Schedule 13

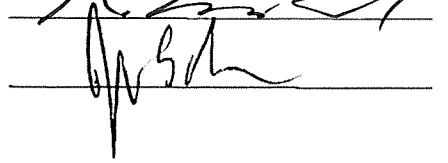
Department of Public Health and Environment

Funding Request for The FY 2019-20 Budget Cycle

Request Title

R-01 Family Planning Purchase of Service Increase

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 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**	**$7,323,361**	**$0**	**$7,323,361**	**$1,025,000**	**$1,025,000**
	FTE	0.0	0.0	0.0	0.0	0.0
	GF	$3,734,461	$0	$3,734,461	$1,025,000	$1,025,000
	CF	$0	$0	$0	$0	$0
	RF	$0	$0	$0	$0	$0
	FF	$3,588,900	$0	$3,588,900	$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
09. Prevention Services Division, (D) Family and Community Health, (1) Women's Health - Family Planning Purchase Of Services	**Total**	**$7,323,361**	**$0**	**$7,323,361**	**$1,025,000**	**$1,025,000**
	FTE	0.0	0.0	0.0	0.0	0.0
	GF	$3,734,461	$0	$3,734,461	$1,025,000	$1,025,000
	CF	$0	$0	$0	$0	$0
	RF	$0	$0	$0	$0	$0
	FF	$3,588,900	$0	$3,588,900	$0	$0

Auxiliary Data

Requires Legislation?	NO		
Type of Request?	Department of Public Health and Environment Prioritized Request	**Interagency Approval or Related Schedule 13s:**	No Other Agency Impact

Cost and FTE

- The Department requests $1,025,000 General Fund in FY 2019-20 and beyond to expand the Family Planning Program (FPP). This request represents an increase of 27 percent over the FY 2018-19 General Fund appropriation for the Family Planning Purchase of Services line.

Current Program c

- The Department has received Federal Title X funds since 1970 to provide comprehensive family planning services to all individuals who want and need them, with priority for low-income clients. A network of 75 family planning clinics across the state, operated and overseen by local public health agencies and the Department, provide these services. The program serves between 50,000-55,000 people annually.

Problem or Opportunity

- The primary focus of the FPP is to reduce unintended pregnancies. Such pregnancies can be associated with poor health, and poor economic and social outcomes.
- Private funding from 2008-2016 allowed CDPHE to leverage existing federal and state funding to train health care providers, support local clinics, and provide long-acting reversible contraceptives to women at low or no cost. In 2016, the Colorado General Assembly increased its allocation to the FPP to continue this successful practice; however, there are still thousands of people without insurance coverage in need of a reproductive health care safety net.

Consequences of Problem

- CDPHE estimates that 48,457 Colorado women are still in need of subsidized contraceptive services, increasing the likelihood of unintended pregnancies.
- Unintended pregnancies can lead to social, economic and public health consequences.

Proposed Solution

- The Department will leverage the requested $1,025,000 with the current FPP infrastructure (made up of private insurance, Medicaid, federal grants, local contributions, and other funding sources) to continue providing increased access to long-acting reversible contraception methods, thereby reducing the teen birth rate, the induced termination rate, second order births, and the rate of unintended pregnancies.
- Current estimates show state, local, federal, Medicaid, and private insurance funds allocated to the FPP avert approximately 9,480 unintended births per year. Using the Guttmacher cost calculator, CDPHE anticipates it will avert an additional 550 unintended births and serve 2,537 additional clients.

COLORADO
Department of Public Health and Environment

John W. Hickenlooper
Governor
Karin McGowan
Interim Executive Director

FY 2019-20 Funding Request | November 1, 2018

Department Priority: R-01
Request Detail: Family Planning Purchase of Services Increase

Summary of Incremental Funding Change for FY 2019-20	Total Funds	General Fund
Family Planning Purchase of Services Increase	$1,025,000	$1,025,000

Problem or Opportunity:

The Department of Public Health and Environment requests $1,025,000 in Fiscal Year 2019-20 and on-going General Fund to expand the Family Planning Program and maintain gains in reducing unintended pregnancies.

Since 1970, the Colorado Department of Public Health and Environment has implemented the Family Planning Program (FPP) for the state of Colorado with a mix of state, federal, local, and private funding. A primary focus of the FPP is to reduce the frequency and rate of unintended pregnancies. The Department's FPP serves men and women throughout the state with a variety of contraceptive-related services such as education, counseling, and provision of contraceptive methods. Unintended pregnancy occurs when a woman becomes pregnant sooner than desired or when the pregnancy is not desired at any time.

Research shows unintended pregnancies are linked to late entry into prenatal care, birth defects, low birth weight, induced termination, maternal depression, reduced rates of breastfeeding, and increased risk of physical violence during pregnancy. Children born as a result of an unintended pregnancy are more likely to experience child abuse, poor mental and physical health, lower educational attainment, and behavioral problems. For teen mothers who reside with their parents, 34 percent live below the poverty line, while the poverty rate for teen mothers living on their own is 63 percent. Nearly two-thirds of teen mothers receive some type of public assistance during the first year of their child's life; this includes Medicaid, food stamps, and other assistance (Power to Decide, 2018)[1]. In 2011, nearly half (45% or 2.8 million) of the 6.1 million pregnancies in the United States were unintended (Guttmacher Institute, 2016)[2]. Teen mothers:

- Are less likely to graduate from high school or attain a General Educational Development (GED) by the time they reach age 30;

[1] Power to Decide. (2018, January). National Cost Savings Fact Sheet. Retrieved from Power to Decide: https://powertodecide.org/sites/default/files/media/savings-fact-sheet-national.pdf

[2] Guttmacher Institute. (2016, September). Unintended Pregnancy in the United States. Retrieved from https://www.guttmacher.org/fact-sheet/unintended-pregnancy-united-states.

- Earn an average of approximately $3,500 less per year, when compared with those who delay childbearing until their 20s;
- Receive nearly twice as much federal aid for nearly twice as long. (Hoffman, S., 2006)[3].

Given the high costs (personal and societal) associated with unintended pregnancies, it is not surprising that the public health benefits of family planning programs have been well documented via numerous scientific studies.

In 2017, a University of Colorado team of economists concluded that between half and two-thirds of the observed decline of 5,020 births among women aged 15-24 between 2010 and 2014 (in Colorado) could be directly attributed to the CDPHE's FPP. Using two different methodologies, Medicaid costs associated with averted births were estimated between $52.3 and $53.7 million. Temporary Assistance to Needy Families (TANF) costs avoided were between $5.8 and $7.0 million, Colorado Food Assistance Program/Supplemental Nutrition Assistance Program (SNAP) avoided costs were $5.2 to $5.5 million and Women, Infants, and Children (WIC) Program avoided costs were $2.7 to $3.4 million. The total avoided cost for the four entitlement programs was between $66.1 and $69.6 million.

Program	**Costs (in millions)**
Medicaid	$52.3 to $53.7
TANF	$5.8 to $7.0
SNAP	$5.2 to $5.5
WIC	$2.7 to $3.6
Total	**$66.1 to $69.6**

In 2008, the Department received funding that brought the FPP to a new level of performance and demonstrated the high return on investment of FPP dollars. This financial support complemented the FPP's scope of work with a focus on offering the most effective, long-acting, reversible contraceptives (LARC). The additional funding allowed the FPP to make LARC (a more effective and expensive form of contraceptives) accessible to thousands of women who would have otherwise gone with a lower cost and less effective option. It also provided for training, clinical efficiencies, and improved clinical business practices (such as billing and coding, insurance contracting, reimbursement, and electronic medical record support).

The influx of funding substantiated studies indicating a strong cost benefit analysis for LARC. As Table 1 demonstrates, the birth rate for young women ages 15 to 19 was reduced by more than half, falling 59 percent between 2009 and 2017. The rate dropped from 37.5 births per 1,000 teens in 2009 to 15.5 in 2017. Table 1 demonstrates these results.

[3] Saul D. Hoffman, P. (2006, October). By the Numbers: The Public Costs of Teen Childbearing. Washington , DC.

Table 1: Teen (Ages 15-19) Birth Data

Other, notable results in Colorado:

- A similar downward trend was seen among women ages 20 to 24, with birth rates dropping 35 percent between 2009 and 2017.
- The number of repeat teen births (teens < 18 years giving birth for the second or third time, etc.) dropped by 85 percent between 2009 and 2017.
- The abortion rate among women ages 15 to 19 fell by 60 percent and among women ages 20 to 24 by 41 percent between 2009 and 2017.
- The average age of first birth increased by 1.7 years among all women between 2009 and 2017, from 25.9 years to 27.6 years.

By investing additional General Fund dollars into the program, the Department and related state agencies can continue to avoid significant costs to Medicaid, and maintain a decrease in the abortion rate, teen birth rate, and second order births.

While the Colorado economy is strong, there are still lower-income families struggling with basic needs. These families often face food insecurity and inadequate housing, but many also face challenges with insurance and insurance enrollment issues (including gaps between jobs or other life changes, prohibitive cost for low income citizens or those in high cost areas, insurance doesn't always cover the best method for a particular patient, or religious exemptions which allow insurance to not provide certain services).

According to the Department's "Women without Coverage" analysis, there are still thousands of people without insurance coverage in need of a reproductive health care safety net. The Department calculated the 2017 number of Colorado women without coverage for family planning services using data from the 2017 Colorado Health Access Survey. This calculation uses the total Colorado female population in 2017 and determines the percent in need of family planning services (defined as sexually active women who are able to bear children, who are not pregnant and who do not desire a pregnancy). The number covered by Medicaid, private insurance, and those who remain uninsured are estimated. A conservative estimate is also made of the number of women with insurance who do not use their insurance because they fear a breach of confidentiality. Table 2 below shows the calculations.

Table 2: Colorado Women without Coverage for Family Planning, 2017

Population				**Insured**			**Women without Coverage**		
Age and Poverty Groups	Total Female Population, 2017	Percentage in Need of Family Planning*	Number in Need of Family Planning	Total Covered by Insurance	Covered by Medicaid	Covered by Non-Medicaid Insurance	Uninsured	Estimated Number Covered But Not Uninsured Using Insurance**	**Total Uninsured plus Women Covered But Not Using Insurance**
Ages 13-19	261,632	29%	75,900	73,200	13,000	60,200	2,700	3,800	6,500
Ages 20-44	950,301	68%	646,200	591,000	118,100	472,900	55,300	30,800	86,100
Below 139% FPL	226,228	65%	147,000	134,000	65,300	68,700	13,100	7,000	20,100
139% to 250% FPL	148,246	61%	90,400	76,700	21,000	55,700	13,700	4,000	17,700
Above 250% FPL	575,827	71%	408,800	380,300	31,800	348,500	28,500	19,800	48,300
Total Ages 13-44	1,211,933	60%	722,100	664,200	131,100	533,100	58,000	34,600	**92,600**

*Guttmacher 2012 estimates. Sexually active women who are able to bear children who are not pregnant and who do not desire a pregnancy.

**An estimated 5.2 percent of women fall in this category. The percentage is based on a provider survey done in June 2015 by the Colorado Department of Public Health and Environment. The primary reason for not using insurance is concern for breach of confidentiality.

This calculation arrived at 92,600 females without family planning coverage in Colorado. The need for subsidized family planning services is clear. In 2017 alone, the Department's FPP program served 44,143 women, just under half of all women in need. That is 48,457 women are still in need of subsidized services.

In 2017, 2,853 of the 7,474 men served through the Department's FPP were 24-years or younger, demonstrating that younger men, oftentimes still school-aged, are in need and seeking sliding fee scale family planning services. Moreover, 2016 Small Area Health Insurance Estimates (SAHIE) show that 16.6 percent of males, ages 16-64 years and <200 percent of the Federal Poverty Level are uninsured in Colorado, indicating the need for a health services safety-net for men.

Coloradans living in rural and frontier parts of the state face significant barriers to accessing healthcare. Eleven counties in Colorado do not have a hospital, 22 counties do not have a licensed psychologist, and over half of all rural counties do not have an active licensed addiction counselor. Disparities across the spectrum of care lead to poor health outcomes and higher rates of premature deaths (Boone, 2018)[4].

Disparities in income and seasonal work can lead to gaps in insurance for rural Coloradans. Households in rural Colorado earn about $48,000 annually, $10,000 less than their urban counterparts (Caldwell, 2016)[5]. Affordability is an issue as rural residents pay the state's highest rates for health insurance. One third of the state's agricultural jobs are located in rural Colorado, many of these jobs tend to be seasonal. Given continued barriers to insurance and struggles to provide healthcare in rural and frontier parts of the state, the FPP clinics continue to function as a significant stop-gap for those without anywhere else to turn for services. State and federal funding allocated to rural clinics provides services to individuals without insurance who cannot pay out of pocket for services.

The Department currently contracts with FPP clinics in six (6) frontier counties and nine (9) rural counties. In 2017, the FPP allocated $1,143,047 in program funds to contractors that served roughly 9,000 men and women.

In the past two (2) years, the FPP recruited two (2) new Federally Qualified Health Center partners to serve as providers: High Plains Health Center in Lamar, and Mountain Family Health Centers in Eagle County. Both organizations have the capacity to serve more men and women with family planning services; however, with flat FPP funding, expansion of the FPP is not feasible.

Proposed Solution:

One of the most successful and proven solutions to the unintended pregnancy rate for uninsured citizens is to ensure the availability of quality and affordable family planning services, including the most effective contraceptive methods, to the men and women that want to access them.

The average cost of providing family planning services in Colorado is $404 a visit. See appendix A for detailed calculations. This average is calculated using the Guttmacher Institute's cost savings estimate calculator (Health Benefits and Cost Savings of Publicly Funded Family Planning Tool) to generate estimates for individual programs and providers located at http://www.guttmacher.org/broader-benefits/index.html. Colorado has 48,457 women still in need of subsidized contraceptive services, it is unrealistic to request funds to cover the entire population. Therefore, the Department requests an increase of approximately 25

[4] Boone, E. (2018, August 17). Colorado Health Institute. Retrieved from https://www.coloradohealthinstitute.org/blog/blazing-trail-colorado-rural-health-strategy-medicaid-and-medicare.

[5] Caldwell, A. (2016, December 14). Colorado Health Institute. Retrieved from https://www.coloradohealthinstitute.org/blog/hot-press-rural-health-innovating-out-necessity.

percent to its Family Planning Purchase of Services and Family Planning Program Administration, General Fund allocation (currently $4,093,836). The requested amount is $1,025,000. This funding will help to serve an estimated 2,537 people in need each year.

This $1,025,000 request is to increase the existing Family Planning Purchase of Services General Fund appropriation to enable the FPP to continue current successful reproductive health care, including a focus in rural and frontier parts of the state, serving uninsured Coloradans, providing access to effective contraceptives, provider training, education and outreach, and additional evaluation opportunities. By investing additional General Fund dollars into the program, the Department and related state agencies can continue to avoid significant costs to Medicaid, and maintain decreases in abortion rates, teen birth rates, and second order births.

The Department has made family planning a priority programmatically, legislatively, and through the media. The Department's past investments in these solutions come with a proven record of success supported by clear and compelling data and an undeniable impact. This request directly ties to current outcome measures within the Department's Winnable Battles:
https://www.colorado.gov/pacific/cdphe/colorados10winnablebattles.

Anticipated Outcomes:

The requested $1,025,000 will be leveraged by the current FPP infrastructure and augment private insurance, Medicaid, federal grants, local contributions and others to assist Coloradans in need of services. A primary focus will be to continue the recent increased access to long-acting reversible contraception methods, thereby reducing teen birth rates, induced termination rates, second order births, and unintended pregnancy rates. Health data suggests increasing the availability of expanded family planning methods (with a focus on long-acting reversible contraceptives) and removing cost barriers has a significant impact on population health and other social welfare programs.

Moving forward, the FPP believes it may see some more (modest) progress, but most of these data points will have plateaued and will remain steady. The Department's FPP will continue to track and trend the data for the following:

- Birth /fertility rate
- Induced termination /abortion rate
- Second order births
- Unintended pregnancy rate
- Contraceptive use in Title X population

Assumptions and Calculations:

The program anticipates the 25 percent increase, or $1,025,000, will be allocated to the family planning clinic network throughout the state.

Current estimates show that state, local, federal, Medicaid and private insurance funds allocated to the FPP avert approximately 9,480 unintended births per year. Using the Guttmacher cost calculator, the Department anticipates an additional 550 unintended births will be averted as a result of the $1,025,000 invested into the FPP. The Department has based projections on the Guttmacher Calculator for Health Benefits and Cost Savings of Publicly Funded Family Planning **(**see Appendix A for Colorado calculator). This tool enables users to estimate the impact of publicly funded family planning services by state or service area, using data entered by the user about the number of contraceptive clients served, the number of specified tests performed,

and the state (location) services were provided. The Department used data from its 2017 Family Planning Annual Report to populate the cells (see Appendix A for the Colorado calculator).

Based on the assumption of $404 per client, it is estimated that 2,537 clients will be served with the requested $1,025,000.

DATA CENTER

Build, download and share custom tables, graphs and maps utilizing data on key sexual and reproductive health indicators from the Guttmacher Institute and other trusted sources.

Health Benefits and Cost Savings of Publicly Funded Family Planning

A Tool to Generate Estimates for Individual Programs and Providers

Select a state and enter one or more inputs

State where service is provided:	Colorado
44,143	# of unduplicated female contraceptive clients served
23,039	# of chlamydia tests provided to female clients
6,587	# of chlamydia tests provided to male clients
26,877	# of gonorrhea tests provided to female clients
7,427	# of gonorrhea tests provided to male clients
7,662	# of HIV tests provided to female clients
8,845	# of HIV tests provided to male clients
-	# of single HPV vaccination injections provided to female clients
8,039	# of Pap and HPV tests provided to female clients

# of unintended pregnancies prevented	9,480
# of unplanned births prevented	4,470
# of abortions prevented	3,200
# of miscarriages following unintended pregnancies	1,810
# of unplanned births after short (<18 months) interpregnancy intervals prevented	1,160
# of unplanned preterm/low-birth-weight births prevented	670
Maternal and birth-related gross costs saved from contraceptive services provided	$49,146,320
Miscarriage and ectopic pregnancy gross costs saved	$1,626,950
Averted abortions gross costs saved	0
# of chlamydia infections prevented	630
# of gonorrhea infections prevented	60
# of PID cases prevented	80
# of ectopic pregnancy cases prevented	10
# of infertility cases prevented	10
# of HIV infections prevented	10
Gross costs saved from STI testing	$1,455,570
# of cervical cancer cases prevented	10
# of cervical cancer deaths prevented	10
Gross costs saved from Pap and HPV testing and vaccinations i	$44,630
Total gross savings	$52,273,460
Total family planning costs	$17,834,750
Total net savings	$34,438,720
44,143 women divided by $17,834,750 (total family planning costs) = $404 per client	

This tool enables users to estimate the impact of publicly funded family planning services in their state or service area, using data entered by the user about the number of contraceptive clients served, the number of specified tests performed and the state where services were provided. It may generate data on:

- cases of unintended pregnancies prevented and their outcomes and associated cost savings;
- cases of STIs prevented and associated cost savings;
- cases of precancer and cervical cancer prevented and associated cost savings

The formulas underlying this tool are based on analyses described in the report "Return on Investment: A Fuller Assessment of the Benefits and Cost Savings of the US Publicly Funded Family Planning Program." These formulas are the property of the Guttmacher Institute and were developed with the highest level of scientific rigor.

These estimates should be viewed as approximations, because of variability among programs in terms of the populations served, the mix of methods provided and the testing protocols used. Moreover, the results generated by this tool are subject to the accuracy and reliability of the data entered by the user.

Note: If no results are returned, the input numbers may be too small to generate reliable estimates of health benefits or cost savings. To estimate the total net savings of family planning services, you must input the number of contraceptive clients served.

- Estimates are based on user inputs and formulas from Frost JJ et al., Return on investment: A fuller assessment of the benefits and cost savings of the US publicly funded family planning program, *The Milbank Quarterly,* 2014, http://onlinelibrary.wiley.com/enhanced/doi/10.1111/1468-0009.12080/, except for formulas related to pregnancies prevented, specifically total pregnancies, unplanned births, abortions and miscarriages following unintended pregnancies, which were updated as of June 2017 with the newest available data from Frost JJ, et al., *Publicly Funded Contraceptive Services at U.S. Clinics,* 2015, New York: Guttmacher Institute, 2017, https://www.guttmacher.org/sites/default/files/report_pdf/publicly_funded_contraceptive_services_2015_3.pdf

Additional resources:

- National fact sheet: Facts on Publicly Funded Contraceptive Services in the United States
- Policy analysis: Beyond Preventing Unplanned Pregnancy: The Broader Benefits of Publicly Funded Family Planning Services
- State fact sheets: Facts on Publicly Funded Family Planning Services,State Facts About Unintended Pregnancy and State Policies in Brief
- Video: Publicly Supported Family Planning Services Are Essential
- Report: Moving Forward: Family Planning in the Era of Health Reform
- Data and tables: Guttmacher Institute Data Center
- *This tool, and the research on which it is based, were made possible by a grant from the JPB Foundation.*

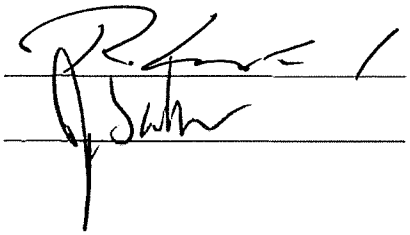
Schedule 13

Department of Public Health and Environment

Funding Request for The FY 2019-20 Budget Cycle

Request Title

R-02 Public Health Transformation

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 Initial Appropriation	FY 2018-19 Supplemental Request	FY 2019-20 Base Request	FY 2019-20 Change Request	FY 2020-21 Continuation
	Total	**$554,706**	**$0**	**$1,306,093**	**$240,472**	**$248,478**
	FTE	8.4	0.0	8.4	0.9	1.0
Total of All Line Items Impacted by Change Request	GF	$335,806	$0	$342,720	$240,472	$248,478
	CF	$0	$0	$0	$0	$0
	RF	$0	$0	$0	$0	$0
	FF	$218,900	$0	$963,373	$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	**$554,706**	**$0**	**$1,306,093**	**$240,472**	**$248,478**
01. Administration and Support, (C) Local Public Health Planning and Support, (1) Local Public Health Planning and Support - Assessment, Planning, and Support Program	FTE	8.4	0.0	8.4	0.9	1.0
	GF	$335,806	$0	$342,720	$240,472	$248,478
	CF	$0	$0	$0	$0	$0
	RF	$0	$0	$0	$0	$0
	FF	$218,900	$0	$963,373	$0	$0

Auxiliary Data

Requires Legislation?	NO		
Type of Request?	Department of Public Health and Environment Prioritized Request	**Interagency Approval or Related Schedule 13s:**	No Other Agency Impact

Cost and FTE

- The Department requests $240,472 General Fund and 0.9 FTE in FY 2019-20, $248,478 General Fund and 1.0 FTE in FY 2020-21 and $135,978 General Fund and 1.0 FTE in FY 2021-22 to a report identifying the most efficient and effective model for delivering public health to urban, rural, and frontier communities across the state. The FTE requested will be term-limited to end in FY 2021-22. This request represents an increase of 70 percent over the FY 2018-19 General Fund appropriation for the Assessment Planning and Support Program line.

Current Program

- The Office of Planning, Partnerships and Improvement (OPPI) serves local public health agencies (LPHAs) and works to improve the overall operation of the public health system in Colorado. Through providing technical assistance and training, OPPI helps local agencies and department programs more effectively and efficiently meet their goals.

Problem or Opportunity

- A 14% increase in Colorado's population over the past decade has increased the need for services and increased costs, causing Colorado's LPHAs (especially those in rural areas) to struggle to meet statutory obligations to provide necessary community public health services to residents.

Consequences of Problem

- LPHAs will continue to be unable to meet demand for services and to protect public health and the environment.
- The Department will fail to meet its goal of helping make Colorado the healthiest state in the nation.

Proposed Solution

- The Department requests $240,472 General Fund and 0.9 FTE in FY 2019-20, $248,478 General Fund and 1.0 FTE in FY 2020-21 and $135,978 General Fund and 1.0 FTE in FY 2021-22 to support the development of a report with recommendations identifying the most efficient and effective model for delivering public health to urban, rural, and frontier communities across the state.
- $225,000 of the requested funds will support a contractor. Over an 18-month period, the consultant will conduct a statewide survey and stakeholder interviews to assess the degree to which core public health services are delivered, where the gaps are and recommend the most effective and efficient delivery system for Colorado.
- The requested FTE will support the contractor; work to garner support from LPHAs and partner organizations (e.g. residents, hospitals, commissioners, other local government entities); assist the LPHAs in completing the assessment survey; and assist with implementation of the recommendations.

Department Priority: R-02
Request Detail: Public Health Transformation

Summary of Incremental Funding Change for FY 2019-20	Total Funds	General Fund
Public Health Transformation	$240,472	$240,472

Problem or Opportunity:

The Department requests $240,472 General Fund and 0.9 time-limited FTE in FY 2019-20, $248,478 General Fund and 1.0 time-limited FTE in FY 2020-21 and $135,978 General Fund and 1.0 time-limited FTE in FY 2021-22 to develop a report identifying the most efficient and effective model for delivering public health to urban, rural, and frontier communities across the state. The Department is completing this request in partnership with the Colorado Association of Local Public Health Officials and local public health agencies across the state. Please note, there is an information only federal funds base adjustment increase (TA-37 Federal Funds True-Up) in this line in the amount of $744,473.

A 14% increase in Colorado's population over the past decade has caused an increasing need for public health services and rising costs. Colorado's local public health agencies (LPHAs) (especially those in rural areas) struggle to fully meet statutory obligations to provide necessary community public health services (see Appendix A: CDPHE Core Services). Community needs push the LPHAs to do more with less, while rates of health conditions such as cancer, heart disease, suicide, and substance use (including alcohol and opioid addiction) continue to increase (Colorado Department of Public Health and Environment, 2018)[1]. For example, Colorado has consistently had one of the highest suicide rates, and in the past five (5) years, the suicide rate has significantly increased. Despite awareness of the problem, many communities have no choice but to spend limited time and resources addressing barriers such as recruiting and training new staff due to high turnover, rather than providing public health activities such as suicide prevention programs and mental health first aid trainings for community members.

Restaurant inspections are another core public health service that many public health agencies are struggling to provide. The fees local health departments receive for restaurant inspections do not cover the cost of the program. This results in programs (especially those in rural areas) having insufficient staff to complete the inspections needed to protect the public from foodborne illness.

Another example of the stresses on LPHAs is recent state wildfires which illustrate the need for LPHAs to provide air quality, water quality, and emergency preparedness and response support.

[1] Colorado Department of Public Health and Environment. (2018). *CO Health and Environmental Data: Suicides in Colorado*. Retrieved from https://www.cohealthdata.dphe.state.co.us/Data/Details/11

An effective public health system improves health outcomes and reduces health care costs by preventing diseases and injuries, promotes healthy behaviors, and reduces chronic diseases and conditions. In order to strengthen Colorado's public health system, a decade ago Colorado's Public Health Act (CRS § 25-1-501) took effect, calling for major reforms to the state's government public health system. Its purpose was to ensure that core public health services such as communicable disease prevention, emergency preparedness, and restaurant inspections are available to every person in Colorado, regardless of where they live, with a consistent standard of quality.

Public health has made great strides since the Public Health Act. For example, the Department has developed and implemented a robust assessment and planning process across all Colorado communities. Each community in Colorado is now under the jurisdiction of a formal public health agency and communities have addressed a multitude of public and environmental health problems using local community data and information.

During FY 2017-18, staff from the Office of Planning, Partnerships, and Improvement visited all 53 health agencies to hear from every local public health director. These listening visits increased trust and communication between the Department and local agencies, while also shedding light on the strengths and needs of these communities. While each local agency works hard to protect the health and the environment of its community, the Department and LPHAs understand the current model does not always meet community needs and other opportunities may provide more cost-effective and efficient models to deliver public health services and programs. For example, less populous counties could work together sharing staff and resources to provide community public health services to residents. Identifying the most effective and efficient delivery model for these services is critical to protecting and improving the health of Colorado's people and the quality of its environment.

For the past several years, the Department and local partners have worked together to identify needs and opportunities in a public health transformation effort. Other states are also engaged in similar transformation projects and the Department is learning from those efforts. The transformation process generally includes the following steps:

- Conduct an assessment using a customized tool that asks governmental public health authorities to self-assess themselves to identify the most effective and efficient public health service delivery system, identifying the services most appropriate for cross-jurisdictional delivery based on analysis of the assessment data related to the service cost and level of local expertise needed;
- Develop and execute a communications strategy and plan to convey the value of public health for all residents;
- To establish sufficient state funding and local funding mechanisms to support implementation and delivery of the services throughout the system;
- Track implementation and evaluate the effectiveness of the new and improved public health system.

The Department, in partnership with the Colorado Association of Local Public Health Officials (CALPHO) and LPHAs across the state, have developed a plan which involves five steps:

1. Aligning the core public health services with the national foundational public health services model;
2. Conducting an assessment to identify the cost of providing core public health services across the state;
3. Identifying the most effective and efficient public health service delivery model for Colorado;
4. Developing and executing a communication strategy and plan to convey the value of public health;

5. Tracking implementation and evaluating the effectiveness of the public health system.

In conjunction with efforts led by the CALPHO, the Department expects to complete steps one (1) and two (2) above by the summer of 2019.

This decision item requests funding to support the completion of step three (3): identifying the most effective and efficient public health service delivery model. If the request is authorized, step three (3) is anticipated to begin in FY 2019-20 upon completion of the first two (2) steps.

Proposed Solution:

The Department requests funding to engage a consultant to help identify the most effective and efficient delivery system for public health in Colorado and a time-limited FTE which can support and provide technical assistance to all 53 Colorado LPHAs during the evaluation and implementation of the recommendations. Over an 18-month period, the consultant will conduct a statewide survey and stakeholder interviews to assess the degree to which core public health services are delivered, identify gaps and inefficiencies, and make recommendations for more effective service delivery. Recommendations may include a future model for shared services that local health agencies support and an accountability system that tracks the number of residents receiving services and what kind of services. The FTE will support the contractor; work to garner support from LPHAs and partner organizations (e.g. residents, hospitals, commissioners, other local government entities); assist the LPHAs in completing the assessment survey; and assist with implementation of the recommendations.

The previously mentioned stakeholder engagement including the listening visits revealed overwhelming support for this approach from LPHA directors, CALPHO, and many local boards of health (including many county commissioners). Ultimately, this transformation project will greatly benefit health departments and community residents. Identifying gaps in programs and services will allow the Department to more efficiently use funding to support communities and determine where to provide additional training and technical assistance.

Additional benefits may include increased coordination and collaboration with other state departments. For example, the project will distinguish CDPHE roles and responsibilities from the roles of the Department of Human Services (DHS). Currently, staff are actively partnering with DHS to increase coordination among local health directors and local human service directors. Lessons from this work will inform the consultant's report.

This transformation approach was thoroughly researched by the Department's Funding and Financing Work Group comprised of state agencies and LPHAs who explored ways to maximize public health funding in Colorado. This workgroup was a subcommittee of the Public Health Improvement Steering Committee, a leadership team resulting from the passage of the 2008 Public Health Act. The workgroup learned that at least four other states (Ohio, Washington[2], Oregon[3], and Kansas[4]) have embarked on a similar journey and implemented a similar approach to increase the efficiency and effectiveness of public health systems. This gives the Department a successful model to follow to determine the best delivery system to improve the health and environment across Colorado.

[2]https://www.doh.wa.gov/ForPublicHealthandHealthcareProviders/PublicHealthSystemResourcesandServices/PublicHealthImprovementPartnership/PublicHealthTransformation

[3]https://www.oregon.gov/oha/PH/ABOUT/TASKFORCE/Pages/index.aspx

[4]https://drive.google.com/file/d/0Bw0mhEPgtXAXLXlfeUhyeW51R1VSbkVRekdnZ2pHTFdkOVNz/view

The four states have all completed an assessment and in each case, the state worked with a consultant to conduct an assessment with recommendations to support a comprehensive public health system that ensures services for all residents. These states used a customized assessment tool that asks government public health authorities to:

- Self-assess their level of implementation for a minimum package service model using a Likert scale (designed to measure attitudes or opinions),
- Isolate their share of spending that currently funds services within the minimum package service model, and estimate the cost of fully implementing the minimum package of services.

Footnotes above provide links to the results of Kansas and Oregon's studies. Washington recently completed an assessment and expects the final report to be public later this fall. In all cases, the assessments found that current implementation and spending on the minimum package of public health services was uneven across the system, as was spending, potentially creating service inequities and furthering health disparities. In all cases, it was identified that the current bifurcated and decentralized service delivery model was not the most efficient and effective model, and, in fact, may be cost prohibitive to implement.

The Department's Strategic Plan, which is aligned to the Governor's Dashboard, includes health and environmental outcomes (such as obesity, clean water, etc.) which requires the whole public health system (state, local, and partners) to coordinate effectively in order to achieve goals. The proposed solution also aligns with the Department's strategic plan as it is a large-scale improvement project, using Lean and Quality Improvement tools and techniques to examine the effectiveness of the current public health system. Identifying the size, scope, and the best delivery model for the core public health services follows best practice improvement methodologies and allows for system-wide improvements.

This time-limited, three-year request, for $624,928 will support identifying the most efficient and effective model for delivering public health to urban, rural, and frontier communities across the state; and provide support and technical assistance to LPHAs, as they work to complete the study and develop an implementation plan. The cost for the contractor was determined based on experiences from other states as demonstrated in the table below:

Time and Cost Estimates for Contractor

Task	Estimated Level of Effort	Cost	Total
Principal oversight of project	35 hours	$250/hour	$8,750
Project kickoff and ongoing management	60 hours	$150/hour	$9,000
Assessment tool development and completion	675 hours	$150/hour	$101,250
Data analysis and recommendations	470 hours	$150/hour	$70,500
Report	170 hours	$150/hour	$25,500
Operating and travel expenses (including design and printing of report)			$10,000

Total	$225,000

The Department also requests a Program Management II to provide technical assistance and consultation with LPHA directors and staff. The decision-making and complexity of the work aligns with the requested classification. Also, to ensure the Department is able to hire an experienced public health professional and compete in the current competitive job market, the calculations for this request include salary at 25% above the minimum. The below table provides a breakdown of time related to each task:

Time Estimates for FTE	
Task	Estimated Level of Effort
Coordinating with state-level entities working on Public Health Transformation (e.g. CALPHO, CCI, School of Public Health), including serving on the advisory committee	15% (6 hours/week)
Communicating with state agency programs about the value and progress of Public Health Transformation	15% (6 hours/week)
Providing technical assistance and consultation to local health departments in gaining support/buy-in from community partners (e.g. boards of health, commissioners, nonprofits) for Public Health Transformation	20% (8 hours/week)
Providing technical assistance and consultation to local health agencies in completing the assessment and identifying the most efficient and effective public health system.	40% (16 hours/week)
Research and learning from other states who have completed this process	5% (2 hours/week)
Evaluation activities (e.g. key informant interviews)	5% (2 hours/week)

In order to fully reflect the funding for this program, the Department wants to note an information-only federal funds base adjustment increase (TA-37 Federal Funds True-Up) in the amount of $744,473. These federal funds have historically been non-appropriated. Since the federal funds impact the program's total funding picture, the Department wanted to note this base adjustment in the interest of transparency.

If this proposal is not approved, local health departments will continue to struggle to deliver the core public health services to their communities. Ultimately, this less efficient and effective system will result in health and environmental consequences (e.g. increase chronic disease, suicides, substance use, and lower quality restaurant inspections resulting in foodborne illness) that could have been prevented.

Timeline for Project		
Activity	Timeline	Who?
Request for proposal process	2-3 months (July 2019-September 2019)	CDPHE
Contract issued	45 days (October 2019-November 2019)	CDPHE
Review of CDPHE information and development of assessment	4 months (November 2019-February 2020)	Contractor
Supporting LPHAs to complete the assessment	4 months (March 2020-June 2020)	Contractor
Conducting stakeholder interviews	8 months (March 2020-October 2020)	Contractor
Compiling and analyzing data	2 months (November 2020-December 2020)	Contractor
Developing recommendations and writing a report	2 months (January 2021-February 2021)	Contractor
Technical assistance and consultation with LPHAs and partner organizations (e.g. local boards of health and county commissioners) to complete the assessment, communicate the results, and begin implementation of the recommendations	36 months (July 2019-June 2022)	CDPHE

Anticipated Outcomes:

The most immediate outcome demonstrating the effectiveness of this project will be a detailed report outlining the most efficient and effective public health delivery system for Colorado. Additionally, the Department anticipates that 75% of LPHAs will support the key recommendations outlined in the report and 25% will have started implementing the recommendations. The Department will measure support through surveys and key informant interviews.

If this project is funded, the Department and LPHAs will identify steps to be taken to ensure Colorado's public health system operates as efficiently and effectively as possible. Additionally, many health departments will begin implementation of these recommendations with the support and technical assistance of the state health department. Ultimately, this will result in more Coloradans receiving the services and support they need to lead healthy productive lives.

In addition, an evaluation will measure the following:

- % of local health agencies who support transforming Colorado's public health system as outlined in the report.
- % of health agencies who have initiated implementation of the recommendations
- % of local health agencies who report an increase in their capacity to deliver the core public health services

The ultimate return on investment can be calculated once the recommendations of the report are implemented and Colorado's public health system is transformed to be more efficient and effective.

Assumptions and Calculations:

The Department requests $240,472 General Fund and 0.9 time-limited FTE in FY 2019-20, $248,478 General Fund and 1.0 time-limited FTE in FY 2020-21 and $135,978 General Fund and 1.0 time-limited FTE in FY 2021-22 to develop a report identifying the most efficient and effective model for delivering public health to urban, rural, and frontier communities across the state.

The below table summarizes the requested funding:

Item	FY 2019-20	FY 2020-21	FY 2021-22	Total
Consultant fees for a report outlining Colorado's most effective and efficient public health model	$112,500	$112,500	$0	$225,000
1.0 FTE Program Management II (25% above minimum)	$122,319	$135,028	$135,028	$392,375
Operating (standard operating, telephone, etc.)	$5,653	$950	$950	$7,553
Total	$240,472	$248,478	$135,978	$624,928

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 Salary	FTE		FTE	
PROGRAM MANAGEMENT II	$8,679	0.9	$93,733	1.0	$104,148
PERA			$9,748		$10,831
AED			$4,687		$5,207
SAED			$4,687		$5,207
Medicare			$1,359		$1,510
STD			$178		$198
Health-Life-Dental			$7,927		$7,927
Subtotal Position 1, 0.9 FTE		**0.9**	**$122,319**	**1.0**	**$135,028**
Classification Title	Monthly Salary	FTE		FTE	
			$0		$0
PERA			$0		$0
AED			$0		$0
SAED			$0		$0
Medicare			$0		$0
STD			$0		$0
Health-Life-Dental			$0		$0
Subtotal Position 2, #.# FTE		**-**	**$0**	**-**	**$0**
Subtotal Personal Services		0.9	**$122,319**	1.0	**$135,028**

	Operating Expenses:					
				FTE		FTE
		Regular FTE Operating Expenses	$500	**1.0**	$500	**1.0**	$500
		Telephone Expenses	$450	**1.0**	$450	**1.0**	$450
		PC, One-Time	$1,230	**1.0**	$1,230	**-**	
		Office Furniture, One-Time	$3,473	**1.0**	$3,473	**-**	
		Consultant for Cost Assessment and Recommended PH Model			$112,500		$112,500
		Other					
		Other					
		Other					
	Subtotal Operating Expenses			**$118,153**		**$113,450**	
TOTAL **REQUEST**	***0.9***	***$240,472***	1.0	**$248,478**			
			General Fund:				
				Cash *funds:*			
				Reappropriated *Funds:*			
			Federal Funds:				

			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**	

Colorado Core Public Health Services

We provide or assure high-quality public health services to all Coloradans to protect and improve the health of Colorado's people and the quality of its environment. The state board of health has established these seven core public health services that must be provided or assured by each local public health agency.

COLORADO
Department of Public Health & Environment

www.colorado.gov/cdphe-lpha/resources-core-service

CORE PUBLIC HEALTH SERVICES IN COLORADO

ADMINISTRATION AND GOVERNANCE

- Establish and maintain programs, personnel and operations.
- Implement public health laws, policies, and procedures.
- Secure and manage financial resources.

COMMUNICABLE DISEASE PREVENTION, INVESTIGATION AND CONTROL

- Monitor, detect and report disease.
- Investigate and control diseases and outbreaks.
- Assure immunizations using established standards.

ENVIRONMENTAL HEALTH

- Ensure food safety.
- Protect and improve air, land and water quality.
- Assist with regulatory compliance.
- Mitigate effects of environmental hazards.

VITAL RECORDS AND STATISTICS

- Record and report vital events (births and deaths).
- Issue Birth Certificates and Death Certificates.

ASSESSMENT, PLANNING AND COMMUNICATIONS

- Analyze local, regional and state data sources.
- Create Community Health Assessments and Public Health Improvement Plans.
- Public health messaging and communications.

EMERGENCY PREPAREDNESS AND RESPONSE

- Promote preparedness by participating in All-Hazards planning and training.
- Prepare for and respond to emergencies.
- Implement an emergency communication strategy.
- Coordinate with other responders.

PREVENTION AND POPULATION HEALTH PROMOTION

- Promote healthy living through policies and programs.
- Promote physical and behavioral health with an emphasis on health equity.
- Develop community-specific solutions to address prevention priorities.

COLORADO
Department of Public Health & Environment

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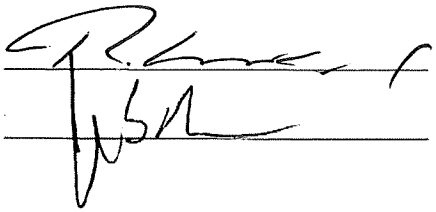
Schedule 13

Department of Public Health and Environment

Funding Request for The FY 2019-20 Budget Cycle

Request Title

R-03 Lab Spending Authority

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 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**	**$5,400,457**	**$0**	**$6,177,326**	**$59,628**	**$59,628**
	FTE	13.3	0.0	13.3	0.0	0.0
	GF	$731,310	$0	$738,973	$88,270	$88,270
	CF	$3,415,868	$0	$4,185,074	$81,452	$81,452
	RF	$318,022	$0	$318,022	($110,094)	($110,094)
	FF	$935,257	$0	$935,257	$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	**$1,086,196**	**$0**	**$1,118,190**	**($110,094)**	**($110,094)**
	FTE	13.3	0.0	13.3	0.0	0.0
03. Laboratory Services, (A) Laboratory Services, (1) Laboratory Services - Director's Office	GF	$398,425	$0	$415,019	$0	$0
	CF	$478,868	$0	$494,268	$0	$0
	RF	$138,346	$0	$138,346	($110,094)	($110,094)
	FF	$70,557	$0	$70,557	$0	$0
	Total	**$4,314,261**	**$0**	**$5,059,136**	**$169,722**	**$169,722**
	FTE	0.0	0.0	0.0	0.0	0.0
03. Laboratory Services, (A) Laboratory Services, (1) Laboratory Services - Chemistry and Microbiology Operating Expenses	GF	$332,885	$0	$323,954	$88,270	$88,270
	CF	$2,937,000	$0	$3,690,806	$81,452	$81,452
	RF	$179,676	$0	$179,676	$0	$0
	FF	$864,700	$0	$864,700	$0	$0

Auxiliary Data			
Requires Legislation?	NO		
Type of Request?	Department of Public Health and Environment Prioritized Request	**Interagency Approval or Related Schedule 13s:**	No Other Agency Impact

Cost and FTE

- The Department requests $59,628, of which includes $88,270 General Fund, $81,452 cash funds, and an offsetting refinance of $110,094 reappropriated funds for FY 2019-20 and beyond to support mission critical lab testing. This request represents a 26.5% increase in General Fund and a 2.8% increase in cash funds from the FY 2018-19 appropriation in the Chemistry and Microbiology Operating Expenses line.

Current Program

- The Laboratory Services Division conducts laboratory tests for various diseases such as rabies and environmental contaminants such as air pollution to protect public and environmental health in the State of Colorado.
- The Laboratory Services Division's funding consists of General Fund, cash funds (from fee-for-service tests), reappropriated funds, and federal funds.
- Operating costs cover the purchase of testing instruments and equipment, instrument maintenance, software, supplies, reagents, and proficiency tests to perform laboratory testing.

Problem or Opportunity

- Operating spending authority does not currently cover the costs of laboratory supplies and equipment and does not adequately support the costs to perform mission critical testing.
- The lack of operating spending authority affects the Laboratory's ability to purchase the supplies and equipment needed to perform the testing required by State and private sample submitters.

Consequences of Problem

- With limited operating spending authority, the Laboratory must make difficult decisions on what supplies and equipment to purchase. This includes making the decision to turn non-critical tests away or reduce testing volumes.
- Limiting testing impacts the ability to collect data on ongoing or emerging issues of public and environmental health significance.

Proposed Solution

- The Department requests $59,628, of which includes $88,270 General Fund, $81,452 cash funds, and an offsetting refinance of $110,094 reappropriated funds for FY 2019-20 and beyond to support mission critical lab testing.
- The proposed increase will enable the laboratory to support increasing costs to purchase testing instruments and equipment, instrument maintenance, software, supplies, reagents, and proficiency tests.
- The increased funding will improve service delivery and ensure the State Lab performs testing activities quickly and accurately.

Department Priority: R-03
Request Detail: Lab Spending Authority

Summary of Incremental Funding Change for FY 2019-20	Total Funds	General Fund	Cash Funds (Laboratory Cash Fund 26A0)	Reappropriated Funds
Lab Spending Authority	$59,628	$88,270	$81,452	$(110,094)

Problem or Opportunity:

The Department requests $88,270 General Fund, $81,452 cash funds, and an offsetting refinance of $110,094 reappropriated funds for FY 2019-20 and beyond to support mission critical lab testing. The Laboratory Services Division conducts laboratory tests for various diseases such as rabies and environmental contaminants such as air pollution to protect public and environmental health in the state of Colorado. Laboratory testing detects pathogens such as bacteria in food, milk, and water, bloodborne diseases and viruses as well as environmental contaminants such as metals and chemicals in food, water, and soil. Operating spending authority has not kept pace with inflation for laboratory supplies and equipment and the allocated spending authority does not adequately support the costs to perform mission critical testing.

Operating costs cover the purchase of testing instruments and equipment, instrument maintenance, software, supplies, reagents, and proficiency tests to perform laboratory testing. Without an increase to operating spending authority, the state's public health laboratory will likely have to reduce the number of tests performed, or stop performing certain cost-prohibitive tests such as norovirus or Zika virus testing.

The Laboratory conducted a comprehensive analysis to determine the true costs for performing various types of chemical and biological tests. The laboratory analyzed data for the direct and indirect costs required for tests supported by both fee-for-service (Laboratory Cash Fund - 26A0 funded testing) and tests supported by General Funds.

The Department has demonstrated the need for an increase in operating spending authority by reviewing past and current costs for laboratory supplies and equipment. To provide some context, the following table illustrates examples for various supply costs in 2015 compared to costs in 2018.

Table 1: Supply Cost Comparison			
Supply Type	**2015 Cost**	**2018 Cost**	**% Increase**
Antibody used in Zika testing	$695	$2,378	242%
Face masks used to protect staff in biosafety level (BSL) 3 laboratories	$251	$298	19%
Pipet tips used to measuring/transferring small volumes of liquid material	$91	$223	147%
HIV test kit	$996	$1,046	5%
DNA polymerase - used in molecular detection assays	$459	$487	6%

The lack of operating spending authority impacts the Laboratory's ability to purchase the supplies and equipment needed to perform the testing required by state and private sample submitters. With limited operating spending authority, the Laboratory must make difficult decisions on what supplies and equipment to purchase. This includes making the decision to turn non-critical tests away or reduce testing volumes. Limiting testing, however, adversely impacts the Department's ability to respond to and collect data on ongoing or emerging issues of public and environmental health significance.

The recent Zika virus concern presents an example of the importance of the State Lab's ability to conduct laboratory testing and analysis. If the State Lab stops performing testing on Zika and recommends that patients send samples to private laboratories, the state will not have access to testing data and could not track the emergence and spread of the disease in Colorado's human and mosquito population. The patient would also have to pay much more for testing at a private laboratory. Colorado's state public health lab only charges $110 for Zika virus PCR testing whereas, private labs charge over $1,200 per test. As shown in the cost analysis in Appendix A, the actual cost of Zika testing has increased to $260 per test.

Another example includes testing for communicable diseases such as tuberculosis. If the Laboratory reduces testing for tuberculosis (TB), infected individuals will continue to spread this highly contagious disease in the community or face up to six weeks in isolation if suspected of having contracted the disease. The State turns TB testing around in 3-7 days; however, private labs do not have the ability to perform molecular testing for rapid results, which means a patient suspected of having TB must remain in isolation for up to 6 weeks before receiving confirmation of disease. This places a greater burden on the patient and the healthcare system. As shown in the cost analysis in Appendix A, the actual cost of TB culture testing has increased to $89 per test, up from $65 per test.

Additionally, rabies funding has not kept up with the steadily increasing testing volume demands since FY 2009-10 when testing demand was 915 animals per year as compared to 1,670 animals in FY 2017-18. Funding limitations during the record rabies season in FY 2017-18 lead to prioritization of testing for rabies only for animals with known human exposure. This resulted in 150 skunks from the heavily populated metro region not receiving testing in FY 2017-18. Not testing the animal samples means that public health officials cannot effectively determine the distribution on range of disease spread, limiting their ability to strategically respond to spread of rabies across Colorado.

The need for an increase in spending authority also delays the purchase of newer instruments that would, in turn, reduce costs over time as technology leads to greater efficiencies. In order to maximize the current operating spending authority, the State Laboratory purchases supplies in bulk as practical to reduce per unit costs and maintains strict inventory management practices to track the use of supplies and consumables. In addition, the Laboratory maximizes the efficiency of instruments to perform multiple tests when possible and negotiates the lowest possible costs with vendors for equipment, supplies, and service agreements.

Even with these practices in place, medical and laboratory supply costs continue to increase by an average of 5-7% annually. The medical and laboratory supply inflationary cost increase presents a challenge for current and future practices. The following table illustrates the projected percent increases for nondurable medical supplies and equipment according to the CMS (Centers for Medicare & Medicaid Services):

Table 2: Inflation Rates For Medical Costs - Nondurable Medical Supplies and Equipment (MSE)	
2018 Projected	6.1 %
2019 Projected	6.2 %
2020 Projected	6.1 %
2021 Projected	5.7%
2022 Projected	5.7%

Source: CMS National Health Expenditure Projections 2012-2022

Proposed Solution:

The Department requests an increase to the Laboratory's operating spending authority to support the actual costs to perform testing. The proposed increase of $88,270 General Fund, $81,452 cash funds, and an offsetting refinance of $110,094 reappropriated funds for FY 2019-20 and beyond will enable the Laboratory to support increasing costs to purchase testing instruments and equipment, instrument maintenance, software, supplies, reagents, and proficiency tests. The Department intends for this increase to equalize the disparity between the actual testing costs and the currently available cash and General Fund spending authority. The increased funding will improve service delivery and ensure the State Lab performs testing activities quickly and accurately.

The Department requests to refinance $110,094 reappropriated funds currently in the Director's Office to offset a portion of this request. The Laboratory Services Division currently has $138,346 reappropriated funds in the Director's Office line with a letternote that references various sources of cash funds; however, the Department only identified one funding stream to support this appropriation for a total of $28,252 from the Water Quality Control Division's Clean Water Program Costs line. These reappropriated funds support administrative functions related to the testing completed on water samples. Refinancing the $110,094 of reappropriated funds to the Chemistry and Microbiology Operating Expenses line would net in a total request of $59,628: $88,270 General Fund, $81,452 cash funds, and ($110,094) reappropriated funds. If authorized, the request will necessitate a fee increase for the cash fund portion of the request. Please reference Appendix A for more detailed information regarding the increased cash fees.

This request helps to protect the public and environmental health of Colorado. This request benefits all Colorado citizens as the testing performed at the State laboratory detects pathogens in food, milk, and water, blood borne diseases and viruses, as well as environmental contaminants such as metals and chemicals in food, water and soil. Quick and accurate detection can reduce the spread of disease and contamination.

The request ties to the Department's strategic plan, as improved laboratory testing contributes to clean air, water, and a healthy community.

Anticipated Outcomes:

The State Laboratory will have sufficient spending authority to procure laboratory supplies, equipment and service agreements needed to complete the projected 3,478 tests estimated for 2019-20 and beyond. This outcome links to the Department's Strategic Priority #6: Ensure air quality is improved and protected and Strategic Priority #7: Ensure water quality is improved and protected

The increase in cash fund spending authority will necessitate increases in the fees charged for certain tests. The Laboratory has recently conducted an extensive analysis of cost drivers on a per test basis and has identified a number of fees requiring an increase to ensure that the fee fully recovers the cost of the test. Please reference Appendix A - Fee Evaluation Table for the full details of these increases.

Assumptions and Calculations:

The State Laboratory performs a total of 278 cash funded fee-for-service tests. After reviewing the data, the Department found that 19 tests necessitate an increase in operating spending authority. Table 3 below summarizes the requested operating spending authority need. Additionally, the attached Appendix A - Fee Evaluation Table details the funding gap by specific test.

The Department requests a total net increase in operating spending authority of $59,628:

Table 3: Net Spending Authority Increase by Fund Type	
Spending Authority Increase - cash funded Tests	**$81,452**
Spending Authority Increase - General Funded Tests	**$88,270**
Refinance of reappropriated funds in Long Bill	**$(110,094)**
Total Request	**$59,628**

Appendix A - Fee Evaluation Table

Test	Prior Years Cost to Perform Test	Current Cost to Perform Test	Increase/ (Decrease) In Cost to Perform Test	Annual Volume	Need for Spending Authority Increase/ (Decrease)	Customer Type
Semivolatile Organic Compounds (SVOC)	$211.00	$260.00	$49.00	43	$2,107	Water providers - Municipalities, cities, towns.
Hardness (calcium + magnesium)	$20.50	$22.00	$1.50	1,530	$2,295	Mostly private citizens
Nitrogen, Total	$42.00	$56.00	$14.00	1,200	$16,800	EPA testing for WQCD
Fluorescent Treponemal Antibody - Absorbed (FTA-ABS)	$22.00	$24.00	$2.00	50	$100	Hospitals or Clinics
Hantavirus antibody, lgM/lgG	$110.00	$150.00	$40.00	10	$400	Local public health agencies (LPHAs) and Hospitals or Clinics
Measles antibody (Rubeola) IgM	$95.00	$150.00	$55.00	25	$1,375	Hospitals or Clinics
Rapid Plasma Reagin antibody (RPR)	$6.00	$8.00	$2.00	100	$200	Hospitals or Clinics
Rubella IgM antibody	$94.00	$150.00	$56.00	25	$1,400	Hospitals or Clinics
Syphilis treponemal assay	$9.00	$13.00	$4.00	50	$200	Hospitals or Clinics

(TP-PA)						
Venereal Disease Research Laboratory (VDRL - CSF)	$16.00	$19.00	$3.00	25	$75	Hospitals or Clinics
Measles Virus RT-PCR	$110.00	$260.00	$150.00	25	$3,750	Hospitals or Clinics
Mumps Virus RT-PCR	$110.00	$260.00	$150.00	25	$3,750	Hospitals or Clinics
Norovirus RT-PCR	$110.00	$260.00	$150.00	20	$3,000	LPHAs and Hospitals or Clinics
Zika Virus PCR	$110.00	$260.00	$150.00	300	$45,000	Clinical labs, Hospitals or Clinics, and OBGYNs
Reference Bacterial Identification	$180.00	$200.00	$20.00	50	$1,000	Hospitals or Clinics
Total					**$81,452**	

Note: Labs at hospitals and clinics will send samples to the CDPHE laboratory for various reasons. Typically, hospitals and clinics send their samples for testing for convenience, physical proximity, pricing, test availability (for example, Zika testing), established customer relationships, or if an agency would need to transmit the results to CDPHE anyway for reportable conditions.

In addition to the cash funded testing, the fee analysis results showed a need for increased spending authority for testing supported by General Funds:

Test	Prior Years Cost to Perform Test	Current Cost to Perform Test	Increase/ (Decrease) In Cost to Perform Test	Annual Volume	Need for Spending Authority Increase/ (Decrease)	Test Submitter
Rabies virus DFA (Direct Fluorescent Antibody)	$65.00	$65.00	$ -	755 (unfunded volume)	$49,075	LPHAs, Veterinary Clinics, and Private citizens
TB acid-fast strain (TB Smear)	$8.00	$11.00	$3.00	850	$2,550	LPHAs
TB culture	$65.00	$89.00	$24.00	850	$20,400	LPHAs
M. tuberculosis direct detection (DNA)	$153.00	$210.00	$57.00	285	$16,245	LPHAs
Total					**$88,270**	

The total net request for increased operating spending authority is $59,628:

Spending Authority Increase - Cash Funded Tests	**$81,452**
Spending Authority Increase - General Funded Tests	**$88,270**
Refinance of Reappropriated Funds in Long Bill	**$(110,094)**
Total Request	**$59,628**

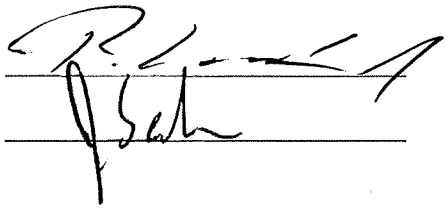
Schedule 13

Department of Public Health and Environment

Funding Request for The FY 2019-20 Budget Cycle

Request Title

R-04 Local Public Health Electronic Medical Records

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 Initial Appropriation	FY 2018-19 Supplemental Request	FY 2019-20 Base Request	FY 2019-20 Change Request	FY 2020-21 Continuation
	Total	**$1,163,978**	**$0**	**$0**	**$837,774**	**$0**
	FTE	0.0	0.0	0.0	3.5	0.0
Total of All Line Items Impacted by Change Request	GF	$1,163,978	$0	$0	$837,774	$0
	CF	$0	$0	$0	$0	$0
	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	**$1,163,978**	**$0**	**$0**	**$837,774**	**$0**
02. Center for Health and Environmental Information, (D) Health Data Programs and Information, (1) Health Data Programs and Information - Electronic Health Records for Local Public Health Agencies	FTE	0.0	0.0	0.0	3.5	0.0
	GF	$1,163,978	$0	$0	$837,774	$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 Public Health and Environment Prioritized Request	**Interagency Approval or Related Schedule 13s:**	No Other Agency Impact

Cost and FTE

- The Department requests $837,774 General Fund and 3.5 term-limited FTE in FY 2019-20 for maintenance and support for the newly launched Electronic Health Record (EHR) system developed for Local Public Health Agencies (LPHA)
- The FY 2018-19 appropriation has been annualized out for FY 2019-20 per the original request. This request represents a 28% decrease from the FY 2018-19 General Fund Appropriation in the Electronic Health Records for Local Public Health Agencies line.
- This includes $502,188 for vendor maintenance and support and $335,586 for 3.5 term-limited FTE

Current Program

- In FY 2014-15, the Joint Budget Committee (JBC) appropriated five years of General Fund monies totaling $8,594,720 to build an EHR for the State's LPHAs.
- In June of 2018, the EHR system was successfully implemented in two pilot LPHAs.
- EHR adoption streamlined and simplified processes providing accurate, up-to-date, and complete information about patients (making prescribing and dispensing medications safer and more reliable, and promoting legible, complete documentation) and integrating information exchange between local public health agencies and the state level.

Problem or Opportunity

- While EHR adoption has been proven to increase population health outcomes and financial sustainability, most of Colorado's 53 LPHAs have been unable to implement an EHR.
- Now that the LPHA EHR system has launched, an additional year of funding for the maintenance and requested FTE for one year will allow the Department to finalize a plan to expand the EHR system to additional LPHAs and to develop a sustainability plan.

Consequences of Problem

- If not funded, the six LPHAs anticipated to be using the EHR as of June 2019 would have to fund the approximately $500,000 annual maintenance cost or revert to prior systems, losing the efficiencies gained by using an EHR system.
- Without the requested staff support, it would be difficult to bring additional agencies onto the system.

Proposed Solution

- The Department requests $837,774 General Fund and 3.5 term-limited FTE in FY 2019-20 to sustain the Electronic Health Record (EHR) system developed for and used by Local Public Health Agencies (LPHAs).
- The funding in this request will cover maintenance of the system and staff support for one year, while the Department works with stakeholders to finalize a plan to expand the EHR system to additional LPHAs and to develop a sustainability plan.

Department Priority: R-04
Request Detail: Local Public Health Electronic Medical Records

Summary of Incremental Funding Change for FY 2019-20	Total Funds	General Fund
Local Public Health Electronic Medical Records	$837,774	$837,774

Problem or Opportunity:

The Department requests $837,774 General Fund and 3.5 term-limited FTE in FY 2019-20 for maintenance and support for the newly launched Electronic Health Record (EHR) system developed for local public health agencies (LPHAs). This includes $502,188 for vendor maintenance, and $335,586 for 3.5 term-limited FTE to support and expand the system to additional LPHAs and assess future funding needs for the system.

In addition to core public health services, local public health agencies provide direct patient services targeted at preventing the spread of disease. Each year, LPHAs administer 100,000 vaccinations and provide 30,000 family planning services to their community members. The Community Preventive Services Task Force (CPSTF) recommends the use of electronic health records as an evidence-based approach to increasing vaccination and cancer screening rates. (Community Preventative Services Task Force, 2012 & 2014)[1,2] EHRs systematize notifications to patients and providers when patients are due for preventive services, systematize standing orders for preventive services (standing orders are standardized protocols non-providers may implement on behalf of the ordering provider) as well as assess clinical provider performance amongst their patient population as this has been proven to significantly increase vaccination and cancer screening rates. EHRs facilitate increased capacity to deliver the right services to the right people at the right time as well as increase safety and quality of those services. Additionally, the increase in the percent of insured Coloradans since 2009 has created a new funding source for services that have historically been subsidized with grant funding such as immunizations and family planning services (The Colorado Health Institute. 2017)[3]. EHRs are a proven mechanism for streamlining patient accounting activities and increased financial sustainability to LPHAs by facilitating patient accounting and electronic billing (Jong Soo Choi, Woo Baik Lee, & and Poong-Lyul Rhee, 2013)[4]. Despite these advantages, only 3 out of 53 Colorado LPHAs had

[1] Community Preventative Services Task Force. (2014, June 12). *The Community Guide.* Retrieved from Vaccination Programs: Immunication Information Systems: https://www.thecommunityguide.org/sites/default/files/assets/Vaccination-Immunization-Info-Systems.pdf.
[2] Community Preventative Task Force. (2013, September 25). *The Community Guide.* Retrieved from Cancer Screening: Client Reminders – Breast Cancer: https://www.thecommunityguide.org/sites/default/files/assets/Cancer-Screening-Client-Reminders.pdf
[3] The Colorado Health Institute. (2017). *Colorado's New Normal: State Maintains Historic Health Insurance Gains; Findings From the 2017 Colorado Health Access Survey.* Denver: Colorado Health Institute.
[4]Jong Soo Choi, P., Woo Baik Lee, P., & and Poong-Lyul Rhee, M. P. (2013). Cost-Benefit Analysis of Electronic Medical Record System at a Tertiary Care Hospital. *Health Inform Res*, 205-214.

implemented an EHR with integrated data collection, billing and public health reporting prior to the State funded EHR project. Using a combination of electronic systems, paper charting and manual billing processes to run public health clinics is inefficient, but most do not have the capacity or funds to invest independently in an EHR system and those that have explored purchasing an EHR on their own have experienced more challenges and higher relative cost per patient than primary care and hospital settings. The Department found that this has left has left LPHAs unable to implement proven EHR advancements that increase revenue and financial stability, improve patient safety, and improve uptake of services.

To facilitate EHR adoption by LPHAs, in FY 2014-15 the Joint Budget Committee (JBC) appropriated five years of General Fund monies for the Department to contract with a vendor to implement an EHR for LPHA use. The total appropriation over five years was $8,594,720. The Department began the project by collecting information on LPHA needs from an EHR; the results of this discovery phase indicated that the unique services offered by LPHAs required a non-traditional set of EHR components that would cost more than was appropriated for the project. To maximize long-term impact and sustainability, the Department jointly entered into an agreement with the Department of Human Services (CDHS) in 2016 to implement an EHR for local public health and behavioral health usage. This collaboration reduced project costs by 50% and allowed the Department to stay within the original appropriation. In FY 2016-17, a contract was executed to implement an EHR for local public health use. The system that was developed can accommodate 20 LPHAs with an annual maintenance cost of $502,188. Two pilot LPHAs invested resources over a two-year period working alongside the Department and the vendor to customize the EHR to meet statewide local public health needs. In June 2018, the EHR was implemented in Broomfield and Kit Carson counties. The EHR effectively replaced a number of separate systems and paper records and resulted in a modern, comprehensive EHR that is integrated across clinical, operational, and financial modules. Although the systems are still new, early reports from the two counties are quite favorable. For example, the EHR's immunization forecaster is linked to the Department's immunization registry and notifies clinic staff of which vaccinations a patient needs. Clinical services entered into the EHR automatically drive patient accounting including electronic billing to Medicaid, Medicare, and private insurance. This has increased billing capacity and streamlined reduced-cost calculations for uninsured patients. Built-in allergy checks and electronic medication inventory management systems have made prescribing and dispensing medications safer and more reliable.

Since the EHR went live in June of 2018, annual maintenance fees are due beginning in FY 2019-20 in the amount of $502,188. As mentioned in the original funding request to develop the system, the Department anticipates eventually shifting maintenance costs of the state EHR to participating LPHAs; however, given the slower than anticipated deployment of the system, local support for the annual maintenance is not realistic at this time. Having the two current users fund the full $502,188 annual maintenance cost is not sustainable. The Department projects that when 10 LPHAs are using the system, approximate costs would be $50,000 per year per LPHA. The Department has a strong plan in place for expanding use of the system to additional LPHAs thereby increasing the return on investment for the system and making it possible for locals to fund the on-going maintenance. Letters of Intent have been signed with four sites to be on-boarded through 2019, highlighting the success of and need for this effort. In addition, the Department will work with the remaining LPHAs that do not have an EHR to finalize a plan to expand the system to additional LPHAs and to develop a sustainability plan. As experience with the system grows, the Department believes that the LPHAs will see the benefits and be more comfortable assuming the work associated with implementing a new electronic system, as well as assuming responsibility for the on-going maintenance costs. However, the Department needs an additional year to bring on additional systems, finalize the expansion plan, and create a sustainability plan. CDPHE anticipates continuing to onboard an additional four LPHAs in 2018-19 with a

goal of adding an average of three every year thereafter as agencies are recruited, with the goal of having 20 LPHAs on board by 2023-24. It is possible that some continued state support would be necessary to maintain the system long term, but without additional information, it is not possible to project the on-going need. Therefore, the Department is requesting General Fund support for an additional year in order to meet with stakeholders and develop a plan to expand and sustain the system.

Since the system has gone live and the Department has entered the maintenance phase of the project, the new contract does not include support for implementation of additional LPHAs. Funds requested include annual vendor maintenance costs as well as staff for the Department to support the current LPHA's using the system and to configure the EHR system for additional LPHAs. See Appendix A for details on projected staff activities which include providing technical support and training to existing end users and assisting new LPHA's to implement the system. The original 2014-15 request was a capital request, and therefore did not include staffing for the system. The EHR was ultimately recommended and approved by JBC as an operating appropriation, but no staff were included at that time. As is generally the case with capital requests, on-going operating needs were to be addressed in a future operating request once the system was developed and ready to enter the maintenance phase.

Implementation of the EHR will provide increased financial stability to participating LPHAs including the ability to bill Medicaid and commercial insurance providers for insured patients. The goal is that the additional revenue being generated should more than offset the annual maintenance costs.

The Department requests continued support for another year, while it assesses LPHA interest and capacity. The Department will bring another request for FY 2020-21 with plans and projections for LPHA contributions and the need for any on-going state support.

Proposed Solution:

The Department requests $837,774 General Fund and 3.5 term-limited FTE for 2019-20 to maintain and expand an Electronic Health Record (EHR) system used by Local Public Health Agencies (LPHAs). The requested funding will cover maintenance of the system, extension of the EHR to additional LPHAs, and assessment and development of a plan to make the system sustainable.

Annual system maintenance costs were identified in the original contract at $502,188 per year. Now that the EHR system is successfully implemented, ongoing maintenance and support costs with the vendor are required to continue to use the system. Typical maintenance and support of a vendor-hosted information technology system is estimated to be 20% of the implementation cost. Because of the Department's collaboration with CDHS and foresight to build a joint system that is scalable, this maintenance and support cost is closer to 5%. This collaboration has effectively saved the state more than 1 million dollars per year in vendor maintenance and support.

In addition to vendor maintenance costs, the Department requests $335,586 for 3.5 term-limited FTE to support existing LPHA users and expand the system to additional users. Since the EHR project has been successfully implemented, it moves to a maintenance and support model. However, in order to continue to onboard additional LPHA sites, 3.5 FTE will be required to support management of the project, configuration of the EHR for use by each new LPHA, support for existing LPHA users, and statewide maintenance for the EHR domain. See appendix A for a detailed five-year work analysis. The analysis shows that in the first years, the majority of staff will be working on onboarding new LPHA users and in the later years, staff will shift to support the growing number of existing users. Specifically, the activities that the Department will assume include:

1. Configuration and change management for continuing LPHAs,
2. Training and support for continuing LPHAs,
3. Supervision, fiscal services, and contract and project management,
4. Assessment and planning efforts for EHR implementations with new LPHAs,
5. Configuring the EHR for new LPHA use,
6. Conducting integration testing with each new LPHA to assess and adjust the EHR, and
7. Training the new LPHA end users and provide support in the transition to EHR use.

See Tab 2 in Appendix A for a detailed workload analysis.

If this request is not approved, the six LPHAs which will be using the EHR by June 2019 will have to pay approximately $80,000 in vendor fees annually for the EHR and would receive no support from the State. If this were to occur, LPHAs would almost certainly not be able to gather the necessary funds to continue using the EHR. This would force local public health partners to revert back to prior systems and the efficiencies gained by using an EHR system for clinical, operational, and financial operations would be erased.

The Department is requesting one year of funding to onboard additional LPHAs, evaluate the effectiveness of the system, assess LPHA support for expanding the number of participating counties, and assess the counties' abilities and willingness to fund the on-going maintenance.

Anticipated Outcomes:

The implementation of a modern, comprehensive EHR for local public health directly ties to Goal Five, "Prepare and respond to all emerging issues," Strategy 8, "Modernize data collection and dissemination" in the Department's Strategic Plan. Improved IT infrastructure and technical options for local public health providers minimizes duplicative reporting to the Department and systematizes clinical, operational, and financial operations at each site. These improvements have contributed to improved data capture, provided accurate, up-to-date, and complete information about patients at the point of care, standardized messages to CDPHE with uniform code sets, and improved efficiency in public health reporting.

Measures of effectiveness for this project include:

- Increase the number of participating local public health agencies to 20 over five years
- Increased adherence to vaccination schedules, cancer screening, and STI screening recommendations in counties with a participating LPHA
- Increased number of LPHAs engaged in public health reporting via health information exchanges (HIEs), including but not limited to increased electronic transmission of vaccination records by 74,000 and of family planning visits by 12,000 annually
- Reduced rates of medical errors from public health practitioners who provide clinical services in participating LPHAs
- Increased financial sustainability of participating LPHAs including the ability to bill Medicaid and commercial insurance providers for insured patients

Assumptions and Calculations:

The Department requests $837,774 General Fund and 3.5 term-limited FTE for 2019-20 to fund annual maintenance and continued expansion of the electronic health records system developed for local public

health agencies. This includes $502,188 per year in vendor maintenance and support, and $335,586 for 3.5 term-limited FTE. See Appendix A for a workload analysis related to the requested FTE.

The FTE costs include salaries requested at 15% above minimum for each classification. This will allow the Department to compete with similar industries within the private sector to hire staff with specific expertise and experience liaising between information technology and public health program implementation.

Vendor EHR Maintenance and staff Support Costs for FY 2019-20:

FY 2019 - 20	
Vendor Maintenance and Support	$ 502,188
Subtotal:	**$ 502,188**
Support Staff FTE	
Health Professional III - 2.7 FTE	
Salary and Benefits	$ 230,610
Operating	$ 16,959
Health Professional V - .5 FTE	
Salary and Benefits	$ 50,271
Operating	$ 5,653
Administrator IV - .3 FTE	
Salary and Benefits	$32,093
Operating	$0
Subtotal:	**$335,586**
YEAR ONE TOTAL:	**$837,774**

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 Salary	FTE		FTE		
HEALTH PROFESSIONAL III	$5,136	2.7	$169,476			$0
PERA			$17,625			$0
AED			$8,474			$0

SAED			$8,474		$0
Medicare			$2,457		$0
STD			$322		$0
Health-Life-Dental			$23,782		$0
Subtotal Position 1, 2.7 FTE		**2.7**	**$230,610**	**-**	**$0**
Classification Title	Monthly Salary	FTE		FTE	
HEALTH PROFESSIONAL V	$6,309	0.5	$34,697		$0
PERA			$3,608		$0
AED			$1,735		$0
SAED			$1,735		$0
Medicare			$503		$0
STD			$66		$0
Health-Life-Dental			$7,927		$0
Subtotal Position 2, 0.5 FTE		**0.5**	**$50,271**	**-**	**$0**
Classification Title	Monthly Salary	FTE		FTE	
ADMINISTRATOR IV	$6,001	0.3	$19,802		$0
PERA			$2,059		$0
AED			$990		$0
SAED			$990		$0
Medicare			$287		$0
STD			$38		$0
Health-Life-Dental			$7,927		$0
Subtotal Position 3, 0.3 FTE		**0.3**	**$32,093**	**-**	**$0**
Subtotal Personal Services		3.5	**$312,974**	-	**$0**
Operating Expenses:					
		FTE		FTE	
Regular FTE Operating Expenses	$500	4.0	$2,000		$0
Telephone Expenses	$450	4.0	$1,800		$0
PC, One-Time	$1,230	4.0	$4,920	-	

Office Furniture, One-Time	$3,473	4.0	$13,892	-	
Maintenance		1.0	$502,188		
Subtotal Operating Expenses			**$524,800**		**$0**
TOTAL REQUEST		3.5	**$837,774**	-	**$0**
	General Fund:		*$837,774*		*$0*
	Cash funds:				
	Reappropriated Funds:				
	Federal Funds:				

LPHA EHR Maintenance and Support Workload Analysis

Section 1: Background Information

The following components are included within the Electronic Health Record (EHR) for Local Public Health Agency (LPHA) use. Workload analyses in Section 2 was assessed per component.

Ambulatory EHR applications are used by LPHA clinical providers and their care team to legally document and approve of (chart) medical information collected on clinical, laboratory and referral services provided to a patient.

Pharmacy EHR applications are used by LPHA clinical providers and pharmacists to prescribe medication, administer medication in office (such as a flu shot), dispense medication (such as take-home antibiotics), and manage medication inventory in accordance with State Board of Pharmacy protocols.

Registration and scheduling EHR applications are used by LPHA front desk staff to register a patient including collecting demographic and insurance information that assesses patient ability to pay for services, scheduling appointments and checking patients in and

Patient accounting EHR applications are used to collect and monitor payments for charges incurred based on services rendered and then entered into ambulatory and pharmacy EHR applications including preparing, submiting and receiving electronic claims from private and public insurers.

Charge services EHR applications are used to connect ammulatory and pharmacy, registration/scheduling and patient accounting EHR applications so that charges are based on services rendered. This includes customization to apply correct charges for 340B Medicaid and Family Planning sliding fee scales dynamically.

Reporting EHR applications are used by LPHAs to extract, aggregate and analyze EHR data. LPHAs use reports to monitor ensure completeness and success of clinical and revenue cycle activities, assess and improve clinical quality of services provided to the LPHA's service area and to assess continuing needs and gaps of LPHA service area.

EHR interface fuctionality connects data from the EHR to other data applications including the Colorado's Health Information Exchange (COHRIO), Colorado Immunization Information System (CIIS), Family Planning data system (iCare), claims clearinghouses for electronic claims submission, external laboratories, etc.)

Volume of project-related items that impact workload by fiscal year		FY2019-2020	FY2020-2021	FY2021-2022	FY2022-2023	FY2023-2024	Assumptions/explanation
	Continuing LPHA EHR users	67	101	135	168	202	Average number of continuing LPHA EHR users is assumed to be 11.25 based on 225 licenses per the contract /20 LPHAs); multiplied by continuing LPHAs
	New LPHA EHR users	33	33	33	33	22	Average number of LPHA EHR users is assumed to be 11.25 new users based on 225 licenses per the contract /20 ; LPHAs multiplied by new LPHAs
	Total LPHA EHR use	100	134	168	201	224	Sum of two rows above. Note that vendor contract allows for 225 users.
	Continuing LPHAs	6	9	12	15	18	
	New LPHAs	3	3	3	3	2	
	Total LPHAs	9	12	15	18	20	Sum of two rows above. Note that vendor contract allows for 20 Local Public Health Agencies.
	Learning Curve	0%	20%	30%	40%	50%	annually from Year 1. This

Section 2: Proposed activities

Activity	Position classification	Interval	Hours (per interval)	Associated volume	Hours in FY2019-2020	Hours in FY2020-2021	Hours in FY2021-2022	Hours in FY2022-2023	Hours in FY2023-2024	Assumptions/explanation
Configuration and change management for continuing LPHAs										
(shared state EHR domain)	Health Professional V	Monthly	8	N/A (constant)	96	77	67	58	48	
LPHA requests that stays within vendor scope	Health Professional V	Monthly	8	N/A (constant)	96	77	67	58	48	
Coordinate with EHR vendor to implement changes	Health Professional III	Monthly	8	N/A (constant)	96	77	67	58	48	
EHR applications	Health Professional III	Monthly	10	Continuing LPHAs	720	864	1,008	1,080	1,080	requests are adjustments to
applications	Health Professional III	Monthly	12	Continuing LPHAs	864	1,037	1,210	1,296	1,296	adjustments to the EHR to
Training and support for continuing LPHAs										
Train new LPHA users in response to staff turnover	Health Professional III	As requested	40	EHR users	268	323	378	403	404	Expect 10% turnover in contir

Monitor and make modifications to training plan strategy	Health Professional V	Annually	40	N/A (constant)	40	32	28	24	20	
Maintain training curriculum & support materials	Health Professional III	Monthly	8	N/A (constant)	96	77	67	58	48	
Monitor and make modifications to end user support plan	Health Professional V	Annually	40	N/A (constant)	40	32	28	24	20	
Provide continuous education on EHR to LPHA end users	Health Professional III	Monthly	6	N/A (constant)	72	58	50	43	36	
(responding to real-time issues while LPHAs are serving	Health Professional III	Weekly	4	Continuing LPHAs	1,248	1,498	1,747	1,872	1,872	end users to call 8am-5pm
Supervision, fiscal , contract and project management										
Monitor vendor contract and budget	Administrator IV	Monthly	60	N/A (constant)	720	720	720	720	720	
support LPHA needs	Health Professional V	Annually	80	N/A (constant)	80	64	56	48	40	
Supervise staff	Health Professional V	Monthly	16	N/A (constant)	192	192	192	192	192	
needs for EHR	Health Professional V	Annually	20	Total LPHAs	180	192	210	216	200	developing and
for new LPHAs	Health Professional V	Monthly	4	New LPHAs	144	115	101	86	48	
Assessment and planning for EHR implementation with new LPHAs										
learn abou their current state clinical and revenue	Health Professional III	One-time	40	New LPHAs	120	96	84	72	40	
Develop connectivity and hardware plan for each LPHA	Health Professional III	One-time	40	New LPHAs	120	96	84	72	40	
alignment with existing LPHA EHR workflows	Health Professional III	One-time	360	New LPHAs	1,080	864	756	648	360	detail per component of the
coordinating and prioritizing EHR enhancements across all	Health Professional V	One-time	80	New LPHAs	240	192	168	144	80	
Configure EHR implementation for new LPHA use										
hardware is set up with OIT and Vendor staff	Health Professional V	One-time	40	New LPHAs	120	96	84	72	40	
Configure EHR for each LPHA	Health Professional III	One-time	400	New LPHAs	1,200	960	840	720	400	detail per component of the
Conduct integration testing with each new LPHA to assess and adjust EHR										
including connectedness of all EHR applications	Health Professional III	One-time	40	New LPHAs	120	96	84	72	40	
Conduct test of EHR connectivity	Health Professional V	One-time	10	New LPHAs	30	24	21	18	10	
test findings	Health Professional III	One-time	80	New LPHAs	240	192	168	144	80	
Train new LPHA end users and provide support in transition to EHR use										
Train LPHA end users on applicable EHR applications	Health Professional III	One-time	60	New LPHAs	180	144	126	108	60	
Provide on-site end user support during EHR implementation	Health Professional III	One-time	80	New LPHAs	240	192	168	144	80	
transition to EHR use (anticipate this is higher during first	Health Professional III	One-time	160	New LPHAs	480	384	336	288	160	

FTE Estimated Need	Health Professional III	FTE	3.4	3.3	3.4	3.4	2.9	
	Health Professional V	FTE	0.6	0.5	0.5	0.5	0.4	
	Administrator IV	FTE	0.3	0.3	0.3	0.3	0.3	
	TOTAL		4.4	4.2	4.3	4.2	3.6	
FTE Requested within this decision item (Difference in FTE will be absorbed by CDPHE)	Health Professional III	Salary $ 61,630.80 FTE	3.0	3.0	3.0	3.0	3.0	
	Health Professional V	Salary $ 75,706.80 FTE	0.5	0.5	0.5	0.5	0.5	
	Administrator IV	Salary $ 72,008.40 FTE	0.3	0.3	0.3	0.3	0.3	
	TOTAL		3.8	3.8	3.8	3.8	3.8	
			3.5					
Total funds requested associated resulting from workload analysis	Health Professional III		184,892	184,892	184,892	184,892	184,892	
	Health Professional V		37,853	37,853	37,853	37,853	37,853	
	Administrator IV		21,603	21,603	21,603	21,603	21,603	
		YEARLY TOTAL REQUEST	**244,348**	**244,348**	**244,348**	**244,348**	**244,348**	
		5 YEAR TOTAL REQUEST					**1,221,742**	

Assumptions:

Staffing salary - 15% over minimum

COLORADO
Governor's Office of
Information Technology

8/1/2018

Lauren Larson
Director
Office of State Planning and Budgeting
111 State Capitol
Denver, Colorado 80203

RE: FY 2019-20 IT Operating Request - CDPHE - CHED EHR Maintenance and Support

Dear Director Larson:

Pursuant to OSPB instructions, this letter is to confirm that the Office of Information Technology (OIT) has reviewed and approved the submission of this proposed FY 2019-20 IT Capital Construction Request, CDPHE - CHED EHR Maintenance and Support. OIT has completed an internal review to ensure the project aligns with statewide IT goals and determined that OIT has the capacity to deliver and meet the requirements of the project. In addition, this review has included ensuring that this project has been included in the agency's Five Year IT Roadmap.

Sincerely,

Bethany Nicholas, OIT Budget Director

Kris Kiburz, OIT IT Director

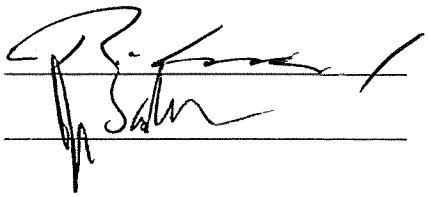
Schedule 13

Department of Public Health and Environment

Funding Request for The FY 2019-20 Budget Cycle

Request Title

R-05 Tableau for Data Transparency

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 Initial Appropriation	FY 2018-19 Supplemental Request	FY 2019-20 Base Request	FY 2019-20 Change Request	FY 2020-21 Continuation
	Total	**$2,513,718**	**$0**	**$2,419,718**	**$85,000**	**$85,000**
	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	$0	$0	$0	$0	$0
	RF	$2,513,718	$0	$2,419,718	$85,000	$85,000
	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	**$2,513,718**	**$0**	**$2,419,718**	**$85,000**	**$85,000**
	FTE	0.0	0.0	0.0	0.0	0.0
01. Administration and Support, (A) Administration, (1) Administration - Operating Expenses	GF	$0	$0	$0	$0	$0
	CF	$0	$0	$0	$0	$0
	RF	$2,513,718	$0	$2,419,718	$85,000	$85,000
	FF	$0	$0	$0	$0	$0

Auxiliary Data

Requires Legislation?	NO		
Type of Request?	Department of Public Health and Environment Prioritized Request	**Interagency Approval or Related Schedule 13s:**	No Other Agency Impact

Cost and FTE

- The Department requests $85,000 reappropriated funds through indirect cost recovery to support the annual server license fees for Tableau, the Department's data visualization software, and for training to support staff utilizing Tableau to create interactive online dashboards, graphs, and charts. This request represents a 3.5% increase in reappropriated funds over the FY 2018-19 appropriation in the Administration Operating Line.

Current Program

- The Department selected Tableau as the data visualization and reporting software in 2015.
- The Tableau Users Group includes over 40 Tableau developers across the Department; these reside within the 11 individual divisions and offices.

Problem or Opportunity

- This request seeks funding in order to meet industry standards regarding data sharing, performance management, and the intent of the SMART Act (State Measurement for Accountable, Responsive, and Transparent Government).
- The Department's 11 divisions currently fund the annual Tableau server license through direct billing; however, it is more equitable and efficient to pay for it through indirect costs.

Consequences of Problem

- Without the Tableau Server license, the Department will lose the opportunity to standardize dashboards, enable best practices with data governance, and provide security at both the user and group level for projects and workbooks.
- The Department will have less security when connecting to external data sources and publishing and sharing data.

Proposed Solution

- The Department requests $85,000 in indirect cost recoveries to provide a stable funding source for the Tableau server renewal fee ($70,000 annually) and annual training ($15,000). The request will support staff development and continued education to develop internal talent to meet the Department's data visualization and performance management needs.
- The Department requests indirect funds as all divisions utilize Tableau across the Department to support both internal performance management and external data sharing. The Department believes indirect funds are an appropriate source to support the Tableau server license due to the department-wide utilization of the platform.

Department Priority: R-05
Request Detail: Tableau for Data Transparency

Summary of Incremental Funding Change for FY 2019-20	Total Funds	reappropriated funds (Indirect)
Tableau for Data Transparency	$85,000	$85,000

Problem or Opportunity:

The Department requests $85,000 reappropriated funds through indirect cost recovery in FY 2019-20 and beyond to support the annual server license fees for Tableau, the Department's data visualization software, and for training to support staff utilizing Tableau to create interactive online dashboards, graphs, and charts.

Not unlike other state agencies and successful organizations, the Colorado Department of Public Health and Environment regularly considers issues that include the following:

- Does the Department move the needle on important health and environmental issues?
- Do changes made by the Department to systems or processes produce better results?
- Are health and environmental programs meeting the needs of the Coloradans that rely on our services?

Through the collection of meaningful data, turning that data into easy-to-use and understandable information, and having conversations about why the trends may change, the Department can answer these questions. Congruent with the intent of the SMART Act (State Measurement for Accountable, Responsive, and Transparent Government) and the national Public Health Accreditation Board standards, the Department works diligently to improve data sharing and performance management ability. Sharing data and information in a transparent manner helps ensure the Department remains accountable to taxpayers, lawmakers, granters, and customers and allows for more efficient and effective collaborations with partners and stakeholders working on shared health and environmental priorities.

Excerpts from recent articles written in the Harvard Business Review and Governing on the subject of performance management and using data provide insight to the subject of data and performance:

- <u>What's your data strategy</u>:

  More than ever, the ability to manage torrents of data is critical to a company's success. But even with the emergence of data-management functions and chief data officers (CDOs), most companies remain badly behind the curve. Cross-industry studies show that on average, less than half of an organization's structured data is actively used in making decisions—and less than 1% of its unstructured data is analyzed or used at all. Building a robust data strategy enables superior

data management and analytics—essential capabilities that support managerial decision making and ultimately enhance performance (DalleMule & Davenport, 2017).[1]

- How to Integrate Data and Analytics into Every Part of Your Organization: "All great leadership teams and high performing organizations don't just monitor their numbers; they use them as the foundational guide to measure their organization's performance and make insightful business decisions about their direction" (Carande, Lipinsky, & Gusher, 2017)[2].

- Performance Management in Government: The Old Is New Again –

  And in a recent column in this space, Stephen Goldsmith explored ways that performance systems are increasingly being linked to visualization tools that provide on-the-fly access to government data to just about anyone who wants it. These tools are increasingly available from a variety of private-sector, public-sector and nonprofit providers and should feature:

  - A set of well-defined, common performance benchmarks that enable communities to compare their performance with other jurisdictions.
  - A tiered service approach that covers all budget sizes and performance-management needs, from basic summary statistics and integrated reporting to more advanced customizable graphs, scorecards, dashboards and performance forecasting.
  - Training and development options that take routine metrics to a higher, more comprehensive level for users (O'Neill, 2017)[3].

- A Roadmap to Measuring Performance - "Performance data is essential to developing strategic plans, measuring progress toward goals, assessing policy alternatives, and making sound management decisions" (O'Neill, 2008)[4].

In order to meet industry standards regarding data sharing and performance management and the true intent of the SMART Act, the Department seeks funding for the annual server license fee for Tableau, the data visualization reporting software used across the Department, and for training to Department staff in order to develop internal talent to ensure best practices with data visualization. The Department currently funds the annual Tableau server license by directly billing each division and office. This involves processing transactions for eleven divisions. Since the Department as a whole uses Tableau, paying through indirect costs proves more equitable and efficient. Without the requested funding, the Department will continue to have to fund the server license fee by direct billing and will not have the ability to provide Department-wide training to Tableau users.

Proposed Solution:

The Department requests $85,000 in indirect cost recoveries to fund the Tableau server renewal fee ($70,000 annually) and annual training ($15,000) for FY 2019-20 and beyond. Training will support staff development and continued education regarding best practices with Tableau and data visualization for the growing number

[1] DalleMule, L., Davenport, T. (2017, May-June). What's Your Data Strategy. Retrieved from https://hbr.org/2017/05/whats-your-data-strategy

[2] Carande, C., Lipinski, P., Gusher, T. (2017, June 23). How to Integrate Data and Analytics into Every Part of Your Organization. Retrieved from https://hbr.org/2017/06/how-to-integrate-data-and-analytics-into-every-part-of-your-organization

[3] O'Neill, R. (2017, September 8). Performance Management in Government: The Old Is New Again. Retrieved from http://www.governing.com/columns/smart-mgmt/col-performance-management-government-history-stat-data-analysis-visualization.html

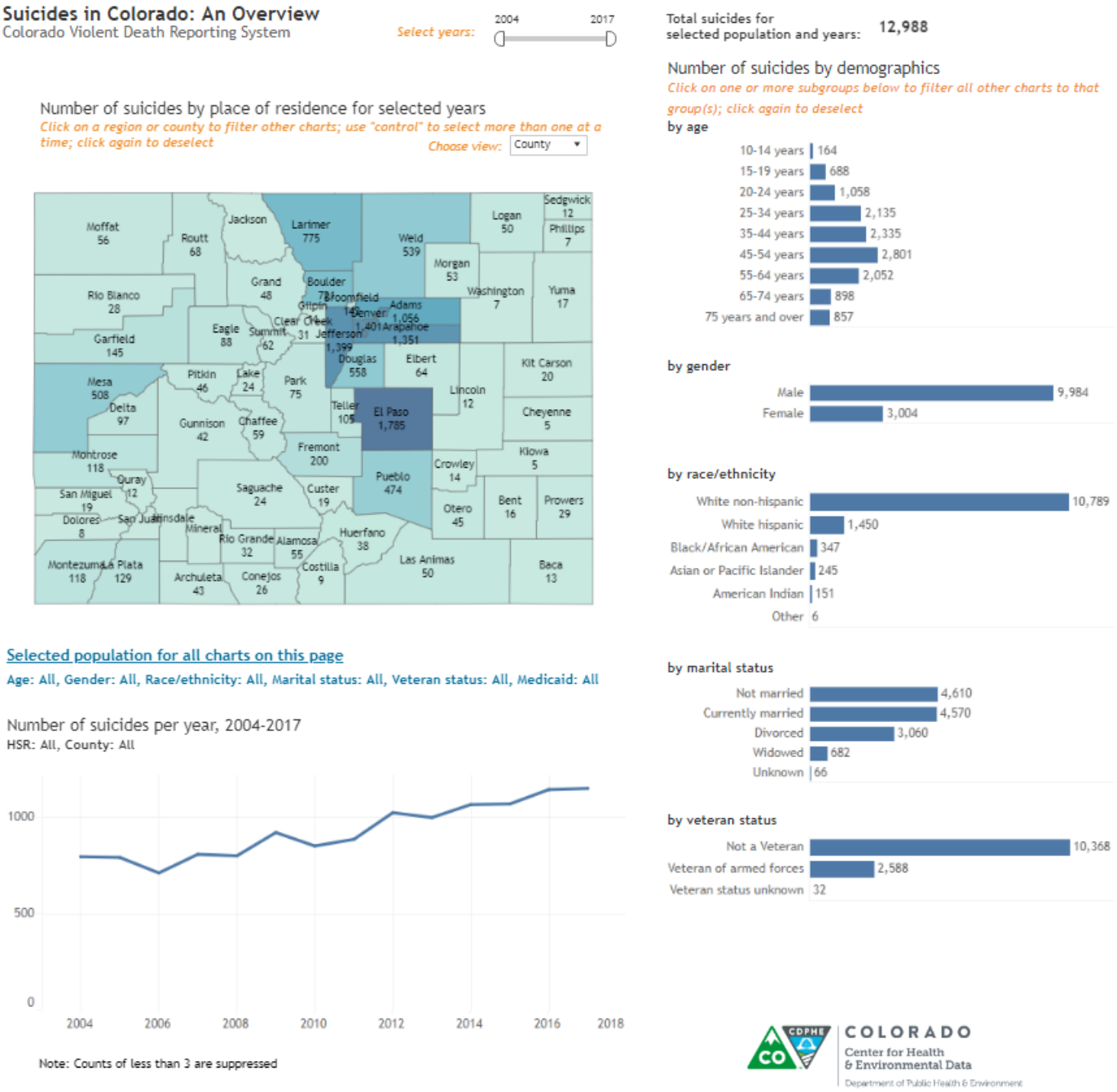
[4] O'Neill, R. (2008, March 12). A Roadmap to Measuring Performance. Retrieved from http://www.governing.com/columns/mgmt-insights/A-Roadmap-to-Measuring.html

of staff working with data across the Department. The Department requests indirect funds as divisions across the Department utilize Tableau to support both internal performance management and external data sharing with customers and citizens.

The Department selected Tableau as the data visualization and reporting software in late 2015 after an extensive process working with the Office of Information Technology (OIT). This process included a Business Analyst creating a Business Requirements Document to detail the needs of the Department. From there, divisions and offices funded (and continue to fund) the single user Desktop licenses ($1500 for initial set up and $450 annually). Later, the divisions pooled funding to purchase the Tableau server license for use across the Department. The server license allows the Department to standardize dashboards, enable best practices with data governance, and provide security at both the user and group level for projects and workbooks. Additionally, the Tableau server allows the Department to connect to data sources securely, and publish and share multiple data sources in a safe, secure environment. The Department requires a secure environment because some projects and workbooks may contain personally identifiable information. Divisions and offices funded staff training on Tableau and best practices with data visualization in early 2016. Since then, the Department has successfully used Tableau to meet data visualization needs and to efficiently use data to make informed decisions. Ongoing support of staff and Tableau will help ensure continuous improvement to the Department's data visualization and performance management efforts.

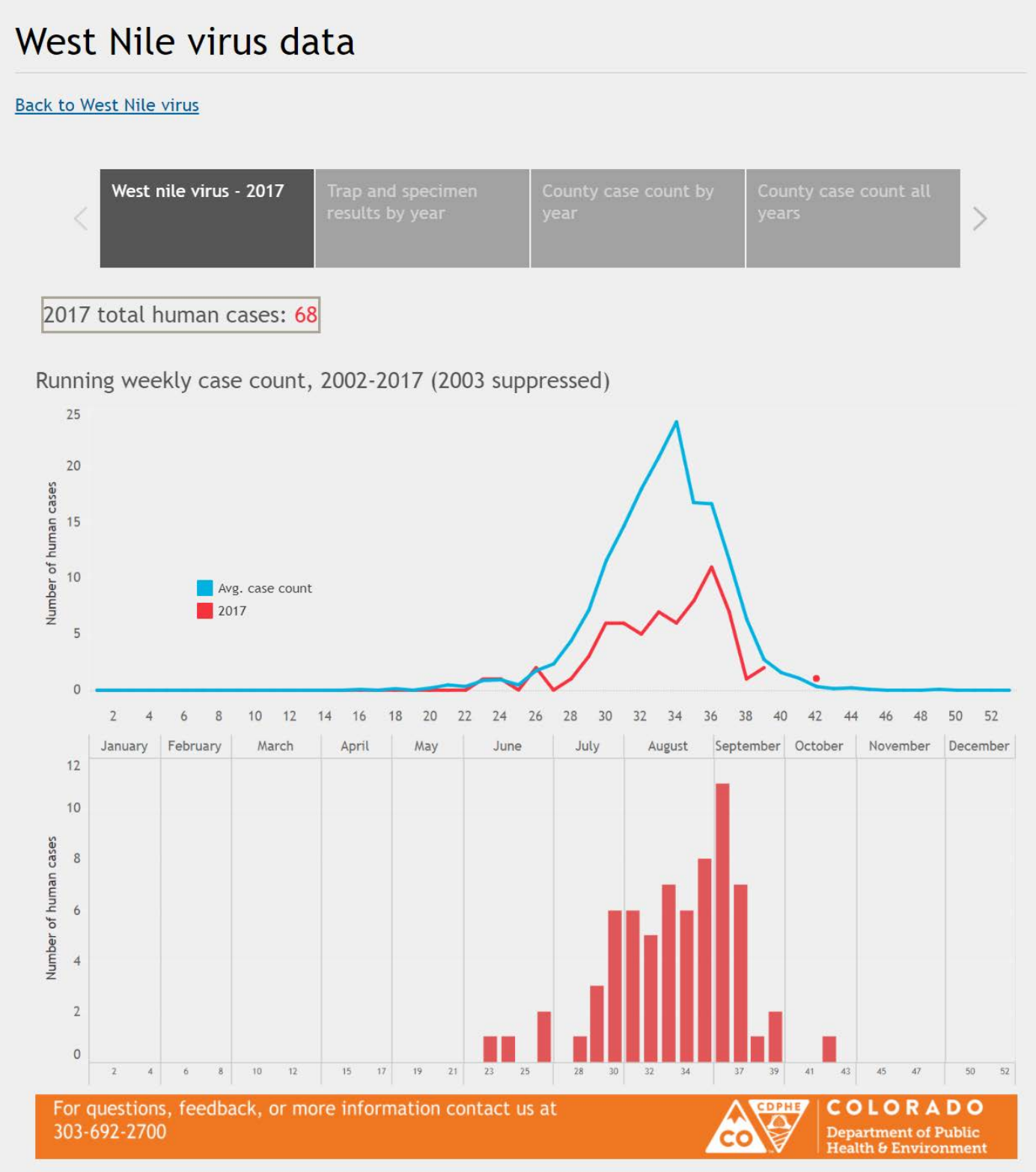
The following projects highlight some of the Tableau work the Department has invested in the past year to give some examples of the improvements made regarding sharing data:

- The Suicide Data for Colorado dashboard took data from multiple, disconnected sources (previously not viewed together) in order to allow citizens, programs, and organizations working in mental health and suicide prevention to visualize suicide data and related information for the state of Colorado. How the Department reported this data visualization impressed the Centers for Disease Control and Prevention (CDC) so much so that they have since promoted this across the nation. This data allows community organizations and programs working on suicide prevention easy access to the needed information to find target areas and groups of people disproportionately affected by suicide. Ready access to information enables the Department to target resources and assistance more effectively, thus improving the response and focus of suicide prevention efforts across the State. See screenshot below.



Another example includes the Environmental Public Health Tracking that has succeeded tremendously in aiding the local public health agencies that utilize the health and environmental data it displays. Previously, managing and updating the health and environmental measures (such as air quality, harmful algae blooms, drinking water, and radon) required significant effort and costs. Now, the Department shares the same data with easy-to-understand visuals, maps, and charts created in Tableau, providing efficiencies for the program. Programs now provide more accurate, relevant, and current content. For example, the West Nile Virus page, which program staff created quickly in May 2017 and continued to update through the summer, provided a live connection to West Nile Virus information throughout the summer. The Oil and Gas Health Information and Response Program, Emerging Infections Program, Vaccine Preventable Disease Program, and Vector-borne Disease program completed similar work. In less than a year, partners and local public

health agencies have increased visits to the site by 25%, showing the usefulness of the information. See screenshot below.



In order to enable staff to use Tableau and follow best practices with data visualization, the Department requests staff development funding. The Department will use the $15,000 requested for training for members of the Department's Tableau User community. This would allow support and training on best practices with Tableau and data visualization. Centralized funding would help to ensure that the Department could direct training towards the most critical needs of Tableau users. The Department based the requested amount on the cost of the afore-mentioned training held in 2016.

Anticipated Outcomes:

Anticipated outcomes include having ongoing funding to support the Tableau server license, the Department's standard reporting software, and the ability to train and support staff who use this tool. By funding the Tableau server through indirect cost recoveries, all divisions will have the ability to utilize this state-of-the-art reporting software which enables Department customers to access data and information needed to help improve Colorado's health and environment. The requested training funding will support on-going opportunities to enhance and expand staff competence and abilities with Tableau.

Prior to the creation of the performance management system, the Department's Strategic Plan consisted of a static PDF document posted on the Department's website. Without frequent manual updates, the data quickly became outdated. In 2016, the Department created the Strategic Plan Dashboard in Tableau and posted it on the Department's website, increasing the transparency of the Department's performance. Similarly, the state Public Health Improvement Plan (Shaping a State of Health) also has an online dashboard. The Department uses this plan to align and show work across the state in key health and environmental priorities.

As staff continue to use Tableau, the Department can make more data available to leadership, stakeholders, and customers. The Department houses a large portion of its data on servers, databases, and complicated spreadsheets, or in specific software applications; Tableau allows for the Department to effectively share and display that data in ways previously not possible. This increased access to data and information will help promote transparency and accountability and allow more data-driven decision making to occur.

Assumptions and Calculations:

Set in a contract negotiated by Insight, the State's approved procurement vendor for IT software and hardware, the Tableau server annual renewal fee currently costs $70,000. Fortunately, the Department benefits from using Insight as they allow for a reduced rate versus the rate that the Department could negotiate directly with Tableau.

The Department has based the $15,000 training request on the assumption that having the trainer come to the Department proves the most cost effective and efficient way to provide training to the maximum number of staff. Based on previous experience, the Department assumes it could provide a two-day training to at least 12 employees for $15,000. Using the individual training rate, estimated at $1,400 per person, training 12 people would cost $16,800 plus travel costs. In lieu of in-person classes, staff have used free online videos as the primary training tool. While the online videos have some effective training on Tableau basics, the in-person and hands-on training provides much more help to support learning. The evaluation of the 2016 class demonstrated that it effectively helped users to more efficiently use Tableau. The requested training funding in this proposal would allow for on-going training for the Tableau users which encourages a learning environment, continual improvement in the skills and abilities of staff, and a workforce that can stay current with the rapidly evolving field of data visualization and performance management.

COLORADO
Governor's Office of
Information Technology

8/1/2018

Lauren Larson
Director
Office of State Planning and Budgeting
111 State Capitol
Denver, Colorado 80203

RE: FY 2019-20 IT Operating Request - CDPHE Tableau Server License

Dear Director Larson:

Pursuant to OSPB instructions, this letter is to confirm that the Office of Information Technology (OIT) has reviewed and approved the submission of this proposed FY 2019-20 IT Capital Construction Request, CDPHE Tableau Server License OIT has completed an internal review to ensure the project aligns with statewide IT goals and determined that OIT has the capacity to deliver and meet the requirements of the project. In addition, this review has included ensuring that this project has been included in the agency's Five Year IT Roadmap.

Sincerely,

Bethany Nicholas, OIT Budget Director

Kris Kiburz, OIT IT Director

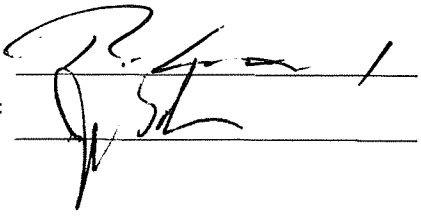
Schedule 13

Department of Public Health and Environment

Funding Request for The FY 2019-20 Budget Cycle

Request Title

R-06 Equity Trainer

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 Initial Appropriation	FY 2018-19 Supplemental Request	FY 2019-20 Base Request	FY 2019-20 Change Request	FY 2020-21 Continuation
	Total	**$371,542**	**$0**	**$501,599**	**$104,348**	**$109,199**
	FTE	4.3	0.0	4.3	0.9	1.0
Total of All Line Items Impacted by Change Request	GF	$69,206	$0	$71,971	$104,348	$109,199
	CF	$0	$0	$0	$0	$0
	RF	$302,336	$0	$302,336	$0	$0
	FF	$0	$0	$127,292	$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	**$371,542**	**$0**	**$501,599**	**$104,348**	**$109,199**
	FTE	4.3	0.0	4.3	0.9	1.0
01. Administration and Support, (B) Office of Health Equity, (1) Office of Health Equity - Program Costs	GF	$69,206	$0	$71,971	$104,348	$109,199
	CF	$0	$0	$0	$0	$0
	RF	$302,336	$0	$302,336	$0	$0
	FF	$0	$0	$127,292	$0	$0

Auxiliary Data

Requires Legislation?	NO		
Type of Request?	Department of Public Health and Environment Prioritized Request	**Interagency Approval or Related Schedule 13s:**	No Other Agency Impact

Cost and FTE

- The Department requests $104,348 General Fund and 0.9 FTE for FY 2019-20 and $109,199 General Fund and 1.0 FTE for FY 2020-21 and beyond to for a three-year pilot program that would build capacity around advancing equity in state programs, policies, budgets, and services as currently supported by the Office of Health Equity (OHE). This request represents a 151% increase over the FY 2018-19 General Fund appropriation in the Office of Health Equity, Program Costs line.

Current Program

- The Department's Office of Health Equity (OHE) provides training and consultation to Department staff about incorporating equity into daily work and have been receiving increasing requests from other state agencies as well. Equity means that everyone in Colorado, regardless of who they are, has the ability to thrive. OHE staff have developed a level of knowledge and skill in helping State government staff troubleshoot barriers to advancing equity. The goal of the office is to stay current with national best practices for advancing equity.

Problem or Opportunity

- When government entities enact equity-focused programs and policies, communities benefit in many ways, including stronger, sustained growth and cost-savings from reductions in health care spending; in essence, all citizens are healthier when a region has lower economic inequality.
- Decisions about housing, education, public safety, etc. are critical to ensuring all Coloradans have the ability to thrive, but state agencies often make decisions without using an equity lens.
- No formalized process currently exists for state agencies to integrate equity into critical decision-making.

Consequences of Problem

- Without additional resources, OHE cannot build broader relationships with other State agencies to advance equity in State government.

Proposed Solution

- The Department requests $104,348 General Fund and 0.9 FTE for FY 2019-20 and $109,199 General Fund and 1.0 FTE for FY 2020-21 and beyond for a three-year pilot program that would build capacity around advancing equity in state programs, policies, budgets, and services.
- The requested FTE will create mechanisms to ensure that State employees are aware of potential capacity-building opportunities, develop curriculum, and provide training, coaching and other support.
- Health Equity and Environmental Justice is one of five Department goals. This proposal supports benefits to Vision 2018 as it aims to make Colorado the healthiest state in the nation and provide efficient, effective, and elegant government services by coordinating a cross-agency approach.

Department Priority: R-06
Request Detail: Equity Trainer

Summary of Incremental Funding Change for FY 2019-20	Total Funds	General Fund
Equity Trainer	$104,348	$104,348

Problem or Opportunity:

The Department requests $104,348 General Fund and 0.9 FTE for FY 2019-20 and $109,199 General Fund and 1.0 FTE for FY 2020-21 and FY 2021-22 to implement a three-year pilot program that would build capacity around advancing equity in state programs, policies, budgets, and services as currently supported by the Office of Health Equity (OHE).

Equity means that everyone in Colorado, regardless of who they are, has the ability to thrive. To give all Coloradans the opportunity to thrive, the Colorado Department of Public Health and Environment recognizes the need to align equity work with other state agencies. State agencies must make critical decisions about housing, transportation, education, public safety, etc. to ensure all Coloradans can live healthy lives; but these state agencies often make these critical decisions without an equity lens. Without a concerted effort to coordinate across state agencies in the name of equity, state government employees will have a limited influence on the upstream social determinants of health.

Evidence from California demonstrates that certain policies, when approached with equity as a goal, can have a significant positive impact both on equity and on other important outcomes across multiple state agencies and programs. California's Farm-to-Fork policies have made it easier for more people to access affordable and nutritious fresh foods: something that is often a challenge for low-income individuals, but that has a significant positive impact on health outcomes. The Farm-to-fork policies make it easier for people and institutions to purchase produce from local farmers resulting in healthier food options and stimulating local economies. While having positive equity implications, the Farm-to-Fork policies also have co-benefits for several agencies and community stakeholders, including:

- Economic development: Farm-to-fork policies and programs can support the local agricultural and food economy.
- Agriculture: Supporting local agriculture helps to preserve agricultural lands.
- Environment: Agricultural lands may support habitat conservation and "ecosystem services," the ways that human communities benefit from nature, such as through clean water, timber, habitats for fisheries, and pollination of native and agricultural plants.
- Education: Healthy eating is an essential component of supporting academic achievement; it is hard for hungry children to learn. An estimated 19%–50% of calorie intake by children occurs at school.

Collaboration amongst several California State agencies, with a commitment to equity as a primary goal of the Farm-To-Fork policies, has resulted in a wide variety of benefits, both equity and otherwise, to the State of California, businesses, community groups and individuals. These wide-ranging benefits would likely not have been achieved if multiple state agencies had not been educated about and committed to equity principles.

Codified in state statute through Senate Bill 242 in 2007, OHE's mission is to ensure that every Coloradan has an equal opportunity to achieve their full health potential. Dedication and momentum for advancing equity has manifested in many ways at the Department. For example, because of a LEAN initiative in 2012, the Department created the Health Equity and Environmental Justice (HE & EJ) Collaborative so staff at all levels and across each division could actively help advance equity and justice in Colorado. From a HE & EJ policy codified in 2016, all Department employees began participating in a foundational course on HE & EJ.

As an example of the benefits, contracts and procurement staff have examined certain state processes, specifically the request for application (RFA) template and process, and worked to eliminate barriers to applying for state funding. This examination resulted in a simplified RFA template and process that follows legal requirements, but also serves more diverse applicants, such as small organizations. This RFA template and process has begun to influence other state agencies using RFAs.

In the environmental divisions, staff have used an environmental justice permitting guidance document to develop enhanced outreach efforts. The divisions issue environmental permits based on State and Federal requirements e.g., allowable emissions from a power plant. Efforts to comply with the environmental justice permitting guidance have included outreach to community groups that are not usually included but are directly impacted, such as family, friends, and neighbors care networks. Since the environmental justice concerns would directly impact individuals in this community, Department staff learned about effective, non-traditional ways to reach those communities. Staff have reported that using the guidance has made them more mindful of their work and why HE & EJ is an important part of the environmental permitting process.

Another example relates to CDPHE grant programs expanding the type of work supported by grant funding. Two programs, the Health Disparities Grant Program and Cancer, Cardiovascular, Pulmonary Disease Program (grantees focusing on the prevention of cancer, diabetes and pulmonary disease), expanded grantee work to address certain factors outside of direct health services, such as food security and the built environment. This directly relates to a mounting body of evidence showing that health is determined largely by physical environment: where people live, work, play, and learn. These are also known as the upstream determinants of health.

A recent article from the American Public Health Association demonstrates that more and more public health departments are placing a stronger emphasis on equity and working outside of traditional health such as poverty, housing and education (Krisberg, 2018)[1]. While internal efforts to advance equity and justice continue at CDPHE, there is a need to increase efforts to partner across state agencies. Research literature substantiates the cost savings of using an equity lens, which ultimately makes government work more elegant, efficient, and effective. Research shows that when government entities enact equity-focused programs and policies, communities benefit in many ways, including economically. With less racial and income segregation, community residents have more chances to prosper and contribute to society. For example:

- Regions with more equity experience stronger, sustained growth.

[1] Krisberg, K. (2018, July). Health Departments Placing Strong Emphasis on Equity: Achieving Social Justice in Public Health. *The Nation's Health*, pp. 1-15.

- Equity can lead to significant cost-savings from reductions in health care spending.
- All citizens are healthier when a region has lower economic inequality (PolicyLink, 2017).[2]

Providing equity training to state agency staff can also help the state avoid difficult situations such as lawsuits. For example, community engagement, specifically including the voice of community residents in decision-making processes that directly impact them, is a core tenant of equity. Integrating authentic community engagement early and frequently in decision-making processes helps community residents voice their concerns, and can possibly prevent lawsuits.

Based on informal inquiries, the Department appears to be the state agency most actively considering equity in its decision making and incorporating equity into daily work. An opportunity exists to build and deepen relationships with other state agencies by providing training and consultation on incorporating equity considerations into their decision-making processes. This effort is already underway and has seen tremendous success.

For example, in 2017, the Department of Natural Resources - Parks and Wildlife division incorporated health and access considerations into its Statewide Comprehensive Outdoor Recreation Plan (SCORP) after consultations with Office of Health Equity staff. According to data from the 2015 Attitudes and Behaviors on Health Survey (TABS), there are certain demographics who wish to have more parks and recreation access but experience barriers. In the 2019-2023 SCORP, "Opportunity and Access" is one of four overarching goals. Specifically, "More Coloradans and visitors benefit from outdoor recreation." Objective 1 of this goal area states, "To better understand and address barriers to engaging current and non-traditional users in active outdoor recreation." Strategies are being finalized, but they include the following:

- Equity-related activities such as engaging diverse types of users (demographic, geographic, cultural, socioeconomic, activity preference, etc.) in the planning and design of outdoor recreation spaces, access, and opportunities;
- Building trust, relationships and networks through enhanced public engagement/outreach focused on breaking down identified barriers;
- Recruiting and retaining an outdoor recreational workforce that is diverse and representative of Colorado's demographics. (Colorado Parks and Wildlife, 2018)[3]

The anticipated benefits are that Colorado families who are not currently accessing outdoor recreation will have more opportunities to access outdoor recreation due to certain barriers being removed and enhanced engagement efforts.

Based on requests from other state agencies in the past year, Office of Health Equity staff have led workshops or consultations for the Departments of Public Safety, Human Services, Higher Education, Local Affairs, Office of Economic Development and International Trade, and the Department of Transportation. The Department is beginning to understand the value of incorporating equity into state government work, yet having the expertise to do this work across state agencies does not currently exist. State agency staff do not know what steps to take to incorporate equity into their work, hence they are reaching out to OHE to help with implementation strategies. As a result of these training and consultation sessions, the number of follow-up requests from these agencies to the Office of Health Equity has exceeded its capacity to honor all requests.

[2] PolicyLink. (2017). *An Equity Profile of New Orleans.* New York: PolicyLink and PERE.

[3] State of Colorado Parks and Wildlife. (2018). *Colorado's 2019 Statewide Comprehensive Outdoor Recreation Plan.* Denver.

Currently, OHE staff can only provide a foundational "Health Equity 101" type of training for other state agencies. While OHE staff do not actively offer supplemental training, after the workshops or consultations OHE staff led in the past year, agencies have requested additional training or consultation approximately 75% of the time. After receiving a foundational type of training on advancing equity, OHE staff often hear, "This is important. So now, what's the next step?" This results in requests for OHE staff to provide more in-depth training, consulting, and technical support for activities such as policy development and strategic planning around equity issues.

For state government to integrate equity into daily operations, the Department must provide ongoing, in-depth training and support beyond the "Health Equity 101." For example, an opportunity exists to assist other state agencies in developing equity action plans through a more in-depth training process. OHE staff are currently able to provide this type of training to Department staff and have seen it result in beneficial changes. The following recent example underscores how a dedicated equity trainer may improve service to Coloradans.

An environmental commission administered by the Department now hosts public hearings that previously only provided interpretation and translation if it was requested by the community. After receiving training on equity, Department staff reviewed demographic data on the population who would be impacted by a particular facility and realized that 50% of the community residents speak Spanish as a primary language. When this information was shared with the Commission, they decided to provide Spanish translation and interpretation services at the public hearing as standard practice, without requiring a request from the community. Adapting this as standard practice eliminates barriers and creates a space where highly impacted communities are now able to participate and inform the public hearing.

Proposed Solution:

The Department requests $104,348 General Fund and 0.9 FTE for FY 2019-20 and $109,199 General Fund and 1.0 FTE for FY 2020-21 and FY 2021-22 to implement a pilot program that would hire an equity trainer to offer workshops and coaching on how to incorporate an equity lens into the practices of other state government programs, practices, and policies. Through workshops and coaching, the equity trainer would strengthen relationships across state agencies and identify joint projects. This solution, which is an expansion of OHE's current "health in all policies" approach, is based on successful work in other states such as California and Minnesota. The result of this type of collaboration and capacity-building will positively impact other state departments by aligning work and increasing the equity return on investment with state dollars.

The requested position will function as the Colorado state government expert and workforce development administrator on integrating equity into state functions. This position will consult with state agency directors and managers on strategies and processes to accomplish department goals related to equity. This position will design and deliver training courses to address identified needs and provide and coordinate organizational development consultation and training to state agency staff. Consultation and training may include: authentic community engagement, communication strategies such as the national standards for Culturally and Linguistically Appropriate Services (CLAS), integrating equity into decision-making, incorporating equity into state plans, and implicit bias. The services may be provided through one-on-one coaching with managers or through group activities with an option for webinar functionality. The position will understand the operational needs of various types of work units in state government to effectively provide consultation and assistance to managers and organizational units to integrate equity.

This position will be building new infrastructure within state government including the following:

- Outreach
- Creating mechanisms to let state employees know about capacity-building opportunities being offered
- Assessment
- Curriculum development based on national best practice and consulting with subject matter experts
- Delivering continuous training content (training sessions build upon one another)
- Evaluating training content based on anonymous state staff feedback
- As appropriate, serving as a resource for local government working on equity capacity-building
- Partnering with DPA to provide training and consultation information for referring other state departments to the Equity trainer.

See the workload analysis in the FTE template for more detail.

Given the level of work required to create and maintain this infrastructure, the Department requests one full time equivalent (FTE) for three years to pilot this program. Currently, OHE staff work to establish joint initiatives with other state agencies as a strategy to address upstream determinants of health. OHE has done some pilot work and determined that providing equity training across state government would prove valuable. However, OHE is currently limited in providing coordinated and continuous services to other state agencies because of insufficient staff resources. This lack of resources also inhibits broader relationship building. Long term, the Department needs to work with other state agencies to address the upstream determinants of health. Also, although the Division of Personnel Administration (DPA) is charged with training delivery to state employees, the equity subject matter is distinct and specialized. OHE has developed staff expertise to deliver the type of training referred to in this decision item.

Given that the Department has been actively incorporating equity and justice into Department work for over six years, staff at the Office of Health Equity have developed a level of knowledge and skill to effectively do this work. OHE staff have some experience helping staff of other state departments troubleshoot barriers to advancing equity. Additionally, OHE staff try to stay current with national best practices. Increasingly, national entities such as the Public Health Accreditation Board and the Association for State and Territorial Health Officials are seeking consultation from OHE staff about how to incorporate an equity lens into their work.

Health Equity and Environmental Justice (HE & EJ) is one of five goals for the Department. This proposal also supports the goal to "Increase CDPHE's efficiency, effectiveness and elegance" by aligning efforts across state agencies. Additionally, it supports the goal that "CDPHE is prepared and responds to all emerging issues." This proposal supports strategy #12, Implement the HE&EJ plan for the Department. One of the activities in this strategy is to implement a Health in All Policies approach, which this proposal directly addresses. Another is to implement HE & EJ training, which would be expanded to employees at other state agencies if the requested FTE were authorized.

In order to fully reflect the funding for the Office of Health Equity, the Department would like to note an information-only federal funds base adjustment increase (TA-37 Federal Funds True-Up) in the amount of $127,292. The federal funds have historically been non-appropriated. Since the federal funds impact the program's total funding picture, the Department wanted to note this informational item in the interests of transparency.

Anticipated Outcomes:

Having an Equity Trainer would lay the framework for long-term improvements in public health and environment, as well as broader government work. However, since the Department proposes a pilot program, the Department would like to establish measurable goals for each of the three years to determine

the success of the pilot program. The Department has developed the following targeted goals for year one (FY 2019-20) through year three (FY 2021-22):

Please note: Equity training and coaching becomes deeper over time which drives the need for training to occur on an ongoing basis. The following measures also account for staff turnover and training new staff.

Goal #1: Assess state agency staff baseline knowledge:

- By June 2020 and repeated biannually: Assess state agency staff baseline knowledge to create one learning plan (includes data analysis on results, research on state regulations, practices, policies that tie into equity).
- By June 2020 and repeated annually: Meet with 60 program managers across at least 8 state agencies to understand the nature of work.

Goal #2: Develop training and communications infrastructure:

- By June 2020 and repeated annually, disseminate monthly information to state employees about opportunities being offered.
- Convene 5 cross-agency peer-learning sessions to build peer support among state agencies to advance equity.

Goal #3: Provide training and coaching to state agencies:

- By June 2020 and repeated annually: Design 5 new in-person trainings to include: boilerplate lesson plans, handouts, PowerPoint, and subject matter expert's (SME) review of content.
- By June 2020, reach 20% of state agencies through training, coaching, and capacity building.
- By June 2021, reach an additional 10% of state agencies through training, coaching and capacity building.
- By June 2022, reach an additional 10% of state agencies through training, coaching and capacity building.
- By June 2020 and repeated annually: Deliver 60 one-on-one coaching or technical assistance sessions.
- By June 2020 and repeated annually: Design and deliver 5 virtual e-learning trainings.

Goal #4: State agency staff apply knowledge from training and coaching:

- By June 2020 and repeated annually: 80% of trainees are able to identify at least one way they can integrate equity into their work.
- By June 2020, 20% of state agencies are using an equity assessment in a budget, program, policy or practice.
- By June 2021, 20% of state agencies have performance metrics on equity initiatives.
- By June 2022, 40% of state agencies have performance metrics on equity initiatives.

Additionally, the Department anticipates that it will build on the following statewide improvements:

1. Build strong working relationships with state agencies to offer training on applying an equity lens to their work.
2. Initiate systems or practice changes at different state agencies that use an equity assessment to guide decision-making on a budget, program, policy, etc.
3. Initiate new cross-agency collaborations on planning committees, commissions, or boards. This could mean that other state agencies outside the Department are incorporating both a health and equity lens to their own state plans, such as the statewide transportation plan.

4. Facilitate opportunities for other state agencies to submit a joint grant application to a federal or private funder.
5. Train other state agency staff on best practices in effective communication and outreach strategies to underserved populations
6. Assist other state employees in informing a data process (collection, interpretation, dissemination) at another state agency.
7. Train board and commission members at other state agencies about equity and how to incorporate it into their decision-making
8. Work with other state agencies to develop policies encouraging staff to consider issues of equity in their decision-making process
9. Inform DPA of the training and consultation opportunities available through the Office of Health Equity.

In addition to serving multiple CDPHE strategic goals, this solution also supports Vision 2018. For example, this solution directly aims to make Colorado the healthiest state in the nation. It also directly aims to provide efficient, effective, and elegant government services by coordinating a cross-agency approach to advance equity so all Coloradans have the opportunity to thrive.

Research and Evidence-Based Policy (REP) Team Review:
Implementation is an important piece of the evidence-based policy framework. Effective implementation is an iterative process, and in order to be most effective, support should be ongoing. This request recognizes the need for additional trainings and acknowledges the need for technical assistance and coaching to complement and supplement training. Another important part of the evidence-based framework is outcome monitoring through process evaluation, which this request incorporates in order to better understand how training is received and how equity is achieved

Assumptions and Calculations:

The Department requests $104,348 General Fund and 0.9 FTE for FY 2019-20 and $109,199 General Fund and 1.0 FTE for FY 2020-21 and 2021-22 to advance equity in Colorado. Please see the attached FTE Calculations, which provides the FTE Calculations and specific program costs. The salary for this position is requested above the minimum to account for commensurate experience and expertise on this specialized topic. Additionally, please see the Workload Analysis that provides a breakdown of proposed activities for the position.

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 Salary	FTE		FTE	
ADMINISTRATOR IV	$6,523	0.9	$70,443	1.0	$78,270
PERA			$7,326		$8,140
AED			$3,522		$3,914
SAED			$3,522		$3,914
Medicare			$1,021		$1,135
STD			$134		$149
Health-Life-Dental			$7,927		$7,927
Subtotal Position 1, 1.0 FTE		**0.9**	**$93,895**	**1.0**	**$103,449**
Subtotal Personal Services		0.9	**$93,895**	1.0	**$103,449**
Operating Expenses:					
		FTE		FTE	
Regular FTE Operating Expenses	$500	1.0	$500	1.0	$500
Telephone Expenses	$450	1.0	$450	1.0	$450
PC, One-Time	$1,230	1.0	$1,230	-	
Office Furniture, One-Time	$3,473	1.0	$3,473	-	
Cell Phone		1.0	$600	1.0	$600
In-State Travel		1.0	$1,200	1.0	$1,200
Professional Development/Conference		1.0	$2,500	1.0	$2,500
Official Function		1.0	$500	1.0	$500
Subtotal Operating Expenses			**$10,453**		**$5,750**
TOTAL REQUEST		0.9	**$104,348**	1.0	**$109,199**

Activity			Number of hours per year spent on activity
Provide in-person training and coaching to state agencies - ANNUAL activities**	Hours per training	X 5 new trainings ANNUALLY	Administrator IV
Design "boilerplate" lesson plans, handouts, PowerPoint, SME reviews of content to be used during live, face-to-face learning events	33	5	165
Create and test evaluation tools	5	5	25
Order meeting supplies	0.25	4	1
Provide in-person training to state agencies - MONTHLY activities	Hours per training	x 5 in-person trainings MONTHLY	Administrator IV
* Meet with program manager to understand nature of work, customize boilerplate training to the program	3	5	180
Deliver trainings/ workshops	4	5	240
Travel time	0.75	5	45
Secure venue and logistics	0.5	5	30
Review and aggregate training evaluation data (based on anonymous state staff feedback). Modify trainings as appropriate.	2	5	120
Provide in-person coaching to state agencies - MONTHLY activities	Hours per coaching session	x 5 in-person coaching sessions MONTHLY	Administrator IV
Meet with program manager to understand nature of work and coaching request	1	5	60
Deliver coaching session	2	5	120
Travel time	0.75	5	45
Review and aggregate training evaluation data (based on anonymous state staff feedback). Modify coaching sessions as appropriate.	0.5	5	30
Virtual e-learning - ANNUAL activities**	Hours ANNUALLY	X 5 new trainings ANNUALLY	Administrator IV
* Design training	30	5	150
Use software/ technology to upload training materials online	10	5	50
Facilitate training	1.5	5	7.5
Research content and platform (software)	10	1	10
Assessment and research - ANNUAL	Hours ANNUALLY		Administrator IV
Assess state agency staff baseline knowledge to create learning plan; data analysis on results; research on state regs, practices, policies that tie into equity	160		160
Create equity learning plan for state agencies	30		30
Research national best practice to inform curriculum development, receive coaching calls with trainers across the nation	60		60
Serve as a resource for local government working on equity capacity-building	40		40
Attend a conference for professional development, including travel time and overnight stays	40		40
Dissemination of findings, e.g. publish in journals, present at conferences, and calls/webinars with other states or professional organizations	15		15
Coaching and training needs across all state agencies (not individual agencies), Professional Development Opportunities - MONTHLY	Hours per MONTH		Administrator IV
Create mechanisms to let state employees know about capacity-building opportunities being offered, e.g. monthly newsletter, creating flyers, training calendar	2		24
Arrange calls and meetings with state agency leadership; conduct meeting; follow up based on meeting notes	10		120
Develop mechanism for state staff to request coaching/training, e.g. technical assistance request form and respond to inquiries	16		192
Convene professional development events to build peer support among state agencies to advance equity	2		24
CDPHE Meetings/ Networking/ Other Roles	Hours per MONTH		Administrator IV
Division and Unit team Meetings	5		60
Supervisor check ins	4		48
		Total Hours Annually	**2092**

*Since each department and work unit is unique, the OHE assumes most trainings will have to be individually developed with the specific program in mind.
**Based on estimates from http://www.chapmanalliance.com/howlong/ and https://www.langevin.com/train/bin/postcards/design_time_ratios.pdf

Assumptions:
Staff available 1888 hours per year - 80 hours holidays, 80 vacation and 32 sick
Staffing salary - 25% over minimum. In order to hire qualified staff, offer 25% over minimum

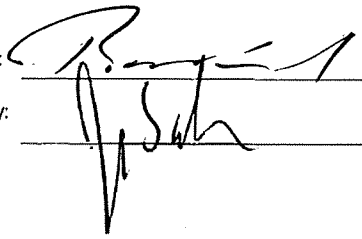
Schedule 13

Department of Public Health and Environment

Funding Request for The FY 2019-20 Budget Cycle

Request Title

R-07 Tribal Liaison

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 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**	**$371,542**	**$0**	**$501,599**	**$82,211**	**$82,487**
	FTE	4.3	0.0	4.3	0.5	0.5
	GF	$69,206	$0	$71,971	$82,211	$82,487
	CF	$0	$0	$0	$0	$0
	RF	$302,336	$0	$302,336	$0	$0
	FF	$0	$0	$127,292	$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	**$371,542**	**$0**	**$501,599**	**$82,211**	**$82,487**
	FTE	4.3	0.0	4.3	0.5	0.5
01. Administration and Support, (B) Office of Health Equity, (1) Office of Health Equity - Program Costs	GF	$69,206	$0	$71,971	$82,211	$82,487
	CF	$0	$0	$0	$0	$0
	RF	$302,336	$0	$302,336	$0	$0
	FF	$0	$0	$127,292	$0	$0

Auxiliary Data

Requires Legislation?	NO		
Type of Request?	Department of Public Health and Environment Prioritized Request	**Interagency Approval or Related Schedule 13s:**	No Other Agency Impact

Cost and FTE

- The Department requests $82,211 General Fund and 0.5 FTE in FY 2019-20 and $82,487 General Fund and 0.5 FTE in FY 2020-21 and beyond to represent the Department and serve American Indians in Colorado. This request represents a 119% increase from the FY 2018-19 General Fund appropriation in the Office of Health Equity Program Costs line.

Current Program

- The Department spearheaded an interagency leadership council that included the Colorado Commission of Indian Affairs in 2000 from which came the tribal consultation process.
- The Department participates in quarterly meetings with the Colorado Commission of Indian Affairs and meets annually in-person with the tribes per the consultation agreement.
- Colorado has two federally recognized Indian tribes and approximately 104,464 individuals who identify as American Indian or Alaska Native alone or in combination with one or more races.

Problem or Opportunity

- The Department has 11 divisions with dozens of programs from emergency preparedness to solid waste management to women and infant health. Having such a wide variety of programs that affect the tribes and urban Indians can make it difficult for the tribes to interface effectively with the Department.
- While the Department participates in the leadership council with the Colorado Commission of Indian Affairs, it does not have sufficient resources to address opportunities to strengthen the relationship and customer service to the tribes and urban Indians.
- This request would ensure that the State Health Department has the resources to maintain a consistent presence in southwest Colorado, devoted to relationship building with the tribes, and serving as a central point of contact.

Consequences of Problem

- Without a dedicated Tribal Liaison, the Department will miss opportunities to improve relations with the tribes and urban Indians, and will thereby miss opportunities to work with the tribes to improve health outcomes and quality of life.

Proposed Solution

- The Department requests $82,211 General Funds and 0.5 FTE tribal liaison in FY 2019-20 and $82,487 General Funds and 0.5 FTE in FY 2020-21 and beyond to represent the Department and serve American Indians in Colorado.
- The Department expects to see improved trust, respect, inclusion, communication with, and services for the tribes and urban Indians.

Department Priority: R-07
Request Detail: Tribal Liaison

Summary of Incremental Funding Change for FY 2019-20	Total Funds	General Funds
Tribal Liaison	$82,211	$82,211

Problem or Opportunity:

The Department requests $82,211 General Fund and 0.5 FTE in FY 2019-20 and $82,487 General Fund and 0.5 FTE in FY 2020-21 and beyond to represent the Department and serve American Indians in Colorado. Please note there is an information-only federal funds base adjustment increase (TA-37 Federal Funds True-Up) in the amount of $127,292.

In 2000, the Colorado legislature created the Prevention Services Division (PSD) within the Colorado Department of Public Health and Environment. As directed in statute, PSD spearheaded an interagency leadership council comprised of representatives from other state agencies to coordinate prevention and intervention services for children, youth and families across state agencies. This interagency leadership council included the Colorado Commission of Indian Affairs (CCIA), established in 1976 by the Colorado General Assembly within the Office of the Lieutenant Governor, and the eventual creation of the Health and Wellness Committee under the CCIA. This is a subcommittee of the Colorado Commission on Indian Affairs that focuses on addressing health issues related to the tribes. The Department played a critical role in creating this subcommittee and continues to be an active member on the subcommittee. Some of the other committee members are tribal liaisons from other state departments. The CCIA is aware of and fully supportive of this request for the Department to have a dedicated tribal liaison who would interface directly with the tribes as well as work with the CCIA and the Health Subcommittee. The tribal consultation process, where state agencies go through a formal process of introducing new opportunities and conducting ongoing business with the tribes, also emerged from the CCIA. CCIA also offers guidance and support to working with urban Indians who represent various tribes including the Lakota and Navajo in Colorado urban areas.

There are two federally recognized American Indian tribes in Colorado: the Southern Ute Indian Tribe and the Ute Mountain Ute Tribe. The 2010 Census Bureau reports that 56,010 people who identify as American Indian or Alaska Native alone live in Colorado: 46,395 of whom live in urban areas, mostly in Denver Metro and Colorado Springs. Additionally, to better understand population growth, the Department compared 2000 census data to the 2016 data for people who identify as American Indian or Alaska Native alone or in combination with one or more races. In 2016, a total of 104,464 people who identify as American Indian or Alaska Native alone or in combination with one or more races, live in Colorado. This represents a 35 percent increase since the 2000 Census.

The Department should prioritize this population due to significant health disparities. The table below provides some examples of health indicators with statistically significant differences among American Indian or Alaska Natives in Colorado, compared to all Coloradans.

Health indicator	American Indian/Alaska Native Coloradans	All Coloradans
Percent of population living below poverty	21.1%	13.0%
Unintended pregnancy	65.5%	37.6%
Cigarette smoking	31.6%	17.9%
Obesity (BMI>=30)	30.1%	20.8%
Diabetes	11.4%	6.9%

The 2017 Healthy Kids Colorado Survey results show that American Indian youth report the highest rates of many health issues including obesity, e-cigarette use, experience with electronic bullying, suicide attempts, and hunger. The executive summary states:

> These behaviors not only affect a youth's current health and well-being, but also a youth's ongoing development and opportunity to lead a happy and healthy life into adulthood. Although American Indian youth make up one percent of youth in the state, they disproportionately face critical challenges that negatively impact their health. These challenges include poverty and reduced access to quality education (Colorado Department of Public Health and Environment, 2017).[1]

To date, the Department has worked with the tribes at the individual program level and through a state-tribe consultation agreement entered into in 2011. The agreement was intended to build confidence and establish a trusting relationship among the tribes and state agencies. While the Department participates in quarterly meetings facilitated by the Colorado Commission of Indian Affairs and meets annually in-person with the tribes per the consultation agreement, these activities have only been supported by a small portion of an existing staff member, the Director of the Office of Health Equity; however, the Department misses out on many opportunities to strengthen the relationship with and customer service to the tribes.

The Department lacks a dedicated staff position responsible for maintaining a consistent presence in southwest Colorado, devoted to relationship building with the tribes, and serving as a central point of contact. The requested position would be located at the central campus in order to build knowledge about the programs, services, etc. at CDPHE. This position will also spend a significant amount of time in the Southwest part of the state, where Colorado's two tribes are located.

The Department has 11 divisions with dozens of programs from emergency preparedness, to solid waste management, to women and infant health. Having such a wide variety of programs that impact the tribes and urban Indians can make it difficult for the tribes to interface effectively with the Department. Both tribes have commented at public meetings that they find it difficult to know who to contact for particular public health or environmental questions or concerns when they arise. The tribes have also noted that they spend more time than necessary to arrive at the correct staff person who can answer their particular concern

[1]Colorado Department of Public Health and Environment. (2017). *Healthy Kids Colorado Survey and Smart Source Information.* Retrieved from Executive Summary: https://www.colorado.gov/cdphe/hkcs

or question. This complexity, taken with growth in the Native American communities, necessitates a half-time position to oversee and implement effective relations between the partners. As per the 2011 Tribal Consultation Agreement, there are other ways outside of formal consultations in which state agencies can foster effective relationships with tribes to include: invite council members to events they may find interesting or relevant; meet with the Tribal Council on a regular basis; provide regular written information to the Tribal Council; or tour the community with someone who knows the land and the history of the tribe. The tribal liaison would:

- Serve as a direct link between the Department and the two federally recognized tribes and urban Indian organizations;
- Facilitate open and frequent communication and consultations between tribes and urban Indians;
- Keep the tribes and urban Indian organizations apprised of Department policies, programs, and opportunities related to their interests;
- Participate in CCIA meetings, including the Health and Wellness Committee;
- And effectively coordinate with other state agency tribal liaisons.

The Department aims to curb health disparities, e.g. infant mortality and diabetes rates, through fostering trusting relationships and knowledge of how Department programs can support tribal and urban Indian health.

Proposed Solution:

Since the Tribal Consultation Agreement took effect in 2011, the consultation process has strengthened the relationship between Colorado governmental agencies and the tribes through consistent contact and information sharing beyond formal consultation meetings. The consultation is a process, not a single meeting; however, this greater contact and coordination requires dedicated staff to maintain a regular visitation schedule and active partnership with the tribes in southwest Colorado, urban Indian organizations, CCIA, and other state agency tribal liaisons. The Department of Health Care Policy and Financing (HCPF) and the Department of Human Services (DHS) both have staff serving in a central liaison capacity. The tribes have given feedback that dedicated resources for these purposes, as is the case for HCPF and DHS, is especially effective. For example, with the addition of the Tribal liaison position at HCPF, the Department and tribes were able to complete a comprehensive American Indian or Alaska Native (AI/AN) Health Assessment for Coloradans enrolled in Medicaid who identify as AI/AN. In addition, HCPF was able to coordinate staff across its divisions to help ensure an aligned approach on AI/AN issues. HCPF's tribal liaison also advocates for Tribal communities and issues with the HCPF Executive Team. With the tribal liaison as the HCPF lead, the 2018 Tribal Consultation between HCPF and the tribes was among the most successful for the state. The HCPF tribal liaison is also responsible for ensuring coordination with the CCIA which provides a statewide approach to AI/AN health issues.

To continue strengthening the Department's relationship with the tribes, the Department needs dedicated resources to provide the tribes with one central contact for health and environmental concerns, needs, and opportunities. The Department believes having a dedicated staff member is a critical part of establishing trust and institutionalizing the relationship, as per the Tribal Consultation Agreement.

The primary beneficiary of this proposed funding request will be the two Colorado tribes and urban Indians. The tribes will benefit by having a designated point of contact at the Department who will be able to coordinate service delivery across all programs, such as prevention and treatment programs for chronic diseases like diabetes, for communicable diseases such as tuberculosis, and for mitigating hazardous waste. The tribes have expressed that they would like to have a designated person to serve as a thought partner in helping to strategize solutions to public health and environmental challenges they experience. With the

requested position, regardless of the concern or question, the tribes would have a designated person charged with keeping them informed of program decisions, rules, and regulations.

The requested Tribal Liaison would address the Department's Goal 1: Implement plans supporting health and environmental priorities; Goal 2: Increase CDPHE's efficiency, effectiveness and elegance; and Goal 4: Promote health equity and environmental justice. This position would increase the efficiency, effectiveness, and elegance of the Department's engagement with the tribes and urban Indians, while also supporting the development of plans to protect the health and environmental priorities of the tribes. In addition to working with the tribes to develop plans and strategies, the tribal liaison position would work with the Office of Planning, Partnerships, and Improvement (OPPI) to develop a plan for addressing identified areas of need. By having a staff member dedicated to working and communicating directly with the tribes and urban Indians and maintaining a consistent presence in their communities, the Department will more readily and directly hear the needs and concerns of the tribes and be able to work expeditiously to collaboratively identify strategies to address those needs and concerns.

These needs also include resolving issues around data. The tribes have stated that they do not believe that the publicly-available health data about the tribes is accurate. They state that the data has been gathered, analyzed, and reported by professionals who are not culturally aware of tribal customs and not trusted by the tribes. Trust and relationship building would help to ensure more usable data. Department epidemiologists have the capacity to work with the tribes on data issues, but need an effective tribal liaison to assist them. The tribal liaison will work closely with the tribes and the Department's epidemiologists and statisticians to more accurately assess the needs and opportunities of this population.

Having a tribal liaison dedicated to building and maintaining a relationship with the tribes and urban Indians will facilitate discussion around health and environmental concerns, which will in turn, improve health outcomes for American Indian people in Colorado. This includes building knowledge and providing education on specific services and programs that exist to support the public's health and environment and which staff to contact regarding questions relating to specific programs.

Another example of potential benefits of having a dedicated position is to streamline contracts. There are opportunities to make the contract processes more efficient for the tribes. In some cases, a tribe might have multiple contracts with different Department programs. It is not efficient for the tribe to have to submit contract documentation, such as a financial risk assessment, multiple times. Instead, the tribal liaison could increase efficiencies by maximizing utilization of the master contract established by the State Controller's Office.

With the requested position, the Department would be able to provide a one-stop opportunity for tribes and urban Indians to access appropriate information and resources to address local problems, streamline services and contracts, and interact with the myriad of programs. The tribal liaison would work cooperatively and collaboratively with the tribes, urban Indian organizations, CCIA, and other state agencies to build an integrated approach to issues, programs, and services. Specifically, the tribal liaison would work to address the types of health disparities noted above.

In order to fully reflect the funding for this program, the Department would like to note an informational federal funds adjustment (TA-37 Federal Funds True-Up) in the amount of $127,292. These federal funds have historically been non-appropriated. Since the federal funds impact the Office of Health Equity total funding picture, the Department wanted to note this informational item as part of the request in the interests of transparency.

Without a dedicated tribal liaison, the Department will miss opportunities to improve relations with the tribes and urban Indians, and will thereby miss opportunities to work with the tribes to improve health outcomes and quality of life.

Anticipated Outcomes:

The Department expects to see improved trust, respect, inclusion, communication and services for the tribes and urban Indians. Specifically, the tribal liaison would work to address the types of health disparities noted above, including unintended pregnancy, cigarette smoking, obesity, and diabetes. Short-term performance measures may include:

1. Increased interaction with tribes and urban Indians (currently only one trip per year to southwest Colorado), for example, quarterly formal consultations and quarterly in-person interactions to attend tribal events, community tours, etc.
2. Streamlined and combined contracting.
3. Improved data-sharing and usage to inform decisions about services and programs. The Department anticipates that improved relationships will facilitate more useful data in decision-making.
4. Improved outreach and education.
5. Improved health and environmental outcomes for the tribes and urban Indian populations. This includes decreasing the health disparities described above.
6. Increased collaboration with sister agencies HCPF and DHS, who currently have liaisons.
7. Enhanced connections between the tribes, urban Indian organizations, CCIA and other organizations, government agencies, and funders as facilitated by the Department.
8. Better funding and resource-sharing based on understanding of the population's unique needs and existing resources.
9. Enhanced appreciation, understanding, and sensitivity by the Department to tribal people and urban Indians

Assumptions and Calculations:

The Department requests $82,211 General Fund and 0.5 FTE in FY 2019-20 and $82,487 General Fund and 0.5 FTE in FY 2020-21 and beyond to represent the Department and serve American Indians in Colorado. Please see the attached workload analysis for further details. This cost includes expenses for quarterly travel to and from southwestern Colorado for the liaison. The travel costs also include funding for an average of three additional staff to accompany the liaison on each trip. These additional staff members will come from a variety of program areas within the Department and have the opportunity to learn from and educate members of the tribes on specific and relevant topics. Given the distance to tribal lands, the Department assumes that each three-day trip will require two overnight stays.

The Department estimates 350 miles per staff person per trip at the standard rate of $.49 per mile for one trip per quarter. When possible, staff will travel together, but given the diverse nature of the staff attending, they may find it difficult to travel together.

The Department assumes per diem rates at $51 per day for three days per employee per quarter. The $51 per day is reduced to 75% for the first and last day as staff are paid 75% of the per diem rate for those days.

The expenses also include lodging costs of an estimated $150 per night per staff for two nights. The Department assumes $150 per night due to the remote nature of the proposed locations.

The request also includes $2,400 for refreshments and meals. This assumes $600 at each of the four annual meetings. The Department has based these estimates on costs for refreshments for past consultation meetings.

To ensure the liaison interacts with the tribes in a culturally-sensitive manner, the Department has included expenses for professional development related to working with American Indian or Alaska Native populations.

The Department requests the salary for this position at 25% above the minimum to account for required experience and expertise on this specialized topic.

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 Salary	FTE		FTE	
ADMINISTRATOR V	$8,160	0.5	$44,880		$0
PERA			$4,668		$0
AED			$2,244		$0
SAED			$2,244		$0
Medicare			$651		$0
STD			$85		$0
Health-Life-Dental			$7,927		$0
Subtotal Position 1, 0.5 FTE		**0.5**	**$62,699**	**-**	**$0**
Subtotal Personal Services		0.5	**$62,699**	-	**$0**
Operating Expenses:					
		FTE		FTE	
Regular FTE Operating Expenses	$500	0.5	$250		$0
Telephone Expenses	$450	0.5	$225		$0
PC, One-Time	$1,230	1.0	$1,230	-	

Office Furniture, One-Time	$3,473	1.0	$3,473	-
Mileage	0.5	5600.0	$2,744	
Per Diem	51.0		$2,040	
Hotel	150.0	32.0	$4,800	
Official Function	600.0	4.0	$2,400	
Cell Phone	50.0	12.0	$600	
Out-of-State Travel			$1,150	
Conference Registration			$600	
Subtotal Operating Expenses			**$19,512**	**$0**

Activity			Number of hours per year spent on activity
Formal Tribal Consultations - ANNUAL activities	Hours ANNUALLY	X 4 Consultations	Administrator IV
Formal communication/ coordination with Tribal leadership re: meeting date, invitees, topics for consideration	12	4	48
Prepare for Tribal Consultations, e.g. create PowerPoint slides, create agenda and seek agenda approval, secure venue, order food, ground transportation, group travel arrangments	15	4	60
Document Consultation via minutes, action plan and CDPHE response letter Tribal Consultations	15	4	60
Travel time to/from Southwestern CO, including overnight stay	20	4	80
Informal interaction with Tribes - ANNUAL activities	Hours ANNUALLY	X 4 in-person visits	Hours ANNUALLY
Attend community tours, Tribal events, etc. with Tribal members	16	4	64
Travel time to/from Southwestern CO, including overnight stay	20	4	80
Attend cross-cultural awareness trainings about American Indian culture	40	n/a	40
CDPHE streamlining - ANNUALLY	Hours ANNUALLY		Hours ANNUALLY
Coordinate with CDPHE program staff re: available services, supports, programs	480		480
Negotiate master contract	20		20
Coordinate with sister agencies (HCPF, CDHS, CCIA)	40		40
Coordinate data activities, e.g. collection, sharing	80		80
CDPHE Meetings/ Networking/ Other Roles	Hours per MONTH		Administrator IV
Division and Unit team Meetings	5		5
Supervisor check ins	4		4
Meeting with Statewide partner and collaborative orgs	2		2
		Total Hours Annually	**1063**

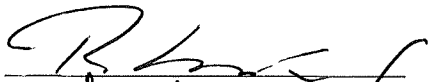
Schedule 13

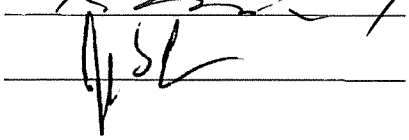
Department of Public Health and Environment

Funding Request for The FY 2019-20 Budget Cycle

Request Title

R-08 Assisted Living Residence Spending Authority

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 Initial Appropriation	FY 2018-19 Supplemental Request	FY 2019-20 Base Request	FY 2019-20 Change Request	FY 2020-21 Continuation
	Total	**$1,774,421**	**$0**	**$1,827,064**	**$648,296**	**$615,375**
	FTE	14.5	0.0	14.5	7.0	7.0
Total of All Line Items Impacted by Change Request	GF	$74,723	$0	$92,009	$0	$0
	CF	$1,699,698	$0	$1,735,055	$648,296	$615,375
	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	**$1,774,421**	**$0**	**$1,827,064**	**$648,296**	**$615,375**
10. Health Facilities and Emergency Medical Services, (B) Health Facilities Program, (1) Health Facilities Program - Home and Community Survey	FTE	14.5	0.0	14.5	7.0	7.0
	GF	$74,723	$0	$92,009	$0	$0
	CF	$1,699,698	$0	$1,735,055	$648,296	$615,375
	RF	$0	$0	$0	$0	$0
	FF	$0	$0	$0	$0	$0

Auxiliary Data

Requires Legislation?	NO		
Type of Request?	Department of Public Health and Environment Prioritized Request	**Interagency Approval or Related Schedule 13s:**	No Other Agency Impact

Cost and FTE

- The Department requests $648,296 of cash fund spending authority and 7.0 FTE in FY 2019-20 and $615,375 of cash fund spending authority and 7.0 FTE in FY 2020-21 and beyond to enhance the quality of life and safety of residents in assisted living (ALR) facilities. This request represents a 50.4 percent increase in cash funds from the FY 2018-19 appropriation in the Home and Community Survey Line**.**

Current Program

- The Assisted Living Residence (ALR) program licenses and regulates ALRs in the state.
- ALRs provide housing and assistance with daily living tasks to seniors and people with disabilities; some facilities also provide a limited number of skilled medical services to residents.

Problem or Opportunity

- The Health Facilities and Emergency Medical Services Division (the Division) does not have the funding or staffing to provide a comprehensive system of regulation to the ALR community.
- The number of ALRs and the number of complaints have grown steadily over the past 10 years.
- The Board of Health worked with the Division and stakeholders to revise health and safety rules, and implemented a two-phase fee increase to generate revenue to fund program-staffing needs. The final rules became effective June 2018.

Consequences of Problem

- The division has struggled with conducting sufficient surveys/inspections and this puts ALR residents at an increased risk of egregious incidents.
- ALRs that do not have routine inspections are more likely to violate minimum standards and regulations, resulting in practices that lead to resident harm including falls, injuries, and death.
- ALRs without routine surveys are more likely to improperly administer medication or provide inadequate assistance to residents including overlooking important resident needs such as incontinence.

Proposed Solution

- The Department requests $648,296 of cash fund spending authority and 7.0 FTE in FY 2019-20 and $615,375 of cash fund spending authority and 7.0 FTE in FY 2020-21 and beyond to enhance the quality of life and safety of residents in ALR facilities.
- This proposal will add 5.0 surveyors (inspectors) to the field team to perform regular surveys of the facilities. In addition, it will add 2.0 FTE to do desk reviews (off-site reviews) of reports provided annually by the facilities.
- The additional FTE and spending authority will support the system of regulation provided by the Division.

Department Priority: R-08
Request Detail: Assisted Living Residence Spending Authority

Summary of Incremental Funding Change for FY 2019-20	Total Funds	Cash Funds (Fund 2460)
Assisted Living Residence Spending Authority	$648,296	$648,296

Problem or Opportunity:

The Department requests $648,296 of Cash Fund spending authority and 7.0 FTE in FY 2019-20 and $615,375 of Cash Fund spending authority and 7.0 FTE in FY 2020-21 and beyond to enhance the quality of life and safety of residents in assisted living (ALR) facilities.

The Assisted Living Residence (ALR) program licenses and regulates ALRs in the state. ALRs provide housing and assistance with daily living tasks to seniors and people with disabilities; some facilities also provide a limited number of skilled medical services to residents.

The Health Facilities and Emergency Medical Services Division (the division) does not have the funding or staffing to provide the minimum level of regulatory oversight to the ALR community as required by C.R.S 25-27-104(2) (b). The number of assisted living facilities and the number of complaints have grown steadily over the past 10 years. In the last four years, the division has experienced a growth rate close to 5% annually, or nearly 30 new ALR facilities per year. See Appendix A-1 for a history of ALR growth since 2011. Additionally, ALRs have seen an increase in the number of complaints each year. As the number of ALR facilities continues to grow and residents have more complex issues, the number of complaints have continued to grow. In FY 2014-2015 there were 194 complaints for Colorado ALRs compared to 482 in FY 2017-2018. (See Appendix A-2 for detail on the growth in the number of complaints since FY 2014-15.) These changes have caused the division to struggle with conducting sufficient surveys and inspections. Lack of surveys can put residents in danger.

Over the last few years, the Department has made efforts to increase the division's ability to provide oversight of ALRs. In 2015, the Department requested additional funding to allow the Division to increase ALR program staffing by 3.0 FTE in an effort to increase regulatory oversight and better protect resident safety and welfare. However, the Division did not pursue the increase in fees necessary to fully fund program activities. The approved request provided the division the authority to fill the new positions; however, as routine turnover occurred, the division could not fill positions so as not to overdraw the cash fund. In 2016, the Board of Health started a two year process with the division and stakeholders to update 6 CCR 1011-1, Chapter 7. In addition to health and safety rule revisions, the revised rules also included a two-phase fee increase which would generate sufficient revenue to fund program staffing needs. The stakeholders agreed on the final rules and the Board of Health approved them effective June 2018.

The Department requests additional staffing in order to inspect each facility a minimum of once every three years (please see Appendix C workload analysis) while also responding to the increasing number of complaints. The goal of a three-year survey cycle is to address issues at a facility prior to the issue becoming systemic or resulting in complaints. ALRs that do not have routine inspections are more likely to violate minimum standards and regulations, resulting in practices that lead to resident harm including falls, injuries, and death. Furthermore, ALRs without routine surveys are more likely to improperly administer medication or provide inadequate assistance to residents including overlooking important resident needs such as incontinence (please see Appendix A-3 for examples of the types of violations that surveyors have identified).

Proposed Solution:

The Department requests an additional $648,296 cash fund spending authority and 7.0 FTE in FY 2019-20 to add additional staff to protect resident safety. The division will add 5.0 FTE surveyors (inspectors) to the field team to perform regular on-site routine surveys of each facility once every three years. The division will also add 2.0 FTE to do desk reviews (off-site reviews) of quality management program reports submitted by each facility. The 7.0 new FTE will increase the total number of surveys conducted each year: from 513 on-site surveys in FY 2017-18, to 741 on-site surveys and 701off-site reviews conducted each year after the approval of this decision item. This will bring the division into statutory compliance. Increased staffing will also ensure the investigation of complaints in a timely manner, improving the overall health and safety of ALR residents. Lastly, the increase in spending authority will allow the division to utilize the cash funds created by the fee structure agreed to by the stakeholders and approved by the Board of Health.

The Division worked with the Assisted Living Advisory Council (ALAC) and stakeholders to create new ALR rules and fee increases. The group came to a consensus on a two-phase plan that balanced the increase in fees with an acceptable level of regulatory oversight (please see Appendix B-1 for information on the phased fee structure). This staffing request aligns with the stakeholder agreement. The Board of Health has already approved the fee increase needed to fund this request it will go into effect on July 1, 2019.

<u>New Inspectors/Surveyors 5.0 FTE for On-site Surveys</u>

The request would add 5.0 surveyors (inspectors) to the field team to perform regular surveys of the facilities. Historical data shows that each surveyor can complete approximately 45 surveys per year. This includes pre-survey preparation, travel, on-site survey, follow-up, deficiency list writing, and other associated tasks. Based on the estimated 741 annual on-site surveys to be completed, the ALR program needs a total of 17 inspectors.

The estimated 741annual on-site inspections include (please see Appendix C Workload Analysis):

- 234 re-licensure routine surveys (one third of the 701 total), 24 of these will include a concurrent complaint survey
- 349 separate complaint surveys
- 90 on-site revisits (only performed for the most egregious violations related to harm or environmental issues
- 68 initial licensing surveys/change of ownership (a pre-survey before opening, and a post-survey for each facility)

<u>Additional Information on the 741 On-Site Inspections</u>

This analysis makes assumptions for the FY 2019-20 workload calculation. The division assumes a 5% (30 facilities) growth rate in facilities. The inspectors will combine surveys when possible. For example, if a facility has a complaint and is also due for a routine survey, both the complaint investigation and survey will

be done at the same time. The Department assumes that combined inspections will be possible in approximately 10% of cases. For the remaining instances, the Department assumes that the nature of the complaint will require an immediate visit and waiting for a routine survey would not be possible due to safety concerns.

The Department has based its estimated complaint number of 373 (349 individual complaints with 24 conducted during a routine survey) on an assumed reduction of complaints from FY 2017-18 of about 25% and includes one inspection per complaint. The Department based this 25% reduction on the expectation that routine surveys will identify issues and correct them, resulting in a decrease in the number of complaints each year.

The division conducts on-site revisits on facilities cited with harm, potential for harm, or for environmental concerns. The division estimates 90 revisits based on historical trends.

New facilities and change of ownership facilities require two surveys: one prior to opening to ensure adequate staff training and qualifications, interior and exterior building safety, and accommodations along with review of required policies and procedures, and one after the facility has admitted residents to evaluate the delivery of care and services. The Division assumes 30 new facilities each year with four additional initial surveys required each year for change of ownership facilities, which also require two surveys, bringing the total number of initial surveys per year to 68.

2.0 FTE for Off-Site Reviews

The Department assumes the need for 2.0 new FTE to perform 701 off-site quality management program report reviews. The division will require that facilities complete and submit a quality management program report (essentially a self-audit) to the division each year. The division estimates that it will take approximately six hours for a Health Professional III to review and analyze each report, identify issues, and conduct follow-ups with each facility. The division has estimated the number of hours per review based upon experience and complexities associated with ALR facilities.

FTE Hiring Assumptions

The Department requests a registered nurse fort 1.0 FTE of the 5.0 FTE field team surveyor (inspector) positions. Since new rules allow ALRs to provide a limited number of skilled medical services by licensed or certified staff, the division believes the skills of a registered nurse surveyor benefit the evaluation of skilled medical services provided by some ALR facilities. Additionally, a registered nurse surveyor will provide surveyor training and can provide support in answering medical questions.

The Department requests hiring the Health Professional III level staff at a rate above the pay minimum due to the difficulty of filling these positions. The positions require significant training and most require overnight travel two to four days a week.

Anticipated Outcomes:

The additional FTE and spending authority will support the overall system of regulation provided by the division:

- Annual licensure of all facilities (projected to be 701 facilities as of 7/1/2019)
- On-site routine survey (inspection) of each facility once every three years (234 surveys per year)
- Off-site review of facilities quality management program report; off-site review will include a review of the facility's quality management program report which includes routine monitoring, tracking, reporting and evaluation of resident care and services (701 reports)
- On-site survey of all facilities prior to initial licensure and after residents are admitted (two-stage initial survey process) (30 new facilities and four change of ownership facilities - for a total of 68 surveys)
- A fee schedule which maintains the existing status of high Medicaid utilization (HMU) facilities paying roughly 45% of the fees paid by a non-HMU facility of the same size (on average)

Assumptions and Calculations:

The Department requests $648,296 of Cash Fund spending authority and 7.0 FTE in FY 2019-20 and $615,375 of Cash Fund spending authority and 7.0 FTE and in FY 2020-21 and beyond. Please see the FTE template for calculations of expenses.

The division anticipates that each of the 5.0 FTE field team staff will travel at least one overnight trip per week. The calculations include:

Per Diem Rates: $51 per day standard rate X 2 days per employee X 50 weeks per year (assume 2 weeks' vacation). The $51 per day is then reduced to 75% as staff are paid 75% of the per diem rate for the first and last day of each trip.

$51 X 5 Surveyors X 50 weeks X 2 days X .75 = $19,125

Hotel: The expenses include $100 per night per surveyor for trips.

$100 X 5 surveyors X 50 weeks = $25,000

Please note, surveys frequently require multiple surveyors.

The Department requests a registered nurse for one of the surveyors and requests to hire the remaining surveyors above the minimum of the range due to the nature of the work.

The Department would also like to mention that the calculations do not include an indirect impact of $152,350 in FY 2019-20 and $144,613 in FY 2020-21 and beyond; however, the total recommended cash fund increase does factor in the assumption of a 23.5% indirect calculation rate.

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 Salary	FTE		FTE	
HEALTH PROFESSIONAL III	$4,884	6.0	$351,648	6.0	$351,648
PERA			$36,571		$36,571
AED			$17,582		$17,582
SAED			$17,582		$17,582
Medicare			$5,099		$5,099
STD			$668		$668
Health-Life-Dental			$47,563		$47,563
Subtotal Position 1, #.# FTE		**6.0**	**$476,713**	**6.0**	**$476,713**
Classification Title	Monthly Salary	FTE		FTE	
HEALTH PROFESSIONAL III	$5,460	1.0	$65,520	1.0	$65,520
PERA			$6,814		$6,814
AED			$3,276		$3,276
SAED			$3,276		$3,276
Medicare			$950		$950
STD			$124		$124
Health-Life-Dental			$7,927		$7,927
Subtotal Position 2, #.# FTE		**1.0**	**$87,887**	**1.0**	**$87,887**
Subtotal Personal Services		7.0	**$564,600**	7.0	**$564,600**

Operating Expenses:					
		FTE		FTE	
Regular FTE Operating Expenses	$500	7.0	$3,500	7.0	$3,500
Telephone Expenses	$450	7.0	$3,150	7.0	$3,150
PC, One-Time	$1,230	7.0	$8,610	-	
Office Furniture, One-Time	$3,473	7.0	$24,311	-	
Travel Per Diem	51.0	500.0	$19,125	500.0	$19,125
Hotel	100.0	250.0	$25,000	250.0	$25,000
Other					
Other					
Subtotal Operating Expenses			**$83,696**		**$50,775**
TOTAL REQUEST		7.0	**$648,296**	7.0	**$615,375**
	General Fund:				
	Cash funds:		*$648,296*		*$615,375*
	Reappropriated Funds:				
	Federal Funds:				

Appendix A-1 ALR Facility Growth Statistics

Fiscal Year	Facilities	Increase in Facilities	Percentage Increase in Facilities
2010-11	536		
2011-12	555	19	3.5%
2012-13	562	7	1.3%
2013-14	586	24	4.3%
2014-15	589	3	0.5%
2015-16	620	31	5.3%
2016-17	660	40	6.5%
2017-18	671	11	1.7%
2018-19 YTD*	706	35	5.2%
8 Year Average		21.25	3.5%
4 Year Average		29.25	4.6%

* There are 35 planned facilities to open in Fiscal Year 2018-2019.

Appendix A-2 ALR Complaints by year

Fiscal Year	Complaints Received	Complaints Completed
Prior to FY 2014-15	180 – 200 Average	Not Available
2014-15	194	104
2015-16	319	236
2016-17	467	297
2017-18	482	383

Complaints are triaged and addressed in order of severity. Some complaints received in one fiscal year may be investigated in the subsequent fiscal year.

Appendix A-3 Examples of Site Visits and Citations

ALR only facility - 5 beds

Previous on-site visit done in Nov 2014 - Complaint, one deficiency cited.

April 2018- next onsite visit, (3.5 years later) prompted by a complaint. Once on-site, staff discovered several system issues and numerous areas of non-compliance- decision made to conduct a full survey.

Cited 28 deficiencies, of the 28 deficiencies, one was cited for the administrator's lack of knowledge of applicable rules and regulations, four deficiencies were cited in regards to personnel, two deficiencies were cited for resident rights - the facility failed to ensure resident respect and dignity- residents were being bathed in front of each other and exposed to visitors. Residents were not being provided the right to make decisions and were forced to take showers when objecting, forced as to when to wake up and go to bed, required to move to other rooms without consent, not being allowed to turn televisions on or to talk in a room of choice with a visitor. Additionally, ten deficiencies were cited for medication administration practices.

Alternative Care Facility (a certified facility with Medicaid residents)

April 2013- complaint and survey completed, one deficiency cited.

March 2016- (3 years) complaint initiated. Once on-site, discovered several system issues and numerous areas of non-compliance and converted the complaint investigation into a full survey inspection. 31 deficiencies cited, including three at harm level, meaning that actual harm occurred to one or more residents.

- Failure to protect a resident from neglect. Staff only provided incontinence care once every 12 hours. Resident sustained a fall with injury and the facility did not seek medical attention- resident found outside at night, with frozen urine on clothing- no medical evaluation or notification of the incident occurred.
- Failure to ensure a resident had the right to be free of restraint. Resident combative during care, staff routinely restrained the resident by holding her down, or kept the resident isolated in her room for multiple hours.
- Failure to ensure residents had the right to the maximum degree of benefit. Residents not provided with personal services, including grooming, bathing and incontinence care due to staff shortages. Residents not receiving medications as ordered, resulting in elevated blood pressure for one resident. Residents were visibly soiled and uncared for, linens soiled and beds wet with urine.

At the Department's direction, the facility developed urgent plans to resolve the above referenced non-compliance issues.

ALR

July 2013- previous visit- survey, two deficiencies

June 2016- (3 years later) Complaint and survey- seven deficiencies including:

- Facility failed to discharge a resident who required care the facility was unable to provide, resulting in a health hazard- Resident was placed in incontinence pads in bed at night and was not toileted or changed at night. Resident found in wet odorous bed. While the resident was resistant to care, the facility staff did not know how to manage the situation and subsequently the resident went days without bathing. The administrator was also unaware of how to manage the situation.
- Failure to provide respect and dignity. Staff used a mechanical lift for a resident, to assist him to get out of bed. Wheeled resident in the lift through the facility dining room in the presence of other residents, wearing only an undershirt and incontinence product.
- Facility did not provide incontinence care at night, did not protect one resident from elopement and did not provide any other services at night- Resident fell at night, called out to staff who did not respond and another resident had to call emergency services.

Appendix B-1 Board of Health Fee Increase Phases and Revenue Projections

1. Phase One (Implemented July 1, 2018): Increase annual revenue to support the currently appropriated 12.0 FTE.
    a. Increase the following fees: initial fees, change of ownership fees, facility base fees, and per bed fees. See Appendix B-2 for more detail.
    b. New Revenue will be approximately $619,278, over actuals for FY 2016-2017, for a total revenue amount of approximately $2,027,000 in FY 2018-19.
    c. Allows for more frequent routine ALR surveys, but not enough to meet the goal of a three-year survey cycle.
    d. The division currently has adequate spending and FTE authority for this phase.
2. Phase Two (Planned implementation date July 1, 2019): Increase annual revenue (already in place) and increase currently appropriated FTE by 7.0 (through this request).
    a. Increase bed fees. See Appendix B-2 for more detail.
    b. Fees maintain the statutory mandated requirement of C.R.S 25-27-107(1.5) (a) requiring high Medicaid utilization (HMU) facilities to pay approximately 45% of the fees paid by a non-HMU facility of the same size.
    c. New Revenue will be approximately $1,438,278 over actuals for FY 2016-2017, for a total projected revenue amount of approximately $2,846,000 in FY 2019-20.
    d. Allows each ALR facility to be surveyed on-site once every three years (consistent with other facility types), with one off-site review conducted annually per facility.
    e. The division requires an increase in spending and FTE authority.

Revenue Projections:

	Revenue	New Revenue from Fees (Increase from FY 2016-17 Actuals)	New Estimated Total Revenue
FY 2016-2017 Actual Revenue	$ 1,407,722		
FY 2017-2018 Actual Revenue	$ 1,515,473		
FY 2018-2019 Estimated Revenue (After Phase 1)		$ 619,278	$ 2,027,000
FY 2019-2020 Estimated Revenue (After Phase 2)		$ 1,438,278	$ 2,846,000

Appendix B-2 ALR Fee Increases

Effective July 1, 2018

FACILITY BASED	Fees prior to 7/1/2018	New Fee 7/1/2018
Initial Survey of New Facilities:		
3-8 beds	$6,000	
9 beds or more	$7,200	
3-8 Bed		$6,300
9-19 beds		$7,300
20-49 beds		$8,750
50-99 beds		$11,550
100+ beds		$14,750
New Secure Unit		$1,600
Change of Ownership Fees (CHOW)		
Flat Rate CHOW (Regardless of bed size)	$5,000	
<=19 beds		$6,250
20-49 beds		$7,800
50-99 beds		$10,600
100+ beds		$14,750
Additional CHOW at exactly the same time		$4,500

Licensing Renewal Fees by Phase

	HMU	Non-HMU
Current Renewal Fees	Base: $ 180 Bed: $ 19	Base: $ 180 Bed: $ 47
Phase 1 Renewal Fees (Effective 7/1/2018)	Base: $ 360 Bed: $ 23	Base: $ 360 Bed: $ 67
Phase 2 Renewal Fees (Effective 7/1/2019)	Base: $ 360 Bed: $ 38	Base: $ 360 Bed: $ 103

Appendix C - Workload Analysis

Current workload

Assisted Living Facilities						
Activity	**Hours per instance**		**Surveyors per survey (HP III)**	**Number of instances per year**	**Extended Hours**	
	HP III	HP V***			HP III	HPV
Routine Survey						
Scheduling and Pre-survey	2.00		1.00	86	172.00	0.00
On-site	20.50		2.00	86	3,526.00	0.00
Off-site	10.50	4.00	2.00	86	1,806.00	344.00
Supervisor Review		8.00	1.00	86	0.00	688.00
Travel	5.00		2.00	86	860.00	0.00
Total Conducted				**86**	**6,364.00**	**1,032.00**
Initial Surveys/Change of Ownership						
Scheduling and Pre-survey	2.00		1.00	44	88.00	0.00
On-site	24.00		2.00	44	2,112.00	0.00
Off-site	8.50	1.00	2.00	44	748.00	44.00
Supervisor Review		0.75	1.00	44	0.00	33.00
Travel	5.00		2.00	44	440.00	0.00
Total Conducted				**44**	**3,388.00**	**77.00**
Survey Revisits						
Scheduling and Pre-survey	2.00		2.00	0	0.00	0.00
On-site	4.00		2.00	0	0.00	0.00
Off-site	3.00	2.00	2.00	0	0.00	0.00
Supervisor Review		3.00	1.00	0	0.00	0.00
Travel	5.00		2.00	0	0.00	0.00
Total Conducted				**0**	**0.00**	**0.00**
Complaints						
Scheduling and Pre-survey	2.00		2.00	482	1,928.00	0.00
On-site	4.00	2.00	2.00	383	3,064.00	766.00
Off-site	3.00	2.00	2.00	383	2,298.00	766.00
Supervisor Review		2.00	1.00	383	0.00	766.00
Travel	5.00		2.00	383	3,830.00	0.00
Total Conducted				**383**	**11,120.00**	**2,298.00**
Triaged, not Completed*				**99**	**198.00**	**0.00**
Sub-total (On-site Surveys)				**513**	**20,872.00**	**3,407.00**
Annual Off-site Reviews						
Scheduling and Pre-survey	0.00		0.00	0	0.00	0.00
On-site	0.00		0.00	0	0.00	0.00
Off-site	6.00		1.00	0	0.00	0.00
Supervisor Review		0.50	1.00	0	0.00	0.00
Total Conducted				**0**	**0.00**	**0.00**
Sub-total (Off-site Surveys)				**0**	**0.00**	**0.00**
Total hours					20,872.00	3,407.00
Total FTE					10.0	1.6
Currently appropriated FTE					12.0	2.8

*Triaged, not completed complaints were complaints that were started but did not result in a survey because they were lower risk.

1. Note: This is below the appropriated 12.0 FTE because there was insufficient revenue to fully fund all staff for FY 2017-18. However, Phase 1 fee increases for FY 2018-19 will allow the division to fill those positions.

2. Note the decision item references 3.0 FTE that the program was unable to fill due to insufficient revenue. This is consistent with the above calculations. 0.7 FTE was backfilled with overtime from managers and supervisors (exempt, so no additional cost) in order to keep the workflow moving.

***The HPV serves in a supervisory capacity only.

Appendix C - Workload Analysis

2019-20 Projected workload with 7.0 additional FTE

Assisted Living Facilities						
Activity	**Hours per instance**		**Surveyors**	**Number of**	**Extended Hours**	
	HP III	HP V***			HP III	HPV
Routine Survey*						
Scheduling and Pre-survey	2.00		1.00	234	468.00	0.00
On-site	20.50		2.00	234	9,594.00	0.00
Concurrent complaint survey	4.00	2.00	2.00	24	192.00	48.00
Off-site	10.50	4.00	2.00	234	4,914.00	936.00
Concurrent complaint survey	3.00	2.00	2.00	24	144.00	48.00
Plan of correction review			1.00	234	0.00	0.00
Concurrent complaint Survey			1.00	24	0.00	0.00
Supervisor Review		8.00	1.00	234.00	0.00	1,872.00
Concurrent Complaint Survey		2.00	1.00	24	0.00	48.00
Travel	5.00		2.00	234.00	2,340.00	0.00
Total Conducted				**234**	**17,652.00**	**2,952.00**
Initial Surveys/Change of Ownership						
Scheduling and Pre-survey	2.00		1.00	68	136.00	0.00
On-site	24.50		2.00	68	3,332.00	0.00
Off-site	8.50	1.00	2.00	68	1,156.00	68.00
Supervisor Review		0.75	1.00	68	0.00	51.00
Travel	5.00		2.00	68	680.00	0.00
Total Conducted				**68**	**5,304.00**	**119.00**
Survey Revisits						
Scheduling and Pre-survey	2.00		2.00	90	360.00	0.00
On-site	4.00		2.00	90	720.00	0.00
Off-site	3.00	2.00	2.00	90	540.00	180.00
Supervisor Review		3.00	1.00	90	0.00	270.00
Travel	5.00		2.00	90	900.00	0.00
Total Conducted				**90**	**2,520.00**	**450.00**
Complaints**						
Scheduling and Pre-survey	2.00		2.00	349	1,396.00	0.00
On-site	4.00	2.00	2.00	349	2,792.00	698.00
Off-site	3.00	2.00	2.00	349	2,094.00	698.00
Supervisor Review		2.00	1.00	349	0.00	698.00
Travel	5.00		2.00	349	3,490.00	0.00
Total Conducted				**349**	**9,772.00**	**2,094.00**
Sub-total (On-site Surveys)				**741**	**35,248.00**	**5,615.00**
Annual Off-site Reviews (Quality Management Program)						
Scheduling and Pre-survey	0.00		0.00	701	0.00	0.00
On-site	0.00		0.00	701	0.00	0.00
Off-site	6.00		1.00	701	4,206.00	0.00
Supervisor Review		0.50	1.00	701	0.00	350.50
Travel	0.00		0.00	701	0.00	0.00
Total Conducted				**701**	**4,206.00**	**350.50**
Sub-total (Off-site Surveys)				**701**	**4,206.00**	**350.50**
Total hours					39,454.00	5,965.50
Total FTE					19.0	2.9
Currently appropriated FTE					12.0	2.8
Needed FTE					**7.0**	**0.1**

*Routine surveys conducted each year are 1/3rd of the total number of ALR facilities in Colorado, projected to be a total o 701 in FY 2019-20.

**Complaints conducted each year will be 349 individual complaint surveys + 24 conducted during routine surveys for a total of 373 conducted each year. This number assumes a 25% reduction in complaints from the 482 received in FY 2017-18 based on the assumption that an increase in routine surveys and annual off-site reviews will decrease the number of complaints received each year.

***The HPV serves in a supervisory capacity only

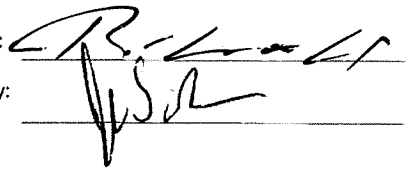
Schedule 13

Department of Public Health and Environment

Funding Request for The FY 2019-20 Budget Cycle

Request Title

R-09 1% Provider Rate Increase

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 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	$9,371,369	$0	$9,371,369	$93,714	$93,714
	FTE	0.0	0.0	0.0	0.0	0.0
	GF	$6,832,906	$0	$6,832,906	$68,329	$68,329
	CF	$1,810,286	$0	$1,810,286	$18,103	$18,103
	RF	$728,177	$0	$728,177	$7,282	$7,282
	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. Administration and Support, (C) Local Public Health Planning and Support, (1) Local Public Health Planning and Support - Distributions to Local Public Health Agencies	Total	$9,371,369	$0	$9,371,369	$93,714	$93,714
	FTE	0.0	0.0	0.0	0.0	0.0
	GF	$6,832,906	$0	$6,832,906	$68,329	$68,329
	CF	$1,810,286	$0	$1,810,286	$18,103	$18,103
	RF	$728,177	$0	$728,177	$7,282	$7,282
	FF	$0	$0	$0	$0	$0

Auxiliary Data

Requires Legislation?	NO		
Type of Request?	Department of Public Health and Environment Prioritized Request	**Interagency Approval or Related Schedule 13s:**	Impacts HCPF Medicaid

Cost and FTE

- The Department requests an increase of $93,714 total funds to the Distributions to Local Public Health Agencies line including $68,329 General Fund, $18,103 Marijuana Tax Cash Funds, and $7,282 reappropriated funds for FY 2019-20 and beyond to account for a provider rate increase of 1.0 percent, which affects the Local Public Health Agencies in the state.

Current Program

- The Department provides grant funding to Local Public Health Agencies in counties around Colorado. Counties use those funds to strengthen the state of their public health through various means such as hiring new nurses and facility inspectors.
- For FY 2018-19, the Department was budgeted $9,371,369 in Distributions to Local Public Health Agencies (Long Bill line item) that is eligible for the provider rate increase.

Problem or Opportunity

- The Department seeks to address continued inflationary increases and to provide a consistent level of support to Local Public Health Agencies.

Consequences of Problem

- Without an increase, Local Public Health Agencies will continue to absorb cost increases, potentially inhibiting the ability to offer programs that improve the health of people in their counties.

Proposed Solution

- The Department requests an increase of $93,714 total funds for the Local Public Health Agencies to address a 1.0 percent provider rate increase.

Department Priority: R-09
Request Detail: 1% Provider Rate Increase

Summary of Incremental Funding Change for FY 2019-20	Total Funds	General Funds	Cash Funds	Reappropriated Funds
1% Provider Rate Increase	$93,714	$68,329	$18,103	$7,282

Problem or Opportunity:

For FY 2019-20, the Governor's Office established a community provider rate increase of 1.0 percent, to include the Local Public Health Agencies (LPHAs) who receive grant funds from the Department of Public Health and Environment. The Local Public Health Agencies were added to the list of providers who would be affected by this 1.0 percent increase during a Joint Budget Committee meeting on March 13, 2015. Should this request not be funded, LPHAs will be forced to continue to absorb cost increases, potentially harming their ability to strengthen the state of the public health in counties around Colorado.

Proposed Solution:

The Department requests an increase of $93,714 total funds, including $68,329 General Fund, $18,103 cash funds (Marijuana Tax Cash Funds), and $7,282 reappropriated fund for FY 2019-20 and beyond to account for a provider rate increase of 1.0 percent. The Department would allocate the additional funding to the 53 local public health agencies using the existing funding allocation formula.

Anticipated Outcomes:

With the increased funding, the Department would be able to partially offset some of the inflationary pressures on basic necessities that Local Public Health Agencies face.

Assumptions and Calculations:

The Department based calculations on a 1 percent across the board rate increase for the following line item:

Table 1 – 1% Provider Rate Increase by Fund Source					
Line Item	**Total Funds**	**General Fund**	**Cash Funds**	**Reappropriated Funds**	**Federal Funds**
FY 2018-19 Distributions to Local Public Health Agencies	$9,371,369	$6,832,906	$1,810,286	$728,177	$0
1% Increase	*$93,714*	*$68,329*	*$18,103*	*$7,282*	*0*
FY 2019-20 Distributions to Local Public Health Agencies	**$9,465,083**	**$6,901,235**	**$1,828,389**	**$735,459**	**$0**

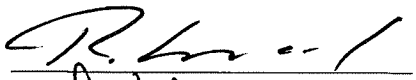
Schedule 13

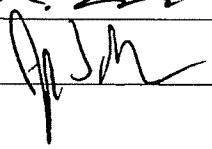
Department of Public Health and Environment

Funding Request for The FY 2019-20 Budget Cycle

Request Title

R-10 Restore Pesticides General Fund

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 Initial Appropriation	FY 2018-19 Supplemental Request	FY 2019-20 Base Request	FY 2019-20 Change Request	FY 2020-21 Continuation
	Total	**$203,742**	**$0**	**$206,951**	**$84,000**	**$84,000**
	FTE	1.0	0.0	1.0	0.0	0.0
Total of All Line Items Impacted by Change Request	GF	$97,749	$0	$100,958	$84,000	$84,000
	CF	$5,993	$0	$5,993	$0	$0
	RF	$0	$0	$0	$0	$0
	FF	$100,000	$0	$100,000	$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	**$203,742**	**$0**	**$206,951**	**$84,000**	**$84,000**
	FTE	1.0	0.0	1.0	0.0	0.0
05. Water Quality Control Division, (B) Clean Water Sectors, (1) Clean Water Sectors - Pesticides Sector	GF	$97,749	$0	$100,958	$84,000	$84,000
	CF	$5,993	$0	$5,993	$0	$0
	RF	$0	$0	$0	$0	$0
	FF	$100,000	$0	$100,000	$0	$0

Auxiliary Data

Requires Legislation?	NO		
Type of Request?	Department of Public Health and Environment Prioritized Request	**Interagency Approval or Related Schedule 13s:**	No Other Agency Impact

Cost and FTE

- The Department requests to restore $84,000 General Fund in FY 2019-20 and beyond in the Pesticides Sector line item. This request represents an 85% increase in General Fund from the total FY 2018-19 budget in the Pesticides Sector Line Item.
- This request will allow the Department to meet the FY 2018-19 and beyond Long Bill obligation of the General Funds transfer to reappropriated funds within the Department of Agriculture**.**

Current Program

- The Long Bill directs the Department to transfer $84,000 General Fund from the Clean Water Programs costs line to reappropriated funds within the Department of Agriculture to support sample testing related to the detection of pesticides.

Problem or Opportunity

- The Department does not have adequate General Fund resources to meet letternote requirements to transfer $84,000 to the Department of Agriculture for water sample testing for the detection of pesticides.
- During a funding analysis and refinancing of the Clean Water Program in FY 2015-16 and subsequent fee increase legislation in FY 2016-17, appropriations did not account for the $84,000 General Fund obligation to the Department of Agriculture.

Consequences of Problem

- The Department will not have adequate General Fund appropriation to meet its requirements to the Department of Agriculture to complete necessary pesticides testing of state waters.

Proposed Solution

- The Department requests $84,000 General Fund for FY 2019-20 and beyond in the Pesticides Sector line item to ensure that it can meet the Long Bill obligation of the General Funds transfer to reappropriated Funds within the Department of Agriculture.
- This solution will ensure that the Clean Water Program may continue to support sample testing related to the detection of pesticides in state waters.

COLORADO
Department of Public Health and Environment

John W. Hickenlooper
Governor
Karin McGowan
Interim Executive Director

FY 2019-20 Funding Request | November 1, 2018

Department Priority: R-10
Request Detail: Restore Pesticides General Fund

Summary of Incremental Funding Change for FY 2019-20	Total Funds	General Fund
Restore Pesticides General Fund	$84,000	$84,000

Problem or Opportunity:

The Department requests to restore $84,000 General Fund in FY 2019-20 and beyond in the Pesticides Sector line item. This request will allow the Department to meet the requirements per the FY 2018-19 and beyond Long Bill obligation of the General Fund transfer of reappropriated funds to the Department of Agriculture. The Department currently does not have adequate General Fund to meet reappropriated Long Bill requirements to transfer $84,000 to the Department of Agriculture for pesticide detection water sample testing. Additionally, the Department of Agriculture's Long Bill letternote uses funds from a line item in the Water Quality Control Division (WQCD) intended for other programmatic purposes. Without adequate General Fund, the WQCD has had to absorb this cost using existing appropriations.

The Long Bill initially appropriated this funding in FY 2013-14; however, the reorganization of Clean Water Program line items caused the funding to be unintentionally omitted. The below account by fiscal year explains the issue:

In FY 2013-14, JBC staff initiated a transfer from the WQCD to the Department of Agriculture to fund an anticipated increase in workload related to pesticide testing at the Department of Agriculture. Joint Budget Committee (JBC) staff funded the $84,000 transfer with a General Fund increase in the WQCD Operating Expenses Line Item. JBC staff also funded 1.0 FTE in the Personal Services Line Item in the WQCD. These expenditures were for the development and implementation of a surface water pesticide monitoring program. In addition, the Department of Agriculture's Long Bill included a letternote that said, "This amount shall be from the Department of Public Health and Environment, Water Quality Control Division."

In FY 2014-15, minor Clean Water Program funding changes occurred without an impact to the pesticides appropriation, the transfer to the Department of Agriculture, or the Department of Agriculture's Long Bill letternote.

In FY 2015-16, the JBC staff refinanced the Clean Water Program into six (6) distinct sectors including the Pesticides Sector. All bottom line funded sectors included a total General Fund appropriation of $2,413,566, this amount included the $84,000 Reappropriated Fund transfer to the Department of Agriculture for pesticides testing. However, the letternote in the Department of Agriculture's Long Bill was not updated to reflect this change and collect the money from the Clean Water Program, the letternote still said, "This amount shall be from the Department of Public Health and Environment, Water Quality Control Division."

In FY 2016-17, the WQCD completed a funding analysis and fee increase and specifically allocated funding to each sector line. The Department requested $143,391 General Fund for the Pesticides Sector based on projected costs; however, no General Fund was appropriated; instead the Pesticides Sector's appropriation included a mix of cash funds ($17,600) and federal funds ($100,000) for a total appropriation of $117,600. This is where the omission of the $84,000 transfer amount to the Department of Agriculture occurred. It created an issue causing the Pesticides Sector to have insufficient General Fund appropriations to meet the Long Bill requirement as identified in the Department of Agriculture's Long Bill. During this session, the Department of Agriculture's Long Bill letternote was correctly updated, stating "[d]Of this amount, $84,000 shall be from the Department of Public Health and Environment from the Pesticides Sector line item in the Clean Water Sectors subdivision in the Water Quality Control Division. . ."

In FY 2017-18, House Bill 17-1285: Refinance the Water Pollution Control Program passed. The new financing structure became effective July 1, 2018. As part of the special bill, the Pesticides Sector received a decrease in the Cash Fund appropriation from the previous year of $17,600 to $5,816; however, the General Fund appropriation was increased by $95,543 and the federal funds of $100,000 remained constant, bringing the program to a new annual total appropriation of $201,359. This bill increased the appropriation to fund program activities related to permitting and compliance issues associated with pesticide applications and to fund the 1.0 FTE authorized in FY 2013-14. The General Fund appropriation did not include the $84,000 transfer to the Department of Agriculture. In FY 2017-18, the WQCD used General Fund in the Clean Water Program Costs line item to pay the Department of Agriculture because the WQCD used the General Fund appropriation in the Pesticides Sector to cover direct program expenses related to the FTE. Additionally, the letternote in the Department of Agriculture's Long Bill said, "[d]Of this amount, $84,000 shall be from the Department of Public Health and Environment from the Clean Water Program Cost line item appropriation in the Clean Water Program subdivision in the Water Quality Control Division. . ."

Please see Table 1 - Timeline of Pesticides Transfer to Department of Agriculture for a summary of the activity in the Pesticides Sector.

Table 1 - Timeline of Pesticides Transfer to the Department of Agriculture

Fiscal Year	**Action**	**GF Appropriation**	**Dept. of Agriculture Letternote**
FY 2012-13	Base year - no changes	N/A	N/A
FY 2013-14	JBC staff initiated a transfer from the Water Quality Control Division (WQCD) as an adjustment to cover an anticipated increase in workload related to pesticide testing at the Department of Agriculture.	$84,000	[b]This amount shall be from the Department of Public Health and Environment, Water Quality Control Division.

FY 2014-15	No changes from previous year	$84,000	[b]This amount shall be from the Department of Public Health and Environment, Water Quality Control Division.
FY 2015-16	JBC staff refinanced the Clean Water Program into six distinct sectors including the Pesticides Sector. Bottomline funded	$84,000	[d]This amount shall be from the Department of Public Health and Environment, Water Quality Control Division.
FY 2016-17	Division completed funding analysis and fee increase to break into each sector line. Requested $143,391 General Fund but was appropriated $117,600 in federal and cash funds.	$ -	[d]Of this amount, $84,000 shall be from the Department of Public Health and Environment from the Pesticides Sector line item in the Clean Water Sectors subdivision in the Water Quality Control Division.
FY 2017-18	House Bill 17-1285: Refinance the Water Pollution Control Program passed. It decreased cash funds in the Pesticides Sector and increased the General Fund appropriation in the Pesticides Sector from $0 to $95,523	$95,523	[d]Of this amount, $84,000 shall be from the Department of Public Health and Environment from the Clean Water Program Cost line item appropriation in the Clean Water Programs subdivision in the Water Quality Control Division
FY 2018-19	Small increases from FY 2017-18 for Salary Survey and Merit Pay base building.	$97,749	[d]Of this amount, $84,000 shall be from the Department of Public Health and Environment from the Clean Water Program Cost line item appropriation in the Clean Water Programs subdivision in the Water Quality Control Division.

Proposed Solution:

The Department requests $84,000 General Fund for FY 2019-20 and beyond in the Pesticides Sector line item to meet the FY 2018-19 Long Bill obligation of the General Fund transfer to reappropriated funds to the Department of Agriculture. Additionally, the Department requests an adjustment to the Department of Agriculture's letternote to direct the transfer of $84,000 to come from the Colorado Department of Public Health and Environment Water Quality Control Division - Pesticides Sector. This will restore General Fund to the Clean Water Program previously omitted when the division refinanced the six (6) clean water sectors lines. The Department depends on these funds to complete pesticides testing of state waters. Due to the fee-for-service nature of the transaction between the Department of Public Health and Environment and the Department of Agriculture for the sampling completed for the Water Quality Control Division, the Department believes that it is most appropriate for the appropriation to remain within the Department.

Anticipated Outcomes:

With restored funding, the Water Quality Control Division would have sufficient funding to meet program obligations including the funding designated to the Department of Agriculture. If not funded, the Water Quality Control Division will continue to have insufficient General Fund to cover programmatic expenses.

Assumptions and Calculations:

Please reference the attached Appendix A - Clean Water Program Funding History.

R-10 Restore Pesticides Funding
Appendix A - Clean Water Program Funding History

FY 2012-13 Clean Water Program Funding						
(A) Clean water Program		GF	CF	RAF	FF	
Personal Services		$ 538,406	$ 3,421,398	$ 37,998	$ 2,793,221	
Operating Expenses		$ 501,585	$ 114,012	$ 1,675	$ 463,283	
Local Grants and Contracts					$ 2,759,120	
Water Quality Improvement			$ 167,196			
TOTAL APPROPRIATION	***$ 10,797,894***	***$ 1,039,991***	***$ 3,702,606***	***$ 39,673***	***$ 6,015,624***	

FY 2013-14 Clean Water Program Funding						
(A) Clean water Program		GF	CF	RAF	FF	
Personal Services		$ 1,849,173	$ 3,613,300	$ 37,998	$ 3,325,900	
Operating Expenses		$ 841,402	$ 117,471	$ 1,675	$ 440,800	Transferred $84,000 GF to the Department of Agriculture per letternote
Local Grants and Contracts					$ 1,777,800	
Water Quality Improvement			$ 167,196			
TOTAL APPROPRIATION	***$ 12,172,715***	***$ 2,690,575***	***$ 3,897,967***	***$ 39,673***	***$ 5,544,500***	

FY 2014-15 Clean Water Program Funding						
(A) Clean water Program		GF	CF	RAF	FF	
Personal Services		$ 2,108,553	$ 3,694,241	$ 37,998	$ 3,325,900	
Operating Expenses		$ 773,208	$ 117,471	$ 1,675	$ 802,500	Transferred $84,000 GF to the Department of Agriculture per letternote
Local Grants and Contracts					$ 2,317,200	
Water Quality Improvement			$ 167,196			
Transfer to the Nutrients Fund		$ 2,000,000				
Nutrients Grant Fund			$ 2,000,000			
TOTAL APPROPRIATION	***$ 17,345,942***	***$ 4,881,761***	***$ 5,978,908***	***$ 39,673***	***$ 6,445,600***	

FY 2015-16 Clean Water Program Funding		GF	CF	RAF	FF	
(A) Administration		$ 537,807	$ 399,781		$ 1,133,863	
(B) Clean Water Sectors						
Commerce and Industry						
Construction						
Municipal Separate Storm Sewer System Sector						
Pesticides Sector						Transferred $84,000 GF to the Department of Agriculture per letternote
Public and Private Utilities						
Water Quality Certification						
General Fund Subsidy						
		$ 2,413,566	$ 3,323,064		$ 2,117,146	
(C) Clean Water Program						
Local Grants and Contracts		$ 362,154		$ 39,673	$ 3,613,977	GF Transfer to Lab
Water Quality Improvement			$ 169,196			
TOTAL APPROPRIATION	***$ 14,110,227***	***$ 3,313,527***	***$ 3,892,041***	***$ 39,673***	***$ 6,864,986***	

FY 2016-17 Clean Water Program Funding		GF	CF	RAF	FF	
(A) Administration		$ 548,464	$ 379,565		$ 1,058,504	
(B) Clean Water Sectors						
Commerce and Industry		$ 687,209	$ 725,873		$ 242,066	
Construction		$ 335,081	$ 1,077,180		$ 115,189	
Municipal Separate Storm Sewer System Sector		$ 62,468	$ 80,454		$ 35,653	
Pesticides Sector		$ -	$ 17,600		$ 100,000	No General Fund Available for the Department of Agriculture despite
Public and Private Utilities		$ 1,103,322	$ 982,584		$ 488,247	
Water Quality Certification			$ 203,095		$ 20,000	
		$ 2,188,080	$ 3,086,786	$ -	$ 1,001,155	
(C) Clean Water Program						
Local Grants and Contracts		$ 362,154		$ 39,673	$ 3,613,977	Transferred $84,000 GF to the Department of Agriculture
Water Quality Improvement			$ 767,196			
TOTAL APPROPRIATION	***$ 12,278,358***	***$ 3,098,698***	***$ 3,466,351***	***$ 39,673***	***$ 5,673,636***	

FY 2017-18 Clean Water Program Funding		GF	CF	RAF	FF	
(A) Administration		$ 548,464	$ 379,565		$ 1,058,504	
17-1285 Refinance Water Pollution Control Program		$ (62,569)	$ 62,569			
Subtotal of Appropriation		$ 485,895	$ 442,134	$ -	$ 1,058,504	
(B) Clean Water Sectors						
Commerce and Industry		$ 687,209	$ 725,873		$ 242,066	
17-1285 Refinance Water Pollution Control Program		$ 182,228	$ 143,565			
Subtotal of Appropriation		$ 869,437	$ 869,438		$ 242,066	
Construction		$ 335,081	$ 1,053,665		$ 115,189	
17-1285 Refinance Water Pollution Control Program		$ (74,878)	$ (20,874)			
Subtotal of Appropriation		$ 260,203	$ 1,032,791		$ 115,189	
Municipal Separate Storm Sewer System Sector		$ 62,468	$ 80,545		$ 35,653	
17-1285 Refinance Water Pollution Control Program		$ 40,558	$ 22,480			
Subtotal of Appropriation		$ 103,026	$ 103,025		$ 35,653	
Pesticides Sector			$ 17,600		$ 100,000	No General Fund Available for the Department of Agriculture in order
17-1285 Refinance Water Pollution Control Program		$ 95,543	$ (11,784)			
Subtotal of Appropriation		$ 95,543	$ 5,816		$ 100,000	
Public and Private Utilities		$ 1,103,322	$ 807,584		$ 488,247	
17-1285 Refinance Water Pollution Control Program		$ 243,120	$ 598,858			
Subtotal of Appropriation		$ 1,346,442	$ 1,406,442		$ 488,247	
Water Quality Certification		$ -	$ 203,095		$ 20,000	
17-1285 Refinance Water Pollution Control Program		$ 9,040	$ (19,849)			
Subtotal of Appropriation		$ 9,040	$ 183,246		$ 20,000	
(C) Clean Water Program						
Clean Water Program Costs		$ 362,154	$ 175,000	$ 39,673	$ 300,000	Transferred $84,000 GF to the Department of Agriculture
Local Grants and Contracts		$ -	$ -	$ -	$ 3,313,977	
Water Quality Improvement			$ 767,196	$ -		
17-1285 Refinance Water Pollution Control Program			$ 50,000			
		$ 362,154	$ 992,196	$ 39,673	$ 3,613,977	
TOTAL APPROPRIATION	***$ 14,280,137***	***$ 3,531,740***	***$ 5,035,088***	***$ 39,673***	***$ 5,673,636***	

FY 2018-19 Clean Water Program Funding		GF	CF	RAF	FF	
(A) Administration		$ 494,629	$ 437,026		$ 1,048,172	
(B) Clean Water Sectors						
Commerce and Industry		$ 889,517	$ 895,838		$ 242,066	
Construction		$ 266,212	$ 1,064,152		$ 115,189	
Municipal Separate Storm Sewer System Sector		$ 105,406	$ 106,154		$ 35,653	
Pesticides Sector		$ 97,749	$ 5,993		$ 100,000	No General Fund Available for the Department of Agriculture in order
Public and Private Utilities		$ 1,377,496	$ 1,448,461		$ 488,247	
Water Quality Certification		$ 9,040	$ 188,810		$ 20,000	
		$ 2,745,420	$ 3,709,408	$ -	$ 1,001,155	
(C) Clean Water Program						
Clean Water Program Costs		$ 437,979	$ 175,000	$ 39,673	$ 300,000	Transfer $84,000 GF to the Department of Agriculture
Local Grants and Contracts		$ -	$ -	$ -	$ 3,313,977	
Water Quality Improvement			$ 1,550,000			
TOTAL APPROPRIATION	***$ 15,252,439***	***$ 3,678,028***	***$ 5,871,434***	***$ 39,673***	***$ 5,663,304***	

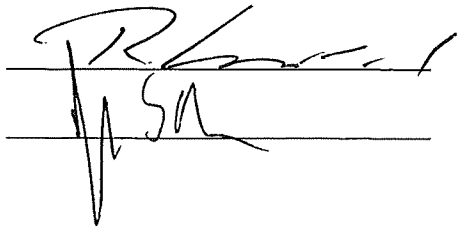
Schedule 13

Department of Public Health and Environment

Funding Request for The FY 2019-20 Budget Cycle

Request Title

R-11 Trauma System

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 Initial Appropriation	FY 2018-19 Supplemental Request	FY 2019-20 Base Request	FY 2019-20 Change Request	FY 2020-21 Continuation
	Total	**$9,991,654**	**$0**	**$10,047,469**	**$0**	**$0**
	FTE	13.5	0.0	13.5	0.0	0.0
Total of All Line Items Impacted by Change Request	GF	$43,315	$0	$44,007	$0	$0
	CF	$9,948,339	$0	$10,003,462	$0	$0
	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	**$1,547,758**	**$0**	**$1,603,573**	**$65,000**	**$65,000**
10. Health Facilities and Emergency Medical Services, (C) Emergency Medical Services, (1) Emergency Medical Services - State EMS Coordination, Planning and Certification Program	FTE	13.5	0.0	13.5	0.0	0.0
	GF	$43,315	$0	$44,007	$0	$0
	CF	$1,504,443	$0	$1,559,566	$65,000	$65,000
	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	**$8,443,896**	**$0**	**$8,443,896**	**($65,000)**	**($65,000)**
10. Health Facilities and Emergency Medical Services, (C)	FTE	0.0	0.0	0.0	0.0	0.0
Emergency Medical Services, (1) Emergency Medical Services - Emergency Medical Services Provider Grants	GF	$0	$0	$0	$0	$0
	CF	$8,443,896	$0	$8,443,896	($65,000)	($65,000)
	RF	$0	$0	$0	$0	$0
	FF	$0	$0	$0	$0	$0

Auxiliary Data			
Requires Legislation?	NO		
Type of Request?	Department of Public Health and Environment Prioritized Request	**Interagency Approval or Related Schedule 13s:**	No Other Agency Impact

Cost and FTE

- This is a net $0 request to transfer $65,000 cash spending authority from the Emergency Medical Services (EMS) Provider Grant line to the EMS program line to pay the annual maintenance costs for the State's updated trauma registry system.
- This request represents a decrease of 0.77% from the FY 2018-19 in the Emergency Medical Services Provider Grants line appropriation.

Current Program

- The Department is required by statute to "oversee the operation of a statewide trauma registry" which requires the ability to "collect, compile, and maintain information for the statewide central registry" (C.R.S. 25-3.5-704).
- Colorado's designated trauma centers are required to submit specific data elements to CDPHE as described in 6 CCR 1015-4, Chapter One.
- Historically, this has occurred through a trauma registry software vendor. This method required the Office of Information Technology (OIT) support to manage large file uploads to the Department's Colorado Emergency Medical Services Information Systems (CEMSIS) website.

Problem or Opportunity

- The trauma registry, which was internally developed, was aged and failing.
- The division has chosen to upgrade the system using a commercial trauma registry product produced by the same vendor that houses the emergency medical system data.
- Integrating the two systems will enhance services and reduce training required for providers and in house staff.
- This request is to transfer spending authority for the annual maintenance costs of the system from the grants line to the program costs line.

Consequences of Problem

- Without approval of the transfer, the division will continue to pay the maintenance for the trauma module out of the grants line and will need to request authorization for the expenditure from the State Emergency Medical and Trauma Services Advisory Council (SEMTAC) on an annual basis through submitting a grant application.

Proposed Solution

- This is a net $0 request to transfer $65,000 cash spending authority from the Emergency Medical Services (EMS) Provider Grant line to the EMS program line to pay the annual maintenance costs for the State's updated trauma registry system.
- Transferring the spending authority to the program line will be more efficient and transparent than funding an operating expense through a grants line.

Department Priority: R-11
Request Detail: Trauma System

Summary of Incremental Funding Change for FY 2019-20	Total Funds	General Fund
Trauma System	$0	$0

Problem or Opportunity:

The Department requests a net $0 transfer of $65,000 cash spending authority from the Emergency Medical Services (EMS) Provider Grant line to the EMS program line to pay the annual maintenance costs for the State's updated trauma registry system.

The Department is required by statute to "oversee the operation of a statewide trauma registry" which requires the ability to "collect, compile, and maintain information for the statewide central registry" (C.R.S. 25-3.5-704). Historically, the trauma registry functioned as a data repository on an internally developed/maintained system. This home built system was aged and was failing. The Department's Health Facilities and Emergency Medical Services division has chosen to upgrade the system using a commercial trauma registry product that is produced by the same vendor that houses the emergency medical system data. Integrating the two systems will enhance services and reduce training required for providers and in house staff.

Colorado's designated trauma centers and hospitals are required to submit specific data elements, such as patient, injury, pre-hospital care, inter-facility transfer, inpatient care, and other information to the Department as described in 6 CCR 1015-4, Chapter One. Historically, this has occurred through a trauma registry software vendor such as Clinical Data Management, Digital Innovations, or Lancet at the hospital level. This method required OIT support to manage large file uploads to the Department's Colorado Emergency Medical Services Information Systems (CEMSIS) website. The transfer of data from the various vendors to the Department system for comprehensive analysis was a complex process. Once uploaded, all data were processed and stored on a secure server. Transition to a new platform was critical to maintain and expand functionality, access, and compliance with statute. The new platform allows hospitals two options for entering data into the system: direct entry without requiring specialized software at the hospital level or import via a third-party vendor using a process supported by the new platform. With the new system, the Department no longer needs support from the Office of Information Technology (OIT); all maintenance will be done by the vendor that built and hosts the system. OIT resources have been reallocated to other Department work subsequent to implementation. Any adjustments in OIT workload will be addressed through the annual true-up process.

Proposed Solution:

The division has secured resources through the EMS grants line to purchase the new trauma registry system. This request relates to the ongoing maintenance of the system with ImageTrend. Under the requested solution, the spending authority would be reduced in the (10) Health Facilities And Emergency Medical Services Division, (C) Emergency Medical Services, Emergency Medical Services Provider Grants line and increased in the (10) Health Facilities And Emergency Medical Services Division, (C) Emergency Medical Services, State EMS Coordination, Planning and Certification Program. The request is to move $65,000 cash fund spending authority between the lines, resulting in a net $0 request. If authorized, this request will facilitate the payment of the annual maintenance costs for the State Trauma system.

The EMS Provider Grant line makes funding available to local emergency services providers to purchase equipment (cots, defibrillators, heart monitors, etc.), vehicles (ambulances and rescue vehicles, such as ATV's), system improvements (coordination between different agencies, training, etc.) and various other EMS (emergency medical services) and trauma system improvements. Current spending authority in the Provider Grants line is $8,443,896. If the requested transfer is approved, there will be a decrease of 0.77% in the grant line. While the Provider Grants line is usually well-utilized for grants, funding the annual maintenance for the trauma system will benefit the entire state; therefore, the Department believes it is an appropriate use of the funds.

The State Emergency Medical and Trauma Services Advisory Council (SEMTAC) approved the purchase of the trauma module and funding of the annual maintenance out of the grant line. SEMTAC is a statutorily required advisory council that guides the Department in policy decisions for emergency medical and trauma services. The applications to the Provider Grant line typically exceed available spending authority; however, the Department believes that the underlying benefits of statewide support for trauma system data collection outweighs the minimal impact on the availability of grant funds.

If this request is not approved, the division anticipates continuing to pay the maintenance for the trauma module from the grant line. However, the division will need to request approval from SEMTAC on an annual basis. The division believes an annual request is not the most efficient approach. Requesting the funding includes development of a grant application, review, and a recommendation from SEMTAC. While there is the chance that future SEMTAC members could deny the funding request, this is unlikely as the SEMTAC members have approved the purchase of the system. The Division discussed the ongoing maintenance costs with SEMTAC members during the January 2018 meeting.

The Department believes that transferring the funds to the program line would be more efficient and transparent as the maintenance cost is more correctly identified as an operational cost, rather than a grant.

Anticipated Outcomes:

The new system fulfilled the immediate need for an updated and functional trauma registry as well as improving functionality and efficiency for internal and external users through an advanced data entry interface and more robust reporting tools. In addition, it enhances access to data for facility trauma programs and state system oversight. With the new system, hospitals can update the Department's trauma registry directly from the electronic medical records that the hospital already compiles. The hospitals can also use their specific data for quality improvement efforts within the hospital. For example, they can review hospital specific data on procedures, outcomes, etc. to identify areas of concern and work to improve procedures and decision making processes.

The new system is compatible with the trauma registry software products used at the local level. Additionally, data entry for Level IV and V facilities is now a direct entry format rather than the

previous spreadsheet methodology. The new system also expands data analysis capabilities through built-in report writer functions. This key feature allows for more robust monitoring and tracking of trauma data elements and improves efficiency and accuracy in Department data releases. Individual facilities, regional coordinators, academic institutions, etc. often request specific data from the Department. These data are used for management, quality improvement, and research purposes, and are provided through Department data releases after internal review.

The system is compatible with the current EMS system used throughout the EMS Branch. The Department is already using ImageTrend products for EMS certification, air ambulance licensure, and statewide EMS data collection. Integration of systems reduces duplication of data entry, ensures compatibility of data across systems, and allows multiple systems to communicate with one another. This communication provides additional validation of data accuracy.

Furthermore, seventeen other states are using ImageTrend for their trauma registries. Colorado can benefit from crowdsourcing as well as from the knowledge other states have gained in use of this product. ImageTrend allows the sharing of work across states including data entry forms and validation rules. As Colorado advances toward improved continuity of care through data sharing, other states can provide best practices as well as lessons learned from similar transitions.

Transferring spending authority from the grants line to the program line provides administrative efficiencies. The SEMTAC is required to recommend to the Department which grants are to be funded. While the SEMTAC approved the purchase of the system and the first year of maintenance from the grant line, continued payment of these expenses from that line would require further recommendation from SEMTAC. By transferring the spending authority to the program line, the Department can contract for the maintenance without going through the grant application process. The placement of this expense under the program line (as it is an ongoing, routine cost of doing business) is more transparent than placing the expenses in a grant line among approximately 100 grants to local agencies. Moving the funding and expense to the Program line also means that a grant application does not need to be developed, reviewed, and approved, reducing workload for both the Program and SEMTAC.

Assumptions and Calculations:

ImageTrend has provided the division with the $65,000 quote for the annual maintenance cost of the system.

The reduction to the Provider Grants line is calculated at 0.77% = $65,000 / $8,443,896.

COLORADO
Governor's Office of
Information Technology

8/1/2018

Lauren Larson
Director
Office of State Planning and Budgeting
111 State Capitol
Denver, Colorado 80203

RE: FY 2019-20 IT Operating Request - CDPHE Trauma System Maintenance

Dear Director Larson:

Pursuant to OSPB instructions, this letter is to confirm that the Office of Information Technology (OIT) has reviewed and approved the submission of this proposed FY 2019-20 IT Operating Request, CDPHE Trauma System Maintenance. OIT has completed an internal review to ensure the project aligns with statewide IT goals and determined that OIT has the capacity to deliver and meet the requirements of the project. In addition, this review has included ensuring that this project has been included in the agency's Five Year IT Roadmap. This particular request is in the following adendum CDPHE FY19 5-Year IT Roadmap Addendum 2018-08-18

Sincerely,

Bethany Nicholas, OIT Budget Director

Kristina Kiburz, OIT IT Director