

**COLORADO GENERAL ASSEMBLY
JOINT BUDGET COMMITTEE**



INTERIM SUPPLEMENTAL REQUEST FOR FY 2013-14

**DEPARTMENT OF PUBLIC HEALTH AND
ENVIRONMENT**

**JBC Working Document - Subject to Change
Staff Recommendation Does Not Represent Committee Decision**

**Prepared By:
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August 19, 2013**

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Prioritized Interim Supplemental Requests

INTERIM SUPPLEMENTAL REQUEST, DEPARTMENT PRIORITY #2 FRAPPE

	Request	Recommendation
Total	<u>\$2,000,000</u>	<u>\$2,000,000</u>
FTE	0.0	0.0
General Fund	0	540,000
Cash Funds	2,000,000	1,460,000
Federal Funds	0	0

<p>Does JBC staff believe the request satisfies the interim supplemental criteria of Section 24-75-111, C.R.S.? [The Controller may authorize an overexpenditure of the existing appropriation if it: (1) Is approved in whole or in part by the JBC; (2) Is necessary due to unforeseen circumstances arising while the General Assembly is not in session; (3) Is approved by the Office of State Planning and Budgeting (except for State, Law, Treasury, Judicial, and Legislative Departments); (4) Is approved by the Capital Development Committee, if a capital request; (5) Is consistent with all statutory provisions applicable to the program, function or purpose for which the overexpenditure is made; and (6) Does not exceed the unencumbered balance of the fund from which the overexpenditure is to be made.]</p>	YES
<p>Does JBC staff believe the request meets the Joint Budget Committee's supplemental criteria? [An emergency or act of God; a technical error in calculating the original appropriation; data that was not available when the original appropriation was made; or an unforeseen contingency.]</p>	YES
<p>JBC staff and the Department agree that (1) this request meets the interim supplemental criteria of Section 24-75-111, C.R.S., and (2) this request is the result of data that was not available when the original appropriation was made.</p>	

Department Request: The Department requests \$2,000,000 cash funds from the Stationary Sources Cash Fund for FY 2013-14, and roll-forward spending authority for FY 2014-15 to supplement local and federal funding already obtained by the National Center for Atmospheric Research for the Front Range Air Pollution and Photochemistry Experiment (FRAPPE). The \$2,000,000 will be used to modify the following equipment required for the FRAPPE:

- five aircraft-based instrumentation at \$200,000 each, for a total of \$1,000,000;
- four ground-based instrumentation at \$200,000 each, for a total of \$800,000; and
- one low altitude aircraft instrumentation at a cost of \$200,000.

Staff Recommendation: Staff recommends the Committee approve the following;

- an appropriation of \$2,000,000 total funds of which \$540,000 is General Fund and \$1,460,000 is cash funds from the Stationary Sources Cash Fund;
- the appropriation be placed in a new line item titled Front Range Air Pollution and Photochemistry Experiment so that there is a transparent record of the amount of state funds contributed to the project; and

- **the new line item include a footnote providing roll-forward spending authority for FY 2014-15 because of the timing of the project.**

Staff recommends the appropriation include General Fund because both stationary sources and mobile sources have contributed to the Front Range's air pollution problems. Based on 2010 emissions data approximately 42.0 percent of state regulated emissions in the Front Range are from stationary oil and gas sources, 31.0 percent are from other stationary sources (e.g. power plants, dry cleaners), and 27.0 are from mobile sources (e.g. lawn mowers, automobiles). Staff believes that since mobile sources account for 27.0 percent of the emissions, 27.0 percent of the project cost should be paid for by mobile sources. The AIR Account is the cash fund for the mobile sources air regulation program but has an insufficient reserve balance to pay for 27.0 percent of the costs. Therefore staff is recommending General Fund be used to pay for 27.0 percent of the cost. The AIR Account has a reserve fund balance of approximately \$967,000 which is less than the 16.5 percent targeted reserve balance of \$1,123,000 for FY 2013-14.

Additionally, since there is not a current source of funding for analysis of the data once it is collected, staff feels it is important to set forth a funding policy that fairly reflects which sources are contributing to the factors causing the need for the FRAPPE in the event the Department submits another funding request related to this issue in the future.

The rules governing interim supplementals in Section 24-75-111 (5), C.R.S., require the Committee to introduce all interim supplementals that it approves.

Staff Analysis:

Background

The National Center for Atmospheric Research located in Boulder, Colorado has submitted a proposal to the National Science Foundation for funding to perform a study on how air emissions from various sources combine with meteorological and photochemical processes to affect local and regional air quality. The funding available from the National Science Foundation will not cover the entire amount of the National Center for Atmospheric Research proposal. The National Center for Atmospheric Research requires supplemental funding from local or state sources where the study will take place in order for the project to be viable.

Despite efforts to limit emissions, the Northern Front Range regularly experiences air quality problems and continues to exceed the National Ambient Air Quality Standard for ozone on a regular basis during the summer months. The complex meteorology and the diverse mix of pollution sources present challenges with respect to characterizing, modeling and forecasting the transport of air pollution and photochemical processes contributing to local air quality. As a result, the National Center for Atmospheric Research would like to do the study on the Front Range if state moneys can be appropriated for the study by the end of August 2013. If the funding is not approved, the study will occur in another state.

If the request is approved, the National Aeronautics and Space Administration will conduct the Deriving Information on Surface Conditions from Column and Vertically Resolved Observations

Relevant to Air Quality (DISCOVER-AQ) Mission over the Front Range in conjunction with the FRAPPE. The DISCOVER-AQ Mission will bring \$7.5 million federal funds to the state.

FRAPPE

The Front Range Pollution and Photochemistry Experiment (FRAPPE) will assess how air emissions from various sources interact with the meteorological conditions of the Front Range to impact overall summertime air quality, in particular for ozone. The Department has indicated that the FRAPPE will evaluate the following factors that impact Front Range air quality:

- Meteorology and transport of pollutants;
- Local and regional sources (urban, industry, industrial, oil and gas extraction and related activities, agriculture and livestock/feeding operations, biogenic emissions, wildfires);
- Import of emissions from non-Colorado based sources; and
- Natural emissions like biogenic volatile organic compounds, nitrogen oxides, lightning, stratospheric ozone.

The FRAPPE, if funded, will occur in July 2014 and will use an airplane, in conjunction with ground-based measurements, to systematically collect air quality samples from all across the Front Range. Samples will be collected at various altitudes to understand how air quality differs at various levels of the atmosphere and how meteorological conditions like altitude, airflow, temperature impact the photochemical activities that affect air quality

DISCOVER-AQ MISSION

The DISCOVER-AQ Front Range Mission would be performed in conjunction with the FRAPPE during the 2014 summer months and will utilize two aircraft and an array of remote sensing devices to do the following:

- Relate column observations from satellites to surface concentrations for aerosols and key trace gases;
- Characterize differences throughout the day between surface and satellite observations of air pollutants; and
- Examine horizontal scales of variability affecting satellites and AQ modeling.

The National Aeronautics and Space Administration have completed DISCOVER-AQ Missions in Baltimore and the Los Angeles Basin, and there is currently one deployed in Houston. The data from these projects, when analyzed, will add to the body of knowledge in overall air quality and remote sensing of atmospheric pollutants. However, the topography and altitude of Colorado adds unique characteristics to how all factors interact and impact air quality in this region.

How the Money will be Used

The requested funds will be used by the National Center for Atmospheric Research and, universities they contract with for specific instrumentation, to modify the instrumentation so it can be used in the airplane. It is anticipated that modifications will begin in May 2014 so the instrumentation are ready for the July 2014 project date. The \$2.0 million supplements the \$1.15 million it will cost the National Center for Atmospheric Research for the

C-130 airplane, and the \$2.5 million the National Center for Atmospheric Research will provide in in-kind support of personnel, equipment and modeling capabilities.

Staff is concerned that while the request states on page 5 that the Department is not requesting funding for out years, there is not a designated source of state, federal, or local funding for analysis of the data collected. This concern is identical to the concerns staff raised during the figure setting recommendation for the Air Emission and Dispersion Study when staff question the effectiveness of funding the collection of data and not funding the analysis of said data. The estimated cost for data analysis is \$2.0 million over two years. The Department is unsure if the National Center for Atmospheric Research will require this funding from the state, and recommended the Joint Budget Committee ask the National Center for Atmospheric Research about future funding needs related to the FRAPPE.

Fee Implications

The Stationary Sources Cash Fund has a fund balance of \$6,364,761 as of June 30, 2013. However, with the use of \$2.0 million cash funds for this purpose, the Department anticipates it will need to request a fee increase during the 2015 Session to avoid potential insolvency of the Fund (the fees for this Fund are set in statute). If the \$2.0 million is not spent, the Department anticipates requesting a fee increase during the 2016 Session. The amount of the fee increase is currently unknown because of the number of different fees credited to the Stationary Source Cash Fund.

Staff inquired about industry reaction to this request and the Department indicated that while the information found from the study will be beneficial to the Department and the public, there could be some concern about such a large expenditure of funds without an opportunity for industry to provide input. Additionally, individual industrial sectors (such as the oil and gas industry) may be concerned that the study will be used to target their industry for additional regulation. Finally, there may well be industry concerns that supporting the study could lead to an earlier fee increase.

	FY 2012-13 Appropriation	FY 2013-14 Appropriation	Fiscal Year 2013-14 Interim Supplemental		
			Requested Change	Recommended Change	New Total with Recommendation
DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT					
Executive Director - Karin McGowan					
Interim Supplemental #2 - FRAPPE					
<i>(4) Air Pollution Control Division</i>					
<i>(B) Technical Services</i>					
Operating Expenses	<u>414,659</u>	<u>493,981</u>	<u>2,000,000</u>	<u>0</u>	<u>493,981</u>
Cash Funds	321,101	317,381	2,000,000	0	317,381
Federal Funds	93,558	176,600	0	0	176,600
Front Range Air Pollution and Photochemistry					
Experiment	<u>0</u>	<u>0</u>	<u>0</u>	<u>2,000,000</u>	<u>2,000,000</u>
General Fund	0	0	0	540,000	540,000
Cash Funds	0	0	0	1,460,000	1,460,000
Total for Supplemental #2	<u>414,659</u>	<u>493,981</u>	<u>2,000,000</u>	<u>2,000,000</u>	<u>2,493,981</u>
General Fund	0	0	0	540,000	540,000
Cash Funds	321,101	317,381	2,000,000	1,460,000	1,777,381
Federal Funds	93,558	176,600	0	0	176,600
Totals					
DEPARTMENT OF PUBLIC HEALTH AND ENIRONMENT					
TOTALS for ALL Departmental line items	468,216,000	524,078,332	2,000,000	2,000,000	526,078,332
FTE	<u>1,223.1</u>	<u>1,241.3</u>	<u>0.0</u>	<u>0.0</u>	<u>1,241.3</u>
General Fund	31,142,676	53,402,747	0	540,000	53,942,747
Cash Funds	159,535,405	149,737,005	2,000,000	1,460,000	151,197,005
Reappropriated Funds	31,568,086	29,677,710	0	0	29,677,710
Federal Funds	245,969,833	291,260,870	0	0	291,260,870