Schedule 13

Department of Governor's Office

Funding Request for The FY 2019-20 Budget Cycle

Request Title

R-01 (CEO) EV Grant Fund Spending Authority Increase

Dept. Approval By: _(signature)_

OSPB Approval By: _(signature)_

_____ Supplemental FY 2018-19

_____ Budget Amendment FY 2019-20

__X__ Change Request FY 2019-20

Summary Information	Fund	FY 2018-19 Initial Appropriation	FY 2018-19 Supplemental Request	FY 2019-20 Base Request	FY 2019-20 Change Request	FY 2020-21 Continuation
	Total	$313,000	$0	$313,000	$723,204	$968,980
	FTE	0.0	0.0	0.0	0.0	0.0
Total of All Line Items Impacted by Change Request	GF	$0	$0	$0	$0	$0
	CF	$313,000	$0	$313,000	$723,204	$968,980
	RF	$0	$0	$0	$0	$0
	FF	$0	$0	$0	$0	$0

Line Item Information	Fund	FY 2018-19 Initial Appropriation	FY 2018-19 Supplemental Request	FY 2019-20 Base Request	FY 2019-20 Change Request	FY 2020-21 Continuation
	Total	$313,000	$0	$313,000	$723,204	$968,980
	FTE	0.0	0.0	0.0	0.0	0.0
01. Office of the Governor, (C) Colorado Energy Office, (1) Colorado Energy Office - Electric Vehicle Charging Station Grants	GF	$0	$0	$0	$0	$0
	CF	$313,000	$0	$313,000	$723,204	$968,980
	RF	$0	$0	$0	$0	$0
	FF	$0	$0	$0	$0	$0

Auxiliary Data

Requires Legislation? NO

Type of Request? Department of Governor's Office Prioritized Request

Interagency Approval or Related Schedule 13s: No Other Agency Impact

Cost and FTE
● The Colorado Energy Office (CEO) requests a cash fund spending authority increase of $723,204 for the Electric Vehicle Grant Fund ("EV Grant Fund") to align with fee revenue projections through FY 2020-21. This request will allow the Office to spend funds that will be collected next year. This is an increase of 231 percent.
Current Program
● CEO uses the funding from the EV Fund for the Charge Ahead Colorado program which provides competitive grants for the installation of charging stations across the state. ● Electric Vehicle (EV) owners pay an additional $50 vehicle registration fee (42-3-304. C.R.S.), $30 of which goes to the Highway Users Trust Fund in lieu of gas taxes. The remaining $20 provides revenue for the EV Fund and fulfils CEO's statutory requirements in 24-38.5-103 C.R.S. to provide grants for charging stations. ● A competitive grant process takes place three times per year and awards are made to successful public and private applicants. Grants are made for installation at workplaces, parking lots and garages, multi-family dwellings, and municipal facilities. Grants cover up to 80 percent of project costs up to a cap based on charging station type. To date, the EV Fund has provided 73 grants and demand for the program continues to grow. In the most recent funding round which closed in June of 2018, CEO received applications for 39 stations totaling $573,000 in funding requests.
Problem or Opportunity
● Current spending authority of $313,000 allows CEO to spend revenue associated with 15,650 registrations annually. CEO anticipates meeting that level of vehicle registrations in FY 2018-19. ● Demand for grants for charging infrastructure is growing. In FY 2017-2018, CEO received $793,455 in grant funding applications through Charge Ahead Colorado, and the EV Fund has provided 73 grants and demand for the program continues to grow each year. ● The lack of EV charging infrastructure is one of primary barriers to greater adoption of EVs. Increasing the number of charging stations in Colorado helps give consumers confidence in the decision to purchase an EV.
Consequences of Problem
● The lack of EV charging infrastructure is one of the primary barriers to greater adoption of EVs. Increasing the number of charging stations in Colorado helps give consumers confidence in the decision to purchase an EV. ● Providing CEO has sufficient spending authority for cash fund fee revenue ensures customers paying the fee receive the benefit of access to charging infrastructure. Leaving these dollars unspent does not provide a benefit to the drivers contributing annual registration fees.
Proposed Solution
● CEO proposes a cash fund spending authority increase of $723,204 (to $1,036,204) for the EV Fund.

Department Priority: R-01
Request Detail: EV Grant Fund Spending Authority Increase

Summary of Incremental Funding Change for FY 2019-20	Total Funds	General Fund
EV Grant Fund Spending Authority Increase	$723,204	$0

Problem or Opportunity:

- The Colorado Energy Office (CEO) is projected to need additional spending authority for the Electric Vehicle Grant Fund (EV Fund) following FY 2018-19. Electric Vehicle (EV) owners pay an additional $50 vehicle registration fee (42-3-304. C.R.S.), $30 of which goes to the Highway Users Trust Fund (43-4-201 C.R.S.) in lieu of gas taxes. The remaining $20 provides revenue for the EV Fund and fulfils CEO's statutory requirements in 24-38.5-103 C.R.S. to provide grants for charging stations.

- As EV adoption grows, the need for charging infrastructure will also increase. CEO uses the funding from the EV Fund for the Charge Ahead Colorado program, which provides competitive grants for the installation of charging stations across the state through three funding rounds each year.
    - Charge Ahead Colorado currently offers grants for up to 80 percent of the cost of a charging station up to the following set maximums: Level 2, Dual Port Station: $9,000 and Level 3, Multiple Connection Standard Station: $30,000.
    - To date, the EV Fund provided 73 grants and demand for the program continues to grow each year. In FY 2017-18, CEO received $793,455 in funding requests through Charge Ahead Colorado. In the first grant round for FY 2018-2019, CEO received applications for $573,000, 72 percent of what was received in 3 rounds the previous year.

- Current spending authority of $313,000 cash funds allows CEO to spend revenue associated with 15,650 registrations annually. CEO anticipates exceeding that level of vehicle registrations in FY 2018-19.

- In 2009, S.B.09-075 created the EV Fund for CEO to provide grants to local governments to install EV charging stations. At the time, no state dollars were appropriated and CEO was limited to funding stations out of gifts, grants, donations, or other existing funds. In 2013, the General Assembly provided a funding source through H.B.13-1110, which created a $50 annual EV registration fee. In 2013 and 2014, S.B.13-126 and S.B.14-028 expanded eligible recipients of the EV Fund beyond local governments. CEO received $313,000 in spending authority for the fund beginning in FY 2015-16.

- The lack of EV charging infrastructure is one of the primary barriers to greater adoption of EVs. Increasing the number of charging stations in Colorado helps give consumers confidence in the decision to purchase an EV. Providing CEO with sufficient cash fund spending authority for the collected fee revenue ensures customers paying the fee receive the benefit of access to charging infrastructure.

- CEO requests to increase spending authority for the EV Fund by $723,204 to $1,036,204, which is projected to provide be sufficient cap room through FY 2019-20 to ensure CEO is able to fully use of the fee revenue contributed by EV drivers to benefit those customers and remain responsive to the growing EV market.
- Beyond the issue of just exceeding the current spending authority cap in FY 2018-19, EV sales are forecasted to have strong growth (see Figures 1-3 below).
  - o There was a 53 percent increase in EV sales in Colorado (4,156 in 2017 up from 2,711 in 2016)
    - ▪ This represents 2 percent of new light duty vehicle sales for 2017, up from 1.2 percent in 2016.
  - o As of May 2018, 14,468 vehicles have been sold in Colorado.
  - o Based on U.S. Energy Information Administration (EIA) EV market projections and in line with CEO's strategies to drive uptake of EVs, CEO's Strategic Policy Initiative #1 includes increasing the number of *new* EVs sold on an annual basis from 4,156 in FY 2017-18 to 19,000 by FY2020-21.
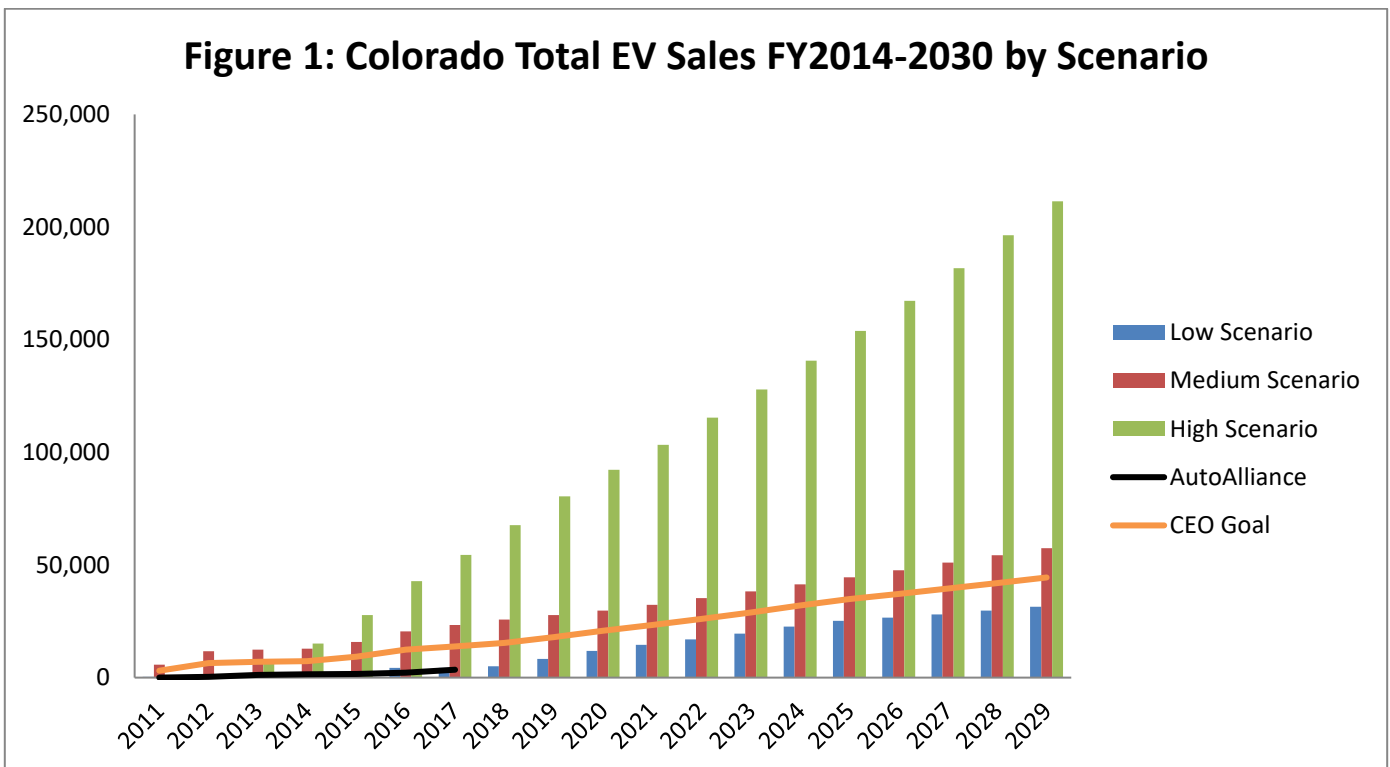 - o Colorado is trending between EIA's low and medium growth scenarios.

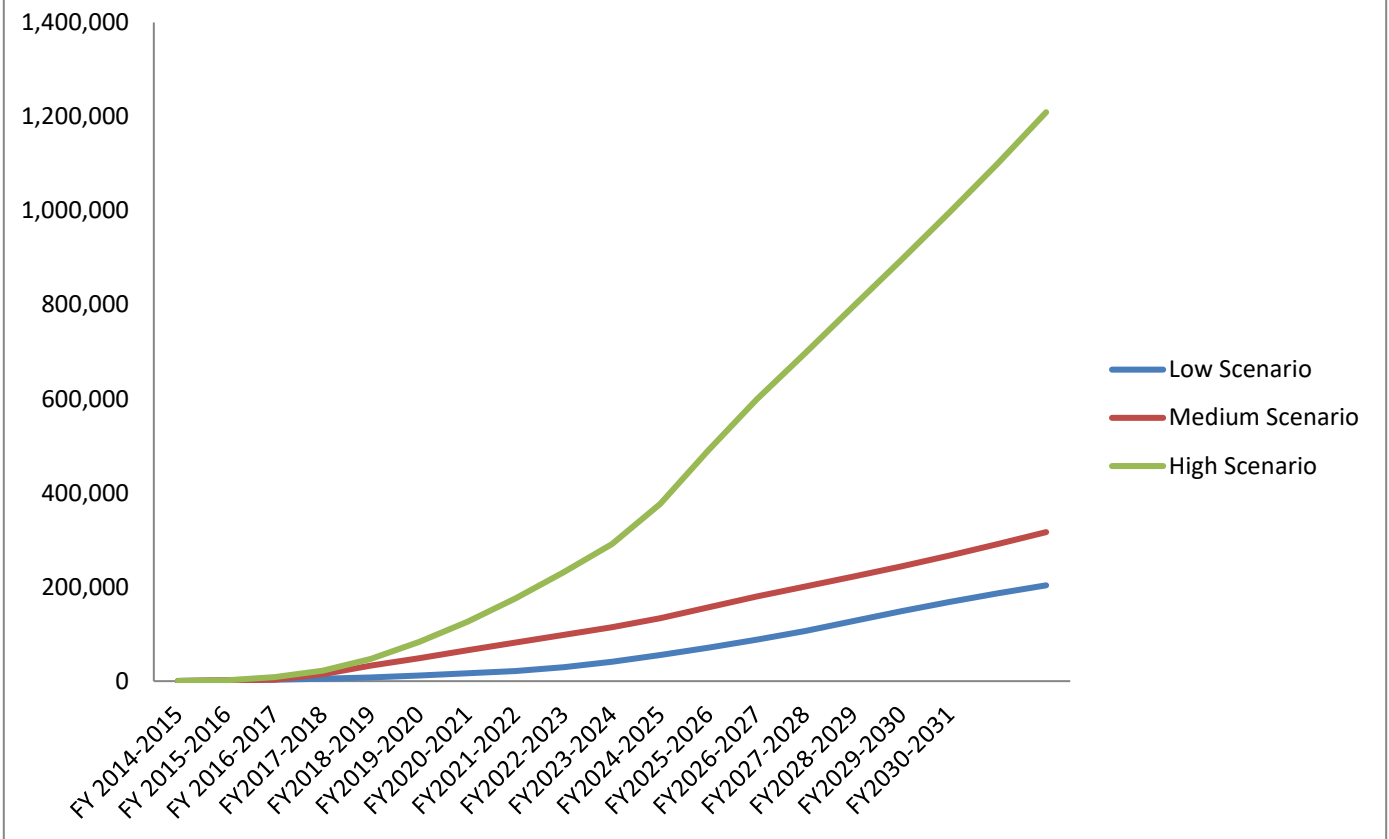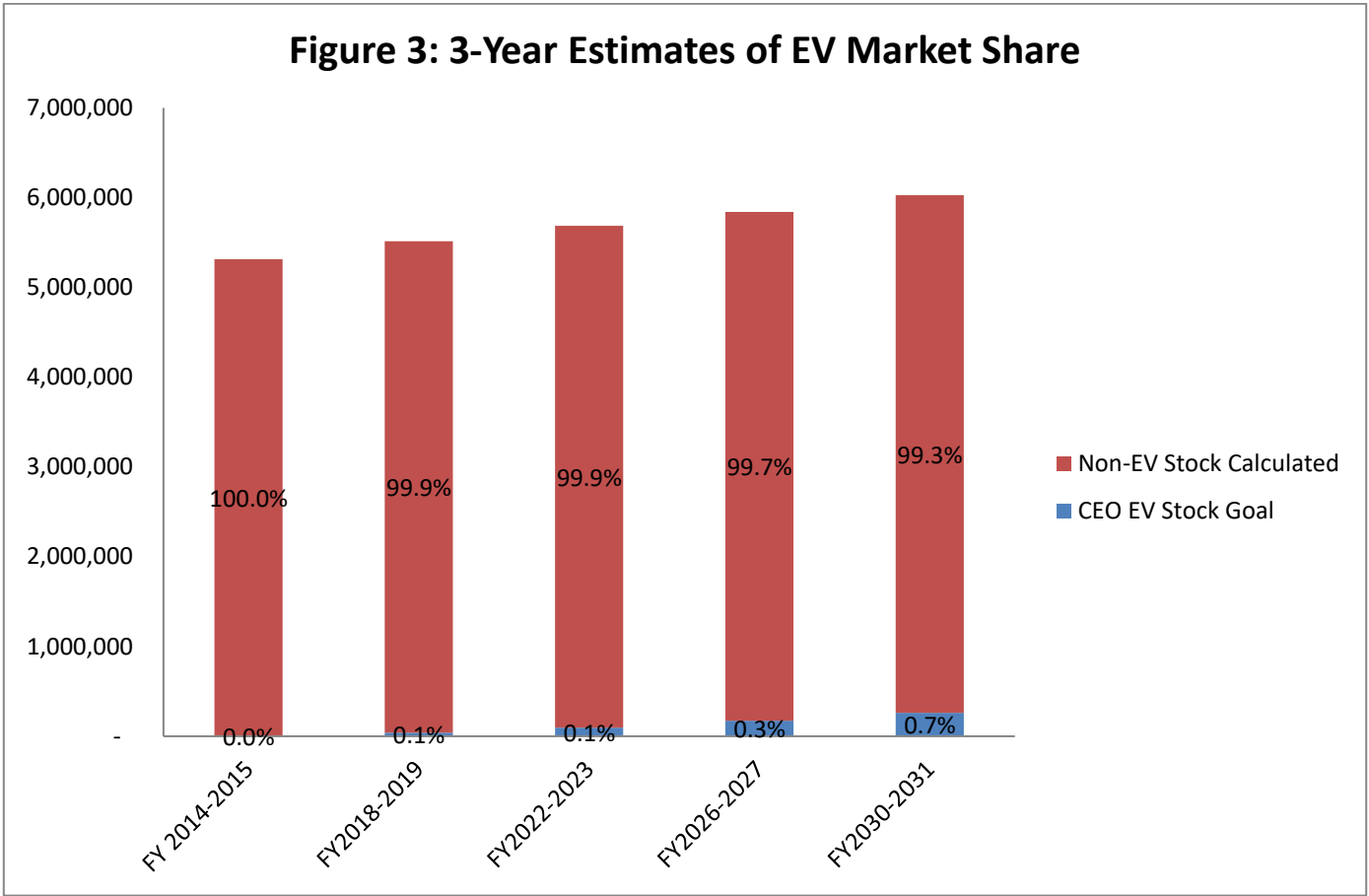Figure 1: Colorado Total EV Sales FY2014-2030 by Scenario

Figure 2: Colorado EV Stock Growth to 2030 by Scenario

- Low Scenario
- Medium Scenario
- High Scenario

Figure 3: 3-Year Estimates of EV Market Share

7,000,000					
6,000,000					
5,000,000					
4,000,000					
3,000,000	100.0%	99.9%	99.9%	99.7%	99.3%
2,000,000					
1,000,000					
-	0.0%	0.1%	0.1%	0.3%	0.7%
	FY 2014-2015	FY2018-2019	FY2022-2023	FY2026-2027	FY2030-2031

Legend:
- Non-EV Stock Calculated
- CEO EV Stock Goal

Anticipated Outcomes:

- Increasing spending authority to $1,036,204 aligns spending authority with fee revenue projections through FY 2020-21 and support charging infrastructure to help spur that adoption rate. As a result, this would also allow CEO to meet annual operational measures related to charging installation.
- Increasing spending authority ensures that CEO can continue to meet the demands of the growing EV market.

Assumptions and Calculations:

Figure 5 contains EV Fund revenue projection scenarios. CEO's revenue projection is based on several market growth scenarios, including projections from the U.S. Energy Information Administration (EIA).

Figure 5: Revenue Projections	Low EIA Projection - EV Stock	Medium EIA Projection - EV Stock	High EIA Projection - EV Stock	Low EIA Projection - EV Fund	Medium EIA Projection - EV Fund	High EIA Projection - EV Fund	CEO EV Stock Goal – Revenue Projection
FY 2014-2015	3,241	3,238	8,477	$64,810	$64,760	$169,531	$ 93,960*
FY 2015-2016	5,009	14,848	22,449	$100,178	$296,954	$448,975	$138,540*
FY 2016-2017	7,801	33,168	47,112	$156,022	$663,363	$ 942,236	$208,740*
FY2017-2018	12,178	48,997	83,390	$243,554	$979,934	$1,667,804	$288,400*
FY2018-2019	16,478	65,495	126,254	$329,554	$1,309,900	$2,525,076	$819,727
FY2019-2020	21,518	82,103	176,206	$430,355	$1,642,054	$3,524,113	**$1,036,204**
FY2020-2021	29,758	98,356	232,000	$595,165	$1,967,116	$4,639,998	$1,281,141
FY2021-2022	41,548	114,359	291,709	$830,957	$2,287,179	$5,834,186	$1,559,068

*actual values

Supplemental, 1331 Supplemental or Budget Amendment Criteria:

Not Applicable

Schedule 13

Department of Governor's Office
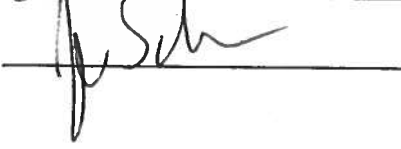
	Funding Request for The FY 2019-20 Budget Cycle

Request Title

R-01 (LG) Colorado Health IT Roadmap Operating

Dept. Approval By: _[signature]_

OSPB Approval By: _[signature]_

—		Supplemental FY 2018-19
—		Budget Amendment FY 2019-20
X		
—		Change Request FY 2019-20

Summary Information		FY 2018-19		FY 2019-20		FY 2020-21
	Fund	Initial Appropriation	Supplemental Request	Base Request	Change Request	Continuation
	Total	$0	$0	$0	$2,008,154	$6,465,845
Total of All Line Items Impacted by Change Request	FTE	0.0	0.0	0.0	2.7	3.0
	GF	$0	$0	$0	$0	$0
	CF	$0	$0	$0	$0	$0
	RF	$0	$0	$0	$2,008,154	$6,465,845
	FF	$0	$0	$0	$0	$0

Line Item Information		FY 2018-19		FY 2019-20		FY 2020-21
	Fund	Initial Appropriation	Supplemental Request	Base Request	Change Request	Continuation
	Total	$0	$0	$0	$2,008,154	$6,465,845
02. Office of the Lieutenant Governor, (A) Office of the Lieutenant Governor, (1) Office of the Lieutenant Governor - Office of eHealth Innovation	FTE	0.0	0.0	0.0	2.7	3.0
	GF	$0	$0	$0	$0	$0
	CF	$0	$0	$0	$0	$0
	RF	$0	$0	$0	$2,008,154	$6,465,845
	FF	$0	$0	$0	$0	$0

Auxiliary Data		
Requires Legislation? NO		
Type of Request?	Department of Governor's Office Prioritized Request	**Interagency Approval or Related Schedule 13s:** Impacts HCPF Medicaid

This page intentionally left blank.

OeHI
Office of eHealth Innovation

Cost and FTE

- The Office of eHealth Innovation (OeHI) is requesting $2,008,154 reappropriated funds and 2.7 FTE in FY 2019-20, and $6,465,845 reappropriated funds and 3.0 FTE ongoing to formally create the Office and fund operational components of the Office's capital construction request. Please note that all funds are reappropriated from the Department of Health Care Policy and Financing and include $1,011,017 General Fund in FY 2019-20, $3,372,367 General Fund in FY 2020-21, and $3,495,423 General Fund in FY 2021-22.

Current Program

- Executive Order B 2015-008 officially created the Governor's Office of eHealth Innovation and the eHealth Commission.
- The OeHI is responsible for defining, maintaining, delivering on, and evolving Colorado's Health IT strategy concerning care coordination, data access, healthcare integration, payment reform and care delivery.
- The Colorado Health IT Roadmap defines the strategic initiatives that will be used to lower costs, improve quality, and prepare the State for value-based payment models.

Problem or Opportunity

- Costly, disjointed, and poorly coordinated health care results in higher costs and less than optimal clinical outcomes.
- Sharing health information between providers, between service organizations, and with consumers is needed to help inform and coordinate care and services.

Consequences of Problem

- Without advancing Colorado's health information infrastructure, health costs will continue to rise as duplicative treatments and tests, which could have been avoided, persist.
- Without addressing and integrating the social determinants of health (data), poor health outcomes and higher costs will persist.
- Without preparing and advancing the health information infrastructure in Colorado (i.e. the ability to measure, share and report quality to payers), the State will be ill-prepared for value-based care.

Proposed Solution

- This request formally creates the Office of eHealth Innovation and provides funding for FTE to further the mission of the Office, which is to promote the expanded use of Health IT in Colorado.
- OeHI also requests funding for the operating costs of the work on the Colorado Health IT Roadmap. OeHI submitted a corresponding capital construction request to implement phase two initiatives. The operating costs will fund contractor funding that will be dedicated to leading teams and implementing the various phases of the roadmap.

This page intentionally left blank.

OeHI
Office of eHealth Innovation
FY 2019-20 Funding Request | November 1, 2018

John W. Hickenlooper
Governor

Mary Anne Leach
Director

Department Priority:	**R-01**
Request Detail:	**Colorado Health IT Roadmap Operating**

Summary of Incremental Funding Change for FY 2019-20	**Total Funds**	**General Fund***
Colorado Health IT Roadmap Operating Request	$2,008,154 (2.7 FTE)	$1,011,017

* Note that the funding requested is 100% reappropriated funds in the OeHI budget and the General Fund reflected is the General Fund impact as appropriated to the Department of Health Care Policy and Financing.

Problem or Opportunity:

Costly, disjointed, and poorly coordinated health care in Colorado results in higher costs and less than optimal clinical outcomes. Sharing health information between providers, service organizations, and with consumers is needed to help to inform and coordinate care and services. The Governor's Office of eHealth Innovation (OeHI) in partnership with the Department of Health Care Policy and Financing (HCPF), Colorado Public Health and Environment (CDPHE), Colorado Department of Health and Human Services (CDHS), Office of Information Technology (OIT), and the State Innovation Model (SIM) has an opportunity to fully implement the Colorado Health IT Roadmap (hereafter referred to as the Roadmap) to further the advancement of health information technology in Colorado. The Roadmap includes sixteen high-level actionable initiatives that can be used as a reference for evaluating the direction of existing and future Health IT projects.

Formal Office Creation
The OeHI is currently authorized through executive order and there is uncertainty as to whether ongoing funding will be provided to sustain the office. Without secured funding, there is no guarantee that the Roadmap would be fully implemented and objectives realized. A lack of funding would also lead to unsustainable leadership to see the Roadmap through design, development, implementation, and the creation of self-sustaining operations.

Operating Funds to Support Roadmap Initiatives
The OeHI was appropriated capital funding in FY 2018-19 to implement the phase one initiatives of the Roadmap to support health delivery reform, payment reform, improve care coordination, reduce costs, and ultimately improve the value Colorado and its citizens receive from health care investments and services. This funding is being used to develop the initiatives over multiple years. Once those initiatives are implemented, the OeHI would require ongoing funding to support the first stages of operations and maintenance of the new capabilities, while self-sustaining business models are implemented (e.g.

subscription services, user fees, etc.). There is currently no appropriation to support these efforts and without funding, the OeHI would not be able to sustain and maintain the new capabilities.

Proposed Solution:

The OeHI requests $2,008,154 total reappropriated funds and 2.7 FTE in FY 2019-20; $6,465,845 total reappropriated funds, and 3.0 FTE in FY 2020-21; and $6,465,845 total reappropriated funds and 3.0 FTE in FY 2021-22 to formally create the office and fund operational components of the office's capital construction request. All funds are reappropriated from the Department of Health Care Policy and Financing.

A corresponding non-prioritized request by HCPF has been submitted for $1,759,468 total funds, including $981,831 General Fund in FY 2019-20; $6,217,159 total reappropriated funds, including $3,343,181 General Fund in FY 2020-21; and $6,217,159 total reappropriated funds, including $3,466,237 General Fund in FY 2021-22 to support this OeHI request.

Formal Office Creation
To support the formal creation of the office, this request is for $458,154 total funds, including $111,017 General Fund in FY 2019-20 to formally establish the OeHI within the long bill and provide for three FTEs. The Department of Health Care Policy and financing is currently providing funding to support two of the positions through its Health Information Exchange Maintenance and Projects line item, however, HCPF is not able to sustain this indefinitely as there is need to direct those funds for the original intended purpose. These positions are for the Office Director and State Health IT Coordinator. This request is to appropriate funding and FTE for those positions to continue in their current roles. This request would also fund a Senior Program Assistant to support communications and administrative duties of the office. These positions require frequent travel for meetings and conferences and this request would support the travel and general operating need of the FTE. The Department of Health Care Policy and Financing will also be submitting a corresponding non-prioritized request that will decrease funding to the Health Information Exchange Maintenance and Projects line item by $248,686 total funds, including a reduction of $29,186 General Fund to account for the movement of responsibilities to OeHI.

Operating Funds to Support Roadmap Initiatives
To support the operations and maintenance of the capital construction projects, this request is for $1,550,000 total funds including $900,000 General Fund in FY 2019-20. The OeHI is focused on the development and implementation of three initiatives in FY 2018-19 that would require ongoing maintenance and support beginning in FY 2019-20.

Health IT Portfolio Management
The request is for $500,000 total funds dedicated to sustaining a Health IT Portfolio Management Office (PMO). This office will consist of up to seven (7) contracted project managers to help coordinate and manage the more than ninety information technology projects that are currently underway across the state, as well as to project-manage the key initiatives, programs, and projects that will be identified through the Roadmap working groups. A dedicated Health IT PMO would provide improved coordination of health IT projects, improved efficiencies, improved outcomes, leveraging scale and reducing costs. The estimates for this ongoing labor and support were provided by the Governor's Office of Information Technology (OIT).

<u>Colorado Consumer Health Portal</u>
This request is for $250,000 total funds dedicated to initial maintenance and labor support to maintain the portal once developed in FY 2018-19. This initiative is aimed at creating a platform for information availability, where consumers can become more informed partners in their care. For instance, the platform may provide access to health care costs, health plan quality, health provider quality, and provider services scores, so consumers (and possibly employers) can become more informed and empowered purchasers of health care services. To maintain the portal, the OeHI would fund initial costs associated with hosting and maintenance fees, which are estimated at $175,000 and initial labor and support for the portal, totaling $75,000. Longer term, the plan is to have this service sustained through partnerships, user fees, subscription services, and/or other revenue streams that would create a self-sustaining, consumer information service.

<u>Advancing Colorado's State Health Information Exchange (HIE) Infrastructure</u>
This request is for $500,000 total funds dedicated to the ongoing upgrades and maintenance of the state's HIE infrastructure. The funding would help to upgrade and maintain the new functionality, and possibly extend the scale of usage, while sustainable business models are developed for long-term operations, such as user fees, subscriptions, etc. HIE advances and enhancements that are currently being considered and evaluated include: enhancing the integration of behavioral health information, integration of social determinants of health and social services information, linking to a statewide provider directory, and improving the availability and completeness of medication information, among others.

<u>Systems Integrator</u>
This request is for $300,000 total funds dedicated to contracting with a vendor to serve as a Systems Integrator. This funding would be used to support multiple consultative roles to advise on infrastructure, architecture, and data integration to ensure interoperability of Colorado's core health information infrastructure, connections between systems, promote an efficient systems architecture, and to ensure that investments made through this request are modular, configurable, and scalable. Without a systems integrator, the state risks building a disjointed system architecture that will be costly to manage over time.

If this request is not approved, the Colorado Health IT Roadmap will likely not be implemented, and the objectives outlined in the Roadmap would not be achieved.

Anticipated Outcomes:

With the approval of this request, the OeHI anticipates a coordinated and sustained leadership to further the advancements in the health IT infrastructure and the Roadmap. The approval of this request would assist the OeHI with producing on-time, on-budget projects, that are coordinated and nonduplicative. This would occur through the Health IT PMO, engaging and sharing information for health care consumers in Colorado; through the Consumer Portal, improving functional capabilities that best serve healthcare stakeholders; through the advancement of HIEs; and finally improving systems integration and statewide architecture, through the Systems Integrator vendor.

Formal Office Creation

The OeHI assumes that the Office Director would be at an unclassified senior executive service level, the State Health IT Coordinator would be at a program management II classification and the Senior Program Assistant would be a program assistant II classification. The office frequently attends and hosts in-state and out-of-state conferences and hosts eHealth Commission meetings. Therefore, the OeHI requests additional general operating funds to attend such events to stay up-to-date with the relevant industry technology advances. The general operating costs also contain expenses for professional memberships, such as Strategic Health Information Exchange (SHIEC) and the College of Healthcare Information Management Executives (CHIME) and software, such as Microsoft Office, Clarity, and Visio. Costs for the memberships and software are based on current estimates of costs from the Department of Health Care Policy and Financing. The operating budget also includes support for communications expenses for printing, distributing and communicating the Health IT Roadmap, as ongoing communications help to ensure broader community alignment with key initiatives.

Specific activities (e.g. Salaries, Travel & Conferences and Professional Memberships) supporting the operations of OeHI qualify for the enhanced federal match through American Recovery and Reinvestment (ARRA) Act and the Health Information Technology for Economic and Clinical Health (HITECH) Act. These activities would qualify at 90% federal financial participation (FFP) through September 30, 2021. As a result, the OeHI leverages the enhanced match rate in FY 2019-20 and FY 2020-21, but reduces all match rates to the standard Medicaid match beginning in FY 2021-22.

Operating Funds to Support Roadmap Initiatives

The cost estimate for the Health IT PMO is based on estimates from vendors that are performing similar work in other states. The OeHI anticipates that the PMO would be established by October 2018. Between October 2018 and April 2019, the PMO vendor would assist the office with developing requirements and mapping out, and aligning, several key projects ongoing in, and across, the state. Between April 2019 and June 2019, the vendor and the Office would work to hire program managers who will be responsible for managing and/or coordinating the various projects. Beginning July 2019, the requested funds would pay for the ongoing labor costs of the PMO vendor and program managers.

The cost estimate for the Consumer Health Portal are based on market research and speaking with states that are developing similar platforms. These costs would cover software maintenance, support for upgrades, and support for contractors needed to support the new system until its funded via a subscription model. The Consumer Health Portal began identifying the needs and requirements in July 2018 and expects the requirement design phase to last through January 2019. Between January 2019 and June 2019, the portal will be developed and tested, with a anticipated go live in July 2019. At that point, there would be a need for ongoing maintenance and support, which is requested to begin in August 2019.

The cost estimate for advancing HIEs is based on market rate for developers and testers that would be required to update current systems with new functionality. Between July 2018 and October 2018, the OeHI will work with the eHealth Commission and an Advancing HIEs workgroup to identify, scope, and prioritize enhancements to the state's HIEs. Between October 2018 and June 2019, the office will contract with the

HIEs to develop the identified enhancements. Beginning in July 2019, the OeHI will be responsible for paying the licensing initial maintenance fees associated with the HIE enhancements, until a self-sustaining business model can be implemented.

The cost estimate for the Systems Integrator is based on costs from other states, specifically New York and Michigan, for completing similar work. The work that the systems integrator will perform would likely be performed through a combination of contracted vendors and OIT. The timeline for systems integration work began with OeHI and its contractors to develop a current state architecture, and identify future state integration opportunities. This work would take place between July 2018 and December 2018. The OeHI anticipates having a vendor under contract to perform systems integration work by January 2019, at which point they would begin to develop and implement the future-state architecture. This should be completed by July 2019, with integration and ongoing support to begin thereafter.

For detailed calculations, please see Appendix A. See Appendix B for the Colorado Health IT Roadmap.

	Table 1.1a: Request Year FY 2019-20 HCPF Summary by Line Item							
Row	Line Item	Total Funds	FTE	General Fund	Cash Funds	Reappropriated Funds	Federal Funds	Source
A	**Total FY 2019-20 Request**	**$1,759,468**	**0.0**	**$981,831**	**$0**	**$0**	**$777,637**	Row B
B	HCPF Long Bill * New Line Item *	$2,008,154	0.0	$1,011,017	$0	$0	$997,137	Table 2.1, Row Q
C	HCPF Long Bill - (1) Executive Directors Office (C) Information Technology Contracts and Projects, Health Information Exchange Maintenance and Projects	($248,686)	0.0	($29,186)	$0	$0	($219,500)	Table 6, Row C

	Table 1.1b: FY 2020-21 HCPF Summary by Line Item							
Row	Line Item	Total Funds	FTE	General Fund	Cash Funds	Reappropriated Funds	Federal Funds	Source
A	**Total FY 2020-21 Request**	**$6,217,159**	**0.0**	**$3,343,181**	**$0**	**$0**	**$2,873,978**	Row B
B	HCPF Long Bill * New Line Item *	$6,465,845	0.0	$3,372,367	$0	$0	$3,093,478	Table 2.2, Row Q
C	HCPF Long Bill - (1) Executive Directors Office (C) Information Technology Contracts and Projects, Health Information Exchange Maintenance and Projects	($248,686)	0.0	($29,186)	$0	$0	($219,500)	Table 6, Row C

	Table 1.1c: FY 2021-22 & Ongoing HCPF Summary by Line Item							
Row	Line Item	Total Funds	FTE	General Fund	Cash Funds	Reappropriated Funds	Federal Funds	Source
A	**Total FY 2021-22 Request**	**$6,217,159**	**0.0**	**$3,466,237**	**$0**	**$0**	**$2,750,922**	Row B
B	HCPF Long Bill * New Line Item *	$6,465,845	0.0	$3,495,423	$0	$0	$2,970,422	Table 2.3, Row Q
C	HCPF Long Bill - (1) Executive Directors Office (C) Information Technology Contracts and Projects, Health Information Exchange Maintenance and Projects	($248,686)	0.0	($29,186)	$0	$0	($219,500)	Table 6, Row C

Table 1.2a: Request Year FY 2019-20 OeHI Summary by Line Item								
Row	Line Item	Total Funds	FTE	General Fund	Cash Funds	Reappropriated Funds	Federal Funds	Source
A	**Total FY 2019-20 Request**	**$2,008,154**	**2.7**	**$0**	**$0**	**$2,008,154**	**$0**	Row B
B	GOV Long Bill * New Line Item *	$2,008,154	2.7	$0	$0	$2,008,154	$0	Table 1.1a, Row B Total Funds

Table 1.2b: FY 2020-21 OeHI Summary by Line Item								
Row	Line Item	Total Funds	FTE	General Fund	Cash Funds	Reappropriated Funds	Federal Funds	Source
A	**Total FY 2020-21 Request**	**$6,465,845**	**3.0**	**$0**	**$0**	**$6,465,845**	**$0**	Row B
B	GOV Long Bill * New Line Item *	$6,465,845	3.0	$0	$0	$6,465,845	$0	Table 1.1b, Row B Total Funds

Table 1.2c: FY 2021-22 & Ongoing OeHI Summary by Line Item								
Row	Line Item	Total Funds	FTE	General Fund	Cash Funds	Reappropriated Funds	Federal Funds	Source
A	**Total FY 2021-22 Request**	**$6,465,845**	**3.0**	**$0**	**$0**	**$6,465,845**	**$0**	Row B
B	GOV Long Bill * New Line Item *	$6,465,845	3.0	$0	$0	$6,465,845	$0	Table 1.1c, Row B Total Funds

Row	Item	Total Funds	FTE	General Fund	Cash Funds	Reappropriated Funds	Federal Funds	FFP or FMAP	Notes/Calculations
	Table 2.1 FY 2019-20 Operating Request Summary by Initiative								
	Establish Office of eHealth Innovation								
A	General Operating Costs	$108,500	0.0	$43,250	$0	$0	$65,250	60.14%	Table 4.1, Row G
B	FTE Costs	$349,654	2.7	$67,767	$0	$0	$281,887	80.62%	Row C + Row D + Row E
C	*FTE Salary, PERA, Medicare*	*$283,119*	*2.7*	*$53,392*	*$0*	*$0*	*$229,727*	*81.14%*	*FTE Calculations - Salary, PERA, Medicare*
D	*FTE AED, SAED, STD and HLD*	*$49,576*	*0.0*	*$10,417*	*$0*	*$0*	*$39,159*	*78.99%*	*FTE Calculations - AED, SAED, STD, HLD*
E	*FTE Operating Expenses*	*$16,959*	*0.0*	*$3,958*	*$0*	*$0*	*$13,001*	*76.66%*	*FTE Calculations - Operating Costs*
F	**Subtotal**	**$458,154**	**2.7**	**$111,017**	**$0**	**$0**	**$347,137**	**75.77%**	**Row A + Row B**
	Ongoing Operating Budget to Support Capital Construction Projects								
G	eCQM Reporting Tools and Registry	$0	0.0	$0	$0	$0	$0	50.00%	Table 3, Row D
H	Health IT Portfolio Management	$500,000	0.0	$250,000	$0	$0	$250,000	50.00%	Table 3, Row G
I	Master Data Management (MPI/MPD)	$0	0.0	$0	$0	$0	$0	50.00%	Table 3, Row K
J	Data Governance Tools and Processes	$0	0.0	$0	$0	$0	$0	50.00%	Table 3, Row O
K	Automated and Integrated Consent	$0	0.0	$0	$0	$0	$0	50.00%	Table 3, Row S
L	Colorado Consumer Portal for Health	$250,000	0.0	$250,000	$0	$0	$0	0.00%	Table 3, Row W
M	Advancing Colorado's State HIE Infrastructure	$500,000	0.0	$250,000	$0	$0	$250,000	50.00%	Table 3, Row Z
N	Technology Infrastructure for Care Coordination	$0	0.0	$0	$0	$0	$0	50.00%	Table 3, Row AC
O	Systems Integrator	$300,000	0.0	$150,000	$0	$0	$150,000	50.00%	Table 3, Row AF
P	**Subtotal**	**$1,550,000**	**0.0**	**$900,000**	**$0**	**$0**	**$650,000**	**41.94%**	**Sum of Rows G through O**
Q	**Total Request**	**$2,008,154**	**2.7**	**$1,011,017**	**$0**	**$0**	**$997,137**	**49.65%**	**Row F + Row P**

Row	Item	Total Funds	FTE	General Fund	Cash Funds	Reappropriated Funds	Federal Funds	FFP or FMAP	Notes/Calculations
	Table 2.2 FY 2020-21 Operating Request Summary by Initiative								
	Establish Office of eHealth Innovation								
A	General Operating Costs	$108,500	0.0	$43,250	$0	$0	$65,250	60.14%	Table 4.2, Row G
B	FTE Costs	$363,653	3.0	$69,771	$0	$0	$293,882	80.81%	Row C + Row D + Row E
C	*FTE Salary, PERA, Medicare*	*$308,881*	*3.0*	*$58,249*	*$0*	*$0*	*$250,632*	*81.14%*	*FTE Calculations - Salary, PERA, Medicare*
D	*FTE AED, SAED, STD and HLD*	*$51,922*	*0.0*	*$10,857*	*$0*	*$0*	*$41,065*	*79.09%*	*FTE Calculations - AED, SAED, STD, HLD*
E	*FTE Operating Expenses*	*$2,850*	*0.0*	*$665*	*$0*	*$0*	*$2,185*	*76.67%*	*FTE Calculations - Operating Costs*
F	**Subtotal**	**$472,153**	**3.0**	**$113,021**	**$0**	**$0**	**$359,132**	**76.06%**	**Row A + Row B**
	Ongoing Operating Budget to Support Capital Construction Projects								
G	eCQM Reporting Tools and Registry	$675,000	0.0	$337,500	$0	$0	$337,500	50.00%	Table 3, Row D
H	Health IT Portfolio Management	$930,000	0.0	$465,000	$0	$0	$465,000	50.00%	Table 3, Row G
I	Master Data Management (MPI/MPD)	$763,692	0.0	$381,846	$0	$0	$381,846	50.00%	Table 3, Row K
J	Data Governance Tools and Processes	$1,300,000	0.0	$650,000	$0	$0	$650,000	50.00%	Table 3, Row O
K	Automated and Integrated Consent	$450,000	0.0	$225,000	$0	$0	$225,000	50.00%	Table 3, Row S
L	Colorado Consumer Portal for Health	$525,000	0.0	$525,000	$0	$0	$0	0.00%	Table 3, Row W
M	Advancing Colorado's State HIE Infrastructure	$500,000	0.0	$250,000	$0	$0	$250,000	50.00%	Table 3, Row Z
N	Technology Infrastructure for Care Coordination	$450,000	0.0	$225,000	$0	$0	$225,000	50.00%	Table 3, Row AC
O	Systems Integrator	$400,000	0.0	$200,000	$0	$0	$200,000	50.00%	Table 3, Row AF
P	**Subtotal**	**$5,993,692**	**0.0**	**$3,259,346**	**$0**	**$0**	**$2,734,346**	**45.62%**	**Sum of Rows G through O**
Q	**Total Request**	**$6,465,845**	**3.0**	**$3,372,367**	**$0**	**$0**	**$3,093,478**	**47.84%**	**Row F + Row P**

Row	Item	Total Funds	FTE	General Fund	Cash Funds	Reappropriated Funds	Federal Funds	FFP or FMAP	Notes/Calculations
	Table 2.3 FY 2021-22 Operating Request Summary by Initiative								
	Establish Office of eHealth Innovation								
A	General Operating Costs	$108,500	0.0	$54,250	$0	$0	$54,250	50.00%	Table 4.3, Row G
B	FTE Costs	$363,653	3.0	$181,827	$0	$0	$181,826	50.00%	Row C + Row D + Row E
C	*FTE Salary, PERA, Medicare*	*$308,881*	*3.0*	*$154,441*	*$0*	*$0*	*$154,440*	*50.00%*	*FTE Calculations - Salary, PERA, Medicare*
D	*FTE AED, SAED, STD and HLD*	*$51,922*	*0.0*	*$25,961*	*$0*	*$0*	*$25,961*	*50.00%*	*FTE Calculations - AED, SAED, STD, HLD*
E	*FTE Operating Expenses*	*$2,850*	*0.0*	*$1,425*	*$0*	*$0*	*$1,425*	*50.00%*	*FTE Calculations - Operating Costs*
F	**Subtotal**	**$472,153**	**3.0**	**$236,077**	**$0**	**$0**	**$236,076**	**50.00%**	**Row A + Row B**
	Ongoing Operating Budget to Support Capital Construction Projects								
G	eCQM Reporting Tools and Registry	$675,000	0.0	$337,500	$0	$0	$337,500	50.00%	Table 3, Row D
H	Health IT Portfolio Management	$930,000	0.0	$465,000	$0	$0	$465,000	50.00%	Table 3, Row G
I	Master Data Management (MPI/MPD)	$763,692	0.0	$381,846	$0	$0	$381,846	50.00%	Table 3, Row K
J	Data Governance Tools and Processes	$1,300,000	0.0	$650,000	$0	$0	$650,000	50.00%	Table 3, Row O
K	Automated and Integrated Consent	$450,000	0.0	$225,000	$0	$0	$225,000	50.00%	Table 3, Row S
L	Colorado Consumer Portal for Health	$525,000	0.0	$525,000	$0	$0	$0	0.00%	Table 3, Row W
M	Advancing Colorado's State HIE Infrastructure	$500,000	0.0	$250,000	$0	$0	$250,000	50.00%	Table 3, Row Z
N	Technology Infrastructure for Care Coordination	$450,000	0.0	$225,000	$0	$0	$225,000	50.00%	Table 3, Row AC
O	Systems Integrator	$400,000	0.0	$200,000	$0	$0	$200,000	50.00%	Table 3, Row AF
P	**Subtotal**	**$5,993,692**	**0.0**	**$3,259,346**	**$0**	**$0**	**$2,734,346**	**45.62%**	**Sum of Rows G through O**
Q	**Total Request**	**$6,465,845**	**3.0**	**$3,495,423**	**$0**	**$0**	**$2,970,422**	**45.94%**	**Row F + Row P**

Row	Item	FY 2019-20	FY 2020-21	FY 2021-22	FFP	Notes / Calculations
	Table 3: Capital Construction Project Detail - Operating Budget					
A	**eCQM Reporting Tools and Registry**					
B	Ongoing Maintenance	$0	$400,000	$400,000	50%	Estimates are from preliminary Deloitte assessment; software maintenance fees, subscription fees, labor to support upgrades ($250,000 1 FTE of contract labor)
C	Labor and Support	$0	$275,000	$275,000	50%	
D	**Subtotal**	**$0**	**$675,000**	**$675,000**	**50%**	**Row B + Row C**
E	**Health IT Portfolio Management**					
F	Labor and Support	$500,000	$930,000	$930,000	50%	Estimates from OIT
G	**Subtotal**	**$500,000**	**$930,000**	**$930,000**	**50%**	**Row F**
H	**Master Data Management (MPI/MPD)**					
I	Ongoing Maintenance	$0	$388,692	$388,692	50%	Ongoing maintenance is subscription fees, software maintenance; estimated labor is for 3 contract staff at $125 per position based on vendor quote.
J	Labor and Support	$0	$375,000	$375,000	50%	
K	**Subtotal**	**$0**	**$763,692**	**$763,692**	**50%**	**Row I + Row J**
L	**Data Governance Tools and Processes**					
M	Ongoing Maintenance	$0	$550,000	$550,000	50%	Estimates from CORHIO's current costs for similar activities; software maintenance for tools; 2 FTEs for contract labor to support
N	Labor and Support	$0	$750,000	$750,000	50%	
O	**Subtotal**	**$0**	**$1,300,000**	**$1,300,000**	**50%**	**Row M + Row N**
P	**Automated and Integrated Consent**					
Q	Ongoing Maintenance	$0	$200,000	$200,000	50%	Ongoing subscription and/or mainteance fees
R	Labor and Support	$0	$250,000	$250,000	50%	Contract FTEs to support upgrades, etc.
S	**Subtotal**	**$0**	**$450,000**	**$450,000**	**50%**	**Row Q + Row R**
T	**Colorado Consumer Portal for Health**					
U	Maintenance and Hosting	$175,000	$350,000	$350,000	0%	Anticipating mid-year activation in FY 20; Full activation in FY 2020-21 and FY 2021-22
V	Labor and Support	$75,000	$175,000	$175,000	0%	Anticipating mid-year activation
W	**Subtotal**	**$250,000**	**$525,000**	**$525,000**	**0%**	**Row U + Row V**
X	**Advancing Colorado's State HIE Infrastructure**					
Y	Ongoing Maintenance	$500,000	$500,000	$500,000	50%	Software maintenance fees and support
Z	**Subtotal**	**$500,000**	**$500,000**	**$500,000**	**50%**	**Row Y**
AA	**Technology Infrastructure for Care Coordination**					
AB	Ongoing Operations	$0	$450,000	$450,000	50%	
AC	**Subtotal**	**$0**	**$450,000**	**$450,000**	**50%**	**Row AB**
AD	**Systems Integrator**					
AE	Ongoing Maintenance	$300,000	$400,000	$400,000	50%	
AF	**Subtotal**	**$300,000**	**$400,000**	**$400,000**	**50%**	**Row AE**
AG	**Total Request**	**$1,550,000**	**$5,993,692**	**$5,993,692**	**NA**	**Row D + Row G + Row K + Row O + Row S + Row W + Row Z + Row AC + Row AF**

Row	Item	Total Funds	General Fund	Cash Funds	Federal Funds	FFP	Notes / Calculations
	Table 4.1: FY 2019-20 General Operating Costs by Fund Split						
A	Travel & Conferences 90/10	$20,000	$2,000	$0	$18,000	90.00%	Various IT conferences, based on FY 2017-18 data
B	Travel & Conferences 50/50	$5,000	$2,500	$0	$2,500	50.00%	Various IT conferences, based on FY 2017-18 data
C	Intern	$41,600	$20,800	$0	$20,800	50.00%	$20/hr for full time work.
D	Commission Meetings	$25,000	$12,500	$0	$12,500	50.00%	Meetings for eHealth Commision (Space/Food/Etc.)
E	Memberships	$9,400	$4,700	$0	$4,700	50.00%	Professional Organization memberships
F	Software	$7,500	$750	$0	$6,750	90.00%	Initial and ongoing software costs
G	**Total Costs**	**$108,500**	**$43,250**	**$0**	**$65,250**	**60.14%**	**Sum of Rows A through E**

Row	Item	Total Funds	General Fund	Cash Funds	Federal Funds	FFP	Notes / Calculations
	Table 4.2: FY 2020-21 General Operating Costs by Fund Split						
A	Travel & Conferences 90/10	$20,000	$2,000	$0	$18,000	90.00%	Various IT conferences, based on FY 2017-18 data
B	Travel & Conferences 50/50	$5,000	$2,500	$0	$2,500	50.00%	Various IT conferences, based on FY 2017-18 data
C	Intern	$41,600	$20,800	$0	$20,800	50.00%	$20/hr for full time work.
D	Commission Meetings	$25,000	$12,500	$0	$12,500	50.00%	Meetings for eHealth Commision (Space/Food/Etc.)
E	Memberships	$9,400	$4,700	$0	$4,700	50.00%	Professional Organization memberships
F	Software	$7,500	$750	$0	$6,750	90.00%	Initial and ongoing software costs
G	**Total Costs**	**$108,500**	**$43,250**	**$0**	**$65,250**	**60.14%**	**Sum of Rows A through E**

Row	Item	Total Funds	General Fund	Cash Funds	Federal Funds	FFP	Notes / Calculations
	Table 4.3: FY 2021-22 General Operating Costs by Fund Split						
A	Travel & Conferences 90/10	$0	$0	$0	$0	90.00%	Various IT conferences, based on FY 2017-18 data
B	Travel & Conferences 50/50	$25,000	$12,500	$0	$12,500	50.00%	Various IT conferences, based on FY 2017-18 data
C	Intern	$41,600	$20,800	$0	$20,800	50.00%	$20/hr for full time work.
D	Commission Meetings	$25,000	$12,500	$0	$12,500	50.00%	Meetings for eHealth Commision (Space/Food/Etc.)
E	Memberships	$9,400	$4,700	$0	$4,700	50.00%	Professional Organization memberships
F	Software	$7,500	$3,750	$0	$3,750	50.00%	Initial and ongoing software costs
G	**Total Costs**	**$108,500**	**$54,250**	**$0**	**$54,250**	**50.00%**	**Sum of Rows A through E**

Table 5 - FTE Calculations

FTE Calculation Assumptions:

Operating Expenses -- Base operating expenses are included per FTE for $500 per year. In addition, for regular FTE, annual telephone costs assume base charges of $450 per year.

Standard Capital Purchases -- Each additional employee necessitates the purchase of a Personal Computer ($900), Office Suite Software ($330), and office furniture ($3,473).

General Fund FTE -- New full-time General Fund positions are reflected in Year 1 as 0.9166 FTE to account for the pay-date shift. This applies to personal services costs only; operating costs are not subject to the pay-date shift.

Expenditure Detail			FY 2019-20		FY 2020-21
Personal Services:					
Classification Title	Monthly	FTE		FTE	
SENIOR EXECUTIVE SERVICE	$10,417	0.9	$114,579	1.0	$125,004
PERA			$11,916		$13,000
AED			$5,729		$6,250
SAED			$5,729		$6,250
Medicare			$1,661		$1,813
STD			$218		$238
Health-Life-Dental			$7,927		$7,927
Subtotal Position 1, #.# FTE		**0.9**	**$147,759**	**1.0**	**$160,482**
Classification Title	Monthly	FTE		FTE	
PROGRAM MANAGEMENT III	$7,500	0.9	$82,494	1.0	$90,000
PERA			$8,579		$9,360
AED			$4,125		$4,500
SAED			$4,125		$4,500
Medicare			$1,196		$1,305
STD			$157		$171
Health-Life-Dental			$7,927		$7,927
Subtotal Position 2, #.# FTE		**0.9**	**$108,603**	**1.0**	**$117,763**
Classification Title	Monthly	FTE		FTE	
PROGRAM ASSISTANT II	$5,096	0.9	$56,052	1.0	$61,152
PERA			$5,829		$6,360
AED			$2,803		$3,058
SAED			$2,803		$3,058
Medicare			$813		$887
STD			$106		$116
Health-Life-Dental			$7,927		$7,927
Subtotal Position 3, #.# FTE		**0.9**	**$76,333**	**1.0**	**$82,558**
Subtotal Personal Services		2.7	$332,695	3.0	$360,803
Operating Expenses:					
		FTE		FTE	
Regular FTE Operating Expenses	$500	3.0	$1,500	3.0	$1,500
Telephone Expenses	$450	3.0	$1,350	3.0	$1,350
PC, One-Time	$1,230	3.0	$3,690	-	
Office Furniture, One-Time	$3,473	3.0	$10,419	-	
Other					
Other					
Other					
Other					
Subtotal Operating Expenses			$16,959		$2,850
TOTAL REQUEST		2.7	**$349,654**	3.0	**$363,653**
General Fund:			*$67,760*		*$69,768*
Cash funds:			*$0*		*$0*
Reappropriated Funds:			*$0*		*$0*
Federal Funds:			*$281,894*		*$293,885*

		Table 6: FY 2019-20 and Ongoing Reduction to HCPF Appropriation Health Information Exchange Maintenance and Projects				
Row	Item	Total Funds	General Fund	Cash Funds	Federal Funds	FFP
A	Salaries	($210,462)	($21,046)	$0	($189,416)	90.00%
B	General Operating	($38,224)	($8,140)	$0	($30,084)	78.70%
C	**Total**	**($248,686)**	**($29,186)**	**$0**	**($219,500)**	**88.26%**

Schedule 13

Department of Governor's Office

Funding Request for The FY 2019-20 Budget Cycle	
Request Title	
R-01 (OEDIT) Colorado Film Office Increase	

Dept. Approval By: _Chad Mitchell_

OSPB Approval By: _[signature]_

___	Supplemental FY 2018-19
___	Budget Amendment FY 2019-20
X	
___	Change Request FY 2019-20

Summary Information		FY 2018-19		FY 2019-20		FY 2020-21
	Fund	Initial Appropriation	Supplemental Request	Base Request	Change Request	Continuation
Total of All Line Items Impacted by Change Request	Total	$1,269,525	$0	$1,269,525	$1,250,000	$1,250,000
	FTE	4.5	0.0	4.5	0.0	0.0
	GF	$750,000	$0	$750,000	$1,250,000	$1,250,000
	CF	$519,525	$0	$519,525	$0	$0
	RF	$0	$0	$0	$0	$0
	FF	$0	$0	$0	$0	$0

Line Item Information		FY 2018-19		FY 2019-20		FY 2020-21
	Fund	Initial Appropriation	Supplemental Request	Base Request	Change Request	Continuation
	Total	$1,269,525	$0	$1,269,525	$1,250,000	$1,250,000
04. Economic Development Programs, (A) Economic Development Programs, (1) Economic Development Programs - Colorado Office of Film, Television, and Media	FTE	4.5	0.0	4.5	0.0	0.0
	GF	$750,000	$0	$750,000	$1,250,000	$1,250,000
	CF	$519,525	$0	$519,525	$0	$0
	RF	$0	$0	$0	$0	$0
	FF	$0	$0	$0	$0	$0

Auxiliary Data			
Requires Legislation?	NO		
Type of Request?	Department of Governor's Office Prioritized Request	**Interagency Approval or Related Schedule 13s:**	No Other Agency Impact

This page is intentionally left blank.

COLORADO

Office of Economic Development
and International Trade

Priority: R-01
OEDIT Colorado Film Office Increase
FY 2019-20 Change Request

Cost and FTE

- This request is for $1.25 million General Fund in FY 2019-20 and ongoing for the Colorado Office of Film, Television & Media (COFTM) to enable the continuation of the 20 percent rebate program for eligible film, television, and other creative production.

Current Program

- The COFTM rebate program includes a rebate for production-related expenses incurred in Colorado, subject to Economic Development Commission approval.
- While rebate recipients are production companies, this program impacts the broader community, supporting direct/indirect jobs and boosting economic and tourist activity, especially in rural areas.
- COFTM also provides location/permitting assistance, public relations, educational collaboration, and general support to the film industry.
- Data from Fiscal Years 2013-17 shows $14 million in incentives through the program, resulting in $96 million total production spend and $12 million estimated tax revenue.

Problem or Opportunity

- Additional funding would result in more jobs and increased expenditures across local communities in industries such as equipment and vehicle rentals, food, and hospitality.
- COFTM received $750,000 General Fund in FY 2017-18 and FY 2018-19, which was significantly lower than the $3.0 million General Fund it received in FY 2016-17 and FY 2015-16. This resulted in Colorado production spend decreasing by 75 percent and 60 percent fewer jobs created. Additional funding for COFTM incentives will reignite the momentum from previous fiscal years to grow and strengthen the local film industry. Since FY 2012-13, COFTM has incentivized over 70 projects, with 14 currently in production, and inquiries have increased.

Consequences of Problem

- Inconsistent funding discourages production in Colorado and adds risk to the local industry.
- Colorado will continue to lose productions to other states offering more incentive funding.
- Skilled workers in this industry will continue trend of moving to other states with more incentive funding.

Proposed Solution

- The proposed solution is to increase funding for COFTM for FY 2019-20 and ongoing with an additional $1.25 million General Fund to continue incentivizing production activities in Colorado.

This page is intentionally left blank.

COLORADO

Office of Economic Development
and International Trade

John W. Hickenlooper
Governor

Stephanie Copeland
Executive Director

FY 2019-20 Funding Request | November 1, 2018

Department Priority: R-01
Request Detail: Colorado Film Office Increase

Summary of Incremental Funding Change for FY 2019-20	Total Funds	General Fund
Colorado Film Office Increase	$1,250,000	$1,250,000

Problem or Opportunity:

The mission of the Colorado Office of Film, Television & Media (COFTM) is to promote Colorado as a location for making feature films, television shows, television commercials, and video games. To that end, over the past six years, COFTM has fostered an environment for media projects aimed at establishing a permanent creative workforce based in Colorado. COFTM's work ranges from large production incentives to on-the-ground education and programming for Colorado talent, especially in rural and mountain communities. From incentivizing productions in economically distressed counties such as Fremont and Teller, to production grants for recruitment videos for local communities including Meeker and Trinidad, COFTM has contributed significantly to Colorado's rural economies.

COFTM's support for education and professional development programs bolsters this growth and includes the Media Professionals Road Tour, the "Colorado Experience" Road Show, and the Screenplay Review Program. Each of these programs helps fund jobs, educate Colorado's workforce, and provides direct experience for those building their careers in this industry.

COFTM's incentive rebate program was designed to encourage film and media production in Colorado. When film and other productions are shot in Colorado, local workers are hired to staff projects, giving members of Colorado's production industry valuable experience that they can parlay into work on other productions. A developing and experienced crew base makes Colorado a more appealing location for future projects. When considering where to shoot, production companies consider the available talent pool. When Colorado is selected for projects, opportunities are created for Coloradans, and this adds to the industry's permanence. Over the past few years,

as more and more productions have filmed in Colorado, the experience and national reputation of Colorado's talent has improved.
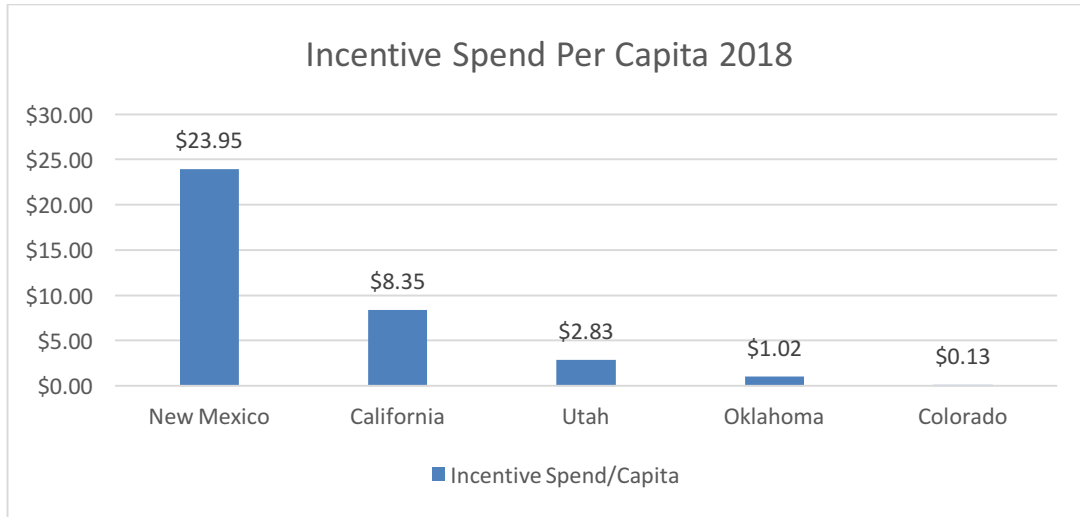
Film and television productions are overwhelmingly located in states that offer significant production incentives. The states that offer the highest levels of incentives are capturing the largest percentage of the nation's productions and, as a result, reaping the economic benefits. Most independent films are financed by small production companies that don't have access to the same capital as large studios. Tax incentives and cash rebates are a significant part of preparing budgets and are, therefore, important factors in picking the location where the film will be shot. Incentives also create a large return on investment for the state of Colorado, in fact, the $14.7 million paid by the state since the program's inception in 2012 has resulted in $12.3 million in estimated tax revenue and $102.7 million in total production spend. That is a net cost of $2.4 million to the state. (See Table 1.3 on page 11 of this request.)

In order to compete with other states for these economic benefits, Colorado must be able to offer financial incentives to attract these productions. Within the Western states that offer film incentive programs, Colorado is ranked last in the amount of incentive funding per capita (see charts below and on next page).

Given the current culture of film incentives across the country, and North America more broadly, producers seek filming destinations in large-part based on the availability of 'soft money.' If no additional General Fund dollars are appropriated to COFTM, then Colorado's incentive rebate program cannot compete with other states to incent production, and production companies will not select Colorado as a viable location to shoot feature films. Though some producers may bring their crew to Colorado to film two or three scenes, Colorado's workforce are not be hired for these short stints, and the state's rental houses and other secondary industries do not benefit from these activities. Two to three days of production has nowhere near the economic impact as a feature film with production activities based in Colorado. For example, in August 2018, *The Mule*, a picture starring and directed by Clint Eastwood filmed for two days in Trinidad, Colorado Springs, Fort Morgan, and Wiggins. The majority of the feature was filmed in Georgia (a state that offers an incentive of up to 30 percent with no cap), and the producing team brought their Georgia crew to Colorado to film a few driving scenes. *The Mule* crew dined in Trinidad and Fort Morgan and stayed in Colorado hotels for two evenings, however the production hired zero local crew and did not have the same impact on the state's economy that a month-long Colorado-based production would. OEDIT is requesting additional funding to help boost local economies and create jobs for current industry crew and new film school graduates, many of whom hold degrees from Colorado institutions of higher education.

Competing Western States Offering Film Incentives (2018)		
State	**Incentive**	**Allocated Fiscal Year Funds 2018**
California	20-25% tax credit	$330,000,000
New Mexico	25% Film tax credit 30% TV tax credit	$50,000,000
Utah	25% tax credit	$8,790,000
Oklahoma	35-37% rebate	$4,000,000
Colorado	20% rebate	$750,000
Source: State Film Commission Official Websites		

Incentive Spend Per Capita 2018

State	Incentive Spend/Capita
New Mexico	$23.95
California	$8.35
Utah	$2.83
Oklahoma	$1.02
Colorado	$0.13

The number of films, television shows, commercials, and video games funded by the current $750,000 General Fund appropriation would, similar to FY 2017-18 and FY 2018-19, allow for a small number of incentivized projects.

Any incentivized project must go through a thorough review to ensure minimum requirements are met. Each project is then considered on a case-by-case basis, and the Economic Development Commission (EDC) must approve any project accepted to the incentive program. With less funding than previous years, COFTM will only be able to incentivize smaller projects, resulting in smaller incentive amounts paid out to production companies (See Table 1.1 on next page).

Table 1.1 Fiscal Year 2018-19 COFTM General Fund Appropriation

General Fund				
General Fund Appropriation: $750,000				
FY2017-18 Rollover: $59,545				
Total: $809,545				
Production Company	**Title of Project**	**Approved Incentive**	**Anticipated Spend**	**Anticipated Hires**
RPM Events Group, LLC*	Colorado Classic 2018	$113, 218	$566,092	40
Exhibit A Pictures, LLC*	Dan O'Bannon's Alien	$29,508	147,540	9
Keep It Moving Productions, LLC*	Soul Custody	$38,846	$194,233	67
General Fund Remaining for FY2018-19: $627,973				
Cash Fund				
Cash Fund Allocation: $519,525				
• COFTM Salary & Benefits • Office Overhead & Supplies • Educational Scholarships • Educational Grants • Screenplay Reviews • Colorado Film Festival Sponsorships • Media Professionals Career Connection Road Tour • "Colorado Experience" Road Show • Additional Outreach and Educational Opportunities				

*Denotes Colorado-based production company

The downside to this tactic is that smaller projects lead to lower Colorado spend and fewer jobs. COFTM has already learned of a number of Colorado workforce, including two Academy Award-winning producers and 12 members of Colorado's International Alliance of Theatrical State Employees (IATSE) union, leaving the state for locations with ample film incentives. Table 1.2 reflects COFTM funding since 2014, and the projects and Colorado spend listed below are a result of local and out-of-state projects.

Table 1.2 COFTM Incentivized Projects FY2014-15 – FY2018-19

Year	Incentive Funding	Number of Projects Completed	Total Colorado Spend	Total Colorado Spend with Multiplier**	Cast & Crew Hires
FY 2014-15	$5,000,000	16	$42,554,231	$81,704,123	717
FY 2015-16	$3,000,000	13	$8,097598	$15,547,388	641
FY 2016-17	$3,000,000	11 (4 Still in Production)	$29,169,700*	$47,899,113	610*
FY 2017-18	$750,000	8 (4 still in Production)	$4,665,439*	$7,931,246	245*
FY 2018-19	$750,000	TBD (<10 Local Projects Anticipated)	TBD	TBD	TBD

*Number based on CPA final reports and estimated spend based on application materials for projects still in production.
** Multiplier calculated for COFTM by University of Colorado Leeds School of Business

- During FY 2017-18, eight projects were approved; four of these projects are still in production.
- Based on the figures provided in the project applications, COFTM expects FY 2017-18 projects to bring $4.6 million of economic impact to Colorado and create 245 new jobs.
- Economic impact of FY 2017-18 incentive program is 16 percent of the Colorado spend of FY 2016-17.
- Number of jobs created FY 2017-18 is 40 percent of the Colorado film jobs created in FY 2016-17.
- Two out-of-state production teams with films projecting a Colorado spend of $2.5 million and $7.0 million, learned that Colorado's FY 2018-19 appropriated funds did not allow for a full 20 percent performance-based rebate and subsequently sought alternative locations.
  - The $7.0 million film, based on events that took place in Aspen, relocated to Salt Lake City (Utah offers a 25 percent tax credit with $8.8 million allocated incentive funds).

Additional funding is necessary to increase this level of job creation and economic growth in the state. The graphs below illustrate incentive dollars to Colorado expenditures.

Film Incentives by Fiscal Year

Chart showing Average Total Production Expenditure (bars) and Average Incentive Paid (line) by fiscal year 2013–2018.

Film Incentives by Fiscal Year

Chart showing Number of Projects Incentivized by fiscal year 2013–2018.
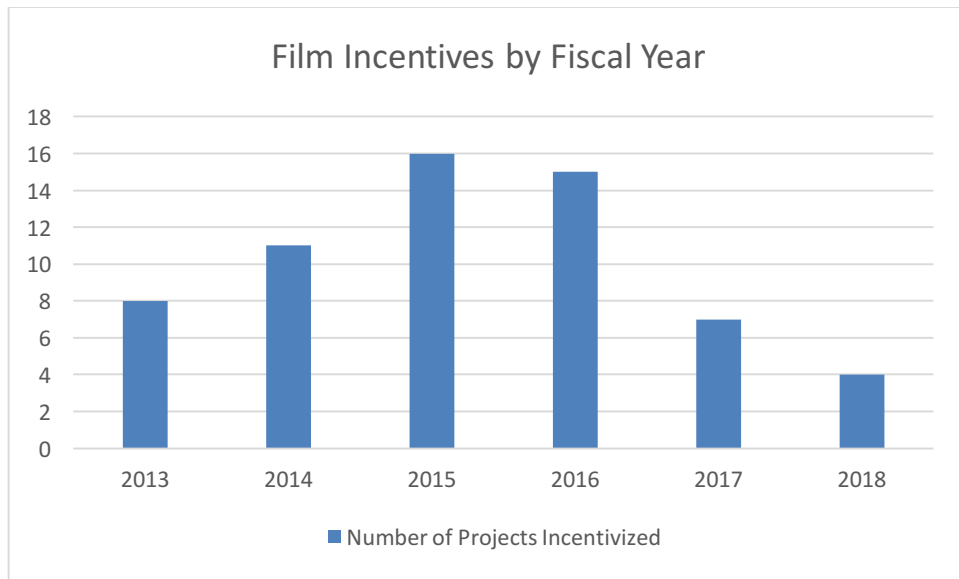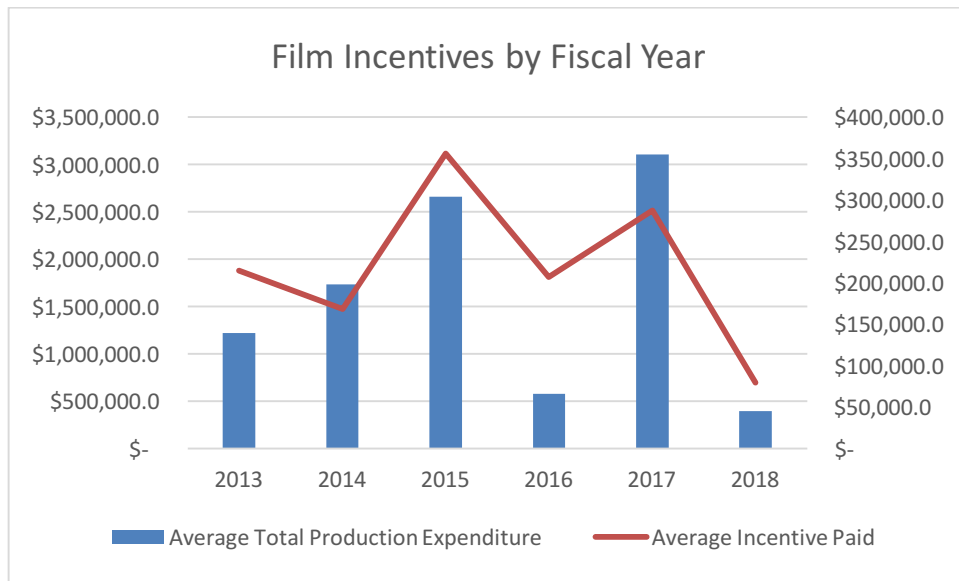
Accountability:

COFTM maintains close oversight over all beneficiaries of its programs, and as required by C.R.S. 24-48.5-116, all projects seeking the film incentive rebate must first be conditionally approved by the Colorado EDC. Upon completion of production activities, and prior to receiving an incentive, a production company must retain a Colorado CPA to review the reported qualified local expenditures. To be eligible for the rebate program, production companies must follow strict guidelines that benefit Colorado. For example, out-of-state production companies must spend at least $1.0 million in Colorado production activities, and Colorado production companies must spend at least $100,000. Both in- and out-of-state productions must hire a workforce of at least 50 percent Colorado residents, and all employees must pay Colorado income taxes.

6

As a result of the statutorily required 2017 COFTM performance audit, COFTM made changes to improve its incentive program and enhanced related internal controls. COFTM has implemented new processes to strengthen the incentive application process with a series of formal guidelines. Changes include a detailed tracking and scoring system to document all incentive inquiries in Salesforce, a content management system; expanded application guidelines which further define qualified (allowable) expenses; requiring distinct application forms for Colorado company and non-Colorado company applicants; and an updated 'proof of performance' form, which aids the evaluation of final project submissions.

Additionally, the COFTM team is now training interested and qualified Colorado CPAs on qualified Colorado expenditures and the program's statutory requirements, in addition to strengthening each CPA's knowledge of the film industry and COFTM's incentive program prior to commencing the required CPA reports. COFTM has also started using vendor and workforce reporting templates, which has streamlined COFTM's program analyst's reviews of each submitted CPA report.

Proposed Solution:

The proposed solution is to fund COFTM for FY 2019-20 and ongoing with an additional $1.25 million General Fund. This would increase COFTM's funding level and allow Colorado to grow the emerging film industry, creating more opportunities for the expanding local workforce. In addition to enticing filmmakers and television producers to the state by offering the incentive rebate, this program gives local projects the boost they need to successfully create productions in their home state and hire local crew, enabling Colorado talent to work where they live. Without this funding, efforts to cultivate the local industry and to attract productions from out of state will be severely handicapped. Furthermore, without these funds and without being able to work on large productions, the local workforce will suffer from lack of experience. A thriving film, television, and gaming industry engages developing *and* experienced crew. Diverse projects incentivized through COFTM add to the permanence of the industry given the growing pool of talent working across Colorado.

Anticipated Outcomes:

Attracting more projects to Colorado is part of a broader strategy to capture the economic value of Colorado's landscapes and build the necessary infrastructure to make Colorado attractive to the film industry. With an additional $1.25 million General Fund, COFTM expects total Colorado spend to be closer to the numbers from FY 2014-15 through FY 2016-17. Recent fiscal year reporting from neighboring states demonstrates the catalytic effect a higher film incentive cap has

on state economies[1] and on workforce development.[2] OEDIT believes the diverse projects incentivized through COFTM add to the permanence of the industry given the state's growing multi-talented workforce.

Production spending impacts the Colorado workforce, sub-industries, and local communities, and it allows Colorado to be competitive in the business of content creation.

Production spending and hiring includes:

- Producers, directors, and writers
- Actors, extras, and casting directors
- Carpenters, electricians, painters, scenic designers, and artists
- Makeup artists and hairdressers
- Costume designers and wardrobe personnel
- Editors, sound recorders, photographers, and musicians
- Food services employees and caterers
- Lawyers
- Truck drivers and location specialists
- Camera and lighting equipment rentals
- Dry cleaners, car rental agencies, suppliers of trailers and equipment, hotels, and apartment rentals

Many Colorado communities, urban and rural, benefit from money spent during productions. To date, we have worked with 53 of 64 Colorado counties, with a goal of impacting production in all 64 counties. As indicated above, a variety of local businesses are positively affected by film, television, and media projects. Productions also create new jobs and provide invaluable experience and training for new and existing workforce. The map on the following page illustrates the counties in which COFTM has worked and incentivized productions. With additional funding, COFTM hopes to demonstrate economic impact in all counties in the coming years.

---

[1] Governor Susana Martinez of New Mexico recently stated that her state saw that the FY 2016-17 film incentive "economic contribution shattered the previous record by more than $115 million and marks the third straight record-setting year for the industry." The total film industry spend that year was $505 million. ("Governor: Film Industry Infuses $505M in New Mexico Economy." The Associated Press. Web. August 10, 2017.)
[2] *Albuquerque Business First* reports "Data from the New Mexico Film Office states 61 major productions did the majority of their filming in New Mexico during fiscal year 2017. The industry also had more than 448,000 "worker days" that year." (Ortega, May. "NM film industry sees record-breaking boom." Albuquerque Business First. Web. August 10, 2017.)

TOTAL PRODUCTION SPEND OF COFTM PROGRAMS AND INCENTIVIZED FILM/TV PRODUCTION:

$85,653,529

- Includes direct spend to local business, hotels, restaurants, rental companies, etc., from 7/1/12 - 7/31/18. Does not include direct hire salaries.

- COFTM programs include film festival sponsorships, educational sponsorships, rural theater grants, scholarships to training programs, special screenings and other miscellaneous events.

(Spend from incentivized projects still in process are estimates provided from production companies).

Legend:
- >$24,000,000
- $10,000,000 - $19,999,999
- $5,000,000 - $9,999,999
- $3,000,000 – 4,999,999
- $1,000,000 – 2,999,999
- $500,000 - $999,999
- $300,000 - $499,999
- $150,000 - $299,999
- $50,000 - $149,999
- $15,000 - $49,000
- $100 - $14,999
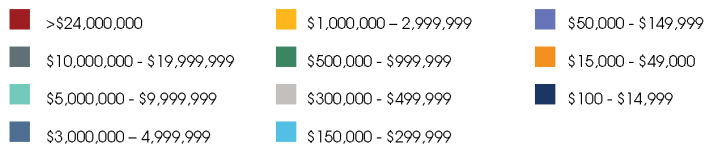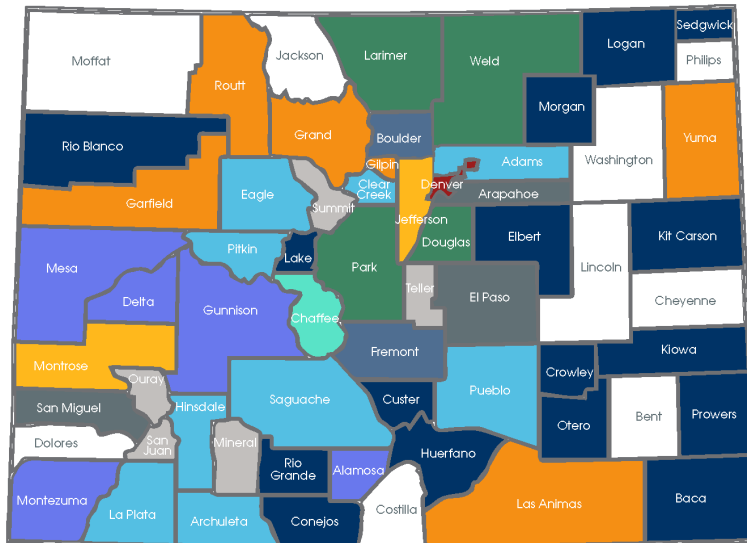
As mentioned above, with Cash Funds, COFTM supports and facilitates numerous projects each year beyond the film incentive program. The map on the following page illustrates the geographic reach of all COFTM programs, including incentives, film festival sponsorships, education grants, and other film outreach opportunities such as the "Colorado Experience" Road Show and the Media Professionals Road Tour.
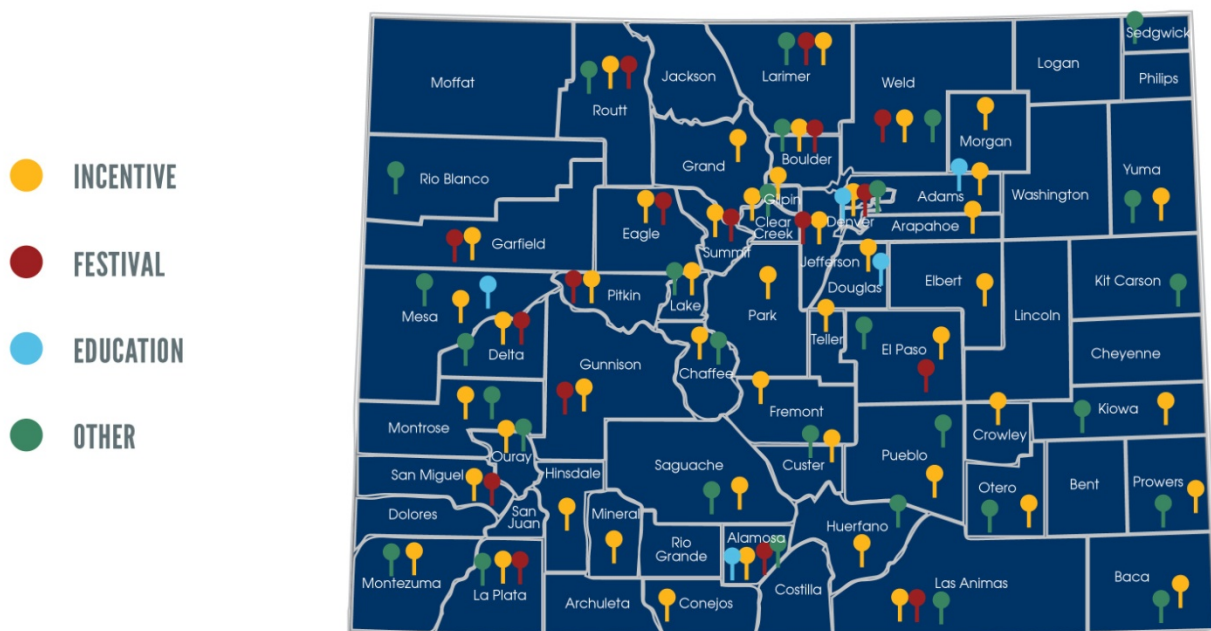
Colorado Film Tourism:

The film and television industries have a long lasting impact on tourism. COFTM and local tourism offices around the state receive numerous calls regarding the filming locations of various films, most notably, the Ouray and Ridgway locations of *True Grit* and the Durango locations of *Butch Cassidy and the Sundance Kid*. More recently, the Weather Channel's hit television show *Prospectors* has brought tourism to Salida and the Mt. Antero area, where much of the show is filmed. The critically acclaimed film *Cop Car*, starring Kevin Bacon, was filmed entirely in Fountain and Colorado Springs and premiered in theaters nationwide, leading to increased tourism in both locations. *Our Souls At Night*, a feature film developed by Netflix and starring Academy Award-winner Robert Redford was filmed in Florence, Cañon City and Colorado Springs. The film, which is based on a novel by Colorado author Kent Haruf created opportunities for 181 Colorado crew and 19 Colorado cast hires, with a total of $7,894,409 spent in Colorado.

COFTM has also collaborated with the Colorado Tourism Office (CTO) to bring high profile productions, such as Bravo TV's *Top Chef* to the state. In the spring of 2017, *Top Chef* filmed in various locations across Colorado, including Denver, Boulder and Telluride, leading to increased visibility of the state's communities and highlighting the emerging food scene to a broader audience. Season 15 of *Top Chef* premiered December 7, 2017. A recent Strategic Marketing and Research Insights (SMARI) study conducted by the CTO showed that *Top Chef* boosted awareness of Colorado as both a tourism and food destination (which drives travel both near- and long-term) among people who were exposed and not exposed to CTO's winter marketing campaign. The reach of this program extended beyond the Bravo TV audience, with published companion pieces in national periodicals such as *The New York Times*, *USA Today, People* magazine and *Food & Wine* magazine, and in local magazines *303* and *5280*. This project is a strong example of collaboration

across OEDIT and the multiple roles Colorado productions can play, providing opportunities for Colorado's workforce and allowing for statewide publicity to a national audience.

Assumptions and Calculations:

Since FY 2012-13, COFTM has received annual appropriations for the incentive rebate program and administrative costs. For FY 2018-19, a total of $1.25 million was appropriated to COFTM. This includes $750,000 General Fund for the incentive rebate program and just over $500,000 Cash Funds for operating expenses. In addition to funding salaries, software subscriptions, and general OEDIT office distribution, Cash Funds allow COFTM to facilitate numerous non-incentive film programs throughout the year. These programs include educational grants, film festival sponsorships, scholarships, screenplay reviews (which are offered free to Colorado scriptwriters), support of Regional Film Commissions, the Film Professionals Educational Road Tour, the "Colorado Experience" Road Show (screening Rocky Mountain PBS documentaries in rural communities), and more.

Table 1.3 Colorado Film Incentive Program Overview FY 2013-18

Colorado Film Incentive Program 2013-18	
Number of Completed Projects	61
Incentives Paid $14.7M	
Economic Impact	
Total Production Spend $102.7M[1]	
Estimated Tax Revenue $12.3M[2]	
Net Cost to State $2.4M	
Estimated ROI 44:1[3]	

[1] Total production spend is calculated from the production company's expenditures, which are submitted to COFTM as a requirement prior to issuance of the performance-based rebate. This documentation has been reviewed by a qualified Colorado CPA and COFTM's Program Analyst.

[2] Estimated Tax Revenue reflects taxes collected throughout the state and are calculated as a result of a study conducted by the University of Colorado Leeds School of Business.

[3] The estimated ROI reflects all incentivized projects. Please note that larger projects return a higher ROI due to COFTM's ability to negotiate an incentive up to 20%. For example, COFTM was able to negotiate a 9% incentive in FY 2016-17 for incentivized project, *Our Souls At Night*, which featured Robert Redford and Jane Fonda, and premiered on Netflix. The film spent $17.9M in Colorado expenditures.

The spending and job creation numbers come from actual expenditure and budget information provided in the incentive rebate applications. For other calculations, COFTM used data provided

by production companies and the University of Colorado Leeds School of Business 2011 "Economic and Fiscal Impact Analysis of Actual Film Budget Scenario on Colorado."

Schedule 13

Department of Governor's Office

Funding Request for The FY 2019-20 Budget Cycle

Request Title

R-01 (OIT) Essential Database Support

Dept. Approval By: _Bethany Nicholas_

OSPB Approval By: _[signature]_

Supplemental FY 2018-19

Budget Amendment FY 2019-20

X

Change Request FY 2019-20

Summary Information	Fund	FY 2018-19		FY 2019-20		FY 2020-21
		Initial Appropriation	Supplemental Request	Base Request	Change Request	Continuation
	Total	$22,513,044	$0	$22,563,878	$936,776	$899,152
	FTE	23.0	0.0	23.0	8.0	8.0
Total of All Line Items Impacted by Change Request	GF	$186,216	$0	$186,216	$0	$0
	CF	$0	$0	$0	$0	$0
	RF	$22,326,828	$0	$22,377,662	$936,776	$899,152
	FF	$0	$0	$0	$0	$0

Line Item Information	Fund	FY 2018-19		FY 2019-20		FY 2020-21
		Initial Appropriation	Supplemental Request	Base Request	Change Request	Continuation
	Total	$8,969,578	$0	$8,969,578	$63,418	$63,418
	FTE	0.0	0.0	0.0	0.0	0.0
05. Office of Information Technology, (A) OIT Central Administration, (1) OIT Central Administration - Health, Life, and Dental	GF	$101,562	$0	$101,562	$0	$0
	CF	$0	$0	$0	$0	$0
	RF	$8,868,016	$0	$8,868,016	$63,418	$63,418
	FF	$0	$0	$0	$0	$0

Line Item Information	Fund	FY 2018-19 Initial Appropriation	FY 2018-19 Supplemental Request	FY 2019-20 Base Request	FY 2019-20 Change Request	FY 2020-21 Continuation
05. Office of Information Technology, (A) OIT Central Administration, (1) OIT Central Administration - Short-term Disability	Total	$127,363	$0	$127,363	$1,289	$1,289
	FTE	0.0	0.0	0.0	0.0	0.0
	GF	$1,414	$0	$1,414	$0	$0
	CF	$0	$0	$0	$0	$0
	RF	$125,949	$0	$125,949	$1,289	$1,289
	FF	$0	$0	$0	$0	$0
05. Office of Information Technology, (A) OIT Central Administration, (1) OIT Central Administration - Amortization Equalization Disbursement	Total	$3,753,986	$0	$3,753,986	$33,929	$33,929
	FTE	0.0	0.0	0.0	0.0	0.0
	GF	$41,620	$0	$41,620	$0	$0
	CF	$0	$0	$0	$0	$0
	RF	$3,712,366	$0	$3,712,366	$33,929	$33,929
	FF	$0	$0	$0	$0	$0
05. Office of Information Technology, (A) OIT Central Administration, (1) OIT Central Administration - Supplemental Amortization Equalization Disbursement	Total	$3,753,986	$0	$3,753,986	$33,929	$33,929
	FTE	0.0	0.0	0.0	0.0	0.0
	GF	$41,620	$0	$41,620	$0	$0
	CF	$0	$0	$0	$0	$0
	RF	$3,712,366	$0	$3,712,366	$33,929	$33,929
	FF	$0	$0	$0	$0	$0
05. Office of Information Technology, (B) IT Infrastructure, (1) IT Infrastructure - Infrastructure Administration	Total	$5,908,131	$0	$5,958,965	$804,211	$766,587
	FTE	23.0	0.0	23.0	8.0	8.0
	GF	$0	$0	$0	$0	$0
	CF	$0	$0	$0	$0	$0
	RF	$5,908,131	$0	$5,958,965	$804,211	$766,587
	FF	$0	$0	$0	$0	$0

Auxiliary Data			
Requires Legislation?	NO		
Type of Request?	Department of Governor's Office Prioritized Request	**Interagency Approval or Related Schedule 13s:**	Impacts Other Agency

Cost and FTE
● The Governor's Office of Information Technology (OIT) requests an increase of $936,776 Reappropriated Funds in FY 2019-20 and 8.0 FTE, and $899,152 Reappropriated Funds in FY 2020-21 and ongoing to augment the OIT Database Services Team.

Current Program
● Currently the OIT Database Services Team supports databases at 15 different State agencies using 17.0 FTE. The State has 3,300 total databases that house a multitude of data that need to be supported and secured on a regular basis. ● State agencies rely on OIT to provide support services for their programs and databases are critical components of the applications that support these programs. The database framework of business needs are development, test, staging and production platforms. The current OIT database support model is a decentralized model where multiple teams are responsible for database support across the Executive Branch. Due to resource constraints, the Database Services Team supports only the production database environments. Staging, test and development environments are supported from FTE within other teams as their availability allows.

Problem or Opportunity
● Security of databases and State data is the first problem driving this request. The need to augment resources with non-database administrator staff causes problems with securing data effectively. It also prevents this team from enforcing database standards across the enterprise. ● Database workload has increased while resources have not. Over the past 10 years database software releases have become more complex with a higher learning curve for each new release. This complexity results in longer patch times and more in-depth tracking, taking more staff resource time to accomplish tasks. The number of databases has also increased statewide. ● Service capacity and overall availability is an issue, as OIT is unable to meet agency needs with current staffing, which has remained constant for 10 years. State agencies have recently embarked on very large and demanding projects, while the database resource pool has remained the same, causing support issues for database services. ● Adding 8.0 FTE to the database services team will enable all database environments to follow the same set of standards. These standards will improve data and database security across all environments, and enable faster response times for customer agencies.

Consequences of Problem
● The current, decentralized, database support model and inability to enforce the Database Administration Standards presents a risk to enterprise database consolidation. It also poses a real cyber security threat by not appropriately securing State data. In addition, the ability for OIT to plan for customer agencies database needs will continue to be a challenge unless staff support is added.

Proposed Solution
● This request will provide $936,776 Reappropriated Funds and 8.0 FTE in FY 2019-20, and $899,152 FY 2020-21 and beyond to expand the database services team. This will enable centralized management of State agency databases, increase service level support, and harden security risks associated with development, test, and staging databases.

This page is intentionally left blank.

COLORADO

Office of Information Technology

John W. Hickenlooper
Governor

Suma Nallapati
Secretary of Technology and Chief Information Officer

FY 2019-20 Funding Request | November 1, 2018

Department Priority: R-01
Request Detail: Essential Database Support

Summary of Incremental Funding Change for FY 2019-20	Total Funds	Reappropriated Funds
Essential Database Support	$936,776 (8.0 FTE)	$936,776 (8.0 FTE)

Customer Impact:

The Governor's Office of Information Technology (OIT) database services team is a service that is billed through its common policy portfolio to agencies as Reappropriated funds. The service is not mandatory and as such will only impact agencies that have existing databases or planned database projects that will be supported by OIT. Customer agencies will experience an increase in service reliability and reduced downtime for OIT-supported databases. Better security will be a critical outcome of this project, however if successful customer agencies should actually not see an impact day to day.

Problem or Opportunity:

With 3,300 total databases across the enterprise, the OIT database services team does not have sufficient staff resources to provide the necessary support to meet current statewide database requirements. The three major issues that result from this lack of support are: (1) security; (2) workload; and (3) service capacity and availability. The most critical problem is security. Inconsistent and incomplete support put the State's data at risk. The industry standard for organizations with similar size and complexity as OIT is a 45:1 database-to-database administrator ratio. OIT current database staffing ratio is 177:1. This customer support dilemma combined with a continuously evolving security landscape has made this request a top OIT priority. Securing the state's database environments is a critical function of securing the State's abundant data

Background

State agencies rely on OIT to provide IT support for programs and databases are critical components of the applications that support these programs. The database framework of business needs are categorized into "production," and "non-production" (development, test, staging) platforms. The following table outlines OIT"s current customer database environments.

Table 1: Current Database Services Program

Type	Description	Number of Databases
Production Database	● Database that supports completed applications as they run business operations. Production work focuses on assuring availability, optimizing efficiency, and promoting usability.	1,550
Non-Production (multiple OIT teams)	● Database that supports the application development lifecycle. These databases include test, development, and staging and are not used directly by the business, but are used indirectly when building or updating databases.	1,750
TOTAL		**3,300**

The current OIT database support model consists of multiple teams responsible for database support across different OIT functional teams. There are currently 17.0 FTE within the Database Services Team. The team uses current limited staff to target support for production databases since they are the most critical. Customer agencies use and access those databases daily. Therefore, they are the most valuable as well as the most vulnerable to attack. The minimal remaining capacity on the team is used to provide support to the non-production databases. Table 2 below outlines how the databases are being supported using the current staff.

Table – 2 Current Database Services Program Support

Type	Category	Count	Current Support
Production	Critical	1,550	100%
Non-Production	Critical	750	20% (150 databases)
	Standard	1,000	0%

The remaining 1,600 non-production databases receive support from various staff on other teams within OIT, as their part-time availability allows. These staff consist of primarily developers or other IT professionals. These staff may have had some experience or have some understanding of databases, but none of them are actually database administrators. They have dedicated full time positions in other capacities within OIT, but pick up the extra task of supporting databases due to the critical need and the resources shortage on the Database Services Team. This situation creates multiple problems.

Problems
- Security
  - The support model currently being used to manage this service causes problems with securing data effectively. It also prevents this team from enforcing database standards across the enterprise. Classified data types, such as the Health Insurance Portability and Accountability Act (HIPAA), Federal Tax Information (FTI), Personal Identifiable Information (PII), and other protected data are secured in production by database services and there is enforcement of the security policy. With the non-production environments, this data becomes the responsibility of the other groups that support databases. Once the data is made available to the non-production environments, database services no longer tracks it due to lack of resources. This is problematic because security risks drastically increase when these activities are not monitored. Without consistent monitoring, it becomes nearly impossible to assure all parts of the State's database environments are secure.
  - With the recent malware attacks, it has become critical that all environments be secured at the appropriate levels. In February of 2018, the Colorado Department of Transportation (CDOT) was attacked by a SamSam ransomware virus completely disabling the agency and all of the databases and database servers. In addition to many other technical tasks, Database Services had to rebuild 354 database servers, re-install the database environments and restore 158 databases. Database services worked directly with the Federal Emergency Management Agency (FEMA) response director and calculated that the recovery of CDOT environments would need 3 database administrators to complete within an acceptable time frame. Existing database services staff resources could not be leveraged fully because the existing database administrator team had other critical state agency responsibilities. Pulling anyone from the existing team would have caused support and security issues at other agencies within the state and jeopardized service level commitments across the board. The current database administrator team did not have enough resources to get the issues resolved in a timely manner. Therefore, FEMA had to provide two non OIT database administrators to assist with response and recovery of the incident. If this cyber incident had not been declared a State Emergency by the Governor, FEMA would not have been present, and it would have taken the existing OIT database team members 3 times as long to bring the environments back up and running. Incidents on a smaller scale run the risk of not being resolved in a timely and effective manner.
- Database Workload Evolution
  - Over the past 10 years, database software releases have become more complex with a higher learning curve for each new release. Each new software release adds in multiple components for additional functionality and processing which, in turn, makes the patching of this software more complex. This complexity results in longer patch times and more in-depth tracking, taking more staff resource time to accomplish tasks and delaying agency projects.
  - Non-production database support and design falls to other teams within OIT. The Database Services Team supports production, which is basically the front-end of the application. Other staff, primarily developers, support non-production, which serves as the back-end. However, there is a relationship and flow between these databases. This causes many issues for OIT. There is then a disconnect in design, architecture, and execution. Having a developer maintain a database is not best practice because they have different goals and priorities. Their first priority is not the database, but the application. This "square peg in a round hole" solution causes poor security controls that can leave these databases with very loose security and poor design architectures.

- ○ Security has become an integral part of modern IT systems. Database services does not have the resource base to keep up with the constantly changing security protocols and tighter security restrictions that need to be deployed due to the threats that exist today as compared to 10 years ago. As a result, all environments need to be tightly secured. Security hacks increasingly target a non-secured test or development area that has not been secured properly.
- Service Capacity and Availability
  - ○ State agencies have recently embarked on very large and demanding projects, while the DBA resource pool remained the same causing support issues for database services. Just a couple examples are the Department of Labor and Employments - Unemployment Insurance Migrated System Operations (UIM), and the Department of Corrections - DeCORuM Management Information System. Now that these and other large systems are going live, the Database Services Team is tasked with the ongoing maintenance and support of these new databases. OIT is unable to continue to meet the needs of state agencies within current staffing, which has remained constant for 10 years.

Proposed Solution:

OIT has struggled to appropriately support databases statewide for many years. OIT has undertaken multiple alternative initiatives in an effort to more efficiently utilize current staff and not have to add FTE. This allowed the State to delay the need for this request nearly 3 years.

Steps Taken To-date
OIT has taken significant steps to address the database services staff support problem with existing resources.
- In addition to utilizing temporary support from other OIT teams where possible, OIT is in the process of consolidating all databases to a centralized enterprise environment. While this merging work does not reduce the total number of databases, it will increase efficiency by significantly reducing the time constraints that are caused by operating in multiple state agency network environments. This will enable OIT to maximize the support from existing resources as well as the new resources in this request. Although these measures have helped alleviate the symptoms of this problem, OIT needs additional staff resources to remedy the problem and stabilize database services.
- OIT continues to implement other efficiencies to provide critically needed support long-term. An initiative known as Role Based Access Control (RBAC) is underway. It will help manage the lack of support issue. RBAC is a method of regulating access to computer resources based on the roles of individual users within an enterprise. RBAC restricts system access to authorized users adding another layer of security. It has two benefits. While this will help harden security, it also preserves the speed of access and can help with performance by limiting access and traffic. Nonetheless, it is not a complete solution. It cannot substitute for the daily job duties required of a Database Administrator. Patches, updates, and other daily tasks still must be executed on all databases and design and architecture require skilled IT professionals.
- Another initiative OIT has undertaken as to reduce the total number of databases that require support. This is a long-term initiative which can be achieved through ongoing application consolidation and transitioning test and development platforms to shared environments. While this consolidation work will decrease the overall number of databases and create efficiencies in the long run, a considerable gap in service support will still exist.

Alternatives Considered
OIT has considered solutions to database services staffing for multiple fiscal years but out of necessity, it prioritized other team areas that serve OIT customers. In that time, OIT has internally vetted numerous alternatives to this issue such as:

- Adding new FTE and or sharing roles through different OIT teams
- Adding new FTE but phased in over multiple years
- Hiring short or long term contractors
- Blending a mix of new FTE and contractors

The contractor solution in any form simply does not align with the security responsibilities that are present in OIT database services. In addition, the contractor solutions would be more cost burdensome to the state in the short and long term. This request is a consolidation of an existing service, to bring all database-related work, under a centralized team and to allow the multiple teams currently doing support, to focus on the work they are trained to do. A phased approach adding new FTE will not enable full enforcement of the Database Administration Standards that is a goal of this request.

OIT serves an estimated 31,297 State employees based on the JBC appropriations report. OIT is appropriated 957.5 FTE which is a ratio of 3.0 percent in comparison to the size of the staff supported. This percentage falls below both private sector and public sector organizations based on the Gartner Benchmark Report. The table below shows benchmarks of what OIT staff levels are and would be using industry benchmarks based on the number of State employees OIT serves. Compared to other state governments and other private sector industries, OIT total workforce is running much leaner with fewer total FTE.

Type	IT FTE as a percent of total employees *Source: Gartner Incorporated "IT Key Metrics Data 2017"*	FTE Benchmark
Governments-State/Local	4.0%	1,251
Software Publishing and Internet Services (private sector)	6.4%	2,003
Cross Industry Average	5.0%	1,564
OIT	**3.0%**	**957**

Proposed Solution
OIT requests 8.0 FTE and $936,776 in Reappropriated funds in FY 2019-20, $899,152 in FY 2020-21 and beyond. This solution does not require a statutory change.

With the addition of 8.0 FTE, OIT will be able to reorganize database services to fulfill critically needed, robust service and support for all database environments. This will alleviate the database support from other OIT teams enabling them to resume primary responsibilities in other functional areas. Table 3.0 below outlines the service gap that exists in hours and its FTE equivalent in staff.

Table 3 – Database Services Team Workload Gap Analysis

Workload Task Description	Support Hours Provided by current staff (17 Existing FTE)	Support Gap (as a %)	Support Gap (in hours per year)
Production database support	26,260	0%	-
Installation of database software and upgrading database server and database tools	1,768	0%	-
Maintain production users and database security levels	884	0%	-
Production database monitoring and optimization	2,652	0%	-
Database backup and recovery planning and execution	884	0%	-
24/7 production on-call	2,652	0%	-
Promotion of database objects from Testing environment	104	97%	2,912
Modification of database structure, as requested by application developers	104	92%	1,248
Generation of reports and running general queries	52	96%	1,248
Engineering and modeling	-	100%	2,080
Active participation in project intake process	-	100%	2,912
Database architecting and design, for both on premise and cloud solutions	-	100%	3,328
Logical data modeling	-	100%	1,248
Database analysis in order to optimize performance and data transfer processes	-	100%	1,664
Total Hours Annually	**35,360**		**16,640**
FTE Equivalent	**17.0**		**8.0**

OIT has compared itself to IT industry standards and then right sized the workloads within the database services team. Key considerations such as database complexity, customer needs, enterprise requirements, and state budget impacts have all been given careful consideration in determining the appropriate number of FTE for this request. An important part in the restructuring of this service is OIT recognizing the need to balance workloads and the fiscal impact it has when billed to its customers as a common policy service. The additional 8.0 FTE is a palatable solution to OIT customers fiscally and enables the team to address the service gaps identified in the table above. Agency IT Directors as well as senior level budget staff at agencies have weighed in on this request. In addition, the OIT service owner has addressed general questions with individual state agencies regarding database operations.

Consequences if the Proposed Solution is Not Approved
The current fragmented database support model and inability to enforce the Database Administration Standards represents a significant security risk to the State's databases. The other OIT staff supporting non-production databases do not have dedicated database administrators, nor is it their primary focus. With the

addition of the 8.0 FTE, OIT will be able to centralize database support and mitigate all of these risks, especially the security of all data, not just production data.

Currently, the state is left vulnerable to an attack (Virus, Malware, Ransomware) on one of the test or development database servers. This would give the attacker access to State data and give them the ability to setup their own administrator level ID and password. Once they have that level of access, they can easily hit the state network and begin looking for other servers and entry points to capture more data. This similar scenario occurred at CDOT earlier this year. For example, if an attack like this were to hit the Department of Revenue, IRS data/ taxpayer data would be at risk.

It is critical that state agencies are able to count on OIT to provide efficient and effective support for all components of their applications, including providing the proper support for development, test, and production databases. Depending on the criticality of a specific application/program, all database platforms can be needed and Database Services must be able to provide support for all databases in a program. Otherwise, the continuity of development-to-production breaks down and causes inefficiencies in the program. This leads to a situation where changes to production environments have to occur without going through the proper development, testing or staging processes. In addition, databases require frequent security updates and patches. If production databases have no mechanism to test a security patch prior to implementing it in production, there is a significant risk to availability and potential service impact.

Anticipated Outcomes:

OIT customer agencies will benefit from this centralized support model. The database environments will be more efficiently supported and will be secured at the level required by the Information Security Office and the Secure Colorado Initiative. This addition of 8.0 FTE will also allow for the efficient collaboration and design of highly effective and secure database structures, enabling the agencies to experience faster response times with their data needs and to have confidence that their data is secure and protected from theft and misuse.

Outcomes will be measured by overall customer satisfaction and monthly Service Level Agreement (SLA) metrics, produced by each state agency. If this request is implemented, all database environments within the state will follow the same set of standards. These standards will improve data and database security, across all environments, so that data is protected from theft or breech. Most attacks on database servers and theft of data start in an unsecured, non-production environment. Database integrity will be implemented in all environments, allowing for accuracy and consistency of data stored in the databases. This in turn will enable a swift response time for the state's numerous applications.

Assumptions and Calculations:

Table 4 is an example of how the current industry standard database support ratio would calculate in the State database environment: (Source: Microsoft Corporation Industry Standards, and Forrester Research Statistics

Table 4 – Staff Support Ratio Analysis

Total Databases	Current FTE	Current FTE to Database ratio	Industry Standards Ratio	Total FTE Requested	New Support Ration with additional 8.0 FTE
3,330	17.0	177:1	45:1	8.0	132:1

In order to meet industry standards for database support, the current state database environments (including all production, staging, test and development databases), would require 56 FTE to be added to the existing OIT database team. That being said, OIT used the industry standard as a base, and realistically looked at what the state's overall database environment needed, and the chart below shows these results. OIT believes that an overall ratio 3 times that of the industry standard, is a good position and gives us a firm base to begin centralized support of all database environments.

The proposed database services staff increase is an ongoing annual cost. This request will provide OIT database services team with $936,776 in FY 2019-20, $899,152 in FY 2020-21 and beyond to expand the team by 8.0 FTE.

Table 5 – Cost Breakdown

Item	FY 2019-20	FY 2020-21	Ongoing
Salaries 8.0 FTE for Database Administrators with a base salary of $7.069/month plus benefits	$891,552	$899,152	$899,152
One-time Operating Expenses	$45,224	$0	$0
TOTALS	**$936,776**	**$899,152**	**$899,152**

FTE Calculation Assumptions:

Operating Expenses -- Base operating expenses are included per FTE for $500 per year. In addition, for regular FTE, annual telephone costs assume base charges of $450 per year.

Standard Capital Purchases -- Each additional employee necessitates the purchase of a Personal Computer ($900), Office Suite Software ($330), and office furniture ($3,473).

General Fund FTE -- New full-time General Fund positions are reflected in Year 1 as 0.9166 FTE to account for the pay-date shift. This applies to personal services costs only; operating costs are not

Expenditure Detail			FY 2019-20		FY 2020-21
Personal Services:					
	Monthly				
Classification Title	Salary	FTE		FTE	
Database Administrator	$7,069	8.0	$678,576	8.0	$678,576
PERA			$70,572		$70,572
AED			$33,929		$33,929
SAED			$33,929		$33,929
Medicare			$9,839		$9,839
STD			$1,289		$1,289
Health-Life-Dental			$63,418		$63,418
Subtotal		8.0	$891,552	8.0	$891,552
Subtotal Personal Services		8.0	$891,552	8.0	$891,552
Operating Expenses:					
		FTE		FTE	
Regular FTE Operating	$500	8.0	$4,000	8.0	$4,000
Telephone Expenses	$450	8.0	$3,600	8.0	$3,600
PC, One-Time	$1,230	8.0	$9,840	8.0	
Office Furniture, One-Time	$3,473	8.0	$27,784	8.0	
Other					
Other					
Other					
Other					
Subtotal Operating Expenses			$45,224		$7,600
TOTAL REQUEST		8.0	**$936,776**	8.0	**$899,152**
	General Fund:				
	Cash funds:				
	Reappropriated Funds:		*$936,776*		*$899,152*
	Federal Funds:				

The costs for these new database services FTE will be allocated to agencies in common policy based on current consumption of the database service in FY 2018-19. The table below outlines the specific allocation for each agency:

Department	FY 2019-20 Cost Allocation	FY 2020-21 Cost Allocation
Agriculture	$35,498	$34,072
Corrections	$9,483	$9,103
Governor's Office	$522	$501
Healthcare Policy and Finance	$7,047	$6,764
Higher Education	$2,610	$2,505
Human Services	$36,150	$34,698
Labor and Employment	$86,439	$82,967
Local Affairs	$25,971	$24,928
Natural Resources	$190,453	$182,803
Personnel and Administration	$23,883	$22,923
Public Health and Environment	$154,737	$148,523
Public Safety	$79,783	$76,579
Regulatory Agencies	$80,653	$77,414
Revenue	$79,130	$75,952
Transportation	$124,416	$119,419
TOTALS	$ 936,776	$ 899,152

Schedule 13

Department of

Request Title

R-02 (LG) State Innovation Model Office Extension

Dept. Approval By: _____

OSPB Approval By: _____

	___	Supplemental FY 2018-19
	___	Budget Amendment FY 2019-20
X	___	Change Request FY 2019-20

Summary Information

		FY 2018-19		FY 2019-20		FY 2020-21
	Fund	Initial Appropriation	Supplemental Request	Base Request	Change Request	Continuation
Total of All Line Items Impacted by Change Request	Total	$0	$0	$0	$202,434	$0
	FTE	0.0	0.0	0.0	1.5	0.0
	GF	$0	$0	$0	$202,434	$0
	CF	$0	$0	$0	$0	$0
	RF	$0	$0	$0	$0	$0
	FF	$0	$0	$0	$0	$0

Line Item Information

		FY 2018-19		FY 2019-20		FY 2020-21
	Fund	Initial Appropriation	Supplemental Request	Base Request	Change Request	Continuation
02. Office of the Lieutenant Governor, (A) Office of the Lieutenant Governor, (1) Office of the Lieutenant Governor - SIM Office Extension	Total	$0	$0	$0	$202,434	$0
	FTE	0.0	0.0	0.0	1.5	0.0
	GF	$0	$0	$0	$202,434	$0
	CF	$0	$0	$0	$0	$0
	RF	$0	$0	$0	$0	$0
	FF	$0	$0	$0	$0	$0

Auxiliary Data

Requires Legislation? NO

Type of Request?	Department of Governor's Office Prioritized Request	**Interagency Approval or Related Schedule 13s:**	No Other Agency Impact

This page is intentionally left blank.

Cost and FTE

- The Colorado State Innovation Model (SIM) Office requests $202,434 General Fund and 1.5 FTE in FY 2019-20 to temporarily extend the Office and avoid disruption of multi-payer supported health reform efforts.
- A small SIM Office will lead health care transformation efforts and develop an all-payer model to ensure that health care reform successes started by SIM and other state initiatives continue.

Current Program

- SIM and the Transforming Clinical Practice Initiative (TCPi) are Governor's Office initiatives funded by the Center for Medicare & Medicaid Services (CMS) with $76 million dollars to improve population health and value-based care.
- The initiatives provide financial incentives and technical assistance to primary and specialty care practices to better manage patients and succeed with value-based payment models. Addressing mental health and substance use disorders is essential to meeting the needs of Colorado communities, and data shows that this bipartisan approach is succeeding in hundreds of practices.
- SIM will help about 25% of the state's primary care providers and four community mental health centers integrate physical and behavioral health and learn how to succeed with alternative payment models. The work benefits more than half a million Coloradans through investments in local public health and health information technology.
- TCPi helps providers improve health outcomes, avoid unnecessary costs and reduce admissions and emergency department visits. It supports more than 2,000 clinicians in more than 200 practices and 10 community mental health centers. The initiative has saved the Colorado health care system an estimated $42 million through June 2018.

Problem or Opportunity

- SIM and TCPi end in July and September 2019, respectively. By extending a small SIM Office, the State ensures uninterrupted momentum with the initiatives, avoids loss of intellectual capital and retains its standing as a national leader in health care reform efforts.

Consequences of Problem

- Interruption of this work could derail creation of an all-payer model known as the Colorado Model of Care, which affects the sustainability of health care reform. Without a coordinated approach to health system reform with multi-payer support, the State could lose momentum.
- SIM is the most appropriate entity to continue this work.
- Lack of dedicated funding to wrap up this effort could lead to unnecessary delays, audits, penalties and costs to state agencies.

Proposed Solution

- Support a 1.5 FTE SIM Office in FY 2019-20 to develop the Colorado Model of Care and effectively transfer work and knowledge to the next administration.
- This will demonstrate the State's financial stewardship of federal funds (to complete the initiative) and national leadership in health care reform.

This Page Intentionally Left Blank

John W. Hickenlooper
Governor

Barbara J. Martin, RN, MSN, ACNP-BC, MPH
SIM Office Director

Department Priority:	R-02
Request Detail:	State Innovation Model Office Extension

Summary of Incremental Funding Change for FY 2019-20	**Total Funds**	**General Fund**
State Innovation Model Office Extension	$202,434	$202,434

Problem or Opportunity:

Step 1: Identify the problem

Federal funding for two health care initiatives — the Colorado State Innovation Model (SIM) and the Transforming Clinical Practice Initiative (TCPi) — end in July and September 2019, and the State must ensure continuation of this successful practice transformation work, which leads to better patient outcomes and a reduction or avoidance of unnecessary costs. Coloradans, who receive care from SIM-participating providers have better access to behavioral health, which includes mental health, substance use and healthy behaviors. This integrated or whole-person care leads to better health outcomes and helps reduce or avoid unnecessary health care costs. A few examples: Patients at SIM practices receive more screenings for depression and substance use disorders, practices record improved Hemoglobin A1C numbers for patients who have diabetes and patients are connected with community resources, which avoids duplication and expands access to care. SIM is influencing the care of Coloradans during 3,342,018 primary care practice site patient visits annually and is reaching almost every county through investments in public health and a new regional health connector workforce.

Step 2: Explain the problem

Health care reform efforts are at a critical juncture in the State. An extension of the SIM Office would ensure a smooth transition of knowledge and strategies to the new administration to ensure that work to create an all-payer model, known as the Colorado Model of Care, will continue. This work requires ongoing guidance and direction from the Governor's Office to succeed and will help support practice transformation work that has been funded by SIM and TCPi, two bipartisan initiatives that are helping health care providers improve patient health and position them for greater success with value-based payment models.

Proposed Solution:

Requested funds will provide a platform for continued multi-payer alignment for value-based payment, support a bipartisan approach to health care reform and prove a commitment to sustaining the federal investment of $76 million collectively.

- o This office will coordinate development of the Colorado Model of Care, an all-payer model that supports health care and payment reform.
  - o Funding will continue to support a multi-payer approach to supporting practices and hospitals with value-based payments and alignment across programs to reduce or avoid unnecessary costs and improve outcomes. It is an essential part of health care reform, which will reduce provider and community burden.
  - o Funding will ensure the continuation of work funded by SIM and TCPi to help practices integrate physical and behavioral health and gain the skills they need to succeed with value-based payment models.
  - o Funding will ensure all State and Federal requirements related to close out of the two Federal cooperative agreements are completed per requirements without penalty or delay.
  - o If this request is not approved, the State is at risk for failing to maintain and build on the progress made with SIM and TCPi and for continuing the work started on the Colorado Model of Care.
- **This small office for health care reform initiatives will:**
  - o Continue to lead State efforts to reform the health care delivery system;
  - o Ensure that practice transformation efforts are recognized and rewarded by health plans and that reduced administrative burden is considered in all efforts;
  - o The all-payer piece of this work links directly to the Department of Health Care Policy and Financing (HCPF) goals to reduce and avoid unnecessary costs and to move toward more value-based reimbursement; and
  - o Ensure a successful closeout period and finalization of the deliverables ensure contractors complete all work and invoices are paid, records are maintained and stored per regulation.
- **Cost of the request and the corresponding FTE:**
  - o This is a one-time request for FY 2019-20.
  - o This request will support all health care reform activities in the State.
  - o The solution does not require a statutory change.
- **Description of the consequences if the proposed solution is not approved**:
  - o If this request is not approved, the State will lose a unique opportunity to build an all-payer model that supports meaningful health care reform.
  - o Payment reform is the lynchpin for true health care reform and by developing an all-payer model that includes hospitals and health systems, the State will support efforts to deliver value-based care and empower communities to take a more active role in the health care industry. It will support HCPF's Accountable Care Collaborative, the Hospital Transformation Program and other initiatives to improve health outcomes and reduce or avoid unnecessary costs.
  - o SIM considered adding these duties to existing State staff, but the workload is estimated to exceed bandwidth of potential staff. This would put the entire investment at risk if the state cannot properly closeout activities and reports as required.

A small SIM Office will appropriately transition SIM and TCPi initiatives and knowledge to advance the integration of physical and behavioral health in primary care settings and practices' ability to succeed with value-based payments.

The Colorado Model of Care will have financial and population health targets during the 5- to 6-year demonstration model. An office with a dedicated workstream to establish governance structures and model development will be crucial. The Colorado Model of Care will measure performance based on financial and population health objectives including reductions to total cost of care, targets for lower premiums for commercial health plans and reduced or avoided costs in Medicare and Medicaid spending, and increased access to quality care. Targets might include reductions in suicide, substance use disorder and emergency department utilization as well as improvements in care coordination between and within primary and specialty/ hospital care and optimal use of palliative care.

- SIM requests 1.5 FTE in FY 2019-20 to continue health care transformation work and to develop the Colorado Model of Care. This includes leading efforts on negotiation between the state and the Center for Medicare and Medicaid Services (CMS) and the Center for Medicare and Medicaid Innovation (CMMI) regarding the all-payer model. Without dedicated staff, this work would not be possible, as it cannot be led by any one department: SIM staff have the institutional knowledge as well as the relationships with Colorado stakeholders and CMMI leadership in the SIM and all-payer divisions to negotiate successfully.
- The Colorado Model of Care will include recommendations for a multi-payer advanced alternative payment model (APM) as well as global budgets for some rural hospitals.
- Staff will be responsible for creating recommendations for a statewide advanced APM. Responsibilities include obtaining approval from the SIM Steering Committee on a formal set of policy recommendations to advance primary care engagement in advanced APMs, leading conversations with CMMI on how the State could pursue payment model development and working with payers and providers on key elements of a payment model, including measure alignment.
- 0.5 FTE will be responsible for leading efforts on further developing a framework for global budgets for some rural hospitals in the state, including the creation of a governance structure, identification of State levers and necessary waivers, work being developed through a group of stakeholders led and organized by SIM. This part-time FTE will also be responsible for convening the SIM Steering Committee, participating in the Multi-Payer Collaborative and other relevant workgroups to ensure that health care leaders are guiding the transition from SIM and TCPi to the next phase of transformation through an all-payer model.
- 0.5 FTE will be responsible for developing a data and evaluation plan for the Colorado Model of Care using cost and utilization data to set cost savings targets and define quality and population health goals for the State.
- 0.5 FTE will be responsible for all administrative functions required to successfully manage the grants closeout process and ensure that the State complies with the terms and conditions of the two initiatives.

- If this request is not funded, the State will miss an opportunity to build on the progress from integration efforts and movement toward greater participation in alternative payment models.

Assumptions and Calculations:

It is anticipated that the 1.5 FTE will be employed for a six-month period to complete the work outlined above and ensure a successful transition across administrations and initiatives. Three FTE positions that are funded through the SIM/TCPI initiatives will be continued for the 6-month period to ensure a smooth transition and consistent staffing to optimize the outcomes of this one-time funding request. Because the positions are already filled, the salaries used in the calculations are not at the base of the pay range for the classification.

There is no Federal approval or regulation required to hire these FTE. It is anticipated that the positions will be filled by SIM Office staff and there will not be a delay in hiring. The staff will be able to use office space provided in kind from HCPF and will have computers and office furniture. This work should be a seamless continuation of targeted activities to catalyze cost-effective health care delivery reform.

$31,974 has been allocated to contractor services. The team anticipates that a contractor will be necessary to provide guidance and support regarding Federal waivers needed to pursue the Colorado Model of Care. A contractor will provide specific deliverables to ensure alignment with Medicaid efforts to reduce cost and improve quality of care.

Additional contractor dollars might be necessary for auditor services should Colorado undergo a detailed post-initiative audit as has happened in some other SIM states after the initiative ends. It is recognized that the 0.5 administrator FTE can manage most aspects of the grants closeout period but might need targeted support related to auditing.

$5,000 has been retained for travel in the budget to ensure the FTE can make any necessary trips to meet with federal partner leadership regarding the development of the model. Additional dollars might be necessary for in-state travel to engage rural Coloradans and solicit their input on health care delivery and services in their regions.

FTE Calculation Assumptions:

Operating Expenses -- Base operating expenses are included per FTE for $500 per year. In addition, for regular FTE, annual telephone costs assume base charges of $450 per year.

Standard Capital Purchases -- Each additional employee necessitates the purchase of a Personal Computer ($900), Office Suite Software ($330), and office furniture ($3,473).

General Fund FTE -- New full-time General Fund positions are reflected in Year 1 as 0.9166 FTE to account for the pay-date shift. This applies to personal services costs only; operating costs are not subject to the pay-date shift.

Administration and Contracts Manager -- 0.5 FTE ($41,502)

This position oversees the execution and closeout of the SIM related initiative as they relate to administrative functions. Monitors and otherwise manages operating budgets and costs, as appropriate. Position ensures that all administrative work supports SIM's overall goals and responsibilities and continually improves on existing processes and workflow of the SIM Office as they relate to projects, operations and processes. Position is responsible for overseeing procurement, contract management, annual negotiation, processes, and contractual performance. Position is responsible for all grants closeout activities as required by the Federal cooperative agreement.

Classification Title	Monthly	FTE		FTE	
Administrator V	$6,917	0.5	$41,502	-	$0
PERA			$4,316		$0
AED			$2,075		$0
SAED			$2,075		$0
Medicare			$602		$0
STD			$79		$0
Health-Life-Dental			$7,927		$0
Subtotal Position 3, #.# FTE		**0.5**	**$58,576**	**-**	**$0**

Strategy and Policy Manager -- 0.5 FTE ($41,502)

Position provides expertise and assistance to the State leadership with the oversight of all aspects of the SIM multi-payer and sustainability strategy. Position assures accuracy of all strategic design work related to the SIM initiative across Department staff, the Governor's Office, the SIM Office, and other key partners and stakeholders that are a part of the SIM initiative. Position ensures streamlined and efficient strategy processes between SIM Office, Department staff, and other key partners and stakeholders. Position is responsible for researching, analyzing and advising on complex policy and regulatory issues in the health care field, focusing on policy and regulatory issues that pertain to delivery system redesign and payment reform, data sharing, collection, aggregation, and reporting, and health information technology (HIT). In addition, this position

will analyze policy and regulatory issues associated specifically with Colorado State agencies involved with the SIM initiative, including: the Colorado Department of Public Health and Environment (CDPHE), the Department of Regulatory Agencies (DORA), the Department of Health Care Policy and Financing (HCPF), and the Department of Human Services (CDHS), as well as their Federal counterparts.

Classification Title	Monthly Salary	FTE		FTE	
Strategy and Policy Mgr. V	$6,917	0.5	$41,502	-	$0
PERA			$4,316		$0
AED			$2,075		$0
SAED			$2,075		$0
Medicare			$602		$0
STD			$79		$0
Health-Life-Dental			$7,927		$0
Subtotal Position 1, #.# FTE		**0.5**	**$58,576**	**-**	**$0**

Data Analyst -- 0.5 FTE ($31,920)
Position will be required to research, review, cross-reference, and compile reports from multiple data streams as they relate to the impact of the State Innovation Model (SIM) Office. This position will identify available data resources and gaps in current data, coordinate and/or assist in the development of mechanisms for data collection and reporting, perform advanced dataset manipulation functions (aggregation, normalization), conduct ongoing data quality monitoring, develop presentation of data for end users, serve as a direct resource for responding to questions and identifying trends, and coordinate with external evaluators for SIM. Monitors specific data and query reports as it relates to measuring practice success in meeting SIM health objectives, issues such as timeliness, mass update exception reports, and pending reports.

Classification Title	Monthly Salary	FTE		FTE	
Statistical Analyst III	$5,320	0.5	$31,920	-	$0
PERA			$3,320		$0
AED			$1,596		$0
SAED			$1,596		$0
Medicare			$463		$0
STD			$61		$0
Health-Life-Dental			$7,927		$0
Subtotal Position 2, #.# FTE		**0.5**	**$46,883**	**-**	**$0**

FTE Calculation Assumptions:

Operating Expenses -- Base operating expenses are included per FTE for $500 per year. In addition, for regular FTE, annual telephone costs assume base charges of $450 per year.

Standard Capital Purchases -- Each additional employee necessitates the purchase of a Personal Computer ($900), Office Suite Software ($330), and office furniture ($3,473).

General Fund FTE -- New full-time General Fund positions are reflected in Year 1 as 0.9166 FTE to account for the pay-date shift. This applies to personal services costs only; operating costs are not subject to the pay-date shift.

Expenditure Detail			FY 2019-20		FY 2020-21
Personal Services:					
Classification Title	Monthly	FTE		FTE	
Strategy and Policy Manager V	$6,917	0.5	$41,502	-	$0
PERA			$4,316		$0
AED			$2,075		$0
SAED			$2,075		$0
Medicare			$602		$0
STD			$79		$0
Health-Life-Dental			$7,927		$0
Subtotal Position 1, #.# FTE		**0.5**	**$58,576**	**-**	**$0**
Classification Title	Monthly	FTE		FTE	
Statistical Analyst III	$5,320	0.5	$31,920	-	$0
PERA			$3,320		$0
AED			$1,596		$0
SAED			$1,596		$0
Medicare			$463		$0
STD			$61		$0
Health-Life-Dental			$7,927		$0
Subtotal Position 2, #.# FTE		**0.5**	**$46,883**	**-**	**$0**
Classification Title	Monthly	FTE		FTE	
Administrator V	$6,917	0.5	$41,502	-	$0
PERA			$4,316		$0
AED			$2,075		$0
SAED			$2,075		$0
Medicare			$602		$0
STD			$79		$0
Health-Life-Dental			$7,927		$0
Subtotal Position 3, #.# FTE		**0.5**	**$58,576**	**-**	**$0**
Subtotal Personal Services		1.5	**$164,035**	-	**$0**

Operating Expenses:		FTE		FTE	
Operating Expenses:					
Regular FTE Operating	$500	1.5	$750		$0
Telephone Expenses	$450	1.5	$675		$0
PC, One-Time	$0	1.5	$0	-	
Office Furniture, One-Time	$0	1.5	$0	-	
Subtotal Operating Expenses			**$1,425**		**$0**

TOTAL REQUEST		1.5	**$165,460**	-	**$0**
General Fund:			*$165,460*		*$0*
Cash funds:			*$0*		*$0*
Reappropriated Funds:			*$0*		*$0*
Federal Funds:			*$0*		*$0*

	FY 2019-20	FY 2020-21
PERA	10.40%	10.40%
AED	5.00%	5.00%
SAED	5.00%	5.00%
Medicare	1.45%	1.45%
STD	0.19%	0.19%
Health-Life-Dental	$7,927	$7,927

Schedule 13

Department of Governor's Office

Funding Request for The FY 2019-20 Budget Cycle

Request Title

R-02 (OEDIT) Minority Business Office Increase

Dept. Approval By: _(signature)_   ___   **Supplemental FY 2018-19**

OSPB Approval By: _(signature)_   ___   **Budget Amendment FY 2019-20**

    X   **Change Request FY 2019-20**

Summary Information		FY 2018-19		FY 2019-20		FY 2020-21
	Fund	**Initial Appropriation**	**Supplemental Request**	**Base Request**	**Change Request**	**Continuation**
Total of All Line Items Impacted by Change Request	Total	$5,315,052	$0	$5,315,052	$25,000	$25,000
	FTE	24.4	0.0	24.4	0.0	0.0
	GF	$4,216,948	$0	$4,216,948	$0	$0
	CF	$548,626	$0	$548,626	$25,000	$25,000
	RF	$175,000	$0	$175,000	$0	$0
	FF	$374,478	$0	$374,478	$0	$0

Line Item Information		FY 2018-19		FY 2019-20		FY 2020-21
	Fund	**Initial Appropriation**	**Supplemental Request**	**Base Request**	**Change Request**	**Continuation**
04. Economic Development Programs, (A) Economic Development Programs, (1) Economic Development Programs - Global Business Development	Total	$5,315,052	$0	$5,315,052	$25,000	$25,000
	FTE	24.4	0.0	24.4	0.0	0.0
	GF	$4,216,948	$0	$4,216,948	$0	$0
	CF	$548,626	$0	$548,626	$25,000	$25,000
	RF	$175,000	$0	$175,000	$0	$0
	FF	$374,478	$0	$374,478	$0	$0

Auxiliary Data			
Requires Legislation?	NO		
Type of Request?	Department of Governor's Office Prioritized Request	**Interagency Approval or Related Schedule 13s:**	No Other Agency Impact

This page is intentionally left blank.

COLORADO
Office of Economic Development
and International Trade

Priority: R-02
Minority Business Office Increase
FY 2019-20 Change Request

Cost and FTE

- The Office of Economic Development and International Trade (OEDIT) is requesting an additional $25,000 in ongoing cash fund spending authority for the Minority Business Office (MBO). This request represents a 100 percent increase in spending authority. The MBO resides within the Global Business Development line item in the Long Bill.

Current Program

- The MBO is currently authorized to spend up to $25,000 from the minority business fund (Fund).
- There is currently approximately $31,000 in the Fund.
- The MBO cannot spend the full amount in the Fund because it lacks sufficient spending authority.

Problem or Opportunity

- The MBO's spending authority is capped at $25,000, but the program has received more than $25,000 in fees from the Advance Colorado Procurement Expo (Expo). This spending authority cap precludes the MBO from utilizing all the funds it has collected. As a result, the MBO must use General Fund dollars to cover costs associated with the Expo that go beyond $25,000.

Consequences of Problem

- Without sufficient spending authority, the MBO will continue receiving and carrying forward funds that it cannot spend.
- Revenue generated by the MBO will continue to increase year over year. With spending authority capped at $25,000, these funds will continue to grow and MBO will continue to be unable to spend the full amount.

Proposed Solution

- The proposed solution is to increase the MBO's cash fund spending authority by $25,000, bringing the total spending authority up to $50,000.

This page is intentionally left blank.

COLORADO
Office of Economic Development and International Trade

John W. Hickenlooper
Governor

Stephanie Copeland
Executive Director

FY 2019-20 Funding Request | November 1, 2018

Department Priority: R-02
Request Detail: Minority Business Office Increase

Summary of Incremental Funding Change for FY 2019-20	Total Funds	General Fund
Minority Business Office Increase	$25,000	$0

Problem or Opportunity:

C.R.S. 24-49.5-104 creates the "minority business fund" (Fund). All moneys from user fees and any other moneys received by the Colorado Minority Business Office (MBO) are deposited into this cash fund. H.B. 18-1322 (Long Bill) appropriates $25,000 in spending authority from the Fund, which resides in the Global Business Development line item. The MBO has collected more than $25,000 in fees from the annual Advance Colorado Procurement Expo (Expo) and not does not have sufficient spending authority to spend revenues. This request is to increase current spending authority by 100 percent to $50,000.

Proposed Solution:

As indicated in Table 1 below, in previous years, the Fund balance has reached as high as $47,319 and is currently at approximately $31,000. The Expo is expected to bring in more revenue than usual, possibly reaching the $50,000 level. Therefore the Colorado Office of Economic Development and International Trade (OEDIT) is requesting a $25,000 increase to MBO's cash fund spending authority.

Anticipated Outcomes:

The MBO will use the funds to pay for costs associated with the annual Expo, which has been growing in size over the past few years. On average, MBO's costs associated with the Expo include:

- $45,000 for the venue;
- $8,000 for printed materials such as signage, program, and table tents;
- $3,000 for the MBO booth;
- $3,000 for costs associated with volunteers; and
- $2,500 for registration software and coordination with exhibitors.

Without sufficient spending authority, MBO must use General Fund dollars to cover costs beyond $25,000 instead of using the revenue from fees.

There is approximately $31,000 in the Fund today. Because of the Expo's growing success, MBO anticipates collecting even more revenue at the next Expo. On top of this, as MBO continues to collect fees and carry forward additional unspent funds, the Fund balance will increase year over year if MBO does not have adequate spending authority. By statute, these funds, along with any interest earned, are required to stay in the Fund and will not revert to the General Fund. OEDIT is therefore requesting $25,000 additional spending authority to ensure MBO has adequate spending authority.

Table 1

Fiscal Year	End Balance
2015-16	$3,625.38
2016-17	$47,318.95
2017-18	$31,123.95

Schedule 13

Department of Governor's Office

Request Title

R-03 (LG) Administration Line Increase

Dept. Approval By: _____

OSPB Approval By: _____

____	**Supplemental FY 2018-19**
____	**Budget Amendment FY 2019-20**
X ____	**Change Request FY 2019-20**

Summary Information		FY 2018-19		FY 2019-20		FY 2020-21
	Fund	Initial Appropriation	Supplemental Request	Base Request	Change Request	Continuation
Total of All Line Items Impacted by Change Request	Total	$371,443	$0	$394,921	$75,000	$75,000
	FTE	2.7	0.0	2.7	1.3	1.3
	GF	$371,443	$0	$394,921	$75,000	$75,000
	CF	$0	$0	$0	$0	$0
	RF	$0	$0	$0	$0	$0
	FF	$0	$0	$0	$0	$0

Line Item Information		FY 2018-19		FY 2019-20		FY 2020-21
	Fund	Initial Appropriation	Supplemental Request	Base Request	Change Request	Continuation
02. Office of the Lieutenant Governor, (A) Office of the Lieutenant Governor, (1) Office of the Lieutenant Governor - Administration	Total	$371,443	$0	$394,921	$75,000	$75,000
	FTE	2.7	0.0	2.7	1.3	1.3
	GF	$371,443	$0	$394,921	$75,000	$75,000
	CF	$0	$0	$0	$0	$0
	RF	$0	$0	$0	$0	$0
	FF	$0	$0	$0	$0	$0

Auxiliary Data			
Requires Legislation? NO			
Type of Request?	Department of Governor's Office Prioritized Request	**Interagency Approval or Related Schedule 13s:**	No Other Agency Impact

This page is intentionally left blank.

COLORADO
Office of the Lieutenant Governor

Cost and FTE

- This request is for $75,000 General Fund and 1.3 FTE in FY 2019-20 and ongoing to accurately represent the necessary level of funding and staffing in the Lt. Governor's Office. This funding request will bolster funding for personal services ($50,000) and will add an operating budget ($25,000) to the line item. Please note that the FTE request is for authority only.

Current Program

- The Lt. Governor's Office oversees Serve Colorado, the Colorado Commission of Indian Affairs, the Office of eHealth Innovation, the State Innovation Model and the Performance Management and Operations team. The Lt. Governor serves as Co-Chair of the Space Coalition, Co-Chair of the Early Childhood Leadership Commission and is on the Executive Committee of the Education Leadership Council. This is in addition to the Lt. Governor's primary role as surrogate for the Governor, and is a key member of his executive team.
- The Lt. Governor's staff also currently oversees the Governors Fellowship, and is on the steering committee for multiple technology related programs and services, including My Biz Colorado, the MyCO services app, and the Colorado Benefits Management System Steering Committee. This is in addition to executing the general functions which support the Lt. Governor.

Problem or Opportunity

- The Lt. Governor's Administration line item budget does not accurately represent operational costs nor FTE required to run the Office. The administration budget of $271,000 covers 2.7 FTE and no operating expenses.
- The office is currently staffed at 4.0 FTE: Lt. Governor, Chief of Staff, Deputy Chief of Staff, and Executive Assistant, and the budget does not have adequate funding to cover their full salaries. The current budget includes no operating funds, which is estimated at $25,000.
- Inadequately funding the Lt. Governor's Office leaves the next administration with an inaccurate budget and places the Office at risk of losing funding for critical roles already in place.

Proposed Solution

- The proposed solution is to ask for a $75,000 General Fund increase for the Lt. Governor's Administration line item so the Long Bill accurately reflects the cost to run the Lt. Governor's Office.
- Appropriating the correct amount of money for FTE and operations increases transparency of use of government funds, and adequately staffs the Lieutenant Governor's Office to fully and properly perform the functions of the Office.

This page is intentionally left blank.

COLORADO

The Lieutenant Governor's Office

John W. Hickenlooper
Governor

FY2019-20 Funding Request | November 1, 2018

Donna Lynne
Office of the Lieutenant Governor

Department Priority: R-01
Request Detail: Administration Line Increase

Summary of Incremental Funding Change for FY 2019-20	Total Funds	General Fund
Lt. Governor Administration Line Increase	$75,000 (1.3 FTE)	$75,000 (1.3 FTE)

Problem or Opportunity:

The Lt. Governor's Administration line item budget does not accurately represent operational costs nor FTE required to run the Office.

- The administration budget of $271,000 covers 2.7 FTE, and no operating expenses.
- The Lt. Governor's Office is currently staffed at 4.0 FTE (Lieutenant Governor, Chief of Staff, Deputy Chief of Staff, and Executive Assistant). This request seeks authority for the additional 1.3 FTE to ensure the Long Bill accurately reflects FTE in place.
- Since the appropriated budget does not adequately cover salary costs for these FTE, approximately $50,000 in additional salary expenses are paid out of other budgets within the Governor's Office.
- The current budget includes no operating funds, which are estimated at $25,000 based on the current year's expenditures.
- The total need for this office is $346,000 (a $75,000 and 28 percent increase) and 4.0 FTE.

The Lt. Governor's Office oversees Serve Colorado, the Colorado Commission of Indian Affairs, the Office of eHealth Innovation, the State Innovation Model and the Performance Management and Operations team. The Lt. Governor serves as Co-Chair of the Space Coalition, Co-Chair of the Early Childhood Leadership Commission and is on the Executive Committee of the Education Leadership Council. This is in addition to the Lt. Governor's primary role as surrogate for the Governor, and a pivotal member of his executive team.

The Lt. Governor's staff also currently oversees the Governors Fellowship, and is on the steering committee for multiple technology related programs and services, including My Biz Colorado, the MyCO services app, and the Colorado Benefits Management System Steering Committee. This is in addition to executing the general functions which support the Lt. Governor.

Proposed Solution:

The cost of running a fully functional (personnel services and operating expenses) Lieutenant Governor's Office is $346,000. The Office currently is appropriated $271,000 General Fund, and therefore seeks an increase of $75,000.

Total budget needed to cover salaries for these 4.0 FTE is $321,000. This plus a nominal operating budget of $25,000 (estimated using FY 2018-19 data) would allow the Office to run fully staffed and remain on an efficient budget. Note that this request is not to hire additional staff but rather for FTE authority to adequately reflect the expenses of this staffed office.

The proposed solution, to increase the administration budget by $75,000, will increase transparency by authorizing the correct amount of money for FTE and operations required of the Office. It allows the Office to continue to serve Coloradans while leaving a more transparent budget for an incoming administration.

Anticipated Outcomes:

The Governor and Lieutenant Governor seek to leave behind a more transparent governing system that supports a fully functional Lt. Governor's Office for the next administration.

Assumptions and Calculations:

Assumptions:
- Currently, the $271,000 in the Lt. Governor's budget is used to partially cover salaries (i.e. the 2.7 FTE)
  - The funds for the additional 1.3 FTE are borrowed from other areas of the Governor's Office budget
- Increasing the appropriation for personal services to $321,000 will allow for the Lt. Governor's budget to properly account for the salaries for all 4.0 FTE currently staffed in this office (see Table 1).

Table 1. Total Expenses and Request Breakdown

	Total Expenses	Currently in LG budget	Request
Personnel Services (Salaries)	**$321,000**	**$271,000**	**$50,000**
Lt. Governor	$60,000	$60,000	
Chief of Staff	$120,000	$120,000	
Deputy Chief of Staff	$84,000	$38,000*	
Executive Assistant	$57,000	$53,000*	
Operating	**$25,000**	**$0**	**$25,000**
Travel expenses	$2,500	$0	
Administrative	$22,500	$0	

Missing $50,000 borrowed from Governor's Office, OSPB, and SERVE Colorado.

- The $25,000 in operating would cover expenses currently charged to the Lt. Governor's operations by accounting. A proper operating budget would not only cover printing, paper, ink, and other critical office expenses, but also support Lt. Governor travel, including greater community outreach for parts of the state outside the front range (i.e., fulfill travel requests currently unsupported by the office due to lack of operating funds). This number was estimated from reviewing office and travel expenses over the last fiscal year (see Table 2).

Table 2. Total Operating Expenses and Request Breakdown

	Total Need	Currently in LG budget	Request
Operating (FY19)*	**$25,000**	**$0**	**$25,000**
Motor Vehicle	$700	$0	
Communications	$7,000	$0	
Supplies & Materials	$15,150	$0	
Travel- in State	$325	$0	
Travel- out of State	$1,825	$0	

Missing $25,000 covered by Governor's Office.

Schedule 13
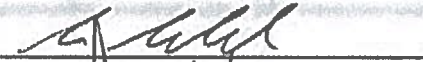
Department of Governor's Office

Funding Request for The FY 2019-20 Budget Cycle

Request Title
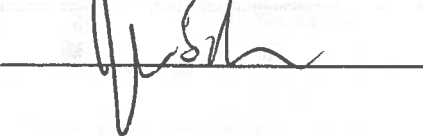
R-03 (OIT) Operations and Administration Center Relocation

Dept. Approval By:

OSPB Approval By:

	Supplemental FY 2018-19
	Budget Amendment FY 2019-20
X	Change Request FY 2019-20

Summary Information	Fund	FY 2018-19		FY 2019-20		FY 2020-21
		Initial Appropriation	Supplemental Request	Base Request	Change Request	Continuation
	Total	$16,566,020	$0	$16,680,308	$5,705,593	$1,999,605
	FTE	97.0	0.0	97.0	0.0	0.0
Total of All Line Items Impacted by Change Request	GF	$256,188	$0	$136,061	$5,705,593	$0
	CF	$3,200,000	$0	$3,200,000	$0	$0
	RF	$13,109,832	$0	$13,344,247	$0	$1,999,605
	FF	$0	$0	$0	$0	$0

Line Item Information	Fund	FY 2018-19		FY 2019-20		FY 2020-21
		Initial Appropriation	Supplemental Request	Base Request	Change Request	Continuation
	Total	$13,359,253	$0	$13,473,541	$5,705,593	$0
	FTE	97.0	0.0	97.0	0.0	0.0
05. Office of Information Technology, (A) OIT Central Administration, (1) OIT Central Administration - Central Administration	GF	$256,188	$0	$136,061	$5,705,593	$0
	CF	$3,200,000	$0	$3,200,000	$0	$0
	RF	$9,903,065	$0	$10,137,480	$0	$0
	FF	$0	$0	$0	$0	$0

| Line Item Information | Fund | FY 2018-19 | | FY 2019-20 | | FY 2020-21 |
		Initial Appropriation	Supplemental Request	Base Request	Change Request	Continuation
	Total	$3,206,767	$0	$3,206,767	$0	$1,999,605
	FTE	0.0	0.0	0.0	0.0	0.0
05. Office of Information Technology, (A) OIT Central Administration, (1) OIT Central Administration - Leased Space	GF	$0	$0	$0	$0	$0
	CF	$0	$0	$0	$0	$0
	RF	$3,206,767	$0	$3,206,767	$0	$1,999,605
	FF	$0	$0	$0	$0	$0

Auxiliary Data			
Requires Legislation?	NO		
Type of Request?	Department of Governor's Office Prioritized Request	Interagency Approval or Related Schedule 13s:	No Other Agency Impact

Cost and FTE
● The Governor's Office of Information Technology (OIT) requests $5,705,593 General Funds in FY 2019-20, and $1,999,605 Reappropriated Funds in FY 2020-21 and ongoing to relocate OIT's Operations and Central Administrative center from its current aging facility to a new leased location in the downtown Denver area.

Current Program
● OIT has been headquartered in the Pearl Plaza building at 601 E. 18th Ave. in Denver for 10 years. In 2008, statewide consolidation of IT functions had just begun. Space in the Pearl Plaza building was acquired in pieces over the course of several years as other tenants left the building and OIT could fit certain portions of staff that were being consolidated at that time. Current teams located at the Pearl Plaza location include Digital Trunked Radio System, Colorado Benefits Management System, Deskside Support, Service Desk, Applications, Leadership, Finance and Human Resources staff.

Problem or Opportunity
● The current Pearl Plaza building is aging and was never designed to house a modern IT organization. Due to the timeline of consolidation and the evolution of IT over the past decade, it was difficult to optimize space distribution to fit the needs of the current functional groups within OIT. The building location and condition inhibit the ability to attract and retain highly qualified technical staff.
● Now that OIT has matured as an IT organization over the past 10 years, OIT faces several key challenges with the current space that drive the need to relocate: 1) It is very difficult to attract and retain qualified staff given the location of the building and the fact that it is aging and has not been renovated recently; 2) The building lacks meeting space. There are some areas where workspace is either short or excessive; 3) The current configuration of space does not align with the needs of each function group; and 4) The existing workspace furniture and design does not adequately support the functions of a modern IT organization.

Consequences of Problem
● Without relocating to an office building with appropriate space and configuration in the downtown Denver area, OIT will not have the quality of space required to attract and retain qualified staff that allow existing teams to perform efficiently to support the IT needs of state agencies in 2020 and beyond.

Proposed Solution
● This request is for funding to cover basic relocation costs in Downtown Denver, as well as the variance in lease costs for a new OIT Operations and Administration Center location. This new location will allow for the incorporation of technology and meeting space to assist in evolving IT job tasks, improve the ability to hire and retain qualified staff, and enhance employee productivity.

This page intentionally left blank

COLORADO

Office of Information Technology

John W. Hickenlooper
Governor

Suma Nallapati
Secretary of Technology and Chief Information Officer

FY 2019-20 Funding Request | November 1, 2018

Department Priority: R-03
Request Detail: OIT Operations and Administration Center Relocation

Summary of Incremental Funding Change for FY 2019-20	Total Funds	General Funds
OIT Operations and Administration Center Relocation	$5,705,593	$5,705,593

Problem or Opportunity:

The Governor's Office of Information Technology (OIT) has been headquartered in the Pearl Plaza building at 601 E. 18th Ave. in Denver for the past 10 years. In 2008, statewide consolidation of IT functions had just begun and space in the Pearl Plaza building was acquired in pieces over the course of the next several years as other tenants left the building and OIT could fit certain portions of staff that were being consolidated at that time. There was no strategic vision for this space, but rather, due to the nature of consolidation, OIT simply filled the space out of necessity without the ability to plan long term for proper office space that would meet the needs of a mature IT organization and serve an important role in recruiting and retaining staff in this field. 10 years after the initial consolidation began, OIT now faces several challenges with the current space that drive the need to relocate staff to a new location:

- The condition and location of the facility makes it very difficult to attract and retain skilled IT staff in a competitive Denver market.
- The building is aging and has not been renovated recently.
- It lacks meeting space. There are some areas where workspace is either short or excessive, and the current configuration of space does not align with the needs of each function group.
- Existing workspace furniture and design does not adequately support the functions of a modern IT organization.

Lease and Building History

The consolidation of statewide IT services began in 2008 with the passing of Senate Bill 08-155. In April 2009, 85 employees from the 1580 Logan location, 27 employees from the 633 17th location, and 100 employees from the Kipling location were relocated, for a total of 212 employees at the Pearl Plaza location in the first days of statewide IT consolidation. At that time OIT had approximately 220 available workstations and occupied 35,000 square feet. Since then, OIT staff has grown to over 300 employees and acquired 4 additional suites within the building, for a total of over 94,000 square feet. This current footprint encompasses staff supporting the Digital Trunked Radio System (DTRS), Colorado Benefits Management System (CBMS), Applications teams, Service Desk, Deskside Support, Network Operations, Human Resources, Finance, and Executive leadership for OIT.

The Pearl Plaza building is aging and was never intended to house a modern IT organization. A variety of organizations have used the building in past decades, including a taxicab company and a trucking organization. When the Children's Hospital and Mercy Hospital rented suites in the facility, the building was

renovated to better accommodate children and the impact of this renovation on the building's restrooms and other facilities can still be seen decades later.

Attracting and Retaining Professional IT Staff
OIT competes directly with private technology firms for skilled staff in the Denver market. Without a central downtown location, it is significantly harder to attract and retain skilled technical staff. Office location and quality play a major role when it comes to prospective employees choosing an employer, and this is particularly true in technology fields where the current workforce shows a strong penchant for being directly in the downtown area which provides a shorter commute and quick access to a variety of amenities. Competing on salary alone is difficult given the vast resources available at highly successful private companies, but OIT believes a quality office location can go a long way toward attracting and retaining skilled technical staff that perform critical work in support of state agencies and citizens.

Space Constraints
Although Pearl Plaza has significant total square footage, not all of it is usable for workspaces and meeting spaces. For example, located on the second floor is the Network Operations Center (NOC). This room is larger than necessary, with inefficient layout and overall design, but the NOC must be housed here because this space provides the required second level of security clearance for entering the room. Similarly, the square footage in several other areas is larger or smaller than what is actually needed, and many of these areas would benefit from a more strategic layout and added levels of security based on different roles and responsibilities.

The Pearl Plaza office space lacks conference rooms. Employees, managers, and visiting vendors all struggle to reserve time in the current meeting spaces. As staff numbers have increased over the past 10 years, several meeting spaces that were once conference rooms have been converted to shared offices out of necessity.

In addition to this basic meeting room shortage, OIT has a unique challenge in accommodating the number of vendors and agency staff that often come to Pearl Plaza to collaborate on IT projects. The IT industry has changed considerably over the past 10 years and OIT is now working on more enterprise projects that span all executive branch agencies. These large statewide projects are often coordinated at the Pearl Plaza location and bring subject matter experts from agencies and vendors to the building, putting pressure on space needs. Also, since OIT serves as the consolidated IT provider for the state, staff engage not only with vendors working on OIT projects, but with all IT vendors that are engaged with executive branch agencies. These issues add pressure to already overbooked meeting spaces.

Collaboration
When OIT consolidated to one location in 2009, existing cubicles were removed and rebuilt within Pearl Plaza to save on moving costs. Since then, the majority of Pearl Plaza has consisted of open office space with multiple rows of cubicles. Although this design was functional ten years ago, the nature of OIT staff work today does not align with this layout. Prior to consolidation, the typical OIT employee supported one specific agency, but as enterprise solutions are now being implemented, staff are increasingly supporting agencies across the entire Executive Branch. This has changed the nature of the work environment. Staff are now collaborating more and need to communicate openly with each other. The current configuration of cubicles creates physical barriers between workspaces, and this fuels intellectual and interpersonal barriers to collaboration.

Proposed Solution:

This request is for funding to cover basic relocation costs within the Downtown Denver area, as well as the variance in lease costs for the new location. This new location will serve the state with better recruitment and retention of highly skilled IT staff, and it will enhance employee productivity through the incorporation of technology and meeting space that supports evolving IT job tasks. OIT requests $5,705,593 in General Funds in FY 2019-20, and Reappropriated Funds of $1,999,605 in FY 2020-21 and ongoing, with an estimated lease increase of 3% annually. OIT's existing lease will end in March of 2019. Negotiations are underway to extend this lease for a period of time. Once funding is approved, negotiations for a new location and the initial buildout will be completed in FY 2019-20, with a lease at a new facility expected to begin July 1, 2020.

The amounts in this budget request represent information available at the time of the request, but given the nature of the real estate market, any change in the actual amounts may need to be addressed through a subsequent budget request. Several factors that may influence the final cost of the move include:
- Exact square footage in the acquired space
- Market construction costs
- Market lease costs
- Final negotiated tenant improvement allowance

Roll forward spending authority is requested to ensure funding follows the final lease build out and start date as negotiated.

Alternatives
OIT evaluated several alternatives, including:
- Renewing the current lease at the Pearl Plaza for another 10 years. This option would not address staff recruitment and retention issues, as well as the core space issues that exist. Ultimately, renewing the lease for an extended period would not meet the long term needs of OIT as a modern IT organization.
- Renewing the current lease and requesting funds to redesign this location to modernize workstations to accommodate more staff and a better layout for current functional groups. This option would come at significant cost, and OIT believes that it is not prudent to invest a large amount of funds in a building that is not owned by the state.
- OIT evaluated options for relocating portions of staff outside of the downtown area altogether, and setting up headquarters in either the northern or southern end of the city. While locations in these areas may have relatively lower overall lease costs, ultimately it was determined that these locations outside of the main Downtown Denver area would pose additional challenges with recruitment and retention of IT employees, since prospective employees in the technology industry strongly prefer a downtown location. As OIT works to attract a quality workforce to serve critical enterprise functions, it is important that OIT positions its central headquarters appropriately in the downtown market.

OIT's chosen solution is to relocate current Pearl Plaza employees to a new office space in Downtown Denver with an appropriate layout, adequate meeting space, long term stability, and the capacity to build out and accommodate the needs of a modern IT workforce.

Anticipated Outcomes:

This request will provide OIT with the ability to attract and retain skilled staff and it will ensure OIT's operations and administrative teams have the facilities needed to perform their jobs effectively. It will allow for the proper space to group employees strategically and ensure an appropriate level of access and security

is maintained for each group.

Information technology continues to play an integral role in accomplishing program objectives across all state agencies. By transitioning to facilities with the necessary space, layout, and buildout to accommodate a modern IT organization, OIT will have the basic resources needed to collaborate effectively, serve state agencies, and help them accomplish critical goals for Coloradans.

Assumptions and Calculations:

OIT collaborated with the Department of Personnel and Administration (DPA) to research potential office space available in the Denver area and estimate the costs associated with this relocation. Data from these sources has informed the estimates below, but a final determination on a specific location would be made based on an evaluation of the available facilities at the time this request is approved. OIT anticipates that any deviation from the estimates below may need to be addressed through a subsequent budget request. Several factors such as the exact square footage in the acquired space, any change in market construction costs or lease costs, as well as the final negotiated tenant improvement allowance may all have an impact on the final cost of the move.

Table 1: Assumptions for Space Requirements:

Current Square Footage by Major Work Group	Square Footage
CBMS	19,089 Sq. Ft.
DTRS	9,601 Sq. Ft
Executive Leadership team	11,827 Sq. Ft.
Applications, Service Desk, Deskside Support, Network Operations, Finance, HR	54,251 Sq. Ft.
TOTAL	**94,768 Sq. Ft.**
Current Pearl Plaza lease cost	$21.42/Sq. Ft
Estimated New Lease Cost (detailed in Table 2 below)	$42.52/Sq. Ft.
Variance between current lease and anticipated new lease cost	$21.10/Sq. Ft.
Estimated annual lease rate increase	3%

OIT reviewed available space on the market at the time of the request in order to evaluate locations that had the potential to meet OIT's space needs. The locations listed below were used to provide a sample of potential lease rates, including rent and applicable operating expenses, in order to determine an estimate for this request. The actual lease rate will be determined at the time of the real estate search/negotiation process once funding has been approved.

Table 2: Assumptions for New Lease Cost Estimate:

Sample Location	Additional Property Information	Estimated Cost Per Sq. Ft. Including Rent and Operating Expenses
1225 17th St.	Building Type: Class A Office Built in: 1982	$36.32/Sq. Ft.
1515 Arapahoe St.	Building Type: Class B Office Built in: 1973, Renovated in 2006	$38.33/Sq. Ft.
370 17th St.	Building Type: Class A Office Built in 1984, Renovated in 2016	$44.29/Sq. Ft.
1144 15th St.	Building Type: Class A Office Built in: 2018	$51.15/Sq. Ft.
AVERAGE		**$42.52/Sq. Ft.**

Table 3: Cost Summary

	Rate per Sq. Ft.	FY 2019-20	FY 2020-21 and ongoing
Higher per sq. ft. lease cost - 94,768 Sq. Ft. (assumed new lease beginning 7/1/2020) Estimated New Lease Cost ($42.52) less current Lease Cost ($21.42) = $21.10 increase	$21.10	$0	$1,999,605
Subtotal - Ongoing Lease Costs		**$0**	**$1,999,605**
Architecture and Engineering (A&E)	$3.65	$345,903	$0
Audio Visual/IT Equipment	$5.00	$473,840	$0
Construction	$60.00	$5,686,080	$0
IT Cabling	$4.00	$379,072	$0
Furniture and Fixtures	$28.00	$2,653,504	$0
Tenant Improvement Allowance	($50.00)	($4,738,400)	$0
Move Costs	$1.50	$142,152	$0
Other one-time costs to transition from existing lease (80% of $954,302 Unamortized Tenant Improvement Allowance)		$763,442	$0
Subtotal - One-time Move and Build Out Costs		**$5,705,593**	**$0**
TOTAL		**$5,705,593**	**$1,999,605**
Total General Funds requested (first year move costs):		**$5,705,593**	
Total Reappropriated Funds requested (increased ongoing lease costs allocated to state agencies through Common Policy):			**$1,999,605**

Table 4: Cost Breakdown, by Major Work Group

	FY 2019-20	FY 2020-21 and ongoing
CBMS		
Higher per sq. ft. lease cost -19,089 Sq. Ft.	$0	$402,778
One-time Move and Build Out Costs	$1,149,270	$0
Subtotal - CBMS	**$1,149,270**	**$402,778**
DTRS		
Higher per sq. ft. lease cost - 9,601 Sq. Ft.	$0	$202,581
One-time Move and Build Out Costs	$578,038	$0
Subtotal - DTRS	**$578,038**	**$202,581**
Executive Leadership Team		
Higher per sq. ft. lease cost - 11,827 Sq. Ft.	$0	$249,550
One-time Move and Build Out Costs	$712,056	$0
Subtotal - ELT	**$712,056**	**$249,550**
All other (Applications, Service Desk, Deskside Support, Network Operations, Finance, HR)		
Higher per sq. ft. lease cost - 54,251 Sq. Ft.	$0	$1,144,696
One-time Move and Build Out Costs	$3,266,229	$0
Subtotal - All Other Workgroups	**$3,266,229**	**$1,144,696**
TOTAL	**$5,705,593**	**$1,999,605**

Table 5: Current Staff Count, by Major Work Group:

	FTE
CBMS	37
DTRS	21
Management, Executive Leadership, Support	51
All other (Applications, Service Desk, Deskside Support, Network Operations, Finance, HR)	228
TOTAL	**337**

Impact to Common Policy:

The costs for the OIT Operations and Administration Center relocation in FY 2019-20 are requested as General Fund and would not impact Common Policy. Increased lease costs in FY 2020-21 and ongoing are requested as Reappropriated funds from state agencies, and these allocations will be incorporated into the FY 2020-21 Base Common Policy.

Schedule 13

Department of Governor's Office

Funding Request for The FY 2019-20 Budget Cycle

Request Title

R-04 (OIT) Application Refresh and Consolidation

Dept. Approval By: *[signature]*

OSPB Approval By: *[signature]*

___		Supplemental FY 2018-19
___		Budget Amendment FY 2019-20
X		Change Request FY 2019-20

Summary Information	Fund	FY 2018-19		FY 2019-20		FY 2020-21
		Initial Appropriation	Supplemental Request	Base Request	Change Request	Continuation
	Total	$15,892,845	$0	$15,892,845	$800,700	$800,700
	FTE	112.0	0.0	112.0	0.0	0.0
Total of All Line Items Impacted by Change Request	GF	$0	$0	$0	$0	$0
	CF	$0	$0	$0	$0	$0
	RF	$15,892,845	$0	$15,892,845	$800,700	$800,700
	FF	$0	$0	$0	$0	$0

Line Item Information	Fund	FY 2018-19		FY 2019-20		FY 2020-21
		Initial Appropriation	Supplemental Request	Base Request	Change Request	Continuation
	Total	$15,892,845	$0	$15,892,845	$800,700	$800,700
	FTE	112.0	0.0	112.0	0.0	0.0
05. Office of Information Technology, (E) Applications, (1) Applications - Shared Services	GF	$0	$0	$0	$0	$0
	CF	$0	$0	$0	$0	$0
	RF	$15,892,845	$0	$15,892,845	$800,700	$800,700
	FF	$0	$0	$0	$0	$0

Auxiliary Data

Requires Legislation?   NO

Type of Request?	Department of Governor's Office Prioritized Request	**Interagency Approval or Related Schedule 13s:**	Impacts Other Agency

This page is intentionally left blank.

Cost and FTE

- The Office of Information Technology requests $800,700 in reappropriated funds in FY 2019-20 and ongoing to fund a program to continually consolidate, modernize, and maintain the State's aging applications. This represents a 2.0 percent increase in the Enterprise Applications (EA) operating budget.

Current Program

- EA has a budget of $40,626,393 and 304.0 FTE in FY 2018-19 to maintain over 1,100 applications. EA supports the majority of operational functions for seventeen state agencies and also develops new applications that agencies request.

Problem or Opportunity

- Over time, agencies have created a large number of disparate applications in response to evolving business needs. As those needs change and the underlying hardware and software become obsolete, many applications require modernization or consolidation.
- As a result of the number, age and custom nature of many applications, 75 percent of EA labor is devoted to maintaining legacy applications and only a few staff members are familiar with each application.
- OIT's Application Portfolio Management System (APMS) holds the inventory and detailed information on the State's applications. There is no funding available to maintain this critical tool.

Consequences of Problem

- Once the vendor ends support for Server 2008 on January 14, 2020 it will not provide security patches and applications left on those servers will become increasingly vulnerable to security threats.
- Without intervention, the number or applications will continue to expand and maintenance costs will grow and crowd out spending on new application development.

Proposed Solution

- OIT will annually engage a team of contractors $420,700 (3,400 hours) and utilize platforms and licenses in the amount of $380,000 to consolidate and modernize applications. OIT will work with agencies to strategically retire, consolidate or modernize applications. As part of this effort, OIT will create new service offerings, enterprise applications that can each meet the needs of many processes in multiple Agencies. This will result in shrinking the application footprint and enable the shifting of EA resources from reactive application repair to providing proactive, value added services.

This page is intentionally left blank.

COLORADO

Office of Information Technology

John W. Hickenlooper
Governor

Suma Nallapati
Secretary of Technology and Chief Information Officer

FY2019-20 Funding Request | November 1, 2018

Department Priority: R-04
Request Detail: Application Refresh and Consolidation (ARC)

Summary of Incremental Funding Change for FY 2019-20	Total Funds	Reappropriated Funds
Application Refresh and Consolidation (ARC)	$800,700	$800,700

Customer Impact:

This request will enable the EA team to provide robust facts, data and solutions to agencies. This information is critically needed so agencies can make informed, strategic decisions about application footprint in partnership with OIT. This request will also enable agencies to closely manage application portfolios and improve business processes. Applications will stay up-to-date on the latest hardware and software technology to reduce security risk and reduce the total cost of software maintenance. Agencies will be able to take advantage of new service offerings that will upgrade or consolidate existing applications. They may experience new functionality and a better user experience.   Agencies will experience better support and service delivery from OIT as EA staff can more efficiently support the enterprise experience.

Problem or Opportunity:

EA is facing three major interrelated problems. The first is a lack of consistent and strategic management of security and performance updates on hardware and software. The second is that the EA Support Model is unsustainable and unable to properly support the current number of applications. The final problem is that there is no available funding to maintain APMS, a critical application inventory tool. These issues arose from the State of Colorado's IT history.

Current Program

Today the State of Colorado has over 1,100 business systems (applications) that support the vast majority of the business functions across 17 government agencies. Up to the current period, agencies built or configured these applications based on a set of requirements at a point in time. However, business needs and technology evolve, and when feasible, the software has been enhanced, but has not kept pace with change. In addition, the continuous security and performance updates needed for the hardware and software components that run these systems have not been consistently and strategically addressed. Another feature of the primarily agency driven nature of application development has been that it did not have a state-wide perspective. As an example, three divisions of a single agency were each separately and almost simultaneously sourcing new licensing applications to do basically the same thing but were unaware of each other until an OIT staff person

alerted them. That example shows how isolated agency sourcing of applications can cause unnecessary expansion and complexity in the application footprint.

The current state of the application portfolio leads to several problems. Agencies without knowledge of similar applications under development or in use are likely to overspend on a specialized vendor solution more expensive and difficult for OIT to maintain. Or agencies will chose a solution because it is the lowest cost, but not take into account the added complexity and cost to OIT staff to have to maintain and support an additional custom vendor solution. An enterprise platform solution may have higher one-time costs to agencies, but the support model is much easier and cost effective for OIT to sustain. Another element of the current system for application development is that agencies usually fund them through one time funding so there is no established funding for application modernization and applications until the hardware on which they reside becomes obsolete and creates a crisis situation.

Lack of Consistent and Strategic Management of Security and Performance Updates
Adding urgency to the need for modernizing the application environment is the impending end of support for MS Server 2008 on January 14, 2020. Once that occurs, MS will stop making patches for the program and applications running on it will become increasingly vulnerable to security issues. The Operating Systems (OS) are the heart of each server. They enable the system to operate properly, to integrate with other systems, and to fend off attackers attempting to gain access to the system. This deadline will affect 400+ applications used by customer agencies to deliver everyday services. Agencies, in conjunction with OIT, will be using other resources to migrate off MS Server 2008 operating systems and hardware onto the cloud or other servers with current operating systems. In parallel, applications that rely on customized database software (SQL, Oracle, and Informix) will likely require an upgrade to the database software as well because of the OS upgrade. The applications have points of integration, updating the OS for one application may require the updating of the interfacing systems as well. Of the 400+ applications, it is estimated that at least half will require some degree of redevelopment.

Unsustainable Support Model
The proliferation of home grown solutions, one-off applications and vendor solutions OIT cannot configure is resulting in an unsustainable support model for OIT and creating an application landscape that is so diverse that the State cannot maximize economies of scale in software acquisition or develop a plan to drive down IT maintenance costs. Currently, 75 percent of applications group staffing is devoted to maintaining legacy applications and only a few staff members are familiar with each application. For example, of the State's 122 Licensing, Permitting and Inspection applications, there are 22 disparate vendor solutions and at least 16 technology solutions for applications built by OIT over the years.

Currently, 45 percent of all applications in this category are recommended for modernization. This area highlights the potential benefit from OIT and the agencies working together to create the efficiency of enterprise solutions.

The U.S. Government has struggled with finding a way to integrate its information technology infrastructure with its business goals and objectives. The U.S. Federal Enterprise Architecture (FEA) was developed to integrate strategic business and technology management. This architecture created a framework for business

people and technology people to categorize applications and tie them to business goals and objectives. OIT has used this model to categorize the over 1,000 state applications into groups and categories as follows:

Management of Government Resources
- This category represents the basic services that run the State from Financial Management, Human Resource Management, and Information Technology Management to Supply Chain Management. About 20 percent of the State's application portfolio support the Management of Government Resources.

Mode of Delivery
- This category is delivery mechanisms for the Services for Citizens; this includes Public Goods Creation & Management and Regulatory Compliance & Enforcement and Transfers to Local Governments. Almost 30 percent of the State's software applications support Mode of Delivery.

Services for Citizens
- This category is the major function of the government; it includes everything from Social Services, Health, and Education to Law Enforcement, Litigation & Judicial Activities and Transportation. Almost 50 percent of the State's software applications support Services for Citizens.

Support of Delivery Services
- This category includes Legislative Relations, Planning & Budgeting, Public Affairs & Regulatory Development – the State does not have many software applications in this area. The final category for Support of Delivery Services is Revenue Collection and the State has about 5 percent of its applications focused on Revenue Collection.

The following table breaks out the New Service Categories and how the current applications will be assigned to the new categories. A table with the complete list of all applications by category is attached to this request as Appendix 1.

Management of Government Resources	Mode of Delivery	Services for Citizens	Support of Delivery Services
Audit/Compliance	Audit/Compliance	Benefits Management	Audit/Compliance
Building Access	Case Management	Audit/Compliance	Case Management
Case Management	Citizen Relationship Management (CRM)	Benefits/Eligibility	Citizen Relationship Management (CRM)
Citizen Relationship Management (CRM)	Data Insight	Case Management	Data Insight
Claims Management	Emergency Management	Citizen Relationship Management (CRM)	Financial Management
Data Insight	Enterprise Content Management (ECM)	Claims Management	Personnel Management - HRIS
Enterprise Architecture & Project Governance	Financial Management	Corrections	Revenue Management
Enterprise Content Management (ECM)	(Geographic Information Systems)	Data Insight	Web Development & Content Management
Financial Management	Licensing, Permitting & Inspections	Data Insight Regulatory Compliance & Enforcement	Regulatory Compliance & Enforcement
GIS (Geographic Information Systems)	Public Safety	Emergency Management	
Identity Management & Single Sign On (SSO)	Regulatory Compliance & Enforcement	Enterprise Content Management (ECM)	
IT Enabling Technologies	Revenue Management	Financial Management	
Personnel Management - HRIS	Supply Chain & Asset Management	GIS (Geographic Information Systems)	
Regulatory Compliance & Enforcement	Web Development & Content Management	Health	
Revenue Management	Regulatory Compliance & Enforcement	Identity Management & Single Sign On (SSO)	
Security Compliance & Business Continuity		IT Enabling Technologies	
Supply Chain & Asset Management		Personnel Management - HRIS	
Web Development & Content Management		Public Safety	
Regulatory Compliance & Enforcement		Regulatory Compliance & Enforcement	
		Revenue Management	
		Security Compliance & Business Continuity	
		Supply Chain & Asset Management	
		Web Development & Content Management	
		Regulatory Compliance & Enforcement	

One factor causing the fragmentation of applications is that OIT does not have readily available, competitively price service offerings that agencies could quickly use. If such offerings were available more agencies would chose an enterprise solution that has a robust, strategic support model. Unfortunately, EA does not have available funding to proactively start creating a menu of such offerings for agencies.

Funding to Maintain APMS

APMS is the official source of record for the inventory of applications OIT supports. OIT created APMS using temporary funds that are now exhausted. Permanent funding is needs to ensure it stays updated and maintained so that it can be used in providing the data needed to undertake an application portfolio strategy. Currently APMS must compete annually for limited discretionary funding within the EA budget and is vulnerable when such funding is scarce.

In FY 2014-15 OIT received one-time Decision Item funding from, "R-03 Eliminate Redundant Applications." One of the deliverables of that Decision Item was an inventory tool to maintain the inventory of state applications and a sustainable application lifecycle management process. The Application Portfolio Management System (APMS) was selected by OIT as the tool for this purpose and it was purchased with the Decision Item funds. With the initial purchase, OIT also paid for the first 4 years of ongoing maintenance. This prepaid maintenance expires on June 30, 2019. OIT has expanded the use of the APMS application, because APMS does much more than just track an inventory of applications. It includes access to a subscription service which provides up to date vendor product lifecycle dates, which the system uses to identify technology debt in the underlying infrastructure and to provide visualizations of the most critical risk factors for the state's applications. This tool tracks each application from cradle to grave and notifies OIT as the servers that support the application reaches obsolescence. The APMS system was not paid for OIT internally, it was purchased with decision item funding and there is no ongoing source of funds at OIT to cover the future costs of APMS after June 30, 2019.

Proposed Solution:

The proposed solution is to establish a permanent program that actively drives enterprise solutions and systematically identifies the maintenance risks, upgrades due, and also drives standardization of the state's constantly growing and aging application portfolio. The program will continually analyze, modernize and/or consolidate applications statewide as well as deploy standardized service offerings which will streamline the state's application footprint. The funding requested will allow OIT to (a) engage contractors to put in place an efficient and systematic governance structure, (b) build out enterprise platforms which can be leveraged statewide, and (c) cover the initial cost of licenses for those platforms.

This request is for $800,700 in annual Reappropriated funding. This will allow OIT to engage contractors to analyze and modernize applications ($420,700). To support those contractors, OIT will also purchase software platforms and licenses and maintain the Application Portfolio Management System (APMS) ($380,000).

In purchasing software platforms, OIT has established standards in order to drive towards strategic platforms that will help streamline the sprawl of applications. Google, Salesforce and Perceptive/Hyland have been

---

determined to provide the best platform strategies for new applications at the state. New enterprise applications will be developed with one of these platforms. The determination of which platform depends on the functionality needed in the new application. As the Agencies establish the work plan for the Application Refresh & Consolidation Program, the platform will be selected and the licenses for the first year will be funded from the Fiscal Year 2019-20 ARC decision item. Any adjunct software required for the deployment will also be covered, so that the Agency will not have to cover license or subscription costs until the following fiscal year after the go live of the new enterprise applications. Salesforce and Perceptive/Hyland are both Software as a Service (SaaS) with annual subscription renewals. Google App Maker is a great tool to modernize small to medium sized applications that are not publicly accessible and many of the costs are covered under the Enterprise Licensing that OIT has with Google, so the cost impact of new Google applications is negligible.

Alternatives Considered

Before deciding to pursue the ARC Program, EA considered multiple other options. The first option was to use existing resources to address the problems. There is a program manager working on the issue who can occasionally marshal additional resources to address critical application modernization needs and easy retirements, but without additional funding he would not be able to address the urgent MS Server 2008 issue quickly enough. The other alternative considered would be to request a temporary funding increase to address the MS Server 2008 issue. This would be similar to FY 2014-15 R-03 Eliminate Redundant Application (ERA) request which achieved success in reducing the number of applications. However this success was a one-time project with one-time funding. It was not sustained and therefore does not provide a long-term solution. Agencies continue to add applications and these new systems developed today will become legacy issues in 5-10 years. This leads the State to the same situation over and over again. One-time projects are not a systemic solution. The best solution was to create an ongoing program that will systematically and continually address managing the State's application footprint.

Implementation Plan

OIT will implement the following steps upon approval of the request.

1. In FY 2018-19 starting in March once the funding is approved, OIT will launch a Governance Team in partnership with agencies. The Governance Team will give agencies a decision making role in the allocation of toward particular applications or service offerings. This team will establish the funding allocation for FY 2019-20 by June 2019. Using APMS, existing OIT staff will identify all applications on end of life hardware and software (i.e., Windows Server OS 2008) and collaborate with the Server Administration Team to determine which, if any, applications can be a simple "lift and shift" to a new Server OS in a virtual server environment.

2. In FY 2019-20 funding will become available and the ARC program will commence in earnest. Contractors will work with Solution Engineering to identify solutions such as cloud storage to reduce future dependency on aging components. They will use APMS and other methods to identify consolidation opportunities with similar applications within the agency and across the enterprise. Contractors will also, continue the effort launched in May, 2018, when $100,000 was directed from

the Technology Advancement Fund to establish a pilot for an OIT enterprise service offering for Licensing, Permitting and Inspection systems. This will lead them to establish enterprise platform(s) for Licensing, Permitting and Inspection services. The Governance Team will establish the funding allocation for FY 2020-21 by June 2020. Contract Staff will be engaged in the following roles:

- **Business Analyst** will work with agency staff to document process and requirements
- **Configuration Analyst** will configure enterprise solutions to set up applications
- **Project/ Product Manager** will focus on product planning and assist Program Manager with management of project to deploy OIT Services
- **Database Programmer Analyst** will work with agencies to migrate historic data and open cases as needed, to the new applications.
- **IT Engineer/Solution Engineer/Database Architect** will analyze requirements and propose solution options which will include enterprise solutions
- **Developer** will assist with any customized code that will be necessary to tailor the application to the specific business process that aren't addressed by generic configurable applications
- **Senior Web Developer** will set up integrations and web access to the new applications

The current applications workforce has an insufficient number of employees who possess the technology skills to create enterprise solutions on modern platforms. The skillsets of current staff are focused on the uniqueness of each Department's myriad legacy applications. OIT has approximately 200 developers on staff at any given time. These staff support nearly 1,200 applications. The average OIT Developer supports about 10-15 applications, handling all tickets and change requests. The Enterprise Applications team responds to about 1,000 tickets and 1,000 change orders each month across a wide variety of applications. As this new program is implemented and applications are transitioned and consolidated onto modern platforms, the current EA staff that now support existing applications will have time to focus on developing new enterprise applications and services. The use of contractors enables OIT to have the right skills at the right time and they can be utilized more efficiently for one month up to nine months.

Although OIT anticipates that in time the ARC Program will free up OIT staff member time, it will take several years before the impact of deploying new service offerings and platforms will be institutionalized. At the same time, the demand for new applications and new user functionality at the State continues to grow.   In July 2014, OIT supported 1,088 applications. Since that date, OIT has decommissioned over 275 applications. However, Department demand has precipitated the creation of 363 new Agency focused applications. As staff time becomes available agency clients drive the development of new customized applications rather than enterprise solutions. In order to reduce the application footprint, OIT must deploy enterprise solutions that will service several agencies while at the same time continuing to support the existing applications. This represents a culture shift for OIT and the State. Agencies must collaborate on reducing the number of applications needed through consolidation of applications with enterprise solutions and service offerings.

3. In FY 2020-21 and beyond, the ARC program will continue progress on creating an enterprise application environment. They will identify top security risks based on aging components and share details with Agencies for budget planning (Microsoft Server 2012 Operating System will be obsolete by 2022). The contractors will establish enterprise platform(s) for next enterprise service offering; the next one is expected to be either Business Insight and Analysis applications, or Content Management. They will also identify opportunities for application consolidations for those applications requiring programming changes due to expiring components. Each year by June 30, the Governance Team will establish the funding allocation for the following fiscal year.

When OIT proactively establishes strategic service offerings, as the ARC Program will enable, then agencies will be able to select standard technologies and OIT will be able to scale its support staff to support these standard platforms and provide more responsive support at lower costs.

Anticipated Outcomes:

Through addressing the three identified problems, this request targets OIT's Wildly Important Goal (WIG) to "deliver effective solutions and reliable customer service" through a sustained drive toward creating an efficient enterprise application environment. In order to track the program's effectiveness, OIT will use APMS to count the number of applications decommissioned each year with an annual goal of reducing 100 for at least the first 3 years. The program will also have a goal of creating at least one service offering each fiscal year. In these ways ARC will demonstrate significant impacts upon both state and OIT key metrics.

Lack of Consistent and Strategic Management of Security and Performance Updates
This program will ensure that Agencies approach necessary updates of software and hardware strategically. The ARC Program will identify the applications in the "red zone" each year for the agencies. The applications affected by the expiring OS or database software will be targeted for modernization or consolidation, but the agency governance team will prioritize the funding allocations based on the most severe technology debt related to the at-risk applications in the red zone each year.

The State's business application environment is complex and when OIT changes one thing, it affects numerous applications. The ARC program will identify enterprise solutions that will utilize cloud storage, so that dedicated servers are no longer required. With this strategy, OIT and the Agencies can progressively minimize their reliance on local data centers with server technology that must be continuously upgraded.

Unsustainable Support Model
OIT estimates the request will enable the decommissioning of about 100 applications per year through consolidation and retirement. Based on a modest assumption of $10,000 in cost avoidance per application per year, the program will generate approximately $1 million of cost avoidance for each future year. Those funds will be redirected to shifting of OIT resources from reactive application repair to providing proactive

value-add services to the agencies including preventative maintenance, addition of requested features and further application modernization.

Funding to Maintain APMS
Funding for APMS Maintenance will be assured. It will serve as a primary source of information in deciding which applications to target for modernization or retirement. OIT has already shared APMS data with agency partners so it could be used on 5 year plans. Agencies in partnership with OIT, will begin to define their IT portfolio strategy, analyze and prioritize the portfolio options and migrate to a new, more efficient enterprise application environment.

Assumptions and Calculations:

Contract labor and operating expenditures will be used to accomplish this initiative. Each year the program will adjust contracted hours in the event of changes in contracted hourly rates to operate within the requested amount. The operating expenses are to build enterprise platforms, pay for the procurement and licensing of those platforms, and cover the ongoing maintenance of APMS (Application Portfolio Management System).

ESTIMATED ANNUAL SPENDING PLAN FOR ARC PROGRAM			
	Contract Services		
Contract Labor cost estimate	Hourly rate	Hours	Dollars
Business Analyst	$115	500	$57,500
Configuration Analyst III	$102	300	$30,600
Database Programmer Analyst	$121	100	$12,100
IT Engineer/solution engineer & Database Architect	$133	100	$13,300
Developer	$118	800	$94,400
Project/Product Manager	$148	800	$118,400
Senior Web developer	$118	<u>800</u>	<u>$94,400</u>
SUBTOTAL		3,400	$420,700
Software Expenses	**Operating Expense**		
Platform and Licensing Costs			$300,000
APMS Maintenance			<u>$80,000</u>
SUBTOTAL			$380,000
TOTAL			$800,700

Impact to Common Policy:

OIT will allocate the costs of this request to agencies using the utilization metric of Agency Applications as recorded in APMS.

PROPOSED ALLOCATION			
Department	Applications	Percent of total	Allocation
Agriculture	42	3.8%	$30,796
Human Services	110	10.1%	$80,656
Labor and Employment	102	9.3%	$74,791
Corrections	12	1.1%	$8,799
Transportation	206	18.9%	$151,048
Public Health and Environment	166	15.2%	$121,718
Public Safety	53	4.9%	$38,862
Military and Veterans Affairs	2	0.2%	$1,466
Natural Resources	135	12.4%	$98,988
Local Affairs	40	3.7%	$29,330
Revenue	62	5.7%	$45,461
Regulatory Agencies	71	6.5%	$52,060
Personnel and Administration	53	4.9%	$38,862
Governor's Office	15	1.4%	$10,999
History Colorado	10	0.9%	$7,332
Health Care, Policy and Financing	13	1.2%	$9,532
OIT			
Grand Total	**1092**	**100.00%**	**$800,700**

Schedule 13

Department of Governor's Office

Funding Request for The FY 2019-20 Budget Cycle

Request Title

R-05 (OIT) Optimize Self-Service Capabilities

Dept. Approval By: _(signature)_

OSPB Approval By: _(signature)_

_____ Supplemental FY 2018-19

_____ Budget Amendment FY 2019-20

__X__ Change Request FY 2019-20

Summary Information	Fund	FY 2018-19		FY 2019-20		FY 2020-21
		Initial Appropriation	Supplemental Request	Base Request	Change Request	Continuation
Total of All Line Items Impacted by Change Request	Total	$3,234,440	$0	$3,548,953	$333,426	$272,806
	FTE	48.0	0.0	48.0	0.0	0.0
	GF	$0	$0	$0	$0	$0
	CF	$0	$0	$0	$0	$0
	RF	$3,234,440	$0	$3,548,953	$333,426	$272,806
	FF	$0	$0	$0	$0	$0

Line Item Information	Fund	FY 2018-19		FY 2019-20		FY 2020-21
		Initial Appropriation	Supplemental Request	Base Request	Change Request	Continuation
05. Office of Information Technology, (F) End User Services, (1) End User Services - Service Desk Services	Total	$3,234,440	$0	$3,548,953	$333,426	$272,806
	FTE	48.0	0.0	48.0	0.0	0.0
	GF	$0	$0	$0	$0	$0
	CF	$0	$0	$0	$0	$0
	RF	$3,234,440	$0	$3,548,953	$333,426	$272,806
	FF	$0	$0	$0	$0	$0

Auxiliary Data

Requires Legislation? NO

Type of Request? Department of Governor's Office Prioritized Request

Interagency Approval or Related Schedule 13s: Impacts Other Agency

This page is intentionally left blank.

Cost and FTE

- The Office of Information Technology (OIT) requests $333,426 in FY 2019-20 and $272,806 in FY 2020-21 and ongoing reappropriated funds for development, licensing, training, and professional services to improve and optimize the self-service customer experience and streamline business functionality.

Current Program

- The increased demand upon the OIT Enterprise Service Desk has grown tremendously between FY 2014-15 and FY 2017-18, yet no staff have been added to the team.
- The Service Desk Team manages an average of 104 major incidents or system outages monthly that disrupt operations.

Problem or Opportunity

- Implement a more customer relatable artificial intelligence and chatbot experience to allow a more connected world where OIT can reduce incident resolution time, increase onboarding accuracy, and help reduce unforeseen outcomes that can easily increase systematic issues for the citizens of Colorado.
- Increase customer empowerment through hands on, intuitive, mobile and transparent self-help channels.
- Expand the capacity of tools already in operation by connecting systems together and programming components to automate and mobilize tools for processing repetitive tasks.

Consequences of Problem

- Without continued support and funding, the OIT Customer Office will struggle to deliver a world-class customer experience through the efficient delivery of IT services that reflect an understanding of its customer's business goals, resources, and challenges.

Proposed Solution

- OIT requests $333,426 in FY 2019-20 and $272,806 in FY 2020-21 and ongoing to continue delivering and enabling the effective cross-functional teamwork to deliver IT solutions that reflect the OIT mission to support customer success.

This page is intentionally left blank.

COLORADO
Office of Information Technology

FY 2019-20 Funding Request | November 1, 2018

Department Priority: R-05
Request Detail: Optimize Self-Service Capabilities

Summary of Incremental Funding Change for FY 2019-20	Total Funds	Reappropriated Funds
Optimize Self-Service Capabilities	$333,426	$333,426

Customer Impact:

The Customer Office at the Governor's Office of Information Technology (OIT) is committed to delivering a world-class customer experience through the efficient delivery of IT services that reflect an understanding of our customers' business goals, resources, and challenges. OIT strives to enable effective, cross-functional teamwork resulting in the ability to deliver IT solutions that reflect the OIT mission to support customer success.

The theme across all Customer Office teams is improving the customer experience with IT through increased tool usage, quicker response to customer inquiries, expanded customer empowerment that enables customers to answer their own questions, and reconfigured tools to better meet their needs.

Problem or Opportunity:

The Service Management Team (SMT) is responsible for designing, delivering, managing, and improving the way information technology is used within OIT, and consumed by OIT's customers, in order to ensure customers meet their business goals.

The SMT accepts more than 200,000 requests for assistance per year. For an average cost of $13 (salary only) per contact, OIT customers access technical services via: Telephone (59 percent), the OIT Self-Service portal where customers input a service ticket (23 percent), Email (15 percent), Walk-up (2 percent), and Chat (1 percent).

FY18
Walk-up 1.5%
Email 15.2%
Cust Submits Online 23.0%
Telephone 59.2%
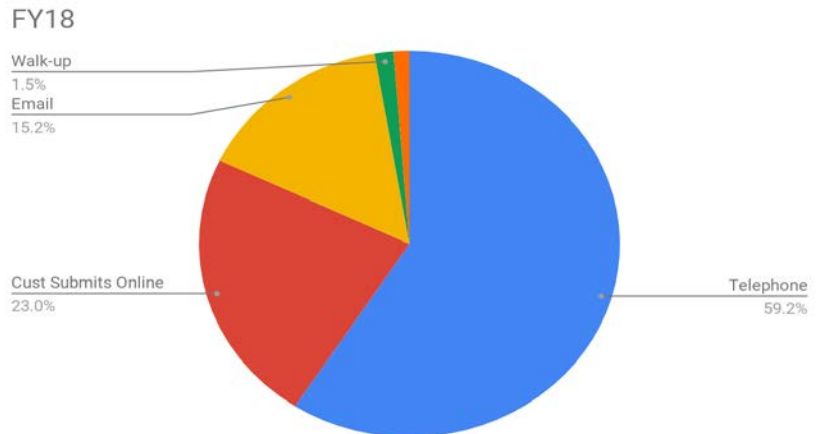
The SMT has been successful in streamlining processes and costs as they improve the customer experience. However, human resources are the greatest expense in a support center, and are the leading cost in OIT's Tier 1 support environment. Currently, 62 percent of all SMT customer interactions are "live" interactions; a customer actively engages with a SMT member to resolve or troubleshoot an issue. The average wait time when placing a call to the Service Desk is 2 1/2 minutes but can run as long as 30 minutes! Pair that with an average time to resolve an issue at almost 3 days. The other 38 percent of the time a customer submits a ticket through the Customer Service Portal, or via email, and only hears from OIT support agents when they are actively providing resolution services. They can move on with their other duties, adding value, without the wait!

Moreover, demand upon the OIT Enterprise Service Desk alone **increased nearly 80 percent** between FY2015 and FY2018, yet **no staff have been added to the Service Desk Team.** Additionally, the team now manages an average of 104 Major Incidents or system outages monthly that disrupt operations. On average, the team fulfills more than 90 percent of all requests passing through Service Desk support channels at first contact. The small percentage of tickets requiring focus beyond that first engagement are resolved in an average of 2 1/2 days; well within Service Level Commitment (SLC) parameters.
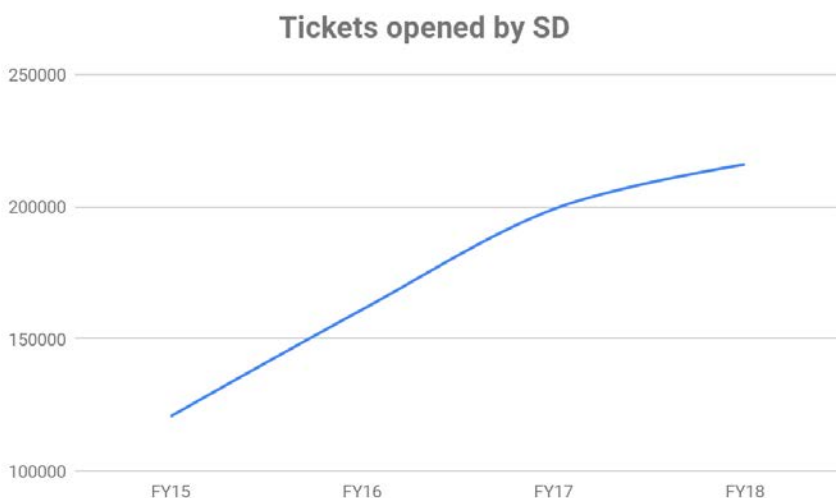
Tickets opened by SD

Proposed Solution:

This solution seeks $333,426 in FY 2019-20 in reappropriated funds, and $272,806 ongoing for development, licensing, training, and professional services to improve and optimize the self-service customer experience and streamline business functionality.

Instead of increasing FTE, the OIT Service Management Team wants to improve the customer experience by implementing relatable Artificial Intelligence (AI) and Chatbots. Chatbots are computer programs used to engage with humans, as a human. They can be employed via voice engagement or text engagement. Chatbots are often used for customer service and information acquisition. A typical application might be as simple as a keyword search that returns information, or a more advanced integration might include a question and answer experience, which drives the chatbot to the resolution for the human answering questions. In a study conducted by Narrative Science, in 2015, it was found that executive leaders, data scientists, and managers believe AI-powered technologies create jobs and improve worker performance and

efficiency. The SMT hopes to achieve increased efficiencies and higher levels of customer engagement through the application of chatbot technology in the Service Desk phone system, as well as the Customer Service Portal. The phone system will engage customers through voice interaction, while the CSP will engage via text input and response. Leveraging knowledge management libraries and tools, the CSP and phone systems will become capable of providing faster resolutions, and more effective real-time routing. Our customers live in a more connected world; as such, OIT can reduce incident resolution time, increase onboarding accuracy and ease, and prevent unforeseen outcomes that can easily propagate systemic problems to the citizens of Colorado by:

Improvement	**Real-world Value**
Investing in intelligent system tools for the implementation of innovative solutions such as smart automation and relatable artificial intelligence that prevents delays and moves customers toward resolutions faster	Automated phone system allows caller to choose from options related to their need Chatbots provide real-time assistance in Self-Service Portal; Faster solutions & Improved experience
Allowing Service Management team members to work on and solve more complex needs	Tier 1 Analyst resolve more Tier 2 requests w/o escalation | Team members can take work from higher tier support teams
Enhancing knowledge capacity and sharing across all OIT and OIT customer channels	How To, FAQ, and other support knowledge will be centralized and distributed with conformity

Additionally, OIT's opportunity costs are greater because of the significant reliance upon staff to resolve routine tasks. For example, the most popular FY18 customer requests for SMT assistance were for password resets, data entry, app support and basic "how to" questions. With smart automation of the SMT's phone and self-service systems, customers can tap directly into the same knowledge IT analysts' access to fulfill everyday needs.

FY18 Popular Requests

- How To 8.3%
- App Support 12.7%
- Data Entry 23.1%
- PSW 55.9%
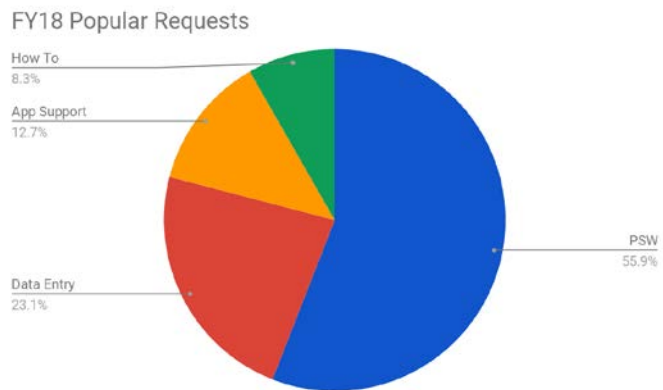
OIT will enhance the customer experience by employing conversational and relatable AI at customer and support staff touchpoints. This solution defines and employs standards that make technical knowledge more digestible and applicable to consumers of OIT services and technology. Continuing to link systems together, the solution helps customers obtain resolutions faster or altogether prevents common customer pain points. By making OIT systems smarter at every customer touchpoint, and increasing the native

intelligence within the tools OIT support staff utilize, team members will be empowered to more effectively respond to customer inquiries and needs in the moment.

The proposed solution will create:

- **Customer Empowerment** -
  - Increase customer empowerment through hands-on, intuitive, mobile and transparent self-help channels.
    - OIT customers want information at their fingertips, and they want that knowledge to be robust, clear, and concise. A growing number of OIT customers are looking to online resources to find solutions themselves.
    - OIT Customer focus group data supports a clear shift in customer preference in rules of engagement to requesting more chat services, self-help articles, and opportunities to bypass unnecessary stops during their support journey.
- **Innovatively Employ Existing Cost Centers**
  - Expanding the capacity of tools already in operation by connecting systems together and programming AI components to automate and mobilize tools for processing repetitive tasks.
    - Simplifying customer effort to access solutions without direct analyst engagement allows for decreased resolution time across all customer requests, so that analysts can be reassigned to problems that are more complicated.
    - Ongoing analysis and partnerships with customers on business process improvements will continually link repetitive requests to the knowledge base and self-service portal capabilities. As tools improve and mature, so will the customer experience.
- **Effectively Leverage OIT Human Capital**
  - Allow OIT SMT members to leverage a single source of accurate, up-to-date information that pertains to all types of knowledge including infrastructure information and diagrams, supplier contracts and agreements, software versioning and definitive media, internal and external contacts, known errors and solutions, support knowledge base and self-help, system integrations and architecture, and internal Standard Operating Procedures (SOPs).

Automation integration benefits, whether through tools integration, workflow management, or other means, have been studied and proven in many real-world settings. This solution will relieve front-line support staff from the mundane, and provide more inspiring challenges to resolve for OIT customers. OIT, and the State at-large, has seen many positive outcomes of Leaning and refining workflow processes. The Service Management Team will be able to leverage the fruits of that labor to provide additional conveniences and security across multiple customer engagements. Employing AI in the IT support portfolio will align OIT to other leading states, and the private industry. Doing so ultimately redefines the service standard within OIT's service portfolio. Figure 1 displays real-world application of this technology and examples of how it can be beneficially applied by the State IT environment:

Figure 1
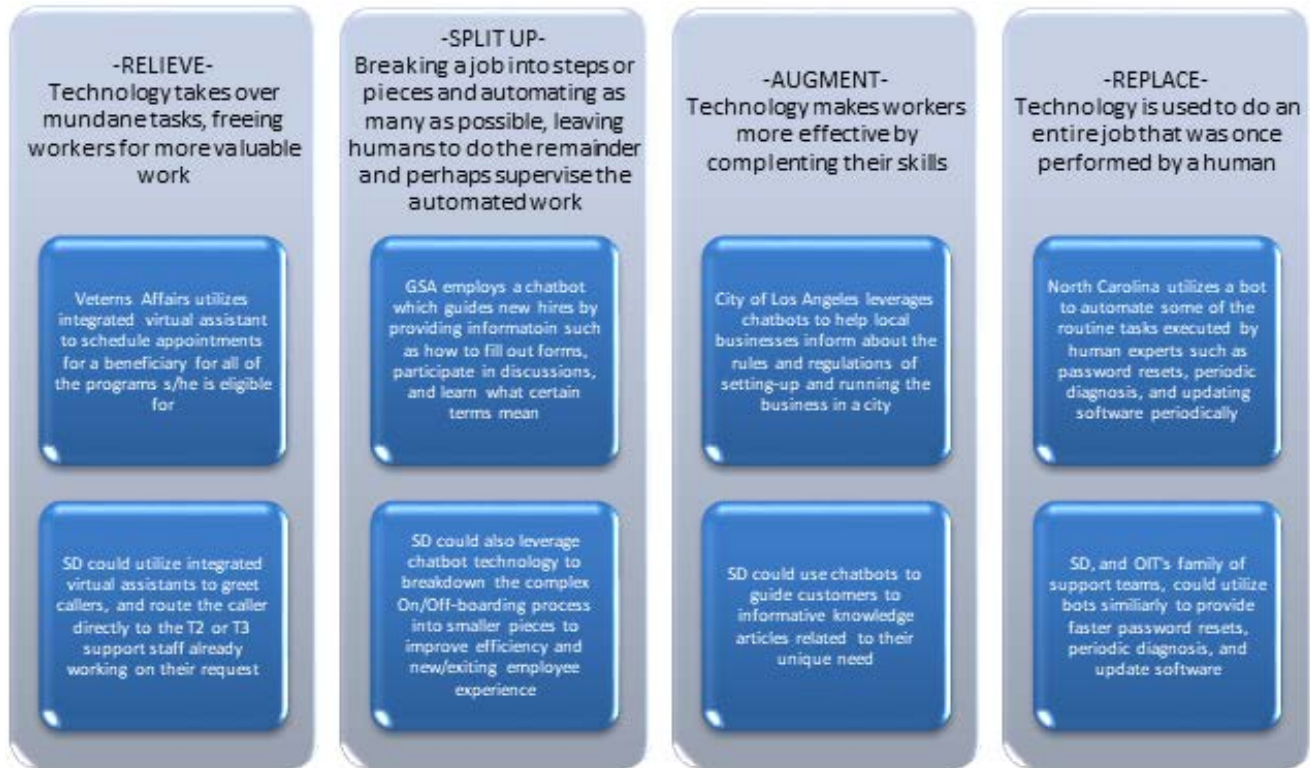
Figure 2
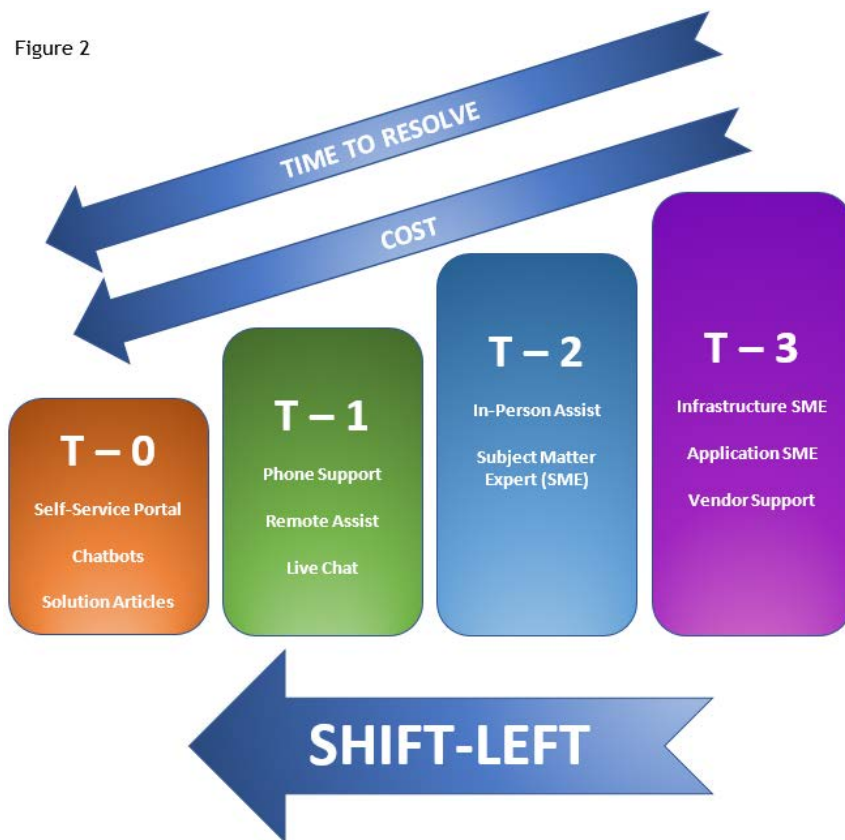
Where will this artificial intelligence (AI) reside? How does that play into the improvement of the customer experience? The AI and knowledge enhancements occur in the Tier 0 and Tier 1 zones of support. Employing a *shift-left* strategy, OIT will begin to shift knowledge closer to the customer.

Displayed in Figure 2. First, and arguably foremost, this shift of knowledge within the flow of support provides the most commonly sought information at the customer's fingertips; resulting in resolutions without waiting to engage OIT employees. Second, and still of significant value to customers, this

approach empowers front-line OIT staff to resolve more customer needs during first contact. When the organization shifts the point of resolution from the most highly paid team members, to/toward an autonomous system, cost benefit is achieved. Simultaneously, higher cost centers within OIT are utilized more effectively, and this results in better use of funding streams.

Each stakeholder unit involved in a ticket's lifecycle will achieve greater output when this solution is implemented. The following are but a small handful of examples of the possible outcomes related to this solution:

★ Customer: Let us say the average downtime for customers is relative to OIT's average Mean Time to Resolve an Incident, which is five days. Translation to customer: *I'm incapable of performing a task for five days*.

With Solution (Let's say…)	Without Solution (Let's say…)
Motor Vehicle employee is able to serve 30 citizens per day, so… **150 citizens are able to renew their plates on time**	DMV employee is unable to serve 30 citizens per day **150 citizens violate renewal deadlines, and could be on the road out of compliance**
Parks and Wildlife employee is able to issue 50 game licenses, so… **250 out-of-state hunters bring money into CO**	P&W employee is unable to issue 50 game licenses, so… **250 out-of-state hunters stay home, and rural CO communities miss an opportunity for much needed revenue**
Dept of Corrections nurse is able to provide 15 Inmates medication when scheduled, so… **75 doses are administered, thereby avoiding any number of dangerous outcomes**	Dept of Corrections nurse is unable to provide 15 doses of medication, so… **75 Inmates are at risk of health failure, emotional or mental instability | All facility correctional staff safety placed in jeopardy**

★ OIT Tier 1: Let us now say it takes an average of five minutes for a Tier 1 analyst to intake a caller's details, and post an update to a Tier 2 or Tier 3 support agent. In this situation, the analyst is only taking in basic details to add an update or inquiry to an existing ticket; not providing more in-depth troubleshooting.

With Solution (Let's say…)	Without Solution (Let's say…)
Tier 1 analyst might normally handle an average of 10 of these *update* calls per day **Nearly one hour is returned to the Tier 1**	Tier 1 analyst is able to handle an average of 10 of these *update* calls per day **The Tier 1 analyst loses nearly one**

analyst's day to provide additional help	hour/day to log update notes in an existing ticket; Opportunity loss: 21 calls/wk
Customer is routed directly to Tier 2/Tier 3 support staff to provide additional information, or inquire about status **Resolution could be provided immediately with new info from customer**	Customer is routed Tier 1 analyst to provide additional information, or inquire about status **The customer loses time talking to Tier 1 analyst, and may not hear from Tier 2/Tier 3 support staff right away**

★ <u>OIT Tier 2 & Tier 3</u>: Finally, let us say a common, but unpreventable error, which requires several steps to resolve. The error may be seen 20 times in a particular month. Though highly technical in nature, the steps are known and could be well documented. It takes highly paid Tier 2/Tier 3 support staff an average of 30 minutes to resolve.

With Solution (Let's say…)	Without Solution (Let's say…)
Tier 1 support teams are empowered to fix this common error during first contact	Tier 1 support team is forced to escalate the 20 occurrences to a higher tiered support agent
OIT Tier 2/Tier 3 employee regains 10 hours to focus on other highly technical needs and troubleshooting	**OIT Tier 2/Tier 3 employee dedicates 10 hours to this error, instead of a priority technical issue with a highly visible project**
Customer receives a varying return of time thanks to the first contact resolution	**Customer loses a variable amount of time; dependent upon the Tier 2/Tier 3 support agent's ability to address the customer's need among their many other tickets in queue**

Many direct benefits will result from implementing smart automation and systems integration; benefits that directly relate to OIT's Wildly Important Goals. Specifically, this solution aligns tightly to OIT's WIGs: Delivering Effective Solutions & Reliable Customer Services, Securing Colorado through Innovation, and Advancing a Culture of Employee Support & Collaboration. See Figure 3 for additional details on how this solution is aligning to OIT's customer-focused strategy.

Figure 3

WIG — **Delivering Effective Solutions & Reliable Customer Service**
- This solution reflects the many conversations with agency customers to survey their interests and ideas for improvements that support their business needs.
- The solution builds upon an existing mission to improve customer experiences with today's complex IT topography

WIG — **Securing Colorado Through Innovation**
- This solution edifies OIT's business design, and paves the way for tighter assurances throughout any areas of OIT's service delivery model.
- The solution aides with security endeavors by providing the framework from which robust policy and process are applied.

WIG — **Advancing a Culture of Employee Support & Collaboration**
- This solution provides a means by which to challenge employees to exercise critical thought and refinement of skill.
- The solution encourages collaboration with internal and external stakeholders as a native benefit to driving tool evolution and process improvement.

Anticipated Outcomes:

Improvements to the self-service portal, and automated call center software, customers will:

- Receive quicker turnaround on their requests, and be able to resolve many repetitive requests through automation.
- Gain more empowerment with the information they need, when they need it at their fingertips from any device
- No longer be required to wait on a phone call just to check the status of their request
- Benefit from more transparency, and be able to track the progress of their requests through each phase of fulfillment process when it's convenient for them

Anticipated outcomes for these upgrades and integrations are many. Table 1 provides details about the expected outcomes/benefits, and how the success of those outcomes will be measured.

Table 1

Customer Benefits	Metrics/Measure of Success

• **Productivity**
  ○ Reduce time spent with support staff; returning time back to customers
  ○ Increased focus on mission-critical tasks
  ○ Increased support output without new FTE
 	
• **Empowerment**
  ○ Ability to choose when to receive support
  ○ Support tailored to each customer's preference
 	
• **Reliability**
  ○ Consistent messaging from OIT
  ○ Connect with support staff best suited to fulfill request
  ○ Higher accuracy rate
 	
• **Performance**
  ○ Obtain help faster
  ○ Receive resolutions sooner
  ○ Expand 24x7 Support Capacity
 	
• **Increased Security and Compliance**
  ○ Remove unnecessary steps in account management process
  ○ Limit number of people involved in access management
	Cost Diversion Rates
	• Cost diversion to show savings gained through automation and direct-routing
	  ○ Every resolution at T0 = Cost Diversion
	  ○ Every SS automated bypass = Cost Diversion
	
	Customer Satisfaction (CSat)
	• Increased customer satisfaction with overall experience
	• Changing the question will provide deeper data/customer expression. (did I resolve your issue? Yes/no, then to respective survey)
	
	First Call Resolution (FCR)
	Knowledge Article Usage
	• Resolutions sourced from knowledge base
	• Article creation = Production rates
	
	Mean Time To Resolution (MTTR)
	• Tier-based Resolution Rates
	• T1/T2/T3 perspective
	
	Dropped Calls
	• Enhanced reporting to reveal drops at specific menu levels

---

Assumptions and Calculations:

This request will provide the Service Desk Services department within OIT to deliver first class customer service when problems arise and a solution is needed quickly. OIT seeks $333,426 in FY 2019-20 and $272,806 in FY 2020-21 and ongoing reappropriated funds for development, licensing, training and professional services to improve and optimize the self-service customer experience and streamline business functionality. Table 2 provides a breakout of costs associated with this request.

Table 2

Item	Description	Detail	FY 2019-20	FY 2020-21
Interactive Voice Response (IVR) System	Implementation	Professional services required during initial rollout activities: initial menu, workflow, and voice programming	$35,000	$0
	Licenses	Analyst Licenses; access to use call management software	$70,200	$70,200
	Maintenance	Annual assurance of uptime	$50,620	$50,620

			FY 2019-20	FY 2020-21
		from vendor, software patches and updates		
	Customization	Ongoing customization: Menu, workflow, and voice modifications	$0	$23,500
		IVR Total Cost	**$155,820**	**$144,320**
Chatbots	Implementation	Professional services required during initial rollout activities: Initial logic and workflow programming Connect to Knowledge Management systems	$25,000	$0
	Intelligent customer interface	Concurrent Licenses; access to use and.maintain chatbot software	$78,486	$78,486
		Chatbot Total Cost	**$103,486**	**$78,486**
Knowledge Management	Implementation	Professional services required during initial rollout activities: initial library, and security protocol programming Connect system to CMDB, and other knowledge sources	$24,120	$0
	Knowledge Sharing Solution Customization	Concurrent Licenses; access to use and maintain knowledge libraries and software	$50,000	$50,000
		Knowledge Total Cost	**$74,120**	**$50,000**
			FY 2019-20	**FY 2020-21**
		Total Cost	**$333,426**	**$272,806**

The costs for this request will be allocated to departments in Common Policy based on the current Department of Personnel and Administration Appropriations report FY 2018. The table below outlines the specific allocations to each department.

Department	Utilization	F20 Allocation Rate	FY20 Cost Allocation	FY21 Allocation Rate	FY21 Cost Allocation
Agriculture	3,497	$0.93	$3,242	$0.76	$2,653
Corrections	74,954	$0.93	$69,492	$0.76	$56,858
Education	7,182	$0.93	$6,659	$0.76	$5,448
General Assembly	0	$0.93	$0	$0.76	$0
Governor's Office	1,673	$0.93	$1,551	$0.76	$1,269
Healthcare Policy and Finance	5,482	$0.93	$5,083	$0.76	$4,158
Higher Education	1,649	$0.93	$1,529	$0.76	$1,251
Human Services	59,232	$0.93	$54,916	$0.76	$44,932
Judicial	55,694	$0.93	$51,636	$0.76	$42,248
Labor and Employment	15,358	$0.93	$14,239	$0.76	$11,650
Law	5,670	$0.93	$5,257	$0.76	$4,301
Local Affairs	2,095	$0.93	$1,942	$0.76	$1,589
Military and Veterans Affairs	953	$0.93	$884	$0.76	$723
Natural Resources	17,503	$0.93	$16,228	$0.76	$13,277
Personnel and Administration	5,068	$0.93	$4,699	$0.76	$3,844
Public Health and Environment	15,955	$0.93	$14,792	$0.76	$12,103
Public Safety	21,607	$0.93	$20,033	$0.76	$16,390
Regulatory Agencies	6,870	$0.93	$6,369	$0.76	$5,211
Revenue	17,224	$0.93	$15,969	$0.76	$13,066
State	1,649	$0.93	$1,529	$0.76	$1,251
Transportation	39,922	$0.93	$37,013	$0.76	$30,284
Treasurer	395	$0.93	$366	$0.76	$300
Total	359,632		**$333,426**		**$272,806**

Schedule 13

Department of Governor's Office

Funding Request for The FY 2019-20 Budget Cycle

Request Title

R-06 (OIT) Enterprise Data Integration Services

Dept. Approval By: *[signature: Bethany Nichols]*

OSPB Approval By: *[signature]*

Supplemental FY 2018-19

Budget Amendment FY 2019-20

X Change Request FY 2019-20

Summary Information	Fund	FY 2018-19		FY 2019-20		FY 2020-21
		Initial Appropriation	Supplemental Request	Base Request	Change Request	Continuation
Total of All Line Items Impacted by Change Request	Total	$19,961,275	$0	$19,413,238	$3,139,756	$3,410,350
	FTE	15.0	0.0	15.0	2.0	2.0
	GF	$1,499,418	$0	$1,528,171	$0	$0
	CF	$638,750	$0	$638,750	$0	$0
	RF	$17,823,107	$0	$17,246,317	$3,139,756	$3,410,350
	FF	$0	$0	$0	$0	$0

Line Item Information	Fund	FY 2018-19		FY 2019-20		FY 2020-21
		Initial Appropriation	Supplemental Request	Base Request	Change Request	Continuation
05. Office of Information Technology, (A) OIT Central Administration, (1) OIT Central Administration - Health, Life, and Dental	Total	$8,969,578	$0	$8,969,578	$15,854	$15,854
	FTE	0.0	0.0	0.0	0.0	0.0
	GF	$101,562	$0	$101,562	$0	$0
	CF	$0	$0	$0	$0	$0
	RF	$8,868,016	$0	$8,868,016	$15,854	$15,854
	FF	$0	$0	$0	$0	$0

| Line Item Information | Fund | FY 2018-19 | | FY 2019-20 | | FY 2020-21 |
		Initial Appropriation	Supplemental Request	Base Request	Change Request	Continuation
05. Office of Information Technology, (A) OIT Central Administration, (1) OIT Central Administration - Short-term Disability	Total	$127,363	$0	$127,363	$434	$434
	FTE	0.0	0.0	0.0	0.0	0.0
	GF	$1,414	$0	$1,414	$0	$0
	CF	$0	$0	$0	$0	$0
	RF	$125,949	$0	$125,949	$434	$434
	FF	$0	$0	$0	$0	$0
05. Office of Information Technology, (A) OIT Central Administration, (1) OIT Central Administration - Amortization Equalization Disbursement	Total	$3,753,986	$0	$3,753,986	$11,400	$11,400
	FTE	0.0	0.0	0.0	0.0	0.0
	GF	$41,620	$0	$41,620	$0	$0
	CF	$0	$0	$0	$0	$0
	RF	$3,712,366	$0	$3,712,366	$11,400	$11,400
	FF	$0	$0	$0	$0	$0
05. Office of Information Technology, (A) OIT Central Administration, (1) OIT Central Administration - Supplemental Amortization Equalization Disbursement	Total	$3,753,986	$0	$3,753,986	$11,400	$11,400
	FTE	0.0	0.0	0.0	0.0	0.0
	GF	$41,620	$0	$41,620	$0	$0
	CF	$0	$0	$0	$0	$0
	RF	$3,712,366	$0	$3,712,366	$11,400	$11,400
	FF	$0	$0	$0	$0	$0
05. Office of Information Technology, (E) Applications, (1) Applications - Applications Administration	Total	$3,356,362	$0	$2,808,325	$3,100,668	$3,371,262
	FTE	15.0	0.0	15.0	2.0	2.0
	GF	$1,313,202	$0	$1,341,955	$0	$0
	CF	$638,750	$0	$638,750	$0	$0
	RF	$1,404,410	$0	$827,620	$3,100,668	$3,371,262
	FF	$0	$0	$0	$0	$0

Auxiliary Data			
Requires Legislation?	NO		
Type of Request?	Department of Governor's Office Prioritized Request	Interagency Approval or Related Schedule 13s:	Impacts Other Agency

Cost and FTE

- The Governor's Office of Information Technology (OIT) requests $3,139,756 in reappropriated funds and 2.0 FTE in FY 2019-20 and $3,410,350 ongoing to improve the support and build out of an Enterprise Service Bus (ESB) statewide.

Current Program

- OIT has been developing an enterprise wide data integration service that provides access to data and systems through application programming interfaces (APIs) based on a technology framework known as an enterprise service bus (ESB). The API centric approach to data integrations and sharing provides much more efficient, effective and secure means for interfacing data and systems. OIT has been building this service on a project-by-project basis using project funding from agency project budgets.

Problem or Opportunity

- The ESB is currently funded with project funds as new systems are built and implemented. This method creates variability and unpredictability in the statewide budget for the ESB. The contract term is one year so it is re-negotiated annually. This variability in the budget makes it difficult to procure the best deal for the State because the spend level is unknown during the time of the negotiation. Also, as Departments increase use of the ESB statewide, OIT has absorbed the workload increase for this new product. This has created a gap in support for data integrations and application programming interface (API) development and prevented OIT from fully enforcing adherence to standards and ensuring a robust, optimized platform for APIs.

Consequences of Problem

- Without a predictable funding source and appropriate staff support, purchases of ESB licenses will continue to be difficult, resource constraints will continue, and the uptake of the service will continue to sputter.
- Lack of appropriate staff support will result in delays in deployment of the enterprise service and will also encourage comparisons with other less robust options or one-off procurements of tools that disadvantage the enterprise service. This places the ESB across the state enterprise at risk.

Proposed Solution

- Obtain common policy funding to negotiate an enterprise license agreement (ELA) with the vendor for an ESB and augment the service delivery staff with 2.0 FTE to ensure optimal implementation.

This page intentionally left blank

COLORADO

Office of Information
Technology

FY 2019-20 Funding Request | November 1, 2018

Department Priority: R-06
Request Detail: Enterprise Data Integration Services

Summary of Incremental Funding Change for FY 2019-20	Total Funds	Reappropriated Funds
Enterprise Data Integration Services	$3,139,756	$3,139,756

Problem or Opportunity:

The State of Colorado has hundreds of systems and databases that interface with each other. In the past the most common tactic for combining the data from these systems and databases or using the data from one system in another system was to develop individualized interfaces between them. Over time these interfaces have been developed by a variety of personnel including external contractors using no standard techniques or application language. This set of point-to-point interfaces is extremely inefficient and costly to maintain and leads to an environment that is unmanageable by the Office of Information Technology (OIT) or State staff and that also potentially contains significant security and governance problems. Each new interface requires starting the development process from scratch, duplicating work including the profiling and understanding of the data involved.

OIT has been developing an enterprise wide data integration service that provides access to data and systems through application programming interfaces (APIs) and that is based on a technology framework known as an enterprise service bus (ESB). The API centric approach to data integrations and sharing provides much more efficient, effective and secure means for interfacing data and systems. It maximizes reusability of data interfaces created in the course of projects to reduce cost of integrating other systems to the same data, and it supports a data strategy of maximizing sharing in a secure and well-governed framework.

OIT has made significant progress in developing this service both in terms of architecting and deploying the necessary technology and organizational development to support the service. An architecture for an ESB has been designed based on data security requirements (i.e., general, PII, HIPAA, FTI), and is being used for the deployment of runtime engines.

Consumption of the ESB is increasing Statewide and as Departments have begun increasing their use of the ESB, OIT has absorbed the workload increase for this new product. Full time employees (FTE) currently on other teams within OIT have developed the skill sets and picked up the work.

Currently Departments are funding the ESB with Capital funds as new systems are built and implemented and also through current operating budgets via InterAgency Agreements when improving current

applications. This method creates variability and unpredictability in the statewide budget. Projecting and securing funding varies as InterAgency Agreements are negotiated and executed.

The spend level is always moving as OIT approaches contract negotiations making it difficult to procure the best deal for the State. This prohibits OIT from having clear negotiating power. Contract negotiations for the FY 2019-20 contract will begin in the spring of 2019. It is difficult to negotiate the contract without having all InterAgency Agreements in place and knowing with certainty what the statewide budget will be.

Proposed Solution:

While the consumption of the ESB is increasing statewide, it has yet to reach the level where OIT can procure an Enterprise License Agreement (ELA) with the vendor. The minimum spend to be able to obtain an ELA is $4 Million. OIT anticipates this level will be reached by the beginning of FY 2019-20 based on current and pending projects.

Table 1 - Current and Pending Projects

Department	Project	Type	Fiscal Year 2019-20
Human Services	PEAK/LEAP	Current Project	$85,168
Human Services	CHATS Modernization	Current Project	$85,168
Human Services	iNotifyIntegration	Current Project	$42,584
Human Services	Judicial SANCA Encryption	Current Project	$42,584
Transportation	CDOT Data Office and Future Projects	Planned Projects	$500,000
OIT	CBMS	Current Project	$568,179
OIT	HR Works	Current Project	$330,519
OIT	Marijuana Data Coordination	Current Project	$266,958
Public Safety	CCIB	FY 2019-20 Capital	$70,000
Human Services	Interoperability	FY 2019-20 Capital	$1,470,000
Healthcare Policy and Financing	Healthcare Data Exchange	FY 2019-20 Capital	$100,000
Personnel and Administration	CARS	FY 2019-20 Capital	$20,000
History Colorado	E106	FY 2019-20 Capital	$35,000
Labor and Employment	Unemployment Insurance	FY 2019-20 Operating	$1,200,000
Revenue	GIS	FY 2019-20 Operating	$195,000
Total			**$5,011,160**

Creating a new service within Common Policy will provide an enterprise support model for the delivery of the ESB. Departments will be billed up front allowing OIT to negotiate and purchase an Enterprise License Agreement (ELA) for the software to support the ESB for $4 million. This request will not require a statutory

change. The purpose of this ELA is to facilitate delivery and improve service. Solidifying this offering as a service within common policy will allow smaller consumers to participate.

In addition to the purchase of the ELA, OIT will hire two senior developers for the data integrations team in OIT for $300,000. The work of these positions falls into three broad categories: project implementation, support of users of integrations services, and operational monitoring and support. The two (2.0) FTE requested will reduce the gap in support for data integrations and application programming interface (API) development. These FTE will still require reliance on contractors for much of the development of APIs and integrations, but will allow OIT to fully build out the patterns and best-practices to which these contractors should adhere. It will also allow OIT to oversee the work fully to ensure adherence to the standards and to ensure a robust, optimized platform for APIs.

Table 2 – Data Integrations Services Team Workload Gap Analysis

Workload Task Description	Support Hours Provided by current staff	Support Gap (as a percent)	Support Gap (in hours per year)
ESB Enterprise Framework - Platform Management, Onboarding & Mentoring - this entails onboarding internal and external developers onto relevant integration platforms, providing the necessary tools and training to promote standards and best practices. Specifically: ○ Develop standardized API templates, examples and libraries access to standardized templates, examples and libraries and enterprise code repository. ○ Provide access to templates, examples, libraries and code repository, as well as establishing associated Enterprise Code Repository structures ○ Creating Continuous Integration / Continuous Delivery (CI / CD) tools and pipelines needed for automated deployment of code and configurations. ○ Train and assist with workshops on platform, tools and patterns and practices.	0.1 FTE 208 hours/year	1,900 percent	3,952

Platform Operational Monitoring & Support - this involves monitoring all aspects of the operation of the data integration platforms and assets and maintenance of platforms where necessary. Specifically:
   ○ Perform platform upgrades and patching.
   ○ Monitor performance and operation of the ESB assets and supporting elements including (CI / CD) tools.
   ○ Serve as the conduit for escalating issues.
   ○ Provide metrics and analyses of operations and performance of the platform.
   ○ Systematically monitor and enforce adherence to business rules related to data sharing and use agreements and to standards and best practices.
	0.1 FTE
	208 hours/yr
		1,900 percent	3,952

Project Implementation Analysis - determine appropriate use of ESB (API-led connectivity) vs. other OIT standard data integration/transfer tools; capture initial parameters to be used in evaluating and sizing potential integrations solutions; develop estimates of project sizing and requirements (application and licensing) and level of effort for implementation services and subsequent operational support costs.	582.4	142.86 percent	832
Project Implementation Design - develop detailed technical design document on how will the solution be developed, validated and promoted to production environment; determine if existing API assets can be leveraged in solution; review designs for adherence to standards and best practices.	1456	142.86 percent	2080
Project Implementation Development - develop applications and APIs; configure applications; perform unit testing on applications.	1747.2	142.86 percent	2496
Project Implementation Testing - ensure integration with other solution	873.6	142.86 percent	1248

components; coordinate and ensure validation by quality assurance personnel and end users.			
Project Implementation Production Cutover - create solution runbook; address operational aspects of the solution and issues that might arise; conduct is conducted to the operational support team; promote applications to production and ensure proper functioning of applications and APIs in production.	582.4	142.86 percent	832
Project Implementation Post Implementation Support - update solution runbook; monitor operation of applications and APIs.	582.4	142.86 percent	832
24/7 production on-call	2080	0 percent	0

	Current Support		Support Gap
Total Hours Annually (2080)	**8,320**		**16,224**
FTE Equivalent	**4.0**		**8.0**

Alternatives Considered

OIT considered continuing to fund the ESB through InterAgency Agreements, however, since exact usage or needs are unknown at the beginning of a project, agencies have to accept significant financial risk up front and budget higher than needed. Additionally, agencies that may want to increase their consumption during the fiscal year don't have a pool of licenses to draw from, and most software companies do not yet have license models that allow for subscriptions for shorter periods than one year. The ELA will allow OIT to issue the ESB licenses on an as needed basis to department customers and will be usage/consumption based rather than over-estimations from prior year budgets.

OIT considered delaying the creation of this new service until the FY 2020-21 Budget Cycle but the longer the ELA is delayed allows for the proliferation of single-purpose, one-off, point-to-point interfaces between systems and data that are difficult to replace in the future. This mode of interface development will continue, resulting in continued waste, inefficiencies, data governance and security risks, as well as continued lack of data integrations across systems.

Consequences if Not Approved

Colorado agencies are becoming increasingly aware that evaluating or improving the effectiveness of State programs or services often requires looking across programmatic boundaries. Housing impacts use of health services, or access to the outdoors has public health implications. When State agencies have needed to connect systems with important data or integrate data for purposes of improving service delivery, the common, traditional method has been "one off", point-to-point interfaces built for the particular project or need at the time. One good example of this is the collection of interfaces of systems built over time within the Colorado Department of Human Services (CDHS). An analysis in 2013 found roughly 500 different

interfaces between almost 100 systems or databases using over 40 different methodologies. This presents a security risk, is expensive in the long run and results in ongoing reliance on external contractors who create the interfaces, or worse, leads to unsustainable interfaces if those contractors are not available. This is not meant to criticize the CDHS. This situation is representative of all other agencies' traditional patterns of system integrations and CDHS has a particularly compelling interest in greater interoperability across the data and systems.

OIT is currently developing a more detailed understanding of the specific return on investment from the API-centric approach to integrations and the ESB, particularly, based on experience from agencies that have implemented it to date. However, based on some general information on the cost of developing and maintaining interfaces from Gartner, the cost to develop a custom interface (based on industry standards) is estimated to be approximately $40,000, depending on complexity and type of protocol used for its development. This also includes the development of the infrastructure. In addition, the expected costs of annual support and maintenance over a 5+ year life cycle for each interface is estimated to be between $15,000 and $30,000 per year, per interface, or a total of $125,000 to $200,000 each, again over a 5 year life cycle. These costs are often hidden in total project costs. Just for an agency like CDHS, these costs are considerable. The same can be said for other agencies such as Colorado Department of Transportation (CDOT), Colorado Department of Labor and Employment (CDLE), Health Care Policy and Finance (HCPF), Colorado Department of Public Health and Environment (CDPHE), and others.

In addition to the cost benefit of the ESB, this platform is a means to accomplishing the enterprise data strategy goals of enhancing data as a strategic asset for the State. This requires sharing and integrating data across programs to evaluate and improve program effectiveness. The ESB provides a secure, effective and efficient mechanism to combine data thereby reducing reliance on cumbersome and insecure methods traditionally used.

Without approval of this decision item, OIT will not be able to build out the service and technology in a predictable and sustainable fashion. Continued difficulty to provide concrete costs to potential customers within agencies and inability to demonstrate increasing economies of scale will lead to frustration among agency customers and potentially a failure to achieve the enterprise deployment of the ESB. This will create risk for the overall strategy for the service and impede uptake. Consequently, there will be a continued high cost for integrating systems on an ad hoc basis. The security and governance of the interfaces will also be at risk, and the sustainability will be jeopardized.

Anticipated Outcomes:

Consumption of the service will be measured based on the license counts for each project. OIT will be able to deploy the enterprise licenses quickly either on-premise or in a hosted cloud solution.

The enterprise data integration solution includes a management and discovery platform that will allow OIT to monitor and measure the use of the APIs. OIT will track usage of the APIs globally and individual. That is, OIT will report the consumption of individual APIs, and therefore the data underlying the APIs, to customer agencies that own them. OIT will also track the total number of APIs deployed through the ESB and the trend in the use of the APIs.

Most important, OIT will be able to monitor and determine whether the consumers of APIs are consistent with the governance of the data identified by the business owner. This will address an ongoing issue that exists with data sharing and data transfers. Currently there is often a gap in monitoring data sharing and use some time after the data sharing agreement between agencies is executed. The ESB management platform will be used to track and govern data integrations and governed on an ongoing basis.

Assumptions and Calculations:

OIT is requesting $4,305,412 which includes $4 million for an Enterprise License Agreement and $305,412 for two (2.0) FTE. Current OIT projects utilizing the ESB will offset the total request by $1,165,656, leaving a total FY 2019-20 net request of $3,139,756 as shown below in table 3.

Table 3 – FY 2019-20 Net Request

	FY 2019-20	FY 2020-21
Enterprise License Agreement	$4,000,000	$4,280,000
OIT Current Spend (HR Works, CBMS, Marijuana Data Coordination)	($1,165,656)	($1,165,656)
2.0 FTE Senior Developers	$305,412	$296,006
FY 2019-20 Net Request	**$3,139,756**	**$3,410,350**

This request includes two full time staff for the data integrations staff within OIT. Table 4 provides a breakdown of the FTE calculation assumptions. Operating expenses include base operating expenses for an FTE. Standard capital purchases are also included in FY 2019-20.

Table 4 - FTE Calculations

Position Title	Salary Including Benefits	Operating Expenses	Total Request
FY 2019-20			
Senior Developer	$147,053	$5,653	$152,706
Senior Developer	$147,053	$5,653	$152,706
Total			**$305,412**
FY 2020-21			
Senior Developer	$147,053	$950	$148,003
Senior Developer	$147,053	$950	$148,003
Total			**$296,006**

Impact to Common Policy
OIT will allocate the costs of this request to agencies using the utilization metric of license counts.

OIT anticipates annual increases in costs due to inflation and there is a 7 percent escalator built in for the cost of the ELA.

SPENDING AUTHORITY
Existing Funding (for Current and Future Projects)

Other Agencies
For Agencies that are currently funding the ESB through InterAgency Agreements and have existing appropriations, these appropriations will be shifted into each Agency's "Payments to OIT Line" in Fiscal Year 2019-20. New Reappropriated spending authority is being requested for OIT.

Table 5 - Other Agencies Current and Future Projects

Department	Project	Fiscal Year 2019-20	Fiscal Year 2020-21
CDHS	PEAK/LEAP	$85,168	$85,168
CDHS	CHATS Modernization	$85,168	$85,168
CDHS	iNotifyIntegration	$42,584	$42,584
CDHS	Judicial SANCA Encryption	$42,584	$42,584
CDOT	CDOT Data Office and Future Projects	$500,000	$500,000
Total		**$755,504**	**$755,504**

OIT
For funding that currently exists within other lines in the OIT budget, the appropriation will remain within the current budget since these programs are direct billed and do not participate in common policy. Costs will be allocated to the program when the invoice is received. This will offset the total amount of costs that need to be recovered for the service through common policy.

Table 6 - OIT Current Projects

Department	Project	Fiscal Year 2019-20	Fiscal Year 2020-21
OIT	CBMS	$568,179	$568,179
OIT/DPA	HR Works	$330,519	$330,519
OIT	MJ Data Coordination	$266,958	$266,958
Total		**$1,165,656**	**$1,165,656**

Pending FY 2019-20 Funding Requests

At this time, the following IT Capital and Operating requests are pending and have not been included in the calculations for this service. However, they will impact the service should they be approved as the budget cycle progresses.

Table 7 - IT Capital Requests

Department	Project	Total Dollars Requested
CDPS/OIT	CCIB	$70,000
CDHS/OIT	Interoperability	$1,470,000
HCPF	Healthcare Data Exchange	$100,000
DPA	CARS	$20,000
History CO	E106	$35,000
Total		**$1,695,000**

Requests that are approved will be reappropriated to OIT in the Capital Long Bill. OIT will bill these projects directly for the cost of the ESB. This will reduce the total amount collected through common policy. Costs will be allocated directly to the applicable project as the invoice is received.

Table 8 - IT Operating Requests

Department	Project	Total Dollars Requested
CDLE	UIM	$1,200,000
DOR	GIS	$195,000
Total		**$1,395,000**

If, for example, none of the pending IT Capital and Operating requests are approved this Decision Item request will be a minimum $3,139,756 increase in appropriation so that OIT has a total of $4 million in spending authority to be able to purchase the ESB ELA and $305,412 to fund the two FTE. There is currently $1,921,160 in existing spend for the ESB.

However, if all of the pending IT requests are approved, the total FY 2019-20 need for the ESB statewide is $5,011,160. As requests are approved the total appropriation needed within the OIT operating budget for this service can be offset up to $1,165,656.

Table 9 - Adjusted Service Cost Recovery

	Department	Project	Fiscal Year 2019-20	Fiscal Year 2020-21
Cost of Enterprise License Agreement			$4,000,000	$4,280,000
	OIT	CBMS	($568,179)	($568,179)
	OIT/DPA	HR Works	($330,519)	($330,519)
	OIT	MJ Data Coordination	($266,958)	($266,958)
Total			$2,834,344	$3,114,344

COMMON POLICY

This Decision Item stands alone not knowing if the other pending requests will be approved. Currently the State is spending $1.9 Million on the ESB. This request will fund $4.3 Million in up front expenditures to secure the $4 Million ELA plus $305,412 for two FTE to support these projects. This will require Agencies currently consuming the ESB within their operating budgets to pay for the $4.3 Million total cost through common policy allocations. The utilization metric used for allocating costs is anticipated license counts.

Table 10 – Common Policy Allocations

Dept.	Project	Fiscal Year 2019-20 Anticipated License Counts				Fiscal Year 2020-21 Anticipated License Counts			
		Production	Pre-Production	Total	Common Policy Allocation	Production	Pre-Production	Total	Common Policy Allocation
CDHS	PEAK/LEAP	2	4	6	$277,037	2	4	6	$300,912
CDHS	CHATS Modernization	4	4	8	$369,383	4	4	8	$401,218
CDHS	iNotifyIntegration	1	2	3	$138,519	1	2	3	$150,457
CDHS	Judicial SANCA Encryption	1	2	3	$138,519	1	2	3	$150,457
CDOT	CDOT Data Office and Future Projects	15	33	48	$2,216,298	15	33	48	$2,407,306
TOTAL		**23**	**45**	**68**	**$3,139,756**	**23**	**45**	**68**	**$3,410,350**

Table 11 – Total Department Allocations

Total Department Allocations		
Department	FY 2019-20	FY 2020-21
Human Services	$923,458	$1,003,044
Transportation	$2,216,298	$2,407,306
Total	**$3,139,756**	**$3,410,350**

Schedule 13

Department of Governor's Office

Funding Request for The FY 2019-20 Budget Cycle

Request Title
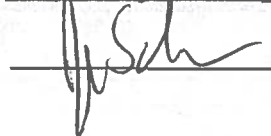
R-07 (OIT) Agency IT Staff Technical Adjustment

Dept. Approval By: _____

OSPB Approval By: _____

___	Supplemental FY 2018-19
___	Budget Amendment FY 2019-20
X	Change Request FY 2019-20

Summary Information	Fund	FY 2018-19		FY 2019-20		FY 2020-21
		Initial Appropriation	Supplemental Request	Base Request	Change Request	Continuation
	Total	$22,395,728	$0	$22,134,524	$144,342	$144,342
	FTE	52.0	0.0	52.0	1.0	1.0
Total of All Line Items Impacted by Change Request	GF	$186,216	$0	$165,087	$0	$0
	CF	$0	$0	$0	$0	$0
	RF	$22,209,512	$0	$21,969,437	$144,342	$144,342
	FF	$0	$0	$0	$0	$0

Line Item Information	Fund	FY 2018-19		FY 2019-20		FY 2020-21
		Initial Appropriation	Supplemental Request	Base Request	Change Request	Continuation
	Total	$5,790,815	$0	$5,800,728	$125,104	$125,104
	FTE	52.0	0.0	52.0	1.0	1.0
05, Office of Information Technology, (A) OIT Central Administration, (1) OIT Central Administration - Project Management	GF	$0	$0	$0	$0	$0
	CF	$0	$0	$0	$0	$0
	RF	$5,790,815	$0	$5,800,728	$125,104	$125,104
	FF	$0	$0	$0	$0	$0

Line Item Information	Fund	FY 2018-19		FY 2019-20		FY 2020-21
		Initial Appropriation	Supplemental Request	Base Request	Change Request	Continuation
05. Office of Information Technology, (A) OIT Central Administration, (1) OIT Central Administration - Health, Life, and Dental	Total	$8,969,578	$0	$8,889,767	$7,927	$7,927
	FTE	0.0	0.0	0.0	0.0	0.0
	GF	$101,562	$0	$88,386	$0	$0
	CF	$0	$0	$0	$0	$0
	RF	$8,868,016	$0	$8,801,381	$7,927	$7,927
	FF	$0	$0	$0	$0	$0
05. Office of Information Technology, (A) OIT Central Administration, (1) OIT Central Administration - Short-term Disability	Total	$127,363	$0	$123,445	$211	$211
	FTE	0.0	0.0	0.0	0.0	0.0
	GF	$1,414	$0	$1,273	$0	$0
	CF	$0	$0	$0	$0	$0
	RF	$125,949	$0	$122,172	$211	$211
	FF	$0	$0	$0	$0	$0
05. Office of Information Technology, (A) OIT Central Administration, (1) OIT Central Administration - Amortization Equalization Disbursement	Total	$3,753,986	$0	$3,660,292	$5,550	$5,550
	FTE	0.0	0.0	0.0	0.0	0.0
	GF	$41,620	$0	$37,714	$0	$0
	CF	$0	$0	$0	$0	$0
	RF	$3,712,366	$0	$3,622,578	$5,550	$5,550
	FF	$0	$0	$0	$0	$0
05. Office of Information Technology, (A) OIT Central Administration, (1) OIT Central Administration - Supplemental Amortization Equalization Disbursement	Total	$3,753,986	$0	$3,660,292	$5,550	$5,550
	FTE	0.0	0.0	0.0	0.0	0.0
	GF	$41,620	$0	$37,714	$0	$0
	CF	$0	$0	$0	$0	$0
	RF	$3,712,366	$0	$3,622,578	$5,550	$5,550
	FF	$0	$0	$0	$0	$0

Auxiliary Data		
Requires Legislation?	NO	
Type of Request?	Department of Governor's Office Prioritized Request	Interagency Approval or Related Schedule 13s: Impacts Other Agency

Cost and FTE

- The Office of Information Technology (OIT) requests $144,342 reappropriated funds and 1.0 FTE in FY 2019-20 and ongoing to transition spending authority from the Colorado Department of Transportation (CDOT) to create a permanent IT budget for a Program Manager (PM) employee.
- Specifically, OIT will convert 1.0 term-limited FTE currently funded via inter-agency agreement (IA) to a full-time OIT employee working at CDOT on critical needs projects.

Current Program

- Currently, 56 percent of OIT's PM staff are contingent workers, whether under contract or through term-limited, inter-agency agreements. The utilization of contingent staff directly impacts OIT's ability to deliver consistent services and the amount of downtime spent on constant re-recruiting and training these positions has a significant impact on both OIT and agency costs and operations.

Problem or Opportunity

- The majority of OIT's PM staff are term-limited. This creates high turnover, causes lost productivity due to time it takes to backfill and train, and restricts the work these positions can undertake.
- CDOT staff must master existing project methodology, state process, and the unique business that projects support, which creates a steep learning curve.

Consequences of Problem

- Projects at CDOT are critical and will require PM's to be on-boarded quicker in order to complete new incoming efforts so that no projects experience delays from turnover and loss of institutional knowledge.
- Without this request OIT would lose an opportunity to provide effective, efficient and elegant solutions and customer service to CDOT.

Proposed Solution

- OIT requests $144,342 in FY 2019-20 in reappropriated funds and 1.0 FTE to address critical resource needs. The allocation of the 1.0 Project Manager FTE will provide PM support to CDOT.
- Currently, CDOT pays for this FTE within its own budget and supports transferring the funds to the OIT common policy line.

This page is intentionally left blank.

COLORADO

Office of Information Technology

John W. Hickenlooper
Governor

Suma Nallapati
Secretary of Technology and
Chief Information Officer

FY 2019-20 Funding Request | November 1, 2018

Department Priority: R-07
Request Detail: Agency IT Staff Technical Adjustment

Summary of Incremental Funding Change for FY 2019-20	Total Funds	Reappropriated Funds
Agency IT Staff Technical Adjustment	$144,342 (1.0 FTE)	$144,342 (1.0 FTE)

Customer Impact:

The Governor's Office of Information Technology (OIT) requests $144,342 in reappropriated funds and 1.0 FTE in FY 2019-20 and beyond to address critical resource needs. Specifically, OIT will convert 1.0 current Inter-Agency (IA) Project Manager (PM) position to a full time OIT employee. This request affects the Colorado Department of Transportation (CDOT). This department will experience increased service, as OIT will be able to retain full time staff and not experience turnover.

Problem or Opportunity:

OIT has a project management office (PMO) which consists of both regular, full-time OIT staff and temporary, term-limited staff that are funded via inter-agency agreements from department specific project funds. The base team consists of 52.0 FTE, with 29.0 FTE on IAs. Therefore, 44 percent of OIT's Project Management staff are regular, full-time employees and 56 percent are contingent workers, through either contract or term-limited, IAs.

Project managers have various job duties that often include:
- Development and execution of project gating
- Development of project plans
- Project leadership and guidance
- Project communication and coordination across stakeholders
- Process leadership including documenting program operating procedures and system functionality
- Coordination of project status reporting
- Overseeing user acceptance testing
- General oversight to ensure vendor solutions meet program needs

PMs are critical to the successful implementation of projects across the Executive Branch. New projects are all required to have a PM to ensure these critical duties are completed on every new initiative. The current funding structure creates multiple problems.

Problem 1: Turnover

IA positions are constantly being vacated, reposted, and filled. This is due not just to the fact that they are temporary positions but also because they experience high turnover. On average, there is a 25 percent turnover rate of term-limited IA project managers leaving their positions before the end of their contracts. Exit interviews indicate the primary reason is instability of the position. Staff are looking for long-term reliable employment. OIT cannot provide the customer service the agencies and OIT expect. Instead of one person managing a project from start to end, OIT places projects on hold while undergoing the 30+ day recruiting process in addition to the 45+ day onboarding/training time needed to bring the new PM up-to-speed on the project. This affects the ability to build and maintain an effective and efficient project management delivery.

CDOT currently has three PMs managing 30 projects at any given time. In order to complete these critical efforts CDOT desires to have a more stable environment with PMs managing multiple prioritized key initiatives. Current staff are able to complete the projects; however, they are moving at a slower rate and are spread too thin. It is very critical to have stability with only three PMs. The new full time employee will give CDOT a base for the potential to request another conversion in the future.

The utilization of contingent staff directly impacts OIT's ability to deliver consistent services and the amount of downtime spent on constantly re-recruiting and training have a significant impact on both time and money. The learning curve for these positions is extreme. Selected staff must master existing project methodology, state process, and the unique businesses that each project supports.

Problem 2: Productivity

This calculation does not include the lost productivity, the labor hours that are required to fill a position, or the time it takes to bring a new hire from first day, through full productivity. It also does not take into account the impact that constant turnover has on morale, which also influences productivity.

Most of our term-limited positions exist for a year or less, meaning that these workers are likely pursuing regular, full-time, permanent positions elsewhere. OIT often loses money on these agreements in addition to the cost of turnover and lost productivity these employment arrangements inevitably experience.

Concern 3: Work Restrictions

The majority of IA agreements restrict the work of the PMs at CDOT. This means that if during slower project periods, these non-permanent employees cannot be assigned to other projects and that limits our ability to be flexible, proactive, and ready for the next project.

Proposed Solution:

OIT requests $144,342 in ongoing reappropriated funds and 1.0 FTE to address critical resource needs. Specifically, OIT will convert 1.0 current IA PM position to a permanent PM position at CDOT.

Transitioning 1.0 PM FTE to a permanent PM position will provide CDOT and our customers with the following benefits:

- Stable resource assignments
- Clear planning and prioritization
- The ability to work across the agency as required
- Gaps in delivery due to retraining
- Work stoppage due to transition of staff
- Reduced risks to technical changes to IT programs
- Stable costs year over year

The allocation of the 1.0 Project Manager FTE will see the PM support CDOT. ***Currently, this agency pays for this FTE from their spending authority and are in support of covering the cost by paying for it through the OIT common policy line.*** With this permanent FTE position, not only will OIT meet statutory requirements for PM oversight, but OIT will also meet its Wildly Important Goal of delivering effective solutions and reliable customer service and its Wildly Important Goal of strengthening Colorado's technology landscape. Additionally, with renewed funding and focus on transportation the permanent FTE will be able to implement initiatives such as smart roads, automated vehicles, animal crossings, and expanded bridge repairs, which are all critical projects that need stability.

Retaining critical skills provides quicker service and consistent delivery to customers, avoids delays in critical efforts, and reduces the risks associated with training new people and losing vital past knowledge. With the approval of this request, CDOT would be able to complete more initiatives annually, thereby increasing service to the citizens and adding value to the state by speeding up delivery cycles. CDOTs project portfolio has remained steady and with this full time employee, they will be able to stay consistent and successful.

Alternatives Considered:
OIT considered multiple alternatives in researching the best direction to take in order to successfully complete IA PM goals and deadlines. One of those was to submit a request for net new FTE. Although this would allow the PM staff the ability to work on various projects and assist with processes, OIT believes the most impactful way was to pursue the spending authority shift from agency to agency. Another alternative that was considered was the hiring of contractors. Contractors are great for the temporary positions and completing short-term projects but cost more from a salary standpoint and the training on systems and processes would slow productivity. It is much easier to have a PM trained that can move from project to project, which uses the same systems without retraining.

Anticipated Outcomes:

Enhanced Support:
Implementing this solution will lead to improved customer service, on-time completion of projects, decreased turnover rate, increased retention rate, reduced project delay times, and reduced external hires for PMs. Table 1 below highlights additional activities to be performed by the FTE.

Table 1

Current Model with IA	Future Model with FTE
Project-level resource assignment	Project-level and strategic resource assignment
Limited strategic resource forecasting	Strategic resource forecasting given PM remains inside the broader team and can operate with view of both agency and OIT portfolios/priorities
Limited ongoing operational planning and transition capability	Completion of solid operational and transition plans given staff remains unchanged
Limited ability to manage more than one effort due to budget and timeline constraints	Ability to handle additional projects given and known longer term presence for PM

Productivity Improvements:

OIT will be able to avoid resource constraints at CDOT and achieve project continuity with staff retention. Table 2 below illustrates this.

Table 2

Current Model with IA	Future Model with FTE
Uneven resource assignment	Ability to plan resources effectively
Unforeseen project stoppage when PM resigns	Limited project stoppage when PM resigns
Many delays in future projects due to stoppages	Limited delays
Variable project satisfaction from 50-100%	Consistent project satisfaction from 90-100%

Success Measurements:

Through the OIT Project & Portfolio Management system, OIT will measure project performance metrics at CDOT to see a decreased number of unmanaged projects and an increase in the number of successfully completed projects.

Through recruiting and exit survey data, OIT will measure retention and turnover rates. With the approval of this request OIT and CDOT will see a reduction in turnover and will reduce losing PMs.

Through project performance metrics, OIT will achieve greater than 90 percent success when measuring on time delivery, within budget, within scope, and meeting customer requirements.

Through overall budget tracking OIT will measure overhead cost savings and/or avoidance.

OIT's Performance Plan:
OIT's first Wildly Important Goal (WIG) is to deliver effective solutions and reliable customer service. Securing permanent project manager resources will ensure OIT meets its goal of achieving over 80 percent Customer Satisfaction Index score.

Assumptions and Calculations:

The costs and calculations for this request were generated from current salary of the 1.0 FTE program manager at CDOT. Attached is the FTE calculations template that breaks down the salary costs associated with this request. Also below is summary table 3.

Table 3

Agency	FTE	FY 2019-20 IA Funding from Agency	Ongoing
CDOT	1.0	$144,342	$144,342
Total	**1.0**	**$144,342**	**$144,342**

Impact to Common Policy:

The Colorado Department of Transportation will be directly billed via the Common Policy.

Expenditure Detail				FY 2019-20		FY 2020-21	
Personal Services:							
	Classification Title	Monthly Salary	FTE		FTE		
	CDOT Sr. Project Manager	$9,250	1.0	$111,000	1.0	$111,000	
	PERA			$11,544		$11,544	
	AED			$5,550		$5,550	
	SAED			$5,550		$5,550	
	Medicare			$1,610		$1,610	
	STD			$211		$211	
	Health-Life-Dental			$7,927		$7,927	
Subtotal			**1.0**	**$143,392**	**1.0**	**$143,392**	
Subtotal Personal Services			1.0	**$143,392**	1.0	**$143,392**	

Operating Expenses:							
			FTE		FTE		
Regular FTE Operating Expenses		$500	1.0	$500	1.0	$500	
Telephone Expenses		$450	1.0	$450	1.0	$450	
Subtotal Operating Expenses				**$950**		**$950**	

TOTAL REQUEST			1.0	**$144,342**	1.0	**$144,342**	
	Reappropriated Funds:			*$144,342*		*$144,342*	

Schedule 13

Department of Governor's Office

Funding Request for The FY 2019-20 Budget Cycle

Request Title

R-08 (OIT) CBMS PEAK

Dept. Approval By: _[signature]_

OSPB Approval By: _[signature]_

___	Supplemental FY 2018-19
___	Budget Amendment FY 2019-20
X	Change Request FY 2019-20

Summary Information	Fund	FY 2018-19 Initial Appropriation	FY 2018-19 Supplemental Request	FY 2019-20 Base Request	FY 2019-20 Change Request	FY 2020-21 Continuation
	Total	$61,868,613	$0	$63,175,076	$3,410,566	$3,521,475
	FTE	49.5	0.0	49.5	0.0	0.0
Total of All Line Items Impacted by Change Request	GF	$0	$0	$0	$0	$0
	CF	$0	$0	$0	$0	$0
	RF	$61,868,613	$0	$63,175,076	$3,410,566	$3,521,475
	FF	$0	$0	$0	$0	$0

Line Item Information	Fund	FY 2018-19 Initial Appropriation	FY 2018-19 Supplemental Request	FY 2019-20 Base Request	FY 2019-20 Change Request	FY 2020-21 Continuation
	Total	$61,868,613	$0	$63,175,076	$3,410,566	$3,521,475
	FTE	49.5	0.0	49.5	0.0	0.0
05. Office of Information Technology, (E) Applications, (1) Applications - Colorado Benefits Management System	GF	$0	$0	$0	$0	$0
	CF	$0	$0	$0	$0	$0
	RF	$61,868,613	$0	$63,175,076	$3,410,566	$3,521,475
	FF	$0	$0	$0	$0	$0

Auxiliary Data

Requires Legislation? NO

Type of Request? Department of Governor's Office Prioritized Request

Interagency Approval or Related Schedule 13s: Impacts Other Agency

This page is intentionally left blank.

Cost and FTE

- The Office of Information Technology in conjunction with the Departments of Health Care Policy and Financing (HCPF), Human Services (CDHS), and Public Health and the Environment (CDPHE), request an increase of $3,410,566 reappropriated funds in FY 2019-20 and $3,521,475 reappropriated funds in FY 2020-21 and ongoing. The purpose of the request is to enhance client experience, improve operational effectiveness, reduce security risks for CBMS/PEAK and associated systems, and comply with federal mandates. The request includes a reduction of $1.3 million in client correspondence, and the impact of a change in the CBMS cost allocation model that increases the HCPF share, decreases the CDHS share and significantly reduces required General fund support.

Current Program

- The CBMS (Colorado Benefits Management System) is the statewide enrollment and eligibility system which provides eligibility determination, benefit calculation, ongoing case management, and historical tracking for all food, cash, and medical assistance benefits.
- PEAK (Program Eligibility and Application Kit) is a customer-facing application for public assistance benefit information that allows customers to self-manage accounts, check benefits, and screen for eligibility for public assistance programs.
- The CBMS/PEAK system is a cooperative effort between HCPF, OIT, CDHS, and all 64 Colorado counties. The system is operated by a third-party vendor and is supported by a combination of State and vendor staff. It is under the federal regulatory oversight of the Centers for Medicare and Medicaid Services (CMS).

Problem or Opportunity

- CBMS has identified several data security issues and has open findings from CMS, but does not have sufficient funding within current resources to address them.
- The program has identified several process issues that harm or slow client service.
- All 838 existing forms requiring a client signature are provided to the client on paper, requiring paper, postage, ink and mailing costs for the state and no flexibility for clients. This has a direct impact on the annual client correspondence budget, which is one of the single largest operational costs in the budget.
- Program stakeholders require additional vendor pool hours to address a backlog of critical projects and ongoing project needs to remain in compliance with state statutes and federal compliance, and improve functionality for public assistance clients and workers at counties and medical assistance sites.

Consequences of Problem

- The new and ongoing security problems increase the risk of operational issues and could result in federal penalties or other negative repercussions is left unaddressed.
- If not solved, the problems will harm provision of services to clients.
- HCPF and CDHS have insufficient development resources to address priorities and project backlog.

Proposed Solution

- The proposed solution redistributes the CMBS/PEAK cost allocation to align with current operations, provides additional resources for mandated security assessments and use of new software. The request also segregates data access, broadens data analytics, fully assesses systems security and privacy and adds contractor pool hours to address state statute and federal requirements and critical project backlogs impacting service to clients.

This page is intentionally left blank.

COLORADO

Office of Information Technology

FY2019-20 Funding Request | Nov 1, 2018

John W. Hickenlooper
Governor

Suma Nallapati
Secretary of Technology and Chief Information Officer

Department Priority: R-08
Request Detail: CBMS PEAK

Summary of Incremental Funding Change for FY 2019-20	Total Funds	Reappropriated Funds
CBMS PEAK	$3,410,566	$3,410,566

Customer Impact:

Additional funding is requested for Colorado's Eligibility and Enrollment Services beginning in FY 2019-20 to enhance client experience, to improve operational effectiveness through integration, and to reduce risk for CBMS/PEAK and associated systems. Several of the initiatives included in this request are summarized below:

- Improve security and align with the statewide strategic direction for Identity and Access Management (IAM) through the utilization of new tools to support privileged user and password management.
- Improve security for user interface and direct access to copies of unmasked production data by isolating the databases from other masked databases on new segregated servers.
- Enhance electronic options for clients to view, update and acknowledge information through e-forms and electronic signatures.
- Improve business intelligence and decision making by utilizing Salesforce Einstein analytics across the full scope of Colorado Eligibility and Enrollment Services.
- Increased funding for third party security assessments required for federal compliance based on higher scope and frequency of required reviews.
- Provide an updated allocation of vendor development resources (pool hours) for stakeholder programs, specifically to address a shortfall in pool hours in the Department of Human Services (CDHS), to provide an allocation of pool hours specific to PEAK usability, to increase the allocation of hours for the PEAK Health mobile application.
- Conduct a resource assessment of the CBMS Staff Development Center, in order to determine resource gaps with the goal of improving training and addressing audit findings.
- Utilize the new cost allocation model implemented in July of 2018 to better leverage federal funds.
- Reduce the base client correspondence budget increase of $3.3 million from the approved FY 2018-19 Funding Request to a more conservative level based on current growth trends. The previous increase is reduced by $1.3 million pursuant to this request.
- Reduce the existing CBMS IV&V budget and incorporate in statewide IV&V strategy with funding appropriated to the Department of Health Care Policy and Financing (HCPF).
- Reduce the project enhancements (pool hour) budget based on a rate change between prior and current vendor contracts.
- Increase OIT reappropriated funding to accommodate system changes, printing and mailing related to PARIS. Note that funding is already appropriated to HCPF.

This request provides the ongoing budget structure to achieve each of these initiatives, while integrating the service delivery framework to best support the client experience of millions of Colorado citizens who are clients of CBMS, PEAK, and related applications.

Additionally, the request includes the impact of a change in the CBMS cost allocation model effective at the beginning of FY 2018-19 that increases the Department of Health Care Policy and Financing's share of CBMS expenditures, decreases the Department of Human Services share of CBMS expenditures, and reduces required General fund support on an ongoing basis.

The Fiscal Year 2019-20 requested amount for OIT is $3,410,566, of which 100% is reappropriated from Health Care Policy and Financing (HCPF), the Colorado Department of Human Services (CDHS) and the Colorado Department of Public Health and Environment (CDPHE) to OIT. The tables in Exhibit A identify in detail how the requested reappropriated funding is allocated to HCPF and CDHS under the new proposed cost allocation model that HCPF and CDHS implemented beginning July 1, 2018. For reference, the aggregate incremental request for HCPF, CDHS, and CDPHE for FY 2019-20 is $3,091,315 total funds, including a General fund reduction of $11,183,227, a cash funds increase of $1,807,464, a reduction of $93,565 in reappropriated funds, and an increase of $12,560,643 in federal funding.

The requested amount in FY 2020-21 and ongoing for OIT is $3,521,475, of which 100% is reappropriated from Health Care Policy and Financing (HCPF), the Colorado Department of Human Services (CDHS) and the Colorado Department of Public Health & Environment (CDPHE) to OIT. For reference, the aggregate incremental request for HCPF, CDHS and CDPHE for FY 2020-21 is $3,258,475 total funds, including a General Fund reduction of $11,187,430, a cash funds increase of $2,082,473, a reduction of $92,904 in reappropriated funds, and an increase of $12,456,336 in federal funding.

The tables in Exhibit A reflect the fiscal impact based on the new cost allocation model between the agencies.

Problem or Opportunity:

The Colorado Benefits Management System (CBMS), the Program Eligibility and Application Kit (PEAK), and related systems are part of a cooperative effort between HCPF, OIT, CDHS, and CDPHE. These State agencies and all 64 Colorado counties have worked collaboratively toward making CBMS, PEAK, and related systems more effective and reliable. The system is operated by a third-party vendor and supported by a combination of State and vendor staff. The system supports interactive interviews with clients, assesses the eligibility of applicants, calculates benefits for clients, and provides ongoing case management and historical tracking. CBMS determines eligibility for many types of public assistance through a single application, including Temporary Assistance to Needy Families (TANF), Food Assistance (SNAP), Aid to the Needy and Disabled (AND), Old Age Pension (OAP), Medicaid, and Child Health Plan *Plus* (CHP+). These programs are administered by the Department of Human Services (CDHS) and the Department of Health Care Policy and Financing (HCPF).

In addition to the core services provided by CBMS, the reach of CBMS is extended directly to clients through the PEAK system. PEAK is a customer-facing online system that provides a centralized location for public assistance benefit information. PEAK provides a universal application and allows customers to self-manage their accounts, check their benefits, and screen themselves for medical, food, and cash assistance programs. Several years ago, an online application was incorporated as well as the ability to report changes online. The diagram below depicts the current scope of the Colorado Eligibility and Enrollment Services:

Colorado Eligibility and Enrollment Services
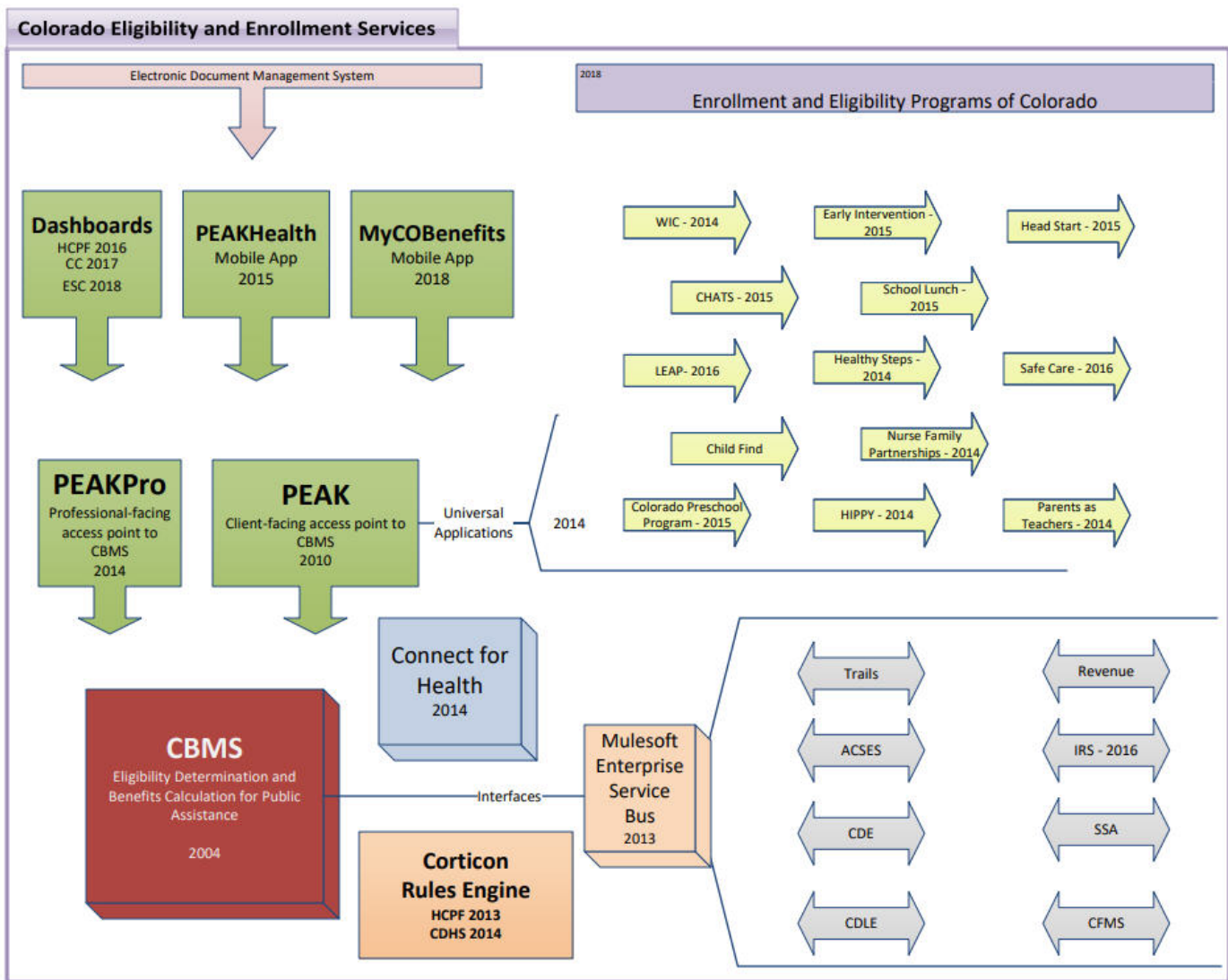
The changes included in this request are based on collaboration across the State agencies who are the primary stakeholders tasked with operating state and federal programs that deliver critical cash and medical benefits to Coloradans most in need of public assistance. The stakeholder departments are able to leverage federal funding, including enhanced federal funding where possible, and the requested funding will be re-appropriated to the Governor's Office of Information Technology which is responsible for technical system oversight, in collaboration with the contracted maintenance and operations vendor.

Program Background:

As referenced above, the program provides eligibility and enrollment services in Colorado for medical, cash and food assistance programs managed by HCPF, CDHS, CDPHE, and Connect for Health Colorado. These services are provided through the Colorado Benefits Management System, which will be fully hosted in Amazon Web Services (AWS) and Salesforce by April 2019; PEAK and PEAKPro, currently hosted in Salesforce; and HCPF and CDHS specific mobile applications. There is also a PEAK Technical support call center that is integrated with the HCPF call center to support applicants, community partners, and clients with the use of PEAK.

Counties and medical assistance sites are the primary users of CBMS and applicants, clients, Connect for Health Colorado brokers and community partners are the primary users of PEAK and PEAKPro. The

agencies and programs supported by CBMS, PEAK and related applications are focused on the following strategic goals, as established and approved by the CBMS Executive Steering Committee:

- Provide excellent client and user service
- Provide efficient and effective training and communication
- Effectively manage ongoing system enhancements & operations
- Maintain secure systems
- Maintain accessible systems
- Adhere to privacy regulations
- Ensure efficient and timely coordination among clients and system users

CBMS is currently undergoing a transformation (referred to as CBMS Transformation) initiative that will result in a migration from the legacy platform to AWS and Salesforce. The opportunities for improvement included in the request are needed post-CBMS Transformation and are neither needed to complete CBMS Transformation, nor needed as a result of CBMS Transformation. The CBMS Transformation is being funded within the existing budget leveraging enhanced federal matching funds primarily provided by the Centers for Medicare and Medicaid Services (CMS).

In the AWS environment, CBMS will have the ability to only pay for hardware and software that is utilized, which is expected to reduce the total cost of operations over the long run. The cost reduction will not occur until after the first full year of operation in the new environment. In FY 2019-20, CBMS will begin to realize the new baseline system costs to provide the operational experience necessary to lock in pricing with AWS and Salesforce. Starting the following fiscal year it is possible that ongoing costs associated with this request can be offset by future actual cost savings.

Note that the CBMS Executive Steering Committee is chaired by the Governor's Deputy Chief of Staff and includes the Executive Directors of OIT, CDHS, HCPF and Connect for Health Colorado, other senior leadership from all stakeholders, along with county and OSPB representation. Given this broad cross-section of multi-jurisdictional partners, this request seeks the resources necessary to implement the initiatives that the CBMS Executive Steering Committee has determined to be the highest priorities for upcoming years.

Finally, all the items in the request have been the subject of ongoing discussions both internal to OIT and directly with the departments and other stakeholders during the past year. Based on the current decision framework used for CBMS and PEAK projects, these initiatives are best targeted for deployment post-CBMS Transformation. The diagram below summarizes the governance structure for CBMS, PEAK and related systems.

Colorado's Eligibility & Enrollment Services Governance
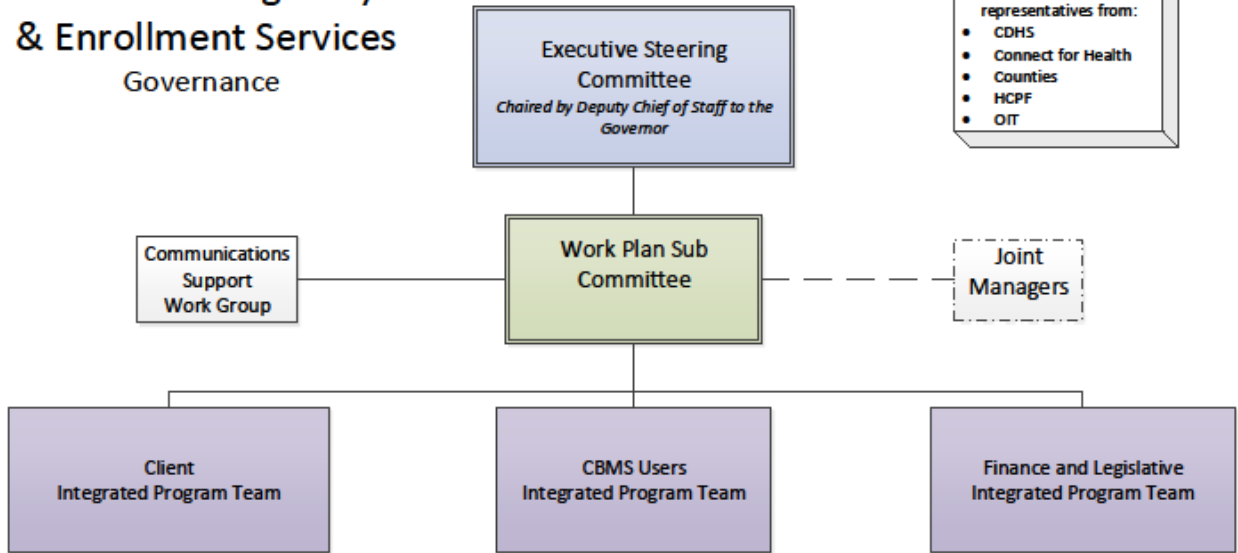
Proposed Solution:

The table below identifies proposed changes included in the request and summarizes the current and future state of each item. The tables located in Exhibit A provide the detailed cost estimates for each item for FY 2019-20 and future fiscal years, along with the related assumptions, including allocations to each Department.

Item	Project Objective	Current State	Future State
Cost Allocation Redistribution	This technical budget adjustment re-aligns HCPF and CDHS appropriations for CBMS based on new Cost Allocation Model	The current allocations for CBMS/PEAK costs is based on Random Moment Sampling (RMS). This results in a larger allocation for CDHS compared to HCPF, and no allocation to CDPHE for PEAK usage	The state implemented a new cost allocation model effective July 1, 2018 that more equitably distributes CBMS/PEAK costs to departments based on detailed service usage statistics and updated cost centers. The result is that HCPF and CDHS allocations are drastically changed, with the CDHS share reducing significantly, while HCPF has a corresponding increase. This new model also allocates an all General fund share to CDPHE for their use of PEAK. This adjustment saves approximately $13.6 million General Fund dollars in FY 2019-20 in part based on the ability for HCPF to leverage a higher federal financial

Item	Project Objective	Current State	Future State
			participation than CDHS has historically been able to.
Security-Identity Access Management (IAM)	Improve security and align with OIT standards and strategic direction for Identity and Access Management (IAM) through the utilization of new tools to support privileged user and password management.	CBMS has open Plan of Action & Milestones findings with the Centers for Medicare and Medicaid Services (CMS) concerning how access is provisioned, authenticated, role based and monitored.	Projects are underway to mitigate the risk associated with the current findings, but additional tools will provide a governance based identify management solution. The solution and the identified tools will address open POA&M and audit findings, and will automate and integrate CBMS access control with the OIT enterprise direction.
Security-Isolate copies of Production Data	Improve security for user interfaces and direct access to copies of unmasked production data (for the User Practice Area and Production 03 environments) by isolating the databases from other masked databases on new segregated servers.	Masked copies of production data exist currently in the same virtual environment with unmasked copies of production data, increasing the risk of unauthorized access. Given the negative outcomes associated with breaches and unauthorized disclosure of citizen data, these security controls are critical, and are a key constituent expectation of the public sector.	If the unmasked copy of production data is segregated, additional controls can be implemented to secure and monitor the data access. This solution reduces risk and ensures compliance with security requirements. It also fits the enterprise standards established for access management and system security.
Enhance Electronic Services Available to Clients	Enhance electronic options for clients to view, update and acknowledge information through e-forms and electronic signatures.	All 838 existing forms requiring a client signature are provided to the client on paper, requiring paper, postage, ink and mailing costs for the state and no flexibility for clients. This has a direct impact on the annual client correspondence budget, which is one of the single largest operational costs in the budget.	Under the proposed solution, all 838 paper forms will be converted to e-forms and a vendor service will be contracted to support e-signature. This will greatly enhance how stakeholder programs are able to interact with clients and over time will drive down mailing, printing, postage and ink costs as clients opt for electronic services over paper.

It will be easier for clients who desire to receive and process documents electronically, rather than having to mail forms back. Responses will not be lost; can be tracked, stored and reproduced.

Additionally, this is consistent with how many clients consistently receive services using current technologies, and it |

Item	Project Objective	Current State	Future State
			has become the expectation in today's marketplace, even with government services and benefits, and has the potential to drive client correspondence costs down materially over time. Any related savings that materialize will be addressed through the annual budget request process in future fiscal years.
Business/Data Analytics	Additional funding to take advantage of log data and Salesforce Einstein analytics, across the full scope of Colorado Eligibility and Enrollment Services.	Data analytics and reporting is in silos and limited in the current environment. Different varieties of ad hoc reporting and program specific dashboards are used currently, by Department Executives and Program sponsors to impact policy and program objectives and provide limited analytics to help consistently drive strategic decisions.	By FY 2019-20, systems will be hosted on platforms that greatly enhance the ability to perform analytics, conduct analysis and develop trending. This information can be used to better provide services to clients, enhance system functions, improve security and reduce cost. The resulting data analytics will be available on-demand, will require less labor-intensive disparate processes, and will eliminate the need to maintain several program executive dashboards currently used.
Annual Third-Party Security Assessment in Support of the HCPF/Connect for Health Authority to Connect with CMS	Additional funding is required to contract with a third party for the annual assessment	Currently, $135,000 is appropriated in the existing budget for the annual security assessment. Due to the demand for this type of work and scope of the assessment, additional funding is required.	The additional funding will support the third-party analysis, testing and administrative report preparation costs required to complete the annual assessment for the entire Eligibility and Enrollment Services boundary and associated SAR report submitted to CMS.
IV&V Quarterly Assessments	Shift in funding for IV&V assessments for CBMS & PEAK to HCPF	Currently funding is appropriated for only 2 reviews each fiscal year. Similar to the third-party security assessments, the federal requirements have increased with regard to scope and frequency of assessments for enrollment and eligibility systems.	The new federal requirements require on-going reviews with quarterly reports, which increases the scope and cost of this function. However, HCPF is submitting a funding request to support an enterprise framework that will apply to CBMS and its other health IT systems. As a result, this request includes a reduction of the $200,000 currently reappropriated to OIT

Item	Project Objective	Current State	Future State
			as the funding will be all appropriated directly to HCPF.
Client Correspondence Reduction	Reduction in existing client correspondence budget to eliminate previously approved increase for FY 2019-20	Currently the FY 2019-20 client correspondence base budget is $10.1 million based on an approved FY 2018-19 funding request.	This request reduces the CBMS base budget by $1.3 million in FY 2019-20 to reduce a previously approved growth increase from last budget cycle.
Pool Hour Rate Change	This technical adjustment reduces the budget for project enhancements based on a contract rate change	When the current base budget was developed the costs for vendor project enhancements (pool hours) were calculated at $137/hour based on the vendor contract in effect at the time.	Since the current base budget was developed, the vendor contract term ended, the contract was resolicited, and the actual rate for FY 2019-20 is $130/hour and for FY 2020-21 is $134/hour. This budget reduction, calculated at $940,030 for FY 2019-20 aligns the CBMS/PEAK operations budget with the correct contract rates.
Enterprise Applications Realignment	This technical adjustment aligns the OIT reappropriated budget with the HCPF and CDHS budgets	OIT previously submitted FY 2017-18 Budget Request #5 to re-align the OIT Enterprise Applications budget. As a result, 3.0 FTE and $217,816 was transferred from OIT's CBMS personal services appropriation to the OIT Enterprise Applications appropriation, however there was no corresponding reduction to HCPF and CDHS budgets for CBMS.	The technical adjustment included in this request reduces HCPF and CDHS line items for CBMS by $217,186 in total to correspond with the budget reduction previously captured in the OIT-CBMS budget.
Assorted Medicaid Program Savings Initiatives	This technical adjustment aligns the OIT reappropriated budget with the HCPF and CDHS budgets	HCPF previously submitted a funding request and received funding to implement system automation in CBMS to identify individuals on the PARIS interstate match who do not have corresponding eligibility end dates and generate a letter to the individual requiring them to verify their Colorado residency within a specified timeframe. This process would also identify individuals at initial application and redetermination who appear on the PARIS list so that appropriate action can be taken. Included in the previously	This request includes a reappropriation of funding to OIT that is already included in the HCPF budget, and was simply not reappropriated to OIT when the associated HCPF budget request was previously approved.

Item	Project Objective	Current State	Future State
		approved request was ongoing funding for printing and mailing	
CDHS Vendor Pool Hours Increase	Increase in annual development resources (pool hours) to satisfy backlog from CDHS programs *(additional background in the section below table)*	Changes to the system are necessary to ensure rules, regulations, and security compliance; to implement Phase II of the CDHS mobile application; to streamline the user and customer experience; and to promote positive program outcomes. The Department currently receives 38,000 pool hours to implement these changes and a significant backlog of projects currently exists. The Department's current backlog is 42 projects, representing over 66,000 vendor pool hours of work.	If additional money for CBMS projects is not provided, the CDHS Employment and Benefits Division will spend half of its current hours on a single project in FY 2020-21, and critical compliance changes may not be possible. Funding constraints will jeopardize the Department's ability to meet customer service, timeliness and accuracy goals and could lead to a degradation of services. The request includes an additional incremental allocation of 17,000 vendor development hours (pool hours) in FY 2019-20 (12,000 for EBD and 5,000 for SNAP), and 15,000 in ongoing fiscal years (10,000 for EBD and 5,000 for SNAP). The Department will use resources requested to implement changes that are necessary to ensure rules compliance, to improve the overall user and customer experience, and to encourage strong program results.
PEAK Usability	Additional vendor development resources (pool hours) to enhance the PEAK user experience *(additional background in the section below table)*	In the current environment PEAK enhancements have been technical and have not focused on the user experience. Several studies, surveys & assessments have resulted in a list of targeted recommendations.	The request includes an additional 5,000 new vendor development hours (pool hours) to implement enhancements that will begin to improve the PEAK user experience based on deliberate feedback from multiple sources. Additional information is provided in the section below this table.
PEAK Health Mobile Application	Increase in vendor development resources (pool hours) for mobile applications *(additional background in the section below table)*	The PEAK Health mobile application currently is allocated 5,000 pool hours annually, which was initially based on the level of program need since the development of the HCPF mobile application. Based on current program objectives, the level needs to be increased to provide additional enhancements. Some	Given the prevalent focus on utilizing technology associated with mobile applications, even in eligibility and enrollment services, the stakeholders have determined that the allocation of vendor development hours for this mobile application is no longer sufficient to satisfy program and customer need. An

Item	Project Objective	Current State	Future State
		examples are provided in the section below.	additional 2,500 annual vendor development hours will allow the state to satisfy the baseline expectations associated with development and maintenance of the deployed mobile technologies.
Staff Development Center Assessment & Technical Correction	One time increase in CDHS/HCPF funding for a consultant to assess training/capacity at the SDC (*additional background in the section below table*)	This item is for a one-time third-party assessment to determine the appropriate level of training resources, and training delivery for the Staff Development Center. Funding is appropriated to CDHS and HCPF and **not** reappropriated to OIT.	This assessment and its results will help inform the long-term strategic training objectives for the Staff Development Center. This adjustment also includes a base building technical adjustment related to salary survey for the SDC staff.

Four of the components of the request from the matrix above relate specifically to the need to increase vendor pool hours to support additional critical projects. The stakeholders/programs that require additional system development are identified below along with detailed descriptions of the drivers of those components of the request:

- Department of Human Services, Employment and Benefits Division
- Department of Human Services, Food and Energy Assistance Division
- Department of Health Care Policy and Financing – PEAK Usability
- Department of Health Care Policy and Financing – PEAK Health Mobile Application

The final item in this section is a request for the CBMS Staff Development Center. This item is included in the request, but the funding is appropriated directly to CDHS and HCPF and is **not** re-appropriated to OIT.

CDHS, Employment & Benefits Division – Additional 12,000 annual CDHS pool hours

The existing 18,000 pool hours are insufficient to meet the CBMS programming demand for the Employment & Benefit Division's three major program areas (Adult Financial, Colorado Works, and Employment First). Year after year, the Division fully expends its available resources on the most critical projects required to ensure that the Department's programs are being operated in compliance with State and federal regulations and statutes. Even among these planned projects, critical projects are deferred each year due to insufficient capacity. These projects, then, are relegated to a growing backlog of projects. Having resources earmarked for these projects would ensure program compliance, reduce errors, speed transaction times, identify and reduce fraud, evaluate program performance, and more.

As of August 2018, the Employment & Benefit Division's backlog is 28,764 hours. The compliance-related projects plus the remaining high priority projects, alone, total 18,815 hours. It is important to note that the backlog is dynamic, with new projects regularly being identified and added to the list and scheduled projects slipping into the backlog due to federal changes demanding immediate action or other capacity constraints. For instance, eight of the 18 most important projects are "new" to the backlog, having slipped off the current workplan.

The backlog does not contain wish-list projects. It is comprised of important projects that will not be completed earlier than FY 2020-21 if resources remain at the status quo. With 12,000 additional incremental pool hours for FY 2019-20 (reduced by 2,000 hours for future fiscal years), the Division could complete the

majority of the 18 most critical projects in FY 2019-20. The remaining 18 projects could be completed by the end of FY 2020-21. With 28,000 pool hours (18,000 existing plus 10,000 ongoing new hours in out-years), the Division anticipates having sufficient resources to prevent a new backlog, completing projects without delay as they are identified and prioritized.

Letting the backlog compound each year puts the State at risk of being out of compliance with state and federal statute and regulation and hinders county workers' ability to work efficiently and accurately to process cases, causing the system and workers to work at cross-purposes (via work-arounds and other means). Other important projects ensure compliance with federal case management requirements per the Colorado Works and Employment First programs.

CDHS, Food & Energy Assistance – Additional 5,000 annual CDHS pool hours
Similarly, the existing pool hours are insufficient to meet the CBMS programming demands for the food assistance program, and this request includes an increase of 5,000 annual pool hours for CDHS Food & Energy Assistance. Every year, all available resources are fully expended on the most critical projects required to ensure that the Department's programs are being operated in compliance with federal regulations and statutes. The U.S. Department of Agriculture, Food and Nutrition Service (FNS) heavily regulates SNAP program delivery and regularly updates rules and other requirements. Yet, critical projects are deferred each year (i.e. moving to the backlog) due to insufficient capacity. The Department's inability to complete all critical projects puts Colorado at risk of sanctions or financial penalties.

As of August 2018, the Food Assistance backlog is 37,002 hours. All SNAP pool hours are committed to projects that will fix open compliance issues cited by federal audits. The projects that have been backlogged are critical projects, yet lack resources to complete. The majority of the food assistance projects on the backlog will ensure that benefits are calculated and reported correctly, thereby reducing the State's Performance Error Rate (PER) and Case and Procedural Error Rate (CAPER) in order to avoid federal sanction. Other important projects will prevent audit findings, improve functionality for applicants seeking benefits, and ensure all federal requirements are met.

PEAK USABILITY – ADDITIONAL 5,000 HCPF POOL HOURS

PEAK was moved to a cloud-based platform in 2013 as a self-service option for Coloradans to apply for medical programs and the Affordable Care Act. The PEAK user experience has not been given sufficient attention until this past fiscal year. In FY 2017-18, several studies and data collection efforts were initiated to evaluate performance and identify specific improvements (see table summary below). The studies and data collection focus around challenges that both the applicants and enrollees experience using the website as well as the workers who receive the applications generated from the website.

The Affordable Care Act nearly doubled the medical assistance caseload, and PEAK was intended to offer a self-service option for applicants, however PEAK currently does not sufficiently meet the applicants and enrollees needs. This results in people seeking help through overly full county lobbies, long phone hold times at both counties and the customer contact center, delayed case updates and extra workload.

The Department estimates that increasing the pool hours from 10,000 to 15,000 will allow the State to complete between 6-10 projects in FY 19-20 that will begin improving the PEAK user experience. Using the results and reports below, the Department will work with project managers and business analysts to target the right initial projects, align and package the improvements in logical and sequential phases over the year. Projects will include member testing and a process to incorporate recommendations from that testing.

Source	Timeframe	Some Improvement areas
Customer Contact Center	Calendar Year 2017	35% of the calls could be handled by an effective PEAK, addressing inquiries on coverage status (23%), case updates and changes (8%) and how to apply (4%).
OIT PEAK Help Desk	Calendar Year 2017	42% of all calls are password resets, locked accounts, and account creation problems.
Worker Input	Calendar Year 2017	• PEAK wording and field structures create confusion resulting in applicants entering information incorrectly • Work-arounds are needed because policy, PEAK and paper applications are different for self-employed applicants
PEAK Usability Study	August 2017	• Process flows are cumbersome and duplicative • Navigation did not perform as expected • Language was unclear • Site organization was not intuitive • Login difficulties • Instructional text does not align with options
Arrow Performance Group (APG) County Customer Service Surveys	December 2017-March 2018	The Department conducted research to better understand the members' experience as they navigate eligibility with our county partners. Of the feedback given, 26% was related to PEAK, despite the fact that members were asked to comment only on their experience at the county.
PEAK Handbook User Testing	Calendar Year 2017	• 90% experienced login barriers and password resets • Barrier using Adobe Flash • Table of Contents was not clickable • Unable to search documents • Document labels of Chapters were "1, 2, etc." instead of meaningful names • Spinning wheel does not return the content.
Code for America	May 2018	• Need to enable self-service while reducing worker burden • Improve language so members understand • Improve process flows and navigation so it's more intuitive to the member

PEAK HEALTH – ADDITIONAL 2,500 HCPF POOL HOURS

The PEAK Health mobile application offers members quick and easy access to:
• The provider directory,
• Basic benefit information,
• An interactive mobile Health First Colorado member card that shows their coverage status,
• Update and maintain their coverage,
• Get a ride to their appointment, and
• Contact the Quit Line, Crisis Line and call center.

Currently over 137,000 households use the PEAK Health Mobile application. Members have recommended improvements that will further educate and empower. Increasing the annual hours from 5,000 to 7,500 will allow the Department to make 3-4 improvements during each year. Some improvement examples include offering an artificial intelligence chat on common questions and problems to expand the Department's ability to serve members consistently, efficiently and effectively; connecting members to proven and approved health applications and other state agency applications; allowing members to view their health plan enrollment; accepting RTD applications for discounted bus fares; and increasing self-service options.

The additional funding will also support proper health care utilization and reduce administrative overhead by increasing self-service (providing access to the information they need and ability to update their information) and reduce the in-person and phone demand. Providing self-service tools that are cumbersome and difficult to use drives citizens to the call center and county offices, and ultimately depletes the citizens' trust in using these tools. Improvements should be prioritized and implemented based on the greatest user impact. For example, a project to be implemented in October 2018 will improve the account management and logon process, which will allow citizens to reset their own passwords and more easily navigate to an account management page to update their basic account information. A change currently in backlog will improve the communication preferences section. When citizens are easily able to find and understand communication preferences, they will trust in the system and feel more comfortable receiving electronic communications instead of paper, thereby reducing paper mail expense and volume of return mail. Another backlog project is designed to add Primary Care Physician (PCP) and Regional Accountable Entity (RAE) enrollment and contact information on members' mobile PEAKHealth cards. More accessible enrollment information can reduce inappropriate utilization in urgent care and emergency rooms.

Staff Development Center Request for Consultant Funding

The Staff Development Center (SDC) is staffed by 14 individuals to support over 4,500 statewide CBMS users which includes 64 county departments of Social/Human Services, as well as Medical Assistance, Presumptive Eligibility, and Certified Application Assistance sites for SNAP, Medicaid/CHP+, and TANF.

Since its inception in 2012, the SDC has evolved to provide competency-based training to an increasing workforce on continuous policy and program changes along with system modernization. Various training modalities such as webinars, video recordings, web-based, and release notes have been implemented to increase training effectiveness and accessibility while maintaining high-quality training to increase trainees' knowledge and accuracy.

Although creative solutions have been implemented to support comprehensive training statewide, there continue to be additional opportunities for trainings that cannot be immediately supported by the SDC.
- Audits and program accuracy rates continue to identify deficiencies with ongoing case maintenance knowledge and processes which lead to audit findings, high error rates, and incorrect eligibility determinations.
  - The result of the audit findings is for the Departments continually accept the audit findings and provide explanations to the Legislative Audit Committee and federal entities about the inability to efficiently provide widespread training on items such case file documentation, data entry of specific eligibility components such as resources, income data entry and complex data entry for all programs.
- Consistency in processing determinations and redeterminations continues to vary across the state.
- Counties and Medical Assistance sites respond well to on-site, in-person trainings for retaining knowledge and skills; however rural counties and sites find it difficult to travel to the Denver area for training.
  - Currently the SDC only provides regional training two times per year. The needs of counties are beyond the two regional sessions they receive annually.
- Eligibility sites require additional training and support due to the significantly different business processes from the counties (e.g., clinics, schools, health centers).

Future State:

The proposed solution within this request is to hire a consultant to provide an in-depth analysis of the work processes, staffing model, training modalities, and training requests to identify an optimal solution for providing effective, comprehensive training. . This consultant will interview the SDC staff and leadership, counties and program areas as well as review training data to gain a full understanding of the processes, identify current gaps in resources, and provide a proposal for addressing the holistic training needs of the State.

Note that the appropriations for the Staff Development Center (including personal services, operating and FTE) are made to the Department of Health Care Policy & Financing and the Department of Human Services. None of the requested funding will be re-appropriated to OIT, but it is included in this joint submission from all three departments based upon historic guidance from OSPB that directed that CBMS/PEAK budget requests should all be contained in one submission each fiscal year with all components included.

Anticipated Outcomes:

For any project or initiative included in the itemized list provided that is not funded, the security or operational risk, the existing client experience and service level, and the impact of cost increases on limited available budget will remain significant barriers to program objectives. The consequence of not funding the full request is the delay or forfeit of the opportunity to improve in all of the detailed areas, which is supported by the strategic priorities of executive leadership and stated intent of all stakeholders and partners.

The state remains committed to developing and implementing a methodology for evaluating CBMS/PEAK changes both from a systematic and user experience perspective. Also, the intent is to ensure the changes implemented are done with limited to no defects. All stakeholders are engaged actively in an ongoing effort to ensure that users benefit from system changes and that they experience improvement in their use of the system. The current governance structure for CBMS/PEAK includes a Client and Community Partner Integrated Project Team and a CBMS User Integrated Project Team that are both in a unique position to recommend system enhancements that provide the most benefit to clients and stakeholders, as well as to evaluate the outcomes that result. These integrated project teams collaborate with and report to the Work Plan Sub Committee (WPSC) and the CBMS Executive Steering Committee (ESC), which ensures that items are prioritized and implemented that provide the maximum benefit to stakeholders, clients, and the State.

This request advances the CDHS value of improving coordination and expansion of services by supporting increased coordination between service partners; identifying and addressing gaps and barriers in accessing services; enabling improving transition services between services and for those transitioning out of human services programs; and improving wraparound and bundled services.

The request aligns with HCPF's strategic policy initiative for operational excellence to be a model for compliant, efficient and effective business practices that are person- and family-centered. The request addresses improvements to the PEAKHealth app that would promote increased utilization of the app by Medicaid households, and enhances and maintains effective operations of CBMS, which is the Department's member eligibility system.

With regard to strategic technology direction, OIT drives technology solutions and supports those agencies whose missions are critical to serving Coloradans. OIT's operational responsibility includes the development and support of enterprise and agency-specific applications; projects, programs, and services; and the state's IT infrastructure. OIT is also responsible for information security governance across all three branches of state government. OIT's Playbook is the annual strategic roadmap. It provides stakeholders (i.e., customers, employees, and partners) with a guide towards the future, linking to the core OIT mission, vision and values

to associated strategies and goals. Each year, OIT presents a "Playbook" which is the strategic roadmap that outlines the actions the Office will take this fiscal year to meet short and long-term goals.

OIT's Vision:

"Enriching the Citizen Experience at Every Digital Touchpoint".

As identified in the OIT Playbook, "*Every interaction Coloradans have with the State is an opportunity. Our customers directly serve the public, and OIT is the IT service delivery partner that can elevate their experience. We strive to empower a seamless interaction between the state and the people we serve. Our work includes expanding broadband coverage across the state, leading the way for enterprise solutions that support effective collaboration, streamlining processes for more efficient service, and enhancing security to keep public data and systems safe.*

We envision a future where the entire journey of any Coloradan receiving state services is simple and fast no matter how many agencies or applications are involved; customers get the services they need, when they need it, wherever they are".

This request supports several of the items that are critical to OIT's strategic focus including the following:

- Delivering effective solutions and reliable customer services
- Securing Colorado through innovation
- Strengthening Colorado's technology landscape

The OIT Playbook and the strategic direction for state information technology is heavily focused on citizen-centric initiatives in addition to Department & Program specific objectives. The expectation is that the state consistently review existing products and services, and transform technology and services to provide the best possible customer experience, including the use of mobile technology wherever feasible to deliver current and future agency services on a modern and mobile platform.

Assumptions and Calculations:

Specific detailed assumptions used to develop this request, the resulting allocations to the Departments of Human Services and Health Care Policy & Financing, and funding source detail by department are provided in the attached appendices.

Cost Allocation Model changes:

Colorado is committed to an integrated eligibility system across public assistance programs and adheres to the guidance set forth in the OMB Circular A-87 exception. Over the past year, based on feedback from federal partners, HCPF, CDHS and OIT partnered to develop and implement a new cost allocation model for CBMS/PEAK costs that would be more equitable and accurate than the previous cost allocation model, which was based heavily on Random Moment Sampling data.

Effective July 1, 2018, joint system costs (e.g., operations, maintenance,) are distributed using an allocation approach selected by HCPF and CDHS to properly allocate expenditures to the benefiting Federal and State programs. Joint system maintenance and operations costs are grouped into cost centers; each with different methodologies to allocate costs to benefitting programs/departments. The result of this change in methodology as identified in the appendices to this request is a significant shift in the allocation of

CBMS/PEAK costs from CDHS to HCPF; given the enhanced federal participation available to HCPF programs, this change actually reduces General fund appropriations for CBMS/PEAK on an ongoing basis.

Additionally, the current request provides an allocation for the Department of Public Health & Environment (CDPHE) to address the WIC program's PEAK utilization. As CDPHE is brought into the cost allocation model in FY 2018-2019 its allocation is 100% General Fund ongoing. CDPHE expects to implement changes to its current business model by the final quarter of the current fiscal year that will decrease their PEAK utilization going forward. Once sufficient data to outline the CDPHE-WIC ongoing annual PEAK utilization is available CDPHE will approach their federal partners regarding federal funding/reimbursement for these costs, but it is not expected that this will occur until the federal fiscal year that commences in October of 2020. The costs allocated to CDPHE will be adjusted through the budget process due to information from the cost allocation model. Additionally, contingent on being awarded additional federal funds for this purpose CDPHE will allocate ongoing annual PEAK utilization costs to its federal partners.

Finally, with regard to other state agencies that may participate in CBMS and/or PEAK in future years, there is a mechanism to include such agencies and programs to the cost allocation model. The fiscal impact to new programs will depend on their system usage as compared to other programs, and the maintenance and operations costs incurred for CBMS and/or PEAK. In the same fashion, changes to an existing program's usage of CBMS and/or PEAK, or programs removed will impact all other programs participating in cost allocation.

The table below summarizes the new allocation approach:

Costs Allocated:	Cost Description:	Allocation Methodology:
Standard Client Correspondence	Costs for Standard Client Correspondence are incurred for managing, printing and mailing correspondence to clients of public assistance programs administered by CBMS and PEAK, including Notices of Action, Forms, and Letters. Costs include the following: • Printing and mailing vendor • Content management software • Address validation software • Note: these costs exclude 1095-b client correspondence costs that are charged to HCPF	Correspondence Mailed and Printed, Counted by Program. Programs include Adult Financial, Colorado Works, Food Assistance, and Medical.
PEAK Application	The PEAK Application provides an online self-service portal for Coloradans to screen and apply for medical, food, cash, and early childhood assistance programs. The PEAK Application has five modules: Am I Eligible, Apply for Benefits, Report My Changes, Recertification, Redetermination, Reassessment (RRR), and PEAK Pro. Costs include the following: • Infrastructure, software licensing, and maintenance • Consumer application support for testing, online help, and maintenance • PEAK outreach & training	Weighted Average, Monthly PEAK System Usage by Program. Usage in each module is weighted based on the module's screen count relative to other PEAK modules. • *Am I Eligible*: Monthly count of users pre-screened for public assistance benefits, counted by program • *Apply for Benefits*: Monthly count of users applying for public assistance benefits, counted by program • *Report My Changes*: Monthly count of users reporting changes to their cases, counted by program • *RRR*: Monthly count of users processing their redetermination, counted by program

Costs Allocated:	Cost Description:	Allocation Methodology:
		• *PEAK Pro*: Monthly count of log-in's into PEAK Pro, counted by program/organization
PEAK Technical Support Center	The PEAK Technical Support Center provides technical support to PEAK Application users via e-mail and telephone. Costs include the following: • Integrated support model infrastructure and maintenance for contact/call center • Software licensing and maintenance	Support Center Tickets Served, Counted by Program. Programs include Food Assistance, Cash Assistance, Medical, and Shared.
CDHS Only Costs	Costs for providing operational enhancements, maintenance and operational support for the CBMS Application as directed by CDHS are charged to CDHS. Costs include the following: • CDHS pool hours • Software licensing and maintenance solely for CDHS programs	Cases Active on the Last Day of the Month, Counted by CDHS programs. CDHS programs include Adult Financial, Old Age Pension (OAP)–Adult Financial, Colorado Works, County Diversion, and Food Assistance.
HCPF Only Costs	Costs for providing operational enhancements, maintenance and operational support for the CBMS Application as directed by HCPF are charged to HCPF. Costs include the following: • 1095-B Client Correspondence • HCPF pool hours • Software licensing and maintenance solely for HCPF programs	Cases Active on the Last Day of the Month, Counted by HCPF program. HCPF programs include Medical, CHP+, and Old Age Pension-Medical (OAP-Med).
All Other CBMS Maintenance and Operations (M&O) Activities and Services	All Other CBMS M&O Activities and Services provides enterprise-wide maintenance and operational support for the CBMS Application. Costs include the following: • Personnel services • Shared pool hours • Operating and contract expenses	Cases Active on the Last Day of the Month, Counted by CDHS and HCPF Programs administered by CBMS. Programs include Medical, CHP+, Old Age Pension-Medical (OAP-Med), Adult Financial, Old Age Pension (OAP)–Adult Financial, Colorado Works, County Diversion, and Food Assistance.

Impact to Common Policy:

This request does not impact OIT common policy allocations to departments. Funding for CBMS and PEAK is program funding outside of statewide Common Policy is a combination of state General Fund, cash funds, and federal funding appropriated in the CDHS and HCPF that are re-appropriated to OIT.

This page is intentionally left blank.

	Table 1.1a: FY 2018-19 OIT CBMS Incremental Request by Line Item							
Row	Item	Total Funds	FTE	General Fund	Cash Funds	Reappropriated Funds	Federal Funds	Source
A	**Total Incremental Request**	**$1,309,206**	**0.0**	**$0**	**$0**	**$1,309,206**	**$0**	Row B
B	(5) Office of Information Technology, (E) Applications, Colorado Benefits Management Systems	$1,309,206	0.0	$0	$0	$1,309,206	$0	Table 2.1a, Row D

	Table 1.1b: FY 2019-20 OIT CBMS Incremental Request by Line Item							
Row	Item	Total Funds	FTE	General Fund	Cash Funds	Reappropriated Funds	Federal Funds	Source
A	**Total Incremental Request**	**$3,410,566**	**0.0**	**$0**	**$0**	**$3,410,566**	**$0**	Row B
B	(5) Office of Information Technology, (E) Applications, Colorado Benefits Management Systems	$3,410,566	0.0	$0	$0	$3,410,566	$0	Table 2.1b, Row G

	Table 1.1c: FY 2020-21 OIT CBMS Incremental Request by Line Item							
Row	Item	Total Funds	FTE	General Fund	Cash Funds	Reappropriated Funds	Federal Funds	Source
A	**Total Incremental Request**	**$3,521,475**	**0.0**	**$0**	**$0**	**$3,521,475**	**$0**	Row B
B	(5) Office of Information Technology, (E) Applications, Colorado Benefits Management Systems	$3,521,475	0.0	$0	$0	$3,521,475	$0	Table 2.1b, Row G

	Table 1.2a: FY 2018-19 DHS CBMS Incremental Request by Line Item							
Row	Item	Total Funds	FTE	General Fund	Cash Funds	Reappropriated Funds	Federal Funds	Source
A	**Total Incremental Request**	**($19,236,034)**	**0.0**	**($15,823,153)**	**($281,944)**	**$0**	**($3,130,937)**	Sum Rows B thru E
B	(2) Office of Information Technology Services, (B) Colorado Benefits Management System (1) Ongoing Expenses, Personal Services	($1,816,021)	0.0	($715,086)	($25,856)	$0	($1,075,079)	Table 2.2a, Row F
C	(2) Office of Information Technology Services, (B) Colorado Benefits Management System (1) Ongoing Expenses, Centrally Appropriated Items	($195,764)	0.0	($76,832)	($2,465)	$0	($116,467)	Table 2.2a, Row I
D	(2) Office of Information Technology Services, (B) Colorado Benefits Management System (1) Ongoing Expenses, Operating and Contract Expenses	($16,300,805)	0.0	($14,659,402)	($242,338)	$0	($1,399,065)	Table 2.2a, Row S
E	(2) Office of Information Technology Services, (B) Colorado Benefits Management System (2) Special Projects, Health Care and Economic Security Staff Development Center	($923,444)	0.0	($371,833)	($11,285)	$0	($540,326)	Table 2.2a, Row AA

	Table 1.2b: FY 2019-20 DHS CBMS Incremental Request by Line Item							
Row	Item	Total Funds	FTE	General Fund	Cash Funds	Reappropriated Funds	Federal Funds	Source
A	**Total Incremental Request**	**($17,403,127)**	**0.0**	**($15,417,623)**	**($277,102)**	**$0**	**($1,708,402)**	Sum Rows B thru E
B	(2) Office of Information Technology Services, (B) Colorado Benefits Management System (1) Ongoing Expenses, Personal Services	($1,816,021)	0.0	($715,086)	($25,856)	$0	($1,075,079)	Table 2.2b, Row F
C	(2) Office of Information Technology Services, (B) Colorado Benefits Management System (1) Ongoing Expenses, Centrally Appropriated Items	($195,764)	0.0	($76,832)	($2,465)	$0	($116,467)	Table 2.2b, Row I
D	(2) Office of Information Technology Services, (B) Colorado Benefits Management System (1) Ongoing Expenses, Operating and Contract Expenses	($14,498,780)	0.0	($14,267,605)	($239,943)	$0	$8,768	Table 2.2b, Row T
E	(2) Office of Information Technology Services, (B) Colorado Benefits Management System (2) Special Projects, Health Care and Economic Security Staff Development Center	($892,562)	0.0	($358,100)	($8,838)	$0	($525,624)	Table 2.2b, Row AC

	Table 1.2c: FY 2020-21 DHS CBMS Incremental Request by Line Item							
Row	Item	Total Funds	FTE	General Fund	Cash Funds	Reappropriated Funds	Federal Funds	Source
A	**Total Incremental Request**	**($17,442,539)**	**0.0**	**($15,437,485)**	**($277,014)**	**$0**	**($1,728,040)**	Sum of Rows B thru E
B	(2) Office of Information Technology Services, (B) Colorado Benefits Management System (1) Ongoing Expenses, Personal Services	($1,816,021)	0.0	($715,086)	($25,856)	$0	($1,075,079)	Table 2.2c, Row F
C	(2) Office of Information Technology Services, (B) Colorado Benefits Management System (1) Ongoing Expenses, Centrally Appropriated Items	($195,764)	0.0	($76,832)	($2,465)	$0	($116,467)	Table 2.2c, Row I
D	(2) Office of Information Technology Services, (B) Colorado Benefits Management System (1) Ongoing Expenses, Operating and Contract Expenses	($14,507,310)	0.0	($14,273,734)	($237,408)	$0	$3,832	Table 2.2c, Row T
E	(2) Office of Information Technology Services, (B) Colorado Benefits Management System (2) Special Projects, Health Care and Economic Security Staff Development Center	($923,444)	0.0	($371,833)	($11,285)	$0	($540,326)	Table 2.2c, Row AB

Row	Item	Total Funds	FTE	General Fund	Cash Funds	Reappropriated Funds	Federal Funds	Source
Table 1.3a: FY 2018-19 HCPF CBMS Incremental Request by Line Item							
A	**Total Incremental Request**	**$18,939,154**	**0.0**	**$3,885,859**	**$1,787,333**	**($95,176)**	**$13,361,138**	Row B + Row C
B	(1) Executive Directors' Office (C) Information Technology Contracts and Projects, Colorado Benefits Management Systems, Operating and Contract Expenses	$17,986,176	0.0	$3,569,502	$1,659,389	($92,054)	$12,849,339	Table 2.3a Row F
C	(1) Executive Directors' Office (C) Information Technology Contracts and Projects, Colorado Benefits Management Systems, Health Care and Economic Security Staff Development Center	$952,978	0.0	$316,357	$127,944	($3,122)	$511,799	Table 2.3a Row L

Row	Item	Total Funds	FTE	General Fund	Cash Funds	Reappropriated Funds	Federal Funds	Source
Table 1.3b: FY 2019-20 HCPF CBMS Incremental Request by Line Item							
A	**Total Incremental Request**	**$20,350,847**	**0.0**	**$4,090,801**	**$2,084,566**	**($93,565)**	**$14,269,045**	Row B + Row C
B	(1) Executive Directors' Office (C) Information Technology Contracts and Projects, Colorado Benefits Management Systems, Operating and Contract Expenses	$19,278,751	0.0	$3,735,992	$1,929,432	($90,449)	$13,703,776	Table 2.3b Row I
C	(1) Executive Directors' Office (C) Information Technology Contracts and Projects, Colorado Benefits Management Systems, Health Care and Economic Security Staff Development Center	$1,072,096	0.0	$354,809	$155,134	($3,116)	$565,269	Table 2.3b Row O

Row	Item	Total Funds	FTE	General Fund	Cash Funds	Reappropriated Funds	Federal Funds	Source
Table 1.3c: FY 2020-21 HCPF CBMS Incremental Request by Line Item							
A	**Total Incremental Request**	**$20,556,342**	**0.0**	**$4,105,383**	**$2,359,487**	**($92,904)**	**$14,184,376**	Row B + Row C
B	(1) Executive Directors' Office (C) Information Technology Contracts and Projects, Colorado Benefits Management Systems, Operating and Contract Expenses	$19,603,364	0.0	$3,789,026	$2,213,476	($89,782)	$13,690,644	Table 2.3b Row I
C	(1) Executive Directors' Office (C) Information Technology Contracts and Projects, Colorado Benefits Management Systems, Health Care and Economic Security Staff Development Center	$952,978	0.0	$316,357	$146,011	($3,122)	$493,732	Table 2.3b Row O

Row	Item	Total Funds	FTE	General Fund	Cash Funds	Reappropriated Funds	Federal Funds	Source
Table 1.4a FY 2018-19 DPHE CBMS Incremental Request by Line Item							
A	**Total Incremental Request**	**$108,598**	**0.0**	**$108,598**	**$0**	**$0**	**$0**	Row B
B	(9) Prevention Services Division, (E) Nutrition Services, Women, Infants, and Children Supplemental Food Grant	$108,598	0.0	$108,598	$0	$0	$0	Table 2.4a, Row F

Row	Item	Total Funds	FTE	General Fund	Cash Funds	Reappropriated Funds	Federal Funds	Source
Table 1.4b FY 2019-20 DPHE CBMS Incremental Request by Line Item							
A	**Total Incremental Request**	**$143,595**	**0.0**	**$143,595**	**$0**	**$0**	**$0**	Row B
B	(9) Prevention Services Division, (E) Nutrition Services, Women, Infants, and Children Supplemental Food Grant	$143,595	0.0	$143,595	$0	$0	$0	Table 2.4b, Row G

Row	Item	Total Funds	FTE	General Fund	Cash Funds	Reappropriated Funds	Federal Funds	Source
Table 1.4c FY 2020-21 DPHE CBMS Incremental Request by Line Item							
A	**Total Incremental Request**	**$144,672**	**0.0**	**$144,672**	**$0**	**$0**	**$0**	Row B
B	(9) Prevention Services Division, (E) Nutrition Services, Women, Infants, and Children Supplemental Food Grant	$144,672	0.0	$144,672	$0	$0	$0	Table 2.4c Row G

	Table 2.1a FY 2018-19 OIT CBMS-PEAK Summary by Initiative							
Row	Item	Total Funds	FTE	General Fund	Cash Funds	Reappropriated Funds[1]	Federal Funds	Source
(5) Office of Information Technology, (E) Applications								
Colorado Benefits Management System								
A	FY 2018-19 Appropriation	**$61,868,613**	49.5	$0	$0	$61,868,613	$0	Table 4.1 Row H
B	Technical Correction to OIT Budget Only: HCPF R-08 Assorted Medicaid Program Saving Initiatives	**$1,309,206**	0.0	$0	$0	$1,309,206	$0	Table 4.4 Row L
C	**Line Item Total**	**$63,177,819**	**49.5**	**$0**	**$0**	**$63,177,819**	**$0**	Row A + Row B
D	**Incremental Request**	**$1,309,206**	**0.0**	**$0**	**$0**	**$1,309,206**	**$0**	Row E + Row A

1 Reappropriated funds are from various sources from the Department of Human Services, the Department of Health Care Policy and Financiing, and the Department of Public Health and Environment.

	Table 2.1b FY 2019-20 OIT CBMS-PEAK Summary by Initiative							
Row	Item	Total Funds	FTE	General Fund	Cash Funds	Reappropriated Funds[1]	Federal Funds	Source
(5) Office of Information Technology, (E) Applications								
Colorado Benefits Management System								
A	FY 2019-20 Base Request	**$63,175,076**	49.5	$0	$0	$63,175,076	$0	Table 5.1 Row H
B	Technical Correction OIT Reappropriated Funds Only: HCPF R-08 Assorted Medicaid Program Saving Initiatives	**$280,969**	0.0	$0	$0	$280,969	$0	Table 5.3 Row K
C	Pool Hour Rate Reduction	**($940,030)**	0.0	$0	$0	($940,030)	$0	Table 5.3 Row M
D	New Pool Hours and Adjustments	**$3,185,000**	0.0	$0	$0	$3,185,000	$0	Table 5.3 Row AD
E	New Operations and Maintenance	**$884,627**	0.0	$0	$0	$884,627	$0	Table 5.4 Row E
F	**Line Item Total**	**$66,585,642**	**49.5**	**$0**	**$0**	**$66,585,642**	**$0**	Sum Rows A through E
G	**Incremental Request**	**$3,410,566**	**0.0**	**$0**	**$0**	**$3,410,566**	**$0**	Row F - Row A

1 Reappropriated funds are from various sources from the Department of Human Services, the Department of Health Care Policy and Financiing, and the Department of Public Health and Environment.

	Table 2.1c FY 2020-21 OIT CBMS-PEAK Summary by Initiative							
Row	Item	Total Funds	FTE	General Fund	Cash Funds	Reappropriated Funds[1]	Federal Funds	Source
(5) Office of Information Technology, (E) Applications								
Colorado Benefits Management System								
A	FY 2020-21 Continuation	**$63,175,076**	49.5	$0	$0	$63,175,076	$0	Table 6.1 Row H
B	Cost Allocation Redistribution Change	**$0**	0.0	$0	$0	$0	$0	Table 6.3 Row H
C	Pool Hour Rate Reduction	**($402,870)**	0.0	$0	$0	($402,870)	$0	Table 6.4 Row M
D	New Pool Hours and Adjustments	**$3,015,000**	0.0	$0	$0	$3,015,000	$0	Table 6.4 Row AD
E	New Operating, Maintenance and Contracts	**$909,345**	0.0	$0	$0	$909,345	$0	Table 6.4 Row E
F	**Line Item Total**	**$66,696,551**	**49.5**	**$0**	**$0**	**$66,696,551**	**$0**	Sum Rows A through E
G	**Incremental Request**	**$3,521,475**	**0.0**	**$0**	**$0**	**$3,521,475**	**$0**	Row F - Row A

1 Reappropriated funds are from various sources from the Department of Human Services, the Department of Health Care Policy and Financiing, and the Department of Public Health and Environment.

Row	Item	Total Funds	FTE	General Fund	Cash Funds[1]	Reappropriated Funds	Federal Funds[2]	Source

Table 2.2a: FY 2018-19 DHS CBMS-PEAK Summary by Initiative

Row	Item	Total Funds	FTE	General Fund	Cash Funds[1]	Reappropriated Funds	Federal Funds[2]	Source
(2) Office of Information Technology Services, (B) Colorado Benefits Management System, (1) Ongoing Expenses								
Personal Services								
A	FY 2018-19 Appropriation	$2,734,449	0.0	$1,123,495	$98,642	$0	$1,512,312	Table 4.1 Row A
B	Cost Allocation Redistribution	$963,274	0.0	$428,351	$76,340	$0	$458,583	Table 4.2 Row A
C	Redistribution Incremental Request	($1,771,175)	0.0	($695,144)	($22,302)	$0	($1,053,729)	Row B - Row A
D	Technical Correction OIT FY 2017-18 OIT R-05 Enterprise Applications Realignment	($44,846)	0.0	($19,942)	($3,554)	$0	($21,350)	Table 4.4 Row A
E	**Line Item Total**	**$918,428**	**0.0**	**$408,409**	**$72,786**	**$0**	**$437,233**	Row A + Row C + Row D
F	**Incremental Request**	**($1,816,021)**	**0.0**	**($715,086)**	**($25,856)**	**$0**	**($1,075,079)**	Row E - Row A
Centrally Appropriated Items								
G	FY 2018-19 Appropriation	$302,235	0.0	$124,178	$10,903	$0	$167,154	Table 4.1 Row B
H	Cost Allocation Redistribution	$106,471	0.0	$47,346	$8,438	$0	$50,687	Table 4.2 Row B
I	**Incremental Request**	**($195,764)**	**0.0**	**($76,832)**	**($2,465)**	**$0**	**($116,467)**	Row H - Row G
Operating and Contract Expenses								
J	FY 2018-19 Appropriation	$30,901,859	0.0	$21,603,372	$926,951	$0	$8,371,536	Table 4.1 Row E
K	Cost Allocation Redistribution	$14,601,054	0.0	$5,579,998	$684,613	$0	$8,336,443	Table 4.2 Row E
L	Redistribution Incremental Request	($16,300,805)	0.0	($16,023,374)	($242,338)	$0	($35,093)	Row K - Row J
M	Technical Correction to OIT Budget Only: HCPF R-08 Assorted Medicaid Program Saving Initiatives	$0	0.0	$0	$0	$0	$0	Table 4.4 Row E
N	Pool Hour Adjustments	$0	0.0	$1,363,972	$0	$0	($1,363,972)	Table 4.4 Row H
O	**Line Item Subtotal**	**$14,601,054**	**0.0**	**$6,943,970**	**$684,613**	**$0**	**$6,972,471**	Sum Rows J, L, M & N
P	**Incremental Subtotal**	**($16,300,805)**	**0.0**	**($14,659,402)**	**($242,338)**	**$0**	**($1,399,065)**	Row O - Row J
Q	SNAP General Fund Offset	$0	0.0	$0	$0	$0	$0	Row AA Less Total SNAP Need
R	**Line Item Total**	**$14,601,054**	**0.0**	**$6,943,970**	**$684,613**	**$0**	**$6,972,471**	Row O + Row Q
S	**Incremental Request**	**($16,300,805)**	**0.0**	**($14,659,402)**	**($242,338)**	**$0**	**($1,399,065)**	Row P + Row Q
T	**SECTION TOTAL**	**$15,625,953**	**0.0**	**$7,399,725**	**$765,837**	**$0**	**$7,460,391**	Row B + Row E + Row M
U	**SECTION INCREMENTAL REQUEST**	**($18,312,590)**	**0.0**	**($15,451,320)**	**($270,659)**	**$0**	**($2,590,611)**	Row C + Row F + Row N
(2) Office of Information Technology Services, (B) Colorado Benefits Management System (2) Special Projects								
Health Care and Economic Security Staff Development Center								
V	FY 2018-19 Appropriation	$1,431,181	11.0	$597,615	$51,523	$0	$782,043	Table 4.1 Row G
W	Cost Allocation Redistribution	$501,657	11.0	$223,078	$39,756	$0	$238,823	Table 4.2 Row G
X	Redistribution Incremental Request	($929,524)	0.0	($374,537)	($11,767)	$0	($543,220)	Row W - Row V
Y	Technical Correction FY 19 HCPF Common Policy/Salary Survey	$6,080	11.0	$2,704	$482	$0	$2,894	Table 4.4 Row B
Z	**Line Item Total**	**$507,737**	**11.0**	**$225,782**	**$40,238**	**$0**	**$241,717**	Row V + Row X + Row Y
AA	**Incremental Request**	**($923,444)**	**0.0**	**($371,833)**	**($11,285)**	**$0**	**($540,326)**	Row X + Row Y
AB	**TOTAL DHS Revised Funding Need**	**$16,133,690**	**11.0**	**$7,625,507**	**$806,075**	**$0**	**$7,702,108**	Row T + Row Z
AC	**TOTAL DHS INCREMENTAL REQUEST**	**($19,236,034)**	**0.0**	**($15,823,153)**	**($281,944)**	**$0**	**($3,130,937)**	Row U + Row AA
	SNAP and TANF Limits							
AD	*SNAP Limits*						*$6,459,259*	Limit in the FY 2018-19 request
AE	*TANF Limits*						*$4,373,786*	Limit in the FY 2018-19 request

[1] Cash Funds are from the Old Age Pension Fund created in Section 1 of Article XXIV of the State Constitution

[2] Federal Funds are from the U.S. Department of Agriculture for the Supplemental Nutrition Assistance Program; Temporary Assistance for Needy Families Block Grant; Part C of the federal Individuals with Disabilities Education Improvement Act; Child Care and Development Fund (CCDF); and The Maternal, Infant, and Early Childhood Home Visiting Program

Table 2.2b: FY 2019-20 DHS CBMS-PEAK Summary by Initiative						
Row	**Item**	**Total Funds**	**FTE**	**General Fund**	**Cash Funds[1]**	**Reappropriated Funds**	**Federal Funds[2]**	**Source**

Row	Item	Total Funds	FTE	General Fund	Cash Funds[1]	Reappropriated Funds	Federal Funds[2]	Source
(2) Office of Information Technology Services, (B) Colorado Benefits Management System, (1) Ongoing Expenses							
Personal Services							
A	FY 2019-20 Base Request	$2,734,449	0.0	$1,123,495	$98,642	$0	$1,512,312	Table 5.1 Row A
B	Cost Allocation Redistribution	$963,274	0.0	$428,351	$76,340	$0	$458,583	Table 5.2 Row A
C	Redistribution Incremental Request	($1,771,175)	0.0	($695,144)	($22,302)	$0	($1,053,729)	Row B - Row A
D	Technical Correction OIT FY 2017-18 OIT R-05 Enterprise Applications Realignment	($44,846)	0.0	($19,942)	($3,554)	$0	($21,350)	Table 5.4 Row B
E	**Line Item Total**	**$918,428**		**$408,409**	**$72,786**	**$0**	**$437,233**	Row A+ Row C + Row D
F	**Incremental Request**	**($1,816,021)**		**($715,086)**	**($25,856)**	**$0**	**($1,075,079)**	Row E - Row A
Centrally Appropriated Items							
G	FY 2019-20 Base Request	$302,235	0.0	$124,178	$10,903	$0	$167,154	Table 5.1 Row B
H	Cost Allocation Redistribution	$106,471	0.0	$47,346	$8,438	$0	$50,687	Table 5.2 Row B
I	**Incremental Request**	**($195,764)**	**0.0**	**($76,832)**	**($2,465)**	**$0**	**($116,467)**	Row E - Row D
Operating and Contract Expenses							
J	FY 2019-20 Base Request	$31,665,413	0.0	$22,339,382	$954,495	$0	$8,371,536	Table 5.1 Row E
K	Cost Allocation Redistribution	$14,870,033	0.0	$5,699,608	$705,930	$0	$8,464,495	Table 5.2 Row E
L	Redistribution Incremental Request	($16,795,380)	0.0	($16,639,774)	($248,565)	$0	$92,959	Row H - Row G
M	Pool Hour Rate Change	($339,921)	0.0	($102,871)	($5,859)	$0	($231,191)	Table 5.4 Row M
N	New Pool Hours and Adjustments	$2,454,389	0.0	$2,394,050	$46	$0	$60,293	Table 5.4 Row AD
O	Operating and Contracts Costs	$182,132	0.0	$80,990	$14,435	$0	$86,707	Table 5.4 Row E
P	Line Item Subtotal	$17,166,633	0.0	$8,071,777	$714,552	$0	$8,380,304	Sum Rows J, L, M, N, O
Q	Incremental Subtotal	($14,498,780)	0.0	($14,267,605)	($239,943)	$0	$8,768	Sum Rows L, M, N, O
R	SNAP General Fund Offset	$0	0.0	$0	$0	$0	$0	Table 5.4 Row AL
S	**Line Item Total**	**$17,166,633**	**0.0**	**$8,071,777**	**$714,552**	**$0**	**$8,380,304**	Row P + Row R
T	**Incremental Request**	**($14,498,780)**	**0.0**	**($14,267,605)**	**($239,943)**	**$0**	**$8,768**	Row S - Row J
U	**SECTION TOTAL**	**$18,191,532**	**0.0**	**$8,527,532**	**$795,776**	**$0**	**$8,868,224**	Row E + Row H + Row S
V	**SECTION INCREMENTAL REQUEST**	**($16,510,565)**	**0.0**	**($15,059,523)**	**($268,264)**	**$0**	**($1,182,778)**	Row F +Row I + Row T
(2) Office of Information Technology Services, (B) Colorado Benefits Management System (2) Special Projects							
Health Care and Economic Security Staff Development Center							
W	FY 2019-20 Base Request	$1,431,181	0.0	$597,615	$51,523	$0	$782,043	Table 5.1 Row G
X	Cost Allocation Redistribution	$501,657	0.0	$223,078	$39,756	$0	$238,823	Table 5.2 Row G
Y	Redistribution Incremental Request	($929,524)		($374,537)	($11,767)	$0	($543,220)	Row X - Row W
Z	Technical Correction FY 19 HCPF Common Policy/Salary Survey	$6,080	0.0	$2,704	$482	$0	$2,894	Table 5.4 Row AP
AA	Staff Development Staffing Survey	$30,882	0.0	$13,733	$2,447	$0	$14,702	Table 5.4 Row AO
AB	**Line Item Total**	**$538,619**		**$239,515**	**$42,685**	**$0**	**$256,419**	Sum Row W, Y, Z, AA
AC	**Incremental Request**	**($892,562)**		**($358,100)**	**($8,838)**	**$0**	**($525,624)**	Row AB - Row W
AD	**TOTAL DHS Revised Funding Need**	**$18,730,151**	**0.0**	**$8,767,047**	**$838,461**	**$0**	**$9,124,643**	Row U + Row AB
AE	**TOTAL DHS INCREMENTAL REQUEST**	**($17,403,127)**	**0.0**	**($15,417,623)**	**($277,102)**	**$0**	**($1,708,402)**	Row V + Row AC
AF	SNAP Limit						$6,459,259	Historical SNAP Limit
AG	TANF Limit						$4,373,786	Historical TANF Limit

[1] Cash Funds are from the Old Age Pension Fund created in Section 1 of Article XXIV of the State Constitution

[2] Federal Funds are from the U.S. Department of Agriculture for the Supplemental Nutrition Assistance Program; Temporary Assistance for Needy Families Block Grant; Part C of the federal Individuals with Disabilities Education Improvement Act; Child Care and Development Fund (CCDF); and The Maternal, Infant, and Early Childhood Home Visiting Program

	Table 2.2c: FY 2020-21 DHS CBMS-PEAK Summary by Initiative						
Row	Item	Total Funds	FTE	General Fund	Cash Funds[1]	Reappropriated Funds	Federal Funds[2]	Source

Row	Item	Total Funds	FTE	General Fund	Cash Funds[1]	Reappropriated Funds	Federal Funds[2]	Source
(2) Office of Information Technology Services, (B) Colorado Benefits Management System, (1) Ongoing Expenses								
Personal Services								
A	FY 2020-21 Continuation Request	$2,734,449	0.0	$1,123,495	$98,642	$0	$1,512,312	Table 6.1 Row A
B	Cost Allocation Redistribution	$963,274	0.0	$428,351	$76,340	$0	$458,583	Table 6.2 Row A
C	Redistribution Incremental Request	($1,771,175)	0.0	($695,144)	($22,302)	$0	($1,053,729)	Row B - Row A
D	Technical Correction OIT FY 2017-18 OIT R-05 Enterprise Applications Realignment	($44,846)	0.0	($19,942)	($3,554)	$0	($21,350)	Table 6.4 Row B
E	**Line Item Total**	**$918,428**	**0.0**	**$408,409**	**$72,786**	**$0**	**$437,233**	Row A + Row C + Row D
F	**Incremental Request**	**($1,816,021)**	**0.0**	**($715,086)**	**($25,856)**	**$0**	**($1,075,079)**	Row E - Row A
Centrally Appropriated Items								
G	FY 2020-21 Continuation Request	**$302,235**	0.0	$124,178	$10,903	$0	$167,154	Table 6.1 Row B
H	Cost Allocation Redistribution	**$106,471**	0.0	$47,346	$8,438	$0	$50,687	Table 6.2 Row B
I	**Line Item Incremental**	**($195,764)**	**0.0**	**($76,832)**	**($2,465)**	**$0**	**($116,467)**	Row H - Row G
Operating and Contract Expenses								
J	FY 2020-21 Continuation Request	**$31,665,413**	$0	$22,339,382	$954,495	$0	$8,371,536	Table 6.1 Row E
K	Cost Allocation Redistribution	**$14,870,033**	$0	$5,699,608	$705,930	$0	$8,464,495	Table 6.2 Row E
L	Redistribution Incremental Request	**($16,795,380)**	$0	($16,639,774)	($248,565)	$0	$92,959	Row K - Row J
M	Pool Hour Rate Reduction	**($145,678)**	$0	($44,086)	($2,510)	$0	($99,082)	Table 6.4 Row M
N	New Pool Hours and Adjustments	**$2,261,908**	$0	$2,333,712	$48	$0	($71,852)	Table 6.4 Row AD
O	Operating and Contracts Costs	**$171,840**	$0	$76,414	$13,619	$0	$81,807	Table 6.4 Row E
P	Subtotal	$17,158,103	0.0	$8,065,648	$717,087	$0	$8,375,368	Rows J, L, M, N, and O
Q	Incremental Subtotal	($14,507,310)	0.0	($14,273,734)	($237,408)	$0	$3,832	Row P - Row J
R	SNAP General Fund Offset	**$0**	0.0	$0	$0	$0	$0	Table 6.4 Row AM
S	**Line Item Total**	**$17,158,103**	**0.0**	**$8,065,648**	**$717,087**	**$0**	**$8,375,368**	Row P + Row R
T	**Incremental Request**	**($14,507,310)**	**0.0**	**($14,273,734)**	**($237,408)**	**$0**	**$3,832**	Row Q - Row R
U	**SECTION TOTAL**	**$18,183,002**	**0.0**	**$8,521,403**	**$798,311**	**$0**	**$8,863,288**	Row E + Row H + Row S
V	**SECTION INCREMENTAL REQUEST**	**($16,519,095)**	**0.0**	**($15,065,652)**	**($265,729)**	**$0**	**($1,187,714)**	Row F + Row I + Row T
(2) Office of Information Technology Services, (B) Colorado Benefits Management System (2) Special Projects								
Health Care and Economic Security Staff Development Center								
W	FY 2020-21 Continuation Request	$1,431,181	11.0	$597,615	$51,523	$0	$782,043	Table 6.1 Row G
X	Cost Allocation Redistribution	$501,657	0.0	$223,078	$39,756	$0	$238,823	Table 6.2 Row G
Y	Redistribution Incremental Request	($929,524)	0.0	($374,537)	($11,767)	$0	($543,220)	Row X - Row W
Z	Technical Correction FY 19 HCPF Common Policy/Salary Survey	$6,080	0.0	$2,704	$482	$0	$2,894	Table 6.4 Row AP
AA	**Line Item Total**	**$507,737**	**11.0**	**$225,782**	**$40,238**	**$0**	**$241,717**	Row W + Row Y + Row Z
AB	**Incremental Request**	**($923,444)**	**0.0**	**($371,833)**	**($11,285)**	**$0**	**($540,326)**	Row AA + Row W
AC	**DHS TOTAL FUNDING NEED**	**$18,690,739**	**11.0**	**$8,747,185**	**$838,549**	**$0**	**$9,105,005**	Row U + Row AB
AD	**DHS TOTAL INCREMENTAL REQUEST**	**($17,442,539)**	**0.0**	**($15,437,485)**	**($277,014)**	**$0**	**($1,728,040)**	Row V + Row AB
AF	SNAP Limit						$6,459,259	Historical SNAP Limit
AG	TANF Limit						$4,373,786	Historical TANF Limit

[1] Cash Funds are from the Old Age Pension Fund created in Section 1 of Article XXIV of the State Constitution

[2] Federal Funds are from the U.S. Department of Agriculture for the Supplemental Nutrition Assistance Program; Temporary Assistance for Needy Families Block Grant; Part C of the federal Individuals with Disabilities Education Improvement Act; Child Care and Development Fund (CCDF); and The Maternal, Infant, and Early Childhood Home Visiting Program

Table 2.3a: FY 2018-19 HCPF CBMS-PEAK Summary by Initiative							
Row	Item	Total Funds	FTE	General Fund	Cash Funds[1]	Reappropriated Funds[2]	Federal Funds	Source
(1) Executive Directors' Office, (C) Information Technology Contracts and Projects, Colorado Benefits Management System,								
	Operating and Contract Expenses							
A	FY 2018-19 Appropriation	$30,068,612	0.0	$6,587,252	$3,754,018	$94,608	$19,632,734	Table 4.1 Row F
B	Cost Allocation Redistribution	$48,227,758	0.0	$10,212,587	$5,441,027	$2,563	$32,571,581	Table 4.2 Row F
C	Redistribution Incremental Change	$18,159,146	0.0	$3,625,335	$1,687,009	($92,045)	$12,938,847	Row B - Row A
D	Technical Correction to OIT Budget Only: HCPF R-08 Assorted Medicaid Program Saving Initiatives	($172,970)	0.0	($55,833)	($27,620)	($9)	($89,508)	Table 4.4 Row L
E	**Line Item Total**	**$48,054,788**	**0.0**	**$10,156,754**	**$5,413,407**	**$2,554**	**$32,482,073**	Row A + Row C + Row D
F	**Incremental Request**	**$17,986,176**	**0.0**	**$3,569,502**	**$1,659,389**	**($92,054)**	**$12,849,339**	Row E - Row A
(1) Executive Directors' Office, (C) Information Technology Contracts and Projects, Colorado Benefits Management Systems								
Health Care and Economic Security Staff Development Center								
G	FY 2018-19 Appropriation	$1,005,415	0.0	$315,815	$184,764	$3,227	$501,609	Table 4.1 Row G
H	Cost Allocation Redistribution	$1,934,939	0.0	$624,600	$308,963	$104	$1,001,272	Table 4.2 Row G
I	Redistribution Change	$929,524	0.0	$308,785	$124,199	($3,123)	$499,663	Row H - Row G
J	Technical Correction FY 19 HCPF Salary Survey	$23,454	0.0	$7,572	$3,745	$1	$12,136	Table 4.4 Row M
K	**Line Item Total**	**$2,887,917**	**0.0**	**$940,957**	**$436,907**	**($3,018)**	**$1,513,071**	Row H + Row I + Row J
L	**Incremental Request**	**$952,978**	**0.0**	**$316,357**	**$127,944**	**($3,122)**	**$511,799**	Row I + Row J
M	**TOTAL HCPF TOTAL COST**	**$50,942,705**	**0.0**	**$11,097,711**	**$5,850,314**	**($464)**	**$33,995,144**	Row E + Row K
N	**TOTAL HCPF REQUEST**	**$18,939,154**	**0.0**	**$14,667,213**	**$7,509,703**	**($92,518)**	**$46,844,483**	Row F + Row M

[1] Cash Funds are from Healthcare Affordability and Sustainability Fee Cash Fund and Children's Basic Health Plan Trust

[2] Reappropriated funds are from the Old Age Pension State Medical Program line item

Table 2.3b: FY 2019-20 HCPF CBMS-PEAK Summary by Initiative							
Row	Item	Total Funds	FTE	General Fund	Cash Funds[1]	Reappropriated Funds[2]	Federal Funds	Source
(1) Executive Directors' Office, (C) Information Technology Contracts and Projects, Colorado Benefits Management System,								
	Operating and Contract Expenses							
A	FY 2019-20 Base Request	$29,583,284	0.0	$6,541,450	$3,735,991	$93,047	$19,212,796	Table 5.1 Row F
B	Cost Allocation Redistribution	$48,237,005	0.0	$10,369,265	$5,704,886	$2,564	$32,160,290	Table 5.2 Row F
C	Redistribution Change	$18,653,721	0.0	$3,827,815	$1,968,895	($90,483)	$12,947,494	Row B - Row A
D	Technical Correction OIT FY 2017-18 OIT R-05 Enterprise Applications Realignment	($172,970)	0.0	($55,834)	($28,306)	($9)	($88,821)	Table 5.4 Row B
E	Pool Hour Rate Reduction	($600,109)	0.0	($96,859)	($51,952)	($31)	($451,267)	Table 5.4 Row M
F	New Pool Hours and Adjustments	$695,614	0.0	$114,937	$59,944	$37	$520,696	Table 5.4 Row AD
G	New Operating and Contracts Costs	$702,495	0.0	($54,067)	-$19,149	$37	$775,674	Table 5.4 Row AE
H	**Line Item Total**	**$48,862,035**	**0.0**	**$10,277,442**	**$5,665,423**	**$2,598**	**$32,916,572**	Sum of Rows A, C, D, E, F, and G
I	**Incremental Request**	**$19,278,751**	**0.0**	**$3,735,992**	**$1,929,432**	**($90,449)**	**$13,703,776**	Row H - Row A
(1) Executive Directors' Office, (C) Information Technology Contracts and Projects, Colorado Benefits Management Systems								
	Health Care and Economic Security Staff							
J	FY 2019-20 Base Request	$1,005,415	0.0	$315,815	$184,839	$3,227	$501,534	Table 5.1 Row G
K	Cost Allocation Redistribution Change	$1,934,939	0.0	$624,600	$316,642	$104	$993,593	Table 5.2 Row G
L	Redistribution Change	$929,524	0.0	$308,785	$131,803	($3,123)	$492,059	Row K - Row J
M	Technical Correction FY 19 HCPF Common Policy/Salary Survey	$23,454	0.0	$7,572	$3,838	$1	$12,043	Table 5.4 Row AP
N	Staff Development Staffing Survey	$119,118	0.0	$38,452	$19,493	$6	$61,167	Table 5.4 Row AO
O	**Line Item Total**	**$2,077,511**	**0.0**	**$670,624**	**$339,973**	**$111**	**$1,066,803**	Sum Row J, L, M and N
P	**Incremental Request**	**$1,072,096**	**0.0**	**$354,809**	**$155,134**	**($3,116)**	**$565,269**	Row O - Row J
Q	**TOTAL HCPF FUNDING NEED**	**$50,939,546**	**0.0**	**$10,948,066**	**$6,005,396**	**$2,709**	**$33,983,375**	Row H + Row O
R	**TOTAL HCPF INCREMENTAL REQUEST**	**$20,350,847**	**0.0**	**$4,090,801**	**$2,084,566**	**($93,565)**	**$14,269,045**	Row I + Row P

[1] Cash Funds are from Healthcare Affordability and Sustainability Fee Cash Fund and Children's Basic Health Plan Trust

[2] Reappropriated funds are from the Old Age Pension State Medical Program line item

Row	Item	Total Funds	FTE	General Fund	Cash Funds[1]	Reappropriated Funds[2]	Federal Funds	Source
Table 2.3c: FY 2020-21 HCPF CBMS-PEAK Summary by Initiative							
(1) Executive Directors' Office (C) Information Technology Contracts and Projects, Colorado Benefits Management System,								
Operating and Contract Expenses								
A	FY 2020-21 Continuation	$29,377,033	0.0	$6,507,646	$3,718,270	$92,387	$19,058,730	Table 6.1 Row E
B	Cost Allocation Redistribution	$48,030,754	0.0	$10,336,022	$5,938,103	$2,553	$31,754,076	Table 6.2 Row E
C	Redistribution Change	$18,653,721	0.0	$3,828,376	$2,219,833	($89,834)	$12,695,346	Row B - Row A
D	Technical Correction OIT FY 2017-18 OIT R-05 Enterprise Applications Realignment	($172,970)	0.0	($55,834)	($29,222)	($9)	($87,905)	Table 6.4 Row B
E	Pool Hour Rate Reduction	($257,192)	$0	($41,512)	($23,627)	($12)	($192,041)	Table 6.4 Row M
F	New Pool Hours and Adjustments	$717,018	$0	$118,474	$65,568	$38	$532,938	Table 6.4 Row AD
G	Operating and Contracts Costs	$662,787	$0	($60,478)	($19,076)	$35	$742,306	Table 6.4 Row E
H	**Line Item Total**	**$48,980,397**	**$0**	**$10,296,672**	**$5,931,746**	**$2,605**	**$32,749,374**	Sum Rows A, C, D, E, F, and G
I	**Incremental Request**	**$19,603,364**	**0.0**	**$3,789,026**	**$2,213,476**	**($89,782)**	**$13,690,644**	Row F - Row A
(1) Executive Directors' Office (C) Information Technology Contracts and Projects, Colorado Benefits Management Systems								
Health Care and Economic Security Staff Development Center								
J	FY 2020-21 Continuation	$1,005,415	$0	$315,815	$184,839	$3,227	$501,534	Table 6.1 Row G
K	Cost Allocation Redistribution	$1,934,939	$0	$624,600	$326,888	$104	$983,347	Table 6.2 Row G
L	Redistribution Change	$929,524	$0	$308,785	$142,049	($3,123)	$481,813	Row K - Row J
M	Technical Correction FY 19 HCPF Common Policy/Salary Survey	$23,454	$0	$7,572	$3,962	$1	$11,919	Table 6.4 Row AO
N	**Line Item Total**	**$1,958,393**	**$0**	**$632,172**	**$330,850**	**$105**	**$995,266**	K
O	**Incremental Request**	**$952,978**	**$0**	**$316,357**	**$146,011**	**($3,122)**	**$493,732**	Row N - Row J
P	**Total HCPF Funding Need**	**$50,938,790**	**$0**	**$10,928,844**	**$6,262,596**	**$2,710**	**$33,744,640**	Row H + Row N
Q	**Total HCPF Incremental Request**	**$20,556,342**	**$0**	**$4,105,383**	**$2,359,487**	**($92,904)**	**$14,184,376**	Row I + Row O

[1] Cash Funds are from Healthcare Affordability and Sustainability Fee Cash Fund and Children's Basic Health Plan Trust

[2] Reappropriated funds are from the Old Age Pension State Medical Program line item

Row	Item	Total Funds	FTE	General Fund	Cash Funds	Reappropriated Funds	Federal Funds	Source
2.4a FY 2018-19 CDPHE CBMS-PEAK Summary by Initiative								
(9) Prevention Services Division, (E) Nutrition Services, Women, Infants, and Children Supplemental Food Grant								
A	FY 2018-19 Appropriation	$0	0.0	$0	$0	$0	$0	Table 4.1 Row H
B	Cost Allocation Redistribution Change	$108,598	0.0	$0	$0	$0	$108,598	Table 4.2 Row H
C	**Redistribution Incremental Change**	$108,598	0.0	$0	$0	$0	$108,598	Row B - Row A
D	WIC GF Offset	$0	0.0	$108,598	$0	$0	($108,598)	Table 4.4 Row K
E	**Line Item Total**	**$108,598**	**0.0**	**$108,598**	**$0**	**$0**	**$0**	Row B + Row D
F	**Incremental Request**	**$108,598**	**0.0**	**$108,598**	**$0**	**$0**	**$0**	Row E - Row A

Row	Item	Total Funds	FTE	General Fund	Cash Funds	Reappropriated Funds	Federal Funds	Source
2.4b FY 2019-20 CDPHE CBMS-PEAK Summary by Initiative								
(9) Prevention Services Division, (E) Nutrition Services, Women, Infants, and Children Supplemental Food Grant								
A	FY 2019-20 Base	$0	0.0	$0	$0	$0	$0	Table 5.1 Row H
B	Cost Allocation Redistribution Change	$108,598	0.0	$0	$0	$0	$108,598	Table 5.2 Row H
C	New Pool Hours and Adjustments	$34,997	0.0	$0	$0	$0	$34,997	Table 5.4 Row AD
D	**Subtotal**	$143,595	0.0	$0	$0	$0	$143,595	Sum Row A thru Row C
E	WIC GF Offset	$0	0.0	$143,595	$0	$0	($143,595)	Table 5.4 Row AL
F	**Line Item Total**	**$143,595**	**0.0**	**$143,595**	**$0**	**$0**	**$0**	Row D + Row E
G	**Incremental Request**	**$143,595**	**0.0**	**$143,595**	**$0**	**$0**	**$0**	Row F - Row A

Row	Item	Total Funds	FTE	General Fund	Cash Funds	Reappropriated Funds	Federal Funds	Source
2.4c FY 2020-21 CDPHE CBMS-PEAK Summary by Initiative								
(9) Prevention Services Division, (E) Nutrition Services, Women, Infants, and Children Supplemental Food Grant								
A	FY 2020-21 Continuation	$0	0.0	$0	$0	$0	$0	Table 6.1 Row H
B	Cost Allocation Redistribution Change	$108,598	0.0	$0	$0	$0	$108,598	Table 6.2 Row H
C	New Pool Hours and Adjustments	$36,074	0.0	$0	$0	$0	$36,074	Table 6.4 Row AD
D	**Subtotal**	$144,672	0.0	$0	$0	$0	$144,672	Sum Row A thru Row C
E	WIC GF Offset	$0	0.0	$144,672	$0	$0	($144,672)	Table 6.4 Row AM
F	**Line Item Total**	**$144,672**	**0.0**	**$144,672**	**$0**	**$0**	**$0**	Row D + Row E
G	**Incremental Request**	**$144,672**	**0.0**	**$144,672**	**$0**	**$0**	**$0**	Row F - Row A

	Table 3.1: FY 2018-19 CBMS-PEAK TOTAL INCREMENTAL REQUEST BY FUND TYPE							
Row	Item	Pool Hrs/ FTE	Total Funds	General Fund	Cash Funds	Reappropriated Funds	Federal Funds	Source
A	Personal Services	0	($217,816)	($205,707)	$205,908	($6,050)	($211,967)	Sum by Fund Type Table 4.5 Row D
B	Centrally Appropriated Items	0	$0	($14,362)	$26,204	($668)	($11,174)	Sum by Fund Type Table 4.5 Row H
C	Operating and Contract Expenses Revised	0	$0	($11,553,151)	$1,156,618	($85,336)	$10,481,869	Sum by Fund Type Table 4.5 Row L
D	Health Care and Economic Security Staff Development Center	0	$29,534	($55,476)	$116,659	($3,122)	($28,527)	Sum by Fund Type Table 4.5 Row P
E	**Total**	**0**	**($188,282)**	**($11,828,696)**	**$1,505,389**	**($95,176)**	**$10,230,201**	Sum Rows A thru D

	Table 3.2: FY 2019-20 CBMS-PEAK TOTAL INCREMETAL REQUEST BY FUND TYPE							
Row	Item	Pool Hrs/ FTE	Total Funds	General Fund	Cash Funds	Reappropriated Funds	Federal Funds	Source
A	Personal Services		($217,816)	($205,709)	$219,517	($6,050)	($225,574)	Sum by Fund Type Table 5.5 Row D
B	Centrally Appropriated Items		$0	($14,362)	$27,784	($668)	($12,754)	Sum by Fund Type Table 5.5 Row H
C	Operating and Contract Expenses Revised	24,500	$3,129,597	($10,959,865)	$1,413,867	($83,731)	$12,759,326	Sum by Fund Type Table 5.5 Row L
D	Health Care and Economic Security Staff Development Center		$179,534	($3,291)	$146,296	($3,116)	$39,645	Sum by Fund Type Table 5.5 Row P
E	**Total**	**24,500**	**$3,091,315**	**($11,183,227)**	**$1,807,464**	**($93,565)**	**$12,560,643**	Sum Rows A thru D

	Table 3.3: FY 20201-21 CBMS-PEAK TOTAL INCREMENTAL REQUEST BY FUND TYPE							
Row	Item	Pool Hrs/ FTE	Total Funds	General Fund	Cash Funds	Reappropriated Funds	Federal Funds	Source
A	Personal Services		($217,816)	($205,709)	$238,275	($6,050)	($244,332)	Sum by Fund Type Table 6.5 Row D
B	Centrally Appropriated Items		$0	($14,362)	$29,959	($668)	($14,929)	Sum by Fund Type Table 6.5 Row H
C	Operating and Contract Expenses Revised	22,500	$3,446,757	($10,911,883)	$1,679,513	($83,064)	$12,762,191	Sum by Fund Type Table 6.5 Row L
D	Health Care and Economic Security Staff Development Center		$29,534	($55,476)	$134,726	($3,122)	($46,594)	Sum by Fund Type Table 6.5 Row P
E	**Total**	**22,500**	**$3,258,475**	**($11,187,430)**	**$2,082,473**	**($92,904)**	**$12,456,336**	Sum Rows A thru D

Table 4.1: FY 2018-19 CBMS/PEAK Summary by Department of Appropriations (Cost Distribution Based on Historical RMS Methods)

Row	Item		Total Funds	OIT Reappropriated Funds	DHS Total Funds	General Fund	Cash Funds	Federal Funds	HCPF Total Funds	General Fund	Cash Funds	Reappropriated Funds	Federal Funds	CDPHE Total Funds	General Fund	Federal Funds	Source
A	Personal Services		$4,678,715	$4,460,899	$2,734,449	$1,123,495	$98,642	$1,512,312	$1,944,266	$634,134	$333,882	$6,241	$970,009	$0	$0	$0	Long Bill Appropriations (HB 18-1322)
B	Centrally Appropriated Items		$517,134	$517,134	$302,235	$124,178	$10,903	$167,154	$214,899	$70,091	$36,904	$690	$107,214	$0	$0	$0	Long Bill Appropriations (HB 18-1322)
C	*Operating and Contract Expenses (before GF Offset is applied)*	134,290	*$58,811,306*	*$56,890,580*	*$30,901,859*	*$11,927,580*	*$926,951*	*$18,047,328*	*$27,909,447*	*$5,883,027*	*$3,383,232*	*$87,677*	*$18,555,511*	*$0*	*$0*	*$0*	*Cost Estimate before GF Offset is applied*
D	*SNAP and TANF GF Offset*		*$0*		*$0*	*$9,675,792*	*$0*	*($9,675,792)*	*$0*	*$0*	*$0*	*$0*	*$0*	*$0*	*$0*	*$0*	*Total GF Offset Applied*
E	Operating and Contract Expenses	134,290	$58,811,306	$56,890,580	$30,901,859	$21,603,372	$926,951	$8,371,536	$27,909,447	$5,883,027	$3,383,232	$87,677	$18,555,511	$0	$0	$0	Long Bill Appropriations (HB 18-1322)
F	SECTION TOTAL	134,290	$64,007,155	$61,868,613	$33,938,543	$22,851,045	$1,036,496	$10,051,002	$30,068,612	$6,587,252	$3,754,018	$94,608	$19,632,734	$0	$0	$0	Sum of Row A, Row B and Row E
G	Health Care and Economic Security Staff Development Center		$2,436,596	$0	$1,431,181	$597,615	$51,523	$782,043	$1,005,415	$315,815	$184,764	$3,227	$501,609	$0		$0	Long Bill Appropriations (HB 18-1322)
H	TOTAL APPROPRIATION	134,290	$66,443,751	$61,868,613	$35,369,724	$23,448,660	$1,088,019	$10,833,045	$31,074,027	$6,903,067	$3,938,782	$97,835	$20,134,343	$0	$0	$0	Row F + Row G

Table 4.2: FY 2018-19 CBMS/PEAK Summary by Department of New Cost Allocation Redistribution

Row	Item		Total Funds	OIT Reappropriated Funds	DHS Total Funds	General Fund	Cash Funds	Federal Funds	HCPF Total Funds	General Fund	Cash Funds	Reappropriated Funds	Federal Funds	CDPHE Total Funds	General Fund	Federal Funds	Source
A	Personal Services		$4,678,715	$4,460,899	$963,274	$428,351	$76,340	$458,583	$3,715,441	$1,199,346	$593,266	$200	$1,922,629	$0	$0	$0	
B	Centrally Appropriated Items		$517,134	$517,134	$106,471	$47,346	$8,438	$50,687	$410,663	$132,561	$65,573	$22	$212,507	$0	$0	$0	Table 4.1 Total Funds redistributed by New Cost Allocation Method
C	*Operating and Contract Expenses*	134,290	*$58,811,306*	*$56,890,580*	*$14,601,054*	*$5,579,998*	*$684,613*	*$8,336,443*	*$44,101,654*	*$8,880,680*	*$4,782,188*	*$2,341*	*$30,436,445*	*$108,598*	*$0*	*$108,598*	
D	*TANF, SNAP and WIC GF Offset*		*$0*	*$0*	*$0*	*$0*	*$0*	*$0*	*$0*	*$0*	*$0*	*$0*	*$0*	*$0*	*$0*	*$0*	
E	Operating and Contract Expenses	134,290	$58,811,306	$56,890,580	$14,601,054	$5,579,998	$684,613	$8,336,443	$44,101,654	$8,880,680	$4,782,188	$2,341	$30,436,445	$108,598	$0	$108,598	
F	SECTION TOTAL	134,290	$64,007,155	$61,868,613	$15,670,799	$6,055,695	$769,391	$8,845,713	$48,227,758	$10,212,587	$5,441,027	$2,563	$32,571,581	$108,598	$0	$108,598	Sum of Row A, Row B and Row E
G	Health Care and Economic Security Staff Development Center		$2,436,596	$0	$501,657	$223,078	$39,756	$238,823	$1,934,939	$624,600	$308,963	$104	$1,001,272	$0	$0	$0	Table 4.1 G Total Funds redistributed by New Cost Allocation Method
H	TOTAL	134,290	$66,443,751	$61,868,613	$16,172,456	$6,278,773	$809,147	$9,084,536	$50,162,697	$10,837,187	$5,749,990	$2,667	$33,572,853	$108,598	$0	$108,598	Row F + Row G

Table 4.3: FY 2018-19 CBMS/PEAK Summary of New Cost Allocation Redistribution Incremental Request

Row	Item		Total Funds	OIT Reappropriated Funds	DHS Total Funds	General Fund	Cash Funds	Federal Funds	HCPF Total Funds	General Fund	Cash Funds	Reappropriated Funds	Federal Funds	CDPHE Total Funds	General Fund	Federal Funds	Source
A	Personal Services		$0	$0	($1,771,175)	($695,144)	($22,302)	($1,053,729)	$1,771,175	$565,212	$259,384	($6,041)	$952,620	$0	$0	$0	Table 4.2 Row A - Table 4.1 Row A
B	Centrally Appropriated Items		$0	$0	($195,764)	($76,832)	($2,465)	($116,467)	$195,764	$62,470	$28,669	($668)	$105,293	$0	$0	$0	Table 4.2 Row B - Table 4.1 Row B
C	*Operating and Contract Expenses*	-	*$0*	*$0*	*($16,300,805)*	*($6,347,582)*	*($242,338)*	*($9,710,885)*	*$16,192,207*	*$2,997,653*	*$1,398,956*	*($85,336)*	*$11,880,934*	*$108,598*	*$0*	*$108,598*	Table 4.2 Row C - Table 4.1 Row C
D	*TANF, SNAP and WIC GF Offset*		*$0*	*$0*	*$0*	*($9,675,792)*	*$0*	*$9,675,792*	*$0*	*$0*	*$0*	*$0*	*$0*	*$0*	*$0*	*$0*	Table 4.2 Row D- Table 4.1 Row D
E	Operating and Contract Expenses Revised	-	$0	$0	($16,300,805)	($16,023,374)	($242,338)	($35,093)	$16,192,207	$2,997,653	$1,398,956	($85,336)	$11,880,934	$108,598	$0	$108,598	Table 4.2 Row E - Table 4.1 Row E
F	SECTION TOTAL	-	$0	$0	($18,267,744)	($16,795,350)	($267,105)	($1,205,289)	$18,159,146	$3,625,335	$1,687,009	($92,045)	$12,938,847	$108,598	$0	$108,598	Table 4.2 Row F - Table 4.1 Row F
G	Health Care and Economic Security Staff Development Center		$0	$0	($929,524)	($374,537)	($11,767)	($543,220)	$929,524	$308,785	$124,199	($3,123)	$499,663	$0	$0	$0	Table 4.2 Row G - Table 4.1 Row G
H	TOTAL	-	$0	$0	($19,197,268)	($17,169,887)	($278,872)	($1,748,509)	$19,088,670	$3,934,120	$1,811,208	($95,168)	$13,438,510	$108,598	$0	$108,598	Table 4.2 Row H - Table 4.1 Row H

Table 4.4: FY 2018-19 CBMS/PEAK Summary of Technical Corrections, Pool Hour Adjustments and General Fund Offsets

Row	Item	Pool Hours	Total Funds	OIT Reappropriated Funds	DHS Total Funds	General Fund	Cash Funds	Federal Funds	HCPF Total Funds	General Fund	Cash Funds	Reappropriated Funds	Federal Funds	CDPHE Total Funds	General Fund	Federal Funds	Source
A	Personal Services		($217,816)	$0	($44,846)	($19,942)	($3,554)	($21,350)	($172,970)	($55,833)	($27,620)	($9)	($89,508)	$0	$0	$0	Row B
B	Technical Correction OIT FY 2017-18 OIT R-05 Enterprise Applications Realignment		($217,816)	$0	($44,846)	($19,942)	($3,554)	($21,350)	($172,970)	($55,833)	($27,620)	($9)	($89,508)	$0	$0	$0	Total Funds Redistributed with New Cost Allocation Method
C	Centrally Appropriated Items		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	NA
D	Operating and Contract Expenses	-	$0	$1,309,206	$0	$1,363,972	$0	($1,363,972)	$0	$0	$0	$0	$0	$0	$108,598	($108,598)	Row E + Row H + Row K
E	Technical Correction to OIT Budget Only: HCPF R-08 Assorted Medicaid Program Saving Initiatives		$0	$1,309,206	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	Row F + Row G
F	*PARIS and Parental Fees Systems Changes*		*$0*	*$1,254,125*	*$0*	*$0*	*$0*	*$0*	*$0*	*$0*	*$0*	*$0*	*$0*	*$0*	*$0*	*$0*	Aligns OIT CBMS funding with HCPF
G	*PARIS and Parental Fees Printing and Mailings*		*$0*	*$55,081*	*$0*	*$0*	*$0*	*$0*	*$0*	*$0*	*$0*	*$0*	*$0*	*$0*	*$0*	*$0*	
H	Pool Hour Adjustments	-	$0	$0	$0	$1,363,972	$0	($1,363,972)	$0	$0	$0	$0	$0	$0	$0	$0	Row I + Row J
I	*Employment and Benefits (TANF)*	(9,956)	*($1,363,972)*	*($1,363,972)*	*($1,363,972)*	*$0*	*$0*	*($1,363,972)*	*$0*	*$0*	*$0*	*$0*	*$0*	*$0*	*$0*	*$0*	Table 7.2 Row E
J	*Employment and Benefits (GF Only)*	9,956	*$1,363,972*	*$1,363,972*	*$1,363,972*	*$1,363,972*	*$0*	*$0*	*$0*	*$0*	*$0*	*$0*	*$0*	*$0*	*$0*	*$0*	Table 7.2 Row F
K	TANF, SNAP and WIC GF Offset Adjustment		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$108,598	($108,598)	GF Offset to FF in Table 4.3 Row H
L	SECTION TOTAL	-	($217,816)	$1,309,206	($44,846)	$1,344,030	($3,554)	($1,385,322)	($172,970)	($55,833)	($27,620)	($9)	($89,508)	$0	$108,598	($108,598)	Row A + Row C + Row D
M	Health Care and Economic Security Staff Development Center		$29,534	$0	$6,080	$2,704	$482	$2,894	$23,454	$7,572	$3,745	$1	$12,136	$0	$0	$0	Row N
N	Technical Correction HCPF Salary Survey Adjustment		$29,534	$0	$6,080	$2,704	$482	$2,894	$23,454	$7,572	$3,745	$1	$12,136	$0	$0	$0	Total Funds from Table 9.1 Row F
O	TOTAL	-	($188,282)	$1,309,206	($38,766)	$1,346,734	($3,072)	($1,382,428)	($149,516)	($48,261)	($23,875)	($8)	($77,372)	$0	$108,598	($108,598)	Row L + Row M

Row	Item	Pool Hrs	Total Funds	OIT Reappropriated Funds	DHS Total Funds	General Fund	Cash Funds	Federal Funds	HCPF Total Funds	General Fund	Cash Funds	Reappropriated Funds	Federal Funds	CDPHE Total Funds	General Fund	Federal Funds	Source
	Table 4.5: FY 2018-19 CBMS/PEAK Summary of Incremental Request by Department																
A	**Personal Services**																
B	Base Funding Appropriation		$4,678,715	$4,460,899	$2,734,449	$1,123,495	$98,642	$1,512,312	$1,944,266	$634,134	$333,882	$6,241	$970,009	$0	$0	$0	Table 4.1 Row A
C	New Funding Estimate		$4,460,899	$4,460,899	$918,428	$408,409	$72,786	$437,233	$3,542,471	$1,143,513	$565,646	$191	$1,833,121	$0	$0	$0	Table 4.2 Row A + Table 4.4 Row A
D	Incremental Request		($217,816)	$0	($1,816,021)	($715,086)	($25,856)	($1,075,079)	$1,598,205	$509,379	$231,764	($6,050)	$863,112	$0	$0	$0	Row C - Row B
E	**Centrally Appropriated Item**																
F	Base Funding Appropriation		$517,134	$517,134	$302,235	$124,178	$10,903	$167,154	$214,899	$70,091	$36,904	$690	$107,214	$0	$0	$0	Table 4.1 Row B
G	New Funding Estimate		$517,134	$517,134	$106,471	$47,346	$8,438	$50,687	$410,663	$132,561	$65,573	$22	$212,507	$0	$0	$0	Table 4.2 Row B + Table 4.4 Row C
H	Incremental Request		$0	$0	($195,764)	($76,832)	($2,465)	($116,467)	$195,764	$62,470	$28,669	($668)	$105,293	$0	$0	$0	Row G - Row F
I	**Operating and Contract Expenses**																
J	Base Funding Appropriation	134,290	$58,811,306	$56,890,580	$30,901,859	$21,603,372	$926,951	$8,371,536	$27,909,447	$5,883,027	$3,383,232	$87,677	$18,555,511	$0	$0	$0	Table 4.1 Row E
K	New Funding Estimate	134,290	$58,811,306	$58,199,786	$14,601,054	$6,943,970	$684,613	$6,972,471	$44,101,654	$8,880,680	$4,782,188	$2,341	$30,436,445	$108,598	$108,598	$0	Table 4.2 Row E + Table 4.4 Row D
L	Incremental Request	0	$0	$1,309,206	($16,300,805)	($14,659,402)	($242,338)	($1,399,065)	$16,192,207	$2,997,653	$1,398,956	($85,336)	$11,880,934	$108,598	$108,598	$0	Row K - Row J
M	**Health Care and Economic Security Staff Development Center**																
N	Base Funding Appropriation		$2,436,596	$0	$1,431,181	$597,615	$51,523	$782,043	$1,005,415	$315,815	$184,764	$3,227	$501,609	$0	$0	$0	Table 4.1 Row G
O	New Funding Estimate		$2,466,130	$0	$507,737	$225,782	$40,238	$241,717	$1,958,393	$632,172	$312,708	$105	$1,013,408	$0	$0	$0	Table 4.2 Row G + Table 4.4 Row M
P	Incremental Request		$29,534	$0	($923,444)	($371,833)	($11,285)	($540,326)	$952,978	$316,357	$127,944	($3,122)	$511,799	$0	$0	$0	Row O - Row N
Q	Total Base Funding Appropriation		$66,443,751	$61,868,613	$35,369,724	$23,448,660	$1,088,019	$10,833,045	$31,074,027	$6,903,067	$3,938,782	$97,835	$20,134,343	$0	$0	$0	Sum Rows B, F, J and N
R	Total Funding Estimate		$66,255,469	$63,177,819	$16,133,690	$7,625,507	$806,075	$7,702,108	$50,013,181	$10,788,926	$5,726,115	$2,659	$33,495,481	$108,598	$108,598	$0	Sum Rows C, G, K and O
S	**Total Incremental Request**	**0**	**($188,282)**	**$1,309,206**	**($19,236,034)**	**($15,823,153)**	**($281,944)**	**($3,130,937)**	**$18,939,154**	**$3,885,859**	**$1,787,333**	**($95,176)**	**$13,361,138**	**$108,598**	**$108,598**	**$0**	Row R - Row Q

Table 5.1 FY 2019-20 CBMS/PEAK Summary of Base Request by Line Item and Department
(Long Bill Plus Annualization Based on Random Moment Sample Cost Distribution Methodology)

Row	Item	Pool Hours	Total Funds	OIT Reappropriated Funds	DHS Total Funds	General Fund	Cash Funds	Federal Funds	HCPF Total Funds	General Fund	Cash Funds	Reappropriated Funds	Federal Funds	CDPHE Total Funds	General Fund	Federal Funds	Source
A	**Personal Services**		$4,678,715	$4,460,899	$2,734,449	$1,123,495	$98,642	$1,512,312	$1,944,266	$634,134	$334,334	$6,241	$969,557	$0	$0	$0	Long Bill (HB 18-1322), Plus Annualizations
B	**Centrally Appropriated Items**		$517,134	$517,134	$302,235	$124,178	$10,903	$167,154	$214,899	$70,091	$36,954	$690	$107,164	$0	$0	$0	Long Bill (HB 18-1322), Plus Annualizations
C	*Operating and Contract Expenses*	*134,290*	*$59,089,532*	*$58,197,043*	*$31,665,413*	*$12,241,299*	*$954,495*	*$18,469,619*	*$27,424,119*	*$5,837,225*	*$3,364,703*	*$86,116*	*$18,136,075*	*$0*	*$0*	*$0*	*Cost Estimate before GF Offset is applied*
D	*SNAP and TANF General Fund Offset*	*0*	*$0*	*$0*	*$0*	*$10,098,083*	*$0*	*($10,098,083)*	*$0*	*$0*	*$0*	*$0*	*$0*	*$0*	*$0*	*$0*	*Total GF Offset Applied*
E	**Operating and Contract Expenses Revised**	134,290	$59,089,532	$58,197,043	$31,665,413	$22,339,382	$954,495	$8,371,536	$27,424,119	$5,837,225	$3,364,703	$86,116	$18,136,075	$0	$0	$0	Long Bill (HB 18-1322), Plus Annualizations
F	**SECTION TOTAL**	134,290	$64,285,381	$63,175,076	$34,702,097	$23,587,055	$1,064,040	$10,051,002	$29,583,284	$6,541,450	$3,735,991	$93,047	$19,212,796	$0	$0	$0	Sum of Row A, Row B and Row E
G	**Health Care and Economic Security Staff Development Center**		$2,436,596	$0	$1,431,181	$597,615	$51,523	$782,043	$1,005,415	$315,815	$184,839	$3,227	$501,534	$0	$0	$0	Long Bill (HB 18-1322), Plus Annualizations
H	**TOTAL**	134,290	$66,721,977	$63,175,076	$36,133,278	$24,184,670	$1,115,563	$10,833,045	$30,588,699	$6,857,265	$3,920,830	$96,274	$19,714,330	$0	$0	$0	Row F + Row G

Table 5.2: FY 2019-20 CBMS/PEAK Summary of Base Request with New Cost Allocation Redistribution by Department

Row	Item	Pool Hours	Total Funds	OIT Reappropriated Funds	DHS Total Funds	General Fund	Cash Funds	Federal Funds	HCPF Total Funds	General Fund	Cash Funds	Reappropriated Funds	Federal Funds	CDPHE Total Funds	General Fund	Federal Funds	Source
A	**Personal Services**		$4,678,715	$4,460,899	$963,274	$428,351	$76,340	$458,583	$3,715,441	$1,199,345	$608,013	$200	$1,907,883	$0	$0	$0	Table 5.1 Total Funds redistributed by New Cost Allocation Method
B	**Centrally Appropriated Items**		$517,134	$517,134	$106,471	$47,346	$8,438	$50,687	$410,663	$132,561	$67,203	$22	$210,877	$0	$0	$0	
C	*Operating and Contract Expenses*	*134,290*	*$59,089,532*	*$58,197,043*	*$14,870,033*	*$5,699,608*	*$705,930*	*$8,464,495*	*$44,110,901*	*$9,037,359*	*$5,029,670*	*$2,342*	*$30,041,530*	*$108,598*	*$0*	*$108,598*	
D	*SNAP, TANF & WIC General Fund Offset*	*0*	*$0*	*$0*	*$0*	*$0*	*$0*	*$0*	*$0*	*$0*	*$0*	*$0*	*$0*	*$0*	*$0*	*$0*	
E	**Operating and Contract Expenses Revised**	134,290	$59,089,532	$58,197,043	$14,870,033	$5,699,608	$705,930	$8,464,495	$44,110,901	$9,037,359	$5,029,670	$2,342	$30,041,530	$108,598	$0	$108,598	
F	**SECTION TOTAL**	134,290	$64,285,381	$63,175,076	$15,939,778	$6,175,305	$790,708	$8,973,765	$48,237,005	$10,369,265	$5,704,886	$2,564	$32,160,290	$108,598	$0	$108,598	Sum of Row A, Row B and Row E
G	**Health Care and Economic Security Staff Development Center**		$2,436,596	$0	$501,657	$223,078	$39,756	$238,823	$1,934,939	$624,600	$316,642	$104	$993,593	$0	$0	$0	Table 5.1 Row G Total Funds redistributed by New Cost Allocation Method
H	**TOTAL**	134,290	$66,721,977	$63,175,076	$16,441,435	$6,398,383	$830,464	$9,212,588	$50,171,944	$10,993,865	$6,021,528	$2,668	$33,153,883	$108,598	$0	$108,598	Row F + Row G

Table 5.3: FY 2019-20 CBMS/PEAK Summary of New Cost Allocation Redistribution Incremental Request

Row	Item	Pool Hours	Total Funds	OIT Reappropriated Funds	DHS Total Funds	General Fund	Cash Funds	Federal Funds	HCPF Total Funds	General Fund	Cash Funds	Reappropriated Funds	Federal Funds	CDPHE Total Funds	General Fund	Federal Funds	Source
A	**Personal Services**		$0	$0	($1,771,175)	($695,144)	($22,302)	($1,053,729)	$1,771,175	$565,211	$273,679	($6,041)	$938,326	$0	$0	$0	Table 5.2 Row A - Table 5.1 Row A
B	**Centrally Appropriated Items**		$0	$0	($195,764)	($76,832)	($2,465)	($116,467)	$195,764	$62,470	$30,249	($668)	$103,713	$0	$0	$0	Table 5.2 Row B - Table 5.1 Row B
C	*Operating and Contract Expenses*	*0*	*$0*	*$0*	*($16,795,380)*	*($6,541,691)*	*($248,565)*	*($10,005,124)*	*$16,686,782*	*$3,200,134*	*$1,664,967*	*($83,774)*	*$11,905,455*	*$108,598*	*$0*	*$108,598*	Table 5.2 Row C - Table 5.1 Row C
D	*SNAP and TANF General Fund Offset*	*0*	*$0*	*$0*	*$0*	*($10,098,083)*	*$0*	*$10,098,083*	*$0*	*$0*	*$0*	*$0*	*$0*	*$0*	*$0*	*$0*	Table 5.2 Row D- Table 5.1 Row D
E	**Operating and Contract Expenses Revised**	0	$0	$0	($16,795,380)	($16,639,774)	($248,565)	$92,959	$16,686,782	$3,200,134	$1,664,967	($83,774)	$11,905,455	$108,598	$0	$108,598	Table 5.2 Row E - Table 5.1 Row E
F	**SECTION TOTAL**	0	$0	$0	($18,762,319)	($17,411,750)	($273,332)	($1,077,237)	$18,653,721	$3,827,815	$1,968,895	($90,483)	$12,947,494	$108,598	$0	$108,598	Table 5.2 Row F - Table 5.1 Row F
G	**Health Care and Economic Security Staff Developm**	0	$0	$0	($929,524)	($374,537)	($11,767)	($543,220)	$929,524	$308,785	$131,803	($3,123)	$492,059	$0	$0	$0	Table 5.2 Row G - Table 5.1 Row G
H	**TOTAL**	0	$0	$0	($19,691,843)	($17,786,287)	($285,099)	($1,620,457)	$19,583,245	$4,136,600	$2,100,698	($93,606)	$13,439,553	$108,598	$0	$108,598	Table 5.2 Row H - Table 5.1 Row H

Table 5.4: FY 2019-20 FY 2018-19 CBMS/PEAK Summary of Incremental Changes
Technical Corrections, Pool Hour Rate Change and Adjustments, New Operations and Maintenance Cost and General Fund Offsets

Row	Item	Pool Hours	Total Funds	OIT Reappropriated Funds	DHS Total Funds	General Fund	Cash Funds	Federal Funds	HCPF Total Funds	General Fund	Cash Funds	Reappropriated Funds	Federal Funds	CDPHE Total Funds	General Fund	Federal Funds	Source
A	**Personal Services**		**($217,816)**	**$0**	**($44,846)**	**($19,942)**	**($3,554)**	**($21,350)**	**($172,970)**	**($55,834)**	**($28,306)**	**($9)**	**($88,821)**	**$0**	**$0**	**$0**	Row B
B	Technical Correction OIT FY 2017-18 OIT R-05 Enterprise Applications Realignment		($217,816)	$0	($44,846)	($19,942)	($3,554)	($21,350)	($172,970)	($55,834)	($28,306)	($9)	($88,821)	$0	$0	$0	Correction to remove DHS and HCPF funding to correspond with the reduction made in FY 2017-18 OIT R-05 request
C	**Centrally Appropriated Items**		**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	NA
D	**Operating and Contract Expenses**		**$3,129,597**	**$3,410,566**	**$2,296,600**	**$2,372,169**	**$8,622**	**($84,191)**	**$798,000**	**($35,989)**	**($11,157)**	**$43**	**$845,103**	**$34,997**	**$143,595**	**($108,598)**	Row E+ Row L +Row AL
E	**Operations and Maintenance Costs**		**$884,627**	**$1,165,596**	**$182,132**	**$80,990**	**$14,435**	**$86,707**	**$702,495**	**($54,067)**	**($19,149)**	**$37**	**$775,674**	**$0**	**$0**	**$0**	Sum Row F thru Row K
F	Pro Services, Vendor Costs, System M&O		$215,000	$215,000	$44,264	$19,683	$3,508	$21,073	$170,736	$27,559	$14,780	$9	$128,388	$0	$0	$0	Table 8.1 RowC
G	Client Correspondence, Standard		($1,306,463)	($1,306,463)	($268,979)	($119,610)	($21,317)	($128,052)	($1,037,484)	($334,902)	($169,778)	($56)	($532,748)	$0	$0	$0	Table 8.1 Row E
H	Hardware		$40,000	$40,000	$8,235	$3,662	$653	$3,920	$31,765	$5,127	$2,750	$2	$23,886	$0	$0	$0	Table 8.1 Row A
I	Software		$2,136,090	$2,136,090	$439,789	$195,566	$34,854	$209,369	$1,696,301	$273,783	$146,848	$91	$1,275,579	$0	$0	$0	Table 8.1 Row B
J	IV&V Security Assessments		($200,000)	($200,000)	($41,177)	($18,311)	($3,263)	($19,603)	($158,823)	($25,634)	($13,749)	($9)	($119,431)	$0	$0	$0	Table 8.1 Row D
K	Technical Correction Reappropriated Funds Only: HCPF R-08 Assorted Medicaid Program Saving Initiatives		$0	$280,969	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	Correction to add corresponding OIT RF funds related to approved FY 2018-19 HCPF R-08 Assorted Medicaid Program Savings Initiatives
L	**Pool Hours Costs**	158,790	**$2,244,970**	**$2,244,970**	**$2,114,468**	**$2,291,179**	**($5,813)**	**($170,898)**	**$95,505**	**$18,078**	**$7,992**	**$6**	**$69,429**	**$34,997**	**$0**	**$34,997**	Row M + Row AD
M	**POOL HOURS INCREMENTAL RATE REDUCTION FROM $137 to $130**	134,290	**($940,030)**	**($940,030)**	**($339,921)**	**($102,871)**	**($5,859)**	**($231,191)**	**($600,109)**	**($96,859)**	**($51,952)**	**($31)**	**($451,267)**	**$0**	**$0**	**$0**	FY 19-20 Rate Change Incremental Table 7.1 Row Q
N	OIT Pool Hours	35,000	($245,000)	($245,000)	($50,443)	($22,431)	($3,998)	($24,014)	($194,557)	($31,401)	($16,843)	($10)	($146,303)	$0	$0	$0	
O	*Maintenance and Operating (M&O)*	*35,000*	*($245,000)*	*($245,000)*	*($50,443)*	*($22,431)*	*($3,998)*	*($24,014)*	*($194,557)*	*($31,401)*	*($16,843)*	*($10)*	*($146,303)*	*$0*	*$0*	*$0*	
P	DHS Pool Hours	38,000	($266,000)	($266,000)	($266,000)	($70,000)	$0	($196,000)	$0	$0	$0	$0	$0	$0	$0	$0	
Q	*Employment and Benefits (TANF)*	*18,000*	*($126,000)*	*($126,000)*	*($126,000)*	$0	$0	*($126,000)*	$0	$0	$0	$0	$0	$0	$0	$0	Table 7.1 Row B through Row P Pool Hour Rate Reductions by department ($7 FY 2019-20 Rate Reduction * Total Pool Hours Distributed with New Cost Allocation Method)
R	*Employment and Benefits (GF Only)*	*0*	*$0*	*$0*	*$0*	*$0*	*$0*	*$0*	*$0*	*$0*	*$0*	*$0*	*$0*	*$0*	*$0*	*$0*	
S	*Food and Energy (SNAP)*	*20,000*	*($140,000)*	*($140,000)*	*($140,000)*	*($70,000)*	*$0*	*($70,000)*	*$0*	*$0*	*$0*	*$0*	*$0*	*$0*	*$0*	*$0*	
T	HCPF Pool Hours	45,000	($315,000)	($315,000)	$0	$0	$0	$0	($315,000)	($50,842)	($27,269)	($17)	($236,872)	$0	$0	$0	
U	*HCPF 75/25 Hours*	*40,000*	*($280,000)*	*($280,000)*	*$0*	*$0*	*$0*	*$0*	*($280,000)*	*($45,193)*	*($24,239)*	*($15)*	*($210,553)*	*$0*	*$0*	*$0*	
V	*PEAK Mobile App*	*5,000*	*($35,000)*	*($35,000)*	*$0*	*$0*	*$0*	*$0*	*($35,000)*	*($5,649)*	*($3,030)*	*($2)*	*($26,319)*	*$0*	*$0*	*$0*	
W	*PEAK Usability*	*0*	*$0*	*$0*	*$0*	*$0*	*$0*	*$0*	*$0*	*$0*	*$0*	*$0*	*$0*	*$0*	*$0*	*$0*	
X	Joint Department Pool Hours	16,290	($114,030)	($114,030)	($23,478)	($10,440)	($1,861)	($11,177)	($90,552)	($14,616)	($7,840)	($4)	($68,092)	$0	$0	$0	
Y	*CCUG Pool Hours*	*10,000*	*($70,000)*	*($70,000)*	*($14,413)*	*($6,409)*	*($1,142)*	*($6,862)*	*($55,587)*	*($8,971)*	*($4,812)*	*($3)*	*($41,801)*	*$0*	*$0*	*$0*	
Z	*Audit Expansion Module*	*3,500*	*($24,500)*	*($24,500)*	*($5,044)*	*($2,243)*	*($400)*	*($2,401)*	*($19,456)*	*($3,139)*	*($1,685)*	*($1)*	*($14,631)*	*$0*	*$0*	*$0*	
AA	*EDMS Vendor Hours*	*1,095*	*($7,665)*	*($7,665)*	*($1,578)*	*($702)*	*($125)*	*($751)*	*($6,087)*	*($984)*	*($527)*	*$0*	*($4,576)*	*$0*	*$0*	*$0*	
AB	*CRM Dev Support*	*1,095*	*($7,665)*	*($7,665)*	*($1,578)*	*($702)*	*($125)*	*($751)*	*($6,087)*	*($984)*	*($527)*	*$0*	*($4,576)*	*$0*	*$0*	*$0*	
AC	*Data Analytics/Exec Dash*	*600*	*($4,200)*	*($4,200)*	*($865)*	*($384)*	*($69)*	*($412)*	*($3,335)*	*($538)*	*($289)*	*$0*	*($2,508)*	*$0*	*$0*	*$0*	
AD	**NEW AND ADJUSTED POOL HOURS REQUEST**	24,500	**$3,185,000**	**$3,185,000**	**$2,454,389**	**$2,394,050**	**$46**	**$60,293**	**$695,614**	**$114,937**	**$59,944**	**$37**	**$520,696**	**$34,997**	**$0**	**$34,997**	Row AE + AI
AE	DHS Pool Hours	17,000	$2,210,000	$2,210,000	$2,210,000	$2,275,000	$0	($65,000)	$0	$0	$0	$0	$0	$0	$0	$0	
AF	*Employment and Benefits (TANF)*	*(3,000)*	*($390,000)*	*($390,000)*	*($390,000)*	*$0*	*$0*	*($390,000)*	*$0*	*$0*	*$0*	*$0*	*$0*	*$0*	*$0*	*$0*	Table 7.2 Row B thru Row Q FY 19-20 Pool Hour Adjustments by department ($130 Rate * Incremental Change in Hours Distributed with New Cost Allocation Method)
AG	*Employment and Benefits (GF Only)*	*15,000*	*$1,950,000*	*$1,950,000*	*$1,950,000*	*$1,950,000*	*$0*	*$0*	*$0*	*$0*	*$0*	*$0*	*$0*	*$0*	*$0*	*$0*	
AH	*Food and Energy (SNAP)*	*5,000*	*$650,000*	*$650,000*	*$650,000*	*$325,000*	*$0*	*$325,000*	*$0*	*$0*	*$0*	*$0*	*$0*	*$0*	*$0*	*$0*	
AI	HCPF Pool Hours	7,500	$975,000	$975,000	$244,389	$119,050	$46	$125,293	$695,614	$114,937	$59,944	$37	$520,696	$34,997	$0	$34,997	
AJ	*PEAK Health Mobile App*	*2,500*	*$325,000*	*$325,000*	*$0*	*$0*	*$0*	*$0*	*$325,000*	*$52,456*	*$28,135*	*$17*	*$244,392*	*$0*	*$0*	*$0*	
AK	*PEAK Usability*	*5,000*	*$650,000*	*$650,000*	*$244,389*	*$119,050*	*$46*	*$125,293*	*$370,614*	*$62,481*	*$31,809*	*$20*	*$276,304*	*$34,997*	*$0*	*$34,997*	
AL	**TANF, SNAP and WIC GF Offset Adjustment**	-	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$143,595**	**($143,595)**	GF Offset to FF in Table 5.3 Row H + Table 5.4 Row L
	HCPF ONLY COSTS																
AM	**HCPF-Only Expenses**		**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	NA
	DHS/HCPF ONLY COSTS (Not Included In OIT Budget)																
AN	**Health Care and Economic Security Staff Development Center**		**$179,534**	**$0**	**$36,962**	**$16,437**	**$2,929**	**$17,596**	**$142,572**	**$46,024**	**$23,331**	**$7**	**$73,210**	**$0**	**$0**	**$0**	Row AO + Row AP
AO	Staff Development Center Assessment		$150,000	$0	$30,882	$13,733	$2,447	$14,702	$119,118	$38,452	$19,493	$6	$61,167	$0	$0	$0	Table 9.2 Row N
AP	Technical Correction, HCPF FY 19 Salary Survey Adjustment		$29,534	$0	$6,080	$2,704	$482	$2,894	$23,454	$7,572	$3,838	$1	$12,043	$0	$0	$0	Correction of HCPF Total Compensation Adjustment for SDC
AQ	**TOTAL**	158,790	**$3,091,315**	**$3,410,566**	**$2,288,716**	**$2,368,664**	**$7,997**	**($87,945)**	**$767,602**	**($45,799)**	**($16,132)**	**$41**	**$829,492**	**$34,997**	**$0**	**$34,997**	Sum Rows A, C, D and AN

Table 5.5: FY 2019-20 CBMS/PEAK Summary of Incremental Request by Department

Row	Item		Total Funds	OIT Reappropriated Funds	DHS Total Funds	General Fund	Cash Funds	Federal Funds	HCPF Total Funds	General Fund	Cash Funds	Reappropriated Funds	Federal Funds	CDPHE Total Funds	General Fund	Federal Funds	Source
A	**Personal Services**																
B	Base Funding Appropriation		$4,678,715	$4,460,899	$2,734,449	$1,123,495	$98,642	$1,512,312	$1,944,266	$634,134	$334,334	$6,241	$969,557	$0	$0	$0	Table 5.1 Row A
C	New Funding Estimate		$4,460,899	$4,460,899	$918,428	$408,409	$72,786	$437,233	$3,542,471	$1,143,511	$579,707	$191	$1,819,062	$0	$0	$0	Table 5.2 Row A + Table 5.4 Row A
D	Incremental Request		($217,816)	$0	($1,816,021)	($715,086)	($25,856)	($1,075,079)	$1,598,205	$509,377	$245,373	($6,050)	$849,505	$0	$0	$0	Row C - Row B
E	**Centrally Appropriated Item**																
F	Base Funding Appropriation		$517,134	$517,134	$302,235	$124,178	$10,903	$167,154	$214,899	$70,091	$36,954	$690	$107,164	$0	$0	$0	Table 5.1 Row B
G	New Funding Estimate		$517,134	$517,134	$106,471	$47,346	$8,438	$50,687	$410,663	$132,561	$67,203	$22	$210,877	$0	$0	$0	Table 5.2 Row B + Table 5.4 Row D
H	Incremental Request		$0	$0	($195,764)	($76,832)	($2,465)	($116,467)	$195,764	$62,470	$30,249	($668)	$103,713	$0	$0	$0	Row G - Row F
I	**Operating and Contract Expenses**																
J	Base Funding Appropriation	134,290	$59,089,532	$58,197,043	$31,665,413	$22,339,382	$954,495	$8,371,536	$27,424,119	$5,837,225	$3,364,703	$86,116	$18,136,075	$0	$0	$0	Table 5.1 Row E
K	New Funding Estimate	158,790	$62,219,129	$61,607,609	$17,166,633	$8,071,777	$714,552	$8,380,304	$44,908,901	$9,001,370	$5,018,513	$2,385	$30,886,633	$143,595	$143,595	$0	Table 5.2 Row E + Table 5.4 Row D
L	Incremental Request	24,500	$3,129,597	$3,410,566	($14,498,780)	($14,267,605)	($239,943)	$8,768	$17,484,782	$3,164,145	$1,653,810	($83,731)	$12,750,558	$143,595	$143,595	$0	Row K - Row J
M	**Health Care and Economic Security Staff Development Center**																
N	Base Funding Appropriation		$2,436,596	$0	$1,431,181	$597,615	$51,523	$782,043	$1,005,415	$315,815	$184,839	$3,227	$501,534	$0	$0	$0	Table 5.1 Row G
O	New Funding Estimate		$2,616,130	$0	$538,619	$239,515	$42,685	$256,419	$2,077,511	$670,624	$339,973	$111	$1,066,803	$0	$0	$0	Table 5.2 Row G + Table 5.4 Row AN
P	Incremental Request		$179,534	$0	($892,562)	($358,100)	($8,838)	($525,624)	$1,072,096	$354,809	$155,134	($3,116)	$565,269	$0	$0	$0	Row O - Row N
Q	Total Base Funding Appropriation		$66,721,977	$63,175,076	$36,133,278	$24,184,670	$1,115,563	$10,833,045	$30,588,699	$6,857,265	$3,920,830	$96,274	$19,714,330	$0	$0	$0	Sum Rows B, F, J and N
R	Total Funding Estimate		$69,813,292	$66,585,642	$18,730,151	$8,767,047	$838,461	$9,124,643	$50,939,546	$10,948,066	$6,005,396	$2,709	$33,983,375	$143,595	$143,595	$0	Sum Rows C, G, K and O
S	**Total Incremental Request**	24,500	**$3,091,315**	**$3,410,566**	**($17,403,127)**	**($15,417,623)**	**($277,102)**	**($1,708,402)**	**$20,350,847**	**$4,090,801**	**$2,084,566**	**($93,565)**	**$14,269,045**	**$143,595**	**$143,595**	**$0**	Row R - Row Q

Table 6.1 FY 2020-21 CBMS/PEAK Summary of Continuation Request by Department

Row	Item	Pool Hours	Total Funds	OIT Reappropriated Funds	DHS Total Funds	DHS General Fund	DHS Cash Funds	DHS Federal Funds	HCPF Total Funds	HCPF General Fund	HCPF Cash Funds	HCPF Reappropriated Funds	HCPF Federal Funds	CDPHE Total Funds	CDPHE General Fund	CDPHE Federal Funds	Source
A	Personal Services		$4,678,715	$4,460,899	$2,734,449	$1,123,495	$98,642	$1,512,312	$1,944,266	$634,134	$334,334	$6,241	$969,557	$0	$0	$0	Long Bill (HB 18-1322), Plus Annualizations
B	Centrally Appropriated Items		$517,134	$517,134	$302,235	$124,178	$10,903	$167,154	$214,899	$70,091	$36,954	$690	$107,164	$0	$0	$0	Long Bill (HB 18-1322), Plus Annualizations
C	*Operating and Contract Expenses*	*134,290*	*$58,883,281*	*$58,197,043*	*$31,665,413*	*$12,241,299*	*$954,495*	*$18,469,619*	*$27,217,868*	*$5,803,421*	*$3,346,982*	*$85,456*	*$17,982,009*	*$0*	*$0*	*$0*	*Cost Estimate before GF Offset is applied*
D	*SNAP and TANF General Fund Offset*	-	*$0*	*$0*	*$0*	*$10,098,083*	*$0*	*($10,098,083)*	*$0*	*$0*	*$0*	*$0*	*$0*	*$0*	*$0*	*$0*	*Total GF Offset Applied*
E	**Operating and Contract Expenses Revised**	134,290	$58,883,281	$58,197,043	$31,665,413	$22,339,382	$954,495	$8,371,536	$27,217,868	$5,803,421	$3,346,982	$85,456	$17,982,009	$0	$0	$0	Long Bill (HB 18-1322), Plus Annualizations
F	**SECTION TOTAL**	134,290	$64,079,130	$63,175,076	$34,702,097	$23,587,055	$1,064,040	$10,051,002	$29,377,033	$6,507,646	$3,718,270	$92,387	$19,058,730	$0	$0	$0	Sum of Row A, Row B and Row E
G	Health Care and Economic Security Staff Development Center		$2,436,596	$0	$1,431,181	$597,615	$51,523	$782,043	$1,005,415	$315,815	$184,839	$3,227	$501,534	$0	$0	$0	Long Bill (HB 18-1322), Plus Annualizations
H	**TOTAL**	134,290	$66,515,726	$63,175,076	$36,133,278	$24,184,670	$1,115,563	$10,833,045	$30,382,448	$6,823,461	$3,903,109	$95,614	$19,560,264	$0	$0	$0	Row F + Row G

Table 6.2: FY 2020-21 CBMS/PEAK Summary of Continuation Request with New Cost Allocation Redistribution by Department

Row	Item	Pool Hours	Total Funds	OIT Reappropriated Funds	DHS Total Funds	DHS General Fund	DHS Cash Funds	DHS Federal Funds	HCPF Total Funds	HCPF General Fund	HCPF Cash Funds	HCPF Reappropriated Funds	HCPF Federal Funds	CDPHE Total Funds	CDPHE General Fund	CDPHE Federal Funds	Source
A	Personal Services		$4,678,715	$4,460,899	$963,274	$428,351	$76,340	$458,583	$3,715,441	$1,199,345	$627,687	$200	$1,888,209	$0	$0	$0	
B	Centrally Appropriated Items		$517,134	$517,134	$106,471	$47,346	$8,438	$50,687	$410,663	$132,561	$69,378	$22	$208,702	$0	$0	$0	
C	*Operating and Contract Expenses*	*134,290*	*$58,883,281*	*$58,197,043*	*$14,870,033*	*$5,699,608*	*$705,930*	*$8,464,495*	*$43,904,650*	*$9,004,116*	*$5,241,038*	*$2,331*	*$29,657,165*	*$108,598*	*$0*	*$108,598*	Table 6.1 Total Funds redistributed by New Cost Allocation Method
D	*SNAP, TANF & WIC General Fund Offset*		*$0*	*$0*	*$0*	*$0*	*$0*	*$0*	*$0*	*$0*	*$0*	*$0*	*$0*	*$0*	*$0*	*$0*	
E	**Operating and Contract Expenses Revised**	134,290	$58,883,281	$58,197,043	$14,870,033	$5,699,608	$705,930	$8,464,495	$43,904,650	$9,004,116	$5,241,038	$2,331	$29,657,165	$108,598	$0	$108,598	
F	**SECTION TOTAL**	134,290	$64,079,130	$63,175,076	$15,939,778	$6,175,305	$790,708	$8,973,765	$48,030,754	$10,336,022	$5,938,103	$2,553	$31,754,076	$108,598	$0	$108,598	Sum of Row A, Row B and Row E
G	Health Care and Economic Security Staff Development Center		$2,436,596	$0	$501,657	$223,078	$39,756	$238,823	$1,934,939	$624,600	$326,888	$104	$983,347	$0	$0	$0	Table 6.1 Row G Total Funds redistributed by New Cost Allocation Method
H	**TOTAL**		$66,515,726	$63,175,076	$16,441,435	$6,398,383	$830,464	$9,212,588	$49,965,693	$10,960,622	$6,264,991	$2,657	$32,737,423	$108,598	$0	$108,598	Row F + Row G

Table 6.3: FY 2020-21 CBMS/PEAK Summary of New Cost Allocation Redistribution Incremental Request

Row	Item	Pool Hours	Total Funds	OIT Reappropriated Funds	DHS Total Funds	DHS General Fund	DHS Cash Funds	DHS Federal Funds	HCPF Total Funds	HCPF General Fund	HCPF Cash Funds	HCPF Reappropriated Funds	HCPF Federal Funds	CDPHE Total Funds	CDPHE General Fund	CDPHE Federal Funds	Source
A	Personal Services		$0	$0	($1,771,175)	($695,144)	($22,302)	($1,053,729)	$1,771,175	$565,211	$293,353	($6,041)	$918,652	$0	$0	$0	Table 6.2 Row A - Table 6.1 Row A
B	Centrally Appropriated Items		$0	$0	($195,764)	($76,832)	($2,465)	($116,467)	$195,764	$62,470	$32,424	($668)	$101,538	$0	$0	$0	Table 6.2 Row B - Table 6.1 Row B
C	*Operating and Contract Expenses*	*0*	*$0*	*$0*	*($16,795,380)*	*($6,541,691)*	*($248,565)*	*($10,005,124)*	*$16,686,782*	*$3,200,695*	*$1,894,056*	*($83,125)*	*$11,675,156*	*$108,598*	*$0*	*$108,598*	Table 6.2 Row C - Table 6.1 Row C
D	*SNAP and TANF General Fund Offset*	*0*	*$0*	*$0*	*$0*	*($10,098,083)*	*$0*	*$10,098,083*	*$0*	*$0*	*$0*	*$0*	*$0*	*$0*	*$0*	*$0*	Table 6.2 Row D- Table 6.1 Row D
E	**Operating and Contract Expenses Revised**	0	$0	$0	($16,795,380)	($16,639,774)	($248,565)	$92,959	$16,686,782	$3,200,695	$1,894,056	($83,125)	$11,675,156	$108,598	$0	$108,598	Table 6.2 Row E - Table 6.1 Row E
F	**SECTION TOTAL**	0	$0	$0	($18,762,319)	($17,411,750)	($273,332)	($1,077,237)	$18,653,721	$3,828,376	$2,219,833	($89,834)	$12,695,346	$108,598	$0	$108,598	Table 6.2 Row F - Table 6.1 Row F
G	Health Care and Economic Security Staff Development Center		$0	$0	($929,524)	($374,537)	($11,767)	($543,220)	$929,524	$308,785	$142,049	($3,123)	$481,813	$0	$0	$0	Table 6.2 Row G - Table 6.1 Row G
H	**TOTAL**	0	$0	$0	($19,691,843)	($17,786,287)	($285,099)	($1,620,457)	$19,583,245	$4,137,161	$2,361,882	($92,957)	$13,177,159	$108,598	$0	$108,598	Table 6.2 Row H - Table 6.1 Row H

Table 6.4: FY 2020-21 CBMS/PEAK Request Summary of Incremental Request by Department
Rate Reduction, Pool Hour Changes, and New Operating, Maintenance and Contracts Costs

Row	Item	Pool Hours/ FTE Count	Total Funds	OIT Reappropriated Funds	DHS Total Funds	General Fund	Cash Funds	Federal Funds	HCPF Total Funds	General Fund	Cash Funds	Reappropriated Funds	Federal Funds	CDPHE Total Funds	General Fund	Federal Funds	Source
A	Personal Services		($217,816)	$0	($44,846)	($19,942)	($3,554)	($21,350)	($172,970)	($55,834)	($29,222)	($9)	($87,905)	$0	$0	$0	Row B
B	Technical Correction OIT FY 2017-18 OIT R-05 Enterprise Applications Realignment		($217,816)	$0	($44,846)	($19,942)	($3,554)	($21,350)	($172,970)	($55,834)	($29,222)	($9)	($87,905)	$0	$0	$0	Correction to remove DHS and HCPF funding to correspond with the reduction made in FY 2017-18 OIT R-05 request
C	Centrally Appropriated Items		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	NA
D	Operating and Contract Expenses	22,500	$3,446,757	$3,521,475	$2,288,070	$2,366,040	$11,157	($89,127)	$1,122,613	$16,484	$22,865	$61	$1,083,203	$36,074	$144,672	($108,598)	Row E + Row L + Row AM
E	Operating and Maintenance Costs	0	$834,627	$909,345	$171,840	$76,414	$13,619	$81,807	$662,787	($60,478)	($19,076)	$35	$742,306	$0	$0	$0	Sum Row F thru Row K
F	Professional Services		$165,000	$165,000	$33,972	$15,107	$2,692	$16,173	$131,028	$21,148	$12,037	$7	$97,836	$0	$0	$0	Table 8.1 Row C
G	Client Correspondence, Standard		($1,306,463)	($1,306,463)	($268,979)	($119,610)	($21,317)	($128,052)	($1,037,484)	($334,901)	($175,272)	($56)	($527,255)	$0	$0	$0	Table 8.1 Row E
H	Hardware		$40,000	$40,000	$8,235	$3,662	$653	$3,920	$31,765	$5,127	$2,918	$2	$23,718	$0	$0	$0	Table 8.1 Row A
I	Software		$2,136,090	$2,136,090	$439,789	$195,566	$34,854	$209,369	$1,696,301	$273,782	$155,831	$91	$1,266,597	$0	$0	$0	Table 8.1 Row B
J	IV&V Security Assessments		($200,000)	($200,000)	($41,177)	($18,311)	($3,263)	($19,603)	($158,823)	($25,634)	($14,590)	($9)	($118,590)	$0	$0	$0	Table 8.1 Row D
K	Technical Correction OIT Reappropriated Funds Only: HCPF R-08 Assorted Medicaid Program Saving Initiatives		$0	$74,718	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	Correction to add corresponding OIT RF funds related to approved FY 2018-19 HCPF R-08 Assorted Medicaid Program Savings Initiatives
L	Pool Hours Costs	156,790	$2,612,130	$2,612,130	$2,116,230	$2,289,626	($2,462)	($170,934)	$459,826	$76,962	$41,941	$26	$340,897	$36,074	$0	$36,074	Sum Rows M, AD and AM
M	POOL HOURS INCREMENTAL RATE REDUCTION FROM $137 to $134	134,290	($402,870)	($402,870)	($145,678)	($44,086)	($2,510)	($99,082)	($257,192)	($41,512)	($23,627)	($12)	($192,041)	$0	$0	$0	Sum Row N, P, T, and X
N	OIT Pool Hours	35,000	($105,000)	($105,000)	($21,618)	($9,613)	($1,713)	($10,292)	($83,382)	($13,458)	($7,660)	($4)	($62,260)	$0	$0	$0	
O	Maintenance and Operating (M&O)	35,000	($105,000)	($105,000)	($21,618)	($9,613)	($1,713)	($10,292)	($83,382)	($13,458)	($7,660)	($4)	($62,260)	$0	$0	$0	
P	DHS Pool Hours	38,000	($114,000)	($114,000)	($114,000)	($30,000)	$0	($84,000)	$0	$0	$0	$0	$0	$0	$0	$0	
Q	Employment and Benefits (TANF)	18,000	($54,000)	($54,000)	($54,000)	($54,000)	$0	($54,000)	$0	$0	$0	$0	$0	$0	$0	$0	
R	Employment and Benefits (GF Only)	0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	
S	Food and Energy (SNAP)	20,000	($60,000)	($60,000)	($60,000)	($30,000)	$0	($30,000)	$0	$0	$0	$0	$0	$0	$0	$0	
T	HCPF Pool Hours	45,000	($135,000)	($135,000)	$0	$0	$0	$0	($135,000)	($21,789)	($12,402)	($7)	($100,802)	$0	$0	$0	Table 7.1 Row B through Row P Pool Hour Rate Reductions by department ($3 Rate Reduction for FY 20-21 * Total Pool Hours Distributed with New Cost Allocation Method)
U	75/25 HCPF-Only	40,000	($120,000)	($120,000)	$0	$0	$0	$0	($120,000)	($19,368)	($11,024)	($6)	($89,602)	$0	$0	$0	
V	PEAK Mobile App	5,000	($15,000)	($15,000)	$0	$0	$0	$0	($15,000)	($2,421)	($1,378)	($1)	($11,200)	$0	$0	$0	
W	PEAK Usability	0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	
X	Joint Department Pool Hours	16,290	($48,870)	($48,870)	($10,060)	($4,473)	($797)	($4,790)	($38,810)	($6,265)	($3,565)	($1)	($28,979)	$0	$0	$0	
Y	CCUG Pool Hours	10,000	($30,000)	($30,000)	($6,175)	($2,746)	($489)	($2,940)	($23,825)	($3,847)	($2,188)	($1)	($17,789)	$0	$0	$0	
Z	Audit Expansion Module	3,500	($10,500)	($10,500)	($2,162)	($962)	($171)	($1,029)	($8,338)	($1,346)	($766)	$0	($6,226)	$0	$0	$0	
AA	EDMS Vendor Hours	1,095	($3,285)	($3,285)	($676)	($300)	($54)	($322)	($2,609)	($421)	($240)	$0	($1,948)	$0	$0	$0	
AB	CRM Dev Support	1,095	($3,285)	($3,285)	($676)	($300)	($54)	($322)	($2,609)	($421)	($240)	$0	($1,948)	$0	$0	$0	
AC	Data Analytics/Exec Dash	600	($1,800)	($1,800)	($371)	($165)	($29)	($176)	($1,429)	($230)	($131)	$0	($1,068)	$0	$0	$0	
AD	NEW AND ADJUSTED POOL HOURS REQUEST	22,500	$3,015,000	$3,015,000	$2,261,908	$2,333,712	$48	($71,852)	$717,018	$118,474	$65,568	$38	$532,938	$36,074	$0	$36,074	Row AE + Row AI
AE	DHS Pool Hours	15,000	2,010,000	$2,010,000	$2,010,000	$2,211,000	$0	($201,000)	$0	$0	$0	$0	$0	$0	$0	$0	
AF	Employment and Benefits (TANF)	(4,000)	($536,000)	($536,000)	($536,000)	$0	$0	($536,000)	$0	$0	$0	$0	$0	$0	$0	$0	
AG	Employment and Benefits (GF Only)	14,000	$1,876,000	$1,876,000	$1,876,000	$1,876,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	Table 7.2 Row B thru Row Q FY 20-21 Pool Hour Adjustments by department ($134 Rate * Incremental Change in Hours Distributed with New Cost Allocation Method)
AH	Food and Energy (SNAP)	5,000	$670,000	$670,000	$670,000	$335,000	$0	$335,000	$0	$0	$0	$0	$0	$0	$0	$0	
AI	HCPF Pool Hours	7,500	$1,005,000	$1,005,000	$251,908	$122,712	$48	$129,148	$717,018	$118,474	$65,568	$38	$532,938	$36,074	$0	$36,074	
AJ	75/25 HCPF-Only	0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	
AK	PEAK Mobile App	2,500	$335,000	$335,000	$0	$0	$0	$0	$335,000	$54,069	$30,775	$18	$250,138	$0	$0	$0	
AL	PEAK Usability	5,000	$670,000	$670,000	$251,908	$122,712	$48	$129,148	$382,018	$64,405	$34,793	$20	$282,800	$36,074	$0	$36,074	
AM	TANF, SNAP and WIC GF Offset Adjustment	-	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$144,672	($144,672)	GF Offset to FF in Table 6.3 Row H + Table 6.4 Row L
AN	HCPF ONLY COSTS																	
	HCPF-Only Expenses	-	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	NA
	DHS/HCPF ONLY COSTS (Not in OIT Budget)																	
AO	Health Care and Economic Security Staff Development Center		$29,534	$0	$6,080	$2,704	$482	$2,894	$23,454	$7,572	$3,962	$1	$11,919	$0	$0	$0	Row AP
AP	Technical Correction, HCPF FY 19 Salary Survey Adjustment	-	$29,534	$0	$6,080	$2,704	$482	$2,894	$23,454	$7,572	$3,962	$1	$11,919	$0	$0	$0	Correction of HCPF Total Compensation Adjustment for SDC
AQ	TOTAL	22,500	$3,258,475	$3,521,475	$2,249,304	$2,348,802	$8,085	($107,583)	$973,097	($31,778)	($2,395)	$53	$1,007,217	$36,074	$0	$36,074	Row A+ Row C + Row D+ Row AO

Table 6.5: FY 2020-21 CBMS/PEAK Summary of Incremental Request by Department

Row	Item		Total Funds	OIT Reappropriated Funds	DHS Total Funds	General Fund	Cash Funds	Federal Funds	HCPF Total Funds	General Fund	Cash Funds	Reappropriated Funds	Federal Funds	CDPHE Total Funds	General Fund	Federal Funds	Source
A	Personal Services																
B	Base Funding Appropriation		$4,678,715	$4,460,899	$2,734,449	$1,123,495	$98,642	$1,512,312	$1,944,266	$634,134	$334,334	$6,241	$969,557	$0	$0	$0	Table 6.1 Row A
C	New Funding Estimate		$4,460,899	$4,460,899	$918,428	$408,409	$72,786	$437,233	$3,542,471	$1,143,511	$598,465	$191	$1,800,304	$0	$0	$0	Table 6.2 Row A + Table 6.4 Row A
D	Incremental Request		($217,816)	$0	($1,816,021)	($715,086)	($25,856)	($1,075,079)	$1,598,205	$509,377	$264,131	($6,050)	$830,747	$0	$0	$0	Row C - Row B
E	Centrally Appropriated Item																
F	Base Funding Appropriation		$517,134	$517,134	$302,235	$124,178	$10,903	$167,154	$214,899	$70,091	$36,954	$690	$107,164	$0	$0	$0	Table 6.1 Row B
G	New Funding Estimate		$517,134	$517,134	$106,471	$47,346	$8,438	$50,687	$410,663	$132,561	$69,378	$22	$208,702	$0	$0	$0	Table 6.2 Row B + Table 6.4 Row C
H	Incremental Request		$0	$0	($195,764)	($76,832)	($2,465)	($116,467)	$195,764	$62,470	$32,424	($668)	$101,538	$0	$0	$0	Row G - Row F
I	Operating and Contract Expenses																
J	Base Funding Appropriation	134,290	$58,883,281	$58,197,043	$31,665,413	$22,339,382	$954,495	$8,371,536	$27,217,868	$5,803,421	$3,346,982	$85,456	$17,982,009	$0	$0	$0	Table 6.1 Row E
K	New Funding Estimate	156,790	$62,330,038	$61,718,518	$17,158,103	$8,065,648	$717,087	$8,375,368	$45,027,263	$9,020,600	$5,263,903	$2,392	$30,740,368	$144,672	$144,672	$0	Table 6.2 Row E + Table 6.4 Row D
L	Incremental Request	22,500	$3,446,757	$3,521,475	($14,507,310)	($14,273,734)	($237,408)	$3,832	$17,809,395	$3,217,179	$1,916,921	($83,064)	$12,758,359	$144,672	$144,672	$0	Row K - Row J
M	Health Care and Economic Security Staff Development Center																
N	Base Funding Appropriation		$2,436,596	$0	$1,431,181	$597,615	$51,523	$782,043	$1,005,415	$315,815	$184,839	$3,227	$501,534	$0	$0	$0	Table 6.1 Row G
O	New Funding Estimate		$2,466,130	$0	$507,737	$225,782	$40,238	$241,717	$1,958,393	$632,172	$330,850	$105	$995,266	$0	$0	$0	Table 6.2 Row A + Table 6.4 Row AO
P	Incremental Request		$29,534	$0	($923,444)	($371,833)	($11,285)	($540,326)	$952,978	$316,357	$146,011	($3,122)	$493,732	$0	$0	$0	Row O - Row N
Q	Total Base Funding Appropriation		$66,515,726	$63,175,076	$36,133,278	$24,184,670	$1,115,563	$10,833,045	$30,382,448	$6,823,461	$3,903,109	$95,614	$19,560,264	$0	$0	$0	Sum Rows B, F, J and N
R	Total Funding Estimate		$69,774,201	$66,696,551	$18,690,739	$8,747,185	$838,549	$9,105,005	$50,938,790	$10,928,844	$6,262,596	$2,710	$33,744,640	$144,672	$144,672	$0	Sum Rows C, G, K and O
S	Total Incremental Request	22,500	$3,258,475	$3,521,475	($17,442,539)	($15,437,485)	($277,014)	($1,728,040)	$20,556,342	$4,105,383	$2,359,487	($92,904)	$14,184,376	$144,672	$144,672	$0	Row R - Row Q

Table 7.1 Pool Hours Rate Reductions

Row	Description / Agency	FY 2018-19 Appropriation Pool Hours	FY 2018-19 Appropriation Total Funds	FY 2019-20 Base Request Pool Hours	FY 2019-20 Base Request Total Funds	FY 2019-20 Rate Change Total Funds	FY 2019-20 Rate Change Incremental Difference	FY 2020-21 Continuation Pool Hours	FY 2020-21 Continuation Total Funds	FY 2020-21 Rate Change Total Funds	FY 2020-21 Rate Change Incremental Difference
A	Hourly Rate		$137		$137	$130	($7)		$137	$134	($3)
B	**OIT**	**35,000**	**$4,795,000**	**35,000**	**$4,795,000**	**$4,550,000**	**($245,000)**	**35,000**	**$4,795,000**	**$4,690,000**	**($105,000)**
C	*Maintenance and Operating 75/25*	*35,000*	*$4,795,000*	*35,000*	*$4,795,000*	*$4,550,000*	*($245,000)*	*35,000*	*$4,795,000*	*$4,690,000*	*($105,000)*
D	**DHS**	**38,000**	**$5,206,000**	**38,000**	**$5,206,000**	**$4,940,000**	**($266,000)**	**38,000**	**$5,206,000**	**$5,092,000**	**($114,000)**
E	*Employment and Benefits (TANF) 100% FF*	*18,000*	*$2,466,000*	*18,000*	*$2,466,000*	*$2,340,000*	*($126,000)*	*18,000*	*$2,466,000*	*$2,412,000*	*($54,000)*
F	*Employment and Benefits (GF Only)*	*0*	*$0*	*0*	*$0*	*$0*	*$0*	*0*	*$0*	*$0*	*$0*
G	*Food and Energy (SNAP) 50/50*	*20,000*	*$2,740,000*	*20,000*	*$2,740,000*	*$2,600,000*	*($140,000)*	*20,000*	*$2,740,000*	*$2,680,000*	*($60,000)*
H	**HCPF**	**45,000**	**$6,165,000**	**45,000**	**$6,165,000**	**$5,850,000**	**($315,000)**	**45,000**	**$6,165,000**	**$6,030,000**	**($135,000)**
I	*Medical Programs 75/25*	*40,000*	*$5,480,000*	*40,000*	*$5,480,000*	*$5,200,000*	*($280,000)*	*40,000*	*$5,480,000*	*$5,360,000*	*($120,000)*
J	*PEAK Health Mobile App*	*5,000*	*$685,000*	*5,000*	*$685,000*	*$650,000*	*($35,000)*	*5,000*	*$685,000*	*$670,000*	*($15,000)*
K	**JOINT**	**16,290**	**$2,231,730**	**16,290**	**$2,231,730**	**$2,117,700**	**($114,030)**	**16,290**	**$2,231,730**	**$2,182,860**	**($48,870)**
L	*CCUG*	*10,000*	*$1,370,000*	*10,000*	*$1,370,000*	*$1,300,000*	*($70,000)*	*10,000*	*$1,370,000*	*$1,340,000*	*($30,000)*
M	*Audit Expansion*	*3,500*	*$479,500*	*3,500*	*$479,500*	*$455,000*	*($24,500)*	*3,500*	*$479,500*	*$469,000*	*($10,500)*
N	*EDMS Vendor*	*1,095*	*$150,015*	*1,095*	*$150,015*	*$142,350*	*($7,665)*	*1,095*	*$150,015*	*$146,730*	*($3,285)*
O	*CRM Dev Support*	*1,095*	*$150,015*	*1,095*	*$150,015*	*$142,350*	*($7,665)*	*1,095*	*$150,015*	*$146,730*	*($3,285)*
P	*Data Analytics/Executive Dashboard*	*600*	*$82,200*	*600*	*$82,200*	*$78,000*	*($4,200)*	*600*	*$82,200*	*$80,400*	*($1,800)*
Q	**TOTAL**	**134,290**	**$18,397,730**	**134,290**	**$18,397,730**	**$17,457,700**	**($940,030)**	**134,290**	**$18,397,730**	**$17,994,860**	**($402,870)**

	Table 7.2 - New Pool Hour and Adjustments by Fiscal Year																		
Row	Description	FY 2018-19 Appropriation		FY 2018-19 Pool Hour Adjustment		FY 2018-19 Incremental Change		FY 2019-20 Base with New Rate		FY 2019-20 Pool Hour Adjustment		FY 2019-20 Incremental Change		FY 2020-21 Continuation with New Rate		FY 2020-21 Pool Hour Adjustment		FY 2020-21 Incremental Change	
	Agency	Pool Hours	Total Funds	Pool Hours	Total Funds	Pool Hours	Total Funds	Pool Hours	Total Funds	Pool Hours	Total Funds	Pool Hours	Total Funds	Pool Hours	Total Funds	Pool Hours	Total Funds	Pool Hours	Total Funds
A	Hourly Rate		$137		$137		$137		$130		$130		$130		$134		$134		$134
B	OIT	35,000	$4,795,000	35,000	$4,795,000	0	$0	35,000	$4,550,000	35,000	$4,550,000	0	$0	35,000	$4,690,000	35,000	$4,690,000	0	$0
C	Maintenance and Operating 75/25	35,000	$4,795,000	35,000	$4,795,000	0	$0	35,000	$4,550,000	35,000	$4,550,000	0	$0	35,000	$4,690,000	35,000	$4,690,000	0	$0
D	DHS	38,000	$5,206,000	38,000	$5,206,000	0	$0	38,000	$4,940,000	55,000	$7,150,000	17,000	$2,210,000	38,000	$5,092,000	53,000	$7,102,000	15,000	$2,010,000
E	Employment and Benefits (TANF) 100% FF	18,000	$2,466,000	8,044	$1,102,028	(9,956)	($1,363,972)	18,000	$2,340,000	15,000	$1,950,000	(3,000)	($390,000)	18,000	$2,412,000	14,000	$1,876,000	(4,000)	($536,000)
F	Employment and Benefits (GF Only)	0	$0	9,956	$1,363,972	9,956	$1,363,972	0	$0	15,000	$1,950,000	15,000	$1,950,000	0	$0	14,000	$1,876,000	14,000	$1,876,000
G	Food and Energy (SNAP) 50/50	20,000	$2,740,000	20,000	$2,740,000	0	$0	20,000	$2,600,000	25,000	$3,250,000	5,000	$650,000	20,000	$2,680,000	25,000	$3,350,000	5,000	$670,000
H	HCPF	45,000	$6,165,000	45,000	$6,165,000	0	$0	45,000	$5,850,000	52,500	$6,825,000	7,500	$975,000	45,000	$6,030,000	52,500	$7,035,000	7,500	$1,005,000
I	Medical Programs 75/25	40,000	$5,480,000	40,000	$5,480,000	0	$0	40,000	$5,200,000	40,000	$5,200,000	0	$0	40,000	$5,360,000	40,000	$5,360,000	0	$0
J	PEAK Health Mobile App	5,000	$685,000	5,000	$685,000	0	$0	5,000	$650,000	7,500	$975,000	2,500	$325,000	5,000	$670,000	7,500	$1,005,000	2,500	$335,000
K	PEAK Usability Project	0	$0	0	$0	0	$0	0	$0	5,000	$650,000	5,000	$650,000	0	$0	5,000	$670,000	5,000	$670,000
L	JOINT	16,290	$2,231,730	16,290	$2,231,730	0	$0	16,290	$2,117,700	16,290	$2,117,700	0	$0	16,290	$2,182,860	16,290	$2,182,860	0	$0
M	CCUG	10,000	$1,370,000	10,000	$1,370,000	0	$0	10,000	$1,300,000	10,000	$1,300,000	0	$0	10,000	$1,340,000	10,000	$1,340,000	0	$0
N	Audit Expansion	3,500	$479,500	3,500	$479,500	0	$0	3,500	$455,000	3,500	$455,000	0	$0	3,500	$469,000	3,500	$469,000	0	$0
O	EDMS Vendor	1,095	$150,015	1,095	$150,015	0	$0	1,095	$142,350	1,095	$142,350	0	$0	1,095	$146,730	1,095	$146,730	0	$0
P	CRM Dev Support	1,095	$150,015	1,095	$150,015	0	$0	1,095	$142,350	1,095	$142,350	0	$0	1,095	$146,730	1,095	$146,730	0	$0
Q	Data Analytics/Executive Dashboard	600	$82,200	600	$82,200	0	$0	600	$78,000	600	$78,000	0	$0	600	$80,400	600	$80,400	0	$0
R	TOTAL	134,290	$18,397,730	134,290	$18,397,730	$0	$0	134,290	$17,457,700	158,790	$20,642,700	24,500	$3,185,000	134,290	$17,994,860	156,790	$21,009,860	22,500	$3,015,000

Table 8.1
FY 2019-20 & FY 2020-21 New Operating, Maintenance and Contracts Costs
Summary by Cost Allocation Method

Row	Item	Priority (H/M/L)	Cost Allocation Method	FY 2019-20 Total	FY 2020-21 Total	Source
A	Hardware		All Other CBMS (Medicaid 75/25)	$40,000	$40,000	Table 8.2 Rows A ,E ,I, M, Q, T, Z, AD, AH, AL, AP & AT
B	Software		All Other CBMS (Medicaid 75/25)	$2,136,090	$2,136,090	Table 8.2 Rows B, F, J, N, R, U, AA, AE, AI, AP ,AT
C	Professional Services		All Other CBMS (Medicaid 75/25)	$215,000	$165,000	Table 8.2 Rows C, G, K,O, S, V, AB, AF, AJ, AQ, AU
D	IV&V Security Assessment		HCPF Direct (Medicaid 90/10)	($200,000)	($200,000)	Table 8.2 Row AX
E	Client Correspondence		Client Correspondence	($1,306,463)	($1,306,463)	Table 8.2 Row BA
F	**Total Request**			**$884,627**	**$834,627**	Sum Rows A thru E

Table 8.2
FY 2019-20 and FY 2020-21 New Operating, Maintenance and Contracts Cost Item Detail

Row	Item	Priority	Cost Allocation Method	FY 2019-20	FY 2020-21 & Ongoing	Cost Description
	Security- Identity Access Management (IAM)	**High**				
A	Hardware		All Other CBMS (Medicaid 75/25)	$40,000	$40,000	AWS (2+)- m4.Xlarge with 100 GB EBS
B	Software		All Other CBMS (Medicaid 75/25)	$621,090	$621,090	Vendor cost estimates (BeyondTrust, SailPoint)
C	Professional Services		All Other CBMS (Medicaid 75/25)	$0	$0	Existing OIT pool hours will be used
D	Subtotal			**$661,090**	**$661,090**	
	Security- Isolate copies of Production Data	**High**				
E	Hardware		All Other CBMS (Medicaid 75/25)	$0	$0	Access privilege is through AWS workspaces now.
F	Software		All Other CBMS (Medicaid 75/25)	$125,000	$125,000	Initial Vendor Estimate - Analysis in process
G	Professional Services		All Other CBMS (Medicaid 75/25)	$0	$0	Existing OIT pool hours will be used
H	Subtotal			**$125,000**	**$125,000**	
	Enhance Electronic Services Available to Clients	**High**				
I	Hardware		All Other CBMS (Medicaid 75/25)	$0	$0	
J	Software		All Other CBMS (Medicaid 75/25)	$840,000	$840,000	based on 838,000 signatures and $1 per signature plus $2000 per year to store in AWS.
K	Professional Services		All Other CBMS (Medicaid 75/25)	$50,000	$0	E-signature vendor support, Existing OIT pool hours will be used for Deloitte work
L	Subtotal			**$890,000**	**$840,000**	
	Business/Data Analytics	**Medium**				
M	Hardware		All Other CBMS (Medicaid 75/25)	$0	$0	
N	Software		All Other CBMS (Medicaid 75/25)	$550,000	$550,000	
O	Professional Services		All Other CBMS (Medicaid 75/25)	$0	$0	Existing OIT pool hours will be used
P	Subtotal			**$550,000**	**$550,000**	
	Annual third party security assessment in support of the HCPF/Connect for Health Authority To Connect with CMS	**High**				
Q	Hardware		All Other CBMS (Medicaid 75/25)	$0	$0	
R	Software		All Other CBMS (Medicaid 75/25)	$0	$0	for CMS based on needing 2 ATC approvals
S	Professional Services		All Other CBMS (Medicaid 75/25)	$165,000	$165,000	
T	Subtotal			**$165,000**	**$165,000**	
Operating and Contract Costs Reductions						
	Independent Validation & Verification	**Medium**				
U	IV&V Security Assessments		HCPF Direct (Medicaid 90/10)	($200,000)	($200,000)	HCPF is requesting to remove funding in the CBMS line as this is a HCPF only requirement that will be address in another request.
V	Subtotal			**($200,000)**	**($200,000)**	
	Client Correspondence	**Medium**				
W	Revised Estimated Need		Client Correspondence	$8,801,028	$8,801,028	Table 4.1b Row H (OIT estimates that the growth trend will not be sustained. Request is to maintain costs as the FY 2018-19 level.)
X	Base Request			$10,107,491	$10,107,491	Table 5.1b Row H
Y	Subtotal		Client Correspondence	($1,306,463)	($1,306,463)	Row AZ - Row BA
Z	Total Request			**$884,627**	**$834,627**	

Row	Item	Appropriation			Cost Allocation Redistribution			Request		
		FY 2018-19	Source		FY 2018-19	Source		FY 2018-19	Source	
		CBMS Reappropriated Funds	Reappropriated Source DHS[1]	Reappropriated Source HCPF[2]	CBMS Reappropriated Funds	Reappropriated Source DHS[1]	Reappropriated Source HCPF[2]	CBMS Reappropriated Funds	Reappropriated Source DHS[1]	Reappropriated Source HCPF[2]
Table 9.1 SDC Cost Allocation Redistribution of HCPF Reappropriated Funds
(1) Executive Director's Office, (A) General Administration,
A	Personal Services	$726,255	$416,087	$310,168	$726,255	$149,536	$576,719	$0	($266,551)	$266,551
B	Health, Life, and Dental	$120,704	$53,319	$67,385	$120,704	$24,853	$95,851	$0	($28,466)	$28,466
C	Short-term Disability	$1,238	$1,147	$91	$1,238	$255	$983	$0	($892)	$892
D	S.B. 04-257 Amortization Equalization Disbursement	$39,274	$27,358	$11,916	$39,274	$8,087	$31,187	$0	($19,271)	$19,271
E	S.B. 06-235 Supplemental Amortization Equalization Disbursement	$39,271	$27,207	$12,064	$39,271	$8,086	$31,185	$0	($19,121)	$19,121
F	Salary Survey	$29,534	$0	$29,534	$29,534	$6,081	$23,453	$0	$6,081	($6,081)
G	Operating Expenses	$10,449	$6,677	$3,772	$10,449	$2,151	$8,298	$0	($4,526)	$4,526
H	**Total EDO A CBMS Reappropriated Funds**	**$966,725**	**$531,795**	**$434,930**	**$966,725**	**$199,049**	**$767,676**	**$0**	**($332,746)**	**$332,746**

[1] DHS Long Bill Line (2) Office of Information Technology Services, (B) Colorado Benefits Management System (2) Special Projects; Health Care and Economic Security Staff Development Center

[2] HCPF Long Bill Line (1) Executive Directors' Office, (C) Information Technology Contracts and Projects, Colorado Benefits Management SystemsHealth Care and Economic Security Staff Development Center

HCPF Long Bill Letternote Revision Requested
(1) Executive Director's Office, (A) General Administration,

[b] Of this amount, $1,138,205 shall be from statewide indirect cost recoveries, $531,795 **$199,049** shall be transferred from the Department of Human Services from the Health Care and Economic Security Staff Development Center line item appropriation, $434,930 **$767,676** shall be transferred from the Colorado Benefits Management System, Health Care and Economic Security Staff Development Center line item appropriation in this department, $365,292 shall be transferred from the Department of Higher Education from the Fee-for-service Contracts with State Institutions for Speciality Education Programs line item, and $192,847 shall be transferred from the Public School Health Services line item appropriation in the Other Medical Services division of this department.

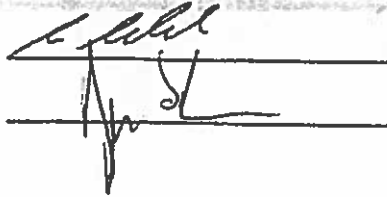| Row	Deliverables	Timelines	Amount
	Table 9.2 Staff Development Center Assessment Cost Estimates		
A	Kickoff Meeting Summary and Materials	Within ten (10) Business Days after the Kick Off Meeting	$10,000
B	Project Plan	Within ten (10) Business Days after the Kick Off Meeting	$10,000
C	Survey Development	Within ten (10) Business Days after Project Plan	$10,000
D	County Representatives and SDC Staff Interviews/Survey	Within twenty (20) Business Days of Survey Development	$25,000
E	County Representatives and SDC Staff Interviews Summary of Survey Findings	Within ten (10) Business Days after concluding the County and SDC Interviews/Survey	$5,000
F	County Representatives and SDC Staff Focus Group	Within ten (10) Business Days after completing the County and SDC Interviews and Survey Summary	$15,000
G	County Representatives and SDC Staff Focus Group Summary	Within fifteen (15) Business Days after the last Focus Group is conducted	$5,000
H	County Representatives and SDC Staff Survey Findings Summary	Within ten (10) Business Days after the completion of Focus Group Summary	$10,000
I	Current State Description Report	Within twenty (20) Business Days after delivering County Representatives and SDC Staff Survey Findings	$15,000
J	Summary of Gaps Report	Within twenty (20) Business Days after delivering the Current State Description Report	$10,000
K	Requirements and Recommendations Report	Within twenty (20) Business Days after delivering the Summary of Gaps Report	$15,000
L	Draft Final Report	Within twenty (20) Business Days after delivering the Requirements and Recommendations Report	$10,000
M	Final Report	Within fifteen (15) Business Days after delivering the Draft Final Report.	$10,000
N	**Total**		**$150,000**

Department of Governor's Office

Funding Request for The FY 2019-20 Budget Cycle

Request Title

R-09 (OIT) DOR Lottery IT Staff Consolidation

Dept. Approval By: _____

OSPB Approval By: _____

___ Supplemental FY 2018-19

___ Budget Amendment FY 2019-20

X ___ Change Request FY 2019-20

Summary Information	Fund	FY 2018-19		FY 2019-20		FY 2020-21
		Initial Appropriation	Supplemental Request	Base Request	Change Request	Continuation
	Total	$76,236,776	$0	$77,398,681	$1,253,066	$1,253,085
	FTE	406.0	0.0	406.0	13.0	13.0
Total of All Line Items Impacted by Change Request	GF	$186,216	$0	$165,087	$0	$0
	CF	$0	$0	$0	$0	$0
	RF	$76,050,560	$0	$77,233,594	$1,253,065	$1,253,065
	FF	$0	$0	$0	$0	$0

Line Item Information	Fund	FY 2018-19		FY 2019-20		FY 2020-21
		Initial Appropriation	Supplemental Request	Base Request	Change Request	Continuation
	Total	$8,969,578	$0	$8,889,767	$103,053	$103,053
	FTE	0.0	0.0	0.0	0.0	0.0
05. Office of Information Technology, (A) OIT Central Administration, (1) OIT Central Administration - Health, Life, and Dental	GF	$101,562	$0	$88,386	$0	$0
	CF	$0	$0	$0	$0	$0
	RF	$8,868,016	$0	$8,801,381	$103,053	$103,053
	FF	$0	$0	$0	$0	$0

Line Item Information	Fund	FY 2018-19		FY 2019-20		FY 2020-21
		Initial Appropriation	Supplemental Request	Base Request	Change Request	Continuation
05. Office of Information Technology, (A) OIT Central Administration, (1) OIT Central Administration - Short-term Disability	Total	$127,363	$0	$123,445	$1,771	$1,771
	FTE	0.0	0.0	0.0	0.0	0.0
	GF	$1,414	$0	$1,273	$0	$0
	CF	$0	$0	$0	$0	$0
	RF	$125,949	$0	$122,172	$1,771	$1,771
	FF	$0	$0	$0	$0	$0
05. Office of Information Technology, (A) OIT Central Administration, (1) OIT Central Administration - Amortization Equalization Disbursement	Total	$3,753,986	$0	$3,660,292	$46,610	$46,610
	FTE	0.0	0.0	0.0	0.0	0.0
	GF	$41,620	$0	$37,714	$0	$0
	CF	$0	$0	$0	$0	$0
	RF	$3,712,366	$0	$3,622,578	$46,610	$46,610
	FF	$0	$0	$0	$0	$0
05. Office of Information Technology, (A) OIT Central Administration, (1) OIT Central Administration - Supplemental Amortization Equalization Disbursement	Total	$3,753,986	$0	$3,660,292	$46,610	$46,610
	FTE	0.0	0.0	0.0	0.0	0.0
	GF	$41,620	$0	$37,714	$0	$0
	CF	$0	$0	$0	$0	$0
	RF	$3,712,366	$0	$3,622,578	$46,610	$46,610
	FF	$0	$0	$0	$0	$0
05. Office of Information Technology, (B) IT Infrastructure, (1) IT Infrastructure - Server Management	Total	$18,772,760	$0	$19,196,962	$599,552	$599,552
	FTE	72.0	0.0	72.0	7.0	7.0
	GF	$0	$0	$0	$0	$0
	CF	$0	$0	$0	$0	$0
	RF	$18,772,760	$0	$19,196,962	$599,552	$599,552
	FF	$0	$0	$0	$0	$0

Line Item Information	Fund	FY 2018-19		FY 2019-20		FY 2020-21
		Initial Appropriation	Supplemental Request	Base Request	Change Request	Continuation
05. Office of Information Technology, (C) Network, (1) Network - Network Administration	Total	$3,943,800	$0	$3,955,432	$88,156	$88,156
	FTE	4.0	0.0	4.0	1.0	1.0
	GF	$0	$0	$0	$0	$0
	CF	$0	$0	$0	$0	$0
	RF	$3,943,800	$0	$3,955,432	$88,156	$88,156
	FF	$0	$0	$0	$0	$0
05. Office of Information Technology, (D) Information Security, (1) Information Security - Security Operations	Total	$5,721,594	$0	$5,794,532	$89,428	$89,428
	FTE	38.0	0.0	38.0	1.0	1.0
	GF	$0	$0	$0	$0	$0
	CF	$0	$0	$0	$0	$0
	RF	$5,721,594	$0	$5,794,532	$89,428	$89,428
	FF	$0	$0	$0	$0	$0
05. Office of Information Technology, (E) Applications, (1) Applications - Agency Services	Total	$21,567,420	$0	$22,227,211	$219,286	$219,286
	FTE	177.0	0.0	177.0	3.0	3.0
	GF	$0	$0	$0	$0	$0
	CF	$0	$0	$0	$0	$0
	RF	$21,567,420	$0	$22,227,211	$219,286	$219,286
	FF	$0	$0	$0	$0	$0
05. Office of Information Technology, (F) End User Services, (1) End User Services - Desk Side Support Services	Total	$9,626,289	$0	$9,890,748	$58,599	$58,599
	FTE	115.0	0.0	115.0	1.0	1.0
	GF	$0	$0	$0	$0	$0
	CF	$0	$0	$0	$0	$0
	RF	$9,626,289	$0	$9,890,748	$58,599	$58,599
	FF	$0	$0	$0	$0	$0

Auxiliary Data		
Requires Legislation?	NO	
Type of Request?	Department of Governor's Office Prioritized Request	Interagency Approval or Related Schedule 13s: Impacts Other Agency

This page is intentionally left blank.

COLORADO

OIT

CO

Governor's Office of
Information Technology

Priority: R-09
Lottery IT Staff Consolidation
FY 2019-20 Request

Cost and FTE

- The Office of Information Technology (OIT) requests $1,253,065 in reappropriated funds and 13.0 FTE in FY 2019-20 and beyond in order to transition the Colorado Department of Revenue's (DOR) Lottery Division IT Staff to OIT.

Current Program

- Currently DOR's Lottery Division IT Staff work for and are funded under the purview of DOR.

Problem or Opportunity

- The Department of Revenue's Lottery IT Staff were not transitioned to OIT at the time of consolidation per 24-37.5-104 (2)(a) C.R.S. As a result, both DOR and OIT are out of compliance with current state law.

Consequences of Problem

- If this consolidation is not completed both DOR and OIT will remain out of compliance with current state law.

Proposed Solution

- OIT requests $1,253,065 feappropriated funds and 13.0 FTE in FY 2019-20 and ongoing to transition 13.0 FTE from DOR's Lottery Division into OIT.

This page is intentionally left blank.

COLORADO

Office of Information Technology

John W. Hickenlooper
Governor

Suma Nallapati
Secretary of Technology and
Chief Information Officer

FY 2019-20 Funding Request | November 1, 2018

Department Priority: R-09
Request Detail: Lottery IT Staff Consolidation

Summary of Incremental Funding Change for FY 2019-20	Total Funds	Reappropriated Funds
Lottery IT Staff Consolidation	$1,253,065 (13.0 FTE)	$1,253,065 (13.0 FTE)

Customer Impact:

This request transfers IT Staff from the Colorado Department of Revenue's (DOR) Lottery Division to the Governor's Office of Information Technology (OIT). DOR and OIT do not anticipate that this change will have any substantial or noticeable impact on either Department.

Problem or Opportunity:

Both DOR and OIT are out of compliance with current Colorado State Law because DOR's Lottery Division IT Staff were not consolidated and made employees of OIT as required when the original IT Consolidation took place. OIT is the statewide IT provider and by statute, all IT FTE staff should be within OIT's appropriation. This request affords the State of Colorado the opportunity to bring both Departments back into full and complete compliance, governance and standards.

Proposed Solution:

In order to bring both DOR and OIT into full and complete compliance with 24-37.5-104 (2)(a) OIT requests $1,253,065 reappropriated funds and 13.0 FTE in FY 2019-20 and beyond to transition DOR Lottery IT Staff and consolidate them with OIT IT Staff.

Over the past year, DOR and OIT have been engaged in ongoing working groups, software verifications, site visits, trainings, Q & A sessions with employees and managers to outline the details of the transition so that this process is successful. The employees impacted have been involved and engaged in these transitioning steps and continue to assist in the ongoing process.

Anticipated Outcomes:

The expected outcome, once this request is approved, is for the Colorado Department of Revenue's IT Staff to be transitioned into the Governor's Office of Technology IT Staff to comply with 24-37.5-104 (2)(a) C.R.S.

OIT believes the transitioning IT staff will benefit from this request in a variety of ways including being offered access to:

- IT training opportunities
- Advancement opportunities
- Professional development programs
- Exposure to various OIT organizational teams

Assumptions and Calculations:

The costs and calculations for this request were generated from the current Colorado Department of Revenue's FY 2017-18 actual IT Lottery staff salaries. Table 1 breaks-down the costs associated with this request and is followed by the FTE calculations template.

Table 1

Position Title	FTE	FY2019-20 Costs
Enterprise Applications Manager	1.0	$139,868
Sr. Developer	1.0	$89,834
Developer II	3.0	$254,886
IT Desktop Analyst	1.0	$70,828
Computer Operations Supervisor	1.0	$121,043
Sr. Systems Administration	3.0	$271,961
Systems Administrator II	1.0	$84,751
Sr. Network Administrator	1.0	$103,078
Security Risk & Compliance Analyst	1.0	$104,466
Operating Costs		$12,350
Total Personal Services Costs & FTE Count	**13.0**	**$1,253,065**

Impact to Common Policy:

The Colorado Department of Revenue will be directly billed via the Common Policy. In ongoing years, these costs will be annualized into the corresponding services.

Personal Services:

Classification Title	Monthly Salary	FTE		FTE	
EA Manager	$9,009	1.0	$108,113	1.0	$108,113
PERA			$11,244		$11,244
AED			$5,406		$5,406
SAED			$5,406		$5,406
Medicare			$1,568		$1,568
STD			$205		$205
Health-Life-Dental			$7,927		$7,927
Subtotal		**1.0**	**$139,868**	**1.0**	**$139,868**

Classification Title	Monthly Salary	FTE		FTE	
Developer II	$5,248	1.0	$62,974	1.0	$62,974
PERA			$6,549		$6,549
AED			$3,149		$3,149
SAED			$3,149		$3,149
Medicare			$913		$913
STD			$120		$120
Health-Life-Dental			$7,927		$7,927
Subtotal		**1.0**	**$84,781**	**1.0**	**$84,781**

Classification Title	Monthly Salary	FTE		FTE	
Developer II	$5,287	1.0	$63,444	1.0	$63,444
PERA			$6,598		$6,598
AED			$3,172		$3,172
SAED			$3,172		$3,172
Medicare			$920		$920
STD			$121		$121
Health-Life-Dental			$7,927		$7,927
Subtotal		**1.0**	**$85,354**	**1.0**	**$85,354**

Classification Title	Monthly Salary	FTE		FTE	
Developer II	$5,246	1.0	$62,949	1.0	$62,949
PERA			$6,547		$6,547
AED			$3,147		$3,147
SAED			$3,147		$3,147
Medicare			$913		$913
STD			$120		$120
Health-Life-Dental			$7,927		$7,927
Subtotal		**1.0**	**$84,751**	**1.0**	**$84,751**

Classification Title	Monthly Salary	FTE		FTE	
IT Desktop Tech Analyst	$4,295	1.0	$51,541	1.0	$51,541
PERA			$5,360		$5,360
AED			$2,577		$2,577
SAED			$2,577		$2,577
Medicare			$747		$747
STD			$98		$98
Health-Life-Dental			$7,927		$7,927
Subtotal		**1.0**	**$70,828**	**1.0**	**$70,828**

Classification Title	Monthly Salary	FTE		FTE	
Computer Ops Supervisor	$7,724	1.0	$92,688	1.0	$92,688
PERA			$9,640		$9,640
AED			$4,634		$4,634
SAED			$4,634		$4,634
Medicare			$1,344		$1,344
STD			$176		$176
Health-Life-Dental			$7,927		$7,927
Subtotal		**1.0**	**$121,043**	**1.0**	**$121,043**

Classification Title	Monthly Salary	FTE		FTE	
Sr. Systems Administrator	$5,415		$64,977	1.0	$64,977

Classification Title	Monthly Salary	FTE		FTE	
		1.0			
PERA			$6,758		$6,758
AED			$3,249		$3,249
SAED			$3,249		$3,249
Medicare			$942		$942
STD			$123		$123
Health-Life-Dental			$7,927		$7,927
Subtotal		**1.0**	**$87,225**	**1.0**	**$87,225**

Classification Title	Monthly Salary	FTE		FTE	
Sr. Systems Administrator	$5,287	1.0	$63,444	1.0	$63,444
PERA			$6,598		$6,598
AED			$3,172		$3,172
SAED			$3,172		$3,172
Medicare			$920		$920
STD			$121		$121
Health-Life-Dental			$7,927		$7,927
Subtotal		**1.0**	**$85,354**	**1.0**	**$85,354**

Classification Title	Monthly Salary	FTE		FTE	
Sr. Systems Administrator	$6,245	1.0	$74,939	1.0	$74,939
PERA			$7,794		$7,794
AED			$3,747		$3,747
SAED			$3,747		$3,747
Medicare			$1,087		$1,087
STD			$142		$142
Health-Life-Dental			$7,927		$7,927
Subtotal		**1.0**	**$99,382**	**1.0**	**$99,382**

Classification Title	Monthly Salary	FTE		FTE	
Systems Administrator II	$5,246	1.0	$62,949	1.0	$62,949
PERA			$6,547		$6,547
AED			$3,147		$3,147
SAED			$3,147		$3,147

Medicare				$913	$913
STD				$120	$120
Health-Life-Dental				$7,927	$7,927

Subtotal		**1.0**	**$84,751**	**1.0**	**$84,751**

Classification Title	Monthly Salary	FTE		FTE	
Sr. Developer	$5,593	1.0	$67,115	1.0	$67,115
PERA			$6,980		$6,980
AED			$3,356		$3,356
SAED			$3,356		$3,356
Medicare			$973		$973
STD			$128		$128
Health-Life-Dental			$7,927		$7,927

Subtotal		**1.0**	**$89,834**	**1.0**	**$89,834**

Classification Title	Monthly Salary	FTE		FTE	
Sr. Network Administrator	$6,497	1.0	$77,967	1.0	$77,967
PERA			$8,109		$8,109
AED			$3,898		$3,898
SAED			$3,898		$3,898
Medicare			$1,131		$1,131
STD			$148		$148
Health-Life-Dental			$7,927		$7,927

Subtotal		**1.0**	**$103,078**	**1.0**	**$103,078**

Classification Title	Monthly Salary	FTE		FTE	
Sec Risk & Compl Analyst	$6,592	1.0	$79,104	1.0	$79,104
PERA			$8,227		$8,227
AED			$3,955		$3,955
SAED			$3,955		$3,955
Medicare			$1,147		$1,147
STD			$150		$150
Health-Life-Dental			$7,927		$7,927

Subtotal		**1.0**	**$104,466**	**1.0**	**$104,466**
Subtotal Personal Services		13.0	**$1,240,715**	13.0	**$1,240,715**
Operating Expenses:					
		FTE		FTE	
Regular FTE Operating Expenses	$500	13.0	$6,500	13.0	$6,500
Telephone Expenses	$450	13.0	$5,850	13.0	$5,850
Subtotal Operating Expenses			**$12,350**		**$12,350**
TOTAL REQUEST		13.0	**$1,253,065**	13.0	**$1,253,065**
	Reappropriated Funds:		*$1,253,065*		*$1,253,065*
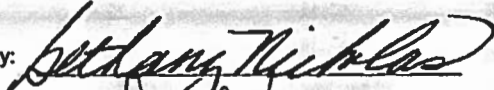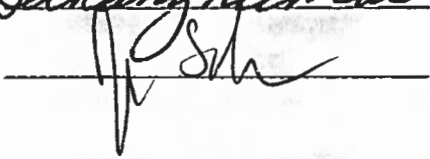
Schedule 13

Department of Governor's Office

Funding Request for The FY 2019-20 Budget Cycle

Request Title

R-02 (OIT) Securing IT Operations

Dept. Approval By: _[signature]_

OSPB Approval By: _[signature]_

	Supplemental FY 2018-19
	Budget Amendment FY 2019-20
X	Change Request FY 2019-20

Summary Information	Fund	FY 2018-19 Initial Appropriation	FY 2018-19 Supplemental Request	FY 2019-20 Base Request	FY 2019-20 Change Request	FY 2020-21 Continuation
	Total	$46,900,638	$0	$47,508,087	$11,857,490	$5,063,636
	FTE	146.0	0.0	146.0	9.0	9.0
Total of All Line Items Impacted by Change Request	GF	$186,216	$0	$186,216	$0	$0
	CF	$0	$0	$0	$0	$0
	RF	$46,714,422	$0	$47,321,871	$11,857,490	$5,063,636
	FF	$0	$0	$0	$0	$0

Line Item Information	Fund	FY 2018-19 Initial Appropriation	FY 2018-19 Supplemental Request	FY 2019-20 Base Request	FY 2019-20 Change Request	FY 2020-21 Continuation
	Total	$8,969,578	$0	$8,969,578	$71,345	$71,345
	FTE	0.0	0.0	0.0	0.0	0.0
05. Office of Information Technology, (A) OIT Central Administration, (1) OIT Central Administration - Health, Life, and Dental	GF	$101,562	$0	$101,562	$0	$0
	CF	$0	$0	$0	$0	$0
	RF	$8,868,016	$0	$8,868,016	$71,345	$71,345
	FF	$0	$0	$0	$0	$0

| Line Item Information | Fund | FY 2018-19 | | FY 2019-20 | | FY 2020-21 |
		Initial Appropriation	Supplemental Request	Base Request	Change Request	Continuation
05. Office of Information Technology, (A) OIT Central Administration, (1) OIT Central Administration - Short-term Disability	Total	$127,363	$0	$127,363	$1,814	$1,814
	FTE	0.0	0.0	0.0	0.0	0.0
	GF	$1,414	$0	$1,414	$0	$0
	CF	$0	$0	$0	$0	$0
	RF	$125,949	$0	$125,949	$1,814	$1,814
	FF	$0	$0	$0	$0	$0
05. Office of Information Technology, (A) OIT Central Administration, (1) OIT Central Administration - Amortization Equalization Disbursement	Total	$3,753,986	$0	$3,753,986	$47,716	$47,716
	FTE	0.0	0.0	0.0	0.0	0.0
	GF	$41,620	$0	$41,620	$0	$0
	CF	$0	$0	$0	$0	$0
	RF	$3,712,366	$0	$3,712,366	$47,716	$47,716
	FF	$0	$0	$0	$0	$0
05. Office of Information Technology, (A) OIT Central Administration, (1) OIT Central Administration - Supplemental Amortization Equalization Disbursement	Total	$3,753,986	$0	$3,753,986	$47,716	$47,716
	FTE	0.0	0.0	0.0	0.0	0.0
	GF	$41,620	$0	$41,620	$0	$0
	CF	$0	$0	$0	$0	$0
	RF	$3,712,366	$0	$3,712,366	$47,716	$47,716
	FF	$0	$0	$0	$0	$0
05. Office of Information Technology, (B) IT Infrastructure, (1) IT Infrastructure - Server Management	Total	$18,772,760	$0	$19,196,962	$3,660,080	$2,736,586
	FTE	72.0	0.0	72.0	5.0	5.0
	GF	$0	$0	$0	$0	$0
	CF	$0	$0	$0	$0	$0
	RF	$18,772,760	$0	$19,196,962	$3,660,080	$2,736,566
	FF	$0	$0	$0	$0	$0

Line Item Information	Fund	FY 2018-19		FY 2019-20		FY 2020-21
		Initial Appropriation	Supplemental Request	Base Request	Change Request	Continuation
	Total	$5,801,371	$0	$5,911,680	$1,627,297	$122,594
	FTE	36.0	0.0	36.0	1.0	1.0
05. Office of Information Technology, (C) Network, (1) Network - Colorado State Network Core	GF	$0	$0	$0	$0	$0
	CF	$0	$0	$0	$0	$0
	RF	$5,801,371	$0	$5,911,680	$1,627,297	$122,594
	FF	$0	$0	$0	$0	$0
	Total	$5,721,594	$0	$5,794,532	$6,401,522	$2,035,885
	FTE	38.0	0.0	38.0	3.0	3.0
05. Office of Information Technology, (D) Information Security, (1) Information Security - Security Operations	GF	$0	$0	$0	$0	$0
	CF	$0	$0	$0	$0	$0
	RF	$5,721,594	$0	$5,794,532	$6,401,522	$2,035,885
	FF	$0	$0	$0	$0	$0

Auxiliary Data			
Requires Legislation?	NO		
Type of Request?	Department of Governor's Office Prioritized Request	Interagency Approval or Related Schedule 13s:	Impacts Other Agency

This page is intentionally left blank.

Cost and FTE
● The Governor's Office of Information Technology (OIT) requests an increase of $11,857,490 in reappropriated funds and 9.0 FTE in FY 2019-20, plus $5,063,636 and 9.0 FTE in FY 2020-21 and beyond. This request includes the use of contractor hours, the hiring of new FTE, and one-time costs of items such as hardware and software.

Current Program
● The State's Secure Colorado and IT Operations' programs have a robust roadmap in place to ensure security is an integral part of providing services to customers. The State Security Program aims to preserve the confidentiality, integrity, and availability of state of Coloradans' data through the innovative use of the right people, processes, technology and services. It is through the acceleration of this program that these innovative practices will significantly reduce and mitigate attacks like the Colorado Department of Transportation (CDOT) cybersecurity incident. From this event, the State recognized risks and vulnerabilities that must be mitigated immediately through an "accelerated" Secure Colorado implementation timeline.

Problem or Opportunity
● The current problem is that while the Secure Colorado program is very successful, the resources and pace at which the security solutions are implemented is not sufficient for effectively protecting and mitigating risks and vulnerabilities in a timely fashion - data is the number one business asset that perpetrators are after. OIT must accelerate the implementation and delivery of robust security solutions that are needed to meet the objectives of the Secure Colorado strategy and the evolving threats in governmental business today.
● The pace at which the Secure Colorado program is progressing, while better than many other states, still leaves the State vulnerable to attack. In addition, because OIT is adopting emerging and maturing technologies, such as public cloud services, OIT must accelerate the pace of many projects underway, and ensure an appropriate investment into the security of these emerging technologies. The CDOT attack came through one of these emerging technologies, and evidenced the fact that simply having a project plan in place, does little to protect the State from an attack meant to exploit existing vulnerabilities.

Consequences of Problem
● Without an expedited approach and the necessary resources to achieve the appropriate level of security protection, OIT will not be able to effectively protect the State against the emerging threat technologies that impacted CDOT and other local institutions statewide.

Proposed Solution
● The request will provide $11,857,490 in reappropriated funds and 9.0 FTE in FY 2019-20, and $5,063,636 in FY 2020-21 and 9.0 FTE ongoing, to expedite Secure Colorado activities and reduce cyber security threats across all state agencies.

This page is intentionally left blank.

COLORADO

Office of Information Technology

John W. Hickenlooper
Governor

Suma Nallapati
Secretary of Technology and Chief Information Officer

FY 2019-20 Funding Request | November 1, 2018

Department Priority: R-02
Request Detail: Securing IT Operations

Summary of Incremental Funding Change for FY 2019-20	Total Funds	Reappropriated Funds
Securing IT Operations	$11,857,490 (9.0 FTE)	$11,857,490 (9.0 FTE)

Customer Impact:

The Governor's Office of Information Technology (OIT) is responsible for the State's information security governance, architecture, risk, and compliance, as well as provisioning user accounts and overseeing day-to-day security operations. This request will benefit OIT customer agencies in that it ensures strong security practices are incorporated into daily operations, such as protecting business productivity, sustaining system availability, preventing cyber infection, recognizing unauthorized change and protecting sensitive data. With more security insight and awareness capability through this request, agencies can expect vulnerabilities to be identified and mitigated before they become security risks or incidents that become emergencies.

Problem or Opportunity:

The Colorado Department of Transportation (CDOT) experienced a significant cybersecurity incident in February 2018. This event was an eye opening experience for the State of Colorado. The state gained new visibility into the risks and vulnerabilities, realizing that current Secure Colorado programs must be accelerated to be effective and new initiatives are needed. While the state's Secure Colorado and IT Operations' programs have a robust roadmap in place to deliver solutions that progressively drive security maturity across the state, the resources and pace at which the security solutions are implemented is not effectively protecting and mitigating against attacks fast enough. OIT must accelerate the implementation and delivery of robust security solutions and practices to properly protect the State against cybersecurity attacks.

Secure Colorado was established to enable the state to make progressive investments into implementing increased security across all departments. At its current funding level, the program has approximately $500,000 available in discretionary funding for FY 2018-19, which will be spent as follows:

- Utilizing contractor resources to help with the implementation of ongoing security projects and audit remediation efforts,
- Offsetting price increases in ongoing expenses, such as license and maintenance renewals,
- Purchasing additional security software and services, as identified, and as the remaining budget allows.

This discretionary funding enables the state to chip-away at improving security, making some progress each year. This is the intent of the program, it is considered to be a fiscally minded way of improving security over

time. However, it also means that larger efforts, such as implementing role-based access, have been ongoing for many years, without enough progress to have measurably reduced risk.

It became very clear, during the CDOT cybersecurity incident, that the efforts to implement role-based access and to reduce privileged access have not made enough progress, thereby becoming a liability that significantly increased the impact of the ransomware spread. Had role-based access efforts been complete, the attacker would have had to launch another type of attack in order to spread out the ransomware, increasing the chances of detection and enabling the security team to respond and contain the event. With role-based access in place, the numbers of workstations and servers impacted would have been significantly less than 1,300 workstations and 400 servers impacted. In fact, impact may have been limited to only one or a handful, verses almost the entire agency.

Additionally, the implementation of a new security tool purchased with FY 2017-18 funds, was being implemented over a several month duration, due to resource constraints. This tool was scheduled to be implemented at CDOT the week after the ransomware attack. Had the tool been in place, it would have provided earlier detection, better prevention, and may have completely contained and prevented the ransomware from spreading. This is an unfortunate example of how the implementation of important security improvements was too slow and rendered no protection when a state agency came under attack.

This request is an attempt to successfully complete risk reducing efforts which are currently in progress, such as implementing role-based access, and recently purchased tools, in a faster timeframe than current Secure Colorado funding allows. It will also allow OIT to purchase necessary software and licenses, and obtain sufficient resources to implement currently planned security projects over the next 18-24 months, instead of implementing slowly and over a 7-10 year timeframe.

The State Security Program aims to preserve the confidentiality, integrity, and availability of State of Colorado's data through the innovative use of the right people, processes, technology and services. It is through the acceleration of this program that these innovative practices will drastically reduce and mitigate attacks like the CDOT cybersecurity incident.

OIT has identified the following problem areas.

1. **Current initiatives** underway, funded with current Secure Colorado budget, cannot progress quickly enough given resources currently available to keep pace with advancing security threats.
2. Current security efforts protecting **East-West Traffic** have become inadequate as security threats increase in complexity and sophistication. Network segmentation is critical in thwarting and containing attacks.
3. Recent movement of more projects and applications to **Public Cloud Solutions** have created the need for new and different security solutions specific to cloud technologies.
4. The Secure Colorado program began as a team under the State Chief Information Security Officer (CISO) focused on governance, risk and compliance, policies, security architecture, and risk scoring. **Technical teams**, such as network, infrastructure, and access control have interdependent processes and practices that **are impacted daily by the work of the CISO's team**. However, these teams lack the tools and staff to holistically implement and integrate security practices across operations.

An overarching problem across all of these gap areas is the existence of many manual processes throughout all technical teams resulting in slow response times. OIT has too many manual controls and practices in place today that prevent a quicker response to incidents. This was evident during the CDOT attack, as it required

many staff working around the clock for several days to make security hardening adjustments to accounts and infrastructure resources. OIT needs to reduce the amount of manual process through the implementation of technologies that automate these functions, so that security related processes and protection are consistent, efficient and expedient. Continuing to utilize manual processes will lag behind security vulnerability developments and ultimately leave the state at risk year after year. It is not acceptable for the state to sit back and rest on manual process. The State must embrace technology and automation to ensure proper security.

Current Initiatives
- The adoption of public cloud and evolution of security risks and mitigation requirements have outpaced OIT resource ability to appropriately manage and protect the states infrastructure. As seen during the CDOT security incident, the Secure Colorado roadmap and associated deliverables were too slow to mitigate the attack. At the time of the incident, a project was underway that would have prevented the attack entirely. It was a week short of go live and therefore was not effective.

  Within the ongoing base budget for Secure Colorado OIT has already initiated multiple projects to increase security. However, these projects are not moving quickly enough to keep pace with evolving security threats.

  Attached to this document are two timelines that lay out the details on current initiatives: Appendix 1, "Secure Colorado Projects and Funding" and Appendix 2, "Project Timeline and Teams."

East West Traffic
- One primary area of focus highlighted by the CDOT Ransomware attack is the need to harden East-West Security. North-South traffic is the communication that occurs between server applications deployed inside data centers and internet based client applications. It is basically data that goes back and forth to the internet. East-West traffic is data that flows between various application instances within the data center.
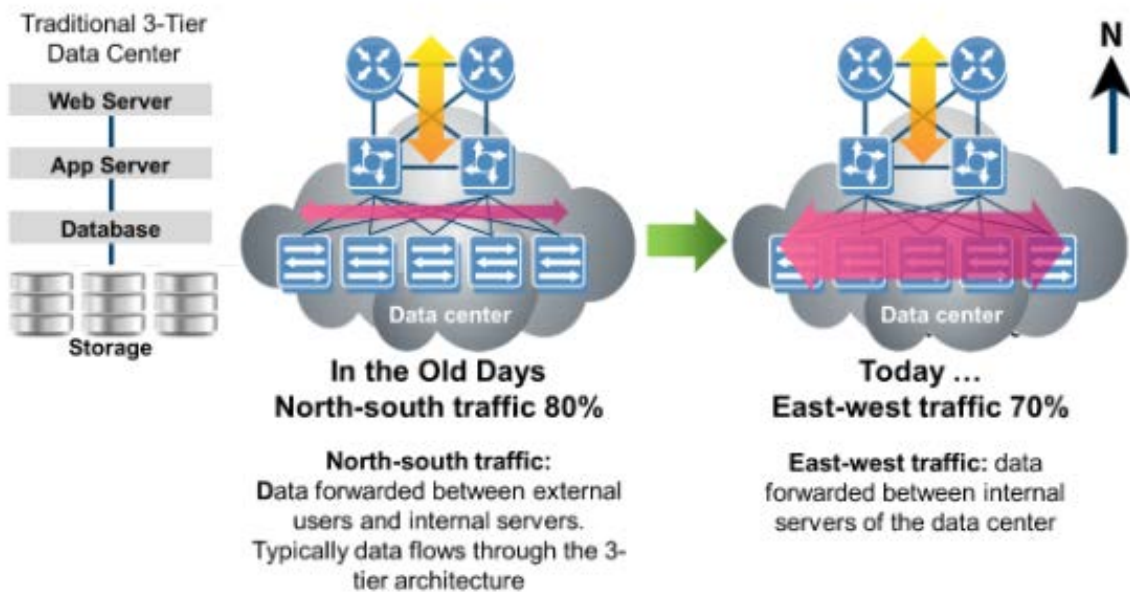
Secure Colorado has primarily focused on securing North-South traffic and hardening end-points with East-West traffic being a secondary concern. North-South traffic used to account for the majority of

activity across the State. This has changed because of how application and infrastructure has evolved over the last several years. The State has a basic level of protection against external threats to the State's network and systems. This is what helped contain the CDOT attack within one agency and prevent it from spreading throughout the Colorado State Network (CSN) to other agencies. However, identification of internal threats, protection against those attacks, and containment (network segmentation) are new initiatives within the Secure Colorado program. For example, there are thousands of network devices that connect agency servers to the network. The CDOT incident has shown how critical is to have security placed on all of these "doorways." Had firewalls and other controls and tools been in place at these network devices, the CDOT Ransomware attack could have been contained to a small portion of CDOT's network and systems. However, when the attack took place the infection was able to spread throughout the entire agency's systems.

The Network Team lacks senior level network engineering to support emerging technology and cloud security integration. Due to this resource shortage, the network team has been slower to adopt and provide the necessary guidance and implementation of security design and configuration. In addition, as East-West threats emerge and further develop there is an increasing need to ensure that the State network is designed and engineered to meet those specific security requirements.

Public Cloud-Cloud Operations Team
- State agencies are now utilizing public cloud solutions as a first option and OIT must provide IT support going forward. This requires a level of operational management and security integration with both on-premise state and public cloud infrastructure. OIT resources currently manage on-premise resources and cannot adequately take on the oversight and management of the additional public cloud solutioning efficiently. Current FTE resources workloads are already very high and existing staff cannot provide the necessary support for day-to-day cloud operations.

  OIT has insufficient processes and practices to ensure security is built into newly adopted services. At the time of the CDOT attack, a newly adopted Cloud service was established without adequate security integration and management practices prior to service consumption. This created the opening that allowed the Ransomware incident to be successful. Practices utilized for on-premise operations are not the same as those required for public cloud operations.

  OIT is skilled at supporting and managing on-premise solution deployments, but is behind in acquiring and utilizing the technologies required to adequately manage and integrate public cloud solutioning and its security requirements.

Security Impacts on OIT Infrastructure Teams
- Security has become a way of life for all technical teams across OIT. Secure Colorado has successfully implemented several, large enterprise initiatives and put in place robust controls, governance, compliance requirements, and important protocols to secure the State's information technology. OIT Infrastructure Teams are required to execute on these initiatives and controls. The problem is increasing Security, which is critical to secure the State's data, is driving new workloads. Infrastructure teams can no longer absorb this increase and it is affecting service delivery.

  The state has a complex infrastructure that evolved over time. This infrastructure has developed complex operational processes and practices to support evolving business needs. These complexities make it difficult to develop security practices and mitigating controls. Because of this the state often seeks multiple technologies at different layers of the infrastructure to improve security and operations,

which requires more personnel resource time and manual controls to mitigate risk. OIT must reduce the complexity of the infrastructure and operations to improve OIT security risk vectors. This will allow the state to leverage technology and practices more efficiently and cost effectively.

Associated support areas such as Identity & Access Management, Network Services, and Security Operations have interdependent processes and practices that must be recognized holistically across operations when applying appropriate security controls and management. The necessary practices and technologies in these support areas are being slowly adopted. However, without complete adoption quickly, the State is inadequately protecting and managing new services and technologies, such as public cloud and the State's expanding security program.

- **Identity and Access Management -** The increasing use of the public cloud is driving a new workload for the Identity and Access Management team. Provisioning of accounts for applications using the public cloud is an entirely manual process. While Secure Colorado has implemented a tool to automate the provisioning of new accounts for on-premise solutions, there is not a similar tool in place to enable the same automation for the public cloud. This new workload is exacerbated by the service expansion experienced over the past two years. This has occurred in multiple areas of operation, such as 2-Factor Authentication, Identity Management Suite and Privileged Access Management. OIT developed three new platforms to enhance and improve security. This added a need for additional skills development and higher workload capacity to the team. The team is unable to maintain existing workload requirements and successfully execute these new security management platforms.

- **High Staff Turnover -** The security industry has dropped to a zero percent unemployment rate. Security staff are in such high demand that the state's existing compensation cannot compete and attract qualified individuals. OIT has completed an extensive analysis showing significant decrease in retention in the Security Operations and Colorado Information Security Office (CISO) groups, reflecting regional and national labor market trends. In a two-year period from March 2016 through today, OIT security units have experienced an approximate 65percent rate of turnover compared to an organization-wide rate of 16 percent turnover during the same period. While recruiting remains a challenge for cybersecurity positions, data indicates that retention represents the greater risk to the organization.

- **Lack of Documentation -** When the National Guard first arrived on-site as CDOT was being attacked by Ransomware, the first thing requested was documentation. Documentation is critical to provide the details of the standards, operations, and configuration of the environment. Unfortunately, much of the documentation needed did not exist or was outdated. Limited OIT staff resources are consistently engaged with the daily tasks of getting the work done and had not been able to keep up with documenting the work they were completing as it was taking place. When it comes to the work required by these staff, documentation often becomes the lower priority to delivering solutions on time. This has left a significant gap. OIT teams worked quickly to put together the critically needed documentation for the National Guard, however it delayed progress in mitigating the breach. While this documentation now exists for CDOT, it does not for the State's remaining departments.

Proposed Solution:

OIT requests $11,857,490 in Reappropriated Funds and 9.0 FTE in FY 2019-20, plus $5,063,636 and 9.0 FTE in FY 2020-21 and beyond to accelerate the implementation of security solutioning and protect the

state's infrastructure operations from security related attacks like data loss/data breach, malware/ransomware, phishing, credential reuse and other emerging vulnerabilities. This request seeks to expedite current security initiatives underway and address three gaps within the current Secure Colorado program that were made evident based on lessons learned from the attack on CDOT. The solution does not require any statutory changes. The solutions in total are summarized in the table below.

Problem Area	FY 2019-20	FY 2020-21 & Ongoing
Current Secure Colorado Initiatives	$4,128,196	$1,480,369
East-West Traffic	$3,332,653	$778,953
Public Cloud	$739,205	$696,878
Identity and Access Management	$1,890,901	$1,080,901
Security Impacts on OIT Infrastructure Teams	$1,766,535	$1,026,535
TOTAL	**$11,857,490**	**$5,063,636**

This request seeks to bring the State to a new, more granular level of Security hardening by placing controls, tools, and security support throughout all the technical teams within OIT (Network, Infrastructure, Access Control, etc.), by addressing East-West security needs, and by proactively putting support structures in place around the new public cloud solutions.

Expedite Current Secure Colorado Initiatives
● The first priority within this request is to expedite projects already underway. If these projects had been fully implemented at the time of the CDOT security incident, the incident would have been minimized and controlled within hours instead of days and weeks.

The projects highlighted in the table below are solutions that will tighten security access to resources on the network, such as 2-factor authentication that utilizes a "challenge and response" functionality at login, restricting access to network resources, filtering appropriate traffic at the agency firewalls and controlling endpoints from malicious behavior or unknown configuration changes. All of these functionalities utilize a logging and monitoring capability that enables OIT staff to quickly identify and isolate vulnerabilities, as well as comply with audit and remediation.

Description	FY 2019-20	FY 2020-21 & Ongoing
Logging Repository - Storage	$250,000	$90,000
Role Based Access Controls (RBAC)	$650,000	$0
Privileged Access Management	$607,350	$44,523
Two-Factor Authentication	$335,846	$155,846
Upgrade Agency Firewalls	$975,000	$45,000
Server & Deskside Endpoint Management	$1,145,000	$1,145,000
Staff Augmentation (Pro Services)	$165,000	$0
Total	**$4,128,196**	**$1,480,369**

○ **Logging Repository Storage -** Regular log collection is critical to understanding the nature of security incidents during an active investigation and post mortem analysis. Logs are also useful for establishing baselines, identifying operational trends and supporting the organization's internal investigations, including audit and forensic analysis. In some cases, an effective audit logging program can be the difference between a low impact security incident which is detected before covered data is stolen and a severe data breach where attackers download large volume of covered data over a prolonged period of time.

Keeping detailed records of security events allows administrators to look for patterns of events. It helps administrators to cross-index or correlate individual instances of certain problems. For instance, network administrators can look for instances of RAID (redundant array of independent disks) errors that may happen when a particular storage disk malfunctions. They can look at invalid logons or authentication records to figure out if somebody is trying to gain unauthorized access. They can look at server performance to see whether data queries are being handled effectively. They can also run certain kinds of security scans and analysis to catch vulnerabilities in the system.

○ **Role Based Access Controls (RBAC) -** Implementing RBAC allows OIT to control what end-users can do at both broad and granular levels. OIT can designate whether the user is an administrator, a specialist user, or an end-user, and align roles and access permissions with each employee's position in the organization. Permissions are allocated only with enough access as needed for employees to do their jobs. Managing and auditing network access is essential to information security. Access can and should be granted on a need-to-know basis. With thousands of State employees, security is more easily maintained by limiting unnecessary access to sensitive information based on each user's established role within the organization. Other advantages include:
  ● Reducing administrative work and IT support. With RBAC, OIT can reduce the need for paperwork and password changes when an employee is hired or changes their role.

Instead, OIT can use RBAC to add and switch roles quickly and implement them globally across operating systems, platforms and applications. It also reduces the potential for error when assigning user permissions. This reduction in time spent on administrative tasks is just one of several economic benefits of RBAC. RBAC also helps to more easily integrate third-party users into the network by giving them predefined roles.

- Maximizing operational efficiency. RBAC offers a streamlined approach that is logical in definition. Instead of trying to administer lower-level access control, all the roles can be aligned with the organizational structure of the business and users can do their jobs more efficiently and autonomously.

- Improving compliance. OIT and its customer Departments are subject to federal and state regulations. With an RBAC system in place, OIT can more easily meet statutory and regulatory requirements for privacy and confidentiality as OIT and executives have the ability to manage how data is being accessed and used. This is especially significant because the State routinely handles highly sensitive data, such as tax and healthcare information.

○ **Privileged Access Management (PAM) -** For a solution, OIT would like to Implement PAM toolsets, to restrict administrator access, and prevent reuse of administrator credentials and monitor sessions. OIT would first implement PAM internally across the organization. Building on that success, OIT would then work individually with agencies to see where a PAM is most appropriate within their organization.

○ **Two-Factor Authentication -** Two-factor authentication, also called multiple-factor or multiple-step verification, is an authentication mechanism to double check that eachidentity is legitimate. If this request is approved OIT would leverage two contractors that would implement the two-factor authentication protocol across all agencies. The work would be completed in one year and rolled out to agencies as a whole rather than individually.

○ **Upgrade Agency Firewalls -** This request would utilize contractors to upgrade outdated agency firewalls in large batches rather than the individual approach OIT currently uses as a result of the limited funding available. OIT anticipates clear outcomes because of this effort. Agencies can expect to see the following.
  - Reduced number of unauthorized access security events.
  - Reduced downtime from crash incidents.
  - Increased productivity is expected, as old firewalls do not run as efficiently as new firewalls.
  - Increased functionality within existing software applications.

○ **Server and Deskside Endpoint Management -** If this request is approved OIT will use the funding to increase the annual budget for this particular activity. An increase in funding allows OIT to have the management platform tool script and patch more endpoints and at a faster pace. It will also allow OIT to train staff and includes an incident response retainer. The anticipated outcome for this piece of this request is that all agency endpoints would be managed under one platform that deploy scripts, patches, and updates for proper security compliance and hardening. In short, agencies can expect to see the number of vulnerable endpoints to be drastically reduced. PAM offer the following advantages.

- Isolation/scoping of privileges - Users do not hold privileges on accounts that are also used for non-privileged tasks like checking email or browsing the Internet. Users need to request privileges. Requests are approved or denied based on identity management policies defined by a PAM administrator. Until a request is approved, privileged access is not available.
- Step-up and proof-up - These are new authentication and authorization challenges to help manage the lifecycle of separate administrative accounts. The user can request the elevation of an administrative account and that request goes through identity management policy workflows.
- Additional logging - Along with the built-in identity management policy workflows, there is additional logging for PAM that identifies the request, how it was authorized, and any events that occur after approval.
- Customizable workflow - The identity management policy workflows can be configured for different scenarios, and multiple workflows can be used, based on the parameters of the requesting user or requested roles.

  ○ **Staff Augmentation (Pro Services)** - OIT will be looking to augment the team with temporary resources to begin performing proactive assessments while the current team attempts to get caught-up with audit activities. Agencies can expect to get a personalized security assessment that have a proactive analysis. This proactive approach will enable agencies to plan better for future IT system upgrades and give them a much better sense of where their specific security risks are within the organization.

East West Traffic Security
- Resources requested in this Decision Item seek to address vulnerabilities present within the traffic going to public clouds, traffic between agency-to-agency applications, and traffic from network to servers. These initiatives are the "glue" that helps bind the Security infrastructure together. They cross the functional Infrastructure, Network, Access Control, and Security operations at OIT.

Description	FY 2019-20	FY 2020-21 & Ongoing
In-depth Network Upgrades at Agencies	$1,500,000	$0
Palo-Alto upgrades	$1,285,000	$231,300
1.0 FTE Network Engineer	$140,653	$140,653
Salary Adjustments	$407,000	$407,000
Total	**$3,332,653**	**$778,953**

  ○ **In-Depth Network Upgrades Agencies** - The new network architecture will provide the capability to secure network access, secure remote access, secure web access, and end-to-end network visibility in order to better protect the State networks and endpoints. This network solution provides protection and monitoring capabilities before, during, and after an attack.

That full-circle component to incident management will be new tools that are applied to networks and be accessible by agencies. Below is a flow chart visually lays out the security situation this solution will target.
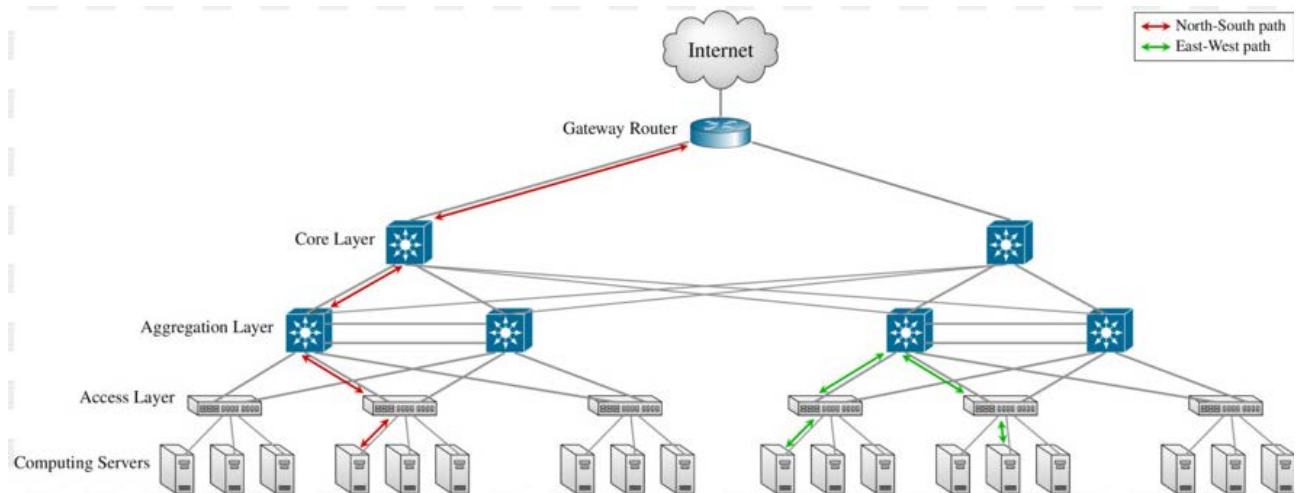
- ○ **Palo-Alto Upgrades -** Essentially this funding is for next generation firewalls that are able to automate many functions that staff would need to do to older outdated firewalls. The traditional firewall only provides filtering to allow or not allow traffic. These next-generation firewalls, can quickly create security rules that mirror business policy, are easy to maintain and adapt to the States dynamic environment. They reduce response times for agencies by using automated policy-based actions, and they can automate workflows via integration with administrative tools.

- ○ **Network Engineer -** The network engineer will ensure that our network is designed and engineered to meet our security requirements. They will work to ensure network segmentation (practice of splitting a computer **network** into subnetworks, each being a **network segment**. Advantages of such splitting are primarily for boosting performance and improving security.) The table below identifies the specific workload of the new FTE.

(Security Operations) Senior Network Engineer		
Workload Task Description	**Support Hours Required**	**Support (as a %)**
Analysis, design, configuration, implementation, management, monitoring and troubleshooting of enterprise network communications and security environments	**832**	**40%**
Staff Authority on network architecture, design and enterprise solutioning	**416**	**20%**
Partners with vendors to develop enterprise solutioning	**208**	**10%**
Partners with Security Operations to ensure security is built into architecture designs	**208**	**10%**
Auditing and testing	**208**	**10%**
Creates drawings to represent network topology, ensuring they are maintained and accurate.	**208**	**10%**
Total Hours Annually	**2,080**	**100%**
FTE Equivalent	**1.0**	**1.0**

- ○ **Salary Adjustments -** These salary adjustments will help retain critical OIT security staff already employed. This is particularly true within the security teams. Keeping OIT employees who are already well versed and trained with the States security operations is a solution to this growing retention issue.

Public Cloud
- ● The OIT Cloud Operations Team is a highly skilled group of individuals that focus their time and efforts on solutioning, implementation and sustainability of agency "cloud-destined" workloads. The creation of this team started in the second quarter of Fiscal Year 2017-18 as critical project needs were requested of OIT, from CDHS. OIT utilized existing resources and contractors to quickly establish an operational cloud framework and solution to meet CDHS's needs. Within 6 - 7 months, several agency cloud solutions were requested of OIT, from full support and deployment to partial support and deployment. OIT has tried to utilize existing staff to sustain the incoming cloud solution requests, but the required skills and time to support the cloud service and initiatives is too much for existing staff that have full time commitments to supporting existing day-to-day operational responsibilities. For example, OIT has pulled a senior network engineer from the network team to focus on cloud architecture full time, but this has left the network services team short a critical resource. As well, OIT has tried to utilize FTE from the existing Server Management and Security Operations' teams, which cannot be sustained due to their existing support responsibilities. OIT has been obtaining professional services to augment the teams so that it can meet cloud service demands.

The vision for this Cloud Team is to acquire additional skilled FTE to focus on Cloud architecture, engineering, security and technical support. Five additional FTE is what OIT estimates is enough to set a foundation for supporting operation needs for cloud solutioning. As the demand increases above this new workload, OIT will look at what existing resources could be transitioned to this team as current workloads retire or are refactored from on-premise infrastructure to cloud services.

Description	FY 2019-20	FY 2020-21 & Ongoing
2.0 FTE Cloud Architects	$267,189	$267,189
2.0 FTE Cloud Engineers	$267,189	$267,189
1.0 FTE Security Program Manager	$153,951	$153,951
Total	**$688,328**	**$688,328**

The tables below identify the specific workload of these new FTE that will establish the cloud operations team. By doing so, it will allow existing server management staff to resume regular ongoing operations they are currently responsible for.

(Infrastructure) Cloud Architect		
Workload Task Description	**Support Hours Required**	**Support (as a %)**
Design of new or modernized computing solutions in the Cloud, with an emphasis on security and integration requirements	**1040**	**25%**
Create Hybrid Cloud design and integration requirements across public and on-premise clouds	**1,248**	**30%**
Consultation and guidance for all Cloud solutioning	**832**	**20%**
Document operational sustainability practices	**416**	**10%**
Develop roles and responsibilities for operational support	**208**	**5%**
Develop standards, billing model and service definitions for Cloud Service offerings	**416**	**10%**
Total Hours Annually	**4,160**	**100%**
FTE Equivalent	**2.0**	**2.0**

(Infrastructure) Cloud Engineer		
Workload Task Description	**Support Hours Required**	**Support (as a %)**
Input, review and recommend on design	**416**	**10%**
Ensures security design and integration is implemented and maintained	**208**	**5%**
Drives standards	**416**	**10%**
Implementation of new or modernized environments	**1,872**	**45%**
Oversee, train and mentor projects to O&M.	**832**	**20%**
Ensures sustainability of cloud integration configurations	**208**	**5%**
Recommends, reviews and approves cloud enhancement	**208**	**5%**
Total Hours Annually	**4,160**	**100%**
FTE Equivalent	**2.0**	**2.0**

(Infrastructure) Security Program Manager		
Workload Task Description	**Support Hours Required**	**Support (as a %)**
Execute multi-faceted large scale and enterprise wide security projects	**1,040**	**50%**
Reporting Point of Contact for key security integrated agency projects	**312**	**15%**
Establish clear roles, responsibilities, lines of authority, communications, and accountability with contractors	**104**	**5%**
Cyber security and operations subject matter expert (SME) (Coordination)	**208**	**10%**
Supports Senior Management driving program improvements and execute daily operations	**208**	**10%**
Works with the team and delivers metrics and dashboard results utilized to drive performance	**208**	**10%**
Total Hours Annually	**2,080**	**100%**
FTE Equivalent	**1.0**	**1.0**

Identity and Access Management

- This solution takes aim at problems that are driven by new cloud related projects and east west traffic security issues. Identity and access management (IAM) is something that OIT has been providing at a service level for many years. The existing effort by this team manages access to a variety of platforms that span across the enterprise. New technologies such as the cloud have changed the dynamic of IAM. Having privileged or controlled access to cloud environments is critical in hardening security. In addition, OIT needs to maintain its existing commitments made by the IAM team and this solution considers that component.

Description	FY 2019-20	FY 2020-21 & Ongoing
2.0 FTE - Senior Analysts	$307,901	$307,901
Identity Analytics and Risk Intelligence	$361,000	$1,000
Data and Access Governance	$730,000	$370,000
Cloud Access Security Broker	$492,000	$402,000
Totals	**$1,890,901**	**$1,080,901**

The table below identifies the specific workload of the new FTE. The new staff will assist in access management relating to new cloud efforts. They will also manage the existing workload for the IAM team.

(Security Operations) Senior Identity & Access Management Administrators		
Workload Task Description	**Support Hours Required**	**Support (as a %)**
Manage identity directory services with additional emphasis on cloud identity and access management	**832**	**20%**
User access provisioning and de-provisioning with additional emphasis on cloud identity and access management	**832**	**20%**
Implementation and maintenance of IAM technology and related infrastructure	**624**	**15%**
Application Development Life Cycle (SDLC) security	**208**	**5%**
Auditing and testing, with additional emphasis on cloud identity and access management	**416**	**10%**
Identifying and handling exceptions	**208**	**5%**
Application integration, with additional emphasis on cloud identity and access management	**416**	**10%**
Federated identity	**208**	**5%**
Assess risks and develop plans based on a strategy and vision that considers changes in the internal and external environments	**416**	**10%**
Total Hours Annually	**4,160**	**100%**
FTE Equivalent	**2.0**	**2.0**

- ○ **Identity Analytics and Risk Intelligence -** In short, this solution will help focus existing and new resources on the higher threats first and enable more accurate resource allocation. It addresses new issues relating to access controls on new cloud projects coming into OIT. This is an innovative approach to tackle identity and access management issues relating to security. Implementing this solution will help OIT quickly analyze and interpret vast amounts of IT identity data enabling enhanced awareness of risk. With these insights, this team can make decisions about how to prioritize their efforts. In short, this solution will help focus existing and new resources on the higher threats and enable more accurate resource allocation.

- ○ **Data and Access Governance -** This solution ensures that sensitive, unstructured data is only accessible to approved users and addresses the concerns raised by the east west scenarios. Funding will be used to implement Data Governance to analyze, approve and fulfill unstructured data access to files, folders, shares across Microsoft NTFS file systems, Network Attached Storage (NAS) devices and SharePoint.

○ **Cloud Access Security Broker -** This tool is a solution that it is able to automate would otherwise be a manual laden processes. In addition, this solution helps govern the use of and protect sensitive state data in the cloud. As cloud computing continues to grow, OIT needs a way to deliver consistent security across multiple clouds and protect everyone using that data.

Security Impacts on OIT Infrastructure Teams
● This solution is aimed at bolstering the OIT infrastructure team. The Server Management team has been the most affected by the new cloud solution projects recently. Further coordination, training, tools, and expedited documentation will help get security projects implemented effectively but also increase OIT operational sustainability.

Description	FY 2019-20	FY 2020-21 & Ongoing
1.0 FTE Security Engineer	$126,535	$126,535
Technical Training and Development	$180,000	$0
Incident Response and Management Training	$105,000	$0
End-to-End Monitoring and Logging	$1,175,000	$900,000
Standards and Operational Sustainability Documentation	$180,000	$0
Totals	**$1,766,535**	**$1,026,535**

The table below identifies the specific workload of the new FTE. This position will be responsible for becoming a subject matter expert on Cloud security and OIT cloud operations. The addition mitigates the need to pull existing server management team away from regular ongoing operations.

(Security Operations) Security Engineer		
Workload Task Description	**Support Hours Required**	**Support (as a %)**
Subject matter expert in multiple domains, with a focus on Cloud Security Operations. Participates as a consultant to other service areas of OIT that require cloud security and operations awareness.	**208**	**10%**
Execute cloud security strategy and ensure practices align with security operations processes; identify new and emerging industry practices to bolster and improve cloud security integration with Security Operations.	**624**	**30%**

Perform analysis and identify areas of infrastructure that require re-engineering and design to improve overall security posture for Cloud operations and integration.	**312**	**15%**
Develop and document execution plans ensuring that cloud security work is in alignment with the project plan and security operations standards.	**208**	**10%**
Through coordination and collaboration, ensure operational continuity to reflect smooth transition of functional tasks and services across cloud and security operations. Focus on design, implementation, monitoring and remediation	**624**	**30%**
Creates cloud integration design drawings to represent network and cloud topology, ensuring they are maintained and accurate.	**104**	**5%**
Total Hours Annually	**2,080**	**100%**
FTE Equivalent	**1.0**	**1.0**

- ○ **Technical Training and Development -** Further training existing staff is a solution that enables a holistic approach so that IT infrastructure can further develop with evolving technologies. This funding will train two technical leads from each infrastructure service group to obtain security certifications.

- ○ **Incident Response and Management Training -** This funding helps bridge a gap that was made clear when the CDOT attack ensued. Additional training for existing staff on incident response and management training will help better prepare OIT for future attacks. In addition, this solution will increase security related communication across the enterprise.

- ○ **End-to-End Monitoring and Logging -** This funding will enable continuous end-to-end monitoring and logging to provide real-time visibility into the state's security posture between the user device and the application. This solution will help OIT identify all touch points between the end user device and the application so that infrastructure complexity can be reduced to improve our security posture. Simplifying infrastructure complexity is a foundational practice for improving overall security.

- ○ **Standards and Operational Sustainability Documentation -** This funding will bring on two contractors for one year. This solves a problem OIT experiences when its resources are stretched too thin for too long leading to many issues outlined throughout this document. These short-term resources will focus on capturing all related documentation for standards and operations sustainability across the State's enterprise infrastructure. This effort will enable quicker remediation of any incidents in the future.

Consequences if the Proposed Solution is not Approved
The CDOT ransomware incident is an actual example of what could occur and what is highly likely occur again, if OIT does not take action now to fix the issues highlighted during the CDOT event. In this particular real-life example, a state agency was down for an entire month with all systems offline and all employees unable to use any computing resources. This event cost the state of Colorado $1.7 million; however, it could have been much more costly, especially if more than one agency had been impacted, or if sensitive data had been stolen or compromised. The city of Atlanta is reported to have spent $17 million so far, and they are not done recovering from the same type of attack. Security improvements which are progressing too slowly, have proven to provide zero mitigation during an attack. Additionally, the use of a public cloud played a significant role in the CDOT incident, essentially opening a door into the CDOT environment that OIT was not aware of. This is an example of the state adopting a new technology, such as the use of a public cloud, with inherent security risks that can have real-world consequences, and for which the current staff is unaware, and unable to mitigate without additional knowledge and tools. The projects identified are those that will mitigate the exact methods which made the CDOT attack successful, and are those recommended by the FBI and the Department of Homeland Security to defend against current attacks for which they have issued recent warnings. If this budgetary request is not approved, the state is highly likely to continue to spend large amounts of money recovering from successful cyber-attacks.

Alternatives Considered
OIT considered expediting only the technology aspects of this request, but this would not accomplish fast-tracking the implementation of the security advancement roadmap. OIT also considered only adding additional resources to fast-track implementations, but this too leaves the roadmap short of technology. These two aspects of the request must be done jointly to ensure proper advancement in an expedited fashion. Cybersecurity risks and vulnerabilities will be exploited if the state does not expedite the Secure Colorado program and IT operational improvements.

Given the investments made in Secure Colorado and its successful roadmap toward increased security, the best alternative OIT has considered is to maintain the current course and pace at which Secure Colorado and IT operations implements security technologies and operational improvements. OIT recognizes that there are several different technologies to help mitigate security risk, but in identifying the best solutions for the state, IT operations must recognize enterprise wide standards to avoid costly duplicative or non-aligned expenditures.

Anticipated Outcomes:

Obviously the state cannot eliminate all security risks; however, the state has been given a view into current weaknesses within the state environment, which attackers are regularly targeting for exploitation. If those weaknesses were remediated it would help the state to be much more resilient, making the attacks much more difficult for the attacker, and helping the state to be more likely to discover and take action to defend and contain the attack before it was successful. The actions within this request will enable the state to be:
- Faster to detect attacks in progress and to defend itself,
- More secure from the beginning, not opening new weaknesses for attackers to exploit,
- More automated to make better use of the limited security resources, and
- More aware of weaknessesses in the adoption of emerging technologies, providing knowledge and visibility to fix weaknesses ahead of attackers discovering them.

If this request is approved, agencies can expect to see:
- Faster implementation of high-value security projects,
- Fewer security related audit findings,

- Faster ability to respond to agencies security requests (such as the request for monitoring and reporting on the inappropriate sharing of cloud data), and
- Faster detection and containment of security threats, resulting in less downtime for agency personnel.

Return on Investment
The return on this security investment is the avoidance of costly business downtime, agency impact and breach of critical / sensitive data. While Secure Colorado has a roadmap in place, the recent CDOT attack and industry cyber-attacks trending highlights the importance of fast tracking progress in securing the state's infrastructure and its IT operations.

Attached to this document are the FTE Template and two timelines, which lay out the details on current initiatives: Appendix 1, "Secure Colorado Projects and Funding" and Appendix 2, "Project Timeline and Teams."

This request is composed using both contractor hours, 9.0 FTE, and one-time costs of items such as hardware and software. This request will provide OIT Infrastructure and State Security Program with $11,857,490 in reappropriated funds in FY 2019-20 and 9.0 FTE, $5,063,636 in FY 2020-21 and 9.0 FTE ongoing. The ongoing costs are licensing/maintenance and FTE expenses.

Impact to Common Policy:
The costs for this request will be allocated to state agencies in common policy based on current the Department of Personnel and Administration Appropriations Report FY 2017-18. The table below outlines the specific allocation to each agency.

Department	FY 2019-20 Cost Allocation	FY 2020-21 Cost Allocation
Agriculture	$115,300	$49,238
Corrections	$2,471,321	$1,055,356
Education	$236,799	$101,123
Governor's Office	$55,161	$23,556
Healthcare Policy and Finance	$180,748	$77,187
Higher Education	$54,369	$23,218
Human Services	$1,952,949	$833,989
Judicial	$1,836,297	$784,174
Labor and Employment	$506,371	$216,241
Law	$186,947	$79,834
Local Affairs	$69,075	$29,498
Military and Veterans Affairs	$31,422	$13,418
Natural Resources	$577,094	$246,443
Personnel and Administration	$167,098	$71,358
Public Health and Environment	$526,055	$224,647
Public Safety	$712,408	$304,228
Regulatory Agencies	$226,512	$96,730
Revenue	$567,895	$242,515
State	$54,369	$23,218
Transportation	$1,316,275	$562,104
Treasurer	$13,024	$5,562
TOTALS	$ 11,857,490	$ 5,063,636

Appendix 1: Overview of Secure Colorado Funding and Projects

Request	Description	Fiscal Year 2014-15	Fiscal Year 2015-16	Fiscal Year 2016-17	Fiscal Year 2017-18	Fiscal Year 2018-19	Names of Tools Implemented	Status of Project
FY 2014-15 Secure Colorado								
	Core Security Infrastructure Upgrade Firewalls, Domain Name Servers, IP address and firewall rule sets management/audit tools, network forensics appliances and licenses, secure password management vaults	$1,100,000	$1,100,000	$1,100,000	$1,100,000	$1,100,000	McAfee Endpoint security toolset	Ongoing - McAfee consumes this full budget annually
	Application Firewalls/Monitoring Deploy application firewalls to protect internet-facing critical and essential web applications. Implement application monitoring system.	$750,000	$750,000	$750,000	$750,000	$750,000	Palo Alto firewalls, Veracode secure coding tool	Ongoing - most of these costs are annual subscription, licensing, and maintenance costs.
	Identity and Automated Access Control Software and hardware to identify all systems connecting to state networks as trusted or un-trusted and then apply rules to control data and network access	$1,500,000	$1,500,000	$1,500,000	$1,500,000	$1,500,000	2-Factor Authentication licenses (Ping Identity) Zix email encryption Role Based Access Control project resources, Identity and Access Management temporary resources Security Awareness Training Platform and Content for all state employees	Ongoing - most of these costs are annual subscription, licensing, and maintenance costs.
	Managed Security Services	$750,000	$750,000	$750,000	$750,000	$750,000	McAfee onsite resident engineers	These resources are required to implement and manage new McAfee functionality as available
FY 2016-17 Secure Colorado								
	(1) Security Event Detection and Response - Funds used to acquire advanced security event analytic capabily to ensure the team is able to determine the most critical events requiring action. Since the initial cost to include detection and analysis coverage for all departments is expected to exceed $1,000,000 the tools will be deployed incrementally over the course of FY 2017-19.			$1,000,000	$1,000,000	$1,000,000	Crowdstrike, Anomali	This project is implemented and ongoing; however, the annual cost of the tools (subscriptions) are $1,200,000
FY 2017-18 Secure Colorado								
	(1) Veteran's Internship Program (1.0) FTE - Funds will be used to create a Veteran's Internship program to enable the hiring and training of returning skilled military veterans. These staff will perform tasks such as firewall management, incident response, project implementation, and ongoing security maintenance to maintain the health of the incident response program.				$912,125	$750,000		This project is implemented and ongoing; these are annual reoccuring costs
	(2) **Governance, Risk and Compliance Tool (GRC)** (2.0 FTE) - Funds will be used to acquire a Governance, Risk and Compliance (GRC) tool. This will be utilized to document security controls to enable multiple types and sources of audits to leverage up-to-date documentation and evidence in the most efficient manner.				$476,506	$250,000	ZenGRC	This project is implemented and building functionality is ongoing; these are annual reoccuring costs
	(3) Regulatory Compliance Program (4.0 FTE) - Funds will enable OIT to add 4.0 highly skilled FTE to perform internal compliance assessments and vendor provider security compliance assessments for 1/3 of the Critical and Essential systems annually.				$453,013	$453,013		The team has been built; these costs are annual ongoing costs

Description						Product	Status
(4) Continuous Risk Assessment, Testing and Remediation of Threats and Vulnerabilities - Funds will enable the launch of a project to complete the remediation of the 1,000 overdue high-risk audit findings. This will include applying additional temporary and permanent resources to projects that have stalled, due to insufficient manpower. Additionally, with these funds OIT will obtain appropriate resources to fast-track the project to implement continuous **automated vulnerability scanning** of all Executive Branch Agency networks and servers. These funds will be utilized to build out the **Security Assessment, Threat, and Vulnerability Management program**. This program will ensure that systems are being assessed and that vulnerabilities are detected on a continuous ongoing basis and that remediation of high priority vulnerabilities is occurring in an appropriate timeframe to minimize risk. These funds will enable **3rd party security and risk assessments, internal risk assessments,** and provide temporary resources as needed to enable faster remediation of risks and vulnerabilities.				$250,000	$250,000	Vulnerability Scanning = Rapid7, Tenable Nessus	The Vulnerability Scanning project will complete in FY18. In FY19, we will use these funds to launch a series of projects to complete remediation associated with numerous audits.
(5) Identity Management - Funds will enable the deployment of an **enterprise identity management toolset** to cover executive branch agencies currently provisioned by the OIT Access Control team. Professional services and project management will be used to assist with implementation. This funding will enable implementation of a **multi-factor authentication framework** across executive branch agency platforms.				$1,000,000	$1,000,000	One Identity (Dell IDM)	The project will go-live in January 2019, for all state employees. OIT's Identity and Access Management also provisions identites for non-state employees (county workers) who access state systems. This will require an additional $900k for those workers.
	$4,100,000	$4,100,000	$5,100,000	$8,191,644	$7,803,013		

Projects Initiated Using Ongoing Base Building Funding

Project						Product	Status
Logging Repository						McAfee Nitro - McAfee resources onsite working on this are accounted for above; no additional money has been spent, yet.	Ongoing (with very little progress made). We need additional resources $250,000 hardware, and $400k consultants to complete this effort.
Role Based Access Controls	$90,000	$90,000	$90,000	$90,000		This is an enteprise wide configuration adjustment. No tools are being used.	Ongoing (with very little progress made). We need additional resources to complete this effort. (approximately $650k)
Privileged Access Management					$450,000	One Identity SafeGuard	Just started. We need at least $100k ongoing for maintenance
Two Factor Authentication				$155,000	$63,400	Ping Identity Licenses	Just beginning. We need another $278,000 to purchase licenses for state employees, and another $444,000 to purchase licenses for non-state (county workers accessing state systems). This is ongoing annual expense.
Agency Firewalls				$170,000	$400,000	Palo Alto	Just beginning. We need another $500,000 or more, to finish this effort.
Endpoint Management (Tanium for Servers)					$113,000	Tanium was purchased for server management. This will be an ongoing annual expense.	Implementing; these are annual reoccuring costs
Optiv					$88,000	Security Assessment is underway for CDOT	Almost complete

Appendix 2 - Project Timeline and Teams

Key Activities		Timeline																			
		FY16				FY17				FY18				FY19				FY20			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Identity & Access Mgmt	Identity Provisioning							Implementing													
	Password Mgmt																				
	2-Factor Authentication																				
	Priviledged Access Mgmt																				
	Cloud Access Security														Not Started						
Security Operations	TVMP																				
	End-Point Protection																				
	Next Gen Firewall																				
	End-Point Behavior									Crowdstrike - Completed											
	SEIM																				
	Veteran's Transition									Ongoing											
Systems Infrastructure	Backup Colorado	Completed																			
	Virtual Security									Lakewood Hosting - Completed								eFort Hosting - Not Started			
	OS Hardening							Completed													
	Cloud Operations									Development and Security								Security and Sustainability - Not Started			
	End-Point Mgmt																	Not Started			
		Discovered During CDOT Incident																			
Network Services	End-Point Mgmt																	Not Started			
	Network Segmentation																	Not Started			
		Secure Colorado																			
CISO	End-Point Risk Score					Implemented					Optimized										
	Risk & Compliance																				
	Policy & Governance FY15																				
	Security Architecture FY15																				
	Perimeter Risk Score													Implemented				Optimize - Not Started			

Schedule 13

Department of Governor's Office

Funding Request for The FY 2019-20 Budget Cycle

Request Title

R-01 (CEO) EV Grant Fund Spending Authority Increase

Dept. Approval By: _(signature)_

OSPB Approval By: _(signature)_

_____ Supplemental FY 2018-19

_____ Budget Amendment FY 2019-20

__X__ Change Request FY 2019-20

Summary Information	Fund	FY 2018-19 Initial Appropriation	FY 2018-19 Supplemental Request	FY 2019-20 Base Request	FY 2019-20 Change Request	FY 2020-21 Continuation
Total of All Line Items Impacted by Change Request	Total	$313,000	$0	$313,000	$723,204	$968,980
	FTE	0.0	0.0	0.0	0.0	0.0
	GF	$0	$0	$0	$0	$0
	CF	$313,000	$0	$313,000	$723,204	$968,980
	RF	$0	$0	$0	$0	$0
	FF	$0	$0	$0	$0	$0

Line Item Information	Fund	FY 2018-19 Initial Appropriation	FY 2018-19 Supplemental Request	FY 2019-20 Base Request	FY 2019-20 Change Request	FY 2020-21 Continuation
01. Office of the Governor, (C) Colorado Energy Office, (1) Colorado Energy Office - Electric Vehicle Charging Station Grants	Total	$313,000	$0	$313,000	$723,204	$968,980
	FTE	0.0	0.0	0.0	0.0	0.0
	GF	$0	$0	$0	$0	$0
	CF	$313,000	$0	$313,000	$723,204	$968,980
	RF	$0	$0	$0	$0	$0
	FF	$0	$0	$0	$0	$0

Auxiliary Data

Requires Legislation? NO

Type of Request? Department of Governor's Office Prioritized Request

Interagency Approval or Related Schedule 13s: No Other Agency Impact

Cost and FTE
● The Colorado Energy Office (CEO) requests a cash fund spending authority increase of $723,204 for the Electric Vehicle Grant Fund ("EV Grant Fund") to align with fee revenue projections through FY 2020-21. This request will allow the Office to spend funds that will be collected next year. This is an increase of 231 percent.

Current Program
● CEO uses the funding from the EV Fund for the Charge Ahead Colorado program which provides competitive grants for the installation of charging stations across the state.
● Electric Vehicle (EV) owners pay an additional $50 vehicle registration fee (42-3-304. C.R.S.), $30 of which goes to the Highway Users Trust Fund in lieu of gas taxes. The remaining $20 provides revenue for the EV Fund and fulfils CEO's statutory requirements in 24-38.5-103 C.R.S. to provide grants for charging stations.
● A competitive grant process takes place three times per year and awards are made to successful public and private applicants. Grants are made for installation at workplaces, parking lots and garages, multi-family dwellings, and municipal facilities. Grants cover up to 80 percent of project costs up to a cap based on charging station type. To date, the EV Fund has provided 73 grants and demand for the program continues to grow. In the most recent funding round which closed in June of 2018, CEO received applications for 39 stations totaling $573,000 in funding requests.

Problem or Opportunity
● Current spending authority of $313,000 allows CEO to spend revenue associated with 15,650 registrations annually. CEO anticipates meeting that level of vehicle registrations in FY 2018-19.
● Demand for grants for charging infrastructure is growing. In FY 2017-2018, CEO received $793,455 in grant funding applications through Charge Ahead Colorado, and the EV Fund has provided 73 grants and demand for the program continues to grow each year.
● The lack of EV charging infrastructure is one of primary barriers to greater adoption of EVs. Increasing the number of charging stations in Colorado helps give consumers confidence in the decision to purchase an EV.

Consequences of Problem
● The lack of EV charging infrastructure is one of the primary barriers to greater adoption of EVs. Increasing the number of charging stations in Colorado helps give consumers confidence in the decision to purchase an EV.
● Providing CEO has sufficient spending authority for cash fund fee revenue ensures customers paying the fee receive the benefit of access to charging infrastructure. Leaving these dollars unspent does not provide a benefit to the drivers contributing annual registration fees.

Proposed Solution
● CEO proposes a cash fund spending authority increase of $723,204 (to $1,036,204) for the EV Fund.

Department Priority: R-01
Request Detail: EV Grant Fund Spending Authority Increase

Summary of Incremental Funding Change for FY 2019-20	Total Funds	General Fund
EV Grant Fund Spending Authority Increase	$723,204	$0

Problem or Opportunity:

- The Colorado Energy Office (CEO) is projected to need additional spending authority for the Electric Vehicle Grant Fund (EV Fund) following FY 2018-19. Electric Vehicle (EV) owners pay an additional $50 vehicle registration fee (42-3-304. C.R.S.), $30 of which goes to the Highway Users Trust Fund (43-4-201 C.R.S.) in lieu of gas taxes. The remaining $20 provides revenue for the EV Fund and fulfils CEO's statutory requirements in 24-38.5-103 C.R.S. to provide grants for charging stations.

- As EV adoption grows, the need for charging infrastructure will also increase. CEO uses the funding from the EV Fund for the Charge Ahead Colorado program, which provides competitive grants for the installation of charging stations across the state through three funding rounds each year.
    - Charge Ahead Colorado currently offers grants for up to 80 percent of the cost of a charging station up to the following set maximums: Level 2, Dual Port Station: $9,000 and Level 3, Multiple Connection Standard Station: $30,000.
    - To date, the EV Fund provided 73 grants and demand for the program continues to grow each year. In FY 2017-18, CEO received $793,455 in funding requests through Charge Ahead Colorado. In the first grant round for FY 2018-2019, CEO received applications for $573,000, 72 percent of what was received in 3 rounds the previous year.

- Current spending authority of $313,000 cash funds allows CEO to spend revenue associated with 15,650 registrations annually. CEO anticipates exceeding that level of vehicle registrations in FY 2018-19.

- In 2009, S.B.09-075 created the EV Fund for CEO to provide grants to local governments to install EV charging stations. At the time, no state dollars were appropriated and CEO was limited to funding stations out of gifts, grants, donations, or other existing funds. In 2013, the General Assembly provided a funding source through H.B.13-1110, which created a $50 annual EV registration fee. In 2013 and 2014, S.B.13-126 and S.B.14-028 expanded eligible recipients of the EV Fund beyond local governments. CEO received $313,000 in spending authority for the fund beginning in FY 2015-16.

- The lack of EV charging infrastructure is one of the primary barriers to greater adoption of EVs. Increasing the number of charging stations in Colorado helps give consumers confidence in the decision to purchase an EV. Providing CEO with sufficient cash fund spending authority for the collected fee revenue ensures customers paying the fee receive the benefit of access to charging infrastructure.

Proposed Solution:

- CEO requests to increase spending authority for the EV Fund by $723,204 to $1,036,204, which is projected to provide be sufficient cap room through FY 2019-20 to ensure CEO is able to fully use of the fee revenue contributed by EV drivers to benefit those customers and remain responsive to the growing EV market.
- Beyond the issue of just exceeding the current spending authority cap in FY 2018-19, EV sales are forecasted to have strong growth (see Figures 1-3 below).
    - o There was a 53 percent increase in EV sales in Colorado (4,156 in 2017 up from 2,711 in 2016)
        - ▪ This represents 2 percent of new light duty vehicle sales for 2017, up from 1.2 percent in 2016.
    - o As of May 2018, 14,468 vehicles have been sold in Colorado.
    - o Based on U.S. Energy Information Administration (EIA) EV market projections and in line with CEO's strategies to drive uptake of EVs, CEO's Strategic Policy Initiative #1 includes increasing the number of *new* EVs sold on an annual basis from 4,156 in FY 2017-18 to 19,000 by FY2020-21.
    - o Colorado is trending between EIA's low and medium growth scenarios.
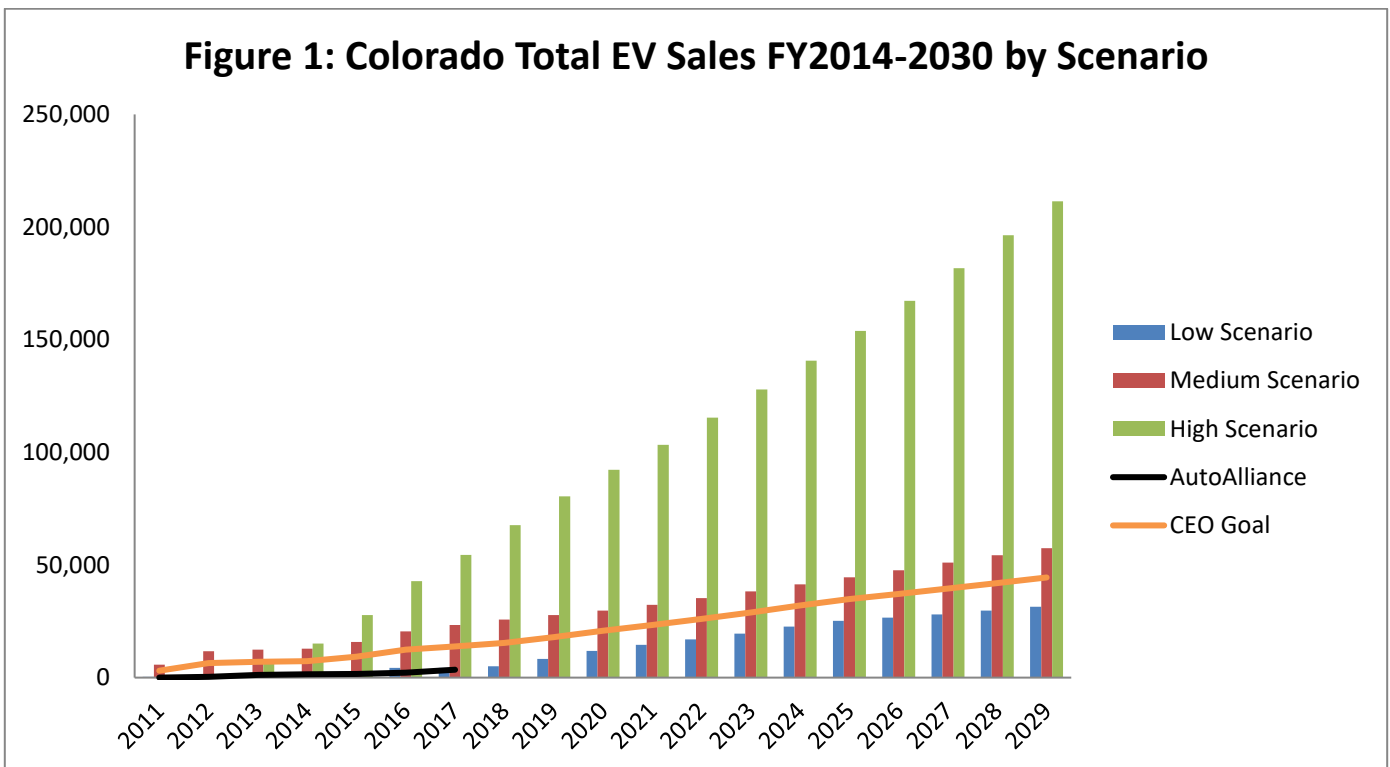

Figure 1: Colorado Total EV Sales FY2014-2030 by Scenario
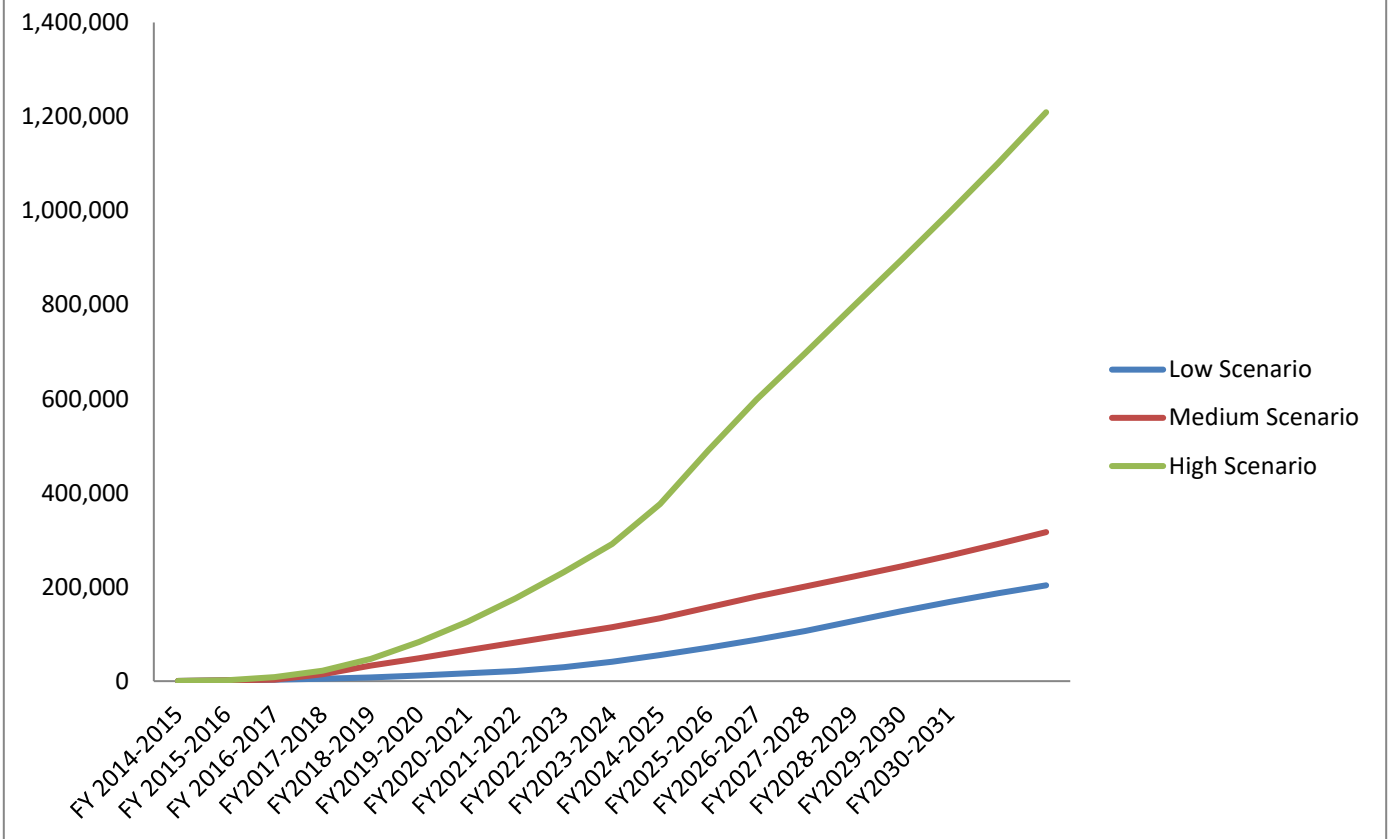
Figure 2: Colorado EV Stock Growth to 2030 by Scenario

Legend:
- Low Scenario
- Medium Scenario
- High Scenario

X-axis: FY 2014-2015, FY 2015-2016, FY 2016-2017, FY2017-2018, FY2018-2019, FY2019-2020, FY2020-2021, FY2021-2022, FY2022-2023, FY2023-2024, FY2024-2025, FY2025-2026, FY2026-2027, FY2027-2028, FY2028-2029, FY2029-2030, FY2030-2031

Y-axis: 0, 200,000, 400,000, 600,000, 800,000, 1,000,000, 1,200,000, 1,400,000

Figure 3: 3-Year Estimates of EV Market Share

Bar chart showing Non-EV Stock Calculated and CEO EV Stock Goal across fiscal years:

Fiscal Year	Non-EV Stock Calculated	CEO EV Stock Goal
FY 2014-2015	100.0%	0.0%
FY2018-2019	99.9%	0.1%
FY2022-2023	99.9%	0.1%
FY2026-2027	99.7%	0.3%
FY2030-2031	99.3%	0.7%

Anticipated Outcomes:

- Increasing spending authority to $1,036,204 aligns spending authority with fee revenue projections through FY 2020-21 and support charging infrastructure to help spur that adoption rate. As a result, this would also allow CEO to meet annual operational measures related to charging installation.
- Increasing spending authority ensures that CEO can continue to meet the demands of the growing EV market.

Assumptions and Calculations:

Figure 5 contains EV Fund revenue projection scenarios. CEO's revenue projection is based on several market growth scenarios, including projections from the U.S. Energy Information Administration (EIA).

Figure 5: Revenue Projections	Low EIA Projection - EV Stock	Medium EIA Projection - EV Stock	High EIA Projection - EV Stock	Low EIA Projection - EV Fund	Medium EIA Projection - EV Fund	High EIA Projection - EV Fund	CEO EV Stock Goal – Revenue Projection
FY 2014-2015	3,241	3,238	8,477	$64,810	$64,760	$169,531	$ 93,960*
FY 2015-2016	5,009	14,848	22,449	$100,178	$296,954	$448,975	$138,540*
FY 2016-2017	7,801	33,168	47,112	$156,022	$663,363	$ 942,236	$208,740*
FY2017-2018	12,178	48,997	83,390	$243,554	$979,934	$1,667,804	$288,400*
FY2018-2019	16,478	65,495	126,254	$329,554	$1,309,900	$2,525,076	$819,727
FY2019-2020	21,518	82,103	176,206	$430,355	$1,642,054	$3,524,113	**$1,036,204**
FY2020-2021	29,758	98,356	232,000	$595,165	$1,967,116	$4,639,998	$1,281,141
FY2021-2022	41,548	114,359	291,709	$830,957	$2,287,179	$5,834,186	$1,559,068

*actual values

Supplemental, 1331 Supplemental or Budget Amendment Criteria:

Not Applicable