

Department of Public Health and Environment

Funding Request for the FY 2022-23 Budget Cycle

Request Title

R-01 Air Quality Transformation

Dept. Approval By: *Viktor Bojilov* _____ Supplemental FY 2021-22

OSPB Approval By: _____ Budget Amendment FY 2022-23

X _____ Change Request FY 2022-23

Summary Information	Fund	FY 2021-22		FY 2022-23		FY 2023-24
		Initial Appropriation	Supplemental Request	Base Request	Change Request	Continuation
	Total	\$60,771,294	\$0	\$71,889,935	\$24,759,015	\$27,359,968
	FTE	228.8	0.0	246.2	75.0	138.0
Total of All Line Items Impacted by Change Request	GF	\$7,131,657	\$0	\$11,768,211	\$24,759,015	\$27,359,968
	CF	\$28,787,958	\$0	\$31,437,930	\$0	\$0
	RF	\$10,233,828	\$0	\$10,338,510	\$0	\$0
	FF	\$14,617,851	\$0	\$18,345,284	\$0	\$0

Line Item Information	Fund	FY 2021-22		FY 2022-23		FY 2023-24
		Initial Appropriation	Supplemental Request	Base Request	Change Request	Continuation
	Total	\$16,169,999	\$0	\$21,063,214	\$753,143	\$1,405,871
	FTE	0.0	0.0	0.0	0.0	0.0
01. Administration and Support, (A)	GF	\$2,238,276	\$0	\$4,737,539	\$753,143	\$1,405,871
Administration, (1)	CF	\$6,265,528	\$0	\$6,689,551	\$0	\$0
Administration - Health, Life, and Dental	RF	\$1,606,315	\$0	\$1,658,579	\$0	\$0
	FF	\$6,059,880	\$0	\$7,977,545	\$0	\$0

	Total	\$183,318	\$0	\$227,580	\$8,900	\$15,925
	FTE	0.0	0.0	0.0	0.0	0.0
01. Administration and Support, (A)	GF	\$25,702	\$0	\$38,496	\$8,900	\$15,925
Administration, (1)	CF	\$65,921	\$0	\$68,651	\$0	\$0
Administration - Short-term Disability	RF	\$17,963	\$0	\$18,887	\$0	\$0
	FF	\$73,732	\$0	\$101,546	\$0	\$0

Line Item Information	Fund	FY 2021-22		FY 2022-23		FY 2023-24
		Initial Appropriation	Supplemental Request	Base Request	Change Request	Continuation
	Total	\$6,033,778	\$0	\$7,440,936	\$278,139	\$497,616
01. Administration and Support, (A)	FTE	0.0	0.0	0.0	0.0	0.0
Administration, (1)	GF	\$846,067	\$0	\$1,262,434	\$278,139	\$497,616
Administration - Amortization	CF	\$2,169,711	\$0	\$2,243,778	\$0	\$0
Equalization	RF	\$591,248	\$0	\$616,995	\$0	\$0
Disbursement	FF	\$2,426,752	\$0	\$3,317,729	\$0	\$0
	Total	\$6,033,778	\$0	\$7,440,936	\$278,139	\$497,616
01. Administration and Support, (A)	FTE	0.0	0.0	0.0	0.0	0.0
Administration, (1)	GF	\$846,067	\$0	\$1,262,434	\$278,139	\$497,616
Administration - Supplemental Amortization	CF	\$2,169,711	\$0	\$2,243,778	\$0	\$0
Equalization	RF	\$591,248	\$0	\$616,995	\$0	\$0
Disbursement	FF	\$2,426,752	\$0	\$3,317,729	\$0	\$0

Line Item Information	Fund	FY 2021-22		FY 2022-23		FY 2023-24
		Initial Appropriation	Supplemental Request	Base Request	Change Request	Continuation
	Total	\$8,196,967	\$0	\$8,324,776	\$495,000	\$910,800
	FTE	0.0	0.0	0.0	0.0	0.0
01. Administration and Support, (A)	GF	\$513,413	\$0	\$641,222	\$495,000	\$910,800
Administration, (1)	CF	\$243,000	\$0	\$243,000	\$0	\$0
Administration - Leased Space	RF	\$7,427,054	\$0	\$7,427,054	\$0	\$0
	FF	\$13,500	\$0	\$13,500	\$0	\$0
	Total	\$2,221,287	\$0	\$2,272,522	\$5,669,834	\$6,476,207
	FTE	23.7	0.0	23.7	14.0	23.5
04. Air Pollution Control Division, (A)	GF	\$493,460	\$0	\$511,936	\$5,669,834	\$6,476,207
Administration, (1)	CF	\$1,544,326	\$0	\$1,577,085	\$0	\$0
Administration - Program Costs	RF	\$0	\$0	\$0	\$0	\$0
	FF	\$183,501	\$0	\$183,501	\$0	\$0

Line Item Information	Fund	FY 2021-22		FY 2022-23		FY 2023-24
		Initial Appropriation	Supplemental Request	Base Request	Change Request	Continuation
	Total	\$3,655,141	\$0	\$3,742,447	\$0	\$390,027
	FTE	33.7	0.0	33.7	0.0	5.0
04. Air Pollution Control Division, (B) Technical Services, (1) Technical Services - Personal Services	GF	\$0	\$0	\$0	\$0	\$390,027
	CF	\$2,431,911	\$0	\$2,519,217	\$0	\$0
	RF	\$0	\$0	\$0	\$0	\$0
	FF	\$1,223,230	\$0	\$1,223,230	\$0	\$0
	Total	\$564,664	\$0	\$564,664	\$5,282,633	\$2,469,889
	FTE	0.0	0.0	0.0	0.0	0.0
04. Air Pollution Control Division, (B) Technical Services, (1) Technical Services - Operating Expenses	GF	\$0	\$0	\$0	\$5,282,633	\$2,469,889
	CF	\$313,941	\$0	\$313,941	\$0	\$0
	RF	\$0	\$0	\$0	\$0	\$0
	FF	\$250,723	\$0	\$250,723	\$0	\$0

Line Item Information	Fund	FY 2021-22		FY 2022-23		FY 2023-24
		Initial Appropriation	Supplemental Request	Base Request	Change Request	Continuation
	Total	\$2,945,250	\$0	\$3,696,030	\$75,405	\$75,405
	FTE	26.7	0.0	26.4	1.0	1.0
04. Air Pollution Control Division, (C) Mobile Sources, (1) Mobile Sources - Personal Services	GF	\$23,449	\$0	\$0	\$75,405	\$75,405
	CF	\$2,510,401	\$0	\$3,284,630	\$0	\$0
	RF	\$0	\$0	\$0	\$0	\$0
	FF	\$411,400	\$0	\$411,400	\$0	\$0
	Total	\$316,901	\$0	\$1,692,901	\$7,950	\$950
	FTE	0.0	0.0	8.3	0.0	0.0
04. Air Pollution Control Division, (C) Mobile Sources, (1) Mobile Sources - Operating Expenses	GF	\$9,405	\$0	\$0	\$7,950	\$950
	CF	\$230,240	\$0	\$1,615,645	\$0	\$0
	RF	\$0	\$0	\$0	\$0	\$0
	FF	\$77,256	\$0	\$77,256	\$0	\$0

Line Item Information	Fund	FY 2021-22		FY 2022-23		FY 2023-24
		Initial Appropriation	Supplemental Request	Base Request	Change Request	Continuation
	Total	\$77,597	\$0	\$77,597	\$4,916,645	\$4,923,645
	FTE	0.0	0.0	0.0	0.0	0.0
04. Air Pollution Control Division, (C) Mobile Sources, (1) Mobile Sources - Local Grants	GF	\$0	\$0	\$0	\$4,916,645	\$4,923,645
	CF	\$77,597	\$0	\$77,597	\$0	\$0
	RF	\$0	\$0	\$0	\$0	\$0
	FF	\$0	\$0	\$0	\$0	\$0
	Total	\$12,798,746	\$0	\$13,510,863	\$4,602,109	\$8,022,068
	FTE	144.7	0.0	153.6	54.0	98.5
04. Air Pollution Control Division, (D) Stationary Sources, (1) Stationary Sources - Personal Services	GF	\$1,362,699	\$0	\$2,010,721	\$4,602,109	\$8,022,068
	CF	\$10,013,836	\$0	\$10,077,931	\$0	\$0
	RF	\$0	\$0	\$0	\$0	\$0
	FF	\$1,422,211	\$0	\$1,422,211	\$0	\$0

Line Item Information	Fund	FY 2021-22		FY 2022-23		FY 2023-24
		Initial Appropriation	Supplemental Request	Base Request	Change Request	Continuation
	Total	\$1,573,868	\$0	\$1,835,469	\$1,855,560	\$675,613
	FTE	0.0	0.0	0.5	0.0	0.0
04. Air Pollution Control Division, (D) Stationary Sources, (1) Stationary Sources - Operating Expenses	GF	\$773,119	\$0	\$1,303,429	\$1,855,560	\$675,613
	CF	\$751,835	\$0	\$483,126	\$0	\$0
	RF	\$0	\$0	\$0	\$0	\$0
	FF	\$48,914	\$0	\$48,914	\$0	\$0
	Total	\$0	\$0	\$0	\$535,558	\$998,336
	FTE	0.0	0.0	0.0	6.0	10.0
04. Air Pollution Control Division, (E) Climate Services, (1) Climate Services - Program Costs	GF	\$0	\$0	\$0	\$535,558	\$998,336
	CF	\$0	\$0	\$0	\$0	\$0
	RF	\$0	\$0	\$0	\$0	\$0
	FF	\$0	\$0	\$0	\$0	\$0

Auxiliary Data

Requires Legislation? YES

Type of Request? Public Health and Environment
Prioritized Request

**Interagency Approval or
Related Schedule 13s:**

No Other Agency Impact



November 1, 2021

**Department Priority: R-01
Request Detail: Air Quality Transformation**

Summary of Funding Change for FY 2022-23			
		Incremental Change	
	FY 2021-22 Appropriation	FY 2022-23 Request	FY 2023-24 Request
Total Funds	\$60,771,294	\$24,759,015	\$27,359,968
FTE	228.8	75.0	138.0
General Fund	\$7,131,657	\$24,759,015	\$27,359,968
Cash Funds	\$28,787,958	\$0	\$0
Reappropriated Funds	\$10,233,828	\$0	\$0
Federal Funds	\$14,617,8513	\$0	\$0

Summary of Request

The Colorado Department of Public Health and Environment (CDPHE or “the department”) respectfully requests \$24,759,015 in General Fund appropriations and 75.0 FTE in FY 2022-23 and 27,359,968 in General Fund appropriations and 138.0 FTE in FY 2023-24. The requested resources will be instrumental in addressing the myriad challenges necessary to achieve Colorado’s ultimate air quality goals. The proposal represents significant new investment in the Air Pollution Control Division (APCD) to achieve immediate emission reductions in specific industries, increase permitting capacity under the expected downgrade of the Denver Metro/North Front Range (DM/NFR) area to severe ozone nonattainment status, improve monitoring of pollutants across Colorado, and more thoroughly engage with our communities. While existing structures and resources within CDPHE and the APCD can serve as a foundation for these efforts, a significant expansion of existing programs and additional resources for new programs is needed to meet Colorado’s air quality goals. In order to avoid negative impacts to the business community during Colorado’s economic recovery from the COVID-19 pandemic, the requested resources are from the General Fund in FY 2022-23 and FY 2023-24. Ongoing costs in FY 2024-25 and beyond are expected to be addressed through a future legislative increase and/or expansion of CDPHE’s existing fee mechanisms.

Current Program

The Air Pollution Control Division administers the federal Clean Air Act and the Colorado Pollution Prevention and Control Act. Major functions of the APCD include:

- permitting, compliance oversight and enforcement of air quality statutes and rules for numerous sectors such as industrial facilities, oil and gas industry, power plants and other commercial air pollutant emitters;
- climate change and greenhouse gas reduction activities;
- supporting regulation development activities through the Air Quality Control Commission, the Colorado Oil and Gas Conservation Commission, and the Colorado Board of Health to improve air quality and protect public health;
- air quality planning to meet federal and state requirements;
- ambient monitoring, pollutant analysis and modeling of air quality;
- researching and reducing pollution from mobile vehicles and the transportation sector;
- reducing adverse health impacts from asbestos, chlorofluorocarbons and lead; and
- financial stewardship and oversight of its programs and small business assistance.

The APCD is comprised of four subdivisions for budgeting purposes: Administration, Technical Services, Mobile Sources, and Stationary Sources.

- A. Administration - This subdivision provides overall administrative support to the division including division leadership, fiscal support, personnel oversight, records management and other business services. This subdivision also includes the Planning and Policy Program. The Planning and Policy Program provides necessary air quality planning and coordination for the development and submittal of federally required regulatory plans and programs (State Implementation Plans (SIPs) and State 111d Plans) and supporting technical information for criteria pollutants and regional haze to the U.S. Environmental Protection Agency (EPA) as set forth in the Clean Air Act. This includes developing mandatory and voluntary emission reduction strategies and advocating for those strategies before a variety of decision-makers, including the Air Quality Control Commission, Public Utilities Commission, Transportation Commission, Program, Regional Air Quality Council, transportation planning organizations and agencies, EPA, and more. The program is responsible for developing and updating the Air Quality Control Commission Regulations, assisting small businesses in better understanding and complying with environmental regulations, tracking federal air quality rulemaking activities, and evaluating federally funded projects for compliance with General Conformity and Transportation Conformity.

Within the Planning and Policy Program, the Climate Change Unit provides necessary planning, collaboration and coordination for the development and proposal of climate related air quality reduction strategies, emission reduction programs and supporting technical information greenhouse gas (GHG) in response to 2019 legislation (H.B.

19-1261, S.B. 19-096, H.B. 19-236 and S.B. 19-181) and more recent 2021 legislation (H.B. 21-1266, H.B. 21-1286, and S.B. 21-264). This includes developing mandatory and voluntary emission reduction strategies and advocating for those strategies before a variety of decision-makers, including the Air Quality Control Commission, Public Utilities Commission, Transportation Commission, transportation planning organizations and agencies, EPA, and more. This Unit develops and maintains partnerships with the Colorado Energy Office (CEO), Colorado Department of Transportation (CDOT), other air quality planning agencies (including the Regional Air Quality Council (RAQC) and other states, etc.), local governments, non-governmental organizations, technical experts and the regulated community to advance environmental and GHG goals through the development of innovative policies, programs and environmental projects. The unit is responsible for establishing a GHG data system, gathering and evaluating reported GHG emissions, developing a state-wide greenhouse gas (GHG) inventory, projecting future emissions, and measuring progress against Colorado's established targets. In carrying out these duties, the unit is also responsible for identifying and engaging Disproportionately Impacted Communities around equity and environmental justice in developing GHG emission reduction strategies for the APCD.

To both aid Colorado's air quality planning capabilities and serve as a bridge between planning and implementation activities the Office of Innovations and Planning was created in 2020 to consider and develop innovative, long-term, and structural solutions to some of the most challenging air quality issues faced by Colorado.

This subdivision is funded primarily by cash funds, including the Stationary Sources Control Fund, and federal funds. The Climate Change Unit also receives general fund dollars (approximately \$0.5M).

- B. Technical Services - The subdivision houses three distinct programs: Air Quality Monitoring; Modeling and Analysis; and Visibility and Risk Assessment. This subdivision is responsible for measuring Colorado's air quality including compliance with the National Ambient Air Quality Standards (NAAQS), performing air quality modeling of industrial sources, performing regional modeling, and providing air quality forecasts and advisories. The Gaseous and Meteorological Monitoring Team is responsible for remote air monitoring of gaseous pollutants (such as ozone and carbon monoxide), air toxics, visibility and meteorology at 28 sites across the state. The unit is responsible for the Colorado Air Monitoring Mobile Laboratory (CAMML) which is used for monitoring air emissions for oil and gas development activities. Funding for this subdivision comes from cash funds, including the department's subaccount of the Highway Users Tax Cash Fund and the Stationary Sources Control Fund, and federal funds.
- C. Mobile Sources - This subdivision primarily focuses on regulating pollution from gasoline and diesel powered vehicles. Activities under this subdivision are primarily carried out by the Mobile Sources Program within APCD. This program develops motor vehicle regulations, oversees the Automobile Inspection and Readjustment Program, collects complaints from the public on smoking vehicles, and develops emissions and fuels

analyses. The program maintains six Emissions Technical Centers that provide emissions system diagnostic services for the public, trains and certifies repair technicians, and performs inspections to support the Diesel Emissions Control Program and Oxygenated Fuels Program. The Inspection and Maintenance Program works to reduce motor vehicle-related pollution through the inspection and emissions-related repair of motor vehicles. Emissions testing of gas and diesel powered vehicles are required when registering, renewing, or selling vehicles along Colorado's Front Range. More recently, the Mobile Sources Program has spearheaded APCDs efforts in requiring lower emission vehicles in Colorado. Specifically, the Mobile Sources Program led the development of both the Low Emissions Vehicle and Zero Emission Vehicle (ZEV) regulations. The Air Quality Control Commission (AQCC) adopted zero emission vehicle standards in August of 2019.

Funding for this subdivision is primarily from the Department's subaccount of the Highway Users Tax Fund and a small amount of federal funds.

In 2018, the State of Colorado received over \$68.7 million from a diesel tampering settlement with Volkswagen Group of America. Colorado used the funds to encourage the purchase of medium- and heavy-duty ZEV and charging stations. Multiple agencies such as CDPHE, CDOT, CEO, and the RAQC were involved in the implementation of the settlement. In 2019, Governor Polis issued Executive Order B 2019 002 directing CDPHE to develop a rule to implement a ZEV program to encourage the widespread adoption of electric vehicles. The ZEV program was adopted by the AQCC in 2019.

- D. Stationary Sources - This subdivision is responsible for controlling and reducing air pollutants from stationary sources (i.e., factories, power plants, oil and gas facilities, small industrial and commercial facilities, wood stoves, etc.) through permits, monitoring, and inspections of stationary sources that emit air pollutants. The majority of funding for this subdivision consists of cash funds from the Stationary Sources Control Fund and a small amount of federal funds.

Within Stationary Sources:

The Permitting Program oversees the issuance of air quality permits for new, modified and existing sources. Within the Permitting Program, the Construction Permit Team issues permits for new and modified non-oil and gas minor sources. The Title V Permitting Team is responsible for issuing permits to control pollution emissions from Colorado's largest and most complex oil and gas, industrial, and commercial facilities. This team issues 209 Title V permits (as of September 2019) following the EPA regulations and standards for the largest sources of air pollution under the Title V Program.

The Oil and Gas Program is responsible for permitting, inspections, and compliance oversight activities related to oil and gas emissions. The team oversees approximately 10,800 oil and gas facilities and approximately 50,000 oil and gas

related sources of emissions, such as individual well pads. Inspection and compliance monitoring activities include infrared (IR) camera inspections. The APCD oil and gas programs are recognized as highly efficient and effective. The APCD Oil and Gas Team was one of the first programs in the nation to apply Lean principles to state government (circa 2008).

The Compliance and Enforcement Team conducts compliance oversight, compliance assistance and enforcement activities related to oil and gas as well as for all other non-oil and gas industrial facilities in the state. The Enforcement Team also performs final approval reviews for oil and gas and non-oil and gas facilities throughout the state. Final approval reviews involve a second step to the permitting process in which companies need to certify compliance with all terms and conditions of their permit which is evidenced through the submission of data that is received by APCD (e.g., self-certification form, opacity observations, stack testing, operating & maintenance plans).

Wildly Important Goals (WIGs) and Other Key Strategic Initiatives

The APCD funding proposal supports the development and ongoing needs for programs and services that align with key state and departmental initiatives. This includes two specific Governor's Office WIGs and two CDPHE Departmental WIGs:

- Governor's Office WIG 1: Greenhouse Gas Roadmap Implementation
- Governor's Office WIG 2: Maximize Renewable Energy
- Department WIG 1: Reduce Greenhouse Gas Emissions
- Department WIG 2: Reduce Ozone

Alignment with WIGs and Other Priority Initiatives



CDPHE WIG Proposal Highlights

- Aligns with Governor's and Dept WIGs
- Supports Reimagining State Gov't Initiative
- Promotes Environmental, Economic & Social Sustainability
- Enhances Business Continuity
- Transformative Projects for the Long-term Health and Welfare of Colorado
- Proposal is Flexible with both One-time & On-going Programs
- Proposed Programs are Scalable and may be Phased-in over Time.

Performance Standards and Outcomes

The division's programs and services are all intended to directly or indirectly align with and support meeting the performance metrics noted above, primarily improving Colorado's air quality by reducing GHG emissions and ozone levels. The division seeks to meet these goals by using a variety of tools, ranging from new regulations, developing accurate and accessible emission inventories and data sets, improved and additional monitoring techniques and incentivizing transition to zero emission vehicles. In addition, community engagement, environmental justice and data transparency are critical areas that the Division intends to deliberately improve and evaluate on a regular schedule.

Problem or Opportunity

Over the years, Colorado has made great progress in improving air quality for its citizens through the development and implementation of technologically feasible and economically reasonable emission reduction strategies. At one point, the Denver Area was out of attainment with five of the six health-based National Ambient Air Quality Standards (NAAQS), and areas across the state were in violation of the particulate matter and carbon monoxide NAAQS. Through application of new and innovative strategies Colorado has, in the face of significant population growth and economic expansion, achieved compliance with each NAAQS throughout the state, with the exception of the ozone NAAQS in the Denver Metro/ North Front Range (DM/NFR) area.

Despite these successes, monumental challenges remain. The DM/NFR area continues to experience unhealthy ozone levels throughout the summer. While new strategies have significantly reduced emissions that cause high ozone levels, additional strategies will be necessary to bring down ambient ozone levels below the NAAQS. Unfortunately, the most cost-effective reduction strategies have already been deployed, and further reducing ozone precursor emissions through technologically feasible and economically reasonable strategies will continue to grow more and more difficult. In addition to high ozone levels, Colorado faces the existential threat from global climate change. In response to this threat, the administration has established ambitious greenhouse gas (GHG) reduction goals and developed a comprehensive Greenhouse Gas Pollution Reduction Roadmap. These are important starting points, but significant work needs to be done to turn these goals and plans into successful reduction strategies. Beyond these two environmental challenges, Colorado must significantly improve its efforts in communicating with and engaging citizens with respect to air quality issues. Recognizing the importance of clean air and the need to reduce GHG emissions, Colorado citizens are increasingly demanding more information, greater transparency, and genuine engagement on the state's air quality initiatives. Finally, Colorado must confront and resolve long-standing environmental justice issues. Historical policies and practices have resulted in communities of color and disadvantaged socio-economic areas facing disproportionate impacts from air pollution in the state. Redressing the legacy of these policies and practices and creating environmental equity for all Coloradans will be challenging, and while the administration has made progress in deploying resources, moving forward additional commitment is necessary to meet this challenge.

Meeting this myriad of challenges within the compressed time-frame necessary to achieve Colorado's ultimate air quality goals will not be easy. While existing structures and resources within CDPHE and the Air Pollution Control Division ("APCD" or "Division") can serve as a foundation for these efforts, a significant expansion of existing programs and additional resources for new programs is needed to meet Colorado's air quality goals. The impending downgrade of the DM/NFR area to severe ozone nonattainment status will bring stringent new requirements that will require a significant increase in permitting, compliance oversight, and plan development resources. The division's small climate change team will need to be significantly expanded, commensurate with other leading states, to develop and implement the necessary GHG reduction strategies. The state must deploy communication, engagement, and environmental justice resources to meet citizen expectations and redress the longstanding and severe impacts of inequitable policies and practices on disproportionately impacted communities. Finally, outdated and insufficient technology to assess, measure and track emissions must be replaced with cutting edge tools. Incremental change is not sufficient. Accordingly, the department seeks funding to ensure the cleanest air possible for all Coloradans. Nothing less than transformative change that balances the environmental, social and economic impacts is needed, and it is needed now.

To enact this transformation, the department has identified five key pillars of improvement that serve to organize its resource request into substantive areas of need:

- Data Management and Air Quality Science (\$10,249,694 and 6.0 FTE);
- Immediate Emission Reductions (\$5,000,000 and 1.0 FTE);
- Cutting Edge Regulatory Efforts (\$1,469,774 and 13.0 FTE);
- Community Services (\$920,948 and 8.0 FTE);
- Driving Performance (\$7,118,599 and 47.0 FTE).

The transformation would maintain and expand current programs and services, such as ambient air monitoring, pollutant analysis, emission monitoring and modeling, permitting, compliance and enforcement as required by federal or state law. The transformation would also augment those programs with new essential services such as modern data systems and management, community services including increased community engagement, communication, air quality education services including increased air quality science, continued cutting edge regulation to drive down emissions, infrastructure supports to drive and manage performance, and the person power needed to be in the field and proactively working with operators across all sectors to reduce emissions.

Recognizing that it is a basic human right, the Polis administration has identified air quality as one of its top priorities. Specifically, the administration recognizes that global climate change, high ambient levels of ozone in the Denver Metro/North Front Range area, and the local effects of pollutants on communities that have long suffered from environmental injustices are critical problems that Colorado must address quickly and comprehensively. These fundamental problems and the numerous specific problems that the department and the state face in addressing these overriding issues are discussed below:

- **Climate Change:** Climate change poses an existential threat that must be met with bold and immediate action. While Colorado cannot solve global climate change on its own, the severity of the threat demands that Colorado both do its part in reducing its own greenhouse gas emissions and serve as a leader in showing how other states and countries can achieve GHG reductions from all significant emission sectors. The GHG Reduction Targets delineated in statute, the GHG Roadmap and the AQ WIGs are extremely ambitious. While Colorado has achieved significant progress in developing policies to reduce GHG during the last two and a half years, significant additional work must be done to identify, develop, and implement the GHG reduction strategies necessary to meet Colorado's ambitious climate goals. Colorado has taken initial steps to provide the resources to do this work. However, the workload demands far exceed the department's existing resources, and this Decision Item is intended to close the gap between Colorado's critical climate change work and the resources needed to successfully complete that work.
- **Ozone:** Population growth, industrial expansion, especially in the oil and gas industry, and more stringent U.S. Environmental Protection Agency (EPA) standards

mean that Colorado has been unable to effectively reduce air pollution fast enough to achieve the ever-more stringent ozone standards. The EPA will be reclassifying the Colorado northern front range as a Severe nonattainment area for ozone pollutant levels beginning in 2022. States with areas designated as nonattainment are required to implement more stringent regulations through a State Implementation Plan (SIP). Reducing ozone will be a critical component of the SIP. Doing this in a manner that reduces economic risk to the state requires careful analysis and implementation. Additional work to respond to reclassification and reduce the risk of an “extreme designation” has been identified since the FY 2019-20 budget cycle. Additional resources are required to meet federal requirements and our ozone WIG.

- Environmental Justice/Community Services: There is a growing awareness that in Colorado, as well as throughout the U.S. and globally, low-income people and communities of color more frequently bear the burden of greater concentrations of pollution and higher numbers of polluting sources - both industrial and GHG - near where they live, work, play, and go to school. This contributes to negative health outcomes, reduced quality of life, and associated stressors that further impact physical and mental health. While Colorado legislation has initiated the work needed to reduce overburdens and advance environmental justice, more is required. All APCD services merit community engagement and to embed environmental justice and climate equity in air quality policy requires a rigorous analysis of the division’s structure, data, practices, policies and regulatory proposals. This need must be met for APCD to be responsive to Colorado communities.

Achieving Colorado’s overriding air quality goals will be difficult and complex, and will require directly attacking challenges to address a multitude of specific problems. These problems/opportunities organized by the Five Pillars of Transformation summarized above are discussed in greater detail below.

Data Management/Air Quality Science

- Conducting the best air quality science and effectively managing the massive amounts of air quality and emission related data will be critical to successfully meeting Colorado’s climate change, ozone, and environmental justice goals. There are currently numerous barriers that impede the department’s ability to conduct the best science and effectively manage critical air quality/emission data.
- APCD currently relies on a 1990’s era data management system to collect, manage, and analyze data about the tens of thousands of emissions sources and permitting and compliance activities across the state. The division’s software and data systems are outdated, lack integration with one another, and need to be upgraded to improve organizational effectiveness as well as to support current data management and overall business needs. The core data systems were implemented in 1995 and the resulting business processes are often inefficient and provide limited capacity to be agile and adapt to current customer and business needs. This outdated system

creates significant inefficiencies across APCD, impedes our ability to effectively assess potential new air quality strategies, and creates a huge barrier to the public to easily access important air quality information.

- In order to assess air quality across the state, and inform policy decisions about Colorado's air quality program, the department operates a network of air quality monitors focused on the six Clean Air Act criteria pollutants: ozone, particulate matter, nitrogen dioxide, sulfur dioxide, carbon monoxide, and lead. As this equipment ages it becomes less and less reliable, and more expensive to maintain. While EPA provides some money for criteria pollutant monitoring equipment, those funds have been stagnant and are not adequate to maintain the existing network. As a result, much of Colorado's network is older than the ten-year recommended life for monitoring equipment, and in some cases, Colorado's monitors are more than 20 years old.
- In addition to maintaining existing monitoring networks there are multiple opportunities for Colorado to expand its monitoring capacity to address climate change, ozone pollution, and environmental justice. The department frequently receives requests from communities and elected officials to conduct additional air quality monitoring and other assessments, but the department lacks equipment to conduct this additional monitoring. Expanding air toxics monitoring would allow Colorado to better assess and ultimately address the direct impact of air pollution on disproportionately impacted communities. Providing additional mobile monitoring would allow the department to more effectively respond to complaints and address citizen concerns. Beyond the actual collection of monitoring data, the department lacks resources to assess this data and identify potential health effects from air pollution in particular communities. Historically the state has relied on EPA to conduct health assessments. But while this federal work is important and ongoing, it does not provide the kind of localized assessments that are needed to support the state's environmental justice efforts.

Immediate Emission Reductions

- In addition to longer-term and ongoing efforts to reduce emissions through new and enhanced regulation, Colorado can achieve more immediate reductions through incentivizing electric equipment. Mobile sources, including vehicles and non-road equipment, are now the largest source of GHG emissions in the state. These vehicles and equipment are also a key contributor to ground level ozone, and negatively impact health in environmental justice communities through the emission of air toxics, nitrogen oxides, and particulate matter.
- Incentivizing the replacement of fuel-fired lawn and garden equipment is a technologically feasible and cost effective way to reduce GHG emissions, ozone precursors, air toxics, and particulate matter. Additionally, these programs can be structured to concentrate benefits in disproportionately impacted communities. Finally, providing additional markets for electric equipment can serve to push wider

adoption of new electric technologies, which will be critical to meeting Colorado's long-term reduction goals.

Cutting Edge Regulatory Efforts

- While regulations in and of themselves will not be sufficient for Colorado to meet its climate change, ozone, and environmental justice goals, they are an important part of Colorado's ongoing efforts to address air quality problems. Over the years, Colorado has been a leader in developing new and innovative air quality regulatory programs, particularly for the oil and gas industry. While these efforts will continue, if the state wants to reach its climate change, ozone, and environmental justice goals, the department and the Air Quality Control Commission must substantially expand their rulemaking efforts in coming years.
- For the most part, Colorado's air quality permitting and emission reduction rules apply equally to different communities across the state and do not contain features specifically to address impacts in environmental justice communities. Given the historical injustices that these communities have faced, and practices and policies that have forced communities of color and socioeconomically disadvantaged communities into areas disproportionately impacted by air pollution, this "equal treatment" is clearly inequitable and insufficient to meet Colorado's environmental justice goals. To meet this inequity and injustice, Colorado must develop, adopt, and implement stringent new permitting and emission reduction requirements aimed at environmental justice/disproportionately impacted communities.
- Meeting Colorado's climate change goals requires finding ways to reduce GHG emissions from all significant emission sectors in the state. Given the vast array of different sources and the need for deep and rapid reductions in total GHG emissions, identifying, developing, adopting, and implementing the full suite of GHG reduction programs needed over the next decade will be extremely challenging. While legislation in 2019 and 2021 provided some resources to conduct climate change activities, these resources were designed to address the foundational work needed to stand up a robust GHG program such as inventory development and initial planning, or targeted toward certain sectors (oil and gas, industrial), and did not provide the comprehensive set of resources needed to develop and implement the type of comprehensive program necessary to achieve Colorado's climate change goals.
- Over the years Colorado has successfully implemented numerous regulatory programs requiring increasingly more stringent emission reductions from new and existing sources. In particular, aggressive and innovative requirements for the oil and gas industry have substantially reduced emissions from that sector on a per unit of production basis. However, ongoing population growth and economic expansion in Colorado and in particular explosive growth in the oil and gas industry in the DM/NFR ozone nonattainment area have reduced some of the overall benefits that would have otherwise been achieved. While Colorado's existing nonattainment area

provisions requiring new major sources to provide emission reduction offsets in order to obtain an air quality permit are helpful, to ensure an overall downward trajectory of emissions, the offset program must be expanded to include both major and minor sources. This is particularly true for the oil and gas sector given the large number of minor sources that are built each year.

Community Services

- Air quality work is complex; engineers and scientists often get tasked with developing communications and presenting division information. The division recognizes that science communication is a unique skill. Communities need more from the division in this area. Along with improved service to communities, improved communication and community outreach will assist the division in meeting another community need, which is the proactive management of air quality communications. Air quality education, public awareness, the division's ability to become a trusted partner to disenfranchised communities, dashboards that support independent study as well as meaningful communications to assist Coloradans in making immediate and long-term decisions to improve our public health and environment are critical.
- To truly serve the needs of environmental justice and disproportionately impacted communities, Colorado must provide the technical resources necessary to assess the unique air quality problems facing each community. While legislation in 2021 provided resources to help the department engage with disproportionately impacted communities in connection with certain state actions, and support the Environmental Justice Task Force and Environmental Justice Ombudsperson, the department lacks the resources needed to comprehensively examine and identify complex air pollution exposures and resultant health outcomes in environmental justice/disproportionately impacted communities across the state
- Increasingly, local governments are taking a more active role in helping to shape Colorado air quality policy. The department welcomes this development but lacks sufficient dedicated staff to interface with the many local governments who seek to collaborate with the state around climate change, ozone, and other air quality issues.

Driving Performance

- Staff Augmentation: In recent years, the APCD's work has become increasingly complex and complicated due to several factors. A higher volume of daily activities, increased tracking, understanding and communicating air quality and potential health issues, legal challenges, environmental justice, and climate change have stretched staffing resources to the breaking point. There is exceptional talent in the division that is difficult to retain when staff are covering multiple positions, supervisors and managers have too many reports or the span of control is too wide, and critical infrastructure services have been cut which impedes timely hiring and nimble systems to support division programming. Scarcity has become a culture that impacts the division's ability to innovate, expand its services and to remain attuned

to Colorado's needs, and pushes progress off pace to meet critically important targets to protect our environment and our public's health.

- The impending downgrade of the DM/NFR ozone nonattainment area under the 2008 ozone NAAQS will create significant additional workload for permitting, particularly major source Title V permitting, compliance oversight and enforcement, and air quality planning. Without additional staff, the state will not be able to meet its obligations under the Clean Air Act, and will lack the resources to develop and implement sufficient new strategies needed to reduce ozone precursors to a level that will allow the state to attain both the 2008 and 2015 standards.
- In addition to new resources needed to respond to the downgrade to Severe nonattainment under the 2008 standard and reduce emissions needed to attain both standards, meeting the administrative requirements associated with responding to two separate ozone NAAQS (2008 and 2015) will require additional planning resources to respond two separate ozone state implementation plan submission timelines.
- Colorado's climate change, ozone, and environmental justice goals are ambitious and complex and meeting these goals will require bold and innovative thinking and action. Recognizing this, in 2020 APCD created an Office of Innovations in Planning (OIP), using staff from existing programs to promote innovative thinking and serve as a bridge among various programs across the division in order to achieve better and more cost-effective air quality results. Over the past fifteen years, overseeing Colorado's air quality program has become increasingly challenging. Stricter air quality standards, a proliferation of new state and federal emission reduction requirements, larger impacts from out-of-state sources, increased public awareness and scrutiny, the growing complexity of required technical assessments, and the exhaustion of the easiest and most cost-effective ways to reduce pollution, have significantly increased the workload throughout the entire organization. To address this increase and the new demands associated with climate change and environmental justice, basic division functions must be expanded, including: leadership and administrative support; emission inventory management, and billing support. These basic infrastructure services are critical to the department's success in achieving the state's climate change goals, meeting health based ozone standards and providing justice to all of Colorado's disproportionately impacted communities.

Proposed Solution

Pillar: Air Quality Science/Data Management

High quality science and data management serve as the foundation of Colorado's air quality program. Collecting and using reliable data about ambient air quality values, sources of emissions, emission trends, and the impact of particular emissions and emission sources on

air quality is essential to every aspect of the division's operations including air quality plan development, permitting, compliance oversight, and public education and engagement. To be successful in conducting these functions and achieving Colorado's overarching air quality goals, the state must invest in new cutting-edge air quality monitoring equipment, expand on existing monitoring networks to better assess air quality values throughout the state, replace aging equipment, and provide funding for the best science to fully assess air quality in Colorado and devise the most complete and cost-effective plans to reduce emissions and improve. Just as importantly, the state needs a state-of-the-art system to manage the massive quantity of data that the state collects on emission sources. Without such a system, Colorado cannot effectively leverage this data to maximize its usefulness in protecting and improving air quality.

Unfortunately, Colorado has fallen behind in its ability to collect and manage vital air quality and emission data. APCD currently relies on a 1995 vintage data management system to collect information about emission sources, conduct compliance oversight, process permit applications, and conduct data analysis to inform critical air quality rulemakings. While the division collects data from tens of thousands of emission sources, our ability to efficiently collect, process, assess and disseminate this data is severely limited by the capabilities of the data system. With respect to air quality monitoring and assessment, APCD relies heavily on stagnant federal dollars to fund our monitoring systems. Accordingly, while Colorado has a monitoring network that meets existing federal requirements, it is not sufficient to support Colorado's ambitious air quality goals or provide the type of high quality monitoring data for multiple pollutants throughout the state that Colorado's citizens are increasingly demanding. Further, the division collects a significant amount of data that must be analyzed either through technology or by personnel. Resources are needed to comprehensively analyze the data collected and ensure that monitors are operating properly.

As reflected in the discussion on the Air Quality Science/Data Management Pillar below the department has developed a comprehensive plan to upgrade its ability to collect, assess, process, store, and disseminate data related to air quality in Colorado. Moving forward on the Pillar will provide the department with the necessary foundation to develop and implement plans to meet Colorado's ambitious air quality and climate change goals, greatly enhance the efficiency and effectiveness of APCD operations, and provide much greater transparency to regulated entities, the scientific community and the general public.

1. Enhanced Monitoring

a. Air Toxics

Air toxics, also known as toxic air pollutants or hazardous air pollutants, are those pollutants that cause or may cause cancer or other serious health effects, such as reproductive effects or birth defects, or adverse environmental and ecological effects. One of the best known air toxics is benzene, which is a known carcinogen. Many air toxics are also volatile organic compounds, which are ozone precursors. Air

toxics are emitted from a variety of sources, including industry, vehicles and commercial and household chemicals.

While there is some air toxics monitoring in Colorado, it is limited to certain areas, and limited in the compounds measured and timeframes measured. Current monitoring by the division is performed once every sixth day for either 24 hours or three hours, as well as site-specific one-hour sampling by the CAMML. Having additional air toxics measurements on a real-time/continuous basis versus once every sixth day across Colorado would help identify if there are potential public health issues that need to be investigated and resolved, and would provide a much better idea as to the frequency of high concentrations to which the public might be exposed. With the current non-continuous methods, it is not feasible to obtain routine short/one-hour concentrations, or to see diurnal fluctuations/patterns. This is a particular concern in the DJ basin in the North Front Range area where real-time monitoring would provide the public with much more reassurance of levels related to oil and gas development to which they may be exposed throughout the day.

Additional real-time air toxics measurements in the DM/NFR ozone nonattainment area would also be very useful to identify and quantify specific air toxic compounds that have a high potential for creating ozone and for modeling as part of Colorado's ozone State Implementation Plan. Knowing just when during the day that concentrations are highest would help refine the modeling to be more accurate on predicting high ozone concentrations and ultimately protecting public health.

In addition, the ability to survey areas with rapidly deployable small sensors is a key enhancement, especially near oil and gas development where activities are done in a limited timeframe and thus are not conducive for fixed monitoring sites. Small sensors can also be used around other facilities where there are concerns on emissions that may affect public health.

The proposed solution is to contract with outside scientists to handle additional air toxics monitoring, by potentially establishing several new air toxics monitoring sites in the North Front Range area using real-time equipment. Real-time monitoring that provides one-hour data or better at low part-per-billion levels should include BTEX compounds as well as methane, ethane and propane. Benzene is a known carcinogen and, from studies, has been found to be one of the primary risk drivers in the area. Ethane is a key indicator for oil and gas development, while methane is a potent greenhouse gas. The data could be posted on APCD's existing website on an hourly basis, after initial validation. Non-continuous monitoring at the sites could also be employed to provide a much more complete set of air toxics compounds at extremely low (part-per-trillion) concentrations, as well as validation of the continuous methods.

In addition, small sensors are becoming a practical way to survey areas for possible high air toxics levels. Currently, total volatile organic compound sensors are

available and a limited number are utilized by the division around oil and gas development activities. However, there are far more oil and gas development sites than the division has staffing or equipment to cover. Also, new technologies for readily deployable sensors that can measure some individual air toxics at low concentrations are becoming available.

Existing units and resources in the Technical Services Program are already focused on other pollutants or non-monitoring duties. Continuous air toxics monitoring is the best option for providing hourly values for comparison to health guideline values for public health protection.

b. Mobile Air Monitoring Fleet

Background

APCD is currently obtaining a mobile monitoring van via the Martinez and Irwin Memorial Settlement (“Firestone Settlement”). This van will be dedicated to monitoring oil and gas-related facilities. Through the recently passed Air Toxics Bill, H.B. 21-1189, the division will be obtaining a second mobile van for monitoring around select facilities in the north Denver/Commerce City and Pueblo areas, per the bill requirements.

As both of these mobile vans are dedicated to specific industries, there is a need for an additional monitoring van to address other sources, including mobile emissions. Having a platform that can monitor the air while in motion instead of at just a few fixed locations allows for a much broader and better characterization of air quality in an area, and can determine if hot-spots exist that need additional investigation. In addition, a third van can also be utilized as a backup for the two dedicated vans, which could be relevant for H.B. 21-1266 bill compliance if a significant mechanical issue arises with its dedicated vehicle, and can be available for emergency responses.

The division has not had mobile air monitoring vans in the past due to the overall initial and ongoing costs and lack of FTE to operate. While still expensive, the cost of mobile air monitoring systems has decreased in recent years, and the sensitivity and durability of monitoring equipment has increased, making mobile vans a more viable option than in the past.

Solution

The proposed solution is to purchase one additional mobile air monitoring van that can monitor for a suite of volatile organic compounds, ethylene oxide, hydrogen sulfide, nitrogen dioxide, ammonia, and methane.

The use of an additional, third mobile air monitoring vehicle will allow for air quality surveys over a broad area, which the division has not had the capability to do in the past. This will greatly help in the mission of protecting public health as the division will be able to determine if there are high concentration pollutant areas that need additional monitoring. In addition, there is currently no back-up system for the two dedicated vans that the division will be receiving and this would provide that capability.

c. Aerial Surveys

Background

Monitoring at fixed sites or by mobile vans is generally focused more on ambient air concentrations. Depending on the configuration, mobile vans have the capability to estimate the volume of emissions at a facility and to detect leaks. However, they are limited to operating on existing roads. Aerial surveys (such as aircraft flyovers, drones, etc.), in contrast, have the potential to identify leaks from pipelines/flowlines, production pads, tanks, central gathering facilities, compressor stations and other sources.

2. Equipment Replacement

Background

The division currently operates approximately 40 air monitoring sites across Colorado. Some of the sites are in temperature-controlled shelters, others are on the roofs of existing buildings. Some sites monitor for one pollutant; others are for multiple pollutants. In addition to the analyzers/monitors themselves, there is a lot of support equipment that is needed, including data loggers, calibrators and zero-air packs.

As equipment ages, more frequent failures occur, leading to gaps in the data. This leads to the public not having complete air monitoring data for their area and may result in credibility and transparency concerns. In addition, more staff time has been needed to repair broken equipment. In some cases, replacement parts are not even available as the equipment is considered obsolete.

The EPA puts a general life expectancy of air monitoring equipment at ten years. The EPA, through grant funds, provides monies for equipment. However, there is a matching component to the grant funds, and a number of the monitors are not required under federal regulations and are thus not covered by grant funds. Over the years, there have not been enough state funds to match or cover all of the monitoring. As a result, a lot of the air monitoring equipment that is in use is well over ten years old and, in some cases, over twenty years old.

Solution

Replacing equipment on a ten-year timeframe is recommended. The current estimated replacement value of all capital air monitoring and related equipment is \$5,900,000. This includes air monitoring analyzers, supporting equipment and temperature-controlled shelters. The estimated value without temperature-controlled shelters which have a longer lifespan, is \$5,170,000. A one-time estimated cost of \$2,590,000 would replace all of the equipment that is currently over ten years old, and ongoing estimated costs of \$258,000 would provide for a full ten-year replacement of equipment to meet EPA recommendations.

Replacing air monitoring equipment on a routine basis will avoid having significant data gaps. As a result, the public will be able to have better data access for their areas. It will also lead to less staff time spent on repairs that could be devoted to additional monitoring efforts. There are no other viable options to maintaining an air monitoring network.

An operating budget of \$863,333 is requested annually for the period of FY 2022-23 to FY 2024-25 to provide funding to address deferred equipment replacement needs and \$258,800 is requested annually to fund ongoing equipment replacement

3. Health and Environmental Science Assessment

Background

The problem is that much of the data collected by the division is not assessed for human health risks or used to determine targets for reducing greenhouse gas emissions or ozone. The lack of clear, readily available information on air quality is frustrating for members of the public, which engenders mistrust. This problem is worth solving because human health is a key reason for goals to reduce greenhouse gas emissions and ozone in Colorado. Solving this problem is also complementary to other goals that increase the amount and availability of air monitoring data by addressing what the division does with the data once it is collected. Access to air quality data and associated health risk information will allow for more informed decision-making on the part of the state, the Air Quality Control Commission, and the public. This is especially important to address longstanding inequities in disproportionately impacted communities who face a larger human health burden related to air quality.

Previously the focus on regulatory compliance has taken much of the attention. Questions about how changes to air quality impact public health at the state level have not been asked. Regulatory compliance is set-up to address regional air quality, but misses the human-scale differences that can vary greatly between neighborhoods.

Solution

The initial goal is to contract up to \$300,000 per year to conduct studies which will increase the availability and accessibility of local air quality data in disproportionately

impacted communities. Ongoing costs would support operations of making that data available.

This contract would be devoted to supporting scientifically-informed decision making by conducting health risk assessments and analyzing data collected by the division. This contract would make the connection between air monitoring data and public health, with a specific focus on understanding health risks in disproportionately impacted communities. This would also further efforts to make data-driven decisions to improve the lives of Coloradans. There also will likely be a need for technical support for members of the public or others trying to access and understand information. Furthermore, connecting the APCD community engagement staff to these resources will be important, as community members may have ideas or questions about the outcomes or potential applications. A well-designed outreach strategy to complement the assessment would be helpful.

This solution is best because it builds new connections to achieve environmental and public health goals by leveraging existing toxicology and GHG expertise. This study and position will enable better use of the data that is already collected by the division to inform actions to improve public health and meet goals for GHG and ozone reductions. Furthermore, it will improve transparency by providing information that the public has been asking for many years.

4. APCD Core Business Technology System and Overall Data Management

a. Stationary Source System Replacement

Background

The division is seeking to replace its core data systems, primarily for management of stationary sources, including permitting, inventory, reporting, inspections, compliance, enforcement, and billing and to improve public access to information. The division's software and data systems are outdated, lack integration with one another, and need to be upgraded to improve organizational effectiveness as well as to support current data management and overall business needs. The core data systems were implemented in 1995 and our resulting business processes are often inefficient and provide limited capacity to be agile and adapt to current customer and business needs.

The division engages with multiple different customer groups through various regulatory programs. The division currently operates on a largely paper-based system that requires manual entry of data for permitting, inspection and compliance programs. Further, not all information from paper submittals is input into the programs, and must be searched for on a case-by-case basis. This has created a situation where technical staff are dedicating significant time to perform routine administrative duties. The current data solution is inefficient and cumbersome for both customers and the division. Although

tasks have been analyzed through process improvement efforts, the division has come to a point where they cannot see sizable increases in efficiency without a current technological solution. The division has also not been able to pursue innovative regulatory strategies due to the barriers presented by the data system's lack of functionality.

The division is proposing to improve the delivery of environmental services to our customers through the construction and operation of a customer-focused, integrated and interactive electronic permitting, inspection and compliance system. The proposed system would allow the regulated community to submit environmental regulatory permit applications and other reports online and also allow the division to process permits, inspections, compliance and enforcement activities in an exclusively electronic environment. The new system will reduce processing times by eliminating errors experienced with the existing, manual submission process. As a result, both the division and regulated community will benefit from time and cost savings with the new online submission and processing system. A new system will also enhance data management, pollutant, and customer tracking and improve overall reporting needs.

Additionally, the division's emerging work in areas such as greenhouse gas emissions and other climate change programs will require a technology solution to manage inventorying of pollutants, data collection and technology needs to support potential new programs such as GHG offsets, accounting and tracking.

Solution

The APCD is seeking funds for the period ranging from FY 2022-23 to FY 2024-25 to develop and implement a modernized data system for permitting, inventory, reporting, inspections, compliance, enforcement and billing. A system replacement would be a complex, multi-year project and would require dedicated staff time from division staff and the state's Office of Information Technology (OIT). It is anticipated that staff resources would include, minimally, a term-limited project manager, other technology staff, and some backfilling of current APCD staff responsibilities to permit dedicated project time.

In preparation for a potential system replacement, several preliminary steps have occurred:

- The project proposal was reviewed and approved by OIT in spring 2020.
- Review of current system capabilities and limited scoping of potential new systems
- All division business processes have been mapped out in a step-by-step method.

This project is a high priority for the division and aligns with the division's Strategic Plan developed in coordination with the Governor Office's Wildly Important Goals - and supports the Governor's Reimagining State Government initiative by enhancing virtual services, and embracing technology solutions to improve organizational efficiency and

effectiveness. The project also serves to fill both an important business continuity purpose and ties to broader economic, environmental and social goals. The budget request is for staff to support the overall project design, management and implementation and some operating funds.

Pillar: Immediate Emission Reductions

Achieving Colorado's air quality and climate change goals will require a multi-pronged, whole-of-government approach to reducing GHGs and other harmful air pollutants. While enforcing existing regulations and developing new regulatory approaches will play an important role in moving forward, these strategies alone are likely not sufficient for Colorado to meet its air quality goals. Technological advancements, such as the rapid adoption of renewable energy will play a critical role in reducing Colorado's GHG footprint and improving ambient air quality. Among the advances that Colorado will need to rely on is the transition from fuel-fired equipment to electric powered alternatives. Mobile sources are now the largest contributor in the state to GHG emissions as well as the leading source of ozone precursor emission in the DM/NFR area. While the transition to electric equipment is currently happening, the process is slow given the natural rate of fleet turnover. To hasten this turnover and provide a technology forcing function, the Immediate Emission Reduction Pillar requests funding to provide grants to incentivize equipment electrification. Specifically, funding under this Pillar would be used to greatly expand on an existing program to electrify lawn and garden equipment. Through these efforts, Colorado can continue building toward a more electric future, provide immediate reductions in GHG and ozone precursor emissions, and protect Colorado's most vulnerable communities from the direct effects of toxic air pollution.

5. Electric Lawn Equipment

Summertime ozone pollution is the primary air pollution problem along the Front Range. Volatile organic compounds (VOCs) and nitrogen oxide (NOx) combine to form ground level ozone which can be dangerous to sensitive populations and cause lung damage and increase the frequency of asthma attacks in sensitive populations. Studies of areas with high ozone levels also report associations with deaths from respiratory issues. Ozone also negatively impacts vegetation and ecosystems, including Colorado's stunning forests, parks, wildlife refuges, and wilderness areas.

In 2019, the EPA reclassified the DM/NFR Nonattainment area to Serious under the 2008 75 parts per billion (ppb) ozone NAAQS. Due to continued violations of the NAAQS, the DM/NFR will be reclassified to Severe ozone nonattainment in the near future. Coming into compliance with the 2008 standard is achievable, but coming into compliance with lower 2015 70 ppb NAAQS for ozone will be a significant challenge. All measures will need to be employed to reach the goal of attainment under the 2015 NAAQS.

Sources including factories, power plants, and vehicles emit fine particles or generate the precursors that form fine particles. These fine particles are directly linked to health

impacts. The smallest of these particles can penetrate deeply into the lungs, heart and cardiovascular system causing increased severity of asthma attacks, reduced lung development and function in children, and potential premature death.

Gasoline-powered lawn and garden equipment ranging from blowers to lawn mowers are another significant source of high levels of localized emissions that includes hazardous air pollutants, VOCs, fine particulate matter, and greenhouse gases. Residents and commercial lawn and garden workers using gasoline powered equipment are directly exposed to these high levels of emissions due to their proximity to the equipment. This exposure occurs over many days during the summer season and occurs where sensitive populations can be encountered in residential neighborhoods, schools, parks, and other public spaces.

These factors, and the trend of high ambient levels of ozone during peak season, raise concerns about the health impacts on residents and commercial lawn and garden workers. Another consideration is that many seasonal workers are going to be low to moderate income workers that may face other disproportionate pollution levels where they reside. Again, there are effective measures that can be implemented to address this localized source of emissions exposure.

A new observational analysis from the department builds on the science that suggests people who live in areas with higher levels of fine particle pollution may have worse COVID-19 outcomes and that COVID-19 disproportionately impacts communities of color. The CDPHE study, ***“Long-term air pollution and other risk factors associated with COVID-19 at the census-tract-level in Colorado,”*** clearly shows a significant association between the presence of communities of color and COVID-19 outcomes in Colorado at the census-tract level. It also found that in general, an increase in long-term exposure to fine particle pollution is associated with more COVID-19 infections, hospitalizations, and deaths, and recommends further data gathering to understand these relationships. By reducing lawn and garden emissions, the state can reduce emissions that contribute to ozone formation, impact sensitive populations and children’s health, and disproportionately manifest in disadvantaged communities and communities of color.

In 2013, the state’s population was approximately 5.27 million. By 2040, the state demographer estimates that the population will increase by 47% to approximately 7.75 million. The state’s population growth is expected to be concentrated along the Front Range in the Denver metropolitan area counties, El Paso County, Larimer County, and Weld County.

This rapid population growth in the Ozone Nonattainment Area will drive both criteria emissions and greenhouse gases up over time in Colorado if action is not taken. While the division implements strong state driven strategies, and federal government actions complement state strategies, population growth can overwhelm these reductions by requiring more power generation, construction, oil and gas development, motorist travel, and everyday activities such as mowing. Therefore, the transition to cleaner sources of

energy that impact these sources of emissions that include renewable energy, electrification and other fuel switching efforts.

Solution

The proposed solution is to create a lawn and garden electrification program. This effort would focus on working with home improvement stores such as Home Depot and Lowe's to offer discounts on residential lawn and garden equipment. Residential equipment offerings could include lawn mowers and handheld power equipment such as weed trimmers and blowers.

By encouraging widespread adoption of this equipment, the state can make progress to meet our climate and air quality goals. A process could be developed whereby commercial operators would be able to avail themselves to lawn mowers and hand held equipment. However, commercial operators will also require electric riding mowers. These units range in price from \$5,000 - \$25,000. For this proposal, the incentive for lawn mowers and handheld equipment will be \$150 and \$5,000 respectively.

Overall project incentives will need to be revisited at the time of project implementation and adjusted upwards based on market demand and conditions, especially due to COVID-19 supply chain issues. Table 1 below details personnel and equipment costs along with equipment counts.

Outreach efforts to impacted communities will be a critical task during this effort.

Pillar: Cutting Edge Regulatory Efforts

Regulatory requirements to reduce emissions have always, and will continue to play a critical role in Colorado's overall efforts to improve air quality and fight global climate change. Over the past several years, CDPHE has been tasked with a number of directives and expectations that greatly increase the need for resources to develop and implement cutting-edge regulations. These include: the adoption of aggressive GHG reduction goals, the directive to minimize emissions from the oil and gas industry, expectations that new air pollution sources will not degrade Colorado's air quality, and the desire to directly protect Colorado's citizens from the cumulative effects of air toxic emissions across the state.

Existing regulatory staff have worked incredibly hard to move forward on these new directives and expectations while maintaining what was already a very busy regulatory schedule. But this pace is not sustainable over the long term, even accounting for new staff to address further directives from the 2021 legislative session. Recognizing this, under the Cutting Edge Regulatory Pillar, the department is proposing an increase in funding for regulatory development staff to support Colorado's ambitious air quality regulatory agenda. These new resources are essential if the state hopes to develop the full suite of regulatory requirements necessary to meet emission reduction targets through the application of technologically feasible and economically reasonable strategies.

6. Environmental Justice Permitting/Rules

Background

Staffing and resource estimates developed in response to specific bills are often done only for the express directives of the bill language, and do not wholly consider the overall impact to the division if additional directives are added with bill amendments. The APCD needs more staffing to wholly execute the broad variety of new directives, on top of the current workload. This request is specific to the Environmental Justice permitting directives of both H.B. 21-1266 (Environmental Justice Disproportionately Impacted Communities) and H.B. 21-1189 (Regulate Air Toxics). While H.B. 21-1189 contemplates fee recovery for permitting efforts specific to four covered facilities and specific pollutants, H.B. 21-1266 does not. Further, H.B. 21-1266 applies much more broadly than H.B. 21-1189.

H.B. 21-1266 contemplates the identification of disproportionately impacted communities, as well as additional permitting of stationary sources impacting communities from both an environmental justice and equity perspective. H.B. 21-1266 directs the evaluation of impacts of sources impacting Disproportionately Impacted (DI) Communities when those sources are undergoing permitting actions for new construction and modifications, and considers the application to existing sources not otherwise undergoing new construction or modification. Separately, H.B. 21-1189 contemplates additional monitoring, modeling and permitting associated with four covered facilities for specific air toxics/pollutants, with the AQCC reviewing and potentially expanding the covered facilities and covered pollutants in future years. These sources are assumed to be sources impacting DI Communities.

These bills secured additional staffing for H.B. 21-1189 and H.B. 21-1266, but the associated Fiscal Notes do not appear to appropriate much in terms of FTE to support these EJ permitting elements. Assuming ten DI Communities are identified, there are assumed to be at least two sources impacting each community, each having at least four pollutants at issue, for which public health impacts must be assessed, emission reduction options must be evaluated, emissions estimated and impacts modeled to select the least impactful option for that community. Further, associated monitoring, recordkeeping and reporting must be determined and then incorporated into a permit for the source. While H.B. -21-1266 is specific to new and modified sources, it also directs consideration of existing sources.

Solution

The Planning and Policy Program requests 4.0 additional staff FTEs to supplement the resources appropriated in 2021 legislation:

This estimate assumes that staffing provided under H.B. 21-1189 and H.B. 21-1266 are insufficient regarding permitting staff needed to develop permit conditions and timely incorporate them into enforceable permits.

This estimate also relies upon resources and staffing provided under H.B. 21-1266 to identify and engage disproportionately impacted communities both initially and after an analysis of the impacts of new construction and modification (and eventually existing sources impacting DI Communities), as well as violations that occur and projects to mitigate the excess emissions. This estimate also relies upon resources and staffing provided under H.B. 21-1189 to conduct monitoring, review results and interface with the relevant communities around the four covered facilities, and that the Compliance and Enforcement Program will periodically verify compliance with these permits and pursue any non-compliance necessary, including undergoing enforcement actions.

Without additional dedicated permitting staff, the timely issuance of enforceable permits is at issue. The Title V permitting program is already being litigated on timeliness of permitting actions required under the federal CAA, and therefore there is not existing staff capacity to take on additional EJ permitting activities.

7. GHG Permitting and Industrial Rules

Background

Greenhouse gas emissions reduction efforts are a priority issue for Colorado, as demonstrated by the significant legislation and associated litigation, and is incorporated as a department WIG. Unfortunately, the division does not have sufficient staff necessary for developing and implementing the GHG requirements directed in statute and Colorado's GHG Roadmap. In fact, Colorado significantly lags other states in addressing GHGs (see Table X below) Providing additional staff will allow the division to meaningfully fulfill its mission of developing and implementing GHG reduction programs and strategies (generally referred to as "GHG permitting"). More effective implementation of these measures will result in greater reduction of GHG emissions in the collective effort necessary to fight climate change as well as provide co-benefits of improved local and regional air quality across the state.

H.B. 19-1261 established ambitious GHG reduction targets for the state and placed significant responsibility for achieving these targets with the AQCC and the division. Colorado's GHG Roadmap placed further emphasis on the responsibility of the AQCC and the division's roles in undertaking specific near- and long-term action items to achieve the state's GHG reduction targets. And again in the 2021 legislative session, the mandates within these roles have been expanded.

The division's responsibility in addressing GHGs as directed by statute is extensive. It involves: 1) developing the appropriate GHG reduction regulations through coordination with other agencies and Governor's Office, meeting and conferring with stakeholders, including local governments, regulated facilities/entities, environmental, industry and other special interest groups (with a statutorily required emphasis on disproportionality impacted communities) and members of the public; 2) the legal drafting of the regulations, considering the input of these entities, along with completing the statutorily required analysis to support the proposed rules (such as the economic impact analysis and projected

emissions reduction benefits); 3) requesting/proposing the adoption of the regulations through a rulemaking proceeding before the AQCC and then, typically in conjunction with the Attorney General’s Office, undertaking the rulemaking proceeding along with the development of the materials such as briefs and exhibits to support/persuade the AQCC’s adoption of the regulations; 4) and then transitioning to implementation, supporting early efforts to implement the rule and hand off to other Programs and Units within the division to implement and enforce over time.

In addition to the GHG regulatory program development, implementation and oversight set forth above, the division is tasked with two other key roles in addressing GHG emissions: 1) undertaking the state’s GHG Inventory; and 2) verifying GHG emissions reductions by utilities in coordination with the Public Utility Commission. Pursuant to statute, the division inventories GHG emissions across the state along with projecting future GHG emissions at least every two years. Also pursuant to statute, the division serves to verify and track GHG emission reductions by gas and electric utilities, and as part of this (in the most recent legislative session) has been directed to develop an accounting and tracking system for certain GHG emission reductions by mid-2022.

With the passing of several pieces of legislation in 2019, the division staffed up a Climate Change Unit consisting of 5.0 FTE to carry out its work on GHG emissions. While the legislature has provided some additional FTE in the latest legislative session, the division still has far fewer FTE dedicated to working on GHGs than other states undertaking similar (or even less ambitious) programs.

Solution

Providing the division with additional FTE would better allow the Air division to fulfill the statutory mandates it is directed to undertake regarding GHGs. This request is for an additional 10.0 FTE to those provided during the 2021 legislative session and in separate portions of this Decision Item. While this is a significant increase in FTE working on GHGs within the division, it is still less than the FTE/resources of comparable programs in other states and represents the minimum for GHG programs of the magnitude placed upon the division by statute. The following table comparing state FTE and resources for GHG programs is provided in the Colorado GHG Roadmap.¹

	California Air Resources Board Climate Program	Washington Proposed Bill S.B. 5981	Oregon Proposed Bill S.B. 1530B	Colorado Air Pollution Control Division
Annual Budget (does not include	\$148M	\$8.5M	\$9.9M	\$454,177

¹ Colorado GHG Pollution Reduction Roadmap Final Report at Pg. 95

incentives and other program costs which range to billions of dollars)				
Staff (FTEs)	211.4	38	26.5	5.1

Currently the Climate Change Unit is responsible for developing and refining emission inventories for base years and projected future years, developing emission reduction strategies according to Colorado’s Greenhouse Gas Roadmap, engages disproportionately impacted communities and other stakeholders, coordinates with partner agencies and contractors in developing data modeling products, conducts and documents analyses, undergoes a public rulemaking process, and advocates for the policies with decision makers.

The people of Colorado, through the legislature, have placed significant responsibility toward achieving the state’s climate goals with the division. Providing the FTE necessary for meaningfully undertaking the measures called for in meeting this responsibility is the best solution. Without these additional resources, Colorado might not meet state goals and expectations.

8. Emission Reduction Credits & O & G Minor Source Offset Program

Background

Big picture, the division has three programs creating the need for significant reductions in pollution: 1) the ozone program, new source review (“NSR”) offsets and the need to reduce VOC and NOx; 2) our climate change program, driving the need for GHG reductions; and 3) our environmental justice program, driving the need to reduce industrial pollution (VOC, NOx, PM, HAP) in disproportionately impacted communities. The division is at the point where direct regulation - i.e., asking a source to take a specific step - is at its limits of effectiveness. To continue to drive emission reductions requires efforts to incentivize more reductions. Offset, or credit-based, programs have a role in that effort. Note that any potential emission offset programs will not apply to greenhouse gas emissions. Instead, the program will be restricted to criteria and potentially other non-GHG emissions sources

The Clean Air Act NSR program, implemented through the Colorado Air Act and Air Quality Control Commission Regulation 3, requires new or modified major stationary sources in an ozone nonattainment area (“NAA”) to “offset” the additional/new emissions being released in the NAA. Such offsets are specifically required by federal law for very large sources of emissions, where a project (i.e., construction of a new facility or modification to a facility) is considered significant.

A source subject to an offset requirement can satisfy that requirement in one of two ways. First, the source can generate simultaneous reductions at the same or another facility owned by the same company. Second, the source can generate (to use later) or obtain emission reduction credits (ERCs). ERCs can be generated under specific circumstances, where a source in the NAA reduces emissions permanently and receives approval of the ERC from the division. Regulation 3 includes requirements for how ERCs can be developed, tracked, and utilized. While the process for developing ERCs has been created, the demand has been low and this program has been handled as an addition to existing engineering positions. With the upcoming reclassification of the NAA to severe, the division expects to see much greater demand for ERCs and the need for specialized, dedicated staff to review and ensure compliance with the special ERC permits. The major source offsetting permit requirements will potentially apply to approximately 473 additional major sources anticipated after the designation of the Denver Metro-North Front Range area to “severe.”

Under H.B. 19-1261 and H.B. 21-1266, the division is also intending to propose a limited-scope trading program for energy-intensive, trade-exposed entities. Under H.B. 21-1266, the division will have to create a new accounting and tracking system for this program. H.B. 21-1266 does not generate resources in the division for the accounting efforts.

Further, the division would also like to consider creating mandatory offsets for even smaller sources of air emissions (minor sources), particularly in the NAA or in disproportionately impacted communities. While such a program may be structured somewhat differently than the major source offset program, a minor source program would affect potentially thousands of permitting actions every year. Therefore, the demand for ERCs or other credits could be significantly higher and the staffing need would grow accordingly. Further, under H.B. 21-1266, any such program for greenhouse gas would be subject to stringent requirements for accounting and tracking.

The ERC program has been included in Regulation 3 since the early 1980s, and has been used historically for other criteria pollutants, such as particulate matter and carbon monoxide. However, the ozone nonattainment area has a great number of minor sources with relatively few major sources of volatile organic compounds and oxides of nitrogen (precursors for ozone formation). Therefore, industrial sources have been able to continue to operate and grow without ever triggering the offset requirement. As the threshold² for major sources decreases with the increase in severity of the ozone nonattainment status, many of these formerly minor sources will become subject to major source requirements, including offsets where triggered.

Further, while the division has decreased emissions in the nonattainment area significantly through regulatory control requirements, there remains no guarantee that emissions might not increase again through the construction of new minor sources. A minor source offset

² Up until 2018, the major threshold was 100 tpy of VOC or NOx. Now, under serious nonattainment, the major threshold is 50 tpy of VOC or NOx. Under the upcoming severe nonattainment designation, the major threshold will be 25 tpy of VOC or NOx.

program would limit the ability for emissions to increase in the nonattainment area through the increase in the number of facilities.

Solution

The division needs a specialized and dedicated unit of engineers and other staff to review ERC applications, develop appropriate permits, and track ERCs as they are sold/transferred to other companies or used as offsets. This unit would need to work closely with the permitting and inspection units. The unit needs engineering, compliance oversight, tech services, AG, records management, and regulatory development support. Further, a successful ERC program will also need a database which is easily searchable by the public, with electronic submittals of relevant forms. Such a database might be developed as a part of the broader database effort or it could be a smaller yet separate system.

With the expected increase in ERC demand, APCD will not be able to meet it. Further, ERC permits are unique and the regulatory language is sometimes obscure, making it difficult for even our most talented staff to “pick up” the ERC permit application / request and easily complete the work. It would be beneficial to have staff who are specialized in the ERC program and can maintain and grow the program as needed.

Pillar: Community Engagement

Air quality and climate change are issues of great concern affecting all of Colorado’s citizens. Historically APCD’s engagement efforts have focused on regulated entities, and air quality experts within certain non-governmental organizations and local governments. These efforts have been critical in forging consensus and adopting innovative and stringent air quality requirements that have often served as a model for the rest of the country. But with an increasing awareness in the importance of air quality issues among Colorado citizens, and the need to engage a host of communities that have been disproportionately impacted by air pollution as a result of decades long practices, engagement practices that were cutting-edge just a few years ago are inadequate today. Resources listed under the Community Engagement Pillar are needed to address this inadequacy and create a robust and comprehensive community engagement program that engages, collaborates with, and informs citizens, local governments and other key stakeholders on the multitude of important air quality issues facing Colorado.

9. Environmental Justice Analysis

Background

While there is an abundance of data available at the department, it takes time, staff, skills, and intentionality to empower data to inform specific decisions. The department, the legislature, and the public are increasingly pointing to Environmental Justice as a principle that needs to be prioritized. There is a growing awareness that in Colorado, as well as throughout the U.S. and globally, low-income people and communities of color more

frequently bear the burden of greater concentrations of pollution and higher numbers of polluting sources near where they live, work, play, and go to school. This contributes to negative health outcomes, reduced quality of life, and associated stressors that further impact physical and mental health.

When state institutions make decisions without the forethought and information needed to actively correct these disparities, they tend to maintain or exacerbate them. Environmental Justice isn't something that happens by accident and the CDPHE has an inherent responsibility to work toward correcting these inequities in our mission to provide clean air and water for all Coloradans.

While our legal frameworks may not currently support the consideration of cumulative pollution from multiple point and nonpoint sources in permitting and other decisions, the lived experience communicated to us by our stakeholders, as well as the data suggest this will need to be considered in order to truly move the needle on EJ. The legislature has signaled in H.B. 21-1266 that they intend to explore a requirement for "identifying and describing cumulative impacts to the health and environment of disproportionately impacted communities" (page 13, lines 18-24). Colorado could prepare for that potential requirement and become a national leader in this area with the right strategy and resources.

House Bill 19-1261:

- Requires APCD to identify communities disproportionately impacted by climate change, to ensure that GHG regulations consider community input and work to reduce burdens and increase benefits for these communities.
- "Disproportionately impacted communities" include communities of color, indigenous people, lower-income residents, and people living in polluted areas (sometimes referred to as "environmental justice areas").
- Further guidance and requirements are included in H.B. 21-1266 (including a definition of DI community), as well as H.B. 21-1189.
- Community members and NGOs are increasingly demanding greater action in the area of EJ.
- APCD could receive additional resources under H.B. 19-1261 though this Decision Item focuses on division needs beyond H.B. 19-1261.

Solution

In order to imbed an EJ analysis into decision making, it's important to have the necessary information to answer questions like:

- Who will experience any burden based on this decision?
- Who will benefit?
- What strategies might be used to mitigate direct, indirect, or unintended consequences for disproportionately impacted communities?

Drawing from the information provided by the data dashboard efforts, the monitoring program, as well as the forthcoming Colorado EnviroScreen (TEEO), including the Health and Environmental Assessment DI, a decision-support tool to anticipate the potential health and economic impacts of APCD programs, permits, and regulations would help answer these questions. This solution requires staff to identify the necessary data inputs, coordinate cross-program and cross-agency data sharing, analyze the data, and provide decision support for the APCD and AQCC. Further, staff skilled in science communication to explain the inputs, process, and outcome scenarios to decision makers and the public will be an important component of this work.

To provide a simple example, a potential rule could be evaluated for anticipated health and economic outcomes for a specific DI community using modeling and monitoring data. Policy models could be used to anticipate what adjustments to the rule might be necessary in order to mitigate potential burdens and prioritize benefits for DI communities. Scenarios could be provided to APCD and/or AQCC to help inform decisions, so that consequences of those decisions are clear and known, with at least some reasonable confidence. That will give staff and commissioners the opportunity to make informed decisions that are aligned with the division's commitment to advancing EJ.

An EJ Analysis tool/process would also enable the division to identify and report on key performance indicators. Such metrics have been requested by many stakeholders during public meetings and through written comments.

- This solution could leverage significant staff and resource investments in existing data gathering, monitoring, and modeling work to strengthen decision making in several areas of APCD's processes.
- Public, NGO, and community concerns to make significant strides toward Environmental Justices have been increasing. This solution would demonstrate a powerful commitment to creating better outcomes for DI communities and a mechanism for accountability.
- If shared publicly (at least in some format), this resource would improve transparency.

10. Data Dashboards

Background

The use of a tool that would provide meaningful and easy-to-follow information would support stronger communication and transparency to Colorado residents. The data would facilitate information sharing, providing critical summary data at reporting levels, such as on particular pollutants, groups of pollutants or for specific communities. A data and communication tool would ensure consistency in reporting on regular, planned intervals and facilitate comparisons across time. The communication and data would be presented in formats that support diverse audiences and stakeholders.

Solution

The division proposes to add a social scientist position to analyze information from available health, pollutant emissions and other data sources. The resulting information and potential recommendations would be distributed to Colorado residents and stakeholders. The data dashboard is envisioned as a comprehensive tool that would incorporate existing health equity, monitoring, general pollutant, emission data and other database information and relevant sources that would be incorporated into a communication and decision-making tool.

11. Research Liaisons

Background

Interest in Colorado air quality has moved beyond the interest of a few (for example, industry and NGOs) to widespread interest and concern of many. Furthermore, citizens are better informed and connected (due to social media). Topics of interest have now spread to common permit actions, air quality planning, etc. As such, members of the community, elected officials and others are routinely seeking additional ways to connect with the division including public meetings, Zoom calls, one-on-one calls with public officials, etc.

The request for strong community engagement has come from a variety of places including stronger awareness of potential environmental justice issues, the news media, etc. No one issue is driving the need for stronger community engagement; however, some high profile permitting matters and negative media coverage have amplified community interest and engagement.

Solution

An additional two staff positions dedicated purely to community engagement will allow the division to have a more direct line of communication to affected communities. Feedback received from these outreach efforts will be used to improve the interface between APCD and the communities served. Currently, APCD staff have inadequate time to provide this level of envisioned support to communities. Furthermore, these positions will be able to better ensure the community “voice” is heard and represented.

12. Communications and Air Quality Education

Background

Due to the level of interest in the division’s ongoing work, the division is often hard-pressed to successfully balance its reactive and proactive communications needs. Responding to media inquiries is a necessity, and as a result proactive outreach and marketing (i.e., intentional framing of the narrative) is often a lower priority. The end result is that many Coloradans are unaware of the work the division does, and their perceptions of the division

are shaped by news stories. Because these news stories often focus on controversies and criticisms, public perception of the division is skewed in a negative way.

Addressing this concern and providing the division with additional communications resources could provide the state with a number of benefits. First, increasing public awareness of the division's ongoing work is a positive good in and of itself – it benefits the state when its citizens are better informed about what the government is doing on their behalf.

Second, there could be a meaningful relationship between better public awareness and improved public health outcomes. For example, the division provides e-mail alerts for air quality advisories throughout the state. If more people are aware of these alerts, they will have better information in making choices about their activities during poor air quality days.

Finally, an increased awareness of the division's work, including the state's ongoing efforts to improve air quality and address longstanding public health inequities, could spur greater public support for these efforts.

At present, the division has one full-time communications employee. This employee is responsible for both responding to incoming media inquiries and conducting proactive outreach to market and message the division's ongoing efforts to provide Coloradans with clean air to breathe.

Under the current administration, the division has been placed at or near the head of an ambitious environmental agenda, including improving air quality, bringing the Front Range into attainment for federal ozone pollution standards, addressing the climate crisis and reducing emissions from the oil and gas industry, among others. These are important, complicated issues with significant public interest, and the division consistently fields inquiries from journalists reporting on these stories.

When this surge of interest is combined with inquiries related to standalone events (for example, an Air Quality Control Commission meeting or an air quality incident at a major facility) or breaking news stories, as well as ongoing public engagement and outreach needs, the strains on the division's communications resources become evident. As a prominent example, inquiries related to the Suncor Energy refinery in Commerce City are frequent and require a significant investment of staff time to adequately address.

Solution

The division proposes solving the above problems by enhancing its communications capacity and improving its ability to conduct outreach and proactively market the division's ongoing air quality improvement efforts. In order to achieve these goals, the division is requesting additional funding to hire three FTE communication employees.

With three FTEs focused on website development, media relations and public outreach and engagement, the division will have sufficient staff to both respond to media inquiries and conduct proactive marketing and messaging. With this additional support, the division's existing communications staffer will have time to focus on finding solutions to larger scale problems facing the division, including improving messaging on controversial issues for which the division is frequently criticized (Suncor regulation, the pace of climate change efforts, etc.) and the extent to which the atomization of modern media outlets and polarization of the broader public makes wider outreach more complicated.

Pillar: Driving Performance

Even without the addition of ambitious new climate change, community engagement, and environmental justice goals, APCD faces significant resource challenges. Stricter national health based standards, ongoing problems meeting ozone standards and the increasingly stringent Clean Air Act requirements that result from this, explosive growth in the oil and gas industry, development of increasingly complex regulatory regimes, increased complexity of air quality assessment methods, substantial increases in legal challenges, and greater sophistication of relevant stakeholders, have substantially increased the workload of APCD over the past fifteen years. Paired with flat federal funding, modest increases in state appropriations, and, over the past several years, inadequate fee revenues to fully pay for existing appropriations, this substantial increase in workload has created an unsustainable situation throughout the organization.

Anxiety and burnout are prevalent throughout the division. Committed, high quality staff are leaving or considering leaving due to crushing workloads and ever-increasing commitments and expectations. Span of control and the breadth of responsibility for senior management staff is too large to allow for the thoughtful and comprehensive management necessary to tackle Colorado's air quality challenges. Staff-level employees face increased workloads and growing backlogs, which inhibit the type of excellent service that the people of Colorado deserve. Administrative support for professional staff is extremely limited, resulting in engineering and environmental protection staff spending too much of their valuable time on ministerial tasks.

Unfortunately, these workload challenges will be substantially increasing over the next few years. Downgrade of the DM/NFR to severe ozone nonattainment status, and the need to address requirements under the 2008 and 2015 ozone NAAQS will result in a massive increase in new major sources requiring substantial increases in Title V permitting and compliance oversight staff, with additional increases in planning staff. Providing the level of service needed to achieve Colorado's climate change goals is not possible with the current handful of climate staff at APCD. Commensurate with other leading states, Colorado needs to fund climate staff at a level that matches the awesome level of responsibility placed upon the state. As the easiest and cheapest ozone precursor and GHG reduction strategies have been deployed, new reduction strategies will become more complex, requiring new approaches to reducing emissions and the resources needed to

support these approaches. In addition, with increasing legal challenges to APCD actions, new resources within the Attorney General's Office will be needed.

Resources listed under the Driving Performance Pillar are needed to address the substantial increase in workload over the past fifteen years, meet new challenges, and provide sufficient capacity to meet the monumental air quality challenges that Colorado faces.

13. Mitigation of Severe Ozone Classification

Background

Population growth, industrial expansion, especially in the oil and gas industry, and more stringent EPA standards mean that Colorado has been unable to effectively reduce air pollution fast enough to achieve the ever-more stringent ozone standards. As a result, EPA reclassified the DM/NFR area as a serious, rather than moderate, ozone nonattainment area in January 2020. The area will be reclassified to Severe ozone nonattainment in 2022. Governor Polis and CDPHE have identified ozone attainment as a key Wildly Important Goal (WIG). Additionally, Governor Polis identified improvements to air quality as one of Colorado's key priorities.

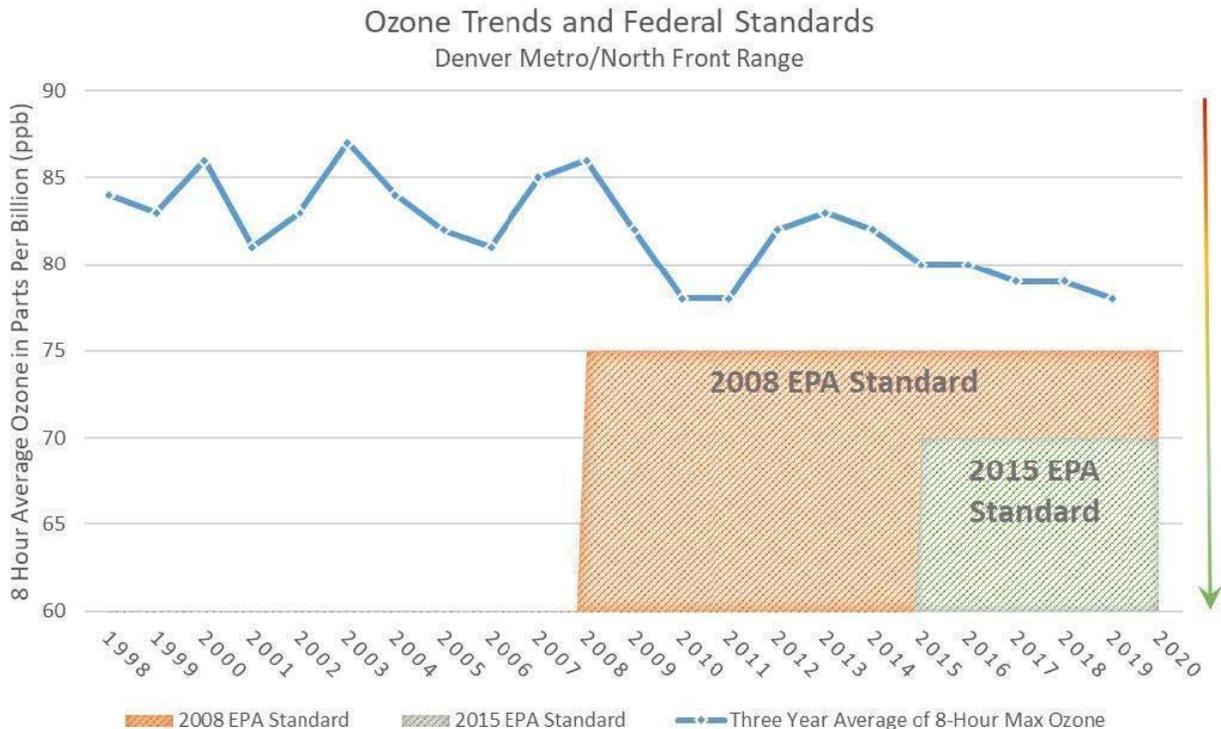
Non-Attainment Designation(s) Status

The EPA works with states and tribes to set NAAQS for ground level ozone to protect human health and the environment. Once a standard is established, the EPA designates an area as meeting (attainment) or not meeting (nonattainment) that standard. There are also different attainment levels (i.e. classifications) set for nonattainment areas ranging from (lowest to highest) marginal, moderate, serious, severe, to extreme. States with areas designated as nonattainment are required to implement more stringent regulations through a State Implementation Plan (SIP). The SIP must be approved by the EPA and establish strategies and goals for the state to come into compliance. More stringent requirements on industry can result in increased costs for regulated entities and can constrain productivity. Additionally, if the state does not come into compliance with EPA standards, the state will be reclassified to a higher level of nonattainment. Reclassification will also result in increased cost and regulatory burden for regulated entities.

The DM/NFR is currently classified by the EPA as a serious ozone nonattainment area under the 2008 standard of 75 ppb. It is expected that this area will be reclassified as a severe nonattainment area in early 2022. The impending reclassification to severe nonattainment will impose additional requirements on the APCD which will necessitate additional resources. Reclassification will increase the APCD's permitting and inspection workloads across all industries, including oil and gas development, because a more stringent nonattainment classification will require additional sources emitting pollution to obtain more rigorous permits and more frequent inspections.

If Colorado does not meet EPA standards, the nonattainment area could be reclassified from severe to extreme. A classification of extreme would drive even more stringent

requirements and demands on APCD resources. Should the area not attain the 75 ppb standard by the July 20, 2027 attainment date, without immediate and sustained action, the reclassification to extreme may happen as early as January 2028 for the 2008 standard.



Source: Regional Air Quality Council
 (<https://raqc.egnyte.com/dl/wl19b0oUix/OzonePlanningUpdate090619.pdf>)

Consequently, the Ozone SIP process is a multi-year process, and SIP requirements continue to evolve. The resulting timing lags and rule changes complicate the planning process, such that by the time future year modeling is completed, that year can be compared to actual monitoring data or the SIP must be revised to reflect a change in SIP requirements. This creates a very iterative, resource-intensive process. Consequently, given the back-to-back reclassifications, the complexity of the process and increased public interest, the planning process is fraught with litigation at the federal and state levels.

Colorado continues to be reclassified to stricter levels of ozone nonattainment and as a result federal and state regulatory requirements become more stringent as well. One key change that informs this resource request is the lowering of the facility emissions threshold that leads to a facility being considered a major source versus a minor source of emissions. The reclassification from a serious nonattainment area to a severe nonattainment area will lower the major source emissions threshold from 50 tons per year of nitrogen oxides & volatile organic compounds (NOx/VOC) to 25 tons per year of NOx/VOC. As a result, there are hundreds of existing facilities in the ozone nonattainment area that will become

subject to more stringent permitting and inspection requirements. The division is responsible for implementing increased major source construction permits, operating permits, inspection, and compliance oversight requirements for these sources.

Solution

Title V Major Source Permitting

Major sources of air pollutants (such as power plants, large manufacturing, and chemical processing and oil and gas facilities) are required under federal law to obtain and renew a Title V major source permit every five years. Severe nonattainment reclassification would impact the number of facilities required to obtain a Title V-major source permit by lowering the threshold to qualify as a Title V major source. Under the current Serious nonattainment designation, the threshold for a Title V-major source permit is 50 tons per year (TPY) for volatile organic compounds (VOC) and nitrogen oxides (NO_x) VOC and NO_x. The anticipated reclassification to Severe nonattainment would lower this threshold to 25 tpy tons per year.

As a result of the anticipated change in Colorado's nonattainment classification, the division anticipates an additional 473 Title V facilities. This anticipated amount is a dramatic increase in the number of Title V facilities (current inventory = 264, representing a 179% increase in workload). This estimated increase is based on the Program's review of current permits and an assessment of how many facilities will be considered Title V major source facilities if the Title V major source permitting threshold is reduced from 50 to 25 TPY. The request includes 24.0 permit engineers, 5.0 new supervisors, 2.0 Title V Managers, and 2.0 Administrative Assistants. The requested permit engineers are based on the evaluation that one permits engineer can manage approximately 20 title V permits. The 2.0 requested supervisors is based on the division goal of a ratio of 1 supervisor for every 5 staff members. The 2.0 Title V Managers will be needed to manage the supervisors. 2.0 Administrative staff are needed to address various administrative tasks required of the Title V unit such as application intake, processing of public notices, managing comment responses, etc.

Title V Major Source and Synthetic Minor Source Inspections

Under the severe nonattainment classification, the APCD will see an increase in the number of oil and gas and other industrial facility full compliance evaluation (FCE) inspections required by the EPA. APCD anticipates an additional 473 Title V major source inspections and 53 synthetic minor (SM80) inspections will need to occur annually. Additional staff are needed to conduct these FCEs each year which will allow the APCD to meet EPA minimum requirements under the anticipated severe nonattainment reclassification. The division is requesting 12 FTE to conduct these additional inspections and 3 FTE to provide supervision of these staff.

Stack Testing Increased Presence

The reclassification to severe ozone nonattainment will lead to more stringent regulatory requirements in addition to more stack testing of emissions sources to ensure compliance with permitted emissions rates in permits. The division believes increased stack testing is a critical activity to ensure companies are not exceeding emissions limits and to help Colorado come into compliance with the ozone NAAQS. To do so, the Department is requesting 2 FTE to support stack testing oversight and 1 FTE to provide supervision to the new and existing staff that provide support for this activity.

Inspection Quality Assurance

Under the severe nonattainment classification, the APCD will see an increase in the number of oil and gas and other industrial facility full compliance evaluation (FCE) inspections required by the EPA. APCD anticipates an additional 473 Title V major source inspections will occur annually. Draft inspection reports undergo important quality assurance review before finalization and inspection data & results are logged into the APCD database for reporting and tracking purposes. Due to the complexity of the facilities, permits and regulatory requirements, quality assurance reviews for Title V inspection reports take longer than other inspection report types. As such, additional staff are needed to conduct this additional report review and log-in associated with 473 additional Title V sources. The Department is requesting 0.3 FTE to complete this additional work.

Review of Mandatory Reporting from Title V Major Sources

Under the severe nonattainment classification, the APCD will see an increase in the number of sources subject to Title V permit requirements. APCD anticipates an additional 473 Title V major sources and associated Title V permits. Title V sources are required to submit mandatory reports each year, including Annual Compliance Certifications (ACC) and Semi-Annual Monitoring Reports (SAR). To provide timely compliance oversight of these Title V sources and meet EPA oversight and reporting requirements, APCD staff review each report (ACC and SAR) and log report details into the APCD database. Additional staff are needed to conduct this additional report review and log-in associated with 473 additional Title V sources and associated mandatory reports. The Department is requesting 0.2 FTE to complete this additional work.

Formal Enforcement Increase

As explained in the Inspections section above, under the severe nonattainment classification, the APCD will see an increase in the number of oil and gas and other industrial facility full compliance evaluation (FCE) inspections required by the EPA. An increase in the number of inspections conducted at major sources will result in an increase in formal enforcement referrals. APCD anticipates an additional 61 formal enforcement referrals each year as a result of the additional annual major source inspections. Additional staff are needed to complete these enforcement actions for APCD. The Department is requesting 1.5 FTE to complete these additional enforcement actions.

Management and Support

With substantial growth in staffing comes the need for additional mid-level management staff to adequately support the operations and strategic direction of the work unit supervisors within programs. Growth within the oil and gas program from the 2020 decision item and this request leads to the need for 2 FTE section manager-level staff. These staff would report directly to the program manager to provide subject matter expertise and support strategic operations and oversight of the work units. In addition, due to forecasted growth with the oil and gas program, the division is requesting 1 FTE for administrative support (Program Assistant II) to support activities within the program such as: public notice publication, website updates and maintenance, staff training coordination, physical document management (scanning and filing) to support records, team meeting coordination, and physical document (permit applications) flow management.

Similarly, growth within the Compliance and Enforcement Program from the 2020 Decision Item, bills passed in the 2021 legislative session, and this request leads to the need for 2 FTE section manager level staff. These staff would report to the program manager to provide subject matter expertise and support strategic operations and oversight of the work units.

Construction Permitting

Two additional engineers will be needed to address the increase in workload anticipated with the reclassification to Severe ozone nonattainment. Expected workload increases are associated with an increase in synthetic minor permit applications and analyzing additional submittals for Reasonably Available Control Technology (RACT). The engineers will also be used to develop additional process improvements to increase work quality to address the strategic plan (i.e. Quality in Permitting). Additionally, the staff will be utilized to help this permit unit issue permits quicker in order to be in compliance with issuance deadlines as required by AQCC Regulation No. 3. One additional supervisor will be needed to assist with staff supervision and should also result in better quality permits and more timely permit issuance since the supervisors can split responsibilities and may focus on different industry segments to give them additional expertise on specific permitting issues/situations.

14. 2015 Ozone Standard

Background

In addition to the 2008 standard, the DMNFR ozone nonattainment area must also comply with the 2015 standard of 70 ppb, which requires separate planning and submissions to EPA on different timelines than the 2008 standard because the boundaries of the nonattainment area are different than those of the 2008 standard. Per recent court and EPA action, the DMNFR ozone nonattainment area for the 2015 standard will be expanded to include all of Weld County, and is facing a reclassification to Moderate nonattainment in early 2022.

Further, there is the real possibility other areas in the state may be reclassified to nonattainment, due to not attaining the ozone standards, as population grows and the monitoring program expands, which could affect the Pikes Peak Region and West Slope.

Colorado is obligated to respond to these reclassifications on different schedules, using different data and requiring different analyses, stakeholder engagement, modeling and rulemakings. Simultaneously, emission reduction strategies needed to meet the federal standards have become much more challenging to develop (i.e., there are no low-hanging fruit, and thus smaller reductions are being pursued from a broader array of emission segments), and the associated analyses, stakeholder engagement, modeling and rulemakings have become significantly more complicated and challenging. The Department estimates that the additional workload for technical analysis, policy development, rule writing, and outreach and engagement will necessitate an additional 10.5 FTE within planning and policy and 2.0 in Technical Services.

Colorado's responses by means of State Implementation Planning (SIPs) and the timing are mandated by federal statute. In Colorado, SIPs must also undergo a Legislative Review process, which means that Colorado SIPs must be adopted by the AQCC in the calendar year before the federal due date, in order to undergo Legislative Review by the General Assembly prior to submission to the EPA for approval. Further, recent EPA actions to reclassify areas under the 2008 standard from Marginal to Moderate and from Moderate to Serious, have been identifying SIP due dates as short as twelve months from the reclassification.

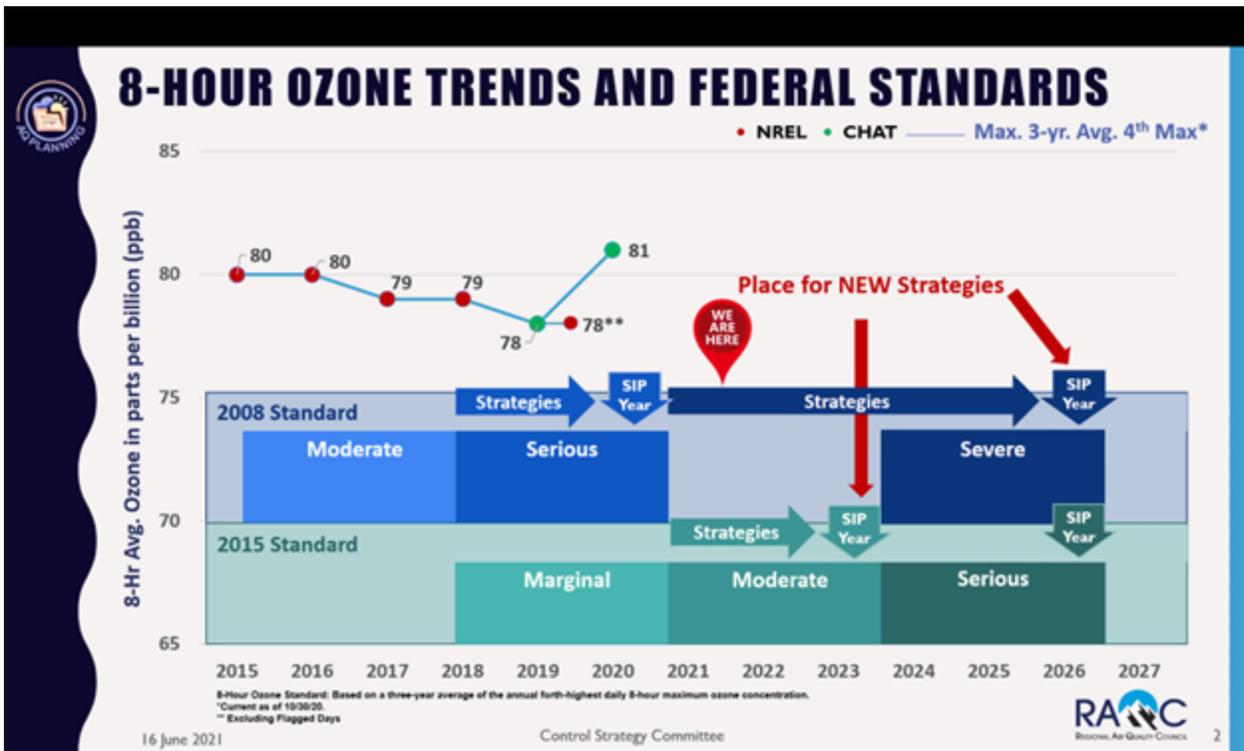
Solution

The Ozone SIP Development Team includes both staff in the Planning and Policy Program and Technical Services Program. This team develops and refines emission inventories for base years and projected future years, develops emission reduction strategies, engages stakeholders, coordinates with partner agencies and contractors to in developing data modeling products, conducts and documents analyses, undergoes a public rulemaking process, advocates for the SIP with decision makers, and negotiates with EPA to secure SIP approval.

In addition to an additional 12.5 FTE, attainment demonstration modeling for the 2008 and 2015 ozone SIPs will require additional funding.

Colorado is obligated to respond to these reclassifications on different schedules, using different data and requiring different analyses, stakeholder engagement, modeling and rulemakings. Simultaneously, emission reduction strategies needed to meet the federal standards have become much more challenging to develop (i.e., there are no low-hanging fruit, and thus smaller reductions are being pursued from a broader array of emission segments), and the associated analyses, stakeholder engagement, modeling and rulemakings have become significantly more complicated and challenging.

Colorado’s preparation of SIPs for various ozone standards and the timing thereof are mandated by federal law. In Colorado, SIPs must also undergo a Legislative Review process, which means that Colorado SIPs must be adopted by the AQCC in the calendar year before the federal due date, in order to undergo Legislative Review by the General Assembly prior to submission to the EPA for approval. Further, recent EPA actions to reclassify areas under the 2008 standard from Marginal to Moderate and from Moderate to Serious have required SIP submittals as quickly as twelve months from the reclassification.



Consequently, the Ozone SIP process is a multi-year process, and SIP requirements continue to evolve. The resulting timing lags and rule changes complicate the planning process, such that by the time future-year modeling is completed, that year can be compared to actual monitoring data or the SIP must be revised to reflect a change in SIP requirements. This creates a very iterative, resource intensive process. Consequently, given the back-to-back reclassifications, the complexity of the process and increased public interest, the planning process is fraught with litigation at the federal and state levels.

15. Organizational Excellence

Background

As noted in the Driving Performance Summary, the division is facing a rapidly increasing workload with constrained staffing and budget resources. The ozone standards (both 2008 and 2015) mandate additional permitting, oversight, inspections and compliance activities. The division and AQCC’s responsibility to protect the health of Coloradans has resulted in

more stringent and complex pollutant regulations. At the same time, the state has seen strong growth in oil and gas industry activities and associated higher levels of legal challenges both from industry and other stakeholders.

In addition, the division is grappling with how to effectively and nimbly manage emergent air-related issues and high priority initiatives, such as environmental justice, greenhouse gas emission and climate change, understanding health issues and ensuring air quality information is communicated to residents in a transparent, prompt and concise manner.

Internally, the division is struggling with highly constrained staff resources and an ever-mounting workload. There are several factors at play here. The division has operated with a long-standing culture of budget minimalism. Over a period of many years, this has resulted in a reticence to identify and request sufficient program and administrative staff. The timing of rule-making, new regulations and economic factors have also impacted the division's ability to seek additional staff.

The following section details identified staffing needs to address both long-standing and anticipated resource deficiencies.

a. Administrative Services and Division Restructure

Background

Over the past many years, APCD has taken on new projects, rules and other responsibilities without proper resourcing at the staff level and at the divisional organizational level. With new resources available to the division through this DI, APCD will have a rare opportunity to evaluate and implement a new structure to support cutting edge approaches to air quality. Research of other states' air quality programs highlights the routine under-resourcing of Colorado's air quality programs.

Though APCD has a strategic plan to drive progress toward organizational goals, without proper resources such plans can be very challenging to implement. Thus, the division had "made due" with its dearth of resources; however, with ever more stringent air quality standards (for example, ozone NAQQS), requests from the AQCC and the public, and an overall need to further protect public health of all Coloradans, more must be done.

Internally, the division is struggling with highly constrained staff resources and an increasing workload. There are several factors at play here. The division has operated with a long-standing culture of budget minimalism and a desire to "do more with less" mentality. This goal is well intentioned but has resulted in longer-term consequences. Examples range from challenges in getting work done efficiently, to having managers at times completing very routine activities, to difficulty maintaining a reasonable workload and work-life balance for staff. Over a period of many years, this practice has resulted in a reticence to identify and request sufficient program and administrative staff. In some

cases, the timing of rule-making, new regulations, evolving work priorities and economic factors have also exacerbated the staffing constraints.

Solution

To address this issue and improve organizational efficiency and effectiveness, the division requests additional staff to support both Program level work teams and the Administrative Services work team broadly in all functional areas, including administrative support accounting, fiscal, contracts, information technology and human resources.

In addition to addressing insufficient administrative and support needs, the growth of APCD and its expansion of programs has led to a re-evaluation of an ideal “future state” for its organizational structure. The request for additional staff will facilitate providing key leadership positions for the division, designed to improve organizational effectiveness, responsiveness and ensure reasonable span of control.

Anticipated Outcomes

Anticipated ultimate outcomes from this request align with the three overarching issues discussed at length above: 1) reducing GHG emissions to meet Colorado’s ambitious climate change goals; 2) lowering ambient concentrations of ground-level ozone in order to meet federal health-based ozone standards; and 3) providing environmental justice for all Coloradans.

Measurement of GHG emission reductions will be done using generally accepted inventorying methodologies that are appropriate for the activity, source, or sector being inventoried. Given both the broad range of source types that emit greenhouse gases and the refinement of inventorying methodologies over time, a full explanation of inventorying methodologies that will be used in measuring success won’t be included here. However, in general, methodologies that may be used in measuring reductions from different sources include: inventorying models such as EPA’s State Inventory Tool (SIT); engineering calculations using process, activity or operational rates, direct measurement of pollutants at a source; standard emission factors; reported emissions; and in some cases regional measurements of emissions.

Measurement of ozone concentrations will be done using federally approved monitoring technologies and measurements. Colorado already has an extensive network of ozone monitors, and the department will rely on that network to track progress with our ozone reduction goals.

Given the nature of the goal, and the somewhat unique circumstances of different disproportionately impacted communities, measurement of success with environmental justice goals will be somewhat more complex and varied. While there are many facets of

our anticipated environmental justice that will need to be measured, ultimate desired outcomes are a reduction in ambient air pollution levels, as well as reduced emissions from sources within disproportionately impacted communities. The pollution measured for a given environmental justice community will depend on the source mix and current pollution concentrations in the area. In general, measurement will involve either monitoring of ambient air in accordance with accepted practice and utilizing accurate and reliable equipment, or source emission calculations using one or more of the tools discussed with respect to GHG emissions above.

In addition to these high-level outcomes that will be used to evaluate the success of this proposal, sub-measures will be used in connection with the various elements of this proposal described in the Proposed Solutions section. Anticipated outcomes and potential measures for these outcomes are below:

Air Quality Science/Data Management

- For the various air quality monitoring elements anticipated outcomes are: 1) successful deployment of the monitoring equipment in accordance with specific project plans for purchasing and deploying the equipment; and 2) collection of high quality data that meets established QA/QC procedures; and 3) operation of the monitors without excessive downtime. The particulars of these outcomes and measures will depend on the type of equipment, but the division has extensive experience operating monitors and will utilize existing practices to track outcomes as appropriate for the particular type of equipment.
- For other air quality assessments, the outcomes and measures will depend on the assessment, but in general the goal will be the collection of high quality data to be used in furthering the state's climate change, ozone, and environmental justice goals.
- For the data management elements, anticipated outcomes include improved efficiency in existing processes such as permitting, compliance oversight, and air quality planning, along with greater data accessibility to both division staff and external stakeholders, including the general public.

Immediate Emission Reductions

- The ultimate outcome for the immediate reduction elements is the cost effective reduction of air emissions from lawn and garden equipment. To assess success the following will be measured: 1) number of equipment replaced; 2) cost of each replacement; and 3) emission reductions from each replacement.

Cutting Edge Regulatory Strategies

- Anticipated outcomes for the various cutting edge regulatory strategies identified above are cost effective reduction of emissions of GHGs, ozone precursors, or other emissions depending on the specific strategy. All AQCC regulatory actions require development of an Economic Impact Analysis that typically includes an assessment of the cost of the proposal and the expected emission reductions, to generate a dollar cost per ton of emissions reduced.

Community Services

- Anticipated outcomes for the various Community Services elements include: better understanding of air quality impacts and health disparities in environmental justice communities, increased and more effective engagement from environmental justice communities and local governments in Colorado’s air quality program, greater transparency, better communication between the department and stakeholders, increased understanding of Colorado’s air quality challenges by stakeholders, and additional input from stakeholders to help inform the department in developing and implementing Colorado’s air quality program. Measurement of these outcomes may be difficult for many of the Community Service elements, and will vary depending on the specific element and even the specific project within each element.

Driving Performance

- The Driving Performance Pillar, and the various elements within that Pillar, are expected to improve environmental outcomes, enhance the overall operation of the division, increase capacity for various functions, more efficient operations, greater transparency and better timeliness across multiple processes. The particular anticipated outcome will vary from element to element, and in some cases measurement of these outcomes may be challenging. Some of the measures that will be used, however, include number of permit actions completed, timeliness of permit actions, number of inspections, number of enforcement actions, environmental violations resolved, and records requests processed. For some of the ozone planning, permitting, and compliance oversight elements there may also be direct assessment of emission reductions conducted as part of the particular process,

Theory of Change	Funding operations, staff, and market transformation will allow the Division to achieve the goals outlined herein.
Program Objective	Reducing GHG emissions to meet Colorado’s ambitious climate change goals; lowering ambient concentrations of ground-level ozone in order to meet federal health-based ozone standards; providing environmental justice for all Coloradans.

Outputs being measured	Number of permit actions completed, timeliness of permit actions, number of inspections, number of enforcement actions, environmental violations resolved, and records requests processed, numbers of equipment replaced, cost of each replacement, emission reductions from each replacement.		
Outcomes being measured	Improved efficiency in existing processes such as permitting, compliance oversight, and air quality planning; greater data accessibility to both division staff and external stakeholders, including the general public; better understanding of air quality impacts and health disparities in environmental justice communities; increased and more effective engagement from environmental justice communities and local governments in Colorado's air quality program; cost effective reduction of emissions of GHGs, ozone precursors, or other emissions depending on the specific strategy.		
Cost/Benefit ratio	N/A		
Evaluations	Pre-Post		
Results of Evaluation	The Division will continue to measure results as this proposal is implemented		
Continuum Level	Step 3		

Assumptions and Calculations

APCD Transformation Pillar	FY23-FTE	FY23-Costs	FY24-FTE	FY24-Costs
Cutting Edge Regulations	13.00	1,469,774	24.00	2,591,268
Immediate Emission Reductions	1.00	5,000,000	1.00	5,000,000
Air Quality Science	6.00	10,249,694	10.00	8,031,953
Community Services	8.00	920,948	16.00	1,732,248
Driving Performance	47.00	7,118,599	87.00	10,004,499
Total	75.00	\$24,759,015	138.00	\$27,359,968

Other Assumptions: Funding for this Decision Item is requested from the General Fund. No material revenue is expected to be generated. It is also anticipated that staffing costs will primarily occur over a two-year period.

The division assessed each individual component under the five Pillars (e.g., Driving Performance, Air Quality Science and Data Management) to determine staffing necessary to achieve the associated goals and outcomes. For many components, a detailed staffing analysis was conducted using metrics or ratios based on established time requirements for

staff to complete various tasks and projects. As an example, the EPA has classified the Denver Metro Area and Front Range of Colorado as being in Serious nonattainment of established ozone pollutant levels. As a result, the division will be setting a lower threshold, as required by the EPA, for more stringent permitting processes. The division estimates this will result in 473 additional facilities that will need to be treated as Title V Major Facilities, which requires more complicated and stringent permitting. There are several staffing assumptions associated with the downgraded classification to Severe nonattainment. For inspections, Title V Major Facility Inspections require, on average, 26 hours for Title V Major Facilities and 17.5 hours for Synthetic Minor Facilities. This equates to 1.5 FTE/year.

As another example, Title V Major Facility permitting is more time intensive and challenging to complete. The division's data indicates that each permit engineer can permit 20 Title V facilities each year. This EPA Ozone classification is driving many of the division's FTE needs. This particular example would result in 24 new FTEs (473 facilities divided by 20 permits/year), as well as associated needs for additional supervisors and managers.

Please refer to Appendix A and B for examples of detailed staffing analyses.

The division used a number of other metrics and standards to determine staffing needs. Additional examples include:

- Establishing an employee to supervisor ratio of 5:1. While there is not a perfect number because every work team differs in terms of workload, variability, complexity, turnover, training needs, etc., it is generally considered a best practice to maintain an upper ratio of 5-6 employees per supervisor. The Decision Item includes requests to create new supervisors based both on current need and also anticipated need resulting from this overarching budget request.
- The division has found that it is understaffed in the Administrative support area. This includes both the Administrative division staff (i.e., fiscal, accounting, procurement, human resources, information technology) as well as administrative support for individual work teams (to provide reasonable and efficient support). A general metric is that it is reasonable to expect that 10% of employees will be in administrative support roles. The division is currently below that mark but has assessed staff needs in this area.
- Air pollutant monitoring programs - From current experience, the division has strong knowledge of the resources necessary to efficiently operate mobile air monitoring vehicles as well as other Air Toxics and monitoring programs.

- Communications and Innovation & Strategy - The division completed a robust review of community and resident expectations, current practices, strengths, weaknesses and opportunities to improve service delivery. As a result, it is anticipated that three FTEs will be added to the one-person Communications Team (i.e., a website developer, a media relations person and community outreach. The Strategy and Innovation Team also completed a detailed analysis to identify work plan goals and resource needs.
- Division Restructure - A draft organizational chart has been developed that identified the need to manage the span of control to ensure a strong organizational leadership structure is in place.

Transformation Pillar - Cutting Edge Regulations

Expenditure Detail	FY 2022-23		FY 2023-24		
Subtotal Personal Services	13.0	\$1,265,624	24.0	\$2,318,068	
Operating Expenses:					
		FTE	FTE		
Regular FTE Operating Expenses	\$500	13.0	24.0	\$12,000	
Telephone Expenses	\$450	13.0	24.0	\$10,800	
PC, One-Time	\$2,000	13.0	11.0	\$22,000	
Office Furniture, One-Time	\$5,000	13.0	11.0	\$55,000	
Indirect Costs, if applicable		13.0		\$0	
Leased Space, if applicable	\$6,600	13.0	24.0	\$158,400	
Staff Training / Development				\$15,000	
Subtotal Operating Expenses		\$204,150		\$273,200	
TOTAL REQUEST	13.0	\$1,469,774	24.0	\$2,591,268	
	<i>General Fund:</i>	13.0	\$1,469,774	24.0	\$2,591,268

The following table comparing state FTE and resources for GHG programs is provided in the Colorado GHG Roadmap.³

	California Air Resources Board Climate Program	Washington Proposed Bill S.B. 5981	Oregon Proposed Bill S.B. 1530B	Colorado Air Pollution Control Division
Annual Budget (does not include incentives and other program costs which	\$148M	\$8.5M	\$9.9M	\$454,177

³ Colorado GHG Pollution Reduction Roadmap Final Report at Pg. 95

range to billions of dollars)				
Staff (FTEs)	211.4	38	26.5	5.1

Transformation Pillar - Immediate Emission Reductions

Expenditure Detail		FY 2022-23		FY 2023-24	
<i>Subtotal Personal Services</i>		1.0	\$92,266	1.0	\$92,266
<i>Operating Expenses:</i>					
		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	\$2,000	1.0	\$2,000	-	\$0
Office Furniture, One-Time	\$5,000	1.0	\$5,000	-	\$0
Indirect Costs, if applicable		1.0	\$0		\$0
Leased Space, if applicable	\$6,600	1.0	\$6,600	1.0	\$6,600
Electric Lawn Eqpt Grant Program			\$4,893,984		\$4,900,184
<i>Subtotal Operating Expenses</i>			\$4,908,534		\$4,907,734
TOTAL REQUEST		1.0	\$5,000,800	1.0	\$5,000,000
<i>General Fund:</i>		1.0	\$5,000,800	1.0	\$5,000,000

Table 1. Project Costs and Equipment Counts

Line Items	Cost per Unit	Units	Total Cost
Program Administration			\$412,000
Residential Lawn Equipment	\$150	23,920	\$3,588,000
Commercial Lawn Equipment	\$5,000	1,200	\$6,000,000
Total			\$10,000,000

Transformation Pillar - Air Quality Science

Expenditure Detail		FY 2022-23		FY 2023-24	
<i>Subtotal Personal Services</i>		6.0	\$585,613	10.0	\$1,003,668
<i>Operating Expenses:</i>					
		FTE		FTE	
Regular FTE Operating Expenses	\$500	6.0	\$3,000	10.0	\$5,000
Telephone Expenses	\$450	6.0	\$2,700	10.0	\$4,500
PC, One-Time	\$2,000	6.0	\$12,000	4.0	\$8,000
Office Furniture, One-Time	\$5,000	6.0	\$30,000	4.0	\$20,000
Indirect Costs, if applicable		6.0	\$0		\$0
Leased Space, if applicable	\$6,600	6.0	\$39,600	10.0	\$66,000
Stationary Sources Database Replcmt.			\$4,099,148		\$4,319,241
Stationary Srcs. Database - Licensing,			\$195,000		\$175,000
Replacement of Monitoring Eqpt.			\$258,800		\$258,800
Replacement of Monitoring Eqpt. -			\$863,333		\$863,333
New Monitoring Eqpmt. - Contracts			\$2,789,000		\$851,911
New Monitoring Eqpmt. - Mobile Air			\$915,000		\$0
Monitoring Eqpmt. - Van - Op. / Maint			\$156,500		\$156,500
Toxicology / Health Assessments			\$300,000		\$300,000
<i>Subtotal Operating Expenses</i>			\$9,664,081		\$7,028,285
TOTAL REQUEST		6.0	\$10,249,694	10.0	\$8,031,953
<i>General Fund:</i>		6.0	\$10,249,694	10.0	\$8,031,953

Transformation Pillar - Community Services

Expenditure Detail		FY 2022-23		FY 2023-24	
<i>Subtotal Personal Services</i>		8.0	\$704,548	16.0	\$1,455,448
<i>Operating Expenses:</i>					
		FTE		FTE	
Regular FTE Operating Expenses	\$500	8.0	\$4,000	16.0	\$8,000
Telephone Expenses	\$450	8.0	\$3,600	16.0	\$7,200
PC, One-Time	\$2,000	8.0	\$16,000	8.0	\$16,000
Office Furniture, One-Time	\$5,000	8.0	\$40,000	8.0	\$40,000
Indirect Costs, if applicable		8.0	\$0		\$0
Leased Space, if applicable	\$6,600	8.0	\$52,800	16.0	\$105,600
Env. Just. / Commncs. / C-ty Engmt.			\$100,000		\$100,000
<i>Subtotal Operating Expenses</i>			\$216,400		\$276,800
TOTAL REQUEST		8.0	\$920,948	16.0	\$1,732,248
<i>General Fund:</i>		8.0	\$920,948	16.0	\$1,732,248

Transformation Pillar - Driving Performance

Expenditure Detail	FY 2022-23		FY 2023-24	
<i>Subtotal Personal Services</i>	47.0	\$4,920,031	87.0	\$8,729,061
<i>Operating Expenses:</i>				
		FTE	FTE	
Regular FTE Operating Expenses	\$500	47.0	87.0	\$43,500
Telephone Expenses	\$450	47.0	87.0	\$39,150
PC, One-Time	\$2,000	47.0	40.0	\$80,000
Office Furniture, One-Time	\$5,000	47.0	40.0	\$200,000
Indirect Costs, if applicable		47.0		\$0
Leased Space, if applicable	\$6,600	47.0	87.0	\$574,200
Ozone SIP for 2015 EPA Standard				\$1,150,000
Ozone Severe Designation and				\$364,718
<i>Subtotal Operating Expenses</i>				\$2,198,568
TOTAL REQUEST	47.0	\$7,118,599	87.0	\$10,004,499
<i>General Fund:</i>	47.0	\$7,118,599	87.0	\$10,004,499

Supplemental, 1331 Supplemental or Budget Amendment Criteria

N/A

Department of Public Health and Environment

Funding Request for the FY 2022-23 Budget Cycle

Request Title

R-02 Colorado Dairy Protection

Dept. Approval By:

Viktor Bojilov

Supplemental FY 2021-22

OSPB Approval By:

Budget Amendment FY 2022-23

X

Change Request FY 2022-23

Summary Information	Fund	FY 2021-22		FY 2022-23		FY 2023-24
		Initial Appropriation	Supplemental Request	Base Request	Change Request	Continuation
	Total	\$2,776,191	\$0	\$2,836,314	\$400,000	\$400,000
	FTE	22.3	0.0	22.3	0.0	0.0
Total of All Line Items Impacted by Change Request	GF	\$706,579	\$0	\$726,508	\$400,000	\$400,000
	CF	\$1,504,164	\$0	\$1,541,885	\$0	\$0
	RF	\$111,730	\$0	\$114,203	\$0	\$0
	FF	\$453,718	\$0	\$453,718	\$0	\$0

Line Item Information	Fund	FY 2021-22		FY 2022-23		FY 2023-24
		Initial Appropriation	Supplemental Request	Base Request	Change Request	Continuation
	Total	\$2,776,191	\$0	\$2,836,314	\$400,000	\$400,000
	FTE	22.3	0.0	22.3	0.0	0.0
07. Division of Environmental Health and Sustainability, (A)	GF	\$706,579	\$0	\$726,508	\$400,000	\$400,000
Division of Environmental Health and Sustainability, (1)	CF	\$1,504,164	\$0	\$1,541,885	\$0	\$0
Division of Environmental Health and Sustainability - Environmental Health Programs	RF	\$111,730	\$0	\$114,203	\$0	\$0
	FF	\$453,718	\$0	\$453,718	\$0	\$0

Auxiliary Data

Requires Legislation? NO

Type of Request?

Public Health and Environment
Prioritized Request

Interagency Approval or
Related Schedule 13s:

No Other Agency Impact



Department Priority: R-02
Request Detail: Colorado Dairy Protection

Summary of Funding Change for FY 2022-23			
		Incremental Change	
	FY 2021-22 Appropriation	FY 2022-23 Request	FY 2023-24 Request
Total Funds	\$2,776,191	\$400,000	\$400,000
FTE	22.3	0.0	0.0
General Fund	\$706,579	\$400,000	\$400,000
Cash Funds	\$1,504,164	\$0	\$0
Reappropriated Funds	\$111,730	\$0	\$0
Federal Funds	\$453,718	\$0	\$0

Summary of Request

The Colorado Department of Public Health and Environment (CDPHE or “the department”) respectfully requests \$400,000 General Fund in FY 2022-23 and FY 2023-24. No new FTE are proposed. This request protects the high-priority dairy protection program that was identified as a critical industry during the COVID-19 pandemic response. The dairy protection program ensures milk and dairy products are in conformance with the national food safety requirements. Conformance with these requirements permits Colorado milk and dairy products to move freely through interstate commerce.

Current Program

The United States Public Health Service and the Food and Drug Administration (FDA) published the first *Grade "A" Pasteurized Milk Ordinance (PMO)* in 1927. In 1949, the National Conference on Interstate Milk Shipments (NCIMS) held its first conference. Since that time, the NCIMS has served as a model cooperative program between the FDA, the states, and the dairy industry. The program is a national cooperative program. Colorado and all other states and U.S. territories implement the PMO and the associated Procedures and Methods. The PMO, Methods, and Procedures are formally revised every two years at NCIMS. The NCIMS brings together state and federal regulatory agencies with industry and academia to discuss and vote on the proposed changes to the current version of the PMO and supporting documents. Colorado has been an engaged partner with the NCIMS and FDA throughout the history of these two organizations. CDPHE's milk and dairy program manager is Colorado's voting delegate at NCIMS. To sustain the cooperative, FDA triennially performs a full evaluation of each state's milk program to ensure conformance with the PMO, Methods and Procedures.

Prior to the implementation of these national standards, milk contributed to 25% of all illness outbreaks associated with contaminated food and water. Current data shows that less than one percent of outbreaks now are linked to pasteurized milk. This can be directly attributed to the alignment of requirements, the assurance those requirements are met, and the on-going partnerships among states, FDA, industry, and academia.

An appropriately resourced milk program ensures that Colorado's milk and dairy industry can thrive not only in Colorado, but can ship (and receive) milk and milk products both interstate and internationally. During Colorado's response to the COVID-19 pandemic, the milk and dairy industry was identified as critical infrastructure to assure that residents of Colorado and beyond had access to safe foods produced by this industry.

Colorado has a \$4.6 billion milk and dairy industry. The dairy protection program ensures milk and dairy products are in conformance with the national food safety requirements. Conformance with these requirements permits Colorado milk and dairy products to move freely in interstate commerce. The current milk program was established at CDPHE in the mid 1980's, at a time when the Colorado milk industry produced approximately 1.1 billion pounds of milk per year. Colorado now processes over 5.5 billion pounds annually.

Due to resource shortfalls and industry expansion, FDA evaluations of Colorado's program prior to 2017 were substandard, jeopardizing Colorado's voting status at NCIMS and milk producers' access to interstate markets. Beginning in 2017, the milk program was re-structured and re-staffed, and all program activities were evaluated for process efficiency and regulatory effectiveness. The result is a proven program with a well-supported level of confidence of effectiveness as documented by successful FDA evaluations during all subsequent evaluation periods.

The Milk Program now consists of 5.1 FTE with an annual appropriation of approximately \$573,700. To ensure food safety, program staff travel approximately 50,000 miles per year to perform over 1,250 inspections, 220 water samples, and over 1700 milk samples annually across the entirety of the industry. In order to achieve this successful level of resourcing, general funds have been diverted from other division environmental health programs (e.g., childcare and school sanitation, food safety, etc.) to the milk program. There is no capacity to continue to divert funding from these other programs.

Problem or Opportunity

Compliance with national food safety standards is necessary for Colorado milk and dairy products to move freely in interstate commerce. But CDPHE current cash balances are not sufficient to pay for the costs of inspecting and testing pasteurization equipment in accordance with national food safety standards. Revenues from the dairy protection program's fee structure are not currently able to provide the resources required to oversee Colorado's rapidly growing dairy industry.

Colorado's dairy industry production has increased over 70% in the last ten years, to over 5.5 billion pounds per year. The size and complexity of today's milk processing plants have advanced dramatically in Colorado over the past twenty years. While Colorado milk plants have grown and continuously add more milk pasteurization equipment, the fees for milk plants have not been adjusted since 2009, resulting in a \$400,000 shortfall in cash funding for the inspection program.

Dairy industry production growth has been concentrated through the expansion of very large processing plants which require significant program resources. For example, the Leprino Foods plant in Greeley processes almost three billion pounds of milk per year. To sustain this volume requires over a dozen pasteurization units and processing equipment which must be continuously tested, repaired and recertified to meet food safety requirements. The milk program is on-call to address problems at the Greeley plant twenty-four hours per day, seven days per week, at a cost of approximately \$120,000 per year. The Greeley plant is a very large example, but Colorado currently has seven other large plants that each process over 100 million pounds of milk per year at similar proportional costs to the program.

This funding shortfall has historically been made up at the expense of other division environmental health programs. Efforts have been made over the past 35+ years to create a more balanced funding make-up between general funds and cash funds. Fees were increased in 2003 and 2009, but the split between general fund and cash funds remains disproportionate at approximately 90/10. As program needs have increased, general funds have been diverted from other division programs to the milk program to fill the gap. There is no capacity to continue to divert funding from these other programs.

The program has conducted extensive Lean process optimization over the last several years. Through this process, opportunities were identified to utilize industry resources to conduct some required inspections and certifications. CDPHE staff have trained and authorized available industry representatives to allow them to inspect milk tanker trucks and to certify dairy product samplers. As a result, industry inspectors annually complete over 250 inspections and certifications at a reduced cost to the program. Additionally, the program has pursued and received FDA grant funding to ensure full staff training for all required competencies to execute the program duties necessary to meet current and future customer needs, including advancements in robotic milking technology. The program also applies for FDA grants to purchase milk testing equipment, for both the Division of Environmental Health and Sustainability and our partners at the CDPHE Laboratory.

Proposed Solution

The Colorado Department of Public Health and Environment respectfully requests \$400,000 General Fund in FY 2022-23 and FY 2023-24. The solution will allow CDPHE to sustain the 5.1 FTE necessary to continue operations as a program with a theory-informed level of effectiveness, to complete the required program functions to meet national food safety standards and allow Colorado’s milk and dairy products to continue to move freely in interstate commerce. This will include continuation of program staff travel of approximately 50,000 miles per year to perform over 1,250 inspections, 220 water samples, and over 1,700 milk samples annually across the entirety of the industry.

Success will be determined by the sustaining of uninterrupted flow of milk and milk products produced in Colorado entering interstate commerce and confirmed through triennial program reviews performed by FDA.

Theory of Change	Proper funding of the milk program will ensure Colorado’s \$4.6 billion industry continues to flourish.
Program Objective	Provide the necessary regulatory oversight of the dairy industry so that their products may move freely within Colorado, in interstate commerce, and even into international markets.
Outputs being measured	Continue conducting over 1,250 milk and dairy inspections and collecting almost 2,000 regulatory samples annually.
Outcomes being measured	Permit the processing of 5.5 billion pounds of raw milk into a variety of milk and milk products disturbed throughout the globe by ensuring substantial regulatory compliance of the dairy industry in Colorado.
Cost/Benefit ratio	The expected annual cost of approximately \$400,000 annually will yield the benefit of sustaining and growing Colorado’s \$4.6 billion milk and dairy industry.

Evaluations	Pre-Post	Quasi-Experimental Design	Randomized Control Trial
Results of Evaluation	<p>Pre: Prior to 2017, program funding was deficient and operations had not been optimized. A 3-year Lean optimization evaluation identified proper operational practices and resource needs. To meet these required funding needs, general funds from other division EH programs has been redirected to the milk program.</p> <p>Post: Since optimizing the program and providing sufficient funding, the program operates in an effective and efficient manner and meets all FDA Cooperative program requirements.</p>		
Continuum Level	Step 3		

Without the requested increase, the program will not meet inspection and testing demands. As a result, resources and services within the dairy protection program will decline. Milk processing delays, shut-downs and the dumping of milk may ensue. Milk and dairy production capacity in Colorado will be reduced and often interrupted. Processing plants will not be able to make timely processing adjustments like those required during the current COVID-19 pandemic, which have averted the need to dump millions of gallons of milk due to processing capacity constraints.

Pasteurization equipment that is taken out of service for routine maintenance or as the result of operational failures will sit idle until CDPHE inspectors are available to certify the equipment as safe to return to service. Because the supply of milk (cow production) cannot be stopped or slowed, any interruption to milk plants' ability to process milk causes raw milk supplies to grow beyond storage capacities. Excess raw milk must be dumped at a significant financial loss to dairy plants and dairy farmers in Colorado and increases costs to the consumers. If milk plants resume pasteurization without equipment certification by CDPHE inspectors, the dairy products produced are subject to federal embargo, additional lab testing, potential mandatory destruction, and food safety recalls, all of which create substantial financial impacts to the entire continuum of the milk industry from farm through the plant.

Anticipated Outcomes

Program outputs are anticipated to remain consistent at around 1,250 inspection/equipment tests annually. Measures of success will be demonstrated using the Division of Environmental Health and Sustainability existing data system to monitor dairy plant inspections, dairy farm inspections, tanker inspections, hauler inspections, lab sampler certifications, equipment tests, broken seal repairs, compliance assurance, and

enforcement cases. Continuous operation of Colorado’s milk and dairy industry without interruptions caused by insufficient resources as well as compliant program assessment during FDA triennial review are the intended outcomes. The proposal will enable the dairy protection program to ensure that Colorado’s \$4.6 billion milk and dairy industry complies with national requirements so that safe milk and dairy products move freely through interstate commerce. The expected return on investment is sustaining and growing the \$4.6 billion milk and dairy industry in Colorado.

The current redirection of general funds to support the milk program at the expense of other general funded environmental health programs (e.g. childcare, schools and other food safety programs) is no longer viable. While the Department is evaluating other means of sustainable funding, additional general funds are needed in the interim to maintain the current effectiveness of the milk program for Colorado’s rapidly growing milk industry.

Assumptions and Calculations

Dairy Protection Program costs (existing program and FTE)

GENERAL FUND				
FTE Required	EPS II	1.6		\$ 156,076.80
	EPS IV	0.34		\$ 48,364.32
Total Operating				\$11,389
			Total Direct Costs	\$ 215,830
			Division Indirect (4.15%)	\$ 8,956.96
			Total Costs	\$ 224,787.38
CASH FUNDS				
FTE Required	EPS II	2.8		\$ 273,134.40
	EPS IV	0.35		\$ 49,786.80
Total Operating				\$25,918
			Total Direct Costs	\$ 348,839
			Division Indirect (4.15%)	\$ 14,476.82

			Department Indirect (19.6%)	\$ 68,372.45
			Total Costs	\$ 431,688.31
			Total Program FTE	5.1
			Total Program Costs	\$ 656,475.69
			Continued GF Funding	\$ 225,000.00
			Continued Cash Revenue (non plant-related)	\$ 33,700.00
			Total Continued Funding	\$ 258,700.00
			Necessary General Fund Increase	\$(397,775.69)
			Necessary GF Increase (Rounded Up)	\$(400,000)

Supplemental, 1331 Supplemental or Budget Amendment Criteria

N/A

Department of Public Health and Environment

Funding Request for the FY 2022-23 Budget Cycle

Request Title

R-03 Colorado General Licensure Health Facility Protection

Dept. Approval By: _____

Viktor Bojilov

Supplemental FY 2021-22

OSPB Approval By: _____

Budget Amendment FY 2022-23

X

Change Request FY 2022-23

Summary Information	Fund	FY 2021-22		FY 2022-23		FY 2023-24
		Initial Appropriation	Supplemental Request	Base Request	Change Request	Continuation
	Total	\$0	\$0	\$0	\$500,000	\$500,000
	FTE	0.0	0.0	0.0	0.0	0.0
Total of All Line Items Impacted by Change Request	GF	\$0	\$0	\$0	\$500,000	\$500,000
	CF	\$0	\$0	\$0	\$0	\$0
	RF	\$0	\$0	\$0	\$0	\$0
	FF	\$0	\$0	\$0	\$0	\$0

Line Item Information	Fund	FY 2021-22		FY 2022-23		FY 2023-24
		Initial Appropriation	Supplemental Request	Base Request	Change Request	Continuation
	Total	\$0	\$0	\$0	\$500,000	\$500,000
10. Health Facilities and Emergency Medical Services, (B) Health Facilities Program, (1) Health Facilities Program - Appropriation to the Health Facilities General Licensure CF	FTE	0.0	0.0	0.0	0.0	0.0
	GF	\$0	\$0	\$0	\$500,000	\$500,000
	CF	\$0	\$0	\$0	\$0	\$0
	RF	\$0	\$0	\$0	\$0	\$0
	FF	\$0	\$0	\$0	\$0	\$0

Auxiliary Data

Requires Legislation? NO

Type of Request? Public Health and Environment Prioritized Request

Interagency Approval or Related Schedule 13s:

No Other Agency Impact



Department Priority: R-03
Request Detail: Colorado General Licensure Health Facility Protection

Summary of Funding Change for FY 2022-23			
		Incremental Change	
	FY 2021-22 Appropriation	FY 2022-23 Request	FY 2023-24 Request
Total Funds	\$0	\$500,000	\$500,000
FTE	0.0	0.0	0.0
General Fund	\$0	\$500,000	\$500,000
Cash Funds	\$0	\$0	\$0
Reappropriated Funds	\$0	\$0	\$0
Federal Funds	\$0	\$0	\$0

Summary of Request

The Colorado Department of Public Health & Environment respectfully requests an appropriation of \$500,000 General Fund to the General Licensure Cash Fund in FY22-23 and FY23-24. The General Licensure Cash Fund is used to cover division expenses for several different types of facilities, including but not limited to, hospitals, nursing facilities, ambulatory surgical centers, and birth centers. The requested resources will allow the Division to ensure that health facilities are following state regulations for the care and treatment of patients, residents and clients. The division not only surveys (inspects) health facilities to ensure compliance, but also provides technical assistance to the facility staff to help them understand how to implement the regulations in day to day procedures. The Division has made a number of efforts to ease provider burden and focused on increasing efficiency and managing workload within current resources. Without continued options for operational efficiency, the Division is requesting General Fund resources in order to maintain current service levels without increasing the burden on providers during Colorado’s recovery from the COVID-19 pandemic.

Current Program

The Health Facilities and Emergency Medical Services Division (HFEMSD) regulates a variety of health care facilities to ensure that the care provided to residents, patients and clients meet state and federal minimum requirements. The division is funded by cash funds, federal funds (Medicare), reappropriated funds (Medicaid) and a small amount of the General Fund. The state requirements are enforced through a licensing process and facilities pay a licensing fee to obtain their required license to operate. The federal regulations are enforced via Medicaid and Medicare funding and certification of facilities. Certification allows a facility to bill Medicaid and Medicare for the services they provide to individuals. The HFEMSD recommends certification of a facility for Medicaid and Medicare to the federal Centers for Medicare and Medicaid Services and to Health Care Policy and Financing.

In the 2012 legislative session, a statute was passed that limited fee increases for this fund to the Denver, Lakewood, Aurora Consumer Price Index (CPI). The division did increase fees by the CPI in 2019 and 2020, however was unable to increase the fees in 2021 due to constraints of the pandemic.

The division has a statutory obligation to regulate health care facilities and the statute further defines that the program be funded from the cash fund. The General Licensure Cash Fund is used to cover division expenses for several different types of facilities, including but not limited to, hospitals, nursing facilities, ambulatory surgical centers, and birth centers. Apart from the two years of CPI increases, the cash fund fee levels have not been increased since 2012 or earlier. The division has, over the years, streamlined regulatory processes to ensure efficient delivery of services. In FY 2020-21 the division was able to use federal coronavirus funds to pay appropriate expenditures which alleviated some of the pressure on this cash fund. However, the division has utilized all options for cutting costs and is now requesting General Fund resources.

To exacerbate the problem, the division has faced a problem for several years of being able to recruit and retain nurses, because the salary for nurses in the clinical setting outweighs the state's compensation rate for these staff. The division does currently offer a higher salary for nurses than a generalist in the health facilities compliance surveyor positions, however, this higher salary has not been consistent in attracting and retaining nurses. The division continues to work on ways to increase the attractiveness of these positions, however there are significant issues that continue to be a detriment, such as low salaries and the extensive travel required.

Problem or Opportunity

The General Licensure Cash fund is the primary cash fund that supports the regulation of over 15 facility types for the division. In 2012, statute was changed to prohibit any fee

increases above the consumer price index of the Denver, Lakewood, and Aurora market. At the time, the division had a significant excess fund balance in that fund, and thus did not request CPI increases until July 2019. The division managed operations by streamlining processes, holding vacancies and utilizing fund balance.

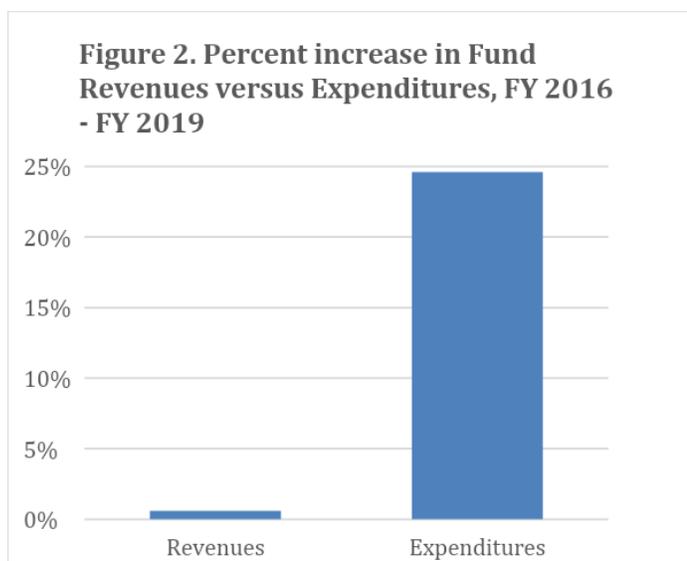
CPI fee increases were approved by the Board of Health for July 1, 2019 and July 1, 2020. CPI increases generally range from 1 to 4%. The 2019 and 2020 fee increases are estimated to have generated approximately \$60,000 in additional revenue each year. A CPI increase for July 1, 2021 was not requested due to the pandemic and, due to the ongoing impact of the pandemic, the Division does not plan to pursue an increase for July 1, 2022. Current estimates show the fund balance falling below \$0 for FY21-22 and beyond.

The Fund is intended to cover the Division's costs for all facility types other than assisted living residences, behavioral health entities, and home care agencies which have separate funds and revenue. The General Licensure Fund includes hospitals, psychiatric hospitals, rehabilitation hospitals, hospital units, nursing facilities, facilities for persons with developmental disabilities, community clinics, dialysis treatment centers, ambulatory surgical centers, hospices, and birth centers.

The Division has made a number of efforts to ease provider burden and focused on increasing efficiency and managing workload within current resources. However, even with the Division's internal efforts, expenditures have been increasing steadily without a corresponding increase in revenue. The fund balance is nearly exhausted and was well below the statutory requirement of the 16.5% fund balance cap in the fund as of June 30, 2021.

Current State of the General Licensure Fund

Over the last several years, the fund balance has been declining and expenditures have been increasing. Despite every operational effort, from FY 2016 to FY 2019, revenues increased by 0.6% while expenditures from the fund increased by 24.6% (see Figure 2)



The leading causes of rising expenditures include:

- General inflationary increases in personnel and travel costs;
- Nursing shortages creating difficulties in hiring and retaining nurse surveyors due to the ability of nurses to find higher salaries in the private sector; and
- Extraordinary growth in complaint numbers that is driving additional workload. For example, between FY 2016 and FY 2018, the number of

facilities increased by 2.2% while the number of complaints increased by 67%.

The Division currently relies on facility fees to support its licensing work. Facilities are in constant flux - opening, closing, changing owners, merging, and shifting in response to business decisions and needs in the healthcare field. With this in mind, revenue is highly variable from year to year and difficult to predict.

During FY 2018-19, the Division requested the Board of Health approve its first CPI-based fee increase of 3.18% for all fees paid into the Fund. The increase was approved and took effect for FY 2019-20. This fee increase is estimated to have generated \$66,850 in additional revenue for the Fund. However, this amount is not sufficient to offset the increased expenditures. The Division contemplated a CPI-based fee increase of 1.2872% for FY 2020-21, but, due to the pandemic, the decision was made not to move forward.

Because of insufficient revenue, and difficulty in hiring, the division has a number of vacant surveyor positions at a time when it is more important than ever that facilities have technical support and oversight. As an illustration of the need, between FY 2016 and FY 2018, the number of facilities increased by 2.2% while the number of complaints increased by 67%.

Proposed Solution

The Colorado Department of Public Health & Environment respectfully requests an appropriation of \$500,000 General Fund to the General Licensure Cash Fund in FY 22-23 and FY 23-24, to sustain critical technical assistance, oversight and enforcement activities for covered health facilities for the next two years. This is critical to ensuring that health facilities are following state regulations for the care and treatment of patients, residents and clients. The division not only surveys (inspects) health facilities to ensure compliance, but also provides technical assistance to the facility staff to help them understand how to implement the regulations in day to day procedures. Infection control violations are among the most common violations cited during surveys/inspections. Additionally, the volume of complaints associated with infection control issues has significantly increased since the beginning of the pandemic. This illustrates the critical role trained, experienced surveyors play in protecting the health and wellbeing of patients, residents and clients.

This request supports Department Wildly Important Goal (WIG) 5. Department WIG 5-reduce Colorado's suicide rate: the General Licensure fund supports regulation and technical assistance for hospitals, psychiatric hospitals, community clinics and free standing emergency departments that serve individuals with behavioral health issues and individuals experiencing behavioral health crises. Without a fee increase, the Division will not have sufficient funding to staff critical technical assistance, inspection, complaint

investigation, and enforcement activities necessary to protect individuals and ensure the highest quality services to behavioral health patients and clients. These facilities are key partners in reducing Colorado’s suicide rate and therefore the Health Facilities Division needs adequate resources to perform the regulatory functions necessary to ensure the highest quality of care.

Department WIG 9-achieve and maintain an R (effective reproductive number) of less than one: the General Licensure fund supports regulation and technical assistance for hospitals, community clinics, nursing homes, and other health facilities that have played a critical role and been significant areas of concern for the pandemic. Health Facilities’ surveyors played a critical role in responding to outbreaks and educating staff who were responding to the pandemic and caring for some of the hardest hit COVID patients. As we move into the next phase of the COVID response, Health Facilities’ staff will continue to play a critical role in education, investigation, and response to reduce the spread of COVID 19 and respond to outbreaks in health facilities across the state. Without a fee increase, the Division will not have sufficient funding to maintain the staffing necessary to continue its essential work in ensuring our hospitals, nursing homes, and other health facilities provide the best care to patients and residents.

Division WIG 1- Fiscal health: Having sufficient cash fund revenue to support the work. Currently, the division is facing a situation where the cash fund balances have been used for the last several years as expenditures have exceeded revenues. Since, in the current climate, fee increases are not practical, General Fund is being requested for two years to sustain the work of the program. The Division will revisit the fee issue next year when fee increases may be more viable. If fee increases are deemed to be viable, the Division will engage in an extensive stakeholder process to establish the new fees. That stakeholder process, taken with the Board of Health review and approval process, means that fee increases would not go into effect until July of 2024. Therefore, the Department is requesting General Fund support to sustain the Program for FY 2022-23 and FY 2023-24.

If this request is denied, the Division will have to continue to hold positions vacant. Fewer surveyors means reduced technical assistance, oversight, and enforcement. This reduction of effort will increase risk to patient and consumer safety at a time when Colorodans are depending on the health care system more than ever.

Theory of Change	The requested resources will allow the continuation of the program while avoiding the negative impacts associated with a fee increase.
Program Objective	Provide oversight and licensure of health facilities in the state to ensure quality of care.
Outputs being measured	Number of surveys completed

Outcomes being measured	Identification of deficiencies, where facilities are not meeting regulations.		
Cost/Benefit ratio	It is difficult to quantify the cost benefit of lives saved or suffering prevented.		
Evaluations	Pre-Post	Quasi-Experimental Design	Randomized Control Trial
Results of Evaluation	N/A	N/A	N/A
Continuum Level	Step 2		

Anticipated Outcomes

The division anticipates being able to maintain the same level of support to health facilities as currently practiced. Additionally, the level of support may increase, particularly if the additional appropriation aids in the recruitment and retention of nurses that will further fill vacancies and be able to provide additional support to facilities.

While the division is in a primarily regulatory oversight role with the health facilities, this does not mean that the relationship between division staff and the facility staff is adversarial. The philosophy of the division is to develop partnerships with the facilities to help them provide the type of care that meets regulations. This is done through collaboration, problem solving and technical assistance. The division does not want to enforce regulations without helping facility staff understand how to meet the regulations and giving them a chance to correct issues. However, if a facility continues to disregard regulations, enforcement actions will be taken.

Assumptions and Calculations

N/A

Supplemental, 1331 Supplemental or Budget Amendment Criteria

N/A

Department of Public Health and Environment

Funding Request for the FY 2022-23 Budget Cycle

Request Title

R-04 Emergency Medical and Trauma Services Support

Dept. Approval By:

Viktor Bojilov

Supplemental FY 2021-22

OSPB Approval By:

Budget Amendment FY 2022-23

X

Change Request FY 2022-23

Summary Information	Fund	FY 2021-22		FY 2022-23		FY 2023-24
		Initial Appropriation	Supplemental Request	Base Request	Change Request	Continuation
	Total	\$0	\$0	\$0	\$2,000,000	\$0
	FTE	0.0	0.0	0.0	0.0	0.0
Total of All Line Items Impacted by Change Request	GF	\$0	\$0	\$0	\$2,000,000	\$0
	CF	\$0	\$0	\$0	\$0	\$0
	RF	\$0	\$0	\$0	\$0	\$0
	FF	\$0	\$0	\$0	\$0	\$0

Line Item Information	Fund	FY 2021-22		FY 2022-23		FY 2023-24
		Initial Appropriation	Supplemental Request	Base Request	Change Request	Continuation
	Total	\$0	\$0	\$0	\$2,000,000	\$0
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 - Appropriation to the Emergency Medical Services Account	GF	\$0	\$0	\$0	\$2,000,000	\$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?

Public Health and Environment
Prioritized Request

Interagency Approval or
Related Schedule 13s:

No Other Agency Impact



Department Priority: R-04
Request Detail: Emergency Medical & Trauma Services Program Support

Summary of Funding Change for FY 2022-23			
		Incremental Change	
	FY 2021-22 Appropriation	FY 2022-23 Request	FY 2023-24 Request
Total Funds	\$0	\$2,000,000	\$0
FTE	0.0	0.0	0.0
General Fund	\$0	\$2,000,000	\$0
Cash Funds	\$0	\$0	\$0
Reappropriated Funds	\$0	\$0	\$0
Federal Funds	\$0	\$0	\$0

Summary of Request

The Colorado Department of Public Health and Environment (CDPHE) respectfully requests a one-time appropriation of \$2,000,000 from the General Fund to the Emergency Medical Services subaccount in the Highway Users Tax Fund in FY 2022-23. The Emergency Medical and Trauma Services Provider Grants Program (EMTS Grants) provides grants across the state to EMTS agencies, hospitals and other health care facilities that serve a wide variety of people in need of emergency care. Grants are used to purchase vital equipment such as ambulances and subsidize personnel for local EMTS providers and emergency departments. Some of the smaller or rural agencies and hospitals may not be able to afford a new ambulance, medical or rescue equipment or personnel without the assistance of the grant program.

Current Program

Colorado residents currently pay a \$2.00 fee as part of their motor vehicle registrations. The fee is deposited into the Emergency Medical Services sub account (EMS Account) of the Highway Users Tax Fund (HUTF).

The funds in the EMS Account are transferred to CDPHE Health Facilities and Emergency Medical Services Division (HFEMSD) for use in coordinating emergency medical and trauma services across the state.

The EMS Provider Grant Program serves emergency medical and trauma service provider agencies as well as Coloradans and visitors who need emergency medical services. The EMS grants are distributed statewide for emergency medical and trauma service providers to purchase equipment, such as ambulances, stretchers, and heart monitors. Funds also support the cost of personnel, injury prevention and other projects to improve emergency medical and trauma services.

Since the program's inception, the HUTF funding has been a vital mechanism to sustain Colorado's emergency medical and trauma services system, especially in rural and frontier communities. The HUTF funds provide funding for Colorado's RETACs, a primary source of grants to fund EMS and trauma education, and a key source of funding to maintain critical EMS and trauma infrastructure in rural and frontier counties.

Annually, HUTF funds are designated to support grants administered under the Colorado Resource for EMS and Trauma Education (CREATE) grant program. In rural and frontier counties, many EMS services are staffed by volunteers with limited access to educational programs. Likewise, rural hospital personnel have limited access to trauma education. The CREATE program helps increase access to education for both EMS and hospital personnel. In FY 2019-20, the CREATE grant program provided \$500,000 from the HUTF. The funding not only increases access to high quality education for individuals, but the funds also help ensure long-term sustainability of EMS and trauma education programs. In 2020, 99% of graduates from Colorado's paramedic programs passed the national board certification exam (compared to an 85% national pass rate).

S.B. 19-065 created the Peer Assistance Program for EMS providers. The EMS Peer Assistance program is available to any of the approximately 19,000 licensed or certified EMS providers in the state of Colorado. The goal of the Peer Assistance program is to provide support to EMS providers who are struggling with physical, mental or behavioral health issues.

The EMS account also provides financial support for the operation of the RETACs. The 11 RETACs provide regional planning and coordination services for the emergency medical and trauma service provider agencies in the counties the RETACs represent. Emergency medical and trauma services are provided by hundreds of response agencies and facilities across the state.

RETACs work with the different disciplines in an area to coordinate the continuum of patient care from system access through tertiary care. RETACs are governed by a council selected by the counties that comprise the region. Most RETACs have a single staff member, although one region has added clerical support, and two RETACs in southern Colorado share a coordinator. The regional coordinator is constantly engaged in meetings to plan and coordinate the system or provide technical assistance to local agencies or facilities. The governing councils regularly meet on a quarterly or bi-monthly basis, depending on the region.

The chart below shows typical grants made by region across the state.

Region	2015-16	2016-17	2017-18	2018-19	Total
Central Mountains	\$644,314.32	\$492,028.01	\$849,809.74	\$563,409.07	\$2,549,561.14
Foothills	\$122,783.84	\$382,922.14	\$295,459.21	\$1,080,321.20	\$1,881,486.39
Mile-High	\$732,631.93	\$577,933.55	\$1,044,068.97	\$805,611.45	\$3,160,245.90
Northeast Colorado	\$740,320.50	\$378,367.65	\$307,966.32	\$898,005.96	\$2,324,660.43
Northwest	\$54,831.80	\$306,075.20	\$992,963.73	\$682,930.81	\$2,036,801.54
Plains to Peaks	\$824,860.17	\$1,366,848.46	\$799,377.93	\$869,754.33	\$3,860,840.89
San Luis Valley	\$1,317,556.03	\$1,618,360.39	\$382,385.99	\$293,644.61	\$3,611,947.02
Southeast Colorado	\$172,864.64	\$717,027.24	\$284,569.07	\$468,262.83	\$1,642,723.78
Southern Colorado	\$632,360.13	\$235,727.47	\$816,846.95	\$297,389.07	\$1,982,323.62
Southwest	\$143,247.80	\$610,844.01	\$571,983.42	\$405,369.75	\$1,731,444.98
Western	\$580,312.51	\$329,303.73	\$520,821.16	\$532,624.81	\$1,963,062.21
(blank)		\$167,679.97	\$372,809.73	\$495,558.25	\$1,036,047.95
Grand Total	\$5,966,083.67	\$7,183,117.82	\$7,239,062.22	\$7,392,882.14	\$27,781,145.85

Problem or Opportunity

The current balance of the EMS subaccount is inadequate to meet the needs of the statewide emergency medical and trauma services system, the facilities and agencies, and the individuals they serve.

There have been several recent changes that have impacted the EMS Account.

- A new computer system was implemented at the Department of Revenue and the related re-interpretation of which types of vehicles should be paying the EMS fee has led to the EMS registration fee not being charged for certain types of registrations. This change led

to an unexpected \$1.6 million decrease in EMS Account revenues in FY 2018-19. It is expected that the lower revenue will continue indefinitely.

- S.B. 19-065 established the Peer Assistance program for EMS providers. Per the legislation, EMS providers pay \$2.55 upon application and per certification renewal (every three years), generating approximately \$16,150 in revenue, while it costs more than \$400,000 to administer the program and purchase services from peer assistance providers. The EMS Account has been funding the program, which has further constrained the funding available for the grant program.
- Additionally, vehicle sales fell significantly during the pandemic and have not returned to pre-pandemic levels. This has also resulted in a reduction in revenue to the EMS Account.

The department has had to restrict the grants being issued. Inadequate funding for grants has adversely impacted local emergency medical and trauma services providers and the individuals they serve. The demand for grant funding has consistently outpaced the amount available for awards. In FY 2020-21, applications requested \$1.7 million more than was available and twenty projects could not be funded. Five of the unfunded projects were ambulances to serve communities in rural parts of the state. In FY 2019-20, requests surpassed awards by \$1.6 million and 29 projects did not receive funds; again, five ambulances to serve rural communities were not funded.

The Peer Assistance program is an underfunded mandate on the EMS system. Currently, the division is covering the costs of the program from the provider grant line which further reduces available grants for provider agencies. The Peer Assistance program is available to and potentially benefits all providers; therefore, it was deemed to be a necessary and appropriate use of the grant funding.

Currently, \$1,785,000 is distributed to the 11 RETACs based on a statutory formula of \$75,000 per RETAC and an additional \$15,000 per county in the RETAC. The statutory amount has remained the same since 2000, while the consumer price index (CPI) from 2000 to 2019 increased by 54.14%. If the current statutory funding of \$1,785,000 was adjusted to reflect increases in the CPI since 2000, the amount distributed to RETACs would increase by \$966,399, to a total of \$2,751,399.

These various demands and constraints on the EMS funding stream means that funds available to assist EMS provider agencies are inadequate to meet the need. This lack of funding, in turn, means individuals in need of emergency medical services may not get the care they need.

Proposed Solution

The Colorado Department of Public Health and Environment (CDPHE) respectfully requests a one-time appropriation of \$2,000,000 from the General Fund to the Emergency Medical Services subaccount in the Highway Users Tax Fund in FY 2022-23. The requested resources will

allow the program to maintain grant funding at 2018 levels as well as provide a supplemental funding source for the Peer Assistance program and increased funding to RETACs. Without the requested resources, there will be a variety of consequences in communities as each EMS agency and community has different needs. Lack of equipment and training can literally mean the difference between life and death for individuals in need of emergency medical services. The department believes that reduced EMS grant funding poses a serious threat to public health and safety. Therefore, continuing to reduce grant funding is not a viable option.

Strengthening the EMS system in Colorado supports the Governor's WIP 1– a cohesive economic development plan for rural Colorado, Department WIG 5 – reduce Colorado's suicide rate, Department WIG 9 – achieve and maintain an R# of less than 1, and Department WIG 11 – advancing operational excellence.

The proposed solution directly relates to the division's strategic plan and the WIG of ensuring financial stability of the division.

Governor's Office WIG-Tax 1 – a cohesive economic development plan for rural Colorado: Having a robust health care infrastructure, which includes reliable and responsive emergency medical and trauma services, is essential for economic vitality, resilience and stability; all goals of Governor's WIP 1.

Department WIG 5 – reduce Colorado's suicide rate: The Health Facilities EMS program supports local EMS providers who are frequently first responders to suicide attempts and other behavioral health crises. EMS provider intervention is often essential to saving the lives of individuals who have attempted to take their own lives. The training and equipment, such as ambulances, funded through the EMS grant program and the Regional Emergency Medical and Trauma Councils (RETACs) are on the front lines of suicide response. EMS providers literally make the difference between life and death when an individual has attempted suicide. EMS providers are often also essential to transporting individuals who are experiencing a behavioral health crisis to get the care they need to avoid a suicide attempt or other harm. EMS agencies and providers are critical partners and first responders on the front lines of the behavioral health crisis. Without the requested resources, local EMS agencies will be denied training and equipment necessary to save lives.

Department WIG 9 – EMS providers have been key players on the front lines of responding to COVID 19, transporting patients in crisis, performing COVID tests, and providing vaccinations. As we move into the next phase of the COVID response, local EMS providers and agencies will undoubtedly continue to be important to the ongoing COVID response. Without training and equipment, which is supported through the EMS grant program and RETACs, EMS providers and agencies will not be adequately prepared to continue to support the COVID response efforts.

Department WIG 11 – Advancing operational excellence: The EMS program supports systems and data collection efforts that are essential to state and local government emergency response efforts. The HUTF funding is the sole source of funding for Colorado's digital platforms for Emergency Medical and Trauma Services, including the provision of the following:

- A statewide electronic patient care report (ePCRs) form for EMS personnel;
- A statewide data repository for EMS ePCRs;
- A statewide data repository for hospital trauma records; and
- An online certification and license processing system for EMS personnel, air ambulances, and hospital trauma designations.

The requested increase will help to achieve the WIG 1 goal of a cohesive economic development plan for rural Colorado, the Department WIG 5 goal of reducing the suicide rate, the Department WIG 9 goal of achieving and maintaining an R of less than 1, and the Department WIG 11 goal of advancing operational excellence. Additionally, consistent with Division WIG 1, the solution will increase the available funding and number of grants for EMS and trauma agencies.

The EMS Program collects a variety of data including the number of grants applied for and approved.

The solution will be successful if more grant funding is available to EMS and trauma agencies so that EMS and trauma agencies can continue to be an essential component of Colorado's health care system.

Additionally, the solution will be a success if more EMS and trauma providers use the Peer Assistance program and the suicide rate decreases among this population.

The return on investment is measured in lives saved which cannot be quantified.

This request is critical to maintaining the grant program that emergency medical and trauma services agencies rely on to fund essential equipment, training and other needs necessary to effectively respond to and care for people injured or experiencing a medical emergency in Colorado.

Enhancing the wellbeing of EMS providers is key to maintaining an effective emergency medical response system and thus using EMS Account funds is appropriate.

RETAC funding has not been increased since the inception of the funding in 2000.

This request will benefit other state departments such as the Department of Public Safety and the Department of Transportation, as EMS agencies are often essential partners in responding to emergencies such as vehicle accidents and violent crimes. Additionally, EMS agencies are critical resources to local communities and local governments often provide EMS services. The EMS grant program is an important resource for these agencies to meet their equipment, training and other needs.

This request does not include any changes to staffing or FTE. While grant funding has decreased, the overall workload is not significantly reduced. Applications for grants still need

to be collected, reviewed, scored and, when contracts are awarded, monitored for appropriate completion of the project. The marginal decrease in workload coincided with the onset of the global pandemic and allowed staff to redirect their efforts to revise business processes required to implement the governor’s emergency public health orders. Staff time that otherwise would have been utilized on grants has been redirected to other branch activities.

Theory of Change	The program is not changing. The General Fund will allow the continuation of the program in the absence of a fee increase.		
Program Objective	Provide grants to local emergency and trauma service agencies for equipment and personnel.		
Outputs being measured	Number of grants awarded and total dollars awarded.		
Outcomes being measured			
Cost/Benefit ratio	It is difficult to quantify the cost benefit of lives saved or suffering and injury reduced.		
Evaluations	Pre-Post	Quasi-Experimental Design	Randomized Control Trial
Results of Evaluation	N/A	N/A	N/A
Continuum Level	Step 2		

Anticipated Outcomes

The department will be able to increase grant awards for the funding cycle that begins in July of 2023. Grant applications are due by February 15 and awards are available in July. The program will continue to track the number of grants requested and awarded with the goal of returning to the 2018 grant award levels.

Assumptions and Calculations

N/A

Supplemental, 1331 Supplemental or Budget Amendment Criteria

N/A

Department of Public Health and Environment

Funding Request for the FY 2022-23 Budget Cycle

Request Title

R-05 Administrative Division Policy Staff

Dept. Approval By: Viktor Bojilov _____ Supplemental FY 2021-22
 OSPB Approval By: _____ Budget Amendment FY 2022-23
 X _____ Change Request FY 2022-23

Summary Information	Fund	FY 2021-22		FY 2022-23		FY 2023-24
		Initial Appropriation	Supplemental Request	Base Request	Change Request	Continuation
Total		\$40,005,499	\$0	\$48,115,138	\$357,580	\$357,580
FTE		81.2	0.0	81.2	3.0	3.0
Total of All Line Items Impacted by Change Request	GF	\$5,836,679	\$0	\$9,239,256	\$0	\$0
	CF	\$10,680,818	\$0	\$11,256,647	\$0	\$0
	RF	\$12,334,549	\$0	\$12,725,449	\$357,580	\$357,580
	FF	\$11,153,453	\$0	\$14,893,786	\$0	\$0

Line Item Information	Fund	FY 2021-22		FY 2022-23		FY 2023-24
		Initial Appropriation	Supplemental Request	Base Request	Change Request	Continuation
Total		\$9,160,316	\$0	\$9,518,162	\$292,182	\$292,182
FTE		81.2	0.0	81.2	3.0	3.0
01. Administration and Support, (A)	GF	\$1,688,649	\$0	\$1,746,435	\$0	\$0
Administration, (1)	CF	\$9,947	\$0	\$10,889	\$0	\$0
Administration -	RF	\$7,295,383	\$0	\$7,581,601	\$292,182	\$292,182
Personal Services	FF	\$166,337	\$0	\$179,237	\$0	\$0

Total		\$16,169,999	\$0	\$21,063,214	\$30,126	\$30,126
FTE		0.0	0.0	0.0	0.0	0.0
01. Administration and Support, (A)	GF	\$2,238,276	\$0	\$4,737,539	\$0	\$0
Administration, (1)	CF	\$6,265,528	\$0	\$6,689,551	\$0	\$0
Administration - Health, Life, and Dental	RF	\$1,606,315	\$0	\$1,658,579	\$30,126	\$30,126
	FF	\$6,059,880	\$0	\$7,977,545	\$0	\$0

Line Item Information	Fund	FY 2021-22		FY 2022-23		FY 2023-24
		Initial Appropriation	Supplemental Request	Base Request	Change Request	Continuation
	Total	\$183,318	\$0	\$227,580	\$416	\$416
	FTE	0.0	0.0	0.0	0.0	0.0
01. Administration and Support, (A)	GF	\$25,702	\$0	\$38,496	\$0	\$0
Administration, (1)	CF	\$65,921	\$0	\$68,651	\$0	\$0
Administration - Short- term Disability	RF	\$17,963	\$0	\$18,887	\$416	\$416
	FF	\$73,732	\$0	\$101,546	\$0	\$0
	Total	\$6,033,778	\$0	\$7,440,936	\$13,003	\$13,003
01. Administration and Support, (A)	FTE	0.0	0.0	0.0	0.0	0.0
Administration, (1)	GF	\$846,067	\$0	\$1,262,434	\$0	\$0
Administration - Amortization	CF	\$2,169,711	\$0	\$2,243,778	\$0	\$0
Equalization	RF	\$591,248	\$0	\$616,995	\$13,003	\$13,003
Disbursement	FF	\$2,426,752	\$0	\$3,317,729	\$0	\$0

Line Item Information	Fund	FY 2021-22		FY 2022-23		FY 2023-24
		Initial Appropriation	Supplemental Request	Base Request	Change Request	Continuation
	Total	\$6,033,778	\$0	\$7,440,936	\$13,003	\$13,003
01. Administration and Support, (A)	FTE	0.0	0.0	0.0	0.0	0.0
Administration, (1)	GF	\$846,067	\$0	\$1,262,434	\$0	\$0
Administration - Supplemental	CF	\$2,169,711	\$0	\$2,243,778	\$0	\$0
Amortization	RF	\$591,248	\$0	\$616,995	\$13,003	\$13,003
Equalization Disbursement	FF	\$2,426,752	\$0	\$3,317,729	\$0	\$0
	Total	\$2,424,310	\$0	\$2,424,310	\$8,850	\$8,850
	FTE	0.0	0.0	0.0	0.0	0.0
01. Administration and Support, (A)	GF	\$191,918	\$0	\$191,918	\$0	\$0
Administration, (1)	CF	\$0	\$0	\$0	\$0	\$0
Administration - Operating Expenses	RF	\$2,232,392	\$0	\$2,232,392	\$8,850	\$8,850
	FF	\$0	\$0	\$0	\$0	\$0

Auxiliary Data

Requires Legislation? NO

Type of Request? Public Health and Environment
Prioritized Request

**Interagency Approval or
Related Schedule 13s:**

No Other Agency Impact



Department Priority: R-05
Request Detail: Administrative Division Policy Staff

Summary of Funding Change for FY 2022-23			
		Incremental Change	
	FY 2021-22 Appropriation	FY 2022-23 Request	FY 2023-24 Request
Total Funds	\$40,005,499	\$357,580	\$357,580
FTE	81.2	3.0	3.0
General Fund	\$5,836,679	\$0	\$0
Cash Funds	\$10,680,818	\$0	\$0
Reappropriated Funds	\$12,334,549	\$357,580	\$357,580
Federal Funds	\$11,153,453	\$0	\$0

Summary of Request

The Department of Public Health and Environment requests \$357,580 Reappropriated Funds from indirect cost recoveries, and 3.0 FTE, to add three new policy analyst positions within the department’s Executive Director’s Office in FY 2022-23 and future years. Recent increases in the volume and complexity of workload related to public health and environmental protection have driven the need for additional policy capacity in the Executive Director’s Office. These new FTE will play a critical role in the department’s partnerships with the Colorado General Assembly, the Governor’s Office, and federal partners to help achieve the critical goals around air and water quality, immunizations, disease prevention, and suicide reduction.

Current Program

The CDPHE Administration Division and Executive Director's Office provide administrative services in support of the department's various divisions, and also provide leadership in the areas of budget analysis, financial analysis, policy analysis, internal and external communications, legislative relations, and the management of operational performance.

For many years, the Executive Director's Office has had limited resources in the area of policy analysis, legislative relations, and associated communications. Typically, CDPHE has had only one legislative liaison representing its many public health and environmental protection programs, while policy and communications staff are largely decentralized throughout the divisions.

Problem or Opportunity

Over the course of the past decade, CDPHE's operations have increasingly come to the forefront in legislative attention, media scrutiny, and the general interest of the public. Deteriorating air quality, emerging water contaminants, the opioid crisis, concerning suicide rates, and the COVID-19 pandemic have all amplified the importance of the public policy decisions made by CDPHE's leaders, the effective communication of those policies, and the relationships CDPHE maintains with elected officials to ensure the proper implementation of those policies.

Yet, while the department's public policy reach has intensified, it has not had sufficient appropriations to ensure that a proper number of qualified, professional policy experts are in place within the Executive Director's Office to facilitate excellent decision-making, coordinate with elected officials, and notify stakeholders of critical decisions.

Proposed Solution

The department proposes adding 3.0 FTE policy experts within the CDPHE Executive Director's Office. These additional FTE will support the Executive Director and her senior staff in the following areas:

- Research and analysis of policy proposals that originate from many sources, including division staff, external stakeholder groups, boards and commissions, local public health agencies, other Executive Branch departments, and the General Assembly;
- Management of the annual legislative process, including review and analysis of bills, engagement with Legislators and Legislative Staff, information sharing, and stakeholder management;

- External communications with stakeholder groups, interest groups, and other concerned parties as it relates to rulemaking, drafting of potential legislation, and the issuance of authoritative guidance by the department; and
- Internal relationship management to ensure that programmatic needs are properly incorporated into public policy.

Theory of Change	The requested positions will enable CDPHE to proactively address current and emerging needs related to its critical goals around air and water quality, immunizations, disease prevention, and suicide reduction.		
Program Objective	Improve research and analysis of policy proposals; improve engagement and communication on the annual legislative process; improve engagement with outside stakeholder and interest groups.		
Outputs being measured			
Outcomes being measured	CDPHE's ability to effectively coordinate the many diverse interests that influence Colorado's public health and environmental protection policies.		
Cost/Benefit ratio	N/A		
Evaluations	Pre-Post	Quasi-Experimental Design	Randomized Control Trial
Results of Evaluation	N/A	N/A	N/A
Continuum Level	Step 1: Program Design		

Anticipated Outcomes

CDPHE will increase its engagement with elected officials and the community on high priority policies such as air and water quality, the opioid crisis, suicide prevention, and the COVID-19 pandemic. CDPHE will also gain capacity to build holistic policy solutions to the important decisions made by CDPHE's leaders on a daily basis. If this request is not approved, CDPHE will continue to struggle to effectively coordinate the many diverse interests that influence Colorado's public health and environmental protection policies.

Assumptions and Calculations

For the purposes of this analysis, CDPHE has assumed that it will hire three Policy Analyst VI positions.

Expenditure Detail		FY 2022-23		FY 2023-24	
Classification Title	Biweekly Salary	FTE		FTE	
POLICY ADVISOR VI ▾	\$3,334	3.0	\$260,064	3.0	\$260,064
PERA			\$28,347		\$28,347
AED			\$13,003		\$13,003
SAED			\$13,003		\$13,003
Medicare			\$3,771		\$3,771
STD			\$416		\$416
Health-Life-Dental			\$30,126		\$30,126
Subtotal Position 2, 1.0 FTE		3.0	\$348,730	3.0	\$348,730
Subtotal Personal Services		3.0	\$348,730	3.0	\$348,730
Operating Expenses:					
		FTE		FTE	
Regular FTE Operating	\$500	3.0	\$1,500	3.0	\$1,500
Telephone Expenses	\$450	3.0	\$1,350	3.0	\$1,350
PC, One-Time	\$2,000	3.0	\$6,000	3.0	\$6,000
Office Furniture, One-Time	\$5,000	0.0	\$0	-	\$0
Subtotal Operating Expenses			\$8,850		\$8,850
TOTAL REQUEST		3.0	\$357,580	3.0	\$357,580

Supplemental, 1331 Supplemental or Budget Amendment Criteria

N/A

Department of Public Health and Environment

Funding Request for the FY 2022-23 Budget Cycle

Request Title

R-06 Enterprise Phone System

Dept. Approval By: _____

Viktor Bojilov

Supplemental FY 2021-22

OSPB Approval By: _____

Budget Amendment FY 2022-23

X

Change Request FY 2022-23

Summary Information	Fund	FY 2021-22		FY 2022-23		FY 2023-24
		Initial Appropriation	Supplemental Request	Base Request	Change Request	Continuation
	Total	\$2,424,310	\$0	\$2,424,310	\$222,125	\$395,250
	FTE	0.0	0.0	0.0	0.0	0.0
Total of All Line Items Impacted by Change Request	GF	\$191,918	\$0	\$191,918	\$0	\$0
	CF	\$0	\$0	\$0	\$0	\$0
	RF	\$2,232,392	\$0	\$2,232,392	\$222,125	\$395,250
	FF	\$0	\$0	\$0	\$0	\$0

Line Item Information	Fund	FY 2021-22		FY 2022-23		FY 2023-24
		Initial Appropriation	Supplemental Request	Base Request	Change Request	Continuation
	Total	\$2,424,310	\$0	\$2,424,310	\$222,125	\$395,250
	FTE	0.0	0.0	0.0	0.0	0.0
01. Administration and Support, (A)	GF	\$191,918	\$0	\$191,918	\$0	\$0
Administration, (1)	CF	\$0	\$0	\$0	\$0	\$0
Administration - Operating Expenses	RF	\$2,232,392	\$0	\$2,232,392	\$222,125	\$395,250
	FF	\$0	\$0	\$0	\$0	\$0

Auxiliary Data

Requires Legislation? NO

Type of Request?

Public Health and Environment
Prioritized Request

Interagency Approval or
Related Schedule 13s:

Impacts Other Agency



**Department Priority: R-06
Request Detail: Enterprise Phone System**

Summary of Funding Change for FY 2022-23			
		Incremental Change	
	FY 2021-22 Appropriation	FY 2022-23 Request	FY 2023-24 Request
Total Funds	\$2,424,310	\$222,125	\$395,250
FTE	0.0	0.0	0.0
General Fund	\$191,918	\$0	\$0
Cash Funds	\$0	\$0	\$0
Reappropriated Funds	\$2,232,392	\$222,125	\$395,250
Federal Funds	\$0	\$0	\$0

Summary of Request

The Colorado Department of Public Health and Environment (CDPHE or “the department”) requests \$222,125 in Reappropriated Funds (RF) in FY 2022-23 and \$395,250 in RF in FY 2023-24 and in future years to replace the department’s phone system. Funding for this request will come from indirect cost recoveries. This request directly supports the department’s current priorities of advancing operational excellence that consistently exceed expectations: Digital Transformation and Climate Friendly Workplace. Additionally, this is critical to supporting remote work and enabling the space consolidation efforts. This request has been identified in the department’s five- year technology plan as an upcoming need since 2015. TThe ongoing request will cover costs related to the installation of a new phone system and ongoing funds for the monthly lease of the phone system service for the following CDPHE locations:

- 1) The main campus (Buildings A and B) at 4300 Cherry Creek Drive South;
- 2) The lab at Lowry;
- 3) The Pueblo office locations.

CDPHE phones at the Grand Junction office are already on MIPC so are not included in this request.

Current Program

CDPHE purchased and implemented its current phone system in 2008. The last hardware upgrade took place in June of 2017. Since that time, the phone replacement costs have been managed by the divisions. The original equipment will reach its end of life on June 30, 2023 and needs to be replaced so that the department can continue to operate. The Office of Information and Technology (OIT) has directed the department to move to the enterprise Managed IP Communications (MIPC) platform.

With the drive to move to a more remote work environment from Governor Polis’ “Reimagined State Government” effort, and the space consolidation efforts CDPHE has implemented, needs have moved to a softphone solution based on Jabber. Jabber is a part of the MIPC offering. The phone system is an infrastructure component supporting the entire department’s ability to communicate with customers. All agency staff and external customers utilizing phones at CDPHE will benefit and serve from this request because the phone system is an integral part of how CDPHE staff interact with external customers.

Problem or Opportunity

CDPHE currently has an on premise CISCO Voice Over Internet Protocol (VoIP) phone system located at the main campus and services the lab and the Pueblo offices. This system will reach end-of-life on June 30, 2023 (the end of FY 2022-23). This phone system supports approximately 1,600 individual extensions, voicemail, and some customer-facing call center functions. OIT does not plan to support phone systems in the future the way they support them for some agencies today. As agencies’ phone systems reach end of life, OIT requires agencies to transition to a standardized third-party hosted phone system that is paid for on an ongoing basis and includes, at a minimum, softphone functionality, phone number adds, moves and deletes over time, and replacement of phone handsets as they age out over time.

If the phone services lapse due to lack of support, customers’ (both internal and external) phone communications will halt and service will be interrupted and any program that relies on phone communication with the customers will be negatively impacted. This upgrade will allow the department to maintain operations and will have no effect on workload.

Proposed Solution

This request will allow CDPHE’s divisions to be able to maintain current communication methods with their customers. The cost for this solution will be \$222,125 in year one and the ongoing costs will be \$395,250. This request has been recommended as a solution from OIT (which is in line with industry standards) and will have no effect on current workload but will

alter future workload in OIT by replacing the need to support the current phone system with the need to support the enterprise solution proposed in this request. If this request is denied, the consequences will include a loss of phone service and important customer service delivery. This infrastructure request ultimately reflects upon the entire department’s performance plan and supports all departmental goals. This solution falls in line with the Opinion-based category on the evidence continuum. Other solutions that were considered but ultimately not recommended were Google Voice and MIPC with physical phones.

Implementation for this solution will take three months and begin in the summer of 2022. The implementation will include self-paced training, and an OIT network team will be available to provide technical assistance during the installation. Once installed, testing will occur to ensure that the lines are operating properly. OIT will evaluate this solution through the standard project evaluation and be measured/tracked by making sure phones are operational from wherever staff are located in the state of Colorado. Once the evaluation is completed, the solution will fall within the Theory-based category on the evidence continuum. There are no statutory changes required with this request.

Theory of Change	Not on the continuum - N/A		
Program Objective	Not on the continuum - N/A		
Outputs being measured	Not on the continuum - N/A		
Outcomes being measured	Not on the continuum - N/A		
Cost/Benefit ratio	N/A		
Evaluations	Pre-Post	Quasi-Experimental Design	Randomized Control Trial
Results of Evaluation	N/A	N/A	N/A
Continuum Level	N/A		

Anticipated Outcomes

The most notable outcome anticipated with this request is that phone systems be operational 99% of the time. OIT will collect data on uptimes to measure outcomes of this request. This solution will be successful if CDPHE staff can make and receive phone calls when needed. The return on investment of the program is the cost of the phone system vs. the service downtime. This solution has been deemed the best possible alternative after CDPHE evaluated three options to replace the current phone system. This solution is considered to be the least expensive, will take the least amount of effort to administer, and supports the space consolidation and remote work effort.

Assumptions and Calculations

Assumptions on costs were made based on discussions with OIT and vendors.

Supplemental, 1331 Supplemental or Budget Amendment Criteria

N/A

Department of Public Health and Environment

Funding Request for the FY 2022-23 Budget Cycle

Request Title

R-07 Provider Rate Increase

Dept. Approval By: _____

Viktor Bojilov

Supplemental FY 2021-22

OSPB Approval By: _____

Budget Amendment FY 2022-23

X

Change Request FY 2022-23

Summary Information	Fund	FY 2021-22		FY 2022-23		FY 2023-24
		Initial Appropriation	Supplemental Request	Base Request	Change Request	Continuation
Total		\$19,231,540	\$0	\$19,231,540	\$92,316	\$92,316
FTE		0.0	0.0	0.0	0.0	0.0
Total of All Line Items Impacted by Change Request	GF	\$7,376,182	\$0	\$17,376,182	\$73,762	\$73,762
	CF	\$1,855,358	\$0	\$1,855,358	\$18,554	\$18,554
	RF	\$0	\$0	\$0	\$0	\$0
	FF	\$10,000,000	\$0	\$0	\$0	\$0

Line Item Information	Fund	FY 2021-22		FY 2022-23		FY 2023-24
		Initial Appropriation	Supplemental Request	Base Request	Change Request	Continuation
Total		\$19,231,540	\$0	\$19,231,540	\$92,316	\$92,316
01. Administration and Support, (C) Local	FTE	0.0	0.0	0.0	0.0	0.0
Public Health Planning and Support, (1) Local	GF	\$7,376,182	\$0	\$17,376,182	\$73,762	\$73,762
Public Health Planning and Support -	CF	\$1,855,358	\$0	\$1,855,358	\$18,554	\$18,554
Distributions to Local	RF	\$0	\$0	\$0	\$0	\$0
Public Health Agencies	FF	\$10,000,000	\$0	\$0	\$0	\$0

Auxiliary Data

Requires Legislation? NO

Type of Request?

Public Health and Environment
Prioritized Request

Interagency Approval or
Related Schedule 13s:

Impacts Other Agency



Department Priority:R-07
Request Detail: Provider Rate Increase

Summary of Funding Change for FY 2022-23			
		Incremental Change	
	FY 2021-22 Appropriation	FY 2022-23 Request	FY 2023-24 Request
Total Funds	\$19,231,540	\$92,316	\$92,316
FTE	0.0	0.0	0.0
General Fund	\$7,376,182	\$73,762	\$73,762
Cash Funds	\$1,855,358	\$18,554	\$18,554
Reappropriated Funds	\$0	\$0	\$0
Federal Funds	\$10,000,000	\$0	\$0

Summary of Request

The Colorado Department of Public Health and Environment (CDPHE or “the department”) requests an increase of \$92,316 total funds to the Distributions to Local Public Health Agencies line, including \$73,762 General Fund and \$18,554 Marijuana Tax Cash Funds for FY 2022-23 and beyond to account for a provider rate increase of 1.0%, which affects the Local Public Health Agencies in the state.

Current Program

The Assessment Planning and Support Program - The Office of Public Health Practice, Planning, and Local Partnerships (previously called the Office of Planning, Partnerships and Improvement) organizes the implementation of the 2008 Public Health Act (S.B. 08-194) and manages Colorado's health assessment and planning system for local and state public health by collaborating and coordinating across the public health system. The office provides technical assistance and support to the Colorado Department of Public Health and Environment (CDPHE) and local public health agencies (LPHAs) for capacity building, assessment and planning, public health practice, performance improvement, and workforce development. Beyond providing direct technical assistance, the office organizes the sharing of local processes and documents, so agencies can learn from each other and share their work. The office staff also work as liaisons to help broker solutions and improve communications between CDPHE programs and local public health.

The office distributes General and Marijuana Tax Cash Funds to local public health agencies for core public health services infrastructure as well as assessment and planning activities, and works across multiple partners to ensure all counties across the state can provide core public health services. The office also provides some grant funding to assist with local assessment and planning activities.

Problem or Opportunity

For FY 2022-23, the Governor's Office established a community provider rate increase of 1.0%, to include the Local Public Health Agencies (LPHAs) who receive grant funds from the Department of Public Health and Environment. 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 public health in counties around Colorado.

Proposed Solution

The department requests an increase of \$92,316 total funds to the Distributions to Local Public Health Agencies line including \$73,762 General Fund and \$18,554 Marijuana Tax Cash Funds for FY 2022-23 and beyond to account for a provider rate increase of 1.0 percent. The department will allocate the additional funding to the 54 local public health agencies using the existing funding allocation formula.

Theory of Change	Investing in adequate provider rates and aligning payment with high-value services are critical components in ensuring members have sufficient access to care, that quality outcomes are achieved, and that services provided are cost effective.		
Program Objective	The objective of adjusting provider rate changes is to increase access to care and to ensure adequate reimbursement of services for providers.		
Outputs Being Measured	Quality of Care, utilization of services, member feedback, and provider feedback.		
Outcomes Being Measured	Member health, member feedback, access to services, adequacy of rates, provider network capacity, provider retention, positive member experience and increased satisfaction.		
Cost/Benefit Ratio	N/A		
Evaluations	Pre-Post	Quasi-Experimental Design	Randomized Control Trial
Results of Evaluation	Evaluation of utilization of services, provider rates, and provider network size.	N/A	N/A
Continuum Level	Step 3		

Anticipated Outcomes

With the increased funding, the department will 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 1.0% across-the-board rate increase for the (1) Administration and Support, (C) Office of Public Health Practice, Planning and Local Partnerships, Distributions to Local Public Health Agencies line item.

Supplemental, 1331 Supplemental or Budget Amendment Criteria

N/A.