

FY 2016-17 Level 1 Controlled Maintenance

Listed in Priority Order

Project Title	Fund Source	Amount
1 1995-048	CCF	\$2,000,000

Personnel and Administration

Controlled Maintenance Emergency Account

The project funds the Controlled Maintenance Emergency Account, which is administered by the Office of the State Architect for emergency projects on an as-needed basis throughout the fiscal year. Criteria for requests for emergency funding are: (1) a need that is immediate in nature; and (2) a problem that directly affects the health, safety, and welfare of the public and day-to-day operations of the agencies. Requests may involve systems and fixed equipment critical to the functionality of a facility, but cannot involve movable equipment, furniture, and fixtures related to the programmatic activities conducted in the facility.

2 2016-055	CCF	\$793,198
---------------------------------	-----	-----------

University of Colorado at Boulder

Renovate Fire Sprinklers and HVAC System, Department of Speech, Language, and Hearing Sciences

The two-phase project renovates the existing fire sprinkler and HVAC systems in the Communications Disorders Building to provide complete fire sprinkler and cooling coverage building wide. The first floor of the building houses a licensed daycare center for special needs children. This year's request for Phase II replaces piping for the fire sprinkler and cooling systems on all floors of the building and completes associated testing of all system components. Phase I designed the project, purchased equipment, and began demolishing and replacing piping for the fire sprinkler and cooling systems.

3 2015-075	CCF	\$1,126,460
---------------------------------	-----	-------------

University of Northern Colorado

Upgrade Fire Sprinklers

The three-phase project provides automatic fire sprinkler systems in six campus buildings. Currently, these buildings lack critical fire prevention infrastructure. The project includes fire sprinkler piping and controls; pumps and water service upgrades, as needed; system modifications; and all related repairs. This year's request for Phase III addresses Carter and Crabbe Halls. Phase I addressed Kepner and Parsons Halls. Phase II addressed Candelaria Hall and the Heating Plant.

4 2015-127	CCF	\$782,647
---------------------------------	-----	-----------

Corrections

Improve Fire Suppression System, Centennial Correctional Facility North

The two-phase project replaces the entire fire sprinkler piping system and installs 400 tamper-resistant sprinkler heads at Centennial Correctional Facility North. This year's request for Phase I replaces sprinkler pipes, sprinkler heads, and control panels in each of the seven living units. Inmates will be relocated from each living unit while the upgrades are made. Phase II, which is requested for FY 2018-19, will design and install a new fire sprinkler system in the Programs Administration Building.

5 2015-084	CCF	\$405,689
---------------------------------	-----	-----------

Colorado Historical Society (History Colorado)

Mitigate Wildfire Risk, Georgetown Loop Railroad

The three-phase project mitigates fire risk in the railroad park by removing high-density dead or dying trees standing outside the firebreak created by a related project. History Colorado has consulted with the Clear Creek County Fire Chief to determine the areas requiring mitigation. The project will reduce fuel loads, promote growth of high value and diverse tree stock, and create access for firefighters in an area covering about 70 acres. This year's request for Phase III encompasses about 31 acres. Phase I encompassed about 16 acres and Phase II addressed another 20 acres.

FY 2016-17 Level 1 Controlled Maintenance

Listed in Priority Order

Project Title	Fund Source	Amount
6 2016-077	CCF	\$467,500
Northeastern Junior College		
<i>Install Electronic Door Access and Camera Systems</i>		
<p>The two-phase project replaces the existing door locking system with an electronic access control system and installs a camera system to monitor public areas such as parking lots and entrances to academic buildings. According to the college, its facility staff uses an allen wrench to unlock and lock the buildings on campus each day. The college explains this situation poses a security risk in the event of an emergency. This year's request for Phase I replaces the door locking system. Phase II installs the camera system.</p>		
7 2016-071	CCF	\$647,500
Otero Junior College		
<i>Repair/Upgrade Campus Security Access and Electronic Locks</i>		
<p>The two-phase project replaces the primary locking system with electronic locks to address security, ADA, and emergency egress requirements. The existing mechanical lock system is over 30 years old and is no longer as functional or secure as the college would like.</p>		
8 2017-034	CCF	\$1,071,012
Pikes Peak Community College		
<i>Upgrade Security, Doors, and Electronic Access Systems, Centennial and Rampart Range Campuses</i>		
<p>The project replaces the mechanical locks on 184 exterior doors on two campuses with electronic locks in order to improve security. It also integrates the new electronic lock system with the existing fire alarm systems.</p>		
9 2017-035	CCF	\$913,208
Pueblo Community College		
<i>Upgrade Building and Common Area Security, Three Campuses</i>		
<p>The two-phase project replaces all mechanical door locks with an electronic locking system in order to improve security on the Pueblo, Canon City, and Mancos campuses. The existing locks and doors are over 30 years old. This year's request for Phase I replaces critical exterior door locks; Phase II will replace interior door locks.</p>		
10 2016-114	CCF	\$1,037,689
Front Range Community College		
<i>Upgrade Exterior and Interior Security, Westminster and Larimer Campuses</i>		
<p>The project replaces traditional mechanical lock systems using hard keys with electronically controllable locks, emergency communication systems, and security cameras in key locations at the Westminster and Larimer campuses. The college explains that, during an emergency lock-out situation, it can take more than 30 minutes for two security staff to manually lock down the campuses.</p>		
11 2017-082	CCF	\$1,005,918
Human Services		
<i>Upgrade Electronic Security Systems, Four Division of Youth Corrections Centers</i>		
<p>The three-phase project replaces antiquated door control and security systems with a uniform, integrated building system at four facilities in the youth corrections system. According to the department, additional identified security problems will also be resolved. The facilities have 50-year old technology and component parts are becoming hard to find, requiring increased maintenance time. Additional security concerns include old cameras, blind spots, and manual locking systems. This year's request for Phase I installs new systems at Gilliam Youth Services Center and Pueblo Youth Services Center. Phases II and III will continue upgrades at Grand Mesa Youth Services Center and Zebulon Pike Youth Services Center. The department received funding in each year from FY 2010-11 through FY 2015-16 for replacing systems at six other youth services centers.</p>		

FY 2016-17 Level 1 Controlled Maintenance

Listed in Priority Order

Project Title	Fund Source	Amount
12 2016-065	CCF	\$1,651,869
Western State Colorado University		
<i>Replace HVAC System, Hurst Hall</i>		
<p>The project replaces and upgrades equipment associated with airflow supply and exhaust in science laboratories. The existing system is out-of-date and some replacement parts are unavailable. The project replaces the pneumatic airflow system with an electronic control exhaust system, new supply and exhaust air valves, and rooftop exhaust fans. The project also installs a high-efficiency evaporative cooling system.</p>		
13 2016-056	CCF	\$343,275
Colorado School of Mines		
<i>Replace Hazardous Laboratory Fume Controls</i>		
<p>The four-phase project replaces fume hoods, variable air volume units, chillers, and air handler control units to ensure the safe removal of hazardous fumes in on-campus laboratories in four buildings. The project also replaces the software used to operate the control units. According to the school, the controls and software used to manage fume ventilation are obsolete and the parts are no longer produced or supported by the manufacturer. This year's request for Phase II replaces the controls and software in Anderson Hall. Phases III and IV address Hill and Berthoud Halls. Phase I, funded in FY 2015-16, replaced controls and software in Coolbaugh Hall.</p>		
14 2015-081	CCF	\$754,965
University of Colorado at Boulder		
<i>Upgrade Fire Sprinklers, Various Buildings</i>		
<p>The five-phase project provides fire sprinkler coverage in buildings on campus that were built at a time when no fire or life-safety codes were in effect. Risks include open stairs and unprotected corridors. A fire on one floor of such a building could quickly spread to other parts of the floor through unprotected corridors. This year's request for Phase III addresses the Science Learning Laboratory and Sommers-Bausch Observatory. Phase I addressed the Clare and Denison Arts and Sciences Buildings. Phase II addressed the McKenna Languages and Economics Buildings. Future phases address the Fiske Planetarium, University Theater, and Muenzinger Building. A previously-funded request, completed in 2008, made similar upgrades to other buildings on campus.</p>		
15 2017-036	CCF	\$578,643
Auraria Higher Education Center		
<i>Replace/Upgrade Fire Alarm Systems, Multiple Buildings</i>		
<p>The three-phase project replaces fire alarm panels and other components with code compliant equipment that will be compatible with and monitored through the campus fire alarm network system. According to the campus, the current systems do not have voice alarm capabilities, comply with campus standards, or integrate with the campus monitoring network. This year's request for Phase I replaces the fire alarm systems in the Plaza Building. Phase II addresses the Boulder Creek building, and Phase III addresses the Facility Services Building, as well as the 9th Street Houses. The campus received funding in FY 2014-15 and FY 2015-16 for replacing systems at five other buildings: St. Cajetans, Rectory, West Classroom, Bear Creek, and Central Classroom.</p>		
16 2014-049	CCF	\$344,708
Colorado State University		
<i>Repair College Lake Dam</i>		
<p>The two-phase project addresses concerns raised by the State Engineer during a recent dam-safety inspection. The dam has been classified as high hazard due to its inadequate spillway capacity and insufficient height. This year's request for Phase II funds the final spillway work. Phase I, funded in FY 2013-14, in combination with cash funds from the university, raised the dam and purchased riprap for the dam face. Since Phase I, the State Engineer extensively modified the scope of work to comply with new rules, requiring the dam to be raised and the spillway to be widened. Furthermore, an invasive snail species was discovered in the lake, requiring special filtration of all water released from the dam and adding to the cost of the spillway.</p>		

FY 2016-17 Level 1 Controlled Maintenance

Listed in Priority Order

Project Title	Fund Source	Amount	
17	2017-037	CCF FF	\$667,130 \$667,130
Military and Veterans Affairs <i>Mitigate Site Flooding Risk and Repair Building Envelope, Watkins Armory</i>			
<p>The project makes site drainage and paving improvements to the site and makes repairs to the building envelope and interior finishes. The department says expansive soils under the building have caused the building slab and walls to move. Heavy rainstorms have caused site flooding, and existing asphalt paving has deteriorated allowing water to penetrate below the pavement. The roof is also leaking and water is infiltrating windows. This year's request for Phase I includes all site drainage and paving work. Phase II address the building envelope and associated interior repairs.</p>			
18	2015-136	CCF	\$1,870,550
Corrections <i>Improve Perimeter Security, Denver Reception and Diagnostic Center and Women's Correctional Facility</i>			
<p>The project upgrades the perimeter security at the Denver Reception and Diagnostic Center (DRDC) and the Denver Women's Correctional Facility. Both of these facilities are located on one site, but their perimeter security systems operate independently. The project will integrate the two systems with a single control room. The project replaces damaged fence fabric and shaker wire on the DRDC side, while replacing the microwave detection system surrounding both facilities. It also installs a non-lethal electrified fence around both facilities and upgrades communication wiring. The department notes that residences, shops, and schools have encroached upon the facilities since their construction.</p>			
19	2015-079	CCF	\$1,072,335
Office of Information Technology <i>Replace Microwave Site Towers, B Group</i>			
<p>The three-phase project replaces six microwave towers. The towers are part of the state public safety radio network used by public safety officers and first responders. Many of the towers are more than 35 years old, and a recent structural analysis of the towers revealed that many suffer from metal fatigue due to continued exposure to poor weather conditions and loading stresses. This year's request for Phase III replaces tower structures at Boyero and Cheyenne Mountain. Phase I replaced tower structures at La Veta and Sunlight Mountain. Phase II replaced tower structures at Reiradon Hill and Buckhorn Mountain. A previously-funded request, completed in 2012, replaced six microwave site towers that were deemed to be in the most critical condition.</p>			
20	2014-056	CCF	\$588,988
Auraria Higher Education Center <i>Improve ADA Accessibility, Tenth Street Pedestrian Corridor</i>			
<p>The three-phase project installs permeable pavers and raises the grade of the curbs along the 10th Street pedestrian corridor. In the course of this work, the project also makes stormwater improvements, replaces buried chilled water piping, and provides cathodic protection to existing condensate and steam piping to reduce corrosion. The existing street cross-slopes are between 5 percent and 10 percent, exceeding the ADA maximum of 2 percent. Additionally, the steep crowns cause slippery and hazardous conditions during inclement weather, and the existing walking surface has deteriorated and cracked. This year's request for Phase III will complete the improvements between Curtis Street and Larimer Street. Phase I designed the project and constructed walkway and drainage improvements from Colfax Avenue to north of Champa Street. Phase II completed the improvements between Champa Street and Curtis Street and replaced the chilled water piping.</p>			

FY 2016-17 Level 1 Controlled Maintenance

Listed in Priority Order

Project Title	Fund Source	Amount
21 2017-038	CCF	\$742,193
University of Colorado Denver		
<i>Replace Fire Detection System, Building 400 Series</i>		
<p>The project replaces fire detection systems in several 1940s-era buildings on the Anschutz Medical Campus, and also installs fire-rated ceilings in the basements of the buildings. The five buildings, formerly used as military barracks and known as the 400 Series, have been reconditioned for academic and campus support uses, including housing clinical research and campus police functions. One building, Building 400, has already had its fire detection system upgraded to a smart detection system. The remaining four buildings require similar upgrades due to failure-prone smoke detector heads and hardware that reports fire activity from large building areas rather than precise locations. All five buildings require fire-rated ceiling upgrades in the basements because these areas store large volumes of combustible materials.</p>		
22 2017-039	CCF	\$798,180
Corrections		
<i>Replace Fire Alarm System and Improve Fire Suppression, Limon Correctional Facility</i>		
<p>The project replaces the fire alarm system at the Limon Correctional Facility, and also replaces the overhead sprinkler system in the facility's 2,300 square-foot control room with new, 30-head, tamper-resistant fire sprinklers. The department explains that the life span of a typical fire alarm system is between 10 and 15 years, while the system at the Limon facility is 25 years old, and replacing detectors is not possible because new detectors are not compatible with the existing system's older infrastructure. The detection system is also not addressable, which means the exact location of a fire cannot be immediately located when the system is set off. The control room, which contains security, HVAC, and communications controls for the facility, is currently not adequately protected by the fire sprinkler system.</p>		
23 2013-076	CCF	\$650,911
Fort Lewis College		
<i>Improve Pedestrian Safety</i>		
<p>The project improves pedestrian walkways throughout the north-south campus circulation spine and other main circulation routes, thus bringing these routes into ADA compliance. The college has been notified that these circulation routes are not in compliance with 2010 ADA standards, since the walkways are excessively sloped and contain deteriorated and uneven asphalt and concrete. The college says continued deterioration of the walkways creates potentially dangerous conditions, particularly in winter months. The project, which has been reduced in scope from previous requests, repairs problem surfaces and reslopes the walkways.</p>		
24 2016-066	CCF	\$1,514,508
Adams State University		
<i>Upgrade HVAC, Music Building</i>		
<p>The project upgrades the HVAC system to address undersized ventilation and air handling units, obsolete controls, and an inadequate return air system. The project also addresses failing hydronic piping located inside the interior walls. The pipe fittings are old and require frequent maintenance. In addition, the ventilation and air-handling units are undersized, the controls are obsolete, and the air return is inadequate. The lack of adequate cooling in the building has led to lost program revenue during the summer months, and the Music Department relies on summer conferences to subsidize its operating budgets. The Music Building was the subject of a recent remodel, but the HVAC system was not within the scope of that project.</p>		
25 2015-107	CCF	\$800,865
Colorado State University		
<i>Upgrade HVAC, Chemistry Building</i>		
<p>The project replaces the primary HVAC system, including pumps, water filters, controls, and valves, in the Chemistry Building. The project also replaces the constant volume fans and pumps with variable volume units and controls in order to reduce building energy use. The existing equipment is well past its useful life and replacement parts are difficult to find. The project received funding in FY 2014-15, but the money was diverted to fund an emergency repair of two air handlers damaged by the failure of an antiquated pump in the same building in December 2014.</p>		

FY 2016-17 Level 1 Controlled Maintenance

Listed in Priority Order

Project Title	Fund Source	Amount
26 2014-052	CCF	\$512,062
Human Services		
<i>Upgrade Building Automation System</i>		
<p>The three-phase project retrofits control panels for the building automation system used by the department to control environmental and life-safety systems in 300 buildings statewide, including youth corrections and psychiatric facilities. Two-thirds of the main control panels that make up the field portion of this system are no longer manufactured, and retrofitting them with modern controllers eliminates the need to install completely new systems. This year's request for Phase III retrofits controllers in seven remaining zones/building complexes in the department's southern district. Phase I made replacements in six zones in the north central district and Phase II made replacements in seven zones in the western district.</p>		
27 2017-040	CCF	\$996,364
University of Northern Colorado		
<i>Upgrade Fire Sprinklers, McKee Building</i>		
<p>The project installs an automatic fire sprinkler system in the McKee Building, which currently has only limited sprinkler coverage in the basement. The university's insurance carrier recommended installing automatic sprinklers in several buildings, including McKee, which contains combustible materials and presents a significant fire hazard. The building also presents concerns with exiting and other code-related issues, which will be mitigated by the sprinkler installation.</p>		
28 2016-060	CCF	\$677,019
University of Colorado at Boulder		
<i>Mitigate/Control Flood Water</i>		
<p>The two-phase project provides appropriate routing of surface water to the storm sewer system or diverts water to areas of the system that accommodate more volume. It also installs flood doors and sump pumps at specific campus buildings to prevent water from entering. During the flood of September 2013, the university incurred damage in over 80 campus buildings. The university says the project will help mitigate future flood water damage on campus. This year's request for Phase II mitigates nine identified locations on campus. Phase I mitigated 15 locations.</p>		
29 2017-041	CCF	\$321,860
Colorado State University		
<i>Add Flood Protection in Tunnels and Heating Plant</i>		
<p>The project protects vulnerable locations in the campus utility tunnel system from flooding by installing additional sump pumps, replacing manhole covers, and reworking hatch doors. Flooding in the tunnel system could result in loss of the steam distribution system or the heating plant, which would require the university to close campus buildings seasonally.</p>		
30 2016-112	CCF	\$990,000
Personnel and Administration		
<i>Rehabilitate Elevators, 690/700 Kipling and Grand Junction Buildings</i>		
<p>The project fully rehabilitates the seven elevators in the Dale Tooley, Resources Park West, and Grand Junction State Services Buildings to prevent accidents or property damage. The department says the elevators frequently malfunction or shut down, requiring constant attention and repairs. Problems include broken relay shunts, failed relay coils, door-related issues, and contact failures in circuits and selector boxes.</p>		

<u>Total Request Amount</u>	\$26,794,376
CCF	26,127,246
FF	667,130