation for the use of any standard not consistent with the guidelines:**

# BEST FY2019-20 GRANT APPLICATION SUMMARIES

## How Does the Applicant Plan to Maintain the Project if it is Awarded?

Douglas County School District maintains three full-time dedicated roofers in the District, assigned to geographical area. DCSD follows a preventative roof maintenance schedule which includes yearly assessments. In previous years, DCSD has allocated up to \$5.6 million for capital construction maintenance materials, which includes roofing, as part of its approximately \$40 million operations and maintenance budget. Due to the recent mill levy override and bond approval, DCSD is able to continue to implement a strong maintenance plan. Trailblazer Elementary's new roof will be incorporated into the District maintenance schedule. On average, DCSD budgets for up to three roof replacements per year. Therefore, Trailblazer Elementary's roof will be put into the replacement schedule for appropriate replacement at the end of its useful life.

## Describe the condition of the public school facility at the time it was purchased or constructed and, if the facility was not new or was not adequate as a public school facility at that time, provide the rationale for purchasing the facility or constructing it in the manner in which you did:

Trailblazer Elementary was constructed in 1997 as a K-6 elementary school. The roof is original. Solar panels were installed in 2013.

## Describe the history of capital improvements made to the facility by the district/charter school in order to make it suitable for students. Include a list of all capital projects undertaken in the affected facility in the last 3 years:

Partial roof membrane replacement has occurred on parapet walls on south facing sections, along with ongoing damage and leak repairs. No major capital improvements have occurred. Solar panels were installed on the roof in 2013.

## What options outside of the BEST grant has the applicant investigated or leveraged to address the school's facility needs?

If our grant application is unsuccessful, DCSD will utilize additional bond proceeds to cover the remaining costs of this project.

## How do you budget annually to address capital outlay needs in your district/charter? Include \$/FTE for the prior fiscal year:

Douglas County School District maintains an overall operations and maintenance budget of approximately \$40 million. For FY '18-'19, this budget is \$40,475,873. This includes \$18,785,674 of salaries and benefits, \$7,792,816 of purchased services, and \$14,338,717 of supplies and materials. District funds are not allocated per affected facility, but are expended on an as-needed basis based on ongoing assessments by District staff. The current operation budget breaks down to \$622.93 per student, based on a budgeted pupil count of 64,977. For reference, the FY '17-'18 budget was \$611.92 per student. With respect to District FTE's, this budget equates to \$4,652.40/FTE (approximately 8,700 staff members).

## If relevant to your project, what are your current annualized utility costs, and what amount of reduction in such costs do you expect to result from this project?

N/A

<b>Grant Request:</b>	\$128,651.60	<b>CDE Minimum Match %:</b>	80%
<b>Applicant Match:</b>	\$514,606.40	<b>Actual Match % Provided:</b>	80%
<b>Total Project Cost:</b>	\$643,258.00	<b>Is a Waiver Letter Required?</b>	No
<b>Affected Sq Ft:</b>	50,782	<b>Contingent on a 2019 Bond?</b>	No
<b>Affected Pupils:</b>	420	<b>Source of Match:</b>	November 2018 Bond
<b>Cost Per Sq Ft:</b>	\$12.67		
<b>Soft Costs Per Sq Ft:</b>	\$0.24	<b>Escalation %:</b>	1%
<b>Hard Costs Per Sq Ft:</b>	\$12.25	<b>Construction Contingency %:</b>	2%
<b>Cost Per Pupil:</b>	\$1,532	<b>Owner Contingency %:</b>	2.5%
<b>Gross Sq Ft Per Pupil:</b>	121	<b>Historical Register?</b>	No
<b>Is a Master Plan Complete?</b>	Yes	<b>Adverse Historical Effect?</b>	No
<b>Who owns the Facility?</b>	District	<b>Does this Qualify for HPCP?</b>	No

# BEST FY2019-20 GRANT APPLICATION SUMMARIES

If owned by a third party, explanation of ownership:

If match is financed, explanation of financing terms:

## Financial Data (School District and BOCES Applicants)

<b>District FTE Count:</b>	61,416	<b>Bonded Debt Approved:</b>	\$250,000,000
<b>Assessed Valuation:</b>	\$6,502,017,811	<b>Year(s) Bond Approved:</b>	18
<b>PPAV:</b>	\$105,868	<b>Bonded Debt Failed:</b>	\$200,000,000
<b>Unreserved Gen Fund 17-18:</b>	\$23,118,228	<b>Year(s) Bond Failed:</b>	11
<b>Median Household Income:</b>	\$111,487	<b>Outstanding Bonded Debt:</b>	\$555,059,570
<b>Free Reduced Lunch %:</b>	12%	<b>Total Bond Capacity:</b>	\$1,300,403,562
<b>Existing Bond Mill Levy:</b>	8.054	<b>Bond Capacity Remaining:</b>	\$745,343,992
<b>3yr Avg OMFAC/Pupil:</b>	\$1,034.21		

● **Facilities Impacted by this Grant Application** ●

**EAGLE COUNTY RE 50 - Berry Creek MS Roof Replacement - Berry Creek MS - 1996**

<b>District:</b>	Auditor - Eagle County RE-50
<b>School Name:</b>	Berry Creek MS
<b>Address:</b>	1000 MILLER RANCH ROAD
<b>City:</b>	EDWARDS
<b>Gross Area (SF):</b>	80,552
<b>Number of Buildings:</b>	1
<b>Replacement Value:</b>	\$23,533,093
<b>Condition Budget:</b>	\$8,001,060
<b>Total FCI:</b>	0.34
<b>Adequacy Index:</b>	0.15



**Condition Budget Summary**

System Group	Replacement Cost	Requirement Cost	SCI
Electrical System	\$2,840,803	\$1,414,108	0.50
Equipment and Furnishings	\$805,508	\$739,242	0.92
Exterior Enclosure	\$2,817,922	\$1,544,849	0.55
Fire Protection	\$711,980	\$12,558	0.02
Furnishings	\$742,846	\$0	0.00
HVAC System	\$3,095,543	\$825,210	0.27
Interior Construction and Conveyance	\$3,708,448	\$1,958,768	0.53
Plumbing System	\$1,262,792	\$260,804	0.21
Site	\$2,178,053	\$1,245,523	0.57
Structure	\$5,369,197	\$0	0.00
<b>Overall - Total</b>	<b>\$23,533,093</b>	<b>\$8,001,062</b>	<b>0.34</b>

# BEST FY2019-20 GRANT APPLICATION SUMMARIES

**Applicant Name:** EAGLE COUNTY RE 50

**County:** Eagle

**Project Title:** Berry Creek MS Roof Replacement

**Applicant Previous BEST Grant(s):** 3

**Has this project been previously applied for and not funded?** No

**If Yes, please explain why:**

## Project Type:

- |   |   |   |  |
|---|---|---|--|
| <input type="checkbox"/> New School         | <input checked="" type="checkbox"/> Roof    | <input type="checkbox"/> Asbestos Abatement | <input type="checkbox"/> Water Systems     |
| <input type="checkbox"/> School Replacement | <input type="checkbox"/> Fire Alarm         | <input type="checkbox"/> Lighting           | <input type="checkbox"/> Facility Sitework |
| <input type="checkbox"/> Renovation         | <input type="checkbox"/> Boiler Replacement | <input type="checkbox"/> Electrical Upgrade | <input type="checkbox"/> Land Purchase     |
| <input type="checkbox"/> Addition           | <input type="checkbox"/> HVAC               | <input type="checkbox"/> Energy Savings     | <input type="checkbox"/> Technology        |
| <input type="checkbox"/> Security           | <input type="checkbox"/> ADA                | <input type="checkbox"/> Window Replacement | <input type="checkbox"/> Other             |

## General Information About the District / School, and Information About the Affected Facilities:

Eagle County Schools is a remarkable school district with a history of innovation, courage, and success. We serve Pre-k through 12th grade students from Vail to Dotsero, including Bond and Mccoy in 20 different schools. Eagle County Schools is comprised of approximately 900 professionals engaging almost 6,900 students. Our vision is to prepare all of our students to be internationally competitive graduates who will be successful in their careers or college experience and contribute to their communities in positive and effective ways. We focus our efforts on an instructional core of educators, learners, and standards that funnel down to each school that has their own school based strategic plan.

The Berry Creek Middle School community believes that our mission is to teach students how to learn, to prepare each student to achieve at their highest levels, and to prepare each student to contribute in the broadest sense to the betterment of the school community as well as to the community at large.

All prior listed capital improvement projects at Berry Creek Middle School have been completed to help improve the learning environment for students to continue the focus on our school based strategic plan.

## Deficiencies Associated with this Project:

The existing roof on the school is a ballasted EPDM. The ballasted EPDM sections on the school have not been replaced since original construction in 1995. There are leaks in multiple locations resulting in numerous ongoing repairs. The ballasted EPDM membrane sections are shrinking and there are holes in the membrane. The ballasted EPDM membrane system on the school is nearly 25 years old; EPDM roofs have a useful life of about 15 to 20 years. These roofs are in poor condition, the membrane is universally shrinking, there are visible holes as a result and there are numerous ongoing leaks. We also discovered a large split seam that could result in major interior damage. The ballasted EPDM roofs are well passed their useful life and need to be replaced as soon as possible. When EPDM roofs show these signs of deterioration, shrinking, and ponding repairing the roofs is temporary at best and requires ongoing maintenance. This ongoing maintenance nuisance strains the school district's resources that are already stretched thin.

## Proposed Solution to Address the Deficiencies Stated Above:

Based upon our inspection of the roofs and archive research, we recommend that the roof on Berry Creek Middle School be replaced within a year. We recommend replacing the ballasted roofs with a fully adhered 90mil EPDM. The school district prefers this type of system for its longevity, durability, and ease of maintenance that it requires. Replacement will include new insulation (to supplement existing), new membrane, new sheetmetal and new roofing accessories. The existing insulation will be able to be reused on this school but will need to be supplemented with new insulation. Reusing existing insulation reduces the overall reroofing cost. The existing ballast from the roof will be re-purposed at sites throughout district property.

New roofing will need to comply with the International Building Code. Building Code provisions include, but are not limited to:

- Structural analysis of each roof section by a State of Colorado licensed Structural Engineer.
- Installation of ladders where roof to roof transitions exceed 30".

# BEST FY2019-20 GRANT APPLICATION SUMMARIES

- Energy requirements for roofs.
- Compliance with minimum roof slope requirements.
- Limitations on ballast which is dependent on local adopted wind speeds.
- Guard rails at HVAC units within ten feet of roof edges.
- Guard rails at roof hatches within ten feet of roof edges.

## How Urgent is this Project?

The roofing system is well past its useful life and is no longer serviceable and should be replaced as soon as possible. Apart from safety concerns, continued leaks can cause damage to the school's structure, interior and educational materials. Furthermore, continued leaking can be a distraction to the learning environment as school resources have to be rededicated to managing the ongoing leaks.

**Does this Project Conform with the Public School Facility Construction Guidelines?** Yes

**If not, provide an explanation for the use of any standard not consistent with the guidelines:**

## How Does the Applicant Plan to Maintain the Project if it is Awarded?

At the project's completion, selected School District personnel will be trained by the roofing contractor to repair simple roof repairs, large roof repairs will be conducted by a competent roofing contractor. The roof will be methodically inspected yearly to determine deficiencies that need to be repaired. At least two times a year School District personnel will access the roof to remove debris from drains, drainage scuppers and other areas on the roof. Included in the Capital Reserve Budget is dollars set aside for future roofing replacement needs.

**Describe the condition of the public school facility at the time it was purchased or constructed and, if the facility was not new or was not adequate as a public school facility at that time, provide the rationale for purchasing the facility or constructing it in the manner in which you did:**

The Eagle School District constructed the school in 1995 and have owned and operated it since.

**Describe the history of capital improvements made to the facility by the district/charter school in order to make it suitable for students. Include a list of all capital projects undertaken in the affected facility in the last 3 years:**

In the last three years we have made the following upgrades/improvements in order to make the building more suitable for students;  
Safety and security upgrades, access control system, new flooring throughout, Partial furniture replacement, heating/hot water pump/VFD upgrades, complete LED retrofit, upgraded classroom technology, renovated landscaping to include play area.

**What options outside of the BEST grant has the applicant investigated or leveraged to address the school's facility needs?**

In November 2016, voters approved a ballot measure authorizing the district to issue \$144 million in general obligation debt to fund the capital projects identified in the Facilities Master Plan. The bond enables significant facility upgrades along with our capital reserve funds to ensure our community schools meet the needs of our growing student population.

**How do you budget annually to address capital outlay needs in your district/charter? Include \$/FTE for the prior fiscal year:**

The district is addressing almost \$155M worth of facility needs over the next three years through General Obligation Bonds, Series 2017. There are still many unfunded facility repairs that are outside of approved bond projects. \$360 per pupil were budgeted in 2017-18 to address special projects and break/fix items as well as establish annual replacements for roofs, concrete/asphalt, flooring and HVAC. Capital projects have been identified and ranked based on priority in the Facility Master Plan.

**If relevant to your project, what are your current annualized utility costs, and what amount of reduction in such costs do you expect to result from this project?**

N/A

<b>Grant Request:</b>	\$300,861.75	<b>CDE Minimum Match %:</b>	75%
<b>Applicant Match:</b>	\$902,585.25	<b>Actual Match % Provided:</b>	75%



## BEST FY2019-20 GRANT APPLICATION SUMMARIES

<b>Total Project Cost:</b>	\$1,203,447.00	<b>Is a Waiver Letter Required?</b>	No
<b>Affected Sq Ft:</b>	80,200	<b>Contingent on a 2019 Bond?</b>	No
<b>Affected Pupils:</b>	297	<b>Source of Match:</b>	Capital Reserve Funds
<b>Cost Per Sq Ft:</b>	\$15.01		
<b>Soft Costs Per Sq Ft:</b>	\$1.34	<b>Escalation %:</b>	5%
<b>Hard Costs Per Sq Ft:</b>	\$13.67	<b>Construction Contingency %:</b>	8%
<b>Cost Per Pupil:</b>	\$4,052	<b>Owner Contingency %:</b>	1%
<b>Gross Sq Ft Per Pupil:</b>	270	<b>Historical Register?</b>	No
<b>Is a Master Plan Complete?</b>	Yes	<b>Adverse Historical Effect?</b>	No
<b>Who owns the Facility?</b>	District	<b>Does this Qualify for HPCP?</b>	No
<b>If owned by a third party, explanation of ownership:</b>			
<b>If match is financed, explanation of financing terms:</b>			

### Financial Data (School District and BOCES Applicants)

<b>District FTE Count:</b>	6,436	<b>Bonded Debt Approved:</b>	\$144,000,000
<b>Assessed Valuation:</b>	\$2,905,528,200	<b>Year(s) Bond Approved:</b>	16
<b>PPAV:</b>	\$451,449	<b>Bonded Debt Failed:</b>	
<b>Unreserved Gen Fund 17-18:</b>	\$11,870,896	<b>Year(s) Bond Failed:</b>	
<b>Median Household Income:</b>	\$83,765	<b>Outstanding Bonded Debt:</b>	\$246,225,000
<b>Free Reduced Lunch %:</b>	41%	<b>Total Bond Capacity:</b>	\$581,105,640
<b>Existing Bond Mill Levy:</b>	7.303	<b>Bond Capacity Remaining:</b>	\$334,880,640
<b>3yr Avg OMFAC/Pupil:</b>	\$6,026.00		

● **Facilities Impacted by this Grant Application** ●

**MOUNTAIN MIDDLE SCHOOL - MMS Roof Replacement - Mountain Middle School - 1958**

<b>District:</b>	Auditor - Charter School Institute
<b>School Name:</b>	Mountain Middle School
<b>Address:</b>	108 West 31st Street
<b>City:</b>	Durango
<b>Gross Area (SF):</b>	13,188
<b>Number of Buildings:</b>	1
<b>Replacement Value:</b>	\$4,010,784
<b>Condition Budget:</b>	\$446,969
<b>Total FCI:</b>	0.11
<b>Adequacy Index:</b>	0.09



**Condition Budget Summary**

System Group	Replacement Cost	Requirement Cost	SCI
Electrical System	\$985,090	\$35,693	0.04
Equipment and Furnishings	\$55,809	\$69,761	1.25
Exterior Enclosure	\$829,794	\$175,732	0.21
Fire Protection	\$627	\$81,433,249	129,790.65
HVAC System	\$425,928	\$0	0.00
Interior Construction and Conveyance	\$506,129	\$111,389	0.22
Plumbing System	\$154,608	\$0	0.00
Site	\$418,285	\$54,393	0.13
Structure	\$634,514	\$0	0.00
<b>Overall - Total</b>	<b>\$4,010,784</b>	<b>\$81,880,217</b>	<b>20.42</b>

# BEST FY2019-20 GRANT APPLICATION SUMMARIES

**Applicant Name:** MOUNTAIN MIDDLE SCHOOL

**County:** La Plata

**Project Title:** MMS Roof Replacement

**Applicant Previous BEST Grant(s):** 0

**Has this project been previously applied for and not funded?** No

**If Yes, please explain why:**

## Project Type:

- |   |   |   |   |
|---|---|---|---|
| <input type="checkbox"/> New School         | <input checked="" type="checkbox"/> Roof    | <input type="checkbox"/> Asbestos Abatement | <input type="checkbox"/> Water Systems  |
| <input type="checkbox"/> School Replacement | <input type="checkbox"/> Fire Alarm         | <input type="checkbox"/> Lighting           | <input type="checkbox"/> Facility Sitework  |
| <input type="checkbox"/> Renovation         | <input type="checkbox"/> Boiler Replacement | <input type="checkbox"/> Electrical Upgrade | <input type="checkbox"/> Land Purchase  |
| <input type="checkbox"/> Addition           | <input type="checkbox"/> HVAC               | <input type="checkbox"/> Energy Savings     | <input type="checkbox"/> Technology   |
| <input type="checkbox"/> Security           | <input type="checkbox"/> ADA                | <input type="checkbox"/> Window Replacement | <input checked="" type="checkbox"/> Other Interior repairs due to water damage from roof leaks. |

## General Information About the District / School, and Information About the Affected Facilities:

Mountain Middle School (MMS) has the vision "to be a distinguished educational community leader that empowers students to own their future" and a mission to provide this "within a safe and supportive culture, MMS integrates technology and project-based learning into a rigorous curriculum that prepares students to achieve their highest academic and social potential." MMS, founded in 2011, serves grades 4th through 8th and is chartered through CSI. Founders of MMS had a vision of a progressive and high performing Charter School educational choice for the Durango community. Since that time, MMS has continued to increase its waitlist of students providing proof that the model is successful. MMS currently enrolls 246 students and is in a building that has had several renovations and additions. The main building was built in 1958 and has housed several schools over the years prior to MMS. An addition was done in 1991 to add several more classrooms to the south of the original structure. Finally, in 2017, a 5,000 sf new construction project was completed to the south. Green space and play space have been added to make this a true community school providing the only playground in the northern area of Durango called the Animas City neighborhood. An additional capital construction project includes the conversion to a 100% solar powered campus which also provides maintenance to the roof. Should snow accumulate to 15", the solar company shovels it. The solar panels also provide protection from direct sunlight, which is very strong in southern Colorado. MMS also employs a full-time maintenance man.

Academically, MMS currently has a CARS rating of Performance having been rated with Distinction in years past. MMS's curriculum and instructional design utilize Colorado State Standards, Common Core and Project-Based Learning. The School's course requirements meet Common Core and Colorado standards. The School offers, at a minimum, the same number of minutes of instruction and days of instruction as required by law. MMS teachers work in teams to create a curriculum that is both integrated across subjects and underpinned by Common Core and Colorado standards.

The guiding pedagogy at the School is project-based learning, an approach which transforms teaching from "teachers telling" to "students doing." More specifically, project-based learning can be defined as:

- Engaging learning experiences that involve students in complex, real-world projects through which they develop and apply skills and knowledge.
- A strategy recognizing that significant learning taps students' inherent drive to learn, capability to do work, and need to be taken seriously.
- Learning in which curricular outcomes can be identified up front, but in which the outcomes of the student's learning process are neither predetermined nor fully predictable.
- Learning that requires students to draw from many information sources and disciplines in order to solve problems.
- Experiences through which students learn to manage and allocate resources such as time and materials.

The School's project-based learning approach is the key to its success in serving a diverse population of students. Students become active participants in their learning and are required to publicly demonstrate their learning through presentations and portfolios, introducing an additional, and arguably more authentic, element of accountability for quality work.

Consistent with the design principle of Personalization, MMS maintains small class sizes (1 teacher : 15 students). The educational program emphasizes enabling students to become self-motivated, lifelong learners who think critically in a

## BEST FY2019-20 GRANT APPLICATION SUMMARIES

sensitive and fair-minded way. The School sees parents as partners and provides them with rich opportunities for involvement in their children's education through Student-Led Conferences, Presentations of Learning, Exhibitions and weekly communication at both a school-wide and grade level.

### **Deficiencies Associated with this Project:**

The MMS roof is leaking in the majority of the northern building of our school, which was built in 1958 and had an addition in 1991. This building holds our multi-purpose room, computer lab, several 7th-grade classrooms, bathrooms, and boiler room. The current roofing material is EPDM and the seams have separated as well as been damaged by years of snow shoveling. The roof is a flat roof. It has been damaged over time and the patches are no longer keeping water out. The roof failure has been going on for a long time and has caused damage to the interior ceilings and those are in need of repair and or replacement. There are areas of the roof that feel soft underfoot and we suspect that the sheathing will also need replacing in approximately 50%. We can see the evidence of moisture in numerous areas on the interior of the building. It is a health and safety issue when students have to adjust to buckets on the floor. This current roof has lived its lifespan. The areas where internal leaking has occurred include two classrooms, 7th-grade bathroom, boiler room, multi-purpose room. We do not want to see the ceiling tiles collapse on the students while they are in class. We have been making due and patching what we can, however when anyone gets on the roof to repair a leak, just the act of walking on the roof damages fragile areas. So the more the roof deteriorates, the faster it deteriorates.

### **Proposed Solution to Address the Deficiencies Stated Above:**

Mountain Middle School is fortunate to have several commercial general contractors on its Board of Directors and its Foundation board. When asked by the Head of School to assess the roof and propose a scope of work, Matt Aupperle from FCI Constructors in Durango reviewed the condition of the existing roof and made his assessment (included in the submittal requirements) that complete tear off and replacement was necessary based on the condition observed. Additionally, multiple subcontractors have evaluated the roof and the project proposed; and are in agreement that the roof needs to be replaced and any damaged underlayment, will also need replacing; as well as the interior repairs from water damage. Per the Scope of Work developed by G2 Contractors, LLC and included in the attached submittal requirements, the proposed project will: 1. Tear off the old EPDM roof from the original school building at Mountain and replace any metal flashings, roof edge trim, insulation, and through penetration flashings. 2. Remove and replace gutters/scuppers if necessary. 3. Install new roof insulation and TPO per Scope of Work. 4. Exterior painting and touch up as necessary. 5. Exterior painting of the exposed metal deck ceiling and all new roofing fasteners. 6. Replacement of new ISO Insulation Board as necessary. Essentially, Mountain Middle School will replace the old EPDM with new TPO as recommended by roofing subcontractors. Not only does TPO provide a better product it is equivalent in price to EPDM. TPO does not have seams that tend to separate with temperature variation and time. Additionally, it will provide a more durable solution. Mountain Middle School will install roof insulation with minimum R-30. This new roof will have a 20-year warranty and we expect it to last 30 years with the maintenance plan and the protection of the solar panels. Mountain Middle School's intention is to improve the longevity of the structure, and add to the insulation over these classrooms, restrooms and multi-use area. On the interior, any water damaged areas will be scraped/removed and repaired and painted as needed.

### **How Urgent is this Project?**

The Mountain Middle School roof can no longer handle another year of rain and snow without risking the health and safety of our students. The roof on the northernmost part of Mountain Middle School has been in need of replacement for some time, however replacing an entire roof is a costly and time consuming endeavor. Replacing an 11,582 square foot roof and the additional interior work that will be required is a large expense for a small charter school such as Mountain Middle School. Additionally, to add to Mountain Middle School's challenges, we have recently added fourth and fifth grades. Mountain Middle School has also had a large capital construction project take place to accommodate the additional grades thus taking the focus away from other needs and from volunteer efforts. The roof really needs to be replaced during the summer of 2019. There is no more putting this project off. Mountain Middle School pursues grants with volunteer effort and it takes time to get organized. We are getting concerned with the structural integrity of the ceiling due to the increase in water coming into the building and the increase in snow for the 2019 winter. If Mountain Middle School is not awarded the BEST grant, and we do not replace the roof this summer, more moisture will continue to degrade the structure of the ceiling and could lead to collapse and mold. Mountain Middle School will have to find alternative funding and time is of the essence for the safety and health of our students.

# BEST FY2019-20 GRANT APPLICATION SUMMARIES

**Does this Project Conform with the Public School Facility Construction Guidelines?** Yes

**If not, provide an explanation for the use of any standard not consistent with the guidelines:**

**How Does the Applicant Plan to Maintain the Project if it is Awarded?**

The new roof will have a warranty of 20 years. During that time, MMS will employ a full-time maintenance man and include a budget for leasehold improvements and maintenance. The maintenance man will help with some of the most basic maintenance items, such as keeping the roof free of debris. Debris can block the flow of water to the roof drains and cause localized ponding, which can prematurely damage a roof system. Debris may also block the drain lines; in extreme cases, ponding water can lead to roof collapse. Keeping roof traffic to a minimum will also be a priority for building personnel. Where foot traffic is expected, membrane protection will be provided. Walkway pads or roof pavers will protect the roof's surface. Building personnel should, at a minimum, walk the roof in the spring and fall, and then provide a written report with observations and/or recommendations to Head Of School. A written policy will help to reduce the damage caused by construction and maintenance traffic. This policy may be targeted toward outside contractors and in-house building personnel. The following are examples of general topics that may be included in the policy: - General access to a roof should be limited or prohibited. - A log should be developed by the building engineer to record all roof activities, including the personnel involved. - Building engineers should document rooftop conditions with photographs at the start of a facade or mechanical equipment project. Photographs should also be taken at the end of the job for comparison if there is a dispute about the cause of damage. The before-and-after conditions of all roof system components should also be documented. - Material stored on the roof membrane should be placed on proper protection boards at all times. Accidental damage to the roof membrane, flashings, or copings should be reported immediately. - Only professional contractors should be allowed to make repairs to a roof. - Roof traffic should be kept to a minimum during the winter because cold weather causes the roof membrane to become brittle and more susceptible to damage. It is important to tailor the policy to include additional topics that cover each building's features. It is MMS's responsibility to manage and coordinate the work performed on the building. A detailed history of the roof installation, repairs and changes made, and a roof plan should be included in the historical file. It also should contain the original plans and specifications, warranties, thorough documentation of maintenance and repairs, and, where possible, samples of roof system. Additionally, the solar panels protect the roof from direct sunlight, providing a longer lifespan for the MMS roof. We anticipate the ability to generate funds to replace the roof in 20 years through the continued success of our model and its ability to access Federal funds for maintenance.

**Describe the condition of the public school facility at the time it was purchased or constructed and, if the facility was not new or was not adequate as a public school facility at that time, provide the rationale for purchasing the facility or constructing it in the manner in which you did:**

MMS moved into the building in 2011 and the building's condition at the time of purchase was solid.

**Describe the history of capital improvements made to the facility by the district/charter school in order to make it suitable for students. Include a list of all capital projects undertaken in the affected facility in the last 3 years:**

Modifications have been made to the existing building including the addition of air conditioning, carpeting and converting to LED lighting. With the addition of 4th and 5th grade the school did a major expansion of 5,000 sf. The following is a list of capital projects:

1. Mini-split AC
2. Solar panels
3. LED lighting
4. Carpeting
5. 5,000 sf expansion
6. Play space construction

**What options outside of the BEST grant has the applicant investigated or leveraged to address the school's facility needs?**

We have not pursued options outside of BEST for the re-roof project. We have reserves to meet the matching fund needs.

**How do you budget annually to address capital outlay needs in your district/charter? Include \$/FTE for the prior fiscal year:**

The MMS 2018/19 annual budget for facility capital outlay includes \$12,000 for maintenance and repair, \$15,000 for leasehold improvements, and \$131,040 for the annual lease. These figures are for the campus, which is one building comprised of an older section (includes the 11,582 sf re-roof) and a 5,000 sf addition completed in 2017.

# BEST FY2019-20 GRANT APPLICATION SUMMARIES

If relevant to your project, what are your current annualized utility costs, and what amount of reduction in such costs do you expect to result from this project?

N/A

<b>Grant Request:</b>	\$118,343.28	<b>CDE Minimum Match %:</b>	31%
<b>Applicant Match:</b>	\$53,168.72	<b>Actual Match % Provided:</b>	31%
<b>Total Project Cost:</b>	\$171,512.00	<b>Is a Waiver Letter Required?</b>	No
<b>Affected Sq Ft:</b>	6,595	<b>Contingent on a 2019 Bond?</b>	No
<b>Affected Pupils:</b>	251	<b>Source of Match:</b>	Capital Reserve Funds
<b>Cost Per Sq Ft:</b>	\$26.01		
<b>Soft Costs Per Sq Ft:</b>	\$1.52	<b>Escalation %:</b>	10%
<b>Hard Costs Per Sq Ft:</b>	\$24.49	<b>Construction Contingency %:</b>	10%
<b>Cost Per Pupil:</b>	\$683	<b>Owner Contingency %:</b>	0%
<b>Gross Sq Ft Per Pupil:</b>	53	<b>Historical Register?</b>	No
<b>Is a Master Plan Complete?</b>	No	<b>Adverse Historical Effect?</b>	No
<b>Who owns the Facility?</b>	3rd Party	<b>Does this Qualify for HPCP?</b>	No

**If owned by a third party, explanation of ownership:**

Facility is owned by the school's foundation, Mountain Foundation for Education.

**If match is financed, explanation of financing terms:**

### Financial Data (Charter Applicants)

<b>Authorizer Min Match %:</b>	25%	<b>CEFCA or financing attempts:</b>	0
<b>&lt; 10% district bond capacity?</b>	NA	<b>Enrollment as % of district:</b>	NA
<b>Authorizer Bond Attempts:</b>	NA	<b>Free Reduced Lunch %</b>	8.4%
<b>Authorizer MLO Attempts:</b>	NA	<b>% of PPR on Facilities:</b>	10%
<b>Non-BEST Capital Grants:</b>	0	<b>Unreserved Gen Fund % Budget:</b>	0%
<b>FY18-19 CSCC Allocation*:</b>	\$63,048.66	<b>3yr Avg OMFAC/Pupil:</b>	\$1,018.85

\*CSCC Allocation figures are based on a \$25M statewide appropriation. Pending legislation may to revise to \$29.25M

**Who will facility revert to if school ceases to exist?**

Should the school cease to exist the Mountain Foundation for Education, as the owner, would still own the building. MFE would have the ability to find another school to take over the lease or it could sell it at market rate to pay off any obligations.

● **Facilities Impacted by this Grant Application** ●

**MOFFAT COUNTY RE:NO 1 - ES Roof Replacement - Sunset ES - 1955**

<b>District:</b>	Auditor - Moffat County RE-1
<b>School Name:</b>	Sunset ES
<b>Address:</b>	800 WEST 7TH STREET
<b>City:</b>	CRAIG
<b>Gross Area (SF):</b>	39,867
<b>Number of Buildings:</b>	1
<b>Replacement Value:</b>	\$12,874,360
<b>Condition Budget:</b>	\$7,171,830
<b>Total FCI:</b>	0.56
<b>Adequacy Index:</b>	0.24



**Condition Budget Summary**

System Group	Replacement Cost	Requirement Cost	SCI
Electrical System	\$1,290,837	\$1,333,116	1.03
Equipment and Furnishings	\$352,855	\$48,611	0.14
Exterior Enclosure	\$2,044,481	\$1,008,189	0.49
Fire Protection	\$1,910	\$483,459	253.13
HVAC System	\$1,735,759	\$158,578	0.09
Interior Construction and Conveyance	\$3,363,824	\$1,734,816	0.52
Plumbing System	\$501,423	\$409,280	0.82
Site	\$2,473,061	\$2,479,247	1.00
Structure	\$1,110,210	\$0	0.00
<b>Overall - Total</b>	<b>\$12,874,360</b>	<b>\$7,655,296</b>	<b>0.59</b>

# BEST FY2019-20 GRANT APPLICATION SUMMARIES

**Applicant Name:** MOFFAT COUNTY RE:NO 1

**County:** Moffat

**Project Title:** ES Roof Replacement

**Applicant Previous BEST Grant(s):** 1

**Has this project been previously applied for and not funded?** No

**If Yes, please explain why:**

## Project Type:

- |   |   |  |  |
|---|---|--|--|
| <input type="checkbox"/> New School         | <input checked="" type="checkbox"/> Roof    | <input checked="" type="checkbox"/> Asbestos Abatement | <input type="checkbox"/> Water Systems     |
| <input type="checkbox"/> School Replacement | <input type="checkbox"/> Fire Alarm         | <input type="checkbox"/> Lighting                      | <input type="checkbox"/> Facility Sitework |
| <input type="checkbox"/> Renovation         | <input type="checkbox"/> Boiler Replacement | <input type="checkbox"/> Electrical Upgrade            | <input type="checkbox"/> Land Purchase     |
| <input type="checkbox"/> Addition           | <input type="checkbox"/> HVAC               | <input type="checkbox"/> Energy Savings                | <input type="checkbox"/> Technology        |
| <input type="checkbox"/> Security           | <input type="checkbox"/> ADA                | <input checked="" type="checkbox"/> Window Replacement | <input type="checkbox"/> Other             |

## General Information About the District / School, and Information About the Affected Facilities:

MCS D serves 2,307 preschool-12th grade students throughout Moffat County's 4,751 square miles in the Northwest corner of Colorado. 43% of our students are considered to be low-income. MCS D provides a comprehensive preschool through 12th grade educational program that is compliant with state and federal regulations. MCS D performance framework in 2018 had a rating of Accredited: Low Participation through the Colorado Department of Education (CDE).

As a district, we have invested significant resources in recent years into curriculum alignment work to ensure that all grade levels at all schools receive consistent and reliable standards based education. This investment included a new early literacy program that has shown positive results. We have also implemented Project Lead the Way Curriculum in all elementary schools. There are approximately 50 schools offering this program in elementary schools in Colorado.

In 2018, Sunset received the highest rating of Performance Plan Rating and was awarded the Colorado Governor's Distinguished Improvement Award. Sunset's English Language Arts Median Growth Percentile for all students was the highest in the state at the elementary level. In February 2019, Jill Hafey, the principal at Sunset, received the Outstanding Administrative Leadership in Reading Award from the Colorado Council of the International Reading Association.

The school district has over 500,000 square feet of facilities to serve our students. MCS D building maintenance is managed by the Facilities Director. Preventative maintenance systems are in place and these systems help the district meet necessary maintenance and custodial objectives. For example, MCS D has scheduled filter changes and services on our HVAC systems. MCS D breaks down the boilers to clean them during summer months. A regular schedule is maintained for replacing parts like belts, bearings, sensors and valves before they break. Yearly safety equipment inspections and annual building inspections from state divisions are also critical to maintaining this facility. Capital improvement projects in MCS D are prioritized by safety, health, and function.

Sunset includes 40,000 square feet of building space with an enrollment of 369 at October 1, 2018. Sunset has 2 FTE in custodial staff in addition to the supervision and support of the Facility Director and maintenance staff. Capital improvements at the school since its construction in 1955 have included additional wings added in 1978 to accommodate student growth and routine replacements and upgrades as systems have reached their useful life.

## Deficiencies Associated with this Project:

The proposed project is a roof replacement for Sunset Elementary. The deficiencies below were noted as part of the roof evaluation performed by Bluefin LLC (Bluefin). Bluefin was engaged to help the school district assess roofs throughout the district.

A. The roof panels have been damaged in sporadic areas throughout the roof as a result of snow removal. Refer to photograph #10.

B. Water rolls off of the roof panels and down the face of the ribbed fascia panels (an extension of the roof panels), which then pools on the horizontal surface of the bottom trim flashing. Water then infiltrates the side laps and into the soffits. Refer to photographs #02 through #05.



## BEST FY2019-20 GRANT APPLICATION SUMMARIES

C. Where the two roof sections intersect along the rake edges, a short flat valley is formed with multiple lap seams that rely on sealant. This condition is prone to develop ice dams which induces standing water on the lap joints and fasteners. Any minor defect can allow water intrusion through the roof system, causing leaks below. There is evidence of numerous sealant repairs in these areas. Refer to photographs #11, #12, #18 through #23, #66, #69 & #70.

D. Sealant repairs were also noted at the roof-to-wall conditions where the lower roof is terminated with a counterflashing below wall panels or a through-wall flashing, suggesting that leaks have occurred at these details. The counterflashing is flat or has negative slope which allows water to sit on the flashing which is then more prone to infiltrate through the end laps causing leaks below. Refer to photographs #41 through #43.

E. Various pipe flashings are loose and improperly sealed or repaired, leaving a path for water to infiltrate the roof system. Refer to photographs #21, 27 & 45.

F. At the clerestory windows, the sill flashing lacks positive drainage. Any residual water that collects on the horizontal leg of the flashing can infiltrate through the lap joint and into the building envelope. The through-wall flashing and weep function of the window has been compromised by sealing the joint between the metal flashing and the window frame. The gaskets around the window panes are worn and deteriorated, allowing water to infiltrate into the gutter system, which cannot escape due to the plugged weep holes. Refer to photographs #31 through #33.

G. At some of the equipment curbs, mastic repairs have been performed in an attempt to remedy leaks. A more permanent repair is needed. Refer to photograph #36.

H. The roof panels have cracked along the ridge where the panels were bent over the opposite facet of the roof due to flexural fatigue. Silicone sealant has been applied over these areas to no avail. Refer to photographs #54 & #59.

I. Some of the ridge caps are open to water intrusion due to poor installation. Refer to photograph #83.

### **Proposed Solution to Address the Deficiencies Stated Above:**

Based on the age of the original roof, the extent of damage to the roof panels, degraded sealants, and substandard installation of the roof panels and related flashings, it is the professional opinion of the roof consultant that the metal roof panels need to be replaced. Upgrades or replacement of the clerestory windows, fascia, soffits is also required.

Due to the rather long runs of the panels, it is recommended that a floating standing seam roof system be designed and installed to replace the existing roof panels. It is also recommended that the windows on the clerestories be replaced in order to effect proper sill and head flashings and sealant joints around the windows. It is further recommended that all of the metal wall cladding be replaced in order to effect proper flashings at the roof-to-wall conditions with the implementation of a breathable air barrier. Bluefin, LLC also recommends that ice melt systems be implemented at valleys and around various chimneys to control snow slides and prevent ice damming in these critical areas.

### **How Urgent is this Project?**

The roof is already failing in that several leaks are noted throughout the building in addition to other deficiencies noted in the report we received from the roof consultant. Buckets are located throughout the building to manage the leaks in the building. These leaks are chronic and uncontrollable leading to interior damage and disrupts the daily operation of the school. Stop gap measures such as sealant repairs are now ineffective due to aging and costs associated with these repairs are rising. More extensive repairs to the various flashings and valley materials would not be cost effective on a 35+ year old roof.

If this grant were not to be awarded, we would continue to manage the leaks as best we can until some other sort of funding could be obtained. The options for this funding would be a bond or capital mill levy election or through general fund budget cuts. Any adjustments to the general fund budget would affect our ability to maintain appropriate class sizes and pay our teachers and other staff appropriate wages.

Sunset's roof is in the worst condition but MCSD has two others roofs in similar condition in the district. The estimates to repair all three of the roofs is over \$4 million and so the budget savings and reserve funds are not there to replace all of these roofs along with other deferred maintenance issues.

**Does this Project Conform with the Public School Facility Construction Guidelines?** Yes

**If not, provide an explanation for the use of any standard not consistent with the guidelines:**

**How Does the Applicant Plan to Maintain the Project if it is Awarded?**

## BEST FY2019-20 GRANT APPLICATION SUMMARIES

A warranty will be obtained as part of the program to ensure the longevity of the new roof.

As part of a preventative maintenance program, inspections will be done in the fall and spring for sealant failures and other issues. Additional inspections will be done as needed after storms and other significant events. Housekeeping surveys will also be done regularly. Valleys will be kept free of debris to prevent ice dams. The Facilities Director is a Class A licensed general contractor with significant experience in commercial construction and roofing and well versed in the needs of a preventative maintenance program for a new roof.

Components of the proposed scope of work will be maintained through general funds budgeted toward maintenance and with funds allocated toward capital projects. The school board will continue to allocate funds toward these needs similar to previous years as revenue amounts allow and has shown a commitment to address the needs. In 2018, the board approved a reduction in the required fund balance reserve from 31% to 25%. The past two budget cycles included a budget that called for spending into the fund balance reserve by \$555,000 in each year to address capital needs. Over the past five years, a total of \$2.8 million has been allocated from the general fund to the capital projects fund to fund building projects, technology and capital equipment needs. This represents approximately \$275/FTE over those five years. The 2018-19 adopted budget also included \$740,000 dedicated to operations and maintenance including salary, benefits, supplies, and purchased services. We are considering a capital fund mill levy to specifically address building needs including roof replacements.

**Describe the condition of the public school facility at the time it was purchased or constructed and, if the facility was not new or was not adequate as a public school facility at that time, provide the rationale for purchasing the facility or constructing it in the manner in which you did:**

Sunset Elementary (Sunset) was constructed in 1955 and has been in use as an elementary school since that time. In 1978 additional wings were added to accommodate a larger student population.

**Describe the history of capital improvements made to the facility by the district/charter school in order to make it suitable for students. Include a list of all capital projects undertaken in the affected facility in the last 3 years:**

Sunset had additional wings added in 1978 to accommodate student growth.

The most recent district-wide capital improvements were the result of a facilities bond approved in 2007. These bonds allowed for new boilers and HVAC system at Sunset along with the rest of the schools in the district. Other projects at Sunset in 2007 included asphalt replacement, security system upgrades to building entries, new intercom/phone systems, lighting upgrades, and fire systems upgrades.

In the last three years the kitchen was remodeled to achieve better workflow and accommodate new appliances (dishwasher and wash station).

The glycol was also replaced in heating system.

**What options outside of the BEST grant has the applicant investigated or leveraged to address the school's facility needs?**

We realized increased enrollment this year after several years of declining enrollment. We also had significant savings resulting from changes in the benefit plan and the closure of an elementary school. This has allowed us to set aside \$2 million for capital projects this year which can provide for the potential match for this project. We have already completed approximately \$500,000 of deferred maintenance projects at our high school. We have two other roofs in similar state and the estimates for all three roofs total over \$4 million. The Sunset roof is in the worst shape and the one that we wish to address first.

As noted above, the board has also reduced the required reserve percentage from 31% to 25%. The new reserve percentage freed up funds to address facility needs but maintains a fiscally responsible reserve for the school district.

We are also currently undergoing a master plan process. As part of that plan, a potential bond issue or mill levy to address our deferred capital projects will be considered.

**How do you budget annually to address capital outlay needs in your district/charter? Include \$/FTE for the prior fiscal year:**

A list of capital projects is presented as part of the annual budget process. The projects are evaluated against other budget needs and a lump sum amount is determined and transferred to the capital projects fund. This transfer along with any remaining fund balance in the capital projects fund is used for capital projects. As noted previously, the board has recently reduced the required general fund reserve and is committed to funding necessary projects as funds allow. Also any budget savings in a fiscal year are also transferred to the capital projects fund to fund future projects.

## BEST FY2019-20 GRANT APPLICATION SUMMARIES

The 2017-18 capital spending as defined in the question totaled 208,600 which represents \$101 per FTE. Funded pupil count in 2017-18 was 2069.5.

Total capital spending in 2017-18 including buildings, equipment and technology totaled 1,227,741 or \$593/FTE.

All amounts represent districtwide figures.

**If relevant to your project, what are your current annualized utility costs, and what amount of reduction in such costs do you expect to result from this project?**

N/A

<b>Grant Request:</b>	\$835,225.00	<b>CDE Minimum Match %:</b>	64%
<b>Applicant Match:</b>	\$835,225.00	<b>Actual Match % Provided:</b>	50%
<b>Total Project Cost:</b>	\$1,670,450.00	<b>Is a Waiver Letter Required?</b>	Yes
<b>Affected Sq Ft:</b>	50,100	<b>Contingent on a 2019 Bond?</b>	No
<b>Affected Pupils:</b>	369	<b>Source of Match:</b>	
<b>Cost Per Sq Ft:</b>	\$33.34	Capital Reserve Funds	
<b>Soft Costs Per Sq Ft:</b>	\$6.09	<b>Escalation %:</b>	0%
<b>Hard Costs Per Sq Ft:</b>	\$27.25	<b>Construction Contingency %:</b>	10%
<b>Cost Per Pupil:</b>	\$4,527	<b>Owner Contingency %:</b>	3%
<b>Gross Sq Ft Per Pupil:</b>	136	<b>Historical Register?</b>	No
<b>Is a Master Plan Complete?</b>	No	<b>Adverse Historical Effect?</b>	No
<b>Who owns the Facility?</b>	District	<b>Does this Qualify for HPCP?</b>	No

**If owned by a third party, explanation of ownership:**

**If match is financed, explanation of financing terms:**

### Financial Data (School District and BOCES Applicants)

<b>District FTE Count:</b>	2,005	<b>Bonded Debt Approved:</b>	
<b>Assessed Valuation:</b>	\$401,479,680	<b>Year(s) Bond Approved:</b>	
<b>PPAV:</b>	\$200,239	<b>Bonded Debt Failed:</b>	
<b>Unreserved Gen Fund 17-18:</b>	\$6,912,946	<b>Year(s) Bond Failed:</b>	
<b>Median Household Income:</b>	\$53,010	<b>Outstanding Bonded Debt:</b>	\$20,500,000
<b>Free Reduced Lunch %:</b>	43%	<b>Total Bond Capacity:</b>	\$80,295,936
<b>Existing Bond Mill Levy:</b>	5.946	<b>Bond Capacity Remaining:</b>	\$59,795,936
<b>3yr Avg OMFAC/Pupil:</b>	\$1,169.38		

## BEST School District and BOCES Grant Waiver Application

The BEST grant is a matching grant and each applicant is assigned a unique minimum matching requirement, pursuant to 22-43.7-109(9) C.R.S., to identify their financial capacity. An applicant may apply to the Capital Construction Assistance Board for a waiver or reduction of the matching moneys requirement for their project if the applicant determines their minimum match is not reflective of their current financial capacity, pursuant to 22-43.7-109(10) C.R.S.

Waiver applications are reviewed independent of the grant application. Upon review of the waiver application, the Capital Construction Assistance Board will make a motion to approve or deny the applicant's waiver request.

The Capital Construction Assistance Board shall seek to be as equitable as possible by considering the total financial capacity of each applicant pursuant to 22-43.7-109(11) C.R.S.

### Instructions

Be specific when answering the questions and explaining the issues and impacts. Your response should include dollar amounts and specific ways in which such issues and impacts make it impossible for the applicant to make its full matching contribution. Please submit meeting minutes, award/non-award letters, official communications, budget documents, or other relevant documentation to support the responses provided.

Question 2, subsections A-H are related directly to the factors used in calculating the matching percentage. Only respond in detail to the factors which you believe inaccurately or inadequately reflect financial capacity. For those factors which you believe accurately or adequately reflect financial capacity, please leave the response blank or type "Agreed".

---

1. Please describe why a waiver or reduction of the matching contribution would significantly enhance educational opportunity and quality within your school district or BOCES, or why the cost of complying with the matching contribution would significantly limit educational opportunities within your school district or BOCES.

We currently have three roofs in similar condition that would require \$4 million total to repair. The Sunset roof is in the most need of replacement. We also have several other deferred maintenance needs that also need to be addressed. If we are required to fund these from general operating funds it would lead to budget cuts to the learning environment including the ability to pay competitive wages in our rural district.

2. Please describe any extenuating circumstances which should be considered in determining the appropriateness of a waiver or reduction in the matching contribution.

Moffat County is heavily dependent on the natural resources and 61% of its property tax base is tied to the industry. Since 2009, the assessed valuation for MCSD has fallen over 15% and will fall further due to the decline of the coal industry. There are two coal mines in the county and a 3-unit power plant. Over 50% of our tax base is tied to the power plant alone and one of the three units is now slated for closure by 2025 and may happen sooner. The decline of the industry limits the ability of the school district to raise money locally. In addition, Moffat County taxpayers already contribute 50.8% of the total program funding as determined by the School Finance formula. This percentage is higher than all but 32 other school districts.

Also, over the past 10 years, MCSD has seen an approximately 10% drop in enrollment. We have one the ten lowest per pupil revenue amounts in the state. This combination of factors has caused the district to make significant cuts including the decision to close one elementary school this year. This has removed some of the deferred maintenance burden on the budget but there is still a great deal for us to address. We requested this same waiver when applying in the 2017 cycle. While we were not awarded a BEST grant in that cycle, the waiver request was approved. At this time, the underlying economic conditions in the county are essentially the same, except for the announcement of the closure of part of the power plant which will have a significant impact on the various numbers below.

*\*The following are factors used in calculating the applicant's matching percentage. Only respond to the factors which you feel inaccurately or inadequately reflect financial capacity. Please provide as much supporting detail as possible.*

A. Per Pupil Assessed Valuation relative to the statewide average – The higher the Per Pupil Assessed Value the higher the match.

Applicant's PPAV: \$200,239

Weighted Rank: 3.03% of 5% max

B. The district's median household income relative to the statewide average – The higher the median household income, the higher the match.

Applicant's Median Household Income: \$53,010

Weighted Rank: 7.42% of 15% max

C. Percentage of pupils eligible for free or reduced cost lunch relative to the statewide average – The lower the percentage for free and reduced cost lunch, the higher the match.

Applicant's FRED Percent: 42.8%

Weighted Rank: 12.02% of 20% max

D. Bond Election failures and successes in the last 10 years – The more attempts the school district has made, the lower the match.

Applicant's Bond Elections: 0

Adjustment: 0% (-1% per attempt)

E. Bond mill levy relative to the statewide average – The higher the bond mill levy, the lower the match.

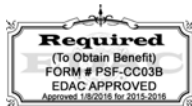
Applicant's Bond Mill Levy: 5.946

Weighted Rank: 10.11% of 20% max

F. The school district's current available bond capacity remaining. - The higher the bond capacity, the higher the match.

Applicant's Remaining Bond Capacity: \$59,795,936

Weighted Rank: 15.62% of 20% max



[Empty box]

G. The school district's unreserved fund balance as it relates to their overall budget.

District's Unreserved General Fund: \$6,912,946

Weighted Rank: 16.29% of 20% max

The current amended budget for 2018-19 projects an unreserved fund balance of 6,158,906.

H. Other unusual financial burdens not reflected in the match calculation (ie. underfunded mandates, unexpected expenses, self-funded programs).

[Empty box]

3. What efforts have been made to coordinate the project with local governmental entities, community based organizations, or other available grants or organizations to more efficiently or effectively leverage the applicant's ability to contribute financial assistance to the project? Please include all efforts, even those which may have been unsuccessful.

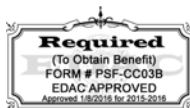
MCS D has entered into an agreement with the local hospital to provide health services for our students allowing the district to increase services more efficiently. We are also working with the local county owned hospital to take ownership of the closed building in our district to be used for other community health care needs which frees the district from the required deferred maintenance on that building. Fire and Police departments have partnered extensively with the district to ensure MCS D meets safety and security requirements. We received \$100,000 in funding from the School Security Disbursement grant in the current year including radios to take advantage of our relationship with the local Craig police department. We also have two School Resource officers are provided by the Craig Police Department. Our costs for these SROs are less than the cost of 1 FTE with the Craig police department.

4. Final Calculation: Based on the above, what is the actual match percentage being requested?

50%

CDE Minimum Match Percentage:

64%



● **Facilities Impacted by this Grant Application** ●

**PUEBLO CITY 60 - Fountain International Magnet School Partial Roof Replacement - Fountain Intl Magnet School - 1971**

District:	Auditor - Pueblo City 60
School Name:	Fountain Intl Magnet School
Address:	925 NORTH GLENDALE AVENUE
City:	PUEBLO
Gross Area (SF):	42,000
Number of Buildings:	1
Replacement Value:	\$10,198,475
Condition Budget:	\$5,563,756
Total FCI:	0.55
Adequacy Index:	0.06



**Condition Budget Summary**

System Group	Replacement Cost	Requirement Cost	SCI
Electrical System	\$1,583,384	\$1,351,256	0.85
Equipment and Furnishings	\$209,510	\$204,711	0.98
Exterior Enclosure	\$1,494,288	\$773,768	0.52
Fire Protection	\$1,994	\$415,709	208.50
HVAC System	\$649,794	\$600,300	0.92
Interior Construction and Conveyance	\$2,431,324	\$1,120,211	0.46
Plumbing System	\$584,838	\$416,441	0.71
Site	\$1,709,917	\$1,097,069	0.64
Structure	\$1,533,426	\$0	0.00
<b>Overall - Total</b>	<b>\$10,198,475</b>	<b>\$5,979,465</b>	<b>0.59</b>

# BEST FY2019-20 GRANT APPLICATION SUMMARIES

**Applicant Name:** PUEBLO CITY 60

**County:** Pueblo

**Project Title:** FIMS Partial Roof Replacement

**Applicant Previous BEST Grant(s):** 3

**Has this project been previously applied for and not funded?** No

**If Yes, please explain why:**

## Project Type:

- |   |   |   |   |
|---|---|---|---|
| <input type="checkbox"/> New School         | <input checked="" type="checkbox"/> Roof    | <input type="checkbox"/> Asbestos Abatement | <input type="checkbox"/> Water Systems  |
| <input type="checkbox"/> School Replacement | <input type="checkbox"/> Fire Alarm         | <input type="checkbox"/> Lighting           | <input type="checkbox"/> Facility Sitework                                      |
| <input type="checkbox"/> Renovation         | <input type="checkbox"/> Boiler Replacement | <input type="checkbox"/> Electrical Upgrade | <input type="checkbox"/> Land Purchase  |
| <input type="checkbox"/> Addition           | <input type="checkbox"/> HVAC               | <input type="checkbox"/> Energy Savings     | <input type="checkbox"/> Technology   |
| <input type="checkbox"/> Security           | <input type="checkbox"/> ADA                | <input type="checkbox"/> Window Replacement | <input checked="" type="checkbox"/> Other Parapet cap flashing at 2003 building |

## General Information About the District / School, and Information About the Affected Facilities:

The Fountain International Magnet School consists of one building located on 925 North Glendale, in Pueblo, Colorado. The original campus was constructed in 1971 and currently serves 382 students from Kindergarten to Grade 3. Fountain International offers a focused curriculum emphasizing technology, mathematics, and science facilitated through the International Baccalaureate (IB). Minority enrollment is 57% of the student body (majority Mexican American/Hispanic), which is higher than the Colorado state average of 46%. The student/teacher ratio of 18:1 is higher than the Colorado state level of 17:1. The school placed in the top 5% of all schools in Colorado for overall test scores (math proficiency is top 5%, and reading proficiency is top 5%) for the 2015-16 school year. A critical component of the school community is parent involvement. Parents are required to complete 18 volunteer hours during the school year. Fountain International is a six year John Irwin Award winner.

This award is given to schools that demonstrate excellent academic achievement.

## Deficiencies Associated with this Project:

The built-up roof which was installed in 2002 on Fountain International Magnet School is approaching its life expectancy (20 years) and is causing on-going maintenance issues with leak repairs, and has the potential to cause health and safety concerns, i.e. potential mold growth, for the staff and students. The following roof issues are of utmost concern and we have included photos with descriptions for a better understanding of the problems:

- Roof gravel has moved, caused low spots for pooling water, and exposed underlying roof material in several areas.
- Rolled roofing material at parapet wall has deteriorated.
- All roof drain caps have rusted and flashing material around them appears to be deteriorating.
- Roof scuppers are open to lower roof areas.
- The finish on metal parapet cap flashing (from the 2003 building addition) has peeled off in several places.
- The parapet slurry cap protecting the top of the exterior masonry walls has cracked in many places and water has the potential to penetrate exterior wall cavity.
- Mechanical equipment roof screens have deteriorated and the deterioration of roof jack penetrations have caused roof leakage.
- Roof expansion joint material near the main roof drains is showing signs of cracking due to UV exposure over time.
- Existing overflow scuppers at the exterior masonry walls are partially blocked due to additional roofing material, i.e. additional insulation, being added to the original roofing material, possibly at the time of previous re-roof or repair.

Even though a great deal of maintenance has gone into this roof, the ongoing leaks and deterioration of the roof and its components is beginning to be nearly impossible to manage with maintenance alone. It is recommended that a new roof, meeting current IBC and IECC codes, be installed as soon as possible.



# BEST FY2019-20 GRANT APPLICATION SUMMARIES

## Proposed Solution to Address the Deficiencies Stated Above:

The following is a summary of the proposed roof replacement for Fountain International Magnet School, addressing the problems of leakage, roof drains, HVAC curbs, overflow scuppers, parapet caps, electrical and gas piping extensions, expansion joint material replacement and increased insulation requirements for a new roof meeting the current IBC and IECC codes:

1. Remove existing roofing to existing concrete Tee roof deck in areas indicated on uploaded plans.
2. Remove existing RTUs and store on site for re-installation on new, taller curbs to address the insulation requirements for a new roof.
3. Remove existing RTU curbs and install new, taller curbs.
4. Extend all vents, exhaust fans, access door curbs, gas piping, electrical, etc. to accommodate new roof installation.
5. Install new R-38 roof per attached specification.
6. Remove existing concrete parapet cap (slurry on masonry) and install new, metal parapet cap in its entirety.
7. Remove existing scuppers and infill with existing brick salvaged from saw-cut of new scuppers as indicated in plan.
8. Remove and demo existing mechanical screens.
9. Replace existing roof drains with new; existing piping to remain.
10. Repace parapet cap for 2003 building addition roof that is showing signs of wear, i.e. peeling finish.

## How Urgent is this Project?

We have exhausted all maintenance options with the current, built-up roof. The current roof is 17 years old and on-going issues with leaks have sometimes caused relocation of students to different classrooms. Taking the children out of their normal environment can be very distracting to their learning and puts additional pressure on teachers to instruct in a temporary environment. Given the unpredictable nature of the leaks occurring with this old built-up roof, ceiling damage has occurred in different places as the roof has aged. With the additional risks and dangers of unknown mold conditions that may occur within the wall systems and above the existing ceilings from intermittent leaking, it is important that the roof is replaced soon.

**Does this Project Conform with the Public School Facility Construction Guidelines?** Yes

**If not, provide an explanation for the use of any standard not consistent with the guidelines:**

## How Does the Applicant Plan to Maintain the Project if it is Awarded?

The school district will contract annual roof inspections from a licensed roofing professional to meet the requirements of this section and all manufacturer's warranty specifications. The roof inspections will be funded through the school districts facilities dept. annual operating funds. Any ongoing repairs potentially needed will also be funded by the school districts facilities dept. annual operating funds. Future roof replacements at the school will be planned for with capital reserve funds.

**Describe the condition of the public school facility at the time it was purchased or constructed and, if the facility was not new or was not adequate as a public school facility at that time, provide the rationale for purchasing the facility or constructing it in the manner in which you did:**

The Fountain International Magnet School, constructed in 1971, is a partial two story building (42,000 SF) located at North Glendale Avenue and East Ninth Street in Pueblo, CO. The school serves K-3 and houses administration spaces, learning classrooms, a media center, gymnasium and cafeteria.

**Describe the history of capital improvements made to the facility by the district/charter school in order to make it suitable for students. Include a list of all capital projects undertaken in the affected facility in the last 3 years:**

The Fountain International Magnet School had a major interior remodel in 1992. Prior to the 1992 remodel, the school was completely open plan. Partitions, HVAC and new electrical service were all done at that time to air condition the school. Also, the school had all new finishes with this project.

In 2003, a single story addition (5,590 SF) to the north end of the building was completed. Finally, there have been additions to the site including a parking lot loop in 2003 and playground equipment in 2012.

**What options outside of the BEST grant has the applicant investigated or leveraged to address the school's facility needs?**

The school district has found no other funding options.

# BEST FY2019-20 GRANT APPLICATION SUMMARIES

**How do you budget annually to address capital outlay needs in your district/charter? Include \$/FTE for the prior fiscal year:**

Capital outlay is funded annually through the school districts general funds. The figures for this amount for FY 2017/18 is \$4,445,500 / 14,710 (FTE) = \$302.20 as a base starting figure for the entire school district. Due to emergency repairs, that figure has been increased over the past two years on as an "increasing and as needed" amount."

**If relevant to your project, what are your current annualized utility costs, and what amount of reduction in such costs do you expect to result from this project?**

N/A

<b>Grant Request:</b>	\$475,639.82	<b>CDE Minimum Match %:</b>	44%
<b>Applicant Match:</b>	\$291,521.18	<b>Actual Match % Provided:</b>	38%
<b>Total Project Cost:</b>	\$767,161.00	<b>Is a Waiver Letter Required?</b>	Yes
<b>Affected Sq Ft:</b>	35,000	<b>Contingent on a 2019 Bond?</b>	No
<b>Affected Pupils:</b>	381	<b>Source of Match:</b>	Capital Reserve Funds
<b>Cost Per Sq Ft:</b>	\$21.92	<b>Escalation %:</b>	0%
<b>Soft Costs Per Sq Ft:</b>	\$0.80	<b>Construction Contingency %:</b>	10%
<b>Hard Costs Per Sq Ft:</b>	\$21.12	<b>Owner Contingency %:</b>	0%
<b>Cost Per Pupil:</b>	\$2,014	<b>Historical Register?</b>	No
<b>Gross Sq Ft Per Pupil:</b>	92	<b>Adverse Historical Effect?</b>	No
<b>Is a Master Plan Complete?</b>	No	<b>Does this Qualify for HPCP?</b>	No
<b>Who owns the Facility?</b>	District		
<b>If owned by a third party, explanation of ownership:</b>			
<b>If match is financed, explanation of financing terms:</b>			

## Financial Data (School District and BOCES Applicants)

<b>District FTE Count:</b>	14,916	<b>Bonded Debt Approved:</b>	
<b>Assessed Valuation:</b>	\$1,018,450,118	<b>Year(s) Bond Approved:</b>	
<b>PPAV:</b>	\$68,277	<b>Bonded Debt Failed:</b>	
<b>Unreserved Gen Fund 17-18:</b>	\$3,649,660	<b>Year(s) Bond Failed:</b>	
<b>Median Household Income:</b>	\$36,313	<b>Outstanding Bonded Debt:</b>	\$41,185,000
<b>Free Reduced Lunch %:</b>	77%	<b>Total Bond Capacity:</b>	\$203,690,024
<b>Existing Bond Mill Levy:</b>	8	<b>Bond Capacity Remaining:</b>	\$162,505,024
<b>3yr Avg OMFAC/Pupil:</b>	\$1,429.26		

## BEST School District and BOCES Grant Waiver Application

The BEST grant is a matching grant and each applicant is assigned a unique minimum matching requirement, pursuant to 22-43.7-109(9) C.R.S., to identify their financial capacity. An applicant may apply to the Capital Construction Assistance Board for a waiver or reduction of the matching moneys requirement for their project if the applicant determines their minimum match is not reflective of their current financial capacity, pursuant to 22-43.7-109(10) C.R.S.

Waiver applications are reviewed independent of the grant application. Upon review of the waiver application, the Capital Construction Assistance Board will make a motion to approve or deny the applicant’s waiver request.

The Capital Construction Assistance Board shall seek to be as equitable as possible by considering the total financial capacity of each applicant pursuant to 22-43.7-109(11) C.R.S.

### Instructions

Be specific when answering the questions and explaining the issues and impacts. Your response should include dollar amounts and specific ways in which such issues and impacts make it impossible for the applicant to make its full matching contribution. Please submit meeting minutes, award/non-award letters, official communications, budget documents, or other relevant documentation to support the responses provided.

Question 2, subsections A-H are related directly to the factors used in calculating the matching percentage. Only respond in detail to the factors which you believe inaccurately or inadequately reflect financial capacity. For those factors which you believe accurately or adequately reflect financial capacity, please leave the response blank or type “Agreed”.

1. Please describe why a waiver or reduction of the matching contribution would significantly enhance educational opportunity and quality within your school district or BOCES, or why the cost of complying with the matching contribution would significantly limit educational opportunities within your school district or BOCES.

**A reduction in the matching funds required in the BEST grant, to be provided by the district, will permit additional needed capital repairs at other schools. The district’s current facilities master plan indicates approximately \$780 million in needed repairs across the district, with approximately \$500 million of that in Priority 1 & 2 critical and high priority renovations & repairs needed. Being able to use BEST grant savings for other repairs eliminates excessive competition with general funds that can be used directly in the classroom.**

2. Please describe any extenuating circumstances which should be considered in determining the appropriateness of a waiver or reduction in the matching contribution.

- **Pueblo City Schools is placed at a severe disadvantage due to the ongoing reduction in funding based on the budget stabilization factor previously known as the negative factor. While it is true that the adjustment effects many school districts throughout the state, Pueblo is severely impacted by all legislative modifications to Property Tax assessment and retention. (Gallagher/TABOR)**
- **Pueblo School Dist. 60 continues to see a reduction in the funded pupil count. This reduction can be**

linked to both internal as well as external factors, such as migration out of the district. Pueblo West continues to expand in population. This migration out of the city limits impacts the property valuation as people tend to move from older existing homes to newer construction with increased value. The migration to Pueblo West transitions students out of the city limits.

- Continued degradation in student test scores. The impact of choice, along with location-specific programming has negatively impacted some of the neighborhood schools ability to maintain a diverse student and higher school utilization population.
- Pueblo School Dist. 60 is the largest school district without a voter approved Mill Levy Override.
- Reductions in funding have crippled the district’s ability to maintain the aging infrastructure.
- ECEA funding currently at \$3.9 million dollars is severely underfunded as Pueblo School Dist. 60 is budgeted to spend upward of \$16 million dollars on providing services to the SPED population.
- Pueblo has struggled to attract industry without additional concessions that do not negatively impact the property tax base within the city limits. Recently the voters passed a 30-year moratorium related to Property Tax assessment for Rocky Mountain Steel Mills. This modification directly impacts the commercial/residential tax calculations which once again impacts Pueblo City Schools without an increase in employment potential.

*\*The following are factors used in calculating the applicant’s matching percentage. Only respond to the factors which you feel inaccurately or inadequately reflect financial capacity. Please provide as much supporting detail as possible.*

A. Per Pupil Assessed Valuation relative to the statewide average – The higher the Per Pupil Assessed Value the higher the match.

Applicant’s PPAV: \$68,276.75

Weighted Rank: 0.59% of 5% max

**\$68,276.75**

B. The district’s median household income relative to the statewide average – The higher the median household income, the higher the match.

Applicant’s Median Household Income: \$36,313.00

Weighted Rank: 1.52% of 15% max

**\$36,313.00**

C. Percentage of pupils eligible for free or reduced cost lunch relative to the statewide average – The lower the percentage for free and reduced cost lunch, the higher the match.

Applicant’s FRED Percent: 77.3%

Weighted Rank: 1.69% of 20% max

**77.3%**

D. Bond Election failures and successes in the last 10 years – The more attempts the school district has made, the lower the match.

Applicant’s Bond Elections: 1

Adjustment: 0% (-1% per attempt)

**2010 Bond election – defeated**  
**2018 Mill Levy Override election – defeated**



E. Bond mill levy relative to the statewide average – The higher the bond mill levy, the lower the match.

Applicant’s Bond Mill Levy: 7.50

Weighted Rank: 7.53% of 20% max

**7.5%**

F. The school district's current available bond capacity remaining. - The higher the bond capacity, the higher the match.

Applicant’s Remaining Bond Capacity: \$ 162,505,024

Weighted Rank: 18.09% of 20% max

**\$162,505,024**

G. The school district's unreserved fund balance as it relates to their overall budget.

District’s Unreserved General Fund: \$3,649,660

Weighted Rank: 14.27% of 20% max

**\$3,649,660**

H. Other unusual financial burdens not reflected in the match calculation (ie. underfunded mandates, unexpected expenses, self-funded programs).

**FY 2018/19 - \$4 million in emergency life safety/functional capital repairs at two high schools for electrical systems that grounding (bonding) failed.**

3. What efforts have been made to coordinate the project with local governmental entities, community based organizations, or other available grants or organizations to more efficiently or effectively leverage the applicant’s ability to contribute financial assistance to the project? Please include all efforts, even those which may have been unsuccessful.

**No other local financial opportunities have been found.**

4. **Final Calculation:** Based on the above, what is the actual match percentage being requested? **38%**

CDE Minimum Match Percentage: **44%**



● **Facilities Impacted by this Grant Application** ●

**MONTE VISTA C-8 - Delta Center Roof Replacement - Byron Syring Delta Ctr - 1926**

<b>District:</b>	Auditor - Monte Vista C-8
<b>School Name:</b>	Byron Syring Delta Ctr
<b>Address:</b>	345 PROSPECT
<b>City:</b>	MONTE VISTA
<b>Gross Area (SF):</b>	14,840
<b>Number of Buildings:</b>	2
<b>Replacement Value:</b>	\$7,040,514
<b>Condition Budget:</b>	\$1,588,955
<b>Total FCI:</b>	0.23
<b>Adequacy Index:</b>	0.22



**Condition Budget Summary**

System Group	Replacement Cost	Requirement Cost	SCI
Electrical System	\$596,944	\$219,923	0.37
Equipment and Furnishings	\$66,638	\$10,412	0.16
Exterior Enclosure	\$1,508,774	\$427,633	0.28
Fire Protection	\$706	\$146,862	208.02
HVAC System	\$727,288	\$32,932	0.05
Interior Construction and Conveyance	\$899,739	\$508,209	0.56
Plumbing System	\$307,720	\$25,091	0.08
Site	\$2,577,877	\$344,688	0.13
Structure	\$354,828	\$20,066	0.06
<b>Overall - Total</b>	<b>\$7,040,514</b>	<b>\$1,735,816</b>	<b>0.25</b>

# BEST FY2019-20 GRANT APPLICATION SUMMARIES

**Applicant Name:** MONTE VISTA C-8

**County:** Rio Grande

**Project Title:** Delta Center Roof Replacement

**Applicant Previous BEST Grant(s):** 1

**Has this project been previously applied for and not funded?** No

**If Yes, please explain why:**

## Project Type:

- |   |   |   |  |
|---|---|---|--|
| <input type="checkbox"/> New School         | <input checked="" type="checkbox"/> Roof    | <input type="checkbox"/> Asbestos Abatement | <input type="checkbox"/> Water Systems     |
| <input type="checkbox"/> School Replacement | <input type="checkbox"/> Fire Alarm         | <input type="checkbox"/> Lighting           | <input type="checkbox"/> Facility Sitework |
| <input type="checkbox"/> Renovation         | <input type="checkbox"/> Boiler Replacement | <input type="checkbox"/> Electrical Upgrade | <input type="checkbox"/> Land Purchase     |
| <input type="checkbox"/> Addition           | <input type="checkbox"/> HVAC               | <input type="checkbox"/> Energy Savings     | <input type="checkbox"/> Technology        |
| <input type="checkbox"/> Security           | <input type="checkbox"/> ADA                | <input type="checkbox"/> Window Replacement | <input type="checkbox"/> Other             |

## General Information About the District / School, and Information About the Affected Facilities:

The building is a historical landmark; built in the early 20th Century, it originally served as the Rio Grande County High School. The DELTA Center alternative education campus serves as the Monte Vista School District's alternative high school and middle school. The DELTA Center offers a full range of secondary core & elective courses for high risk students (as defined by the Colorado Department of Education). The DELTA Center's primary function is existential (not just academic), and it is to serve the needs of high risk students and to help them gain the skills and knowledge necessary for success in beyond school. Maintenance and custodial is managed under the Monte Vista School District facilities department. In 2012, the Delta Center had modifications performed as part of the Best Grant that our high school was rebuilt under. These modifications included: New doors with added security, and bathroom modifications. Also in 2012, one of the HVAC units in the building was renovated. New windows were installed in 2007, and a re-coating of the the roof was performed in 2001 and 2015.

## Deficiencies Associated with this Project:

The current condition of the roof is poor and has resulted in leaks within the building, including on the stairway and bathroom area on the top floor. A qualified contractor performed a plug test and found the under layers did have deterioration and some moisture content. Areas on the roof continue to hold water after rain and snow storms because of poor drainage. Though the roof has been re-coated two different times, we continue to have issues which has resulted in us reaching out for the grant.

## Proposed Solution to Address the Deficiencies Stated Above:

Because re-coating the roof in past years has not completely resolved the deficiencies stated above, we feel a complete roof replacement is required to resolve the issues. This will also correct the drainage deficiencies. We have reached out to our insurance agent and received a list of recommended roofing contractors who have experience with school district projects. The estimates received have come from the recommendations on the list.

## How Urgent is this Project?

If the project is not awarded, we fear the moisture content from the leaks could result in a mold issue, continuous deterioration of underlayment, and damage to the interior of the building (such as ceiling tiles, sheet rock panels, etc.). It may pose a health and safety threat to occupants of the building.

**Does this Project Conform with the Public School Facility Construction Guidelines?** Yes

**If not, provide an explanation for the use of any standard not consistent with the guidelines:**

## How Does the Applicant Plan to Maintain the Project if it is Awarded?

The facilities department is enrolled in a preventative maintenance program through SchoolDude.com. The new roof will be added to our PM schedule to monitor for wear and tear and document the roof conditions. If wear and tear is present after our warranty period is no longer valid, our next fiscal year shall include costs of repairs as needed.

# BEST FY2019-20 GRANT APPLICATION SUMMARIES

**Describe the condition of the public school facility at the time it was purchased or constructed and, if the facility was not new or was not adequate as a public school facility at that time, provide the rationale for purchasing the facility or constructing it in the manner in which you did:**

The facility was constructed in 1926. The purpose of the construction of this building was indeed to be used as a school facility. It has always been used as a school facility or part of a school facility. It is constructed out of wood trusses, plywood decking, and quarry stone. The original roof was constructed out of asphalt and gravel. It is a two story building with many classrooms and offices within on both stories. It also has a crawlspace. Modifications have been made over the decades for safety and security reasons (windows, doors, repairs, etc.), but the majority of the building remains in it's original construction.

**Describe the history of capital improvements made to the facility by the district/charter school in order to make it suitable for students. Include a list of all capital projects undertaken in the affected facility in the last 3 years:**

June 2001-Roof re-coated,  
 August 2007-Replaced windows,  
 2010-Replaced broken water line,  
 2012-HVAC renovation,  
 August 2012-Upgraded entryways, doors, and restrooms,  
 March 2015-Roof re-coated

**What options outside of the BEST grant has the applicant investigated or leveraged to address the school's facility needs?**

The department researched our budget for an affordable fix to the Delta Center roof, which resulted in re-coating and the leaking and poor drainage problems persisted. The department also looked into insurance claims which would have only covered recently damaged areas.

**How do you budget annually to address capital outlay needs in your district/charter? Include \$/FTE for the prior fiscal year:**

The Monte Vista School District has allocated \$355.93 per FTE student toward capital/insurance reserve expenditures, much of which is dedicated to large-scaled controlled-maintenance projects.

**If relevant to your project, what are your current annualized utility costs, and what amount of reduction in such costs do you expect to result from this project?**

N/A

<b>Grant Request:</b>	\$131,891.25	<b>CDE Minimum Match %:</b>	25%
<b>Applicant Match:</b>	\$43,963.75	<b>Actual Match % Provided:</b>	25%
<b>Total Project Cost:</b>	\$175,855.00	<b>Is a Waiver Letter Required?</b>	No
<b>Affected Sq Ft:</b>	6,840	<b>Contingent on a 2019 Bond?</b>	No
<b>Affected Pupils:</b>	48	<b>Source of Match:</b>	General Funds
<b>Cost Per Sq Ft:</b>	\$25.71	<b>Escalation %:</b>	0%
<b>Soft Costs Per Sq Ft:</b>	\$0.00	<b>Construction Contingency %:</b>	10%
<b>Hard Costs Per Sq Ft:</b>	\$25.71	<b>Owner Contingency %:</b>	10%
<b>Cost Per Pupil:</b>	\$3,664	<b>Historical Register?</b>	Yes
<b>Gross Sq Ft Per Pupil:</b>	190	<b>Adverse Historical Effect?</b>	No
<b>Is a Master Plan Complete?</b>	Yes	<b>Does this Qualify for HPCP?</b>	No
<b>Who owns the Facility?</b>	District		
<b>If owned by a third party, explanation of ownership:</b>			
<b>If match is financed, explanation of financing terms:</b>			



# BEST FY2019-20 GRANT APPLICATION SUMMARIES

## Financial Data (School District and BOCES Applicants)

<b>District FTE Count:</b>	942	<b>Bonded Debt Approved:</b>	
<b>Assessed Valuation:</b>	\$58,091,497	<b>Year(s) Bond Approved:</b>	
<b>PPAV:</b>	\$61,636	<b>Bonded Debt Failed:</b>	
<b>Unreserved Gen Fund 17-18:</b>	\$1,901,118	<b>Year(s) Bond Failed:</b>	
<b>Median Household Income:</b>	\$37,447	<b>Outstanding Bonded Debt:</b>	\$7,332,089
<b>Free Reduced Lunch %:</b>	70%	<b>Total Bond Capacity:</b>	\$11,618,299
<b>Existing Bond Mill Levy:</b>	10.293	<b>Bond Capacity Remaining:</b>	\$4,286,210
<b>3yr Avg OMFAC/Pupil:</b>	\$932.01		

● **Facilities Impacted by this Grant Application** ●

**SOUTH ROUTT RE 3 - HS North Roof Replacement - Soroco HS/MS - 1948**

<b>District:</b>	Auditor - South Routt RE-3
<b>School Name:</b>	Soroco HS/MS
<b>Address:</b>	305 SOUTH GRANT STREET
<b>City:</b>	OAK CREEK
<b>Gross Area (SF):</b>	96,031
<b>Number of Buildings:</b>	3
<b>Replacement Value:</b>	\$27,608,577
<b>Condition Budget:</b>	\$14,023,502
<b>Total FCI:</b>	0.51
<b>Adequacy Index:</b>	0.11



**Condition Budget Summary**

System Group	Replacement Cost	Requirement Cost	SCI
Electrical System	\$3,853,568	\$3,859,358	1.00
Equipment and Furnishings	\$387,346	\$339,603	0.88
Exterior Enclosure	\$4,171,545	\$1,390,450	0.33
Fire Protection	\$427,888	\$979,905	2.29
Furnishings	\$1,018,929	\$417,910	0.41
HVAC System	\$3,644,117	\$1,898,283	0.52
Interior Construction and Conveyance	\$6,104,787	\$2,728,684	0.45
Plumbing System	\$1,473,202	\$1,182,439	0.80
Site	\$2,509,384	\$1,519,428	0.61
Structure	\$4,017,810	\$154,830	0.04
<b>Overall - Total</b>	<b>\$27,608,577</b>	<b>\$14,470,890</b>	<b>0.52</b>

# BEST FY2019-20 GRANT APPLICATION SUMMARIES

**Applicant Name:** SOUTH ROUTT RE 3

**County:** Routt

**Project Title:** HS North Roof Replacement

**Applicant Previous BEST Grant(s):** 3

**Has this project been previously applied for and not funded?** No

**If Yes, please explain why:** N/A

## Project Type:

- |   |   |   |  |
|---|---|---|--|
| <input type="checkbox"/> New School         | <input checked="" type="checkbox"/> Roof    | <input type="checkbox"/> Asbestos Abatement | <input type="checkbox"/> Water Systems     |
| <input type="checkbox"/> School Replacement | <input type="checkbox"/> Fire Alarm         | <input type="checkbox"/> Lighting           | <input type="checkbox"/> Facility Sitework |
| <input type="checkbox"/> Renovation         | <input type="checkbox"/> Boiler Replacement | <input type="checkbox"/> Electrical Upgrade | <input type="checkbox"/> Land Purchase     |
| <input type="checkbox"/> Addition           | <input type="checkbox"/> HVAC               | <input type="checkbox"/> Energy Savings     | <input type="checkbox"/> Technology        |
| <input type="checkbox"/> Security           | <input type="checkbox"/> ADA                | <input type="checkbox"/> Window Replacement | <input type="checkbox"/> Other             |

## General Information About the District / School, and Information About the Affected Facilities:

South Routt School District, located in southern Routt county, includes two small incorporated communities and vast expanses of rural ranching land. Our elementary school, South Routt Elementary, is located in Yampa (about 400 residents). Our Soroco Middle School and Soroco High School are located in Oak Creek (about 900 residents). Our entire school district encompasses 584 square miles with a total population of 3,160.

South Routt's economy has strong ties to agriculture and includes many residents which commute to Steamboat Springs for employment (approximately 20 miles one way). According to the U.S. Census Bureau 2013 data, 18% of families with school aged children live in poverty (state rate is 15%). Our students free/reduced lunch rate is 47% while the state rate is approximately 40%.

We have 340 students enrolled in our district Pre-K to 12th grade. We provided a comprehensive education which includes special education, gifted education and English learner programs, PE, art and music for all our students. At the secondary level, we have a strong Agricultural/FFA program, music, Career/Technical Education and concurrent enrollment classes. The school district is Accredited w/ Distinction and the number ten ranked school district in the state.

The focus of the BEST grant proposal is section two of Soroco High School. This building is used to educate 110 high school students and 70 middle school students. As well, numerous community events take place in this building which are directly effected by leaks when they occur. This section of the building includes classrooms, an older gym and our wrestling room.

## Deficiencies Associated with this Project:

A JP Stevens 45 mil Hypalon roofing membrane protects the north area of the 1982 addition. The addition surrounds the original building built in 1948. The addition has 2 roofing systems currently in place the top layer a 45 mil hypalon/TPO installed in 2002. The membrane was viewed with the typical dramatic failures associated to the manufacturer's inadequate formulation. The membrane is mechanically attached at seams. Rips and tears at the heat welded seams are widespread with layer upon layer of failed coatings. Field sheets have advanced loss of scrim. The degeneration appearing as flaking exposes the reinforcing fibers primarily where water was allowed to pond. Moisture travels directly through the membrane in all aforementioned locations. Repairs utilized a non-standard application applying multiple layers of elastomeric coatings. All in extreme deteriorating condition. The Hypalon overlays the 1982 additions original roofing system a 60 mil EPDM. Designed as a stone ballasted system, now with thousands of attachment screw penetrations that anchor the hypalon. Continued and extensive leaks are primarily absorbed by the roofing systems insulation. The leaks are trapped and travel between multiple layers of roofing creating excessive live-loads and potential for catastrophic failure. The leaks are nearly impossible to locate/repair many nick-named "Ghost Leaks". Repairs above have little or no effect on the constant drips below. Previous re-roofing projects did not correct drainage issues or address insulation deficiency, reviewed further-in. Massive amounts of ponded water were allowed to be stored on the roof. Structural roofing planes have severely undersized and inadequate counter sloping crickets to direct moisture to, in some areas, missing roof drains. Overflow protection to roof drains is also missing in some areas. Membrane failure in areas of ponded water is enormous. Test cuts reveled mold between roofing

## BEST FY2019-20 GRANT APPLICATION SUMMARIES

layers and moister/mold damage to the wood decking. Leak repair response is complex due to multiple roofing systems with numerous repairs, one on top of another and has become financially overbearing and unpractical as leaks continue nonetheless. Roofing warranties are expired. The dilemma below the roof leaks for maintenance is nearly excruciating. Ceiling tiles below leaks have been replaced with plastic buckets students dump on a regular schedule. Plastic tapes cover essential equipment. Air circulation has been increased via open windows and doors to detour moldy smells while District personal guard the area for security purposes, at times. Every snowmelt or rainfall event requires containment and remediation as needed to limit the impact and consequential damage from leaks. Despite due diligence, water damaged ceiling tile are falling to the floor below. Wet insulation, carpet and ceiling tiles presents mold issues. Standing water on VCT presents slip and fall hazards. The wood structural deck and joists are at risk for water damage. Children are doubled up in the few dry rooms available while temporary remedial action occurs. Mold, of course, is an ever present risk factor where constantly wet materials offer the perfect medium for growth. Students and staff have complained about air quality. Attic insulation is currently rated at R-30 where R-40 is required. Existing roof top insulation rates R-3.85, at best. Roof top HVAC units nearly reach maximum capacity to heat the underrated R-Values areas below.

### **Proposed Solution to Address the Deficiencies Stated Above:**

No reclaimable or salvageable materials/insulation were viewed in test cuts taken on the existing roofing assemblies. Thermal imaging located massive amounts of moisture between roofing system layers and moisture intrusion on exterior wall. Existing roofing membrane has outlived any dependable life and must be replaced. A repair benefit ratio is less than zero/zero. The areas multiple roofing systems will be removed exposing decking as required by current code. The potential for damaged decking unsuitable for the new roofing system is high. When/if exposed it must be replaced during the roofing event. A cost per square foot for replaced damaged decking will be developed on contractors bid foam to establish replacement cost up front. The obsolete oakum packed, nearly 37 year old roof drains will be replaced with the roofing event. Adding drains and overflow protection currently absent or unprotected in some areas. Half inch per foot sloped sump panels will be installed at each new roof drain increasing drainage, adding 3/8 per inch counter sloping crickets between drain bowls directing moister to roof drains. The Addition of code required roof top insulation meeting 2018 IECC thermal requirements will reduce flashing heights below minimum on some roof top exhaust vents and fans. The impact in this area is minimal however each will be raised during the roofing event. Large HVAC units currently meet flashing heights requirements and will be slip-flashed on existing curbs. High density FR rated polyisocyanurate cover board will be fully adhered on top of mechanically attached insulation. Oak Creek Colorado is on the line between climate zone 6 and 7. High mountain regions have proven far more successful with darker membranes that increase snowmelt. A 90 mil thick black EPDM will be installed on top of the new HD cover board and insulation package. New wind rated edge metal to preplace existing. EPDM walk-pads to and around HVAC units will increase the longevity of the new roofing system. Tree's that encroach and overhang the building will be removed for added protection to the drainage system. The new roofing system will be designed with 6" seams/cover strip for a no dollar limit 30 year manufacturer warranty.

### **How Urgent is this Project?**

Soroco High Schools new Superintendent and maintenance team were introduced to this failed roofing system upon arrival in 2017. The Superintendent, Rim Watson referred to the current roofing conditions similar to a colander with continued leaks plaguing the facility and staff. Layer upon layer of roof coatings previously installed continue to fail and are more commonly found floating around the school yard grounds, blown off the roof. An Inspection of the HS viewed the same troublesome membrane replaced on Soroco Middle in 2017 in-place on the High School. Identical formulation failures/leaks have plagued the entire School. An unexpected dilemma for the new Superintendent and major problem given the current finical situation of South Routt RE-3. The new Superintendent/District were not prepared for the \$1,450,000.00 construction budget estimate to replace the entire schools failed roofing. A scope of work was developed detailing the most troublesome areas. Dividing roofing replacement into 3 sectional areas spread over the next 2-3 years was the only viable economically achievable option given the current financial state of the District. The south of Soroco High School was replaced with CDE BEST assistance last year. Repair dollars are continually wasted chancing ghost leaks. The District, simply cannot afford the sectional area replacement without securing additional funding and or borrowing from the necessary funds from private lenders. Thermal scans and test cuts of the sectional areas plotted for replacement in 2019 reveal nearly 35% of the existing system saturated with underlying moisture. This potentially setting the stage for catastrophic failure. If BEST funding is not secured the District, under the current conditions will be need to seek funding from alternate source for the replacement and or extensive non-reclaimable repairs must be implemented as best as possible, though typically futile as leaks return over and over past repair response.

# BEST FY2019-20 GRANT APPLICATION SUMMARIES

**Does this Project Conform with the Public School Facility Construction Guidelines?** Yes

**If not, provide an explanation for the use of any standard not consistent with the guidelines:**

**How Does the Applicant Plan to Maintain the Project if it is Awarded?**

The District has adopted a policy intended to protect the value of one of our most important assets; the roofing assembly on every one of our buildings. This policy is in addition to the published warranty requirements of a manufacturer with a current roof system warranty. The following program is to serve as the first draft of an evolving document that will be reviewed and revised as needed. The Maintenance Department is the primary staff intended to implement this directive; however, reporting moisture intrusion is the responsibility of the entire staff. If you see something, say something.

The district commits a certain amount of funds each year for maintenance needs. These funds are redirected from academic needs and staff salaries. Even the amount committed does not allow for replacement of even one section of the high school roof. We do not have a grant funding source available.

The District has employed a Professional Roof Consultant who will offer an in-service training session to Maintenance Department Staff so they may serve as inspectors.

Perhaps surprisingly, the starting point of a roof inspection should actually be the interior of our buildings. The interior walls and ceilings should be examined for any signs of water staining which would indicate a problem above on the roof.

The roof itself should then be visually inspected. The following key areas should be checked in this order:

- Cap flashings; - Edge metal; - Base flashings; - Penetrations; - Field of the roof; - Ballast; - Roof adhesives; and Surface coatings, if present. Cap flashings, which are metal or other rigid covers at membrane terminations, should be inspected for: - loose areas of attachment or loose or missing fasteners; - loose or displaced sections of metal; - deformed metal that could collect water and funnel it through an end joint; - corrosion; - missing or loose joint covers; and - sealants showing signs of cracking, weather and/or aging.

Edge metal, installed at the edge of a roofing system to terminate the roof and provide waterproof flashing, should be checked for: - loose areas of attachment or loose or missing fasteners; - loose or missing stripped-in flashing; - splits in the stripping at metal flashing joints; - corroded metal; - missing or displaced metal sections or joint covers; - open joints and sealants displaying signs of cracking or weathering or aging. Base flashings, which are roof membrane terminations at walls and curbs, should then be looked at. Watch for: - a secure and sealed top termination;

- continuous adhesion of base flashing to substrate, with no loose membrane or extensive bridging; - a covered top seal of the membrane base flashing; - closed seams at the bottom of the base flashing at its attachment to the field membrane; - sealed seams at vertical laps; - sealants in good condition, without signs of cracking, weathering or aging; and - base flashing material without signs of deterioration or building movements. Penetrations are pipes, drains and other items that are inserted through the roof membrane. They must be flashed properly to assure a watertight integrity. An inspector should examine the following: - the drain clamping ring and drain strainer to ensure proper securement for a watertight seal at the membrane-to-drain interface; - thorough adhesion of sealant inside pitch pockets and membrane adhesion around the outside of pitch pockets; - pitch pockets containing adequate fill material to prevent water from collecting; - pipe boot flanges sealed tightly to the roof membrane; and - a tight seal and termination around pipe(s) at the top of pipe boots. In the field of the roof, be sure that: - No fasteners protrude against the membrane, causing a "tenting" effect; or that there are no visibly loose fastening points; - the membrane contains no worn spots, deteriorated areas, or holes in the membrane; - insulation panels are in their original positions; no buckling or warping, - there are no changes in insulation or substrate firmness when the roof is walked on; - adequate drainage is present; and - around rooftop equipment, no areas have been degraded by equipment leaks or spills, or have been punctured by dropped tools or equipment parts from workers maintaining roof-mounted equipment. If the roof membrane has a coating on it, it should be examined. Coatings will generally require reapplication(s) during the life of the roof system; frequency depends on many factors, such as the local environment, ponding water, roof slope, and the type and quality of the original coating. Recoating work is typically the responsibility of the building owner and should be performed by a professional roofing contractor. The inspector should also pick up debris i.e. Paper, bottles, broken glass, tree limbs and vegetation and dispose of it properly. Likewise, he/she should also remove obstructions, such as leaves or dirt from roof drains and/or scuppers, ensuring that they flow freely. Clogged drains and/or scuppers can lead to excessive ponding on the roof, which frequently causes leaks or even roof collapse. However, caution should be exercised when clearing debris from drains because significant suction can be created by draining water; it can quickly suck tools into a drain.

Roof inspection may uncover the need for repairs in a variety of categories, including spot patches, emergency repairs, general repairs and permanent repairs. If membrane repairs are needed, they should be performed by professional roofing contractor specifically authorized by the membrane manufacturer. Not doing so could also void the warranty. And in keeping

## BEST FY2019-20 GRANT APPLICATION SUMMARIES

with typical warranty requirements, the manufacturer of a warranted roof system should be notified promptly about the need for repair(s) and the procedures to be followed. Typically manufacture warranties require written notification to the warranty department within thirty (30) days of discovery of any leak. The District policy is to report leaks discovered immediately by phone followed up by email to the warranty department with written notification by mail as required by the manufacturer's warranty. All procedures should be documented in order to create an informative history of a roof system's performance. Future roofing projects will require the Contractor to deliver a care and maintenance manual for his products. An in-service Training program will be required to acquaint District personnel with methods of procedure for temporary patches of damaged or defective areas. Specialized tools and small quantities of peel and stick membrane material will be a contract requirement.

Maintenance will control access to the roofs. Outside contractors hired to service rooftop equipment must coordinate access through the Maintenance Department. Each contractor will be required to provide certificates of insurance naming the District as additional insured. Contractors will be informed of their responsibility to protect the Districts roofs. Failure to follow District guidelines in this matter will result in an insurance claim filed directly with the contractor's insurance company. Contractors with a pattern of disregard of our policy will be barred from future work.

Building Principals will be responsible to restrict access to the roof by staff and students. Any rooftop equipment or cabling need to support the educational needs of students or staff must be performed by the Maintenance Department or an approved contractor. Lost toys or car keys or other valuables will be retrieved by the Maintenance Department, without exception.

The District will adhere to this policy. February 22, 2017 Respectfully submitted,  
Rim Watson, Superintendent of Schools

**Describe the condition of the public school facility at the time it was purchased or constructed and, if the facility was not new or was not adequate as a public school facility at that time, provide the rationale for purchasing the facility or constructing it in the manner in which you did:**

The High School was built in 1948 and has no apparent defects and is visually structurally sound. Additions in 1982 surrounded the 1948 structure and addition to the east of the 1982 structure was added in 2002 as an entry vestibule and gymnasium. All areas viewed appear structurally sound. Interior moisture and mold issues are prevalent due to excessing roof leaks.

**Describe the history of capital improvements made to the facility by the district/charter school in order to make it suitable for students. Include a list of all capital projects undertaken in the affected facility in the last 3 years:**

2018 High School South Sectional Area Roof Replacement

**What options outside of the BEST grant has the applicant investigated or leveraged to address the school's facility needs?**

The district commits a certain amount of funds each year for maintenance needs. These funds are redirected from academic needs and staff salaries. Even the amount committed does not allow for replacement of even one section of the high school roof. We do not have a grant funding source available

**How do you budget annually to address capital outlay needs in your district/charter? Include \$/FTE for the prior fiscal year:**

The district puts an amount into Capital Outlay each year which allows addressing of known district needs. Last year we emphasized replacing section one of our high school roof and the middle school roof the year before. With these expenditures we added safety initiatives in order to 'harden our schools' and the purchase of a needed full-size bus (purchased used). These expenditures have been approximately \$300,000 each of the last two years which equates to \$850 per student.

**If relevant to your project, what are your current annualized utility costs, and what amount of reduction in such costs do you expect to result from this project?**

Current costs are \$12,000/month for utilities.

Project will add additional insulation reducing heating/cooling expense. The District should see lower cost in future years as compared to previous.

<b>Grant Request:</b>	\$289,332.96	<b>CDE Minimum Match %:</b>	44%
<b>Applicant Match:</b>	\$227,333.04	<b>Actual Match % Provided:</b>	44%
<b>Total Project Cost:</b>	\$516,666.00	<b>Is a Waiver Letter Required?</b>	No

## BEST FY2019-20 GRANT APPLICATION SUMMARIES

<b>Affected Sq Ft:</b>	16,200	<b>Contingent on a 2019 Bond?</b>	No
<b>Affected Pupils:</b>	110	<b>Source of Match:</b>	Capital Reserve Funds
<b>Cost Per Sq Ft:</b>	\$31.89		
<b>Soft Costs Per Sq Ft:</b>	\$1.91	<b>Escalation %:</b>	10%
<b>Hard Costs Per Sq Ft:</b>	\$29.98	<b>Construction Contingency %:</b>	10%
<b>Cost Per Pupil:</b>	\$4,697	<b>Owner Contingency %:</b>	0%
<b>Gross Sq Ft Per Pupil:</b>	565	<b>Historical Register?</b>	No
<b>Is a Master Plan Complete?</b>	No	<b>Adverse Historical Effect?</b>	No
<b>Who owns the Facility?</b>	District	<b>Does this Qualify for HPCP?</b>	No
<b>If owned by a third party, explanation of ownership:</b>			
<b>If match is financed, explanation of financing terms:</b>			

### Financial Data (School District and BOCES Applicants)

<b>District FTE Count:</b>	297	<b>Bonded Debt Approved:</b>	
<b>Assessed Valuation:</b>	\$85,774,490	<b>Year(s) Bond Approved:</b>	
<b>PPAV:</b>	\$288,803	<b>Bonded Debt Failed:</b>	
<b>Unreserved Gen Fund 17-18:</b>	\$924,133	<b>Year(s) Bond Failed:</b>	
<b>Median Household Income:</b>	\$50,615	<b>Outstanding Bonded Debt:</b>	\$3,470,000
<b>Free Reduced Lunch %:</b>	40%	<b>Total Bond Capacity:</b>	\$17,154,898
<b>Existing Bond Mill Levy:</b>	8.394	<b>Bond Capacity Remaining:</b>	\$13,684,898
<b>3yr Avg OMFAC/Pupil:</b>	\$2,157.79		

● **Facilities Impacted by this Grant Application** ●

**GREELEY 6 - Scott ES Roof Replacement - Scott ES - 1963**

<b>District:</b>	Auditor - Greeley 6
<b>School Name:</b>	Scott ES
<b>Address:</b>	3000 13TH STREET
<b>City:</b>	GREELEY
<b>Gross Area (SF):</b>	57,978
<b>Number of Buildings:</b>	2
<b>Replacement Value:</b>	\$14,890,826
<b>Condition Budget:</b>	\$7,155,228
<b>Total FCI:</b>	0.48
<b>Adequacy Index:</b>	0.23



**Condition Budget Summary**

System Group	Replacement Cost	Requirement Cost	SCI
Electrical System	\$2,292,109	\$1,597,507	0.70
Equipment and Furnishings	\$246,179	\$223,209	0.91
Exterior Enclosure	\$1,546,917	\$1,210,559	0.78
Fire Protection	\$25,527	\$468,224	18.34
Furnishings	\$3,110	\$0	0.00
HVAC System	\$3,565,457	\$431,865	0.12
Interior Construction and Conveyance	\$2,413,875	\$1,575,829	0.65
Plumbing System	\$728,465	\$838,760	1.15
Site	\$1,285,085	\$997,038	0.78
Special Construction	\$195,249	\$244,061	1.25
Structure	\$2,588,854	\$7,644	0.00
<b>Overall - Total</b>	<b>\$14,890,826</b>	<b>\$7,594,696</b>	<b>0.51</b>



# BEST FY2019-20 GRANT APPLICATION SUMMARIES

**Applicant Name:** GREELEY 6

**County:** Weld

**Project Title:** Scott ES Roof Replacement

**Applicant Previous BEST Grant(s):** 4

**Has this project been previously applied for and not funded?** No

**If Yes, please explain why:**

## Project Type:

- |   |   |   |  |
|---|---|---|--|
| <input type="checkbox"/> New School         | <input checked="" type="checkbox"/> Roof    | <input type="checkbox"/> Asbestos Abatement | <input type="checkbox"/> Water Systems     |
| <input type="checkbox"/> School Replacement | <input type="checkbox"/> Fire Alarm         | <input type="checkbox"/> Lighting           | <input type="checkbox"/> Facility Sitework |
| <input type="checkbox"/> Renovation         | <input type="checkbox"/> Boiler Replacement | <input type="checkbox"/> Electrical Upgrade | <input type="checkbox"/> Land Purchase     |
| <input type="checkbox"/> Addition           | <input type="checkbox"/> HVAC               | <input type="checkbox"/> Energy Savings     | <input type="checkbox"/> Technology        |
| <input type="checkbox"/> Security           | <input type="checkbox"/> ADA                | <input type="checkbox"/> Window Replacement | <input type="checkbox"/> Other             |

## General Information About the District / School, and Information About the Affected Facilities:

Weld County School District 6 (the District) is a political subdivision of the State of Colorado and a corporate body organized in 1870. The District currently owns approximately 450 acres of land, and includes 36 schools and support sites. Our 36 schools and support facilities total 2.1 million square feet of building space and range in age of establishment from 1910-2015. The District boundaries have been redrawn numerous times over the last 135 years, the last redistricting occurring in 1964, enlarging District 6 to its current 75 square miles. The District is an independent school District that is a public corporation duly organized and existing under the constitution and laws of the State of Colorado.

Approximately 23,000 students attend school at the District's 32 schools and educational programs. The educational makeup of Weld County School District 6 includes eleven traditional elementary schools (K-5), five K-8 schools, four middle schools, one alternative middle school, three traditional high schools, two alternative high schools, one high school of innovation, and five charter schools.

Weld County School District 6 serves a diverse and growing population of minority and immigrant students. The school district provides 69.69% of their student body with a free and reduced lunch, excluding charter schools. Scott Elementary alone serves 82.72% of their student body with a free and reduced lunch. The Scott Elementary roof has been identified as having emergent roofing needs significant enough to require immediate replacement.

## Deficiencies Associated with this Project:

The majority of the roofing on the school is over 30 years old and is well past its useful life and there are ongoing leaks throughout the school which is negatively affecting the learning environment. The EPDM flashings are shrinking and pulling away from the walls and mechanical curbs in multiple locations. There are holes in the flashings in several locations due to the shrinking membrane. On the oldest section of the school, there is very little slope in the existing roofing system which results in several areas that water can pond. When EPDM roofs show these signs of deterioration, shrinking, and ponding repairing the roofs is temporary at best and requires ongoing maintenance. This ongoing maintenance nuisance strains the school district's resources that are already stretched thin. Furthermore, on the old section of the school, there is an architectural detail at the perimeter of the roof that causes water to drain on walking surfaces. In the winter this creates a hazard for students, parents and school staff. Finally, the roof access is on the outside of the building where it is easily accessed by trespassers despite efforts made by the school district to deter this unlawful activity. Excessive leaking has caused staining on interior brick and other solid surfaces. Water has infiltrated light fixtures and other electrical components creating a safety concern. Moist areas are providing an environment conducive to the growth of mold and possible indoor air quality issues.

## Proposed Solution to Address the Deficiencies Stated Above:

The roofs on the school will be replaced with a fully adhered EPDM system with new insulation, tapered insulation, roof accessories and sheet metal, the existing roof ballast will be re-purposed. The school district prefers this type of system for its longevity, moderate expense and ease of maintenance. The troublesome edge detail described above was redesigned to install a low wall around the perimeter and tapered insulation installed to redirect water to the roof drains on the interior of

# BEST FY2019-20 GRANT APPLICATION SUMMARIES

the roof. Stained and damaged drywall, ceiling tiles, and bricks will be repaired or replaced by district personnel. A new interior ladder and roof hatch will be installed and, the insecure exterior access ladder will be removed. The International Building Code, The State of Colorado and The Colorado Department of Education Guidelines were adhered to in the design of the new roofing system.

## How Urgent is this Project?

The roofing system is well past its useful life, no longer serviceable and should be replaced as soon as possible. Apart from safety concerns, continued leaks can cause damage to the school's structure, interior and educational materials. Furthermore, continued leaking can be a distraction to the learning environment as school resources have to be refocused to managing the ongoing leaks. These roof leaks have put the IT infrastructure in harm's way. Plastic barriers are used to funnel water from the ceiling and into collection buckets in order to keep water away from the server. Additionally, there are two roofing systems (EPDM over built-up roof) which creates challenges maintaining the roof.

**Does this Project Conform with the Public School Facility Construction Guidelines?** Yes

**If not, provide an explanation for the use of any standard not consistent with the guidelines:**

## How Does the Applicant Plan to Maintain the Project if it is Awarded?

At the project's completion, selected School District personnel will be trained by the roofing contractor to repair simple roof repairs. Large roof repairs will be conducted by a competent roofing contractor. Additionally, School District 6 has a roofer on staff that has 35 years of roofing experience that is well versed on all types of roofing systems. The roof will be methodically inspected yearly to determine deficiencies that need to be repaired. At least two times a year School District personnel will access the roof to remove debris from drains, drainage scuppers and other areas on the roof.

During the 2017-18 school year, approximately 12% of the general fund mill levy override funds were allocated to deferred maintenance projects, specifically roof partial or full replacements at Madison, Meeker and Jackson Elementary Schools and Franklin Middle School. In the 2018-2019 school year, approximately 9% of the mill levy override funds have been allocated to deferred maintenance projects. In addition to the General Fund support, the Capital Projects fund has supported over \$12 million on district facilities in the past three years. At the end of the 2017-18 fiscal year, there was over \$4.2 million balance in the Capital Projects Fund supporting ongoing deferred maintenance projects. This available balance is just a fraction of the \$350 million in deferred maintenance needs district wide. Nevertheless, this money over time has been set aside to address the growing list of significant maintenance repairs, health and safety concerns, and code compliance issues identified by facility assessments. When the project is completed, the district will continue to transfer a minimum of \$3 million of the General Fund annually for the continued preventative maintenance of systems and infrastructure for the facilities. Weld County School District 6 is currently in the middle of a full Facility Master Plan study and expects to place a bond issue on the November 2019 ballot to support deferred maintenance needs.

The district would expect to see a savings in repair and maintenance costs from these roof replacements. These savings would, in turn, help to ensure the sustainability of these funds for a preventative maintenance plan and will be reflected in the district's maintenance department budget as well as the Capital Projects Fund budget.

**Describe the condition of the public school facility at the time it was purchased or constructed and, if the facility was not new or was not adequate as a public school facility at that time, provide the rationale for purchasing the facility or constructing it in the manner in which you did:**

Weld County School District 6 constructed the building in the 1960s and has owned it since. Several additions have been built over the decades in an attempt to keep pace with Greeley's growing population.

**Describe the history of capital improvements made to the facility by the district/charter school in order to make it suitable for students. Include a list of all capital projects undertaken in the affected facility in the last 3 years:**

The original building was built in 1963. The following capital improvements were made:

- Added two wet portables in 1969.
- Added SE wing in 1988.
- Remodel in 2003 (HVAC upgrades, new kitchen, classroom enclosures)
- Updated BAS in 2018.

# BEST FY2019-20 GRANT APPLICATION SUMMARIES

## What options outside of the BEST grant has the applicant investigated or leveraged to address the school's facility needs?

District Capital Project Funds are carefully managed and maintained to cover emergency maintenance needs, operations, facility upgrades, and progress towards the district's master plan goals. Because the Scott Elementary roof has exceeded its useful life, our normal budgetary operations cannot sustain the maintenance needed to continue to repair the roof. The district was successful in passing a Mill Levy Override in November 2017. Because of the successful campaign, Weld County School District 6 is able to commit the 55% required match for the BEST grant application and not submit a waiver.

## How do you budget annually to address capital outlay needs in your district/charter? Include \$/FTE for the prior fiscal year:

Weld County School District 6 budgeted about \$200.00 per student for the 2018-19 fiscal year to maintain and support deferred maintenance which allocated to \$4.5 million. This budget was developed to cover the most egregious of the identified maintenance needs.

The budget did not cover the costs of systems that have emergency breakdowns during the school year. The district has repeatedly relied upon their dwindling cash reserves for these emergency purposes. Over the years, the school district has been forced into deferring the majority of costs associated with system replacement in order to focus on the academics of the students.

## If relevant to your project, what are your current annualized utility costs, and what amount of reduction in such costs do you expect to result from this project?

N/A

<b>Grant Request:</b>	\$597,001.05	<b>CDE Minimum Match %:</b>	55%
<b>Applicant Match:</b>	\$729,667.95	<b>Actual Match % Provided:</b>	55%
<b>Total Project Cost:</b>	\$1,326,669.00	<b>Is a Waiver Letter Required?</b>	No
<b>Affected Sq Ft:</b>	60,093	<b>Contingent on a 2019 Bond?</b>	No
<b>Affected Pupils:</b>	567	<b>Source of Match:</b>	General Fund's Mill Levy Override dollars
<b>Cost Per Sq Ft:</b>	\$22.08		
<b>Soft Costs Per Sq Ft:</b>	\$0.86	<b>Escalation %:</b>	5%
<b>Hard Costs Per Sq Ft:</b>	\$21.22	<b>Construction Contingency %:</b>	8%
<b>Cost Per Pupil:</b>	\$2,340	<b>Owner Contingency %:</b>	1%
<b>Gross Sq Ft Per Pupil:</b>	106	<b>Historical Register?</b>	No
<b>Is a Master Plan Complete?</b>	Yes	<b>Adverse Historical Effect?</b>	No
<b>Who owns the Facility?</b>	District	<b>Does this Qualify for HPCP?</b>	No

If owned by a third party, explanation of ownership:

If match is financed, explanation of financing terms:

### Financial Data (School District and BOCES Applicants)

<b>District FTE Count:</b>	21,303	<b>Bonded Debt Approved:</b>	\$8,200,000
<b>Assessed Valuation:</b>	\$1,681,585,612	<b>Year(s) Bond Approved:</b>	12
<b>PPAV:</b>	\$78,937	<b>Bonded Debt Failed:</b>	
<b>Unreserved Gen Fund 17-18:</b>	\$23,327,885	<b>Year(s) Bond Failed:</b>	
<b>Median Household Income:</b>	\$52,010	<b>Outstanding Bonded Debt:</b>	\$51,082,559

# BEST FY2019-20 GRANT APPLICATION SUMMARIES

<b>Free Reduced Lunch %:</b>	65%	<b>Total Bond Capacity:</b>	\$336,317,122
<b>Existing Bond Mill Levy:</b>	8.85	<b>Bond Capacity Remaining:</b>	\$285,234,563
<b>3yr Avg OMFAC/Pupil:</b>	\$1,558.44		

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● **Facilities Impacted by this Grant Application** ●

**WESTMINSTER PUBLIC SCHOOLS - ECC Roof Replacement - Gregory Hill Preschool - 1961**

<b>District:</b>	Auditor - Westminster Public Schools
<b>School Name:</b>	Gregory Hill Preschool
<b>Address:</b>	8030 IRVING STREET
<b>City:</b>	WESTMINSTER
<b>Gross Area (SF):</b>	23,310
<b>Number of Buildings:</b>	1
<b>Replacement Value:</b>	\$8,059,350
<b>Condition Budget:</b>	\$4,096,751
<b>Total FCI:</b>	0.51
<b>Adequacy Index:</b>	0.23



**Condition Budget Summary**

System Group	Replacement Cost	Requirement Cost	SCI
Electrical System	\$853,503	\$852,163	1.00
Equipment and Furnishings	\$170,747	\$187,454	1.10
Exterior Enclosure	\$979,186	\$746,313	0.76
Fire Protection	\$1,105	\$244,196	221.07
HVAC System	\$1,559,559	\$909,049	0.58
Interior Construction and Conveyance	\$1,796,966	\$712,686	0.40
Plumbing System	\$329,628	\$311,511	0.95
Site	\$1,143,076	\$409,078	0.36
Structure	\$1,225,580	\$0	0.00
<b>Overall - Total</b>	<b>\$8,059,350</b>	<b>\$4,372,450</b>	<b>0.54</b>

# BEST FY2019-20 GRANT APPLICATION SUMMARIES

**Applicant Name:** WESTMINSTER PUBLIC SCHOOLS

**County:** Adams

**Project Title:** ECC Roof Replacement

**Applicant Previous BEST Grant(s):** 9

**Has this project been previously applied for and not funded?** No

**If Yes, please explain why:** N/A

## Project Type:

- |   |   |   |  |
|---|---|---|--|
| <input type="checkbox"/> New School         | <input checked="" type="checkbox"/> Roof    | <input type="checkbox"/> Asbestos Abatement | <input type="checkbox"/> Water Systems     |
| <input type="checkbox"/> School Replacement | <input type="checkbox"/> Fire Alarm         | <input type="checkbox"/> Lighting           | <input type="checkbox"/> Facility Sitework |
| <input type="checkbox"/> Renovation         | <input type="checkbox"/> Boiler Replacement | <input type="checkbox"/> Electrical Upgrade | <input type="checkbox"/> Land Purchase     |
| <input type="checkbox"/> Addition           | <input type="checkbox"/> HVAC               | <input type="checkbox"/> Energy Savings     | <input type="checkbox"/> Technology        |
| <input type="checkbox"/> Security           | <input type="checkbox"/> ADA                | <input type="checkbox"/> Window Replacement | <input type="checkbox"/> Other             |

## General Information About the District / School, and Information About the Affected Facilities:

The Early Childhood Center is home to approximately 293 students. This school is included in the district's master plan. Westminster Public Schools cut 3.2 million dollars in the 14/15 budget cycle, funding for both Operating and Capital Reserve budgets were reduced accordingly. Operating budgets have been cut approximately fifty percent since 2004. Our last successful bond election was in 2006 for \$98 million which was the maximum allowed. Due to these restrictions we have not had the opportunity to fund major projects such as roof replacement for many years. In November of 2013 and 2014 the district had an unsuccessful Mill Levy and Bond Election. It was decided by the School Board to not pursue another bond election since then. With the new code requirements from the State of Colorado Division of Fire Safety IEBC 707.3.2 will require us to complete a structural analysis of the roof and any structural repairs as identified. Cost for these repairs will be identified in our grant requests as a separate line item as an alternate price.

## Deficiencies Associated with this Project:

The system was installed in 1980. It has a 20 year service life, which expired in 2000. Per the CDE school assessment report: The system is recommended to be replaced due to probable increased condition budget needs, the potential failure of its components or in order to meet the performance guidelines for this system. The current system has a roof slope of 1/4" or greater. The deck varies throughout the school to include gypsum and tectum. The insulation is expanded polystyrene and perlite insulation. The roofing system is a ballasted EPDM membrane. This roof continues to leak.

## Proposed Solution to Address the Deficiencies Stated Above:

Replace the roof of the main building with a new EPDM fully adhered roofing system and structural upgrades to include:

- Rough carpentry at curbs and perimeter
- General Conditions, Insurance
- 245 SQ EPDM Membrane and Flashings
- Setup
- Tear off/Misc. Labor
- Low Rise and Bonding Adhesive
- Tapered Insulation System
- 6" Isocyanurate Insulation
- 1/2" DensDeck Cover Board
- Pavers and Walkpads
- Roof Coating
- Sheet Metal Flashing
- Painting of misc. surfaces impacted from the project
- New overflow scuppers as required
- 30 year warranty. Cost is included in the project
- All structural repairs according to the approved drawings

# BEST FY2019-20 GRANT APPLICATION SUMMARIES

Project to be overseen by Roofing Consultant/Owners' Representative to include:

- Schematic design/design development
- Construction documents
- Construction administration
- Assist with Pre-Qualifying contractors
- Assist with competitive bid process
- Assist with bid evaluation
- Assist with "punch list" and warrant issues

## How Urgent is this Project?

The system is deemed as somewhat urgent because the roof will continue to deteriorate causing more and more leaks throughout the building. Each year we wait to replace it, the situation will only get worse. An adequate roof provides proper protection of the district's fixed assets and provides improved space conditions for all learning spaces within the building.

**Does this Project Conform with the Public School Facility Construction Guidelines?** Yes

**If not, provide an explanation for the use of any standard not consistent with the guidelines:**

## How Does the Applicant Plan to Maintain the Project if it is Awarded?

The district will require a 30 year warranty on the roof, and requires the contractor to repair any problems during the warranty period. The roof will be inspected quarterly. The district has allocated \$50,000 to roof repairs and preventive maintenance annually, which it uses to contract out roof repairs as needed for all its roofs. There are 20 elementary, middle, and high school buildings with 1 Early Childhood Center. Of these, 16 have roofs under warranty and one BEST Grant in progress. One roof grant is being applied for this BEST grant cycle. That would leave six older roofs.

The district has the following roof replacement plan in place, pending funding:

- 2021- FM Day
- 2022- Skyline Vista
- 2023- Colorado STEM Academy
- 2024- Sherrelwood Elementary
- 2025-Auxiliary Services, Purchasing and South Annex
- 2026-Shaw Primary and Orchard Court

Unfortunately, most of these roofs were replaced in 1980 and 1981. That made their useful life due around the same time. Our current long-range plan will allow for better budgeting and planning to replace roofs starting around 2025 and beyond.

**Describe the condition of the public school facility at the time it was purchased or constructed and, if the facility was not new or was not adequate as a public school facility at that time, provide the rationale for purchasing the facility or constructing it in the manner in which you did:**

This is a school facility that was built new for the district in 1960. This project is for replacement of the roof which is leaking and beyond all warranties.

The structure is gypsum deck

There are no additional visible issues with the integrity of the structure. Except for those identified in the structural analysis from the Engineering Firm Martin/Martin and identified upgrades in the drawings to meet the 707.3.2 code requirements.

**Describe the history of capital improvements made to the facility by the district/charter school in order to make it suitable for students. Include a list of all capital projects undertaken in the affected facility in the last 3 years:**

N/A

**What options outside of the BEST grant has the applicant investigated or leveraged to address the school's facility needs?**

None

**How do you budget annually to address capital outlay needs in your district/charter? Include \$/FTE for the prior fiscal year:**

Westminster Public Schools capital Funding budget is at \$204.00 per student. this budget is used to provide funding to all our Capital Project needs that include but are not limited to Roofing, HVAC upgrades, Life Safety Projects, ie: Fire Alarms,

## BEST FY2019-20 GRANT APPLICATION SUMMARIES

Intercoms, etc. Electrical upgrades and ADA Accessible projects to name a few.

**If relevant to your project, what are your current annualized utility costs, and what amount of reduction in such costs do you expect to result from this project?**

N/A

<b>Grant Request:</b>	\$930,849.15	<b>CDE Minimum Match %:</b>	45%
<b>Applicant Match:</b>	\$761,603.85	<b>Actual Match % Provided:</b>	45%
<b>Total Project Cost:</b>	\$1,692,453.00	<b>Is a Waiver Letter Required?</b>	No
<b>Affected Sq Ft:</b>	23,310	<b>Contingent on a 2019 Bond?</b>	No
<b>Affected Pupils:</b>	293	<b>Source of Match:</b>	Restricted Funds
<b>Cost Per Sq Ft:</b>	\$72.61		
<b>Soft Costs Per Sq Ft:</b>	\$2.53	<b>Escalation %:</b>	20%
<b>Hard Costs Per Sq Ft:</b>	\$70.08	<b>Construction Contingency %:</b>	5%
<b>Cost Per Pupil:</b>	\$5,776	<b>Owner Contingency %:</b>	5%
<b>Gross Sq Ft Per Pupil:</b>	80	<b>Historical Register?</b>	No
<b>Is a Master Plan Complete?</b>	Yes	<b>Adverse Historical Effect?</b>	No
<b>Who owns the Facility?</b>	District	<b>Does this Qualify for HPCP?</b>	No

**If owned by a third party, explanation of ownership:**

**If match is financed, explanation of financing terms:**

### Financial Data (School District and BOCES Applicants)

<b>District FTE Count:</b>	8,294	<b>Bonded Debt Approved:</b>	
<b>Assessed Valuation:</b>	\$682,441,830	<b>Year(s) Bond Approved:</b>	
<b>PPAV:</b>	\$82,286	<b>Bonded Debt Failed:</b>	\$20,000,000
<b>Unreserved Gen Fund 17-18:</b>	\$7,956,664	<b>Year(s) Bond Failed:</b>	14
<b>Median Household Income:</b>	\$53,290	<b>Outstanding Bonded Debt:</b>	\$70,430,000
<b>Free Reduced Lunch %:</b>	82%	<b>Total Bond Capacity:</b>	\$136,488,366
<b>Existing Bond Mill Levy:</b>	12.533	<b>Bond Capacity Remaining:</b>	\$66,058,366
<b>3yr Avg OMFAC/Pupil:</b>	\$1,514.20		



● **Facilities Impacted by this Grant Application** ●

**LEWIS-PALMER 38 - Prairie Winds ES Roof Replacement - Prairie Winds ES - 2001**

<b>District:</b>	Auditor - Lewis-Palmer 38
<b>School Name:</b>	Prairie Winds ES
<b>Address:</b>	790 King's Deer Pt. E.
<b>City:</b>	Monument
<b>Gross Area (SF):</b>	53,711
<b>Number of Buildings:</b>	1
<b>Replacement Value:</b>	\$16,075,270
<b>Condition Budget:</b>	\$5,003,484
<b>Total FCI:</b>	0.31
<b>Adequacy Index:</b>	0.10



**Condition Budget Summary**

System Group	Replacement Cost	Requirement Cost	SCI
Electrical System	\$2,144,859	\$1,391,406	0.65
Equipment and Furnishings	\$629,742	\$87,611	0.14
Exterior Enclosure	\$1,530,267	\$1,022,370	0.67
Fire Protection	\$540,863	\$12,558	0.02
HVAC System	\$4,596,330	\$552,478	0.12
Interior Construction and Conveyance	\$2,575,503	\$1,383,218	0.54
Plumbing System	\$776,664	\$42,118	0.05
Site	\$1,614,701	\$511,726	0.32
Structure	\$1,666,343	\$0	0.00
<b>Overall - Total</b>	<b>\$16,075,270</b>	<b>\$5,003,485</b>	<b>0.31</b>

# BEST FY2019-20 GRANT APPLICATION SUMMARIES

**Applicant Name:** LEWIS-PALMER 38

**County:** El Paso

**Project Title:** Prairie Winds ES Roof Replacement

**Applicant Previous BEST Grant(s):** 4

**Has this project been previously applied for and not funded?** No

**If Yes, please explain why:**

## Project Type:

- |   |   |   |  |
|---|---|---|--|
| <input type="checkbox"/> New School         | <input checked="" type="checkbox"/> Roof    | <input type="checkbox"/> Asbestos Abatement | <input type="checkbox"/> Water Systems     |
| <input type="checkbox"/> School Replacement | <input type="checkbox"/> Fire Alarm         | <input type="checkbox"/> Lighting           | <input type="checkbox"/> Facility Sitework |
| <input type="checkbox"/> Renovation         | <input type="checkbox"/> Boiler Replacement | <input type="checkbox"/> Electrical Upgrade | <input type="checkbox"/> Land Purchase     |
| <input type="checkbox"/> Addition           | <input type="checkbox"/> HVAC               | <input type="checkbox"/> Energy Savings     | <input type="checkbox"/> Technology        |
| <input type="checkbox"/> Security           | <input type="checkbox"/> ADA                | <input type="checkbox"/> Window Replacement | <input type="checkbox"/> Other             |

## General Information About the District / School, and Information About the Affected Facilities:

PWES is located in the town of Monument, Colorado, in Lewis Palmer School District #38. PWES serves approximately 376 students in grades K through 6. PWES has a reputation for high academic standards and achievement. The school has received the John Irwin School of Excellence award each year it has been awarded since 2008. Programs offered are music, PE, art, band, choir, SMART Lab, KKids/Student Council, and GE. Special education programs include two center-based programs for children with autism ranging from mild to severe. PWES practices Responsive Classroom and we are a Trauma-Informed school. We provide after school enrichment opportunities as well as partnering with the YMCA to provide onsite before and after school care.

Additionally, the YMCA and various community groups, including 4H, boy and girl scouts, and the Kings Deer HOA, use PWES during non-school hours for meetings, youth sports, and other activities. PWES is an anchor to its students, families, and surrounding community members. The Wounded Warriors use our facility as a starting point for their local WW Bikeride event.

The district uses two tracking systems called Maintenance Direct and School Dude. Both software programs remind and set schedules for required maintenance. In addition work orders can be submitted and tracked by level of priority from low to urgent. All pertinent facility specs are stored within the Maintenance Direct system. School Dude software tracking is monitored at the district level as well as within the building by the PWES building engineer.

PWES is a vital facility within LPSD#38 and will be used as an elementary school indefinitely.

## Deficiencies Associated with this Project:

The roofing system at Prairie Winds Elementary is original to the building which was constructed in 2000. There are no warranties in place and the roof is at the end of the expected life. There are three separate roofing systems. There is a cement tile section over the slanted portions of the roof, a ballasted EPDM section over flat areas of the roof and a Bitumen section which is covered with a metal outer system on the higher elevated sections of the roof.

The roof leaks severely under the tile and EPDM sections. The cement tile section has innumerable leaks. There are cracked tiles over every section of the roof. There are upwards of 200 leaks throughout the building. Leaks are present in every grade level and classroom pod covered by the tile roof. There are leaks in the front office, teacher's lounge, conference room, technology lab, computer classrooms and the STAR Lab. The principal's office has very strong smell of mildew. The smell permeates the office and is spreading to the surrounding hallway.

The ballasted EPDM flat roof section is leaking significantly around the perimeter, at seams, joints and at transitions. The EPDM is buckled and is being pulled which creates the gaps and open seams. The flashing is open. Water comes into the building through the gaps and runs through the ceiling tiles and down the walls. Hallways, doorways and changes in elevation

## BEST FY2019-20 GRANT APPLICATION SUMMARIES

with compromised interior transitions allow water to come in. In many spots water is dripping down through electrical fixtures and hard wired computers and technology equipment.

The Bitumen section has questionable perimeters. There is evidence of dripping and pooling around the perimeters but, this section does not have chronic leaks. It is of the belief that this section may last a few more years but, will not protect the building long term.

The entire roof has been maintained and repaired regularly however, the leaks are progressing at such a rate that the patches and repairs are no longer sufficient. The chronic presence of water, wet ceiling tiles and moist air is not a suitable environment for the students or the staff. Additionally, the chronic leaks are compromising the building and are getting more significant with time. The metal decking is at risk structurally, should the cement tile section not be replaced prior to another winter season.

The recommendation from LPSD-38, independent roofing contractors and consultants that roof replacement is imperative to protect the integrity of the building. The section that is most imperative concerning timing, is the cement tile section. That section of the roof should be replaced first and as soon as possible followed by the EPDM section.

Number and location of compromised areas:

Kindergarten: 12 water spots/wet tiles

1st grade: 61 water spots/wet tiles

2nd grade: 21 water spots wet/tiles

3rd grade: 2 water spots/wet tiles

3rd grade common area: 2 water spots/wet tiles

4th grade: 54 water spot wet/tiles

5th grade: 79 water spots/wet tiles

6th grade: 15 water spots/wet tile

Conference room: 3 water spots/wet tiles

Intervention room: 18 water spots/wet tiles

Main office: 4 water spots/wet tiles

Computer classroom: 34 water spots/wet tiles

Technology lab: 11 water spots/wet tiles

Special Ed: 18 water spots wet/tiles

Star lab: 3 water spots/wet tiles

Teachers' lounge: 4 water spots/wet tiles

### **Proposed Solution to Address the Deficiencies Stated Above:**

The recommended solution for PWES is a roof replacement. Roof is broken down into sections. Concrete tile roof sections and ballasted EPDM roof sections. The solution is to remove all current systems down to the decking and replace with the below recommended roofing system. Solution was determined by an independent roof consultant. See detailed solution below.

Roof Sections A through F: Concrete Tile Roof Sections.

- Remove existing concrete tile roof down to the cover board.
- Replace/Add insulation and replace cover board as needed due to deterioration and to meet code requirements.
- Install new ice and water shield.
- Install new asphalt-based shingle system (color to be selected by owner).
- Follow all engineering plans, architectural renderings and procure all required permits.

Roof Section G, H and I: Ballasted EPDM Roof Sections.

- Remove existing ballast and save for reuse assuring ballast is separated by size during removal.
- Remove existing EPDM System down to the deck and replace with new Ballasted EDPM roof system.
- The new ballasted system will include polyisocyanurate roof insulation to provide a minimum of R30 insulation value.
- The new ballasted system will include a new 5/8" protection board installed over the polyisocyanurate roof insulation assembly.

## BEST FY2019-20 GRANT APPLICATION SUMMARIES

- Follow all engineering plans, architectural renderings and procure all required permits.

Roof should be replaced at the earliest juncture to protect the facility from further leaking and damage. The concrete tile roof section should be done first and as soon as possible. The integrity of the metal decking is at risk and may result in structural damage. This should be followed by EPDM section.

### How Urgent is this Project?

The PWES roof is failing and is in need of replacement as soon as possible in order to protect the facility. The interior and all contents are at risk of severe water damage. The roof is at the end of its useful life and no warranties are in place.

Repairs are no longer sufficient, and the LPSD#38 maintenance department is not able to keep up. Additionally, the necessary repairs are beyond the scope of our maintenance department and must be contracted out, increasing the costs and manpower.

Even with repairs, new leaks appear on a regular basis. The leaks are severe in every section of the building with the exception of the gymnasium. Water comes into the building throughout cement tile sections as well as the ballasted EPDM sections.

There are over 100 cracked tiles in one section of the roof alone. The cracks permeate over the entire tile section. The transitions and seams over the EPDM section leak. Water drips through the seams and travels down the ceiling and walls. The leaks increase and worsen with each season.

Ceiling tiles need to be replaced constantly as they become saturated. Moist tiles in classroom cause water to drip down the walls.

Air quality in the building is affected. Some rooms have a musty mildew smell that is present constantly and seems to worsen each season.

Carpeting, tile, dry wall, paint, electrical and hardwired technology are all at risk for serious damage as leaks continue. The expense to replace damaged equipment will be create an even larger problem if the facility is not protected immediately.

The overall concern is catastrophic failure in any section of the building. The number of leaks indicate that a ceiling section could fail and that larger quantities of water could enter the facility. Our severe weather patterns cause major storms with large amounts of snow and moisture which contribute greatly to the risk. We have severe hails storms which pummel roof systems. Should catastrophic failure take place, we do not have the ability to relocate students within the building or to another facility.

The LPSD #38 maintenance and facility department along with an independent roof consultant recommend roof replacement at the earliest juncture to avoid any catastrophic loss or failure. The concrete tile roof section should be done first and as soon as possible. The integrity of the metal decking is at risk and may result in structural damage. This should be followed by EPDM section.

Number and location of compromised areas:

Kindergarten: 12 water spots/wet tiles

1st grade: 61 water spots/wet tiles

2nd grade: 21 water spots wet/tiles

3rd grade: 2 water spots/wet tiles

3rd grade common area: 2 water spots/wet tiles

4th grade: 54 water spot wet/tiles

5th grade: 79 water spots/wet tiles

6th grade: 15 water spots/wet tile

Conference room: 3 water spots/wet tiles

Intervention room: 18 water spots/wet tiles

Main office: 4 water spots/wet tiles

Computer classroom: 34 water spots/wet tiles

Technology lab: 11 water spots/wet tiles

# BEST FY2019-20 GRANT APPLICATION SUMMARIES

Special Ed: 18 water spots wet/tiles  
 Star lab: 3 water spots/wet tiles  
 Teachers' lounge: 4 water spots/wet tiles

**Does this Project Conform with the Public School Facility Construction Guidelines?** Yes

**If not, provide an explanation for the use of any standard not consistent with the guidelines:**

**How Does the Applicant Plan to Maintain the Project if it is Awarded?**

LPSD#38 will maintain the new roof at PWES. The roof will be visually inspected every six months and as needed following major storms, high winds, or unusual weather episodes. Labor and maintenance costs will be entered into the LPSD#38 maintenance tracking software system and work order cycle to ensure sufficient funds, staff, appropriate scheduling, and warranty compliance.

The LPSD#38 maintenance tracking software program automatically generates work orders for scheduled maintenance, warranty requirements, and any repairs on the roof. LPSD#38 is responsible for all scheduled maintenance. Approved vendors or technicians will perform repairs and maintenance outside of the scope of LPSD#38 facilities and maintenance departments. Warranties will dictate changes or additions to the maintenance and repair schedule and will be incorporated into our system and performed as needed.

All projected costs are entered into the maintenance tracking software system to ensure sufficient funding to maintain the roof. The life of the new roof system is approximately twenty years. The roof will be maintained throughout the life cycle or until the roof needs to be replaced. Funds for a new roof system will be built into the budget and funds will be allocated as needed and deemed appropriate by LPSD#38.

The district uses two tracking systems called Maintenance Direct and School Dude. Both software programs remind and set schedules for required maintenance. In addition, work orders can be submitted and tracked by level of priority from low to urgent. All pertinent facility specs are stored within the Maintenance Direct system. School Dude software tracking is monitored at the district level as well as within the building by the RKES building engineer.

**Describe the condition of the public school facility at the time it was purchased or constructed and, if the facility was not new or was not adequate as a public school facility at that time, provide the rationale for purchasing the facility or constructing it in the manner in which you did:**

Prairie Winds Elementary School (PWES) was constructed in 2000 and opened in 2001.

**Describe the history of capital improvements made to the facility by the district/charter school in order to make it suitable for students. Include a list of all capital projects undertaken in the affected facility in the last 3 years:**

Not applicable; no capital improvements have been necessitated in the last three years.

**What options outside of the BEST grant has the applicant investigated or leveraged to address the school's facility needs?**

LPSD38 routinely partners with local government, agencies, merchants, and community entities on varying projects. While services and financial assistance are often provided, no contributions have been offered for the current roof replacement. The lack of funds is a direct result of budget constraints.

**How do you budget annually to address capital outlay needs in your district/charter? Include \$/FTE for the prior fiscal year:**

The District currently expends approximately \$1.3 million dollars annual for capital maintenance and repairs. Projects are prioritized for the district based upon a rubric developed by our Operations Advisory Committee. This project has been prioritized. The District is contribution 68% of the total cost.

**If relevant to your project, what are your current annualized utility costs, and what amount of reduction in such costs do you expect to result from this project?**

No expected change in utility costs are projected.

<b>Grant Request:</b>	\$357,298.08	<b>CDE Minimum Match %:</b>	68%
<b>Applicant Match:</b>	\$759,258.42	<b>Actual Match % Provided:</b>	68%
<b>Total Project Cost:</b>	\$1,116,556.50	<b>Is a Waiver Letter Required?</b>	No

## BEST FY2019-20 GRANT APPLICATION SUMMARIES

<b>Affected Sq Ft:</b>	43,200	<b>Contingent on a 2019 Bond?</b>	No
<b>Affected Pupils:</b>	367	<b>Source of Match:</b>	General Fund
<b>Cost Per Sq Ft:</b>	\$25.85		
<b>Soft Costs Per Sq Ft:</b>	\$0.55	<b>Escalation %:</b>	5%
<b>Hard Costs Per Sq Ft:</b>	\$25.30	<b>Construction Contingency %:</b>	8%
<b>Cost Per Pupil:</b>	\$3,042	<b>Owner Contingency %:</b>	8%
<b>Gross Sq Ft Per Pupil:</b>	146	<b>Historical Register?</b>	No
<b>Is a Master Plan Complete?</b>	Yes	<b>Adverse Historical Effect?</b>	No
<b>Who owns the Facility?</b>	District	<b>Does this Qualify for HPCP?</b>	No
<b>If owned by a third party, explanation of ownership:</b>			
<b>If match is financed, explanation of financing terms:</b>			

### Financial Data (School District and BOCES Applicants)

<b>District FTE Count:</b>	6,409	<b>Bonded Debt Approved:</b>	
<b>Assessed Valuation:</b>	\$513,571,210	<b>Year(s) Bond Approved:</b>	
<b>PPAV:</b>	\$80,133	<b>Bonded Debt Failed:</b>	\$36,500,000
<b>Unreserved Gen Fund 17-18:</b>	\$8,343,946	<b>Year(s) Bond Failed:</b>	18
<b>Median Household Income:</b>	\$120,340	<b>Outstanding Bonded Debt:</b>	\$58,865,000
<b>Free Reduced Lunch %:</b>	9%	<b>Total Bond Capacity:</b>	\$102,714,242
<b>Existing Bond Mill Levy:</b>	13.415	<b>Bond Capacity Remaining:</b>	\$43,849,242
<b>3yr Avg OMFAC/Pupil:</b>	\$1,251.30		

**● Facilities Impacted by this Grant Application ●**

**MONTROSE COUNTY RE-1J - Roof Replacements 1HS, 1MHS, 1MS, 2 ES - Centennial MS - 1974**

District:	Auditor - Montrose County RE-1J
School Name:	Centennial MS
Address:	1100 South 5th Street
City:	Montrose
Gross Area (SF):	99,469
Number of Buildings:	3
Replacement Value:	\$27,632,980
Condition Budget:	\$14,968,501
Total FCI:	0.54
Adequacy Index:	0.41



**Condition Budget Summary**

System Group	Replacement Cost	Requirement Cost	SCI
Electrical System	\$3,994,137	\$3,773,231	0.94
Equipment and Furnishings	\$679,782	\$673,427	0.99
Exterior Enclosure	\$5,118,618	\$296,967	0.06
Fire Protection	\$255,408	\$588,171	2.30
Furnishings	\$674,152	\$483,960	0.72
HVAC System	\$4,713,224	\$2,986,958	0.63
Interior Construction and Conveyance	\$3,837,137	\$3,028,147	0.79
Plumbing System	\$1,679,697	\$1,896,503	1.13
Site	\$2,721,920	\$1,813,022	0.67
Structure	\$3,958,905	\$30,000	0.01
<b>Overall - Total</b>	<b>\$27,632,980</b>	<b>\$15,570,386</b>	<b>0.56</b>

**MONTROSE COUNTY RE-1J - Roof Replacements 1HS, 1MHS, 1MS, 2 ES - Cottonwood ES - 1996**

District:	Auditor - Montrose County RE-1J
School Name:	Cottonwood ES
Address:	3500 Woodgate Road
City:	Montrose
Gross Area (SF):	43,073
Number of Buildings:	5
Replacement Value:	\$8,996,335
Condition Budget:	\$3,267,495
Total FCI:	0.36
Adequacy Index:	0.16



**Condition Budget Summary**

System Group	Replacement Cost	Requirement Cost	SCI
Electrical System	\$1,362,365	\$629,260	0.46
Equipment and Furnishings	\$231,584	\$104,365	0.45
Exterior Enclosure	\$965,516	\$439,940	0.46
Fire Protection	\$11,709	\$356,364	30.44
Furnishings	\$3,545	\$0	0.00
HVAC System	\$696,960	\$723,041	1.04
Interior Construction and Conveyance	\$1,560,369	\$759,070	0.49
Plumbing System	\$448,291	\$35,455	0.08
Site	\$1,507,617	\$577,651	0.38
Special Construction	\$301,572	\$0	0.00
Structure	\$1,906,807	\$14,432	0.01
<b>Overall - Total</b>	<b>\$8,996,335</b>	<b>\$3,639,578</b>	<b>0.40</b>

**● Facilities Impacted by this Grant Application ●**

**MONTROSE COUNTY RE-1J - Roof Replacements 1HS, 1MHS, 1MS, 2 ES - Montrose HS - 1941**

District:	Auditor - Montrose County RE-1J
School Name:	Montrose HS
Address:	600 S. Selig Avenue
City:	Montrose
Gross Area (SF):	200,216
Number of Buildings:	3
Replacement Value:	\$47,205,515
Condition Budget:	\$25,363,304
Total FCI:	0.54
Adequacy Index:	0.39



**Condition Budget Summary**

System Group	Replacement Cost	Requirement Cost	SCI
Electrical System	\$6,920,993	\$6,139,108	0.89
Equipment and Furnishings	\$829,005	\$707,161	0.85
Exterior Enclosure	\$5,572,950	\$1,557,705	0.28
Fire Protection	\$465,939	\$1,647,602	3.54
Furnishings	\$2,712,703	\$66,929	0.02
HVAC System	\$5,573,739	\$5,088,394	0.91
Interior Construction and Conveyance	\$7,744,203	\$4,964,685	0.64
Plumbing System	\$3,256,830	\$2,013,316	0.62
Site	\$4,948,127	\$4,428,158	0.89
Structure	\$9,181,025	\$390,767	0.04
Overall - Total	\$47,205,515	\$27,003,825	0.57

**MONTROSE COUNTY RE-1J - Roof Replacements 1HS, 1MHS, 1MS, 2 ES - Olathe ES - 1950**

District:	Auditor - Montrose County RE-1J
School Name:	Olathe ES
Address:	211 Roberts Avenue
City:	Olathe
Gross Area (SF):	55,273
Number of Buildings:	5
Replacement Value:	\$11,010,127
Condition Budget:	\$4,595,011
Total FCI:	0.42
Adequacy Index:	0.25



**Condition Budget Summary**

System Group	Replacement Cost	Requirement Cost	SCI
Electrical System	\$1,552,413	\$1,060,538	0.68
Equipment and Furnishings	\$334,074	\$145,883	0.44
Exterior Enclosure	\$1,735,587	\$454,383	0.26
Fire Protection	\$230,946	\$259,457	1.12
Furnishings	\$131,785	\$164,731	1.25
HVAC System	\$843,572	\$1,046,250	1.24
Interior Construction and Conveyance	\$2,252,793	\$1,197,437	0.53
Plumbing System	\$565,418	\$158,628	0.28
Site	\$1,408,301	\$269,513	0.19
Special Construction	\$339,269	\$94,241	0.28
Structure	\$1,615,969	\$6,570	0.00
Overall - Total	\$11,010,127	\$4,857,631	0.44



● **Facilities Impacted by this Grant Application** ●

**MONTROSE COUNTY RE-1J - Roof Replacements 1HS, 1MHS, 1MS, 2 ES - Olathe MS/HS - 1974**

<b>District:</b>	Auditor - Montrose County RE-1J
<b>School Name:</b>	Olathe MS/HS
<b>Address:</b>	410 HIGHWAY 50
<b>City:</b>	OLATHE
<b>Gross Area (SF):</b>	120,847
<b>Number of Buildings:</b>	2
<b>Replacement Value:</b>	\$33,808,016
<b>Condition Budget:</b>	\$12,171,559
<b>Total FCI:</b>	0.36
<b>Adequacy Index:</b>	0.42



**Condition Budget Summary**

System Group	Replacement Cost	Requirement Cost	SCI
Electrical System	\$4,527,785	\$2,611,946	0.58
Equipment and Furnishings	\$549,474	\$487,947	0.89
Exterior Enclosure	\$6,080,126	\$1,107,271	0.18
Fire Protection	\$260,938	\$653,639	2.50
Furnishings	\$1,393,698	\$30,467	0.02
HVAC System	\$3,643,372	\$1,760,319	0.48
Interior Construction and Conveyance	\$4,738,667	\$3,141,532	0.66
Plumbing System	\$1,961,589	\$919,394	0.47
Site	\$4,807,974	\$2,133,622	0.44
Structure	\$5,844,393	\$0	0.00
<b>Overall - Total</b>	<b>\$33,808,016</b>	<b>\$12,846,137</b>	<b>0.38</b>

# BEST FY2019-20 GRANT APPLICATION SUMMARIES

**Applicant Name:** MONTROSE COUNTY RE-1J

**County:** Montrose

**Project Title:** Roof Replacements 1HS, 1MHS, 1MS, 2 ES

**Applicant Previous BEST Grant(s):** 5

**Has this project been previously applied for and not funded?** No

**If Yes, please explain why:**

## Project Type:

- |   |   |   |  |
|---|---|---|--|
| <input type="checkbox"/> New School         | <input checked="" type="checkbox"/> Roof    | <input type="checkbox"/> Asbestos Abatement | <input type="checkbox"/> Water Systems     |
| <input type="checkbox"/> School Replacement | <input type="checkbox"/> Fire Alarm         | <input type="checkbox"/> Lighting           | <input type="checkbox"/> Facility Sitework |
| <input type="checkbox"/> Renovation         | <input type="checkbox"/> Boiler Replacement | <input type="checkbox"/> Electrical Upgrade | <input type="checkbox"/> Land Purchase     |
| <input type="checkbox"/> Addition           | <input type="checkbox"/> HVAC               | <input type="checkbox"/> Energy Savings     | <input type="checkbox"/> Technology        |
| <input type="checkbox"/> Security           | <input type="checkbox"/> ADA                | <input type="checkbox"/> Window Replacement | <input type="checkbox"/> Other             |

## General Information About the District / School, and Information About the Affected Facilities:

Montrose County is located in the southwestern quadrant of the state and has a population of just more than 41,000 residents. The county is considered rural, with residents traveling 60 miles north to Western Colorado's largest city (Grand Junction) for medical and other services. The Montrose County economy has not rebounded as fast as Colorado's overall, with the county experiencing higher than state average unemployment rates, and lower wages; the housing market is now recovering. At the same time, the Colorado Center on Law & Policy reports that Montrose County families need income nearly two-and-a-half times the federal poverty level to make ends meet. Affordable housing is an issue for many families, with wait times of two years to rent affordable family units.

Montrose County is 2,241 square miles, located in the west central portion of the state, a region referred to as Colorado's Western Slope. It is 269 miles southwest of the Denver metro area over the Continental Divide, and nearly 100 miles east of the Utah state line. Just fewer than half of Montrose County residents live in unincorporated areas (47%), while the City of Montrose is home to 46% of the County's residents. Olathe (4%), Naturita (1%), and Nucla (2%) are town centers providing residence for the remainder of the County's population (U.S. Census, 2010). The area is considered mountain desert, experiencing four distinct seasons and a temperate climate.

In recent years, the school district has shifted its education focus on a problem-based learning approach, coupled with the highly rigorous Advanced Placement curriculum. Currently the Montrose County School District is the only district on the Western Slope that is Science, Technology, Engineering, and Mathematics (STEM) based. Our students have a unique opportunity in that they attend a district that is the first Western Slope district to commit all its schools to STEM standards. The schools have a robust problem-based learning (PBL) instructional approach that encourages students to discover the tools and information necessary to solve problems, rather than memorizing set strategies. As educators, our school district is committed to being the first in Western Colorado to provide STEM based curriculum and Problem Based Learning at all 13 of our campuses.

The district has several buildings that are affected with HVAC problems, with Olathe Middle School being the highest priority. Because of the challenges the HVAC systems have created, students and staff are affected daily. The district currently used a maintenance program for tracking all work orders. SchoolDude (work order platform) has given the district the available data to manage our facilities with correct and accurate information. The Maintenance Dept. has received a total of 1952 work orders for the 2018 year.

## Deficiencies Associated with this Project:

This roofing replacement BEST grant application has 6 building sections that are in 5 different schools. As part of the district's roof asset management assessment these sections are at the end of their serviceable life and have the lowest Roof Condition Index "RCI". Over the years, these roofs have had multiple leaks, continue to leak and received many associated repairs. The district's maintenance staff over the many years has attempted different approaches to solve the deficiencies caused by aging and original installation issues. The district has worked diligently to prevent water infiltration and address maintenance

## BEST FY2019-20 GRANT APPLICATION SUMMARIES

requirements. The biggest issue is, there is no long-term repair process left to extend the life of these roofs. The district experiences disruptions to the classroom learning environment and interior building damage, due to water infiltration. It is also starting to affect the structure in some cases.---

### OLATHE MIDDLE/HIGH SCHOOL:

These roof sections are in the schedule for replacement because of its Roof Condition Index ranking of 17 out of a possible 100 (100 being the best). These roofs consist of a 45 mil TPO single ply roofing membrane, R-20 polyurethane insulation. The roofs were mechanically attached to the steel pan-deck. The roofs have severe deterioration in the TPO membrane. This deterioration is referred to in the roofing industry as crazing. The crazing has migrated below the scrim which is in the middle of the membrane. In many places the crazing is through the entire membrane. This severe deterioration of the membrane will not provide a solid surface for any coatings or new TPO material to be welded or glued to it. Therefore, the maintenance departments attempt to repair, or patch are very short term and frustrating at best. Additionally, the deterioration is system wide. The roof is also under insulated and does not meet current energy code requirements. In one section the mechanical curbs are too low and are not allowing for proper heights to resist water infiltration from high snow load conditions.---

### OLATHE ELEMENTARY SCHOOL:

This roof section is in the schedule for replacement because of its RCI ranking of 20. This roof section is a low slope metal roof panel that is not continuous. The slope is 1/4" in 12". There is no decking under the metal roof. The roof is fastened to the purlins which are 4' on center. There is batt insulation below the metal panel. This insulation equates to approximately R-19 and has been damaged from water leaks. The leak issues are stemming from a number of conditions. Improperly installed curb flashing's force water to back-up behind them allowing for infiltration. The sealant for the metal joinery was not installed in compression or soldered properly. Screw holes have over the years wallowed out beyond screw replacement sizes. The valley sealants and minimum overlapping is failing. Since there is no underlayment the water is falling directly into the building. There is a wall connection where the wall flashing is extra-long to compensate for the short panels. There are interior gutters that are built in between the exterior wall and roof edge. The gutter joints cannot be maintained and the gutter cannot overflow to the outside of the building. Locations along all gutters where the metal panels do not extend beyond the eave's edge enough, allow water to wick back into the building. Due to improper overlaps at the seams and valley numerous coats of sealant have been applied in an attempt to stop water entering these locations. This has only provided temporary results. This roof was installed when the building was originally built in 1992 and is beyond its useful life. In order to correct these issues, the panels would have to be removed and replaced. This would cost as much or more than replacing the roof with a new over lay system leaving the metal panels in place.---

### MONTROSE HIGH SCHOOL:

This roof section is referred to as the upper classroom. This roof section is scheduled for replacement because of its Roof Condition Index ranking of 18. The roof consists of a 45 mil TPO single ply roofing membrane, R-20 polyurethane insulation. This roof was mechanically attached through one existing roof. This roof has severe deterioration in the TPO membrane. Similar to Olathe MS/HS, this deterioration is referred to in the roofing industry as crazing. The crazing has migrated below the scrim which is in the middle of the membrane. In many places the crazing is through the entire membrane. The severe deterioration of the membrane will not provide a solid surface for any coatings or new TPO material to be welded or glued to it. Therefore, the maintenance departments attempt to repair, or patch are very short term. Additionally, the deterioration is system wide. The roof is also under insulated and does not meet current energy code requirement.---

### CENTENNIAL MIDDLE SCHOOL:

These roof sections are referred to as the main building and wood shop. These roof sections are scheduled for replacement because of its Roof Condition Index ranking of 16 and 19. The roofs consist of a 45 mil TPO single ply roofing membrane, R-20 polyurethane insulation. The roofs were mechanically attached through one existing roof. These roofs have severe deterioration in the TPO membrane. As with other roofs included in this grant application, this deterioration is referred to as crazing. The crazing has migrated below the scrim which is in the middle of the membrane. In many places the crazing is through the membrane. The severe deterioration of the membrane does not provide a solid surface for any coatings or new TPO material to be welded or glued to it. Therefore, the maintenance departments attempt to repair, or patch are very short term. In one section there are 2 HVAC unit curbs that are too low and were not raised during the last reroof. This condition is allowing water to enter the building with high snow accumulations. Additionally, the deterioration is system wide. The roof is

## BEST FY2019-20 GRANT APPLICATION SUMMARIES

also under insulated and does not meet current energy code requirements.---

### COTTONWOOD ELEMENTARY SCHOOL:

This roof section is in the schedule for replacement because of its Roof Condition Index ranking of 19. The metal standing rib roof is fastened to the Structural B-decking. There is minimum insulation below this metal panel. This insulation equals approximately R-19 and has been damaged from water leaks. The underlayment material installed under the roof panels in the valleys, eaves and rakes was 30 # rolled (felt) sheet. This low sloped condition should have had a peel and stick membrane installed. The leak issues are stemming from improperly installed valleys that have minimum overlapping, rake flashing's that are improperly integrated with metal wall panels, and curb flashings that have water backing up behind them. There are 8 skylights that never had the proper curbs made with crickets to allow water to go around the curbs. These skylights have been one of the major source water leakage along with the valleys. The sealant for the metal joinery was not installed in compression, therefore these panel lap sealants have failed. This roof was installed when the building was originally built in 1996. To correct these issues the panels would require removal. This is very costly and near impossible without damaging the panels on a standing seam roof.

### Proposed Solution to Address the Deficiencies Stated Above:

The district engaged a roofing consultant to assess the conditions of the roofs included in this grant application. The recommendations from the roofing consultant comply with the Public-School Facility Construction Guidelines and are as follows:---

### MONTROSE HIGH SCHOOL, CENTENNIAL MIDDLE SCHOOL, AND OLATHE MIDDLE/HIGH SCHOOL:

Remove roofing to the decking in order to inspect deck conditions for rusting from water damage, attachment methods and to comply with all code requirements.

Install new R-30 polyurethane insulation in a minimum of 2 layers with staggered joints. This will upgrade the insulation to the current energy code requirements.

Install new high density cover board to provide hail protection and traffic damage.

Install a minimum of 72 mil PVC white membrane. This will decrease the heat absorption and benefit the districts cooling costs.

Heat inducted fastening of the roof assembly. This system provides the greatest resistant to wind in Factory Mutual Uplift testing results.

Raise mechanical curbs to allow for proper heights for the snow accumulation.

Install proper crickets for counter sloping to drains and drain edges.

Damaged drain bowls will be replaced and water tested after the roof installation is completed.

Provide new roof access ladders and roof hatch rails to provide controlled safe access to the roof.

Obtain a 20 year no dollar manufacturer warranty and 5-year contractor workmanship warranty.---

### OLATHE ELEMENTARY AND COTTONWOOD ELEMENTARY SCHOOLS:

Infill the metal roof flutes, install new R-30 polyurethane insulation in a minimum of 2 layers with staggered joints. This will upgrade the insulation of the roof to current energy code requirements.

Install new high density coverboard to provide hail protection and traffic damage.

Install a minimum of 72 mil PVC white membrane on Olathe elementary school. This will decrease the heat absorption and will benefit the districts cooling costs.

Install a minimum of 72 mil PVC dark grey. PVC ribs will be applied to simulate standing seam ribs. These will be installed on the front of the building only.

Heat inducted fastening of the roof assembly. This system provides the greatest resistant to wind in Factory Mutual Uplift testing results.

Raise mechanical curbs to allow for proper heights for the snow accumulation and install proper counter sloping crickets.

Replace the skylights on Cottonwood with proper curbs and counter sloping crickets.

Install new gutters that are sized properly to handle the water with open faced downspouts eliminate clogging and ice damage.

Provide new roof access ladders and roof hatch rails to provide controlled safe access to the roof.

# BEST FY2019-20 GRANT APPLICATION SUMMARIES

Obtain a 20 year no dollar manufacturer warranty and 5-year contractor workmanship warranty.

The district is also committing to on-site quality control from the roofing consultant to confirm all of the new roofs are installed per manufacturers' recommendations and industry standards. The roofing consultant will provide daily photos and regular reports to document and communicate with the district and the roofing contractors. This will allow any non-conforming work to be addressed immediately.

## How Urgent is this Project?

The Armstrong Group Inc. (AGI), roof design and building envelope specialists, was hired by MCS D through a competitive RFQP process to conduct a district wide roof analysis and establish an overall plan for replacement. AGI also provides the architectural-engineering design services for construction documents as well as installation quality control inspections. AGI has been implementing a Roof Asset Management Program and Roof Condition Index (RCI) to establish which roofs are in need of repair or replacement. This program is based on inventory of all distresses in the many roofs the district has. This system is based on statistical data, identifies each distress, compares these distress effects on the performance of each roof, projects remaining years left of the roofs and compares the costs of repairs and replacement. The system ranks the roof condition with a number that ranges from 1- 100, 100 being the best. Based on the results and comparing the results to onsite conditions. The district determined these roofs to be in the worst condition, with a negative effect on safety, learning environment, and the building's overall integrity. These roofs cannot be properly repaired and need immediate replacement. As outlined above in the deficiency section, these roofs are at the end of their useful lives and on a short time frame for needed replacement. The district maintenance staff has put forth great efforts and costs to contain and address water infiltration. It has caused major disruption to school district operations and obligations. These schools hold over 53% of the entire district's student population. Ensuring the roofs on these schools protect the valuable assets these buildings provide to students and staff is of paramount importance. If there was a roof failure, the district would not have the space to relocate students and staff to an alternate location.

**Does this Project Conform with the Public School Facility Construction Guidelines?** Yes

**If not, provide an explanation for the use of any standard not consistent with the guidelines:**

## How Does the Applicant Plan to Maintain the Project if it is Awarded?

The new roof installations will carry a 5-year warranty from the roofing contractor and a 20-year full roofing system guarantee by the roofing material manufacturer. The district commits to follow all contractor and manufacturer recommended maintenance to ensure the warranties stay intact throughout the course of the warranty period. There will also be a 1-year inspection made by the district, AGI and the roofing contractor. The roof replacements useful life will be maximized through a formal maintenance plan. District maintenance staff will inspect roofs every fall and after winter to determine if weather conditions caused damage, remove debris and maintain as necessary. Additional roof inspections will also occur if there is any indication of roof damage throughout the years. If damage is suspected or identified, the district maintenance staff will notify the roofing manufacturer and contractor to provide a permanent solution to the damage. The district will troubleshoot any concerns on a temporary basis until a permanent solution can be conducted. The district will provide water intrusion cleanup procedures to minimize damage and provide safety protocols. The district will also implement annual and ongoing maintenance repairs while incorporating proactive strategies to reduce the likelihood of damage. A capital renewal budget will be used for maintenance expenses and for eventual roof replacement.

**Describe the condition of the public school facility at the time it was purchased or constructed and, if the facility was not new or was not adequate as a public school facility at that time, provide the rationale for purchasing the facility or constructing it in the manner in which you did:**

The school facilities submitted in this grant for roof replacements were all constructed as schools within the Montrose County School District at the various times of construction, the materials and methods were consistent with best practices and compliant with governing codes.

Olathe Middle/High School:

The current Olathe Middle High School located at 410 Hwy 50 in Olathe was constructed in 1970 by the school district. The old Olathe High School that shared the same campus was rebuilt as an attachment to the Middle School to form what is now

## BEST FY2019-20 GRANT APPLICATION SUMMARIES

Olathe Middle/High School. This campus has always served as the location for the Middle and High School for the town of Olathe.

Olathe Elementary School:

Olathe Elementary School located at 326 N. 3rd Street in Olathe was constructed in 1912, burned in 1924, was rebuilt on the original site to be an Elementary school. The gymnasium was added in 1952. The classroom portion was removed in 1992 when a new administration and classroom wing was attached to the 1952 gym. It has always served as an elementary school for the school district.

Centennial Middle School:

Centennial Middle School located at 1100 South 5th Street in Montrose was constructed for the school district in 1974. The north building housed Johnson Elementary. The south building was Montrose Junior High School. An new Johnson Elementary was constructed in 2004 at 13820 6700 Road in Montrose to relieve overcrowding. At that time the north building became part of the current Centennial Middle School.

Montrose High School:

Montrose High School, located at 600 South Selig Avenue in Montrose was constructed by the school district in 1941. It was built as a high school and remains as the district's high school, serving students from Centennial and Columbine Middle Schools.

Cottonwood Elementary located at 3500 Woodgate Road in Montrose. It was constructed in 1996 as an Elementary School for the district and has remained an elementary school to serve the students on the south side of the Montrose community

**Describe the history of capital improvements made to the facility by the district/charter school in order to make it suitable for students. Include a list of all capital projects undertaken in the affected facility in the last 3 years:**

All of the facilities discussed in this grant have undergone capital improvements at one time or another. It would be accurate and important to note that the improvements have been for the most part additions, to provide for the increase in student body as our community has grown. Additional improvements also include, HVAC upgrades and Roof replacements.

Olathe Middle/High School:

Olathe Middle/High School, with additions and improvements in 1993, 2004, 2006 (all funded by successful bond measures). 2016 - Installation of new roofing over the middle school gymnasium and stage (Capital Reserve). 2017 - A comprehensive storm water management project and exterior sports bleachers replacement (Capital Reserve). 2018 - One HVAC unit replacement, upgrade of electrical switch gear and transformer and woodshop dust collection system installation (Cap Reserve)

Olathe Elementary School:

At the Olathe Elementary School site, the 1952 gymnasium is all that was kept intact when the 1992 administration classroom addition was constructed (successful bond funds). There was another addition in 2004 to provide classrooms and restrooms for increased enrollment (funded through part of a successful bond passed by voters in 2002). 2015 - Early Childhood Modular relocated to site (Cap Reserve). 2017 - HVAC upgrades to the 1992 administration and classroom wing (Cap Reserve). 2018 - Playground improvement project (GOCO Grant & General Fund). 2019 - Perimeter fencing upgrades (Rural Funding)

Centennial Middle School:

Centennial Middle School, 2005 - Substantial upgrade with renovation of north building and industrial arts and roof replacement (2002 Bond). 2011- HVAC upgrades (Cap Reserve and BEST Grant funds). 2017- Main entrance security vestibule (Cap Reserve) 2017 - Playground improvement project (Colorado Health Foundation Grant). 2018 - Some Door and Hardware replacement (Cap Reserve). 2018 - Cafeteria floor abatement (Cap Reserve and BEST Funds). 2018 - ADA improvements and Fencing upgrades (Rural Funding).

Montrose High School:

Montrose High School, has had several additions with other buildings added to the campus to compliment educational programs and athletics. These occurred in the years 1974, 1980, 1992, 1998, 1999, 2000, and 2003. Recent capital

## BEST FY2019-20 GRANT APPLICATION SUMMARIES

improvements have been: 2013 through 2015 - Energy Efficiency upgrades, HVAC, Boiler's and Lighting (Cap Reserve and ESCO Loan). Wood Shop Electrical Upgrade (Cap Reserve and BEST Grant). Campus wide ADA access improvements in 2015, 2016, and 2017 (Cap Reserve). 2016 - Roof replacements for Library, Wood Shop/ ROTC building, Kitchen/Cafeteria, Auxiliary gym and Art building with HVAC replacement at Art Building (Cap Reserve). 2017 - Irrigation pump replacement (Cap Reserve). 2018 - Resurface all-weather track. (Cap Reserve).

Cottonwood Elementary School.

Cottonwood was built in 1995. In 2004 - Classroom addition (2002 bond Funds) 2010 - Cafeteria addition (Cap Reserve). 2016 - Roof replacements for kitchen and mechanical wells (Cap Reserve). 2017 - Modular ramp replacements and ADA improvements (Cap Reserve). 2018 - Campus perimeter fence improvements.

**What options outside of the BEST grant has the applicant investigated or leveraged to address the school's facility needs?**

None at this time.

**How do you budget annually to address capital outlay needs in your district/charter? Include \$/FTE for the prior fiscal year:**

The board budgets \$750,000 annually out of Fund 10 to be moved into Fund 43 for district wide capital projects based on need and ROI. The per pupil FTE is \$132.75. If the project cannot extend its useful life beyond the ROI of what it would be to replace, then the goal is to replace. The district has bond monies that we are going to use for two projects that the board has agreed to proceed with, one of these projects is to replace and repair those roofs that have been identified as critical.

**If relevant to your project, what are your current annualized utility costs, and what amount of reduction in such costs do you expect to result from this project?**

N/A

<b>Grant Request:</b>	\$1,755,359.22	<b>CDE Minimum Match %:</b>	62%
<b>Applicant Match:</b>	\$2,864,007.14	<b>Actual Match % Provided:</b>	62%
<b>Total Project Cost:</b>	\$4,619,366.36	<b>Is a Waiver Letter Required?</b>	No
<b>Affected Sq Ft:</b>	166,790	<b>Contingent on a 2019 Bond?</b>	No
<b>Affected Pupils:</b>	3,282	<b>Source of Match:</b>	
<b>Cost Per Sq Ft:</b>	\$27.70	2016 Bond	
<b>Soft Costs Per Sq Ft:</b>	\$4.69	<b>Escalation %:</b>	2%
<b>Hard Costs Per Sq Ft:</b>	\$20.61	<b>Construction Contingency %:</b>	4%
<b>Cost Per Pupil:</b>	\$1,407	<b>Owner Contingency %:</b>	3.5%
<b>Gross Sq Ft Per Pupil:</b>	138	<b>Historical Register?</b>	No
<b>Is a Master Plan Complete?</b>	Yes	<b>Adverse Historical Effect?</b>	No
<b>Who owns the Facility?</b>	District	<b>Does this Qualify for HPCP?</b>	No

**If owned by a third party, explanation of ownership:**

**If match is financed, explanation of financing terms:**

### Financial Data (School District and BOCES Applicants)

<b>District FTE Count:</b>	5,650	<b>Bonded Debt Approved:</b>	\$21,700,000
<b>Assessed Valuation:</b>	\$495,499,663	<b>Year(s) Bond Approved:</b>	16
<b>PPAV:</b>	\$87,699	<b>Bonded Debt Failed:</b>	
<b>Unreserved Gen Fund 17-18:</b>	\$8,732,897	<b>Year(s) Bond Failed:</b>	

# BEST FY2019-20 GRANT APPLICATION SUMMARIES

<b>Median Household Income:</b>	\$44,741	<b>Outstanding Bonded Debt:</b>	\$24,915,000
<b>Free Reduced Lunch %:</b>	47%	<b>Total Bond Capacity:</b>	\$99,099,933
<b>Existing Bond Mill Levy:</b>	3.959	<b>Bond Capacity Remaining:</b>	\$74,184,933
<b>3yr Avg OMFAC/Pupil:</b>	\$2,480.27		



● **Facilities Impacted by this Grant Application** ●

**WESTMINSTER PUBLIC SCHOOLS - Shaw Heights MS Boiler Replacement - Shaw Heights MS - 1960**

<b>District:</b>	Auditor - Westminster Public Schools
<b>School Name:</b>	Shaw Heights MS
<b>Address:</b>	8780 CIRCLE DRIVE
<b>City:</b>	WESTMINSTER
<b>Gross Area (SF):</b>	85,984
<b>Number of Buildings:</b>	1
<b>Replacement Value:</b>	\$23,645,925
<b>Condition Budget:</b>	\$12,021,933
<b>Total FCI:</b>	0.51
<b>Adequacy Index:</b>	0.20



**Condition Budget Summary**

System Group	Replacement Cost	Requirement Cost	SCI
Electrical System	\$3,197,053	\$3,358,435	1.05
Equipment and Furnishings	\$452,726	\$315,571	0.70
Exterior Enclosure	\$2,650,722	\$718,370	0.27
Fire Protection	\$317,510	\$908,799	2.86
Furnishings	\$496,426	\$0	0.00
HVAC System	\$5,039,625	\$1,603,568	0.32
Interior Construction and Conveyance	\$5,461,527	\$3,845,189	0.70
Plumbing System	\$1,275,720	\$755,617	0.59
Site	\$1,230,572	\$1,040,207	0.85
Structure	\$3,524,042	\$34,126	0.01
<b>Overall - Total</b>	<b>\$23,645,925</b>	<b>\$12,579,882</b>	<b>0.53</b>

# BEST FY2019-20 GRANT APPLICATION SUMMARIES

**Applicant Name:** WESTMINSTER PUBLIC SCHOOLS

**County:** Adams

**Project Title:** Shaw Heights MS Boiler Replacement

**Applicant Previous BEST Grant(s):** 9

**Has this project been previously applied for and not funded?** No

**If Yes, please explain why:** N/A

## Project Type:

- |   |  |   |  |
|---|--|---|--|
| <input type="checkbox"/> New School         | <input type="checkbox"/> Roof                          | <input type="checkbox"/> Asbestos Abatement | <input type="checkbox"/> Water Systems     |
| <input type="checkbox"/> School Replacement | <input type="checkbox"/> Fire Alarm                    | <input type="checkbox"/> Lighting           | <input type="checkbox"/> Facility Sitework |
| <input type="checkbox"/> Renovation         | <input checked="" type="checkbox"/> Boiler Replacement | <input type="checkbox"/> Electrical Upgrade | <input type="checkbox"/> Land Purchase     |
| <input type="checkbox"/> Addition           | <input type="checkbox"/> HVAC                          | <input type="checkbox"/> Energy Savings     | <input type="checkbox"/> Technology        |
| <input type="checkbox"/> Security           | <input type="checkbox"/> ADA                           | <input type="checkbox"/> Window Replacement | <input type="checkbox"/> Other             |

## General Information About the District / School, and Information About the Affected Facilities:

Shaw Heights Middle School is home to approximately 560 students. This school is included in the district's master plan. Westminster Public Schools cut 3.2 million dollars since the 14/15 budget cycle, funding for both Operating and Capital Reserve budgets were reduced accordingly. Operating budgets have been cut approximately fifty percent since 2004. Our last successful bond election was in 2006 for \$98 million which was the maximum allowed. Due to these restrictions we have not had the opportunity to fund major projects such as boiler replacements for many years. The current boilers that provide heat to the building are the original boilers installed in 1960. In November of 2018 the district had a successful Mill Levy election, that currently does not provide funding for boiler replacement at Shaw Heights. Re-piped boiler room and replaced pumps to create redundancy.

## Deficiencies Associated with this Project:

The system was installed in 1960. It has a 30 year service life, which expired in 1990. Per the CDE school assessment report: The system is recommended to be replaced due to probable increased condition budget needs, the potential failure of its components or in order to meet the performance guidelines for this system.

## Proposed Solution to Address the Deficiencies Stated Above:

Replace the existing boilers with new energy efficient boilers. The project to be overseen by District owner's representative and mechanical engineers.

- Installing four Patterson Kelly high efficiency boilers, to replace the three existing boilers
- Replacing two boiler circulation pumps with three circulation pumps
- Installation of new temperature controls and tie with existing system
- Installation of backflow preventer's for domestic and fire system
- Pipe installation
- Schematic design/design development
- Construction documents
- Construction administration
- Assist with Pre-Qualifying contractors
- Assist with competitive bid process
- Assist with bid evaluation
- Assist with "punch list" and warrant issues

## How Urgent is this Project?

The system is deemed urgent as the boilers have out lived their 30 year life expectancy. If the boilers fail the school would be without heat causing the closure of the school. This would impact the learning environment. Each year we wait to replace boilers, the situation will only get worse.

**Does this Project Conform with the Public School Facility Construction Guidelines?** Yes

# BEST FY2019-20 GRANT APPLICATION SUMMARIES

**If not, provide an explanation for the use of any standard not consistent with the guidelines:**

**How Does the Applicant Plan to Maintain the Project if it is Awarded?**

The district will require the contractor to repair any problems during the warranty period. The boilers will be maintained through an ongoing PM program. Westminster Public Schools has used the Patterson Kelly boilers as replacement boilers for approximately ten years. They are a high performance energy efficient boiler, and all indications show us they will have a life expectancy of twenty years. It is our expectation that we will fund boiler replacement through capital improvement budget in the future. In the summer of 2018 we replaced the building HVAC controls with our updated digital control system for \$125,000.00. To date we have replaced and updated our HVAC systems to include boiler replacement where necessary and HVAC controls at all schools except for six.

**Describe the condition of the public school facility at the time it was purchased or constructed and, if the facility was not new or was not adequate as a public school facility at that time, provide the rationale for purchasing the facility or constructing it in the manner in which you did:**

New build

**Describe the history of capital improvements made to the facility by the district/charter school in order to make it suitable for students. Include a list of all capital projects undertaken in the affected facility in the last 3 years:**

Asbestos flooring removed and replaced with VCT and carpet, classrooms and hallways have been painted, new cabinets and countertops installed in classrooms, all new HVAC controls.

**What options outside of the BEST grant has the applicant investigated or leveraged to address the school's facility needs?**

None at this time

**How do you budget annually to address capital outlay needs in your district/charter? Include \$/FTE for the prior fiscal year:**

Westminster Public Schools capital Funding budget is at \$204.00 per student. this budget is used to provide funding to all our Capital Project needs that include but are not limited to Roofing, HVAC upgrades, Life Safety Projects, ie: Fire Alarms, Intercoms, etc. Electrical upgrades and ADA Accessible projects to name a few.

**If relevant to your project, what are your current annualized utility costs, and what amount of reduction in such costs do you expect to result from this project?**

N/A

<b>Grant Request:</b>	\$342,517.45	<b>CDE Minimum Match %:</b>	45%
<b>Applicant Match:</b>	\$280,241.55	<b>Actual Match % Provided:</b>	45%
<b>Total Project Cost:</b>	\$622,759.00	<b>Is a Waiver Letter Required?</b>	No
<b>Affected Sq Ft:</b>	85,984	<b>Contingent on a 2019 Bond?</b>	No
<b>Affected Pupils:</b>	565	<b>Source of Match:</b>	Restricted Funds
<b>Cost Per Sq Ft:</b>	\$7.24		
<b>Soft Costs Per Sq Ft:</b>	\$2.53	<b>Escalation %:</b>	5%
<b>Hard Costs Per Sq Ft:</b>	\$70.08	<b>Construction Contingency %:</b>	5%
<b>Cost Per Pupil:</b>	\$1,102	<b>Owner Contingency %:</b>	5%
<b>Gross Sq Ft Per Pupil:</b>	152	<b>Historical Register?</b>	No
<b>Is a Master Plan Complete?</b>	Yes	<b>Adverse Historical Effect?</b>	No
<b>Who owns the Facility?</b>	District	<b>Does this Qualify for HPCP?</b>	No

**If owned by a third party, explanation of ownership:**

**If match is financed, explanation of financing terms:**

# BEST FY2019-20 GRANT APPLICATION SUMMARIES

## Financial Data (School District and BOCES Applicants)

<b>District FTE Count:</b>	8,294	<b>Bonded Debt Approved:</b>	
<b>Assessed Valuation:</b>	\$682,441,830	<b>Year(s) Bond Approved:</b>	
<b>PPAV:</b>	\$82,286	<b>Bonded Debt Failed:</b>	\$20,000,000
<b>Unreserved Gen Fund 17-18:</b>	\$7,956,664	<b>Year(s) Bond Failed:</b>	14
<b>Median Household Income:</b>	\$53,290	<b>Outstanding Bonded Debt:</b>	\$70,430,000
<b>Free Reduced Lunch %:</b>	82%	<b>Total Bond Capacity:</b>	\$136,488,366
<b>Existing Bond Mill Levy:</b>	12.533	<b>Bond Capacity Remaining:</b>	\$66,058,366
<b>3yr Avg OMFAC/Pupil:</b>	\$1,514.20		

## ● Facilities Impacted by this Grant Application ●

## LEWIS-PALMER 38 - Ray Kilmer ES Boiler Replacement - Ray E. Kilmer ES - 1988

District:	Auditor - Lewis-Palmer 38
School Name:	Ray E. Kilmer ES
Address:	4285 Walker Road
City:	Colorado Springs
Gross Area (SF):	50,087
Number of Buildings:	1
Replacement Value:	\$14,085,694
Condition Budget:	\$7,994,745
Total FCI:	0.57
Adequacy Index:	0.09



## Condition Budget Summary

System Group	Replacement Cost	Requirement Cost	SCI
Electrical System	\$1,946,437	\$1,883,107	0.97
Equipment and Furnishings	\$323,802	\$164,097	0.51
Exterior Enclosure	\$1,303,672	\$270,109	0.21
Fire Protection	\$11,714	\$412,582	35.22
HVAC System	\$3,451,059	\$3,478,603	1.01
Interior Construction and Conveyance	\$2,487,100	\$1,271,370	0.51
Plumbing System	\$798,045	\$77,024	0.10
Site	\$2,194,476	\$836,268	0.38
Structure	\$1,569,388	\$0	0.00
Overall - Total	\$14,085,694	\$8,393,160	0.60

# BEST FY2019-20 GRANT APPLICATION SUMMARIES

**Applicant Name:** LEWIS-PALMER 38

**County:** El Paso

**Project Title:** Ray Kilmer ES Boiler Replacement

**Applicant Previous BEST Grant(s):** 0

**Has this project been previously applied for and not funded?** No

**If Yes, please explain why:**

## Project Type:

- |   |  |   |  |
|---|--|---|--|
| <input type="checkbox"/> New School         | <input type="checkbox"/> Roof                          | <input type="checkbox"/> Asbestos Abatement | <input type="checkbox"/> Water Systems     |
| <input type="checkbox"/> School Replacement | <input type="checkbox"/> Fire Alarm                    | <input type="checkbox"/> Lighting           | <input type="checkbox"/> Facility Sitework |
| <input type="checkbox"/> Renovation         | <input checked="" type="checkbox"/> Boiler Replacement | <input type="checkbox"/> Electrical Upgrade | <input type="checkbox"/> Land Purchase     |
| <input type="checkbox"/> Addition           | <input type="checkbox"/> HVAC                          | <input type="checkbox"/> Energy Savings     | <input type="checkbox"/> Technology        |
| <input type="checkbox"/> Security           | <input type="checkbox"/> ADA                           | <input type="checkbox"/> Window Replacement | <input type="checkbox"/> Other             |

## General Information About the District / School, and Information About the Affected Facilities:

Ray Kilmer Elementary School (RKES) is located within Lewis Palmer School District #38, in the city of Colorado Springs.

RKES serves approximately 393 students in grades K through 6. RKES has a reputation for high academic standards and achievement and has received the John Irwin School of Excellence award. Programs offered include art, technology, physical education, and music.

RKES' special education programs include center-based moderate to severe needs for physically and cognitively challenged students, as well as gifted education.

RKES provides after school enrichment opportunities as well as partnering with the YMCA to provide onsite before and after school care. Additionally, the Boy Scouts and the Way Community Church use RKES during non-school hours for meetings, youth sports, and other activities. RKES is an anchor to its students, families, and surrounding community members.

RKES is the eastern-most school in the district and gets the most severe weather and coldest temperatures. It is in a rural setting with no other large facilities within a reasonable distance that could house students temporarily or permanently.

## Deficiencies Associated with this Project:

The dual boiler system at Kilmer Elementary School is at the end of its useful life and is no longer under warranty. It is failing more consistently with time. The boiler currently fails to fire approximately six times per year. The cast iron interior is cracked and rusted. The mixing valve is no longer operational, and the system has no lubrication or glycol which causes the system to use raw water. This impairs function and increases wear. The insulation is almost nonexistent as it is dried up and severely compacted. The flue is rusted as are the heating elements. Pieces of metal are flaking off the elements which impacts the performance and heat regulation. The air separator is outdated and there is no modulation within the system. The heat within the system is uneven and much hotter than necessary. The highest heat is constantly pulled due to the age and wear and tear of the system. This causes uneven heating and unusually high energy use. Operational costs are also escalated.

The issues with the boiler system are labor intensive, requiring a large number of service calls and resulting in increased labor costs.

The systems do not maintain adequate pressure and often have different pressure readings. Both boiler components turn off randomly and must be checked daily and re-fired to provide heat. There is no back up system should the boiler not fire. This is of concern as we experience severe weather and extreme cold.

The LPSD maintenance department and the in-district HVAC expert, ME Engineers, have determined that the entire system is beyond repair and should be replaced.

# BEST FY2019-20 GRANT APPLICATION SUMMARIES

## Proposed Solution to Address the Deficiencies Stated Above:

The recommended solution is to remove the existing inefficient and unreliable dual boiler system and all components to starting point for new systems to be installed. This includes removal of the old system and all components associated to the current boiler system. Two new high efficiency boilers with a long-life expectancy and warranties will be installed. A recommended system is Two Patterson-Kelly Modufire 1500, MBH boilers or the equivalent high efficiency system. Provide two new end suction pumps, 68 GPM at 75 Ft. head or equivalent. Install all new piping in the mechanical room. Follow all code compliance including permits, insulation, valves, air separators and controls. Ensure that all venting and combustion shall be as required by the manufacturer of the new boiler. Disconnect and reconnect all electrical systems for a new mechanical system as well as for general power and new controls. Ensure that the new system is engineered as per system regulations and specs. The current boiler system should be replaced as soon as possible due to the age and performance of the boiler. Heavy snow and cold temperatures along with poor performance, energy inefficiency, high cost and extra man hours warrant that this replacement takes place at the earliest juncture.

## How Urgent is this Project?

Ray Kilmer Elementary School (RKES) boiler system is original to the building, is out of warranty, and is past its expected life. The system has two boiler components. The system fails to fire approximately six times per year and must be checked daily for function. As a result of the boiler being at the end of its useful life and failing, the internal temperature and pressure build, which the system cannot accommodate, as a result, the system shuts down without warning. The pressure reading from each side of the dual-boiler reads differently. There is deficient temperature moderation within the system. Thus, the hottest air is being pulled constantly instead of using residual and modulated heat. This poses a safety hazard.

The flue is rusted and shows chronic moisture being present. The interior of the system also shows rust, moisture, and degradation of the cast iron sides. The metal heating elements are cracked and breaking apart. The insulation surrounding the metal casing of the boiler is dried up and has gaps of one to three inches, which causes heat to escape into the boiler room as opposed to heating the building-escalating cost and wasting energy. The system piping is original, obsolete, and shows signs of breakdown. There is no inhibitor within the system, meaning that the boiler runs on raw water. This increases the speed at which the boiler ages and exacerbates any cracks, leaks, or faults. Any leaking and rusting will increase exponentially as a result.

Failure to fire is of great concern as RKES is the only facility in the eastern portion of our district, where the weather is most severe. We are located on the Palmer Divide and experience below average winter temperatures and higher than average snowfall.

The significant number of times the boiler system fails to fire puts the building at risk for no heat and catastrophic loss by way of frozen pipes and flooding. There is no back up plan should catastrophic failure occur as there is no facility with room to house students within a reasonable distance. LPSD#38 and ME Engineers recommend boiler replacement in the immediate future.

**Does this Project Conform with the Public School Facility Construction Guidelines?** Yes

**If not, provide an explanation for the use of any standard not consistent with the guidelines:**

## How Does the Applicant Plan to Maintain the Project if it is Awarded?

LPSD#38 will maintain the new boiler at RKES. The boiler will be visually inspected every six months and as needed following unusual weather episodes. Labor and maintenance costs will be entered into the LPSD#38 maintenance tracking software system and work order cycle to ensure sufficient funds, staff, appropriate scheduling, and warranty compliance.

The LPSD#38 maintenance tracking software program automatically generates work orders for scheduled maintenance, warranty requirements, and any repairs on the boiler. LPSD#38 is responsible for all scheduled maintenance. Approved vendors or technicians will perform repairs and maintenance outside of the scope of LPSD#38 facilities and maintenance departments.

Warranties will dictate changes or additions to the maintenance and repair schedule and will be incorporated into our system and performed as needed. Also, LPSD#38 partners with ME Engineering who monitor and assist in maintaining the boiler system.

## BEST FY2019-20 GRANT APPLICATION SUMMARIES

All projected costs are entered into the maintenance tracking software system to ensure sufficient funding to maintain the boiler. The life of the new boiler system is approximately twenty years. The boiler will be maintained throughout the life cycle or until the boiler needs to be replaced. Funds for a new boiler system will be built into the budget and funds will be allocated as needed and deemed appropriate by LPD#38.

LPD#38 uses two tracking systems called Maintenance Direct and School Dude. Both software programs remind and set schedules for required maintenance. In addition, work orders can be submitted and tracked by level of priority from low to urgent. All pertinent facility specs are stored within the Maintenance Direct system. School Dude software tracking is monitored at the district level as well as within the building by the RKES building engineer.

**Describe the condition of the public school facility at the time it was purchased or constructed and, if the facility was not new or was not adequate as a public school facility at that time, provide the rationale for purchasing the facility or constructing it in the manner in which you did:**

Ray Kilmer Elementary School (RKES) was constructed in 1987 and opened in 1988.

**Describe the history of capital improvements made to the facility by the district/charter school in order to make it suitable for students. Include a list of all capital projects undertaken in the affected facility in the last 3 years:**

Not applicable; no capital improvements have been necessitated in the last three years.

**What options outside of the BEST grant has the applicant investigated or leveraged to address the school's facility needs?**

LPD#38 routinely partners with local government, agencies, merchants, and community entities on varying projects. While services and financial assistance are often provided, no contributions have been offered for the current boiler replacement. The lack of funds is a direct result of budget constraints.

**How do you budget annually to address capital outlay needs in your district/charter? Include \$/FTE for the prior fiscal year:**

The District currently expends approximately \$1.3 million dollars annual for capital maintenance and repairs. Projects are prioritized for the district based upon a rubric developed by our Operations Advisory Committee. This project has been prioritized. The District is contribution 68% of the total cost.

**If relevant to your project, what are your current annualized utility costs, and what amount of reduction in such costs do you expect to result from this project?**

No expected change in utility costs are projected.

<b>Grant Request:</b>	\$140,049.66	<b>CDE Minimum Match %:</b>	68%
<b>Applicant Match:</b>	\$297,605.54	<b>Actual Match % Provided:</b>	68%
<b>Total Project Cost:</b>	\$437,655.20	<b>Is a Waiver Letter Required?</b>	No
<b>Affected Sq Ft:</b>	50,087	<b>Contingent on a 2019 Bond?</b>	No
<b>Affected Pupils:</b>	393	<b>Source of Match:</b>	General Fund
<b>Cost Per Sq Ft:</b>	\$8.74		
<b>Soft Costs Per Sq Ft:</b>	\$0.36	<b>Escalation %:</b>	0%
<b>Hard Costs Per Sq Ft:</b>	\$8.38	<b>Construction Contingency %:</b>	8%
<b>Cost Per Pupil:</b>	\$1,114	<b>Owner Contingency %:</b>	8%
<b>Gross Sq Ft Per Pupil:</b>	127	<b>Historical Register?</b>	No
<b>Is a Master Plan Complete?</b>	Yes	<b>Adverse Historical Effect?</b>	No
<b>Who owns the Facility?</b>	District	<b>Does this Qualify for HPCP?</b>	No



# BEST FY2019-20 GRANT APPLICATION SUMMARIES

If owned by a third party, explanation of ownership:

If match is financed, explanation of financing terms:

## Financial Data (School District and BOCES Applicants)

<b>District FTE Count:</b>	6,409	<b>Bonded Debt Approved:</b>	
<b>Assessed Valuation:</b>	\$513,571,210	<b>Year(s) Bond Approved:</b>	
<b>PPAV:</b>	\$80,133	<b>Bonded Debt Failed:</b>	\$36,500,000
<b>Unreserved Gen Fund 17-18:</b>	\$8,343,946	<b>Year(s) Bond Failed:</b>	18
<b>Median Household Income:</b>	\$120,340	<b>Outstanding Bonded Debt:</b>	\$58,865,000
<b>Free Reduced Lunch %:</b>	9%	<b>Total Bond Capacity:</b>	\$102,714,242
<b>Existing Bond Mill Levy:</b>	13.415	<b>Bond Capacity Remaining:</b>	\$43,849,242
<b>3yr Avg OMFAC/Pupil:</b>	\$1,251.30		

**TRI-LAKES MONUMENT FIRE PROTECTION DISTRICT**

16055 Old Forest Point, Suite 103

Monument, CO 80132

Bus: (719) 484-0911 Fax (719) 481-3456



Christopher Truty, Fire Chief

March 27, 2019

**LETTER OF SUPPORT**

**TO WHOM IT MAY CONCERN:**

The Tri-Lakes Monument Fire Protection District (TLMFPD) wholeheartedly supports the Lewis Palmer School District's efforts to replace a boiler at the Kilmer Elementary School. The importance of a reliable heating system in a grade school cannot be overstated both from a student education quality perspective as well as a safety issue. Being proactive about its replacement prior to any catastrophic failure shows a great responsibility in taking of their students and the more they can take care of them, the less we may have to.

Kilmer Elementary is also a remote Red Cross shelter facility that we most recently used this past week during the record blizzard in El Paso County. The reliability of Kilmer as a shelter literally saved hours off of rescues we were performing mid-blizzard and allowed both us and Douglas County rescuers great opportunities to get people out of harm's way as quickly as possible. That would not have happened with a boiler that failed.

TLMFPD hopes you will support Lewis Palmer's efforts to provide a stable and safe learning environment by funding their need for a new boiler.

Respectfully submitted,

Chris Truty  
Fire Chief  
Tri-Lakes Monument FPD

● **Facilities Impacted by this Grant Application** ●

**MONTROSE COUNTY RE-1J - Olathe MS HVAC Replacement - Olathe MS/HS - 1974**

<b>District:</b>	Auditor - Montrose County RE-1J
<b>School Name:</b>	Olathe MS/HS
<b>Address:</b>	410 HIGHWAY 50
<b>City:</b>	OLATHE
<b>Gross Area (SF):</b>	120,847
<b>Number of Buildings:</b>	2
<b>Replacement Value:</b>	\$33,808,016
<b>Condition Budget:</b>	\$12,171,559
<b>Total FCI:</b>	0.36
<b>Adequacy Index:</b>	0.42



**Condition Budget Summary**

System Group	Replacement Cost	Requirement Cost	SCI
Electrical System	\$4,527,785	\$2,611,946	0.58
Equipment and Furnishings	\$549,474	\$487,947	0.89
Exterior Enclosure	\$6,080,126	\$1,107,271	0.18
Fire Protection	\$260,938	\$653,639	2.50
Furnishings	\$1,393,698	\$30,467	0.02
HVAC System	\$3,643,372	\$1,760,319	0.48
Interior Construction and Conveyance	\$4,738,667	\$3,141,532	0.66
Plumbing System	\$1,961,589	\$919,394	0.47
Site	\$4,807,974	\$2,133,622	0.44
Structure	\$5,844,393	\$0	0.00
<b>Overall - Total</b>	<b>\$33,808,016</b>	<b>\$12,846,137</b>	<b>0.38</b>

# BEST FY2019-20 GRANT APPLICATION SUMMARIES

**Applicant Name:** MONTROSE COUNTY RE-1J

**County:** Montrose

**Project Title:** Olathe MS HVAC Replacement

**Applicant Previous BEST Grant(s):** 5

**Has this project been previously applied for and not funded?** No

**If Yes, please explain why:**

## Project Type:

- |   |   |   |  |
|---|---|---|--|
| <input type="checkbox"/> New School         | <input type="checkbox"/> Roof               | <input type="checkbox"/> Asbestos Abatement | <input type="checkbox"/> Water Systems     |
| <input type="checkbox"/> School Replacement | <input type="checkbox"/> Fire Alarm         | <input type="checkbox"/> Lighting           | <input type="checkbox"/> Facility Sitework |
| <input type="checkbox"/> Renovation         | <input type="checkbox"/> Boiler Replacement | <input type="checkbox"/> Electrical Upgrade | <input type="checkbox"/> Land Purchase     |
| <input type="checkbox"/> Addition           | <input checked="" type="checkbox"/> HVAC    | <input type="checkbox"/> Energy Savings     | <input type="checkbox"/> Technology        |
| <input type="checkbox"/> Security           | <input type="checkbox"/> ADA                | <input type="checkbox"/> Window Replacement | <input type="checkbox"/> Other             |

## General Information About the District / School, and Information About the Affected Facilities:

Montrose County is located in the southwestern quadrant of the state and has a population of just more than 41,000 residents. The county is considered rural, with residents traveling 60 miles north to Western Colorado's largest city (Grand Junction) for medical and other services. The Montrose County economy has not rebounded as fast as Colorado's overall, with the county experiencing higher than state average unemployment rates, and lower wages; the housing market is now recovering. At the same time, the Colorado Center on Law & Policy reports that Montrose County families need income nearly two-and-a-half times the federal poverty level to make ends meet. Affordable housing is an issue for many families, with wait times of two years to rent affordable family units.

Montrose County is 2,241 square miles, located in the west central portion of the state, a region referred to as Colorado's Western Slope. It is 269 miles southwest of the Denver metro area over the Continental Divide, and nearly 100 miles east of the Utah state line. Just fewer than half of Montrose County residents live in unincorporated areas (47%), while the City of Montrose is home to 46% of the County's residents. Olathe (4%), Naturita (1%), and Nucla (2%) are town centers providing residence for the remainder of the County's population (U.S. Census, 2010). The area is considered mountain desert, experiencing four distinct seasons and a temperate climate.

In recent years, the school district has shifted its education focus on a problem-based learning approach, coupled with the highly rigorous Advanced Placement curriculum. Currently the Montrose County School District is the only district on the Western Slope that is Science, Technology, Engineering, and Mathematics (STEM) based. Our students have a unique opportunity in that they attend a district that is the first Western Slope district to commit all its schools to STEM standards. The schools have a robust problem-based learning (PBL) instructional approach that encourages students to discover the tools and information necessary to solve problems, rather than memorizing set strategies. As educators, our school district is committed to being the first in Western Colorado to provide STEM based curriculum and Problem Based Learning at all 13 of our campuses.

The district has several buildings that are affected with HVAC problems, with Olathe Middle School being the highest priority. Because of the challenges the HVAC systems have created, students and staff are affected daily. The district currently used a maintenance program for tracking all work orders. SchoolDude (work order platform) has given the district the available data to manage our facilities with correct and accurate information. The Maintenance Dept. has received a total of 1952 work orders for the 2018 year.

## Deficiencies Associated with this Project:

Olathe Middle/High School has concerning deficiencies related to the HVAC Systems serving the areas constructed in 1974. Of the five Roof Top Units (RTUs), there are four remaining that are original equipment to the 1974 construction. These units cannot be repaired as their parts are obsolete. The fresh air modulating dampers no longer work and must be manually opened. Classroom section RTUs also have no operating zone dampers at this time, creating wide temperature swings. Our HVAC technician can only set the units to run, fan on or fan off, for heating. This does not meet the requirements for fresh air

## BEST FY2019-20 GRANT APPLICATION SUMMARIES

in the building making CO2 is a big concern for the learning environment. Students can become lethargic and have a hard time focusing. The RTU servicing the girl's locker room does not provide proper ventilation, again causing poor air quality. Also, the gymnasium RTU cannot be setback to reduce energy consumption as it takes all day to recover the heat loss in this space. Numerous work orders related to temperature regulation and indoor air quality are submitted during the school year. These work orders will many times cause disruptions to classroom learning. The remaining four RTUs are well beyond their expected life cycle of 20-25 years. There was nearly a complete failure to one of the five 45-year-old RTUs in December of 2017. We had to cut out one of the two large fans that sheared from the drive shaft in order to limp it along for the remainder of the school year. This made for a less than ideal learning environment due to noise, the inability to maintain adequate room temperatures and supply proper ventilation.

### **Proposed Solution to Address the Deficiencies Stated Above:**

Addressing the current deficiencies of the four remaining 1974 RTUs will require their complete replacement. As Facility Director, I engaged our on call mechanical engineers (Bighorn Engineering) to develop construction documents to replace the HVAC system that broke down in December 2017, while defining a complete scope of work that would best provide for the near future replacement of the remaining systems. The design goal was to dramatically improve the overall interior learning environment, while meeting the district's high energy efficiency standards for new equipment. To do this, required the addition of DX cooling coils for a cooling cycle (not present on the current RUTs) and replacement of the outdated electrical switch gear. Over the 2018 summer break the district replaced the failed RTU with a new gas fired unit with DX cooling and VAV boxes for zone control, as well as the new switch gear and a necessary new electrical transformer. This work has set the design and specification standards while providing the infrastructure for the installation of remaining HVAC Systems requested of this grant.

### **How Urgent is this Project?**

This HVAC system upgrade is an absolute priority as a complete failure of these systems is imminent. It would create a dire situation if a system fails, with the potential to make portions of the building unusable, displacing kids and disrupting educational operations.

Our Master Plan's updated Facilities and Campus Repairs Report has this replacement as a number one priority needing to be completed within one to two years.

**Does this Project Conform with the Public School Facility Construction Guidelines?** Yes

**If not, provide an explanation for the use of any standard not consistent with the guidelines:**

### **How Does the Applicant Plan to Maintain the Project if it is Awarded?**

Montrose County School District believes in a strong preventative maintenance program. This commitment is evident in the fact that many of the original building systems still function even though they are aged well beyond their life expectancy. We implemented scheduled maintenance and warranty inspections for all capital construction repairs or replacement projects soon after project completion. Training of maintenance and custodial personnel on new components and systems are incorporated into the contract documents. Training sessions takes place at various stages during project construction this helps insure a successful maintenance/care program, allowing us to get the best performance and longevity out of the entire project. The District budgets for maintenance and repairs in two different funds. Maintenance Discretionary Budget which is funded from the General Fund, and the Capital Reserve Fund allocation of \$750,000. The District is prepared to continue to budget the Capital Reserve allocation of \$750,000, as well as the same operating costs historically budgeted in the General Fund for maintenance of facilities.

**Describe the condition of the public school facility at the time it was purchased or constructed and, if the facility was not new or was not adequate as a public school facility at that time, provide the rationale for purchasing the facility or constructing it in the manner in which you did:**

The school facility submitted in this grant for HVAC replacement were all constructed as schools within the Montrose County School District. At various times of construction, the materials and methods were consistent with best practices and compliant with governing codes. Olathe Middle School was constructed in 1970 by the school district.

**Describe the history of capital improvements made to the facility by the district/charter school in order to make it suitable for students. Include a list of all capital projects undertaken in the affected facility in the last 3 years:**

All of the facilities discussed in this grant have undergone capital improvements at one time or another. It would be accurate

## BEST FY2019-20 GRANT APPLICATION SUMMARIES

and important to note that the improvements have been for the most part additions, to provide for the increase in student body as our community has grown. Additional improvements also include, HVAC upgrades and Roof replacements. Olathe Middle/High School:

Olathe Middle/High School, with additions and improvements in 1993, 2004, 2006 (all funded by successful bond measures). 2016 - Installation of new roofing over the middle school gymnasium and stage (Capital Reserve). 2017 - A comprehensive storm water management project and exterior sports bleachers replacement (Capital Reserve). 2018 - One HVAC unit replacement, upgrade of electrical switch gear and transformer and woodshop dust collection system installation (Cap Reserve).

**What options outside of the BEST grant has the applicant investigated or leveraged to address the school's facility needs?**

None at this time.

**How do you budget annually to address capital outlay needs in your district/charter? Include \$/FTE for the prior fiscal year:**

The board budgets \$750,000 annually out of Fund 10 to be moved into Fund 43 for district wide capital projects based on need and ROI. The per pupil FTE is \$132.75. If the project cannot extend its useful life beyond the ROI of what it would be to replace, then the goal is to replace. The district has bond monies that we are going to use for two projects that the board has agreed to proceed with, one of these projects is to replace and repair those roofs that have been identified as critical.

**If relevant to your project, what are your current annualized utility costs, and what amount of reduction in such costs do you expect to result from this project?**

N/A

<b>Grant Request:</b>	\$395,708.06	<b>CDE Minimum Match %:</b>	62%
<b>Applicant Match:</b>	\$645,628.94	<b>Actual Match % Provided:</b>	62%
<b>Total Project Cost:</b>	\$1,041,337.00	<b>Is a Waiver Letter Required?</b>	No
<b>Affected Sq Ft:</b>	21,732	<b>Contingent on a 2019 Bond?</b>	No
<b>Affected Pupils:</b>	224	<b>Source of Match:</b>	
<b>Cost Per Sq Ft:</b>	\$47.92	2016 Bond	
<b>Soft Costs Per Sq Ft:</b>	\$3.96	<b>Escalation %:</b>	2%
<b>Hard Costs Per Sq Ft:</b>	\$43.96	<b>Construction Contingency %:</b>	4%
<b>Cost Per Pupil:</b>	\$4,649	<b>Owner Contingency %:</b>	3.5%
<b>Gross Sq Ft Per Pupil:</b>	506	<b>Historical Register?</b>	No
<b>Is a Master Plan Complete?</b>	Yes	<b>Adverse Historical Effect?</b>	No
<b>Who owns the Facility?</b>	District	<b>Does this Qualify for HPCP?</b>	No

**If owned by a third party, explanation of ownership:**

**If match is financed, explanation of financing terms:**

### Financial Data (School District and BOCES Applicants)

<b>District FTE Count:</b>	5,650	<b>Bonded Debt Approved:</b>	\$21,700,000
<b>Assessed Valuation:</b>	\$495,499,663	<b>Year(s) Bond Approved:</b>	16
<b>PPAV:</b>	\$87,699	<b>Bonded Debt Failed:</b>	
<b>Unreserved Gen Fund 17-18:</b>	\$8,732,897	<b>Year(s) Bond Failed:</b>	
<b>Median Household Income:</b>	\$44,741	<b>Outstanding Bonded Debt:</b>	\$24,915,000

# BEST FY2019-20 GRANT APPLICATION SUMMARIES

<b>Free Reduced Lunch %:</b>	47%	<b>Total Bond Capacity:</b>	\$99,099,933
<b>Existing Bond Mill Levy:</b>	3.959	<b>Bond Capacity Remaining:</b>	\$74,184,933
<b>3yr Avg OMFAC/Pupil:</b>	\$2,480.27		

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● **Facilities Impacted by this Grant Application** ●

**CLEAR CREEK RE-1 - ES Boiler Replacement - Georgetown Community School - 1939**

<b>District:</b>	Auditor - Clear Creek RE-1
<b>School Name:</b>	Georgetown Community School
<b>Address:</b>	504 4TH STREET
<b>City:</b>	GEORGETOWN
<b>Gross Area (SF):</b>	33,890
<b>Number of Buildings:</b>	2
<b>Replacement Value:</b>	\$7,942,378
<b>Condition Budget:</b>	\$5,240,573
<b>Total FCI:</b>	0.66
<b>Adequacy Index:</b>	0.33



**Condition Budget Summary**

System Group	Replacement Cost	Requirement Cost	SCI
Electrical System	\$1,222,089	\$892,813	0.73
Equipment and Furnishings	\$149,986	\$92,983	0.62
Exterior Enclosure	\$895,603	\$525,809	0.59
Fire Protection	\$8,671	\$338,710	39.06
HVAC System	\$1,600,658	\$1,922,611	1.20
Interior Construction and Conveyance	\$2,096,946	\$1,020,828	0.49
Plumbing System	\$444,523	\$324,869	0.73
Site	\$417,068	\$394,082	0.94
Structure	\$1,106,835	\$71,614	0.06
<b>Overall - Total</b>	<b>\$7,942,378</b>	<b>\$5,584,319</b>	<b>0.70</b>



# BEST FY2019-20 GRANT APPLICATION SUMMARIES

**Applicant Name:** CLEAR CREEK RE-1

**County:** Clear Creek

**Project Title:** ES Boiler Replacement

**Applicant Previous BEST Grant(s):** 0

**Has this project been previously applied for and not funded?** No

**If Yes, please explain why:**

## Project Type:

- |   |  |   |  |
|---|--|---|--|
| <input type="checkbox"/> New School         | <input type="checkbox"/> Roof                          | <input type="checkbox"/> Asbestos Abatement | <input type="checkbox"/> Water Systems     |
| <input type="checkbox"/> School Replacement | <input type="checkbox"/> Fire Alarm                    | <input type="checkbox"/> Lighting           | <input type="checkbox"/> Facility Sitework |
| <input type="checkbox"/> Renovation         | <input checked="" type="checkbox"/> Boiler Replacement | <input type="checkbox"/> Electrical Upgrade | <input type="checkbox"/> Land Purchase     |
| <input type="checkbox"/> Addition           | <input type="checkbox"/> HVAC                          | <input type="checkbox"/> Energy Savings     | <input type="checkbox"/> Technology        |
| <input type="checkbox"/> Security           | <input type="checkbox"/> ADA                           | <input type="checkbox"/> Window Replacement | <input type="checkbox"/> Other             |

## General Information About the District / School, and Information About the Affected Facilities:

This school opened in 1939. While the building is owned by the Clear Creek School District (CCSD), it currently operates as a charter school authorized through the CCSD. GCS is a charter school, operating with guidance from CCSD. Our school has a 2 1/2 to 5 year old preschool, in addition to serving K-6. Our enrollment of K-6 dropped slightly over last year. We anticipate enrollment to slightly increase as the town has had an increase in preschool enrollment. Average K-6 class size is 13 students to one teacher, with the lower elementary classes being larger than the upper classes. Maintenance tech on site has been addressing building issues as they are presented, from replacing parts of water saving faucets to routine daily cleaning. There were many building issues that were not corrected in the past, so we are addressing them on a safety level basis.

## Deficiencies Associated with this Project:

The boilers are 20 plus years old and are past the end of their useful life. Over the years they have operated at too cool of temperature which has allowed them to condense acidic water vapor in the flue. This drains back into the heat exchanger. The heat exchanger is constructed of steel which will not withstand acidic water. The sections of the boiler leak when they are cooled down for either service or to shutdown. These boilers at best operate at 50-60% efficiency because they must be operated at 200 degrees to keep them from leaking at the section seams and to keep the flue from condensing. Operating an aging boiler at these extreme temperatures can pose a life safety issue. The new boilers operate as much as 94% efficiency and are designed to operate at a cooler temperature as the outdoor air temperature increases providing significant operating cost savings. The heat exchangers are constructed of an acid resistant material. The safety and reliability of the new boilers is of paramount importance.

## Proposed Solution to Address the Deficiencies Stated Above:

The boilers will be replaced. By installing new boilers all of the deficiency issues will be addressed. Two different companies have evaluated the boilers and recommend that they are replaced. The cost of repairing the connections between the sections is too much of an investment into boilers of this age.

## How Urgent is this Project?

Due to the age and condition of these boilers, replacement is urgent. A failure during the winter months could cause an extended school closure of 4-6 weeks in order to do an emergency replacement to be completed. The elevation of Georgetown Community School is approximately 8,530 ft. As a result the having heat in the school is absolutely essential for operations throughout the school year. We are concerned about continuing to operate these boilers due to the high temperatures that are needed to prevent leaks. These boilers must be replaced during the summer of 2019. If the BEST grant funds are not available, the Board may choose to delay the replacement until the Bond funding becomes available. If this occurs, replacement of these boilers would likely occur during the summer of 2020.

**Does this Project Conform with the Public School Facility Construction Guidelines?** Yes

# BEST FY2019-20 GRANT APPLICATION SUMMARIES

**If not, provide an explanation for the use of any standard not consistent with the guidelines:**

**How Does the Applicant Plan to Maintain the Project if it is Awarded?**

All manufacturer service requirements will be followed. Routine maintenance will be included in the building budget in order to maintain the units and possibly extend their life. This will include the ongoing monitoring of the unit for efficiency.

**Describe the condition of the public school facility at the time it was purchased or constructed and, if the facility was not new or was not adequate as a public school facility at that time, provide the rationale for purchasing the facility or constructing it in the manner in which you did:**

The building was opened as a school in 1939 and was originally constructed as a school. It has operated as a school since it was built.

**Describe the history of capital improvements made to the facility by the district/charter school in order to make it suitable for students. Include a list of all capital projects undertaken in the affected facility in the last 3 years:**

Within the past three years Georgetown community school has completed some capital improvements to the property. This included radon mitigation, resurfacing of some sidewalk areas, and the replacement of stair treads for an outdoor stairwell where students access bus transportation to and from the school. Additional improvements have included; window replacements in the preschool rooms and staff center, wall pads added to the gym, interior stairs repaired and new treads added, flooring in the preschool areas, changed out all lighting to LED, replaced all exit and emergency lighting, added exterior security lighting, added AI phone and keyless entry into both buildings, technology rewiring and exhaust fans for venting, fence slats to reduce blowing snow.

**What options outside of the BEST grant has the applicant investigated or leveraged to address the school's facility needs?**

The only alternative would be to deplete bond proceeds more than anticipated.

**How do you budget annually to address capital outlay needs in your district/charter? Include \$/FTE for the prior fiscal year:**

Together with the building maintenance director and the business manager, the conditions at all district buildings are evaluated and the time frames and cost estimates for major repairs and replacements are considered and included in the current and long term portion of the capital reserve budget.

Capital outlay during 2018-19 was \$491,277 divided by 731.5 FTE = \$671.60 district wide

**If relevant to your project, what are your current annualized utility costs, and what amount of reduction in such costs do you expect to result from this project?**

Actual costs for electric and gas utilities at Georgetown Community School (where the boiler is located) for 2017-18 were \$17,741.86. We expect at least a 20% reduction in these costs.

<b>Grant Request:</b>	\$117,042.48	<b>CDE Minimum Match %:</b>	61%
<b>Applicant Match:</b>	\$183,066.44	<b>Actual Match % Provided:</b>	61%
<b>Total Project Cost:</b>	\$300,108.92	<b>Is a Waiver Letter Required?</b>	No
<b>Affected Sq Ft:</b>	29,408	<b>Contingent on a 2019 Bond?</b>	No
<b>Affected Pupils:</b>	128	<b>Source of Match:</b>	
<b>Cost Per Sq Ft:</b>	\$10.21	2018 Bond	
<b>Soft Costs Per Sq Ft:</b>	\$0.10	<b>Escalation %:</b>	0%
<b>Hard Costs Per Sq Ft:</b>	\$10.11	<b>Construction Contingency %:</b>	8%
<b>Cost Per Pupil:</b>	\$2,345	<b>Owner Contingency %:</b>	8%
<b>Gross Sq Ft Per Pupil:</b>	230	<b>Historical Register?</b>	No

## BEST FY2019-20 GRANT APPLICATION SUMMARIES

<b>Is a Master Plan Complete?</b>	No	<b>Adverse Historical Effect?</b>	No
<b>Who owns the Facility?</b>	District	<b>Does this Qualify for HPCP?</b>	No
<b>If owned by a third party, explanation of ownership:</b>			
<b>If match is financed, explanation of financing terms:</b>			

### Financial Data (School District and BOCES Applicants)

<b>District FTE Count:</b>	662	<b>Bonded Debt Approved:</b>	\$5,000,000
<b>Assessed Valuation:</b>	\$396,343,920	<b>Year(s) Bond Approved:</b>	18
<b>PPAV:</b>	\$599,159	<b>Bonded Debt Failed:</b>	
<b>Unreserved Gen Fund 17-18:</b>	(\$1,197,359)	<b>Year(s) Bond Failed:</b>	
<b>Median Household Income:</b>	\$68,534	<b>Outstanding Bonded Debt:</b>	\$10,825,000
<b>Free Reduced Lunch %:</b>	27%	<b>Total Bond Capacity:</b>	\$79,268,784
<b>Existing Bond Mill Levy:</b>	4.045	<b>Bond Capacity Remaining:</b>	\$68,443,784
<b>3yr Avg OMFAC/Pupil:</b>	\$1,883.69		

● **Facilities Impacted by this Grant Application** ●

**POUDRE R-1 - HS Welding Ventilation and Expansion - Poudre HS - 1964**

<b>District:</b>	Auditor - Poudre R-1
<b>School Name:</b>	Poudre HS
<b>Address:</b>	201 IMPALA DRIVE
<b>City:</b>	FORT COLLINS
<b>Gross Area (SF):</b>	277,143
<b>Number of Buildings:</b>	5
<b>Replacement Value:</b>	\$69,665,897
<b>Condition Budget:</b>	\$17,160,154
<b>Total FCI:</b>	0.25
<b>Adequacy Index:</b>	0.06



**Condition Budget Summary**

System Group	Replacement Cost	Requirement Cost	SCI
Electrical System	\$10,486,826	\$6,809,834	0.65
Equipment and Furnishings	\$2,428,627	\$617,569	0.25
Exterior Enclosure	\$5,851,991	\$439,335	0.08
Fire Protection	\$1,098,092	\$1,708,215	1.56
Furnishings	\$2,056,506	\$24,976	0.01
HVAC System	\$14,290,307	\$193,881	0.01
Interior Construction and Conveyance	\$9,550,133	\$4,560,926	0.48
Plumbing System	\$4,297,928	\$111,207	0.03
Site	\$10,585,823	\$4,365,083	0.41
Special Construction	\$299,906	\$0	0.00
Structure	\$8,719,759	\$24,786	0.00
<b>Overall - Total</b>	<b>\$69,665,897</b>	<b>\$18,855,812</b>	<b>0.27</b>

**POUDRE R-1 - HS Welding Ventilation and Expansion - Rocky Mtn HS - 1973**

<b>District:</b>	Auditor - Poudre R-1
<b>School Name:</b>	Rocky Mtn HS
<b>Address:</b>	1300 WEST SWALLOW ROAD
<b>City:</b>	FORT COLLINS
<b>Gross Area (SF):</b>	291,634
<b>Number of Buildings:</b>	1
<b>Replacement Value:</b>	\$82,005,524
<b>Condition Budget:</b>	\$35,859,318
<b>Total FCI:</b>	0.44
<b>Adequacy Index:</b>	0.07



**Condition Budget Summary**

System Group	Replacement Cost	Requirement Cost	SCI
Electrical System	\$11,384,705	\$9,006,418	0.79
Equipment and Furnishings	\$1,929,793	\$1,243,811	0.64
Exterior Enclosure	\$7,512,811	\$420,596	0.06
Fire Protection	\$2,996,043	\$2,236,463	0.75
Furnishings	\$1,467,306	\$5,550	0.00
HVAC System	\$15,643,406	\$10,039,867	0.64
Interior Construction and Conveyance	\$11,640,597	\$6,574,173	0.56
Plumbing System	\$4,361,299	\$2,893,142	0.66
Site	\$11,311,449	\$3,439,302	0.30
Structure	\$13,758,115	\$0	0.00
<b>Overall - Total</b>	<b>\$82,005,524</b>	<b>\$35,859,322</b>	<b>0.44</b>

# BEST FY2019-20 GRANT APPLICATION SUMMARIES

**Applicant Name:** POUDRE R-1

**County:** Larimer

**Project Title:** HS Welding Ventilation and Expansion

**Applicant Previous BEST Grant(s):** 2

**Has this project been previously applied for and not funded?** No

**If Yes, please explain why:** N/A

## Project Type:

- |  |   |  |   |
|--|---|--|---|
| <input type="checkbox"/> New School            | <input type="checkbox"/> Roof               | <input type="checkbox"/> Asbestos Abatement            | <input type="checkbox"/> Water Systems                |
| <input type="checkbox"/> School Replacement    | <input type="checkbox"/> Fire Alarm         | <input type="checkbox"/> Lighting                      | <input checked="" type="checkbox"/> Facility Sitework |
| <input checked="" type="checkbox"/> Renovation | <input type="checkbox"/> Boiler Replacement | <input checked="" type="checkbox"/> Electrical Upgrade | <input type="checkbox"/> Land Purchase                |
| <input checked="" type="checkbox"/> Addition   | <input checked="" type="checkbox"/> HVAC    | <input type="checkbox"/> Energy Savings                | <input checked="" type="checkbox"/> Technology        |
| <input type="checkbox"/> Security              | <input type="checkbox"/> ADA                | <input type="checkbox"/> Window Replacement            | <input type="checkbox"/> Other                        |

## General Information About the District / School, and Information About the Affected Facilities:

Poudre School District (PSD) is a mid-sized, suburban school district located in Larimer County, 55 miles north of Denver and stretching west to the Continental Divide and north to the Wyoming Border. PSD's large geographic area encompasses 1856 square miles, and students attend at 50 Pre-K-12 schools, with the majority located in the city of Fort Collins, population 179,000, and the neighboring towns and communities of Wellington, Timnath, Stove Prairie, Livermore, Laporte and Red Feather. Over 31% of PSD's 30,190 students are certified for free or reduced lunch benefits and 27% are ethnic minorities. In the coming year, PSD will increase the size of one elementary school and by 2022, PSD will add an additional new elementary school, two 6th-12th schools, and an innovation learning center. These new buildings were approved in a 2016 Bond initiative, the same Bond funding that will provide the match for the two schools included in this request for BEST construction funds.

Poudre School District has four District Ends that guide its work for students: Foundations for Success, Success in a Changing World, Above and Beyond, and Connections. Each End gives the district the focus and direction it needs to successfully support students. For the high school students impacted by this proposal, the Ends place a special emphasis on graduation and preparing students for post-secondary opportunities and workforce readiness. Courses in career and technical education (CTE), taught at the two impacted schools, play a very important role in training students for pursuits after high school, including careers in industrial and technical trades.

The two high schools in this proposal are large comprehensive high schools that serve diverse student populations. Poudre High School (PHS) opened in 1964 and serves 1821 students in grades 9-12. Poudre uses a unique model of Career Pathways to guide its students towards post-secondary success. Students chose one of 6 pathways based on their interests such as the arts, agriculture, and engineering, and participate in classes with that smaller learning community. Poudre is endorsed by the Higher Learning Commission as an additional site for Front Range Community College, and many PHS teachers are certified to offer their courses for concurrent enrollment college credits. The school annually builds a house for a Habitat for Humanity family through its Geometry in Construction course.

Rocky Mountain High School (RMHS) is the largest high school in PSD, serving 2035 students in Grades 9-12. RMHS opened in 1973 and uses the only four-block/9-week terms schedule in the district. Fewer subjects and longer classes (90 minutes) allow students to increase the depth of their learning on a subject while building strong relationships with each other and staff in their areas of interest. For Career and Technical Education, the schedule provides more time to experience project-based learning without interruption.

As Poudre School District (PSD) continues to grow career and technical education offerings to meet the interests of students, so comes the need to update facilities, equipment and technology to serve students in work-based learning courses teaching employable skills. For example, one of the fields experiencing a shortage of trained workers in Colorado is metal fabrication. According to the Bureau of Labor Statistics, this field has expanded by 15 to 22% over the past ten years. Metal fabrication includes welders and pipe fitters in many major industries. High School Career and Technical Education programs in Poudre School District (PSD), are ready to address this employment need if CTE school facilities can be improved for safety and

## BEST FY2019-20 GRANT APPLICATION SUMMARIES

students are able to learn in healthy environments. This proposal seeks to improve facilities at Poudre High School and expand and improve facilities at Rocky Mountain High School so that students can safely learn new skills for their futures.

### **Deficiencies Associated with this Project:**

Deficiencies in CTE classrooms, particularly in the areas of safety and overcrowding, are present at two of PSD's largest comprehensive high schools. Both high schools included in this proposal need assistance to address three key issues: student and staff health and safety, overall space use to eliminate equipment overcrowding, and technology equipment modernization. Air quality issues are the most pressing problem, particularly as the programs seek to increase material fabrication. Safety from welding fumes and particulates center on outdated ventilation systems. Technical education spaces at Poudre need remodeling and an addition is necessary at Rocky Mountain to continue to serve existing students in safe, uncrowded spaces. Both high schools need additional technology and tools for students that provide them an experience similar to a safe workplace environment.

The lack of adequate metals ventilation in both high school technical education areas is a definite health hazard to students and staff that has gone unrepaired for some time. Students and staff regularly experience particulate matter in the air while trying to learn their craft. In a successful 2018 BEST proposal, PSD was able to address the major need for dust collection systems in these two sites and several others. But some remaining wood particulates are still in the air, and when combined with metal particulates, are an increased fire hazard as well as a breathing hazard. The ever-growing interest in welding and fabrication programs have resulted in an increase in fumes and other particulates that are also hazardous to student health. Welding stations need directional fume extraction for each individual station. Instead, both schools currently have welding hoods that draw the fumes past the students' heads and up through the vent in the ceiling of their spaces. It is impossible not to inhale some fumes unless a student has a respirator, which is not a common welding practice. An excerpt from OSHA's Standard for Ventilation and Protection in Welding, Cutting, and Heating (1926.353(a)(3) states: "Local exhaust ventilation shall consist of freely movable hoods intended to be placed by the welder or burner as close as practicable to the work. This system shall be of sufficient capacity and so arranged as to remove fumes and smoke at the source and keep the concentration of them in the breathing zone within safe limits."

Adding to the lack of welding stations with proper ventilation hoods, both high schools have inefficient equipment layouts resulting in overcrowded classrooms that exacerbate the safety hazards. At Rocky Mountain, 100-150 students use the 2200 square foot technical education shop daily. There can be as many as 35 students in each of the two adjacent classrooms (woodworking and metals fabrication) areas at the same time, as well as large pieces of equipment. Poudre has 175 students in their metal class space daily. The teachers coordinate so students don't get in each other's way, but they occasionally end up with a stressful 29 students in the 2100 square foot metal shops space. Both schools are offering Engineering Explorations classes, full at 35 students, all who need to be in the CTE classroom space at the same time for instruction.

Welding requires grinding, torching, and hammering, all which generate a lot of carbon soot, grinding dust, and other metal fabrication waste. Poudre needs to enhance its machining offerings, which require coolant fluids and lubricants and involve making cuts with a precision within ten-thousandths of an inch. The two processes have mutual constraints and need to be housed in two separate areas and away from woodworking areas. Poudre would also like to add CNC Machining capabilities to meet skills that are in high demand in Colorado's advanced manufacturing sector. Due to the current arrangement of physical space and electrical and venting issues, authentic milling experiences are not possible.

At both schools, too many projects and materials must remain in the shop space due to a lack of anywhere else to keep them. Woodworking classes and metal fabrication classes both require a large quantity of raw materials. This creates a crowded floor area that impacts movement and learning, but most importantly, safety. Poudre needs an exterior storage unit to move projects and materials off the floor for student safety, as well as a new garage door to allow more efficient materials movement from the classroom to the new outdoor storage building.

Rocky Mountain has outdoor storage and no way to move materials to it. A new addition will double classroom sizes and provide two garage door openings that allow students to access their projects and new materials efficiently. Rocky Mountain's current classrooms are narrow and crowded. A lack of space makes it difficult to address new workforce needs and to add industry standard equipment that students need to experience prior to more advanced training or the workforce. Rocky seeks to add metal 3-D printing and metal lathes, as well as laser equipment to update its offerings, but those tools also require

## BEST FY2019-20 GRANT APPLICATION SUMMARIES

floor space that is not available in current classroom space.

Poudre High School's current welding equipment dates from the 1970's and is not current with health standards. Poudre currently has five mobile welding stations that have no dedicated ventilation or shielding, and 8 welding stations under the one existing hood in the classroom. They have three manual machine lathes for turning steel and aluminum parts--great training for young machinists. But there are too few lathes to accommodate the number of students seeking to complete tasks in a timely way before they move on to other project steps. The 1970's sheet metal equipment at PHS was donated from Colorado State University. The current manual plasma torch is 10 years old and nearing the end of its useful life.

While instruction in the technology classroom remains largely hands-on and experiential, there are times when group instruction is needed and when students need to work individually on project design elements as they build. The PHS metals and wood shops did not receive projectors and visual projection equipment when it was provided in other PHS classrooms due to harsh environments. Modern touch-screen televisions are currently used in technical industries and withstand the demands of the lab situation. Students can see blueprints that are projected and follow them. Similarly, other technology tools can also be incorporated into more industrial settings.

### **Proposed Solution to Address the Deficiencies Stated Above:**

Extraction at the source is the most effective way to collect and remove fumes. Both sites will remove existing ductwork, MAU, and exhaust fans and install new make Up Air units, exhaust fans and fume hoods for individual welding stations. This would include upgrading the existing ventilation to horizontal or direction venting, as well as adding horizontal or directional fume extraction at the site of the welding stations.

Overcrowded technology education classrooms hamper the relevancy of what can be taught. The desire of students to learn work-force ready skills has surpassed the available space. The good news is that at Rocky Mountain High School, the current classrooms are next to a parking lot where there is space for a bump-out addition that will double useable classroom space.

Because there is currently limited opportunity for Poudre High School to expand its building footprint, it needs to move equipment to better serve groups of students and re-route HVAC and electrical to improve overall safety. At Poudre High School, one solution will be to add two Roland Desktop milling machines, providing students with milling skills that are highly sought in industry without overcrowding already existing small spaces. Poudre will also renovate their current space, providing a better separation between the welding and machining spaces by moving equipment and re-routing HVAC and electrical.

The biggest change at Poudre High School will be the addition of 14 arc welding stations (6 SMAW, 6 MIG, 2 TIG). Ten of the new stations will be electric arc welding stations, set up in an area of the classroom that will be reconfigured with welding hoods for improved ventilation. PHS will purchase a 4' x 4' CNC Plasma Cutting Table, a robotic, metal cutting apparatus with a plasma torch, that will also be ventilated. These purchases will allow removal of current Oxy-Fuel Gas welding stations that don't fit the needs of student workforce development and take up valuable space. Oxy-Fuel welding is still a valuable and relevant skill, but it has become more specialized and more of a niche industry as electric arc welding now dominates the market. Electrical outlets will be added, and equipment reconfigured to add safety to the types of work occurring in the classroom space. Upgraded sheet metal forming equipment would allow students to experience more current work environments that include sheet metal brakes, sheers, slip rolls, English Wheel, and other hand tools. A new plasma cutting torch and table would increase opportunities for students working with sheet metal.

Other instructional benefits will be gained through modernization of current technology. Poudre High School's shop area is devoid of technology, largely due to space that will be reconfigured as described above, but also due to the lack of large projection devices and small monitors that allow students to see the project and make any changes necessary while still in the shop setting. Likewise, PHS students would benefit from a new 3-D Printer that is faster and has greater precision than the 2007 original model currently used by students, taking advantage of the great strides made in 3-D printing technology. Rocky Mountain will also add additional 3-D printing machines in their new space.

### **How Urgent is this Project?**

Providing the right amount of training on the right type of equipment is not enough. Poudre School District must first make

## BEST FY2019-20 GRANT APPLICATION SUMMARIES

sure that the skill-building taught in its classrooms is done in an environment that is safe. For example, welders face a series of risks from dangerous substances that could lead to a lifetime of illnesses. Welding methods and materials contain different amounts of fumes containing various concentrations of hazardous substances. Among the high-risk elements are hexavalent chromium Cr (VI), manganese, nickel and lead. The particle size of the particulates affects how toxic the fumes are. The smaller the particles, the more dangerous they are because they are easier to breathe in deeply in the lungs. Inhaling dangerous substances through welding can lead to cancer of lungs, bowel, intestines and liver, brain damage and neurological diseases, decreased lung capacity and pneumonia, and asthma, skin diseases and allergies. Other types of equipment may emit other types of fumes and particulates. PSD has adequate dust collection systems; the schools now need adequate ventilation for other hazardous risks.

For PSD students, there are three urgent needs. First, schools need to reduce the risks of breathing hazardous substances. Second, students and staff need access to newer methods of welding and new equipment that will lead to improved working environments. Third, buildings need to have enough space in the classroom environment so that manufacturing and fabrication can be practiced safely without impacting other types of learning at other equipment. All three of these pressing needs are addressed with this BEST proposal.

**Does this Project Conform with the Public School Facility Construction Guidelines?** Yes

**If not, provide an explanation for the use of any standard not consistent with the guidelines:**

**How Does the Applicant Plan to Maintain the Project if it is Awarded?**

Poudre School District's Facilities Department budget and individual school site budgets are used to provide maintenance on all building systems. The District has a long range plan for such maintenance, with a matrix that defines priorities and projected life cycles of systems such as the ventilation systems and electrical systems included in this proposal, once they are purchased or replaced. This plan includes industry best practices life cycle timelines for staff to perform regular assessment of the condition of the systems. This proposal also includes equipment that is warranted by the manufacturer initially and then will be maintained by site budgets following that period.

**Describe the condition of the public school facility at the time it was purchased or constructed and, if the facility was not new or was not adequate as a public school facility at that time, provide the rationale for purchasing the facility or constructing it in the manner in which you did:**

Both Poudre and Rocky Mountain High Schools were newly constructed; Poudre High School was built in 1962 and Rocky Mountain High School was built in 1973..

**Describe the history of capital improvements made to the facility by the district/charter school in order to make it suitable for students. Include a list of all capital projects undertaken in the affected facility in the last 3 years:**

Poudre High School: Habitat for Humanity trades program space, re-keyed building, landscaping, time-out room renovation, gym floor replacement, entry door replacement, renovation of office entry from outside building, Everest cylinders, expansion tanks, Glycol feeder valves, screen door replacement on kitchen entry, restroom compliance, flooring repairs, asphalt repairs, concrete repairs, tree trimming and removal, CO2 sensors. Rocky Mountain High School: polished concrete, traffic island, trash enclosures, backstop and fencing, classroom conversion, Tech Ed LED installation, Everest cylinders, expansion tanks, Glycol feeder valves, screen doors on kitchen entry, restroom compliance, flooring repairs, asphalt repairs, concrete repairs, tree trimming and removal, CO2 sensors.

**What options outside of the BEST grant has the applicant investigated or leveraged to address the school's facility needs?**

Poudre School District's Career and Technical Education program provided the matching funds for the 2018 BEST grant that improved the dust collection systems in CTE classrooms/shops across the District. However, this is a much larger program need and request for funds, and the amount of match needed is unavailable through CTE department funding. Other District funding and school site funding may be available in the form of additional staffing as programs at these two high schools continue to attract students to workforce learning experiences.

**How do you budget annually to address capital outlay needs in your district/charter? Include \$/FTE for the prior fiscal year:**

Poudre School District has an established capital projects program to address the needs of all district facilities based on prior



## BEST FY2019-20 GRANT APPLICATION SUMMARIES

need. Facility Services is allotted \$623,000 per year for these programs, equating to approximately \$180 per FTE.

**If relevant to your project, what are your current annualized utility costs, and what amount of reduction in such costs do you expect to result from this project?**

N/A

<b>Grant Request:</b>	\$636,563.40	<b>CDE Minimum Match %:</b>	68%
<b>Applicant Match:</b>	\$1,485,314.60	<b>Actual Match % Provided:</b>	70%
<b>Total Project Cost:</b>	\$2,121,878.00	<b>Is a Waiver Letter Required?</b>	No
<b>Affected Sq Ft:</b>	7,100	<b>Contingent on a 2019 Bond?</b>	No
<b>Affected Pupils:</b>	3,854	<b>Source of Match:</b>	
<b>Cost Per Sq Ft:</b>	\$298.86	2016 Bond	
<b>Soft Costs Per Sq Ft:</b>	\$62.40	<b>Escalation %:</b>	0%
<b>Hard Costs Per Sq Ft:</b>	\$236.46	<b>Construction Contingency %:</b>	10%
<b>Cost Per Pupil:</b>	\$551	<b>Owner Contingency %:</b>	0%
<b>Gross Sq Ft Per Pupil:</b>	146	<b>Historical Register?</b>	No
<b>Is a Master Plan Complete?</b>	Yes	<b>Adverse Historical Effect?</b>	No
<b>Who owns the Facility?</b>	District	<b>Does this Qualify for HPCP?</b>	No

**If owned by a third party, explanation of ownership:**

**If match is financed, explanation of financing terms:**

### Financial Data (School District and BOCES Applicants)

<b>District FTE Count:</b>	28,198	<b>Bonded Debt Approved:</b>	\$495,000,000
<b>Assessed Valuation:</b>	\$3,284,003,917	<b>Year(s) Bond Approved:</b>	10, 16
<b>PPAV:</b>	\$116,460	<b>Bonded Debt Failed:</b>	
<b>Unreserved Gen Fund 17-18:</b>	\$12,438,878	<b>Year(s) Bond Failed:</b>	
<b>Median Household Income:</b>	\$63,316	<b>Outstanding Bonded Debt:</b>	\$175,845,000
<b>Free Reduced Lunch %:</b>	29%	<b>Total Bond Capacity:</b>	\$656,800,783
<b>Existing Bond Mill Levy:</b>	13.947	<b>Bond Capacity Remaining:</b>	\$480,955,783
<b>3yr Avg OMFAC/Pupil:</b>	\$1,214.71		

● **Facilities Impacted by this Grant Application** ●

**BYERS 32J - Asbestos Abatement - Byers ES Jr.Sr. HS - 1951**

<b>District:</b>	Auditor - Byers 32J
<b>School Name:</b>	Byers ES/ Jr/Sr HS
<b>Address:</b>	444 EAST FRONT STREET
<b>City:</b>	Byers
<b>Gross Area (SF):</b>	115,260
<b>Number of Buildings:</b>	2
<b>Replacement Value:</b>	\$26,684,883
<b>Condition Budget:</b>	\$8,755,012
<b>Total FCI:</b>	0.33
<b>Adequacy Index:</b>	0.23



**Condition Budget Summary**

System Group	Replacement Cost	Requirement Cost	SCI
Electrical System	\$5,601,047	\$1,439,416	0.26
Equipment and Furnishings	\$264,444	\$134,170	0.51
Exterior Enclosure	\$4,711,132	\$446,674	0.09
Fire Protection	\$15,544	\$737,996	47.48
Furnishings	\$873,345	\$372,998	0.43
HVAC System	\$2,390,593	\$1,118,825	0.47
Interior Construction and Conveyance	\$4,122,739	\$1,774,465	0.43
Plumbing System	\$1,554,006	\$486,479	0.31
Site	\$3,328,143	\$2,969,427	0.89
Structure	\$3,823,892	\$0	0.00
<b>Overall - Total</b>	<b>\$26,684,883</b>	<b>\$9,480,450</b>	<b>0.36</b>

# BEST FY2019-20 GRANT APPLICATION SUMMARIES

**Applicant Name:** BYERS 32J

**County:** Arapahoe

**Project Title:** Asbestos Abatement

**Applicant Previous BEST Grant(s):** 3

**Has this project been previously applied for and not funded?** No

**If Yes, please explain why:**

## Project Type:

- |   |   |  |  |
|---|---|--|--|
| <input type="checkbox"/> New School         | <input type="checkbox"/> Roof               | <input checked="" type="checkbox"/> Asbestos Abatement | <input type="checkbox"/> Water Systems     |
| <input type="checkbox"/> School Replacement | <input type="checkbox"/> Fire Alarm         | <input type="checkbox"/> Lighting                      | <input type="checkbox"/> Facility Sitework |
| <input type="checkbox"/> Renovation         | <input type="checkbox"/> Boiler Replacement | <input type="checkbox"/> Electrical Upgrade            | <input type="checkbox"/> Land Purchase     |
| <input type="checkbox"/> Addition           | <input type="checkbox"/> HVAC               | <input type="checkbox"/> Energy Savings                | <input type="checkbox"/> Technology        |
| <input type="checkbox"/> Security           | <input type="checkbox"/> ADA                | <input type="checkbox"/> Window Replacement            | <input type="checkbox"/> Other             |

## General Information About the District / School, and Information About the Affected Facilities:

### Introduction to School District

Byers School District is located 45 miles east of downtown Denver, Colorado on the I-70 corridor. The Byers School District serves a population of 550 students ranging from Pre-K through 12th grade on one contiguous K12 campus that includes Pre-K, Elementary School, Middle School and High School classroom wings. The school district covers 500 square miles and has a fleet of buses that provides transportation for students. The district maintains a standard five day school week. The community uses district facilities for various events and activities in the evening and on weekends throughout the year.

### Academics & Educational Programming

The district serves a population of 550 students, 50% of whom qualify for the free/reduced lunch program. Students are offered a well-rounded academic program with two hours of language arts offered daily along with math, social studies, science, computer science, physical education and music.

### Affected Facilities

The scope of the proposed project is for significant upgrades to improve and modernize areas from the 1970s construction eras that still contain hazardous materials in building materials. District personnel has done a good job maintaining these areas to the best of their ability, but regulation and other health requirements limit the ability for staff to be able to responsibly maintain these nearly 50 year old areas of the facility as building materials degrade further creating increasing concern for district decision-makers and staff. With the economic downturn, and a negative factor of approximately \$ 408,000 (for the 2017/2018 fiscal year) the Byers School District has endured while putting forth significant effort to continue to responsibly prioritize safety, health, and building maintenance needs while continuing to provide quality education for our students. Annual audits are completed by the Arapahoe County Sheriff's department around safety and welfare, providing guidance for future 1-3 year planning activities.

### Conclusion

The district's greatest asset is its people, a tightly knit, hard-working community known for its friendly and caring atmosphere. A mix of fourth-generation ranchers, longtime locals, and new residents, Byers is filled with both citizens and students, all of whom have a strong sense of community pride and tradition. It is the district's hope that a BEST grant would give the district the ability to continue to ensure a safe environment for our students, staff and community members with the goal of continuous improvement towards a high-quality education and satisfying, healthy experience for students and community members for the long-term future.

## Deficiencies Associated with this Project:

A targeted building analysis/audit and districtwide facility maintenance plan was completed in 2014 analyzing HVAC, electrical, plumbing, building envelope, building construction/materials, program and function. This audit emphasized building health, safety, and included an assessment of all major building systems and infrastructure to identify deficiencies and prioritize improvements relative to various quantitative and qualitative needs.

The districtwide audit and master planning effort identified numerous deficiencies related to health, safety, accessibility, functional use, and ineffective/failing building systems that are critical for occupant health, safety, and supporting educational programs. The district has used this analysis for a systematic approach toward prioritizing the needs for the immediate future

## BEST FY2019-20 GRANT APPLICATION SUMMARIES

and long range plans.

### IDENTIFIED HEALTH ISSUES RELEVANT TO THIS PROJECT

#### Asbestos Containing Materials

The most significant relevant health concern is the presence of asbestos in various materials from the 1970's areas of the K12 facility. Asbestos containing materials is present in flooring tile mastic and drywall in specific areas.

The district and Building Inspector Consultants have identified a high risk area of approximately 3,400 square feet of vinyl asbestos tile material (VAT's) in the central wing of the 1970's building. The VAT's are covered by adhesive applied carpeting. The condition of the VAT's is primarily unknown due to the carpet covering. The assumption is that the carpet covered VAT's are currently non-friable. Normally, carpet replacement would include stripping the old carpet followed by aggressive removal of the adhesive in preparation for replacement. However, in this case, the carpet is adhered to VAT's. The removal of adhered carpeting from VAT's cannot be done without breakage of the tile, thus rendering it friable, therefore needing full abatement. Commercial carpeting in our district generally has a lifespan of around ten years. The primary impact to lifespan is the amount of traffic. The classroom carpeting is in fair condition. While the hallway carpeting is showing significant degradation due to high volume traffic including fraying, material dislocation, seams separating and permanent staining.

The carpet was originally installed due to heavy traffic over the aging tile and concern over "dislodging" or "breakage" over time, and that was a concern 15 years ago. District maintenance staff can only work on a 3'x3' area at a time, which worked for minor issues. However, it is time to replace the carpet and it has been strongly suggested by a Certified Building Inspector specializing in ACM (see attached letter from inspector) to not remove the glued down carpet without a proper abatement process conducted and protocol followed.

Given the wear on the carpet as well as degradation of the original 9"x9" tiles, there is significant concern that continuing to forego a major effort could increasingly create risk and liability for the school district, as it is widely known by community members the presence of these hazardous materials within the oldest areas of the building.

In 1982, the U.S. EPA commissioned a study of potential for fiber release from VAT's (GCA-TR-82-16-G, Analysis of Fiber Release from Certain Asbestos Products). This study indicated that the useful lifespan of VAT's is 20 to 30 years. According to school district records these tiles were installed during the original construction in 1972, making them 46 years old. The study also points out that "the greatest fiber release occurs during removal". The study measured fiber exposure during "controlled" removal of tiles to indicate that fiber exposures can be significant; approaching 40 times the State defined maximum allowable fiber level (MAL).

#### Proposed Solution to Address the Deficiencies Stated Above:

##### Floor Tile Solution:

A number of areas have been addressed by the district under a legitimate Operations and Maintenance approach as evidenced by the patchwork of miss-matched tiles in the space. It is clear that the opportunity to use an O&M process is outpaced by the advancing degradation of the tile. Large portions of these tiles are in a condition in which they can no longer be managed in any other way than a complete abatement.

The asbestos abatement plan has been developed as follows:

- Construct a modified full containment per Colorado Regulation 8 to include criticals on all exit openings, two 6 mill poly walls overlapping two mill reinforced floors overlapping two 4 mill ceilings.
- Construct three stage decontamination and two stage waste load out stations.
- Install negative air machines, box fans, manometer, etc.
- Abate: 3,090 square feet of carpet and floor tile identified as asbestos containing.
- Abate: 3,090 square feet of asbestos containing mastic.
- Call for independent third party visual and PCM /TEM air clearances.
- Load waste into roll off containers and transport demolition to the DADS landfill.
- Manifest each roll off.
- Demobilize equipment from site.
- District will be provided all copies of project completion documentation, air-clearances, etc.

##### Restoration to Affected Areas:

Once the existing VAT floor tile with ACM and mastic has all been demolished in the affected area, approximately 370 square

## BEST FY2019-20 GRANT APPLICATION SUMMARIES

yards of commercial carpet tile will be installed with 600-700 feet of new rubber cove base. The commercial carpet tile will be adhered to a carpet pad with commercial carpet contact glue that will be connected to the concrete base below. The district has had success with commercial carpet tile in the past and likes the flexibility to replace a single tile as needed, as opposed to an overall carpeted area. Also, the carpet tile significantly cuts down on noise in many of these high traffic areas, which is another goal of the district, given the way the district responsibly utilizes its entire K12 facility.

### **How Urgent is this Project?**

Byers Schools does not have the financial capacity to address our long list of building needs without assistance. The urgency of completing this project, in full, is a very high priority to the district for the health and safety of our staff, students and community. Devastating health impacts of hazardous materials like asbestos are well documented. If this grant were not awarded, the district would be forced to dig into financial reserves it would rather not have to spend given the volatile climate right now in Colorado K12 finance. Foregoing the abatement project will further put the district at risk and in an even greater reactive position. This project has the potential to create a safer and healthier environment for every Byers Schools student and staff, as these areas are utilized by all grades.

Given the health hazards of various types of asbestos containing materials in the building, any effort to renovate the buildings and upgrade systems and infrastructure will undoubtedly require significant asbestos abatement. While the proposed project is not a comprehensive removal of all asbestos in each of the buildings, it is a significant amount and will eliminate many areas of concern. If the project is awarded, asbestos is planned to be abated the summer of 2019.

**Does this Project Conform with the Public School Facility Construction Guidelines?** Yes

**If not, provide an explanation for the use of any standard not consistent with the guidelines:**

### **How Does the Applicant Plan to Maintain the Project if it is Awarded?**

Byers School District believes in a strong preventative maintenance program. This commitment is evident in the fact that many of the original building's systems still function even though they are aged well beyond their life expectancy. We implement scheduled maintenance and warranty inspections for all capital construction repair or replacement projects soon after project completion. Training of maintenance and custodial personnel on new components and systems are incorporated into the contract documents. Training sessions take place at various stages during project construction. This helps ensure a successful maintenance/care program, allowing us to get the best performance and longevity out of the entire project. The District budgets for maintenance and repairs in two different funds. Maintenance Discretionary Budget which is funded from General Fund and the Capital Reserve Fund. The District may continue to allocate up to \$100 per pupil into Capital Reserve. The District is prepared to continue to budget the Capital Reserve allocation, as well as the same operating costs historically budgeted in the General Fund for maintenance of facilities.

**Describe the condition of the public school facility at the time it was purchased or constructed and, if the facility was not new or was not adequate as a public school facility at that time, provide the rationale for purchasing the facility or constructing it in the manner in which you did:**

The eras of the K12 facility were built as new construction adding to the contiguous campus at their respective time of original construction. Each addition was borne from continued enrollment growth for the district as the unincorporated community of Byers has seen organic population increases due to the desire for available residential areas continue to expand further east from the Denver Metro area.

The Byers K12 facility is a 109,000 square foot combination elementary, junior and senior high school. The building is one connecting facility besides an adjacent Vo-Ag building to the west. The building is primarily constructed of brick and block with various vintages of construction. Two of the four main areas being from the 1970s and the other two from the early 2000s.

The eras of construction for the K12 facility are as follows:

- 1917/1923: The original structure was built but was torn down in 1980.
- 1952: Old gym built.
- 1967: Vo-Ag building constructed.
- 1972: Elementary wing built.
- 1979: Junior/Senior High and gym added.
- 1989: Commons addition.
- 2000: Elementary, high school and kitchen additions & remodel.
- 2007: Elementary remodel.

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**Describe the history of capital improvements made to the facility by the district/charter school in order to make it suitable for students. Include a list of all capital projects undertaken in the affected facility in the last 3 years:**

The Elementary Wing of the K12 facility was construction in 1972 as the main classroom portion of the current building. In 1979, the current Junior High classroom wing and main gymnasium were built, adding significant square footage to the southern portions of the connected building. Hallway were added connecting the old gymnasium (from 1952) to the new gymnasium space. In addition, an expansive hallway connected the new classroom wing with the new gymnasium/athletic areas and also the original Elementary wing areas. This addition more than doubled the square footage of the now contiguous building.

The late 1980's brought the addition of the existing Commons area which further infilled the Elementary School addition and the gymnasium/athletic areas to the south.

A major bond effort was passed in the 2000 adding the second most new space to the facility to-date. The far eastern wing of the Elementary School was added as an anchor to that side of the building. Also, a similar addition was added to the south and southeaster portion of the K12 facility. This was for the High School/Junior high entrance and an additional classroom wing for the growing High School enrollment. Further remodeling of the original Elementary areas was conducted in 2007.

Originally the building was only heated by a hot water boiler system. The 2000 bond issue and 2007 remodel began the incorporation of decentralized systems for heating and cooling the building. A further HVAC project in 2014 added cooling to the remaining areas of the building and fully decentralized the building from the hot water boiler system.

Byers Schools has also successfully utilized the BEST Program in the past for a major re-roofing effort, implementing a built up roof over a majority of the building's oldest square footage in 2013.

**What options outside of the BEST grant has the applicant investigated or leveraged to address the school's facility needs?**

We have looked at safety and security grants to improve entryway and perimeter protections. These projects included a match as well, so the leverage of funds really didn't occur.

**How do you budget annually to address capital outlay needs in your district/charter? Include \$/FTE for the prior fiscal year:**

We annually allocate \$85-165 per student, district wide to address facility's capital needs. The prior fiscal year is indicative of that number.

**If relevant to your project, what are your current annualized utility costs, and what amount of reduction in such costs do you expect to result from this project?**

NA

<b>Grant Request:</b>	\$35,668.36	<b>CDE Minimum Match %:</b>	59%
<b>Applicant Match:</b>	\$51,327.64	<b>Actual Match % Provided:</b>	59%
<b>Total Project Cost:</b>	\$86,996.00	<b>Is a Waiver Letter Required?</b>	No
<b>Affected Sq Ft:</b>	3,400	<b>Contingent on a 2019 Bond?</b>	No
<b>Affected Pupils:</b>	547	<b>Source of Match:</b>	General Fund
<b>Cost Per Sq Ft:</b>	\$25.59		
<b>Soft Costs Per Sq Ft:</b>	\$7.96	<b>Escalation %:</b>	6.5%
<b>Hard Costs Per Sq Ft:</b>	\$17.63	<b>Construction Contingency %:</b>	4%
<b>Cost Per Pupil:</b>	\$159	<b>Owner Contingency %:</b>	4.5%
<b>Gross Sq Ft Per Pupil:</b>	199	<b>Historical Register?</b>	No
<b>Is a Master Plan Complete?</b>	Yes	<b>Adverse Historical Effect?</b>	No
<b>Who owns the Facility?</b>	District	<b>Does this Qualify for HPCP?</b>	No

**If owned by a third party, explanation of ownership:**

**If match is financed, explanation of financing terms:**

# BEST FY2019-20 GRANT APPLICATION SUMMARIES

## Financial Data (School District and BOCES Applicants)

<b>District FTE Count:</b>	484	<b>Bonded Debt Approved:</b>	
<b>Assessed Valuation:</b>	\$64,699,416	<b>Year(s) Bond Approved:</b>	
<b>PPAV:</b>	\$133,815	<b>Bonded Debt Failed:</b>	
<b>Unreserved Gen Fund 17-18:</b>	\$654,075	<b>Year(s) Bond Failed:</b>	
<b>Median Household Income:</b>	\$69,744	<b>Outstanding Bonded Debt:</b>	\$215,000
<b>Free Reduced Lunch %:</b>	40%	<b>Total Bond Capacity:</b>	\$12,939,883
<b>Existing Bond Mill Levy:</b>	0	<b>Bond Capacity Remaining:</b>	\$12,724,883
<b>3yr Avg OMFAC/Pupil:</b>	\$1,411.76		

● **Facilities Impacted by this Grant Application** ●

**PRITCHETT RE-3 - Building System/ Safety Upgrades - Pritchett ES/MS/HS - 1929**

<b>District:</b>	Auditor - Pritchett RE-3
<b>School Name:</b>	Pritchett ES/MS/HS
<b>Address:</b>	533 IRVING STREET
<b>City:</b>	PRITCHETT
<b>Gross Area (SF):</b>	39,000
<b>Number of Buildings:</b>	2
<b>Replacement Value:</b>	\$8,615,509
<b>Condition Budget:</b>	\$6,445,446
<b>Total FCI:</b>	0.75
<b>Adequacy Index:</b>	0.41



**Condition Budget Summary**

System Group	Replacement Cost	Requirement Cost	SCI
Electrical System	\$1,258,537	\$1,490,255	1.18
Equipment and Furnishings	\$426,209	\$171,688	0.40
Exterior Enclosure	\$1,384,933	\$567,931	0.41
Fire Protection	\$1,851	\$386,016	208.50
Furnishings	\$66,568	\$16,642	0.25
HVAC System	\$1,084,721	\$1,312,914	1.21
Interior Construction and Conveyance	\$1,740,331	\$1,399,235	0.80
Plumbing System	\$572,474	\$588,610	1.03
Site	\$755,893	\$792,597	1.05
Special Construction	\$75,551	\$94,439	1.25
Structure	\$1,248,443	\$22,520	0.02
<b>Overall - Total</b>	<b>\$8,615,509</b>	<b>\$6,842,847</b>	<b>0.79</b>



# BEST FY2019-20 GRANT APPLICATION SUMMARIES

**Applicant Name:** PRITCHETT RE-3

**County:** Baca

**Project Title:** Building System/ Safety Upgrades

**Applicant Previous BEST Grant(s):** 0

**Has this project been previously applied for and not funded?** No

**If Yes, please explain why:**

## Project Type:

- |  |  |  |  |
|--|--|--|--|
| <input type="checkbox"/> New School            | <input type="checkbox"/> Roof                          | <input checked="" type="checkbox"/> Asbestos Abatement | <input type="checkbox"/> Water Systems     |
| <input type="checkbox"/> School Replacement    | <input checked="" type="checkbox"/> Fire Alarm         | <input checked="" type="checkbox"/> Lighting           | <input type="checkbox"/> Facility Sitework |
| <input checked="" type="checkbox"/> Renovation | <input checked="" type="checkbox"/> Boiler Replacement | <input checked="" type="checkbox"/> Electrical Upgrade | <input type="checkbox"/> Land Purchase     |
| <input type="checkbox"/> Addition              | <input checked="" type="checkbox"/> HVAC               | <input checked="" type="checkbox"/> Energy Savings     | <input type="checkbox"/> Technology        |
| <input checked="" type="checkbox"/> Security   | <input type="checkbox"/> ADA                           | <input checked="" type="checkbox"/> Window Replacement | <input type="checkbox"/> Other             |

## General Information About the District / School, and Information About the Affected Facilities:

Pritchett School is the centerpiece of the community. We have a large number of families sending a 4th generation through, viewing the school as an extension of their homes. We have maintained the facility in a way that is not only safe for students and conducive to learning, but makes our community proud. Our people view the gym, and the entire building, as the community living room, where families, friends, and neighbors gather, and news is exchanged. With rising costs, and decreasing state funding, as well as a low capital reserve, repairs have become increasingly impossible, and we have reached the point where several projects are critical to provide a safe facility.

Pritchett School District RE-3 is located in the southwest corner of Baca County, in Southeast Colorado where the main industry is Agriculture, ranch land and dry land farming. Pritchett is a small rural town with no traffic lights or in sight; not to mention no fast food, grocery stores or amenities that most people are accustomed to.

The original school was built around 1929 and served K-12 in one building. The district expanded the school in the 60s to include a bigger gym and more classrooms. The school still houses K-12 in one building, as well as the administration office. Surrounded and supported by an agricultural economy, the District built an Agriculture Education (FFA) Shop in 1998, this provided a bigger building for Ag-Ed and provided more room in the school to expand into a larger kindergarten room. The 18-19 enrollment is 51 PK-12 students. Our total count does not tell the full story. Part of our growth is families returning after having graduated, married and settled away from Pritchett, but once they have children, parents want them in our school. The community has seen growth directly related to the school. We are drawing families back because of the strength of our program. These same strengths also draw students from surrounding districts because of our reputation of excellence. We provide small class sizes, and work hard to create an inclusive environment with a family like sense of belonging. We provide many opportunities for individualized education plans, working to overcome the obstacles many students face. We also ensure every student has the 21st century skills needed to be successful in today's workforce.

With our building at adequate size and structurally sound, it is time to address building issues that have been postponed due to our decline in State funding. Many have become safety issues for our students, staff and community. A renovation of the existing facility will address building integrity/safety, building comfort and improve life safety. As detailed in the Deficiencies section, you will see that we still have a great building - old but in great shape. However, the life of all internal fixtures is at the max life expectancies. The latest revised CDE Statewide Facility Assessment assigned an FCI score to Pritchett Schools of a 0.75. When looking at this number one might think that it is time to consider dozing the school and starting from new. On the contrary, the structure is in very good shape and should easily last many more years. The BEST Grant can ensure our school for many more years without having to spend the extra money in a total new school.

When looking at the FCI score and what we are proposing for renovation to the building it will show a big improvement to the total FCI score and show that Pritchett school would be a better investment of everybody's money to update the internal workings of the school, instead of a tear down and rebuild. Since the Facility assessment of the Pritchett School we have a new Gym roof (2018) that was an insurance claim, this roof is a sloped roof and should last for many years. At the same time this is a three-phase project and in the next two years the whole school will have a new roof. This project in itself should help the FCI score for our school.

## Deficiencies Associated with this Project:

# BEST FY2019-20 GRANT APPLICATION SUMMARIES

## PRITCHETT SCHOOL BUILDING OVERVIEW

The Pritchett School is an existing PreK-12th Grade school built in two phases. A 12,700 square foot, two-story Elementary School was built in approximately 1929. An 18,400 square foot addition consisting of a kitchen, gym, middle school and high school was added in 1962. The Elementary was refurbished as part of the 1962 addition. Two small additions have been added since 1962 - a 665 square foot visitor's locker room was also added behind the gymnasium in approximately 1974. And, a 1,630 square foot maintenance shop was added behind the original shop classroom. At the same time, the shop classroom was converted to a media center / library.

Beside the two small additions, there has been little to no work done on much of the building since 1962 other than occasional finish upgrades and minimum required maintenance on MEP systems. The accompanying drawings show an overall floor plan of the entire school building with each area labeled.

The entire building structure is built of brick and block, and it shows only minor signs of wear. No structural issues have been noted by the staff or discovered by professional inspections. Most roofs have been replaced in the last 10-15 years, and the final roof that requires replacement is scheduled to begin work in the summer of 2019 using insurance funds.

In summary, the structure of the building is in good condition, but the mechanical, electrical, and plumbing infrastructure and equipment are well past their useful lives, having been essentially untouched for 57 years.

BEST funding would be specifically directed to improve health and safety, and to provide better educational environments for students and staff. Technology would be integrated into the HVAC control system by enabling remote monitoring and troubleshooting of mechanical systems. Building renovations will meet all CDE Facility Construction Guidelines.

## HEATING, VENTILATION, AND AIR CONDITIONING

### Elementary School

The original heating system, installed in 1929, is still in operation. The system is a one-pipe steam system in which low pressure steam is distributed in over-sized piping to radiators at the perimeter of the building. Steam condenses in the radiators and flows back into the boiler via gravity in the same pipe. The radiators and steam piping are all original to the building and are well past their useful life. The steam boiler was replaced when the addition was built in 1962, so it is 57 years old - also well past its useful life.

Most steam piping and all radiators are exposed throughout the building, which is a burn hazard. Also, the only ventilation available is via operable windows in the classrooms.

There is no zone level control system at all. A central thermostat in a first-floor classroom turns the boiler on and off. Because there are no zone controls, the spaces are heated very unevenly. Due to stratification, the second-floor classrooms are almost unbearably hot at 80+<sup>+</sup>F, while the first floor is kept in the high 60s.

### Gym

The gym has four gas-fired unit heaters, of which two have failed totally, and the other two are currently functioning only with major repairs every few years. Often, students wear coats during PE due to a lack of heat in the gymnasium.

The original ventilation system consisting of an exhaust fan and intake louvers has not functioned for a long time, so there is currently no ventilation in the gym at all.

### Middle School / High School

The MS / HS is heated and ventilated via gas-fired furnaces located in the corner of each classroom. These furnaces are all original to the building - 57 years old. Fresh air intakes are available, but have been closed off long ago by maintenance staff trying maintain heat in the classrooms.

The gas pressure regulators in each furnace had to be replaced in 2018 because of gas leaks. Some of the furnaces in the interior locker rooms have been put out of service due to the high cost of additional repairs, so no heat is available in these

# BEST FY2019-20 GRANT APPLICATION SUMMARIES

areas currently. All furnaces are well past their useful lives and need to be replaced.

**Cooling**  
The only cooling capabilities at the school are window- and roof-mounted evaporative coolers in the classrooms. These units are residential type units, not intended for permanent installation in an educational setting. Most of the coolers are around 20 years old and failing. Poor evaporative efficiency and lack of adequate relief air capabilities lead to moisture build up during the cooling season, which creates an uncomfortable environment.

The gym and auditorium have no means of cooling at all. Pritchett School is the center of the community, and it often hosts large community events. Lack of cooling in these two gathering spaces means events are sometimes delayed or cancelled due to heat. Additionally, the lack of cooling during the school year makes athletic events and PE classes quite uncomfortable, especially when couple with the lack of ventilation mentioned above.

## ELECTRICAL

Electrical distribution systems throughout the building are all of the 1962 vintage. The main distribution panel (MDP) and sub-panels are out of compliance with current codes and lack the capacity to supply power to modern classrooms. All panels throughout the building are completely full, with no room for additional circuits. The MDP and sub-panels are in very poor condition and require replacement.

Existing classrooms have only two receptacles each, on either side of the room, and many extension cords and power strips are currently used in order to get power to technology in the classrooms. Many more outlets are needed in every classroom to avoid fire hazards caused by the extension cords and power strips. Breakers are often tripped due to over use of the circuit power.

## CEILINGS & LIGHTING

Ceilings throughout the building are the original acoustical tile from 1962, and are in poor condition. Many tiles are chipped, falling off, or missing. Tiles are also dirty and faded, offering very little reflectivity to provide even lighting levels.

Light fixtures throughout the building are old metal vane style fixtures that are either surface mounted or hung on short pendants. These fixtures also have a limited distribution pattern, which causes uneven lighting in the classrooms. These fixtures are past their useful life and should be replaced.

Lighting in the Gym and Auditorium is controlled solely via circuit breakers, in violation of current codes, and require proper lighting control systems.

## FIRE ALARM SYSTEMS

The building lacks any modern fire alarm or suppression systems. A limited number of pull stations are located around the building, and the annunciators are outdated. There are no sprinklers, smoke detectors, or central control panel.

## WINDOWS, DOORS, & SECURITY

Windows throughout the building are all of the 1962 vintage. They are aluminum frame with single pane, and the exterior seals have been scraped and caulked many times over. The seals in nearly every window have failed, and condensation and infiltration are major issues. These windows provide little in the way of insulation value and are past their useful lives.

Most window treatments are attached directly to the mullions, and are 20+ years old. These will need to be replaced as well.

Exterior doors throughout the building are all original to the date of construction (1929 or 1962) and are in poor condition. There are large gaps between the doors and frames, and the manual locks have been replaced many times due to failures. All doors need to be replaced.

Additionally, there is little in the way of security and access control. Doors are not keyed consistently, and the antiquated camera system is neither monitored or recorded. There is a single main entrance is mostly left open due to the manual nature

## BEST FY2019-20 GRANT APPLICATION SUMMARIES

of the locks, so there is no controlled entry point for visitors.

### PLUMBING

The main sewer line that discharges from near the kitchen out to the city sewer to the west is original to the 1929 building, and is in poor condition. The school cleans this line out three times per year in order to get by, but there are still issues with periodic back-ups. This line needs to be completely replaced.

### ASBESTOS

There are some areas with known ACM, which are listed in the up to date AHERA report from 2017. Specific materials in areas with planned work were tested in January 2019 for ACM.

In summary, no interior or exterior walls were found to have any ACM, so penetrations through them should not be a problem. Additionally, no ceiling tiles or mastic were found to have ACM, so all ceiling work is clear. A minimal amount of ACM was discovered in the exterior window caulking, VCT tiles throughout the building were confirmed to be ACM, and significant amounts of ACM are present in the boiler room.

### Proposed Solution to Address the Deficiencies Stated Above:

#### HEATING, VENTILATION, AND AIR CONDITIONING

In order to improve thermal comfort, increase standardization, and provide minimum required ventilation rates, all HVAC systems throughout the building will be removed and replaced. In all areas, except the gym, a water source heat pump (WSHP) system will be installed.

The WSHP system will consist of a central plant with n+1 redundant, high-efficiency, condensing boilers; a closed loop cooler; and pumps to circulate water through the equipment and the building. Unit ventilators will be installed in each classroom, with new outdoor air intakes where needed. Unit ventilators will have hot water bypass capability to use hot water directly for heating. Areas with heating only needs will be provided with cabinet unit heaters.

In the gym, a dedicated, gas-fired, DX cooling rooftop unit will be installed. This unit will have full ventilation capacity for the gymnasium, and it will provide variable air volume capacity to meet the varying loads in the gym.

A new building automation system will be installed to provide energy efficient control strategies, as well as to enable remote monitoring and troubleshooting capabilities.

#### ELECTRICAL

The entire electrical distribution system will be replaced. A new MDP will be provided, and all sub-panels and associated feeders will be installed to comply with 2017 NEC. Existing lighting and receptacle circuits will be re-used where possible, and all new mechanical units will be provided with dedicated circuits. New receptacles will be provided in every classroom to meet the school's needs for classroom technology and general service.

#### PLUMBING

Main sewer lines will be excavated, removed, and replaced with new PVC or cast iron lines sized for the full load of the building plus 25% additional capacity for future use. Trenches will be properly sloped, compacted, and back-filled to prevent settling and low spots.

#### CEILINGS & LIGHTING

Since all new piping and conduit will be run in the ceilings, a new suspended acoustical ceiling tile system will be installed in all classrooms, corridors, offices, and other occupied areas as needed to conceal the utilities. New suspended ceilings will provide improved sound quality, reflectivity and illuminance over the previous acoustical tiles.

New high efficiency LED fixtures will be installed to provide improved and even light levels. IESNA standards for educational facilities will be met, and ASHRAE 90.1 / IECC efficiency levels will be exceeded.

#### FIRE ALARM SYSTEMS

## BEST FY2019-20 GRANT APPLICATION SUMMARIES

A modern fire alarm system will be installed to meet current NFPA and IBC requirements in un-sprinkled buildings. A new FACP will be installed, with pull stations, smoke detectors, and annunciators as required for code compliance.

### WINDOWS, DOORS, & SECURITY

All of the original 1962 windows will be replaced with new, insulated, thermally broken, aluminum frame windows with double pane, low-e glazing. Existing mullion lines will be matched, and operable sections will be provided in similar locations to the existing windows.

All exterior doors will be replaced with insulated metal doors (glazed where appropriate). Exterior doors will all have centralized access control.

At the main entrance, a security vestibule will be created by installing a new wall with access-controlled doors inside the main entry doors. The main entrance will be monitored by staff in the office adjacent to the entry.

A video monitoring system will be installed with cameras at appropriate locations. The system will be centrally monitored and recorded.

### ASBESTOS

The specific abatement plan will be developed by a licensed abatement professional. The general plan is to abate all windows on the exterior, the boiler room, and any VCT located under floor mounted mechanical units where pipe penetrations may occur.

### How Urgent is this Project?

As stated in the deficiencies section, numerous areas of the building are already falling short of meeting code requirements for electrical safety, indoor air quality, and thermal comfort. Some spaces are as cold as 50 degrees and other spaces as hot as 90 degrees. The situation is growing more dire now that all equipment is at, or in most cases, well beyond its rated useful life.

Since the electrical system is already beyond its capacity, the district will continue to have limited ability to improve equipment, upgrade HVAC systems or implement classroom technology.

If the grant request is not awarded, equipment will continue to fail, and more funds will be expended with no benefit other than a short term fix that enables the district to limp along for another year or two. These short term fix funds will continue to deplete money from the capital budget, and the district will be in an even worse position to provide a match at a later date.

**Does this Project Conform with the Public School Facility Construction Guidelines?** Yes

**If not, provide an explanation for the use of any standard not consistent with the guidelines:**

### How Does the Applicant Plan to Maintain the Project if it is Awarded?

The District has historically maintained its facility and equipment well, which is why most of the building systems continue to operate at some level well beyond their rated useful life. The District will continue this tradition of operation and maintenance. For the HVAC systems, controls, security and fire alarm systems, Pritchett is dedicated to finding a low-maintenance system that can be updated to extend its life beyond its rated useful life.

We will utilize life cycle cost analysis to determine which systems provide the overall lowest cost to the district and has selected those HVAC, and controls systems. This makes the best use of both BEST and Pritchett's funds. The electrical, HVAC, and control systems upgrades will allow Pritchett to continue using its existing school buildings for decades into the future. Pritchett School District will allocate \$200 per student per fiscal year to the districts capital renewal reserve fund. Pritchett will continue to look first toward using its own resources to the greatest extent possible to keep up with future capital demands at the facility. Equally important to financial resources is Pritchett's continued attention to operations and maintenance (O&M). Pritchett has been able to maintain its equipment so the equipment reaches and often exceeds the equipment's rated useful life. This is readily observable as we have the majority of fixtures still in operation from the original build of the school. This dedicated O&M effort will continue to play a key role in how Pritchett is able to maximize the value of its facility's equipment. As a part of this O&M effort, Pritchett allocates approximately \$125,000 per year for O&M .

Electricity Utilities = \$30,000

# BEST FY2019-20 GRANT APPLICATION SUMMARIES

Natural Gas Utilities = \$15,000

O&M third party labor for mechanical/electrical/plumbing, controls, other facilities support services. = \$20,000

O&M supplies for other facilities support services. = \$60,000

**Describe the condition of the public school facility at the time it was purchased or constructed and, if the facility was not new or was not adequate as a public school facility at that time, provide the rationale for purchasing the facility or constructing it in the manner in which you did:**

The school pre K-12 was constructed in 1929. In the 1960's the school was added on to in order to accommodate the growing numbers of students.

**Describe the history of capital improvements made to the facility by the district/charter school in order to make it suitable for students. Include a list of all capital projects undertaken in the affected facility in the last 3 years:**

2018 = The District GYM was a flat roof and leaked. In 2018 the District through an insurance claim replaced the roof with a Sloped roof. Not only did the GYM roof get replaced we are in a three phase process of replacing the whole School roof.

2015 = USDA NSLP Equipment Grant \$12,500

2017 = USDA NSLP Equipment Grant \$15,000

**What options outside of the BEST grant has the applicant investigated or leveraged to address the school's facility needs?**

As a means to leverage additional funding sources, we are utilizing the Colorado Energy Office (CEO) Energy Performance Contracting Program and will be implementing this project under an energy performance contract. Iconergy, a pre-qualified services provider, will be thoroughly evaluating the facility deficiencies and then implementing solutions that will improve the deficiencies and reduce operating costs. Money saved from the current operating budget will help offset the up-front costs of our proposed project. In addition, Pritchett will receive free technical assistance from the CEO during all phases of the project, including procurement, contracting, engineering, design, construction and post construction review of training, commissioning and warranty. We will continue to pursue any and all available funding such as utility rebates and incentives, other state or federal funding sources that may come available to include in the performance contract to help offset District costs.

**How do you budget annually to address capital outlay needs in your district/charter? Include \$/FTE for the prior fiscal year:**

Pritchett school District is housed in one building preK-12. Capital outlay in the District budget since we are only one building and have no funds for big improvement projects are combined into only one area which is our maintenance budget. Within this line item of maintenance, funds are used for all repair to the building and fixtures as well as the District housing, plus maintenance personal salary. Therefore an accurate FTE is not applicable. However here is a good look at what our total District budget based on a 51.5 FTE is: Per Pupil Revenue = \$26,304 Per Pupil Expense = \$26,753 Which equates to a \$449 per FTE deficit. With the Best grant request, our District will work within the maintenance budget to allocate \$200 per student per year to help maintain new equipment as explained in section II.

**If relevant to your project, what are your current annualized utility costs, and what amount of reduction in such costs do you expect to result from this project?**

Our annual utility costs for electricity and natural gas totaled \$45,000 last year. We expect a reduction of costs for these utilities to be about \$7,000 per year. Costs for phone, internet and trash are not expected to be impacted by this project.

<b>Grant Request:</b>	\$3,910,681.65	<b>CDE Minimum Match %:</b>	41%
<b>Applicant Match:</b>	\$205,825.35	<b>Actual Match % Provided:</b>	5%
<b>Total Project Cost:</b>	\$4,116,507.00	<b>Is a Waiver Letter Required?</b>	Yes
<b>Affected Sq Ft:</b>	32,685	<b>Contingent on a 2019 Bond?</b>	No
<b>Affected Pupils:</b>	57	<b>Source of Match:</b>	
<b>Cost Per Sq Ft:</b>	\$125.94		District funds and a lease purchase funded by an energy performance contract
<b>Soft Costs Per Sq Ft:</b>	\$25.53	<b>Escalation %:</b>	2%
<b>Hard Costs Per Sq Ft:</b>	\$100.41	<b>Construction Contingency %:</b>	5%

## BEST FY2019-20 GRANT APPLICATION SUMMARIES

<b>Cost Per Pupil:</b>	\$72,219	<b>Owner Contingency %:</b>	5%
<b>Gross Sq Ft Per Pupil:</b>	619	<b>Historical Register?</b>	No
<b>Is a Master Plan Complete?</b>	No	<b>Adverse Historical Effect?</b>	No
<b>Who owns the Facility?</b>	District	<b>Does this Qualify for HPCP?</b>	No

**If owned by a third party, explanation of ownership:**

**If match is financed, explanation of financing terms:**

We have not pursued a BEST grant in the past due to our inability to fund the match requirement. With the facility improvement needs and urgency continuing to increase year over year, we began researching options on ways to facilitate the match and apply for BEST grant funding. We were introduced to the concept of Energy Performance Contracting (EPC) and how EPC enables the District to combine multiple funding sources (grants, rebates, annual utility savings and operational savings) and to finance up front costs (the match) using the annual cost savings along with available district funds to pay for the up front project costs over time. Thus reducing the need for the up front capital which we do not have available. By understanding how other districts have used Performance Contracting, we were able to identify the capability to move forward with the BEST grant request. It is still challenging to design a performance contract to provide the annual cash flow performance required by the legislation, therefore we must still request a waiver of our assigned match percentage in order for us to be able to fit the project into our overall budget.

### Financial Data (School District and BOCES Applicants)

<b>District FTE Count:</b>	49	<b>Bonded Debt Approved:</b>	
<b>Assessed Valuation:</b>	\$17,195,605	<b>Year(s) Bond Approved:</b>	
<b>PPAV:</b>	\$350,931	<b>Bonded Debt Failed:</b>	
<b>Unreserved Gen Fund 17-18:</b>	\$520,303	<b>Year(s) Bond Failed:</b>	
<b>Median Household Income:</b>	\$44,063	<b>Outstanding Bonded Debt:</b>	\$0
<b>Free Reduced Lunch %:</b>	58%	<b>Total Bond Capacity:</b>	\$3,439,121
<b>Existing Bond Mill Levy:</b>	0	<b>Bond Capacity Remaining:</b>	\$3,439,121
<b>3yr Avg OMFAC/Pupil:</b>	\$3,708.35		

## BEST School District and BOCES Grant Waiver Application

The BEST grant is a matching grant and each applicant is assigned a unique minimum matching requirement, pursuant to 22-43.7-109(9) C.R.S., to identify their financial capacity. An applicant may apply to the Capital Construction Assistance Board for a waiver or reduction of the matching moneys requirement for their project if the applicant determines their minimum match is not reflective of their current financial capacity, pursuant to 22-43.7-109(10) C.R.S.

Waiver applications are reviewed independent of the grant application. Upon review of the waiver application, the Capital Construction Assistance Board will make a motion to approve or deny the applicant’s waiver request.

The Capital Construction Assistance Board shall seek to be as equitable as possible by considering the total financial capacity of each applicant pursuant to 22-43.7-109(11) C.R.S.

### Instructions

Be specific when answering the questions and explaining the issues and impacts. Your response should include dollar amounts and specific ways in which such issues and impacts make it impossible for the applicant to make its full matching contribution. Please submit meeting minutes, award/non-award letters, official communications, budget documents, or other relevant documentation to support the responses provided.

Question 2, subsections A-H are related directly to the factors used in calculating the matching percentage. Only respond in detail to the factors which you believe inaccurately or inadequately reflect financial capacity. For those factors which you believe accurately or adequately reflect financial capacity, please leave the response blank or type “Agreed”.

---

1. Please describe why a waiver or reduction of the matching contribution would significantly enhance educational opportunity and quality within your school district or BOCES, or why the cost of complying with the matching contribution would significantly limit educational opportunities within your school district or BOCES.

Pritchett School District runs a vigorous educational program for preK-12 students with programs such as full day kindergarten, music, art, agriculture education (FFA) and all manner of extracurricular programs not often found in rural schools. We do this even though our agriculture community has limited means as we believe it comprises a well-rounded education for our students. Furthermore, our Budget Stabilization Factor over the last five years has cost the District nearly \$500,000. Thus a 5% match wavier that could be granted would help make the District financially whole for just the basic funding that every school district is to receive from the State. It will allow the District to allow the essential capital projects to be completed without disrupting the educational programs we are currently providing. Without the 5% wavier, many of these offerings will have to be downsized or eliminated.

2. Please describe any extenuating circumstances which should be considered in determining the appropriateness of a waiver or reduction in the matching contribution.

Responses in items A-H show needs of the District, and what extenuating circumstances lead to the District asking for a lowered match.



*\*The following are factors used in calculating the applicant's matching percentage. Only respond to the factors which you feel inaccurately or inadequately reflect financial capacity. Please provide as much supporting detail as possible.*

A. Per Pupil Assessed Valuation relative to the statewide average – The higher the Per Pupil Assessed Value the higher the match.

Applicant's PPAV: \$350,930.71

Weighted Rank: 3.85% of 5% max

Pritchett in the last year because of our excellence has seen an increase in students, if this continues it will lower our PPAV however.

B. The district's median household income relative to the statewide average – The higher the median household income, the higher the match.

Applicant's Median Household Income: \$44,063.00

Weighted Rank: 3.88% of 15% max

In looking at this figure, I believe it does not tell the whole story of the Pritchett School District. 1<sup>st</sup> Baca County is labeled as a suppressed County. 2<sup>nd</sup> the majority of the people whom live in the town of Pritchett are of low economic salary. I know this is an average figure which entails our agriculture community which is what brings this figure up. However, our District is not a very populated District.

C. Percentage of pupils eligible for free or reduced cost lunch relative to the statewide average – The lower the percentage for free and reduced cost lunch, the higher the match.

Applicant's FRED Percent: 57.9%

Weighted Rank: 6.29% of 20% max

It seems this figure may have been from a few years ago. For the school year of 2018-2019 the District is 69.72% FRED

D. Bond Election failures and successes in the last 10 years – The more attempts the school district has made, the lower the match.

Applicant's Bond Elections: 0

Adjustment: 0% (-1% per attempt)

Agreed

E. Bond mill levy relative to the statewide average – The higher the bond mill levy, the lower the match.

Applicant's Bond Mill Levy: 0.00

Weighted Rank: 20% of 20% max

Agreed

F. The school district's current available bond capacity remaining. - The higher the bond capacity, the higher the match.

Applicant's Remaining Bond Capacity: \$3,439,121

Weighted Rank: 5.17% of 20% max

With our total bonding capacity being less than \$4M, the fixed initiation costs for a bond program make this an prohibitively high cost alternative for funding.



G. The school district's unreserved fund balance as it relates to their overall budget.

District's Unreserved General Fund: \$520,303

Weighted Rank: 1.35% of 20% max

In a small Rural School, it is imperative to try to maintain this reserve for Capital projects beyond our control. With the waiver and the performance contract, we will still need to use 20% of our unreserved general fund at a minimum to fund this project leaving us in a difficult position should we have an unforeseen issue arise.

H. Other unusual financial burdens not reflected in the match calculation (ie. underfunded mandates, unexpected expenses, self-funded programs).

As stated in the school profile the District passed an increase in the mil levy in 2010, which made the funds available to the District in 2011-2012. The Budget Stabilization Factor mostly absorbs this increase in funds to our District. Below is the cost to our District from the Budget Stabilization Factor:

2014 = \$106,458  
2015 = \$98,300  
2016 = 97,773  
2017 = \$97,393  
2018 = \$82,496  
Total = \$482,420

3. What efforts have been made to coordinate the project with local governmental entities, community-based organizations, or other available grants or organizations to more efficiently or effectively leverage the applicant's ability to contribute financial assistance to the project? Please include all efforts, even those which may have been unsuccessful.

In the School year 2018-2019 the District applied for a \$50,000 Grant from a Baca County Foundation and was not successful in receiving any funds.

The District ran a successful Mill Levy Override (MLO) campaign in 2010 which took effect in 2011-2012

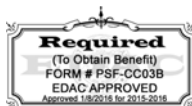
This project will be structured as an Energy Performance Contract which will reduce operating costs through the installation of newer and more efficient systems and allow the district to finance the up-front costs of the project including the BEST match amount over 15 to 20 years. By reducing up front capital the district can maintain an appropriate balance in the general fund for emergency issues.

4. **Final Calculation:** Based on the above, what is the actual match percentage being requested?

5%

CDE Minimum Match Percentage:

41%



**● Facilities Impacted by this Grant Application ●**

**SPRINGFIELD RE-4 - Safety Upgrades - Springfield Jr/Sr HS, - 1958**

District:	Auditor - Springfield RE-4
School Name:	Springfield Jr/Sr HS
Address:	389 TIPTON STREET
City:	SPRINGFIELD
Gross Area (SF):	60,806
Number of Buildings:	6
Replacement Value:	\$11,688,073
Condition Budget:	\$7,456,273
Total FCI:	0.64
Adequacy Index:	0.31



**Condition Budget Summary**

System Group	Replacement Cost	Requirement Cost	SCI
Electrical System	\$1,722,093	\$1,758,256	1.02
Equipment and Furnishings	\$341,034	\$278,971	0.82
Exterior Enclosure	\$2,167,864	\$770,191	0.36
Fire Protection	\$2,697	\$603,732	223.88
Furnishings	\$118,167	\$70,046	0.59
HVAC System	\$1,106,184	\$1,180,655	1.07
Interior Construction and Conveyance	\$2,785,308	\$1,832,291	0.66
Plumbing System	\$797,596	\$693,100	0.87
Site	\$809,465	\$659,824	0.82
Special Construction	\$230,125	\$287,657	1.25
Structure	\$1,607,540	\$0	0.00
Overall - Total	\$11,688,073	\$8,134,723	0.70

**SPRINGFIELD RE-4 - Safety Upgrades - Springfield ES, - 1949**

District:	Auditor - Springfield RE-4
School Name:	Springfield ES
Address:	389 Tipton Street
City:	Springfield
Gross Area (SF):	40,080
Number of Buildings:	3
Replacement Value:	\$8,625,111
Condition Budget:	\$4,042,163
Total FCI:	0.47
Adequacy Index:	0.29



**Condition Budget Summary**

System Group	Replacement Cost	Requirement Cost	SCI
Electrical System	\$1,392,819	\$1,032,405	0.74
Equipment and Furnishings	\$436,848	\$0	0.00
Exterior Enclosure	\$1,968,258	\$750,322	0.38
Fire Protection	\$1,789	\$396,706	221.78
Furnishings	\$84,254	\$105,318	1.25
HVAC System	\$681,368	\$126,159	0.19
Interior Construction and Conveyance	\$1,628,179	\$1,212,400	0.74
Plumbing System	\$488,779	\$492,089	1.01
Shell	\$21,845	\$0	0.00
Site	\$614,411	\$352,502	0.57
Structure	\$1,306,561	\$27,493	0.02
Overall - Total	\$8,625,111	\$4,495,394	0.52

# BEST FY2019-20 GRANT APPLICATION SUMMARIES

**Applicant Name:** SPRINGFIELD RE-4

**County:** Baca

**Project Title:** Safety Upgrades

**Applicant Previous BEST Grant(s):** 0

**Has this project been previously applied for and not funded?** No

**If Yes, please explain why:**

## Project Type:

- |  |  |  |  |
|--|--|--|--|
| <input type="checkbox"/> New School          | <input type="checkbox"/> Roof                  | <input checked="" type="checkbox"/> Asbestos Abatement | <input type="checkbox"/> Water Systems     |
| <input type="checkbox"/> School Replacement  | <input checked="" type="checkbox"/> Fire Alarm | <input type="checkbox"/> Lighting                      | <input type="checkbox"/> Facility Sitework |
| <input type="checkbox"/> Renovation          | <input type="checkbox"/> Boiler Replacement    | <input type="checkbox"/> Electrical Upgrade            | <input type="checkbox"/> Land Purchase     |
| <input type="checkbox"/> Addition            | <input type="checkbox"/> HVAC                  | <input type="checkbox"/> Energy Savings                | <input type="checkbox"/> Technology        |
| <input checked="" type="checkbox"/> Security | <input checked="" type="checkbox"/> ADA        | <input type="checkbox"/> Window Replacement            | <input type="checkbox"/> Other             |

## General Information About the District / School, and Information About the Affected Facilities:

Springfield School District is a small rural district in southeast Colorado. The district has a PK-12 student population of 320. Currently we hold PK-12 classes in 6 different buildings. Our staff includes 23 teachers, 2 spec.ed. teachers, a Title I teacher, 4 paras, a counselor and two administrators. The district has worked hard at adding and maintaining programs that fit the needs of our students. Despite funding deficiencies we have continued to offer band/music, physical education, Vo-AG/FFA, Family and Consumer Health and art. Our technology department offers classes to all 7-12 students and we continue to increase our technology capabilities to offer the best possible education possible. With an increase in mental health and counseling needs and have kept a full time counselor, and recently added a part time one at the elementary.

### Information about the affected facilities

The age and outdated nature of all the buildings on our campus are cause for our current security and safety needs. These deficiencies have become to be a concern of staff and community. These facilities no longer meet the expectations of the community or the staff. We are taking steps to make them as secure as possible and are working with law enforcement to help in this area as well.

### Maintenance Programs

Springfield has a maintenance supervisor that oversees all the facilities on campus. The district meets yearly with the maintenance supervisor, administrators and the board to determine current and future maintenance needs. The maintenance supervisor does yearly inspections on our various systems. He follows manufacturers recommended service procedures by monitoring owners manuals and speaking with company representatives. The district's yearly budget contains a \$100-\$125/student O&M budget which the supervisor determines the priority needs. When additional projects are needed the district evaluates the budget's capability to meet that need. If it is determined it can be met then it is added to the next budget. The maintenance supervisor is responsible along with the administration to develop replacement plans for all district.

### Past capital construction projects

Past capital construction projects throughout the district have included adding H/VAC to both the high school and elementary building in 2003 along with a new roof to both buildings at this time. To allow for expanded enrollment numbers need for storage until were added on to each elementary classroom. In the summer of 2016 the district began a 4 year project to replace the carpet in all classrooms as well repaint each room. A plan to replace the hallway carpet in this time is also in place. The gymnasium was constructed in 1958 and until recently had the original wooden seating. The district replaced this seating in August of 2018 with modern style plastic seats. In the fall of 2018 an outdated Merlan phone system was replaced with a Voip system. In 2016 the district began budget planning to replace the asphalt on our bus run. The deterioration in this run was increasing repair and maintenance costs on all of the district's fleet. This project was completed in the fall of 2018. In 2008 the district replaced the florescent lighting throughout the campus with T-8 light bulbs. We are currently working on a project to replace the T-8's with LED lighting. A new permanent trophy case was installed in the fall of 2018 to showcase the successes of our students. The district has on campus an all-weather track that was completed in 2003. We have recoated the track twice since that time. In the past 3 years we have also resurfaced damaged sections and the run ways. In the fall of 2018

## BEST FY2019-20 GRANT APPLICATION SUMMARIES

the district did a resurfacing of the high jump area. We are currently investigating grants and other funding opportunities to do a complete tear out and replacement of the running track surface.

### **Deficiencies Associated with this Project:**

The 320 pre-K through 12 Students in the Springfield School District attend educational programming in seven separate buildings which are separated by a maximum of 200 yards and a minimum of 50 yards. Kindergarten students traverse the 200 yard maximum distance to the cafeteria twice a day to receive breakfast and lunch, and elementary students travel a substantial, although slightly smaller distance, twice a day for breakfast and lunch. These routes also cross the central bus loading and unloading zone as well as the access road from the transportation services areas to the junior/senior high school. Similarly, junior and senior high school students travel 200 yards to attend vocational education programming while other, junior/senior high students walk this same distance, although in the opposite direction, to attend family career and consumer classes. In essence the distance from one corner of the campus to the opposite end of the campus is approximately 400 yards. Having students travel these substantial distances multiple times per day, severely diminishes the safety and security of students and staff.

Furthermore, the multiple uncontrolled entrances - 23 access points in the elementary and 15 in the junior/senior high school - make controlling access of the buildings problematic and highlight the need for an integrated video surveillance, controlled-access security system. Additionally, the original(1958), outdated, and inferior fire alarm and control systems are different in each building. These systems do not have central notification capabilities and thereby decrease command and control capabilities of administration and faculty to ensure the safety and security of the student body, should a fire or intruder emergency ensue. The intercom system is not integrated and does not allow communication from the classroom to the office unless the office initiates the call.

The multiple exterior entrance doors to the junior/senior high school are original (1958 high school, 1971 junior high) and no longer adequately prevent unauthorized access to the building. The original doors and door hardware are deteriorated, push-bars for egress fail to re-engage, leaving the entrances vulnerable and accessible. Access to entrances is controlled by metal keys, however obtaining the necessary parts to change the lock cylinders are no longer available from suppliers or they are available at inflated prices. Interior doors must be locked and unlocked with a key to secure individual classrooms which does not comply with state requirements.

Both exterior and interior doors fail to meet existing Americans with Disabilities Act (ADA). Replacing the spherical door handles with lever-type handles will allow easier student accessibility to classroom instruction.

The high school science fume hood is original to the building and in the most recent inspection failed to meet the current exhaust standards, by approximately 30 cubic feet per minute as required by current code, and the sliding glass shields do not contain impact resistant glass. Similarly, the current safety shower is composed of a garden hose clamped from a laboratory faucet to a shower head mounted to an overhead steel bracket extending from the wall. Unfortunately, there is no floor drain to collect the water from the shower, should it be used. A simple eyewash attachment is connected to the main hand-washing sink, but is not a dedicated eyewash station. The current electric hot water supply for the hand-washing sink was installed in 1995 and is powered by a shielded cable that is plugged into a GFI outlet directly below the sink.

Upgrading the aforementioned safety, security and fire control capabilities will likely require the penetration of floor, wall and ceiling components, which will require some level of asbestos abatement to limit exposure, maintain healthy environmental standards, and to insure continuity of instruction.

### **Proposed Solution to Address the Deficiencies Stated Above:**

The district hired an architectural firm with more than 20 years of experience working on public school facilities. The firm performed a district wide assessment of all district facilities (exterior, interior, code compliance, and site conditions). The firm photo documented and ranked each item based on three criteria. 1) What is the problem or concern? 2) Failure Expectancy - When is the problem likely to occur? 3) Consequence - What happens when failure occurs? Each item and the corresponding score were reviewed with the district to confirm the findings. Scores for each item can range from 1 to 500 or more with the lower score items (closer to a score of 1) being more significant problems which have already failed or will fail in the next

## BEST FY2019-20 GRANT APPLICATION SUMMARIES

three years which will affect the building occupants. After review of those items the district prioritized the most pressing issues to determine the list of items below.

### 1) Fire Alarm System

a. Elementary School: Due to continued discussions regarding the long-term solutions for the elementary school the fire alarm system will be considered in the future upon completion of a larger master plan solution.

b. Middle / High School: Replace the existing fire alarm system to comply with current building code including voice evacuation requirements.

### 2) Installed controlled access to buildings.

a. Pre-School Building: Install electronic door hardware and intercom phone at main entry to building.

b. Elementary School: Install electronic door hardware at main entry (including intercom phone), install card access at primary exterior doors to building, install wireless door position switch (DPS) at all exterior doors. Install new door hardware at kindergarten building with wireless door position switch (DPS).

c. Middle / High School: Install electronic door hardware at main entry (including intercom phone), install card access at primary exterior doors to building, install wireless door position switch (DPS) at all exterior doors. Install new exterior hollow metal doors and door hardware to improve operations, access control, and reduce maintenance.

### 3) Replace existing interior classroom locking door hardware for lock downs

a. Elementary School: Due to continued discussions regarding the long-term solutions for the elementary school site interior door hardware will be considered in the future upon completion of a larger master plan solution.

b. Middle / High School: Replace all existing classroom door hardware to comply with state requirements. This upgrade will include other primary door hardware throughout the building to limit number of master keys to operate and maintain the buildings.

### 4) Public Address System

a. Elementary School: Due to continued discussions regarding the long-term solutions for the elementary school the public address system will be considered in the future upon completion of a larger master plan solution.

b. Middle / High School: Replace the existing public address system to improve communication throughout the high school complex buildings.

### 5) Security Systems

a. Pre-school: Add controlled main entry and intercom phone.

b. Elementary School: Add access control at building entry, access to detached kindergarten, playground, and across the campus to the cafeteria. Add exterior cameras to key circulation locations to provide additional over sight of the existing school.

c. Middle / High School: Add access control at building entry, access to detached cafeteria, weight room, and across the campus to vocational building. Add exterior cameras to key circulation locations to provide additional over sight of the existing school.

The cost of work described above was included in the original assessment by the architectural firm. The firm used recent school projects and historical data to develop the initial cost of each item on the list. After district prioritization of the list a regional general contractor evaluated the construction cost independently to validate the cost of construction.

### How Urgent is this Project?

The fire alarm system is original to the building and is still operational but continues to pose on-going maintenance issues and we suspect we will not be able to provide parts within 5 years. The fire alarm deficiencies have been identified on our annual review for several years. Beyond the deficiencies identified the current system does not include mass notification systems. Replacing this system is an immediate priority to address identified deficiencies in the multiple buildings associated with the middle / high school campus.

Controlled access at the main entry of the pre-school and elementary school including installation of an intercom phone. At the middle / high school, the existing office has limited visible control at the entry. Replacing the original entry doors, door hardware, installing a secure vestibule, and intercom phone will improve access control in the building and improve energy efficiency at the same time. This work is a priority to complete a holistic building access control approach.

The original exterior and interior doors and hardware are on average 50 plus years old and continue to degrade with time. The door hardware and key cores are beyond their useful life and continue to be maintenance issues with limited parts available. More importantly many of exterior doors do not open and close properly to create controlled access to the buildings. Doors

## BEST FY2019-20 GRANT APPLICATION SUMMARIES

and hardware need to be replaced to improve function and create a controlled access to the buildings.

The interior door hardware is also original with limited availability of keying cores. The original classroom door hardware does not meet the requirement for teachers to manually lock the doors from within the classroom nor does the current hardware meet ADA. For ease of long-term maintenance, management of keying, the district believes it is important this work is done concurrently with the exterior doors.

The original bell system and public address systems limit our ability to communicate with students and staff during the day. To improve communication throughout the multiple buildings associated with the jr/sr high school this is a high priority to replace with the fire alarm system.

**Does this Project Conform with the Public School Facility Construction Guidelines?** Yes

**If not, provide an explanation for the use of any standard not consistent with the guidelines:**

**How Does the Applicant Plan to Maintain the Project if it is Awarded?**

Our current high school facility is beyond its expected useful life, but continues to function. This is attributed to a history of effective maintenance. Current funding shortfalls have limited our ability to effectively fund our maintenance plans.

Springfield School District is developing a capital replacement plan that sets aside funds for the purpose of replacing the major systems in our facility as they reach the end of the expected life. We realize that the cost of this replacement may vary as the economy and school funding changes from year to year. We also feel that by following proper inspection and maintenance plans closely should extend the life of some of these systems. We will use this to develop a budget for replacement of new systems. Our maintenance department has developed a records plan that will allow them to keep accurate records on servicing and repairs that should prolong the life of the new systems.

Annual fire inspections will help identify deficiencies and failures within the alarm system. Maintenance staff conducts our own annual inspections of needs and replaces worn parts on an as needed basis. All service recommendations from owners manuals and company representatives are followed at districts capabilities.

It is a goal of the district to maintain a capital improvements plan to insure the life of our system are maintained for the expected period of time.

The award of this project will precipitate a continued investment in the maintenance budget as well as increasing our capital construction budget to increase according to the life expectancy of the systems. This account is reevaluated and adjusted twice annually to meet our capital construction and maintenance needs.

Interior door hardware should have a life expectancy of 40 years. This replacement would come to \$600/ year.

The exterior doors and hardware we expect to last 30 years. At this expectancy yearly we plan \$1800/year.

The fire alarm has a 40 year expectancy and will require an additional \$4000 to meet replacement at end of life.

The fume hood and eye wash station will require \$1200/year in additional funds

The front door vestibule is expected to be efficient for 40 years. We will plan on \$2000/year for this.

Our security improvements including the AI phones and door switches will need \$1400/year.

A new intercom system has a life expectancy of 30 years. This will require \$700/year.

The funds required to meet these needs will come from the general funds. The district will also seek grants and other independent donations that can be used to keep the budget funded.

## BEST FY2019-20 GRANT APPLICATION SUMMARIES

**Describe the condition of the public school facility at the time it was purchased or constructed and, if the facility was not new or was not adequate as a public school facility at that time, provide the rationale for purchasing the facility or constructing it in the manner in which you did:**

Springfield Elementary was constructed in 1949 as a K-6 school. At the time of construction, it met all applicable codes for a public school building.

Due to increase enrollment and an expansion of academic programs, additional classrooms, a band room, and a library were added to the original building in 1966. A gym and administrative offices were added to the original building in 1971. At the time of construction, these additions met all applicable codes for a public school building. Due to the small size of classrooms, storage units were constructed in 2003 to increase space. These exterior storage units are accessed through existing classroom exits, which is not allowed by current building codes. The detached w classroom kindergarten building is constructed like a house in 1966. The elementary school cafeteria is shared with the JR/SR high school not attached to the elementary.

Springfield High School was constructed in 1958 as a 9-12 school. At the time of construction, it met all applicable codes for a public school building.

Growth- Due to increased enrollment and an expansion of academic programs, steel frame metal buildings were added to the campus, housing the cafeteria and band room. A cafeteria and band room was constructed in 1965. An industrial arts building and an arts and crafts building were constructed in 1968, these buildings currently serve as the maintenance shop and a weight room. In 1973 a Home Economic Cottage was constructed about 2 blocks west of campus. A wrestling room and locker rooms were constructed in 1975. A new industrial arts building was constructed in 2006. At the time of construction, all these additional metal buildings met all applicable codes for a public school. A junior high wing was added to the high school in 1971. Prior to 1971, 6th-8th grades attended class in the condemned high school that was replaced by the building constructed in 1958. At the time of construction, the junior high addition met all applicable codes for a public school building.

**Describe the history of capital improvements made to the facility by the district/charter school in order to make it suitable for students. Include a list of all capital projects undertaken in the affected facility in the last 3 years:**

Capital improvements in the last three years include: new seating in the gymnasium (2018), resurfaced asphalt on the bus run (2018), and a 4 year project to replace all carpeting in the high school building (2017), new phone system (2017). The gymnasium seating replaced the original plank style seats that had become unsafe. The bus run resurfacing was necessary to improve drainage, fill potholes, and improve safety of a surface that had become very unstable. The carpet project is replacing 20+ year old carpets. The phone system replaced an outdated Merlin system. It integrated communication throughout the district. It was also an attempt to replace the outdated intercom system, but has proven insufficient to communicate emergency notification.

Due to funding shortfalls from 2009 to 2017, capital improvements were limited to our transportation fleet that was necessitated by safety concerns.

Additionally, lighting was converted to T-8 in 2008 new roofs and rooftop HVAC units were installed in 2003. Network wiring was installed in 2000 to access external high speed internet lines. Bathrooms were remodeled to meet ADA standards in 1998.

In 2014 a roof was replaced on the north end of the elementary school following a hail storm We also installed new carpet in the north hallway and 3 classrooms. In order to do this an asbestos abatement was completed before the carpet was installed.

**What options outside of the BEST grant has the applicant investigated or leveraged to address the school's facility needs?**

The district has been increasing our reserves by a minimum of \$100,000 per year to put towards these large capital improvements. We will continue to do this as long as our revenues allow. We are also starting a bond campaign to increase the amount and allow larger improvements in the future. This plan will include a period of informing our stakeholders of our facilities needs and what it will take to reach our goals. We are also looking into other grant options. We have done an analysis of our budget to see what we can sustain over the next few years. A energy savings program for new lighting is also being developed. The district is currently waiting to hear from a playground grant (specific to elementary school) we have applied for this winter. The district contributed \$15,000 towards this project and has received another \$30,000 in donations



## BEST FY2019-20 GRANT APPLICATION SUMMARIES

from the community and local trusts. The district is aware of capital improvements that are needed. We will continue to make budgeting decisions to prepare for this.

**How do you budget annually to address capital outlay needs in your district/charter? Include \$/FTE for the prior fiscal year:**

The district has been allocating a minimum of \$150/student FTE towards maintaining and purchasing assets. The last three years we have increased our budget to purchase new gymnasium seating, an asphalt bus run, we began a 4 year plan to replace carpet in all classrooms, repainting each classroom as new carpet is installed, (the carpet and painting has been district wide) and resurfacing damaged sections of our all weather track. We obtained grants and increased the cafeteria budget to purchase new coolers. The district budgeted an additional \$140,000 that was used on district wide on capital improvements the last 3 years. This amount was in line with our plan of \$150 per FTE.

**If relevant to your project, what are your current annualized utility costs, and what amount of reduction in such costs do you expect to result from this project?**

NA

<b>Grant Request:</b>	\$513,515.08	<b>CDE Minimum Match %:</b>	41%
<b>Applicant Match:</b>	\$356,849.46	<b>Actual Match % Provided:</b>	41%
<b>Total Project Cost:</b>	\$870,364.54	<b>Is a Waiver Letter Required?</b>	No
<b>Affected Sq Ft:</b>	93,386	<b>Contingent on a 2019 Bond?</b>	No
<b>Affected Pupils:</b>	249	<b>Source of Match:</b>	General Fund
<b>Cost Per Sq Ft:</b>	\$9.32		
<b>Soft Costs Per Sq Ft:</b>	\$3.44	<b>Escalation %:</b>	7%
<b>Hard Costs Per Sq Ft:</b>	\$5.88	<b>Construction Contingency %:</b>	10%
<b>Cost Per Pupil:</b>	\$3,495	<b>Owner Contingency %:</b>	10%
<b>Gross Sq Ft Per Pupil:</b>	375	<b>Historical Register?</b>	No
<b>Is a Master Plan Complete?</b>	No	<b>Adverse Historical Effect?</b>	No
<b>Who owns the Facility?</b>	District	<b>Does this Qualify for HPCP?</b>	No
<b>If owned by a third party, explanation of ownership:</b>			
<b>If match is financed, explanation of financing terms:</b>			

**Financial Data (School District and BOCES Applicants)**

<b>District FTE Count:</b>	268	<b>Bonded Debt Approved:</b>	
<b>Assessed Valuation:</b>	\$28,262,818	<b>Year(s) Bond Approved:</b>	
<b>PPAV:</b>	\$105,458	<b>Bonded Debt Failed:</b>	
<b>Unreserved Gen Fund 17-18:</b>	\$1,701,535	<b>Year(s) Bond Failed:</b>	
<b>Median Household Income:</b>	\$32,833	<b>Outstanding Bonded Debt:</b>	\$0
<b>Free Reduced Lunch %:</b>	66%	<b>Total Bond Capacity:</b>	\$5,652,564
<b>Existing Bond Mill Levy:</b>	0	<b>Bond Capacity Remaining:</b>	\$5,652,564
<b>3yr Avg OMFAC/Pupil:</b>	\$1,503.40		

● **Facilities Impacted by this Grant Application** ●

**Justice High School - HS Health, Safety & Adequacy Improvements - Justice High School - 1979**

<b>District:</b>	Auditor - Boulder Valley RE-2
<b>School Name:</b>	Justice High School
<b>Address:</b>	805 Excalibur Street
<b>City:</b>	Lafayette
<b>Gross Area (SF):</b>	11,500
<b>Number of Buildings:</b>	1
<b>Replacement Value:</b>	\$2,440,142
<b>Condition Budget:</b>	\$1,438,454
<b>Total FCI:</b>	0.59
<b>Adequacy Index:</b>	0.36



**Condition Budget Summary**

System Group	Replacement Cost	Requirement Cost	SCI
Electrical System	\$361,723	\$371,044	1.03
Equipment and Furnishings	\$43,780	\$0	0.00
Exterior Enclosure	\$360,521	\$280,709	0.78
Fire Protection	\$551	\$88,923	161.51
HVAC System	\$134,645	\$22,108	0.16
Interior Construction and Conveyance	\$541,682	\$306,689	0.57
Plumbing System	\$145,546	\$81,108	0.56
Site	\$435,524	\$376,219	0.86
Structure	\$416,168	\$0	0.00
<b>Overall - Total</b>	<b>\$2,440,142</b>	<b>\$1,526,800</b>	<b>0.63</b>

# BEST FY2019-20 GRANT APPLICATION SUMMARIES

**Applicant Name:** Justice High School

**County:** Boulder

**Project Title:** HS Health, Safety & Adequacy Improvements

**Applicant Previous BEST Grant(s):** 0

**Has this project been previously applied for and not funded?** No

**If Yes, please explain why:**

## Project Type:

- |  |  |  |   |
|--|--|--|---|
| <input type="checkbox"/> New School            | <input type="checkbox"/> Roof                  | <input checked="" type="checkbox"/> Asbestos Abatement | <input type="checkbox"/> Water Systems                |
| <input type="checkbox"/> School Replacement    | <input checked="" type="checkbox"/> Fire Alarm | <input checked="" type="checkbox"/> Lighting           | <input checked="" type="checkbox"/> Facility Sitework |
| <input checked="" type="checkbox"/> Renovation | <input type="checkbox"/> Boiler Replacement    | <input checked="" type="checkbox"/> Electrical Upgrade | <input type="checkbox"/> Land Purchase                |
| <input type="checkbox"/> Addition              | <input checked="" type="checkbox"/> HVAC       | <input type="checkbox"/> Energy Savings                | <input checked="" type="checkbox"/> Technology        |
| <input checked="" type="checkbox"/> Security   | <input checked="" type="checkbox"/> ADA        | <input type="checkbox"/> Window Replacement            | <input type="checkbox"/> Other                        |

## General Information About the District / School, and Information About the Affected Facilities:

Located in Lafayette, Colorado, Justice High School is a Title 1, Alternative Education School with 89 students in grades 9-12. The mission of JHS is to provide year-round, college-prep education for students who have been unsuccessful in traditional school, are chronically truant or have been involved in the criminal justice system. Our students experience multiple factors at home, such as abject poverty, dysfunction in family and home life, substance abuse, domestic/environmental violence, prostitution and sexual assault, and 88% qualify for free and reduced lunch.

Nearly all JHS students have demonstrated difficulties in traditional schools. For most of our students, school represents the only normative aspect of their lives - a place where they can build tools for success through high standards, new opportunities, tutoring, high quality staff and mentors, and an environment that cultivates growth. Research has shown that school participation and engagement are demonstrated protective factors for students, improving their academic and lifetime achievement. At JHS, our philosophy is that at-risk youth can be successful, if given opportunity and a supportive, structured environment.

We offer traditional high school academic courses as well as many post-secondary prep extra-curricular activities, clubs, and competitive athletics. Completion of at least 2 college level courses and acceptance into a college or career training program are requirements for graduation. JHS also requires seniors to complete a college preparation course with instruction in the application process, entrance exams, applying for financial aid and scholarships, how to find housing and developing soft skills to enhance educational and career opportunities.

Justice opened in 2003 in one room in the Boulder County Courthouse. By 2006, enrollment grew to 116 students and the school was also using space in a residential property adjacent to the courthouse. In 2010, JHS moved to the current location, leasing about 70% of the building from then-current owners; the other 30% is still leased to two small businesses that have separate entrance from the school. The facility was originally built in 1979 as a daycare, and is of average commercial-grade construction for its time. Like other 40-year old buildings, ongoing maintenance is required and it does not meet all current building codes for new school construction.

In 2016, the building owners presented an opportunity to purchase the property. Considering the cost and availability of commercial property that could serve as a school, the facility was a good fit because of its location, public transportation access, classroom space that meets basic instructional needs for our enrollment, and site that allows for PE/outdoor learning activities. JHS decided to remain in this location, and Phoenix Building Corporation was formed as a separate legal entity to purchase the facility. Rent collected from JHS and the 2 business tenants pays the debt held by PBC. JHS now uses 7,850 SF (80%) of the 9,750 SF building.

In 2017, knowing that this would be our school facility for the foreseeable future, we began work on a plan to address our long term facility needs. In early 2019 we completed facility master plan with a prioritized list of facility and adequacy needs.

## BEST FY2019-20 GRANT APPLICATION SUMMARIES

Like other public and charter schools in Colorado, we have a very tight budget with which to address capital construction. Per-pupil funding and rents collected from tenants provide funding for minimum maintenance to keep the facility operational, and we have to make hard decisions to prioritize capital projects. As a very small school with a small staff that serves a high-poverty, disadvantaged population, Justice has a very limited capacity to raise funds for capital needs on its own.

### Deficiencies Associated with this Project:

As part of the master plan, the facility was assessed by a team of Wold Architects and Engineers, Cator Ruma Associates (MEPT) and JVA (Civil/Site). It was also assessed by the CDE Statewide Facility Assessment in 2018. The following are the most critical deficiencies identified:

#### Health/Safety/Security:

1. The fire alarm system is original to the building and consists of a non-addressable Simplex system, smoke detection installed in corridors and minimal visual/audio notification devices. We are able to conduct fire alarm drills adequately, but the system is at the end of its life and parts are increasingly difficult to replace.
2. Security system: There is no reliable visitor access control system. There is a residential doorbell with keypad at the main entry that rings to the office adjacent to the main entrance. With the level of use at the main entry, it is frequently in need of maintenance, and when we are waiting for maintenance, the entry is unlocked. There are no card readers for staff access at any door. There are no video cameras.
3. Door hardware and doors are aging and require ongoing maintenance that is difficult to keep up with. The school strives to lock all 15 exterior doors, but the age of the doors and the hardware makes it difficult to monitor and keep them locked. The main entrance door also has a mail slot which is not secure: it is possible to reach through and open the door through the opening. Two exterior doors are residential sliding glass doors that don't meet egress code requirements. We have replaced interior door hardware on about 1/3 of the interior doors where hardware has failed. The remaining have original non-ADA hardware from 1979.
4. The HVAC system is piecemeal and does not provide adequate outside ventilation air. The system consists of small residential, constant volume furnaces with underground supply ductwork and overhead air handling units, which is how the building was originally designed. Split A/C has been added on the east side of the building only. The quality of air in the building is noticeably stale, indicating poor ventilation. Temperature control is very difficult to maintain. Each furnace serves 2 or 3 rooms, and are controlled by one thermostat. This provides uneven heating, so some classrooms have 2 or 3 space heaters to keep them as comfortable as possible. We've grown accustomed to wearing coats inside the building in the winter (in some rooms we can even see our breath).
5. Site chain link fencing around the west and north perimeter of the site is deteriorating. Students use the field and outdoor basketball court daily for PE and after lunch recess. We've installed temporary plastic screen material to provide a visual separation from neighbors, however this undermines the sense of security and pride in the environment.
6. The AHERA documents from BVSD show asbestos testing has occurred in the 6,800 SF portion of the school that Justice originally occupied. There is vinyl sheet flooring containing asbestos in the majority of spaces. Ceilings, wallboard, cove base, and countertops were tested but no ACM was identified. Additional testing will be needed for the east side of the building. There is anecdotal indication that ACM vinyl sheet flooring is present there as well.
7. The kitchen is a serving kitchen only; we receive meals from BVSD prepared offsite. Although there is no food preparation here, the casework is beyond its expected life, with deteriorating countertop laminates, and it is difficult to maintain clean surfaces for serving. There is also a defunct kitchen hood original to the building, with a roof opening that is not fully sealed. This allows air (and once the odor of a decaying dead bird caught within it) into the building.
8. There are two business tenants that occupy office space in the east side of the building and provide income that contributes to debt service. These businesses have separate entrances and are self-contained. Fortunately we have not experienced any security problems, but it is not ideal to have non-school functions occur on site. This side of the school is not visible to school staff through windows, nor is it monitored by camera.

#### Educational Adequacy and Program Needs:

1. The facility doesn't have a space large enough to accommodate assembly functions or any group larger than a class. When necessary to meet as a school, we either go outside or we lease space from other facilities. This requires additional time, logistics, supervision and cost, and if we ever have a need for emergency assembly, we have no choice but to gather in separate spaces and rely on radio and cellphone communication between staff. Without a large space to eat lunch in

## BEST FY2019-20 GRANT APPLICATION SUMMARIES

together, students typically eat in several classrooms.

2. For our current enrollment, there is a need for more classrooms that have adequate access to the main hallway circulation path. Two classrooms we use regularly can only be accessed by walking through other classrooms, which causes disruption to the learning environment. The ISS room on the east side of the building is not accessible to the main school circulation hallway; in order to access it, students and staff must walk outdoors to enter that side of the building through an exterior door. This is a concern for supervision and causes additional staff time to manage.

### Critical Facility Condition Needs:

1. As noted as a health and safety concern, the building's HVAC system consists of residential furnaces and split AC units. These independent furnaces serve multiple spaces and do not operate continuously as required to maintain proper ventilation, and do not have economizer cycle capability. As well as no ventilation air (no outside air), the system has buried ducts that are not accessible to review condition/integrity. Building occupants experience poor indoor air quality and fluctuations in temperature that vary from room to room and are difficult to control.
2. Plumbing fixtures are original and failing. We most recently over winter break had a toilet fixture leak and clogged sewer pipe requiring closure of a toilet room for several days until it could be addressed. We don't have maintenance personnel on staff, so we hire a plumbing company to assist with these issues.
3. The electrical distribution consists of a 120/240V, single phase, 400 amp wire way which serves (2) 120/240V disconnects serving (2) 225 amp branch circuit panel boards. This is significantly undersized for the needs of a school today. Power distribution is very minimal and surface mounted raceway has been added in some locations. Extension cords and power strips are used for computer equipment and space heaters in classrooms. This is a fire hazard and safety concern, but we also struggle with keeping spaces adequately warm. Breakers trip 2 to 4 times each week.
4. The existing interior lighting consists primarily of linear T12 fluorescent fixtures and exterior lighting is a combination of recessed HID lighting and security flood lighting using incandescent PAR lamping. Exterior lighting is controlled by a time clock, but there is no control system for interior lighting other than standard toggle switches.
5. Interior finishes throughout the building are aging. Since occupying the building, we've re-painted and re-carpeted some areas to improve aesthetics and school pride, but our budget cannot keep up with the entire building. In this project we would renew paint and flooring throughout the building. Casework
6. There are several locations where there are cracks or heaving in sidewalk concrete that create tripping hazards that are a safety issue and high priority.

### Proposed Solution to Address the Deficiencies Stated Above:

As identified in our facility master plan, a solution is proposed that will extend the life of the building and establish a path to address capital needs in the future on our own and in partnership with BVSD. The master plan process included definition of Guiding Principles, creation of prioritized list of capital needs and evaluation of several options to meet long term needs.

### Guiding Principles for Future Facility Planning:

Justice HS provides a safe and supportive learning environment, which will:

- Help build confidence of students
- Support the strong sense community in the school
- Result in students' respect and pride in their environment

Our facilities will support the strong sense community in the school with space for:

- All-school gatherings and engagement with the larger community
- Maximum enrollment of 120 students.

As we reviewed potential options, it became clear that the solution would be a combination health and safety improvements, along with a modest remodel to allow us to use the building more effectively and efficiently. We plan to no longer lease space to tenants after 2019, and take back the space on the east side of the building, which will be converted to learning space. This will allow us to address the two highest priority adequacy issues noted above. The proposed construction work will include

# BEST FY2019-20 GRANT APPLICATION SUMMARIES

the following:

1. Install new fire alarm system.
2. To improve building security: installation of cameras, card readers, magnetic door hardware and a video phone at the main entry. The school office is located adjacent to the main entry with an existing window that allows staff to see visitors approaching the building, so the school does not think a secure entry vestibule is necessary.
3. Replace 15 exterior doors and interior doors with code compliant hardware.
4. Replace furnaces and split A/C units with a new mechanical system consisting of a four pipe fan coil or two pipe water source heat pump system. Piping, duct work and fan coil units would be located above ceiling. A boiler room would be allocated inside the building. The proposal allows for ceilings to be demolished and replaced with ACT in hallways and in 4 classrooms in order to access above ceiling space.
5. Install new site fencing at north and west side of site.
6. Abate approximately 8,250 SF of ACM sheet vinyl flooring and replace with carpet or LVT.
7. Replace plumbing fixtures and finishes in toilet rooms that are beyond their life.
8. Install new 600-800 amp 120/280V, 3-phase electrical service.
9. Replace interior lighting throughout building with LED light fixtures.
10. Replace the casework in the kitchen with appropriate and cleanable kitchen storage casework and countertops. Remove the defunct kitchen hood and patch the roof opening.
11. Convert two classrooms on the west side of the building to a centrally located Commons, for assembly and lunchroom space (which is close to the existing serving kitchen). This includes removal of a demising wall and repair/renewal of finishes to provide a flexible multi-use space that is educationally appropriate and safe. This will provide central space for all-school gatherings, to provide a sense of family and community that our students need. A strong sense of connection to peers and adults is a proven protective factor in decreasing risky behaviors, and is directly related to academic achievement and learning.
12. Demolish a wall to open the connection between the west and east sides of the school, to improve safe access and eliminate the need to go outside and re-enter.
13. Convert two tenant spaces on the east side of the building into 4 classrooms and a flex classroom. This will replace the two classrooms that are remodeled for the Commons, and allow us to relocate two classes for direct and safe access to hallways.
14. Upgrade sections of sidewalks are a tripping hazard.

## How Urgent is this Project?

The health and safety deficiencies at JHS are of immediate concern and critical in nature. In the past year we have addressed repeated security, mechanical and electrical problems that require immediate repair. The many required repairs puts undue pressure on our small school staff, taking valuable time that should be focused on addressing student needs.

**Does this Project Conform with the Public School Facility Construction Guidelines?** Yes

**If not, provide an explanation for the use of any standard not consistent with the guidelines:**

## How Does the Applicant Plan to Maintain the Project if it is Awarded?

The renewal and maintenance budget includes the following:

Facilities maintenance @ \$6,000

Operations (utilities, custodial,  
trash) @ \$3,500

Deferred maintenance \$2,500

ADA repair/maintenance \$2,500

Lighting and utilities \$10,000

Taxes and insurance \$5,500

Total: \$30,000

**Describe the condition of the public school facility at the time it was purchased or constructed and, if the facility was not new or was not adequate as a public school facility at that time, provide the rationale for purchasing the facility or constructing it in the manner in which you did:**

At the time of purchase, it was in acceptable operating condition and adequate for school use. The building was built in 1979 as a daycare facility.

## BEST FY2019-20 GRANT APPLICATION SUMMARIES

When JHS moved to the facility in 2009, the following work was done:

- Asphalt shingle roof replaced
- Exterior and interior paint
- ADA toilet remodel
- Installation of hallway partition to separate Justice HS from other tenant space
- Classroom and office carpet replaced

**Describe the history of capital improvements made to the facility by the district/charter school in order to make it suitable for students. Include a list of all capital projects undertaken in the affected facility in the last 3 years:**

Over the past 3 years, the following work has occurred:

- HVAC and A/C maintenance repairs 2018
- Replace drinking fountain 2018
- Two doors replaced 2018
- Light maintenance and replacement of two fixtures 2018
- Landscape planting removal and cleanup 2018
- Grading and seeding of field for safe football practice use 2018
- Install new fence at front of school 2017
- Replace portion of classroom built-in cabinets 2017
- Re-paint exterior window and door frames 2016
- Re-paint portions of interior 2016
- Replace select interior door hardware as needed when they fail, yearly

**What options outside of the BEST grant has the applicant investigated or leveraged to address the school's facility needs?**

Justice High School has a very limited capacity to raise funds through private sector grants and donations. There is no parent organization that might assist in such efforts. In recent years, grant-writing efforts by the school and the district on behalf of Justice High have focused on long-term CDE-funded programs that have increased staffing for counseling, intervention, student support services, personnel training, and extended-time-for-learning. Efforts to secure capital grants from private-sector funders to improve facilities have not been successful.

**How do you budget annually to address capital outlay needs in your district/charter? Include \$/FTE for the prior fiscal year:**

Justice High School Executive Team and Board of Directors meet annually to develop the annual facilities development and maintenance budget.

**If relevant to your project, what are your current annualized utility costs, and what amount of reduction in such costs do you expect to result from this project?**

N/A

<b>Grant Request:</b>	\$921,525.36	<b>CDE Minimum Match %:</b>	54%
<b>Applicant Match:</b>	\$1,081,790.64	<b>Actual Match % Provided:</b>	54%
<b>Total Project Cost:</b>	\$2,003,316.00	<b>Is a Waiver Letter Required?</b>	No
<b>Affected Sq Ft:</b>	9,750	<b>Contingent on a 2019 Bond?</b>	No
<b>Affected Pupils:</b>	98	<b>Source of Match:</b>	BVSD General Funds
<b>Cost Per Sq Ft:</b>	\$205.47		
<b>Soft Costs Per Sq Ft:</b>	\$58.00	<b>Escalation %:</b>	6%
<b>Hard Costs Per Sq Ft:</b>	\$147.47	<b>Construction Contingency %:</b>	5%
<b>Cost Per Pupil:</b>	\$20,442	<b>Owner Contingency %:</b>	5%
<b>Gross Sq Ft Per Pupil:</b>	117	<b>Historical Register?</b>	No

## BEST FY2019-20 GRANT APPLICATION SUMMARIES

<b>Is a Master Plan Complete?</b> Yes	<b>Adverse Historical Effect?</b> No
<b>Who owns the Facility?</b> 3rd Party	<b>Does this Qualify for HPCP?</b> No

**If owned by a third party, explanation of ownership:**

Owned by Phoenix Building Corporation, a building corporation allowable by statute, established by JHS for the purpose of holding JHS property and debt. JHS effectively pays the mortgage.

**If match is financed, explanation of financing terms:**

### Financial Data (Charter Applicants)

<b>Authorizer Min Match %:</b> 73%	<b>CEFCA or financing attempts:</b> 0
<b>&lt; 10% district bond capacity?</b> No	<b>Enrollment as % of district:</b> 0.33%
<b>Authorizer Bond Attempts:</b> 1	<b>Free Reduced Lunch %</b> 87.5%
<b>Authorizer MLO Attempts:</b> 1	<b>% of PPR on Facilities:</b> 17%
<b>Non-BEST Capital Grants:</b> 4	<b>Unreserved Gen Fund % Budget:</b> 10.5%
<b>FY18-19 CSCC Allocation*:</b> \$22,810.28	<b>3yr Avg OMFAC/Pupil:</b> \$5,832.13

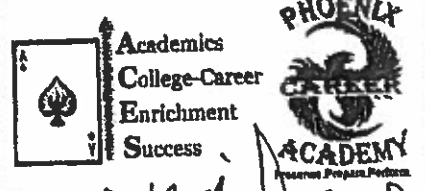
\*CSCC Allocation figures are based on a \$25M statewide appropriation. Pending legislation may to revise to \$29.25M

<b>Who will facility revert to if school ceases to exist?</b>	If Justice were to relocate or cease to exist, the property would be sold and proceeds would be used to settle remaining debt held by PBC.
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# JUSTICE HIGH SCHOOL



J Rod Mainie  
 Brittany Geisler  
 Gabrielle Cortez  
 Christian Hoff  
 Alyssa Sobke  
 Tom Kepp  
 Mckenzie  
 Israel  
 Alexandra Mitchell  
 Deyja Enriquez

## Letter of Appreciation & Support

We, the students, faculty, and community of Justice High School, wish to express our gratitude to the members of the Boulder Valley School Board, Superintendent, and Administrative staff for your support with the BEST Grant Application. Your assistance will provide us with a safe and secure school. The students of today thank you on behalf of the students of tomorrow!

Larry Gabe Sobke  
 Eliag B.

Coo  
 Dgwn

Nathan Hochman  
 Marc R.

Coker R.

Michlyn

Cole

zara Nelson

Kimm

Damon Anthony

Wally Clay  
 Kenzi Salee

Misael Huerta  
 Mario PLAZA I#  
 Amariyah T

Daniel Malhi

SYRUS  
 SATT

Andruja H.

Vince C

Allison G.

Erika M.

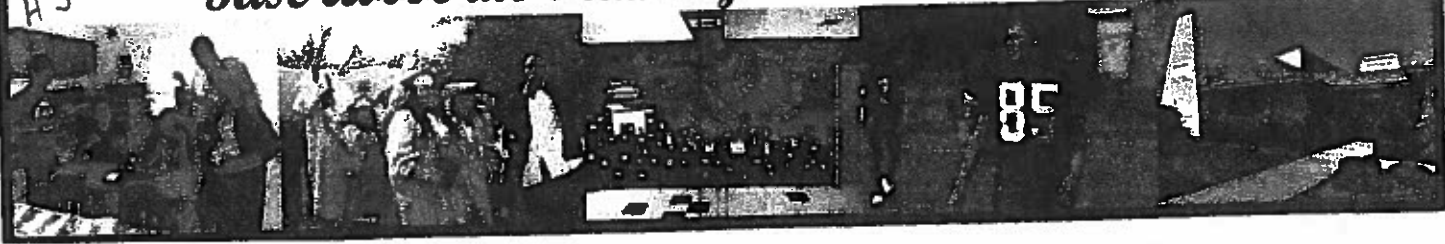
Estefania

Isalah Hoff

Felipe Bodeg

Rise Above the Ordinary to Achieve the Impossible

A3





**Boulder Valley**  
**School District**  
*Excellence and Equity*

**Justice High School**  
*Founded in 2002*

805 Excalibur Street  
Lafayette, CO 80026  
720-328-4864

**JUSTICE HIGH SCHOOL**  
**PARENT SUPPORT ORGANIZATION.**  
**'Making a difference in our kids lives'**

**We the parents of Justice High School, urge the CDE BEST grant committee to select Justice High as a worthy applicant for grant funding.**

**As parents, we can see the need for facility improvements everyday. As committed parents of the PTA, we hope that grant funding can help bring equity to our students so that they can have the same opportunities as others Colorado students.**

**Sincerely,**

A handwritten signature in black ink that reads "Stacy Valdez". The signature is written in a cursive style with a horizontal line underneath the name.

**Stacy Valdez**

**PTSO President**

To: Boulder Valley School District  
Board of Directors  
Superintendent

805 Excalibur Street  
Lafayette, CO 80026  
720-328-4864

Re: Request for BEST Grant matching funds

Justice High School has been a part of BVSD since 2003, first as a program school, and then as a charter school. In the spirit of excellence and equity, it is with a humble tone that the Justice High School's (JHS) community request a onetime financial matching grant of one million dollars from the Boulder Valley School District's (BVSD) Superintendent & Board of Directors.

The purpose of this letter is to provide an outlook of JHS's community and services, to convey building and grounds needs, and to provide an overview of the school's efforts to address these needs. Your individual and collective guidance will be providing an equitable learning experience to all BVSD students.

Justice High School (JHS) is a public charter school that is located in Lafayette, Colorado. It is a learning environment that serves nontraditional youth that are disconnected from the traditional school system because of juvenile delinquency, academic suspension or expulsion, substance use, mental and behavioral issues, multi-generational family dysfunction, social alienation, or other factors. The school serves 100 to 110 students annually. According to *Infinite Campus*, the student information management system, the school's ethnic breakdown is 60% Hispanic, 31% Caucasian, and 7% African-American (*Infinite Campus*, 2018). Over 88% of students qualify for *Free or Reduced Lunch*. JHS is an *Alternative Education Campus (AEC)* because 100% of its students fall into, at least, one "at-risk" category for state designation (Colorado Department of Education, 2018). To add to the myriad of challenges, the school has one of the highest concentration of special education students in the district at 33% (*Infinite Campus*, 2018).

Due to interpersonal, social, or academic difficulties, students find no comfort in learning within large traditional schools, therefore, enrolling at JHS as an alternative. The school is a place of refuge and a home for its students. For healthy development and intellectual growth of students, holistic services are provided to address economic disparities, personal and social development, and academic achievement. The school is focused on "fixing the inequities" that poor and disenfranchised people face (Gorski, 2013, p. 3). JHS's goal is to eliminate students' economic gaps through community partnerships that maximize resources and personal/social development by providing evidence-based biopsychosocial education. After going into a 5<sup>th</sup> year *Priority Improvement* status with the Colorado Department of Education in 2016, JHS has been on *Improvement* status for the past two years and was 2.28 points from *Performance* (Colorado Department of Education, 2018)!

While JHS has been making progress to improve outcomes, 21<sup>st</sup> Century schools promote the growth, achievement, and ultimately the success of all students, not just through curriculum and instructional practices, but through the design and appearance of school

buildings and classrooms. School buildings and classrooms hold the key to the energy, acceptance, safety, respect, and pride in a community. Classroom layouts and designs improve student learning (Special Sections, n.d.). Modern era classrooms are infused with technology and dynamic learning environments to provide the best experience for all students. A walk through of the physical condition of JHS will display that its needs are overwhelming. After a series of meetings consisting of a BVSD representative from facilities and maintenance, school administration, and *Wold Architects and Engineers* personnel, a *Facility Assessment Summary* was developed and stated that the school needed at least \$2.5 million to address all of the *currently critical, potentially critical, necessary, and long-term requirement* building deficiencies (Wold, 2019).

The following is a chronological rendition of how the school arrived at this situation of need. In 2010, due to high real estate costs, JHS moved from Boulder to Lafayette, Colorado, with the intent to expand the campus. Initially, the school rented the space in Lafayette, and, therefore, did not benefit from any large bond, mill levy, or capital improvement measures because of the requirement of ownership. Fortunately, in 2016, JHS purchased the school building and property in hopes to gain increased ownership for grounds improvement. To maximize learning, and to meet state requirement mandates, all school efforts and expenditures prioritize student academic and social growth and achievement making capital improvements fiscally and operationally impossible. For equitable education, students' multifaceted needs require services that are prioritized at the forefront.

After the purchase of the building in 2016, JHS applied for four grants that focused on capital and grounds improvements. Applications were sent to the City of Lafayette and to the Jim White Foundation for capital improvements focused on recreation, in hopes to improve the basketball court and football/soccer field, but were denied. JHS collaborated with Omega Psi Phi for support in improving the conditions of the building. After a couple of attempts and brainstorming sessions, funding changed and things fell through. The Alan Cogen Foundation has been a staple in JHS's large array of student services and learning experiences for over fifteen years, but unfortunately, after working on a capital improvement proposal, they identified too many building and grounds deficiencies, felt that their contributions were too minimal, and that they would not make an impactful change.

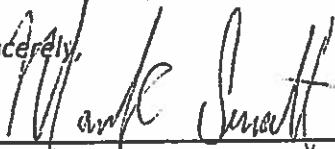
After conducting a resource scan for all of the possible financial support avenues and establishing community partnerships, it is evident that the task is complex and forthcoming, but the beautiful spectrum of students at JHS deserve the best environment possible to support their development and learning. The JHS community is in dire need of support to continue to fulfill its purpose. As mentioned before, JHS serves a population with limited resources and in unequitable conditions. The Board's intervention would be an equalizer for students, as they will be exposed to a learning environment that parallels that of their middle-class peers as they navigate through their journeys for self-discovery and excellence.

For 12 years Justice High did not receive funding from some mill levy overrides. JHS has labored on without this critical funding, because of its mission to serve. Now that innovation

funds are available, and there is some other funding is available, equity would suggest that this is a great opportunity to assist in rectifying this deficiency.

This request of 'one time' capital support was created by the Board and school staff and their signatures below affirm the aforementioned. If there are any questions or concerns, please feel free to contact any of us. Thank you for your dedication towards the academic and social achievement of children.

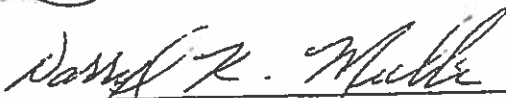
Sincerely,



Mark Surratt Chairman of the Board



Alexandra Mitchell, Teacher, Curricula and Title I Specialist



Darryl Mullin, Student Support Specialist



Israel Sanchez, Assistant Principal



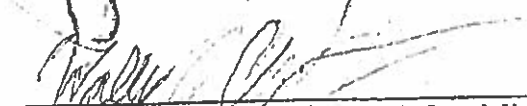
Laurie Light, School Guidance Counselor



Nels Thoreson, Teacher and Academic Support Specialist



Tijani Cole, Principal



Wally Clay, Community Outreach Specialist



Maurice Henriques Engagement Specialist

● **Facilities Impacted by this Grant Application** ●

**DENVER COUNTY 1 - George Washington HS Fire Suppression Upgrades - George Washington HS - 1960**

<b>District:</b>	Auditor - Denver County 1
<b>School Name:</b>	George Washington HS
<b>Address:</b>	655 S. Monaco Parkway
<b>City:</b>	Denver
<b>Gross Area (SF):</b>	342,800
<b>Number of Buildings:</b>	1
<b>Replacement Value:</b>	\$95,431,508
<b>Condition Budget:</b>	\$30,997,633
<b>Total FCI:</b>	0.32
<b>Adequacy Index:</b>	0.14



**Condition Budget Summary**

System Group	Replacement Cost	Requirement Cost	SCI
Electrical System	\$13,422,135	\$5,250,641	0.39
Equipment and Furnishings	\$2,816,528	\$1,426,794	0.51
Exterior Enclosure	\$6,764,855	\$1,337,637	0.20
Fire Protection	\$594,562	\$3,443,301	5.79
Furnishings	\$1,556,476	\$0	0.00
HVAC System	\$25,247,173	\$8,238,794	0.33
Interior Construction and Conveyance	\$14,979,422	\$8,555,514	0.57
Plumbing System	\$5,153,496	\$2,800,362	0.54
Site	\$5,091,332	\$2,739,108	0.54
Structure	\$19,805,528	\$0	0.00
<b>Overall - Total</b>	<b>\$95,431,508</b>	<b>\$33,792,151</b>	<b>0.35</b>

# BEST FY2019-20 GRANT APPLICATION SUMMARIES

**Applicant Name:** DENVER COUNTY 1

**County:** Denver

**Project Title:** George Washington HS Fire Suppression Upgrades **Applicant Previous BEST Grant(s):** 0

**Has this project been previously applied for and not funded?** No

**If Yes, please explain why:**

## Project Type:

- |   |  |   |  |
|---|--|---|--|
| <input type="checkbox"/> New School         | <input type="checkbox"/> Roof                  | <input type="checkbox"/> Asbestos Abatement | <input type="checkbox"/> Water Systems     |
| <input type="checkbox"/> School Replacement | <input checked="" type="checkbox"/> Fire Alarm | <input type="checkbox"/> Lighting           | <input type="checkbox"/> Facility Sitework |
| <input type="checkbox"/> Renovation         | <input type="checkbox"/> Boiler Replacement    | <input type="checkbox"/> Electrical Upgrade | <input type="checkbox"/> Land Purchase     |
| <input type="checkbox"/> Addition           | <input type="checkbox"/> HVAC                  | <input type="checkbox"/> Energy Savings     | <input type="checkbox"/> Technology        |
| <input type="checkbox"/> Security           | <input type="checkbox"/> ADA                   | <input type="checkbox"/> Window Replacement | <input type="checkbox"/> Other             |

## General Information About the District / School, and Information About the Affected Facilities:

Denver Public Schools District No. 1 was created after the creation of the City and County of Denver in 1902. Based on the inequities of families paying taxes in one school district but then having to pay tuition where their children attended (another district). Therefore DPS No. 1 was established in 1903 by consolidating all the other districts around Denver. By the 1920s the school district initiated a large building program to update and meet the needs of the city. This was the result of several studies completed following the consolidation of the district. Large amounts of money were spent by the district during the ensuing years to upgrade the buildings, the facilities and raise the level of the Denver school system. Today DPS has over 200 schools serving 92,331 students.

## Deficiencies Associated with this Project:

George Washington High School was built under the jurisdiction of the City and County of Denver 1952 Denver Building Code. The existing building is three to two-story with a basement the internal total square footage is 307,712 sf with a larger student population. Existing fire protection systems consist of a monitored fire alarm detection throughout with original fire sprinkler system in the basement only. The balance of the building was designed with passive fire-rated construction that includes rated floors, stair enclosures, corridors wall/doors and fire-rated dampers. Currently the State of Colorado has adopted the 2015 International Building and International Fire Codes these codes require fire sprinkler system throughout for all school buildings greater than 12,000 sf in area, this dynamic change can be contribute to the fire code recognizing large number of occupants and the increase use of plastic/vinyl materials. Plastic products of combustion include large quantities of thick, black smoke, carbon monoxide, carbon dioxide and hydrogen cyanide, an extremely toxic and flammable gas. All these factors lead to increase occupant exposure and increased egress time.

## Proposed Solution to Address the Deficiencies Stated Above:

Retrofit the school throughout with a National Fire Protection Association Standard 13 for the installation of fire sprinkler system. Fire sprinkler systems provide a critical element of safety for occupants of the building. Sprinklers are designed to detect heat from a fire and automatically activate, providing a flow of water that is intended to slow or extinguish a fire with the reduction toxic products of combustion. Fire sprinklers provide sufficient early suppression to allow building occupants to safely evacuate the building before the fire spreads. Fire sprinklers respond to heat, not smoke within seconds to reduce heat, flames and smoke from a fire, giving occupants precious time to get out safely.

## How Urgent is this Project?

The retrofit installation of the fire sprinkler system is proactive to ensure the health and safety of the occupants and the continual service of this school. The evidence is clear that fire sprinklers save lives, with the award of this grant and approved/operational fire sprinkler system can be installed by the end of fourth quarter of 2019. Without the award of this grant - the forecasted installation of this system is based on future public approval of Capital improvements within the district (2020). If capital improvements are approved predicted installation time frame would be 2022. Without capital improvement funding its undetermined when the system would be installed.

# BEST FY2019-20 GRANT APPLICATION SUMMARIES

**Does this Project Conform with the Public School Facility Construction Guidelines?** Yes

**If not, provide an explanation for the use of any standard not consistent with the guidelines:**

**How Does the Applicant Plan to Maintain the Project if it is Awarded?**

All fire sprinkler systems are subject to requirement of NFPA 25 for persistent inspections, testing and maintenance. The components and frequency are prescriptively proscribed within the standard. The frequency can be quarterly, semiannually and annually. All inspections, testing and maintenance are outsourced to licensed fire sprinkler contractor to meet the requirements of NFPA 25. Annual maintenance funds are provided to comply with these requirements.

**Describe the condition of the public school facility at the time it was purchased or constructed and, if the facility was not new or was not adequate as a public school facility at that time, provide the rationale for purchasing the facility or constructing it in the manner in which you did:**

George Washington High School was a newly constructed building in 1958 to serve as a comprehensive high school for Denver Public Schools. The time period in which it was built most likely stemmed from the tremendous upswing in births from the Baby Boomer generation during the late 1940's and early 1950's which resulted in school children far out numbering the available classroom space. And to compound the problem, the City and County of Denver was annexing more land at the same time, thereby increasing the district student population. Growth maps of the 1950s show population growth in neighborhoods outside the central core of Denver including Hilltop and Washington/Virginia Vale where George Washington High School is located.

**Describe the history of capital improvements made to the facility by the district/charter school in order to make it suitable for students. Include a list of all capital projects undertaken in the affected facility in the last 3 years:**

Like most of DPS's older buildings, GW has undergone many remodels, additions and systems upgrades. In 2017, GW underwent mechanical upgrades to add classroom cooling and in 2018 the school replaced all the exterior windows. There are no additional projects scheduled for George Washington funded by the 2016 General Obligation Bond fund.

**What options outside of the BEST grant has the applicant investigated or leveraged to address the school's facility needs?**

DPS currently has a recurring budget of \$2 million in the Capital Reserve fund to service for catastrophic needs. This funding is used for all 216 facilities in the district. DPS also uses Critical Maintenance funding from our 2016 bond, however that funding is allocated to already identified and approved projects.

While this is a critical need for health and safety for students in the building in the event of an emergency, the funding does not currently exist to address it. We have come to the BEST program with only our most critical unmet projects specifically addressing health and safety of DPS students. This project is an extremely high priority for DPS.

This project was identified by Dave Clark, former Chief Fire Protection Engineer at City and County of Denver as the top priority installation of fire protection recently. As this has just been identified, it has not undergone any other inquiry for outside funding. DPS will include this project for the next general obligation bond so will depend on Denver voter approval. However, we would like to address the need as soon as possible, and while DPS has succeeded in its most recent bond elections, there is no guarantee for future results.

**How do you budget annually to address capital outlay needs in your district/charter? Include \$/FTE for the prior fiscal year:**

On a recurring basis, DPS budgets \$23 million annually in total for Regular & Critical Maintenance between the General Fund and Capital Reserve Fund. We budget \$21 million annually specifically for regular maintenance deficiencies and an additional \$2 million in the Capital Reserve Fund (CRF) for catastrophic repairs. Between DPS managed schools and the charter students within DPS buildings, about 82k students are educated in DPS managed & owned facilities. This is about \$280/per pupil. This is about 2% of our operating revenue and is an extraordinarily low amount.

From a technical accounting standpoint relative to the Capital Outlay referenced in the question, the \$2 million of expenses through the CRF is the only capitalized expense in our recurring budgets. This amount is about \$25 per student. DPS does have additional expenses in the CRF for capital leases and technology and debt service; however, those expenses do not seem to fit in the definition of capital outlay as described in the question.

We see a great need to deploy additional recurring funding toward capital outlay and regular maintenance of our facilities. As



## BEST FY2019-20 GRANT APPLICATION SUMMARIES

it stands, we perform far less work than we would like, and we defer many projects until they reach a critical point. Both of the projects DPS applied to the BEST program for in 2019 have reached this critical point, and even at this critical moment, we are having a difficult time prioritizing these projects ahead of our other needs.

Because Denver voters have approved DPS to issue Bonds for Capital Projects in 2012 and 2016, DPS has been fortunate enough to use portions of those approved funds for Critical Maintenance. However, these funding sources are not necessarily recurring, and bond measures devote most of the funding to new construction for capacity expansion and technology enhancements. Even so, there was substantial funding devoted to critical maintenance from the most recent bonds, and without those funds, our critical maintenance needs would go unfulfilled. We need additional resources to meet even the most basic facility needs.

One of the reasons we are applying for consideration from the BEST board is that our needs are great. The Maintenance need had become so great in 2016 that even though most of our focus with additional resources go directly to students, DPS passed a Mill Levy Override in 2016 which did devote a substantial recurring funding of \$4 million annually to critical maintenance. The \$21 million we spend annually includes this \$4 million annual investment. We spent \$17 million prior to that time for regular maintenance. We feel this is important to mention in this section because DPS has made efforts to add additional funds to our facility needs on a recurring basis; and still we have greater needs.

**If relevant to your project, what are your current annualized utility costs, and what amount of reduction in such costs do you expect to result from this project?**

N/A

<b>Grant Request:</b>	\$1,471,517.40	<b>CDE Minimum Match %:</b>	59%
<b>Applicant Match:</b>	\$2,117,549.44	<b>Actual Match % Provided:</b>	59%
<b>Total Project Cost:</b>	\$3,589,066.84	<b>Is a Waiver Letter Required?</b>	No
<b>Affected Sq Ft:</b>	338,684	<b>Contingent on a 2019 Bond?</b>	No
<b>Affected Pupils:</b>	1,174	<b>Source of Match:</b>	2016 General Obligation Bond
<b>Cost Per Sq Ft:</b>	\$10.60		
<b>Soft Costs Per Sq Ft:</b>	\$0.30	<b>Escalation %:</b>	0%
<b>Hard Costs Per Sq Ft:</b>	\$10.30	<b>Construction Contingency %:</b>	9%
<b>Cost Per Pupil:</b>	\$3,057	<b>Owner Contingency %:</b>	10%
<b>Gross Sq Ft Per Pupil:</b>	296	<b>Historical Register?</b>	No
<b>Is a Master Plan Complete?</b>	No	<b>Adverse Historical Effect?</b>	No
<b>Who owns the Facility?</b>	3rd Party	<b>Does this Qualify for HPCP?</b>	No

**If owned by a third party, explanation of ownership:**

DPS pledged the George Washington facility for the Pension COPs issued related to the PERA merger. DPS has rights to make improvements on the site.

**If match is financed, explanation of financing terms:**

### Financial Data (School District and BOCES Applicants)

<b>District FTE Count:</b>	83,382	<b>Bonded Debt Approved:</b>	\$1,038,000,000
<b>Assessed Valuation:</b>	\$16,824,261,116	<b>Year(s) Bond Approved:</b>	12,16
<b>PPAV:</b>	\$201,773	<b>Bonded Debt Failed:</b>	

## BEST FY2019-20 GRANT APPLICATION SUMMARIES

**Unreserved Gen Fund 17-18:** \$113,401,693

**Year(s) Bond Failed:**

**Median Household Income:** \$60,098

**Outstanding Bonded Debt:** \$1,718,072,000

**Free Reduced Lunch %:** 68%

**Total Bond Capacity:** \$3,364,852,223

**Existing Bond Mill Levy:** 9.65

**Bond Capacity Remaining:** \$1,646,780,223

**3yr Avg OMFAC/Pupil:** \$2,779.70

## ● Facilities Impacted by this Grant Application ●

## DENVER COUNTY 1 - Gilpin ES Galvanized/ Steam Piping Replacement - Denver Language School - Gilpin - 1951

District:	Auditor - Denver County 1
School Name:	Denver Language School - Gilpin
Address:	2949 CALIFORNIA STREET
City:	DENVER
Gross Area (SF):	88,984
Number of Buildings:	1
Replacement Value:	\$30,390,767
Condition Budget:	\$12,688,339
Total FCI:	0.42
Adequacy Index:	0.17



## Condition Budget Summary

System Group	Replacement Cost	Requirement Cost	SCI
Electrical System	\$7,735,040	\$2,043,020	0.26
Equipment and Furnishings	\$584,081	\$187,061	0.32
Exterior Enclosure	\$2,932,611	\$183,132	0.06
Fire Protection	\$871,849	\$124,367	0.14
Furnishings	\$42,142	\$0	0.00
HVAC System	\$5,837,040	\$5,033,295	0.86
Interior Construction and Conveyance	\$5,152,620	\$3,850,510	0.75
Plumbing System	\$1,307,570	\$877,724	0.67
Site	\$983,022	\$404,832	0.41
Structure	\$4,944,792	\$17,063	0.00
Overall - Total	\$30,390,767	\$12,721,004	0.42

# BEST FY2019-20 GRANT APPLICATION SUMMARIES

**Applicant Name:** DENVER COUNTY 1

**County:** Denver

**Project Title:** Gilpin ES Galvanized/ Steam Piping Replacement

**Applicant Previous BEST Grant(s):** 0

**Has this project been previously applied for and not funded?** No

**If Yes, please explain why:**

## Project Type:

- |  |  |  |   |
|--|--|--|---|
| <input type="checkbox"/> New School            | <input type="checkbox"/> Roof                          | <input checked="" type="checkbox"/> Asbestos Abatement | <input checked="" type="checkbox"/> Water Systems |
| <input type="checkbox"/> School Replacement    | <input type="checkbox"/> Fire Alarm                    | <input type="checkbox"/> Lighting                      | <input type="checkbox"/> Facility Sitework        |
| <input checked="" type="checkbox"/> Renovation | <input checked="" type="checkbox"/> Boiler Replacement | <input type="checkbox"/> Electrical Upgrade            | <input type="checkbox"/> Land Purchase            |
| <input type="checkbox"/> Addition              | <input checked="" type="checkbox"/> HVAC               | <input type="checkbox"/> Energy Savings                | <input type="checkbox"/> Technology               |
| <input type="checkbox"/> Security              | <input type="checkbox"/> ADA                           | <input type="checkbox"/> Window Replacement            | <input type="checkbox"/> Other                    |

## General Information About the District / School, and Information About the Affected Facilities:

Denver Public Schools District No. 1 (DPS) was created after the creation of the City and County of Denver in 1902. Based on the inequities of families paying taxes in one school district but then having to pay tuition where their children attended (another district). Therefore DPS No. 1 was established in 1903 by consolidating all the other districts around Denver. By the 1920's the school district initiated a large building program to update and meet the needs of the city. This was the result of several studies completed following the consolidation of the district. Large amounts of money were spent by the district during the ensuing years to upgrade the buildings, the facilities and raise the level of the Denver school system. Today DPS has over 200 schools serving 92,331 students.

Gilpin School is home to the Denver Language Schools (DLS) grades 4 - 8. DLS's mission is to achieve academic excellence and intercultural competence through language immersion education. Gilpin provides immersion programs in Spanish and Mandarin from kindergarten through 8th grade.

Renovations in the last five years have included ADA renovations, new fire panel and upgrade for thermostatic mixing valves for hot water compliance. In 2020, Gilpin will also have a new elevator installed so the school will have ADA access to all public/common spaces.

## Deficiencies Associated with this Project:

The Gilpin School was originally constructed in 1951. The building currently houses The Denver Language School grades 4 - 8. Two steam boilers generate steam to heat the building. The boilers supply steam to the air handling units, unit ventilators, convectors and cabinet heaters throughout the building. Steam piping mains are routed through the crawl space to feed HVAC equipment. The steam, condensate return piping are all original to the construction of the school are both past its useful life and failing causing excess moisture to be trapped in the crawlspace. The moisture buildup is also the breeding ground for insects, rodents and mold which is currently visible. The steam piping also has asbestos containing material so will require complete abatement prior to system replacement. The access to the crawlspace is adjacent to the school's cafeteria which presents a problem with both insects and rodents as well as mold permeating/entering the common space (and near food) used by all occupants of the building. As the room is located in the basement we cannot provide a way to open windows to have natural air exchanges.

Also, Gilpin domestic water galvanized piping that is original to the building. These pipes are also covered with asbestos containing material. The water has been tested for lead; however, the water runs brown with contains rust particles. The visible water quality makes the water feel unsafe and untenable to drink.

The hazards are visible in both piping systems, whether it is the insects, rodents and mold or the rusty water.

## Proposed Solution to Address the Deficiencies Stated Above:

DPS does not have swing buildings to house schools while construction is taking place so we rely on phasing projects over

## BEST FY2019-20 GRANT APPLICATION SUMMARIES

multiple school breaks (summer breaks). This scope work is extensive enough that we will execute over two summer breaks. The first requirement will be to remove all asbestos containing material and mold on all galvanized pipe and steam pipe. This cleanup/remediation will allow for safe access to the crawlspace for replacement of steam piping. While abatement and remediation is taking place, DPS will solicit for architectural and engineering services for the replacement work, which will require review by the state and permit for work. The solicitation will be scheduled for spring 2019 which will allow for sufficient time to produce construction documents for the project.

Even though we are categorizing the work as piping replacement, we are replacing the domestic water system and heating system for the building. This will require replacement of the domestic hot water boiler, storage tank, and pump & removal and replacement of all domestic galvanized pipe. Removal of the existing steam heating system, steam traps and replace with a hydronic heating system. Replace all existing classroom unit ventilators and other unit ventilators serving the auditorium, gymnasium and cafeteria. Provide new heating system will also replace the pneumatic control system with a front end and a system wide digital controls (DDC) that can be monitored on and off site our main maintenance department.

### How Urgent is this Project?

The systems are already in failure. We plan to begin this summer with the asbestos abatement and mold removal on all the piping whether for domestic water or steam heat. In Summer 2020, we will begin the replacement of both the replacement efforts. As we do not have operational empty buildings that can serve as swing spaces, we rely heavily on times the students and staff are not in the building. We will employ that same method for this project: leverage all available breaks to complete the work.

As this project is now an emergency, we will take steps to re-mediate as much as possible to help solve the initial hazards and safety problems using the funds we have set aside for the match. We hope that we are awarded the funds to help with this unscheduled and thus unfunded scope of work. However if we are not awarded grant funding, DPS will identify priority levels to systematically phase repairs to address the issues and then use any budgetary savings in the 2016 General Obligation Bond program. This approach may ultimately result in higher costs and a sub-optimal facility for students as we can only address the work as funding is available because it may take many years to complete and we may ultimately need to wait for approval of a future bond to fully complete the scope.

**Does this Project Conform with the Public School Facility Construction Guidelines?** Yes

**If not, provide an explanation for the use of any standard not consistent with the guidelines:**

### How Does the Applicant Plan to Maintain the Project if it is Awarded?

General:

The recommendations from the project assessment was originally focused on replacing the steam systems and galvanized pipe. After careful review of the project upfront capital expense and the continued maintenance expense the recommendation was revised to remove/abandon the steam system and to change over to a hydronic heating system as well as replace the existing unit ventilators. The maintenance of the hydronic system is preferred from our facility maintenance team, and considered systems that are less costly to maintain. (DPS has moved from steam heating systems in our older building and are replacing with hydronic systems as the steam systems fail.) We currently have several district employed technicians who are skilled in maintaining hydronic systems. Through the recommendations, all pneumatic controls will be abandoned and the HVAC systems will be operated through digital controls. This will allow the facility maintenance team to remotely monitor the systems and adjust for optimal comfort levels.

The additional value add to the district is the energy savings by moving to more efficient systems. The steam systems take a great deal of energy to heat the buildings, and the aging system at Gilpin currently provides only variable heat, where one part of the building will be very warm and another quite cold. The new hydronic system and digital controls will allow more consistent heat throughout the building, which in turn creates less "work tickets" to address the variable conditions, reducing one level of maintenance costs.

Maintenance plan:

Denver Public Schools currently has maintenance programs in place for the HVAC systems throughout the district. This includes routine checks performed by the on-site facility building engineer, quarterly site visits from the mechanical technicians and bi-annual replacement of filters and components. The contractor that will perform the project is responsible for a 2 year warranty on all labor, and we often negotiate for a 5 to 10 year warranty on equipment such as boilers and unit

## BEST FY2019-20 GRANT APPLICATION SUMMARIES

ventilators. (Warranty duration are subject to contract negotiations.)

How to pay for the project replacement at the end of it's useful life:

The new systems that are recommended for the Gilpin school are anticipated to have a 20 year useful life. That is specific for the boilers and the components of the unit ventilators. The life of the piping is expected to extend to 30 years with anticipated maintenance for pin holes and welds. The first aspect of keeping the system active and serving the students comfort levels after the useful life of the system will be to replace the boilers. The funding structure for all capitol projects is currently a two tiered structure. Capital funding through the state and dependent upon the voters passing deferred maintenance bond initiatives. Future considerations may be based upon budget, technology and new systems available. Denver Public Schools will work hard to find funding either through a bond initiative or through state funding to repair or replace the systems for optimal comfort levels.

**Describe the condition of the public school facility at the time it was purchased or constructed and, if the facility was not new or was not adequate as a public school facility at that time, provide the rationale for purchasing the facility or constructing it in the manner in which you did:**

The original Gilpin Elementary school opened it's doors January 6th, 1882, for the Denver Public School District. The building was named after the first territorial governor of Colorado William Gilpin. Between the years of 1949 and 1950 the 1882 building was torn down and replaced with a new bond funded concrete structure and masonry building. The features of this building included hollow steel windows, aesthetic and structural masonry, and the curriculum attributes of 26 classrooms, a 309 seat auditorium, a library and gymnasium. One feature of the 1950 design was that it was located on the site to allow for maximum daylight. The school included a cafeteria, outdoor playground and parking located on a 2 city block area in the Five Points neighborhood of Denver. The replacement facility was funded through the 1948 \$21 million bond issue.

**Describe the history of capital improvements made to the facility by the district/charter school in order to make it suitable for students. Include a list of all capital projects undertaken in the affected facility in the last 3 years:**

There have been several minor renovations to Gilpin over the last 60 years. Between 1960 and 1964 stage steps were added, a hot water boiler was replaced and a playground was developed. In 1969 the building was converted to gas and a new incinerator was installed. Between 1975 and 1978 auditorium renovations, site improvements and a sump pit project were completed. The renovations during the 1980's included, fire alarm systems, kitchen hood, walkway renovations, classroom remodel, entry remodel, office remodel, site improvements, implementation of a soccer field and irrigation systems. In 1992 a storage shed was added to the property. Fire alarm upgrades were completed in 1993. In 1996 roof repair of the existing roof were conducted. Between 2000 and 2005 computer and electrical upgrades were brought into the building, back flow prevention was done, Educational technology program requirements were incorporated into the building. Also in 2005 a learning landscape was installed into the playground area. Between 2005 and 2010 there were miscellaneous interior renovations, including the addition of cooling to the main frame distribution room (MDF). Renovations in the last five years have included ADA renovations, new fire panel and upgrade for thermostatic mixing valves for hot water compliance. In 2020, Gilpin will also have a new elevator installed so the school will have ADA access to all public/common spaces. Currently the cafeteria and the gymnasium are located in the basement, and are not accessible.

**What options outside of the BEST grant has the applicant investigated or leveraged to address the school's facility needs?**

DPS currently has a recurring budget of \$2 million in the Capital Reserve fund to service for catastrophic needs. This funding is used for all 216 facilities in the district. DPS also uses Critical Maintenance funding from our 2016 bond, however that funding is allocated to already identified and approved projects. While this is a critical need, the funding does not currently exist to address it.

DPS does use bond funding for critical maintenance needs. While this issue was identified during the 2016 planning process, the severity has escalated in the time since the original scope of the 2016 bond was developed. The need is great at this time, and this project would have been included had DPS known the severity would be this great. However, now that the funds from the most recent bond projects have been assigned to other projects, we are working to collect funding from all available sources to fund this project.

Among the two submission to BEST, the Galvanized and Steam Piping at Gilpin is the top priority.

**How do you budget annually to address capital outlay needs in your district/charter? Include \$/FTE for the prior fiscal year:**

On a recurring basis, DPS budgets \$23 million annually in total for Regular & Critical Maintenance between the General Fund

## BEST FY2019-20 GRANT APPLICATION SUMMARIES

and Capital Reserve Fund. We budget \$21 million annually specifically for regular maintenance deficiencies and an additional \$2 million in the Capital Reserve Fund (CRF) for catastrophic repairs. Between DPS managed schools and the charter students within DPS buildings, about 82k students are educated in DPS managed & owned facilities. This is about \$280/per pupil. This is about 2% of our operating revenue and is an extraordinarily low amount.

From a technical accounting standpoint relative to the Capital Outlay referenced in the question, the \$2 million of expenses through the CRF is the only capitalized expense in our recurring budgets. This amount to about \$25 per student. DPS does have additional expenses in the CRF for capital leases and technology and debt service; however, those expenses do not seem to fit in the definition of capital outlay as described in the question.

We see a great need to deploy additional recurring funding toward capital outlay and regular maintenance of our facilities. As it stands, we perform far less work than we would like, and we defer many projects until they reach a critical point. Both of the projects DPS applied to the BEST program for in 2019 have reached this critical point, and even at this critical moment, we are having a difficult time prioritizing these projects ahead of our other needs.

Because Denver voters have approved DPS to issue Bonds for Capital Projects in 2012 and 2016, DPS has been fortunate enough to use portions of those approved funds for Critical Maintenance. However, these funding sources are not necessarily recurring, and bond measures devote most of the funding to new construction for capacity expansion and technology enhancements. Even so, there was substantial funding devoted to critical maintenance from the most recent bonds, and without those funds, our critical maintenance needs would go unfulfilled. We need additional resources to meet even the most basic facility needs.

One of the reasons we are applying for consideration from the BEST board is that our needs are great. The Maintenance need had become so great in 2016 that even though most of our focus with additional resources go directly to students, DPS passed a Mill Levy Override in 2016 which did devote a substantial recurring funding of \$4 million annually to critical maintenance. The \$21 million we spend annually includes this \$4 million annual investment. We spent \$17 million prior to that time for regular maintenance. We feel this is important to mention in this section because DPS has made efforts to add additional funds to our facility needs on a recurring basis; and still we have greater needs.

**If relevant to your project, what are your current annualized utility costs, and what amount of reduction in such costs do you expect to result from this project?**

N/A

<b>Grant Request:</b>	\$3,344,136.35	<b>CDE Minimum Match %:</b>	59%
<b>Applicant Match:</b>	\$4,812,293.76	<b>Actual Match % Provided:</b>	59%
<b>Total Project Cost:</b>	\$8,156,430.11	<b>Is a Waiver Letter Required?</b>	No
<b>Affected Sq Ft:</b>	21,508	<b>Contingent on a 2019 Bond?</b>	No
<b>Affected Pupils:</b>	375	<b>Source of Match:</b>	2016 General Obligation Bond
<b>Cost Per Sq Ft:</b>	\$379.23	<b>Escalation %:</b>	3%
<b>Soft Costs Per Sq Ft:</b>	\$52.35	<b>Construction Contingency %:</b>	9%
<b>Hard Costs Per Sq Ft:</b>	\$326.88	<b>Owner Contingency %:</b>	10%
<b>Cost Per Pupil:</b>	\$21,750	<b>Historical Register?</b>	No
<b>Gross Sq Ft Per Pupil:</b>	219	<b>Adverse Historical Effect?</b>	No
<b>Is a Master Plan Complete?</b>	No	<b>Does this Qualify for HPCP?</b>	No
<b>Who owns the Facility?</b>	District		
<b>If owned by a third party, explanation of ownership:</b>			

# BEST FY2019-20 GRANT APPLICATION SUMMARIES

If match is financed, explanation of financing terms:

## Financial Data (School District and BOCES Applicants)

<b>District FTE Count:</b>	83,382	<b>Bonded Debt Approved:</b>	\$1,038,000,000
<b>Assessed Valuation:</b>	\$16,824,261,116	<b>Year(s) Bond Approved:</b>	12,16
<b>PPAV:</b>	\$201,773	<b>Bonded Debt Failed:</b>	
<b>Unreserved Gen Fund 17-18:</b>	\$113,401,693	<b>Year(s) Bond Failed:</b>	
<b>Median Household Income:</b>	\$60,098	<b>Outstanding Bonded Debt:</b>	\$1,718,072,000
<b>Free Reduced Lunch %:</b>	68%	<b>Total Bond Capacity:</b>	\$3,364,852,223
<b>Existing Bond Mill Levy:</b>	9.65	<b>Bond Capacity Remaining:</b>	\$1,646,780,223
<b>3yr Avg OMFAC/Pupil:</b>	\$2,779.70		



● **Facilities Impacted by this Grant Application** ●

**PLATTE RIVER CHARTER ACADEMY - School Safety/ Security Upgrades - Platte River Charter Academy - 2004**

<b>District:</b>	Auditor - Douglas County RE-1
<b>School Name:</b>	Platte River Charter Academy
<b>Address:</b>	4085 LARK SPARROW ST
<b>City:</b>	LITTLETON
<b>Gross Area (SF):</b>	35,553
<b>Number of Buildings:</b>	1
<b>Replacement Value:</b>	\$10,381,798
<b>Condition Budget:</b>	\$2,578,894
<b>Total FCI:</b>	0.25
<b>Adequacy Index:</b>	0.18



**Condition Budget Summary**

System Group	Replacement Cost	Requirement Cost	SCI
Electrical System	\$1,486,485	\$697,469	0.47
Equipment and Furnishings	\$93,115	\$0	0.00
Exterior Enclosure	\$1,618,936	\$35,280	0.02
Fire Protection	\$344,328	\$0	0.00
Furnishings	\$24,398	\$0	0.00
HVAC System	\$1,284,963	\$935,050	0.73
Interior Construction and Conveyance	\$1,470,834	\$667,552	0.45
Plumbing System	\$495,465	\$24,516	0.05
Site	\$1,250,259	\$254,303	0.20
Structure	\$2,313,015	\$30,000	0.01
<b>Overall - Total</b>	<b>\$10,381,798</b>	<b>\$2,644,170</b>	<b>0.25</b>

# BEST FY2019-20 GRANT APPLICATION SUMMARIES

**Applicant Name:** PLATTE RIVER CHARTER ACADEMY

**County:** Douglas

**Project Title:** School Safety/ Security Upgrades

**Applicant Previous BEST Grant(s):** 0

**Has this project been previously applied for and not funded?** No

**If Yes, please explain why:**

## Project Type:

- |  |   |   |  |
|--|---|---|--|
| <input type="checkbox"/> New School            | <input type="checkbox"/> Roof               | <input type="checkbox"/> Asbestos Abatement | <input type="checkbox"/> Water Systems     |
| <input type="checkbox"/> School Replacement    | <input type="checkbox"/> Fire Alarm         | <input type="checkbox"/> Lighting           | <input type="checkbox"/> Facility Sitework |
| <input checked="" type="checkbox"/> Renovation | <input type="checkbox"/> Boiler Replacement | <input type="checkbox"/> Electrical Upgrade | <input type="checkbox"/> Land Purchase     |
| <input type="checkbox"/> Addition              | <input type="checkbox"/> HVAC               | <input type="checkbox"/> Energy Savings     | <input type="checkbox"/> Technology        |
| <input checked="" type="checkbox"/> Security   | <input type="checkbox"/> ADA                | <input type="checkbox"/> Window Replacement | <input type="checkbox"/> Other             |

## General Information About the District / School, and Information About the Affected Facilities:

As a public school of choice, PRA offers students and their families a curriculum alternative. The academic program follows the Core Knowledge Foundation's content-based curriculum as outlined in the Core Knowledge Scope and Sequence and in the book series by E.D. Hirsch, Jr., *What Your First Grader Needs to Know*, et al. PRA has high academic expectations and emphasizes the mastery of basic skills, such as language arts and mathematics. Teachers strive to integrate curriculum and instruction across disciplines and to develop students' problem solving and critical thinking skills. Homework assignments are given on a regular basis to reinforce classroom learning. Character values include integrity, respect, responsibility and compassion and are taught daily.

We are fortunate to have a talented and dedicated staff to meet the needs of every student. The success of the school is due to everyone that works here: from our instructional aides that go above and beyond their required duties, to our facilities manager that takes great pride in keeping our school safe and looking great, to our teachers that spend countless hours nurturing, teaching and inspiring our students. Additionally, we have a very conscientious office staff and administrative staff that serve our families 24/7, if needed. Our school has won 18 John Irwin School of Excellence Awards in its 22 years of existence. Those 18 awards have been in a row (since 2001).

Our parents volunteer over 20,000 hours, on average, per school year. Their accomplishments include many "unseen" duties that are vital to the success of PRA. Parents help keep our kids safe by working carpool no matter the weather. Parents are key in assisting with serving hot lunch, selling milk and cleaning the gym after lunch. The PRA PTO is another example where parents can volunteer their time in order to support the students and staff at the school. The PTO provides many community events and activities that have helped develop a PRA Panther culture through the school year.

Students are the reason we are here. Every school day they show up ready to learn and to demonstrate the core values of respect, responsibility, integrity, and compassion. These values are as important today as they were in the founding of this school. PRA students have unselfishly raised money and collected items for many causes. Our students have gone on to academic success at the high school and college levels with parents often commenting on how well PRA has prepared their child for the future.

Affected facilities have been in place for 15 years and have served the school well for programming purposes. We have done a very good job maintaining the facility by setting aside substantial funds for maintenance and capital improvements, which have been outlined in the previous section. Yet, we do have security deficiencies that are noted below.

## Deficiencies Associated with this Project:

### Existing Conditions:

There is one main entry point into the school served by a receptionist/security person. It is a single access control system which gives the receptionist/security personnel the ability to allow someone in the building where they have access to the building prior to going through our screening protocol. Therefore, a person enters the building, produces their driver's license

## BEST FY2019-20 GRANT APPLICATION SUMMARIES

or government-issued identification and they are screened while they wait. If this person is deemed unacceptable for entry into our school building, they are asked to leave. During this process, the administration of the school is immediately notified and are usually present to escort the person off school premises, if needed. Yet, during this process, the individual is "in" our building and could have access to our building and children based on our physical layout and arrangement at this time.

### Deficiencies:

It is the professional opinion of our school district as well as our staff and our architect that our main entry into the building is not as secure as it needs to be and needs improvement. The specific concerns are as follows:

1. There is no physical deterrent that blocks the possible use of a vehicle to forcibly enter the front of the building.
2. The single access control allows visitors to be able to bypass the check-in point and allows for piggy-back entry.
3. There are no security barriers in the reception area that would keep an intruder contained and separate from the rest of the school population.
4. There is not adequate protection for reception/security personnel from those who might pose a threat to the school as they service the visitor in the screening process.
5. There is not adequate protection against gunfire at critical windows at the front of the building or in areas where an intruder could shoot out a window or door and enter the building.

Therefore, individuals who should not be in our building have access to the entire building prior to being fully screened. The screening process takes less than a minute, yet the fact that an undesirable person has access to our children due to the lack of another barrier is not acceptable.

### Proposed Solution to Address the Deficiencies Stated Above:

Platte River Academy is in the process of completing a master planning process. During that process, we identified the issues and deficiencies noted above. With the help of the Douglas County School District Security Team, our architect, and our Owner's Representative, we have determined that the following renovations and changes need to occur:

1. Install concrete bollards and chains at the main entry points of the parking lot for use, as needed, during the school day.
2. Install concrete bollard planters at the front entry of the school to act as a vehicle barrier to the glass door main entry.
3. Install a combination of glazing options (i.e. ballistic film, laminated glass or ballistic glass) on existing interior and exterior front entry windows and doors as well as classroom windows along front (south side) of the building. Our budget reflects pricing that will accommodate the use of ballistic film, laminated glass or ballistic glass. The main desire is to create a ballistic security level that protects our personnel and our students.
4. Secure the main vestibule in the following way:
  - a) Provide for a larger vestibule area between the front main entry doors and the second set of doors (that give access to the actual building). This will provide more room for visitors to be authenticated and thus gain clearance to enter the second set of doors into the building. Basically, it is a "man trap." It also reduces the ability for piggy-back entrances.
  - b) Add a bullet resistant transaction window that will allow school personnel to be able to monitor incoming visitors and process their entry into the school. This transaction window would also provide a safe location, outside of the physical reach and possible harm of undesirable visitors, who have yet to be authenticated or cleared for entry. Ballistic resistant glass will allow personnel to have a safe and maximized line of sight to monitor approaching visitors while still being secure.
  - c) Beyond the reception area, provide fully framed, aluminum storefront doors with bullet resistant glazing/film and/or glass and an automatic locking mechanism. This would be a third set of doors that would protect the main halls to the classrooms. This provides an additional layer of security in the case of a piggy-back entry. Bullet resistant glazing and/or glass allows line of sight into the corridors during emergencies.
  - d) Reorganize the HVAC system in the enlarged vestibule area.
  - e) Replace the existing access control system. The current system can only support 4 doors. We would purchase a new system that can support the school all the way through its master plan to avoid another replacement in the future.

This entire renovation would follow Public School Facility Construction Guidelines 1CCR 303-1.

### How Urgent is this Project?

We would like to remedy this deficiency this summer (2019) but certainly no later than the summer of 2020. Presently, visitors have full access to our school prior to finishing the authentication process, and therefore puts us at greater risk. We have had several incidents in which an undesirable person has entered our facility and had access to our building. These

## BEST FY2019-20 GRANT APPLICATION SUMMARIES

incidents ended without harm to anyone but it did create a situation that gave us less control over the person who should not be in our building and access to our children. This renovation would solve that issue.

If we are not awarded the grant, it will significantly delay the timeline to a more secure building by at least two years.

**Does this Project Conform with the Public School Facility Construction Guidelines?** Yes

**If not, provide an explanation for the use of any standard not consistent with the guidelines:**

**How Does the Applicant Plan to Maintain the Project if it is Awarded?**

Platte River Academy maintains a repair and replacement fund for many long-range replacement needs as well as emergencies for our facility. Per PRA Governing Board planning and resolution, set in August of 2003, we have built a \$450,000 repair and replacement fund for use to help maintain our entire facility as well as this project. This equates to \$927.83, per student, for repair and replacement needs. We have maintained this fund for 16 years and we will continue to do so by making annual contributions to the capital renewal reserve at \$100 per student, per year.

We anticipate that the maintenance of the bollards, security gates/doors and the ballistic window film and/or ballistic glass would be minimal. Yet, quarterly inspections of all windows, doors, gates and bollards would take place to ensure that they are not in any disrepair. On top of the repair and replacement reserves set by our Governing Board, and the annual contributions to that fund, we have a budget line item of \$25,000 per year for building repairs (excluding maintenance).

The security gates/doors may be the one and only item that may come to the end of its useful life. That useful life is estimated to be twenty years. Upon retiring those gates, our repair and replacement fund would be used to purchase new gates/doors.

**Describe the condition of the public school facility at the time it was purchased or constructed and, if the facility was not new or was not adequate as a public school facility at that time, provide the rationale for purchasing the facility or constructing it in the manner in which you did:**

Platte River Academy was newly constructed during the 2003-2004 school year on the site it occupies today. The school has operated out of this facility and has not been housed in any other location since moving to this permanent site.

**Describe the history of capital improvements made to the facility by the district/charter school in order to make it suitable for students. Include a list of all capital projects undertaken in the affected facility in the last 3 years:**

Platte River Academy has made some improvements over the last five years:

1. Completely renovated our library/media center from floor to ceiling. Total cost was \$45,000. This included the following:
  - a. Installed new carpet throughout the 2,500 sf.
  - b. Purchased new collapsible tables and rolling chairs.
  - c. Replaced all bookshelves with Douglas County School District "slightly used" bookcases. Some of these cases were installed with heavy-duty caster wheels to allow them to be moved so that the room could be converted into a multi-use space for student presentations and school meetings.
  - d. Painted the entire room and added wall graphics.
  - e. Refurbished the librarian desk and checkout counter.
  - f. Added a wall to the north portion of the library so that a small room could be utilized for small group activity adjacent to the main library. This room is equipped with a projection system and tile floors so that it can serve as a "maker" space.
  - g. Installed a special Middle School reading area with couches and lighting that produced an area that our seventh and eighth grade students could call their own.
  - h. Installed a touch wall with a projection system so that presentations by faculty and students could take place on a huge screen/wall.
2. Converted lighting throughout the building to LED to increase the quality of lighting in all student areas as well as cut energy costs nearly in half. Total cost was net \$22,000, which has been recouped in two years of energy cost savings.
3. Re-branded the entire main hall. Total cost was \$5,000.
  - a. Added PRA's "Guiding Principles" through graphic presentation and photos to the walls.
  - b. Painted all the hallways, adding color and graphics for a more upbeat feel and coordination around a specific color palate.

## BEST FY2019-20 GRANT APPLICATION SUMMARIES

4. Painted the entire exterior of the building at a total cost of \$26,500.
5. Added a Visitor Management System. It is called Raptor and is used for the screening of all individuals that enter our facility. Raptor provides sex offender screening and internal alert screening for parents and visitors. Visitors are issued a photo sticker for their visit.
6. Added a new North Door Exit. Total cost was \$63,000. Prior to this addition, there were only two egresses to the building and there were significant safety and security needs that affected the entire building and all 485 students.

**What options outside of the BEST grant has the applicant investigated or leveraged to address the school's facility needs?**

We have not sought any funds from other granting organizations at this time but will be pursuing that support in the weeks/months ahead. Again, we do have the needed matching funds based on our own strategic financial planning, yet funds from another organization would certainly allow us to use what funds we have set aside for this project for other needs for facility improvements (i.e. our roof).

**How do you budget annually to address capital outlay needs in your district/charter? Include \$/FTE for the prior fiscal year:**

Platte River Academy maintains a repair and replacement fund for long-range replacement needs as well as emergencies related to our facility. Per PRA Governing Board planning and resolution, set in August of 2003, we have built a \$450,000 repair and replacement fund for use to help maintain our entire facility as well as this project. This equates to \$927.83, per FTE student, for repair and replacement needs. We have maintained this fund for 16 years and we will continue to do so by making annual contributions to the capital renewal reserve at \$100 per student, per year. This affects our facility only, and not any other buildings within our district.

**If relevant to your project, what are your current annualized utility costs, and what amount of reduction in such costs do you expect to result from this project?**

NA

<b>Grant Request:</b>	\$118,851.33	<b>CDE Minimum Match %:</b>	72%
<b>Applicant Match:</b>	\$421,381.99	<b>Actual Match % Provided:</b>	78%
<b>Total Project Cost:</b>	\$540,233.32	<b>Is a Waiver Letter Required?</b>	No
<b>Affected Sq Ft:</b>	1,500	<b>Contingent on a 2019 Bond?</b>	No
<b>Affected Pupils:</b>	485	<b>Source of Match:</b>	Refinanced 2003 Construction Bonds in 2016
<b>Cost Per Sq Ft:</b>	\$360.16		
<b>Soft Costs Per Sq Ft:</b>	\$51.17	<b>Escalation %:</b>	6%
<b>Hard Costs Per Sq Ft:</b>	\$308.99	<b>Construction Contingency %:</b>	10%
<b>Cost Per Pupil:</b>	\$1,114	<b>Owner Contingency %:</b>	10%
<b>Gross Sq Ft Per Pupil:</b>	76	<b>Historical Register?</b>	No
<b>Is a Master Plan Complete?</b>	No	<b>Adverse Historical Effect?</b>	No
<b>Who owns the Facility?</b>	Charter School	<b>Does this Qualify for HPCP?</b>	No

**If owned by a third party, explanation of ownership:**

**If match is financed, explanation of financing terms:**

Platte River Academy refinanced its 2003 Construction Bonds in 2016. During the process of bringing our debt service down by \$130,000 a year through this effort, we were also able to secure additional money for undeclared renovations on our facility in the years to come. Our Governing Board decided that the security issue identified in this grant is where they would like to see the funds go. Therefore, we have the \$399,542 needed to match the BEST grant and secured those funds through our refinancing efforts.

# BEST FY2019-20 GRANT APPLICATION SUMMARIES

## Financial Data (Charter Applicants)

<b>Authorizer Min Match %:</b>	77%	<b>CEFCA or financing attempts:</b>	1
<b>&lt; 10% district bond capacity?</b>	No	<b>Enrollment as % of district:</b>	1%
<b>Authorizer Bond Attempts:</b>	1	<b>Free Reduced Lunch %</b>	1%
<b>Authorizer MLO Attempts:</b>	1	<b>% of PPR on Facilities:</b>	8.88%
<b>Non-BEST Capital Grants:</b>	0	<b>Unreserved Gen Fund % Budget:</b>	23.57%
<b>FY18-19 CSCC Allocation*:</b>	\$131,946.00	<b>3yr Avg OMFAC/Pupil:</b>	\$1,403.54

\*CSCC Allocation figures are based on a \$25M statewide appropriation. Pending legislation may to revise to \$29.25M

**Who will facility revert to if school ceases to exist?** The land, furniture, equipment and facility will be assimilated by the Douglas County School District.

● **Facilities Impacted by this Grant Application** ●

**COLORADO SPRINGS 11 - RJ Wasson Academic Campus System Upgrades - Roy J. Wasson Academic Campus - 1959**

<b>District:</b>	Auditor - Colorado Springs 11
<b>School Name:</b>	Roy J. Wasson Academic Campus
<b>Address:</b>	2115 AFTON WAY
<b>City:</b>	COLORADO SPRINGS
<b>Gross Area (SF):</b>	254,876
<b>Number of Buildings:</b>	1
<b>Replacement Value:</b>	\$79,491,314
<b>Condition Budget:</b>	\$59,079,238
<b>Total FCI:</b>	0.74
<b>Adequacy Index:</b>	0.16



**Condition Budget Summary**

System Group	Replacement Cost	Requirement Cost	SCI
Electrical System	\$9,947,444	\$8,223,138	0.83
Equipment and Furnishings	\$2,879,113	\$2,762,532	0.96
Exterior Enclosure	\$7,162,233	\$5,123,365	0.72
Fire Protection	\$430,117	\$3,132,303	7.28
Furnishings	\$1,644,265	\$1,230,477	0.75
HVAC System	\$20,012,374	\$21,214,243	1.06
Interior Construction and Conveyance	\$16,956,963	\$11,066,734	0.65
Plumbing System	\$3,868,547	\$3,685,544	0.95
Site	\$6,332,616	\$3,991,250	0.63
Special Construction	\$913,488	\$1,171,860	1.28
Structure	\$9,344,153	\$30,000	0.00
<b>Overall - Total</b>	<b>\$79,491,314</b>	<b>\$61,631,446</b>	<b>0.78</b>

# BEST FY2019-20 GRANT APPLICATION SUMMARIES

**Applicant Name:** COLORADO SPRINGS 11

**County:** El Paso

**Project Title:** RJ Wasson Academic Campus System Upgrades

**Applicant Previous BEST Grant(s):** 5

**Has this project been previously applied for and not funded?** No

**If Yes, please explain why:** N/A

## Project Type:

- |   |  |   |   |
|---|--|---|---|
| <input type="checkbox"/> New School         | <input type="checkbox"/> Roof                          | <input type="checkbox"/> Asbestos Abatement | <input checked="" type="checkbox"/> Water Systems |
| <input type="checkbox"/> School Replacement | <input type="checkbox"/> Fire Alarm                    | <input type="checkbox"/> Lighting           | <input type="checkbox"/> Facility Sitework        |
| <input type="checkbox"/> Renovation         | <input checked="" type="checkbox"/> Boiler Replacement | <input type="checkbox"/> Electrical Upgrade | <input type="checkbox"/> Land Purchase            |
| <input type="checkbox"/> Addition           | <input type="checkbox"/> HVAC                          | <input type="checkbox"/> Energy Savings     | <input type="checkbox"/> Technology               |
| <input type="checkbox"/> Security           | <input type="checkbox"/> ADA                           | <input type="checkbox"/> Window Replacement | <input type="checkbox"/> Other                    |

## General Information About the District / School, and Information About the Affected Facilities:

Colorado Springs School District 11 (D11) provides pre-kindergarten through 12th grade public education and care to 26,435 students on 49 campuses spread throughout the city's core. Students come from all backgrounds with a wide array of talents and challenges. Their families speak more than 70 languages. Just over half of students are White (51.2%), 7.6% Black/African American, and 7.4% a racially mixed. Nearly one-third (31.1%) claim Hispanic/Latino heritage. Sixty-one percent of students qualify for free or reduced-price meals. The traditional four-year, on-time graduation rate is 80.4%.

The Roy J. Wasson Academic Campus (RJWAC) is the sole focus of this BEST proposal. RJWAC is now a comprehensive education center replacing disparate programs previously spread across the district. RJWAC houses three alternative high schools, two alternative middle/high schools, the Springs Community Night School, and several programs (Adult and Family Education, Career Pathways, Technical Education, and Transition).

- Achieve Online: Serves grades 6-12 via online curriculum supported by certified teachers (n=252 students).
- The Bijou School: Serves students in grades 9-12 who are at risk for dropping out of high school prior to graduation. Classroom sizes average 15-17 students (n=137 students).
- Digital High School: A credit recovery program serving El Paso County students and supported by certified teachers (n=143 students). Free childcare is available.
- Odyssey ECCO High School: Allows students to earn a high school diploma as well as the opportunity to earn an Associate's Degree. (n=232 students)
- Springs Community Night School: Late afternoon and evening classes for credit recovery and/or high school education completion (n=57 students).
- Tesla Educational Opportunity School: Serves grades 6-12 through small class sizes. Free childcare is available (n=199 students).
- Adult and Family Education: This program offers Adult Basic Education, Adult Secondary Education, and English Language Acquisition classes to 173 students under age 21. Free childcare is provided while teen students attend classes or complete homework.

The alternative programs provide many opportunities for student success in several different types of non-traditional environments. Preschool and nursery facilities support teen parents completing their secondary education. RJWAC is open from 7:00 am to 10:00 pm Monday through Thursday and 7:00 am to 4:00 pm on Fridays.

As the state's 10th largest school district, staff oversee 4,016,950 square feet of facilities and 720 acres of property. D11's Facilities and Operations Department strives to maintain all 49 campuses to the best of its ability with the funding provided by the state. Repairing and patching currently functioning systems as well as repairing failing systems until the funding for replacement is available is a large part of the manpower time and financial cost to the District (~\$2 million per year). The D11 Facilities Maintenance Plan identifies functioning and deficient items in each building. Metrics including safety, life expectancy, previous and ongoing repair needs, frequency, and costs versus replacement, safety and code compliance are measured at least annually. A rubric places items on a Capital Requirements list under one of three categories: replace within five years (Red), replace in 6-10 years (Yellow), or requested improvement (Green).



# BEST FY2019-20 GRANT APPLICATION SUMMARIES

## Deficiencies Associated with this Project:

The RJ Wasson Academic Campus' "Red List" includes 15 projects, all considered necessary to replace within five years. Two projects that encompass four of the 15 listed issues are deemed the most urgent and critical to health and safety: replacing the fire alarm system and improving water quality by replacing the potable water system, including the building's domestic backflow preventer (RPZ), the domestic pressure regulator tree, and domestic site piping, etc. (see items 3, 4 and 5 in Red List under Urgency).

Both priorities are urgent. The fire alarm system does not meet code. It is deemed a critical need based on student and staff safety as well as the system's potential to close the building in case of failure. To address this priority District 11 will use three years (FY19-20 - FY21-22) of RJWAC's share of mill-levy override (MLO) building maintenance/renovation funds to create a pool of \$640,500 (see Urgency - Funding below for more detail).

However, the potable water system also is endangering student and staff health and has raised concerns among staff and community members. For example, in 2017 brown water was reported coming from a classroom sink. The water was tested utilizing EPA Method 200.8 Determination of Trace Elements in Waters and Wastes by Inductively Coupled Plasma-Mass Spectrometry. The water tested positive for lead at 48 ppb (parts per billion) - more than three times the allowable level of 15 ppb or 15 mg/L. It was determined that the solder utilized in the original 1959 plumbing system contained lead that leached into the water creating water quality concerns plus an identifiable health hazard. In addition, copper levels ranged from less than 5 micrograms/liter to more than 11,000. The EPA acceptable level is less than 1,300 mcg/L.

The deteriorating fixtures and associated, nearby piping and solder joints were replaced and the water was re-tested. Results at those junctions were within acceptable levels for both lead and copper. However, the situation heightened district- and building-level concerns about water quality. After many discussions and planning sessions, all RJWAC water supply fixtures were tested between May 10, 2017 and July 14, 2018. In several locations results showed higher than allowable levels for lead (ranging from 15 mcg/L to 466 mcg/L) and for copper (ranging up to 2,500 mcg/L). (See attached testing reports and map of lead results.)

Because of the additional positive tests and parents' and community members' heightened concerns about water quality, district-wide testing protocols were developed and the water coming from every district fixture was tested. Only two buildings in the entire district showed water quality issues -- RJWAC and Russell Middle School. Both showed higher than acceptable lead and copper levels in the water and at RJWAC overall water quality was intermittently poor (brown, discolored, odd smell, etc.). The district placed signs stating "Washing only" or "Let water run for 1 minute before consuming" at every deficient hand lavatory until a permanent solution could be implemented. All drinking fountains also were tested and were within acceptable levels - but given that traditional drinking fountains are often unused and instead students and staff fill water bottles from lavatory and classroom sinks, the district especially is concerned about sinks at both facilities.

At Russell Middle School, nearly 100 water samples tested over the 15 parts per billion level established as safe by the Environmental Protection Agency. The district diverted funds from other critical capital projects to fund the Russell project this year. District 11 experienced so many critical capital needs already in 2018-19 that District 11 not only diverted all of the FY19 MLO and capital reserve funds to address crises but also shifted \$8 million of FY19 MLO funds specified for bond debt reduction to augment available funding. This further reduces the available MLO funds in future years when those funds must be repaid to bond debt reduction. Overall, District 11 has identified approximately \$700 million in capital needs of which \$100 million are urgent.

In January, Colorado Department of Education's (CDE) School Auditor's Report (January 15, 2019) outlined the following specific potable water deficiencies at RJWAC.

G3011 - Potable Water Distribution and Storage - Water Supply, Potable Water Distribution Piping (page 22): Water supply includes underground potable water distribution piping with excavation and backfill. - Impact: Total facility (254,876 sq. ft.) - Renewal/Whole system replacement: Within 1 year - SCI Score: 1.00 - Priority: 1 - based on the system condition and concerns over domestic water quality coming into the facility.

D2020 - Domestic Water Distribution - Water Distribution Complete (p. 82): The building domestic water distribution system includes a four-inch main line, water meter, backflow preventer with rough-ins included. The water heater is captured in a

## BEST FY2019-20 GRANT APPLICATION SUMMARIES

separate system. The system should be budgeted for repair/replacement. - Impact: Total facility (254,876 sq. ft.); - Renewal/Whole system replacement: Within 2 years; - SCI Score: 1.12; - Priority: 2 - based on the system condition alone.

o CONCERNS ABOUT WATER QUALITY SPECIFICALLY ARE REFLECTED IN THE ADEQUACY ASSESSMENT (016.1; 016.2) WITH A SCORE OF 1. Score comments were: 016.1 -- "Reported concern due to color, odor, etc." and 016.2 - "The results for lead levels exceed 0.015 mg/L for lead." (p. 127)

D2020 - Domestic Water Distribution - Water Heater, Steam, Storage Tank, Commercial (page 83): The domestic hot water is provided by a 55 GPM steam-heated, semi-instantaneous commercial water heater, with a 460-gallon storage tank and recirculation pump. The system should be budgeted for repair/replacement. The school currently is utilizing a temporary 175-gallon storage tank. - Impact: Total facility (254,876 sq. ft.); - Renewal/Whole system replacement: Within 2 years; - SCI Score: 1.12 - Priority 2: based on the system condition.

These findings mirror to a significant extent the district's concerns related to the RJWAC water supply and the facility's potable water system. Additionally, this report shows the overall context at RJWAC where repairing old systems is becoming more expensive than replacing them.

### **Proposed Solution to Address the Deficiencies Stated Above:**

Solution design has been ongoing among D11 Administration, RJWAC Administration, and Facilities and Operations staff for two years. Verified water quality issues, the lead and copper leaching and the resultant drinking water impact reflect contamination throughout the cold-water distribution system. Given the age of the building and its original plumbing fixtures, the only permanent solution to remedy the water quality concerns is to remove contaminated fixtures and piping throughout the entire building. The hot water lines, recirculating system, and boiler are impacted by cold-water contaminants and face the same replacement requirements as the cold-water system. The most cost-effective solution is to replace all components identified in the CDE RJWAC assessment items G3011 and D2020, including piping to drinking fountains and the kitchen as well as piping to the swimming pool where students are subject to inadvertent water ingestion. Wall-mount drinking fountains (D2010, page 81, priority 2) installed in 1959 would be simultaneously be replaced.

The test results, offending fixtures and associated piping were used to map out a sector and floor-based plan that informs the entire scope of replacement work. Detailed phasing is necessary to maintain building operations given the widespread construction impact. The following is a description of the work areas and associated phasing requirements: A) All piping from the mechanical room to the storage tanks: 1) New piping to be installed adjacent to existing piping during the summer of 2019 and the school-year (SY)19/20; 2) Tie-ins and demo of old piping to be completed summer 2020. This requires total water supply shut-off and school closure (for students, teachers, administrators). B) New storage tanks, boilers, pumps and appurtenances: 1) Demo of existing, abandoned storage tanks to be done during the summer 2019 and SY19/20; 2) New piping and storage tanks to be installed during SY19/20; 3) Replacement of existing boilers, pumps, piping, and appurtenances, tie-ins, and start-up/testing to be completed summer 2020. C) All water supply piping and fixtures in the kitchen: 1) Replacement of piping to be initiated during summer 2019 and completed during summer 2020. D) All water supply mains located within the existing utility tunnel system that supplies all restrooms, classrooms, and drinking fountains: 1) New piping to be installed adjacent to existing during the SY19/20 and/or SY20/21; 2) Tie-ins and demo of old piping to be completed summer 2021. E) All water supply piping from mains in the tunnel up to fixtures located in hallways, classrooms and offices: 1) Replacement of piping to be completed by summer 2021. F) All water supply piping from mains in the tunnel up to restrooms: 1) Replacement of piping from mains to fixtures to be completed by summer 2021. G) All drinking fountains and piping with sanitary tying back into existing: 1) Replacement of wall-mount drinking fountains and piping (originally installed in 1959) to be completed by summer 2021. H) All water supply lines to the swimming pool: 1) Replacement of piping to be completed during SY19/20 or SY20/21. The new water piping system has been designed to meet the Division of Fire Prevention and Control in 8 CCR 1507 and the Colorado Department of Health & Environment regulations in 6 CCR 1010-6.

Throughout this phased project, District 11 will continue to use signage to prevent consumption of water that is deemed to be of poor quality for various reasons, including those sources that include lead or other contaminants. The district will communicate with parents, students, staff and other constituents to ensure they understand the water quality issues and the ongoing project to address these. The goal will be to minimize disruption while moving as swiftly as possible to remedy this critical health and safety issue.

Due to the complexity of the renovations and the importance of phasing to keep the building operational, the project was

## BEST FY2019-20 GRANT APPLICATION SUMMARIES

designed by MEP Engineering Design Firm out of Denver, Colorado. District 11 is seeking proposals for construction now using its RFQ process. The design firm, their estimators, and District 11's budget determination are an extrapolation of similar piping replacement costs at Russell Middle School. Total project costs are projected at \$4,236,802.

### How Urgent is this Project?

#### Health Urgency:

Student and staff health within a safe learning environment is the highest priority at RJWAC. The water quality at the site not only tests at higher than safe levels for contaminants but also intermittently is discolored and smells. The district repaired the most critical plumbing junctions yet elevated levels remain throughout the building with concerns that when water has not been used frequently, such as after the weekend or even longer breaks, that water quality is worse. Signs warning students, staff, and visitors not to drink from certain spigots are woefully inadequate particularly given the number of young (infant and preschool) children and the number of English Language Learners using the building.

Meanwhile, water quality issues at Detroit schools roused a "Call To Action" piece on local television station KKTU Channel 11 regarding lead levels in drinking water at all public schools (9/26/18). Following this story, KRDO Channel 13 aired a story about D11- specific, water-quality testing results (11/8/18). In this story, District 11 assured the public that it is looking for funding to address the issue. As mentioned above in the Deficiency section, already the district has diverted funds from other projects to address Russell Middle School's water quality problem.

Clearly, science supports the district and community concerns. Water quality, including unsafe levels of lead and copper within the facility's drinking water, are unacceptable. As a toxic metal, lead is harmful to human health with persistent effects exacerbated when it accumulates in bodily tissues over time. The degree of exposure and impact depends on the concentration of lead, route of exposure (air, water, food), current medical condition, and age. It has been estimated that up to 20% of the total lead exposure in children can be attributed to a waterborne route, i.e., consuming contaminated water. High levels of lead contamination in a child can result in convulsions, major neurological damage, organ failure, coma, and ultimately death. Moderate to low levels of exposure may result in hearing loss, inhibit growth, and cause learning disabilities (Orem, B. Water Research Center. 2014).

Lead can enter drinking water when service pipes that contain lead corrode, especially where the water has high acidity or low mineral content (as in Colorado Springs). In 1959 when Wasson High School was constructed and before widespread health protection policies, lead was used during the plumbing installation (Safe Drinking Water Act Amendments of 1986 prohibited use of lead solders, pipes and flux in drinking water systems). The joints of pipes were soldered with an alloy of lead and tin. When water sits in the pipes, even for short amounts of time, the lead leaches into the water and exposes the person drinking the water to trace amounts of lead. Similar leaching and corrosion occur with copper pipes. Despite the lack of lead in the pipes themselves, the solder contained elevated levels of lead. Over time significant amounts of lead can enter into the water, especially hot water (Environmental Protection Agency, Basic Information about Lead in Drinking Water, 2018); thus, the need to replace RJWAC's cold and hot water systems.

The Safe Drinking Water Act requires the EPA to determine the level of contaminants in drinking water at which no adverse health effects are likely to occur with an adequate margin of safety. These non-enforceable health goals, based solely on possible health risks, are called maximum contaminant level goals. EPA has set the maximum contaminant level goal for lead in drinking water at zero because lead is a toxic metal that can be harmful to human health even at low exposure levels. The EPA action level for lead is 15 parts per billion (Centers for Disease Control and Prevention, Lead: Water, 2016). RJWAC levels tested up to 48 parts per billion.

In summary, the district tried to resolve the RJWAC water quality issue using a stopgap process that temporarily addressed the most urgent concerns. However, additional concerns were identified and many of our students, staff, parents and other community members are concerned about these issues. It is time to address permanently the RJWAC water quality problem. Since the full project must be phased over two-plus years, the district needs to find a way to fund this priority just as we are completing the Russell Middle School project and shifting all RJWAC-designated MLO capital project funds to the fire alarm system project. RJWAC is a much bigger, more complex facility than Russell Middle School, and it is much older. As such, this water quality project requires more funding.

## BEST FY2019-20 GRANT APPLICATION SUMMARIES

### Fiscal Urgency:

The 15 projects on RJWAC's "Red List" (items to be replaced within 5 years because of critical deficiency - not ordered by priority) are:

- 1) Fire Alarm System: Replace the horn and strobe system - does not meet current code requirements.
- 2) Fire Sprinkler Head replacement
- 3) Potable Water System: Building's domestic Backflow Preventer (RPZ); Building's domestic pressure regulator tree; Domestic Site Piping, etc.
- 4) Plumbing Fixture System: Sink, Faucets, Drinking Fountains, Urinals and Showers - fixtures have been repaired numerous times over the years
- 5) Water Heater: Unit
- 6) HVAC System: A/C Split Systems: condenser, evaporator and refrigerant
- 7) Storm Sewer System: Improve storm sewer drainage issues at east stage doors
- 8) Sanitary Sewer System: Clean-Outs - Lack of outside clean-outs to effectively unclog sanitary blockages
- 9) Door System - New code requires all classroom doors to be lockable from inside the room.
- 10) Network System: Replace existing telephone system - parts for the current system are difficult to find.
- 11) Elevator System: Replace existing elevator - Repair/replacement parts for the current system are difficult to obtain.
- 12) Electrical Power System: Replace 15 transformers.
- 13) Millwork System: Replace auditorium seating - cannot find repair parts.
- 14) Window System: Replace existing glazing system - cannot obtain parts for operable windows.
- 15) Ceiling System: Replace all 12" x 12" glued on (asbestos containing) acoustical ceiling tile - many tiles are stained and loose.

Several of these projects affect health and safety issues. Yet, like most school districts with aging facilities, growing low-income populations and declining enrollment, most of the "Red List" items will not be addressed within five years.

District 11 voters failed to pass a bond election in the fall of 2016 that was intended to help the district address backlogged maintenance and key, capital improvement projects. In response, the school district proposed a more limited mill levy override (MLO) in fall of 2017. Luckily, local voters passed the MLO. However, it includes much more limited funds for capital projects with significant portions of the funding devoted to other purposes such as staff raises and hiring of additional counselors to address student mental health issues. Recurring expenditures like these as well as MLO funds devoted to paying down previous bond debt, limit the resources available to assist the district with addressing critical issues such as RJWAC's water quality.

District 11 has just over \$5.5 million from Mill Levy Override (MLO) funds AND Capital Reserve to replace high priority "Red List" items at ALL District 11 buildings over the next year (FY19-20). To give context, based on square footage RJWAC represents 6.3% of the district's total facility square footage. Applying that percentage to the MLO/Capital Reserve total allocates \$346,500 to RJWAC for FY19-20. These funds represent just 2.8% of the estimated cost for all RJWAC "Red List" items (\$12,419,281.00). Additional RJWAC-targeted MLO funds of approximately \$147,000 in years two and three create a pool of \$640,500. The plan is that all of this MLO-generated funding will be used to replace the Fire Alarm System, one of the facility's two highest priority issues. In other words, District 11 has sufficient funding to address one, urgent RJWAC project over the next 3 years. And, that one project is the fire alarm system. Yet, water quality also must be addressed (#s 3, 4 and 5 in the above list).

Already this year D11 has diverted funds to address the Russell Middle School water quality project. Every school in the district has a "Red List" of items, most of which are being put off until they become urgent. To generate the match required for the BEST project, the district will take MLO funds earmarked for other schools' "Red List" projects. As such, the MLO funds, while inadequate to help us address all urgent district projects, do provide us with some flexible funding. As such, the district is able to meet the match required by BEST.

If this project does not receive BEST assistance, D11 will divert MLO funding intended for other schools' health and safety projects, or projects to repair/replace failing systems. It is likely that we will replace only some of the cold-water lines at RJWAC. Replacement of hot water, water-return or boiler components will not be feasible. Health hazards will be reduced but not eliminated. Finally, diverting funds from other schools is possible because of our district's size. However, unlike a smaller

## BEST FY2019-20 GRANT APPLICATION SUMMARIES

district, we have well over 50 facilities, many of which are on the brink of failing systems from roofs to boilers. Other chemical contaminants, including mercury, are being addressed by diverting the same MLO funds. Pressure is intense in all districts. The BEST program funds offer District 11 a way to address, adequately and cost-effectively, the critical water quality health issue at RJWAC without merely placing a Band-Aid on a festering problem.

**Does this Project Conform with the Public School Facility Construction Guidelines?** Yes

**If not, provide an explanation for the use of any standard not consistent with the guidelines:**

**How Does the Applicant Plan to Maintain the Project if it is Awarded?**

The building maintenance equipment and supply budget for the entire district is \$2,441,055.65. The funds are distributed on an as needed basis to district facilities. This fiscal allocation does not include salaries, benefits, mileage, printing, etc. District 11 Facilities and Maintenance staff create a Preventative Maintenance Plan for each school campus (see RJWAC maintenance plan in Attachments). Capital construction completed under BEST grant funding will become part of the RJWAC maintenance and renewal schedules. - Preventative maintenance plans are outlined by work order number, frequency, building or site, equipment item, and responsible craft department (see Attachments) - However, non-scheduled maintenance responds to safety and health issues and is tracked by school and occurrence (see RJWAC non-scheduled maintenance plan details in Attachments - examples are highlighted).

**Describe the condition of the public school facility at the time it was purchased or constructed and, if the facility was not new or was not adequate as a public school facility at that time, provide the rationale for purchasing the facility or constructing it in the manner in which you did:**

Roy J. Wasson High School was built in 1959 on 28.2 acres of land that had been the Colorado Bird and Game Farm. The \$3.1 million facility included three academic wings, gymnasiums, vocational shops, an auditorium, a kitchen, a swimming pool, and a cafeteria. The 72 classrooms were constructed to accommodate up to 2,000 students. As part of the initial construction, the district built a stadium on the adjacent athletic fields to be used by all Colorado Springs District 11 (D11) schools. The field hosted graduation ceremonies for all high schools until they were moved to the World Arena in 1998, to negate weather impact.

Throughout the years, D11's school demographics have shifted with neighborhood change and shifting pockets of growth. Various schools were underutilized and continued operation cost prohibitive. In 2009, the D11 School Board voted to close eight schools and three more in 2013, one of those being Wasson High School.

During the building's temporary closure (2013), the facility was re-invented and renovated as the Roy J. Wasson Academic Campus. Renovations consisted mainly of office and classroom reconfigurations to provide office spaces for the administration of each program as well as classrooms to better suit the 14-hour per day programs. The envelope, structure and core elements of the building such as the restrooms, elevator, plumbing, mechanical and electrical systems are original. Spaces such as the kitchen and commons, gymnasiums, auditorium and media center are original as well and remain as shared spaces for all of the programs to utilize. The building capacity now stands at 1,058 students. As of the 2018-2019 school year, utilization on paper is at 160%. However, because the facility is home to alternative education programs, students use the facility from 7 am to 10 pm staggering daily utilization across 15 hours rather than the traditional 7.5 hours.

**Describe the history of capital improvements made to the facility by the district/charter school in order to make it suitable for students. Include a list of all capital projects undertaken in the affected facility in the last 3 years:**

The following are the notable upgrades and repairs to Wasson High School from 1959 through 2013.

- 1971 Office/Resource center addition
- 1980 Gymnasium addition
- 1985 Swimming pool & stage upgrades
- 1990 Pool repairs
- 1993 Elevator addition
- 1996 Classroom upgrades
- 1996-1998 Theater renovation
- 1997 Boiler replacement
- 1997 Asbestos remediation of friable asbestos containing materials or mastic (most ceilings, insulation and some flooring were in degraded

## BEST FY2019-20 GRANT APPLICATION SUMMARIES

condition)

- 1998 Wood flooring restoration
- 2000 Dance studio upgrades
- 2001 Media Lab cooling system addition
- 2003 Stage Lighting upgrades; synthetic turf replaced sod on athletic field; tennis courts replaced
- 2004 Breaker replacement
- 2005 Partial water efficient fixture upgrades
- 2006 Gymnasium roof renovation
- 2009 Industrial Arts building roof renovation; Direct Digital Controls (DCC) added to building
- 2010 All-weather track replaced
- 2013 Major renovation from a high school facility to the RJWAC. Primary renovations included office and classroom re-configurations to provide office spaces for the administration of each program; classroom re-configurations to accommodate 15-hour per day programs, technology, and preschool.

No renovations were made to the envelope, structure and core elements of the building (restrooms, elevator, plumbing, mechanical and electrical systems) or common areas (kitchen, student commons, gymnasiums, auditorium, media center, shared administrative space).

Major Capital projects during the past three years:

- 2017 Pool Boiler replacement

Other than the pool boiler replacement and scheduled maintenance and minor repairs to various building systems, there have been no major capital projects to the building since 2013.

### **What options outside of the BEST grant has the applicant investigated or leveraged to address the school's facility needs?**

Following a failed bond election in fall 2016, District 11 passed a Mill Levy Override (MLO) in the fall of 2017 that includes some capital funding. Unfortunately, it is inadequate to address the district's capital needs, even those needs that are most critical (as discussed previously). Additionally, it is phased in over six years, therefore, funds for urgent projects are even more limited. The District 11 Board of Education is debating pursuit of de-TABORing the district to remove constraints on the budgeting process but that will not necessarily generate additional revenue. Additionally, the district is considering another attempt at a bond issue in the future. With the recent MLO passage, a bond election is not likely until 2020 or 2021. If the district is successful at de-TABORing, it would allow the district to pursue a less complicated bond election. Given previous experience, it is likely that more time will need to elapse before the district will be able to pass another funding measure. And, de-TABORing the district in which TABOR was birthed is likely to be a continuing challenge.

### **How do you budget annually to address capital outlay needs in your district/charter? Include \$/FTE for the prior fiscal year:**

District 11 budgets annually to address facilities' capital outlay through two funding sources: (1) Capital Reserve and (2) MLO 2017. These two funding sources renew annually. The sources represent a critical needs' funding pool for 50 schools and campuses as well as other district facilities. District 11 distributes funds to facility projects via a prioritization process. The annual prioritization method uses a two-step, triage approach: Step 1 is to conduct facilities condition assessments that leverage District 11's in-house tradespeople (electricians, HVAC technicians, plumbers, carpenters, landscapers, etc.) as subject matter experts. They identify the 'worst of the worst' assets and assess which need to be replaced within the next 2-10 years. Each specific item or system is placed on a master list for the facility in order of urgency. Step 2 is to establish a prioritized composite score for items requiring repair/replacement and broken down by building system type. This process uses a risk-type matrix and considers the following six categories: (a) risk of injury, considering both likelihood (risk) and severity of possible injuries; (b) risk of property loss; (c) program support (i.e., will this replacement/repair affect student achievement and/or the learning environment); (d) legal/code compliance; (e) recurring general fund savings (i.e., energy cost saving, ongoing repairs, etc.); and (f) appearance/convenience/morale (studies show that positive learning environments improve student academic and behavioral outcomes and can decrease teacher turnover by 25%; Eartham, 2017; Gunter & Shao, 2016; Maxwell, 2016; Leigh, 2018). The six categories are analyzed using weighted score methodology to ensure staff achieve an accurate composite score that aligns with District 11's core mission. The composite scores and assessments are shared with key leaders and priorities finalized through consensus.

## BEST FY2019-20 GRANT APPLICATION SUMMARIES

The annual funding allocation available for capital projects in Fiscal Year 2018-2019 from the Capital Reserve Fund and MLO 2017 Fund was approximately \$1,500,000 and \$13,500,000 respectively. Of the MLO's \$13.5 million, \$8 million was borrowed from its intended purpose of bond debt reduction to cover urgent capital projects. The \$8 million must be repaid to bond debt reduction beginning in FY2020-21, decreasing the future amount of MLO-generated funds for capital renewal/replacement projects over four years. These funds are district-wide figures and are distributed accordingly to the 5-Year Capital Plan that was developed via the above-mentioned two-step process. On a per student basis (n=26,435 students), the Capital Reserve Fund is \$56.74/student and the MLO fund is \$510.69) - or \$567.43/student from the entire pool. Without including the \$8 million borrowed from the MLO bond debt reduction, the MLO fund amount is \$208.06/student for a total of \$264.80/student from both sources. For the RJWAC campus (n=1,193 students under age 21), the allocation on a per student basis is \$676,944 for FY18-19 including the \$8 million in bond debt reduction funds and \$315,906 without those funds - far less funding than is required for crisis level systems repair or replacement.

**If relevant to your project, what are your current annualized utility costs, and what amount of reduction in such costs do you expect to result from this project?**

N/A

<b>Grant Request:</b>	\$1,566,281.20	<b>CDE Minimum Match %:</b>	64%
<b>Applicant Match:</b>	\$2,784,499.90	<b>Actual Match % Provided:</b>	64%
<b>Total Project Cost:</b>	\$4,350,781.10	<b>Is a Waiver Letter Required?</b>	No
<b>Affected Sq Ft:</b>	253,199	<b>Contingent on a 2019 Bond?</b>	No
<b>Affected Pupils:</b>	820	<b>Source of Match:</b>	Mill Levy Override (MLO) funds
<b>Cost Per Sq Ft:</b>	\$17.18	<b>Escalation %:</b>	4%
<b>Soft Costs Per Sq Ft:</b>	\$0.00	<b>Construction Contingency %:</b>	10%
<b>Hard Costs Per Sq Ft:</b>	\$17.18	<b>Owner Contingency %:</b>	10%
<b>Cost Per Pupil:</b>	\$5,306	<b>Historical Register?</b>	No
<b>Gross Sq Ft Per Pupil:</b>	309	<b>Adverse Historical Effect?</b>	No
<b>Is a Master Plan Complete?</b>	Yes	<b>Does this Qualify for HPCP?</b>	No
<b>Who owns the Facility?</b>	District		
<b>If owned by a third party, explanation of ownership:</b>			
<b>If match is financed, explanation of financing terms:</b>			

### Financial Data (School District and BOCES Applicants)

<b>District FTE Count:</b>	24,215	<b>Bonded Debt Approved:</b>	
<b>Assessed Valuation:</b>	\$2,653,571,140	<b>Year(s) Bond Approved:</b>	
<b>PPAV:</b>	\$109,584	<b>Bonded Debt Failed:</b>	\$235,000,000
<b>Unreserved Gen Fund 17-18:</b>	\$22,685,892	<b>Year(s) Bond Failed:</b>	16
<b>Median Household Income:</b>	\$51,240	<b>Outstanding Bonded Debt:</b>	\$126,313,111
<b>Free Reduced Lunch %:</b>	60%	<b>Total Bond Capacity:</b>	\$530,714,228
<b>Existing Bond Mill Levy:</b>	3.513	<b>Bond Capacity Remaining:</b>	\$404,401,117
<b>3yr Avg OMFAC/Pupil:</b>	\$1,204.55		

● **Facilities Impacted by this Grant Application** ●

**ELLICOTT 22 - ES/HS Safety Upgrades - Ellicott ES - 2001**

District:	Auditor - Ellicott 22
School Name:	Ellicott ES
Address:	399 South Ellicott Highway
City:	Ellicott
Gross Area (SF):	55,579
Number of Buildings:	1
Replacement Value:	\$13,482,903
Condition Budget:	\$2,603,115
Total FCI:	0.19
Adequacy Index:	0.14



**Condition Budget Summary**

System Group	Replacement Cost	Requirement Cost	SCI
Electrical System	\$2,172,776	\$1,086,705	0.50
Equipment and Furnishings	\$206,715	\$60,528	0.29
Exterior Enclosure	\$1,728,273	\$1,971	0.00
Fire Protection	\$559,324	\$12,558	0.02
HVAC System	\$2,826,811	\$249,297	0.09
Interior Construction and Conveyance	\$2,624,546	\$1,020,534	0.39
Plumbing System	\$793,673	\$19,023	0.02
Site	\$1,074,423	\$154,470	0.14
Structure	\$1,496,362	\$0	0.00
<b>Overall - Total</b>	<b>\$13,482,903</b>	<b>\$2,605,086</b>	<b>0.19</b>

**ELLICOTT 22 - ES/HS Safety Upgrades - Ellicott HS - 1986**

District:	Auditor - Ellicott 22
School Name:	Ellicott HS
Address:	375 South Ellicott Highway
City:	Ellicott
Gross Area (SF):	58,038
Number of Buildings:	1
Replacement Value:	\$12,355,501
Condition Budget:	\$5,276,639
Total FCI:	0.43
Adequacy Index:	0.15



**Condition Budget Summary**

System Group	Replacement Cost	Requirement Cost	SCI
Electrical System	\$2,328,018	\$944,546	0.41
Equipment and Furnishings	\$296,530	\$60,528	0.20
Exterior Enclosure	\$1,535,348	\$38,133	0.02
Fire Protection	\$583,626	\$726,099	1.24
Furnishings	\$317,698	\$44,347	0.14
HVAC System	\$1,324,567	\$1,468,645	1.11
Interior Construction and Conveyance	\$1,874,970	\$821,028	0.44
Plumbing System	\$1,022,921	\$234,784	0.23
Site	\$1,292,980	\$938,526	0.73
Structure	\$1,778,843	\$0	0.00
<b>Overall - Total</b>	<b>\$12,355,501</b>	<b>\$5,276,636</b>	<b>0.43</b>



# BEST FY2019-20 GRANT APPLICATION SUMMARIES

**Applicant Name:** ELLICOTT 22

**County:** El Paso

**Project Title:** ES/HS Safety Upgrades

**Applicant Previous BEST Grant(s):** 2

**Has this project been previously applied for and not funded?** Yes

**If Yes, please explain why:** Ellicott School District previously applied for a BEST grant in 2017, which included secure vestibules in its scope, as well as other site improvements. This application was not approved for funding; however, it appears the majority of the feedback on the

## Project Type:

- |  |   |   |  |
|--|---|---|--|
| <input type="checkbox"/> New School          | <input type="checkbox"/> Roof               | <input type="checkbox"/> Asbestos Abatement | <input type="checkbox"/> Water Systems   |
| <input type="checkbox"/> School Replacement  | <input type="checkbox"/> Fire Alarm         | <input type="checkbox"/> Lighting           | <input type="checkbox"/> Facility Sitework                                       |
| <input type="checkbox"/> Renovation          | <input type="checkbox"/> Boiler Replacement | <input type="checkbox"/> Electrical Upgrade | <input type="checkbox"/> Land Purchase   |
| <input type="checkbox"/> Addition            | <input type="checkbox"/> HVAC               | <input type="checkbox"/> Energy Savings     | <input type="checkbox"/> Technology  |
| <input checked="" type="checkbox"/> Security | <input type="checkbox"/> ADA                | <input type="checkbox"/> Window Replacement | <input checked="" type="checkbox"/> Other Plumbing repairs and high wind shelter |

## General Information About the District / School, and Information About the Affected Facilities:

Ellicott School District is located approximately 17 miles east of Colorado Springs. The district covers over 220 square miles of central eastern El Paso County. The district is a rural district with a small town feel that has for the past five years had a stable enrollment with a 5-year average of 975 students per year. Our district has a diverse population that has access to free half day preschool for students 3 and 4 year olds, and free full day kindergarten. Our Elementary School serves 480 students grades K-5, our Middle School serves 250 middle school students and 100 preschool students (in our LEED Gold, BEST-funded Middle School), and our High School serves 280 students grades 9-12. Elective course offerings include band, choir, industrial arts, Spanish, and welding, which lead to at least 6-12 participants in their respective content competitions at the state and national levels, i.e. honor band/choir and FBLA. We have an excellent vocational education program that partners with Pikes Peak Community College and students excel in welding. Students have access to AP curriculum, and a pre-collegiate program with UCCS, that serves students in grades 7-12. Our student's continue to surpass the national norm in the areas of science for NWEA Assessments. The district has committed to remain current with our technology initiatives, with a full 1:1 iPad initiative at our middle school and 1:1 laptops at the high school. Students participate in football, soccer, volleyball, basketball, wrestling, track and baseball. With all of the good things that are happening in our district we continue to struggle with recruiting and retention of great teachers and administrators. Our free/reduced lunch status district wide is over 60%, our students with disabilities is over 12% and our English learner population is over 10%. These factors are limiting and with the current lack of funding in the state, the challenge of educating children, recruiting and retaining staff, and maintaining facilities is difficult. We are extremely grateful for the BEST grant and the opportunity to build our new Middle School facility in 2015. We are looking now to address immediate health and life safety needs at our High School and Elementary School.

## Deficiencies Associated with this Project:

High School: The High School was originally built in 1986 and partially rebuilt in 2001 due to significant tornado damage, and has been maintained to the best of the District's ability since that time. Routine repairs and maintenance have continued to occur, as well as life cycle system replacements when required. The current High School entrance is typical of similarly-aged facilities. The front entrance of the school includes a vestibule; however, this is for weather protection purposes only and does not provide any secure access control. Entrance to the front office is through an adjacent door once access is gained to the school interior. In the event of a security incident, an intruder could be inside the building in a matter of seconds, potentially without anyone seeing the breach. However, even if office staff were able to visually see the intruder, there is no way to control their entrance into the school.

A partial plumbing replacement occurred in the High School in 2001 as part of the tornado reconstruction. However, the building routinely experiences plumbing issues which include backed up toilets, clogged pipes and horizontal separation of sewer pipes where the original repairs were made in 2001. These issues result in shutting down the kitchen and restrooms especially during large events. There are pervasive smells related to these issues as well, which present a health hazard to students and staff, and affect their ability to learn. While these are addressed as much as possible with ongoing maintenance,

## BEST FY2019-20 GRANT APPLICATION SUMMARIES

it is apparent that more significant issues remain which will result in ongoing health and safety hazards.

Elementary School: The Elementary School was built in 1999. This school also includes a vestibule for weather protection, but encounters even more significant access control issues because the office is across a central lobby from the main entrance doors and has no opportunity for direct line of sight. There is not a clear line of sight to the front entrance door or the exterior of the school. Doors are routinely propped open to allow unencumbered access during heavy traffic times. While similar to the High School, secured access to the Elementary School is even more difficult with current conditions. An intruder to the school could be inside and directly into kindergarten classrooms without any visual observation of their approach.

Additionally, the extreme openness once inside the building allows for an intruder to take multiple directions to avoid being seen.

Another significant deficiency for the Elementary School is its lack of adequate tornado shelter emergency protection.

Elementary age students are currently ushered across a state highway to the Ellicott Middle School to shelter in a storm.

Although this transition can be made in a record time of 14 minutes, that does not account for an actual storm situation when conditions may be poor and students are under extreme stress. The life safety of our youngest students are put at risk due to the inadequate nature of our existing facility.

### **Proposed Solution to Address the Deficiencies Stated Above:**

High School: To address the High School access security issue, a design charrette was held with staff, the Board president, District administration, and the regional Safety Resource Officer. This resulted in a proposed reconfiguration of the existing office to allow for access controls at the doors and a pass through window. This can be accommodated within the existing layout of the offices, but will require certain modifications to the walls and doors. We intend to add an additional storefront door to create a secondary vestibule for security, while utilizing the existing pass through window and office door.

Supplemental access controls will be added, as well as an expansion to the existing camera system where needed for this vestibule.

Based on analysis of the existing plumbing system through investigation and engineer review, the most responsible solution to the plumbing backups is to install a new sanitary sewer system outside of the building. The cost and impact to operations to remove and replace the system in place was deemed by the project stakeholders to be too extreme. PVC pipes will be installed from the existing fixtures at the north restrooms/kitchen, as well as the locker rooms on the east, and routed out of the building to the main sanitary sewer line.

Elementary School: The unsecured access control at the Elementary School requires a slightly higher level of modification, but is still the most efficient solution as determined by the District and design team. The existing vestibule will remain, as well as existing access controls. Two additional storefront systems with access controls will be added inside the building to restrict access deeper into the school once inside. The existing door into the office will be modified to become a pass through window, which will allow the front office to meet face to face with visitors (once buzzed through from the existing vestibule) and then allow them access into the building. The new storefronts will have access controls to allow teachers and students to utilize the corridor during passing periods, at which time the exterior vestibule will remain as a holding area for visitors. This will limit the mixing of visitors and students during passing periods. Certain office modifications will be required for this solution, with minimal impact to the current layout.

A high wind shelter is planned as an annex to the existing Elementary School cafeteria. Multiple locations adjacent to the Elementary School were evaluated and ultimately it was decided that this location on the southeast of the building was the most economical. The annex will be connected to the existing cafeteria by an expansion joint, with points of egress and ingress along the existing wall, as well as exterior doors as required by code. The shelter is being designed for capacity of the Elementary School students and staff, in order to be efficient with per person square footage. The construction will meet all Public School Capital Construction Guidelines.

### **How Urgent is this Project?**

High School: The existing entry vestibule of the High School does not meet current security needs. Therefore, the urgency is immediate. There is no direct visibility to the entrance of the school. Although an AI phone is installed, the control and visual security of the entrance is extremely limited.

With respect to the plumbing issues, recent plumbing investigations through the use of a sewer camera have revealed even more urgent needs. The lines are clogged and damaged and will continue to deteriorate until a solution is implemented.

Jetting of the lines is not seen as a possible option near the kitchen restrooms due to the age and fragility of the existing lines. Should a more serious line break occur, which is very possible, the ongoing health safety of students and staff is at risk. The continuing sewer smells which occur in the high school locker rooms make these spaces unusable for recreational use, or as

## BEST FY2019-20 GRANT APPLICATION SUMMARIES

tornado shelters in the event of an emergency.

Elementary School: The existing Elementary School vestibule is even more inadequate than the High School, and represents an extremely urgent safety deficiency. While the District has installed cameras to provide more visibility, if an intruder is able to enter the school, there is no longer any secure containment, or adequate visibility to determine the path of the threat. There would be no time to enact a lockdown procedure before the District's most vulnerable students are exposed to this danger.

While the urgency of need for a tornado shelter can never be accurately predicted, the fact that the District has been directly impacted by a tornado previously makes the results of unpreparedness very real. Shepherding elementary school students across a highway and into a potentially already crowded shelter at the middle school is not an adequate solution, and may result in a tragic situation if the best laid plans cannot be enacted in time.

**Does this Project Conform with the Public School Facility Construction Guidelines?** Yes

**If not, provide an explanation for the use of any standard not consistent with the guidelines:**

**How Does the Applicant Plan to Maintain the Project if it is Awarded?**

The district will follow all manufacturer recommendations for upkeep of any equipment installed with this project, as well as include these improvements within our annual maintenance program. Replacement floors at the high school due the plumbing repairs, and new floors at the high wind shelter will be cleaned daily, and re-sealed if needed on an annual basis. Doors and hardware related to the security improvements will be adjusted as needed, and inspected as required by the manufacturer. It will be budgeted into the District Budget. The district maintains a Capital Project Line Item in its budget for larger projects. This budget is approximately \$100,000 per year.

**Describe the condition of the public school facility at the time it was purchased or constructed and, if the facility was not new or was not adequate as a public school facility at that time, provide the rationale for purchasing the facility or constructing it in the manner in which you did:**

The District has three primary buildings, two of which are affected by this grant application. Ellicott High School was originally built in 1986 to house grades 7-12. In 2001, the building was hit by a tornado that demolished approximately 75% of the building, leaving only the gymnasium area standing. The building was then rebuilt to allow continued school operations on that side. The Elementary School was built in 1999 with an addition completed in 2006.

**Describe the history of capital improvements made to the facility by the district/charter school in order to make it suitable for students. Include a list of all capital projects undertaken in the affected facility in the last 3 years:**

Since the High School reconstruction in 2001, areas such as the roof have been replaced, and sidewalks are continually being addressed to meet the 2010 ADA requirements. The building condition overall is generally acceptable, except as noted for our grant application with respect to underground plumbing. Routine maintenance has allowed us to extend the life of various systems. No major capital improvements have occurred at the Elementary School.

**What options outside of the BEST grant has the applicant investigated or leveraged to address the school's facility needs?**

The District went out for a bond election in November 2018 and was unsuccessful. After collecting more feedback from the community as to why this occurred, it was determined that the community's main focus is life safety (secure vestibule, high wind shelter) and health safety (repair of plumbing issues). Therefore, the District is electing to use capital expenditures monies to address these concerns. Additionally, the District has received partial funds for the project related to the security vestibules from a Colorado Department of Public Safety School Security Grant.

**How do you budget annually to address capital outlay needs in your district/charter? Include \$/FTE for the prior fiscal year:**

The district does its best to operate on an 80% Salary and 20% Operational Model. The past 5 years the District total program expense for facilities was \$3,990,269.36. This is a yearly average of \$798,053.87 over that 5 year span. Our maintenance expenses generally average to 7% of that operations budget, which we intend to continue and use to maintain our new improvements as well. Additionally, the District maintains a Capital Construction budget of \$100/student/year, which equals approximately \$100,000, as well as \$60,000 per year from our Spectrum lease.

**If relevant to your project, what are your current annualized utility costs, and what amount of reduction in such costs do you expect to result from this project?**

N/A

## BEST FY2019-20 GRANT APPLICATION SUMMARIES

<b>Grant Request:</b>	\$2,150,585.28	<b>CDE Minimum Match %:</b>	28%
<b>Applicant Match:</b>	\$836,338.72	<b>Actual Match % Provided:</b>	28%
<b>Total Project Cost:</b>	\$2,986,924.00	<b>Is a Waiver Letter Required?</b>	No
<b>Affected Sq Ft:</b>	10,900	<b>Contingent on a 2019 Bond?</b>	No
<b>Affected Pupils:</b>	864	<b>Source of Match:</b>	
<b>Cost Per Sq Ft:</b>	\$274.03	Small rural funding, 2015 GOCO grant reimbursement, Colorado Department of Public Safety School Security Grant	
<b>Soft Costs Per Sq Ft:</b>	\$35.92	<b>Escalation %:</b>	3%
<b>Hard Costs Per Sq Ft:</b>	\$238.11	<b>Construction Contingency %:</b>	5%
<b>Cost Per Pupil:</b>	\$3,457	<b>Owner Contingency %:</b>	5%
<b>Gross Sq Ft Per Pupil:</b>	132	<b>Historical Register?</b>	No
<b>Is a Master Plan Complete?</b>	Yes	<b>Adverse Historical Effect?</b>	No
<b>Who owns the Facility?</b>	District	<b>Does this Qualify for HPCP?</b>	No
<b>If owned by a third party, explanation of ownership:</b>			
<b>If match is financed, explanation of financing terms:</b>			

### Financial Data (School District and BOCES Applicants)

<b>District FTE Count:</b>	972	<b>Bonded Debt Approved:</b>	\$2,373,000
<b>Assessed Valuation:</b>	\$32,145,870	<b>Year(s) Bond Approved:</b>	11
<b>PPAV:</b>	\$33,089	<b>Bonded Debt Failed:</b>	\$4,370,000
<b>Unreserved Gen Fund 17-18:</b>	\$1,272,927	<b>Year(s) Bond Failed:</b>	18
<b>Median Household Income:</b>	\$58,472	<b>Outstanding Bonded Debt:</b>	\$1,944,717
<b>Free Reduced Lunch %:</b>	67%	<b>Total Bond Capacity:</b>	\$6,429,174
<b>Existing Bond Mill Levy:</b>	10	<b>Bond Capacity Remaining:</b>	\$4,484,457
<b>3yr Avg OMFAC/Pupil:</b>	\$1,122.79		

February 1, 2019

To whom it may concern,

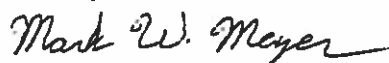
I, Mark Meyer, Deputy of El Paso County Sheriff and the Ellicott School District Resource Officer am writing this letter of support for the District as it tries to get the BEST grant for students and staff by hardening its schools entrances at the elementary and high school. I have served the Ellicott Schools and surrounding area schools in this capacity for just over 5 years.

One of the major safety concerns that I have for the Ellicott High School and Ellicott Elementary School, is that the entrances are not secure enough. They have a buzzer system and camera attached to it, but if a visitor has bad intentions they would be able to get buzzed in pretty easily and then have access to the entire building. A major security breach occurs when the high school students are coming back into the building after each period from being at the welding/industrial arts or music. The students are let in but can be infiltrated by anyone else who doesn't belong there. At the elementary the administration office is too far away, that if a threat is recognized they will not be able to react in time. With the system they have, they do the best they can by being vigilant in trying to monitor the people entering and leaving, but the schools need to be remodeled to allow for improved line of sight and a more controlled pattern of access.

I work with the schools as it relates to drills and protocols and hardening the entrances would be one of the easiest and reliable methods to accomplish this. It would help to slow down the intruder so that I might be able to respond in time. It is one of my greatest fears that I will get a call that there is an active shooter in one of the buildings, but an added layer of security such as having all visitors having a face to face interaction with the school administration office would help.

If you have any questions or concerns, please do not hesitate to contact me at your earliest convenience. I can be reached at (719)238-9273 or by email at [markmeyer@elpasoco.com](mailto:markmeyer@elpasoco.com). Thank you for your time and consideration.

Sincerely-



Deputy Mark Meyer

Dear Best Board,

I, Jackie Chambers, am writing this letter on behalf of the Ellicott School Board. Our board has met with the community, school staff and local business to fully vet the proposal that we are submitting to the BEST Board. Our District fully supports the grant because if successful we can provide the safety and security that our district desperately needs for our students. Being hit by a Tornado not that many years ago is a grim reminder for all of us that things can happen and can happen quickly and we want to guarantee that our kids will have the shelter they need so that injury and loss of life can be avoided.

The district has already pledged and set aside the matching monies and we are prepared to support this project any way we can.

Thank you.

A handwritten signature in cursive script that reads "Jackie Chambers". The signature is written in black ink and is positioned above the printed name.

Jackie Chambers

Ellicott School Board President

## ● Facilities Impacted by this Grant Application ●

## Thomas MacLaren State Charter School - MacLaren Safety Upgrades - Thomas MacLaren - 1963

District:	Auditor - Charter School Institute
School Name:	Thomas MacLaren Charter
Address:	1702 N Murray Blvd
City:	COLORADO SPRINGS
Gross Area (SF):	120,189
Number of Buildings:	3
Replacement Value:	\$29,794,138
Condition Budget:	\$9,416,574
Total FCI:	0.32
Adequacy Index:	0.11



## Condition Budget Summary

System Group	Replacement Cost	Requirement Cost	SCI
Electrical System	\$4,202,633	\$973,826	0.23
Equipment and Furnishings	\$794,160	\$445,651	0.56
Exterior Enclosure	\$3,192,083	\$260,232	0.08
Fire Protection	\$15,734	\$966,495	61.43
Furnishings	\$455,494	\$226,121	0.50
HVAC System	\$5,987,902	\$4,105,005	0.69
Interior Construction and Conveyance	\$7,137,816	\$1,468,437	0.21
Plumbing System	\$1,937,527	\$1,130,967	0.58
Site	\$1,795,329	\$929,833	0.52
Structure	\$4,275,461	\$0	0.00
Overall - Total	\$29,794,138	\$10,506,567	0.35

# BEST FY2019-20 GRANT APPLICATION SUMMARIES

**Applicant Name:** Thomas MaLaren State Charter School

**County:** El Paso

**Project Title:** MaLaren Safety Upgrades

**Applicant Previous BEST Grant(s):** 0

**Has this project been previously applied for and not funded?** No

**If Yes, please explain why:**

## Project Type:

- |  |   |  |  |
|--|---|--|--|
| <input type="checkbox"/> New School            | <input type="checkbox"/> Roof               | <input checked="" type="checkbox"/> Asbestos Abatement | <input type="checkbox"/> Water Systems         |
| <input type="checkbox"/> School Replacement    | <input type="checkbox"/> Fire Alarm         | <input type="checkbox"/> Lighting                      | <input type="checkbox"/> Facility Sitework     |
| <input checked="" type="checkbox"/> Renovation | <input type="checkbox"/> Boiler Replacement | <input type="checkbox"/> Electrical Upgrade            | <input type="checkbox"/> Land Purchase         |
| <input checked="" type="checkbox"/> Addition   | <input checked="" type="checkbox"/> HVAC    | <input type="checkbox"/> Energy Savings                | <input checked="" type="checkbox"/> Technology |
| <input checked="" type="checkbox"/> Security   | <input type="checkbox"/> ADA                | <input type="checkbox"/> Window Replacement            | <input type="checkbox"/> Other                 |

## General Information About the District / School, and Information About the Affected Facilities:

Chartered by the Colorado Charter School Institute (CSI) on November 18, 2008, Thomas MaLaren School opened in fall 2009 within the boundaries of Colorado Springs District 11. By the fall of 2013 MaLaren had graduated its first class and was accredited as a School of Distinction by CSI. MaLaren has maintained this rating since 2013, and our charter was just renewed for another five-years. Thomas MaLaren School has been repeatedly recognized for academic and organizational excellence, including a record-breaking ACT score in 2016 and most recently winning a Best Workplace in Colorado Springs award.

As Colorado is a "local control" state, we originally sought to be chartered through District 11. They asked us to apply to the Charter School Institute for fear that another charter school would adversely affect their funding. Currently CSI schools are not funded with parity to the District schools: we do not own our own facilities and do not have access to mill levy override (MLO) funding. This past year the Governor's budget allowed for a small funding of MLO equalization: this year, this translated to an allotment of nearly \$250,000 for the school. (The projects outlined in capital improvements that were not funded from our bond came from this funding this year.) If MaLaren had equal funding as District 11 we would have a budget increase of about \$1MM per year.

Originally chartered to serve students in grades 6-12, within a few years we had a strong conviction that opening elementary grades would be one of the best solutions to the clear need of preparing students for our rigorous program. We postponed this plan for several years as we wanted to ensure operational and academic excellence in the 6-12 program first and we also knew that we needed to find a facility that could house our 6-12 program before we began to take on the complexity of K-5 facility needs. In the summer of 2017 we purchased a building that not only fit our full 6-12 program, including space for the orchestra program and athletics, but it also had room for a K-5 program. We opened our doors to elementary students in kindergarten through fifth grade in August 2018.

MaLaren's academic program has several distinct features, most notably that it does not offer any electives, nor does it track students. All students in grades K-12 take a common curriculum, deliberately sequenced so that all students gain mastery in the sciences, humanities, and the arts. All students in the elementary school study from the Core Knowledge curriculum and have physical education and music (Kodály singing) every day. In the Upper School all students study seven years of history, literature, economics, and political theory from a set reading list; all students study the same math and science curriculum culminating in calculus-based physics; all students play a string instrument, put on a Shakespearean play, and take art history and art studio. While this means that we cannot offer many of the offerings other schools do as electives, our students gain tremendous sophistication in what we do offer. The Upper School gathers every morning for a 15-minute Assembly; the entire Lower School gathers for a daily Line-Up with a presentation as well.

## Deficiencies Associated with this Project:

Our Facility Assessment Team has been tracking ongoing facility needs since the purchase of the property (see Attachment which outlines completed projects). The current deficiencies are outlined here:



## BEST FY2019-20 GRANT APPLICATION SUMMARIES

1. Lack of secure entrance. The greatest threat to security in the building is the outdated entry system. In the attachments, we have photos of the current entrance: from the outside one can see a set of stairs leading up to the main door. There are 4 doors in this entrance (numbered on the attachment). Door 2 is the main door; this door is fobbed for staff access and can be opened from a buzzer from both the front desk there in the lobby and from the main office. Door 1 is used for ADA access; it is not fobbed. Doors 3 and 4 are for exiting only. We staff the front desk in the lobby with two staff members at all times. (See photo of "Atrium-view of front desk from front door"). We recently installed the RAPTOR system, which screens all visitors checking a national sex offender list and creates a clearly identifiable visitor badge. All visitors must check in at the front desk. If one looks at the photo of "Atrium-Numbered", one can see the doors as seen from the front desk staff. When the lobby is quiet, staff can see out onto the plaza and can see when visitors arrive, but need to use the camera on the buzzer to identify visitors before they come in. During any busy time of day, however, the visitors quickly mingle with the students. Front desk staff cannot see who is at the door (see "Front Doors Crowded"), and many times we have visitors walk in (well-intentioned students open the doors for them despite training to the contrary) and these visitors have been seen walking through the building without being vetted and identified by staff. Moreover, this main entrance opens directly into one of the most used spaces on campus: the Commons area which holds daily assemblies and three lunch shifts. Thus visitors and students are mingling immediately upon arrival at the school. We have placed additional staff at a corner hallway to the east of the cafeteria so that we have eyes on who is going into the hallway towards the main office or the elementary wing, but even so, visitors have made it past these staff members unidentified. Our Building Safety Plan (found in attachments) has been reviewed by first responders who tell us that, given our building, we have a good plan. But even better would be a single point of entry with much tighter control.

2. Lack of school-wide communication.

A) Intercom System: The intercom system is one-way. The building is wired to have phones in every classroom, but we were not able to put the hardware in through operational funds. We currently have 40 telephones in offices and conference rooms, but no phones in classrooms. Teachers and staff carry personal cell phones with them in the event of an emergency.

B) Camera System: When we purchased the building, the campus had 16 cameras. This past summer we both added three more cameras and upgraded to digital as the old cameras produced images that were quite grainy. Despite this camera upgrade, there are still parts of the campus-inside and outside-that we cannot see on the current camera system. We would like to find out immediately who broke the gym window by throwing rocks or who snuck into a small hallway with friends to vape during class.

3. Lack of ventilation in science labs. The science wing includes three classrooms, which clearly used to have operating gas with fume hoods. These have been removed (we do not know when). The science storage room also has minimal ventilation. This means that we do not have a reliable confinement of chemicals to limit student exposure to toxic, noxious, flammable or hazardous fumes or vapors. Thus, our science rooms are not operational as fully functioning science labs, limiting the chemistry and physics labs. We do not have the designated space for experiments which results in unwanted contamination of non-laboratory equipment-for example, students use the same space to take notes and to participate in an experiment that uses chemicals. Without a confined space, we are not able to minimize exposure in the event of a chemical spill. When students do dissections in Biology we can only use fans...and much of the building smells of the formaldehyde. Several teachers move classes outside to avoid the fumes. See photos of rooms 66 and 68 to see what rooms currently look like. One complicating factor is that the counter surface in these rooms contains asbestos, so any plan requires abatement.

4. Lack of proper ventilation in the kitchen. The kitchen hood is broken, so we are not able to use the existing gas stove. We have a workaround using electrical cook-tops and warmers (see photo of kitchen hood), but this is not ideal for our lunch program serving three lunch shifts every day. In the meantime, we have disconnected all gas lines to the existing stoves.

5. Other safety deficiencies found by the Safety Team include door hardware (inability to lock from the inside) and windows that open wide enough for someone to enter if left unattended. The safety team is also interested in pursuing security glass or film on offices and classroom windows and doors so that people on the outside cannot see in. We are not addressing these final deficiencies in this grant.

### **Proposed Solution to Address the Deficiencies Stated Above:**

1. Secure entrance: Our solution is to build an addition in the current portico allowing for a controlled entryway. See the building plan attached (particularly New Entryway-numbered doors) On the drawing, doors 1-4 are the existing doors which

## BEST FY2019-20 GRANT APPLICATION SUMMARIES

can be seen in the photos of the current entryway (also labeled 1-4).

The main entrance would now be through Door 5, accessible via a ramp (to compensate for addition being at the top of current stairs). This takes visitors into a mid-sized airlock. All visitors will be screened with RAPTOR here before entering the school through Door 6. At this point visitors can go into the main building through Door 8, which will replace a current set of windows. This will require a set of stairs due to increased elevation. Anyone who needs ADA access can go through Door 4 to access the ramp inside the building. Visitors who are coming to an event in the auditorium (south of the cafeteria) can go through Door 7 which will become a small lobby. This lobby is also accessed from the cafeteria through Door 3 and will have a staff presence during school hours. Visitors in the lobby can exit the building through Door 10 if desired. Door 2 becomes a regular exit. Door 1 becomes an airlock for student entrance and exiting only. This will be staffed during morning and afternoon peak traffic times. This allows for student and public traffic to be separated during the day as well. This addition is 1,447 square feet. The current front of the school remains in place and new storefront is added. The roof of the current portico will be used with rooftop units added for air in the new addition. The bids we receive have allocations for partial bullet-proof glass in the visitor airlock. The bids also carry allowances for security access changes including ADA operators.

### 2. Communication:

A) We currently have 40 phones in offices and conference rooms. We propose adding 66 more telephones so that each classroom has the ability to have two-way communication.

B) To our current 19 cameras, we propose adding 23 more cameras. This will require larger 9TB video recorder to store footage from all 42 cameras.

3. Ventilation in Science Lab: Our solution is to add five six-foot hoods to two classrooms and one additional hood to the chemical storage room. Chemical fume hoods are the "primary control device for protecting laboratory workers" (OSHA quickfacts pdf). The addition of hoods will minimize student exposure to toxic, noxious, flammable, or hazardous fumes or vapors. It will also minimize cross-contamination of laboratory and non-laboratory equipment in the classroom as well as minimizing exposure in the event of a chemical spill.

4. Ventilation in Kitchen: Our solution is to fix the ventilation and replace the hood allowing for a full, functioning kitchen, able to use the gas ranges.

### How Urgent is this Project?

If not awarded the project funds, the School will continue to operate in the same way. What is the urgency? Unfortunately, the instances of school violence are on the rise. Looking at the list of incidents that have happened near our campus in the first two years here is stark. Ten significant incidents are documented in the Safety Questionnaire during the 18 months we have been in our current location, in addition to every day concerns that a school faces. We want to be in this neighborhood, providing a first rate education to all kinds of students from District 11. But it is our responsibility to keep them safe while we are here, and the 1960's construction and internal communication system is woefully out of date. Without grant funds the school will be forced to operate with a sub-optimal safety infrastructure, further taxing faculty and staff and leaving students vulnerable. In the science wing, biology and chemistry will continue to be implemented with approved experiments not requiring ventilation hoods, but the risks outlined in the deficiencies section will be ongoing. Similarly, our kitchen staff will continue to function in a sub-operable setting for serving lunch to the student population.

**Does this Project Conform with the Public School Facility Construction Guidelines?** Yes

**If not, provide an explanation for the use of any standard not consistent with the guidelines:**

### How Does the Applicant Plan to Maintain the Project if it is Awarded?

The airlock project is a permanent addition to the structure of the facility and should last as long as the building. This addition to the structure will be maintained as we maintain the interior space of the facility. The current five-year budget for the campus includes maintaining a custodial staff of six to eight personnel to care for the facility. Salary and benefits currently total \$190,000 for six custodians or 3% of PPR. We allocate \$75,000 per year towards maintenance and repair projects. This is 1% of PPR.

The budget also allows for a regular allowance to repair equipment; the current budget has an allocation of \$50,000 a year to

## BEST FY2019-20 GRANT APPLICATION SUMMARIES

replace items such as cameras and phones.

This year we are working with G.E. Johnson to create a facility calendar in light of all of the renovations just completed. This allows us to track ongoing repairs and upgrades needed, from replacing batteries in the fire alarm, replacing filters in the ventilators to scheduling inspections. If awarded the grant, we would add the expected life of new ventilation hoods (20 years) to this calendar, allowing us to budget for expected replacement needs.

**Describe the condition of the public school facility at the time it was purchased or constructed and, if the facility was not new or was not adequate as a public school facility at that time, provide the rationale for purchasing the facility or constructing it in the manner in which you did:**

Thomas MaClaren School purchased our property in June of 2017. We had been renting classrooms from a church since our founding in 2009 and had outgrown that space. Moving to a larger campus became urgent in 2015; we were under contract on two separate buildings before finding this one. The purchase of those buildings fell through due to the cost of renovation needed to put a school in them. Our current building was built in 1963 as a junior high school for Colorado Springs District 11. Ten years ago, due to declining enrollment, D11 began to use it for alternate programming, and then eventually sold the property in 2012 to a management group who leased it to a charter school (Global Village Academy). The charter school could not afford any upgrades to the campus, and, in fact, became eager to sell it to us due to their lower than expected enrollment.

The campus fit our needs well: first of all, it is located in the heart of urban Colorado Springs. We had turned down facility opportunities in neighboring D20 and D49, as a key part of our mission is to serve the diverse population found in D11. Next, the campus was large enough to support our planned enrollment growth. The campus is 18.5 acres, with three buildings totaling 120,189 square feet. It fits our 6-12 program at full build out and had space for a K-5 expansion. This expansion was approved last year and was implemented this year. Thus our enrollment grew from 450 to 823 this past year. (The campus was designed for around 900 students.) Moreover, the campus included a gym and athletic fields, allowing us to sustain an athletics program, and we were finally admitted to CHSAA this past year.

That said, the building was in very poor shape when we purchased it: the electrical and HVAC systems had not been touched in decades; there was no air flow in much of the building (the exterior vents were all sealed shut), and even though air conditioning was available it was not up and running in parts of the building. The fire alarm was not up to code; the sprinkler system was partially working and much of the campus had dead grass; there was a sinkhole in the main plaza that had been cheaply repaired recently and which needed immediate correction; several sewage lines were blocked. The former Industrial Arts building had been shut down for years; it was being used as a massive storage unit. All around the campus were signs of neglect-broken lights, holes in the roof paneling showing that the building had been target practice for generations of neighborhood kids, and filthy walls and floors.

**Describe the history of capital improvements made to the facility by the district/charter school in order to make it suitable for students. Include a list of all capital projects undertaken in the affected facility in the last 3 years:**

When we assessed the property, it became clear that no capital improvements had been made for well over a decade. Thus, we closed on a 15.5 million dollar bond; 12.5 was for the purchase of the property and the remaining 3 million was earmarked for immediate upgrades. With those funds we updated the electrical system, including the outdated fire alarm, overhauled the entire HVAC system (we cleaned or replaced every single ventilator in the main building and returned airflow to classrooms and offices and repaired the air-conditioning units (AC is only available in certain areas of the main building); we made some minor roof improvements. We then made improvements to make the property usable as a K-12 campus: we doubled the size of the parking lot to minimize impact of traffic in the neighborhood; we renovated old storage spaces to become kindergarten rooms, and we completely gutted and remodeled a former Industrial Arts building to become a space with seven classrooms and a library. During the renovation phase, we found projects that needed attending to that were not immediately apparent. We addressed some of these through the bond funds: we fixed broken sewer lines and addressed other plumbing issues, repaired broken sprinkler systems, and repaired correctly old sink holes. But most of the other needs were paid for through our operational budget (\$230,000): we put a fence around the property, created clearer signage, fixed the broken electric sign, and rekeyed the entire campus. We upgraded and expanded security cameras and added phones to offices and conference rooms. We upgraded the lighting through the building. Then of course, there were the many aesthetic upgrades-every surface of the building has undergone deep cleaning and painting and several spaces received new carpeting. These improvements were all done between June 2017 - August 2018.

# BEST FY2019-20 GRANT APPLICATION SUMMARIES

**What options outside of the BEST grant has the applicant investigated or leveraged to address the school's facility needs?**

MacLaren has applied for and received a small School Security Disbursement award. This is for additional hand-held radios and an additional RAPTOR kiosk (visitor screening software).

**How do you budget annually to address capital outlay needs in your district/charter? Include \$/FTE for the prior fiscal year:**

The current five-year budget for the campus includes maintaining a custodial staff of six to eight personnel to care for the facility. Salary and benefits currently total \$190,000 for six custodians or 3% of PPR and \$240 per FTE. We allocate \$75,000 per year towards maintenance and repair projects. This is 1% of PPR and \$94 per FTE.

The budget also allows for a regular allowance to repair equipment; the current budget has an allocation of \$50,000 a year (\$63 per FTE) to replace items such as computers, cameras and phones.

**If relevant to your project, what are your current annualized utility costs, and what amount of reduction in such costs do you expect to result from this project?**

Current annual utility costs are \$165,000. No reduction is expected.

<b>Grant Request:</b>	\$1,323,282.18	<b>CDE Minimum Match %:</b>	29%
<b>Applicant Match:</b>	\$197,731.82	<b>Actual Match % Provided:</b>	13%
<b>Total Project Cost:</b>	\$1,521,014.00	<b>Is a Waiver Letter Required?</b>	Yes
<b>Affected Sq Ft:</b>	4,579	<b>Contingent on a 2019 Bond?</b>	No
<b>Affected Pupils:</b>	823	<b>Source of Match:</b>	Charter School Reserves
<b>Cost Per Sq Ft:</b>	\$332.17		
<b>Soft Costs Per Sq Ft:</b>	\$38.81	<b>Escalation %:</b>	4%
<b>Hard Costs Per Sq Ft:</b>	\$293.36	<b>Construction Contingency %:</b>	0%
<b>Cost Per Pupil:</b>	\$1,848	<b>Owner Contingency %:</b>	6%
<b>Gross Sq Ft Per Pupil:</b>	146	<b>Historical Register?</b>	No
<b>Is a Master Plan Complete?</b>	No	<b>Adverse Historical Effect?</b>	No
<b>Who owns the Facility?</b>	3rd Party	<b>Does this Qualify for HPCP?</b>	No

**If owned by a third party, explanation of ownership:**

Thomas MacLaren School Foundation, building corporation

**If match is financed, explanation of financing terms:**

**Financial Data (Charter Applicants)**

<b>Authorizer Min Match %:</b>	25%	<b>CEFCA or financing attempts:</b>	1
<b>&lt; 10% district bond capacity?</b>	NA	<b>Enrollment as % of district:</b>	NA
<b>Authorizer Bond Attempts:</b>	NA	<b>Free Reduced Lunch %</b>	21.9%
<b>Authorizer MLO Attempts:</b>	NA	<b>% of PPR on Facilities:</b>	12%
<b>Non-BEST Capital Grants:</b>	0	<b>Unreserved Gen Fund % Budget:</b>	31.77%
<b>FY18-19 CSCC Allocation*:</b>	\$205,205.49	<b>3yr Avg OMFAC/Pupil:</b>	\$1,017.48

\*CSCC Allocation figures are based on a \$25M statewide appropriation. Pending legislation may to revise to \$29.25M

**Who will facility revert to if school ceases to exist?**

If Thomas MacLaren School ceased to exist, the building would go back to the agency which issued our bond, the Colorado Educational and Cultural Facility Agency (CECFA).

## BEST Charter School Grant Waiver Application

The BEST grant is a matching grant and each applicant is assigned a unique minimum matching requirement, pursuant to 22-43.7-109(9) C.R.S., to identify their financial capacity. An applicant may apply to the Capital Construction Assistance Board for a waiver or reduction of the matching moneys requirement for their project if the applicant determines their minimum match is not reflective of their current financial capacity, pursuant to 22-43.7-109(10) C.R.S.

Waiver applications are reviewed independent of the grant application. Upon review of the waiver application, the Capital Construction Assistance Board will make a motion to approve or deny the applicant's waiver request.

The Capital Construction Assistance Board shall seek to be as equitable as practicable by considering the total financial capacity of each applicant pursuant to 22-43.7-109(11) C.R.S.

### Instructions

Be specific when answering the questions and explaining the issues and impacts. Your response should include dollar amounts and specific ways in which such issues and impacts make it impossible for the applicant to make its full matching contribution. Please submit meeting minutes, award/non-award letters, official communications, budget documents, or other relevant documentation to support the responses provided.

Question 2, subsections A-H are related directly to the factors used in calculating the matching percentage. Only respond in detail to the factors which you believe inaccurately or inadequately reflect financial capacity. For those factors which you believe accurately or adequately reflect financial capacity, please leave the response blank or type "Agreed".

---

1. Please describe why a waiver or reduction of the matching contribution would significantly enhance educational opportunity and quality within your charter school, or why the cost of complying with the matching contribution would significantly limit educational opportunities within your charter school.

Thomas MacLaren School is chartered through the Colorado Charter School Institute and not through the local geographic school district (District 11). As a CSI school, MacLaren did not have access to a district funded facility nor does it have bonding capacity.

MacLaren leased space from a church the first eight years of its existence. In June 2017 MacLaren purchased its current facility with a \$15,500,000 CECFA bond. Repayment schedule is 10% of PPR this year and increasing to 15% of PPR in subsequent years.

Schools in D-11 receive approximately \$8,000 in PPR funding. MacLaren receives \$300 less per student. MacLaren strives to provide our students with excellent education despite this inequity. MacLaren has consistently achieved excellence in school performance every year since its opening in 2009.

A match of 29% will severely limit our general funds budget for teacher salaries and benefits as well as for needed school expenses. A 29% match for our proposed project amounts to \$441,100. MacLaren is requesting a reduction of the

required match to 13%. We have set aside \$200,000 for facility improvement projects.

2. Please describe any extenuating circumstances which should be considered in determining the appropriateness of a waiver or reduction in the matching contribution.

As a CSI school MacLaren does not have access to a district facility, and its PPR is \$300 less per student than that of a district school. From its reduced PPR MacLaren has to set aside 10% - 15% for the repayment stream on the \$15,500,000 bond it used to purchase its school facility. The school has set aside \$200,000 for this proposed project. This is a 13% match for the total project cost.

*\*The following are factors used in calculating the applicant's matching percentage. Only respond to the factors which you feel inaccurately or inadequately reflect financial capacity. Please provide as much supporting detail as possible.*

A. Weighted average of district matches which comprise the student population.

Applicant's Weighted Average: 25%

Agree.

B. Does the authorizing district have 10% or less bonding capacity remaining?

Applicant's Response: N/A – CSI Charter

Adjustment: N/A – CSI Charter

n/a

C. Is the charter school in a district owned facility?

Applicant's Response: N/A – CSI Charter

Adjustment: N/A – CSI Charter

no

D. How many times has the charter school attempted or attained bond proceeds from an authorizer's ballot measure for capital needs?

Applicant's Total: N/A – CSI Charter

Adjustment: N/A – CSI Charter

n/a

E. How many times has the charter school attempted to do a special mill levy override pursuant to 22-30.5-405 for capital needs?

Applicant's Total: N/A – CSI Charter

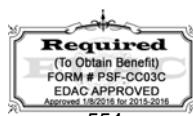
Adjustment: N/A – CSI Charter

n/a

F. How many times has the charter school attempted or attained grant funding through a non-BEST source for capital needs?

Applicant's Total: 2

Adjustment: 0% decrease of max 5%



MacLaren was successful in attaining the startup grant (CCSP) in 2009-2012 for its opening years and in 2017-2020 for the expansion to add K-5. MacLaren also was awarded \$18,000 from the School Security Disbursement grant this year.

G

G. How many times has the charter school attempted or attained funding through CECFA or another type of financing?

Applicant's # Attained: 1

Adjustment: -5% (5% decrease for attained)

June 2017 - \$15,500,000 bond for the purchase of the current facility.

H. Charter school enrollment as a percent of district enrollment.

Applicant's Enrollment: N/A – CSI Charter

Adjustment: N/A – CSI Charter

n/a - TMS enrollment is 800 vs D-11 total enrollment of 30,009

I. Free/reduced lunch percentage in relation to the statewide average charter school free/reduced lunch percentage?

Applicant's FRED: 21.9%

Adjustment: +3 %

21.9%

J. Percentage of PPR spent on non M&O facilities costs.

Applicant's % PPR: 12.0%

Adjustment: +1 %

12%

K. Unreserved fund balance as a percent of budget.

Applicant's % of Budget: 31.77%

Adjustment: +5 %

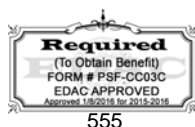
MacLaren strives to keep a higher than average reserves in order to satisfy the reserves requirements of the CECFA bond. As indicated above, \$200,000 is set aside for facility improvement projects.

3. What efforts have been made to coordinate the project with local governmental entities, community based organizations, or other available grants or organizations to more efficiently or effectively leverage the applicant's ability to contribute financial assistance to the project? Please include all efforts, even those which may have been unsuccessful.

The Facility Needs assessment was created in coordination with school staff, Board members, and first responders. We applied for and received the School Security Disbursement grant to address some of our facility needs. Furniture, fixtures, and equipment have been provided to the school through ongoing fundraising efforts (from resurfacing the gym floor to outfitting a new library).

4. **Final Calculation:** Based on the above, what is the actual match percentage being requested?

CDE Minimum Match Percentage:



● **Facilities Impacted by this Grant Application** ●

**WIDEFIELD 3 - ES MS HS Fire Alarm/Camera Upgrades - Venetucci ES - 1957**

District:	Auditor - Widefield 3
School Name:	Venetucci ES
Address:	405 WILLIS DRIVE
City:	COLORADO SPRINGS
Gross Area (SF):	43,519
Number of Buildings:	2
Replacement Value:	\$10,893,063
Condition Budget:	\$6,493,394
Total FCI:	0.60
Adequacy Index:	0.25



**Condition Budget Summary**

System Group	Replacement Cost	Requirement Cost	SCI
Electrical System	\$1,549,269	\$730,547	0.47
Equipment and Furnishings	\$346,028	\$165,229	0.48
Exterior Enclosure	\$1,420,289	\$1,121,986	0.79
Fire Protection	\$1,991	\$357,692	179.62
HVAC System	\$2,065,041	\$2,277,914	1.10
Interior Construction and Conveyance	\$2,285,296	\$1,016,361	0.44
Plumbing System	\$558,223	\$508,626	0.91
Site	\$1,064,632	\$672,598	0.63
Special Construction	\$78,695	\$0	0.00
Structure	\$1,523,597	\$16,631	0.01
<b>Overall - Total</b>	<b>\$10,893,063</b>	<b>\$6,867,584</b>	<b>0.63</b>

**WIDEFIELD 3 - ES MS HS Fire Alarm/Camera Upgrades - SA Wilson - 1960**

District:	Auditor - Widefield 3
School Name:	SA Wilson Online & Alternative Ed Center
Address:	930 LETA DRIVE
City:	SECURITY
Gross Area (SF):	34,410
Number of Buildings:	1
Replacement Value:	\$8,878,437
Condition Budget:	\$5,351,441
Total FCI:	0.60
Adequacy Index:	0.26



**Condition Budget Summary**

System Group	Replacement Cost	Requirement Cost	SCI
Electrical System	\$1,334,691	\$671,251	0.50
Equipment and Furnishings	\$207,718	\$28,561	0.14
Exterior Enclosure	\$1,390,321	\$968,843	0.70
Fire Protection	\$129,228	\$527,239	4.08
HVAC System	\$1,962,390	\$1,851,277	0.94
Interior Construction and Conveyance	\$1,545,656	\$1,013,987	0.66
Plumbing System	\$500,560	\$300,153	0.60
Site	\$597,102	\$365,660	0.61
Structure	\$1,210,772	\$15,205	0.01
<b>Overall - Total</b>	<b>\$8,878,437</b>	<b>\$5,742,176</b>	<b>0.65</b>



**● Facilities Impacted by this Grant Application ●**

**WIDEFIELD 3 - ES MS HS Fire Alarm/Camera Upgrades - Discovery HS - 1958**

District:	Auditor - Widefield 3
School Name:	Discovery HS
Address:	701 WIDEFIELD DRIVE
City:	COLORADO SPRINGS
Gross Area (SF):	6,690
Number of Buildings:	1
Replacement Value:	\$1,671,703
Condition Budget:	\$718,082
Total FCI:	0.43
Adequacy Index:	0.37



**Condition Budget Summary**

System Group	Replacement Cost	Requirement Cost	SCI
Electrical System	\$272,515	\$98,683	0.36
Equipment and Furnishings	\$33,235	\$0	0.00
Exterior Enclosure	\$246,744	\$94,441	0.38
Fire Protection	\$317	\$54,244	171.33
HVAC System	\$142,591	\$174,099	1.22
Interior Construction and Conveyance	\$294,037	\$127,667	0.43
Plumbing System	\$93,818	\$83,141	0.89
Site	\$177,826	\$137,540	0.77
Structure	\$410,622	\$9,503	0.02
<b>Overall - Total</b>	<b>\$1,671,703</b>	<b>\$779,318</b>	<b>0.47</b>

**WIDEFIELD 3 - ES MS HS Fire Alarm/Camera Upgrades - Sproul JHS - 1960**

District:	Auditor - Widefield 3
School Name:	Sproul JHS
Address:	235 SUMAC DRIVE
City:	COLORADO SPRINGS
Gross Area (SF):	67,813
Number of Buildings:	5
Replacement Value:	\$17,386,581
Condition Budget:	\$9,702,189
Total FCI:	0.56
Adequacy Index:	0.23



**Condition Budget Summary**

System Group	Replacement Cost	Requirement Cost	SCI
Electrical System	\$2,467,795	\$1,020,995	0.41
Equipment and Furnishings	\$316,903	\$239,859	0.76
Exterior Enclosure	\$2,104,062	\$672,017	0.32
Fire Protection	\$3,842	\$613,633	159.73
Furnishings	\$522,348	\$369,114	0.71
HVAC System	\$3,752,514	\$3,085,792	0.82
Interior Construction and Conveyance	\$3,058,207	\$1,912,829	0.63
Plumbing System	\$927,731	\$871,897	0.94
Site	\$1,407,498	\$1,325,141	0.94
Special Construction	\$314,781	\$196,738	0.62
Structure	\$2,510,901	\$4,527	0.00
<b>Overall - Total</b>	<b>\$17,386,581</b>	<b>\$10,312,542</b>	<b>0.59</b>

**● Facilities Impacted by this Grant Application ●**

**WIDEFIELD 3 - ES MS HS Fire Alarm/Camera Upgrades - Webster ES - 1968**

District:	Auditor - Widefield 3
School Name:	Webster ES
Address:	445 JERSEY LANE
City:	COLORADO SPRINGS
Gross Area (SF):	46,380
Number of Buildings:	4
Replacement Value:	\$10,378,660
Condition Budget:	\$4,128,790
Total FCI:	0.40
Adequacy Index:	0.22



**Condition Budget Summary**

System Group	Replacement Cost	Requirement Cost	SCI
Electrical System	\$1,412,813	\$465,758	0.33
Equipment and Furnishings	\$261,575	\$0	0.00
Exterior Enclosure	\$894,740	\$566,637	0.63
Fire Protection	\$29,837	\$272,776	9.14
HVAC System	\$2,507,669	\$1,592,063	0.63
Interior Construction and Conveyance	\$1,890,768	\$471,821	0.25
Plumbing System	\$525,668	\$488,890	0.93
Site	\$1,006,335	\$462,417	0.46
Special Construction	\$535,127	\$98,369	0.18
Structure	\$1,314,128	\$0	0.00
<b>Overall - Total</b>	<b>\$10,378,660</b>	<b>\$4,418,731</b>	<b>0.43</b>

**WIDEFIELD 3 - ES MS HS Fire Alarm/Camera Upgrades - Sunrise ES - 1985**

District:	Auditor - Widefield 3
School Name:	Sunrise ES
Address:	7070 GRAND VALLEY DRIVE
City:	COLORADO SPRINGS
Gross Area (SF):	57,150
Number of Buildings:	2
Replacement Value:	\$14,830,083
Condition Budget:	\$10,126,981
Total FCI:	0.68
Adequacy Index:	0.19



**Condition Budget Summary**

System Group	Replacement Cost	Requirement Cost	SCI
Electrical System	\$2,007,856	\$1,823,975	0.91
Equipment and Furnishings	\$372,173	\$148,331	0.40
Exterior Enclosure	\$1,296,097	\$477,057	0.37
Fire Protection	\$2,473	\$426,249	172.38
HVAC System	\$4,191,054	\$4,450,396	1.06
Interior Construction and Conveyance	\$2,695,240	\$1,290,188	0.48
Plumbing System	\$742,444	\$514,990	0.69
Site	\$1,595,087	\$1,435,947	0.90
Special Construction	\$314,781	\$0	0.00
Structure	\$1,612,878	\$0	0.00
<b>Overall - Total</b>	<b>\$14,830,083</b>	<b>\$10,567,133</b>	<b>0.71</b>

● **Facilities Impacted by this Grant Application** ●

**WIDFIELD 3 - ES MS HS Fire Alarm/Camera Upgrades - Pinello ES - 1963**

<b>District:</b>	Auditor - Widefield 3
<b>School Name:</b>	Pinello ES
<b>Address:</b>	2515 CODY DRIVE
<b>City:</b>	COLORADO SPRINGS
<b>Gross Area (SF):</b>	39,491
<b>Number of Buildings:</b>	3
<b>Replacement Value:</b>	\$10,193,927
<b>Condition Budget:</b>	\$7,314,235
<b>Total FCI:</b>	0.72
<b>Adequacy Index:</b>	0.25



**Condition Budget Summary**

System Group	Replacement Cost	Requirement Cost	SCI
Electrical System	\$1,390,115	\$1,137,184	0.82
Equipment and Furnishings	\$368,311	\$21,810	0.06
Exterior Enclosure	\$1,008,845	\$818,219	0.81
Fire Protection	\$1,733	\$391,261	225.82
HVAC System	\$2,742,504	\$2,857,780	1.04
Interior Construction and Conveyance	\$1,852,277	\$1,242,787	0.67
Plumbing System	\$429,885	\$363,201	0.84
Site	\$1,021,936	\$885,287	0.87
Special Construction	\$157,390	\$0	0.00
Structure	\$1,220,931	\$2,646	0.00
<b>Overall - Total</b>	<b>\$10,193,927</b>	<b>\$7,720,175</b>	<b>0.76</b>

# BEST FY2019-20 GRANT APPLICATION SUMMARIES

**Applicant Name:** WIDEFIELD 3

**County:** El Paso

**Project Title:** ES MS HS Fire Alarm/Camera Upgrades

**Applicant Previous BEST Grant(s):** 0

**Has this project been previously applied for and not funded?** No

**If Yes, please explain why:**

## Project Type:

- |  |  |   |  |
|--|--|---|--|
| <input type="checkbox"/> New School          | <input type="checkbox"/> Roof                  | <input type="checkbox"/> Asbestos Abatement | <input type="checkbox"/> Water Systems     |
| <input type="checkbox"/> School Replacement  | <input checked="" type="checkbox"/> Fire Alarm | <input type="checkbox"/> Lighting           | <input type="checkbox"/> Facility Sitework |
| <input type="checkbox"/> Renovation          | <input type="checkbox"/> Boiler Replacement    | <input type="checkbox"/> Electrical Upgrade | <input type="checkbox"/> Land Purchase     |
| <input type="checkbox"/> Addition            | <input type="checkbox"/> HVAC                  | <input type="checkbox"/> Energy Savings     | <input type="checkbox"/> Technology        |
| <input checked="" type="checkbox"/> Security | <input type="checkbox"/> ADA                   | <input type="checkbox"/> Window Replacement | <input type="checkbox"/> Other             |

## General Information About the District / School, and Information About the Affected Facilities:

Widefield School District 3 (WSD3) is a vibrant community located in the southeast side of Colorado Springs. Our climate and culture give a comforting small-town feel in a big city environment. We are a tight-knit community with generations of families who have graduated and come back to work in our district. Our 17 schools serve more than 9,500 students each year with a variety of educational programming.

We pride ourselves on innovation and creating opportunities for students to succeed.

Four of our schools have received innovation status from the Colorado Department of Education which allows for unique educational programming including STEAM (science, technology, engineering, arts, and mathematics), computer science, and performing and visual arts.

In partnership with Peyton School District, WSD3 opened the Manufacturing Industry Learning Lab (MiLL) in the fall of 2017. The MiLL houses a manufacturing and construction program for high school students and is supported by more than 50 industry leaders world-wide. Our district saw a need to provide students who may not be college bound with a pathway that not only teaches them soft skills needed for life, but can provide jobs and improve Colorado's workforce.

Last year, the district successfully passed a bond and mill levy override. It was the first time in nearly 20 years that we went to voters for help, and we are beyond thankful for their support. Both measures are helping to build a new school, renovate and refresh existing schools, expand educational programs, and help retain and recruit high quality staff. Funding is also being used to update technology and improve safety and security.

WSD3 Mission Statement: To Learn, Grow, Achieve: Every Child, Every Classroom, Every Day

The following school buildings offer students and parents choice in education and will be directly affected by this grant:

Sproul Junior High, Family-like culture, Student leadership opportunities, Whole-child approach.

Venetucci Elementary, AVID Program, Before/After School Activities, Whole-child focus.

Pinello Elementary, STEM Focus, Title I Intervention/GT Program, After-school activities.

Webster Elementary, AVID Program, After-school activities, Student leadership.

Sunrise Elementary, Social-Emotional Learning, Playworks Recess Program, STEAM Enrichment Days.

Discovery High School, Social & Academic Skills, Six-Week Terms, Field Experiences/Experiential Learning.

## BEST FY2019-20 GRANT APPLICATION SUMMARIES

SA Wilson, D3 My Way - Online Education, Tutoring Opportunities, Alternative Learning.

This grant application is for fire alarm system upgrades at five facilities and camera installations at four facilities, seven facilities in total. The current maintenance of these systems is performed both in house and by Johnson Controls (Formerly Simplex Grinnell) for the fire alarm systems and Linx for the camera systems. Annual Inspections are performed in accordance with NFPA 72 by Johnson Controls on all fire alarm systems .

Widefield School District 3 has performed fire alarm upgrades and camera system installations district wide over the past two decades. We currently have four schools in need of camera installations and six schools in need of fire alarm upgrades to complete our fire and camera upgrades throughout the district. Receiving this grant would allow our district to complete camera and fire alarm upgrades in their entirety.

### **Deficiencies Associated with this Project:**

The Fire Alarm systems at Pinello Elementary, Venetucci Elementary, Sproul Junior High, Discovery High School and SA Wilson are not code compliant. NFPA-72 requires both audible and visual notification devices. In most cases in the noted facilities, the audible notification devices are horns that were installed during the original construction and do not provide complete coverage with proper decibel levels. Most of the locations do not have adequate visual notification devices. Smoke detector coverage is non existent. Some of the panels were installed during the original construction rendering service and maintenance difficult. During the annual inspections last summer at SA Wilson, the system caught fire and became inoperable when a manual pull station was exercised. The original panel was installed in 1966 and was deemed inoperable and needing replacement by Johnson Controls. Pinello Elementary has the same panel still in use and it was also installed in the mid 1960's.

The current state of the fire alarm systems in the facilities in question poses a direct safety and security hazard for students and staff. With inadequate audible and visual notifications, the risk for a potentially hazardous situation is evident. These safety and security deficiencies are intertwined with the technological deficiencies; outdated and antiquated systems still in place from the original construction are problematic for maintenance and function.

Sunrise Elementary, Venetucci Elementary, Webster Elementary, and SA Wilson do not have security cameras installed inside or outside the building. Security cameras have been installed at the other WSD3 facilities. Operating without security cameras of any type does not provide a safe learning environment consistent with WSD3 philosophy.

### **Proposed Solution to Address the Deficiencies Stated Above:**

The district's goal (with the approval of this BEST grant) is to install complete code compliant fire alarm systems at the five schools listed above. These systems will include voice evacuation for occupant notification in conjunction with fire alarm strobes and code compliant smoke detection. The entire system will comply with NFPA 72. As for security cameras, our proposed solution is to install the necessary cameras at the buildings in need. WSD3 performed a comprehensive conditions report in 2016 which reiterated a need for fire alarm and security upgrades at these facilities. After the conditions report, Simplex Grinnell was tasked with providing design and an estimate for fire alarm system upgrades; Linx was tasked with providing the camera system design and estimate. The safety, security, and technological deficiencies mentioned above will all be remedied with the installation of code compliant fire alarm and security systems.

### **How Urgent is this Project?**

Staff and student safety is our highest priority. The seven schools identified do not have the Life Safety or Security components necessary for a proper safe learning environment.

Unfortunately, a frequent item in local and national news presentations centers on flawed safety and security systems in schools. If WSD3 was not awarded the grant we would proceed with these improvements at these facilities, but not as soon as needed. With this grant we would perform the fire and camera installations in all of the mentioned facilities within 12-18 months.

As noted above and in the CDE building assessments, the fire alarm systems in these facilities are "beyond their useful life and should be budgeted for repair/replacement." Although many of our current fire alarm systems are functioning at an inadequate level, the fact they are not code compliant makes failure an imminent reality. Our current fire alarm systems do not provide the necessary protection for our students and staff. This is a direct safety issue in conflict with WSD3 philosophy. In the case of the non-existing security cameras, failure is an ongoing issue that needs to be addressed as soon as possible.

## BEST FY2019-20 GRANT APPLICATION SUMMARIES

Obtaining this grant would allow us to fix these critical safety issues in a more urgent manner and provide a higher level of safety for our students and staff.

**Does this Project Conform with the Public School Facility Construction Guidelines?** Yes

**If not, provide an explanation for the use of any standard not consistent with the guidelines:**

**How Does the Applicant Plan to Maintain the Project if it is Awarded?**

WSD3 is a firm believer in the proper upkeep of district property to avoid future maintenance issues. Annual inspections for the fire alarm systems are budgeted to be performed by Johnson Controls. These inspections will be performed in compliance with NFPA 72. The current state of our existing fire alarm systems is a testament to our dedication to preventative maintenance. Most of our systems are past their useful life and recommended for replacement according to CDE assessments. The fact that they are still operating at all is a testament to our personnel's dedication to long term and proactive maintenance. We plan on applying these same standards as well as annual testing to the new systems when they are installed to maximize their life.

WSD3 uses SchoolDude as our work order system to address maintenance issues after they arise. By following manufacturer's recommendations for maintenance and scheduling yearly inspections of the systems we can extend the life of the systems and minimize the need for reactive maintenance. WSD3 budgets approximately Two million dollars annually for capital improvements. That money is invested in our schools and prioritized with safety needs coming first, academic/instructional needs next, and finally building needs. Fire alarm and security systems qualify as safety needs, so the proper amount of funds will be allocated to maintain them and extend their useful life as long as possible.

**Describe the condition of the public school facility at the time it was purchased or constructed and, if the facility was not new or was not adequate as a public school facility at that time, provide the rationale for purchasing the facility or constructing it in the manner in which you did:**

Widefield School District 3 has built all of our schools as new facilities.  
Pinello Elementary was constructed in 1963 with an addition completed in 1964.  
Sunrise Elementary was constructed in 1985.  
Venetucci Elementary was constructed in 1957 with additions completed in 1959 & 1966.  
Webster Elementary was constructed in 1969.  
Sproul Junior High was constructed in 1958 with additions completed in 1958, 1960, 1973, 1974 & 1989.  
Discovery High School was constructed in 1957.  
SA Wilson was constructed in 1957.

**Describe the history of capital improvements made to the facility by the district/charter school in order to make it suitable for students. Include a list of all capital projects undertaken in the affected facility in the last 3 years:**

Generally speaking, all of the facilities that are a part of this grant have received interior remodels that include new carpet, paint, cabinetry, storage, new offices and classrooms as required by growth and maintenance.

Pinello Elementary- received an electrical upgrade and new fire alarm control panel in 2008, the balance of the fire alarm system has never been completed. Security Cameras were installed in 2009. Over the last three years we have installed a new kitchen serving line, a library remodel including new carpet, paint and cabinetry. We have implemented fire alarm monitoring through Advanced Alarm, installed new tile in the bathrooms and performed the required asbestos abatement. We also installed a new hydration station.

Venetucci Elementary- received an electrical upgrade and new fire alarm control panel in 2008, the balance of the fire alarm system has never been completed. Over the last three years we have performed a boiler replacement, which included boiler redundancy. New exterior doors were installed and painted. We have implemented fire alarm monitoring, performed an interior remodel that included new carpet, paint and cabinetry. We installed a new concrete curb and walkway at the bus drop off as well as a new hydration station.

Webster Elementary- received a complete electrical upgrade and fire alarm system upgrade with a remodel that was performed in 1998. Over the last three years we have installed a new kitchen serving line, performed a playground remodel and installed a chain link fence around the playground. We have implemented fire alarm monitoring through Advanced Alarm,

## BEST FY2019-20 GRANT APPLICATION SUMMARIES

installed new asphalt at the bus loop and installed a new hydration station.

SA Wilson- received an electrical upgrade in 2008. Over the last three years we have performed an interior remodel which included new carpet, paint and cabinetry. We have implemented fire alarm monitoring through Advanced Alarm, performed an LED Lighting Upgrade and installed a new hydration station.

Sproul Junior High- received an electrical upgrade and new fire alarm control panel in 2010, the balance of the fire alarm system has never been completed. Security cameras were installed in 2010. Over the last three years we have installed new roofing on part of the building, performed a partial interior remodel including new carpet, paint and cabinetry. We have implemented fire alarm monitoring through Advanced Alarm and installed a new hydration station.

Discovery High School- had security cameras installed in 2010. Over the last three years we have performed a complete asbestos abatement of the floor and installed new carpet throughout the entire facility. We performed an interior remodel which included new carpet, paint and cabinetry. We have implemented fire alarm monitoring through Advanced Alarm and have replaced the asphalt in the parking lot and installed a new hydration station.

Sunrise Elementary- Over the last three years we have installed a new freezer on site, implemented fire alarm monitoring through Advanced Alarm and installed new exterior gutters. We performed a partial interior remodel, which included new carpet, paint and cabinetry. We also installed a new hydration station.

All WSD3 improvements have been done with WSD3 funds and without BEST grant funding.

### **What options outside of the BEST grant has the applicant investigated or leveraged to address the school's facility needs?**

In November 2017, WSD3 passed a bond. Funds from this bond have been budgeted to pay for our matching percentage. Receiving the Best Grant would allow to use bond funds for other projects that would otherwise be deferred.

### **How do you budget annually to address capital outlay needs in your district/charter? Include \$/FTE for the prior fiscal year:**

WSD3 maintains an ongoing maintenance list for capital projects. When evaluating the funding for these projects, they are prioritized annually with safety needs coming first, academic/instructional needs second, and building updates last. Input is provided by district administrators, building administrators, school board and facilities department staff in compiling this list as each brings a unique perspective. In fiscal year 2017-2018 approximately \$180 (per FTE) was spent out of the Capital Projects fund. WSD3 budgets approximately 2.1 million dollars annually in our Capital Projects fund. This is a district wide figure as these funds are used for various projects in all of our facilities.

### **If relevant to your project, what are your current annualized utility costs, and what amount of reduction in such costs do you expect to result from this project?**

The projects are to improve fire alarm systems and add security cameras. Utility cost data is not relevant to the grant request.

<b>Grant Request:</b>	\$317,626.43	<b>CDE Minimum Match %:</b>	59%
<b>Applicant Match:</b>	\$457,072.19	<b>Actual Match % Provided:</b>	59%
<b>Total Project Cost:</b>	\$774,698.62	<b>Is a Waiver Letter Required?</b>	No
<b>Affected Sq Ft:</b>	261,305	<b>Contingent on a 2019 Bond?</b>	No
<b>Affected Pupils:</b>	2,726	<b>Source of Match:</b>	Bond passed Nov. 2017
<b>Cost Per Sq Ft:</b>	\$2.96	<b>Escalation %:</b>	5%
<b>Soft Costs Per Sq Ft:</b>	\$0.19	<b>Construction Contingency %:</b>	8%
<b>Hard Costs Per Sq Ft:</b>	\$2.77	<b>Owner Contingency %:</b>	6%
<b>Cost Per Pupil:</b>	\$284	<b>Historical Register?</b>	No
<b>Gross Sq Ft Per Pupil:</b>	96		

## BEST FY2019-20 GRANT APPLICATION SUMMARIES

<b>Is a Master Plan Complete?</b>	No	<b>Adverse Historical Effect?</b>	No
<b>Who owns the Facility?</b>	District	<b>Does this Qualify for HPCP?</b>	No
<b>If owned by a third party, explanation of ownership:</b>			
<b>If match is financed, explanation of financing terms:</b>			

### Financial Data (School District and BOCES Applicants)

<b>District FTE Count:</b>	8,835	<b>Bonded Debt Approved:</b>	\$49,500,000
<b>Assessed Valuation:</b>	\$382,280,590	<b>Year(s) Bond Approved:</b>	17
<b>PPAV:</b>	\$43,269	<b>Bonded Debt Failed:</b>	
<b>Unreserved Gen Fund 17-18:</b>	\$12,176,245	<b>Year(s) Bond Failed:</b>	
<b>Median Household Income:</b>	\$62,669	<b>Outstanding Bonded Debt:</b>	\$6,900,000
<b>Free Reduced Lunch %:</b>	47%	<b>Total Bond Capacity:</b>	\$76,456,118
<b>Existing Bond Mill Levy:</b>	11.972	<b>Bond Capacity Remaining:</b>	\$69,556,118
<b>3yr Avg OMFAC/Pupil:</b>	\$1,309.27		



● **Facilities Impacted by this Grant Application** ●

**LEGACY ACADEMY - Safety/ Security Upgrades - Legacy Academy Charter - 2006**

<b>District:</b>	Auditor - Elizabeth School District
<b>School Name:</b>	Legacy Academy Charter
<b>Address:</b>	1975 LEGACY CIRCLE
<b>City:</b>	ELIZABETH
<b>Gross Area (SF):</b>	35,440
<b>Number of Buildings:</b>	2
<b>Replacement Value:</b>	\$9,007,716
<b>Condition Budget:</b>	\$2,148,724
<b>Total FCI:</b>	0.24
<b>Adequacy Index:</b>	0.24



**Condition Budget Summary**

System Group	Replacement Cost	Requirement Cost	SCI
Electrical System	\$1,442,312	\$550,238	0.38
Equipment and Furnishings	\$136,169	\$0	0.00
Exterior Enclosure	\$1,113,951	\$577,993	0.52
Fire Protection	\$329,287	\$0	0.00
Furnishings	\$167,292	\$0	0.00
HVAC System	\$781,877	\$715,020	0.91
Interior Construction and Conveyance	\$1,558,472	\$278,910	0.18
Plumbing System	\$449,087	\$26,564	0.06
Site	\$1,724,488	\$0	0.00
Special Construction	\$75,687	\$0	0.00
Structure	\$1,229,095	\$0	0.00
<b>Overall - Total</b>	<b>\$9,007,716</b>	<b>\$2,148,725</b>	<b>0.24</b>

# BEST FY2019-20 GRANT APPLICATION SUMMARIES

**Applicant Name:** LEGACY ACADEMY

**County:** Elbert

**Project Title:** Safety/ Security Upgrades

**Applicant Previous BEST Grant(s):** 0

**Has this project been previously applied for and not funded?** No

**If Yes, please explain why:**

## Project Type:

- |  |   |   |  |
|--|---|---|--|
| <input type="checkbox"/> New School            | <input type="checkbox"/> Roof               | <input type="checkbox"/> Asbestos Abatement | <input type="checkbox"/> Water Systems     |
| <input type="checkbox"/> School Replacement    | <input type="checkbox"/> Fire Alarm         | <input type="checkbox"/> Lighting           | <input type="checkbox"/> Facility Sitework |
| <input checked="" type="checkbox"/> Renovation | <input type="checkbox"/> Boiler Replacement | <input type="checkbox"/> Electrical Upgrade | <input type="checkbox"/> Land Purchase     |
| <input type="checkbox"/> Addition              | <input type="checkbox"/> HVAC               | <input type="checkbox"/> Energy Savings     | <input type="checkbox"/> Technology        |
| <input checked="" type="checkbox"/> Security   | <input type="checkbox"/> ADA                | <input type="checkbox"/> Window Replacement | <input type="checkbox"/> Other             |

## General Information About the District / School, and Information About the Affected Facilities:

Legacy Academy was chartered in 1997 by a group of parents who envisioned a back-to-basics type of school. Initially, the school embraced the Core Knowledge Curriculum and remained with that model for 14 years. In 2011, the board of directors initiated a technology and curriculum overhaul that has transformed the school into its current form. Over the past several years, the school has settled into its new identity, has shown consistent K-8 enrollment, and assessment scores are trending above state and national averages. As of 2018, the Charter School has entered phase 3 of its technology plan.

The school's staff is continually surveying new technologies and innovative educational practices to prepare our students for the fast-paced world that students face. As part of this mission, Legacy instituted a required Business Technology class in 2014 and a STEM class in 2015 for all of our students (K-8). Legacy Academy has retained its Art and Music classes because we believe that the arts encourage collaborative and creativity in our hands on environment.

When the current building was constructed, the school utilized most of its available funds to complete the project. During the process many compromises were needed to be made to keep the budget in line, and most of these items could not be addressed in subsequent years due to the ongoing mortgage obligation combined with the funding challenges that were associated with the economic slowdown. Several design issues that the proposed renovation will address were not high on the list of priorities when the school was constructed due to the financial limitations of the school along with a much different atmosphere around school safety and security in the early 2000's.

## Deficiencies Associated with this Project:

The design of Legacy's building has caused some significant health, safety, and security concerns. Our administrative office, health office, and reception desk are all located well away from the main entry doors. None of these spaces provide an ability to directly see the areas outside of the building, and the location of the health office is not quickly accessible without passing through the school's main corridor. Another significant health and safety concern is generated by the lack of adequate spaces for students to change clothing for PE classes and athletic activities.

Deficiency: Relocating Admin Office

The safety and security climate of schools has changed regardless of rural or urban location. It is Legacy Academy's highest priority to keep our students and staff safe at all times. We have instituted various security measures to ensure safety throughout the building, however, we still lack an essential component of security. The main office does not have a clear line of sight to front entrance of the building. The current design of the building is putting students and staff at risk.

The location of the administrative office has caused safety concerns and does not adhere to the CDE guideline (4.1.11.9.3). Our current view of visitors entering the building is a 2" x 3" video screen with unreliable audio feed. Visitors push a call button that alerts the front office that someone is wanting to enter the building. Even though the video feed shows the visitor in the current vestibule, the audio feed does not allow the staff to communicate effectively to screen visitors wanting to enter

## BEST FY2019-20 GRANT APPLICATION SUMMARIES

the building. With no direct line of site to view the person, it is impossible to determine the visitor's overall demeanor, and we are unable to determine if anyone else is waiting out of the camera's line of sight.

Unsecure entry provides easy and immediate access to students prior to checking in at the front office. If an intruder gains access at the front doors (due to inadequate visitor screening), they have direct access to the heart of the school as well as both wings and gymnasium. They have immediate hall access where students travel as individuals and groups throughout the day. The need to provide a secure and supervised vestibule (4.1.11.9.1) is highly urgent. In the current layout, the main office cannot see the north side of the building nor the main parking lot where visitors are expected to enter and exit.

The obvious safety and security failings, like an internally located administrative office, prevents first-contact with visitors. This creates an incredibly unsafe school premises. When law enforcement is called in an emergency situation there is no direct way to screen parent pick-up in a safe and secure way except in the hallways with the potential for direct contact with students.

### Deficiency: Emergency Care Room

The existing administrative office structure has the health office located adjacent to the main office window. Students walking past the office, as well as visitors coming to the front desk area are able to see into the health office. Any staff members or visitors who use the office hallway to meet with an administrator, are able to see and hear the individuals who are in health office area. This violates the confidentiality of the students being treated and the health code standard put forth by the Department of Public Health CDE guideline (4.1.14).

There is no direct access from the health office to the main hallway nor is there a private path from the health room to the main entry doors. In several emergency situations when an individual needed to be transported out of the health office, to an awaiting ambulance, the student was forced to walk or had to be transported in a wheelchair because the EMTs could not access the health office with their stretcher. This is both a health and safety concern, as well as a security problem. Sick or injured students currently have to move through the main hallway to leave the school grounds. Again this creates a confidentiality concern.

The school currently there has no laundering capabilities on the premises. The health office staff must take home all soiled and used linens (ice pack pouches, used pillowcases, blankets, etc.) and use their own personal washing machines to clean and disinfect these items.

### Deficiency: Locker / Changing Space

Within the current design, the school has three pairs of student restrooms. There are restrooms in the elementary and middle school hallways, and another set of facilities are located near the cafeteria and gymnasium. All six restrooms are used frequently throughout the day by students of all ages (K-8). All middle school students are required to attend one period of physical education and they must change into gym uniforms for this class. Students are dismissed in groups to the cafeteria restroom or the middle school restroom to change before class begins. Currently, there is not adequate space for students who are in PE class to change while continuing to accommodate other students that need to use the restroom. The current situation makes it very difficult for PE teachers to know where students are to properly manage their class.

The cafeteria restroom has curtains that block the view of those in the hallway, but these do not provide adequate privacy for the students. This also poses a safety issue when there are middle school students getting dressed for class while elementary students are needing to use these restrooms.

The lack of an appropriate changing/locker room creates unsanitary conditions which results in health concerns. Back-ups and water leaks from restrooms occur several times each week, and student's clothing frequently lands on the restroom floors (occasionally in the toilets or urinals). While Legacy does its best to maintain cleanliness in its restrooms, the current lack of suitable changing rooms inevitably cause health concerns and unsanitary conditions.

## BEST FY2019-20 GRANT APPLICATION SUMMARIES

Throughout the school year, we have numerous academic activities that families and community members are invited to attend. Some examples are: book fair, wax museum, market day, classroom parties, assemblies, and performances. In these instances, the restrooms within the administrative office cannot accommodate the additional adults in the building. This results in having guests use the restrooms throughout the building. It is a safety and security concern to have our young students using the same restroom as adult visitors. We have the same concern in regards to students who are expected to change for PE class during these events. Legacy does its best to make sure visitors and students are aware of expectations during these events, but our staff is unable to adequately monitor these areas as the building is currently laid out.

### **Proposed Solution to Address the Deficiencies Stated Above:**

Solution: Relocating Admin Office

Legacy Academy needs to be able to control access to the building during the school day, and front office staff must be able to screen visitors prior to allowing them into our building. The office renovation plan will enable the staff to evaluate visitors within a locked vestibule (4.1.11.9.1), and relocating office spaces to the front of the building will provide our staff with clear sight lines to the driveway, front parking lot, and the areas adjacent to the main entry doors (4.1.11.9.3). With this design, visitors can be seen as they drive onto the property, and staff will be able to watch when they approach the entry vestibule. Following an initial assessment and evaluation of each visitor, staff will either allow or deny access into the main office for additional screening and check in procedures. With our current building design, check in procedures and face-to-face evaluations cannot occur until a person has already been granted access into the building's main hallway, and it is not possible to see anyone who may be hiding beyond the view of the single camera in the entry area. A security vestibule and reception window provides for proper screening of all visitors which would greatly increase the safety and security of the school. To ensure student and staff safety throughout the building door detection and keyless entry systems (4.1.11.3.1.2) would also be installed. The completed project would ultimately enhance the learning environment by providing a properly secured facility with an improved level of risk management.

Solution: Emergency Care Room

The new location of the school's health office will greatly increase the level of confidentiality for anyone needing treatment or assistance from the school nurse. Students, staff members, and guests who are near the front desk will no longer be able to see who is in the health office or hear conversations in that area. This renovation will also provide direct access through the secure front office instead of needing to pass through a main hallway of the school, allowing medical personnel and parents to discreetly move a student outside for transportation. Should a stretcher be necessary, it could be taken directly through the front office into the health room.

Solution: Locker / Changing Space

The proposed renovation to the existing building will relocate the administrative office to the north side of the building which allows the existing office area to be utilized for a locker room and athletic offices. These locker rooms will provide an appropriate space for students who need to change clothing for their physical education classes, or athletic events. The design will enable the teachers and coaches to monitor their students more effectively. Building a locker/changing area will keep our students safer and healthier by removing the need to change clothing in the restrooms, which also makes the cafeteria and middle school restrooms available for all grade levels to use throughout each day.

### **How Urgent is this Project?**

Urgency: Relocating Admin Office

A recent incident that underscores the urgency of this project involved an intoxicated parent attempting to pick up a student for an appointment. Without the ability to clearly see and assess this person's condition, the office staff allowed entrance into the school. The office staff was not able to verify the parent's information in a separate and secure area, which led to the individual waiting in the hallway as students were traveling to and from classes. Staff members strategically escorted the individual outside of the building to await the arrival of law enforcement, but this did not happen until several classes had walked past the front office where the altercation was taking place. After escorting the parent outside, some students that

## BEST FY2019-20 GRANT APPLICATION SUMMARIES

were already in their classrooms were able to see the situation develop from their seats. Incidents like this will be handled differently when the front office staff are able to properly assess each visitor within the secure entry. No visitors will need to be given access to the hallway, or any areas of the school if it is determined that there is a danger or a threat of any kind. This design will also help to avoid embarrassment for the individuals involved, and it keeps potential conflict out of the main hallway when a concern has been identified. This renovation must move forward as soon as possible to allow the school to rectify the significant safety and security concerns that our current building design generates.

Urgency: Emergency Care Room

Recently, we had a student athlete that needed emergency medical attention after school hours. The emergency responders came but were unable to move their transport equipment into the health office to move the patient. This meant the student needed to walk 25 feet to the waiting stretcher to be transported out to the ambulance. The student's condition was such that they should not have been walking on their own. This is an unsafe environment. If the health office was moved to the new location, emergency responders would have less obstacles to deal with when attempting to help in an emergency.

Urgency: Locker / Changing Space

There is a high degree of urgency for this part of the project. The current need to use our restrooms as changing rooms leads to unsafe and unsanitary conditions. Younger students cannot access the restrooms during transitions because these spaces are full of older students who are trying to quickly change clothing within this tight timeframe. In addition, the frequency of incidents involving articles of clothing in the toilets along with the assumed number of times that someone's clothing lands on the restroom floor gives us concern for the health of our staff and students. The school wants to be in a position to solve this issue as quickly as possible. Funds from the BEST program will enable Legacy Academy to take swift and appropriate action to address this problem.

**Does this Project Conform with the Public School Facility Construction Guidelines?** Yes

**If not, provide an explanation for the use of any standard not consistent with the guidelines:**

**How Does the Applicant Plan to Maintain the Project if it is Awarded?**

The school's maintenance staff will ultimately be responsible for the upkeep of the areas affected by the renovation project. Cleaning and maintenance schedules will be adopted to maximize the life of these spaces, and funding will be allocated to provide for periodic repair and replacement of facilities, furnishings, and equipment (as it is currently done for the existing design). In addition, the administrative, office, and athletics teams will be expected to monitor the use of their assigned areas, and each staff member will be asked to control access to these areas to ensure that students or any other visitors are utilizing the facilities appropriately.

**Describe the condition of the public school facility at the time it was purchased or constructed and, if the facility was not new or was not adequate as a public school facility at that time, provide the rationale for purchasing the facility or constructing it in the manner in which you did:**

Legacy Academy's current facility has been owned and operated by the charter school since its construction in 2004. The construction of this building caused the school to allocate all of its available funds to complete the project, and several compromises needed to be made to keep the overall budget within reach. Attempts to rectify some of the design issues within the original building layout were not possible in past years due to the financial constraints connected to the 2004 bonds, economic conditions during the Great Recession, funding issues related to the State's negative funding factor, and the inability to address capital or per pupil funding needs through local ballot questions.

**Describe the history of capital improvements made to the facility by the district/charter school in order to make it suitable for students. Include a list of all capital projects undertaken in the affected facility in the last 3 years:**

The majority of the capital improvements that have been made fall within general maintenance and upkeep. There have been several minor adjustments within a few of the interior spaces to accommodate the needs of various classes. The network, security camera, phone, and public address systems have all been completely updated within the past 3-4 years. During the 2016/17 school year, the board authorized a project to convert all of the buildings interior and exterior lighting to LEDs. In addition, a motion sensor was installed in each classroom to save energy when classrooms are empty during the school day. In 2017 new lockers were purchased and installed for grades 5-8, and the modular classroom received a new roof and new

## BEST FY2019-20 GRANT APPLICATION SUMMARIES

skirting. Also in 2017, the school's paved parking lots and driveways were resealed and restriped.

### What options outside of the BEST grant has the applicant investigated or leveraged to address the school's facility needs?

The school has evaluated other grant programs (Daniel's Fund, Walton Foundation, ...), but many of these programs will only provide funding for new charters or for those that are expanding to add new programs. Legacy's proposed projects do not fit within the scope of the educational initiatives currently being funded by these organizations. There are very few options for facilities funding, and even fewer options for existing charter schools that are looking for help with a health/safety/security project.

### How do you budget annually to address capital outlay needs in your district/charter? Include \$/FTE for the prior fiscal year:

For the fiscal year 2018-2019, the school set aside \$412,000, approximately 13% of PPR, or \$1,040 per FTE for annual debt service on it's facility. This represents the specific affected facility and is not a districtwide figure.

### If relevant to your project, what are your current annualized utility costs, and what amount of reduction in such costs do you expect to result from this project?

NA

<b>Grant Request:</b>	\$572,101.20	<b>CDE Minimum Match %:</b>	67%
<b>Applicant Match:</b>	\$468,082.80	<b>Actual Match % Provided:</b>	45%
<b>Total Project Cost:</b>	\$1,040,184.00	<b>Is a Waiver Letter Required?</b>	Yes
<b>Affected Sq Ft:</b>	5,628	<b>Contingent on a 2019 Bond?</b>	No
<b>Affected Pupils:</b>	447	<b>Source of Match:</b>	Bank financing and or unrestricted fund balance
<b>Cost Per Sq Ft:</b>	\$184.82	<b>Escalation %:</b>	9%
<b>Soft Costs Per Sq Ft:</b>	\$22.28	<b>Construction Contingency %:</b>	13%
<b>Hard Costs Per Sq Ft:</b>	\$162.54	<b>Owner Contingency %:</b>	10%
<b>Cost Per Pupil:</b>	\$2,327	<b>Historical Register?</b>	No
<b>Gross Sq Ft Per Pupil:</b>	76	<b>Adverse Historical Effect?</b>	No
<b>Is a Master Plan Complete?</b>	Yes	<b>Does this Qualify for HPCP?</b>	No
<b>Who owns the Facility?</b>	Charter School		

### If owned by a third party, explanation of ownership:

### If match is financed, explanation of financing terms:

The loan with Sunflower Bank has been quoted at 4.5% based on a 25 year amortization with a maximum 10 year term. The bank will also need to refund our current loan (held through Bank of Oklahoma - Colorado State Bank & Trust) as a part of this process.

The board worked with the school's finance team and some individuals who previously assisted with refinancing the original bonds which were issued to build the facility. This team received term sheets from two banks for private placement offers, and they requested projections for bond funding through DA Davidson. During the exploration of bond financing, Moody's partnered with the school and DA Davidson to evaluate the schools investment rating. It was hoped that Legacy Academy would be able to achieve a prime rating with would help to qualify the school for the State's Moral Obligation Program. The rating process fell one position below the prime category, making the bond financing projections higher than the school was willing to risk.

Ultimately, Sunflower Bank was best able to accommodate the school's financing needs. They were also the most willing to work with the finance team to address questions and concerns related to the long term sustainability of the overall debt commitment that the school will assume.

# BEST FY2019-20 GRANT APPLICATION SUMMARIES

When evaluating the repayment terms with respect to the school's budget, the finance team used very conservative numbers to ensure the organization's ability to sustain the projected financial implications. Enrollment growth projections were held very low, revenue growth (primarily state funding categories) were set below historical trends, and the overall cost of the proposed projects was estimated towards the high end of expectations. Through this process the school's leadership wanted to know if the new debt service projections would be sustainable should we experience little change in enrollment or revenue. We feel that it is highly likely that actual growth in both of these areas will exceed these assumptions during the next 2-5 fiscal years. Given the conservative picture, the projected budget numbers for the next seven years all show that Legacy Academy will be able to sustain the debt service requirements, while maintaining acceptable (positive) fund balance numbers each year.

## Financial Data (Charter Applicants)

<b>Authorizer Min Match %:</b> 68%	<b>CEFCA or financing attempts:</b> 1
<b>&lt; 10% district bond capacity?</b> No	<b>Enrollment as % of district:</b> 21%
<b>Authorizer Bond Attempts:</b> 2	<b>Free Reduced Lunch %</b> 10.4%
<b>Authorizer MLO Attempts:</b> 2	<b>% of PPR on Facilities:</b> 13%
<b>Non-BEST Capital Grants:</b> 0	<b>Unreserved Gen Fund % Budget:</b> 19.39%
<b>FY18-19 CSCC Allocation*:</b> \$101,528.87	<b>3yr Avg OMFAC/Pupil:</b> \$1,422.18

\*CSCC Allocation figures are based on a \$25M statewide appropriation. Pending legislation may to revise to \$29.25M

**Who will facility revert to if school ceases to exist?** (1) If, at any time the School receives a bonafide offer ("Third Party Offer") to purchase all or any portion of the property on which the School is then located (the "Property"), which the School desires to accept, the School shall provide written notice

## BEST Charter School Grant Waiver Application

The BEST grant is a matching grant and each applicant is assigned a unique minimum matching requirement, pursuant to 22-43.7-109(9) C.R.S., to identify their financial capacity. An applicant may apply to the Capital Construction Assistance Board for a waiver or reduction of the matching moneys requirement for their project if the applicant determines their minimum match is not reflective of their current financial capacity, pursuant to 22-43.7-109(10) C.R.S.

Waiver applications are reviewed independent of the grant application. Upon review of the waiver application, the Capital Construction Assistance Board will make a motion to approve or deny the applicant's waiver request.

The Capital Construction Assistance Board shall seek to be as equitable as practicable by considering the total financial capacity of each applicant pursuant to 22-43.7-109(11) C.R.S.

### Instructions

Be specific when answering the questions and explaining the issues and impacts. Your response should include dollar amounts and specific ways in which such issues and impacts make it impossible for the applicant to make its full matching contribution. Please submit meeting minutes, award/non-award letters, official communications, budget documents, or other relevant documentation to support the responses provided.

Question 2, subsections A-H are related directly to the factors used in calculating the matching percentage. Only respond in detail to the factors which you believe inaccurately or inadequately reflect financial capacity. For those factors which you believe accurately or adequately reflect financial capacity, please leave the response blank or type "Agreed".

---

1. Please describe why a waiver or reduction of the matching contribution would significantly enhance educational opportunity and quality within your charter school, or why the cost of complying with the matching contribution would significantly limit educational opportunities within your charter school.

Like many charter schools, Legacy Academy is subject to the PPR calculations in our authorizing district. Elizabeth School District's level of per pupil funding (after budget stabilization) is among the lowest 20% in the state (33rd out of 179). Providing adequate educational offerings, attracting and retaining high quality teachers, and maintaining our current facility is further exacerbated by inequitable funding as compared to our neighboring districts to the North and West. A reduction of matching contribution is essential for Legacy to continue meeting the needs of our educational program, and to enable preserve funding to compete with compensation structures in neighboring districts.

We are requesting a waiver to limit the amount of expenditures that need to be allocated for necessary health, safety, & security renovations to enable the school to utilize its funding for items that will directly impact students in the classroom. In addition, we need to be able to offer competitive wages to attract and retain high quality staff members to ensure the school's ability to offer a consistent educational program.

2. Please describe any extenuating circumstances which should be considered in determining the appropriateness of a waiver or reduction in the matching contribution.



It is our desire to utilize our funding for our student's educational opportunities instead of needing to allocate funds for building and infrastructure needs. We compete with surrounding schools and district that have significantly higher salary schedules, and more revenue from past success with local funding initiatives. This is due, in part, to the disparity in property tax revenues. One mill in the Elizabeth School District generates substantially less than one mill in Cherry Creek, Boulder Valley, Douglas County, or Adams 12. In addition to this difference, the local community also lacks commercial tax base which places an additional burden on our homeowners to shoulder any tax increases than in other neighboring districts. These factors substantially limit the community's ability to pass future mill levies or bond proposals.

The school needs to commit significant funds to completing the first portion of the master plan to ensure that the appropriate space is available for the needed health, safety, and security renovations. Because the classroom addition will not qualify for BEST funding the school needs to reduce its matching contribution to ensure that the school can sustain the overall cost of the entire master plan. If the school is not able to receive the BEST Grant, and if the matching contribution cannot be reduced the school's ability to complete the renovation in a timely manner will be affected.

*\*The following are factors used in calculating the applicant's matching percentage. Only respond to the factors which you feel inaccurately or inadequately reflect financial capacity. Please provide as much supporting detail as possible.*

A. Weighted average of district matches which comprise the student population.

Applicant's Weighted Average: 67%

Agree

B. Does the authorizing district have 10% or less bonding capacity remaining?

Applicant's Response: No

Adjustment: No – No Change

Agree

C. Is the charter school in a district owned facility?

Applicant's Response: No

Adjustment: No – No Change

Agree

D. How many times has the charter school attempted or attained bond proceeds from an authorizer's ballot measure for capital needs?

Applicant's Total: 2

Adjustment: -2% decrease of max 5%

Legacy Academy was not included in either of the last two district bond elections. In 2013, the local bond measure lost by 60.9%. The 2014 bond initiative lost by 52.5%. The likelihood of a successful bond election to generate additional local revenue for any needs at the charter school is highly unlikely. This puts the burden of any additional capital improvements on the school's PPR, which causes the school to reallocate dollars that could otherwise be used to benefit student learning.

E. How many times has the charter school attempted to do a special mill levy override pursuant to 22-30.5-405 for capital needs?

Applicant's Total: 2

Adjustment: -2% decrease of max 5%

Elizabeth Public Schools has had 3 unsuccessful mill levy override questions on the local ballot in recent years (2002, 2008, 2014). In 2018, the district finally succeeded in passing an override question and Legacy will receive a proportionate share of this local revenue. These dollars have been allocated specifically for staff salaries, technology, and health/safety/security. The bulk of the proceeds are being used by the district, and Legacy, to begin addressing the disparity in wages between Elizabeth and other nearby districts. The remaining funds are intended to be used in ways that directly impact students. None of these priorities provides for supplemental funding for necessary capital improvement projects such as the ones currently needed at Legacy Academy.

F. How many times has the charter school attempted or attained grant funding through a non-BEST source for capital needs?

Applicant's Total: 0

Adjustment: 0% decrease of max 5%

There are very few options for grant funding for capital needs. We have submitted unsuccessful applications for grant programs related to furnishings, STEM, & technology programs during each of the past 5 years.

G. How many times has the charter school attempted or attained funding through CECFA or another type of financing?

Applicant's # Attained: 1

Adjustment: -5% (5% decrease for attained)

Financing for the construction of the current building was attained through CECFA in 2004. The 2004 bonds were refunded through CECFA at a much more attractive interest rate in 2016. Legacy Academy has a preliminary application submitted to CECFA for the proposed 2019 projects.

H. Charter school enrollment as a percent of district enrollment.

Applicant's Enrollment: 21%

Adjustment: +3%

Agree

I. Free/reduced lunch percentage in relation to the statewide average charter school free/reduced lunch percentage?

Applicant's FRED: 10.4%

Adjustment: +4%

Our calculation for the 2018/19 school year brings our percentage to approximately 13%. We also recognize that many of our families who may qualify for this program do not complete the application process. This is largely due to a misunderstanding of the program overall. They do not understand why they should bother with the application/paperwork if they have no intention of using any of the school's lunch service options.

J. Percentage of PPR spent on non M&O facilities costs.

Applicant's % PPR: 13%

Adjustment: 0%

Agree

K. Unreserved fund balance as a percent of budget.

Applicant's % of Budget: 19.3%

Adjustment: +1%

3. What efforts have been made to coordinate the project with local governmental entities, community based organizations, or other available grants or organizations to more efficiently or effectively leverage the applicant's ability to contribute financial assistance to the project? Please include all efforts, even those which may have been unsuccessful.

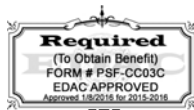
There are very few local organizations or entities in our local community with the capacity to support our project through financial assistance. The board will be engaging parents and the local community through a capital campaign to raise funds for portions of the overall project (new bleachers for the gym, furnishings for the renovated area...).

4. **Final Calculation:** Based on the above, what is the actual match percentage being requested?

45%

CDE Minimum Match Percentage:

67%



**SUPERINTENDENT'S OFFICE**

RE: Capital Construction Assistance Grant Application – Legacy Academy

February 21, 2019

Dear Members of the Capital Construction Assistance Board,

Legacy Academy is a charter school operating under a contract with the Elizabeth School District. The administration of the district was made aware of the charter school's intent to apply for a BEST grant in a timely fashion and was briefed at various times about the general nature of the need and the proposed solution. The district has reviewed the main portion of the grant application and is supportive of the request. We do not have any objections to the grant.

District administration would like to clarify that while we support Legacy Academy in meeting the needs they have identified through this grant request, we have not reviewed all of the application materials and do not certify the accuracy of information submitted in the grant.

Sincerely,



Douglas Bissonette  
Superintendent

Cc: Ron Patera, CFO, Elizabeth School District  
Board of Directors, Elizabeth School District

**● Facilities Impacted by this Grant Application ●**

**EAST GRAND 2 - District Wide Safety Upgrades - East Grand MS - 2000**

District:	Auditor - East Grand 2
School Name:	East Grand MS
Address:	251 WEST DIAMOND AVE
City:	GRANBY
Gross Area (SF):	86,465
Number of Buildings:	1
Replacement Value:	\$21,360,950
Condition Budget:	\$5,078,502
Total FCI:	0.24
Adequacy Index:	0.10



**Condition Budget Summary**

System Group	Replacement Cost	Requirement Cost	SCI
Electrical System	\$2,946,436	\$2,320,273	0.79
Equipment and Furnishings	\$595,447	\$36,306	0.06
Exterior Enclosure	\$2,118,772	\$195,986	0.09
Fire Protection	\$753,460	\$0	0.00
Furnishings	\$471,080	\$0	0.00
HVAC System	\$4,045,226	\$357,329	0.09
Interior Construction and Conveyance	\$3,515,901	\$2,104,415	0.60
Plumbing System	\$1,054,942	\$29,054	0.03
Site	\$1,178,154	\$35,136	0.03
Structure	\$4,681,533	\$0	0.00
<b>Overall - Total</b>	<b>\$21,360,950</b>	<b>\$5,078,499</b>	<b>0.24</b>

**EAST GRAND 2 - District Wide Safety Upgrades - Middle Park HS - 1980**

District:	Auditor - East Grand 2
School Name:	Middle Park HS
Address:	765 NORTH 2ND STREET
City:	GRANBY
Gross Area (SF):	122,481
Number of Buildings:	2
Replacement Value:	\$34,535,069
Condition Budget:	\$14,532,139
Total FCI:	0.42
Adequacy Index:	0.15



**Condition Budget Summary**

System Group	Replacement Cost	Requirement Cost	SCI
Electrical System	\$4,090,465	\$3,495,802	0.85
Equipment and Furnishings	\$1,259,008	\$879,279	0.70
Exterior Enclosure	\$4,677,479	\$348,415	0.07
Fire Protection	\$1,147,141	\$12,142	0.01
Furnishings	\$1,605,966	\$628,105	0.39
HVAC System	\$5,803,789	\$3,304,774	0.57
Interior Construction and Conveyance	\$6,346,815	\$2,732,294	0.43
Plumbing System	\$1,789,634	\$528,839	0.30
Site	\$4,180,545	\$2,584,628	0.62
Structure	\$3,634,227	\$30,000	0.01
<b>Overall - Total</b>	<b>\$34,535,069</b>	<b>\$14,544,278</b>	<b>0.42</b>

● **Facilities Impacted by this Grant Application** ●

**EAST GRAND 2 - District Wide Safety Upgrades - Fraser ES - 1979**

<b>District:</b>	Auditor - East Grand 2
<b>School Name:</b>	Fraser ES
<b>Address:</b>	125 EASTOM
<b>City:</b>	FRASER
<b>Gross Area (SF):</b>	52,910
<b>Number of Buildings:</b>	1
<b>Replacement Value:</b>	\$14,667,426
<b>Condition Budget:</b>	\$7,781,734
<b>Total FCI:</b>	0.53
<b>Adequacy Index:</b>	0.19



**Condition Budget Summary**

System Group	Replacement Cost	Requirement Cost	SCI
Electrical System	\$1,709,846	\$1,685,035	0.99
Equipment and Furnishings	\$528,663	\$577,919	1.09
Exterior Enclosure	\$1,759,678	\$765,757	0.44
Fire Protection	\$374,391	\$93,667	0.25
Furnishings	\$84,090	\$0	0.00
HVAC System	\$2,835,475	\$2,003,947	0.71
Interior Construction and Conveyance	\$3,286,933	\$1,730,447	0.53
Plumbing System	\$690,933	\$186,060	0.27
Site	\$1,352,543	\$832,574	0.62
Structure	\$2,044,874	\$0	0.00
<b>Overall - Total</b>	<b>\$14,667,426</b>	<b>\$7,875,406</b>	<b>0.54</b>

# BEST FY2019-20 GRANT APPLICATION SUMMARIES

**Applicant Name:** EAST GRAND 2

**County:** Grand

**Project Title:** District Wide Safety Upgrades

**Applicant Previous BEST Grant(s):** 0

**Has this project been previously applied for and not funded?** No

**If Yes, please explain why:**

## Project Type:

- |  |   |   |  |
|--|---|---|--|
| <input type="checkbox"/> New School          | <input type="checkbox"/> Roof               | <input type="checkbox"/> Asbestos Abatement | <input type="checkbox"/> Water Systems     |
| <input type="checkbox"/> School Replacement  | <input type="checkbox"/> Fire Alarm         | <input type="checkbox"/> Lighting           | <input type="checkbox"/> Facility Sitework |
| <input type="checkbox"/> Renovation          | <input type="checkbox"/> Boiler Replacement | <input type="checkbox"/> Electrical Upgrade | <input type="checkbox"/> Land Purchase     |
| <input type="checkbox"/> Addition            | <input type="checkbox"/> HVAC               | <input type="checkbox"/> Energy Savings     | <input type="checkbox"/> Technology        |
| <input checked="" type="checkbox"/> Security | <input type="checkbox"/> ADA                | <input type="checkbox"/> Window Replacement | <input type="checkbox"/> Other             |

## General Information About the District / School, and Information About the Affected Facilities:

East Grand School District is a high-performing district serving about 1400 students in Granby, Fraser, Winter Park, Hot Sulphur Springs and Grand Lake. The district includes two elementary schools, one middle school, and one high school. The newest facility was completed in 2000; the oldest school was built in 1940. East Grand Middle school performs in the top 1% of schools in Colorado. The district serves a growing population of students, over 30% of whom are eligible for free and reduced lunch.

EGSD believes in providing safe places for its students to learn, work and grow. The school board's top current goal is to "take measures both physically, and through training and practice, to continually make our schools safe places..." A Comprehensive District Emergency Management Plan has been developed in order to provide a path to reaching this goal. Unfortunately, it has become clear that there are obvious safety and security failings in facilities throughout the district that are not insignificant. Internally-located administrative offices, lack of monitoring and alert systems; and a multitude of unsecured doors all combine to create unsafe premises at each of the schools.

On February 27th of 2018, a non-school day, our lead middle school custodian walked into the main office and felt like something or someone had been in the office. She looked in attached rooms and found nothing. Later that day she requested that we look at cameras to see if anything had happened before she entered. The camera in the office showed an intruder in the office when she entered. The intruder ducked under a secretaries desk when the custodian came in and then left out a side door when she left. Thank goodness she did not find him. The intruder was a former employee who also broke into the district office where he stole keys to enter the middle school. He was trying to get into the "safe" at the middle school to access money to purchase drugs.

B.E.S.T. grant funding would be specifically directed towards achieving a high level of improved safety and security for schools across the district. The security features that would be implemented will allow the District's Emergency Management Plan to be implemented effectively and with consistency in each district school facility.

## Deficiencies Associated with this Project:

### SAFETY HAZARDS + FACILITY SECURITY

1. Internally located main administration and staff offices with no useful exterior windows or supervision of the main entry. At Fraser Valley Elementary, the main administration offices are disconnected from the main entry vestibule and do not provide a face-to-face checkpoint for visitors, who, once admitted through the entry doors, enter directly into the main hallway. The offices do not have exterior windows facing the parking lot or site perimeter. At East Grand Middle School, the main offices are over forty feet away from the front doors, and the school must rely on signage directing visitors across the commons and into the offices. These offices have few exterior windows, and none that supervise the parking lot or entry approach.

## BEST FY2019-20 GRANT APPLICATION SUMMARIES

2. Antiquated video and speaker system controlling the main entries and student entry-doors at Fraser Valley Elementary and at East Grand Middle. Video and audio are unclear visually and audibly.
3. Unsecured main entries at Fraser Valley Elementary and at the Middle School provide easy and immediate access to students prior to checking in at the front office.
4. Inadequate or No video surveillance system. The existing video surveillance system in the middle and high school does not work well and was installed for the purpose of catching students doing wrong. They do not give adequate coverage and are only installed in main hallway and office areas.
5. No public address / mass notification system. The public address systems are older and do not cover all areas of the buildings, making it difficult to alert the entire school of an emergency at one time. In areas of coverage the system is difficult to hear.
6. Classroom Door Hardware. In each of the schools there is a portion of the door hardware, especially the classroom hardware, that needs replacement for safety purposes. A significant portion of the classroom door hardware cannot be locked / secured from within the classrooms.
7. Exterior Access Control. There is no access control at the schools for either interior or exterior doors. The lack of a card reader or remote control for the exterior doors encourages the practice of propping doors open, or of occupants allowing unauthorized people into an unsupervised entrance.
8. Inadequate Fire Alarm Systems and Incomplete Fire Sprinkler Coverage. Fire alarm systems require updating to meet code at each of three school facilities. Fire sprinkler coverage does not extend to the entire floor area at either the High School or at Fraser Valley Elementary. Extending the sprinklers to fully cover the school would add significantly to student safety.

### **Proposed Solution to Address the Deficiencies Stated Above:**

East Grand School District and its planning team are proposing a package of district-wide safety improvements as measures to resolve the deficiencies identified above. The individual improvements described below provide a holistic approach covering numerous needs at the schools and move the district closer to realizing the goals of the District Emergency Management Plan.

1. Internally located main administration. Interior renovations at Fraser Valley Elementary and at East Grand Middle School will relocate the administrative offices to physically connect reception with the main entry vestibules. The main office will thus be provided with exterior windows that supervise the main entry approach, parking lot, and site perimeter. At both schools, visitors will be required to check in at the main reception desk before being admitted to the school. At Fraser, the former office suite will be replaced with a classroom. At the Middle School, the main office suite and the current counseling suite will exchange locations.
2. Antiquated video and speaker system. An upgraded main entry camera / remote admittance system will be provided at Fraser Valley Elementary and at East Grand Middle School's front doors.
3. Unsecured entry. Interior renovations at Fraser Valley Elementary and at East Grand Middle School will relocate the administrative offices to physically connect reception with the main entry vestibules. At both schools, visitors will be required to check in at the main reception desk before being admitted to the school.
4. Inadequate or no video surveillance system. A complete video surveillance system will be installed at each school facility and will include cameras covering exterior doors, the exterior building perimeter, entry approach, and key points for interior supervision. The system will be monitored from a location either central within each school or central to the district.
5. No public address / mass notification system. The Public Address / Mass Notification system will be replaced with new equipment and expanded into all locations so that the entire school can be notified of an emergency situation at once.



## BEST FY2019-20 GRANT APPLICATION SUMMARIES

6. Classroom Door Hardware Door hardware throughout the facilities will be replaced with new hardware that complies with the Americans with Disabilities Act, Colorado State regulations, and CDE Facility construction guidelines.
7. Exterior Access Control. All exterior doors in the schools will receive exterior card-reader access controls.
8. Inadequate Fire Alarm Systems and Incomplete Fire Sprinkler Coverage. Fire sprinkler coverage does not extend to the entire floor area at either the High School or at Fraser Valley Elementary. Extending the sprinklers to fully cover the school will add significantly to student safety.

### How Urgent is this Project?

The deficiencies throughout East Grand School District are of immediate concern.

### SAFETY HAZARDS + FACILITY SECURITY

1. Internally located main administration. If the proposed renovations are not undertaken, the students at Fraser Valley and at East Grand Middle will remain vulnerable to an intruder entering the school without being required to check in. The school will not have the option of using background check systems to vet visitors, since once they are "buzzed" in via camera, they would be free to enter the school and encounter students.
2. Antiquated video and speaker system. Poor communications between the office and the entry door locations make it tempting for students to allow in visitors without proper screening, and easy for staff to allow visitors entry without clear understanding of who is arriving. With new visitors arriving and main-entry deliveries being made on a daily basis, the school will be in a vulnerable position on a daily basis without these improvements.
3. Unsecured entry provides easy and immediate access to students prior to checking in at the front office. At the Middle School, if an intruder gained access at the front doors, he or she would have direct access to the cafeteria, two classroom wings and the second floor without passing near the main office. At Fraser Valley Elementary, if an intruder gained access at the front doors, he or she would have direct access to the gymnasium, 2 classroom wings and the second floor without passing through the main office.
4. No video surveillance system. More incidents such as the 2018 break-in will likely continue to occur without the obvious deterrent of security cameras both inside and outside of the school.
5. No public address / mass notification system. A school-wide emergency cannot be communicated effectively and this puts both staff and students at immediate risk. With any number of school safety threats being possible, the need to communicate future dangers effectively is of the highest urgency at the school.
6. Classroom Door Hardware. The risks associated with teachers being unable to lock their classroom doors mean that a true lockdown security measure cannot be accomplished in the school. In an emergency situation, without classroom locks, teachers may be tempted to barricade the classroom door thereby created a fire hazard for the occupants in addition to any security threat.
7. Exterior Access Control The inability to maintain control over all of the exterior access points to the school is more likely to result in a security issue as time goes on. From an operations standpoint, the ability to change who has access and when they have it (as with programmable key cards) is invaluable compared to a myriad of spare door keys which require time and money to alter.
8. Inadequate Fire Alarm Systems and Incomplete Fire Sprinkler Coverage. The threat of a fire to student safety in the High School and FV Elementary School will remain a reality as long as the buildings are not covered by a full sprinkler system and a full voice evacuation system as part of the fire alarm.

**Does this Project Conform with the Public School Facility Construction Guidelines?** Yes

**If not, provide an explanation for the use of any standard not consistent with the guidelines:**

# BEST FY2019-20 GRANT APPLICATION SUMMARIES

## How Does the Applicant Plan to Maintain the Project if it is Awarded?

Over the last three years, on average approximately 8.4% or \$965,000 of the General Fund Budget has been on expended on the maintenance of facilities in the district. A yearly average of \$782,000 is spent at District Schools. Approximately \$129,000 is spent annually in preventive maintenance contracts with vendors to address varied systems repairs or service including HVAC, electrical and plumbing. There are other costs associated with preventive maintenance. The costs of filters, valves, blowers and motors, etc. is funded by the maintenance department budget with the labor provided by district maintenance staff. The district expects to see savings from having new, more efficient systems and infrastructure, and plans to use that savings to insure the sustainability of funds for preventive maintenance planning. Approximately \$1,180,000 annually is projected to be needed for continued maintenance of the District's facility systems and grounds, and will be reflected in our maintenance department budget.

In addition to the General Fund expenditures, the district has also spent over \$989,000 on district facilities in the past three years out of Capital Reserve Funds. There is currently a \$658,000 balance in our Capital Reserve Fund. This money over time has been set aside to address the growing list of significant maintenance repairs, health and safety concerns and code compliance issues identified by facility assessments.

When the project is completed the district will continue to transfer a minimum of 3% or \$360,000 of the General Fund annually, to the Capital Reserve Fund for the continued preventative maintenance of systems and infrastructure for the facilities proposed.

## Describe the condition of the public school facility at the time it was purchased or constructed and, if the facility was not new or was not adequate as a public school facility at that time, provide the rationale for purchasing the facility or constructing it in the manner in which you did:

All Schools were new construction

## Describe the history of capital improvements made to the facility by the district/charter school in order to make it suitable for students. Include a list of all capital projects undertaken in the affected facility in the last 3 years:

Partial Roof Repair / Replacement

General maintenance and repairs

No large capital projects within the last three years

## What options outside of the BEST grant has the applicant investigated or leveraged to address the school's facility needs?

N/A

## How do you budget annually to address capital outlay needs in your district/charter? Include \$/FTE for the prior fiscal year:

The District has been able to fund its annual capital needs from the additional funds it has received from the Federal Forest Service School and Roads Grant that is passed through the State to the County. The District is hopeful that this funding source will continue to be authorized at the Federal level. This funding source totals \$360,000 or \$300.00 per FTE, and is transferred into the Capital Fund to pay for its District wide capital needs.

## If relevant to your project, what are your current annualized utility costs, and what amount of reduction in such costs do you expect to result from this project?

N/A

<b>Grant Request:</b>	\$2,185,142.40	<b>CDE Minimum Match %:</b>	73%
<b>Applicant Match:</b>	\$5,907,977.60	<b>Actual Match % Provided:</b>	73%
<b>Total Project Cost:</b>	\$8,093,120.00	<b>Is a Waiver Letter Required?</b>	No
<b>Affected Sq Ft:</b>	261,856	<b>Contingent on a 2019 Bond?</b>	Yes
<b>Affected Pupils:</b>	982	<b>Source of Match:</b>	
<b>Cost Per Sq Ft:</b>	\$30.91	2019 Bond	
<b>Soft Costs Per Sq Ft:</b>	\$4.02	<b>Escalation %:</b>	7%

## BEST FY2019-20 GRANT APPLICATION SUMMARIES

<b>Hard Costs Per Sq Ft:</b>	\$26.89	<b>Construction Contingency %:</b>	3%
<b>Cost Per Pupil:</b>	\$8,241	<b>Owner Contingency %:</b>	7%
<b>Gross Sq Ft Per Pupil:</b>	267	<b>Historical Register?</b>	No
<b>Is a Master Plan Complete?</b>	No	<b>Adverse Historical Effect?</b>	No
<b>Who owns the Facility?</b>	District	<b>Does this Qualify for HPCP?</b>	No
<b>If owned by a third party, explanation of ownership:</b>			
<b>If match is financed, explanation of financing terms:</b>			

### Financial Data (School District and BOCES Applicants)

<b>District FTE Count:</b>	1,256	<b>Bonded Debt Approved:</b>	
<b>Assessed Valuation:</b>	\$553,019,050	<b>Year(s) Bond Approved:</b>	
<b>PPAV:</b>	\$440,477	<b>Bonded Debt Failed:</b>	
<b>Unreserved Gen Fund 17-18:</b>	\$3,333,352	<b>Year(s) Bond Failed:</b>	
<b>Median Household Income:</b>	\$69,502	<b>Outstanding Bonded Debt:</b>	\$25,090,000
<b>Free Reduced Lunch %:</b>	33%	<b>Total Bond Capacity:</b>	\$110,603,810
<b>Existing Bond Mill Levy:</b>	5.3	<b>Bond Capacity Remaining:</b>	\$85,513,810
<b>3yr Avg OMFAC/Pupil:</b>	\$1,331.88		

## ● Facilities Impacted by this Grant Application ●

## JEFFERSON COUNTY R-1 - JeffcoNet - Fiber Network Infrastructure \*\*Info Provided by School District\*\*

School Name	Year Built	Asset Size (Sq Ft)	FCI
Adams Elementary School	1988	47,784	0.29
Alameda International Junior-Senior High School	1961	231,177	0.21
Bear Creek High School	2008	255,986	0.05
Bear Creek K-8 School	2008	122,367	0.04
Bell Middle School	1964	125,740	0.20
Belmar Elementary School	1961	40,829	0.26
Bradford K-8 North	1994	46,070	0.12
Bradford K-8 South	1990	48,682	0.21
Brady Exploration School	1940	68,612	0.23
Carmody Middle School	1965	99,694	0.17
Connections Learning Center on Earle Johnson Campus	2010	20,500	0.06
Creighton Middle School	1962	120,847	0.08
Deane Elementary School	1954	46,118	0.20
Dennison Elementary School (Districtwide/Option)	1958	43,420	0.30
D'Evelyn Jr-Sr High School (Districtwide/Option)	2000	154,002	0.07
Devinny Elementary School	1964	52,617	0.22
Dunstan Middle School	2006	125,644	0.05
Edgewater Elementary School	1949	45,207	0.27
Eiber Elementary School	1955	52,018	0.33
Emory Elementary School	1994	107,786	0.17
Everitt Middle School	1966	103,698	0.25
Fairmount Elementary School	1962	65,146	0.23
Fletcher Miller Special Education (Districtwide/Option)	1963	51,184	0.36
Foothills Elementary School	1970	40,000	0.24
Glennon Heights Elementary School	1957	34,699	0.37
Golden High School	2008	187,259	0.06
Green Gables Elementary School	1969	36,920	0.53
Green Mountain Elementary School	1962	40,336	0.29
Green Mountain High School	1973	199,223	0.29
Horizon Montessori	1980	29,146	0.00
Hutchinson Elementary School	1973	44,400	0.40
Jefferson County Open School	1930	102,628	0.12
Jefferson Junior-Senior High School	1959	123,773	0.20
Kendrick Lakes Elementary School	1970	40,078	0.66
Kullerstrand Elementary School	1961	35,531	0.32
Kyffin Elementary School	1972	49,472	0.55
Lakewood High School	1958	248,135	0.10
Lasley Elementary School	1961	66,926	0.17
Lukas Elementary School	1988	47,742	0.19

## ● Facilities Impacted by this Grant Application ●

School Name	Year Built	Asset Size (Sq Ft)	FCI
Lumberg Elementary School	1955	49,380	0.50
Mandalay Middle School	1983	88,977	0.19
Manning School	1958	72,678	0.27
Maple Grove Elementary School	1960	42,410	0.18
McLain Community High School	2000	79,113	0.10
Mitchell Elementary School	1997	52,697	0.15
Molholm Elementary School	1954	46,525	0.44
Moore Middle School	1978	83,756	0.26
Patterson International School	1964	48,895	0.36
Peak Expeditionary at Pennington Elementary School	1961	36,877	0.30
Prospect Valley Elementary School	1967	46,229	0.52
Ralston Elementary School	1955	51,303	0.18
Red Rocks Elementary School	1955	29,177	0.63
Rooney Ranch Elementary School	1994	53,635	0.20
Rose Stein International Elementary School	1954	47,094	0.33
Ryan Elementary School	1994	50,545	0.32
Semper Elementary School	1996	53,756	0.17
Shelton Elementary School	1998	53,530	0.26
Sheridan Green Elementary School	1987	46,466	0.25
Slater Elementary School	1953	46,085	0.24
Sobesky Academy	1994	53,724	0.22
South Lakewood Elementary School	1995	51,797	0.23
Standley Lake High School	1988	193,706	0.19
Stevens Elementary School (Formerly Wheat Ridge)	1995	112,152	0.16
Stober Elementary School	1965	31,243	0.54
Vivian Elementary School	1953	33,139	0.64
Warren Tech Central	1972	166,995	0.20
Wayne Carle Middle School	2006	105,483	0.10
Welchester Elementary School	1961	42,093	0.34
Westgate Elementary School	1972	51,212	0.30
Wheat Ridge High School	1956	211,311	0.32
Wilmore-Davis Elementary School	1955	38,596	0.28
Witt Elementary School	1980	44,341	0.40
Anderson Preschool	2007	13,743	0.07
Irwin Preschool	2009	10,705	0.06
Litz Preschool	2007	9,674	0.07
North Lakewood	1947	29,992	0.31
Jefferson County Stadium	1960	13,706	0.51
Lakewood Memorial Stadium	1983	1,722	1.66
South Area Transportation Center	1981	17,240	0.16
Trailblazer Stadium	1996	5,637	0.74

# BEST FY2019-20 GRANT APPLICATION SUMMARIES

**Applicant Name:** JEFFERSON COUNTY R-1

**County:** Jefferson

**Project Title:** JeffcoNet - Fiber Network Infrastructure

**Applicant Previous BEST Grant(s):** 1

**Has this project been previously applied for and not funded?** No

**If Yes, please explain why:**

## Project Type:

- |   |   |   |  |
|---|---|---|--|
| <input type="checkbox"/> New School         | <input type="checkbox"/> Roof               | <input type="checkbox"/> Asbestos Abatement | <input type="checkbox"/> Water Systems   |
| <input type="checkbox"/> School Replacement | <input type="checkbox"/> Fire Alarm         | <input type="checkbox"/> Lighting           | <input type="checkbox"/> Facility Sitework   |
| <input type="checkbox"/> Renovation         | <input type="checkbox"/> Boiler Replacement | <input type="checkbox"/> Electrical Upgrade | <input type="checkbox"/> Land Purchase   |
| <input type="checkbox"/> Addition           | <input type="checkbox"/> HVAC               | <input type="checkbox"/> Energy Savings     | <input checked="" type="checkbox"/> Technology   |
| <input type="checkbox"/> Security           | <input type="checkbox"/> ADA                | <input type="checkbox"/> Window Replacement | <input checked="" type="checkbox"/> Other This project expands the data/internet network to all schools which will increase support for student safety and 1-1 digital learning strategic goals. |

## General Information About the District / School, and Information About the Affected Facilities:

Approximately nine percent of all the K-12 students in Colorado attend a Jefferson County Public School (Jeffco). Jeffco educates 85,000 students in 156 schools. More than 26,000 Jeffco students qualify for free or reduced price meals. Educational programs range from English language acquisition to career and technical education.

Five years ago, the district was approached by information security leaders from the Colorado School of Mines and the National Renewable Energy Laboratory (NREL) with an invitation. As a trusted partner, Jeffco was asked to collaborate on building a fiber network. The partnership enabled Jeffco's Information Technology Department (Jeffco IT) to establish a resilient network between key facilities. The network has five times the capacity of previously used commercial offerings.

Knowing other public service entities face the same challenge of securing adequate Internet access with limited funding, Jeffco IT began exploring additional relationships with municipalities and public safety organizations. The district joined the Jefferson County Emergency Communications Authority (JCECA 911 Network) to leverage their fiber assets and explore opportunities to team up with other municipalities and emergency responders. For example, the school district and Jeffco Sheriff Department have built a base for sharing school camera feed by purchasing the camera system software.

The far-reaching benefits of a dedicated, secure communication channel between schools and public safety became clear through JCECA partnerships. Another benefit of a co-developed, resilient network is sustainability. By pooling resources, partnerships to date have saved four times the amount over commercial offerings while increasing capacity by five times.

## Deficiencies Associated with this Project:

Public safety and response systems progressively rely on information technology at a foundational level. For example, standalone video surveillance systems are increasingly IT based and leverage network, server and storage components to provide first responders needed situational awareness. The current method for first responders accessing key security systems is cumbersome and time consuming. During crisis response events, commercial communication platforms are frequently overburdened and unable to provide guaranteed levels of service, introducing delays which can cost valuable minutes. Modern software solutions for cameras and notification systems can not be used with the current system. Reliable, high capacity bandwidth connectivity is needed.

For the educational environment, student data use/need will exceed the present 1000mbps/1Gbps bandwidth to each school in a very short period of time. Using the State Educational Technology Directors Association (SETDA) Broadband Imperative,

## BEST FY2019-20 GRANT APPLICATION SUMMARIES

our present per school bandwidth of 1000mbps/1Gbps is below current guidelines. As an example, a high school with 1500 enrolled students would need 1500mbps/1.5 Gbps. In 2020, the recommended bandwidth requirements for the same example school will be 3750mbps or 3.75Gbps. Commercial offerings become cost prohibitive when providing bandwidth capacity at these levels.

The district's strategic plan includes a 1:1 initiative where in, each student will have one electronic device to assist with learning. The planned growth of devices with the 1:1 initiative, coupled with the SETDA imperative, highlights the district's current bandwidth deficiencies.

### **Proposed Solution to Address the Deficiencies Stated Above:**

The solution is to build JeffcoNet - a secure, co-developed fiber network used cooperatively between the district and local municipalities. Providing a dedicated, high-speed communication channel between individual school locations and local public safety organizations enables rapid access without resource contention. The network will also provide cost-effective capacity to keep pace with the 1:1 initiative.

A dedicated network allows active sharing of security systems. Features include remote access for remote lockdown, live camera feed, facility floor plans, alarms and environmental controls. Schools used as relief shelters and command centers during emergency situations will have adequate bandwidth. Jeffco's internal security department will be able to more closely control security in one or multiple schools.

The plan for a district-wide network is divided into three phases. Due to the early partnership with Arvada, the plan moves geographically from north to south.

- Phase I is the Arvada project which connects 34 school sites. This phase will be completed with district funds.
- Phase II is the project focus of this BEST Grant Application. This phase will connect 80 schools. The project involves multiple local partners - Westminster, Lakewood, Golden and Edgewater; and a regional partner, CDOT. Completion of Phase I and Phase II results in connectivity for more than 75% of district schools.
- Phase III will connect the mountain schools. This district plans to apply for a DOLA grant to connect these rural areas. Phase III is not part of the BEST Grant application.
- Phase IV will provide connections for Charter Schools that choose to join the network.

The ability to own the network has many benefits. The fiber network can easily be upgraded by replacing the equipment or adding a few components to the equipment, allowing the district to increase bandwidth where needed. The district and its government partners can more effectively control access to and content of the network. Owning the network allows the school district to save operating expenses that would normally be spent leasing telecommunication circuits from the service providers. This network is an excellent long-term investment, as the lifespan of a fiber network is estimated at 50 years. JeffcoNet will be a robust data highway to service five generations of future students and the community.

### **How Urgent is this Project?**

The safety of every Jeffco student could not be more urgent. Creating secure, streamlined inter-connectivity between school and emergency personnel is key to informed action when student safety is at risk. Failure would be one incident at one school during which first responders have no information on events inside the building and students are harmed.

Additional urgency for this project is based on current construction activities in Jefferson County. A window of opportunity is open for Jeffco to partner with municipalities who are constructing fiber networks in the near future. Presently, Jeffco IT staff are actively working with municipalities on co-development of a dedicated fiber network. District delays will lead to added expenses and lost opportunities to share the most economic routes.

It is currently estimated that Phase II of network build will take 2-3 years to complete. If this project is not awarded funding through the BEST grant, the scope will shrink. Jeffco and county partners will have to make very difficult decisions about which schools will be included in the Phase II plan and which schools will be left out. A delay of Phase II will also delay subsequent phases.

**Does this Project Conform with the Public School Facility Construction Guidelines?** Yes

# BEST FY2019-20 GRANT APPLICATION SUMMARIES

## **If not, provide an explanation for the use of any standard not consistent with the guidelines:**

The Project is consistent with the guidelines and follows the standards outlined in:

- 4.2.4 (SETDA) broadband imperative
- 4.2.6 Long-term, sustainable technology infrastructure

## **How Does the Applicant Plan to Maintain the Project if it is Awarded?**

For shared fiber infrastructure, the municipalities will be responsible for the general maintenance of the fiber plant. The district will pay a small percentage fee to those municipalities for the cities overall maintenance costs. The maintenance includes fiber locates and repairs. Utility Location is the process of identifying and labeling public utility mains that are underground to prevent damage and interruption of service. These mains include lines for telecommunication, electricity distribution, natural gas, cable television, fiber optics, traffic lights, street lights, storm drains, water mains, and wastewater pipes. The maintenance fee also covers repairs for all fiber cable disruption including re-routing and splicing. The district will retain a third party fiber operations and maintenance vendor in regions where there are no shared asset with municipalities.

As with all facility assets, the district will budget for annual maintenance costs.

## **Describe the condition of the public school facility at the time it was purchased or constructed and, if the facility was not new or was not adequate as a public school facility at that time, provide the rationale for purchasing the facility or constructing it in the manner in which you did:**

For the purpose of this application, the "facility" is a secure network built in collaboration with county and regional municipalities. Jeffco's network, built within the last three years, covers only one percent of the district.

District school buildings were constructed from the 1940's to current day. Over the past 12 years, conduit infrastructure has been installed to connect the buildings to city right-of-ways to provide network and Internet access. This Jeffco owned infrastructure will be leveraged to reduce the overall project costs in providing connectivity to municipality fiber assets.

## **Describe the history of capital improvements made to the facility by the district/charter school in order to make it suitable for students. Include a list of all capital projects undertaken in the affected facility in the last 3 years:**

Improvements to the building technology infrastructure is an on-going endeavor as demands for security initiatives and digital learning grow annually. Some of the more recent improvements to our school buildings include:

- Security/Camera Systems
  - \* High Schools have multiple cameras - 32 or more
  - \* All Middle and Elementary Schools have a secure front entry which includes a camera and door phone as part of the Safe, Warm and Dry program
- Card Access Control
  - \* All schools have card key access systems
- Network cabling (Category 6) for wireless access points which is now the standard for any new buildings. The new high density standard allows for more bandwidth capacities for the large number of mobile devices. All buildings have been retro-fitted to include this wiring standard.
- On-going network electronics modernization of switches and routers
- Wireless Access Points are now in every classroom to handle the capacity requirements of digital learning.
- Mobile devices such as Chromebooks and iPads are provided to students through annual distribution of funds through Title I and School Based Budgeting.

## **What options outside of the BEST grant has the applicant investigated or leveraged to address the school's facility needs?**

As part of the Phase III roll-out - the district will be applying for a DOLA grant to address the schools in the mountain areas.

The DOLA grant process IS NOT part of this BEST Grant application.

## **How do you budget annually to address capital outlay needs in your district/charter? Include \$/FTE for the prior fiscal year:**

The expected life of the fiber network is over 50 years. The only ongoing costs are for the maintenance of the network. The district's utility budget, which is adjusted annually, will cover the costs of annual maintenance of JeffcoNet



# BEST FY2019-20 GRANT APPLICATION SUMMARIES

**If relevant to your project, what are your current annualized utility costs, and what amount of reduction in such costs do you expect to result from this project?**

A \$780,000 annual savings is anticipated to the telecommunications annualized utility cost. The current annualized cost is at \$1,180,000. This cost includes the service and support to provide data transport(DataCenter Connectivity) to all district schools and sites. Once complete, those annual costs will drop to \$400,000 for the ongoing Maintenance fee.  
 Note: The annual commercial costs are based on current bandwidth rates (1gb per school) provided from the service provider. Cost savings increase as bandwidth amounts from service provider increase. As an example; when circuits are increased to 10gb per school, the cost savings jump to over \$6.5 million annually.

<b>Grant Request:</b>	\$2,000,000.00	<b>CDE Minimum Match %:</b>	79%
<b>Applicant Match:</b>	\$8,000,000.00	<b>Actual Match % Provided:</b>	80%
<b>Total Project Cost:</b>	\$10,000,000.00	<b>Is a Waiver Letter Required?</b>	No
<b>Affected Sq Ft:</b>	424,144	<b>Contingent on a 2019 Bond?</b>	No
<b>Affected Pupils:</b>	37,846	<b>Source of Match:</b>	District Bond 2018 and Informa. on Technology Capital Budget
<b>Cost Per Sq Ft:</b>	\$23.58		
<b>Soft Costs Per Sq Ft:</b>	\$1.04	<b>Escalation %:</b>	2%
<b>Hard Costs Per Sq Ft:</b>	\$22.54	<b>Construction Contingency %:</b>	7%
<b>Cost Per Pupil:</b>	\$264	<b>Owner Contingency %:</b>	2%
<b>Gross Sq Ft Per Pupil:</b>	151	<b>Historical Register?</b>	No
<b>Is a Master Plan Complete?</b>	Yes	<b>Adverse Historical Effect?</b>	No
<b>Who owns the Facility?</b>	District	<b>Does this Qualify for HPCP?</b>	No
<b>If owned by a third party, explanation of ownership:</b>			
<b>If match is financed, explanation of financing terms:</b>			

### Financial Data (School District and BOCES Applicants)

<b>District FTE Count:</b>	77,698	<b>Bonded Debt Approved:</b>	\$666,000,000
<b>Assessed Valuation:</b>	\$9,493,786,539	<b>Year(s) Bond Approved:</b>	12, 18
<b>PPAV:</b>	\$122,189	<b>Bonded Debt Failed:</b>	\$535,000,000
<b>Unreserved Gen Fund 17-18:</b>	\$95,975,105	<b>Year(s) Bond Failed:</b>	16
<b>Median Household Income:</b>	\$75,056	<b>Outstanding Bonded Debt:</b>	\$953,225,000
<b>Free Reduced Lunch %:</b>	33%	<b>Total Bond Capacity:</b>	\$1,898,757,308
<b>Existing Bond Mill Levy:</b>	4.55	<b>Bond Capacity Remaining:</b>	\$945,532,308
<b>3yr Avg OMFAC/Pupil:</b>	\$1,644.29		

● **Facilities Impacted by this Grant Application** ●

**DURANGO 9-R - Animas ES Boiler Replacement - Animas Valley ES - 1994**

<b>District:</b>	Auditor - Durango 9-R
<b>School Name:</b>	Animas Valley ES
<b>Address:</b>	373 HERMOSA ROAD
<b>City:</b>	DURANGO
<b>Gross Area (SF):</b>	60,000
<b>Number of Buildings:</b>	1
<b>Replacement Value:</b>	\$18,141,358
<b>Condition Budget:</b>	\$11,322,523
<b>Total FCI:</b>	0.62
<b>Adequacy Index:</b>	0.26



**Condition Budget Summary**

System Group	Replacement Cost	Requirement Cost	SCI
Electrical System	\$2,147,072	\$1,552,801	0.72
Equipment and Furnishings	\$723,044	\$740,334	1.02
Exterior Enclosure	\$2,211,169	\$563,695	0.25
Fire Protection	\$523,834	\$12,558	0.02
HVAC System	\$3,401,721	\$3,282,040	0.96
Interior Construction and Conveyance	\$3,554,943	\$2,070,890	0.58
Plumbing System	\$931,164	\$590,759	0.63
Site	\$2,667,951	\$2,509,449	0.94
Structure	\$1,980,461	\$0	0.00
<b>Overall - Total</b>	<b>\$18,141,358</b>	<b>\$11,322,526</b>	<b>0.62</b>

# BEST FY2019-20 GRANT APPLICATION SUMMARIES

**Applicant Name:** DURANGO 9-R

**County:** La Plata

**Project Title:** Animas ES Boiler Replacement

**Applicant Previous BEST Grant(s):** 5

**Has this project been previously applied for and not funded?** No

**If Yes, please explain why:** N/A

## Project Type:

- |   |  |   |  |
|---|--|---|--|
| <input type="checkbox"/> New School         | <input type="checkbox"/> Roof                          | <input type="checkbox"/> Asbestos Abatement | <input type="checkbox"/> Water Systems     |
| <input type="checkbox"/> School Replacement | <input type="checkbox"/> Fire Alarm                    | <input type="checkbox"/> Lighting           | <input type="checkbox"/> Facility Sitework |
| <input type="checkbox"/> Renovation         | <input checked="" type="checkbox"/> Boiler Replacement | <input type="checkbox"/> Electrical Upgrade | <input type="checkbox"/> Land Purchase     |
| <input type="checkbox"/> Addition           | <input type="checkbox"/> HVAC                          | <input type="checkbox"/> Energy Savings     | <input type="checkbox"/> Technology        |
| <input type="checkbox"/> Security           | <input type="checkbox"/> ADA                           | <input type="checkbox"/> Window Replacement | <input type="checkbox"/> Other             |

## General Information About the District / School, and Information About the Affected Facilities:

Durango School District 9-R is a high performance school district located in western La Plata County in southwest Colorado. It's seven elementary schools, two middle schools, two high schools, and an in-district charter elementary serve approximately 5000 students. First established in 1881 to serve the new railroad town of Durango, the School District was the 9th in La Plata County. In the late 1950s the District reorganized and incorporated 12 rural school districts to form the "R" in 9-R (District 9-Reorganized). Today 9-R is a "community committed to innovation and excellence in education."

Animas Valley Elementary School is a small school 10 miles north of Durango in the beautiful Animas Valley. It has been recognized as a Health School Champion since 2010, an award which recognizes schools for best practices in the areas of health education/services, counseling, nutrition services/education, physical education, family/community involvement, staff wellness, and a healthy school environment. Animas Valley Elementary is a neighborhood school for the upper Animas Valley and has a very active Parent/Teacher Organization.

## Deficiencies Associated with this Project:

The five boilers in the south boiler plant were installed when the school was built. They were manufactured in 1991, but were put in use in 1994. Although many boilers can last 30 years, we feel that we should replace these boilers at this time because of the hard water in the boiler loop. The boiler loop does contain a glycol mixture, but the glycol can solidify the minerals in the water and we have found some sludge when we do pump repairs. Animas Valley Elementary is at a higher elevation than Durango and is often much colder due to it's situation in a narrow mountain valley. If we had a failure in the boiler system, we would need to shut down or relocate the school until we could get new boilers shipped in.

## Proposed Solution to Address the Deficiencies Stated Above:

We would like to replace the existing boilers with new, high efficiency condensing boilers, and replace the boiler and main circulation pumps, along with any expansion tanks, or controls as needed. We also would like to modify the fresh air vent in the boiler room to a smaller size, if possible. And we will replace the boiler loop water with fresh water treated with an anti-corrosion mixture.

## How Urgent is this Project?

If the boilers stopped working during the winter months it would be catastrophic to this school. There is no alternative facility that could be used to house the school while boilers are being ordered and installed. Because of our remote location, it would take at least two weeks to get the heating system back up and running. There would also be a danger of damage to other building systems if the boilers stopped working in the coldest part of winter. It is crucial to replace the boilers before there is a failure, and we don't know when that failure will happen.

**Does this Project Conform with the Public School Facility Construction Guidelines?** Yes

**If not, provide an explanation for the use of any standard not consistent with the guidelines:**

**How Does the Applicant Plan to Maintain the Project if it is Awarded?**

## BEST FY2019-20 GRANT APPLICATION SUMMARIES

Our Capital Renewal budget is close to 1 million dollars per year, which should be sufficient to replace these boilers at the end of their life span. We have a Preventative Maintenance plan in place for all of our equipment and work orders are automatically generated per manufacturer's recommendations. Water testing is planned for the boiler loop to minimize corrosion. And we do combustion checks when we start up the boilers each year.

**Describe the condition of the public school facility at the time it was purchased or constructed and, if the facility was not new or was not adequate as a public school facility at that time, provide the rationale for purchasing the facility or constructing it in the manner in which you did:**

Facility was built new in 1994. It was in very good condition when it was constructed.

**Describe the history of capital improvements made to the facility by the district/charter school in order to make it suitable for students. Include a list of all capital projects undertaken in the affected facility in the last 3 years:**

Built in 1994, Animas Valley Elementary is one of our newer schools. Only recently, as it approaches 25 years old, have we needed to replace some of the components of the school. In the last 3 years we have: replaced the kitchen roll-up fire doors, replaced the refrigerant systems on the walk-in refrigerator and freezer, replaced exterior locks with electronic security locks, and replaced carpet and linoleum in many of the classrooms and restrooms. We have also tilled and reseeded the playgrounds and soccer fields after they were used for a wildfire operations base.

**What options outside of the BEST grant has the applicant investigated or leveraged to address the school's facility needs?**

We have applied for and received a School Safety and Security Disbursement Grant for \$1.1 million to be used for radios, ballistic film, security cameras, and main entrance security remodels district-wide. Our community passed a Mill Levy in 2016, and we may pursue a Bond issue in 2019 which will help maintain and replace ageing building components.

**How do you budget annually to address capital outlay needs in your district/charter? Include \$/FTE for the prior fiscal year:**

For the current year, our Capital Project Budget is \$973,516 for the entire district of 5290 students. This is an investment of \$184 per pupil. That money gets divided up according to need. Animas Valley Elementary is one of our newer schools and only recently have we needed to begin replacing building components.

**If relevant to your project, what are your current annualized utility costs, and what amount of reduction in such costs do you expect to result from this project?**

The relevant cost is Natural Gas which cost us \$10,643 at Animas Valley Elementary last year. With the new, high efficiency boilers available now, we expect that cost to go down considerably. We have not calculated the expected savings at this time.

<b>Grant Request:</b>	\$87,773.02	<b>CDE Minimum Match %:</b>	71%
<b>Applicant Match:</b>	\$214,892.55	<b>Actual Match % Provided:</b>	71%
<b>Total Project Cost:</b>	\$302,665.57	<b>Is a Waiver Letter Required?</b>	No
<b>Affected Sq Ft:</b>	43,160	<b>Contingent on a 2019 Bond?</b>	No
<b>Affected Pupils:</b>	259	<b>Source of Match:</b>	Capital Reserve Funds
<b>Cost Per Sq Ft:</b>	\$7.01		
<b>Soft Costs Per Sq Ft:</b>	\$0.32	<b>Escalation %:</b>	5%
<b>Hard Costs Per Sq Ft:</b>	\$6.69	<b>Construction Contingency %:</b>	5%
<b>Cost Per Pupil:</b>	\$1,169	<b>Owner Contingency %:</b>	5%
<b>Gross Sq Ft Per Pupil:</b>	167	<b>Historical Register?</b>	No
<b>Is a Master Plan Complete?</b>	Yes	<b>Adverse Historical Effect?</b>	No
<b>Who owns the Facility?</b>	District	<b>Does this Qualify for HPCP?</b>	No

**If owned by a third party, explanation of ownership:**

**If match is financed, explanation of financing terms:**

# BEST FY2019-20 GRANT APPLICATION SUMMARIES

## Financial Data (School District and BOCES Applicants)

<b>District FTE Count:</b>	4,286	<b>Bonded Debt Approved:</b>	
<b>Assessed Valuation:</b>	\$1,352,969,010	<b>Year(s) Bond Approved:</b>	
<b>PPAV:</b>	\$315,672	<b>Bonded Debt Failed:</b>	
<b>Unreserved Gen Fund 17-18:</b>	\$2,858,936	<b>Year(s) Bond Failed:</b>	
<b>Median Household Income:</b>	\$63,854	<b>Outstanding Bonded Debt:</b>	\$40,870,000
<b>Free Reduced Lunch %:</b>	33%	<b>Total Bond Capacity:</b>	\$270,593,802
<b>Existing Bond Mill Levy:</b>	5.776	<b>Bond Capacity Remaining:</b>	\$229,723,802
<b>3yr Avg OMFAC/Pupil:</b>	\$1,525.15		

● **Facilities Impacted by this Grant Application** ●

**DURANGO 9-R - DHS Fire Alarm and Intercom System Upgrade - Durango HS - 1977**

<b>District:</b>	Auditor - Durango 9-R
<b>School Name:</b>	Durango HS
<b>Address:</b>	2390 MAIN AVENUE
<b>City:</b>	DURANGO
<b>Gross Area (SF):</b>	247,700
<b>Number of Buildings:</b>	2
<b>Replacement Value:</b>	\$93,161,023
<b>Condition Budget:</b>	\$35,596,034
<b>Total FCI:</b>	0.38
<b>Adequacy Index:</b>	0.09



**Condition Budget Summary**

System Group	Replacement Cost	Requirement Cost	SCI
Electrical System	\$10,019,535	\$7,739,331	0.77
Equipment and Furnishings	\$3,875,989	\$1,763,338	0.45
Exterior Enclosure	\$8,059,037	\$1,972,482	0.24
Fire Protection	\$2,128,233	\$17,519	0.01
Furnishings	\$1,938,516	\$1,330,880	0.69
HVAC System	\$19,380,519	\$10,453,930	0.54
Interior Construction and Conveyance	\$16,650,729	\$8,060,596	0.48
Plumbing System	\$4,237,232	\$1,536,186	0.36
Site	\$12,203,708	\$2,739,292	0.22
Structure	\$14,667,525	\$0	0.00
<b>Overall - Total</b>	<b>\$93,161,023</b>	<b>\$35,613,554</b>	<b>0.38</b>

# BEST FY2019-20 GRANT APPLICATION SUMMARIES

**Applicant Name:** DURANGO 9-R

**County:** La Plata

**Project Title:** DHS Fire Alarm and Intercom System Upgrade

**Applicant Previous BEST Grant(s):** 5

**Has this project been previously applied for and not funded?** No

**If Yes, please explain why:** N/A

## Project Type:

- |  |  |   |  |
|--|--|---|--|
| <input type="checkbox"/> New School          | <input type="checkbox"/> Roof                  | <input type="checkbox"/> Asbestos Abatement | <input type="checkbox"/> Water Systems     |
| <input type="checkbox"/> School Replacement  | <input checked="" type="checkbox"/> Fire Alarm | <input type="checkbox"/> Lighting           | <input type="checkbox"/> Facility Sitework |
| <input type="checkbox"/> Renovation          | <input type="checkbox"/> Boiler Replacement    | <input type="checkbox"/> Electrical Upgrade | <input type="checkbox"/> Land Purchase     |
| <input type="checkbox"/> Addition            | <input type="checkbox"/> HVAC                  | <input type="checkbox"/> Energy Savings     | <input type="checkbox"/> Technology        |
| <input checked="" type="checkbox"/> Security | <input type="checkbox"/> ADA                   | <input type="checkbox"/> Window Replacement | <input type="checkbox"/> Other             |

## General Information About the District / School, and Information About the Affected Facilities:

Durango, Colorado in La Plata County, is a rural community of approximately 51,300 residents and 1,700 square miles. We are located in the Four Corners Region of the Southwestern United States. The nearest cities are Albuquerque (215 miles) and Denver (340 miles). Fort Lewis College provides numerous educational and cultural advantages to the region. The Durango community is composed of business, agricultural, professional, and service industry providers.

Durango High School is a thriving educational community with a mission to ensure each student develops the positive character attributes and academic excellence necessary to compete and contribute in the global community, providing tailored, engaging, and relevant educational opportunities within a safe and healthy environment. Durango High School is a public, four-year North Central Accredited comprehensive high school with an enrollment of approximately 1,100 students. We have a student to teacher ratio of one teacher to 25 students.

## Deficiencies Associated with this Project:

The Fire Panel at Durango High School was installed in 2004. We are putting in service calls to the vendor fairly regularly for issues with the panel performance and programming. The program in that panel is obsolete and many times the technicians were unable to get the program to respond to their link-up. Also, many additions have been built onto this building over the years and there is a need standardize the equipment throughout the building. Life expectancy of a fire panel is around ten years. We have older fire panels in our District, but this one is showing it's age the most. The intercom system is in similar shape. We have replaced major components inside this system to keep it running. It is also overtaxed because of the many additions that have been built which have added more speakers. We have had problems during lock down drills with people being unable to hear the announcement.

## Proposed Solution to Address the Deficiencies Stated Above:

We need to upgrade and update the fire alarm panel to current code. Fire Code requires that when we upgrade the panel, we also need to bring the entire system into current code compliance. This means that the notifiers will need to be able to broadcast voice messages. This project will add speakers throughout the building for code compliance and it will exchange horn/strobes with strobe only notifiers.. The existing smoke detectors and heat detectors will remain in place. There may need to be some modification to the NAC panels throughout the building to bring all control systems up to date. At the same time, we need to update the school intercom system so that it has the capacity to send a strong signal to all classrooms.

## How Urgent is this Project?

The problems that we are having with this fire panel are getting more frequent and more serious. If the panel were to fail, we would need to hire staff for fire-watch duties until the panel can be repaired or replaced. If the fire panel needs to be replaced, we may need to have a fire-watch for weeks, which would be very expensive. And in such a large building, a fire watch may not be able to detect a fire soon enough to evacuate the building in a safe manner. There are safety concerns around the intercom system as well. Lock Down Drills have shown where we have notification problems in some areas of the building. We need to upgrade the fire alarm and intercom systems in the summer of 2019.

# BEST FY2019-20 GRANT APPLICATION SUMMARIES

**Does this Project Conform with the Public School Facility Construction Guidelines?** Yes

If not, provide an explanation for the use of any standard not consistent with the guidelines:

**How Does the Applicant Plan to Maintain the Project if it is Awarded?**

Our capital renewal budget is around 1 million dollars per year for a district with around 1 million square feet. With the exception of cleaning and replacing smoke detectors, our fire panels are serviced by the fire alarm company. We have a different company that tests the fire panels each June and alerts us to any problems that we need to address. Fire alarm systems are a priority for us and we get the service that is needed immediately. Our regular Lock Down Drills will test the functionality of the intercom system regularly and any problems will be dealt with immediately.

**Describe the condition of the public school facility at the time it was purchased or constructed and, if the facility was not new or was not adequate as a public school facility at that time, provide the rationale for purchasing the facility or constructing it in the manner in which you did:**

Durango High School was built in 1976 and was in very good condition at that time. There have been major additions and renovations in 1985, 1992, 1998 and 2005.

**Describe the history of capital improvements made to the facility by the district/charter school in order to make it suitable for students. Include a list of all capital projects undertaken in the affected facility in the last 3 years:**

In 1985 a vocational/technical area was added. In 1992 a classroom wing was built as a second story to the 1985 addition. In 1998 a new classroom wing was built. And in 2005 a large classroom wing, a fine arts wing, and a major renovation of building systems was done. Capital projects in the last three years are:

2016- roof replacement auditorium, kitchen and cafeteria, replace main electrical service switch, remodel 1976 restrooms and locker rooms for ADA compliance, 2017- Add softball dugouts for Title 9 requirements, replace glycol in boiler loop. 2018- Replace 60,000 square feet of roofing, remodel classrooms for Child Care Center, new electronic security locks, overhaul cooling tower.

**What options outside of the BEST grant has the applicant investigated or leveraged to address the school's facility needs?**

In 2017 the District was able to get a Mill Levy passed that has helped our financial stability. We have applied for and received \$1.1 million in School Safety and Security Disbursement Grants that will enabled us to add radios, ballistic film, security cameras, and main entrance security remodels district-wide.

**How do you budget annually to address capital outlay needs in your district/charter? Include \$/FTE for the prior fiscal year:**

The 2017/2018 Capital renewal budget was \$973,516 for the entire district. This is \$184 per FTE pupil. We are confident that we will be able to budget another 1 million dollars for capital projects next year.

**If relevant to your project, what are your current annualized utility costs, and what amount of reduction in such costs do you expect to result from this project?**

N/A

<b>Grant Request:</b>	\$110,588.60	<b>CDE Minimum Match %:</b>	71%
<b>Applicant Match:</b>	\$270,751.40	<b>Actual Match % Provided:</b>	71%
<b>Total Project Cost:</b>	\$381,340.00	<b>Is a Waiver Letter Required?</b>	No
<b>Affected Sq Ft:</b>	257,320	<b>Contingent on a 2019 Bond?</b>	No
<b>Affected Pupils:</b>	1,159	<b>Source of Match:</b>	Capital Reserve Funds
<b>Cost Per Sq Ft:</b>	\$1.48		
<b>Soft Costs Per Sq Ft:</b>	\$0.00	<b>Escalation %:</b>	5%
<b>Hard Costs Per Sq Ft:</b>	\$1.48	<b>Construction Contingency %:</b>	10%
<b>Cost Per Pupil:</b>	\$329	<b>Owner Contingency %:</b>	0%
<b>Gross Sq Ft Per Pupil:</b>	222	<b>Historical Register?</b>	No



# BEST FY2019-20 GRANT APPLICATION SUMMARIES

<b>Is a Master Plan Complete?</b> Yes	<b>Adverse Historical Effect?</b> No
<b>Who owns the Facility?</b> District	<b>Does this Qualify for HPCP?</b> No
<b>If owned by a third party, explanation of ownership:</b>	
<b>If match is financed, explanation of financing terms:</b>	

## Financial Data (School District and BOCES Applicants)

<b>District FTE Count:</b> 4,286	<b>Bonded Debt Approved:</b>
<b>Assessed Valuation:</b> \$1,352,969,010	<b>Year(s) Bond Approved:</b>
<b>PPAV:</b> \$315,672	<b>Bonded Debt Failed:</b>
<b>Unreserved Gen Fund 17-18:</b> \$2,858,936	<b>Year(s) Bond Failed:</b>
<b>Median Household Income:</b> \$63,854	<b>Outstanding Bonded Debt:</b> \$40,870,000
<b>Free Reduced Lunch %:</b> 33%	<b>Total Bond Capacity:</b> \$270,593,802
<b>Existing Bond Mill Levy:</b> 5.776	<b>Bond Capacity Remaining:</b> \$229,723,802
<b>3yr Avg OMFAC/Pupil:</b> \$1,525.15	

● **Facilities Impacted by this Grant Application** ●

**CHERAW 31 - Building System/ Safety Upgrades - Cheraw K-12 - 1960**

<b>District:</b>	Auditor - Cheraw 31
<b>School Name:</b>	Cheraw K-12
<b>Address:</b>	110 LAKEVIEW AVENUE
<b>City:</b>	CHERAW
<b>Gross Area (SF):</b>	60,580
<b>Number of Buildings:</b>	2
<b>Replacement Value:</b>	\$15,857,617
<b>Condition Budget:</b>	\$6,724,337
<b>Total FCI:</b>	0.42
<b>Adequacy Index:</b>	0.37



**Condition Budget Summary**

System Group	Replacement Cost	Requirement Cost	SCI
Electrical System	\$2,197,832	\$1,863,269	0.85
Equipment and Furnishings	\$624,190	\$119,588	0.19
Exterior Enclosure	\$4,455,769	\$97,864	0.02
Fire Protection	\$3,524	\$440,683	125.07
Furnishings	\$119,822	\$21,080	0.18
HVAC System	\$2,131,374	\$1,666,220	0.78
Interior Construction and Conveyance	\$2,490,411	\$1,501,704	0.60
Plumbing System	\$1,011,771	\$676,631	0.67
Site	\$1,027,360	\$883,273	0.86
Structure	\$1,795,564	\$0	0.00
<b>Overall - Total</b>	<b>\$15,857,617</b>	<b>\$7,270,312</b>	<b>0.46</b>

# BEST FY2019-20 GRANT APPLICATION SUMMARIES

**Applicant Name:** CHERAW 31

**County:** Otero

**Project Title:** Building System/ Safety Upgrades

**Applicant Previous BEST Grant(s):** 0

**Has this project been previously applied for and not funded?** No

**If Yes, please explain why:**

## Project Type:

- |   |   |  |   |
|---|---|--|---|
| <input type="checkbox"/> New School         | <input type="checkbox"/> Roof               | <input checked="" type="checkbox"/> Asbestos Abatement | <input checked="" type="checkbox"/> Water Systems |
| <input type="checkbox"/> School Replacement | <input type="checkbox"/> Fire Alarm         | <input type="checkbox"/> Lighting                      | <input type="checkbox"/> Facility Sitework        |
| <input type="checkbox"/> Renovation         | <input type="checkbox"/> Boiler Replacement | <input type="checkbox"/> Electrical Upgrade            | <input type="checkbox"/> Land Purchase            |
| <input type="checkbox"/> Addition           | <input checked="" type="checkbox"/> HVAC    | <input type="checkbox"/> Energy Savings                | <input type="checkbox"/> Technology               |
| <input type="checkbox"/> Security           | <input type="checkbox"/> ADA                | <input type="checkbox"/> Window Replacement            | <input type="checkbox"/> Other                    |

## General Information About the District / School, and Information About the Affected Facilities:

The Cheraw School District facilities consist of two separate education buildings encompassing a high school, middle school and elementary school. Additional school district site features include a bus barn, a 6-man football field surrounded by a dirt track, a detached restroom block near the field, small storage sheds, bleachers, a fenced basketball court, playground equipment, a concrete-paved plaza, gravel parking lots, a pavilion, and a separate district-owned residence that is rented out. The site is surrounded by residential homes and farm lands to the North, East and West, with residential, commercial and industrial buildings to the South.

A summary and history of the Cheraw School District facilities are as follows:

### Original School (Current High School) - 1960

The original school burned down in 1959, and was replaced with the existing high school in 1960. This building consists of a classroom wing of six rooms, a performance gym with a stage and locker rooms, administrative offices and main entry, a cafeteria and kitchen, a home economics room, and basement level storage and mechanical.

### Middle School- 1968

The original middle school building constructed in 1968 was first used as a wood shop that was later remodeled into three middle school classrooms, a computer lab, and a special education room.

### Elementary School Addition - 1975

The elementary school addition was added onto the high school in 1975. The addition consists of classrooms for grades K-5, a centralized library, an art room, teacher lounge, and computer lab. Two new locker rooms with showers and an office were added to the existing performance gym at the same time. This addition was connected to the high school by a covered walkway.

### Middle School Addition - 1996

The middle school addition was added onto the existing middle school building in 1996. This new metal building consists of a practice gym with locker rooms, a weight room, a music room, and a science classroom.

### Minor Additions - 1996 - 2010

Additions constructed between the elementary school and high school were built at an unknown date between 1996 and 2010. These additions include a preschool room with office, a freezer and cooler off of the kitchen, and an enclosed walkway including vestibules. Other improvements and additions to the high school during this timeframe consist of vestibules, a concession stand, teacher work room and storage.

### Exterior Restrooms - 2010

A separate two restrooms with storage were built at 2010 near the football field.

## Deficiencies Associated with this Project:

### Domestic Plumbing Systems:

The existing domestic water plumbing system in the High School/Elementary portion of the building is estimated to be almost 60 years old. The system is comprised of both copper and galvanized piping. The piping has excessive corrosion caused in part by the dis-similar pipe materials and by leaking/deteriorating di-electric unions. The engineers who assessment building in the master plan process recommended that all the piping be replaced due to age of piping and the very poor condition of existing piping. It has been noted that portions of the building including the locker room areas suffer from poor water pressure due to accumulation of calcium carbonate in the galvanized piping.

Furthermore it was noted that the school has received a letter from the Health Department warning of excessively high levels of Radium in the domestic water supply in the town of Cheraw. It has been advised that alternative drinking water be utilized. Refer to letter attached to this grant application.

### Sanitary Sewer Piping:

The sanitary sewer piping below the High School and Elementary portions of the building run exposed in the basement and crawl spaces of the building. The piping is over 60 years old and currently has a number of areas where backups occur on a regular basis. The district has retained a plumber to scope the lines and has found excessive degradation of the pipes. During the assessment process the design team was unable to locate a grease interceptor down stream from the kitchen and the district has no knowledge that one exists. Both the plumber and the assessment engineers recommended replacement of the drain pipe system and installation of a grease interceptor in the High School/Elementary School Building.

### Plumbing Fixtures:

Existing restroom plumbing fixtures in the High School/Elementary Building are approximately 60 years old and are beyond there service life. The assessment engineers recommended replacement to reduce water usage and improve performance and accessibility.

### HVAC System:

The existing Cheraw school campus currently includes a mix of HVAC equipment and controls for the various buildings. The elementary and high school building heating and cooling is a failing hydronic two-pipe change over system with boiler and an air cooled chiller that share common supply and return piping. This arrangement limits the comfort control of occupants and equipment and infrastructure is past service life and at risk of failure at various points of the system. The existing system relies on controls and components that are not serviceable by the local community. Two pipe fan coils serve the classroom spaces and provide heating, cooling and ventilation. The fan coils are installed in an uninsulated attic and have had pipes freeze and burst in recent years causing downtime and damage to the facility. The gymnasium is served by an evaporative cooled, hot water heated air handling unit. Staff complaints about thermal dis-comfort in the virtually all portions of the Elementary/High School building have lead to numerous calls for mechanical repair in recent years. Climate Systems has advised the school district that the age and condition of the systems are such that full replacement is recommended to avoid the continual repair of individual parts and components. Refer to separately attached list of mechanical repairs for the previous year.

### Locker Rooms:

The existing locker rooms have not been renovated since original construction and are in very poor condition. Showers are not functional due to inadequate water pressure and outmoded gang showers. Toilet partitions are in disrepair and have many components that are missing. Ceilings have been damaged by water leaks and overall accessibility is very poor.

### Main Corridors:

The main school corridor in the High School wing currently has carpet installed over asbestos containing VAT. The carpet is in poor condition and has been in place for over 30 years. The carpet is not sanitary and has not been able to be replaced because of the potential to disturb the asbestos tile underneath.

### Kitchen:

The existing kitchen hood does not contain an Ansul fire protection system and is considered unsafe. The hood that is

## BEST FY2019-20 GRANT APPLICATION SUMMARIES

currently in place dates to the original construction and was never provided with a fire suppression system. The kitchen does not currently have an adequate functioning make up air system. The assessment engineers recommended that this hood be removed and replaced with a code compliant system.

### **Proposed Solution to Address the Deficiencies Stated Above:**

The proposed solution includes the replacement of all plumbing serving the High School restrooms, and locker room areas. This would include all domestic water piping and sanitary sewer lines that can be accessed from the basement and crawl space beginning in the water entry room and extending to the plumbing fixtures. The existing plumbing fixtures in the High School wing would all be replaced with low flow code compliant fixtures. A water filtration system will be provided on the domestic water supply system to filter the radium and make the water safe to drink throughout the school building. This project will provide the High School area in the school with completely new plumbing systems. The locker rooms will receive new individual stall showers, new partitions, and finish repairs. Walls where new plumbing would occur would receive wall furring and tile. Restroom toilet partitions, and accessories that are affected by the work will be replaced with new. Overall accessibility will be improved with ADA compliant fixtures and clearances where technically possible.

The hydronic system in the High School/Elementary building will be removed fully and replaced with high efficiency gas/DX systems that are more readily maintained by the local labor force with less reliance on support coming from hours away. Existing hydronic unit heaters will be replaced with electric unit heaters for areas like vestibules and mechanical rooms. Existing packaged rooftop units at the middle school are past their anticipated service life and showing signs of extensive wear and are being planned for direct replacement. The existing middle school gym is heated and ventilated only, limiting the flexibility of use for the students and faculty. The existing unit is being recommended to be replaced to include a unit that provide heating and DX cooling for year round use. The new systems will be high efficiency units that exceed current energy code while also being more serviceable by HVAC techs in the area.

The Cheraw School District would like to consider the idea of including a bid alternate in the project to replace the HVAC unit in the transportation building located north of the school. The budget does not include funds for this; however, if the project would bid under budget the district would like to be able to consider including this scope of work as well.

The kitchen will be provided with a grease interceptor per health department regulations. The existing kitchen hood will be replaced with a new hood, Ansul system fire suppression system, and make-up air unit.

The High school corridor will be abated to remove asbestos floor tiles as well as the existing carpet. A new resilient floor tile will be installed. This new floor will be much more maintainable than the carpet in the existing corridor.

### **How Urgent is this Project?**

Currently the school district is unable to utilize the showers in the locker rooms due to extremely low water pressure and flows. The plumbing has degraded to the point where use of sinks in portions of the building is not possible due to drain line backups. The Town of Cheraw has recommended that students drink alternative water (bottled water) rather than drink from the drinking fountains. The school would benefit dramatically from plumbing work that resolves these issues as soon as possible.

Mechanical failures continue to plague the school and require continual calls to mechanical contractors in order to maintain the school schedule. The failure of mechanical units in portions of the building are a distraction to students and hinder the learning process due to thermal discomfort. The school district has been sending students home due to these ongoing issues. The school district is seeking a more permanent solution that addresses these long term facility needs. The proposed project is in alignment with the goals established in the Master Plan completed in 2017.

**Does this Project Conform with the Public School Facility Construction Guidelines?** Yes

**If not, provide an explanation for the use of any standard not consistent with the guidelines:**

### **How Does the Applicant Plan to Maintain the Project if it is Awarded?**

The National Academies Press ([www.nap.edu](http://www.nap.edu)) recommended that 2-4% of an agencies budget be set aside for construction

## BEST FY2019-20 GRANT APPLICATION SUMMARIES

projects. Currently, Cheraw School District receives about \$3 million in total revenue from federal, state, and local resources. The new HVAC system is budgeted to cost \$1.5 million. If a new HVAC system is required in 15 years, Cheraw School District would need to put aside at least \$100,000 (3.33% of budget) per year into a construction fund.

Cheraw School District currently allocates \$273,000 of general funds towards salaries, benefits, services, supplies, etc. to maintain the current system. This practice will continue and will be adjusted from year to year based on needs and as costs for services and supplies change. The head maintenance director will be trained to maintain and complete minor repairs.

Part of the long-term plan in maintaining the facility include a less-commercial HVAC system. Cheraw School District is located in rural southeast Colorado. When services to maintain the facility are beyond our abilities, especially the HVAC, our only option is to call service technicians who live some distance away. It takes time and money for them to make the trip to our facilities. The HVAC system planned for this grant is designed for our small school and will allow local technicians the opportunity to help us maintain the new system, saving us time and money, while supporting our local economy.

**Describe the condition of the public school facility at the time it was purchased or constructed and, if the facility was not new or was not adequate as a public school facility at that time, provide the rationale for purchasing the facility or constructing it in the manner in which you did:**

The facility was originally constructed for the school district in 1960 (current High School). The elementary wing was added in 1975 and the Middle School Building was built in 1996.

**Describe the history of capital improvements made to the facility by the district/charter school in order to make it suitable for students. Include a list of all capital projects undertaken in the affected facility in the last 3 years:**

Cheraw Schools have not undertaken a major capital project in the last three years.

**What options outside of the BEST grant has the applicant investigated or leveraged to address the school's facility needs?**

Using monies from the General Fund was considered in making the necessary facility improvements. However, the cost of the current project is just shy of \$4 million, which is roughly \$1 million more than the annual revenues received by the school district.

In developing the master plan, it was determined that local residents would not be in favor of increasing the taxes for the school. Currently, Cheraw receives the maximum 27 Mills. According to the Colorado School Finance Project, Cheraw would receive only \$7,169 per 1 Mill raised. That would be a lot of Override Mills to cover the cost of this project.

Cheraw School District has looked into a zero or low interest loan to cover the cost of these projects. Securing a loan should be the last resort as it would encumber funds not yet received. Cheraw School District is still paying off a loan used on the current (faulty) HVAC system. The loan is scheduled to mature December 2021.

**How do you budget annually to address capital outlay needs in your district/charter? Include \$/FTE for the prior fiscal year:**

The last few years, including the current year, Cheraw School District has allocated \$0 into a capital outlay fund. Because of our smaller size, Cheraw School District does not budget facility needs by FTE. General Fund monies are allocated based on needs as they arise. The current year budget has allocated \$273,000 for all facility maintenance needs for the district, which includes salaries, benefits, services, supplies, etc. This amount represents 9% of expected revenue, \$1,213 per student (225 students at most recent October count), and \$15,082 per FTE (18).

**If relevant to your project, what are your current annualized utility costs, and what amount of reduction in such costs do you expect to result from this project?**

Cheraw School District current utility costs by the year:

Electrical \$70,489.00

Gas: \$17,034.23

Trash, Water, Sewage: \$2,733.00

The cost savings with this project is not expected to come from a decrease in utility use, though that will be nice and may happen with updated mechanical equipment. With the current HVAC system, repairs outside of our abilities come from technicians who travel from a great distance to get here. With the new HVAC system, it is expected that the cost of repairs will require less time and less travel. Local technicians will have the ability to perform repairs and improve the learning

## BEST FY2019-20 GRANT APPLICATION SUMMARIES

environment for our students, which has the added bonus of improving the local economy.

<b>Grant Request:</b>	\$2,762,188.40	<b>CDE Minimum Match %:</b>	39%
<b>Applicant Match:</b>	\$1,183,795.03	<b>Actual Match % Provided:</b>	30%
<b>Total Project Cost:</b>	\$3,945,983.43	<b>Is a Waiver Letter Required?</b>	Yes
<b>Affected Sq Ft:</b>	55,000	<b>Contingent on a 2019 Bond?</b>	No
<b>Affected Pupils:</b>	225	<b>Source of Match:</b>	General/Capital reserve fund
<b>Cost Per Sq Ft:</b>	\$71.75		
<b>Soft Costs Per Sq Ft:</b>	\$9.39	<b>Escalation %:</b>	7%
<b>Hard Costs Per Sq Ft:</b>	\$62.36	<b>Construction Contingency %:</b>	10%
<b>Cost Per Pupil:</b>	\$17,538	<b>Owner Contingency %:</b>	9%
<b>Gross Sq Ft Per Pupil:</b>	269	<b>Historical Register?</b>	No
<b>Is a Master Plan Complete?</b>	Yes	<b>Adverse Historical Effect?</b>	No
<b>Who owns the Facility?</b>	District	<b>Does this Qualify for HPCP?</b>	No
<b>If owned by a third party, explanation of ownership:</b>			
<b>If match is financed, explanation of financing terms:</b>			

### Financial Data (School District and BOCES Applicants)

<b>District FTE Count:</b>	202	<b>Bonded Debt Approved:</b>	
<b>Assessed Valuation:</b>	\$7,369,160	<b>Year(s) Bond Approved:</b>	
<b>PPAV:</b>	\$36,391	<b>Bonded Debt Failed:</b>	
<b>Unreserved Gen Fund 17-18:</b>	\$1,291,427	<b>Year(s) Bond Failed:</b>	
<b>Median Household Income:</b>	\$47,279	<b>Outstanding Bonded Debt:</b>	\$0
<b>Free Reduced Lunch %:</b>	63%	<b>Total Bond Capacity:</b>	\$1,473,832
<b>Existing Bond Mill Levy:</b>	0	<b>Bond Capacity Remaining:</b>	\$1,473,832
<b>3yr Avg OMFAC/Pupil:</b>	\$1,523.84		

## BEST School District and BOCES Grant Waiver Application

The BEST grant is a matching grant and each applicant is assigned a unique minimum matching requirement, pursuant to 22-43.7-109(9) C.R.S., to identify their financial capacity. An applicant may apply to the Capital Construction Assistance Board for a waiver or reduction of the matching moneys requirement for their project if the applicant determines their minimum match is not reflective of their current financial capacity, pursuant to 22-43.7-109(10) C.R.S.

Waiver applications are reviewed independent of the grant application. Upon review of the waiver application, the Capital Construction Assistance Board will make a motion to approve or deny the applicant's waiver request.

The Capital Construction Assistance Board shall seek to be as equitable as possible by considering the total financial capacity of each applicant pursuant to 22-43.7-109(11) C.R.S.

### Instructions

Be specific when answering the questions and explaining the issues and impacts. Your response should include dollar amounts and specific ways in which such issues and impacts make it impossible for the applicant to make its full matching contribution. Please submit meeting minutes, award/non-award letters, official communications, budget documents, or other relevant documentation to support the responses provided.

Question 2, subsections A-H are related directly to the factors used in calculating the matching percentage. Only respond in detail to the factors which you believe inaccurately or inadequately reflect financial capacity. For those factors which you believe accurately or adequately reflect financial capacity, please leave the response blank or type "Agreed".

---

1. Please describe why a waiver or reduction of the matching contribution would significantly enhance educational opportunity and quality within your school district or BOCES, or why the cost of complying with the matching contribution would significantly limit educational opportunities within your school district or BOCES.

The project request for this grant is estimated to cost just shy of \$4 million, which is almost \$1 million more than the total annual revenue. Cheraw School district has been asked to match 39% of the cost of the project, which would equal \$1.54 million (which is 51% of the annual revenue). Cheraw School District is requesting a matching reduction at 30% or \$1.18 million (\$1,183,795.03), which is about 39% of the annual revenue.

The current budget shows \$1.2 million in unreserved general funds. These funds will be used to match the grant. To comply with the match, Cheraw School District would need to find another \$359,000 (12% of revenue). We considered cutting the project; however, the requested projects are needed as soon as possible and do not cover the entire list of deficiencies in the master plan. We are already spending too much money into maintaining a faulty HVAC system.

Reducing the matching contribution would significantly enhance educational opportunities and quality. We would be able to maintain our current budgeted resources into maintaining current/new facility systems, keep all our teachers and other employees, keep full day Kindergarten, continue to update and keep current with textbook and curriculum, continue to enroll students into college classes, and implement new standard requirements with necessary resources and professional development. Your consideration regarding this reduction request is greatly appreciated.



2. Please describe any extenuating circumstances which should be considered in determining the appropriateness of a waiver or reduction in the matching contribution.

*\*The following are factors used in calculating the applicant's matching percentage. Only respond to the factors which you feel inaccurately or inadequately reflect financial capacity. Please provide as much supporting detail as possible.*

A. Per Pupil Assessed Valuation relative to the statewide average – The higher the Per Pupil Assessed Value the higher the match.

Applicant's PPAV: \$36,390.91

Weighted Rank: 0.17% of 5% max

According to the Colorado School Finance Project, Cheraw assessed value per funded pupil count (\$36,059) is significantly lower than the state average (\$243,146).

B. The district's median household income relative to the statewide average – The higher the median household income, the higher the match.

Applicant's Median Household Income: \$47,279

Weighted Rank: 5.31% of 15% max

C. Percentage of pupils eligible for free or reduced cost lunch relative to the statewide average – The lower the percentage for free and reduced cost lunch, the higher the match.

Applicant's FRED Percent: 62.9%

Weighted Rank: 4.72% of 20% max

Colorado Department of Education shows that the percentage of students eligible for free and/or reduced lunch prices in Cheraw (45%) is higher than the state average (41%).

D. Bond Election failures and successes in the last 10 years – The more attempts the school district has made, the lower the match.

Applicant's Bond Elections: 0

Adjustment: 0% (-1% per attempt)

E. Bond mill levy relative to the statewide average – The higher the bond mill levy, the lower the match.

Applicant's Bond Mill Levy: 0.0

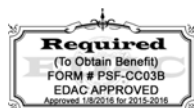
Weighted Rank: 20% of 20% max

The Bond Mill Levy for Cheraw (27) is at the maximum and higher than the state average (19.7). During the master planning process, 75% of people polled would not support a Mill Levy Override.

F. The school district's current available bond capacity remaining. - The higher the bond capacity, the higher the match.

Applicant's Remaining Bond Capacity: \$1,473,832

Weighted Rank: 2.7% of 20% max



According to the Colorado School Finance Project, Cheraw would be able to raise \$7,169 by levying 1 Mill, much less than the state average of \$612,690 per 1 Mill.

G. The school district's unreserved fund balance as it relates to their overall budget.

District's Unreserved General Fund: \$1,291,427

Weighted Rank: 6.29% of 20% max

\$1.2 million in unreserved general fund is a hefty amount for our small school district. However, it could be argued that the accounting practices that lead to this result helped create our current facility issues. Instead of expending available funds toward maintenance needs, the school is left with faulting equipment. Also, the previous accounting practices neglected setting aside funds into a capital construction fund. The school could have easily placed these funds into a construction fund, instead of keeping it unreserved in the general fund. If the funds had been properly allocated into a construction fund, our unreserved general fund would be much, much lower.

H. Other unusual financial burdens not reflected in the match calculation (ie. underfunded mandates, unexpected expenses, self-funded programs).

Cheraw School District has expended a considerable amount of money this year toward updating and maintaining our facilities as identified in the master plan. Cheraw School District used a loan to pay for the current (faulty) HVAC system. The loan balance currently stands at \$33,000 and matures December 2021. As noted in the BEST grant application, the school has spent (and continues to spend) a considerable amount of funds toward maintaining our failing HVAC system (please see documentation with BEST grant application). The school purchased new serving tables which increased sanitation and cost \$10,000. We also purchased a new condenser (\$5,000) to support our kitchen freezer. The roof required repairs for \$10,000. Outside lighting has also been updated for \$2000. We have started a plan to improve security and have added controlled entry to our front door for \$3,000. Keep in mind that we have budgeted to receive \$3 million in total revenue this year. Regardless of the BEST grant, Cheraw School District has expended and will expend funds on behalf of supporting the facility needs. Any consideration from the BEST board toward our BEST grant application and our reduction in the match on behalf of the Cheraw School students and employees would be much appreciated.

3. What efforts have been made to coordinate the project with local governmental entities, community based organizations, or other available grants or organizations to more efficiently or effectively leverage the applicant's ability to contribute financial assistance to the project? Please include all efforts, even those which may have been unsuccessful.

I have recently been contacted by one of our county commissioners (Kim MacDonnell) who has successfully assisted other agencies in the county in obtaining a Brownfield Cleanup Grant. It is expected that this grant will provide funds toward asbestos abatement. We have just begun conversations and have not applied for the grant at this time.

4. **Final Calculation:** Based on the above, what is the actual match percentage being requested?

30%

CDE Minimum Match Percentage:

39%



● **Facilities Impacted by this Grant Application** ●

**GRANADA RE-1 - Building System/ Safety Upgrades - Granada Pre-K-12 - 1967**

<b>District:</b>	Auditor - Granada RE-1
<b>School Name:</b>	Granada Pre-K-12
<b>Address:</b>	201 SOUTH HOISINGTON STREET
<b>City:</b>	GRANADA
<b>Gross Area (SF):</b>	81,810
<b>Number of Buildings:</b>	6
<b>Replacement Value:</b>	\$18,320,188
<b>Condition Budget:</b>	\$8,302,812
<b>Total FCI:</b>	0.45
<b>Adequacy Index:</b>	0.12



**Condition Budget Summary**

System Group	Replacement Cost	Requirement Cost	SCI
Electrical System	\$2,694,505	\$1,636,320	0.61
Equipment and Furnishings	\$374,531	\$347,315	0.93
Exterior Enclosure	\$2,810,184	\$1,899,957	0.68
Fire Protection	\$5,006	\$610,547	121.97
Furnishings	\$323,833	\$0	0.00
HVAC System	\$2,100,574	\$600,320	0.29
Interior Construction and Conveyance	\$3,739,632	\$1,989,336	0.53
Plumbing System	\$1,279,488	\$581,939	0.45
Site	\$2,117,061	\$1,357,180	0.64
Special Construction	\$153,417	\$95,886	0.63
Structure	\$2,721,957	\$10,188	0.00
<b>Overall - Total</b>	<b>\$18,320,188</b>	<b>\$9,128,988</b>	<b>0.50</b>

# BEST FY2019-20 GRANT APPLICATION SUMMARIES

**Applicant Name:** GRANADA RE-1

**County:** Prowers

**Project Title:** Building System/ Safety Upgrades

**Applicant Previous BEST Grant(s):** 0

**Has this project been previously applied for and not funded?** No

**If Yes, please explain why:**

## Project Type:

- |  |  |  |   |
|--|--|--|---|
| <input type="checkbox"/> New School          | <input type="checkbox"/> Roof                  | <input checked="" type="checkbox"/> Asbestos Abatement | <input checked="" type="checkbox"/> Water Systems |
| <input type="checkbox"/> School Replacement  | <input checked="" type="checkbox"/> Fire Alarm | <input checked="" type="checkbox"/> Lighting           | <input type="checkbox"/> Facility Sitework        |
| <input type="checkbox"/> Renovation          | <input type="checkbox"/> Boiler Replacement    | <input checked="" type="checkbox"/> Electrical Upgrade | <input type="checkbox"/> Land Purchase            |
| <input type="checkbox"/> Addition            | <input checked="" type="checkbox"/> HVAC       | <input checked="" type="checkbox"/> Energy Savings     | <input type="checkbox"/> Technology               |
| <input checked="" type="checkbox"/> Security | <input type="checkbox"/> ADA                   | <input checked="" type="checkbox"/> Window Replacement | <input type="checkbox"/> Other                    |

## General Information About the District / School, and Information About the Affected Facilities:

### GRANADA SCHOOL DISTRICT | PROWERS RE-1

The Granada School District was founded in 1902, and has undergone many changes over the years, but the school is and has always been the hub of the community; hosting athletic events, community events, plays, and community meetings. The school district moved into the current K-12 facility when it combined with Bristol School District in 1967. The 67,231 sf. discussed in this application has been the foundation of our student's education and community for over 50 years, and it will continue to serve us well into the future.

### TEACHERS & STAFF

Granada School District offers small class sizes and a dedicated staff that strives to make sure all students succeed. We have 32 full-time and 3 part-time employees, many of which have dedicated more than 15 years of their lives and careers to Granada School District. This low turnover rate (uncommon in many rural districts across the State of Colorado and the county), and our students' countless examples of educational excellence gives us great pride and drives our educational mission.

### STUDENTS & EDUCATIONAL PROGRAMMING

Currently, Granada School District has a 100% graduation rate and a 0% drop out rate, which speaks to the personal contact and relationships with our students. Based on the success of our school, Granada School District was recently included in a study by the University of Denver that seeks to learn what successful schools like ours are doing to increase student achievement and decrease achievement gaps, both of which Granada has demonstrated the ability to do.

Our school offers a variety of educational and athletic programs. We offer an assortment of dual credit courses, which allows students to earn up to 52 college credits prior to graduating from high school and have had several students graduate with an AA prior to receiving their high school diploma.

Our Vocational Program allows students to have a hands-on learning experience on auto restoration in our auto body program, and continues to grow with over 20 students currently enrolled. The Vocational Program is also restoring two houses on our property to be used as future teacher housing. This has provided for an invaluable experience for our students, allowing them to experience and gain specialty skill sets that will be used throughout their lives.

### AMACHE PRESERVATION SOCIETY

The district is very proud of our Amache Preservation Society, which works to restore the WWII Japanese Internment Camp located near Granada, CO. This group has come to be known internationally and give presentations on their work throughout the state. This group has produced three Boettcher Scholars, one Daniels Scholar, and two acceptances to the Air Force Academy as a result.

### MAINTENANCE PROGRAM

# BEST FY2019-20 GRANT APPLICATION SUMMARIES

The district's maintenance program consists of 3 full-time staff members, including a Head Facilities Manager, maintenance and custodial staff operating an annual budget of \$448,759. Their responsibilities for the general maintenance of district facilities and grounds include upkeep of all mechanical systems, lighting/ballast replacement, flooring and waxing, minor plumbing and electrical needs, mowing, and cleaning. These staff members also change locks, replace door closures, change filters, replace floor tiles, and insure all safety codes are maintained throughout the building.

Without the dedication of these staff members, our school would not be maintained in the excellent manner that it has been for the last 51 years, and our operation issues in this application would tell a very different story. However, the hours they currently spent to keep major system running, such as the HVAC system, is taking them away from other proactive responsibilities. Like all staff members serving in our district, the maintenance team shows their commitment to our school, the students, and our collective community in everything they do.

## Deficiencies Associated with this Project:

### I. HEALTH-RELATED & INFRASTRUCTURE DEFICIENCIES

#### 1. POOR INDOOR AIR QUALITY: CARBON DIOXIDE CONCENTRATION MEASUREMENTS

All areas of the Granada School District K-12 Facility have mechanical HVAC systems which are intended to deliver ventilation air. However, in nearly all instances, they are failing to provide adequate ventilation air to occupants and spaces. As part of the development of the Master Plan and BEST Grant application, an assessment to measure the concentrations of carbon dioxide (CO<sub>2</sub>) was performed.

Four sensors were placed in various classrooms to sample the building's current air quality where it was suspected inadequate ventilation air is occurring, recording CO<sub>2</sub> levels every 15 minutes from January 1st to January 29th. Two were placed in classrooms served by the multizone AHU (math and language rooms), and two were placed in classrooms served by rooftop package units (2nd and 3rd grade rooms), providing data related to the two primary HVAC systems.

CO<sub>2</sub> concentrations are measured in parts per million (PPM), or the number of CO<sub>2</sub> molecules found in one million molecules of air. For context, CO<sub>2</sub> concentration levels that match outdoor conditions are typically around 450 PPM, and concentrations of CO<sub>2</sub> at or below 600 PPM are considered good indoor air quality.

Peak recorded measurements of the four sensors are as follows:

- 976 PPM - 2nd Grade (1998 addition classroom)
- 2,371 PPM - 3rd Grade (1998 addition classroom)
- 1,268 PPM - Math (1967 area classroom)
- 1,023 PPM - Language (1967 area classroom)

Per the standards set by OSHA and ASHRAE, the maximum allowed concentration of CO<sub>2</sub> that can be designed for classroom environments supplying ventilation is 1,000 PPM. At concentrations above this level, building occupants can begin to experience decreased levels of cognitive ability affecting performance, concentration, and productivity, as well as such temporary physical symptoms as headaches, drowsiness, and eye or throat irritation. These symptoms do generally resolve quickly after being removed from the exposure.

Results from a study\* by the Berkeley National Laboratory, for instance, on the effects of indoor CO<sub>2</sub> concentrations and outdoor air ventilation on decision-making performance in 2013, strongly indicated that exposure to CO<sub>2</sub> concentration levels ranging from 1,000-2,500 ppm results in moderate and statistically significant declines in cognitive performance.

The CO<sub>2</sub> measurements from our school building clearly demonstrate that areas of our school served by either the multizone air handling units or the packaged rooftop units (100% of the classrooms, and more than 80% of the facility as a whole) are not receiving adequate levels of ventilation air to maintain appropriate levels indoor air quality at levels, often exceeding standard set by OSHA and ASHRAE.

(\*Source: [https://eta.lbl.gov/sites/all/files/publications/lbnl-6148e-is\\_co2\\_an\\_indoor\\_pollutant\\_v3.pdf](https://eta.lbl.gov/sites/all/files/publications/lbnl-6148e-is_co2_an_indoor_pollutant_v3.pdf))

### 3. OBSOLETE HVAC SYSTEMS: POOR VENTILATION AIR & TEMPERATURE CONTROL

Through investigation and analysis, it has become clear this health issue is a result of fundamental flaws in the design, functionality and reliability of the two HVAC systems serving the facility. The two primary mechanical systems and their effect on our educational environment are described below.

The entirety of the original 1967 area of the facility, which includes a majority of the K-12 classrooms, the auditorium, and cafeteria is conditioned by inefficient multi-zone air handling systems fed by the cold and hot water hydronic loops. Multi-zone systems provide areas with a constant volume mixture of both hot and cold air - If a zone needs heat, the ratio of hot to cold air is increased and vice versa. The simultaneous heating and cooling innate in these systems have become prohibited as energy code has evolved.

Air handlers located in mechanical rooms next to the corridor with underfloor ductwork branching off from each unit to serve the classrooms. Per the original design, the air handlers should be obtaining outside air from intake hoods located on the roof, but there are no balancing dampers in the air handlers, and appropriate outside airflows are not scheduled in the original building plans - It is likely that these areas are not receiving enough outside air. What is more likely is that these outside air connections have been shut or closed completely over the years.

Ductwork in the corridor ceilings is intended to provide a return air path from the classrooms to the mechanical rooms, but this also does not appear to be the case. Instead, the air handlers are pulling corridor air in from under the mechanical room doors, which is a breach of fire code and needs to be rectified as soon as possible.

The inconsistency of temperature and comfort control are also common shortfalls that need to be addressed. The gymnasium's two air handlers, for instance, have no cooling or any distribution ductwork, making the space uncomfortable during the warmer months or during large assemblies. Within each classroom, spaces have two or three small-sized floor registers which are insufficient for meeting the thermal loads in the spaces. The ductwork connected to these registers does not appear to be insulated. This compounds the issue, as it causes excessive energy loss of the air traveling through the runs, resulting in heating and cooling loss before reaching the classroom.

To make matters worse, since December of 2018, the maintenance staff has lost all relevant access and effective control of the building automation system. In an effort to address the problem, it was quickly discovered that controls system is obsolete and no longer supported. This was and a clear indication to our staff that it is time to move away from the system.

The central plant providing the hot- and chilled water the air handlers consists of a 24-year old 40-ton TRANE air-cooled scroll chiller providing chilled water to the air handling equipment described. This equipment is well past its useful life, shows signs of imminent failure and is due to be retired or replaced. Hot water is supplied by two 15-year old Lochinvar Copper Finn II natural gas hot water boilers with an efficiency of 80%.

The other primary mechanical system is packaged gas/DX rooftop units (RTUs) that serve the classrooms in the 1998 addition, most of which are 21 years old and well passed their 15-year median service life as recommended by the American Society of Heating, Refrigeration, and Air Conditioning Engineers. Each rooftop unit serves two classrooms, sharing ductwork to split to two rooms and a shared thermostat. Conflict between teachers over temperature control due to the shared thermostat is common.

The results of these operational deficiencies, coupled with the results of the CO2 Concentrations Assessment, are overwhelmingly detrimental to our district.

### 3. ORIGINAL 1967 WINDOW SYSTEMS

The exterior windows and doors are original to the building and provide inefficient insulation to the classrooms during winter months and causing unnecessary heat gain in warmer month. The windows are aluminum frame glazing systems and need to be replaced to provide better continuity in performance within the building envelope.

# BEST FY2019-20 GRANT APPLICATION SUMMARIES

In an attempt mitigate solar gains and cold air transfer we have added blinds to many classrooms, but many classrooms must rely on electrical space heaters which creates noise issues. The age and poor performance of the exterior fenestration impacts building comfort and mechanical system efficiency on a day-to-day basis.

The district needs to replace these with modern window and door systems that provide proper thermal comfort and a properly sealed building envelope. Furthermore, we need to replace these windows to effectively justify the investment of new HVAC systems that is correctly sized and performs as intended.

## 4. HAZARDOUS MATERIALS

The insulation on the ductwork in the mechanical rooms has been identified as having asbestos containing material (ACM). The districts most recent AHERA report also noted a possibility of non-friable asbestos in the block filler of the Concrete Masonry Units (CMU) block walls, but this has been unconfirmed and is currently assumed. We have planned further testing to take place in March 2019 of the facility as a whole.

Renovating the HVAC system will require abating this material as well as adhesive and sealants used in other locations around the 1967 building which will be remediated as needed prior to the renovation of our school.

## II. SAFETY & SECURITY DEFICIENCIES

### 1. INSUFFICIENT EMERGENCY BACKUP POWER

The facility does not have a back-up generator capable of providing power to critical building systems in the event of an emergency. As the we rely on this main building to serve all K-12 students, teachers and staff, the protection provided from of a back-up power system is a high priority. Additionally, because our district facility often serves as a community hub, back-up power from a generator will better equip the facility to serve as a central location for services in an emergency event.

### 2. UNRELIABLE INTERCOM SYSTEM

Our current intercom system was installed in the mid-1980's, is wholly unreliable and has reached a point of failure. When it does work, the system has distortion issues and is often hard to understand. In the past two years, there have been at least four occasions when the system simply stopped working and we had to do without for a period of time. It can only be operated from the main office, and because of its age and lack of available replacement parts, we are unable to service or fix the system.

A functioning intercom system is vital to our emergency preparedness and communication, and it is imperative that we have the ability to clearly and quickly communicate with all of our students and staff throughout the building. A new system that could be accessed from any room in the building to begin an emergency lockdown or procedure is necessary and considered of highest priority for the safety and security of our students and teachers.

### 3. FIRE PROTECTION & MEANS OF EGRESS

The original interior construction of the Granada K-12 School utilizes stud walls with drywall and provides basic fire protection between classrooms and corridors. However, penetrations between spaces are not sealed by today's fire protection standards to meet a one-hour fire rated construction. To increase fire safety within the building and to provide a protected means of egress for students and teachers to exit the building, a fire-resistant rated acoustic grid and tile ceiling system should be installed in the corridors to assist in providing increased fire protection.

An additional fire safety measure involves the school fire alarm system in place, which does operate effectively, but many classrooms throughout the school do not have audible or visual fire alarm notification. A need to provide strobe and horn combination alarms within classrooms has been identified.

### 4. UNSECURED & NON-RATED INTERIOR DOOR SYSTEMS

In addition to the fire ratings and egress deficiency cited above, the primary interior fire and life safety concern pertains to the interior doors and door hardware located in the 1967 building, which includes the original knob door pulls with backsets exceeding 2-3/4". Knob pulls are difficult for young children to open with smaller hands and in the event of a fire the knobs

# BEST FY2019-20 GRANT APPLICATION SUMMARIES

can become extremely hot and young children may not be able to exit the building and must be replaced. The placement of the hardware on the door is inset more than 2-3/4" on many of the doors which is not readily available to replace the hardware with correct lever hardware, that does not require grasping or twisting.

The existing doors are also unable to lock from the inside, which would prevent teachers from properly securing our students from exterior threats in the event of an emergency. The National Association of State Fire Marshalls recommends that schools utilize interior doors that can be locked from the inside only. It is recommended that new doors and jambs are installed with the new door hardware to provide doors with 20-minute rating and appropriate lock sets for classroom doors to resolve both life safety and fire protection deficiencies.

## III. OPERATIONS & MAINTENANCE (O&M) & HIGH ENERGY CONSUMPTION DEFICIENCIES

### 1. T12 FLORESCENT LIGHTING

A majority of the lighting fixtures in our facility consist of highly-inefficient 40-watt T12 linear fluorescent lamps with magnetic ballasts, or standard 32-watt T8 lighting in the 1998 addition. Simply put, this technology is over 80 years old and considered obsolete. In fact, since 2012, U.S. Congress has passed legislation that sets minimum standards of efficiency for lighting technologies and prohibited the manufacturing of T12 lamps, and even some T8 efficiencies.

The effect on our budget is twofold; excessive energy consumption that results in high utility expenses and increasing maintenance costs to source and stock a limited supply of lamps and ballasts. When we have had the opportunity, our staff has begun to convert to higher efficiency lighting, including an LED lighting replacement in the gymnasium, but due to time and labor needed and cost restrictions, we have been unable to complete the upgrades in-house.

The opportunity to upgrade our lighting once and for all will reduce our energy consumption by half, erase useless materials costs from our budget, and save our maintenance staff hours each week is critical, and the impact in both time and money immediate.

### 2. FAILED BUILDING MANAGEMENT SYSTEM

The air handling and hydronic equipment serving the 1967 wing is controlled by a Reliable Controls system that is 15 years old. The software has failed, and the district can no longer effectively control the building management system interface. Consequently, equipment like the air handlers are running 24/7 and our maintenance staff have to run around the building manually opening and closing valves throughout the day. Replacing the controls system is the number one priority for the team, especially now that the software and controllers that compose the system are no longer supported or manufactured and repairing the existing system appears futile.

The rooftop units serving the 1998 wing are controlled by individual thermostats. The thermostats in the 1998 addition have the ability to schedule the rooftop units in that area, but it is unclear how effectively the equipment is actually scheduled. The maintenance team cannot bulk edit schedules remotely, which makes it difficult to diligently update schedules as the district calendar changes. The inability to effectively manage our facilities energy consumption equates to tens of thousands of dollars expended out of our operational budget each year.

### 3. PLUMBING

The plumbing fixtures in the 1967 area are original the school's construction and are in poor condition. The protective chrome plating on many of the urinal flush valves has rubbed off, causing the underlying pipe to oxidize. Additionally, many of the fixtures do not function reliably.

The main sanitary waste line serving the 1967 area has also become problematic, and we must routinely address blockages in the pipe. A recent sewer scope was completed on the pipe which did find blockages throughout the line. Also noted, though, is that the pipe is only 3" in diameter, undersized for a modern facility, and is the probably actual issue that needs to be addressed. An additional investigation is currently underway (as of this application) into the scope and source of the on-going problem, but it is likely that replacement of the main sanitary waste line will be the best course of action.

## **Proposed Solution to Address the Deficiencies Stated Above:**



# BEST FY2019-20 GRANT APPLICATION SUMMARIES

## I. HEALTH-RELATED & INFRASTRUCTURE SOLUTIONS

### FACILITY-WIDE HVAC SYSTEMS RENOVATION

To provide the most accurate information possible for making informed decisions related to operation of the buildings, a thorough life-cycle cost analysis (LCCA) was performed to compare applicable HVAC system alternatives. This comprehensive financial model considered not just first-cost, but all-encompassing factors such as anticipated maintenance costs, district utility costs (based on the district's historical data), and major equipment replacement future costs to provide an overall picture of the true cost of ownership and operations of each system. Detail of this study can be found in the Facility Maintenance Master Plan.

The following HVAC System alternatives make qualitative sense in the facility and were quantitatively evaluated for their 25-year life-cycle costs:

1. Single Zone Gas/DX Packaged Rooftop Units
2. Air-source Variable Refrigerant Flow System (VRF) w/ Dedicated Outside Air

After collaborative discussion, it is determined that the design, implementation and commissioning of an Air-Source Variable Refrigerant Flow (VRF) HVAC System with a Dedicated Outdoor Air System (DOAS) and a modern Building Management System (BMS) will provide the best long-term solution to our district.

VRF system are large-capacity, sophisticated versions of ductless multi-split air-conditioning or heat pump systems. In summary, they include multiple indoor evaporators connected to a single condensing unit containing one or multiple inverter-driven (variable-speed) compressors. The inverter driven compressors, coupled with efficient indoor unit fan operation, result in heating and cooling efficiencies that are comparable to high-efficiency water-cooled systems. The term Variable Refrigerant Flow refers to the ability of the system to control the amount of refrigerant flowing to each of the evaporators, enabling the use of many evaporators of differing capacities and configurations, individualized comfort control, simultaneous heating and cooling in different zones, and heat recovery from one zone to another.

In simpler terms, this will result in maximum operational efficiency, individual temperature control customized to the needs of the space, system reliability, and an improvement to the educational environment and building occupants. Each classroom in the school will be served by a dedicated VRF unit that would provide heating and cooling throughout the year. It is also recommended to replace the existing cafeteria, auditorium and gymnasium air handling units with high efficiency packaged gas/DX rooftop units. New rooftop units will incorporate variable air volume (VAV) strategies, multiple stages or variable speed compressor technology, and other energy efficient specifications.

To accommodate the electrical requirements of modern HVAC equipment, associated electrical infrastructure upgrades are needed in conjunction with the implementation of the new HVAC system. Primarily, this includes replacing the main distribution panel and the panel-boards (which are assessed to be in poor condition) in the 1967 area.

In summary, the combination of a VRF system serving the classrooms and modern high efficiency rooftop units serving the large assembly spaces would eliminate the need for the chiller and would significantly reduce the heating load of the boilers, greatly reducing the facilities electrical and nature gas usage while increasing the comfort and outside air ventilation in each space. VRF systems and modern package rooftop units can achieve both full and part load efficiencies that exceed the existing 40-ton chiller's efficiencies by as much as 28%.

### DEDICATED OUTDOOR AIR SYSTEM (DOAS)

As a part of the air-source VRF system installation, a Dedicated Outdoor Air System (DOAS) would be installed to provide the proper amount of ventilation air required by code. It is recommended that the DOAS system include energy recovery devices to minimize the heating and cooling energy required to condition outside air. These devices would take heat from warm office/classroom exhaust air in the winter that would otherwise be wasted to outdoors and use it to preheat the cold outdoor air being introduced to the building. The process is reversed in the summer, pre-cooling the ventilation air. The introduction of fresh, outside air into offices and classrooms has been shown to improve occupant focus and health, and reduce adverse impacts to cognitive function, decision-making, performance and attention, symptoms prevalent in facilities which constantly

# BEST FY2019-20 GRANT APPLICATION SUMMARIES

recirculate the same stale air.

## MODERN BUILDING MANAGEMENT SYSTEMS

New building management systems will be installed in conjunction with the new HVAC system as well. Equipment will be scheduled to setback the space temperature and close outside air dampers to reduce heat loss and usage during unoccupied periods. More advanced control sequences will be implemented, such as demand controlled ventilation (CO2 control), variable volume pumping, supply air temperature reset, static pressure reset, and optimal start. These strategies and sequences are aimed at optimizing comfort, ventilation, and efficiency of the new system, and can be controlled from a central interface with mobile accessibility for authorized staff.

## DEMAND-BASED VENTILATION CONTROL (DCV)

Large assembly spaces, like cafeterias, gymnasiums, and auditoriums require a large amount of ventilation air when they are fully occupied, though, most of the time these spaces are vacant or sparsely occupied. Demand control ventilation varies the amount of outside air delivered to these assembly spaces as a function of their occupancy. This is done by measuring the CO2 levels in the spaces and then adjusting the amount of ventilation air to maintain a CO2 setpoint, typically ~700 ppm.

## ZONE-LEVEL THERMOSTAT DEADBAND CONTROL

This control feature will involve implementing a space temperature setpoint deadband of 6°F using a heating setpoint of 68°F and a cooling setpoint of 74°F. Introducing a deadband allows the system to "float" and not provide mechanical heating or cooling when the space temperature is between 68°F and 74°F.

## REPLACE ALL ORIGINAL WINDOW SYSTEMS

Demolition, replacement and weatherization of all fixed/operable windows throughout the 1967 portion of the facility will secure the points of exit and egress and improve of the thermal comfort of building occupants. Modern window systems have better thermal performance than older systems, because of double panes, thermal-break technology in their frames, and low-emissivity coatings on glass. A thermal break means that there is no contiguous metal conductor to carry heat from one side of the building envelope to the other.

Replacement and new seals at exterior fenestrations and new weather stripping at exterior doors in conjunction with a new HVAC system would provide a significantly improved environment for the students, provide strategic cost advantages and maximizes efficiencies in the performance and operation of a central heating and cooling system.

With new windows and doors many benefits will be made for the building occupants, including improved air quality when combined with the updated mechanical system and more consistent working environments which in turn allows less distraction and a better learning environment for students and staff. Moreover, these changes translate into a new HVAC system that is more appropriately sized and designed to serve only the thermal loads that are intrinsic to the building and its occupants, not those that are wasted on unnecessary infiltration and the heat gains and losses due to poor insulation.

By negating the infiltration of outside air into the building and insulating the building envelope to significantly reduce thermal loss, we will ensure a more consistent temperature and comfort level within the school and partner with the new HVAC system. The new mechanical system can also be more appropriately sized to serve only the thermal loads that are essential to the building and its occupants rather than accommodating thermal heat loss or gains. In the short-term, this will ensure cost-effective first costs of the system's equipment selections and infrastructure needs by defining its necessary capacities for heating and cooling, and over the long-term will reduce the utility and maintenance costs by maximizing operational efficiencies, prolonging the useful life of this major capital investment. Improvements resulting from the HVAC renovation, specifically ones related to comfort and operations issues, can only be realized by resolving deficiencies in our building envelope.

## ABATEMENT OF HAZARDOUS MATERIALS

We have identified specific areas for ACM abatement as it relates to impacted areas and anticipated project scope. This is based on the information from our latest AHERA report, and additional testing will be completed by this March 2019. Additional funds have been budgeted in the Detailed Project Budget for unforeseen conditions and pending the results

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of updated testing.

1. Abatement demolition of asbestos-wrapped flexible duct connectors above air handlers in the elementary, auditorium and Library mechanical rooms.
2. Spot-abatement of CMU brick in locations specific to potential wall penetrations associated with the HVAC renovation.

## II. SAFETY & SECURITY SOLUTIONS

### FIRE-RATED INTERIOR DOORS WITH SECURED LOCKING HARDWARE & EXPANDED AUDIBLE/VISUAL ALARMS

Door systems in the 1967 area will be replaced with door and frame assemblies that are 20-minute fire-rated and have proper handles for code-compliant egress. They will also be equipped with locking mechanisms for securing the room from the inside. The new door assemblies provide two solutions; bringing the path of egress into code compliance and provided added safety and security to our classrooms. In addition, existing fire alarm systems will be expanded to include a combination horn/strobe alarms in each classroom, ensuring completion notification of the entire building in the event of an emergency. The main fire alarm panel will need to be upgraded to accommodate the electrical loads from new alarms.

### NEW EMERGENCY GENERATOR POWER SYSTEM

An appropriately-sized standby generator will be installed with an automatic transfer switch. This transfer switch will detect an interruption to the utility electric service and automatically start the standby generator to supply standby power to the building heating system and other required loads. Computer servers, refrigerators, freezers, and other equipment will be added to the standby power system to maintain essential building functions during power outages.

### NEW INTERCOM SYSTEM

An intercom system will improve the school safety by increasing the ease of communication between classrooms and the front office, as well as allowing for announcement to be heard everywhere on campus. A robust, wireless, school wide intercom system will be installed to enable two-way communication between the classrooms and the front office. The intercom system's base station will be located in the front office and wireless intercom stations will be installed in classrooms. The base station will have the ability to initiate and answer two-way intercom calls to and from multiple wireless intercom stations or make facility-wide announcements. One-way speakers and LED message boards will be installed in indoor common areas with additional speakers outdoors to provide full campus coverage for announcements.

To further improve school safety the system will be capable of sending emergency notifications quickly and easily from the base station in the office or over the phone. The system will also allow for emergency notifications to be sent from any classroom via a panic button. Activation of a panic button can send a silent alert to local authorities and trigger a prerecorded message to be delivered over the intercom system. The system will operate over its own 900 MHz radio frequency to provide uninterrupted communication.

## III. OPERATIONS & MAINTENANCE (O&M) & HIGH ENERGY CONSUMPTION SOLUTIONS

### LED LIGHTING REPLACEMENT & OCCUPANCY-BASED CONTROL

All existing fluorescent lamps will be replaced with super-efficient 12-watt LED lamps to increase our energy-efficiency by more than 50% and provide a uniform lamp type throughout the building. We will also consider current space lighting density, space density requirements, and configurations with an end goal of reduced number of lamps and increased energy efficiency.

The average life of 50,000 hours, compared to typical fluorescent lamps, which are rated at 20,000 or 25,000 hours, and is guaranteed by the manufacturer for five years, which will help ease annual O&M supply costs. Additionally, unlike fluorescent lamps, LED lamps do not require ballasts to operate, but instead use a built-in driver that converts AC current to DC current to power the diodes, further reducing our expenses.

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In situations common to our building, where lighting may be on longer than needed, left on in unoccupied areas, or used when sufficient daylight exists, we will minimize our consumption and maximize district savings through occupancy-based automatic controls. Occupancy sensors detect the presence of people in a room and automatically turn off lights in areas that are intermittently occupied, meaning unoccupied for two hours or more per day, and where lights typically remain on when the space is unoccupied. A thorough lighting project will also ensure that code-compliant emergency lighting is installed within the building and includes new exterior LED wall packs and parking lot lighting to expand exterior illumination of the K-12 facility, increasing public safety.

### AIR SYSTEMS CONTROL STRATEGIES FOR OPTIMAL ENERGY PERFORMANCE

As previously mentioned, the new HVAC system will include the installation of direct digital control (DDC) systems, and large portion of energy savings attributed to the new HVAC system will be predicated upon control system optimization. Additional strategies focused on greater reductions in energy use and utility savings include:

#### 1. Optimize HVAC Operating Schedules (Space Temperature Setback and Setup)

This control feature will involve implementing optimized night setup and setback temperatures using energy management controls for most of the facilities spaces. The current HVAC systems have no ability to automatically be shut off when the building is not occupied, maintaining normal temperatures throughout these areas. Controls with setup and setback temperatures will be implemented for the HVAC systems. The setup and setback temperatures will be 55°F during the heating mode and 90°F during the cooling mode.

#### 2. Optimal Start of HVAC Systems Based on Outdoor Air Conditions

Equipment start times are normally set earlier than necessary to ensure proper comfort is maintained even during hot or cold weather. An optimal start feature incorporated into our design would automatically compensates building start times for changes in weather. If weather is extreme, then equipment is started early enough to properly condition the building before it is occupied. During mild weather, equipment start times can be delayed obtaining more energy savings. A complementary feature, Optimal Stop, is used to save energy at the end of each day. This feature takes advantage of a building's "flywheel" effect. In mild weather, equipment can be stopped earlier than usual without adversely effecting indoor temperatures.

### HVAC SYSTEM COMMISSIONING

New HVAC and control systems installed will undergo a rigorous commissioning process, which ensures that common operational issues are identified and remedied before installing contractors leave the site. The process certifies the adherence of the work to the design intent and acts as a method of quality control. In general, projects which are commissioned use less energy, result in a more comfortable building, and pass far fewer issues on to the customer post-construction.

### PLUMBING FIXTURE REPLACEMENT & MAIN SEWER LINE REPLACEMENT

The plumbing fixtures throughout the 1967 area will be replaced with modern, high efficiency fixtures. Efficiency in water-use will be achieved by replacing the urinals with 0.25 or 0.13 gpf fixtures, and toilets replaced with 1.28 gpf fixtures. Sinks with modern low flow aerators can achieve 0.5 gallons per minute while still achieving adequate coverage - providing a cost-effective alternative to the current operation.

Additional investigation into the problematic main sewer line is currently underway. Based on the results from a recent sewer scope, specifically that the line is probably undersized and has reached the end of its life, we have planned in this application and detailed project budget for the replacement of this section of sewer line.

### How Urgent is this Project?

If this project is not awarded, the opportunity to address these issues in a comprehensive manner will become unlikely, at least in the short-term. We would explore other opportunities of funding these projects, such as the planned lease-purchase financing or voter-approved bond issue, but they likely result in needed "cost-cutting" and not allow us to holistically implement these projects as intended.

The most impactful outcome of continuing to perform reactive repairs and other piecemeal projects in an attempt to maintain and prevent failure will be financial, until we can resolve them for the long-term. A majority of the projects outlined in the

# BEST FY2019-20 GRANT APPLICATION SUMMARIES

application will result in tangible and immediate impact to our operations and maintenance budget and annual utility expenses.

The two projects of urgency are described below:

## FACILITY-WIDE HVAC SYSTEMS RENOVATION

It is critical that indoor air quality issues are resolved quickly and completely. CO2 levels recorded in the school are far from acceptable for a K-12 facility, and more than twice the acceptable standards set by OSHA. It is also our duty to provide our students and teachers a healthy learning environment, fresh air ventilation and modern standards of temperate and comfort control.

Professional analysis of our systems indicate that are running on borrowed time, and our maintenance staff is confident based on their own experiences, that major equipment failures of the HVAC systems are imminent, or they will simply continue to deteriorate into disrepair. Evidence of what is likely to continue has been displayed in the recent failure of the building automation and control system. The inability to effectively manage building comfort control or the efficiency of our largest energy consuming system results in a poor educational environment and sunk costs from our budget.

Replacing the original single-pane windows in conjunction with these HVAC improvements and the upcoming security grant-funded exterior door replacements ensures that a financial commitment made by our district and the CDE is not wasted on oversized equipment, and uncontrolled heat loss/gain from a poorly insulated building envelope.

## INTERCOM SYSTEM

This system is another that is critical to our daily operations, considered of the highest priority for the safety and security of our students and teachers, and that has recently experienced a wholesale failure. We need the ability to clearly, quickly and reliably communicate with all of our students and staff throughout the building not just for daily announcements, but for emergency lockdown, procedures and preparedness throughout the district.

**Does this Project Conform with the Public School Facility Construction Guidelines?** Yes

**If not, provide an explanation for the use of any standard not consistent with the guidelines:**

## How Does the Applicant Plan to Maintain the Project if it is Awarded?

### CAPITAL RENEWAL BUDGET

The district will include a minimum of \$200 per student per year into a capital renewal budget, which is estimated to be \$40,000 in direct funding towards the annual preventative maintenance of this project's systems and major components. This budget will maximize the life of the project and ensure funding for future replacement costs, which, according to ASHRAE and manufacturer data is approximately 20-25 years for major equipment.

With assistance from BEST to complete of these major projects, current operational expenditures would be freed up to serve as an additional funding source toward capital renewal and proactive maintenance. We would no longer need to spend on the upkeep of obsolete systems and equipment, but instead would be able to effectively budget and maintain building systems and infrastructure as intended.

### PREVENTATIVE MAINTENANCE PLAN

The district's annual expenditures reactive capital costs on the specific systems planned for replacement exceed and average \$30,000 per year. Once these major systems are replaced, current budgeted funds will be reallocated into a meticulous Preventative Maintenance Plan. A detailed outline of these anticipated preventative maintenance costs has been provided as a supplementary document with this application.

In summary, we will commit to reallocating an estimated \$25,917 towards the proactive upkeep of major systems, including regular seasonal servicing and inspections, filter replacement, and cleaning, and will build additional cash reserves for unexpected repair such as parts replacement after warranties expire. Additional annual net operational savings are expected as a result of our current and future O&M costs, and these funds will remain in the district's operations and maintenance budget, and be allocated to additional proactive measures, deferred maintenance, and increased support for Granada School

# BEST FY2019-20 GRANT APPLICATION SUMMARIES

District Maintenance Staff.

## OWNER TRAINING OF NEW SYSTEMS

District staff will receive dedicated training, support and on-boarding of the new HVAC and Building Management Systems during and after the project. Periodic onsite training and education will be provided by the design professionals throughout the project to help our staff gain familiarity with the operations and maintenance responsibilities. Formal training sessions will be provided by engineers and installing trade contractors when systems are fully operational. On-going training and support may be required to ensure that our staff receives the proper knowledge of the system's operations, maintenance, repairs and replacement responsibilities.

**Describe the condition of the public school facility at the time it was purchased or constructed and, if the facility was not new or was not adequate as a public school facility at that time, provide the rationale for purchasing the facility or constructing it in the manner in which you did:**

The original portion of the current Granada School District facility, which is approximately 55,186 sf., was built new in 1967 upon the school district combining with Bristol School District. Today it serves all PK-12 students, and our community, as the primary education center in the district.

**Describe the history of capital improvements made to the facility by the district/charter school in order to make it suitable for students. Include a list of all capital projects undertaken in the affected facility in the last 3 years:**

The most significant capital improvement made was a 1998 addition which added 12,045 sf. of new classrooms, office space, a meeting room, concession stand, restrooms and an atrium to connect the building. Currently, the facility totals approximately 67,231 square feet.

Through the years, Granada School District has also expanded its facility inventory by adding a new bus barn and bus shed, three outbuildings to house English and Band classes, and visitor locker rooms.

**What options outside of the BEST grant has the applicant investigated or leveraged to address the school's facility needs?**

Outside the BEST Grant, Granada School District has applied for, and was recently awarded, the School Security Disbursement Grant in the amount of \$116,674.00. This funding will provide for new exterior doors on all of the 1967 building, a new pass thru window in the main office to provide for visual sight of the front doors, three new cameras and automatic locks on three sets of doors, and a monitor and buzzer system to allow access into the building during school hours.

Currently the district has cash reserves of approximately \$1.9 million that we have worked hard to build up in recent years. Although it is not enough to address the needs in the application as a primary source of capital outlay, it has positioned us well to secure lease-purchase financing for our matching funds.

**How do you budget annually to address capital outlay needs in your district/charter? Include \$/FTE for the prior fiscal year:**

Since the 2016-2017 Fiscal Year, \$701.00 per FTE has been spent by the district out of the Capital Projects Fund. Each year, the district determines budgeting for capital outlay through collaborative planning and discussion of the administration, maintenance and custodial personnel, and school board members to best understand and prepare for the upcoming capital project needs. This represents both the affected facility, and districtwide, as they are one in the same.

**If relevant to your project, what are your current annualized utility costs, and what amount of reduction in such costs do you expect to result from this project?**

Baseline O&M Costs for Granada School District's K-12 Facility are as follows:

Electric: \$73,373

Gas: \$19,547

Water: \$6,215

The building has a relatively high Energy Use Intensity (EUI) of 80.5. For comparison, on average, most schools have an EUI between 50 - 70. The high energy use and operating cost are due to obsolete fluorescent lighting, a malfunctioning building management system (BMS), an inefficient and outdated HVAC system, and leak prone windows.

Correctly these issue through proper design and implementation of a high-efficiency systems will have an immediate impact

## BEST FY2019-20 GRANT APPLICATION SUMMARIES

on our annual energy use, reducing our baseline by as much as 50.04%, and utility costs, resulting in potential annual utility savings of as much as \$49,615. This does not include anticipated maintenance savings outlined in our Capital Renewal Plan used for the preventative maintenance of the new systems.

<b>Grant Request:</b>	\$3,361,303.54	<b>CDE Minimum Match %:</b>	41%
<b>Applicant Match:</b>	\$2,335,821.10	<b>Actual Match % Provided:</b>	41%
<b>Total Project Cost:</b>	\$5,697,124.64	<b>Is a Waiver Letter Required?</b>	No
<b>Affected Sq Ft:</b>	67,231	<b>Contingent on a 2019 Bond?</b>	No
<b>Affected Pupils:</b>	208	<b>Source of Match:</b>	Lease-purchase financing and cash contributions
<b>Cost Per Sq Ft:</b>	\$84.74	<b>Escalation %:</b>	6%
<b>Soft Costs Per Sq Ft:</b>	\$9.86	<b>Construction Contingency %:</b>	12%
<b>Hard Costs Per Sq Ft:</b>	\$74.88	<b>Owner Contingency %:</b>	5%
<b>Cost Per Pupil:</b>	\$27,390	<b>Historical Register?</b>	No
<b>Gross Sq Ft Per Pupil:</b>	323	<b>Adverse Historical Effect?</b>	No
<b>Is a Master Plan Complete?</b>	Yes	<b>Does this Qualify for HPCP?</b>	No
<b>Who owns the Facility?</b>	District		
<b>If owned by a third party, explanation of ownership:</b>			
<b>If match is financed, explanation of financing terms:</b>			

### Financial Data (School District and BOCES Applicants)

<b>District FTE Count:</b>	188	<b>Bonded Debt Approved:</b>	
<b>Assessed Valuation:</b>	\$15,577,885	<b>Year(s) Bond Approved:</b>	
<b>PPAV:</b>	\$82,861	<b>Bonded Debt Failed:</b>	
<b>Unreserved Gen Fund 17-18:</b>	\$2,300,685	<b>Year(s) Bond Failed:</b>	
<b>Median Household Income:</b>	\$29,489	<b>Outstanding Bonded Debt:</b>	\$0
<b>Free Reduced Lunch %:</b>	65%	<b>Total Bond Capacity:</b>	\$3,115,577
<b>Existing Bond Mill Levy:</b>	0	<b>Bond Capacity Remaining:</b>	\$3,115,577
<b>3yr Avg OMFAC/Pupil:</b>	\$2,142.94		

**● Facilities Impacted by this Grant Application ●**

**EATON RE-2 - Districtwide Secure Entries - Eaton HS - 1928**

District:	Auditor - Eaton RE-2
School Name:	Eaton HS
Address:	114 Park
City:	Eaton
Gross Area (SF):	135,940
Number of Buildings:	6
Replacement Value:	\$38,899,274
Condition Budget:	\$17,556,754
Total FCI:	0.45
Adequacy Index:	0.23



**Condition Budget Summary**

System Group	Replacement Cost	Requirement Cost	SCI
Electrical System	\$5,449,337	\$3,302,655	0.61
Equipment and Furnishings	\$977,626	\$453,068	0.46
Exterior Enclosure	\$4,680,190	\$189,526	0.04
Fire Protection	\$16,394	\$1,368,609	83.48
Furnishings	\$627,633	\$0	0.00
HVAC System	\$9,267,683	\$8,157,755	0.88
Interior Construction and Conveyance	\$5,389,272	\$3,337,017	0.62
Plumbing System	\$1,855,115	\$630,800	0.34
Site	\$3,531,970	\$1,545,483	0.44
Special Construction	\$1,064,980	\$30,000	0.03
Structure	\$6,039,073	\$0	0.00
<b>Overall - Total</b>	<b>\$38,899,274</b>	<b>\$19,014,913</b>	<b>0.49</b>

**EATON RE-2 - Districtwide Secure Entries - Eaton MS - 1977**

District:	Auditor - Eaton RE-2
School Name:	Eaton MS
Address:	225 Juniper Street
City:	Eaton
Gross Area (SF):	71,570
Number of Buildings:	1
Replacement Value:	\$19,240,069
Condition Budget:	\$6,785,093
Total FCI:	0.35
Adequacy Index:	0.06



**Condition Budget Summary**

System Group	Replacement Cost	Requirement Cost	SCI
Electrical System	\$3,545,195	\$1,143,592	0.32
Equipment and Furnishings	\$422,942	\$184,741	0.44
Exterior Enclosure	\$2,266,646	\$0	0.00
Fire Protection	\$38,938	\$652,771	16.76
Furnishings	\$380,013	\$281,203	0.74
HVAC System	\$4,353,139	\$3,836,894	0.88
Interior Construction and Conveyance	\$3,079,499	\$709,895	0.23
Plumbing System	\$1,073,899	\$337,238	0.31
Site	\$1,880,806	\$259,683	0.14
Structure	\$2,198,990	\$0	0.00
<b>Overall - Total</b>	<b>\$19,240,069</b>	<b>\$7,406,017</b>	<b>0.38</b>



● **Facilities Impacted by this Grant Application** ●

**EATON RE-2 - Districtwide Secure Entries - Eaton ES - 1955**

District:	Auditor - Eaton RE-2
School Name:	Eaton ES
Address:	25 Cheyenne Avenue
City:	Eaton
Gross Area (SF):	36,490
Number of Buildings:	2
Replacement Value:	\$8,467,495
Condition Budget:	\$3,820,963
Total FCI:	0.45
Adequacy Index:	0.33



**Condition Budget Summary**

System Group	Replacement Cost	Requirement Cost	SCI
Electrical System	\$1,355,567	\$330,314	0.24
Equipment and Furnishings	\$369,112	\$265,845	0.72
Exterior Enclosure	\$1,351,150	\$102,786	0.08
Fire Protection	\$11,548	\$333,481	28.88
HVAC System	\$1,704,201	\$1,374,244	0.81
Interior Construction and Conveyance	\$1,383,204	\$933,649	0.67
Plumbing System	\$387,334	\$328,815	0.85
Site	\$608,998	\$472,755	0.78
Special Construction	\$156,199	\$0	0.00
Structure	\$1,140,181	\$0	0.00
<b>Overall - Total</b>	<b>\$8,467,495</b>	<b>\$4,141,889</b>	<b>0.49</b>

**EATON RE-2 - Districtwide Secure Entries - Benjamin Eaton ES - 2002**

District:	Auditor - Eaton RE-2
School Name:	Benjamin Eaton ES
Address:	100 South Mountain View Drive
City:	Eaton
Gross Area (SF):	53,560
Number of Buildings:	1
Replacement Value:	\$16,554,459
Condition Budget:	\$4,220,039
Total FCI:	0.25
Adequacy Index:	0.12



**Condition Budget Summary**

System Group	Replacement Cost	Requirement Cost	SCI
Electrical System	\$2,783,317	\$1,230,481	0.44
Equipment and Furnishings	\$431,405	\$109,752	0.25
Exterior Enclosure	\$3,024,590	\$0	0.00
Fire Protection	\$558,446	\$12,558	0.02
Furnishings	\$28,120	\$0	0.00
HVAC System	\$3,448,149	\$1,079,536	0.31
Interior Construction and Conveyance	\$2,084,283	\$1,091,034	0.52
Plumbing System	\$737,644	\$22,257	0.03
Site	\$1,777,541	\$674,424	0.38
Structure	\$1,680,964	\$0	0.00
<b>Overall - Total</b>	<b>\$16,554,459</b>	<b>\$4,220,042</b>	<b>0.25</b>

● **Facilities Impacted by this Grant Application** ●

**EATON RE-2 - Districtwide Secure Entries - Galeton ES - 1955**

<b>District:</b>	Auditor - Eaton RE-2
<b>School Name:</b>	Galeton ES
<b>Address:</b>	24750 3rd Street
<b>City:</b>	Galeton
<b>Gross Area (SF):</b>	31,400
<b>Number of Buildings:</b>	2
<b>Replacement Value:</b>	\$8,375,199
<b>Condition Budget:</b>	\$3,829,379
<b>Total FCI:</b>	0.46
<b>Adequacy Index:</b>	0.21



**Condition Budget Summary**

System Group	Replacement Cost	Requirement Cost	SCI
Electrical System	\$1,270,769	\$315,537	0.25
Equipment and Furnishings	\$218,988	\$0	0.00
Exterior Enclosure	\$1,194,325	\$151,767	0.13
Fire Protection	\$11,449	\$310,059	27.08
Furnishings	\$101,233	\$126,541	1.25
HVAC System	\$1,820,961	\$1,660,124	0.91
Interior Construction and Conveyance	\$1,380,260	\$995,551	0.72
Plumbing System	\$457,444	\$217,585	0.48
Site	\$808,154	\$344,297	0.43
Structure	\$1,111,617	\$29,336	0.03
<b>Overall - Total</b>	<b>\$8,375,199</b>	<b>\$4,150,797</b>	<b>0.50</b>

# BEST FY2019-20 GRANT APPLICATION SUMMARIES

**Applicant Name:** EATON RE-2

**County:** Weld

**Project Title:** Districtwide Secure Entries

**Applicant Previous BEST Grant(s):** 1

**Has this project been previously applied for and not funded?** No

**If Yes, please explain why:**

## Project Type:

- |  |   |  |  |
|--|---|--|--|
| <input type="checkbox"/> New School          | <input type="checkbox"/> Roof               | <input checked="" type="checkbox"/> Asbestos Abatement | <input type="checkbox"/> Water Systems     |
| <input type="checkbox"/> School Replacement  | <input type="checkbox"/> Fire Alarm         | <input type="checkbox"/> Lighting                      | <input type="checkbox"/> Facility Sitework |
| <input type="checkbox"/> Renovation          | <input type="checkbox"/> Boiler Replacement | <input type="checkbox"/> Electrical Upgrade            | <input type="checkbox"/> Land Purchase     |
| <input type="checkbox"/> Addition            | <input type="checkbox"/> HVAC               | <input type="checkbox"/> Energy Savings                | <input type="checkbox"/> Technology        |
| <input checked="" type="checkbox"/> Security | <input checked="" type="checkbox"/> ADA     | <input type="checkbox"/> Window Replacement            | <input type="checkbox"/> Other             |

## General Information About the District / School, and Information About the Affected Facilities:

Weld County School District RE-2 (Eaton) serves the communities of Eaton and Galeton. Our economic base centers around farming, ranching, dairies, the oil/gas industry, and small-scale manufacturing. It is also a popular bedroom community for families that work in the nearby communities of Greeley, Windsor, Fort Collins, and Loveland. We educate 1,918 students K-12 in five buildings. We also provide preschool for 68 Colorado Preschool Program (CPP) students for a grand total of 1,986 students served. Eaton Elementary (built in 1955) serves 364 K-2 students. Benjamin Eaton Elementary opened in 2003 and serves 399 3rd-5th grade students. Galeton Elementary (built in 1918/1968/1988) operates in the town of Galeton with a single class per grade serving 124 K-5 students. Eaton Middle School (built in 1977) serves 473 6th-8th grade students, and Eaton High School (built in 1928/1962/1988) serves 558 9th-12th grade students. In 2018, all five schools in the district were accredited by the state at the highest performance level. We take pride in this as our schools are the center of the community. All of the facilities are available for public use and are reserved on the weekends and evenings for community events, club athletics, and fundraisers.

In 2015 the district formed a facilities committee to develop a facilities master plan. The process of writing the facilities master plan began in earnest in December of 2017 when the district began to evaluate and hire professional consultants to assist. The district was supported by an owner's representative, an architectural team, and a Construction Manager/General Contractor (CM/GC) to develop a facility master plan. The team frequently met to evaluate the needs of the district and develop a budget for the master plan. We also worked with facility assessors from CDE to update our facilities insight information for each school and had the School Safety Resource Center conduct a school safety audit for the district. The district established three broad goals for future solutions in the master plan.

\*Increase safety and security at all District facilities by creating a secure entry sequence, and by connecting physically separated buildings into a single building at facilities with multiple buildings.

\*Address building infrastructure issues.

\*Increase the enrollment capacity of the district.

Our funding level from the state continues to be in the bottom 10% of all school districts in the state. This has affected our ability to maintain our facilities as we are forced to redirect these funds into operational costs. In 2018, the board of education determined that the district's facility needs are such that it made sense to pursue a \$75 million facilities bond in the November 2018 election. Unfortunately, the facility bond was defeated by the voters. Securing funding for the district's facility needs remains, so the district formed a BEST Grant Steering Committee to explore all options for funding our facility projects. With that in mind, this BEST grant application will be contingent on us passing a facility bond in November of 2019 to provide our matching funds. Recently, the district was awarded a grant for \$192,203.00 from the School Security Disbursement Grant fund that we will be able to dovetail into the safety and security goals of this application and provide additional matching funds necessary to finance the project. The facility master plan will continue to focus on the same broad goals; installing safety and security projects at each school, addressing building infrastructure deficiencies to extend service life, and increasing classroom space to accommodate growth with modifications based on community feedback. This application focuses specifically on increasing the safety and security at all schools by providing secure entries with controlled electronic access at Eaton Elementary, Galeton Elementary, Benjamin Eaton Elementary, Eaton Middle, and Eaton High School.

# BEST FY2019-20 GRANT APPLICATION SUMMARIES

## Deficiencies Associated with this Project:

The district has deeply analyzed the safety and security of each building in the district. In November of 2018, we asked the Colorado School Safety Resource Center (CSSRC) to perform a safety audit for our district. We also gathered data from our 2018 & 2019 CDE facilities insight assessments with the generated Facility Condition Index (FCI) for each school. In addition, we relied on the analysis provided by our architects and CM/GC during the development of the facilities master plan that was completed in the fall of 2018. The audits found inadequate access control across all schools in the district, which could allow for unauthorized entry and represents a safety risk to occupants. Once in a building, the audits found our existing camera surveillance system did not provide sufficient coverage to allow comprehensive monitoring of each school. No schools met the Colorado Department of Education Construction Guidelines for controlling access or providing adequate barriers between building occupants and traffic.

### Benjamin Eaton Elementary (BEES):

The district installed a camera and intercom buzzer system at the front entry door to control visitor access. The system does not meet CDE Construction Guidelines 4.1.11.3 because there is no containment vestibule or line of sight to the office once a visitor is admitted to the building. Visitors to BEES enter a hallway and have the opportunity to travel to three different sections of the building without ever being seen by the main office personnel. In addition, automated locking mechanisms are not available on the 33 existing exterior doors nor are staff members notified if a door is propped or left open. The eleven installed security cameras at BEES do not sufficiently cover the entire building, and several blind spots were noted during our school safety audit from the CSSRC. Safety will be greatly increased by remedying these deficiencies.

### Eaton Elementary (EES):

The district installed a camera and intercom buzzer system at the front entry door to control visitor access. The system does not meet CDE Construction Guidelines 4.1.11.3 because there is no containment vestibule or line of sight to the office once a visitor is admitted to the building. Visitors to EES enter a hallway and have the opportunity to travel to three different sections of the building before entering the line of sight of the main office personnel. The eight installed security cameras at EES do not sufficiently cover the entire building, and several blind spots were noted during our school safety audit from the CSSRC. Although trace asbestos containing block filler will be impacted during installation of the new door, the proposed secure entry would also address the current mastic and asbestos in the floor tile and the fact that it is not protected from forced vehicle entry. Further safety concerns are students traveling to modular classrooms for their music, art, library and computer classes. Add to that, 29 existing exterior doors that do not have automated locking mechanisms or electronic access control (card readers) for staff or notification if a door is propped or left open and it is clear that the safety of EES staff and students can be greatly improved.

### Galeton Elementary (GES):

This school has an intercom buzzer system at the front entry door to control visitor access without the camera. The system does not meet CDE Construction Guidelines 4.1.11.3 because there is no containment vestibule once a visitor is admitted to the building. The nine installed security cameras at GES do not sufficiently cover the entire building, and several blind spots were noted during our school safety audit from the CSSRC. Further safety concerns are students traveling to a converted garage south of the main building for their art classes. Although construction of a vestibule would require the removal of asbestos in the entombed sheet vinyl and assumed wall texture within the existing entrance, the proposed secure entry will allow staff to screen/monitor visitors while addressing the abatement of the asbestos. Add to that, 20 existing exterior doors that do not have automated locking mechanisms or electronic access control (card readers) for staff or notification if a door is propped or left open and it is clear that the safety of GES staff and students can be greatly improved.

### Eaton Middle School (EMS):

The district installed a camera and intercom buzzer system at the front entry door to control visitor access. The system does not meet CDE Construction Guidelines 4.1.11.3 because there is no containment vestibule or line of sight to the office once a visitor is admitted to the building. Visitors to EMS enter into the cafeteria and have the opportunity to enter most of the building without entering the line of sight of the main office personnel. The sixteen installed security cameras at EMS do not sufficiently cover the entire building, and several blind spots were noted during our school safety audit from the CSSRC. Although construction of a vestibule would require the removal of asbestos in the entombed floor tile and mastic within the

## BEST FY2019-20 GRANT APPLICATION SUMMARIES

existing entrance, the proposed secure entry will allow staff to screen/monitor visitors while addressing the abatement of the asbestos. Add to that, 20 existing exterior doors that do not have automated locking mechanisms or electronic access control (card readers) for staff or notification if a door is propped or left open and it is clear that the safety of EMS staff and students can be greatly improved.

Eaton High School (EHS):

EHS is unable to control access because students must travel between 6 different buildings (35 exterior doors) to attend their classes. Visitors are asked to enter the high school via the main entrance that leads into the cafeteria/commons area which is adjacent to the main office. There is not a secure vestibule nor any type of controlled access that can deter entrance as recommended by CDE Construction Guidelines 4.1.11.3. Students and staff are trained to use certain doors to pass between the six buildings; however, because there is no automated locking mechanism on the other doors, staff members are not alerted if a door is propped open during school hours. The fifty-one installed security cameras at EHS do not sufficiently cover the entire six-building campus and, several blind spots were noted during our school safety audit from the CSSRC. With such a large campus, door propping is prevalent to decrease walking times between buildings. Moreover, EHS has no electronic access control system and must rely on numerous keys checked out to staff members and community groups that use the building constantly. EHS administrators are regularly called to the building to secure doors that have been left open or propped after school hours. Lastly, the district transportation center is located adjacent to the high school and, students currently have no barrier between the vehicles and the walkways connecting the classrooms located in exterior buildings.

### **Proposed Solution to Address the Deficiencies Stated Above:**

Due in part to the deficiencies described above, the Weld County School District RE-2 (Eaton) developed a facilities master plan with community input based on recommendations from professionals that were hired to conduct analysis and gather costs. The number one goal of the plan is to improve safety and security at the schools. The district diligently assessed the safety of our buildings with both a safety audit from the Colorado School Safety Resource Center, and full facility assessment audits from the CDE for all schools within the last year. In addition, the district contracted with a reputable K-12 architect to perform a full facility assessment in 2018 that resulted in our November 2018 Facility Master Plan. Based on our in-depth review, we feel that controlling access to meet the security guidelines detailed in section 4.1.11 of the public school facility guidelines for the CDE at our five schools is a comprehensive solution. To control access to our schools, we will need to construct secure, ADA compliant, double-entry vestibules that connect with a window to the main office for the required line of sight at each school. Each school will need to install automated electronic access control systems for exterior doors identified for entry and select interior doors associated with the main entry vestibule. These systems shall include the ability to use credentials cards/fobs for school personnel, the ability to disengage the system via a timer while entries are monitored by school personnel, notification of open doors to eliminate door propping, and the ability to automatically lock all exterior doors from a secured position. Once inside the secure vestibule, each school shall install a visitor management system that will scan visitor credentials along with visual identification to screen for potential threats before being granted access to the building. Each school shall install an adequate amount of security cameras in order for personnel from multiple locations to monitor/screen incoming visitors to each school without any blind spots. Installing fencing at strategic locations on the Eaton High School campus will provide a barrier to keep transportation vehicles away from students traveling to their classrooms. Each school's deficiencies are unique, so their solutions are unique as described below.

BEES: Opened in 2002, BEES was designed prior to the current facilities guidelines for secure entries. While it has a double-door vestibule, it lacks a line of sight and only has controlled access on the exterior door. The remedy for this is to create a second double-door vestibule with a line of sight and window to the main office by simply building a wall across the existing entryway. The reception area of the main office would need to be reconfigured to move the reception desk adjacent to the new vestibule and install a window into the existing wall. There are 6 exterior/interior doors that would require access control. In addition, 10 new security cameras would bring the system up to current facility guidelines.

Construct new secure entry vestibule.

Install new secure check-in window.

Install a new storefront (10'-0" high).

Infill existing door to copy room.

Demo portion of existing casework in the reception area.

Install a new reception desk.

Install (10) new security cameras and additional surveillance storage on a shared server.

## BEST FY2019-20 GRANT APPLICATION SUMMARIES

Install (6) doors -new access controls system.  
Install door position switches/controllers to balance of exterior doors.  
Install new visitor management system.  
Add one additional ADA push-button opener.

EES: The layout of EES is such that we can create the double-door vestibule with a line of sight to the main office by simply building a wall at the end of the existing entryway. There are 6 exterior/interior doors that would require access control. In addition, 10 new security cameras would bring the system up to current facility guidelines.

Construct new secure entry vestibule.  
Install new hollow metal frame (10'-0" high).  
Install (10) new security cameras and additional surveillance storage on a shared server.  
Install (6) doors -new access controls system.  
Install door position switches/controllers to balance of exterior doors.  
Install new visitor management system.  
Add one additional ADA push-button opener.  
Remove asbestos in affected areas.

GES: The layout of GES is such that we can create the double-door vestibule with a line of sight and window to the main office by simply building a wall at the end of the existing entryway. There are 6 exterior/interior doors that would require access control. In addition, 10 new security cameras would bring the system up to current facility guidelines.

Construct new secure entry vestibule.  
Install new secure check-in window.  
Install new hollow metal door and frame.  
Install (10) new security cameras and additional surveillance storage on a shared server.  
Install (6) doors -new access controls system.  
Install door position switches/controllers to balance of exterior doors.  
Install new visitor management system.  
Add two additional ADA push-button openers.  
Remove asbestos in affected areas.

EMS: The solution for EMS involves constructing a double-entry vestibule outside of the current main entry and reconfiguring the reception area of the main office in order to provide a window and line of sight to the vestibule. There are 10 exterior/interior doors that would require access control. In addition, 15 new security cameras would bring the system up to current facility guidelines.

Construct new secure entry vestibule.  
Install new secure check-in window.  
Install new storefront (10'-0" high).  
Demo portion of the wall for new opening.  
Install a new reception desk.  
Install (15) new security cameras and additional surveillance storage on a shared server.  
Install (10) doors -new access controls system.  
Install door position switches/controllers to balance of exterior doors.  
Install new visitor management system.  
Add one additional ADA push-button opener.  
Remove asbestos in affected areas.

EHS: The solution for EHS involves constructing a double-entry vestibule inside of the current cafeteria and reconfiguring the reception area of the main office in order to provide a window and line of sight to the vestibule. There are 25 exterior/interior doors that would require access control. In addition, 25 new security cameras would bring the system up to current facility guidelines.

Construct new secure entry vestibule.  
Install new secure check-in window.

# BEST FY2019-20 GRANT APPLICATION SUMMARIES

Install new storefront (10'-0" high).  
Install a new reception desk.  
Install (25) new security cameras and additional surveillance storage on a shared server.  
Install (25) doors -new access controls system.  
Install door position switches/controllers to balance of exterior doors.  
Install new visitor management system.  
Add one additional ADA push-button opener.  
Install 300 linear feet of fencing to provide a barrier between classrooms and transportation center.

## How Urgent is this Project?

At every community meeting we had, the number one concern was school safety and security. At the same time, our district has a long tradition of using our school facilities every evening and weekend for various community events. Controlled access will ensure that we are able to continue to provide facility access to our community while maintaining the safety of our students and staff. Currently, we frequently are contacted at night to secure a door that was left open or propped. On any given day at Eaton High School, you will be able to find at least one exterior door that is supposed to be locked at all times propped open. Community members and visitors can freely enter the buildings through propped doors or piggybacking on another visitor who was granted entrance. We are fortunate that so far we have not experienced an emergency event because someone was able to enter a building unsupervised, but the opportunity is there. Most voters in the Weld County RE-2 School District (Eaton) supported the security and safety portion of the November 2018 bond however when encompassed with other district-wide changes; this urgent need could not be met. The BEST Steering Committee recognized the critical need to secure our perimeters and agreed that waiting until November for another ballot opportunity was not in the best interest of our students and of course, their parents' concerns. Securing \$192,203.00 in funds from the School Security Disbursement Grant Program provides additional urgency to leverage those grant funds to complete a comprehensive school safety project. Additionally, it is imperative that our district work towards meeting, if not exceeding the public-school facility construction guidelines and with the assistance of the BEST funding, this vital issue can be met. Ensuring the safety of our students and staff is an urgent priority for our district.

**Does this Project Conform with the Public School Facility Construction Guidelines?** Yes

**If not, provide an explanation for the use of any standard not consistent with the guidelines:**

## How Does the Applicant Plan to Maintain the Project if it is Awarded?

The Weld County School District RE-2 (Eaton) consists of 5 school campuses (serving 1986 students), a district office, a food service building, a transportation facility, a maintenance facility, and a technology services building. The capital renewal budget allocations for the past five fiscal years were as follows:

14-15 = \$981,970

15-16 = \$549,500

16-17 = \$577,500

17-18 = \$597,500

18-19 = \$770,000

The district has highly qualified and well-trained maintenance staff. The maintenance team has developed facilities master plan building standards around controls, mechanical systems, instructional technology, entry systems, and roofing systems. This is demonstrated by Benjamin Eaton Elementary school that is now 16 years old but still looks brand new. The district will also capitalize on this opportunity to provide staff with professional development in maintaining new systems and finishes.

**Describe the condition of the public school facility at the time it was purchased or constructed and, if the facility was not new or was not adequate as a public school facility at that time, provide the rationale for purchasing the facility or constructing it in the manner in which you did:**

All five schools were built as new school projects. Benjamin Eaton Elementary was built in 2003, Eaton Elementary was built in 1955, Galeton Elementary was built in 1918, Eaton Middle School was built in 1977, and Eaton High School was built in 1928.

**Describe the history of capital improvements made to the facility by the district/charter school in order to make it suitable for students. Include a list of all capital projects undertaken in the affected facility in the last 3 years:**

School facility projects took place across the district to add capacity and maintain existing facilities. EES added new classrooms

## BEST FY2019-20 GRANT APPLICATION SUMMARIES

in 1968 and 4 modular classrooms were installed in 2010. Galeton Elementary was remodeled in 1968 and again in 1988 to accommodate elementary students. Eaton Middle School added a 6th-grade classroom wing in 2004. Eaton High School had major renovations in 1962 and 1988. The cafeteria and administrative support center were renovated in 2003. The district completed a lease-purchase project in 2006 to replace boilers and airflow piping at various schools to improve energy consumption. EHS was approved for a BEST grant in 2011 to abate asbestos, replace heating water, and replace domestic hot water piping. Capital projects that have taken place in the last three years include repairs to roofs and windows that have been damaged by hail in all buildings.

**What options outside of the BEST grant has the applicant investigated or leveraged to address the school's facility needs?**

Recently, the district was awarded a grant for \$192,203.00 from the School Security Disbursement Grant fund that we will be able to dovetail into the safety and security goals of this application and provide additional matching funds necessary to finance the project. While this does not complete our match, it certainly reduces the burden and will allow us to seek a more comprehensive solution to school security.

**How do you budget annually to address capital outlay needs in your district/charter? Include \$/FTE for the prior fiscal year:**

The District prioritizes its facilities capital needs projects. The Group Priorities are 1's, 2's & 3's. The 1's being the highest priorities. The Scope of Work for each project is described in detail to help determine the Group Priority. Typically there are so many needs within the District for maintaining the facilities that we usually don't get to the 2nd tier of priorities.

For the fiscal year 2018-19, the General Fund transferred to the Capital Reserve / Capital Projects fund an amount equal to \$292.86 per pupil or \$560,000. Although as of 2009-10 the minimum allocation per pupil amount went away the District maintained the amount.

**If relevant to your project, what are your current annualized utility costs, and what amount of reduction in such costs do you expect to result from this project?**

NA

<b>Grant Request:</b>	\$478,886.40	<b>CDE Minimum Match %:</b>	76%
<b>Applicant Match:</b>	\$1,516,473.60	<b>Actual Match % Provided:</b>	76%
<b>Total Project Cost:</b>	\$1,995,360.00	<b>Is a Waiver Letter Required?</b>	No
<b>Affected Sq Ft:</b>	317,245	<b>Contingent on a 2019 Bond?</b>	No
<b>Affected Pupils:</b>	1,915	<b>Source of Match:</b>	2019 Bond Election or General Fund
<b>Cost Per Sq Ft:</b>	\$6.29		
<b>Soft Costs Per Sq Ft:</b>	\$1.10	<b>Escalation %:</b>	6%
<b>Hard Costs Per Sq Ft:</b>	\$5.19	<b>Construction Contingency %:</b>	10%
<b>Cost Per Pupil:</b>	\$1,042	<b>Owner Contingency %:</b>	12%
<b>Gross Sq Ft Per Pupil:</b>	166	<b>Historical Register?</b>	Yes
<b>Is a Master Plan Complete?</b>	Yes	<b>Adverse Historical Effect?</b>	No
<b>Who owns the Facility?</b>	District	<b>Does this Qualify for HPCP?</b>	No

**If owned by a third party, explanation of ownership:**

**If match is financed, explanation of financing terms:**

**Financial Data (School District and BOCES Applicants)**

<b>District FTE Count:</b>	1,866	<b>Bonded Debt Approved:</b>	
<b>Assessed Valuation:</b>	\$438,235,510	<b>Year(s) Bond Approved:</b>	



# BEST FY2019-20 GRANT APPLICATION SUMMARIES

<b>PPAV:</b>	\$234,916	<b>Bonded Debt Failed:</b>	\$75,000,000
<b>Unreserved Gen Fund 17-18:</b>	\$3,631,110	<b>Year(s) Bond Failed:</b>	18
<b>Median Household Income:</b>	\$76,173	<b>Outstanding Bonded Debt:</b>	\$4,115,000
<b>Free Reduced Lunch %:</b>	33%	<b>Total Bond Capacity:</b>	\$87,647,102
<b>Existing Bond Mill Levy:</b>	2.388	<b>Bond Capacity Remaining:</b>	\$83,532,102
<b>3yr Avg OMFAC/Pupil:</b>	\$1,417.33		







**DIVISION OF CAPITAL CONSTRUCTION**

**MAY 2019**