

COVER PAGE

Department of Transportation

FY 2016-17 CAPITAL CONSTRUCTION REQUESTS (LISTED IN OSPB PRIORITY ORDER)

RECOMMENDED FOR FUNDING BY OSPB:

- Highway Construction Projects (*on-going, unspecified projects*)

NOT RECOMMENDED FOR FUNDING BY OSPB:

- Mountain Pass Safety Improvements (*new*)
- I-70 Fall River Road Pedestrian Bridge (*new*)

TOTAL: FY 2016-17 CAPITAL CONSTRUCTION STATE-FUNDED REQUEST AMOUNT = \$3,950,503

HISTORY OF STATE FUNDING

- **\$2.5 million** has been appropriated on behalf of capital projects at the department since FY 2011-12. This represents **0.3 percent** of the total amount appropriated on behalf of all capital construction and controlled maintenance projects during this period.
- **\$0.5 million** was appropriated in **FY 2015-16**.

INVENTORY OF FACILITIES

- The inventory of department facilities totals **3,373,967 GSF**. The department has no General Fund supported facilities. This total represents **4.6 percent** of the entire inventory of state buildings.

RECENT CDC VISITS

- New Region 4 Headquarters and State Patrol Troop Office, Greeley (June 2015)

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Transportation

Mountain Pass Safety Improvements

PROGRAM PLAN STATUS

2017-028

Approved Program Plan?

Date Approved:

PRIORITY NUMBERS

Prioritized By	Priority	
Dept/Inst	1 of 2	
OSP/B	45 of 46	Not recommended for funding.

PRIOR APPROPRIATION AND REQUEST INFORMATION

<u>Fund Source</u>	<u>Prior Approp.</u>	<u>FY 2016-17</u>	<u>FY 2017-18</u>	<u>Future Requests</u>	<u>Total Cost</u>
CCF	\$0	\$2,550,675	\$0	\$0	
Total	\$0	\$2,550,675	\$0	\$0	\$2,550,675

ITEMIZED COST INFORMATION

<u>Cost Item</u>	<u>Prior Approp.</u>	<u>FY 2016-17</u>	<u>FY 2017-18</u>	<u>Future Requests</u>	<u>Total Cost</u>
Land Acquisition	\$0	\$0	\$0	\$0	\$0
Professional Services	\$0	\$0	\$0	\$0	\$0
Construction	\$0	\$548,550	\$0	\$0	\$548,550
Equipment	\$0	\$1,787,100	\$0	\$0	\$1,787,100
Miscellaneous	\$0	\$0	\$0	\$0	\$0
Contingency	\$0	\$215,025	\$0	\$0	\$215,025
Software Acquisition	\$0	\$0	\$0	\$0	\$0
Total	\$0	\$2,550,675	\$0	\$0	\$2,550,675

PROJECT STATUS

This is a new, never-before-requested project.

PROJECT DESCRIPTION / SCOPE OF WORK

The Colorado Department of Transportation (CDOT) is requesting state funds to make infrastructure improvements at up to seven mountain pass truck chain-up stations, based on the level of funding, to improve winter driving safety for the traveling public. Improvements to be made include installing or improving lighting; lengthening, widening, or resurfacing the chain-up areas; and upgrading or replacing road closure gates. These improvements will be made at mountain passes in CDOT's Region 5, which is comprised of the San Luis Valley and southwestern Colorado. Specific improvements to be made at selected mountain passes, and associated costs, are as follows:

US Highway 160 at Wolf Creek Pass: Installation of a new chain-up station, addition of highway lighting, and replacement of six road closure gates. All of the work will take place between mile markers 158 and 177. (Cost: \$701,250)

US 50 at Monarch Pass: Installation of luminaries, lengthening and resurfacing of gravel chain-up stations, and upgrading road closure gates between mile markers 190 and 210. (Cost: \$498,750)

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US 550 at Red Mountain Pass: Improvements to four substandard chain-up stations, including installation of new lighting, lengthening and resurfacing of chain-up stations, and upgrades to four substandard road closure gates on the pass between mile markers 71 and 93.5. (Cost: \$458,750)

US 285 at Poncha Pass: Improvements to existing chain-up stations between mile markers 117 and 126, including resurfacing and installation of new lighting. (Cost: \$125,000)

State Highway 145 at Lizard Head Pass: Installation of new lighting at two chain-up stations and replacement of three substandard road closure gates between mile markers 54 and 71. (Cost: \$282,500)

State Highway 17 at Cumbres and La Manga Passes: Resurfacing and installing new lighting for existing chain-up stations and upgrading of existing road closure gates between mile markers 0 and 17. (Cost: \$250,000)

US 550 at Molas Pass: Resurfacing and lengthening of two chain-up stations. (Cost: \$234,425)

CDOT explains that, while federal and state highway funding provides for the maintenance of highways, there is no dedicated source of funding for truck chain-up stations, and funding for this vital infrastructure has been pieced together over the years using small amounts of maintenance funds.

PROJECT JUSTIFICATION

The department says that improving truck chain-up stations and associated features, such as road closure gates and lighting, will improve safety for both truck drivers and the rest of the traveling public, reduce drive times, and reduce economic impacts associated with trucking accidents and delays. According to CDOT, the new features will result in fewer incidences of jack-knifed trucks, accidents, hazmat spills, and highway closures that reduce the efficiency of Colorado's highway system.

CDOT explains that many existing chain-up stations are located immediately adjacent to highway driving lanes, with little or no buffer area. Resurfacing the stations includes widening and lengthening the chain-up areas, creating a larger buffer area between the vehicles being chained and highway traffic and more room for vehicles while drivers install the chains. This will greatly improve the safety of those installing chains on vehicles as well as those in passing vehicles, since the parked vehicles will be further separated from moving traffic. Additional lighting is needed at some chain-up stations to illuminate both sides of parked trucks, thus increasing the visibility of drivers installing chains for safety purposes and making chain installation more efficient. Current lighting at chain stations often lights only one side of a truck, resulting in drivers installing chains with little or no illumination on the side of the truck exposed to traffic. The department says the road closure gates to be replaced under the project are outdated, do not meet federal crash standards, and do not fully block the roadway when lowered for highway closures. Some of the gates are thought to be over 50 years old. Since these gates do not cover the entire roadway, drivers have been known to navigate around closed gates, resulting in drivers motoring on roads where avalanche hazards exist or where avalanche control activities are being conducted.

The department says it must build an additional chain-up station closer to the spring/fall snow line on Wolf Creek Pass about 1,850 feet, or five driving miles, closer to the summit of the pass than the current station. Truckers will not drive this distance with chains on when the roads are clear or wet, subsequently get stuck in snow at the higher elevation, and then chain up in a live traffic lane.

According to the department, as truck freight traffic continues to increase on Colorado highways, the costs resulting from truck accidents and resulting road closures will directly impact hundreds of trucks daily, negatively impacting consumers and businesses. The department estimates this impact at between \$102,000 and \$210,000 annually for the mountain passes impacted by the project, calculated using federal tools that estimate the economic impacts of reductions in freight travel times. This project will help minimize these losses, and the costs saved by the freight industry are projected to add up to the total cost of the project within 15 to 20 years. Moreover, this analysis accounts for savings based on freight traffic only, and does not account for travel time benefits that will be experienced by the general public as a result of the project.

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Mountain Pass Safety Improvements

PROGRAM INFORMATION

CDOT's engineering operations are broken into five regions. Region 5, the subject of this project, is bordered by Chaffee County in the northeast, Montrose County in the northwest, Costilla County in the southeast, and Montezuma County in the southwest. The department operates and maintains 14 chain-up areas and 12 road closure gates in Region 5. Annual average daily traffic figures for specified mountain passes in Region 5 are as follows:

- US 160 at Wolf Creek Pass - 3,400
- US 50 at Monarch Pass - 2,300
- US 550 Red Mountain Pass - 2,000
- US 285 Poncha Pass - 2,200
- SH 145 Lizard Head Pass - 2,000
- SH 17 at Cumbres and La Manga Passes - 380
- US 550 Molas Pass - 2,200

PROJECT SCHEDULE

	Start Date	Completion Date
Design	January 2016	November 2016
Construction	May 2017	November 2017
Equipment		
Occupancy		

HIGH PERFORMANCE CERTIFICATION PROGRAM

The project is not required to comply with the provisions of Senate Bill 07-051 regarding the High Performance Certification Program because it is a highway maintenance project and does not involve the renovation, design, or construction of a physical facility.

SOURCE OF CASH FUNDS

This project is not funded from cash sources.

OPERATING BUDGET

The department estimates it will cost about \$20,000 per year to operate and maintain each chain-up location, including \$15,000 per year for maintaining lighting and gates and \$50,000 every 10 years to resurface the chain-up area. These costs will be covered by the department's \$250 million annual maintenance budget.

STAFF QUESTIONS AND ISSUES

1. If this project is not funded through the capital construction process, does the department plan to complete the project using other resources? If so, what resources will it use and what would be the estimated time frame of the project's completion?

CDOT does not have a specific funding source to complete this project. Without CDC funds, we would use maintenance level of service funding to slowly complete the improvements. It would take 10 or more years to complete the project in this fashion.

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Mountain Pass Safety Improvements

2. Has the department promulgated rules as to when it will invoke the chain laws? If so, please briefly describe what conditions must be present for the department to invoke the chain laws for commercial vehicles.

The Winter Operations Plan details CDOT's snow removal program. It describes how and when Codes 15, 16, 17, and 18 for chain laws are invoked. Codes 15 and 16 are for passenger vehicles. Codes 17 and 18 are for commercial motor vehicles (trucks). Chain station upgrades are needed to improve safety because CDOT and the State Patrol will be enforcing stricter compliance of Code 15 to reduce accidents and congestion on mountain corridors starting this winter. The law requires all passenger vehicles to have either 4-wheel drive, snow tires, or chains. The region anticipates increased usage of these facilities by both commercial and passenger vehicles when chain laws are enforced. It should also be noted that there are efforts underway by lawmakers, with support from Gov. John Hickenlooper, to make Code 15 a permanent winter-time law in Colorado.

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I-70 Fall River Road Pedestrian Bridge

PROGRAM PLAN STATUS

2017-029

Approved Program Plan?

N/A

Date Approved:

PRIORITY NUMBERS

Prioritized By	Priority	
Dept/Inst	2 of 2	
OSPB	46 of 46	Not recommended for funding.

PRIOR APPROPRIATION AND REQUEST INFORMATION

Fund Source	Prior Approp.	FY 2016-17	FY 2017-18	Future Requests	Total Cost
CCF	\$0	\$899,828	\$0	\$0	\$899,828
Total	\$0	\$899,828	\$0	\$0	\$899,828

ITEMIZED COST INFORMATION

Cost Item	Prior Approp.	FY 2016-17	FY 2017-18	Future Requests	Total Cost
Land Acquisition	\$0	\$0	\$0	\$0	\$0
Professional Services	\$0	\$55,331	\$0	\$0	\$55,331
Construction	\$0	\$844,497	\$0	\$0	\$844,497
Equipment	\$0	\$0	\$0	\$0	\$0
Miscellaneous	\$0	\$0	\$0	\$0	\$0
Contingency	\$0	\$0	\$0	\$0	\$0
Software Acquisition	\$0	\$0	\$0	\$0	\$0
Total	\$0	\$899,828	\$0	\$0	\$899,828

PROJECT STATUS

This is a new, never-before-requested project.

PROJECT DESCRIPTION / SCOPE OF WORK

The Colorado Department of Transportation (CDOT) is requesting state funds to install a prefabricated steel pedestrian bridge with a concrete deck connecting Fall River Road and the Interstate 70 Frontage Road west of Idaho Springs in Clear Creek County. The bridge will provide a safer route for bicyclists and hikers and will be strong enough to accommodate emergency vehicles, thus providing emergency responders an option for accessing the Frontage Road from I-70 during periods of high traffic congestion or interstate closures. Once completed, Clear Creek County will assume maintenance of the bridge as part of the planned Clear Creek County Greenway.

PROJECT JUSTIFICATION

Constructing a pedestrian bridge over I-70 at Fall River Road will provide a safe, off-interstate option for bicyclists and hikers to access the Frontage Road, thus facilitating a safe route to nearby Idaho Springs and Dumont. The bridge will also increase access to Fall River Road as a multi-modal recreational and transportation route, benefitting nearby residents and increasing the area's tourism potential. In addition, constructing an additional transportation connection

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I-70 Fall River Road Pedestrian Bridge

capable of bearing emergency vehicles such as ambulances creates public safety benefits.

Despite state law restricting bicycle travel on interstates, tourists and nearby residents have been using the east and westbound shoulders of I-70 to access the towns of Dumont and Idaho Springs. A recently completed project to create a lane in the eastbound shoulder to accommodate traffic during peak congestion periods, and a pending project to do the same in the westbound shoulder, reduces the shoulder from ten feet to four feet, increasing the danger of such travel.

Clear Creek County is currently developing a greenway along the creek from Jefferson County to the Continental Divide, and the pedestrian bridge will serve as a component of the greenway. The department says the greenway will bring local economic benefits through expanded tourism opportunities.

Project alternatives. The issue of dangers presented by bicycle traffic using the shoulders of I-70 came to the attention of CDOT late in the design of the eastbound shoulder lane project, but the project was already over budget and the pedestrian bridge could not be incorporated into the scope of work. The department considered integrating the bridge into the westbound shoulder lane project, but funding for that project is not currently available. The department also considered installing a full roadway over Clear Creek to connect Fall River Road and the Frontage Road, but this alternative costs \$4.0 million and may have major traffic impacts. The department also says this alternative would involve high maintenance costs.

PROGRAM INFORMATION

The Clear Creek Greenway is a planned multi-use path between the Eisenhower-Johnson Memorial Tunnels and the Jefferson County-Clear Creek County line. The Greenway Master Plan represents a set of trail plans and river access opportunities recently adopted by the Clear Creek County Open Space Commission. The trail will run approximately 36 miles through the county, connecting key open spaces, parks, trail connections, recreational activities, and related amenities. The greenway will incorporate, enhance, and create many types of recreational opportunities along Clear Creek, including kayaking, rafting, hiking, walking, biking, picnicking, camping, and fishing. It will also link existing attractions along Clear Creek, including commercial rafting, historic sites, big horn sheep viewing, and the Georgetown Loop Railroad. Other possible attractions include a sculpture park, a demonstration garden, accessible fishing areas, and interpretive displays highlighting the county's mining heritage and natural environment. The Clear Creek County Greenway Master Plan was completed in 2005. Only parts of the Clear Creek County Greenway have been constructed. The rest of the greenway is being designed by Clear Creek County with \$2.0 million in CDOT Responsible Acceleration of Maintenance and Partnerships (RAMP) funding.

PROJECT SCHEDULE

	Start Date	Completion Date
Design	October 2015	April 2016
Construction	June 2016	October 2016
Equipment		
Occupancy	October 2016	December 2016

HIGH PERFORMANCE CERTIFICATION PROGRAM

The project is not required to comply with the provisions of Senate Bill 07-051 regarding the High Performance Certification Program because it installs a pedestrian bridge and does not involve the renovation, design, or construction of a physical facility.

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I-70 Fall River Road Pedestrian Bridge

SOURCE OF CASH FUNDS

This project is not funded from cash sources.

OPERATING BUDGET

This project has no projected impact on state operating costs. CDOT expects to turn the maintenance of the bridge over to Clear Creek County through an intergovernmental agreement as part of the Clear Creek County Greenway. Maintenance costs for pedestrian bridges are minimal.

STAFF QUESTIONS AND ISSUES

1. If this project is not funded through the capital construction process, does the department plan to complete the project using other resources? If so, what resources will it use and what would be the estimated time frame of the project's completion?

If the project is not funded through the capital construction process, there is currently no plan for CDOT to complete the project using other resources. If CDOT further explores a westbound peak period shoulder lane in conjunction with a funded westbound Floyd Hill capacity project, this pedestrian bridge could be included. No funding is available, earmarked, or planned for any of these projects at this time.

2. What is the status of the Eastbound and Westbound Peak Period Shoulder Lane projects along this stretch of I-70? Are these new lanes part of the toll lane initiative?

The Eastbound Peak Period Shoulder Lane Project is currently under construction and will open on December 12, 2015 as the Mountain Express Lane. The Westbound Peak Period Shoulder Lane Project was briefly explored in 2013 but no funding was identified to move the project forward. There is no funding for the project at this time.

3. Is this project part of the department's Bicycle and Pedestrian Program?

This project is not part of the department's Bicycle and Pedestrian Program. However, the project will open Fall River Road to more bicyclists and pedestrians for recreational and commuting activity.