COVER PAGE
Colorado Parks and Wildlife

FY 2018-19 CAPITAL CONSTRUCTION REQUESTS (LISTED IN CPW PRIORITY ORDER)
RECOMMENDED FOR FUNDING BY OSPB:

- Park Infrastructure and Facilities *(on-going, cash funded)*
- Infrastructure and Real Property Maintenance, Wildlife Areas *(on-going, cash funded)*
- Land and Water Acquisitions, State Parks *(on-going, cash funded)*

TOTAL: FY 2018-19 CAPITAL CONSTRUCTION STATE-FUNDED REQUEST AMOUNT = $0

HISTORY OF STATE FUNDING

- The department is cash-funded. **$160.7 million** has been authorized from cash fund sources for capital projects at CPW since FY 2013-14.

- **$30.9 million** in cash funds spending was authorized in **FY 2017-18**.

INVENTORY OF FACILITIES

- The inventory of department facilities totals **2,694,627 GSF**. The department has no General Fund supported facilities. This total represents **3.4 percent** of the entire inventory of state buildings.

RECENT CDC VISITS

- Durango Fish Hatchery (October 2015)
- Pueblo Fish Hatchery (June 2017)
- Rifle Gap State Park, Rifle Falls State Park, and Rifle Falls Fish Hatchery (June 2016)
- Staunton State Park (October 2014)
- Tamarack Ranch State Wildlife Area (June 2015)

Fiscal Year 2018-19 Capital Construction Request

Natural Resources — Parks and Wildlife

Park Infrastructure and Facilities

PROGRAM PLAN STATUS

2011-023

Approved Program Plan? Yes **Date Approved:** November 19, 2015

PRIORITY NUMBERS

Prioritized By	Priority	
DeptInst	1 of 3	
OSPB	N/A of 53	Recommended for funding from cash sources.

PRIOR APPROPRIATION AND REQUEST INFORMATION

Fund Source	Prior Approp.	FY 2018-19	FY 2019-20	Future Requests	Total Cost
CF	$99,429,576	$16,505,025	$16,505,025	$49,515,075	$181,954,701
FF	$13,296,911	$0	$0	$0	$13,296,911
HUTF	$1,200,000	$300,000	$300,000	$900,000	$2,700,000
Total	$113,926,487	**$16,805,025**	$16,805,025	$50,415,075	$197,951,612

ITEMIZED COST INFORMATION

Cost Item	Prior Approp.	FY 2018-19	FY 2019-20	Future Requests	Total Cost
Land Acquisition	$0	$0	$0	$0	$0
Professional Services	$17,453,795	$2,180,624	$2,180,624	$6,541,872	$28,356,915
Construction	$88,486,173	$12,612,071	$12,612,071	$37,836,213	$151,546,528
Equipment	$1,629,627	$650,000	$650,000	$1,950,000	$4,879,627
Miscellaneous	$0	$0	$0	$0	$0
Contingency	$6,356,892	$1,362,330	$1,362,330	$4,086,990	$13,168,542
Software Acquisition	$0	$0	$0	$0	$0
Total	$113,926,487	**$16,805,025**	$16,805,025	$50,415,075	$197,951,612

PROJECT STATUS

This is an ongoing request. Cash funds spending authority has been granted to Colorado Parks and Wildlife (CPW) for the project each year for the last eight years.

PROJECT DESCRIPTION / SCOPE OF WORK

CPW, within the Department of Natural Resources, is requesting cash funds spending authority for dam maintenance, facility and infrastructure improvements, and other small projects at state parks. The projects included in this request have been divided into the following categories:

Dam maintenance ($4,800,000). The division is requesting funds to repair two dams and for annual dam maintenance projects at state parks. The two dams are at Staunton State Park ($450,000) and State Forest State Park ($3,750,000). The Staunton State Park Upper Elk Falls Dam request engages a consultant to analyze the condition of the existing dam, the outlet, the site hydrology, and the recommended size for a new spillway. The State Forest State Park request includes the rehabilitation of the North Michigan Dam, including a two-stage filter, buttress, spillway, and outlet improvements. The division is also requesting $600,000 for ongoing dam maintenance projects,

including dam monitoring equipment, erosion protection, and other priority repairs discovered during routine annual inspections.

Facility and infrastructure improvements ($10,392,695). The division is requesting funding for 23 infrastructure projects, including:

- Arkansas Headwaters Recreation Area - constructs boat chute, fish ladder, and a portage trail ($350,000);
- Crawford State Park - replaces lift stations that pump wastewater from a lower to higher elevation ($350,000);
- Eldorado State Park - constructs new entrance structure ($650,000);
- Eleven Mile State Park - replaces picnic tables, benches, and existing toilets with new pre-manufactured vault ones ($352,000);
- Golden Gate State Park - replaces existing toilets with modern models, upgrades water wells, and builds a new water treatment shed ($676,500);
- Highline State Park - expands wastewater treatment plant, repairs damaged asphalt on boat ramp, and develops park maintenance plans ($870,000);
- Jackson State Park - chip-seals pavement throughout park ($207,900);
- John Martin State Park - extends the boat ramp ($608,000);
- Lake Pueblo State Park - re-paves roads (Phase 4, and additional phases are anticipated) and upgrades and repairs the visitor center ($1,730,000);
- Lone Mesa State Park (currently closed) - develops a protection, preservation, habitat enhancement, and recreation plan in order to develop an opening day time frame ($181,500);
- Mancos State Park - replaces drinking water lines ($150,000);
- Navajo State Park - replaces rental boats ($216,000);
- Navajo State Park - replaces a piece of equipment for marina operations ($120,000);
- North Sterling State Park - chip-seals existing south end parking lots ($132,000);
- Ridgway State Park - purchases rental boats and constructs a boat storage facility ($220,000);
- Rifle Gap State Park - installs shade shelters at the campground ($343,000);
- Stagecoach State Park - upgrades electrical infrastructure ($671,000);
- Staunton State Park - stabilizes historic structures with primary emphasis on foundations and roofing (Phase 3 of 4) and constructs roads, parking lots, and trails (Phase 2 of 4) ($2,364,795); and
- Sweitzer State Park - replaces water service lines and backflow controls ($200,000).

Statewide project investigation and consultant services ($100,000). CPW is requesting funds for design and investigation of future capital development projects. Examples of projects include geotechnical investigations, environmental assessments and permitting, specialty consulting, State Historical Preservation Office reports, and threatened and endangered species studies.

Statewide infrastructure asset inventory ($150,000). CPW is requesting funds to implement a geographic information system (GIS) mapping and data collection effort that will assist in completing an asset inventory of state parks. The project scope includes collecting information about fixed assets and to map them across the state. The project also includes the evaluation and ranking of the assets. This funding request is the first of three with the overall project taking three to five years.

Contingency ($1,362,330). CPW is requesting funds to address emergencies and other unforeseen circumstances.

Cost assumption. The cost assumption is based on CPW staff estimates and previous maintenance project costs. The project is not required to meet the Art in Public Places or High Performance Certification Program requirements.

PROJECT JUSTIFICATION

The project addresses the division's park infrastructure needs statewide. The division says maintaining and improving basic park facilities is an important part of sustaining a solid visitation base and generating the revenue necessary to cover the majority of day-to-day operating costs for the state park system. Infrastructure is designed to enhance the

outdoor recreation experience of visitors. Most park infrastructure facilitates access to state park property, while other infrastructure is designed to promote outdoor recreation. Failure to maintain state park infrastructure will likely decrease visitation, reduce CPW's cash revenue stream, and decrease the economic impact state parks provide to local economies.

According to CPW, components of its system are over 50 years old and in need of ongoing repair, renovation, and replacement. Furthermore, CPW believes maintaining the park infrastructure is a core fiduciary duty and that inadequate and outdated park infrastructure will negatively impact visitation and revenue. CPW also estimates that $14 million per year in investment is needed, on average, to keep its existing assets in a sustainable and safe condition. Total state park infrastructure assets owned by CPW are currently valued at about $700 million. CPW says the projects included in this request will address a variety of health and safety, regulation, and visitor amenity concerns. The request also addresses two concerns with dams that do not meet current safety criteria. Failure to address these concerns could result in storage restrictions and other life-safety risks.

PROGRAM INFORMATION

See Project Description / Scope of Work section.

PROJECT SCHEDULE

	Start Date	Completion Date
Design	July 2017	Varies
Planning	July 2017	Varies
Construction	July 2018	Varies
The department explains that the time frame for completion of each project under this line item is dependent on factors such as physical location, weather, and length of construction season.		

SOURCE OF CASH FUNDS

The source of cash funds for the projects is lottery funds ($7,443,230) and Great Outdoors Colorado (GOCO) funds ($9,061,795), as authorized by Article XXVII of the Colorado Constitution; and the Highway Users Tax Fund ($300,000), created in Section 43-4-201 (1)(a), C.R.S.

CPW indicates that it hopes to receive a $200,000 State Historic Fund grant for the Staunton State Park project. If awarded, the grant funds would offset the total amount of lottery funds currently reflected in the request.

STAFF QUESTIONS AND ISSUES

1. Cash funds spending authority was granted for the Arkansas Headwaters Recreation Area in FY 2017-18 ($150,000) to design a fish ladder. For this funding cycle, $350,000 is being requested to construct the fish ladder as well as a boat chute and portage trail. Is CPW confident the construction phase can be completed within the requested budget during FY 2018-19? Please differentiate the costs for the fish ladder, boat chute, and portage trail.

This project is being undertaken in conjunction with Homestake Partners, which consists of Colorado Springs Utilities and Aurora Water. Homestake Partners are redesigning a primary headgate facility on the Arkansas River; as part of this construction, there is an opportunity to construct fish passage infrastructure and a boat chute/portage trail. Constructing these amenities will improve the biology of the river and provide increased recreation opportunities.

The total cost of the project is currently estimated to be between $6.5 million and $7.8 million, the majority of which is being borne by Homestake. Estimated costs for the headgate project and fish passage infrastructure are $5.3 million to $6.4 million. Estimated costs for the boat chute and portage trail are $1.2 million to $1.4 million. The $150,000 in FY 2017-18 funding is CPW's contribution to total design costs associated with the fish passage. The additional

FY 2018-19 $350,000 request is CPW's contribution toward the construction of the fish ladder and boat chute/portage trail. CPW is confident that the construction phase can be completed within the requested budget.

2. Cash fund spending authority was granted for Crawford State Park sewage disposal systems in FY 2017-18 ($200,000). Is this separate from the wastewater lift station, for which $350,000 is being requested in FY 2018-19?

These are separate projects. The FY 2017-18 request for $200,000 is for leach fields and repair of an irrigation dam. The $350,000 for FY 2018-19 is for existing lift station renovation for domestic sewage treatment that is pumped to the town of Crawford. This is separate from the leach fields.

3. Lone Mesa State Park is currently closed to general public access while development and management planning is in progress. When is the park anticipated to open? The request includes $181,500 for the planning phase of recreation, natural resource and habitat protection and preservation at Lone Mesa State Park. When is it anticipated the plan recommendations will be requested for funding?

CPW does not have an estimated date to open Lone Mesa to the general public, though the park currently does have limited public access for hunting. The goal of the planning project is to help determine budgets and time frames for the development of the park. Part of the results of the planning project will be to break down the proposed facility development into multiple years of phasing. The results of the plan, along with budgets for park development, will help determine build-out of infrastructure and opening dates for the park.

4. Is Phase 4 the final phase for repaving roads throughout Lake Pueblo State Park? If not, please explain and provide anticipated costs in upcoming funding cycles. What is the total estimated construction cost?

Phase 4 is not the final phase. At least one additional mile of the park's main road and the swim beach parking lots require repaving. Estimated cost for these projects is $1.5 million. Lake Pueblo also contains many side roads and campground roads that may also need paving in the future and will be evaluated annually to assess the condition.

OPERATING BUDGET

This project has no impact on state operating costs.

Fiscal Year 2018-19 Capital Construction Request

Natural Resources — Parks and Wildlife

Infrastructure and Real Property Maintenance, Wildlife Areas

PROGRAM PLAN STATUS

2011-026

Approved Program Plan? Yes **Date Approved:** November 19, 2015

PRIORITY NUMBERS

Prioritized By	Priority	
DeptInst	2 of 3	
OSPB	N/A of 53	Recommended for funding from cash sources.

PRIOR APPROPRIATION AND REQUEST INFORMATION

Fund Source	Prior Approp.	FY 2018-19	FY 2019-20	Future Requests	Total Cost
CF	$15,351,093	$6,859,315	$6,859,315	$20,577,945	$49,647,668
Total	$15,351,093	**$6,859,315**	$6,859,315	$20,577,945	$49,647,668

ITEMIZED COST INFORMATION

Cost Item	Prior Approp.	FY 2018-19	FY 2019-20	Future Requests	Total Cost
Land Acquisition	$0	$0	$0	$0	$0
Professional Services	$2,038,400	$2,885,000	$2,885,000	$8,655,000	$16,463,400
Construction	$12,694,189	$3,026,700	$3,026,700	$9,080,100	$27,827,689
Equipment	$63,571	$412,000	$412,000	$1,236,000	$2,123,571
Miscellaneous	$0	$0	$0	$0	$0
Contingency	$554,933	$535,615	$535,615	$1,606,845	$3,233,008
Software Acquisition	$0	$0	$0	$0	$0
Total	$15,351,093	**$6,859,315**	$6,859,315	$20,577,945	$49,647,668

PROJECT STATUS

This is an ongoing request. Cash funds spending authority has been granted for the project each year for the last eight years.

PROJECT DESCRIPTION / SCOPE OF WORK

CPW, within the Department of Natural Resources, is requesting cash funds spending authority to address dam maintenance and to rehabilitate and improve infrastructure and facilities. This project includes maintenance, enhancement, or replacement of a wide variety of existing physical assets, such as: dams, fish hatchery infrastructure, roads and crossings, water and irrigation infrastructure, wildlife habitats, buildings, and other infrastructure.

Dam maintenance ($2,600,000). The statewide dam maintenance request includes addressing items related to state code, dam safety, and minor maintenance. The dam safety projects include:

- Alberta Park Dam - design costs for repairs and improvements (Phase 2 with further phases to be identified) ($500,000);
- Chief Creek Dam - a hydrological study, maintenance, and design and construction of the outlet ($500,000);

- Haviland Lake Dam - a hydrological study and outlet repair ($500,000);
- Rito Hondo Dam - investigation of abutments and seepage mitigation design (Phase 2 with further phases to be identified) ($300,000);
- Tarryall State Wildlife Dam - study and design ($400,000); and
- wildlife dam maintenance - funds for smaller, regular maintenance and repair projects ($400,000).

Maintenance and repair projects ($1,898,700). These projects include improvements to the:

- administrative offices at Buena Vista, Denver, and Pueblo ($347,000);
- administrative office at Fort Collins (office relocation design) ($330,000);
- boat docks in Area 10, including Lake John, Delaney Butte Lakes, and Cowdrey Lake ($217,000);
- boat ramp and dock at Miramonte Reservoir at the Dan Noble State Wildlife Area ($148,000);
- fish hatcheries at Chalk Cliffs, Durango, Poudre, and Rifle Falls ($627,000);
- hatchery water measuring devices at ten hatcheries (Phase 2 of 2) ($70,000);
- state wildlife areas at Beaver Creek, Bosque del Oso, and Oxbow ($80,500); and
- toilets at John Martin and Rosemont Reservoir State Wildlife Areas ($79,200).

Wildlife crossings ($1,000,000). CPW will build crossing sites which, depending upon the circumstance, may include highway overpasses and underpasses in conjunction with appropriate fencing to allow connections between habitats and avoid collisions. The wildlife crossing site under consideration is located at Highway 160 near Chimney Rock. Other sites are being identified through a wildlife prioritization study in cooperation with the Colorado Department of Transportation.

Habitat improvement projects ($800,000). The habitat improvement project currently involves the West Slope Mule Deer Strategy, a multi-year effort to address declining mule deer populations on the Western Slope. CPW will use habitat improvement funds to complete a variety of projects including landscape management plans, and habitat treatments (including prescribed fire, weed management, and other habitat protection activities).

Wildlife project investigation and consultant services ($25,000). The statewide project investigation and consultant services request is for project feasibility and preliminary planning work and may include, but is not limited to: geotechnical investigations; environmental assessments and permitting; specialty consulting/reviews; State Historical Preservation Office reports; and, threatened or endangered species studies.

Contingency ($535,615). CPW is requesting funds to address emergencies and other unforeseen circumstances.

Cost assumption. The cost assumption is based on CPW staff estimates and previous maintenance project costs. The project is not required to meet the Art in Public Places or High Performance Certification Program requirements.

PROJECT JUSTIFICATION

According to CPW, funding for ongoing maintenance needs at its facilities statewide is essential to meeting critical goals, such as providing hunting and fishing recreation in Colorado. CPW also emphasizes that delays in funding these projects could result in further deterioration, the inability to provide customer service, a loss in property value, and increased safety hazards. Specifically, the failure to repair or improve dams may necessitate lower water storage levels. Lower water levels could impact the fisheries and recreational opportunities at the reservoirs. Those structures determined to be dangerous may be required to be drained and the dam could be breached, which would lead to a loss of key fisheries, wildlife, and aquatic habitat. Further, breaching a dam is often more expensive than maintaining it. CPW notes that maintaining dams will help to avoid more costly repairs in the future.

CPW explains that a reduction in customer service could lead to fewer hunting and fishing recreation opportunities. CPW says reduced hunting and fishing recreation would not only negatively impact revenues, but may impact state and local economic tourism benefits associated with these activities. Hunting, fishing, and wildlife viewing activities provide a total economic impact to the state of approximately $5 billion annually and support an estimated 46,500 jobs in Colorado.

CPW further reports that wildlife/vehicle collisions are a significant hazard to human health and safety and to Colorado's wildlife population. Over-and underpasses have proven to be effective techniques to remediate the risk of wildlife/vehicle collisions and to decrease the barriers that highways present.

Lastly, CPW says the mule deer population has decreased over the past 15 years and there has been a multi-year effort to address this issue. One component to better managing wildlife populations is habitat management, with the goal of increasing the volume and quality of habitat available to mule deer and other animals. CPW says that mule deer contribute to the economy in Colorado, with hunters and wildlife viewers as the main contributors.

PROGRAM INFORMATION

According to CPW, the projects included in this request are selected based on mission priorities, the nature of the work, and the impact of delaying or not repairing infrastructure. This year's request funds maintenance for some of the 110 dams managed by the division. The division notes that most of the dams it owns are 50 years old and several are over 100 years old. Inspections are performed yearly on high-hazard dams and every two years on significant-hazard dams. CPW uses a Screening Level Risk Analysis (SLRA) to identify and categorize the risk for all of its dams. The SLRA determines failure modes, analyzes consequences of dam failures, and provides a matrix to identify dams that are at a high level of risk.

The West Slope Mule Deer Strategy is a multi-year effort by CPW to address declining mule deer populations. A key component of the strategy is reducing the impacts of highways on mule deer survival, movements, and migration. Improving or managing the habitat is another element of the strategy, with the goal of increasing the volume and quality of habitat available to mule deer.

PROJECT SCHEDULE

	Start Date	Completion Date
Planning Phase	July 2018	Varies
Construction	Varies	Varies
The department explains that the time frame for completion of each project under this line item is dependent on factors such as location, weather, and length of construction season.		

SOURCE OF CASH FUNDS

The source of cash funds for the project is the Wildlife Cash Fund ($3,259,315), created in Section 33-1-112 (1)(a), C.R.S. and Great Outdoors Colorado Funds ($3,600,000), as authorized by Article XXVII of the Colorado Constitution.

The division has statutory authority to receive and expend grants, gifts, and bequests, including federal funds, for authorized purposes pursuant to Section 33-10-107 (1)(e), C.R.S. Should federal funds become available for the project, the division may replace its cash funds spending authority with federal funds so long as the total appropriation for the line item is not exceeded.

STAFF QUESTIONS AND ISSUES

1. Is Phase 2 the final phase for Alberta Park Dam and Rito Hondo Dam projects? If not, please explain and provide anticipated costs in upcoming funding cycles. What is the total estimated construction cost for all phases?

Additional phases will be necessary to complete the project; detailed construction estimates for future phases have not been developed at this time. This current request will fund project design, including engineer's estimates for

construction of the repairs. Preliminary construction estimates are approximately $8.5 million for Alberta Park Dam and $6.0 million for Rito Hondo Dam; these estimates are subject to change based on the final design. Timing of construction will be based on available funding and other factors.

2. Please detail locations for hatchery water measuring devices.

Current plans call for putting water-measuring devices at the following hatcheries:

- *Bellvue-Watson;*
- *Crystal River;*
- *Durango;*
- *Finger Rock Rearing Unit;*
- *Glenwood Springs;*
- *Las Animas;*
- *Mount Shavano;*
- *Pitkin;*
- *Poudre River Rearing Unit; and*
- *Roaring Judy.*

OPERATING BUDGET

This project has no impact on state operating costs.

Fiscal Year 2018-19 Capital Construction Request

Natural Resources — Parks and Wildlife

Land and Water Acquisitions, State Parks

PROGRAM PLAN STATUS

2011-024

Approved Program Plan? Yes **Date Approved:** November 19, 2015

PRIORITY NUMBERS

Prioritized By	Priority	
DeptInst	3 of 3	
OSPB	N/A of 53	Recommended for funding from cash sources.

PRIOR APPROPRIATION AND REQUEST INFORMATION

Fund Source	Prior Approp.	FY 2018-19	FY 2019-20	Future Requests	Total Cost
CF	$11,050,000	$1,400,000	$1,400,000	$4,200,000	$18,050,000
Total	$11,050,000	**$1,400,000**	$1,400,000	$4,200,000	$18,050,000

ITEMIZED COST INFORMATION

Cost Item	Prior Approp.	FY 2018-19	FY 2019-20	Future Requests	Total Cost
Land Acquisition	$11,050,000	$1,400,000	$1,400,000	$4,200,000	$18,050,000
Professional Services	$0	$0	$0	$0	$0
Construction	$0	$0	$0	$0	$0
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	$11,050,000	**$1,400,000**	$1,400,000	$4,200,000	$18,050,000

PROJECT STATUS

This is an ongoing request. Cash funds spending authority has been granted for the project each year for the last eight years. In FY 2016-17, Colorado Parks and Wildlife (CPW) closed on two state park fee title acquisitions: Arkansas Headwaters Recreation Area, Texas Creek Parcel (2 acres; $25,750) and Staunton State Park, Berrien Property (160 acres; $560,000). CPW also closed on one conservation easement at Saint Vrain State Park, City of Longmont Parcel (215 acres; no monetary consideration).

Also in FY 2016-17, CPW leased or purchased water for several state parks and recreation areas. Most of these were minor acquisitions, none of which exceeded $100,000.

PROJECT DESCRIPTION / SCOPE OF WORK

CPW, within the Department of Natural Resources, is requesting cash funds spending authority to purchase lands adjacent to state parks to provide a buffer between park lands and new development, and to acquire water for recreational purposes at various state parks. The FY 2018-19 request addresses acquisitions for two programs: the Water Resources Program and the Property Acquisitions Program.

Water Resources Program. The Water Resources Program addresses water management plans at 42 state parks. The division acquires water through conventional water purchases, water options and leases, cooperative

agreements, and the lease or purchase of storage space in reservoirs. CPW is requesting $700,000 for the Water Resources Program for FY 2018-19, including lottery funds and Great Outdoors Colorado (GOCO) funds. The spending priorities for these moneys were identified and ranked according to park users' demand for water-dependent recreation, cost effectiveness, and revenue impact. CPW says it regularly purchases water each year pursuant to existing agreements, including for:

- water supply (drinking and sanitary) at various state parks;
- recreation and conservation pools in various reservoirs at state parks, including John Martin and Trinidad State Parks;
- augmentation water pursuant to water court requirements; and
- replacement water for whitewater boating flows on the Arkansas River.

Property Acquisitions Program. The Property Acquisitions Program allows CPW to identify and acquire lands of critical resource value that buffer state parks from residential and commercial development or that constitute private in-holdings within a park. It also allows CPW to protect resources that are important to the maintenance of plant and animal habitat and to provide additional recreation opportunities for visitors. CPW is requesting $700,000 for the Property Acquisitions Program in FY 2018-19 and is currently in the process of negotiating for properties in Chaffee, Fremont, and Pueblo counties.

According to CPW, it maintains a prioritized plan to purchase buffer lands and private in-holdings for parks statewide. Where possible, it acquires conservation easements in order to minimize costs and to allow for productive uses of adjacent lands. In other cases, a fee title acquisition may be more attractive, especially where the intent is to open land to recreational use. According to CPW, it evaluates properties adjacent to existing state parks as they become available for sale or easement based on cost, property value, zoning, and the availability of matching funds. The six prioritization criteria are: location (inholding, ownership, size, ease of management, and adjacent use); preservation value (unique features and recreational value); costs (acquisition, development, operation, and maintenance); partners/support; funding source(s); and revenue potential (public use).

Cost assumption. The cost assumption is based on CPW staff estimates and past acquisition costs. The project is not required to meet the Art in Public Places or High Performance Certification Program requirements.

PROJECT JUSTIFICATION

CPW says that it engages in an ongoing, annual effort to acquire water for recreational purposes at certain parks. CPW says it is essential to keep sufficient water for recreational purposes in order to meet the demand of park visitors. According to CPW, about 75 percent of state parks have either a reservoir or river as their feature attraction. CPW maintains there is a direct link between adequate water levels for recreation and the amount of revenue earned from park visitors, making maintenance of water levels a high priority for the division. CPW says that if it does not address water needs on an ongoing basis, then the water levels in state-managed reservoirs and streams may drop significantly and water quality may be degraded, which would negatively impact the natural environment, park visitation, and CPW revenues.

CPW explains that it is necessary to purchase land adjacent to or within existing park property in order to create a buffer between park lands and new development and to protect wildlife habitat. According to CPW, many state parks were purchased with the funds available at the time of initial development, which resulted in an incomplete land base that is insufficient for visitor needs and resource protection. CPW says population growth experienced by Colorado over the past ten years, combined with continued projected population growth, makes buffer acquisitions critical to maintaining the outdoor recreation infrastructure necessary to serve the citizenry. CPW also says that if this project is not funded, it would make the overall management of state parks more difficult and would inhibit CPW's ability to accomplish its outdoor recreation mission.

PROGRAM INFORMATION

CPW has maintained an active Property Acquisition Program since the 1980s. The Water Resources Program was established in 1984 to provide a means to protect water levels at Cherry Creek Reservoir. Since then, the program

has grown to include water management plans for 42 state parks.

PROJECT SCHEDULE

	Start Date	Completion Date
Verify Priorities, Identify and Match Properties	July 2018	June 2021
Appraisals, Environmental Reviews, Close Sale	July 2018	June 2021
Purchase Water Rights or Acreage	July 2018	June 2021

SOURCE OF CASH FUNDS

The source of cash funds is $700,000 from lottery funds and $700,000 from GOCO moneys, as authorized by Article XXVII of the Colorado Constitution. The division has statutory authority to receive and expend grants, gifts, and bequests, including federal funds, for authorized purposes pursuant to Section 33-10-107 (1)(e), C.R.S. Should federal funding become available for the project, it could be used to offset the use of the appropriated cash funds, not to increase the overall project cost. The division says this would allow it to make the most efficient use of available funding, streamline administrative contract management, and preserve cash funds.

STAFF QUESTIONS AND ISSUES

All responses to staff questions were incorporated into the project write-up.

OPERATING BUDGET

This project has no impact on state operating costs.

COVER PAGE
Department of Corrections

FY 2018-19 CAPITAL CONSTRUCTION REQUESTS (LISTED IN OSPB PRIORITY ORDER)

RECOMMENDED FOR FUNDING BY OSPB:

- Fire Alarm System Replacement, Arkansas Valley Correctional Facility (Capital Renewal) *(new)*
- Correctional Industries – Miscellaneous Small Projects *(cash funded)*

TOTAL: FY 2018-19 CAPITAL CONSTRUCTION STATE-FUNDED REQUEST AMOUNT = $2,543,505

FY 2018-19 CONTROLLED MAINTENANCE REQUESTS (11)

RECOMMENDED FOR FUNDING BY OSPB:

LEVEL I:

- Replace/Upgrade Primary Electric, Generator, and Docking Station, Denver Reception and Diagnostic Center ($1,526,998)
- Replace Kitchen Floor, Colorado Territorial Correctional Facility ($1,288,651)
- Replace Fire Alarm System, Sterling Correctional Facility ($718,887)

NOT RECOMMENDED FOR FUNDING BY OSPB:

LEVEL II:

- Replace Roof, Infirmary, Colorado Territorial Correctional Facility ($683,879)
- Improve Perimeter Security, Denver Reception and Diagnostic Center and Women's Correctional Facility ($1,081,464)
- Repair Fire Alarm System, Support Buildings, Limon Correctional Facility ($1,029,031)
- Replace Electronic Security System, Denver Women's Correctional Facility ($1,963,275)
- Improve Staff Security, Cellhouse 3, Colorado Territorial Correctional Facility ($1,056,695)

LEVEL III:

- Replace Roof, Programs and Support Buildings, Trinidad Correctional Facility ($1,238,134)
- Replace Roof, Living Units 6,7, and 8 and Administration Building, Fremont Correctional Facility, Ph 1 of 3 ($1,941,470)
- Replace Roof, Administration Building, Colorado Territorial Correctional Facility ($867,768)

HISTORY OF STATE FUNDING

- **$80.4 million** has been appropriated to the department on behalf of capital projects since FY 2013-14. This represents **8.5 percent** of the total amount appropriated on behalf of all capital construction and controlled maintenance projects during this period.

- **$8.0 million** was appropriated in **FY 2017-18**.

- An additional **$8.4 million** was authorized through Senate Bill 17-265 for controlled maintenance.

COVER PAGE (Cont.)
Department of Corrections

INVENTORY OF GENERAL FUND SUPPORTED FACILITIES

- The General Fund supported inventory of department facilities totals **6,421,599 GSF**. This total represents **13.3 percent** of the entire General Fund supported inventory of state buildings.

RECENT CDC VISITS

- Arkansas Valley Correctional Facility (June 2017)
- Buena Vista Correctional Facility (October 2014)
- Centennial Correctional Facility (June 2015)
- Limon Correctional Facility (October 2016)
- Rifle Correctional Center (September 2013)
- San Carlos Correctional Facility (June 2015)
- Sterling Correctional Facility (June 2015)
- Trinidad Correctional Facility (October 2015)

Fiscal Year 2018-19 Capital Construction Request

Corrections

Fire Alarm System Replacement, Arkansas Valley Correctional Facility (Capital Renewal)

PROGRAM PLAN STATUS

2017-097

Approved Program Plan? N/A **Date Approved:**

PRIORITY NUMBERS

Prioritized By	Priority	
DeptInst	1 of 2	
OSPB	7 of 53	Recommended for funding.

PRIOR APPROPRIATION AND REQUEST INFORMATION

Fund Source	Prior Approp.	FY 2018-19	FY 2019-20	Future Requests	Total Cost
CCF	$0	$2,543,505	$0	$0	$2,543,505
Total	$0	**$2,543,505**	$0	$0	$2,543,505

ITEMIZED COST INFORMATION

Cost Item	Prior Approp.	FY 2018-19	FY 2019-20	Future Requests	Total Cost
Land Acquisition	$0	$0	$0	$0	$0
Professional Services	$0	$244,830	$0	$0	$244,830
Construction	$0	$1,813,550	$0	$0	$1,813,550
Equipment	$0	$0	$0	$0	$0
Miscellaneous	$0	$253,897	$0	$0	$253,897
Contingency	$0	$231,228	$0	$0	$231,228
Software Acquisition	$0	$0	$0	$0	$0
Total	$0	**$2,543,505**	$0	$0	$2,543,505

PROJECT STATUS

The project was previously requested through controlled maintenance for FY 2016-17. The project was prioritized as a Level 2 request and was not funded.

In the last two years, the department has made minor upgrades to the fire alarm systems in three buildings, including installing a new control panel and peripheral devices. It also installed a new network display unit at a support facility.

PROJECT DESCRIPTION / SCOPE OF WORK

The Department of Corrections (DOC) is requesting state funds to replace key parts of the fire alarm and suppression system at the Arkansas Valley Correctional Facility (AVCF). The existing fire alarm system is 30 years old and well past its expected life span. The department says the life span for a typical fire alarm system is between 10 and 15 years. The project affects 361,744 square feet of programming, administrative, and living space. DOC says it will vacate living unit pods in phases during construction. Each living pod houses about 66 offenders.

Specifically, the project replaces:

- the network head-end fire alarm control unit;
- nine fire alarm control panels;

- initiating devices such as heat, smoke, or flame detectors;
- notification devices to alert occupants in the event of a fire;
- eight annunciators to indicate the zone and approximate location of an alarm;
- equipment to allow for multiple building systems to interface; and
- fiber optic cable.

The project also upgrades the system to an addressable system so the exact location of fire can be immediately determined.

Cost assumption. The cost assumption is based on an opinion of probable cost from a third-party consultant hired to assess and report on the existing system. As a capital renewal request, the project is not required to meet the High Performance Certification or Art in Public Places program requirements.

PROJECT JUSTIFICATION

The department says it contracted with a third-party consultant to conduct an evaluation of its existing fire alarm system in 2016. The consultant report recommends replacing the entire fire alarm system due to the system's age and the lack of support for the existing system components. According to DOC, it is very challenging and time-consuming to find replacement parts, which undermines the effectiveness of the existing system.

Sole source vendor. The department has identified potential cost savings associated with contracting with a sole source vendor (Simplex). DOC says the limited system replacements to date (noted in the Project Status tab) have installed Simplex systems. If the same system is used for the rest of the AVCF campus, the department expects it will be able to reuse some existing devices and annunciators.

PROGRAM INFORMATION

The Arkansas Valley Correctional Facility is located about 50 miles east of Pueblo, and was constructed in 1987 as the first major adult facility built outside of the Canon City area. The medium-security facility has a capacity of 1,050 beds, and hosts a number of educational and vocational programs. The facility also hosts several programs conducted by Colorado Correctional Industries.

PROJECT SCHEDULE

	Start Date	Completion Date
Design	August 2018	June 2019
Construction	July 2019	December 2020
Equipment		
Occupancy	January 2021	February 2021

SOURCE OF CASH FUNDS

This project is not funded from cash sources.

STAFF QUESTIONS AND ISSUES

1. Are there any instances of system failure in the recent past?

In the last fiscal year there have been 10 system failures requiring three facility fire watches. (A fire watch is when facility staff visually watch for the outbreak of a fire, with observations logged every 30 minutes. A recent fire watch

lasted over 72 hours.) The existing system's technology and components are out of date requiring the replacement components purchased from internet resource stores. These individual components are often second hand, but are purchased to maintain the operation of the existing system. Locating the component parts often takes time and extends the fire watch.

2. How will the department maintain system functionality while the new equipment is installed?

Migration using new Simplex system components allows the installers to replace one fire alarm system at a time without the need to maintain parallel networks, which is critical to the sustained operation of the facility. It is anticipated that the construction schedule would be extended so that the existing Simplex fire alarm network would remain operational (parallel operation) throughout construction until the new Simplex system could be tested. Once tested and accepted, the existing network system could then become non-operational and abandoned in place.

The department intends to pursue a sole source manufacturer on this request for system consistency, with the installation of the system competitively bid. Utilizing Simplex would allow for the fire alarm replacement to be phased more easily with replacing one system at a time, while keeping the other systems on the network operational. If the fire alarm system replacement is with a non-Simplex vendor, a new network communication method will be required as well as additional costs incurred beyond the submitted budget.

3. What is the status/condition of other parts of the fire suppression system, i.e. fire sprinklers? Does the department anticipate the need for major upgrades or replacements to other parts of the system in the next three years?

The majority of the existing fire suppression system is operational. This project includes the interface with the pre-action, deluge sprinkler systems, and the replacement of all monitor modules associated with water flow indication

OPERATING BUDGET

The department anticipates the project will reduce the number of service calls for repairs to the fire alarm system.

Fiscal Year 2018-19 Capital Construction Request

Corrections

Correctional Industries – Miscellaneous Small Projects

PROGRAM PLAN STATUS

1998-016

Approved Program Plan? N/A **Date Approved:**

PRIORITY NUMBERS

Prioritized By	Priority	
DeptInst	2 of 2	
OSPB	N/A of 53	Recommended for funding from cash sources.

PRIOR APPROPRIATION AND REQUEST INFORMATION

Fund Source	Prior Approp.	FY 2018-19	FY 2019-20	Future Requests	Total Cost
CF	$7,498,063	$660,000	$0	$0	$8,158,063
CFE	$3,371,000	$0	$0	$0	$3,371,000
FF	$806,917	$0	$0	$0	$806,917
Total	$11,675,980	**$660,000**	$0	$0	$12,335,980

ITEMIZED COST INFORMATION

Cost Item	Prior Approp.	FY 2018-19	FY 2019-20	Future Requests	Total Cost
Land Acquisition	$0	$0	$0	$0	$0
Professional Services	$479,492	$42,200	$0	$0	$521,692
Construction	$10,368,617	$503,990	$0	$0	$10,872,607
Equipment	$480,000	$80,000	$0	$0	$560,000
Miscellaneous	$14,000	$0	$0	$0	$14,000
Contingency	$333,871	$33,810	$0	$0	$367,681
Software Acquisition	$0	$0	$0	$0	$0
Total	$11,675,980	**$660,000**	$0	$0	$12,335,980

PROJECT STATUS

This is an ongoing request. Cash funds spending authority has been granted for the project each year for the last 20 years. Attachment A lists projects funded under this line item in recent years.

PROJECT DESCRIPTION / SCOPE OF WORK

The Department of Corrections (DOC) is requesting cash funds spending authority for various small projects to support the operation of Colorado Correctional Industries (CCi). This is an ongoing request that allows the department to expand CCi where needed to accommodate new business or to maintain current operations. CCi creates work opportunities for offenders, which in turn offsets the costs of incarceration and provides on-the-job training to foster rehabilitation.

The department notes that project selection for the current request has not yet taken place, and it will make a final selection in FY 2018-19. It will postpone final selection as long as possible in order to best respond to production needs in an ever-changing business environment.

Cost assumption. The cost assumption is based on staff estimates and past program capital costs. The DOC budgets 8 percent of project costs for professional services. The project is not required to meet the Art in Public Places or High Performance Certification Program requirements.

PROJECT JUSTIFICATION

The department says the CCi Miscellaneous Small Projects line item furthers the CCi objectives of instilling a work ethic in offenders and equipping more offenders with usable job skills. According to the department, CCi generates funds to help offset DOC General Fund costs. For example, supervision of offenders working on CCi initiatives is provided by CCi staff who are paid with cash funds earned by CCi businesses. This request also allows CCi to develop future business ventures, says DOC.

The department notes that it has historically listed each of the projects anticipated to be undertaken in this ongoing capital request, but it says that market changes continually require that products be changed, upgraded, discarded, or replaced. This requires the department to change the capital projects that support these products. Market changes influence the department's decisions about which projects to undertake, says DOC. These market changes in turn influence requirements for the physical plant that supports production.

PROGRAM INFORMATION

CCi produces inmate-manufactured goods that are sold to individuals; local, state, and federal agencies; and retailers. The revenue generated by CCi is used for the ongoing costs of the program's operation, including personnel, raw materials, inmate pay, and indirect costs. In addition, CCi pays for maintenance and upgrades to the physical plant and for the capital needs of existing and new programs. For FY 2015-16, CCi gross revenue was about $73.1 million, including canteen revenue, and CCi paid approximately $13.1 million in staff wages and in utility costs.

See Capital Construction Fact Sheet: Colorado Correctional Industries for additional program information.

PROJECT SCHEDULE

The department plans to identify a project or projects for funding in FY 2018-19. All associated work is projected to be completed within the fiscal year, no later than June 2019.

SOURCE OF CASH FUNDS

The source of cash funds is revenue generated by CCi manufacturing operations. CCi manufacturing operations are conducted pursuant to Article 24 of Title 17 of the Colorado Revised Statutes. The department allocates $660,000 annually for program-related capital construction, with the remainder being allocated to operating costs. Although the department estimates the amount of CCi funds that will be allocated for capital needs each year, these amounts are subject to change if additional operating expenses arise.

STAFF QUESTIONS AND ISSUES

1. Please identify the potential projects in this request where proceeds are being used to reimburse the General Fund for the costs of inmates' incarceration.

Most CCi Small Projects capital needs are used to improve production of specific products or services. The ability to respond to an ever-changing market enables CCi to train and employ offenders and to create adequate cash funds to maintain, and when possible, grow the overall support to the DOC. Market demands continually require products to be upgraded, discarded, or replaced with something that requires a different manufacturing process.

Every offender who is employed by CCi offsets costs that would otherwise require DOC to request additional General Fund staff to manage and train offender workers within the DOC facilities. Supervision for these offenders, while

working for CCi, is provided by CCi staff that are paid with cash funds earned by the various CCi businesses. Consequently, continued strength within the CCi programs avoids the need for additional General Fund dollars spent within DOC. Cash generated through CCi programs is put back into CCi for operating and growth.

These cash-funded projects in themselves are not revenue-generating programs, but are initial construction or repairs to existing infrastructure; therefore there are no proceeds available to be used to reimburse General Fund for offender incarceration costs.

OPERATING BUDGET

This project has no anticipated impact on state operating costs. The department notes that CCi programming reduces DOC's reliance on General Fund moneys by using program-generated moneys for staffing.

CCi Small Projects Commenced During FY 2017-18

Facility	Description	Estimated Expense	Status
ECCC	Replace Cow Dairy milking parlor roof	$260,000	Not Completed
CWCF	Replace International Training roof	$260,000	Not Completed
ECCC	Add additional hunting bird runs	$40,000	Completed
FCF	Upgrade electric power to support new machine shop program	$40,000	Not Completed
FCF	Upgrade electric power in furniture shop for new LED sighting program	$60,000	Not Completed

Department of Corrections
Five-Year Projection of Need
FY 2018-19 through FY 2022-23

Project Title	Fund Source	FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	Totals
Capital Construction (Current Year)							
Correctional Industries – Miscellaneous Small Projects	CCF	$0	$0	$0	$0	$0	$0
	CF	660,000	0	0	0	0	$660,000
Fire Alarm System Replacement, Arkansas Valley Correctional Facility (Capital Renewal)	CCF	2,543,505	0	0	0	0	$2,543,505
	CF	0	0	0	0	0	$0
Capital Construction (Out Year)							
Cellhouse 5 Security, Utilities, and ADA Improvements, Colorado Territorial Correctional Facility (Capital Renewal)	CCF	0	0	0	0	6,105,845	$6,105,845
	CF	0	0	0	0	0	$0
Electrical Infrastructure, East Canon City Prison Complex (Capital Renewal)	CCF	0	0	0	6,866,500	0	$6,866,500
	CF	0	0	0	0	0	$0
Facility Shower/Toilet/Drains/ADA Improvements, Arkansas Valley Correctional Facility (Capital Renewal)	CCF	0	0	9,318,960	0	0	$9,318,960
	CF	0	0	0	0	0	$0
Food Services Building Renovation, Sterling Correctional Facility (Capital Renewal)	CCF	0	6,675,400	0	0	0	$6,675,400
	CF	0	0	0	0	0	$0
Hot and Chilled Water Piping Replacement, Arkansas Valley Correctional Facility (Capital Renewal)	CCF	0	0	0	6,297,588	0	$6,297,588
	CF	0	0	0	0	0	$0
Improve ADA, Electrical, HVAC, and Plumbing Systems, Building 11 and 27, Colorado Territorial Correctional Facility (Capital Renewal)	CCF	0	0	0	0	12,311,400	$12,311,400
	CF	0	0	0	0	0	$0
Improve Primary Electrical System, Colorado Territorial Correctional Facility (Capital Renewal)	CCF	0	0	0	6,297,100	0	$6,297,100
	CF	0	0	0	0	0	$0
Perimeter Security Improvements, Delta Correctional Center	CCF	0	3,899,000	0	0	0	$3,899,000
	CF	0	0	0	0	0	$0

Department of Corrections (Cont.)
Five-Year Projection of Need
FY 2018-19 through FY 2022-23

Project Title	Fund Source	FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	Totals
Capital Construction (Out Year) (Cont.)							
Programs Building Addition, Trinidad Correctional Facility	CCF	$0	$0	$0	$2,584,000	$0	$2,584,000
	CF	0	0	0	0	0	$0
Progressive Care Living Unit, Skyline Correctional Center	CCF	0	0	7,383,125	0	0	$7,383,125
	CF	0	0	0	0	0	$0
Denver Reception and Diagnostic Center - Centennial Correctional Facility Population Swap	CCF	0	0	9,970,125	0	0	$9,970,125
	CF	0	0	0	0	0	$0
Capital Construction Subtotals	CCF	*2,543,505*	*10,574,400*	*26,672,210*	*22,045,188*	*18,417,245*	*80,252,548*
	CF	*660,000*	*0*	*0*	*0*	*0*	*660,000*
Controlled Maintenance Subtotals	CCF	*13,396,252*	*See OSA Annual Report.*				*$13,396,252*
Total: State Funds		*15,939,757*	*10,574,400*	*26,672,210*	*22,045,188*	*18,417,245*	*$93,648,800*
Grand Total: All Fund Sources		**$16,599,757**	**$10,574,400**	**$26,672,210**	**$22,045,188**	**$18,417,245**	**$94,308,800**

Source: Office of the State Architect

COVER PAGE
History Colorado

FY 2018-19 CAPITAL CONSTRUCTION REQUESTS
RECOMMENDED FOR FUNDING BY OSPB:

- Regional Museum Preservation Projects *(cash-funded)*

TOTAL: FY 2018-19 CAPITAL CONSTRUCTION STATE-FUNDED REQUEST AMOUNT = $0

FY 2018-19 CONTROLLED MAINTENANCE REQUESTS (2)
NOT RECOMMENDED FOR FUNDING BY OSPB:
LEVEL II:

- Paint High Bridge, Georgetown Loop Railroad ($560,980)

LEVEL III:

- Assess and Restore Adobe, Ph 1 of 3 ($1,052,444)

HISTORY OF STATE FUNDING

- **$9.0 million** has been appropriated on behalf of capital projects at the agency since FY 2013-14. This represents **1.0 percent** of the total amount appropriated on behalf of all capital construction and controlled maintenance projects during this period.

- **$0.6 million** was appropriated in **FY 2017-18**.

INVENTORY OF GENERAL FUND SUPPORTED FACILITIES

- The General Fund supported inventory of department facilities totals **457,182 GSF**. This total represents **1.0 percent** of the entire General Fund supported inventory of state buildings.

RECENT CDC VISITS

- El Pueblo History Museum (June 2015)
- Fort Garland Museum (October 2015)
- Fort Vasquez Museum (June 2015)
- Georgetown Loop Railroad (June 2016)
- Trinidad History Museum (October 2015)

Fiscal Year 2018-19 Capital Construction Request

Colorado Historical Society (History Colorado)

Regional Museum Preservation Projects

PROGRAM PLAN STATUS

2002-180

Approved Program Plan? N/A **Date Approved:**

PRIORITY NUMBERS

Prioritized By	Priority	
DeptInst	1 of 1	
OSPB	N/A of 53	Recommended for funding from cash sources.

PRIOR APPROPRIATION AND REQUEST INFORMATION

Fund Source	Prior Approp.	FY 2018-19	FY 2019-20	Future Requests	Total Cost
CF	$7,100,001	$700,000	$0	$0	$7,800,001
CFE	$5,958,131	$0	$0	$0	$5,958,131
FF	$1,145,878	$0	$0	$0	$1,145,878
Total	$14,204,010	**$700,000**	$0	$0	$14,904,010

ITEMIZED COST INFORMATION

Cost Item	Prior Approp.	FY 2018-19	FY 2019-20	Future Requests	Total Cost
Land Acquisition	$0	$0	$0	$0	$0
Professional Services	$723,773	$72,000	$0	$0	$795,773
Construction	$8,473,792	$252,727	$0	$0	$8,726,519
Equipment	$4,231,101	$350,000	$0	$0	$4,581,101
Miscellaneous	$155,144	$0	$0	$0	$155,144
Contingency	$620,200	$25,273	$0	$0	$645,473
Software Acquisition	$0	$0	$0	$0	$0
Total	$14,204,010	**$700,000**	$0	$0	$14,904,010

PROJECT STATUS

This is an ongoing request. Cash funds spending authority has been granted on behalf of the project each year for the last 17 years. History Colorado did not detail out year request amounts in its current-year request documents, but it will likely continue submitting requests for cash funds spending authority each year.

PROJECT DESCRIPTION / SCOPE OF WORK

The Colorado Historical Society (History Colorado) is requesting cash funds spending authority to address a number of historical preservation projects at regional museums. History Colorado says that it has statutory responsibility to reconstruct, restore, repair, install, and furnish state monuments to the extent funds are available. For FY 2018-19, funds will be used for the following projects:

(1) Byers-Evans House (Denver) — The project replaces the roof and hires a consultant to recommend other permanent repairs ($55,000).

(2) Fort Garland Museum (Fort Garland) — The project installs drainage systems to divert water from two newly

repaired adobe buildings on the museum grounds ($90,000).

(3) Fort Vasquez Museum (Platteville) — The project improves drainage to divert water from the adobe fort ($40,000).

(4) Georgetown Loop Railroad (Georgetown/Silver Plume) — The project purchases additional rolling stock and makes annual repairs to existing locomotives, passenger cars, kitchen cars, and work cars ($350,000).

(5) Grant-Humphreys Mansion (Denver) — The project makes interior and exterior repairs on the property, including to the gutter, drainage, spigot, and roof. It also allocates funding for the hiring of a consultant to recommend other permanent repairs ($40,000).

(6) Trinidad History Museum (Trinidad) — The project installs drainage systems for three adobe buildings on the museum grounds ($90,000).

(7) Construction Management – Construction management for water diversion projects and roofing needs at each location ($35,000).

Cost assumption. The cost assumption is based on History Colorado staff estimates, bids from local contractors, and previous maintenance project costs. The project is not required to meet the Art in Public Places or High Performance Certification Program requirements.

PROJECT JUSTIFICATION

History Colorado says that not making the improvements will endanger the structural integrity of the buildings, impact public accessibility, and increase future preservation needs. This would also have adverse effects on local communities and economies by harming tourism revenue, says History Colorado.

Adobe buildings are highly susceptible to water damage and deteriorate because of excessive rainwater or ground water infiltration. Successful stabilization of adobe structures depends on how effectively a structure sheds water, and proper drainage systems are necessary to move water from the base or foundation.

PROGRAM INFORMATION

All historic properties held by the Colorado Historical Society are state monuments, as set forth in the State Monuments Act.

PROJECT SCHEDULE

	Start Date	Completion Date
Design	July 2018	May 2019
Construction	May 2019	April 2020
Equipment		April 2020
Occupancy		June 2020

SOURCE OF CASH FUNDS

The source of cash funds is revenue from the State Historical Fund ($600,000 CF), which accrues revenue from limited stakes gaming, and from revenue, gifts, grants, and donations generated at the museums and historical sites ($100,000 CF). These funds are administered pursuant to Section 12-47.1-1201, C.R.S.

Fiscal Year 2018-19 Capital Construction Request

Colorado Historical Society (History Colorado)

Regional Museum Preservation Projects

STAFF QUESTIONS AND ISSUES

1. Fort Garland, Fort Vasquez, and Trinidad History Museum requested funding for water drainage systems. Please explain the unique nature of the drainage for each site.

Each site is unique and requires different needs. For example, at the Baca House at the Trinidad History Museum, a new roof is needed to ensure the adobe structure is not experiencing further water damage. In addition, all three sites have areas of standing water that damage the adobe structures from the inside out. At Fort Garland, dirt will need to be moved to ensure there is a counter-slope that carries water away from the adobe buildings. Fort Vasquez is located in the middle of Highway 85, so there is a need to ensure the structure is protected from water backsplash from vehicles on the highway. The needs at each of these museums is likely to change over the next year and History Colorado intends on reevaluating each site in the summer of 2018 with a consultant to ensure the agency is addressing its most pressing water diversion needs with these funds.

2. Please provide an update of efforts being made by the Office of State Architect to explore the possibility of shifting portions of future requests to the operating budget.

History Colorado is amenable to this move as long as roll-forward authority is granted for the funds. History Colorado cannot spend the full appropriation in one fiscal year.

OPERATING BUDGET

The project has no anticipated impact on state operating costs.

History Colorado
Five-Year Projection of Need
FY 2018-19 through FY 2022-23

Project Title	Fund Source	FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	Totals
Capital Construction (Current Year)							
Regional Museum Preservation Projects	CCF	$0	$0	$0	$0	$0	$0
	CF	700,000	0	0	0	0	$700,000
Capital Construction (Out Year)							
Connect Placitas to Galleries, El Pueblo History Museum	CCF	0	898,857	0	0	0	$898,857
	CF	0	0	0	0	0	$0
Capital Construction Subtotals	CCF	*0*	*898,857*	*0*	*0*	*0*	*898,857*
	CF	*700,000*	*0*	*0*	*0*	*0*	*700,000*
Controlled Maintenance Subtotals	CCF	*1,613,424*	*See OSA Annual Report.*				*$1,613,424*
Total: State Funds		*1,613,424*	*898,857*	*0*	*0*	*0*	*$2,512,281*
Grand Total: All Fund Sources		**$2,313,424**	**$898,857**	**$0**	**$0**	**$0**	**$3,212,281**

Source: Office of the State Architect

COVER PAGE
Department of Human Services

FY 2018-19 CAPITAL CONSTRUCTION REQUESTS (LISTED IN OSPB PRIORITY ORDER)

RECOMMENDED FOR FUNDING BY OSPB:

- Adams County Youth Services Center Replacement *(continuation)*
- Facility Refurbishment for Safety, Risk Mitigation, and Modernization, Division of Youth Services (*continuation)*
- Grand Junction Regional Center Campus Relocation and Closure *(new)*
- Fall Prevention, Fire Control, and Video Surveillance Improvements, Homelake and McCandless VCLCs *(cash funded)*
- Regional Center Capital Improvements (*cash funded)*

NOT RECOMMENDED FOR FUNDING BY OSPB:

- Upgrade Campus Utility Infrastructure, CMHI at Fort Logan (Capital Renewal) *(previously requested)*
- Upgrade Campus Utility Infrastructure, CMHI at Pueblo (Capital Renewal) *(previously requested)*
- Replace Windows, CMHI at Fort Logan (Capital Renewal) (*new*)
- Facility Modernization, Colorado Mental Health Institutes (*new*)

TOTAL: FY 2018-19 CAPITAL CONSTRUCTION STATE-FUNDED REQUEST AMOUNT = $64,838,594

FY 2018-19 CONTROLLED MAINTENANCE REQUESTS (12)

RECOMMENDED FOR FUNDING BY OSPB:

LEVEL I:

- Upgrade Life Safety System, Southern District ($465,126)
- Repair/Replace Fire Protection Systems, Gilliam and Lookout Mountain Youth Services Centers, Ph 1 of 3 ($1,387,021)
- Improve Exterior Accessibility, Grand Junction Development Center ($118,300)

NOT RECOMMENDED FOR FUNDING BY OSPB:

LEVEL II:

- Repair/Replace HVAC Systems, B Building, Colorado Mental Health Institute at Fort Logan, Ph 1 of 2 ($1,240,996)
- Repair/Replace HVAC Systems, Pueblo, Spring Creek, and Zebulon Pike Youth Services Centers, Ph 1 of 3 ($723,889)
- Repair/Replace HVAC Systems, DeNier, Marvin Foote, and Platte Valley Youth Services Centers, Ph 1 of 3 ($590,425)
- Repair/Replace Ash Conveyor System, Heat Plant, CMHI at Pueblo, Ph 1 of 2 ($1,345,750)
- Repair/Replace Roofs, CMHI at Fort Logan (fourth cycle) ($1,114,405)

COVER PAGE (Cont.)
Department of Human Services

LEVEL III:

- Replace Gym Floors, Youth Services Centers, Ph 1 of 2 ($1,575,310)
- Repair/Replace Roofs, Adams, Gilliam, and Mount View Youth Services Centers, Ph 1 of 2 ($1,274,697)
- Replace Windows, Two Buildings, CMHI at Pueblo, Ph 1 of 2 ($942,379)
- Replace Flooring, Seven Buildings, CMHI at Fort Logan, Ph 1 of 3 ($837,503)

HISTORY OF STATE FUNDING

- **$69.3 million** has been appropriated to the department on behalf of capital projects since FY 2013-14. This represents **7.3 percent** of the total amount appropriated on behalf of all capital construction and controlled maintenance projects during this period.

- **$13.9 million** was appropriated in **FY 2017-18**.

- An additional **$23.9 million** was authorized through Senate Bill 17-265 for controlled maintenance.

INVENTORY OF GENERAL FUND SUPPORTED FACILITIES

- The General Fund supported inventory of department facilities totals **3,541,437 GSF**. This total represents **7.4 percent** of the entire General Fund supported inventory of state buildings.

RECENT CDC VISITS

- Colorado Mental Health Institute at Fort Logan (October 2017)
- Colorado Mental Health Institute at Pueblo (June 2017)
- Colorado Veterans Community Living Center at Fitzsimons, Aurora (August 2014)
- Colorado Veterans Community Living Center at Rifle (June 2016)
- Colorado Veterans Community Living Center at Walsenburg (October 2014)
- Grand Junction Regional Center campus (June 2016)
- Pueblo Youth Services Center (June 2017)
- Zebulon Pike Youth Services Center, Colorado Springs (June 2015)

Grand Junction Regional Center Campus Relocation and Closure

Staff Analysis Pending

Fiscal Year 2018-19 Capital Construction Request

Human Services

Adams County Youth Services Center Replacement

PROGRAM PLAN STATUS

2016-034

Approved Program Plan? Yes **Date Approved:** March 31, 2009

PRIORITY NUMBERS

Prioritized By	Priority	
DeptInst	2 of 9	
OSPB	2 of 53	Recommended for funding.

PRIOR APPROPRIATION AND REQUEST INFORMATION

Fund Source	Prior Approp.	FY 2018-19	FY 2019-20	Future Requests	Total Cost
CCF	$4,982,833	$15,499,760	$0	$0	$20,482,593
Total	$4,982,833	**$15,499,760**	$0	$0	$20,482,593

ITEMIZED COST INFORMATION

Cost Item	Prior Approp.	FY 2018-19	FY 2019-20	Future Requests	Total Cost
Land Acquisition	$0	$0	$0	$0	$0
Professional Services	$2,012,833	$0	$0	$0	$2,012,833
Construction	$2,697,273	$13,777,238	$0	$0	$16,474,511
Equipment	$0	$678,814	$0	$0	$678,814
Miscellaneous	$0	$305,624	$0	$0	$305,624
Contingency	$272,727	$738,084	$0	$0	$1,010,811
Software Acquisition	$0	$0	$0	$0	$0
Total	$4,982,833	**$15,499,760**	$0	$0	$20,482,593

PROJECT STATUS

This is a continuation request. Phase II was funded in FY 2016-17.

Phase III was submitted for funding in FY 2017-18 and included in the CDC's February 2017 prioritized funding recommendation to the Joint Budget Committee (JBC). The JBC initially recommended funding on behalf of the project, but subsequently rescinded this recommendation. The CDC and JBC met on March 20, 2017, to discuss the project status and to determine whether to appropriate funding for Phase III in the 2017 Long Bill. The department testified at the hearing that it did not anticipate acquiring property for the new facility until October of 2017. Therefore, the soonest the department anticipated beginning the underground utility and site infrastructure work funded through Phase II was January 2018. Following discussion with the department about the delays in the project schedule associated with the site acquisition and the likelihood of beginning site infrastructure work in the winter months, the department decided to withdraw the request for FY 2017-18. The department stated that it did not believe delaying funding for one year would significantly impact the project schedule and that -- pending an appropriation -- it anticipated issuing a request for proposals after the 2018 Long Bill is signed in April or May.

PROJECT DESCRIPTION / SCOPE OF WORK

The Department of Human Services, Division of Youth Services (DYS), is requesting state funds for the final phase of a three-phase project to design, construct, and equip a 40-bed, 38,577-square-foot youth detention facility. The

project adds capacity to address the 17th Judicial District's current population needs — although it will not increase statewide capacity, which is legislatively mandated — and adds programming for the high-needs and diverse population housed in the facility. The facility will replace the existing 13,788-square-foot Adams County Youth Services Center (YSC). This year's request for Phase III constructs and equips the new facility. Phase I designed the project and updated the operational and facility program plans prepared in 2008 and 2009. Phase II constructs offsite infrastructure, including streets, curbs, gutters, and underground utilities.

Programmatic improvements anticipated under the project include:

- increased program and activity space, including individual, group, and family counseling session meeting areas;
- additional interior and exterior recreational facilities; and
- additional special and general education classrooms.

DHS says it cannot expand the existing Adams County YSC because the site is surrounded by other public and private land and facilities, and the existing building is not configured for expansion.

The new facility will be sited on 13 acres in Brighton. Traditionally, counties provide sites for youth correction detention facilities. After the new facility is built, the land where the existing Adams YSC is sited will transfer back to Adams County in accordance with the terms of the ordinal deed transferring ownership to the state, and ownership of the new site will transfer from the county to the state.

Cost assumption. The cost assumption is based on a 2016 facilities program plan. The project cost has increased from the last budget cycle to account for inflation using an escalation factor of 4.5 percent based on current construction market conditions. The cost per GSF is $531. The project meets the Art in Public Places and High Performance Certification Program requirements.

PROJECT JUSTIFICATION

DHS says additional beds are needed at the Adams County YSC in order to address the growing juvenile offender population in the 17th Judicial District and the statutory direction to ensure that, to the extent possible, a juvenile is held in a juvenile detention facility located in the judicial district where an offense was committed (see Section 19-2-402.5 (1)(a), C.R.S.) The Adams County YSC provides services exclusively to the 17th Judicial District, which DHS says has one of the fastest growing juvenile populations and arrest rates in the state. According to 2015 estimates cited by DHS, the juvenile arrest rate in the 17th Judicial District accounts for nearly one-third of all juvenile arrests statewide. When a juvenile is detained outside of the district in which an offense was committed, it falls to in-district local law enforcement to transport juveniles to and from court hearings. The department says this drives additional costs at the local level and it also makes it harder for juveniles detained out-of-district to interact with family members.

The department says the new facility will allow for better supervision and staff interaction with youth. The existing facility was built in 1968 and, according to the department, is inadequate to meet current DYS program needs. The department explains that program philosophies have changed in the last four decades and that program space deficiencies limit the availability of staff to provide needed services. For instance, the layout of the existing facility limits the ability of staff to separate youth by classification status such as age, gender, or diagnosis and there is no programming space in the residential pods. Also, it is difficult for staff to supervise youth in the residential pods because rooms are located down long, narrow, poorly lit corridors. Additionally, there is a shortage of classroom and recreation space, which DHS says restricts the number of activities and developmental opportunities that are made available to the residents.

The department says that numerous systems within and construction elements of the existing building do not meet current building codes. The original building systems are of residential rather than institutional quality. Based on various facility audits and consultant reports, the department determined that the cost of correcting building deficiencies exceeds the current replacement value of the existing facility.

Fiscal Year 2018-19 Capital Construction Request

Human Services

Adams County Youth Services Center Replacement

PROGRAM INFORMATION

The DYS oversees the state's juvenile detention, commitment, and parole programs and is statutorily mandated to provide for the care and supervision of youth committed to the custody of the Colorado Department of Human Services. The DYS serves youth between the ages of 10 and 21 who are pre-adjudicated, sentenced, or committed to the division. The division also manages and oversees state-funded and locally administered programs that provide services to youth at risk of further progressing into the juvenile justice system. The DYS system is organized into four regions: Central, West, South, and Northeast. The regional offices are responsible for client management services. The division has 12 facilities located throughout the state; ten facilities are operated directly by the division, and two are privately operated. The northeast region, which includes the Adams and Platte Valley YSCs, encompasses the area of the state north and east of Metro Denver to the Wyoming, Nebraska, and Kansas borders.

PROJECT SCHEDULE

	Start Date	Completion Date
Design	July 2015	July 2018
Construction	July 2018	September 2019
Equipment	October 2019	December 2019
Occupancy	January 2020	

SOURCE OF CASH FUNDS

This project is not funded from cash sources.

STAFF QUESTIONS AND ISSUES

1. What is the status of the site acquisition?

The department continues to make progress towards the acquisition of the Bromley Park property as the location for the new Adams Youth Services Center (AYSC). The property is located in Adams County and the City of Brighton. As of November 2017, the department is in the final stages of working with Adams County to finalize the purchase agreement between the county and the developer for the purchase of the land. Additionally, the department has submitted to Adams County, for signature, an Intergovernmental agreement that establishes the county and department's respective roles and responsibilities for acquisition and development of the land for the AYSC project. The next steps in the process include:

- ***November 2017:*** *Finalize and sign the Intergovernmental Agreement with the county.*
- ***January 2018:*** *Department of Human Services will file a courtesy copy of the Final Development Plan (FDP) for the parcel to be re-platted with the City of Brighton.*
- ***January 2018:*** *Complete and file a fence variance request with the City of Brighton to allow the department to build a typical DYS security fence (16' high with anti-climb mesh) on the property that differs from the Bromley Planned Unit Development (PUD) and typical city standards for the height of the fence.*
- ***May 2018:*** *Approval of variance and site package (courtesy submittal) complete and property re-platted by the City of Brighton.*
- ***May 2018:*** *Land purchase by Adams County and Land Transfer from Adams to department.*
- ***July 2018:*** *Complete all design phases (design development and construction documentation) and post construction project for bid. (Provided FY 2018-19 capital request is approved).*
- ***September 2018:*** *Award bid and begin construction.*

Factors that can stall this timeline would include any delays in approval (of the department's FDP or fence variance) by the City of Brighton. Delay of purchase or failure to purchase the property by Adams County, unanticipated or unachievable development requirements placed on the department by the City of Brighton or County, or a failed construction bid that requires revising the project scope and re-bidding the project. At this time, based on discussions with Adams County, the department does not anticipate encountering any difficulties with the seller (developer), City of Brighton, or Adams County in proceeding with this project.

OPERATING BUDGET

The department indicates it will submit a FY 2019-20 decision item to the Joint Budget Committee to address operating cost increases, including an expected increase in FTE.

Fiscal Year 2018-19 Capital Construction Request

Human Services

Facility Refurbishment for Safety, Risk Mitigation, and Modernization, Division of Youth Services

2015-031

PROGRAM PLAN STATUS

Approved Program Plan? Yes **Date Approved:** March 1, 2015

PRIORITY NUMBERS

Prioritized By	Priority	
DeptInst	3 of 9	
OSPB	3 of 53	Recommended for funding.

PRIOR APPROPRIATION AND REQUEST INFORMATION

Fund Source	Prior Approp.	FY 2018-19	FY 2019-20	Future Requests	Total Cost
CCF	$12,307,050	$5,904,772	$1,782,200	$0	$19,994,022
Total	$12,307,050	**$5,904,772**	$1,782,200	$0	$19,994,022

ITEMIZED COST INFORMATION

Cost Item	Prior Approp.	FY 2018-19	FY 2019-20	Future Requests	Total Cost
Land Acquisition	$0	$0	$0	$0	$0
Professional Services	$1,496,480	$770,188	$247,426	$0	$2,514,094
Construction	$9,461,314	$4,667,803	$1,395,249	$0	$15,524,366
Equipment	$300,000	$0	$0	$0	$300,000
Miscellaneous	$28,173	$0	$0	$0	$28,173
Contingency	$1,021,083	$466,781	$139,525	$0	$1,627,389
Software Acquisition	$0	$0	$0	$0	$0
Total	$12,307,050	**$5,904,772**	$1,782,200	$0	$19,994,022

PROJECT STATUS

This is a continuation request. Phase IV was funded in FY 2017-18.

To date, the project has completed a comprehensive safety and risk mitigation assessment at 12 facilities, made critical security upgrades to five homes, replaced metal detectors in five homes, and completed design to mitigate the risk of self-harm in two homes.

PROJECT DESCRIPTION / SCOPE OF WORK

The Division of Youth Services (DYS) within the Department of Human Services is requesting state funds for the fifth phase of a six-phase project to address safety and self-harm risks in 12 DYS facilities. This year's request for Phase V addresses repairs in the Marvin W. Foote Youth Services Center (YSC), Mount View YSC, Platte Valley YSC, and Spring Creek YSC. The project mitigates the risk of self-harm in sleeping rooms, restrooms, and seclusion rooms and replaces components of the security and electronic systems, as needed.

Phase I conducted a comprehensive assessment of, and planning process for, the necessary renovations at division facilities. The assessment was completed in December 2014, and department staff priced and prioritized the needs for future requests in spring 2015. The assessment identified 787 distinct deficiencies at division facilities.

Examples of the type of work that will be conducted under this phase of the project include:

- installation of self-harm-resistant hardware such as handles, hinges, light fixtures, sprinkler heads, and shower heads;
- upgrades to interior and exterior doors, including sally ports; and
- replacement of select window glazing with attack-resistant glazing.

Cost assumption. The cost assumption is based on the detailed cost estimates provided by the private firm that conducted the safety and risk mitigation assessment. The project cost accounts for future inflation. The project is not required to meet the Art in Public Places Program requirements because the requirements have been waived by the manager of the program. It is not required to meet the requirements of the High Performance Certification Program because it does not involve the substantial renovation of a facility.

PROJECT JUSTIFICATION

According to the division, the facilities encompassed in the project range from 15- to 100-years old, and previous overutilization of the facilities has taken its toll on the physical plant. The department says that the facilities have evidence of wear in housing units, day room areas, and classrooms, as well as on central systems such as dining facilities and HVAC systems. The department explains that the average length of stay in a DYS facility is two weeks, and that facilities experience a very high volume of use. According to the department, there are nearly 8,000 new admissions annually.

In addition to the deterioration and heavy use of the physical buildings, the division says that many aspects of the facilities are not conducive to safe treatment environments that reflect current best practices to reduce the risk of harm to residents and staff. According to data compiled by the division, in FY 2013-14 there were 41 suicide attempts in DYS; this number more than doubled for FY 2014-15 to 83 attempts. The department reports that there were 78 recorded suicide attempts from July 2016 through March 2017. The DYS says that staff at one facility identified 17 distinct places in a single restroom where residents with self-harm tendencies could hurt themselves. The department explains that most of the DYS facilities were constructed with relatively non-secure perimeters and commercial grade features, and that the clients housed in the facilities tend to be more violent, traumatized, impulsive, and destructive than they were 20 years ago.

Project alternative. If the project is not funded, the department explains that it will divert operating dollars to address the most immediate facility needs; however, this approach will not be sufficient to address the deferred maintenance of or the risk of self-harm or injury that exists at the facilities.

PROGRAM INFORMATION

The Division of Youth Services oversees the state's juvenile detention, commitment, and parole programs and is statutorily mandated to provide for the care and supervision of youth committed to the custody of the Colorado Department of Human Services. The DYS serves youth between the ages of 10 and 21 who are pre-adjudicated, sentenced, or committed to the division. The division also manages and oversees state-funded and locally administered programs that provide services to youth at risk of further progressing into the juvenile justice system. The division has 12 facilities located throughout the state; ten facilities are operated directly by the division, and two are privately operated. Many of the buildings in the system were remodeled in 1988, but there have been no substantive upgrades since that time.

The homes addressed through the current request are located in Colorado Springs (Spring Creek), Englewood (Marvin W. Foote), Greeley (Platte Valley), and Lakewood (Mount View).

Fiscal Year 2018-19 Capital Construction Request

Human Services

Facility Refurbishment for Safety, Risk Mitigation, and Modernization, Division of Youth Services

PROJECT SCHEDULE

	Start Date	Completion Date
Design	July 2018	April 2019
Construction	May 2019	May 2020
Equipment	June 2020	August 2020
Occupancy	August 2020	September 2020

SOURCE OF CASH FUNDS

This project is not funded from cash sources.

STAFF QUESTIONS AND ISSUES

1. Once the final phase of this project is funded, will the department bring forward a new project for FY 2020-21 or beyond to address upgrades identified in the 2015 assessment that are outside of the scope of the current project, such as reconfiguring program space or making upgrades to finishes and systems past their useful life?

The department is continuing to assess outstanding facility physical plant needs outside the scope of the Facility Refurbishment project although a specific time frame or scope for a new request has not yet been established. As previously reported, the existing project covers only a portion of the deficiencies identified in the 2015 statewide facility assessment as part of the Reilly Johnson Architecture Facility Refurbishment capital construction project. However, this past summer the Division of Youth Services (DYS) experienced the tragedy of two youth suicides in its Mount View Youth Services Center facility. These incidents are driving the division to reassess priorities for self-harm mitigation in light of lessons learned from these incidents.

Additionally, the DYS has initiated the planning process for three facilities (Zebulon Pike, Grand Mesa and Platte Valley). An Operational Program Plan (OPP) to be followed by a Facility Program Plan (FPP) have been funded through DYS General Fund and targeted for completion by June 30, 2018. The facilities identified for this initiative range in age from 20-30 years old. These DYS facilities were designed for a different clientele than are currently served. The youth in the DYS today have a myriad of needs, especially in the realm of vocational training and trauma responsive treatment, to help reintegrate them into their communities and reduce recidivism. Also, facilities built 20-30 years ago cannot provide optimal program delivery due to the changes in program delivery philosophies. DYS facilities have unique needs based on the youth demographic they serve; but face challenges due to the lack of funding. Some of the deficiencies identified at these facilities include inadequate space for vocational educational programming, medical clinic space, meeting space, and to engage and host families.

Finally, HB17-1329 requires the division to begin a 24-bed pilot project on the grounds of Lookout Mountain YSC to enhance trauma responsive programming and a home-like, non-institutional environment. This pilot will serve as a model to further cultural and programmatic change throughout the Division of Youth Services. Lessons learned from operating the pilot project in current physical plant space may result in further facility planning dependent on funding availability and program identified deficiencies.

OPERATING BUDGET

DHS says the renovations funded by the project may slightly reduce the facilities' maintenance costs.

Fiscal Year 2018-19 Capital Construction Request

Human Services

Replace Windows, CMHI at Fort Logan (Capital Renewal)

2019-129

PROGRAM PLAN STATUS

Approved Program Plan? N/A **Date Approved:**

PRIORITY NUMBERS

Prioritized By	Priority	
DeptInst	4 of 9	
OSPB	15 of 53	Not recommended for funding.

PRIOR APPROPRIATION AND REQUEST INFORMATION

Fund Source	Prior Approp.	FY 2018-19	FY 2019-20	Future Requests	Total Cost
CCF	$0	$1,676,384	$0	$0	$1,676,384
Total	$0	**$1,676,384**	$0	$0	$1,676,384

ITEMIZED COST INFORMATION

Cost Item	Prior Approp.	FY 2018-19	FY 2019-20	Future Requests	Total Cost
Land Acquisition	$0	$0	$0	$0	$0
Professional Services	$0	$164,890	$0	$0	$164,890
Construction	$0	$1,374,085	$0	$0	$1,374,085
Equipment	$0	$0	$0	$0	$0
Miscellaneous	$0	$0	$0	$0	$0
Contingency	$0	$137,409	$0	$0	$137,409
Software Acquisition	$0	$0	$0	$0	$0
Total	$0	**$1,676,384**	$0	$0	$1,676,384

PROJECT STATUS

This is a new, never-before-requested project. The project was previously listed on the department's five-year projection of controlled maintenance need.

An earlier project made similar upgrades to the Team 2 units as part of a larger renovation.

PROJECT DESCRIPTION / SCOPE OF WORK

The Department of Human Services (DHS) is requesting state funds for a capital renewal request to replace single-pane windows in patient rooms and living areas in Building E at the Colorado Mental Health Institute at Fort Logan (CMHIFL). The capital renewal approach focuses on upgrading building systems, infrastructure, and the basic building components within existing state-owned buildings on a building-by-building basis, rather than the project-by-project approach used for controlled maintenance. Specifically, the project replaces 123 windows on the Team 1, 3, and 5 living units, including 84 patient room windows and 39 day hall and living area windows. The new windows will be double-glazed with laminated security glass and will include built-in mini blinds that can be rotated vertically.

Cost assumption. The cost assumption is based on calculations provided by a professional estimator hired by the department. As a capital renewal request, the project is not required to comply with the requirements of the Art in Public Places or High Performance Certification programs.

Fiscal Year 2018-19 Capital Construction Request

Human Services

Replace Windows, CMHI at Fort Logan (Capital Renewal)

PROJECT JUSTIFICATION

According to DHS, the existing single-pane windows increase the amount of energy required to adequately heat and cool the building and make it difficult to regulate the temperature of living areas. The department cites a study from the Department of Energy which states that single-pane glazing has twice the heat loss as double-pane glazing. The new windows will be more energy efficient. The department also says the new windows will be safer and more sanitary, because the department will abandon the cloth curtains used for privacy in favor of built-in mini blinds. The existing cloth curtains pose a risk of self harm and are difficult to keep clean. DHS explains that it is important to maintain privacy in patient rooms, both for patients and passers by on public streets. The built-in mini blinds will be capable of rotating vertically, but cannot be raised or lowered and will be operated by facility staff.

PROGRAM INFORMATION

The Fort Logan campus operates 94 inpatient psychiatric beds for adults with serious mental illness. Patients are treated on four units: Teams 1, 2, 3, and 5. There is no Team 4 unit. Most of the patients treated at CMHIFL are referred by community mental health centers.

PROJECT SCHEDULE

	Start Date	Completion Date
Design	July 2018	May 2019
Construction	June 2019	September 2020
Equipment		
Occupancy		October 2020

SOURCE OF CASH FUNDS

This project is not funded from cash sources.

STAFF QUESTIONS AND ISSUES

1. How does the department plan to address the need to relocate temporarily one or more patients during stages of the project?

The time duration for the installation of the windows in each room will determine the logistics of how many patients will be displaced at any given time. If the windows can be replaced in each room in approximately one to two hours, patients will remain on the unit but would be restricted from entering their room. If the installation process is significantly longer (one day), then the affected patients would need to be transferred to another unit for the day. We have successfully housed patients on other units for similar construction projects. If the scope of the project determines that all patients would need to be relocated for more than one day, the hospital could use one of the vacated units to temporarily house the patients.

2. The cost estimate references about $30,000 in costs associated with the removal of asbestos-containing materials. How confident is the department that it has identified the full scope of need associated with addressing ACMs in the materials at and near the windows?

The asbestos-containing material (ACM) costs included in the request are an allowance. As with any existing building, especially one which is more than 50 years old, the extent of ACM abatement needed has a degree of uncertainty. The actual level of abatement needed will only be accurately determined once construction starts. The project also includes contingency funds should the actual costs be higher than the estimated amount included in the project.

Human Services

Replace Windows, CMHI at Fort Logan (Capital Renewal)

OPERATING BUDGET

The project is expected to improve energy efficiency, which may lower utility costs. The project should also reduce the amount of time staff spends cleaning, mending, and replacing curtains.

Fiscal Year 2018-19 Capital Construction Request

Human Services

Facility Modernization, Colorado Mental Health Institutes

2019-130

PROGRAM PLAN STATUS

Approved Program Plan? No **Date Approved:**

PRIORITY NUMBERS

Prioritized By	Priority	
DeptInst	5 of 9	
OSPB	50 of 53	Not recommended for funding.

PRIOR APPROPRIATION AND REQUEST INFORMATION

Fund Source	Prior Approp.	FY 2018-19	FY 2019-20	Future Requests	Total Cost
CCF	$0	$11,812,033	$18,107,934	$638,580,432	$668,500,399
Total	$0	**$11,812,033**	$18,107,934	$638,580,432	$668,500,399

ITEMIZED COST INFORMATION

Cost Item	Prior Approp.	FY 2018-19	FY 2019-20	Future Requests	Total Cost
Land Acquisition	$0	$0	$0	$0	$0
Professional Services	$0	$11,249,556	$17,245,652	$32,709,570	$61,204,778
Construction	$0	$0	$0	$309,432,099	$309,432,099
Equipment	$0	$0	$0	$7,450,000	$7,450,000
Miscellaneous	$0	$0	$0	$272,161,023	$272,161,023
Contingency	$0	$562,477	$862,282	$16,827,740	$18,252,499
Software Acquisition	$0	$0	$0	$0	$0
Total	$0	**$11,812,033**	$18,107,934	$638,580,432	$668,500,399

PROJECT STATUS

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

The department received an appropriation of $815,000 CCF for FY 2014-15 to develop a master plan for the state mental health institutes.

The department completed an operational program plan for the state mental health institutes in October 2016.

PROJECT DESCRIPTION / SCOPE OF WORK

The Department of Human Services (DHS) is requesting state funds for the first phase of a five-phase project to replace the hospitals at the Colorado Mental Health Institute at Fort Logan (CMHIFL) and Pueblo (CMHIP) in order to expand the number of inpatient psychiatric beds in the system. The year three and year five requests anticipate the issuance of certificates of participate (COPs) to finance most of the costs associated with construction of the new facilities. This year's request for Phase 1 begins the design of the CMHIFL replacement project. Phase 2 completes design and Phase 3 issues the COPs and constructs a new hospital at CMHIFL. Phase 3 also begins the design of the CMHIP replacement project. Future phases complete design, issue additional COPs, and construct a new hospital at CMHIP.

This analysis describes the proposed improvements at the CMHIFL campus. The department anticipates building a 475,730-GSF hospital on a vacant plot of land on the northwest part of the campus. The new hospital will be a self-contained, contiguous building with residential and programming space. In this request, the department proposes reallocating some of its current bed capacity from Pueblo to Fort Logan in order to locate patients in closer proximity to family and to better reflect the geographic population centers of the state. The project replaces 94 beds and constructs 150 new beds at CMHIFL, increasing the total to 244. The campus currently serves an adult, civil population. The new beds will allow for an increased adult, civil population, and the addition of geriatric beds and low-risk forensic beds. The project also makes associated site improvements, such as constructing parking lots and improving campus wayfinding.

Cost assumption. The cost assumption is based on estimates prepared by a third-party consultant involved in earlier planning efforts. The cost estimates include future inflation. The project meets the requirements of the Art in Public Places and High Performance Certification programs.

Certificates of participation. The projected COPs issuance for Phase 3 of the project is $353.0 million. The projected COPs issuance for Phase 5 of the project is $263.7 million.

PROJECT JUSTIFICATION

The department explains that the request is the result of comprehensive planning efforts, including a report commissioned from the Western Interstate Commission on Higher Education (WICHE) completed in April 2015, an operational master plan for the mental health institutes completed in October 2016, and a facility master plan/site master plan completed in June 2017. The studies all identified a need for a significant increase in the number of mental health treatment beds in the state.

The facility master plan cites a national trend showing a reduction in the number of inpatient mental health beds and an increase in the number of people with mental illness in prisons and jails. Colorado now has fewer state psychiatric beds per capita (10 for every 100,000) than the national average, which is 11.7 beds for every 100,000 people. The WICHE study recommends that Colorado operate 1,125 state psychiatric beds by 2025, or 17.4 beds for every 100,000 people.

DHS says the existing facilities cannot be renovated to meet the needs of the mental health institute population. There have been significant changes in the type of population treated in the state mental health institutes since the construction of the CMHIFL campus. Specifically, the facility is only used to treat adults, rather than individuals of all ages. Also, those referred to the mental health institutes have more acute diagnoses than in the past. In particular, clients are more likely to experience substance abuse disorders, histories of violence and trauma, severe mental illness, and significant developmental disabilities. Additionally, treatment models and standards of care have changed in the decades since the hospital was constructed. At the time the hospital was constructed in the early 1960s, mental health services tended to be more custodial and less treatment-centered. The campus setting was appropriate for a population with less acute needs, because less direct supervision was required.

Other improvements that can be realized through the construction of a new hospital include: (1) better perimeter security, which will allow for more freedom of movement for qualifying patients between programs, services, and residential areas; (2) staffing efficiencies resulting from a better configuration of treatment units and shared services; (3) elimination of ongoing maintenance needs associated with aging systems; and (4) elimination of code compliance concerns associated with outdated and aging facilities.

Court-ordered evaluations and restorations. Under current law, the department is required to provide mental health services to individuals referred by the court system. The department says there has been a sharp increase in the number of competency evaluations and restoration orders in the last 10 to 15 years. The number of court-ordered evaluations and restoration orders is not within the department's control and is the result of a number of factors, such as changes in judicial system practices and the growth in the overall state population. According to data cited by the department, the overall number of referrals has increased from 538 in FY 2001-02 to 3,176 in FY 2016-17. This is an increase of almost 600 percent in a 15-year period. DHS explains that the rate of referrals continues to grow faster than expected and that it needs to provide more beds to comply with the settlement agreement reached in the federal district court lawsuit: *Center for Legal Advocacy d/b/a The Legal Center for People with Disabilities and Older People v. Reggie Bicha and Teresa A. Bernal.* The department is working with the Joint

Budget Committee and the Judicial Department to address the sharp increase in court-ordered evaluations (see Staff Questions and Issues #1 for more details). However, the department says that even if alternative programs are pursued with regard to court-ordered competency evaluations and treatment, there will still be an ongoing shortage of beds in the mental health system unless more beds are added through new construction.

PROGRAM INFORMATION

The department provides services at the mental health institutes for pretrial detainees referred by the courts, including: (1) competency evaluations, including evaluations to determine if a defendant has been restored to competency; and (2) restoration to competency treatments. Competency evaluations are conducted for both inpatient and outpatient referrals.

The Fort Logan campus operates 94 inpatient psychiatric beds for adults with serious mental illness. The patients treated at CMHIFL are referred by community mental health centers.

The Pueblo campus operates 449 inpatient psychiatric beds for adults with serious mental illness. The patients treated at CMHIP are either court ordered for evaluation or treatment or referred by community mental health centers.

The state mental health hospitals are licensed by the Colorado Department of Public Health and Environment, certified for Medicare and Medicaid participation by the federal Centers for Medicare and Medicaid Services, and accredited by the Joint Commission.

PROJECT SCHEDULE

	Start Date	Completion Date
Design	July 2018	July 2020
Construction	July 2020	October 2025
Equipment	October 2025	March 2026
Occupancy	April 2026	

*This schedule reflects work at CMHIFL only.

SOURCE OF CASH FUNDS

This project is not funded from cash sources.

STAFF QUESTIONS AND ISSUES

1. Does the department anticipate that it will continue to work with Judicial and the JBC to find alternatives to addressing the increased demand for inpatient psychiatric care, including building on past efforts to limit court-ordered competency evaluations and create additional jail-based restoration programs?

Yes, the department will continue to work with Judicial and the JBC to find alternatives to addressing the increased demand for inpatient psychiatric care, including building on past efforts to limit court-ordered competency evaluations and creating additional jail-based restoration programs. This work is ongoing, and includes suggested statutory changes. The 2015 report by the Western Interstate Commission for Higher Education (WICHE) entitled, "Office of Behavioral Health (OBH) Needs Analysis: Current Status, Strategic Positioning, and Future Planning" examined a range of options to help mitigate the shortage of mental health beds in the state including, alternative programs within jails, expansion of inpatient services in other regions of the state, and incentivizing payment plans for private psychiatric hospitals. Given the ever-rising demand for inpatient psychiatric beds, even if all such interventions are optimally implemented, there will remain a substantial need for inpatient psychiatric beds to meet the needs of civil and forensic patients.

2. Does the project include the cost to demolish any of the existing campus facilities?

No, the CMHIFL project as proposed in the decision item does not include significant demolition costs of the existing facilities. Because the plan indicates building the new CMHIFL facility on a new site location, the existing facility would remain intact. It is possible that, while the existing facility is no longer sufficient to meet inpatient mental health needs for the Denver Metro area that the facility could be of use by another provider or as additional office space.

3. During its recent tour of CMHI Fort Logan, DHS staff and members of the CDC discussed the various accreditation bodies that have oversight of hospital operations. There was some discussion around whether there are real differences between CMS and Joint Commission standards and whether Joint Commission accreditation is necessary in light of ongoing CMS accreditation. What are the department's thoughts on this issue? Do both bodies need to accredit the hospital? Is there a different value offered by each accrediting body?

The department is currently analyzing the overall accreditation process, the different values offered by each accrediting body and the overall benefits to both of the Colorado Mental Health Institutes (MHIs). This analysis will take several months to make an informed decision.

OPERATING BUDGET

The department did not provide a projection of the operating budget increase. It explains that the cost increase can only be accurately projected once the layout of the facility is finalized in the design phase.

Fiscal Year 2018-19 Capital Construction Request

Human Services

Upgrade Campus Utility Infrastructure, CMHI at Fort Logan (Capital Renewal)

PROGRAM PLAN STATUS

2002-108

Approved Program Plan? N/A **Date Approved:**

PRIORITY NUMBERS

Prioritized By	Priority	
DeptInst	6 of 9	
OSPB	13 of 53	Not recommended for funding.

PRIOR APPROPRIATION AND REQUEST INFORMATION

Fund Source	Prior Approp.	FY 2018-19	FY 2019-20	Future Requests	Total Cost
CCF	($1,182,351)	$8,935,147	$10,414,444	$6,862,309	$25,029,549
CCFE	$1,347,521	$0	$0	$0	$1,347,521
Total	$165,170	**$8,935,147**	$10,414,444	$6,862,309	$26,377,070

ITEMIZED COST INFORMATION

Cost Item	Prior Approp.	FY 2018-19	FY 2019-20	Future Requests	Total Cost
Land Acquisition	$0	$0	$0	$0	$0
Professional Services	$0	$1,276,699	$761,929	$516,179	$2,554,807
Construction	$165,170	$6,846,162	$8,705,747	$5,722,284	$21,439,363
Equipment	$0	$0	$0	$0	$0
Miscellaneous	$0	$0	$0	$0	$0
Contingency	$0	$812,286	$946,768	$623,846	$2,382,900
Software Acquisition	$0	$0	$0	$0	$0
Total	$165,170	**$8,935,147**	$10,414,444	$6,862,309	$26,377,070

PROJECT STATUS

The department has requested controlled maintenance funding for various components of the project each year for almost 20 years.

The department says 12 emergency controlled maintenance projects associated with infrastructure failures on the campus have been funded in the last six years. The average amount spent per year on emergency controlled maintenance in each of the last six years is $74,015.

Funding history. Funding on behalf of the first phase of a multiple-phase controlled maintenance project to address deteriorating campus infrastructure on the Fort Logan campus was awarded in FY 2001-02, and later rescinded during the 2003 legislative session. Funding was again awarded in FY 2006-07, and rescinded during the 2009 legislative session.

PROJECT DESCRIPTION / SCOPE OF WORK

The Department of Human Services (DHS) is requesting state funds for the first phase of a three-phase capital renewal project to repair or replace underground campus infrastructure on the Fort Logan campus, such as domestic

water mains, sewer mains, storm water drainage, irrigation lines, and fire lines. The project also replaces roads, parking lots, and sidewalks and adds underground conduit for future communication cabling. The capital renewal approach focuses on upgrading building systems, infrastructure, and the basic building components within existing state-owned buildings on a building-by-building basis, rather than the project-by-project approach used for controlled maintenance.

The Fort Logan campus infrastructure has exceeded its useful life and experiences frequent failures. This year's request for Phase 1 addresses the most crucial repairs. Phases 2 and 3 make improvements to the remaining roadways and underground infrastructure on the campus. The project is phased in order to reduce disruption and maintain access to critical facilities on the campus for the duration of the project.

DHS says the capital renewal approach is estimated to save $2.3 million in design and construction costs over the traditional controlled maintenance approach, which would fund the project over six years. Furthermore, the state will likely avoid future emergency controlled maintenance costs for repairs on the campus.

Cost assumption. The cost assumption is based on an April 2017 report by a third-party consultant. Phase 1 of the project includes a site survey, which will be used to verify the costs and scope of the remaining phases. The project cost accounts for future inflation at a rate of 4 percent a year. As a capital renewal request, the project is not required to comply with the requirements of the Art in Public Places or High Performance Certification programs.

PROJECT JUSTIFICATION

The department explains that outages and disruptions caused by aging and failing infrastructure compromise the safety and security of patients and staff. DHS says campus roads and sidewalks are failing because of high traffic volumes and because inadequate storm water drainage leads to flooding and water build-up on road surfaces. The roads are hazardous due to cracks, heaving, and uneven surfaces. The pedestrian walkways across campus are not ADA compliant. The fire lines, some of which are almost 90 years old, leak and have low water pressure, and some campus fire hydrants do not function. The sewer lines are clay or cast iron pipes and range in age from 50 to 100 years old. The sewer system is failing because the components are beyond their useful lives and because of root incursions. The department says it is not uncommon for the failing sewer system to flood program areas. The water lines, which are composed of steel, cast iron, and copper, are rusting, leading to poor water quality.

PROGRAM INFORMATION

The Fort Logan campus was originally constructed as a military outpost in 1881. In 1961, the campus was transferred to the state for use as a mental health institute. The campus is comprised of 231 acres, 74 buildings, and 643,054 GSF. The campus houses offices and programs within a number of department divisions, including the Office of Behavioral Health, the Division of Youth Corrections, and the Division of Facilities Management; the campus also houses programs within other state agencies such as the Governor's Office of Information Technology and the University of Colorado.

About 830 people are employed on the campus and campus programs serve about 2,500 clients.

PROJECT SCHEDULE

	Start Date	Completion Date
Design	July 2018	April 2019 - April 2021
Construction	April 2019	April 2021 - April 2023
Equipment		
Occupancy		

SOURCE OF CASH FUNDS

This project is not funded from cash sources.

STAFF QUESTIONS AND ISSUES

None.

OPERATING BUDGET

The operating impact is unknown; however, it is anticipated that the state will realize cost savings from a reduction in emergency maintenance and repair costs. Additionally, the department expects the project will allow it to devote more resources to routine maintenance, which will extend the useful life of various systems.

Fiscal Year 2018-19 Capital Construction Request

Human Services

Upgrade Campus Utility Infrastructure, CMHI at Pueblo (Capital Renewal)

2015-049

PROGRAM PLAN STATUS

Approved Program Plan? N/A **Date Approved:**

PRIORITY NUMBERS

Prioritized By	Priority	
DeptInst	7 of 9	
OSPB	14 of 53	Not recommended for funding.

PRIOR APPROPRIATION AND REQUEST INFORMATION

Fund Source	Prior Approp.	FY 2018-19	FY 2019-20	Future Requests	Total Cost
CCF	$0	$15,537,566	$5,679,412	$9,376,379	$30,593,357
Total	$0	**$15,537,566**	$5,679,412	$9,376,379	$30,593,357

ITEMIZED COST INFORMATION

Cost Item	Prior Approp.	FY 2018-19	FY 2019-20	Future Requests	Total Cost
Land Acquisition	$0	$0	$0	$0	$0
Professional Services	$0	$1,921,897	$726,015	$1,236,529	$3,884,441
Construction	$0	$12,203,163	$4,437,087	$7,287,452	$23,927,702
Equipment	$0	$0	$0	$0	$0
Miscellaneous	$0	$0	$0	$0	$0
Contingency	$0	$1,412,506	$516,310	$852,398	$2,781,214
Software Acquisition	$0	$0	$0	$0	$0
Total	$0	**$15,537,566**	$5,679,412	$9,376,379	$30,593,357

PROJECT STATUS

This is the third request for funding. Funding was first requested for FY 2014-15.

PROJECT DESCRIPTION / SCOPE OF WORK

The Department of Human Services (DHS) is requesting state funds for the first phase of a three-phase capital renewal project to complete a number of critical controlled maintenance projects on the Colorado Mental Health Institute at Pueblo (CMHIP) campus. The capital renewal approach focuses on upgrading building systems, infrastructure, and the basic building components within existing state-owned buildings on a building-by-building basis, rather than the project-by-project approach used for controlled maintenance. The project replaces primary and secondary electrical distribution lines, installs new water and sewer mains, reinforces the tunnel infrastructure, and installs new roadways, parking lots, and sidewalks. The department will work south to north to complete the campus infrastructure repairs.

Cost assumption. The cost assumption is based on estimates from local contractors and engineers. The project cost accounts for future inflation at a rate of 4 percent a year. As a capital renewal request, the project is not required to comply with the requirements of the Art in Public Places or High Performance Certification programs.

Fiscal Year 2018-19 Capital Construction Request

Human Services

Upgrade Campus Utility Infrastructure, CMHI at Pueblo (Capital Renewal)

PROJECT JUSTIFICATION

According to the department, the project completes upgrades and improvements initiated in the last fifteen years through various capital construction, controlled maintenance, and emergency controlled maintenance projects. DHS anticipates that completing the various improvements detailed in this request as a single project rather than multiple controlled maintenance requests will be less expensive. These savings will be made possible through an accelerated construction schedule resulting in limited cost escalation and a reduction in overhead costs. Furthermore, the state will likely avoid future emergency controlled maintenance costs for repairs on the campus.

The department says that the deterioration of the campus infrastructure causes disruptions to patient care and management and leads to expensive ongoing and controlled maintenance costs. Specifically, the project abates asbestos in and improves the safety of the ingress and egress to the campus tunnel system, improves sidewalks to comply with accessibility code, replaces old and undersized electrical distribution lines, and replaces other systems that have exceeded their useful life. Specific concerns with existing infrastructure include:

- the sewer mains are an outdated clay tile pipe system and are cracked and brittle;
- there is significant root incursion in the sanitary sewers;
- the steps in the manholes are degraded in many locations;
- the water lines are made, in part, of cast iron and pose ongoing water quality and reliability issues;
- most campus fire hydrants have exceeded their useful life and at least 21 have been identified for replacement under the project;
- electrical service to the north side of campus is supplied from the oldest substation in Pueblo and replacement parts are not readily available;
- the oldest sections of the utility tunnel system require renovation, including removal of asbestos-containing materials; and
- moisture and heavy traffic have deteriorated campus roads and sidewalks.

PROGRAM INFORMATION

The mental health institutes provide residential services to individuals of all ages with complex, serious, and persistent mental illness. The majority of the patients are referred to the facility by community mental health centers when patients are deemed too unstable for community services to be effective.

CMHIP was established in 1879. The campus spans 300 acres and houses the mental health institute, and some Division of Youth Services and Department of Corrections functions.

PROJECT SCHEDULE

	Start Date	Completion Date
Design	July 2018	April 2019 - April 2021
Construction	April 2019	April 2021 - April 2023
Equipment		
Occupancy		

SOURCE OF CASH FUNDS

This project is not funded from cash sources.

STAFF QUESTIONS AND ISSUES

None.

OPERATING BUDGET

The operating impact is unknown; however, it is anticipated that the department will realize cost savings from a reduction in ongoing maintenance and repair costs.

Fiscal Year 2018-19 Capital Construction Request

Human Services

Regional Center Capital Improvements

PROGRAM PLAN STATUS

2017-030

Approved Program Plan? N/A **Date Approved:**

PRIORITY NUMBERS

Prioritized By	Priority	
DeptInst	NP of 9	
OSPB	N/A of 53	Recommended for funding from cash sources.

PRIOR APPROPRIATION AND REQUEST INFORMATION

Fund Source	Prior Approp.	FY 2018-19	FY 2019-20	Future Requests	Total Cost
CF	$1,982,809	$728,271	$0	$0	$2,711,080
Total	$1,982,809	**$728,271**	$0	$0	$2,711,080

ITEMIZED COST INFORMATION

Cost Item	Prior Approp.	FY 2018-19	FY 2019-20	Future Requests	Total Cost
Land Acquisition	$0	$0	$0	$0	$0
Professional Services	$281,661	$136,962	$0	$0	$418,623
Construction	$1,569,966	$531,240	$0	$0	$2,101,206
Equipment	$0	$0	$0	$0	$0
Miscellaneous	$8,048	$0	$0	$0	$8,048
Contingency	$123,134	$60,069	$0	$0	$183,203
Software Acquisition	$0	$0	$0	$0	$0
Total	$1,982,809	**$728,271**	$0	$0	$2,711,080

PROJECT STATUS

This is on ongoing request. This is the third request for cash funds spending authority under this line item. Two additional projects were funded for FY 2014-15 and FY 2015-16 from the same fund source: the Regional Center Depreciation Fund (depreciation fund). To date, $3.3 million has been appropriated for capital improvement projects from the depreciation fund.

The work under the project lags a fiscal year behind the request. The FY 2018-19 request amount is based on the estimated FY 2018-19 earnings to the depreciation fund and therefore construction on these projects will not begin until the fiscal year following the appropriation. For instance, the FY 2016-17 work commenced at the beginning of the current fiscal year.

PROJECT DESCRIPTION / SCOPE OF WORK

The Department of Human Services (DHS) is requesting cash funds spending authority to make ongoing capital improvements at its three regional centers, including 40 group homes, day-programming facilities, and administrative space, in order to address the wear and tear of continuous use and to improve resident quality of life. The scope of work identified for the project is outlined below. The department explains that it will complete related upgrades one home at a time and schedule the projects in such a way as to minimize disruptions. The work is prioritized based on the condition of the homes with respect to safety, security, accessibility, and programming needs.

The scope of work planned with depreciation earned in FY 2018-19 addresses critical needs at all three regional centers.

Wheat Ridge Regional Center

- secure and/or add access control to twelve exterior doors at the Zier Building. The Zier Building houses administration, some day-programming services, and other program spaces such as medical and dental offices;
- upgrade doors to make doors accessible for individuals with mobility impairments at the Zier Building;
- add access controls and a secure entrance door at the therapeutic pool building; and
- upgrade finishes in the kitchen at the 59th Street home (7 residents).

Grand Junction Regional Center

- upgrade three bathrooms at the Cedar Street home (6 residents); and
- remove island, reconfigure living room, and update windows to improve safety and prevent elopements at the B Road home (7 residents).

Pueblo Regional Center

- relocate medication room and upgrade lighting at the Hahn's Peak Avenue home (4 residents); and
- add access control and secure eight doors at the A and B Buildings. These buildings house administration, day-programming services, a pool, and other program spaces.

The request also includes $67,000 for unforeseen facility needs that may arise during the fiscal year.

Cost assumption. The cost assumption is based on similar, recently completed projects at other department facilities and a vendor estimate for the cost to upgrade doors at the Zier Building. The project is not required to comply with the requirements of the Art in Public Places or High Performance Certification Program.

PROJECT JUSTIFICATION

The department explains that the goal of the ongoing request is to improve the safety and security of its residents, while also promoting opportunities for independence. While the need for upgrades to the regional center system facilities far outstrips the amount that will be made available from depreciation payments, DHS says this ongoing request has offset controlled maintenance needs in the system. The improvements planned for the homes address safety concerns associated with interrupted sight lines resulting from a large island constructed in the living room of the B Road home and the location of the medication cabinet in the busy kitchen area rather than a separate, secured space in the Hahn's Peak Avenue home. The planned improvements also promote independence by making the restrooms at the Cedar Street home more accessible. Finally, the improvements upgrade worn finishes in homes that were constructed almost 40 years ago. The department identifies the most pressing needs and makes improvements on a home-by-home basis, so future requests will likely address similar scope in other homes in the system.

A recent critical infrastructure security assessment of the Zier Building on the Wheat Ridge campus revealed security gaps. The department says that the doors into the building are old, hard to lock, and left unlocked during business hours with no access controls. The project will secure the building and funnel visitors through a single entrance. This will lead to enhanced monitoring of individuals entering the building, offer protection for vulnerable individuals in day programming, and better secure the medical treatment office and pharmacy. DHS says that while the assessment only studied the Zier Building similar security gaps exist at the Pueblo A and B Buildings.

PROGRAM INFORMATION

The department's regional centers serve people with developmental disabilities who have the most intensive service needs based on complex diagnoses. The regional centers serve adults in group homes, both on- and off-campus. The total capacity of all three regional centers is about 265 beds and 574,000 square feet of program delivery space. Services include 24-hour supervision; residential services; day programming; and habilitation, medical, training, and

behavioral interventions.

There are three regional centers in the state, located in Wheat Ridge, Grand Junction, and Pueblo. The average facility age is 48 years. The group homes are inspected for licensure and certification as Medicaid service providers by the Colorado Departments of Public Health and Environment and Public Safety. There are 40 off-campus group homes. On-campus facilities are licensed as Intermediate Care Facilities. Off-campus homes are licensed as Home and Community Based Services waiver homes. The homes typically serve between 6 and 8 residents.

PROJECT SCHEDULE

	Start Date	Completion Date
Design	October 2018	January 2019
Construction	January 2019	July 2020
Equipment		
Project Close Out		Ongoing

SOURCE OF CASH FUNDS

The source of cash funds for the project is the Regional Center Depreciation Fund subaccount within the Capital Construction Fund, administered pursuant to Section 24-75-302 (3.8)(a), C.R.S. The account consists of all moneys received by the Department of Health Care Policy and Financing from the federal government for the annual calculated depreciation of the state's regional centers. The amount available for FY 2018-19 projects will not be reported until the close of the fiscal year.

STAFF QUESTIONS AND ISSUES

1. How are the medication rooms being reconfigured? Is this reconfiguration the result of a new policy or best practice?

The three group homes at Pueblo Regional Center (PRC) with medication room configuration within their scope of work (887 Bellflower, 495 Latimer and 330 Hahn's Peak) currently store their medication in locked cabinets in the kitchen. These three medication rooms are the only rooms being reconfigured. Program/client input and desires were the primary drivers for the design and configuration of this new space/room, which is dedicated and secure, as part of program operational best practices.

2. How many doors will be upgraded for security purposes at each administrative building? Does the project encompass all exterior doors at these two buildings?

At the Wheat Ridge Regional Center (WRRC), 13 exterior doors will be upgraded – 12 at the Zier Building and one at the therapeutic pool building. Of the exterior doors at Zier affected, the two west doors will be completely replaced with new card access, five others will be existing doors retrofitted with card access/security controls. The other five exterior doors at Zier which are egress only, will not be upgraded with card access.

The PRC estimate was based on the WRRC estimates. The scope of work for card access at exterior doors at PRC is not defined, but the intent is to follow the direction as outlined for WRRC. It is anticipated that eight exterior doors at the two administration buildings at PRC will be upgraded with card access.

3. In the opinion of the department, has the creation and use of the depreciation fund offset any of the controlled maintenance need within the regional center system?

The creation and use of the depreciation fund has helped offset the following controlled maintenance needs at WRRC, PRC and GJRC:

- *WRRC – Fire alarms at the 19 group homes (~$370,000) was offset by this fund.*
- *PRC – Fire alarm system modification at 10 group homes (~$40,000) was offset by this fund.*
- *GJRC – Fire alarms at 9 of 10 group homes (~$184,000) was offset by this fund.*
- *GJRC – HVAC at the developmental center (~$300,000) was offset by this fund.*

OPERATING BUDGET

The department says it does not anticipate an increase in operating costs as a result of the work planned for the FY 2018-19 depreciation payment. The project may lead to staff efficiences, but associated savings have not been quantified.

Fiscal Year 2018-19 Capital Construction Request

Human Services

Fall Prevention, Fire Control, and Video Surveillance Improvements, Homelake and McCandless VCLCs

PROGRAM PLAN STATUS *2019-023*

Approved Program Plan? N/A **Date Approved:**

PRIORITY NUMBERS

Prioritized By	Priority	
DeptInst	NP of 9	
OSPB	N/A of 53	Recommended for funding from cash sources.

PRIOR APPROPRIATION AND REQUEST INFORMATION

Fund Source	Prior Approp.	FY 2018-19	FY 2019-20	Future Requests	Total Cost
CF	$0	$781,900	$0	$0	$781,900
Total	$0	**$781,900**	$0	$0	$781,900

ITEMIZED COST INFORMATION

Cost Item	Prior Approp.	FY 2018-19	FY 2019-20	Future Requests	Total Cost
Land Acquisition	$0	$0	$0	$0	$0
Professional Services	$0	$68,001	$0	$0	$68,001
Construction	$0	$600,930	$0	$0	$600,930
Equipment	$0	$35,878	$0	$0	$35,878
Miscellaneous	$0	$6,009	$0	$0	$6,009
Contingency	$0	$71,082	$0	$0	$71,082
Software Acquisition	$0	$0	$0	$0	$0
Total	$0	**$781,900**	$0	$0	$781,900

PROJECT STATUS

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

PROJECT DESCRIPTION / SCOPE OF WORK

The Department of Human Services (DHS) is requesting cash funds spending authority to make improvements to two Veterans Community Living Centers (VCLCs). The request is part of the department's ongoing efforts to address deferred maintenance at the VCLCs using revenue earned from the operation of the facilities. The improvements address concerns with resident safety and security through four separate projects at the Homelake and McCandless centers, as detailed below.

1. *Replace fire alarm and suppression system at Homelake VCLC.* This project replaces the fire sprinkler system, installs fire and smoke detectors throughout the campus (including in the attic space of 25 domiciliary cottages and the outpatient clinic), and adds an eight-zone control panel.

The department explains that the fire suppression piping is original to the building and is largely corroded and at risk of failure. Also, the fire notification system is not integrated among the administration building, nursing home, and domiciliary cottages. Additionally, the notification system is too general; for instance, the system can indicate that an alarm has been triggered in the administration building, but it can not provide the specific location of the alarm.

Planned upgrades to the fire panels will provide accurate location and notification in one system, and comply with certification and code requirements.

2. *Upgrade security camera system at Homelake VCLC.* This project doubles the number of cameras in the security system from eight to 16. It also upgrades the electrical wiring associated with the system. The upgraded system will record 24/7 and archive 30 days of footage. DHS says the camera system requires upgrades to provide better monitoring to address concerns with increased visitor traffic, local drug activity, and thefts. The project replaces broken cameras and adds video recording capability, which will help the department and local law enforcement respond to reported incidents.

3. *Build a dedicated server room at McCandless VCLC.* This project converts an office to a server closet with a stand-alone cooling unit. The server is currently located in an adjacent electrical room. The department explains that the location of the existing server is problematic because of the proximity of the electrical panel. There is not enough safe distance between the server and the electrical panel for an electrician to safely perform repairs or upgrades. Additionally, the heat generated by the electrical panel is not optimal for server performance.

4. *Improve accessibility of outdoor spaces at McCandless VCLC.* This project installs 220 feet of handrails and smooths outdoor paths in parking lots and gardens to make steep slopes more navigable for residents, employees, and visitors. It also upgrades seven doors with electronic access so residents can use outdoor spaces independently.

Cost assumption. The cost assumption was determined based on industry standards and historical data from projects of similar scope and location. The project cost accounts for future inflation. The project is not required to comply with the requirements of the Art in Public Places and High Performance Certification programs.

PROJECT JUSTIFICATION

See Project Description / Scope of Work

PROGRAM INFORMATION

The Colorado Veterans Community Living Centers serve honorably discharged veterans, veterans' spouses and widows, and "Gold Star" parents (parents whose children died while serving in the Armed Forces).

The Colorado State Veterans Center at Homelake was originally established in 1889 as the Soldiers' and Sailors' Home, providing a home for aging and disabled Civil War veterans. The facility currently includes a 60-bed skilled nursing home and 48 domiciliary cottages for individuals who do not require 24-hour care. The facility also offers short-term rehabilitation services, respite care, and hospice services. At the time of the most recent census, there were 55 residents on the skilled nursing unit and 39 residents in the domiciliary cottages.

The Bruce McCandless State Veterans Home in Florence opened in 1975. It is a 105-bed facility, with a 20-bed secure environment known as the Four Seasons Trail neighborhood. It offers skilled long-term care nursing services, specific care for memory-impaired individuals, short-term rehabilitation services, respite care, and hospice services. In addition, the facility offers resident-selected programs including intergenerational activities, pet welfare, spa bathing, and more. At the time of the most recent census, there were 90 residents on the skilled nursing unit.

Fiscal Year 2018-19 Capital Construction Request

Human Services

Fall Prevention, Fire Control, and Video Surveillance Improvements, Homelake and McCandless VCLCs

PROJECT SCHEDULE

	Start Date	Completion Date
Design	June 2018	April 2019
Construction	April 2019	December 2019
Equipment		
Occupancy		January 2020

SOURCE OF CASH FUNDS

The source of cash funds is the Central Fund for Veterans Community Living Centers, created in Section 26-12-108, C.R.S. The fund accrues revenue from resident room and board payments and is used for the direct costs of the operation and administration of the veterans centers and for capital construction in connection with the veterans centers. The fund is continuously appropriated. The VCLCs operate as an enterprise.

STAFF QUESTIONS AND ISSUES

1. Does the department maintain a prioritized list of future projects for each home? What are the major deficiencies that it hopes to address at Homelake and McCandless in the next two to three years?

Yes, the department maintains a prioritized list of future projects for each home. The major deficiencies that the department hopes to address at Homelake and McCandless in the next two to three years include:

Homelake: Skilled Nursing Facility Room Expansion/Renovation and Electrical Upgrade. This project would reconfigure the resident rooms, including bathroom, to provide a higher quality environment for the residents. The project would help Homelake better ensure that it meets federal standards related to quality of care, resident dignity and respect, adequate and comfortable lighting levels, free of accidents and supervision (falls), and toilet facilities.

McCandless: Rehabilitation suite expansion. This project would increase the amount of space and equipment that McCandless has for meeting the needs of residents recovering from injury/illness through physical, occupational, and speech therapy services. Currently, the home has inadequate space for these services and a lack of equipment due to the inadequate space. The project would help McCandless better ensure that it meets federal standards related to quality of care, resident dignity and respect, and free of accidents and supervision (falls).

2. Are there any recent examples of theft or other crimes that could have been avoided with a better video monitoring system at Homelake?

Below are recent examples of theft or other crimes at Homelake that a better video monitoring system could have helped prevent:

- *On 2/9/17, and again on 8/3/17, the Colorado State Patrol (CSP) requested that the facility/home go to lockdown due to a gunman in the area/vicinity. CSP contacted the home to go on lockdown due to an armed man who was believed to be moving towards Homelake.*
- *Four domiciliary residents have reported break-ins and theft in their cottages in the past six months.*
- *Domiciliary residents have made multiple complaints of unsolicited knocking on their cottages after 8:00 p.m. and prior to 6:00 a.m.*
- *The screen door to the Superintendent Home was broken into within the last 30 days.*

Human Services

Fall Prevention, Fire Control, and Video Surveillance Improvements, Homelake and McCandless VCLCs

OPERATING BUDGET

Operating costs are paid from the Central Fund for Veterans Community Living Centers. Any cost increases are anticipated to be minimal and paid from current revenues. The department indicates it may realize some staff efficiencies associated with the planned upgrades at the Homelake VCLC.

Department of Human Services
Five-Year Projection of Need
FY 2018-19 through FY 2022-23

Project Title	Fund Source	FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	Totals
Capital Construction (Current Year)							
Adams County Youth Services Center Replacement	CCF	$15,499,760	$0	$0	$0	$0	$15,499,760
	CF	0	0	0	0	0	$0
Facility Modernization, Colorado Mental Health Institutes	CCF	11,812,033	18,107,934	362,160,184	12,684,279	263,735,969	$668,500,399
	CF	0	0	0	0	0	$0
Facility Refurbishment for Safety, Risk Mitigation, and Modernization, Division of Youth Services	CCF	5,904,772	1,782,200	0	0	0	$7,686,972
	CF	0	0	0	0	0	$0
Fall Prevention, Fire Control, and Video Surveillance Improvements, Homelake and McCandless VCLCs	CCF	0	0	0	0	0	$0
	CF	781,900	0	0	0	0	$781,900
Grand Junction Regional Center Campus Relocation and Closure	CCF	5,472,932	0	0	0	0	$5,472,932
	CF	1,174,750	0	0	0	0	$1,174,750
Regional Center Capital Improvements	CCF	0	0	0	0	0	$0
	CF	728,271	0	0	0	0	$728,271
Replace Windows, CMHI at Fort Logan (Capital Renewal)	CCF	1,676,384	0	0	0	0	$1,676,384
	CF	0	0	0	0	0	$0
Upgrade Campus Utility Infrastructure, CMHI at Fort Logan (Capital Renewal)	CCF	8,935,147	10,414,444	6,862,309	0	0	$26,211,900
	CF	0	0	0	0	0	$0
Upgrade Campus Utility Infrastructure, CMHI at Pueblo (Capital Renewal)	CCF	15,537,566	5,679,412	9,376,379	0	0	$30,593,357
	CF	0	0	0	0	0	$0
Capital Construction (Out Year)							
Campus Utility Infrastructure Upgrade, Lookout Mountain Youth Services Center (Capital Renewal)	CCF	0	0	0	0	900,000	$900,000
	CF	0	0	0	0	0	$0
Facility Modernization, Denver Metro Area, Non 24/7 Facilities	CCF	0	0	0	5,500,000	15,000,000	$20,500,000
	CF	0	0	0	0	0	$0
Facility Modernization, Homelake, McCandless, and Rifle VCLCs	CCF	0	0	0	900,000	5,000,000	$5,900,000
	CF	0	0	0	0	0	$0

Department of Human Services (Cont.)
Five-Year Projection of Need
FY 2018-19 through FY 2022-23

Project Title	Fund Source	FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	Totals
Capital Construction (Out Year) (Cont.)							
Facility Modernization, Regional Centers	CCF	$0	$0	$0	$0	$1,100,000	$1,100,000
	CF	0	0	0	0	0	$0
Facility Modernization, Remainder of Campus, CMHI at Pueblo	CCF	0	0	0	0	4,000,000	$4,000,000
	CF	0	0	0	0	0	$0
Grand Mesa and Platte Valley Youth Services Centers Remodel	CCF	0	0	650,000	2,300,000	0	$2,950,000
	CF	0	0	0	0	0	$0
Gymnasium Upgrades, Homelake, McCandless, and Rifle VCLCs	CCF	0	0	5,000,000	4,500,000	3,500,000	$13,000,000
	CF	0	0	0	0	0	$0
Program and Master Planning, Department-Wide	CCF	0	0	0	0	0	$0
	CF	0	5,271,946	0	0	0	$5,271,946
Zebulon Pike Youth Services Center Remodel	CCF	0	0	970,000	0	0	$970,000
	CF	0	0	0	0	0	$0
Capital Construction Subtotals	CCF	*64,838,594*	*35,983,990*	*385,018,872*	*25,884,279*	*293,235,969*	*$804,961,704*
	CF	*2,684,921*	*5,271,946*	*0*	*0*	*0*	*$7,956,867*
Controlled Maintenance Subtotals	CCF	*11,615,801*	*See OSA Annual Report.*				*$11,615,801*
Total: State Funds		*76,454,395*	*35,983,990*	*385,018,872*	*25,884,279*	*293,235,969*	*$816,577,505*
Grand Total: All Fund Sources		**$79,139,316**	**$41,255,936**	**$385,018,872**	**$25,884,279**	**$293,235,969**	**$824,534,372**

Source: Office of the State Architect

COVER PAGE
Office of Information Technology

FY 2018-19 CAPITAL CONSTRUCTION REQUESTS (LISTED IN OSPB PRIORITY ORDER)

RECOMMENDED FOR FUNDING BY OSPB:

- Public Safety Communications Network Microwave Infrastructure Replacement *(continuation)*
- *Digital Trunked Radio System, Software Upgrade (continuation)*

NOT RECOMMENDED FOR FUNDING BY OSPB:

- Microwave Tower Replacement, Group D (Capital Renewal) *(new)*

TOTAL: FY 2018-19 CAPITAL CONSTRUCTION STATE-FUNDED REQUEST AMOUNT = $20,747,064

FY 2018-19 CONTROLLED MAINTENANCE REQUESTS (1)

NOT RECOMMENDED FOR FUNDING BY OSPB:

LEVEL III:

- Repair Fiber Glass Buildings, Five Sites ($445,457)

HISTORY OF STATE FUNDING

- **$79.1 million** has been appropriated to the office on behalf of capital projects since FY 2013-14. This represents **8.4 percent** of the total amount appropriated on behalf of all capital construction and controlled maintenance projects during this period.

- **$10.3 million** was appropriated in **FY 2017-18**.

- An additional **$0.6 million** was authorized through Senate Bill 17-267 for controlled maintenance.

INVENTORY OF GENERAL FUND SUPPORTED FACILITIES

- The General Fund supported inventory of OIT facilities totals **25,385 GSF**. This total represents **0.01 percent** of the entire General Fund supported inventory of state buildings.

Fiscal Year 2018-19 Capital Construction Request

Office of Information Technology

Public Safety Communications Network Microwave Infrastructure Replacement

PROGRAM PLAN STATUS *2016-011*

Approved Program Plan? N/A **Date Approved:**

PRIORITY NUMBERS

Prioritized By	Priority	
OSPB	4 of 53	Recommended for funding.

PRIOR APPROPRIATION AND REQUEST INFORMATION

Fund Source	Prior Approp.	FY 2018-19	FY 2019-20	Future Requests	Total Cost
CCF	$31,783,780	$10,316,372	$10,316,372	$0	$52,416,524
Total	$31,783,780	**$10,316,372**	$10,316,372	$0	$52,416,524

ITEMIZED COST INFORMATION

Cost Item	Prior Approp.	FY 2018-19	FY 2019-20	Future Requests	Total Cost
Land Acquisition	$0	$0	$0	$0	$0
Professional Services	$10,522,474	$4,166,390	$4,166,390	$0	$18,855,254
Construction	$2,811,360	$0	$0	$0	$2,811,360
Equipment	$18,047,100	$6,015,700	$6,015,700	$0	$30,078,500
Miscellaneous	$0	$0	$0	$0	$0
Contingency	$402,846	$134,282	$134,282	$0	$671,410
Software Acquisition	$0	$0	$0	$0	$0
Total	$31,783,780	**$10,316,372**	$10,316,372	$0	$52,416,524

PROJECT STATUS

This is a continuation request. Additional funding for a software upgrade is requested for FY 2018-19 through a separate project.

Associate projects. Funding for the Digital Trunked Radio System (DTRS) was awarded in nine years between FY 1998-99 and FY 2008-09. Funding for the DTRS software upgrade was awarded in FY 2013-14 to FY 2014-15, with a current request for FY 2018-19. Several recent controlled maintenance projects have addressed deteriorating microwave tower infrastructure. Additional, ongoing funding for projects associated with the DTRS was also awarded through House Bill 14-1203.

PROJECT DESCRIPTION / SCOPE OF WORK

The Governor's Office of Information Technology (OIT) is requesting state funds for the fourth year of a multi-year project to replace the state microwave system with a system that creates more communication safeguards through redundancies. The microwave system provides connectivity between the DTRS transmitter sites. The DTRS is a statewide public safety, two-way radio communication system. The system is used by state and local government agencies for day-to-day communications to improve interagency cooperation and coordination in first responder situations. The request addresses all of the equipment associated with the operation of the microwave transmitter system. The system replacement is expected to end in June 2019.

A microwavy system is used to provide connectivity between remote transceiver sites and dispatchers at centralized or regional communication centers. The term microwave refers to the part of the radio spectrum that is used to transmit data from one radio site to another. A microwave transmitter must have a direct line-of-site connection to the device with which it is communicating. Therefore, a network of transmitters, typically located on tall buildings, transmission towers, or mountaintops, is required to connect across large distances.

The existing microwave transmitter system operates like a chain — each site consists of a main and backup microwave transmitter, and each site is linked to another site in a series or chain. OIT explains that a failure at one site may reduce the communication capabilities of transmitter sites later in the chain. The proposed new system allows for radio traffic to be rerouted in several directions (away from a failed site) in order to avoid large-scale communication outages. The project creates five rings, or loops, using existing communication sites. The department will determine, based on the selected project vendor, the best way to send signals between various sites which will determine the best equipment for each site and whether additional transmitter sites are needed to improve transmissions. As many as six new transmission sites may be constructed through the project.

The project also funds:

- a network monitoring/management system;
- the replacement of obsolete microwave radios (60 percent of state system);
- upgrades to manufacturer-supported microwave radios (40 percent of state system);
- new battery backup power systems;
- test equipment;
- ancillary equipment;
- costs associated with Federal Communications Commission licensing;
- training for vendor-supported equipment;
- project management costs;
- administration costs; and
- project engineering.

The installation of the new equipment will be undertaken by OIT staff. The project replaces equipment region by region. The order of planned replacement by region is as follows:

- Western Slope (20 backbone sites);
- Southeast (2 backbone sites);
- Northeast (32 backbone sites);
- Southwest (32 backbone sites); and
- Denver Metro area (6 backbone sites).

This FY 2018-19 request includes funds for work on the Southeast, Southwest, and Western Slope regions. To date, the Metro Denver Phase is 100 percent complete, with the Northeastern Phase 51 percent complete and Southeastern Phase 10 percent complete.

PROJECT JUSTIFICATION

OIT says that if the total project is not funded, the system may experience an unrecoverable electronic failure which would negatively impact first responders. The independent consultant who conducted a recent system assessment found that 60 percent of the 377 microwave radio stations in the DTRS could no longer be supported with existing parts and services. In order to extend the useful life of the system, OIT personnel source parts from sites like eBay and often purchase and repair broken parts. In order to optimize the system, OIT says the system components and equipment should be replaced or upgraded to ensure the same level of redundancy. OIT explains that all of the DTRS partner agencies have already replaced their obsolete microwave system equipment.

OIT says the project will increase system circuit capability and monitoring. It will also minimize ongoing maintenance costs and free up staff to address routine maintenance rather than system failures. Finally, it will improve the office's

ability to test and diagnose the entire microwave transmitter system from a centralized location.

PROGRAM INFORMATION

According to OIT, about 1,000 local, state, and federal government agencies currently use the DTRS. The system processes about 103 million transmissions a year. The primary stakeholders of the DTRS include state, local, and tribal government public safety entities, and several federal agencies. An agency may opt to use the DTRS as its primary radio system or for interoperability only, especially during first responder situations. The state's components of the microwave system (91 percent of the overall system) are supported through state appropriations, grants from various agencies and groups, local government general funds, and user fees.

PROJECT SCHEDULE

	Start Date	Completion Date
Southeast Ring	November 2016	June 2018
Southwest Ring	August 2018	September 2018
Western Ring	August 2018	June 2019

SOURCE OF CASH FUNDS

This project is not funded from cash sources.

STAFF QUESTIONS AND ISSUES

1. Please provide more information on the project delays that led to the revised project completion date of June 2019. Does OIT foresee similar delays for the completion of Rings 4 and 5?

The project design phase was far more complex than originally projected. The engineering analysis on non-state-owned nor maintained tower sites, surrounding the tower loading, tower structural modifications, and agreements with tower owners have contributed to some project delays. In addition, FCC frequency applications for new microwave paths must be submitted and approved through due process, providing same frequency users ability to challenge frequency coordination - allocations - submissions providing for interference mitigation.

We anticipate similar engineering, non-state-tower compliance and FCC frequency coordination to challenge the microwave installation timelines to various degrees.

OPERATING BUDGET

The project has no anticipated impact on state operating costs.

Fiscal Year 2018-19 Capital Construction Request

Office of Information Technology

Microwave Tower Replacement, Group D (Capital Renewal)

PROGRAM PLAN STATUS *2019-022*

Approved Program Plan? N/A **Date Approved:**

PRIORITY NUMBERS

Prioritized By	Priority	
OSPB	16 of 53	Not recommended for funding.

PRIOR APPROPRIATION AND REQUEST INFORMATION

Fund Source	Prior Approp.	FY 2018-19	FY 2019-20	Future Requests	Total Cost
CCF	$0	$3,246,549	$0	$0	$3,246,549
Total	$0	**$3,246,549**	$0	$0	$3,246,549

ITEMIZED COST INFORMATION

Cost Item	Prior Approp.	FY 2018-19	FY 2019-20	Future Requests	Total Cost
Land Acquisition	$0	$0	$0	$0	$0
Professional Services	$0	$284,376	$0	$0	$284,376
Construction	$0	$2,667,032	$0	$0	$2,667,032
Equipment	$0	$0	$0	$0	$0
Miscellaneous	$0	$0	$0	$0	$0
Contingency	$0	$295,141	$0	$0	$295,141
Software Acquisition	$0	$0	$0	$0	$0
Total	$0	**$3,246,549**	$0	$0	$3,246,549

PROJECT STATUS

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

Funding history. The replacement of microwave towers Groups A, B, and C was previously funded through controlled maintenance. Work on Groups A and B is complete, with 60 percent of Group C complete to date.

PROJECT DESCRIPTION / SCOPE OF WORK

The Governor's Office of Information Technology (OIT) is requesting state funds for a capital renewal project to replace microwave towers. The capital renewal approach focuses on the installation of new tower structures, including foundations and guy anchors, and the removal of old towers in Group D (Haswell, Storm King, Wray, Anton, Cedar Mountain, and Valley). According to the department, the towers are over thirty-five years old and are under severe stress due to age and weather which leads to hazardous working environments for state personnel. The project will maintain continuity of the microwave tower system by adding microwave antennas and waveguides to towers.

This project is not required to meet the Art in Public Places Program or High Performance Certification requirements.

Fiscal Year 2018-19 Capital Construction Request

Office of Information Technology

Microwave Tower Replacement, Group D (Capital Renewal)

PROJECT JUSTIFICATION

The department explains that certain towers are in danger of collapsing due to age and weather which could injure personnel and damage state transmitter buildings. According to the department, tower failures will lead to a serious disruption in life safety communications, making it hard for public safety officials and other first responders to respond to incidents.

PROGRAM INFORMATION

The DTRS is a statewide public safety, two-way radio communication system. The system is used by state and local government agencies like the Department of Corrections and local sheriffs for day-to-day communications and to improve interagency cooperation and coordination in first responder situations.

PROJECT SCHEDULE

	Start Date	Completion Date
Design	June 2018	April 2019
Construction	June 2019	October 2021
Completion		December 2021

SOURCE OF CASH FUNDS

This project is not funded from cash sources.

STAFF QUESTIONS AND ISSUES

1. Why is OIT submitting this project as a capital renewal project instead of a controlled maintenance project?

The Office of the State Architect provided guidance regarding the submission method. The Group D tower replacements would qualify for either project category, but due to the size of the project (greater than $2 million) the decision was made to submit as a capital renewal request instead of controlled maintenance.

OPERATING BUDGET

The project has no anticipated impact on state operating costs.

Governor's Office of Information Technology
Five-Year Projection of Need
FY 2018-19 through FY 2022-23

Project Title	Fund Source	FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	Totals
Capital Construction (Current Year)							
Digital Trunked Radio System, Software Upgrade	CCF	$7,184,143	$0	$0	$0	$0	$7,184,143
	CF	0	0	0	0	0	$0
Microwave Tower Replacement, Group D (Capital Renewal)	CCF	3,246,549	0	0	0	0	$3,246,549
	CF	0	0	0	0	0	$0
Public Safety Communications Network Microwave Infrastructure Replacement	CCF	10,316,372	10,316,372	0	0	0	$20,632,744
	CF	0	0	0	0	0	$0
Capital Construction (Out Year)							
Microwave Tower Replacement, Group E (Capital Renewal)	CCF	0	2,370,293	0	0	0	$2,370,293
	CF	0	0	0	0	0	$0
Capital Construction Subtotals	CCF	*20,747,064*	*12,686,665*	*0*	*0*	*0*	*33,433,729*
	CF	*0*	*0*	*0*	*0*	*0*	*$0*
Controlled Maintenance Subtotals	CCF	*445,457*	*See OSA Annual Report.*				*$445,457*
Total: State Funds		*21,192,521*	*12,686,665*	*0*	*0*	*0*	*$33,879,186*
Grand Total: All Fund Sources		**$21,192,521**	**$12,686,665**	**$0**	**$0**	**$0**	**$33,879,186**

Source: Office of the State Architect

COVER PAGE
Colorado Department of Public Health and Environment

FY 2018-19 CAPITAL CONSTRUCTION REQUESTS (LISTED IN OSPB PRIORITY ORDER)
NOT RECOMMENDED FOR FUNDING BY OSPB:

- State Lab Build-Out *(new)*

TOTAL: FY 2018-19 CAPITAL CONSTRUCTION STATE-FUNDED REQUEST AMOUNT = $2,933,226

FY 2018-19 CONTROLLED MAINTENANCE REQUESTS (1)
NOT RECOMMENDED FOR FUNDING BY OSPB:
LEVEL II:

- Upgrade/Replace Mechanical System, State Laboratory Building, Ph 1 of 3 ($989,896)

HISTORY OF STATE FUNDING

- **$16.9 million** has been appropriated to the department on behalf of capital projects since FY 2013-14. This represents **1.8 percent** of the total amount appropriated on behalf of all capital construction and controlled maintenance projects during this period.

- **$1.5 million** was appropriated in **FY 2017-18**.

- An additional **$1.7 million** was authorized through Senate Bill 17-267 for controlled maintenance.

INVENTORY OF GENERAL FUND SUPPORTED FACILITIES

- The General Fund supported inventory of department facilities totals **114,412 GSF**. This total represents **0.2 percent** of the entire General Fund supported inventory of state buildings.

Fiscal Year 2018-19 Capital Construction Request

Public Health and Environment

State Lab Build-Out

PROGRAM PLAN STATUS

2019-021

Approved Program Plan? No **Date Approved:**

The department completed a site planning study in November 2016 and a space needs study in August 2017.

PRIORITY NUMBERS

Prioritized By	Priority	
DeptInst	1 of 1	
OSPB	17 of 53	Not recommended for funding.

PRIOR APPROPRIATION AND REQUEST INFORMATION

Fund Source	Prior Approp.	FY 2018-19	FY 2019-20	Future Requests	Total Cost
CCF	$0	$2,933,226	$0	$0	$2,933,226
Total	$0	**$2,933,226**	$0	$0	$2,933,226

ITEMIZED COST INFORMATION

Cost Item	Prior Approp.	FY 2018-19	FY 2019-20	Future Requests	Total Cost
Land Acquisition	$0	$0	$0	$0	$0
Professional Services	$0	$454,426	$0	$0	$454,426
Construction	$0	$1,362,143	$0	$0	$1,362,143
Equipment	$0	$850,000	$0	$0	$850,000
Miscellaneous	$0	$0	$0	$0	$0
Contingency	$0	$266,657	$0	$0	$266,657
Software Acquisition	$0	$0	$0	$0	$0
Total	$0	**$2,933,226**	$0	$0	$2,933,226

PROJECT STATUS

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

An operating request, first approved in FY 2016-17, authorized the department to redesign and replace aging cubicles at its main campus. The department says the existing cubicles are in a state of disrepair and no longer in compliance with current building and fire codes related to electrical systems and data storage. The project replaces cubicles over the course of eight years and will result in the net gain of 58 additional workspaces. It is paid with reappropriated funds from indirect cost recoveries from federal grants.

PROJECT DESCRIPTION / SCOPE OF WORK

The Colorado Department of Public Health and Environment (CDPHE) is requesting state funds to build out about 14,800 GSF of unfinished warehouse space at its State Laboratory Building in Lowry to alleviate overcrowding at its main Cherry Creek campus. A space needs analysis published by a third-party consultant in August 2017 determined that CDPHE will exceed its current space capacity by 2018. The department explains that this request is part of a larger effort to alleviate overcrowding due to continued growth in programs and employees. It is also retrofitting cubicles in existing leased space to add workspace and it may pursue additional leased space in one of the buildings it already partially occupies on the main campus, once it is made available in 2022.

Fiscal Year 2018-19 Capital Construction Request

Public Health and Environment

State Lab Build-Out

The project demolishes and renovates the interior of unused warehouse space to construct office space for 92 employees, including cubicle work stations, private offices, and conference rooms. The department plans to relocate some of its staff from the main campus to the renovated space. It will determine the occupants of the new space based on group size and the need for proximity to other department staff.

The project also builds paths to connect existing walkways between an adjacent city parking lot and the lab building. The department has a no-cost agreement with the city for use of the lot during regular business hours in exchange for use of an existing parking lot at the State Lab Building on nights and weekends.

Cost assumption. The cost assumption is based on a November 2016 building finish and site planning study conducted by a third-party consultant. The cost per GSF is $198. The project meets the Art in Public Places program requirements. The project is not required to comply with the requirements of the High Performance Certification Program because the anticipated cost of the renovation is less than 25 percent of the current replacement value of the building.

PROJECT JUSTIFICATION

The department says that overcrowded work spaces lead to low morale and a loss of productivity. Additionally, overcrowding leads to repurposing areas that were not originally built as work spaces into offices, such as closets, which leads to fire code concerns. The recently completed space analysis indicates that the department's headcount grows about 2.5 percent a year and that, based on these growth trends, CDPHE will exceed its currently available space capacity in the next year. According to CDPHE, ongoing growth is due to a variety of factors, including new legislation, budget requests, and federal and private grants. The department already has some measures in place to address the work space capacity issue, including the cubicle remodel and replacement project and shared workspaces for employees that often work out of the office. However, even with these measures in place, the department's anticipated growth will outstrip available work spaces in the near future. Additionally, CDPHE says that because much of the main campus has not been remodeled since before it occupied the space in 1993, it is hard to exchange work spaces between groups and divisions, even if such moves could alleviate space concerns.

Project alternatives. CDPHE says that building out the unused space at the State Laboratory Building is more cost effective than leasing additional space. The 10-year cost to build out and lease tenant space is $7.5 million, as compared to $4.6 million, which is the projected 10-year cost to renovate and operate space in the existing building. Furthermore, the department expects the ongoing cost to operate state-owned space is $200,000 less per year than the cost to lease comparable space.

PROGRAM INFORMATION

CDPHE employs more than 1,300 people and oversees, tests, and regulates a number of industries and groups in order to protect the public from environmental contaminants, food-borne illnesses, and diseases. The main campus, comprised of three buildings leased from the private sector, is located in Cherry Creek. The laboratory services division is located in the Lowry building. Additionally, the department operates two satellite office in Grand Junction and Pueblo.

PROJECT SCHEDULE

	Start Date	Completion Date
Design	July 2018	September 2018
Construction	October 2018	March 2019
Equipment	March 2019	May 2019
Occupancy	May 2019	June 2019

Public Health and Environment

State Lab Build-Out

SOURCE OF CASH FUNDS

This project is not funded from cash sources.

STAFF QUESTIONS AND ISSUES

All responses to staff questions and issues were incorporated into the project write-up.

OPERATING BUDGET

The department projects a $219,000 annual increase in operating costs to pay expenses associated with the new space, including utility fees, insurance coverage, information technology support, telecom bills, and building maintenance costs. Additional cost increases may result from increasing administrative support functions.

COVER PAGE
Colorado Department of Transportation

FY 2018-19 CAPITAL CONSTRUCTION REQUESTS (LISTED IN OSPB PRIORITY ORDER)
NOT RECOMMENDED FOR FUNDING BY OSPB:

- San Luis Valley Doppler Weather Radar Partnership *(new)*
- I-70 Vail Pass Rest Area Waste Water Renovation *(new)*
- Eisenhower-Johnson Memorial Tunnels Electrical System *(new)*

TOTAL: FY 2018-19 CAPITAL CONSTRUCTION STATE-FUNDED REQUEST AMOUNT = $2,302,000

HISTORY OF STATE FUNDING

- **$2.5 million** has been appropriated to the department on behalf of capital projects since FY 2013-14. 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 2017-18**.

INVENTORY OF GENERAL FUND SUPPORTED FACILITIES

- The inventory of department facilities totals **3,652,382 GSF**. The department has no General Fund supported facilities. This total represents **4.7 percent** of the entire inventory of state buildings.

RECENT CDC VISITS

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

OTHER INFORMATION

Pursuant to Section 43-1-113 (2.5), C.R.S., CDOT is required to submit a capital construction request for state highway reconstruction, repair, or maintenance projects to the CDC on or before October 1 each year.

Since FY 2010-11, the capital budget has included $500,000 for transportation projects each year, funded through a General Fund Exempt account transfer. Moneys in the General Fund Exempt account are available because of the passage of Referendum C, which, beginning in FY 2010-11, allows the state to retain all revenues in excess of the TABOR limit, but less than the excess state revenue cap. This revenue may be spent, in part, on strategic transportation projects.

Fiscal Year 2018-19 Capital Construction Request

Transportation

San Luis Valley Doppler Weather Radar Partnership

2019-018

PROGRAM PLAN STATUS

Approved Program Plan? N/A **Date Approved:**

PRIORITY NUMBERS

Prioritized By	Priority	
OSPB	51 of 53	Not recommended for funding.

PRIOR APPROPRIATION AND REQUEST INFORMATION

Fund Source	Prior Approp.	FY 2018-19	FY 2019-20	Future Requests	Total Cost
CCF	$0	$302,000	$0	$0	$302,000
CF	$0	$100,000	$0	$0	$100,000
HUTF	$0	$125,000	$0	$0	$125,000
RF	$0	$375,000	$0	$0	$375,000
Total	$0	**$902,000**	$0	$0	$902,000

ITEMIZED COST INFORMATION

Cost Item	Prior Approp.	FY 2018-19	FY 2019-20	Future Requests	Total Cost
Land Acquisition	$0	$0	$0	$0	$0
Professional Services	$0	$0	$0	$0	$0
Construction	$0	$125,000	$0	$0	$125,000
Equipment	$0	$695,000	$0	$0	$695,000
Miscellaneous	$0	$0	$0	$0	$0
Contingency	$0	$82,000	$0	$0	$82,000
Software Acquisition	$0	$0	$0	$0	$0
Total	$0	**$902,000**	$0	$0	$902,000

PROJECT STATUS

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

PROJECT DESCRIPTION / SCOPE OF WORK

The Colorado Department of Transportation (CDOT) is requesting a combination of state funds, cash funds spending authority, and reappropriated funds to purchase and install a C-band, dual polarization Doppler weather radar system at the Alamosa County Airport. The project is being undertaken in conjunction with several other state and local agencies to improve various functions associated with weather forecasting, water management, public safety, and economic development. The department explains that the area to be covered by the radar is not currently covered by federal radar systems due to mountainous topography.

Under the project, a vendor will install the radar system, including a 75-foot tower; stakeholders will contract with the vendor to maintain the system over its life. The radar will collect data in a 146-mile radius in the San Luis Valley, and will cover the entire Rio Grande watershed. CDOT says the new system will be state-of-the-art and meet federal standards for the next two decades. The National Oceanic and Atmospheric Administration's (NOAA) National

Severe Storms Lab plans to integrate the new radar system into its national mosaic to precisely track storms in the San Luis Valley.

Cost assumption. The cost assumption for the project was established through research undertakend by NOAA and the Colorado Water Conservation Board (CWCB). These organizations identified a vendor to both install and service the new radar system. The project is not required to comply with the requirements of the High Performance Certification and Art in Public Places programs because it purchases equipment and does not build or renovate a physical facility.

PROJECT JUSTIFICATION

CDOT and other state and local agencies use radar systems to forecast weather and water supplies. These forecasts are used to support various public interests, including public safety, water management, and economic development. CDOT explains that Colorado's existing radar infrastructure, which is managed by federal agencies, does not cover the San Luis Valley due to interruption by mountain ranges, thus impacting the ability of stakeholders to perform their missions. There are no plans on the part of the federal government to provide radar coverage for the San Luis Valley. A packet of letters from stakeholders in support of the project is attached (Attachment A).

Public safety. CDOT explains that its Division of Highway Maintenance uses weather forecasting and avalanche prediction to place road-clearing resources in the appropriate locations. Doppler radar technology helps agencies to more accurately predict when severe weather will visit a certain area, allowing for better planning and notification by emergency managers, first responders, and public safety officials. The new radar system will support CDOT's Division of Aeronautics as it manages flights in the region. The department explains that lack of radar has been a challenge for small commercial airlines that fly into the area due to poor weather information.

Water management. The CWCB and Western States Water Council will use the radar system for snow forecasting, water modeling, and water rights administration. According to CDOT, modeling is critical to water management in the San Luis Valley, and inaccurate modeling has led to mismanagement of the Rio Grande's water.

Economic development. CDOT says that the radar system will support economic drivers in the San Luis Valley, such as agriculture and tourism. The agricultural industry relies on the accuracy of water management practices, as described above. Radar and weather forecasts also allow businesses and outdoor recreationists to more acurately assess current weather conditions for their enjoyment and safety.

The department notes that many of the forecasting benefits of the new system will also accrue to the Front Range, since predictions concerning weather originating from southwest Colorado impacting the Front Range will be more accurate.

Project alternatives. In recent years, portable radar units have operated in the San Luis Valley on a temporary basis, providing some of the benefits described above. However, CDOT says renting a radar unit would be significantly more expensive on an operational basis than installing a permanent unit.

PROGRAM INFORMATION

CDOT's Highway Maintenance Division is responsible for roadway maintenance and preservation, as well as associated duties such as snow and ice removal, avalanche control, and rockfall mitigation. The mission of the department's Transportation Systems Management and Operations Division is "to systematically improve travel time reliability and safety on Colorado highways through technology, innovative programs and strategies, targeted traffic management activities, and safety improvements to maximize the return on investment of transportation funds." This division works with other CDOT programs and divisions, as well as stakeholders, to reduce traffic congestion through such strategies as traffic signal timing, ramp metering, lane management, and broadcasting real-time travel information. CDOT's Aeronautical Division works with the Federal Aviation administration and local governments to promote aviation safety and provide advisory assistance for Colorado's 74 public-use airports.

PROJECT SCHEDULE

Fiscal Year 2018-19 Capital Construction Request

Transportation

San Luis Valley Doppler Weather Radar Partnership

	Start Date	Completion Date
Design **Construction** **Equipment** **Occupancy**	July 2018	December 2018

SOURCE OF CASH FUNDS

The source of cash funds for the project is the Highway Users Tax Fund (HUTF), along with financial commitments from other stakeholders. The HUTF, created in Section 43-4-201, C.R.S., is the primary source of highway funds in Colorado. Revenue accrues to the HUTF from motor fuel taxes, registration fees, and other miscellaneous sources, including driver's license fees, court fines, and interest earnings. HUTF funds are allocated to CDOT, counties, and municipalities based on statutory formulas. CDOT's Transportation Systems Management and Operations Division is committing $25,000 of the HUTF moneys to the project, and its Division of Highway Maintenance is committing $100,000. Other stakeholders have committed resources to the project as follows:

- CWCB — $375,000;
- RWEACT — $100,000 for the design and installation of the radar tower; and
- Alamosa County — land for installing the radar unit at the airport.

STAFF QUESTIONS AND ISSUES

None.

OPERATING BUDGET

The project is not expected to have an impact on the department's operating budget. CDOT explains that the local government and water districts will be responsible for maintenance and repair of the new radar unit.

SAN LUIS VALLEY IRRIGATION DISTRICT

P. O. Box 637 296 Miles Street
Center, Colorado 81125-0637

719-754-2254

July 5, 2017

Legislative Council
Room 029 State Capital
Denver, CO 80203-1784
C/O Kori Donaldson

RE: "Water Forecasting Partnership Project"
San Luis Valley Permanent Radar

The San Luis Valley Irrigation District strongly supports the Water Forecasting Partnership Project/permanent radar for the San Luis Valley.

The San Luis Valley Irrigation District "SLVID" was established in 1907 and serves/delivers water to 62,000 acres of highly productive agricultural lands in Rio Grande, Saguache, and Alamosa counties. The SLVID has partnered with the Colorado Conservation Board and the Conejos Water Conservancy District to address the longstanding water administrative and forecasting issues in the upper Rio Grande Basin.

The CWCB- sponsored radar project has clearly shown that a permanent radar located at the Alamosa airport would greatly improve stream forecasting, provide early weather warning capabilities, and provide for a greater confidence regarding public safety.

The San Luis Valley Irrigation District is committed to assisting with the long term operation and maintenance costs as well as assisting with the initial purchase as the partnership develops with additional Valley water user groups.

Respectfully,

Travis Smith

Superintendent

June 23, 2017

Re: Letter of Support for Efforts for Permanent Radar in our Region

The Rio Grande Watershed Emergency Action Coordination Team (RWEACT) supports the efforts to bring permanent radar back into the San Luis Valley in southcentral Colorado.

RWEACT was established in July 2013 in response to the West Fork Complex fire. RWEACT brings together local, state and federal agencies, organizations and individuals in a coordinated approach to address fire-caused hazards, early notification, and future resiliency of our natural and economic communities. Working closely with the Rio Grande National Forest, the Colorado Water Conservation Board, the counties of Hinsdale, Mineral, and Rio Grande, and more than 70 additional partners, RWEACT has implemented 200 projects and endeavors. We have increased the geographical representation of our Board of Directors now to also include Saguache, Alamosa, and Costilla counties and partnered with Archuleta County to implement an economic recovery grant.

The West Fork Complex fire increased collaboration between counties and other local governments. Current work of RWEACT includes an Upper Rio Grande Watershed Assessment, improved Emergency Communications, and stewardship activities. Specific benefits that RWEACT can identify for a permanent radar solution in the San Luis Valley include more effective water management, forecasting of snow depth, increased emergency management notification and efficiency of communications, improved weather alerts for road and travel management, increased efficiency for farming techniques, increased outdoor-recreation tourism based on streamflow and access, overall economic development, increased safety for aviation, and overall better planning for weather events by residents and visitors.

Since our inception, RWEACT has overseen Governor's Executive Order 22 which was a $2.5 million grant to implement efforts designed to mitigate impacts of the West Fork Complex fire, and specifically to improve the access to radar for emergency notifications. We currently have committed $100,000 under Task Order #10 to design and construct a 75-foot tower that will hold the Doppler Radar unit.

During summer and fall seasons of 2013, 2014, and 2015, RWEACT provided temporary radar services together with the National Weather Service for increased public safety, awareness, and notification. These efforts helped highlight the potential and importance of a more permanent radar system, as well as the benefits with other applications, such as stream forecasting. A consortium of partners is being developed to provide funding for the overall system and its ongoing operation and maintenance.

RWEACT's mission to promote partnerships and actions that provide for public safety and resiliency of communities and watersheds of the Rio Grande Basin in Colorado. With an emphasis on Watershed Stewardship and the ability to leverage, RWEACT is implementing strategic projects. More information about our organization can be found at www.rweact.org Thank you for your consideration.

Respectfully,

Kristine M. Borchers
Program Director
RWEACT Board of Directors: Travis Smith, Commissioner Darius Allen, Commissioner Susan Thompson, Commissioner Karla Shriver, Commissioner Ramona Weber, Commissioner Jason Anderson, Kevin Terry, Heather Dutton
PO Box 721
Lake City, CO 81235
970-596-9071

RIO GRANDE COUNTY
BOARD OF COUNTY COMMISSIONERS

rgcommissioner@riograndecounty.org

925 6th St Room 207
Del Norte, Colorado
81132
(719) 657-2744
Fax (719) 657-2514

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Kristy Dennis

June 29, 2017

Legislative Council
c/o Kori Donaldson
Room 029 State Capitol
Denver, CO 80203-1784

Dear Legislative Council Members:

Rio Grande County Commissioners strongly support the concept of installing a permanent weather radar system in the San Luis Valley. We want to emphasize the importance of such a system and what it could do for Rio Grande County and the Valley as a whole. We understand that there are many details to work out, but to move forward, we need to secure funding for the purchase and installation for the project.

A weather radar system would provide several benefits to residents, businesses, and the agriculture, aviation, and tourism industries:

- **Public Safety:** The San Luis Valley is a major "hole" when it comes to current radar coverage. Installation of radar will help Emergency Managers, first responders, public safety officials, and anyone in decision making positions responsible for the safety of the public or their individual families by providing more accurate information and preparedness opportunities.

- **Aviation Industry:** Both private and commercial pilots need current and accurate information to fly safely. Lack of permanent radar has been challenge with the small commercial airline companies who fly into the Valley because of poor information concerning weather conditions. Radar may allow a more consistent flight schedule to the Valley.

- **Water Community:** The Valley has been testing radar technology for the last several years to improve SNOTEL forecasting to assist in predicting snow run-off which will also help in managing the Rio Grande River Compact with the States of New Mexico, Texas, and the Country of Mexico.

- **Economic Development:** Tourism is a large economic engine for the Valley. Radar and weather forecasts will help businesses and outdoor recreationists more accurately assess current weather conditions for their enjoyment and

safety. The majority of the United States has good weather radar coverage. People come to expect it and assume this service exists. When it does not, decisions may be based on inaccurate information and public expectations are not met.

We hope that the Council will favorably consider the grant application submitted by the Region 5 Office of the Colorado Department of Transportation.

Appreciatively,

Karla L. Shriver
Chairman

San Luis Valley Commissioner's Association
Alamosa – Conejos – Costilla – Mineral – Rio Grande – Saguache Counties
% Alamosa County Commissioner Office
8900 Independence Way
Alamosa, CO 81101

July 17, 2017

Legislative Council
c/o Kori Donaldson
Room 029 State Capitol
Denver, CO 80203-1784
Dear Legislative Council Members:

The San Luis Valley Commissioner's Association strongly supports the concept of installing a permanent weather radar system in the San Luis Valley. The Valley Commissioners understand the importance of such a system and what it could do for the Valley as a whole. With that said, we also realize there are many details to work out, but to move forward, we need to secure funding for the purchase and installation for the project.

The San Luis Valley Commissioner's Association believes the weather radar system would provide the following benefits to residents and the many visitors that come to the San Luis Valley:

- **Public Safety:** The San Luis Valley is a major "hole" when it comes to current radar coverage. Installation of radar will help Emergency Managers, first responders, public safety officials, and anyone in decision making positions responsible for the safety of the public or their individual families by providing more accurate information and preparedness opportunities.

- **Aviation Industry:** Both private and commercial pilots need current and accurate information to fly safely. It has been a standing issue with the small commercial airline companies who fly into the Valley do not have consistent flights because of poor information concerning weather conditions.

- **Water Community:** The Valley has been testing radar technology for the last several years to improve SNOTEL forecasting to assist in predicting snow run-off which will also help in managing the Rio Grande River Compact with the States of New Mexico, Texas, and the Country of Mexico.

- **Economic Development:** Tourism is becoming a large economic engine for the Valley. Radar and weather forecasts will help businesses and outdoor recreationists more accurately assess current weather conditions for their enjoyment and safety.

- **Public Expectations:** The majority of the United States has good weather radar coverage. People come to expect it and assume everyone in the country has it. However, we do not have good radar coverage in the Valley which may produce a sense of false security and cause security risks for those visiting.

- **Department of Transportation:** Whether it is state, county, or a municipality employees, the public use of our road system is critical. We need viable radar to identify incoming snowstorms and other drastic weather events that could impact the ability to drive safely on the roads and highways as well as planning trips over La Veta, Wolf Creek, or Cochetopa Passes. Those employees driving those snowplows need to understand the weather conditions and whit lies before them.

The San Luis Valley Commissioner's Association hopes that the Capital Development Committee will favorably consider the request submitted by the Region 5 Office of the Colorado Department of Transportation and the Department of Natural Resources.

Appreciatively,

Karla L. Shriver

Karla L. Shriver
Chairman
719-850-5808

COLORADO POTATOES

QUALITY AT ITS PEAK

July 5, 2017

Legislative Council
C/O Kori Donaldson
Room 029 State Capitol
Denver, Colorado 80203-1784

Dear Ms. Donaldson,

I am writing to express support from the Colorado Potato Administrative Committee (CPAC) in the San Luis valley for the proposed permanent radar solution for the San Luis valley being submitted to the Capital Development Committee. The CPAC committee represents the federal and state potato marketing order within the San Luis valley and the one hundred sixty potato growers farming in the area. The marketing order was formed in 1941 and still serves growers needs today by insuring quality size and grade standards, and up to date market information for potato growers in the region. The San Luis valley typically produces twenty one million cwt. of potatoes annually making Colorado the second largest producer of fresh market potatoes in the United States. In a geographical region dominated by agricultural production the potato industry is the prime driver in the area's economy.

Irrigation water is critical to our potato production and the source of this irrigation water is primarily snow melt from the surrounding mountain ranges. Having the most accurate snow fall measurements are crucial to the Colorado Division of Water Resources (CDWR) in forecasting stream flows that they use to administer water rights and compact obligations to neighboring states. Through four years of field testing mobile radar has demonstrated the capability to improve water modeling forecasting. The accuracy of radar driven water modeling was four times more accurate than the official National Resource Conservation Service estimates for the Conejos and Rio Grande basins in recent years.

Water administration is difficult in the Rio Grande basin because of the tight supply of water in most years to meet water user's water rights. A new analysis by the Colorado Water Conservation Board (CWCB) using water numbers developed by the CDWR showed large volume errors in forecasting six out of the last ten years. We believe that this new radar installation will likely improve water allocation in future years by providing better information for the CDWR to administer the available water and insure that the water is put to beneficial use by the owners of the water rights.

There are numerous additional benefits to this radar installation including much needed severe weather forecasting for valley residents such as tornado and flash flood warnings, and aviation and highway safety monitoring that could potentially save lives and assist state and municipal transportation departments efficiently manage snow removal resources in a timely manner. We are certain this new technology will prove beneficial to our communities and certainly hope the Capital Development Committee will see the urgent need for a permanent weather radar solution in the San Luis valley.

Sincerely,

Jim Ehrlich

Jim Ehrlich
Executive Director- Colorado Potato Administrative Committee, San Luis Valley

1305 Park Ave. ▲ P.O. Box 348 ▲ Monte Vista, CO 81144 ▲ Ph. 719.852.3322 ▲ Fax 719.852.4684 ▲ www.ColoradoPotato.org

COLORADO
Department of Transportation
Division of Aeronautics

5126 Front Range Parkway
Watkins, CO 80137
(303) 512-5250

June 14, 2017

Rio Grande Watershed Emergency Action Coordination Team (RWEACT)
P.O. Box 721
Lake City, CO 81235

RE: Proposed San Luis Valley Weather Radar Facility

In 1991, the Colorado Legislature created the Colorado Division of Aeronautics under the Department of Transportation, recognizing the need to "promote the safe operation and accessibility of general aviation and intrastate commercial aviation in this state", pursuant to C.R.S. 43-10-101.

It is with this charge that I write you today as Director of the Division to offer our support for the potential installation of a weather radar facility in the San Luis Valley, a facility we understand is being proposed by several entities in southwest Colorado. We are especially supportive if such radar facility could provide enhanced weather information to aviators operating in the region, where high terrain and dynamic weather pose unique challenges to flight crews. Such a facility could prove to be an excellent adjunct to the Division's network of 13 mountain automated weather observing systems (AWOS), which provide real time weather to pilots across Colorado's high country, including the San Luis Valley.

While the Division's current and forecast financial position precludes our participation in this project at this time, we support this initiative, and the potential safety benefits it could bring for our state's aviators.

On behalf of the Division, we appreciate your consideration of our comments. If you have any questions, please contact me at (303)-512-5254.

Sincerely,

David R. Ulane, A.A.E.
Aeronautics Director

Fiscal Year 2018-19 Capital Construction Request

Transportation

I-70 Vail Pass Rest Area Waste Water Renovation

2019-017

PROGRAM PLAN STATUS

Approved Program Plan? N/A **Date Approved:**

PRIORITY NUMBERS

Prioritized By	Priority	
OSPB	52 of 53	Not recommended for funding.

PRIOR APPROPRIATION AND REQUEST INFORMATION

Fund Source	Prior Approp.	FY 2018-19	FY 2019-20	Future Requests	Total Cost
CCF	$0	$1,000,000	$0	$0	$1,000,000
Total	$0	**$1,000,000**	$0	$0	$1,000,000

ITEMIZED COST INFORMATION

Cost Item	Prior Approp.	FY 2018-19	FY 2019-20	Future Requests	Total Cost
Land Acquisition	$0	$0	$0	$0	$0
Professional Services	$0	$0	$0	$0	$0
Construction	$0	$1,000,000	$0	$0	$1,000,000
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	**$1,000,000**	$0	$0	$1,000,000

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 renovate the waste water system at the Vail Pass rest area, located at exit 190 off Interstate 70. The department says the system is old and failing, and is not meeting the demands placed on it by the public, resulting in temporary closures of the rest area. The scope of the project includes restoration of the system's intake pumps, control modules, and waste-water filters, and installation of a larger septic tank. CDOT says these upgrades will bring the system into compliance with waste-water regulations now and into the future. The department notes that it budgeted $73,000 toward project design in May 2017, and design is underway.

Cost assumption. The cost assumption was determined based on installations of comparable waste-water systems in other areas of the state. The project is not required to comply with the requirements of the High Performance Certification and Art in Public Places programs because it purchases equipment and does not build or renovate a physical facility.

PROJECT JUSTIFICATION

Fiscal Year 2018-19 Capital Construction Request

Transportation

I-70 Vail Pass Rest Area Waste Water Renovation

CDOT says the waste-water system at the Vail Pass rest area requires renovation to comply with regulations and meet consumer demand. According to the department, the system is old and failing, and heavy use is putting the system at maximum capacity or over capacity, resulting in temporary closures. The rest area is situated at a nexus of high tourist traffic, both summer and winter; an estimated 21,000 travelers per week visit the rest area, and it serves as a central point of ingress for the Vail Pass/Tenmile Canyon National Recreation Trail, use of which exceeds 5,000 hikers during summer weekends. Vail Pass is also heavily used in the winter for recreation. The wastewater system pumps an estimated 9,000 gallons into the filtration plant on a busy weekend, stressing the system's capacity. To remedy this, CDOT closes the rest area for two days per week to allow the system to recover. The closures push travelers to nearby rest areas, many of which are also at capacity, creating an unsustainable situation, according to the department. In addition, CDOT says the rest area closures jeopardize the safety of I-70 travelers because rest areas mitigate driver fatigue and distracted driving and provide a safe alternative to roadside or shoulder stopping practices.

CDOT adds that cost savings will also result from the project. The department spends $150,000 to $200,000 per year to operate the Vail Pass rest area, and the renovations will reduce this cost by 20 to 30 percent based on the elimination of contracting to pump the septic tank. In addition, the project will lead to eliminating maintenance costs associated with the use of portable toilets at nearby rest areas during closures of the Vail Pass rest area, which CDOT says will save about $60,000 per year. Finally, the department says the upgrades will enable the facility to meet current and future federal and state waste-water discharge permit requirements and limits.

PROGRAM INFORMATION

CDOT operates 26 rest areas on highways in Colorado featuring restrooms and picnic areas. Some of the rest areas feature additional amenities such as visitor information and trailer dumps.

PROJECT SCHEDULE

	Start Date	Completion Date
Design	April 2017	March 2018
Construction	May 2018	September 2018
Equipment		
Occupancy		

SOURCE OF CASH FUNDS

This project is not funded from cash sources.

STAFF QUESTIONS AND ISSUES

None.

OPERATING BUDGET

The department expects the project to result in a reduction in the cost to operate the Vail Pass rest area of 20 to 30 percent, with reduced operating costs at nearby rest areas as well.

Fiscal Year 2018-19 Capital Construction Request

Transportation

Eisenhower-Johnson Memorial Tunnels Electrical System

2019-016

PROGRAM PLAN STATUS

Approved Program Plan? N/A **Date Approved:**

PRIORITY NUMBERS

Prioritized By	Priority	
OSPB	53 of 53	Not recommended for funding.

PRIOR APPROPRIATION AND REQUEST INFORMATION

Fund Source	Prior Approp.	FY 2018-19	FY 2019-20	Future Requests	Total Cost
CCF	$0	$1,000,000	$0	$0	$1,000,000
Total	$0	**$1,000,000**	$0	$0	$1,000,000

ITEMIZED COST INFORMATION

Cost Item	Prior Approp.	FY 2018-19	FY 2019-20	Future Requests	Total Cost
Land Acquisition	$0	$0	$0	$0	$0
Professional Services	$0	$152,381	$0	$0	$152,381
Construction	$0	$0	$0	$0	$0
Equipment	$0	$800,000	$0	$0	$800,000
Miscellaneous	$0	$0	$0	$0	$0
Contingency	$0	$47,619	$0	$0	$47,619
Software Acquisition	$0	$0	$0	$0	$0
Total	$0	**$1,000,000**	$0	$0	$1,000,000

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 new electrical controllers on the ventilation and exhaust fans in the Eisenhower-Johnson Memorial Tunnels for both cost savings and operational benefits. CDOT currently operates 28 600-horsepower inductive motor fans in the tunnel complex, 14 for each portal. The primary purpose of the fans is to provide life-safety fire ventilation. Under the project, the department will install variable frequency drive controllers for the fans, which limit the current being supplied to the fans upon start-up, reducing electrical usage and the amount of time needed to get the fans up to full speed. The department would like to install a dedicated drive for each motor that operates the fans, but might decide to use a switching system to allow several motors to share a drive. The department will determine the preferred course of action during the design process.

Cost assumption. The cost assumption was determined through consultation with a tunnel owner in New Zealand that operates a variable frequency drive system, and through discussions with heavy electrical equipment suppliers. The project is not required to comply with the requirements of the High Performance Certification or Art in Public Places programs because it purchases equipment and does not build or renovate a physical facility.

Fiscal Year 2018-19 Capital Construction Request

Transportation

Eisenhower-Johnson Memorial Tunnels Electrical System

PROJECT JUSTIFICATION

CDOT explains that installing the new drives will result in economic benefits and more efficient operation of the exhaust system. When the fans are started using the current hardware, they pull eight to ten times their steady-state current until they are spinning at full speed, taxing the electrical supply. The department estimates that installing new technology under the project will save over $150,000 per year in electrical costs based on the fans running full speed during peak periods, and additional cost savings will be realized during day-to-day use. Based on a 30-year life cycle for the new starting equipment, the department estimates the net-present value of the savings to be $2.9 million. The fans will also get up to speed more quickly using the new system. Using the current system, each fan takes over 30 seconds to achieve full speed, and only one fan can be started at a time due to the limited capacity of the power lines feeding the system, which results in a total elapsed time of up to ten minutes for the system to be fully operational. Since the new system will allow multiple fans to start simultaneously, full operation can be achieved in under two minutes. The department says this difference in start-up time has life-safety implications during instances of fire when the exhaust system is relied upon to clear smoke and provide fresh air to trapped motorists.

PROGRAM INFORMATION

CDOT manages the Eisenhower-Johnson Memorial Tunnels along Interstate 70, which are 1.7 miles in length and bore through the Continental Divide about seven miles east of Frisco. The 28 600-horsepower inductive fans were installed when the tunnels were constructed in the 1970s.

PROJECT SCHEDULE

	Start Date	Completion Date
Design	July 2017	September 2018
Construction	January 2019	March 2019
Equipment		
Occupancy		

SOURCE OF CASH FUNDS

This project is not funded from cash sources.

STAFF QUESTIONS AND ISSUES

None.

OPERATING BUDGET

The department expects the project to result in operating cost reductions of about $150,000 per year based on the electrical demand-dampening effect of the new equipment.

COVER PAGE
Adams State University

FY 2018-19 CAPITAL CONSTRUCTION REQUESTS (LISTED IN OSPB PRIORITY ORDER)
NOT RECOMMENDED FOR FUNDING BY OSPB:

- Plachy Hall HVAC Upgrade and Replacement (Capital Renewal) *(previously requested)*

TOTAL: FY 2018-19 CAPITAL CONSTRUCTION STATE-FUNDED REQUEST AMOUNT = $5,281,034

FY 2018-19 CONTROLLED MAINTENANCE REQUESTS (3)
RECOMMENDED FOR FUNDING BY OSPB:
LEVEL I:

- Upgrade Restroom for Code Compliance, Planetarium ($122,430)

NOT RECOMMENDED FOR FUNDING BY OSPB:
LEVEL II:

- Replace Campus Boiler ($930,414)
- Replace Bleachers and Restroom, Rex Field ($566,273)

HISTORY OF STATE FUNDING

- **$28.9 million** has been appropriated on behalf of capital projects at the university since FY 2013-14. This represents **3.1 percent** of the total amount appropriated on behalf of all capital construction and controlled maintenance projects during this period.

- **$0.3 million** was appropriated in **FY 2017-18**.

- An additional **$1.6 million** was authorized through Senate Bill 17-267 for controlled maintenance.

INVENTORY OF GENERAL FUND SUPPORTED FACILITIES

- The General Fund supported inventory of university facilities totals **670,253 GSF**. This total represents **1.4 percent** of the entire General Fund supported inventory of state buildings.

RECENT CDC VISITS

- Campus tour (October 2015)

Fiscal Year 2018-19 Capital Construction Request

Adams State University

Plachy Hall HVAC Upgrade and Replacement (Capital Renewal)

PROGRAM PLAN STATUS *2017-023*

Approved Program Plan? Yes **Date Approved:** October 29, 2015

PRIORITY NUMBERS

Prioritized By	Priority	
DeptInst	1 of 1	
CCHE	14 of 34	
OSPB	29 of 53	Not recommended for funding.

PRIOR APPROPRIATION AND REQUEST INFORMATION

Fund Source	Prior Approp.	FY 2018-19	FY 2019-20	Future Requests	Total Cost
CCF	$0	$5,281,034	$0	$0	$5,281,034
Total	$0	**$5,281,034**	$0	$0	$5,281,034

ITEMIZED COST INFORMATION

Cost Item	Prior Approp.	FY 2018-19	FY 2019-20	Future Requests	Total Cost
Land Acquisition	$0	$0	$0	$0	$0
Professional Services	$0	$465,540	$0	$0	$465,540
Construction	$0	$4,335,400	$0	$0	$4,335,400
Equipment	$0	$0	$0	$0	$0
Miscellaneous	$0	$0	$0	$0	$0
Contingency	$0	$480,094	$0	$0	$480,094
Software Acquisition	$0	$0	$0	$0	$0
Total	$0	**$5,281,034**	$0	$0	$5,281,034

PROJECT STATUS

This is the third request for funding. Funding was first requested on behalf of the project for FY 2016-17.

PROJECT DESCRIPTION / SCOPE OF WORK

Adams State University (ASU) is requesting state funds to retrofit the HVAC system for the 118,054-GSF Plachy Hall, the university's main athletic facility. This is a capital renewal project. The capital renewal approach focuses on upgrading building systems, infrastructure, and the basic building components within existing academic buildings on a building-by-building basis, rather than project by project. The project will address a failing boiler system and code compliance issues with the building's HVAC system. The project upgrades and replaces several components of the HVAC system, including:

- 14 air handling units (AHUs);
- 9 exhaust fans;
- 11 cabinet unit heaters;
- 3 unit heaters;
- 2 condensing boilers with flues, pumps, expansion tanks, and air separators;

- 1 swimming pool boiler;
- 3 swimming pool pumps;
- 1 domestic hot water side-arm for hot water storage;
- 12 variable air volume (VAV) hot water heating coils;
- piping and pipe insulation; and
- ductwork.

The project also installs a new AHU and ductwork in the field house of Plachy Hall.

Cost assumption. The cost assumption was determined by an energy management consultant hired by the university in May 2015, and has since been modified based on construction inflation and the recent cost of repairs. The cost per GSF is $45. The project cost accounts for future inflation. As a capital renewal request, the project is not required to meet the Art in Public Places or the High Performance Certification Program requirements.

PROJECT JUSTIFICATION

According to ASU, the boilers and AHUs that service Plachy Hall are at the end of their useful life. The existing AHUs do not meet the required air exchange guidelines established by the American Society of Heating, Refrigerating, and Air-Conditioning Engineers (ASHRAE) for indoor air quality and likely do not meet other current code requirements. Furthermore, only two of the four steam boilers in Plachy Hall are currently working, resulting in a lack of redundancy for the building's HVAC system. The two working boilers are close to 20 years old. ASU says it is constantly patching and mending worn-out piping, fittings, pumps, seals, bearings, pulleys, and belts.

The university says that the entire HVAC system is in dire need of replacement, and without replacement, the building is in imminent danger of shutting down for periods of time, which would impact athletic events and classes. Plachy Hall has lost programming in recent years due to the inadequate HVAC system, and ASU says its athletic programs will continue to be negatively affected without the proper upgrades. Furthermore, ASU says it has lost HVAC control for parts of the building; pneumatic controls are in poor condition; heating coils are failing on a monthly basis; and parts are difficult to obtain because the current systems are no longer manufactured.

PROGRAM INFORMATION

Plachy Hall is the university's main athletic facility. It houses an indoor swimming pool, a weight room, trainer's facilities, locker rooms, a wrestling room, an indoor track, classrooms, faculty and staff offices, a human performance lab, an equipment room, storage, and a gymnasium with a seating capacity of 1,782. Plachy Hall was constructed in 1963. Heat was originally supplied to the building from a central heating steam plant, which was decommissioned in 1997. At that time, boilers were added to each building on campus. In 2007, renovations were completed to the basketball and swimming pool areas, and additions were added to the south and west sides of the building.

PROJECT SCHEDULE

	Start Date	Completion Date
Design	July 2018	January 2019
Construction	March 2019	September 2019
Equipment	March 2019	September 2019
Occupancy		August 2019

SOURCE OF CASH FUNDS

This project is not funded from cash sources.

Fiscal Year 2018-19 Capital Construction Request

Adams State University

Plachy Hall HVAC Upgrade and Replacement (Capital Renewal)

STAFF QUESTIONS AND ISSUES

All responses to staff questions were incorporated into the project write-up.

OPERATING BUDGET

Operating expenses are paid from institutional sources. The university anticipates a decrease in operating expenses, because the HVAC system upgrades are expected to result in reduced energy and maintenance costs.

Adams State University
Five-Year Projection of Need
FY 2018-19 through FY 2022-23

Project Title	Fund Source	FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	Totals
Capital Construction (Current Year)							
Plachy Hall HVAC Upgrade and Replacement (Capital Renewal)	CCF	$5,281,034	$0	$0	$0	$0	$5,281,034
	CF	0	0	0	0	0	$0
Capital Construction (Out Year)							
Art Building Renovation	CCF	0	17,525,852	0	0	0	$17,525,852
	CF	0	0	0	0	0	$0
Central Technology Building Renovation	CCF	0	0	2,112,957	0	0	$2,112,957
	CF	0	0	0	0	0	$0
Facilities Services Building	CCF	0	0	0	0	8,212,397	$8,212,397
	CF	0	0	0	0	0	$0
Nielsen Library Renovation	CCF	0	0	0	15,915,527	0	$15,915,527
	CF	0	0	0	0	0	$0
Capital Construction Subtotals	CCF	*5,281,034*	*17,525,852*	*2,112,957*	*15,915,527*	*8,212,397*	*$49,047,767*
	CF	*0*	*0*	*0*	*0*	*0*	*$0*
Controlled Maintenance Subtotals	CCF	*1,619,117*	*See OSA Annual Report.*				*$1,619,117*
Total: State Funds		*6,900,151*	*17,525,852*	*2,112,957*	*15,915,527*	*8,212,397*	*$50,666,884*
Grand Total: All Fund Sources		**$6,900,151**	**$17,525,852**	**$2,112,957**	**$15,915,527**	**$8,212,397**	**$50,666,884**

Source: Department of Higher Education and Office of the State Architect

COVER PAGE
Auraria Higher Education Center

FY 2018-19 CAPITAL CONSTRUCTION REQUESTS (LISTED IN OSPB PRIORITY ORDER)
NOT RECOMMENDED FOR FUNDING BY OSPB:

- King Center Renovation and Addition *(previously requested)*

TOTAL: FY 2018-19 CAPITAL CONSTRUCTION STATE-FUNDED REQUEST AMOUNT = $45,849,564

FY 2018-19 CONTROLLED MAINTENANCE REQUESTS (4)
RECOMMENDED FOR FUNDING BY OSPB:
LEVEL I:

- Replace Fire Alarm System, Administration Building ($850,613)
- Repair Fire Sprinkler System, Seventh Street Classroom and Rectory Building ($79,826)

NOT RECOMMENDED FOR FUNDING BY OSPB:
LEVEL II:

- Repair Main Electrical Switchgear ($1,230,793)
- Replace Transformers, Three Buildings, Ph 1 of 3 ($384,397)

HISTORY OF STATE FUNDING

- **$32.8 million** has been appropriated on behalf of capital projects at AHEC since FY 2013-14. This represents **3.5 percent** of the total amount appropriated on behalf of all capital construction and controlled maintenance projects during this period.

- **$0.7 million** was appropriated in **FY 2017-18**.

- An additional **$3.7 million** was authorized through Senate Bill 17-267 for controlled maintenance.

INVENTORY OF GENERAL FUND SUPPORTED FACILITIES

- The General Fund supported inventory of AHEC facilities totals **2,288,459 GSF**. This total represents **4.8 percent** of the entire General Fund supported inventory of state buildings.

RECENT CDC VISITS

- Campus tour (May 2013)

Fiscal Year 2018-19 Capital Construction Request

Auraria Higher Education Center

King Center Renovation and Addition

PROGRAM PLAN STATUS

2016-098

Approved Program Plan? Yes **Date Approved:** June 28, 2017

PRIORITY NUMBERS

Prioritized By	Priority	
DeptInst	1 of 1	
CCHE	10 of 34	
OSPB	25 of 53	Not recommended for funding.

PRIOR APPROPRIATION AND REQUEST INFORMATION

Fund Source	Prior Approp.	FY 2018-19	FY 2019-20	Future Requests	Total Cost
CCF	$0	$45,849,564	$0	$0	$45,849,564
CF	$0	$465,000	$0	$0	$465,000
Total	$0	**$46,314,564**	$0	$0	$46,314,564

ITEMIZED COST INFORMATION

Cost Item	Prior Approp.	FY 2018-19	FY 2019-20	Future Requests	Total Cost
Land Acquisition	$0	$0	$0	$0	$0
Professional Services	$0	$5,397,635	$0	$0	$5,397,635
Construction	$0	$36,493,881	$0	$0	$36,493,881
Equipment	$0	$691,550	$0	$0	$691,550
Miscellaneous	$0	$586,589	$0	$0	$586,589
Contingency	$0	$3,144,909	$0	$0	$3,144,909
Software Acquisition	$0	$0	$0	$0	$0
Total	$0	**$46,314,564**	$0	$0	$46,314,564

PROJECT STATUS

This is the third request for funding. Funding was first requested on behalf of the project for FY 2016-17.

PROJECT DESCRIPTION / SCOPE OF WORK

The Auraria Higher Education Center (AHEC) is requesting a combination of state funds and cash funds spending authority to renovate 87,455 GSF in and add 27,525 GSF to the existing 192,684-GSF Kenneth King Academic and Performing Arts Center (King Center) on the Auraria Campus. The building is, and will continue to be, shared by the three Auraria campus institutions: the Community College of Denver (CCD), Metropolitan State University of Denver (MSUD), and the University of Colorado Denver (UCD). The project expands and improves programmatic space for performing arts departments, including Music and Theater (for CCD and MSUD); Music and Entertainment Industry Studies (UCD); and Theater, Film, and Video Production (UCD). Specifically, the project will:

- relocate the non-performing arts programs that currently use the building to other campus facilities;
- consolidate performing arts space from other campus buildings in the King Center;
- improve program efficiency by unifying music and theater programs;

- expand the King Center to include specialized instructional spaces, including rehearsal rooms, practice rooms, and recording studios; and
- augment building equipment to address operating deficiencies.

Design elements for the project include:

- updated security and acoustic controls;
- specialized exhaust, communication, lighting, mechanical, electrical, and plumbing systems;
- interior modifications, such as acoustical separation, open ceiling structures, system disturbance minimization, special doors and openings, resilient floors, and unique finishes;
- new lobbies at the east and west entrances to the building;
- three new theater rehearsal/class studios;
- two new large music ensemble rehearsal studios;
- 65 individual music practice rooms;
- new instructional labs for the theater program (including scenery design, lighting design, sound recording, and costume design);
- two scenery shops;
- two costume shops; and
- a suite of recording studios.

Cost assumption. The cost assumption was determined through the program planning process. The cost per GSF is $403. The project cost accounts for future inflation. The project meets the Art in Public Places and High Performance Certification Program requirements.

PROJECT JUSTIFICATION

According to AHEC, a 2013 space utilization study identified a 187,000-GSF space deficit for the performing arts departments. There are waiting lists for courses, and students are being turned away from these programs. Due to continued program growth and aging facilities, the need for new space has become a major priority for AHEC. All of the performing arts venues and rehearsal spaces are occupied an average of 62 to 90 hours per week. The Colorado Commission for Higher Education (CCHE) standard is 40 hours per week. The scheduled use of the Music and Theater Departments rehearsal and performance spaces are double to triple the CCHE recommendation.

From 2002 to 2012, the music programs experienced 45 percent growth and the theater programs experienced 274 percent growth, according to AHEC. Occupations in performing arts, film and media, and publishing disciplines represent the fifth-largest occupational group in Colorado. AHEC says that many of these occupations are projected to grow at a faster rate than population growth in the next 25 years.

While the motivation for the renovation is generally programmatic, AHEC says the project also addresses deferred maintenance, including:

- repairing/replacing the building finishes and envelope;
- repairing interior water leaks;
- repairing leaking rooftop mechanical units;
- addressing plumbing and fire sprinkler system leaks;
- addressing an aging roof;
- repairing the cracking and settling of structural elements;
- improving stair and balcony railings to meet code requirements; and
- updating bathrooms to meet code and accessibility standards.

The most significant health/life-safety projects in the building, according to AHEC, are to replace the fire alarm system, provide appropriate building communication systems, recommission the HVAC system to meet fresh air requirements, address acoustical design and energy efficiency, add a ramp to the south side of the building, and add

eye wash stations in the paint and scenery shops.

Project alternatives. In addition to the renovation and expansion of the King Center, AHEC considered several alternatives including a full replacement of the King Center, construction of a new separate wing for the King Center, modification of existing performance venues, and deferring the project expansion. After exploring the feasible project alternatives, AHEC identified the King Center Renovation and Addition as the preferred option for meeting the performing arts space needs of the institutions that share the Auraria Campus. It was also determined to be the most cost effective option, with the other alternatives estimated to cost between $65 and $85 million.

PROGRAM INFORMATION

AHEC is comprised of three separate higher education institutions, with a combined student population of about 42,000. CCD, MSUD, and UCD share classroom space, parking, and general services on the campus. AHEC manages campus facilities and non-academic functions, including the library, the child care center, classroom and event scheduling, and campus police and security. Located in Denver's city center, the Auraria Campus occupies 150 acres within close proximity to Denver's theater and convention district. The King Center opened in 2000 and houses performing arts programs and some non-performing arts space for all three institutions.

PROJECT SCHEDULE

	Start Date	Completion Date
Design	July 2018	December 2019
Construction	July 2019	June 2021
Equipment		July 2021
Occupancy		July 2021

SOURCE OF CASH FUNDS

The source of cash funds is the annual deferred maintenance budget provided by the constituent institutions. The three institutions will pay a portion of their deferred maintenance budgets to AHEC according to their allocation of campus space. Of the total $465,000 cash contribution, 15 percent will come from CCD, 50 percent from MSUD, and 35 percent from UCD.

STAFF QUESTIONS AND ISSUES

1. The life-cycle cost analysis indicates that leasing off-campus space may be required if the project is not completed. Do any departments currently lease off-campus space for performing arts programs? Has AHEC considered partnering with any other performing arts venues in downtown Denver? How does the cost of leasing off-campus space compare to the cost of renovating the King Center?

Yes, the performing arts departments have leased off-campus space and partnered with other performing arts facilities/organizations. As to the relative costs, even when "partnering" the cost overhead of any nearby facility, including contracted union labor rates, makes the difference so profound that it really is only an option as a final resort. For Music, the cost of doing a "partnered" event at the Denver Center for Performing Arts is staggering compared to producing it internally. Since the Denver Center eliminated their educational arm, theater has had no opportunity to partner for the use of that space as they had in the past. In addition, the performing arts departments do not pursue off campus space for these programs because they need to be in close proximity to the campus and existing arts spaces. Splitting the programs between two locations is not feasible, nor would it be feasible to move an entire program off campus.

Auraria Higher Education Center

King Center Renovation and Addition

OPERATING BUDGET

Operating expenses are paid from institutional sources. Despite an increase in building area, the university does not anticipate an increase in operating costs. It expects potential savings due to reduced building maintenance demands.

Auraria Higher Education Center
Five-Year Projection of Need
FY 2018-19 through FY 2022-23

Project Title	Fund Source	FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	Totals
Capital Construction (Current Year)							
King Center Renovation and Addition	CCF	$45,849,564	$0	$0	$0	$0	$45,849,564
	CF	465,000	0	0	0	0	$465,000
Capital Construction (Out Year)							
Visual Arts Building Renovation	CCF	0	25,325,737	0	0	0	$25,325,737
	CF	0	260,000	0	0	0	$260,000
Capital Construction Subtotals	CCF	*45,849,564*	*25,325,737*	*0*	*0*	*0*	*$71,175,301*
	CF	*465,000*	*260,000*	*0*	*0*	*0*	*$725,000*
Controlled Maintenance Subtotals	CCF	*2,545,629*	*See OSA Annual Report.*				*$2,545,629*
Total: State Funds		*48,395,193*	*25,325,737*	*0*	*0*	*0*	*$73,720,930*
Grand Total: All Fund Sources		**$48,860,193**	**$25,585,737**	**$0**	**$0**	**$0**	**$74,445,930**

Source: Department of Higher Education and Office of the State Architect

COVER PAGE
Colorado Community College System

FY 2018-19 CAPITAL CONSTRUCTION REQUESTS (LISTED IN OSPB PRIORITY ORDER)

RECOMMENDED FOR FUNDING BY OSPB:

- Health Care Career Center (Front Range Community College) *(previously requested)*

NOT RECOMMENDED FOR FUNDING BY OSPB:

- Boulder Creek Building (Community College of Denver) *(previously requested)*
- Freudenthal Library Renovation (Trinidad State Junior College)

TOTAL: FY 2018-19 CAPITAL CONSTRUCTION STATE-FUNDED REQUEST AMOUNT = $39,295,544

FY 2018-19 CONTROLLED MAINTENANCE REQUESTS (28)

RECOMMENDED FOR FUNDING BY OSPB:

LEVEL I:

- Replace Existing Fire Panels, CTC and ETC Buildings, Lakewood Campus (RRCC) ($253,462)
- Replace Main Electrical System and Emergency Generator, Centennial Campus (PPCC) ($991,956)
- Upgrade Security Systems, Ph 1 of 3 (CCCS-Lowry) ($511,167)
- Repair Structural Deficiencies, East Wing, Westminster Campus (FRCC) ($256,383)
- Repair/Replace Electrical System, Cottonwood and Aspen Halls (MCC) ($612,000)

NOT RECOMMENDED FOR FUNDING BY OSPB:

LEVEL II:

- Upgrade Interior and Exterior Building Access Control, Campuswide, Ph 1 of 2 ($786,094) (LCC)
- Replace Chiller #2, Westminster Campus (FRCC) ($895,427)
- Upgrade Controls and Replace Boilers and Air Handling Units, Building 753 (CCCS-Lowry) ($753,814)
- Replace Chillers, Boilers, and Associated Equipment, Main Building, Ph 1 of 3 (ACC) ($1,596,661)
- Replace Roof, Main Building, Southwest Campus, Ph 1 of 2 (PCC) ($815,326)
- Repair/Replace Roofs, Kiva, McBride, and Wheeler Buildings (OJC) ($714,065)
- Improve Site Safety and Security (LCC) ($173,382)
- Upgrade Exterior Lighting, Centennial Campus (PPCC) ($512,235)
- Replace Air Handling Unit, Controls, and Boiler, Davis Building, Ph 1 of 2 (TSJC) ($902,059)
- Upgrade HVAC, Two Buildings, North Campus (NJC) ($659,175)
- Replace HVAC System, Allred-Real Building, Rangely Campus (CNCC) ($378,308)
- Modernize Elevator, West Wing, Lakewood Campus (RRCC) ($198,672)
- Replace Roof, Harmony Library, Larimer Campus (FRCC) ($420,500)
- Repair Accessibility Compliance Deficiencies (LCC) ($547,184)
- Upgrade Fire Alarm System, Repair HVAC, and Improve Security, McDivitt Center (OJC) ($953,854)
- Improve Accessibility, Two Buildings, Ph 1 of 2 (NJC) ($387,200)
- Replace Boilers, Chillers, and Air Handling Units and Upgrade Controls, Building 999 (CCCS-Lowry) ($918,253)

COVER PAGE (Cont.)
Colorado Community College System

LEVEL III:

- Replace Roof, Building 999 (CCCS-Lowry) ($180,637)
- Replace Roof, Student Center Building (CCA) ($434,368)
- Upgrade HVAC System, Building 905 (CCCS-Lowry) ($1,964,137)
- Replace Roof and Roof Top Units, Challenger Point Building, Larimer Campus (FRCC) ($460,496)
- Repair Exterior Walls, Gorsich Advanced Technology Center (PCC) ($961,840)
- Reroof Sections 2, 3, and 4 of Aspen Building, Centennial Campus (PPCC) ($1,192,056)

HISTORY OF STATE FUNDING

- **$65.8 million** has been appropriated to the system on behalf of capital projects since FY 2013-14. This represents **7.0 percent** of the total amount appropriated on behalf of all capital construction and controlled maintenance projects during this period.

- **$5.5 million** was appropriated in **FY 2017-18**.

- An additional **$14.2 million** was authorized through Senate Bill 17-267 for *controlled maintenance.*

- An additional **$4.6 million** was authorized through Senate Bill 17-267 for *capital construction*.

INVENTORY OF GENERAL FUND SUPPORTED FACILITIES

- The General Fund supported inventory of system facilities totals **5,361,250 GSF**. This total represents **11.1 percent** of the entire General Fund supported inventory of state buildings.

RECENT CDC VISITS

- Colorado Community College System at Lowry (June 2017)
- Front Range Community College, Larimer Campus (June 2015)
- Lamar Community College (June 2017)
- Morgan Community College (June 2015)
- Northeastern Junior College (June 2015)
- Otero Junior College (June 2017)
- Pikes Peak Community College, Centennial Campus (June 2017)
- Pikes Peak Community College, Downtown Studio Campus (October 2014)
- Pueblo Community College, Main Campus (June 2017 and June 2015)
- Pueblo Community College, Southwest Campus (October 2015)
- Trinidad State Junior College (October 2015)

Fiscal Year 2018-19 Capital Construction Request

Front Range Community College

Health Care Career Center

PROGRAM PLAN STATUS *2015-015*

Approved Program Plan? Yes **Date Approved:** October 24, 2016

PRIORITY NUMBERS

Prioritized By	Priority	
DeptInst	1 of 1	
CCHE	2 of 34	
OSPB	9 of 53	Recommended for funding.

PRIOR APPROPRIATION AND REQUEST INFORMATION

Fund Source	Prior Approp.	FY 2018-19	FY 2019-20	Future Requests	Total Cost
CCF	$0	$14,118,684	$11,927,424	$0	$26,046,108
CF	$0	$4,723,211	$3,696,060	$0	$8,419,271
Total	$0	**$18,841,895**	$15,623,484	$0	$34,465,379

ITEMIZED COST INFORMATION

Cost Item	Prior Approp.	FY 2018-19	FY 2019-20	Future Requests	Total Cost
Land Acquisition	$0	$0	$0	$0	$0
Professional Services	$0	$2,131,544	$540,677	$0	$2,672,221
Construction	$0	$14,603,477	$12,423,477	$0	$27,026,954
Equipment	$0	$1,032,333	$1,738,047	$0	$2,770,380
Miscellaneous	$0	$177,308	$177,308	$0	$354,616
Contingency	$0	$897,233	$743,975	$0	$1,641,208
Software Acquisition	$0	$0	$0	$0	$0
Total	$0	**$18,841,895**	$15,623,484	$0	$34,465,379

PROJECT STATUS

This is the fifth request for funding. Funding was first requested on behalf of the project in FY 2014-15.

PROJECT DESCRIPTION / SCOPE OF WORK

Front Range Community College (FRCC) is requesting state funds and cash funds spending authority for the first phase of a two-phase project to construct a new, 55,333-GSF facility to house its health care programs on an undeveloped site at the northwest corner of the college's Larimer Campus. The three-story facility will consolidate and improve physical space for the Allied Health and Nursing programs. These programs include: Registered and Licensed Practical Nursing, Certified Nurse Aide, Dental Assistant, Emergency Medical Services, Health and Wellness, Holistic Health, Medical Careers Exploration, Phlebotomy, and Medical Assisting, as well as potential new programs such as Clinical Lab Technician, Dental Hygienist, and Pharmacy Technician.

The Health Care Career Center will consist of classroom, lab, office, and public spaces. The educational spaces are expected to incorporate state-of-the-art design that encourages small group and collaborative learning and offer ample access to technology that will allow digital presentation, streaming, and archiving of many classroom and lab

activities. The office spaces will be built in clusters to encourage efficiencies and collaboration. A multi-story lobby featuring glass walls is expected to display works depicting health and wellness, while corridors will also have areas for display. Clinic areas will be accessible from the public spaces.

Cost assumption. The cost assumption was determined through the program planning process. The cost per GSF is $623. The project cost accounts for future inflation. The project was originally submitted as a singe phase. It has since been rescoped as a two-phase project and the college has included a 6 percent inflation factor for the second phase, leading to a $884,348 increase in the total project cost. The project meets the Art in Public Places and High Performance Certification Program requirements.

PROJECT JUSTIFICATION

According to the college, the project addresses a 110,964-GSF space deficit at the Larimer Campus and consolidates programs that are currently spread between the Larimer Campus and leased spaces into one facility on campus. The college says that its largest unmet need is adequate academic space, and that even after the completion of the new building, the Larimer Campus will still have a space deficit of about 40,000 GSF. The project also achieves cost savings by eliminating the use of leased facilities for certain programs. The college expects that it will offset operational cost components at the new facility with lease savings and staff efficiencies.

Additionally, the college says the new facility will address Colorado's projected increase in demand for health care professionals. According to a December 2016 Department of Local Affairs report, the population of Colorado residents over the age of 65 will grow by more than 200 percent from 2015 to 2050. Registered Nurses, Nursing Assistants, Licensed Practical Nurses, and Medical Assistants are considered high-demand occupational groups. According to a 2016 report by the Department of Higher Education, the projected growth rate from 2015 to 2025 for these health-related fields will range from 29 to 41 percent.

Project alternatives. The college considered remaining in leased space, which would require the programs to remain spread apart at different facilities. This alternative presents challenges for students, who are limited in their access to on-campus services and must travel long distances between classes. It also presents challenges for the school, which is not able to make practical investments in lab facilities; is subject to the disruption caused by relocation at the end of a lease cycle; and is less likely to receive donations for those programs operating in leased space.

PROGRAM INFORMATION

FRCC, Larimer Campus, is a two-year institution offering associate degrees and certificate programs, as well as online courses and continuing education. The college also guarantees credit transfer to all public four-year colleges and universities in the state and partners with area high schools to allow concurrent enrollment.

The FRCC system was established in 1968. It was the first community college to be established by the State Board for Community Colleges and Occupational Education. The Larimer campus was formed in 1988, when the Larimer County Voc-Tech Center merged with FRCC. As one of the largest community colleges in Colorado, FRCC serves more than 19,700 students annually through three campuses (Boulder, Larimer, and Westminster), two learning centers (Brighton and Loveland), numerous outreach sites associated with the campuses, and online learning. Today, more than 8,400 students attend classes at the Larimer Campus.

Fiscal Year 2018-19 Capital Construction Request

Front Range Community College

Health Care Career Center

PROJECT SCHEDULE

	Start Date	Completion Date
Design	April 2018	April 2019
Construction	April 2019	July 2020
Equipment		July 2020
Occupancy		July 2020

SOURCE OF CASH FUNDS

The source of cash funds is institutional reserves and donations.

STAFF QUESTIONS AND ISSUES

1. Please describe the source(s) of revenue for the institutional cash funds to be used for the project. What portion of the cash funds will be from donations?

The total institutional cash commitment to the project is $8,419,272 or 25.1 percent of the total project cost. FRCC does not intend to increase student fees to fund this project, and $6,419,272 of this total commitment is planned from institutional cash funds while $2,000,000 is planned from donations. As a result of preliminary consultations with key community constituents, we think it is likely we will be able to raise the $2,000,000 of the donation portion of the project funding. FRCC commits to contributing the requisite funds if unable to raise all of the funds required to support this capital building project.

2. How does the total present value life cycle cost of $32.5 million compare to the life cycle cost of continuing to lease space over the same timeframe (30 years)?

The new programs which will be housed in the new HCCC facility would otherwise require the college to lease an additional 6,000 SF, assuming that we are fortunate enough to find a facility that aligns with the program needs. The base lease rate we are experiencing in the Fort Collins area is $15 per square foot, and this rate would likely escalate depending on the tenant finishes required to incorporate water, power, and other non-office-standard tenant finishes that the health care related programs will require. This would be in addition to up-front expenses required to tailor the space to the medical-related program finishes at the date of occupancy. We also anticipate yearly increases for owner-related expenses (common area maintenance and building infrastructure upgrades) in the amount of 5 percent annually. It is these factors that have been imputed into the life-cycle cost analysis provided. The total cost of leasing the additional space over 30 years would be around $6,750,000.

Furthermore, it is our hope that the committee considers the educational impact as well as the financial impact of the building. One key reason to build this building is to create space for additional programs in a building owned by the State. A second key reason is to improve the quality of instruction. The new building would make substantial improvements in our ability to educate health professionals. Leasing space off campus is a very poor alternative for meeting either of these objectives because it becomes much more difficult to provide student support services and to configure the space appropriately.

OPERATING BUDGET

Operating expenses are paid from institutional sources. The college anticipates annual operating costs will be $522,344, which will be offset by $338,984 in annual lease savings and staff efficiencies.

Fiscal Year 2018-19 Capital Construction Request

Community College of Denver

Boulder Creek Building

2018-028

PROGRAM PLAN STATUS

Approved Program Plan? Yes **Date Approved:** October 24, 2016

PRIORITY NUMBERS

Prioritized By	Priority	
DeptInst	1 of 1	
CCHE	15 of 34	
OSPB	31 of 53	Not recommended for funding.

PRIOR APPROPRIATION AND REQUEST INFORMATION

Fund Source	Prior Approp.	FY 2018-19	FY 2019-20	Future Requests	Total Cost
CCF	$0	$23,258,852	$0	$0	$23,258,852
CF	$0	$1,484,608	$0	$0	$1,484,608
Total	$0	**$24,743,460**	$0	$0	$24,743,460

ITEMIZED COST INFORMATION

Cost Item	Prior Approp.	FY 2018-19	FY 2019-20	Future Requests	Total Cost
Land Acquisition	$0	$0	$0	$0	$0
Professional Services	$0	$2,929,871	$0	$0	$2,929,871
Construction	$0	$17,691,033	$0	$0	$17,691,033
Equipment	$0	$2,877,528	$0	$0	$2,877,528
Miscellaneous	$0	$166,295	$0	$0	$166,295
Contingency	$0	$1,078,733	$0	$0	$1,078,733
Software Acquisition	$0	$0	$0	$0	$0
Total	$0	**$24,743,460**	$0	$0	$24,743,460

PROJECT STATUS

This is the second request for funding. Funding on behalf of the project was also requested for FY 2017-18.

PROJECT DESCRIPTION / SCOPE OF WORK

The Community College of Denver (CCD) is requesting a combination of state funds and cash funds spending authority to remodel the 65,593-GSF Boulder Creek Building and to construct a 10,327-GSF addition. The project also makes minor renovations to portions of the Clear Creek, Cherry Creek, and Confluence Buildings to accommodate programmatic changes associated with the Boulder Creek Building.

The Boulder Creek building is currently shared by all three institutions at the Auraria Higher Education Center (AHEC), including CCD, Metropolitan State University of Denver (MSUD), and the University of Colorado Denver (UCD); however, the AHEC campus master plan calls for better definition of campus "neighborhoods" for each institution on the Auraria Campus. To help achieve this goal, the Boulder Creek Building is anticipated to house only CCD programs in the future. The project relocates CCD's Health Sciences Center, currently located on the Lowry Campus seven miles east of the Auraria Campus, to the Boulder Creek Building.

Programs that will be offered if the Health Sciences Center is relocated to the Boulder Creek Building include: Medical Assistant, Licensed Practical Nurse, Radiologic Technologist, Certified Nurse Aide, Dental Hygienist, Surgical Technologist, and Veterinary Technologist. The project also provides:

- a centralized Design Center for the college's Architectural Design, Engineering Graphic Design, and Computer Aided Drafting programs;
- office space for the Administrative Department, which is currently housed in the Administration Building on the other side of campus; and
- a nutrition teaching kitchen and cafe, where students can learn to provide health food alternatives to campus students and the community.

In addition to remodeling programmatic space within the building and constructing additional classrooms and faculty offices for the health sciences programs, the project makes improvements to the roof, windows, and HVAC systems in the Boulder Creek Building. It also creates an outdoor plaza adjacent to the new addition to provide for better connectivity with campus walkways and the nearby light rail station. The project also reconfigures space, upgrades electrical and data systems, and purchases new furniture associated with moving the college's Information Technology Department into the Clear Creek Building. Finally, the project repurposes existing office space for new student computer labs in the Cherry Creek and Confluence Buildings.

Cost assumption. The cost assumption was determined through the program planning process. The cost per GSF is $326. The project cost accounts for future inflation. The project meets the Art in Public Places and High Performance Certification Program requirements.

PROJECT JUSTIFICATION

According to CCD, the Boulder Creek Building's prominent location along Colfax Avenue adjacent to the campus light rail station allows the building to serve as a gateway to CCD's "neighborhood" on the Auraria Campus and to further distinguish it as an AHEC institution. The college says the project enhances the building exterior in order to create inviting spaces for campus visitors and users, places the most appropriate programs in the building to satisfy space and efficiency needs, and aligns with both the "neighborhood" and campus master plans.

CCD says its Health Sciences Center is hindered from offering new programs at its current location on the Lowry Campus. The college says that moving the health sciences programs to the Boulder Creek building will allow for better and more efficient use of space and for the integration of several programs, including the dental hygiene clinic and the veterinary technician clinic. Also, the new teaching kitchen and new clinic space will be available for use by multiple departments, thereby eliminating the segregated nature of some programs. The new facilities will be accessible to the entire Auraria Campus student population, as well as the nearby community. Low-cost health services may be available to more people than are currently offered at the Lowry Campus.

Furthermore, the college explains that the project addresses several deferred maintenance items, including replacing deteriorated roofing and flashing, repairing existing window glazing that is insufficient and offers little thermal protection, and replacing the inefficient HVAC systems, which are in poor condition and beyond their useful lives. Failure to complete these priority repairs could result in unexpected system failures and increase repair and maintenance costs, which are currently about $50,000 per year.

Project alternatives. The college considered renovating and expanding the building for the Advanced Manufacturing Center, instead of the Health Sciences Center; however this alternative was estimated to cost about $1.4 million more. The college states that the Advanced Manufacturing Center is located in a recently renovated facility a few miles north of the Auraria Campus and relocating it would have benefitted fewer students. The college also considered other alternatives such as a smaller renovation, a complete demolition of the Boulder Creek Building, and renovating a different building. CCD says these alternatives were either cost prohibitive or do not meet the programmatic needs or goals of the college.

Fiscal Year 2018-19 Capital Construction Request

Community College of Denver

Boulder Creek Building

PROGRAM INFORMATION

The Boulder Creek Building was constructed in 1974. According to CCD, it has not been significantly remodeled since it was constructed. The building is currently occupied by CCD (24 percent), MSUD (42 percent), UCD (19 percent), and AHEC (15 percent); however, it is anticipated that CCD will be the sole occupant of the building within two to four years.

PROJECT SCHEDULE

	Start Date	Completion Date
Design	July 2018	December 2018
Construction	January 2019	November 2020
Equipment	November 2020	December 2020
Occupancy		December 2020

SOURCE OF CASH FUNDS

The source of cash funds is institutional reserves. No new or existing student fees will be used to finance this project.

STAFF QUESTIONS AND ISSUES

1. Is the Community College of Aurora (CCA) still interested in occupying the Health Sciences Center on the Lowry Campus? If not, does CCCS have contingency plans for these facilities if they are vacated by CCD?

CCD's health sciences and dental hygiene programs are located at the Lowry Campus and comprise 52,000 and 14,777 square feet, respectively. If this project is funded, CCCS, CCA, and CCD would engage in communication about the best use of these facilities.

2. If the project is not funded, does CCD plan to move forward with reestablishing its Licensed Practical Nurse program?

Yes. Regardless of whether the Boulder Creek project gets funded, the college is moving forward with reinstating the LPN program. Staff have already identified space on the Lowry Campus to conduct all teaching and are in the process of hiring a program chair. In addition, medical providers, such as Kaiser Permanente, have continued to express a need for qualified applicants with LPN certifications.

3. Since the narrative indicates that construction can be phased (renovation phase and new construction phase), would it also be possible to split the funding into two phases?

Funding could be split into two phases. Phase I would include:

- *Boulder Creek – vacated space can be remodeled for general assignment classrooms and a smaller computer lab;*
- *Cherry Creek – new student computer labs would be identified and built out;*
- *Clear Creek – space on the 2nd floor of this facility would be remodeled to accommodate IT's move into this facility; and*
- *Confluence – new student computer labs would be identified and built out.*

Phase II would include the addition of 10,327 square feet to Boulder Creek for the health sciences programs and to finish remaining areas to be remodeled.

Fiscal Year 2018-19 Capital Construction Request

Community College of Denver

Boulder Creek Building

OPERATING BUDGET

Operating expenses are paid from institutional sources. The college believes the project would result in a $348,054 net decrease in annual operating costs, based on the existing operating costs at the Lowry Campus. Furthermore, it says the project would increase revenue by offering additional continuing education courses and expanding the number of dental exam chairs.

Fiscal Year 2018-19 Capital Construction Request

Trinidad State Junior College

Freudenthal Library Renovation

PROGRAM PLAN STATUS *2017-057*

Approved Program Plan? Waived **Date Approved:** October 23, 2017

PRIORITY NUMBERS

Prioritized By	Priority	
DeptInst	1 of 1	
CCHE	16 of 34	
OSPB	32 of 53	Not recommended for funding.

PRIOR APPROPRIATION AND REQUEST INFORMATION

Fund Source	Prior Approp.	FY 2018-19	FY 2019-20	Future Requests	Total Cost
CCF	$0	$1,918,008	$0	$0	$1,918,008
CF	$0	$19,374	$0	$0	$19,374
Total	$0	**$1,937,382**	$0	$0	$1,937,382

ITEMIZED COST INFORMATION

Cost Item	Prior Approp.	FY 2018-19	FY 2019-20	Future Requests	Total Cost
Land Acquisition	$0	$0	$0	$0	$0
Professional Services	$0	$180,500	$0	$0	$180,500
Construction	$0	$1,355,590	$0	$0	$1,355,590
Equipment	$0	$205,986	$0	$0	$205,986
Miscellaneous	$0	$19,180	$0	$0	$19,180
Contingency	$0	$176,126	$0	$0	$176,126
Software Acquisition	$0	$0	$0	$0	$0
Total	$0	**$1,937,382**	$0	$0	$1,937,382

PROJECT STATUS

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

PROJECT DESCRIPTION / SCOPE OF WORK

Trinidad State Junior College (TSJC) is requesting state funds and cash funds spending authority to renovate the 11,782-GSF Freudenthal Library. Specifically, the project:

- moves the library book collection to a separate location within the building;
- provides a new learning commons with individual and group study space;
- renovates the existing restrooms;
- constructs a new family restroom;
- renovates the atrium and courtyard; and
- upgrades library technology, including the purchase of additional computers and printers.

Cost assumption. The cost assumption was determined by college staff based on their knowledge of the local construction market and from historical cost data from similar library renovation projects. The cost per GSF is $164. The project does not include future inflation. The project meets the Art in Public Places program requirements. The project is not required to comply with the requirements of the High Performance Certification Program because the anticipated cost of the renovation is less than 25 percent of the current replacement value of the building.

PROJECT JUSTIFICATION

According to TSJC, the role of libraries is changing and the renovation is necessary to recruit students. Since 2014, the college has recognized the need to modernize its library facilities in its Implementation Plan. TSJC completed a Facility Master Plan in 2012, which identified the need for a Learning Resource Center, study rooms, computer terminals, and other learning spaces in the library. TSJC says the existing library is not fully functional and does not meet the needs of today's students. It is losing visitors as more digital services are provided. The decreased visitation also negatively impacts the Success Center in the library, where students receive advising, tutoring, and writing assistance.

Project alternatives. TSJC also considered building a new library; however, it would cost about $5.7 million more than the renovation.

PROGRAM INFORMATION

The Freudenthal Library was completed in 1968 and has not had any major renovations since it was opened. The library is used by local K-12 schools and also provides services for high school students and other community organizations on a regular basis. The library is also open evenings and weekends.

PROJECT SCHEDULE

	Start Date	Completion Date
Design	July 2018	June 2019
Construction	August 2019	August 2020
Equipment	August 2020	September 2020
Occupancy		October 2020

SOURCE OF CASH FUNDS

The source of cash funds is institutional reserves. TSJC does not intend to increase student fees to finance the project.

STAFF QUESTIONS AND ISSUES

All responses to staff questions were incorporated into the project write-up.

OPERATING BUDGET

Operating expenses are paid from institutional sources. The college anticipates operating costs may decrease as a result of the energy and water savings associated with the project.

Colorado Community College System
Five-Year Projection of Need
FY 2018-19 through FY 2022-23

Project Title	Fund Source	FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	Totals
Arapahoe Community College							
Capital Construction (Out Year)							
Health Programs Integration Renovation	CCF	$0	$7,500,000	$0	$0	$0	$7,500,000
	CF	0	2,500,000	0	0	0	$2,500,000
ACC Capital Construction Subtotals	CCF	*0*	*7,500,000*	*0*	*0*	*0*	*$7,500,000*
	CF	*0*	*2,500,000*	*0*	*0*	*0*	*$2,500,000*
Colorado Community Colleges - Lowry							
Capital Construction (Out Year)							
Diesel Power School Building Renovation, Community College of Aurora	CCF	0	387,150	0	0	0	$387,150
	CF	0	129,740	0	0	0	$129,740
Gymnasium Renovation, Community College of Aurora	CCF	0	0	805,840	0	0	$805,840
	CF	0	0	270,060	0	0	$270,060
CCCS – Lowry Capital Construction Subtotals	CCF	*0*	*387,150*	*805,840*	*0*	*0*	*$1,192,990*
	CF	*0*	*129,740*	*270,060*	*0*	*0*	*$399,800*
Community College of Aurora							
Capital Construction (Out Year)							
Administration Building Repairs and Lock Upgrades	CCF	0	0	650,000	0	0	$650,000
	CF	0	0	0	0	0	$0
Academic Classroom Building Renovation	CCF	0	0	0	0	10,000,000	$10,000,000
	CF	0	0	0	0	0	$0
Vocational Classroom/Physical Plant	CCF	0	0	8,000,000	0	0	$8,000,000
	CF	0	0	0	0	0	$0
CCA Capital Construction Subtotals	CCF	*0*	*0*	*8,650,000*	*0*	*10,000,000*	*$18,650,000*
	CF	*0*	*0*	*0*	*0*	*0*	*$0*

Colorado Community College System (Cont.)
Five-Year Projection of Need
FY 2018-19 through FY 2022-23

Project Title	Fund Source	FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	Totals
Community College of Denver							
Capital Construction (Current Year)							
Boulder Creek Building	CCF	$23,258,852	$0	$0	$0	$0	$23,258,852
	CF	1,484,608	0	0	0	0	$1,484,608
Capital Construction (Out Year)							
Boulder Creek Building Backfill	CCF	0	0	0	0	1,649,736	$1,649,736
	CF	0	0	0	0	0	$0
Clear Creek Building	CCF	0	0	34,646,897	0	0	$34,646,897
	CF	0	0	0	0	0	$0
Colfax and 7th Street Building	CCF	0	0	0	0	67,215,517	$67,215,517
	CF	0	0	0	0	0	$0
CCD Capital Construction Subtotals	CCF	*23,258,852*	*0*	*34,646,897*	*0*	*68,865,253*	*$126,771,002*
	CF	*1,484,608*	*0*	*0*	*0*	*0*	*$1,484,608*
Front Range Community College							
Capital Construction (Current Year)							
Health Care Career Center	CCF	14,118,684	11,927,424	0	0	0	$26,046,108
	CF	4,723,211	3,696,060	0	0	0	$8,419,271
Capital Construction (Out Year)							
Classroom Building, Boulder County	CCF	0	0	72,000,000	0	0	$72,000,000
	CF	0	0	5,000,000	0	0	$5,000,000
FRCC Capital Construction Subtotals	CCF	*14,118,684*	*11,927,424*	*72,000,000*	*0*	*0*	*$98,046,108*
	CF	*4,723,211*	*3,696,060*	*5,000,000*	*0*	*0*	*$13,419,271*

Colorado Community College System (Cont.)
Five-Year Projection of Need
FY 2018-19 through FY 2022-23

Project Title	Fund Source	FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	Totals
Lamar Community College							
Capital Construction (Out Year)							
Betz Technology Center Renovation	CCF	$0	$1,869,156	$0	$0	$0	$1,869,156
	CF	0	0	0	0	0	$0
Bowman Administration Wing Renovation	CCF	0	0	1,869,156	0	0	$1,869,156
	CF	0	0	0	0	0	$0
Bowman Building Renovation	CCF	0	2,484,309	8,695,082	1,242,155	0	$12,421,546
	CF	0	0	0	0	0	$0
Community Library	CCF	0	785,760	0	0	0	$785,760
	CF	0	0	0	0	0	$0
Indoor Practice Arena and Horse Stall	CCF	0	1,575,000	0	0	0	$1,575,000
	CF	0	0	0	0	0	$0
Trustees Building Renovation	CCF	0	1,901,653	6,655,788	950,827	0	$9,508,268
	CF	0	0	0	0	0	$0
LCC Capital Construction Subtotals	CCF	*0*	*8,615,878*	*17,220,026*	*2,192,982*	*0*	*$28,028,886*
	CF	*0*	*0*	*0*	*0*	*0*	*$0*

Colorado Community College System (Cont.)
Five-Year Projection of Need
FY 2018-19 through FY 2022-23

Project Title	Fund Source	FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	Totals
Morgan Community College							
Capital Construction (Out Year)							
Bennett Center Facility	CCF	$0	$0	$0	$0	$0	$0
	CF	0	600,000	1,400,000	0	0	$2,000,000
Career and Technical Education Program Expansion	CCF	0	0	0	600,000	5,000,000	$5,600,000
	CF	0	0	0	100,000	200,000	$300,000
Cottonwood Hall Renovation and Expansion	CCF	0	0	600,000	6,400,000	0	$7,000,000
	CF	0	0	400,000	900,000	0	$1,300,000
Fine Arts Programs Expansion	CCF	0	0	0	900,000	8,000,000	$8,900,000
	CF	0	0	0	500,000	200,000	$700,000
MCC Capital Construction Subtotals	CCF	*0*	*0*	*600,000*	*7,900,000*	*13,000,000*	*$21,500,000*
	CF	*0*	*600,000*	*1,800,000*	*1,500,000*	*400,000*	*$4,300,000*
Northeastern Junior College							
Capital Construction (Out Year)							
Agriculture Building Phase 1	CCF	0	0	0	5,827,850	0	$5,827,850
	CF	0	0	0	450,000	0	$450,000
Agriculture Building Phase 2	CCF	0	0	0	0	2,477,150	$2,477,150
	CF	0	0	0	0	0	$0
Beede Hamil Renovation	CCF	0	0	2,250,000	0	0	$2,250,000
	CF	0	0	0	0	0	$0
Cosmetology Building Renovation	CCF	0	0	3,250,000	0	0	$3,250,000
	CF	0	0	0	0	0	$0
Hays Student Center Renovation	CCF	0	10,105,000	0	0	0	$10,105,000
	CF	0	0	0	0	0	$0
Maintenance Building Renovation	CCF	0	3,862,500	0	0	0	$3,862,500
	CF	0	0	0	0	0	$0

Colorado Community College System (Cont.)
Five-Year Projection of Need
FY 2018-19 through FY 2022-23

Project Title	Fund Source	FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	Totals
Northeastern Junior College (Cont.)							
Capital Construction (Out Year) (Cont.)							
New Residence Hall	CCF	$0	$0	$0	$0	$0	$0
	CF	0	12,000,000	0	0	0	$12,000,000
North Campus Athletic Field	CCF	0	0	0	0	0	$0
	CF	0	2,000,000	1,500,000	1,000,000	0	$4,500,000
Walker Hall Renovation	CCF	0	0	0	0	3,862,500	$3,862,500
	CF	0	0	0	0	0	$0
NJC Capital Construction Subtotals	CCF	*0*	*13,967,500*	*5,500,000*	*5,827,850*	*6,339,650*	*$31,635,000*
	CF	*0*	*14,000,000*	*1,500,000*	*1,450,000*	*0*	*$16,950,000*
Otero Junior College							
Capital Construction (Out Year)							
Agriculture Science Building	CCF	0	0	0	0	8,000,000	$8,000,000
	CF	0	0	0	0	0	$0
McDivitt Hall Remodel	CCF	0	700,000	0	0	0	$700,000
	CF	0	0	0	0	0	$0
Humanities Center Remodel	CCF	0	0	7,500,000	0	0	$7,500,000
	CF	0	0	0	0	0	$0
McBride Hall Renovation	CCF	0	0	0	7,500,000	0	$7,500,000
	CF	0	0	0	0	0	$0
OJC Capital Construction Subtotals	CCF	*0*	*700,000*	*7,500,000*	*7,500,000*	*8,000,000*	*$23,700,000*
	CF	*0*	*0*	*0*	*0*	*0*	*$0*

Colorado Community College System (Cont.)
Five-Year Projection of Need
FY 2018-19 through FY 2022-23

Project Title	Fund Source	FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	Totals
Pikes Peak Community College							
Capital Construction (Out Year)							
Allied Health Building, Rampart Range Campus	CCF	$0	$10,250,000	$0	$0	$0	$10,250,000
	CF	0	14,750,000	0	0	0	$14,750,000
Breckenridge Building Renovation and Expansion	CCF	0	5,328,000	0	0	0	$5,328,000
	CF	0	1,872,000	0	0	0	$1,872,000
Downtown Studio Campus West Renovation	CCF	0	0	0	0	5,550,000	$5,550,000
	CF	0	0	0	0	1,950,000	$1,950,000
Emergency Services Training Building	CCF	0	0	0	9,081,280	0	$9,081,280
	CF	0	0	0	3,190,720	0	$3,190,720
Facilities Maintenance Building	CCF	0	0	2,340,250	0	0	$2,340,250
	CF	0	0	822,250	0	0	$822,250
PPCC Construction Subtotals	CCF	*0*	*15,578,000*	*2,340,250*	*9,081,280*	*5,550,000*	*$32,549,530*
	CF	*0*	*16,622,000*	*822,250*	*3,190,720*	*1,950,000*	*$22,584,970*
Pueblo Community College							
Capital Construction (Out Year)							
Dental Hygiene and Clinic Consolidation	CCF	0	2,000,000	0	0	0	$2,000,000
	CF	0	0	0	0	0	$0
Medical Technologies Building/CUA Renovation	CCF	0	0	2,000,000	0	0	$2,000,000
	CF	0	0	0	0	0	$0
PCC Capital Construction Subtotals	CCF	*0*	*2,000,000*	*2,000,000*	*0*	*0*	*$4,000,000*
	CF	*0*	*0*	*0*	*0*	*0*	*$0*
Red Rocks Community College							
Capital Construction (Out Year)							
Construction Technology Center Renovation and Expansion	CCF	0	12,000,000	0	0	0	$12,000,000
	CF	0	3,000,000	0	0	0	$3,000,000
RRCC Capital Construction Subtotals	CCF	*0*	*12,000,000*	*0*	*0*	*0*	*$12,000,000*
	CF	*0*	*3,000,000*	*0*	*0*	*0*	*$3,000,000*

Colorado Community College System (Cont.)
Five-Year Projection of Need
FY 2018-19 through FY 2022-23

Project Title	Fund Source	FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	Totals
Trinidad State Junior College							
Capital Construction (Current Year)							
Freudenthal Library Renovation	CCF	$1,918,008	$0	$0	$0	$0	$1,918,008
	CF	19,374	0	0	0	0	$19,374
Capital Construction (Out Year)							
Banta Building Renovation	CCF	0	0	6,800,000	0	0	$6,800,000
	CF	0	0	0	0	0	$0
Valley Campus Career and Technical Education Upgrade/Expansion	CCF	0	0	0	0	1,460,000	$1,460,000
	CF	0	0	0	0	0	$0
Massari Building Renovation, Trinidad Campus	CCF	0	1,825,000	0	0	0	$1,825,000
	CF	0	0	0	0	0	$0
Fourth Floor Remodel, Berg Building	CCF	0	0	0	1,691,355	0	$1,691,355
	CF	0	0	0	0	0	$0
TSJC Capital Construction Subtotals	CCF	*1,918,008*	*1,825,000*	*6,800,000*	*1,691,355*	*1,460,000*	*$13,694,363*
	CF	*19,374*	*0*	*0*	*0*	*0*	*$19,374*
Capital Construction Subtotals	CCF	*39,295,544*	*74,500,952*	*158,063,013*	*34,193,467*	*113,214,903*	*$419,267,879*
	CF	*6,227,193*	*40,547,800*	*9,392,310*	*6,140,720*	*2,350,000*	*$64,658,023*
Controlled Maintenance Subtotals	CCF	*19,430,711*	*See OSA Annual Report.*				*$19,430,711*
Total: State Funds		*58,726,255*	*74,500,952*	*158,063,013*	*34,193,467*	*113,214,903*	*$438,698,590*
Grand Total: All Fund Sources		**$64,953,448**	**$115,048,752**	**$167,455,323**	**$40,334,187**	**$115,564,903**	**$503,356,613**

Source: Department of Higher Education and Office of the State Architect

COVER PAGE
Colorado Mesa University

FY 2018-19 CAPITAL CONSTRUCTION REQUESTS (LISTED IN OSPB PRIORITY ORDER)

RECOMMENDED FOR FUNDING BY OSPB:

- Health Sciences, Phase II, PA/PT/OT Center *(new)*

NOT RECOMMENDED FOR FUNDING BY OSPB:

- Electric Lineworker Building *(continuation)*
- Performing Arts Expansion and Renovation *(previously requested)*
- Trigeneration, Combined Cooling, Heating, and Power System *(previously requested)*

TOTAL: FY 2018-19 CAPITAL CONSTRUCTION STATE-FUNDED REQUEST AMOUNT = $20,589,182

FY 2018-19 CONTROLLED MAINTENANCE REQUESTS (5)

NOT RECOMMENDED FOR FUNDING BY OSPB:

LEVEL II:

- Upgrade HVAC and Control Systems, Moss Performing Arts ($1,206,475)
- Improve Building Envelope ($375,804)
- Upgrade HVAC and Controls, Heiny Hall ($542,113)
- Replace Roof, Science Building ($278,454)

LEVEL III:

- Replace Roof, Heiny Hall ($284,710)

HISTORY OF STATE FUNDING

- **$43.4 million** has been appropriated on behalf of capital projects at the university since FY 2013-14. This represents **4.6 percent** of the total amount appropriated on behalf of all capital construction and controlled maintenance projects during this period.

- **$0.3 million** was appropriated in **FY 2017-18**.

- An additional **$1.4 million** was authorized through Senate Bill 17-267 for *controlled maintenance.*

- An additional **$1.5 million** was authorized through Senate Bill 17-267 for *capital construction.*

INVENTORY OF GENERAL FUND SUPPORTED FACILITIES

- The General Fund supported inventory of university facilities totals **1,034,320 GSF**. This total represents **2.2 percent** of the entire General Fund supported inventory of state buildings.

RECENT CDC VISITS

- Campus tour (June 2016)

Fiscal Year 2018-19 Capital Construction Request

Colorado Mesa University

Health Sciences, Phase II, PA/PT/OT Center

2019-001

PROGRAM PLAN STATUS

Approved Program Plan? Yes **Date Approved:** April 25, 2017

PRIORITY NUMBERS

Prioritized By	Priority	
DeptInst	1 of 4	
CCHE	3 of 34	
OSPB	11 of 53	Recommended for funding.

PRIOR APPROPRIATION AND REQUEST INFORMATION

Fund Source	Prior Approp.	FY 2018-19	FY 2019-20	Future Requests	Total Cost
CCF	$0	$4,302,087	$4,302,087	$0	$8,604,174
CF	$0	$881,151	$881,151	$0	$1,762,302
Total	$0	**$5,183,238**	$5,183,238	$0	$10,366,476

ITEMIZED COST INFORMATION

Cost Item	Prior Approp.	FY 2018-19	FY 2019-20	Future Requests	Total Cost
Land Acquisition	$0	$0	$0	$0	$0
Professional Services	$0	$870,227	$853,719	$0	$1,723,946
Construction	$0	$3,706,589	$3,263,991	$0	$6,970,580
Equipment	$0	$422,516	$845,031	$0	$1,267,547
Miscellaneous	$0	$0	$57,856	$0	$57,856
Contingency	$0	$183,906	$162,641	$0	$346,547
Software Acquisition	$0	$0	$0	$0	$0
Total	$0	**$5,183,238**	$5,183,238	$0	$10,366,476

PROJECT STATUS

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

PROJECT DESCRIPTION / SCOPE OF WORK

Colorado Mesa University (CMU) is requesting a combination of state funds and cash funds spending authority for the first phase of a two-phase project to construct a 22,286-GSF, two-story building to house three new Health Sciences programs. The building will house the university's recently created Physician Assistant (PA), Physical Therapy (PT), and Occupational Therapy (OT) programs. The PA/PT/OT Center will be located adjacent to the university's recently constructed Nurse Practitioner Center and will be designed with similar interior and exterior architectural features. Specifically, space in the new building for the PA program will include:

- two 30-student classrooms;
- six student breakout rooms;
- clinical exam rooms;
- student-faculty interactive space; and

- clinical lab space.

The building will also include two additional classrooms and two instructional labs for the PT program, as well as two classrooms and one lab for the OT program. Finally, the new building will include student-faculty interactive spaces and a cadaver lab for use by the entire Kinesiology Department.

Cost assumptions. The cost assumption was determined through the program planning process. The cost per GSF is $458. The project cost does not account for future inflation. The project meets the Art in Public Places and High Performance Certification Program requirements.

PROJECT JUSTIFICATION

The university says it is starting new graduate degree programs in PA, PT, and OT in order to meet the regional health care needs of western Colorado. With the new programs, CMU will offer a Master of Science degree in Physician Assistant Studies. Both the PT and OT programs will offer doctorate degrees.

The PA program is scheduled to admit its first students in the 2019-20 academic year. PAs are health care professionals who are licensed to practice medicine under the supervision of a medical doctor. They can make clinical decisions and provide diagnostic, therapeutic, preventative, and other health services to patients. According to a recent study cited by CMU, the demand for PAs is expected to grow by 50 percent in Colorado from 2014 to 2024, which is higher than the expected national growth. The university also conducted a survey of medical clinics, hospital systems, and health care providers in western Colorado, and over 60 percent of respondents ranked the need for new PA graduates as moderate to high. Nearly the same number of respondents said it was likely they would hire a PA in the next five years.

PTs are health care professionals who are trained to diagnose and treat individuals with medical problems or health-related conditions that restrict movement or the ability to perform daily activities. PTs provide care for people of all ages and in a variety of settings, including hospitals, private practices, outpatient clinics, home-health agencies, schools, sport and fitness facilities, workplaces, and nursing homes. According to the recent study cited by CMU, the demand for PTs is expected to grow by 45 percent in Colorado. The survey conducted by CMU indicated over 70 percent of respondents ranked the need for new PT graduates as moderate to high and 76 percent said it was likely they would hire a PT in the next five years.

OTs are health care professionals who are trained to treat individuals of all ages with health conditions or disabilities in order to help them successfully engage with occupational tasks. OTs work in similar settings as PTs. CMU says demand for OTs is increasing as a result of an aging population, individuals staying active later in life, and a growing population of patients with chronic medical conditions, such as Alzheimer's, mobility issues, and complications from stroke. According to the recent study cited by CMU, the demand for OTs is expected to grow by 36 percent in Colorado. The survey conducted by CMU indicated 61 percent of respondents ranked the need for new OT graduates as moderate to high and 59 percent said it was likely they would hire an OT in the next five years.

Project alternatives. The university says it considered remodeling unused basement space under the Nurse Practitioner Center; however, it was determined that the basement would not meet the space needs of the new programs. CMU also considered utilizing available space within the Wellness Center, but it was also deemed to be too small. Finally, separating the PA/PT/OT programs between the Nurse Practitioner Center and the Wellness Center would not be ideal for the needs of the three programs.

PROGRAM INFORMATION

Founded in 1925, CMU offers liberal arts, professional, and technical programs at the certificate, associate, baccalaureate, and graduate degree levels. The university specifically emphasizes increasing the level of educational attainment for the residents of its 14-county region in Western Colorado. The Kinesiology Department offers undergraduate programs in adapted physical education, athletic training, exercise science, fitness and health promotion, K-12 Education, personal training, and sport management. The Department of Health Sciences offers graduate programs in nursing, nurse practitioner, and health information technology systems.

Fiscal Year 2018-19 Capital Construction Request

Colorado Mesa University

Health Sciences, Phase II, PA/PT/OT Center

PROJECT SCHEDULE

	Start Date	Completion Date
Design	April 2018	August 2018
Construction	August 2018	June 2019
Equipment	June 2019	July 2019
Occupancy		July 2019

SOURCE OF CASH FUNDS

The source of cash funds for the project is institutional reserves and fundraising.

STAFF QUESTIONS AND ISSUES

1. The map provided in the program plan indicates that existing parking may be impacted by the new building. Does CMU have a plan to address the displaced parking spaces? Please explain how CMU has addressed parking shortages in recent years.

Any loss of spaces will be absorbed in the surrounding parking lots or the addition of low cost parking alternatives.

2. The overall cost per GSF for the Health Sciences, Phase I, Nurse Practitioner project was $417. The overall cost per GSF for this project has increased to $458. Please explain the increase.

Health Sciences Phase I – Nurse Practitioner Center involved construction of 25,719 square feet and a remodel of 9,600 square feet. Remodeled space is significantly cheaper than new construction. The current project is entirely new construction. The current project is also occurring three years later, meaning that prices have been subject to inflation in the interim.

OPERATING BUDGET

Operating expenses are paid from institutional sources. The university expects the project to have an operating impact of $4.50 per square foot, or $90,891 per year.

Fiscal Year 2018-19 Capital Construction Request

Colorado Mesa University

Electric Lineworker Building

PROGRAM PLAN STATUS *2018-026*

Approved Program Plan? Yes **Date Approved:** October 24, 2016

PRIORITY NUMBERS

Prioritized By	Priority	
DeptInst	2 of 4	
CCHE	8 of 34	
OSPB	24 of 53	Not recommended for funding.

PRIOR APPROPRIATION AND REQUEST INFORMATION

Fund Source	Prior Approp.	FY 2018-19	FY 2019-20	Future Requests	Total Cost
CCF	$1,450,000	$1,473,361	$0	$0	$2,923,361
CF	$218,000	$71,125	$0	$0	$289,125
Total	$1,668,000	**$1,544,486**	$0	$0	$3,212,486

ITEMIZED COST INFORMATION

Cost Item	Prior Approp.	FY 2018-19	FY 2019-20	Future Requests	Total Cost
Land Acquisition	$0	$0	$0	$0	$0
Professional Services	$265,965	$143,856	$0	$0	$409,821
Construction	$1,351,221	$1,106,158	$0	$0	$2,457,379
Equipment	$0	$220,000	$0	$0	$220,000
Miscellaneous	$0	$22,362	$0	$0	$22,362
Contingency	$50,814	$52,110	$0	$0	$102,924
Software Acquisition	$0	$0	$0	$0	$0
Total	$1,668,000	**$1,544,486**	$0	$0	$3,212,486

PROJECT STATUS

This is a continuation project.

In June 2017, the university received cash funds spending authority to begin site infrastructure work associated with the project. Site infrastructure work includes sanitary sewer, storm water, water, intersection, parking lot, and access road improvements. In October 2017, the committee allocated $1.45 million in state funds to the project under a future lease purchase agreement authorized through Senate Bill 17-267.

PROJECT DESCRIPTION / SCOPE OF WORK

Colorado Mesa University (CMU) is requesting a combination of state funds and cash funds spending authority to construct an 8,105-GSF, pre-engineered structure to house the university's Electric Lineworker program adjacent to the existing facility on its 29 and D Road property. The steel sub-structure for the new building has been donated by a local company. The new building will include classrooms, labs, equipment storage bays, a high-bay for indoor training, a workroom, conference rooms, and student common spaces. The building will also include all new mechanical, electrical, and plumbing systems, as well as interior finishes. The project also constructs lineworker pole

fields and below-grade infrastructure, including conduits, switchgear, ground-mounted transformers, and other lineworker training infrastructure adjacent to the new building.

Phasing. CMU intends to delay the start of the project until the FY 2018-19 capital construction appropriations are made. This will allow CMU to determine whether phasing the project is necessary. This request for FY 2018-19 assumes that phasing will not be required. CMU states that costs could increase if phasing is required. If this request for additional funds for FY 2018-19 is not approved, CMU will still be able to construct a semi-functional space using the funding allocated under SB 17-267.

Cost assumptions. The cost assumption was determined through the program planning process. The cost per GSF is $396. The project meets the Art in Public Places and High Performance Certification Program requirements.

PROJECT JUSTIFICATION

CMU says the existing Electric Lineworker program location is inadequate. The program is currently housed in a building constructed in 1982, which is in need of renovation to meet industry training needs. Furthermore, the existing site has poor soil conditions and becomes unusable during periods of rain and snow, resulting in loss of use from mud and standing water. Additionally, a nearby incinerator contributes to air quality concerns for students. The new building will be located upwind of the incinerator.

CMU states that 30 percent of all electric utility workers in the U.S. are within five years of retirement. Coupled with a projected 7 percent increase in occupational growth for the industry over the next six years, the demand for electric lineworkers is expected to increase. There is substantial interest in the project from the electric industry. The university has received commitments from local power distribution cooperatives, suppliers, and industry contractors for donations of material, labor, and equipment hours to assist with the move to the new facility.

From 2012 to 2016, the Electric Lineworker program grew from 15 to 33 enrolled students, with 44 students enrolled in fall 2016. The university says the program has suffered from a lack of high-quality, specialized space and is at capacity. The university says the new building will provide a more authentic training environment that replicates actual working conditions of lineworkers in the field.

Project alternatives. The original project request relocated the program to the Whitewater Campus, located ten miles southeast of Grand Junction. After further consultation and planning, CMU now intends to construct the new facility on a different parcel adjacent to the existing facility. According to CMU, maintaining the program at the 29 and D Road property is more convenient for students who reside in CMU's residence halls or live in Grand Junction. The university also considered upgrading the existing facility, which is in need of significant upgrades, including poles and underground instructional space. This option is estimated to cost $2.2 million. Additional costs would also be required for drainage improvements. The university says investing in the existing facility is not economical due to the poor soil conditions and air quality issues.

PROGRAM INFORMATION

The Electric Lineworker program is a ten-month certificate program that targets future electric line mechanics, electric lineworkers, and power linemen. The program trains students to install and repair cables and wires used in electrical power and distribution systems. Electric lineworkers locate line failures, climb poles, use tools designed for live electric lines, and operate and maintain distribution systems. Students also learn to splice, repair, and install underground systems using boring machines and other heavy equipment. They are trained to perform transformer connections, underground installation, and other industry activities. In 2015, about 70 percent of program graduates were hired by Colorado-based contractors. In recent years, the university has also hosted the Mesa Hotline School, which is an annual recertification and education conference for those employed in the electrical transmission and distribution industry. The event attracts several hundred electric industry professionals each year from the western U.S.

Fiscal Year 2018-19 Capital Construction Request

Colorado Mesa University

Electric Lineworker Building

PROJECT SCHEDULE

	Start Date	Completion Date
Design	July 2017	October 2017
Construction	July 2018	February 2019
Equipment	February 2019	May 2019
Occupancy		May 2019

SOURCE OF CASH FUNDS

The source of cash funds for the project is institutional reserves and fundraising.

STAFF QUESTIONS AND ISSUES

1. Last year, CMU indicated that the only other school in Colorado offering lineworker training was Trinidad State Junior College (TSJC). Is this still the case? How does CMU's enrollment in the program compare to TSJC?

Rocky Mountain Lineman School is a division or enterprise of TSJC. To CMU's knowledge, this is still the only other public option in Colorado. Echotech Institute in Aurora, a for-profit school focusing on training in the field of renewable energy, advertises a power line utility worker program. Their reviews are average to below average and there is very little information available regarding costs or enrollments.

TSJC lists 22-26 graduates of TSJC each of the last three years. At CMU, 40 students completed the Electrical Lineworker program last year, and the program expects 42-44 students will complete this year.

2. What portion of the students in the program are residents of Colorado? What portion of graduates of the program have been hired in Colorado in the last three years?

Approximately 89 percent of the students in the program are residents of Colorado, and 65 percent of program completers have Electrical Lineworker jobs in Colorado.

OPERATING BUDGET

Operating expenses are paid from institutional sources. The university expects the project to have an operating impact of $4.50 per square foot, or $36,473 per year.

Fiscal Year 2018-19 Capital Construction Request

Colorado Mesa University

Performing Arts Expansion and Renovation

PROGRAM PLAN STATUS

2016-044

Approved Program Plan? Yes **Date Approved:** July 17, 2016

PRIORITY NUMBERS

Prioritized By	Priority	
DeptInst	3 of 4	
CCHE	14 of 34	
OSPB	30 of 53	Not recommended for funding.

PRIOR APPROPRIATION AND REQUEST INFORMATION

Fund Source	Prior Approp.	FY 2018-19	FY 2019-20	Future Requests	Total Cost
CCF	$0	$8,228,384	$0	$0	$8,228,384
CF	$0	$813,797	$0	$0	$813,797
Total	$0	**$9,042,181**	$0	$0	$9,042,181

ITEMIZED COST INFORMATION

Cost Item	Prior Approp.	FY 2018-19	FY 2019-20	Future Requests	Total Cost
Land Acquisition	$0	$0	$0	$0	$0
Professional Services	$0	$1,098,916	$0	$0	$1,098,916
Construction	$0	$6,055,735	$0	$0	$6,055,735
Equipment	$0	$1,490,518	$0	$0	$1,490,518
Miscellaneous	$0	$55,107	$0	$0	$55,107
Contingency	$0	$341,905	$0	$0	$341,905
Software Acquisition	$0	$0	$0	$0	$0
Total	$0	**$9,042,181**	$0	$0	$9,042,181

PROJECT STATUS

This is the fourth request for funding. Funding was requested for the project each year since FY 2015-16.

PROJECT DESCRIPTION / SCOPE OF WORK

Colorado Mesa University (CMU) is requesting a combination of state funds and cash funds spending authority to renovate 7,160 GSF in the Moss Performing Arts Building and construct a 13,520-GSF addition to the building. The project will provide teaching, practice, and performance space in support of undergraduate music and theater programs.

The renovation and expansion of the Moss Performing Arts Center will feature:

- a dance studio/theater;
- theater instruction and rehearsal space;
- prop storage;
- dressing rooms;

- an acting studio;
- a theater design studio;
- a theater lobby; and
- a four-room, multi-disciplinary and flexible academic instruction space that can be combined into one room.

The renovations to Moss will replace outdated performing arts lighting and stage communication systems, and address vibration and acoustical deficiencies. These improvements will help alleviate the Music Department's encroachment on Theater Department space in Moss. The new classroom space will allow the university to expand a new, team-taught, three-credit-hour, general education course called the Maverick Milestone for students midway through their program requirements, along with its co-requisite course, Essential Speech. These courses require students to integrate what they have learned in their general education courses, and to demonstrate written and oral communication proficiency.

Cost assumptions. The cost assumption was determined through the program planning process. The cost per GSF is $437. The project includes inflation costs. It meets the Art in Public Places and High Performance Certification Program requirements.

PROJECT JUSTIFICATION

CMU identifies the following primary benefits of the project:

- providing uniquely designed academic instruction space to meet the needs of diverse and growing program areas;
- tailoring space designs to the needs of students and faculty; and
- equipping each space with advanced technology equipment to maximize instruction flexibility.

The university says growth in the programs that will be affected by the project is driving the need for new instruction space. Specifically, the Music Department grew from 3,270 to 4,106 total credit hours from 2009 to 2016, a 26 percent increase. Additionally, CMU has grown its enrollment by more than 50 percent since 2008. When the university created its last facilities master plan in 2010, it projected a student population of 4,800 by 2020; instead, the university's student population reached 7,813 in 2016. CMU says it has spent the last five years designing and constructing facilities to meet this demand. Finally, a recent study conducted by CMU revealed that in fall 2016, some space utilization rates meet or exceed guidelines recommended by the Department of Higher Education.

According to CMU, the project will benefit the whole campus community, because it improves academic classroom space for multiple degree programs. CMU says growth in the Music Department has increased its space usage in the Moss Performing Arts Center, limiting the ability of the Theater Department to grow.

Project alternatives. CMU considered other options for providing classroom space for the Music and Theater Departments. CMU says the alternatives cost more than the preferred project and have more difficulties accommodating new space. There are no vacant classrooms within close proximity to the existing building that are suitable for the Music and Theater Departments. CMU says constructing a separate building would require additional costs for utility connections. There is no area in close proximity to the existing building available for new construction. Therefore, a new building would inconvenience students and faculty and could potentially duplicate equipment costs.

PROGRAM INFORMATION

Founded in 1925, CMU offers liberal arts, professional, and technical programs at the certificate, associate, baccalaureate, and graduate degree levels. The university specifically emphasizes increasing the level of educational attainment for the residents of its 14-county region in Western Colorado.

Fiscal Year 2018-19 Capital Construction Request

Colorado Mesa University

Performing Arts Expansion and Renovation

PROJECT SCHEDULE

	Start Date	Completion Date
Design	June 2018	December 2018
Construction	January 2019	June 2020
Equipment	June 2020	August 2020
Occupancy		August 2020

SOURCE OF CASH FUNDS

The source of cash funds for the project is a combination of institutional reserves and fundraising.

STAFF QUESTIONS AND ISSUES

1. What is the current and projected enrollment in the Maverick Milestone course?

There are currently 365 students enrolled in the Maverick Milestone course and 370 enrolled in the Essential Speech class. However, as evidenced by the speed with which the courses fill, CMU needs to offer additional Maverick Milestone and Essential Speech classes in future semesters. CMU estimates that the campus will need capacity for 800 students each semester (400 each in the Milestone and Speech class) to fully meet demand.

2. The narrative states that the 2010 Facilities Master Plan (FMP) was based on 2020 enrollment projections that have already been exceeded. Last year, CMU indicated it was in the process of updating its FMP. Has the FMP been completed? If so, please provide a copy. If not, please explain the progress on the plan to date and when it will be completed.

In spring 2016, CMU selected an architect for the FMP and conducted a space utilization study to begin the data-gathering process for an updated FMP. In fall 2017, CMU began the process of confirming the results of the spring 2016 utilization study. In spring 2018, CMU will begin the design process for the FMP with the goal of finishing it sometime next year.

OPERATING BUDGET

Operating expenses are paid from institutional sources. The university expects the project to have an operating impact of $4.40 per square foot, or $59,448 per year.

Fiscal Year 2018-19 Capital Construction Request

Colorado Mesa University

Trigeneration (Combined Cooling, Heating, and Power System)

PROGRAM PLAN STATUS

2015-008

Approved Program Plan? Yes **Date Approved:** October 3, 2013

PRIORITY NUMBERS

Prioritized By	Priority	
DeptInst	4 of 4	
CCHE	21 of 34	
OSPB	35 of 53	Not recommended for funding.

PRIOR APPROPRIATION AND REQUEST INFORMATION

Fund Source	Prior Approp.	FY 2018-19	FY 2019-20	Future Requests	Total Cost
CCF	$0	$6,585,350	$0	$0	$6,585,350
CF	$0	$651,299	$0	$0	$651,299
Total	$0	**$7,236,649**	$0	$0	$7,236,649

ITEMIZED COST INFORMATION

Cost Item	Prior Approp.	FY 2018-19	FY 2019-20	Future Requests	Total Cost
Land Acquisition	$0	$0	$0	$0	$0
Professional Services	$0	$1,043,386	$0	$0	$1,043,386
Construction	$0	$5,861,176	$0	$0	$5,861,176
Equipment	$0	$49,000	$0	$0	$49,000
Miscellaneous	$0	$53,337	$0	$0	$53,337
Contingency	$0	$229,750	$0	$0	$229,750
Software Acquisition	$0	$0	$0	$0	$0
Total	$0	**$7,236,649**	$0	$0	$7,236,649

PROJECT STATUS

This is the fifth request for funding. Funding has been requested for the project each year since FY 2014-15.

PROJECT DESCRIPTION / SCOPE OF WORK

Colorado Mesa University (CMU) is requesting state funds to construct a 1.5-megawatt combined cooling, heating, and power (CCHP) system to provide additional power to the main campus. CCHP systems use waste heat from an electricity generator for heating and cooling functions, a process called trigeneration. The university says the project will allow it to delay the need to increase power supply from its energy provider and corresponds with efforts to "green" state government.

Under the project, CMU will construct a 10,000-GSF masonry building to house a new gas turbine, generator, heat recovery systems, absorption chillers, and associated power generation infrastructure. The turbine and generator will be placed below ground in a 12-foot-deep concrete foundation to decrease noise levels and provide an enclosure to contain fluid leaks. The heat recovery systems and absorption chillers will be placed above grade, and the main floor of the building will allow room for equipment storage, a control room, and offices.

Colorado Mesa University

Trigeneration (Combined Cooling, Heating, and Power System)

A CCHP system uses excess heat from the electricity generator to provide hot or cold functions to the campus through the project's heat recovery systems and absorption chillers. Equipment installed by the project and the existing geoexchange system will work in concert to regulate temperatures in the campus central loop. This process increases system efficiency and allows the university to add new buildings to the campus grid without the need to drill new fields for the geoexchange system.

The university is still considering the site location for the new CCHP system, and will make a decision on siting based on certain efficiency factors, including existing energy infrastructure locations and potential mutual benefits to the university, the city, Xcel Energy, and nearby St. Mary's Hospital. The most likely location for the facility at this time is along 7th Street.

Cost assumptions. The cost assumption was determined through the program planning process. The cost per GSF is $724. The project meets the Art in Public Places and High Performance Certification Program requirements.

PROJECT JUSTIFICATION

The university says building a CCHP system will allow it to meet the growing energy demands of an expanding campus population in a cost-effective and energy-efficient manner. According to CMU, continued campus growth and expansion has resulted in the need for additional sources of energy to power the campus in the near and long term. The university has focused on incorporating a CCHP system into its energy portfolio because its use of waste heat from electricity generation is economical and will allow the university to cut peak energy demand, reducing reliance on traditional energy delivery and benefitting both the university and its power supplier. CMU says trigeneration also represents a more efficient and environmentally sensitive energy option. Additional benefits of installing a CCHP system on campus include:

- the flexibility to feed electricity into the public grid or use it to cover campus electricity requirements;
- the ability to integrate new technology into the university's existing energy portfolio, which includes the geoexchange system, ground source heat pumps, and solar electricity;
- lowering demand on the local energy delivery system; and
- reducing CMU's reliance on traditional energy supplies, leading to potential cost savings.

CMU notes that the design and operation of the CCHP system will provide a learning opportunity for its students and faculty in the Landman/Energy Management, Construction Management, Mechanical Engineering, Hospitality Management, and Masters of Business Administration programs.

Project alternatives. The university says if it does not build a CCHP system, it will eventually negotiate with Xcel Energy to provide additional power to meet the university's growing energy demands. According to the university, constructing the CCHP system could delay the need for an additional power supply from Xcel by 10 to 15 years, depending on campus growth.

PROGRAM INFORMATION

The university consumes approximately 23.5 million kilowatt-hours of electricity per year, with a peak demand low of 3,055 kilowatts in the winter months and a high of 4,298 kilowatts during the summer. Xcel Energy is the campus energy provider, and the university employs several "green" technologies in its energy portfolio.

Fiscal Year 2018-19 Capital Construction Request

Colorado Mesa University

Trigeneration (Combined Cooling, Heating, and Power System)

PROJECT SCHEDULE

	Start Date	Completion Date
Design	June 2018	December 2018
Construction	January 2019	May 2019
Equipment	May 2019	June 2019
Occupancy		June 2019

SOURCE OF CASH FUNDS

The source of cash funds for the project is institutional reserves and fundraising.

STAFF QUESTIONS AND ISSUES

1. Last year, CMU indicated that the additional electrical feed from Xcel Energy would provide power for an expanding campus and will be needed at some point in the future, regardless of the decision to fund the Trigeneration project. Is this still the case? If so, when is it estimated that the new Xcel feed will be necessary? Is the cost for the new Xcel feed still expected to be $1.0 million? Please describe any recent discussions with Xcel about a new campus electrical feed.

CMU still anticipates the future need for an additional feed from Xcel Energy. The institution is in discussions with Xcel Energy about when and where that will occur, but CMU is confident that the institution will not need the additional feed in the short term for the projects currently under discussion.

OPERATING BUDGET

Operating expenses are paid from institutional sources. The project is expected to increase annual operating costs by $200,000 for two FTE and other maintenance costs. These costs will be offset by savings in Xcel Energy demand and energy use charges.

Colorado Mesa University
Five-Year Projection of Need
FY 2018-19 through FY 2022-23

Project Title	Fund Source	FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	Totals
Capital Construction (Current Year)							
Electric Lineworker Building	CCF	$1,473,361	$0	$0	$0	$0	$1,473,361
	CF	71,125	0	0	0	0	$71,125
Health Sciences, Phase II, PA/PT/OT Center	CCF	4,302,087	4,302,087	0	0	0	$8,604,174
	CF	881,150	881,150	0	0	0	$1,762,300
Performing Arts Expansion and Renovation	CCF	8,228,384	0	0	0	0	$8,228,384
	CF	813,797	0	0	0	0	$813,797
Trigeneration (Combined Cooling, Heating, and Power System)	CCF	6,585,350	0	0	0	0	$6,585,350
	CF	651,299	0	0	0	0	$651,299
Capital Construction Subtotals	CCF	*20,589,182*	*4,302,087*	*0*	*0*	*0*	*$24,891,269*
	CF	*2,417,371*	*881,150*	*0*	*0*	*0*	*$3,298,521*
Controlled Maintenance Subtotals	CCF	*2,687,556*	*See OSA Annual Report.*				*$2,687,556*
Total: State Funds		*23,276,738*	*4,302,087*	*0*	*0*	*0*	*24,891,269*
Grand Total: All Fund Sources		**$25,694,109**	**$5,183,237**	**$0**	**$0**	**$0**	**$30,877,346**

Source: Department of Higher Education and Office of the State Architect

COVER PAGE
Colorado School of Mines

FY 2018-19 CAPITAL CONSTRUCTION REQUESTS (LISTED IN OSPB PRIORITY ORDER)

RECOMMENDED FOR FUNDING BY OSPB:

- Green Center Roof Replacement (Capital Renewal) *(continuation)*

NOT RECOMMENDED FOR FUNDING BY OSPB:

- Campus Infrastructure Project *(new)*

TOTAL: FY 2018-19 CAPITAL CONSTRUCTION STATE-FUNDED REQUEST AMOUNT = $12,591,792

FY 2018-19 CONTROLLED MAINTENANCE REQUESTS (4)

RECOMMENDED FOR FUNDING BY OSPB:

LEVEL I:

- Upgrade Fire Alarm Mass Notification, Ph 1 of 4 ($604,998)
- Remediate Campus Fall Hazards, Ph 1 of 3 ($538,931)

NOT RECOMMENDED FOR FUNDING BY OSPB:

LEVEL II:

- Replace Primary Power Transformers ($695,743)
- Replace Obsolete Controls, Lakes Library ($293,110)

HISTORY OF STATE FUNDING

- **$27.9 million** has been appropriated on behalf of capital projects at the university since FY 2013-14. This represents **3.0 percent** of the total amount appropriated on behalf of all capital construction and controlled maintenance projects during this period.

- **$4.0 million** was appropriated in **FY 2017-18**.

- An additional **$0.8 million** was authorized through Senate Bill 17-267 for controlled maintenance.

INVENTORY OF GENERAL FUND SUPPORTED FACILITIES

- The General Fund supported inventory of university facilities totals **2,055,572 GSF**. This total represents **4.3 percent** of the entire General Fund supported inventory of state buildings.

Fiscal Year 2018-19 Capital Construction Request

Colorado School of Mines

Green Center Roof Replacement (Capital Renewal)

PROGRAM PLAN STATUS *2018-027*

Approved Program Plan? N/A **Date Approved:**

PRIORITY NUMBERS

Prioritized By	Priority	
DeptInst	1 of 2	
CCHE	1 of 34	
OSPB	6 of 53	Recommended for funding.

PRIOR APPROPRIATION AND REQUEST INFORMATION

Fund Source	Prior Approp.	FY 2018-19	FY 2019-20	Future Requests	Total Cost
CCF	$1,908,207	$6,591,792	$0	$0	$8,499,999
CF	$1,908,208	$6,591,793	$0	$0	$8,500,001
Total	$3,816,415	**$13,183,585**	$0	$0	$17,000,000

ITEMIZED COST INFORMATION

Cost Item	Prior Approp.	FY 2018-19	FY 2019-20	Future Requests	Total Cost
Land Acquisition	$0	$0	$0	$0	$0
Professional Services	$1,165,978	$0	$0	$0	$1,165,978
Construction	$2,650,437	$12,074,211	$0	$0	$14,724,648
Equipment	$0	$0	$0	$0	$0
Miscellaneous	$0	$0	$0	$0	$0
Contingency	$0	$1,109,374	$0	$0	$1,109,374
Software Acquisition	$0	$0	$0	$0	$0
Total	$3,816,415	**$13,183,585**	$0	$0	$17,000,000

PROJECT STATUS

This is a continuation project. The first phase was funded in FY 2017-18.

A renovation project, which included the deferred maintenance improvements addressed in this request, as well as additional programmatic improvements, was first requested for FY 2016-17. A version of the project was first listed on the university's five-year projection of need in 2011 and approved as part of the university's two-year projection of cash need in August 2012.

Emergency roof repairs were made to the building in 2004 and 2005 using state emergency funds and later capital construction funds. These funds were also used to address ADA-accessibility issues and to make some laboratory improvements.

PROJECT DESCRIPTION / SCOPE OF WORK

Colorado School of Mines (Mines) is requesting state funds and cash funds spending authority for the second phase of a two-phase project to make improvements to the two-story, 158,000-GSF Green Center to replace the roof, abate

asbestos, and upgrade mechanical systems. This is a capital renewal request. The capital renewal approach focuses on upgrading building systems, infrastructure, and the basic building components within existing academic buildings on a building-by-building basis, rather than project by project. In order to address the extent of asbestos-containing materials in the roofing material, the project demolishes the roof through the second floor ceilings. The project replaces mechanical equipment on the roof and in the basement mechanical rooms.

The university anticipates that the building will be vacated for the duration of the project. Information technology employees will be permanently relocated elsewhere on campus. Other building occupants will be temporarily relocated to modular units or other campus buildings.

Cost assumption. The cost assumption was determined by a third-party consultant through asbestos abatement studies. The cost per GSF is $108. The project is not required to meet the Art in Public Places requirements.

PROJECT JUSTIFICATION

According to the university, the building contains extensive and highly friable asbestos-containing materials, which has limited its ability to make significant improvements to the building. The emergency roof repairs made between 2004 and 2005 installed a temporary roof with a useful life of eight years. The university notes that the temporary roof repairs are now in danger of failure. Due to the friable nature of the asbestos fire proofing on the roof decking, the new roof was not mechanically fastened to the old roof. The new roof is delaminating from the old, raising concerns that the roof may detach in a strong wind.

The building mechanical systems are at or near the end of their useful life. The actual age of the existing equipment ranges from about 20 to 45 years, which either meets or far exceeds the expected service term of the equipment. The roof replacement project affords the university the opportunity to replace rooftop equipment while it is undertaking other work in the area.

Project alternatives. The university considered five project alternatives, one of which would have built an addition to the building, another of which would have renovated the building, and three of which would have constructed a new facility. Mines determined that revising the preferred project alternative of renovating the building to only address outstanding deferred maintenance met its immediate goal of maintaining important building functions. The university explains that there are no facilities on or off campus that can accommodate the programming functions of the Green Center. In particular, the building houses several large event spaces.

PROGRAM INFORMATION

The Green Center, which was constructed in 1972, houses the Department of Geophysics, computer enterprise systems staff, and general purpose classrooms. It also houses the Bunker Auditorium, which seats 1,200 people and is the largest performance venue on campus and in Jefferson County, and three major meeting venues used for campus events, continuing education forums, and other professional gatherings.

PROJECT SCHEDULE

	Start Date	Completion Date
Design	July 2017	February 2018
Construction	February 2018	June 2019
Equipment	February 2018	June 2019
Occupancy	July 2019	September 2019

SOURCE OF CASH FUNDS

The source of cash funds is bonds to be repaid from the university General Fund. The university indicates that it will

not borrow under the Higher Education Revenue Bond Intercept Program. The bonds are expected to be issued for a period of 30 years at an interest rate of about 3 percent.

STAFF QUESTIONS AND ISSUES

1. What work has been completed to date?

To date, programming is complete, the AE firm and CMGC are selected, and schematic design is 10 percent complete.

OPERATING BUDGET

Operating costs are paid from institutional sources. Mines anticipates the project will result in a decrease in its operating costs.

Fiscal Year 2018-19 Capital Construction Request

Colorado School of Mines

Campus Infrastructure Project

2019-002

PROGRAM PLAN STATUS

Approved Program Plan? Yes **Date Approved:** July 28, 2017

PRIORITY NUMBERS

Prioritized By	Priority	
DeptInst	2 of 2	
CCHE	27 of 34	
OSPB	41 of 53	Not recommended for funding.

PRIOR APPROPRIATION AND REQUEST INFORMATION

Fund Source	Prior Approp.	FY 2018-19	FY 2019-20	Future Requests	Total Cost
CCF	$0	$6,000,000	$0	$0	$6,000,000
Total	$0	**$6,000,000**	$0	$0	$6,000,000

ITEMIZED COST INFORMATION

Cost Item	Prior Approp.	FY 2018-19	FY 2019-20	Future Requests	Total Cost
Land Acquisition	$0	$0	$0	$0	$0
Professional Services	$0	$611,550	$0	$0	$611,550
Construction	$0	$4,356,306	$0	$0	$4,356,306
Equipment	$0	$0	$0	$0	$0
Miscellaneous	$0	$746,430	$0	$0	$746,430
Contingency	$0	$285,714	$0	$0	$285,714
Software Acquisition	$0	$0	$0	$0	$0
Total	$0	**$6,000,000**	$0	$0	$6,000,000

PROJECT STATUS

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

A capital renewal project funded from state and cash funds in FY 2015-16 renovated the on-campus heating plant, which uses steam to provide heating, domestic hot water, and cooling to all of the major buildings on campus through tunnels and pipes.

PROJECT DESCRIPTION / SCOPE OF WORK

The Colorado School of Mines (Mines) is requesting state funds to increase the capacity of its steam and chilled water system on the south campus. The project purchases a new chiller, extends existing distribution tunnels, and increases the size and capacity of existing steam lines. The additional capacity will allow for future development on the campus, including planned academic facilities and a student dormitory.

Cost assumption. The cost assumption was determined based on input from engineering consultants. The project cost accounts for future inflation at a rate of 11 percent to the midpoint of construction. The project is in compliance with the Art in Public Places Program. The project is not required to comply with the provisions of Senate Bill 07-051 regarding the High Performance Certification Program because it does not involve the renovation, design, or

construction of a physical facility.

PROJECT JUSTIFICATION

According to Mines, the existing capacity of the steam and chilled water system is not sufficient to support future growth on the south campus. The campus heating plant produces sufficient steam, but the pipes to some existing and future buildings are undersized for the identified distribution needs. In addition to increasing distribution capacity, the project will improve the performance of the steam system with regard to increasing the pressure and velocity of the steam travelling through the pipes to specified campus facilities. The campus chiller plant does not have sufficient capacity to support future growth without an additional chiller. Finally, new tunnels are needed to extend services to new locations on the south campus. Mines says that its campus master plan requires an integrated, campus-wide utility system.

Project alternative. The school identified one project alternative. Rather than construct a campus-wide utility system, it could construct new buildings with stand-alone systems. Mines says this alternative would lead to higher long-term maintenance and energy costs.

PROGRAM INFORMATION

Founded in 1874, Mines is a public teaching and research university devoted to engineering and applied science, with expertise in natural resource development and stewardship. The Heating Plant has provided steam utility service to the campus since 1948. Chiller plant six and an extension of the existing steam tunnel system were built as part of the Brown Hall Addition in 2010.

PROJECT SCHEDULE

	Start Date	Completion Date
Design	July 2018	November 2018
Construction	December 2019	July 2020
Equipment		
Occupancy		

SOURCE OF CASH FUNDS

This project is not funded from cash sources.

STAFF QUESTIONS AND ISSUES

1. Please explain the rationale behind consolidating the increase in capacity in the steam and chilled water system in a free standing request rather than including incremental increases in individual capital budget requests. (It appears that including incremental cost increases in individual budget requests is a strategy used by Mines in the past.)

The increase in steam capacity is required for any further construction on the south campus. Although, the increase is triggered by a new residence hall, now in design, it will provide steam for additional building on the south campus. Similarly, the increase in chilled water capacity by adding a chiller will serve more than the immediate needs but eventually more capacity will be needed.

To include this infrastructure as a component of the residence hall puts an unfair financial burden on the residence hall project.

2. Does this request address all future growth on the south campus? In other words, is there capacity for additional

growth (which could require future expansion) beyond the buildings identified in the flow model?

No, although future buildings will be served by this increase in steam capacity, to realize full build-out of the south campus additional boilers and chillers will be required.

OPERATING BUDGET

Operating costs are paid from institutional sources. Mines does not anticipate that the project will affect operating costs.

Colorado School of Mines
Five-Year Projection of Need
FY 2018-19 through FY 2022-23

Project Title	Fund Source	FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	Totals
Capital Construction (Current Year)							
Campus Infrastructure Project	CCF	$6,000,000	$0	$0	$0	$0	$6,000,000
	CF	0	0	0	0	0	$0
Green Center Roof Replacement	CCF	6,591,792	0	0	0	0	$6,591,792
	CF	6,591,793	0	0	0	0	$6,591,793
Capital Construction Subtotals	CCF	*12,591,792*	*0*	*0*	*0*	*0*	*$12,591,792*
	CF	*6,591,793*	*0*	*0*	*0*	*0*	*$6,591,793*
Controlled Maintenance Subtotals	CCF	*2,132,782*	*See OSA Annual Report.*				*$2,132,782*
Total: State Funds		*14,724,574*	*0*	*0*	*0*	*0*	*$14,724,574*
Grand Total: All Fund Sources		**$21,316,367**	**$0**	**$0**	**$0**	**$0**	**$21,316,367**

Source: Department of Higher Education and Office of the State Architect

COVER PAGE
Colorado State University System

FY 2018-19 CAPITAL CONSTRUCTION REQUESTS (LISTED IN OSPB PRIORITY ORDER)
RECOMMENDED FOR FUNDING BY OSPB:

- Water Resources Center (National Western COP)

NOT RECOMMENDED FOR FUNDING BY OSPB:

- Shepardson Building and Renovation and Expansion *(previously requested)*
- Psychology Building Renovation and Addition (CSU-Pueblo*) (previously requested)*
- Anatomy/Zoology East Wing Revitalization (Capital Renewal) *(previously requested)*
- Chemistry B and C Wing Renovation (Capital Renewal) *(previously requested)*

TOTAL: FY 2018-19 CAPITAL CONSTRUCTION STATE-FUNDED REQUEST AMOUNT = $62,075,774

FY 2018-19 CONTROLLED MAINTENANCE REQUESTS (13)
RECOMMENDED FOR FUNDING BY OSPB:
LEVEL I:

- Replace Wastewater Treatment Plant, Mountain Campus ($562,075)
- Install Fire Sprinkler, Industrial Sciences Building ($217,810)
- Install Fire Sprinkler, Forestry Building ($262,132)
- Install Fire Sprinkler, Danforth Chapel ($109,068)

NOT RECOMMENDED FOR FUNDING BY OSPB:
LEVEL II:

- Repair/Replace Water Wells, Pumps, Ditches, Agriculture Research Development and Education Center ($870,476)
- Replace Roof, Hasan School of Business (CSU-Pueblo) ($617,672)
- Modernize Elevators ($233,970)
- Upgrade Fire Alarm Voice Notification System ($643,161)
- Replace Campus Water Lines, Ph 1 of 3 (CSU-Pueblo) ($895,070)

LEVEL III:

- Upgrade Electrical System, Foothills Campus ($1,216,501)
- Upgrade Exterior Lighting ($465,772)
- Replace Roof, Buell Communications Center and Administration Building Walkway (CSU-Pueblo) ($495,132)
- Modernize Elevators, Four Buildings (CSU-Pueblo) ($686,657)

COVER PAGE (Cont.)
Colorado State University System

HISTORY OF STATE FUNDING

- **$82.6 million** has been appropriated to the system on behalf of capital projects since FY 2013-14. This represents **8.7 percent** of the total amount appropriated on behalf of all capital construction and controlled maintenance projects during this period.

- **$3.3 million** was appropriated in **FY 2017-18**.

- An additional **$12.8 million** was authorized through Senate Bill 17-267 for controlled maintenance.

INVENTORY OF GENERAL FUND SUPPORTED FACILITIES

- The General Fund supported inventory of Colorado State University System facilities totals **7,332,368 GSF**. This total represents **15.2 percent** of the entire General Fund supported inventory of state buildings.

RECENT CDC VISITS

- Fort Collins Campus (June 2015)
- Pueblo Campus (June 2015)

Fiscal Year 2018-19 Capital Construction Request

Colorado State University

Shepardson Building Renovation and Expansion

2008-071

PROGRAM PLAN STATUS

Approved Program Plan? Yes **Date Approved:** October 3, 2016

PRIORITY NUMBERS

Prioritized By	Priority	
DeptInst	1 of 4	
CCHE	5 of 34	
OSPB	20 of 53	Not recommended for funding.

PRIOR APPROPRIATION AND REQUEST INFORMATION

Fund Source	Prior Approp.	FY 2018-19	FY 2019-20	Future Requests	Total Cost
CCF	$0	$4,527,223	$13,482,700	$15,794,995	$33,804,918
CF	$0	$0	$0	$9,000,000	$9,000,000
Total	$0	**$4,527,223**	$13,482,700	$24,794,995	$42,804,918

ITEMIZED COST INFORMATION

Cost Item	Prior Approp.	FY 2018-19	FY 2019-20	Future Requests	Total Cost
Land Acquisition	$0	$0	$0	$0	$0
Professional Services	$0	$3,805,053	$0	$555,000	$4,360,053
Construction	$0	$0	$12,539,366	$18,052,653	$30,592,019
Equipment	$0	$0	$0	$3,661,068	$3,661,068
Miscellaneous	$0	$125,638	$71,474	$102,900	$300,012
Contingency	$0	$596,532	$871,860	$2,423,374	$3,891,766
Software Acquisition	$0	$0	$0	$0	$0
Total	$0	**$4,527,223**	$13,482,700	$24,794,995	$42,804,918

PROJECT STATUS

This is the ninth request for funding. Funding was requested on behalf of the project each year between FY 2007-08 and FY 2010-11. From FY 2011-12 through FY 2013-14, the project was listed on the university's five-year projection of need. Funding was again requested beginning in FY 2014-15.

The scope of the request has expanded from prior fiscal years and now includes a more complete renovation of the existing building and the construction of two additions. (Earlier requests planned for a single addition.)

PROJECT DESCRIPTION / SCOPE OF WORK

Colorado State University (CSU) is requesting state funds for the first phase of a three-phase project to renovate the existing 46,811-GSF Shepardson Building, which houses the Departments of Horticulture and Landscape Architecture, and to construct additions to the north and south of the building totaling 47,998 GSF. The project creates a new floor plan in the building and installs modern architectural finishes. It also replaces all existing mechanical, plumbing, electrical, and telecommunication systems. The existing building will house a new Student Success Center, computer labs, offices, studio space, and the Dean's office. The additions will construct classrooms,

laboratories, offices, a library, and a large auditorium. The university says that enrollment in the programs housed in the building is currently restricted due to space limitations and the outdated condition of classrooms, studios, and labs.

Cost assumption. The cost assumption was determined by a third-party consultant. The cost per GSF is $452. The project cost accounts for future inflation at rate of 5 percent a year. The project meets the Art in Public Places and High Performance Certification Program requirements.

PROJECT JUSTIFICATION

According to the university, the age and condition of the existing building limits program growth, the functionality of the research and teaching laboratories, and the types of instructional methodologies used. The newly renovated building and additions will address a demand for increased enrollment in agricultural science programs. It will also construct a Student Services Center and collaborative work space to create a home base for students enrolled in agricultural science programs campus wide. The university says there is a documented need for more trained professionals in agricultural industries. CSU cites data published in 2015 by the U.S. Department of Agriculture, which state that about 60,000 high-skilled jobs are created in the U.S. agricultural industry every year, and that there are not enough trained professionals to meet this demand. The university says the project will help it to meet challenges related to the safety, security, and sustainability of agricultural ecosystems.

The project will change the floor plan of the existing building in order to address some of the limiting factors of the building's original construction, such as narrow corridors, which prohibit the expansion of existing classrooms. Also, the floor-to-floor height of the building is not sufficient to improving ventilation in the laboratories. Other concerns exist with building systems. The building is not fully air conditioned, which causes discomfort for building occupants and is problematic for some of the research conducted in research labs, and the building is still heated by its original steam radiator system. The building's most recent Facility Condition Index (FCI) score is 38. The FCI rating is a ratio of a facility's deficiencies compared to its current replacement value on a scale of 100. Generally speaking, FCI rating assumes a life space of 100 years for a building and, if left untouched, a building loses about one point in its FCI rating each year. The Office of the State Architect's target rating for state buildings is 85.

Project alternatives. The university identified project alternatives early in the program planning process. CSU considered renovating the facility, but determined that a renovation did not meet its space needs or make the desired upgrades to programmatic space. It also considered building a new facility on the site. This alternative would require the demolition of an existing, structurally sound building and would cost 25 percent more per GSF than the proposed addition and renovation of the existing facility.

PROGRAM INFORMATION

The mission of CSU's College of Agricultural Sciences is to provide undergraduate and graduate education, basic and applied research, and public education related to agricultural, ornamental horticulture, and equine industries. The Shepardson Building, located on the university's main campus, was constructed in 1938 and has received only minor renovations since its opening. It currently houses the Departments of Horticulture and Landscape Architecture; agricultural career and internship services; college-sponsored student leadership activities; student computer labs and information technology support; the Dean's office; the Colorado Seed Testing Laboratory; and the Soil Morphology Program in the Soil and Crop Sciences Department.

CSU is currently ranked in the top 25 universities for agricultural studies by QS World University Ranking.

Fiscal Year 2018-19 Capital Construction Request

Colorado State University

Shepardson Building Renovation and Expansion

PROJECT SCHEDULE

	Start Date	Completion Date
Design	July 2018	June 2019
Construction	July 2019	June 2021
Equipment	July 2021	
Occupancy	August 2021	

SOURCE OF CASH FUNDS

The first two phases of the project are not funded from cash sources. The CSU System plans to issue bonds to finance some of the Phase III project costs.

STAFF QUESTIONS AND ISSUES

None.

OPERATING BUDGET

Operating expenses are paid from institutional sources. CSU says that similar renovation projects have decreased electrical use by 25 percent and water use by 50 percent in existing space.

Fiscal Year 2018-19 Capital Construction Request

Colorado State University — Pueblo

Psychology Building Renovation and Addition

PROGRAM PLAN STATUS

2006-050

Approved Program Plan? Yes **Date Approved:** October 2, 2008

PRIORITY NUMBERS

Prioritized By	Priority	
DeptInst	1 of 1	
CCHE	12 of 34	
OSPB	27 of 53	Not recommended for funding.

PRIOR APPROPRIATION AND REQUEST INFORMATION

Fund Source	Prior Approp.	FY 2018-19	FY 2019-20	Future Requests	Total Cost
CCF	$0	$16,812,751	$0	$0	$16,812,751
Total	$0	**$16,812,751**	$0	$0	$16,812,751

ITEMIZED COST INFORMATION

Cost Item	Prior Approp.	FY 2018-19	FY 2019-20	Future Requests	Total Cost
Land Acquisition	$0	$0	$0	$0	$0
Professional Services	$0	$2,345,361	$0	$0	$2,345,361
Construction	$0	$12,284,512	$0	$0	$12,284,512
Equipment	$0	$790,686	$0	$0	$790,686
Miscellaneous	$0	$646,845	$0	$0	$646,845
Contingency	$0	$745,347	$0	$0	$745,347
Software Acquisition	$0	$0	$0	$0	$0
Total	$0	**$16,812,751**	$0	$0	$16,812,751

PROJECT STATUS

This is the tenth request for funding. Funding on behalf of the project has been requested each year since FY 2009-10.

PROJECT DESCRIPTION / SCOPE OF WORK

Colorado State University (CSU) – Pueblo is requesting state funds to renovate 45,987 GSF in and construct a 26,460-GSF addition to the Psychology Building. The project remedies existing deficiencies in space and building conditions, and will accommodate predicted enrollment growth. The project increases the building's existing GSF by 57 percent and upgrades the building's technological, electrical, and mechanical systems in order to meet current building codes and academic standards. The addition will provide the university with additional classrooms, laboratories, administrative areas, and storage space. It also includes two large lecture auditoriums, which seat 200 each, a computer lab, a language lab, and two large classrooms to better serve the general education, English, and language classes.

The program space for the addition and renovation will:

- upgrade accessibility throughout the building;

- upgrade main entrances to be compliant with Americans with Disabilities Act regulations;
- remodel walls and ceilings of classrooms to improve sound transmission;
- add gathering and networking space for student interaction; and
- reorganize departmental faculty and staff into a centralized location.

The renovation will include upgrades to the HVAC system, information technology services, electrical services, building lighting, and the fire protection sprinkler system. The building will also undergo asbestos abatement to comply with code requirements.

Cost assumption. The cost assumption was determined through the program planning process. The cost per GSF is $232. The project cost accounts for future inflation. The project meets the Art in Public Places and High Performance Certification Program requirements.

PROJECT JUSTIFICATION

The Psychology Building houses six departments of the College of Humanities and Social Sciences. The university says that building programming is no longer supported effectively due to the poor building conditions. According to CSU-Pueblo, the Psychology Building is the most heavily used academic building on the campus, and is no longer able to support the academic programs assigned to the space due to technological and space inadequacies. Furthermore, the 42-year-old building does not comply with current building codes for fire protection, asbestos abatement, HVAC systems, lighting, information technology systems, safety upgrades, and mechanical and electrical systems. A facility condition index (FCI) assessment was conducted in September 2006. Generally speaking, the FCI rating assumes a life span of 100 years for a building, and, if left untouched, a building loses about one point in its FCI rating each year. The Office of the State Architect's target rating for state buildings is 85. The September 2006 FCI rating of the Psychology Building was 63.

Project alternatives. CSU – Pueblo considered other alternatives to the project, including moving certain programs from the Psychology Building to other spaces on campus. CSU-Pueblo says the project alternatives do not meet the primary educational goal of keeping departments together in a single cohesive work environment. Furthermore, space is very limited in the other buildings on campus.

PROGRAM INFORMATION

CSU – Pueblo is a four-year university that serves over 4,200 students. More than 33 percent of its students are of Hispanic descent, and the university is designated as a Hispanic-serving institution by the federal government. The university offers undergraduate and graduate degree programs in the College of Sciences and Mathematics, the Hasan School of Business, the College of Humanities and Social Sciences, and the College of Education, Engineering, and Professional Studies.

The Psychology Building was built in 1975 and houses six departments of the College of Humanities and Social Sciences: Psychology; English and Foreign Languages; History, Political Science, Philosophy, and Geography; Social Work; Sociology and Anthropology; and Speech Communications. As of 2015, 300 classes – with a combined enrollment of 6,000 students – are offered in the building's 12 classrooms. This represents a 150 percent increase in usage from the number reported by CSU – Pueblo in 2013.

Fiscal Year 2018-19 Capital Construction Request

Colorado State University — Pueblo

Psychology Building Renovation and Addition

PROJECT SCHEDULE

	Start Date	Completion Date
Design	July 2018	December 2018
Construction	January 2019	November 2020
Equipment	July 2020	November 2020
Occupancy		December 2020

SOURCE OF CASH FUNDS

This project is not funded from cash sources. However, the university indicated after the submittal deadline that it could contribute up to $170,000 in cash funds towards the project.

STAFF QUESTIONS AND ISSUES

All responses to staff questions were incorporated into the project write-up.

OPERATING BUDGET

Operating expenses are paid from institutional sources. CSU – Pueblo anticipates additional annual costs of $80,000 to operate and maintain the building addition.

Fiscal Year 2018-19 Capital Construction Request

Colorado State University

Anatomy/Zoology East Wing Revitalization (Capital Renewal)

PROGRAM PLAN STATUS

2006-160

Approved Program Plan? Yes **Date Approved:** October 4, 2007

PRIORITY NUMBERS

Prioritized By	Priority	
DeptInst	2 of 4	
CCHE	22 of 34	
OSPB	38 of 53	Not recommended for funding.

PRIOR APPROPRIATION AND REQUEST INFORMATION

Fund Source	Prior Approp.	FY 2018-19	FY 2019-20	Future Requests	Total Cost
CCF	$0	$15,784,650	$0	$0	$15,784,650
Total	$0	**$15,784,650**	$0	$0	$15,784,650

ITEMIZED COST INFORMATION

Cost Item	Prior Approp.	FY 2018-19	FY 2019-20	Future Requests	Total Cost
Land Acquisition	$0	$0	$0	$0	$0
Professional Services	$0	$1,821,883	$0	$0	$1,821,883
Construction	$0	$12,526,590	$0	$0	$12,526,590
Equipment	$0	$0	$0	$0	$0
Miscellaneous	$0	$0	$0	$0	$0
Contingency	$0	$1,436,177	$0	$0	$1,436,177
Software Acquisition	$0	$0	$0	$0	$0
Total	$0	**$15,784,650**	$0	$0	$15,784,650

PROJECT STATUS

This is the fifth request for funding. Funding was first requested on behalf of the project for FY 2008-09.

Associated project. In January 2015, the committee approved cash funds spending authority through the two-year cash process for the construction of a five-story, 147,700-GSF biology teaching and research building on the main campus to address a growing deficiency in available space for biology laboratories, support spaces, and new faculty. The source of cash funds for the project was bonds to be repaid from university funds, donations, and a student fee for capital improvements approved in May 2014 ($5.51 per credit hour).

PROJECT DESCRIPTION / SCOPE OF WORK

Colorado State University is requesting state funds for a capital renewal project to upgrade and replace multiple systems in the 81,000-GSF east wing of the Anatomy/Zoology Building. The capital renewal approach focuses on upgrading building systems, infrastructure, and the basic building components within existing academic buildings on a building-by-building basis, rather than project by project. According to the university, the condition of the building is poor enough to warrant immediate action. The project updates mechanical, electrical, and plumbing systems, installs a new roof, abates asbestos, and upgrades the fire alarm system.

Additionally, the project:

- upgrades the electrical system with a new transformer, switch gear, panels, and lighting;
- installs new air handlers, dampers, coils, controls, and variable air volume boxes to improve the HVAC system;
- updates lift stations for the septic system; and
- installs process cooling and a dedicated freezer room for laboratory storage to improve energy efficiency.

Cost assumption. The cost assumption was determined by university architects. The cost per GSF is $195. The project cost accounts for future inflation at rate of 5 percent a year. As a capital renewal request, the project is not required to meet the Art in Public Places or High Performance Certification Program requirements.

PROJECT JUSTIFICATION

The university says that the building is in a desirable location on campus and that there is always a high demand for use. The university explains that many of the building systems are outdated and not energy efficient. Fire sprinklers are installed in only part of the building and there are maze-like corridors that make egress in emergency situations challenging. If the project is not funded, the university will replace equipment as it fails, but this will lead to interruptions in academic instruction, particularly with regard to laboratory functions.

PROGRAM INFORMATION

The Anatomy/Zoology Building was constructed in 1973. It historically housed classrooms, offices, and laboratory space for the Department of Biology, including the major anatomy teaching laboratories. In fall 2017, many of the building occupants and functions moved into the recently constructed Biology Building. Vacated space in the Anatomy/Zoology Building has been backfilled by several programs, including Biomedical Sciences; Fish, Wildlife, and Conservation; Biochemistry; and an office within the Vice President for Research.

PROJECT SCHEDULE

	Start Date	Completion Date
Design	July 2018	October 2018
Construction	October 2018	December 2019
Equipment		
Occupancy	January 2020	

SOURCE OF CASH FUNDS

This project is not funded from cash sources.

STAFF QUESTIONS AND ISSUES

None.

Colorado State University

Anatomy/Zoology East Wing Revitalization (Capital Renewal)

OPERATING BUDGET

Operating costs are paid from institutional sources. CSU anticipates the project will result in a decrease in its operating costs. CSU says that similar renovation projects have decreased electrical use by 25 percent and water use by 50 percent in existing space.

Fiscal Year 2018-19 Capital Construction Request

Colorado State University

Chemistry B and C Wing Renovation (Capital Renewal)

2008-088

PROGRAM PLAN STATUS

Approved Program Plan? N/A **Date Approved:**

PRIORITY NUMBERS

Prioritized By	Priority	
DeptInst	3 of 4	
CCHE	26 of 34	
OSPB	40 of 53	Not recommended for funding.

PRIOR APPROPRIATION AND REQUEST INFORMATION

Fund Source	Prior Approp.	FY 2018-19	FY 2019-20	Future Requests	Total Cost
CCF	$0	$24,951,150	$0	$0	$24,951,150
Total	$0	**$24,951,150**	$0	$0	$24,951,150

ITEMIZED COST INFORMATION

Cost Item	Prior Approp.	FY 2018-19	FY 2019-20	Future Requests	Total Cost
Land Acquisition	$0	$0	$0	$0	$0
Professional Services	$0	$2,878,575	$0	$0	$2,878,575
Construction	$0	$19,780,204	$0	$0	$19,780,204
Equipment	$0	$0	$0	$0	$0
Miscellaneous	$0	$0	$0	$0	$0
Contingency	$0	$2,292,371	$0	$0	$2,292,371
Software Acquisition	$0	$0	$0	$0	$0
Total	$0	**$24,951,150**	$0	$0	$24,951,150

PROJECT STATUS

This is the second request for funding.

Associated projects. The university recently completed construction of a 60,000-GSF Chemistry Research Building in order to address a shortage of laboratory and associated office space for faculty and students. The project received funding between FY 2014-15 and FY 2016-17 in the amount of $56.6 million, including $5.4 million in cash funds.

A second project, funded through controlled maintenance, is replacing pumps and related components of the steam system that supplies the heating coils in the A, B, and C wings of the Chemistry Building. An earlier emergency controlled maintenance project replaced the heating coils. While the work performed under the controlled maintenance project is related to building systems that will be updated or replaced under the FY 2018-19 request, the work is discreet and not part of the overall scope of the requested project.

Attachment A shows the location of the Chemistry Building and the Chemistry Research Building on the main campus. It also labels the four separate wings of the Chemistry Building.

Fiscal Year 2018-19 Capital Construction Request

Colorado State University

Chemistry B and C Wing Renovation (Capital Renewal)

PROJECT DESCRIPTION / SCOPE OF WORK

Colorado State University (CSU) is requesting state funds for a capital renewal project to upgrade or replace multiple systems in the 128,100-GSF B and C wing of the Chemistry Building. The capital renewal approach focuses on upgrading building systems, infrastructure, and the basic building components within existing academic buildings on a building-by-building basis, rather than project by project. The project updates mechanical, electrical, and plumbing systems, installs a new roof, abates asbestos, and upgrades the fire alarm system.

Additionally, the project:

- upgrades the electrical system with a new transformer, switch gear, panels, and lighting;
- installs new air handlers, dampers, coils, controls, and variable air volume boxes to improve the HVAC system;
- updates lift stations for the septic system; and
- installs process cooling and a dedicated freezer room for laboratory storage to improve energy efficiency.

The university says that the project only addresses two wings of the building because it is not practical to take the HVAC systems offline for the entire building.

Cost assumption. The cost assumption was determined by university architects. The cost per GSF is $195. The project cost accounts for future inflation at rate of 5 percent a year. As a capital renewal request, the project is not required to meet the Art in Public Places or High Performance Certification Program requirements.

PROJECT JUSTIFICATION

The university explains that many of the building systems are outdated and not energy efficient. According to CSU, the Chemistry Building is the highest energy user on the main campus. The building uses about one million gallons of water every 10 days due to the lack of process cooling. The university says this represents one out of every seven gallons used on the main campus. Fire sprinklers are installed in only part of the building and there are maze-like corridors that make egress in emergency situations challenging. If the project is not funded, the university will replace equipment as it fails, but this will lead to interruptions in academic instruction, particularly with regard to laboratory functions.

PROGRAM INFORMATION

The four-wing Chemistry Building was constructed in 1971. It houses classrooms and laboratory space for the Department of Chemistry. In fall 2017, some of the building occupants and functions moved into a newly constructed Chemistry Research Building (shown in Attachment A). Vacated space in the Chemistry Building has been backfilled by several programs, including chemistry research, additional teaching labs, and an office within the Vice President for Research.

PROJECT SCHEDULE

	Start Date	Completion Date
Design	July 2018	October 2018
Construction	October 2018	December 2019
Equipment		
Occupancy	January 2020	

SOURCE OF CASH FUNDS

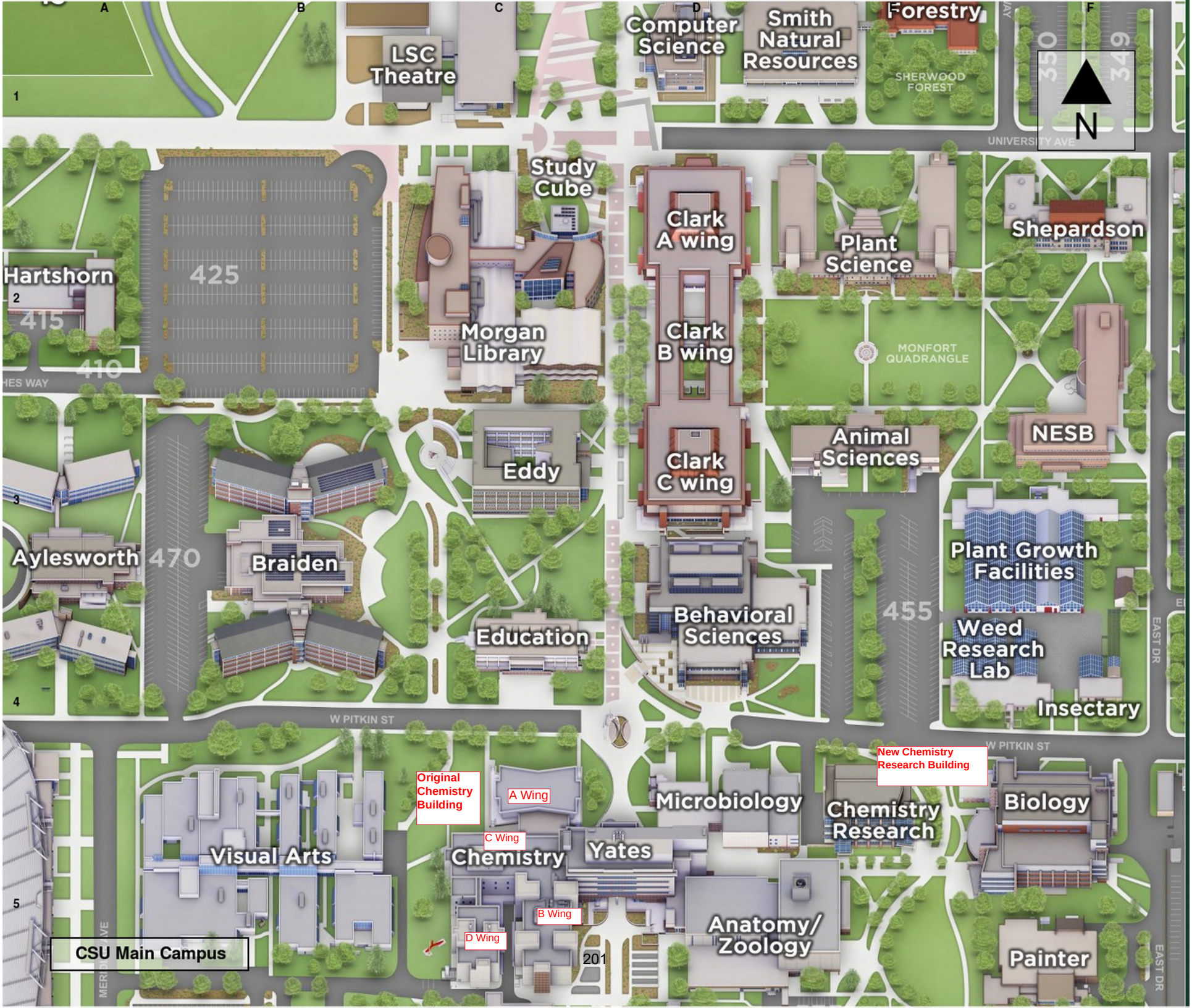
This project is not funded from cash sources.

STAFF QUESTIONS AND ISSUES

None.

OPERATING BUDGET

Operating costs are paid from institutional sources. CSU anticipates the project will result in a decrease in its operating costs. CSU says that similar renovation projects have decreased electrical use by 25 percent and water use by 50 percent in existing space.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LSC Theatre
Computer Science
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Forestry
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Clark C wing
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Plant Growth Facilities
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Behavioral Sciences
Education
Weed Research Lab
Insectary
EAST DR
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Original Chemistry Building
A Wing
C Wing
B Wing
D Wing
Chemistry
Yates
Microbiology
New Chemistry Research Building
Chemistry Research
Biology
Visual Arts
Anatomy/ Zoology
Painter
CSU Main Campus
201

Fiscal Year 2018-19 Capital Construction Request

Colorado State University

Water Resources Center (National Western Center COP)

2017-065

PROGRAM PLAN STATUS

Approved Program Plan? Yes **Date Approved:** July 3, 2017

PRIORITY NUMBERS

Prioritized By	Priority	
DeptInst	4 of 4	
CCHE	N/A of 34	Recommended.
OSPB	12 of 53	Recommended.

PRIOR APPROPRIATION AND REQUEST INFORMATION

Fund Source	Prior Approp.	FY 2018-19	FY 2019-20	Future Requests	Total Cost
CCF	$0	$91,512,205	$0	$0	$91,512,205
CF	$0	$28,200,000	$0	$0	$28,200,000
Total	$0	**$119,712,205**	$0	$0	$119,712,205

ITEMIZED COST INFORMATION

Cost Item	Prior Approp.	FY 2018-19	FY 2019-20	Future Requests	Total Cost
Land Acquisition	$0	$27,725,871	$0	$0	$27,725,871
Professional Services	$0	$10,078,244	$0	$0	$10,078,244
Construction	$0	$71,543,317	$0	$0	$71,543,317
Equipment	$0	$2,962,424	$0	$0	$2,962,424
Miscellaneous	$0	$1,701,768	$0	$0	$1,701,768
Contingency	$0	$5,700,581	$0	$0	$5,700,581
Software Acquisition	$0	$0	$0	$0	$0
Total	$0	**$119,712,205**	$0	$0	$119,712,205

PROJECT STATUS

This is a new, never-before-requested project. The project was previously listed on the university's five-year projection of need and is part of a larger effort to rebuild the National Western Center.

PROJECT DESCRIPTION / SCOPE OF WORK

Colorado State University (CSU) is requesting approval for a project to be financed through state-backed certificates of participation (COPs). The COP issuance is authorized by House Bill 15-1344, which concerned funding for the National Western Center and Capitol Complex projects. The project purchases land at the National Western site for the future construction of three CSU facilities. It also constructs a seven-story, 152,000-GSF water resources center on the north side of the National Western site. The building will be shared between CSU and Denver Water.

Denver Water will contribute $28.2 million towards the overall project cost (shown as cash funds for informational purposes) for the build out of about 68,000 GSF of the facility to house its Water Quality Lab and other, yet-to-be determined programmatic functions. The Water Quality Lab tests about 30,000 samples and 250,000 households a year.

The remainder of the building will house:

- K-20 educational classrooms;
- event and conference space;
- an auditorium;
- a kitchen and café;
- research and teaching lab space;
- labs for developing and demonstrating new water technologies;
- data analysis and visualization space; and
- outdoor spaces.

The project acquires fee simple title to 513,350 square feet (sf) of property at the National Western site at a projected cost of $54 per sf. The purchase price includes land acquisition costs, the remediation of environmental contaminants, demolition, utility and infrastructure installation, including providing temporary water, power, and parking for the duration of construction, and the installation of street lighting, perimeter landscaping, side walks, bike paths, and roadways. The City and County of Denver will manage the site work and upon completion deliver three "pads" to the university, as follows: Water Resources Center (248,347 sf), Equine Sports Medicine Clinic (179,000 sf), and the CSU Center (86,000 sf). Payment for the property acquisition and site preparation work is due in full in April 2018.

Attachment A illustrates the building development sites. Attachment B illustrates the floor-by-floor space use plan for the new facility.

Funding for lease-purchase agreements. In FY 2018-19, the state will make the final annual lease payment for COPs issued to finance the construction of the Centennial Correctional Facility expansion project. HB 15-1344 repurposes the average amount paid on behalf of these annual lease payments in the years following the retirement of the Centennial Correctional Facility COP. Money from the General Fund ($20 million) that has otherwise been set aside for the existing COP payment will be made available for future COP issuances on behalf of the National Western Center and projects in the Capitol Complex.

Cost assumption. The cost assumption was determined through the program planning process. The cost per GSF is $605. The cost per GSF excludes the cost to purchase and prepare the construction sites. The project meets the High Performance Certification and Art in Public Places Program requirements. The project costs include inflation calculations through the expected midpoint of construction.

PROJECT JUSTIFICATION

The university says that as the state's land-grant institution, it is important for it to be a partner and participant in the development of the National Western Center as it looks forward to year-round use and the next 100 years.

The new water resources center is well positioned to provide collaborative research opportunities for a number of users. It will be sited next to a newly restored mile of riverbank along the South Platte River. Additionally, it is located about a mile downriver from the Denver Water recycling plant and the Metro Wastewater Reclamation plant. These multiple sources of water offer unique opportunities for research in water treatment and testing among a number of public and private groups. The water resources center is also adjacent to areas of the state with significant agricultural production.

The university says that the new facility will help bring new water-related products to market. It will accommodate large-scale prototyping and testing in the development of new equipment and processes. CSU anticipates that the facility will be used by both start-up and existing companies for product testing. It will also offer educational opportunities for community members and students of all ages.

Fiscal Year 2018-19 Capital Construction Request

Colorado State University

Water Resources Center (National Western Center COP)

PROGRAM INFORMATION

The university is a founding partner of the National Western Center. It says its goal at the center will be to advance academic, research, and outreach initiatives related to the state's broad-based economy in agriculture, food systems, health, and western culture."

PROJECT SCHEDULE

	Start Date	Completion Date
Design	April 2018	June 2019
Construction	July 2019	June 2021
Equipment	July 2021	
Occupancy	August 2021	

SOURCE OF CASH FUNDS

The source of cash funds is money from Denver Water. The cash fund contribution towards the overall project cost is shown for informational purposes only. It will not be financed through the COP issuance.

STAFF QUESTIONS AND ISSUES

1. Did the university always anticipate that it would purchase the sites at the National Western Center? Or was there some discussion about the city retaining ownership of the CSU sites?

Both owning and leasing from the city were considered. It became the preference of both the CSU Board of Governors and the city for CSU to purchase the land under the facilities, since they would eventually be state-owned facilities.

2. Who will be responsible for maintaining the portion of the building occupied by Denver Water?

Denver Water and CSU will determine the best operation and maintenance structure for the full facility in coming months. The responsibilities will be laid out in a formal legal agreement between CSU and Denver Water. In addition, the full facility, including Denver Water's lab, are required to be maintained in good condition, based on the framework agreement between CSU, the city, and the Western Stock Show Association.

3. Does CSU hope to earn revenue through event space rental in the facility? If so, what is the intended use of this revenue?

Through the design process, CSU will determine the details of the event spaces and their uses. We hope that the spaces will be used by a wide range of groups and communities. The primary purpose of these various spaces is not revenue generation. Should the rental of these event spaces eventually generate revenue, that revenue will support the educational mission of the facility.

4. How does the cost allocation formula account for the city's share of the cost with respect to land it already owns? (What is the city paying, per square foot, for the site remediation and preparation costs on land it already owns?)

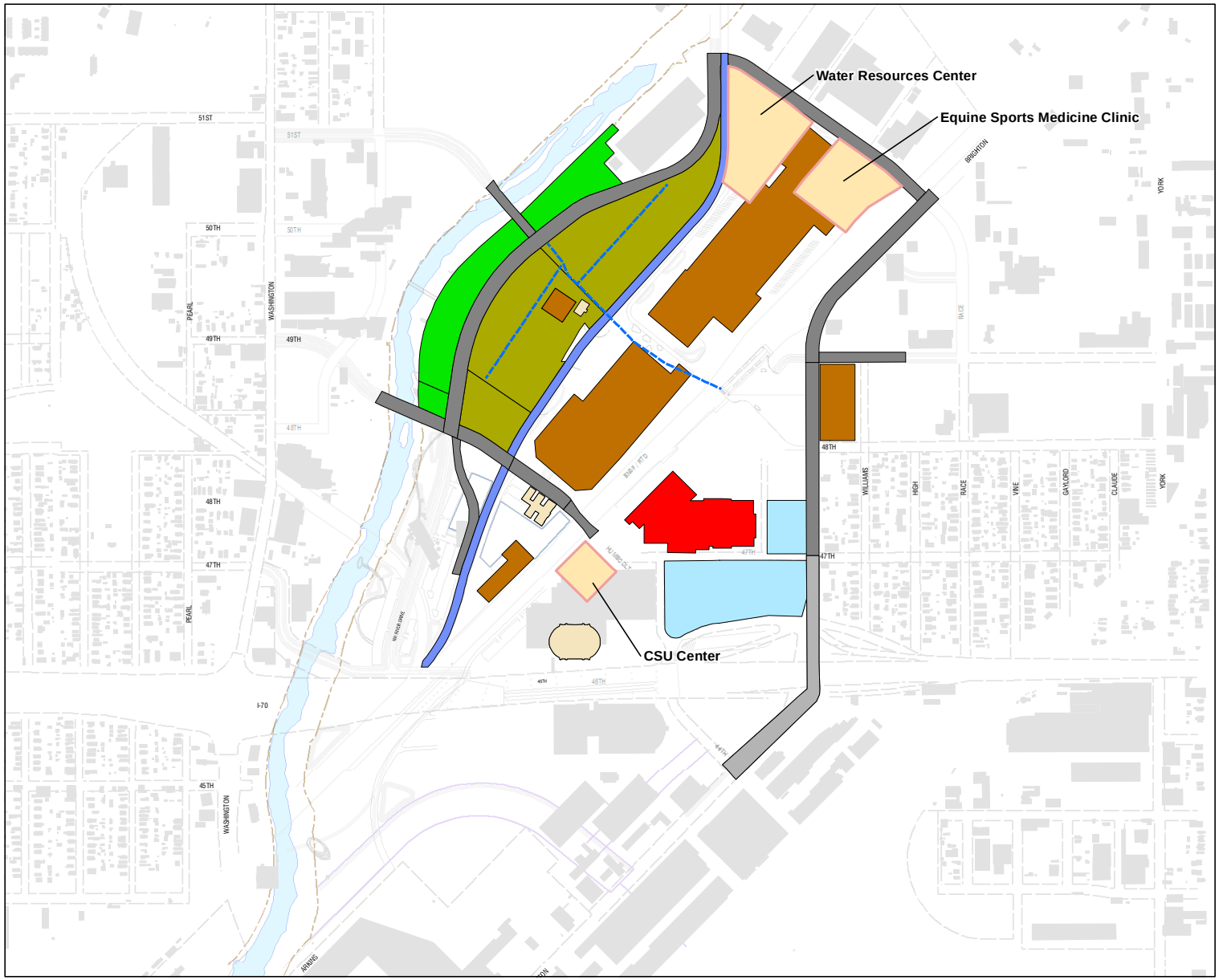
The City and County of Denver and Western Stock Show Association gifted their land, at no cost, to the National Western Program. The early cost estimating and the baseline assumptions that have fed into the cost allocation formula allocated $54M for demolition, remediation, earthworks, environmental and site grading, and contingencies across the entire 250-acre site for Phases 1 to 8. This equates to $5.94 per square foot for site land preparation costs for all equity partners, including the City and County of Denver, across the entire site.

5. How will CSU address land acquisition cost increases if the cost per square foot increases after the project is reviewed and approved by the legislature? Will these increases be reflected in future requests or will the university value engineer the Water Resources Center in order to address the additional costs?

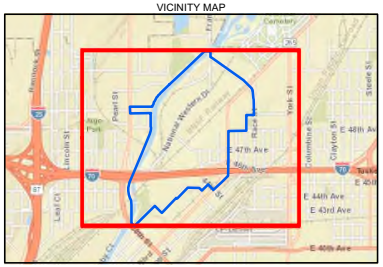
At this time, the City and County of Denver's land acquisition costs are trending on budget and within the cost allocation formula with only a few key parcels remaining to acquire. CSU is actively participating in the cost allocation management of the horizontal and enabling works and involved in the decision making with design and construction of this work, which will facilitate budget conformance. If the City and County of Denver do propose a cost increase, CSU's Board of Governors will review the request. We do not anticipate that any increases will be reflected in any future CSU requests.

OPERATING BUDGET

Operating costs are paid from institutional sources. CSU projects its operating and maintenance costs for its portion of the building will total about $683,000 a year.



VICINITY MAP



LEGEND

- CSU Building Development Site
- Demolition
- Buildings to be Demolished
- Road Vacated
- Elevated Walkway/Pedestrian Bridge

WBS Phasing

- Finished Building Construction
- Finished Construction
- Finished Yard Construction
- Finished Road Construction
- Finished Rail Construction
- Finished Open Space Construction
- Construction
- Pad Ready/Clear
- Temporary Parking
- Historical Building to be Refurbished
- South Platte River

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CSU Building Development Sites
National Western Center

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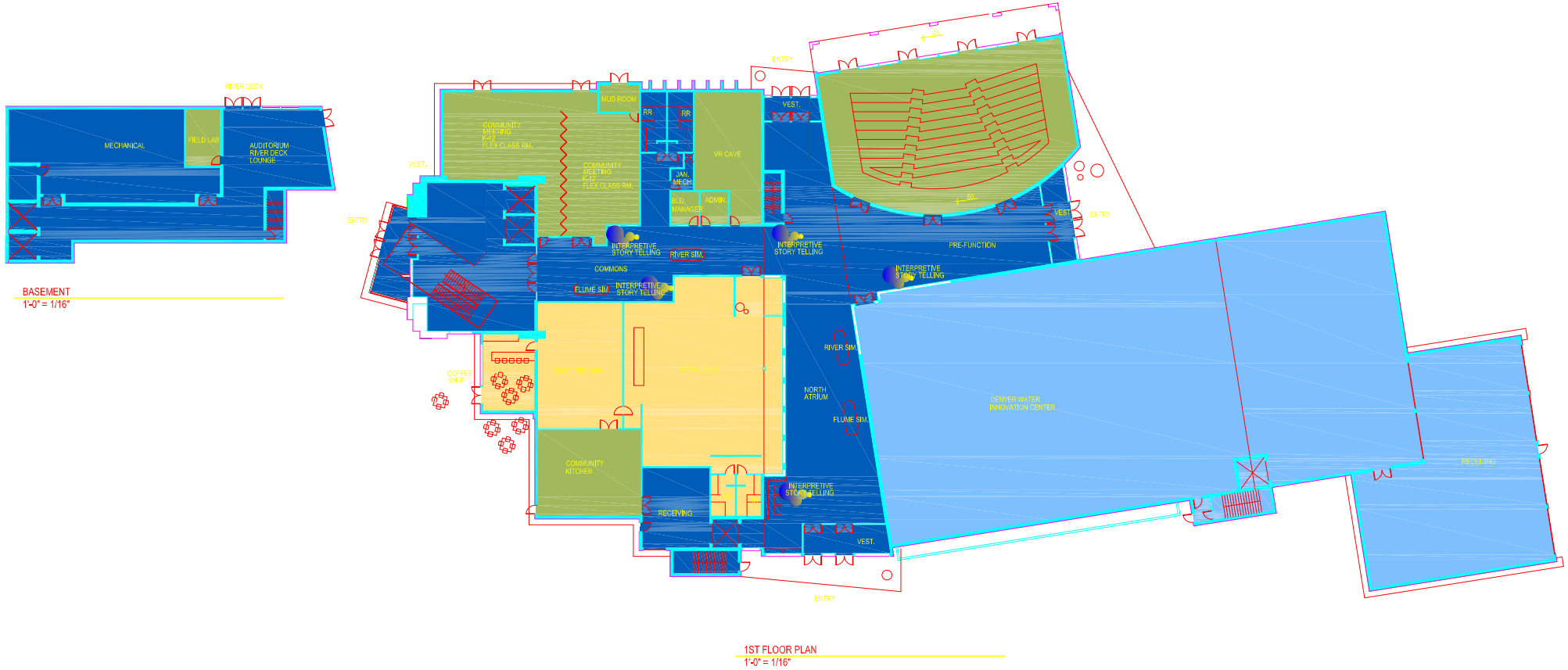
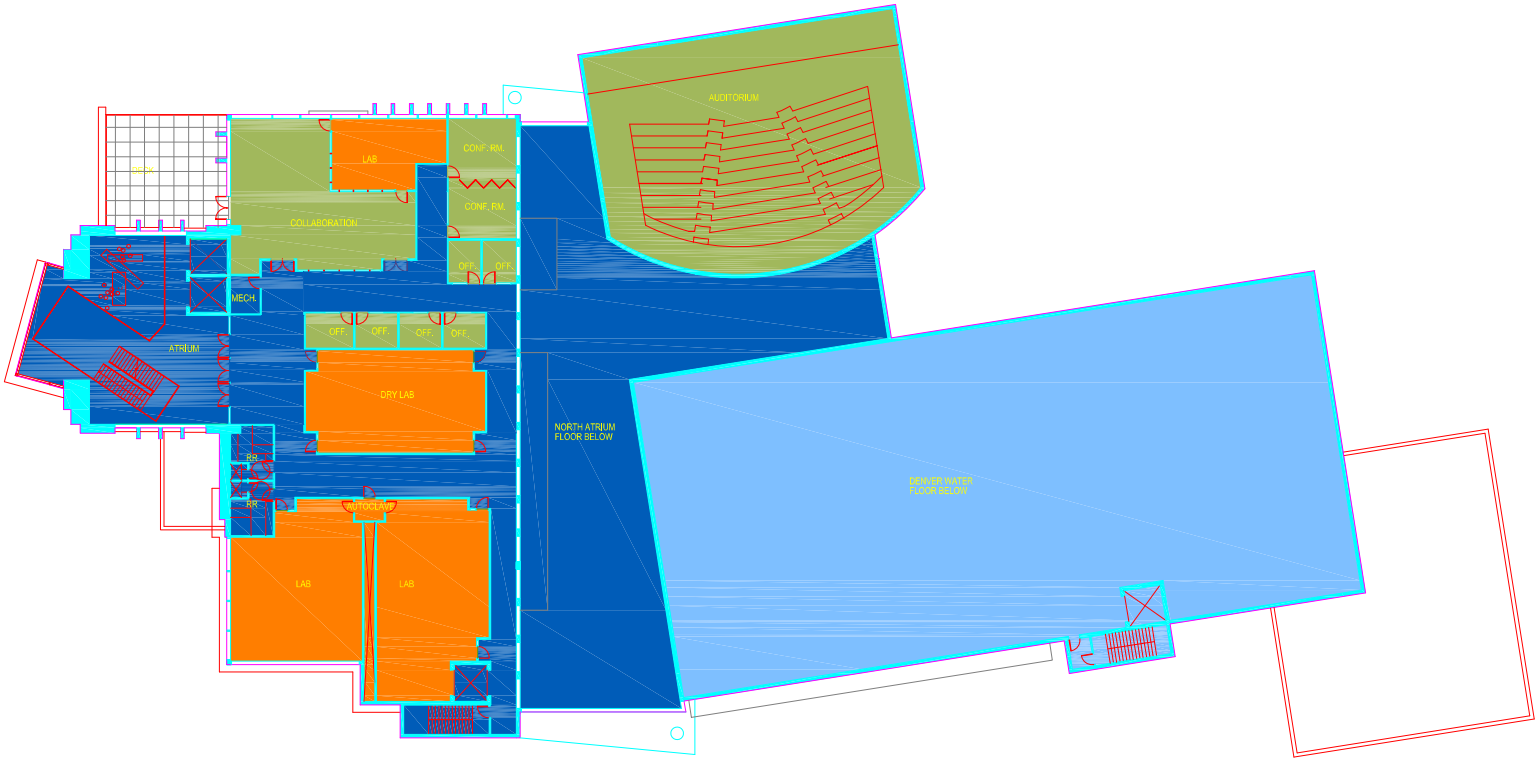
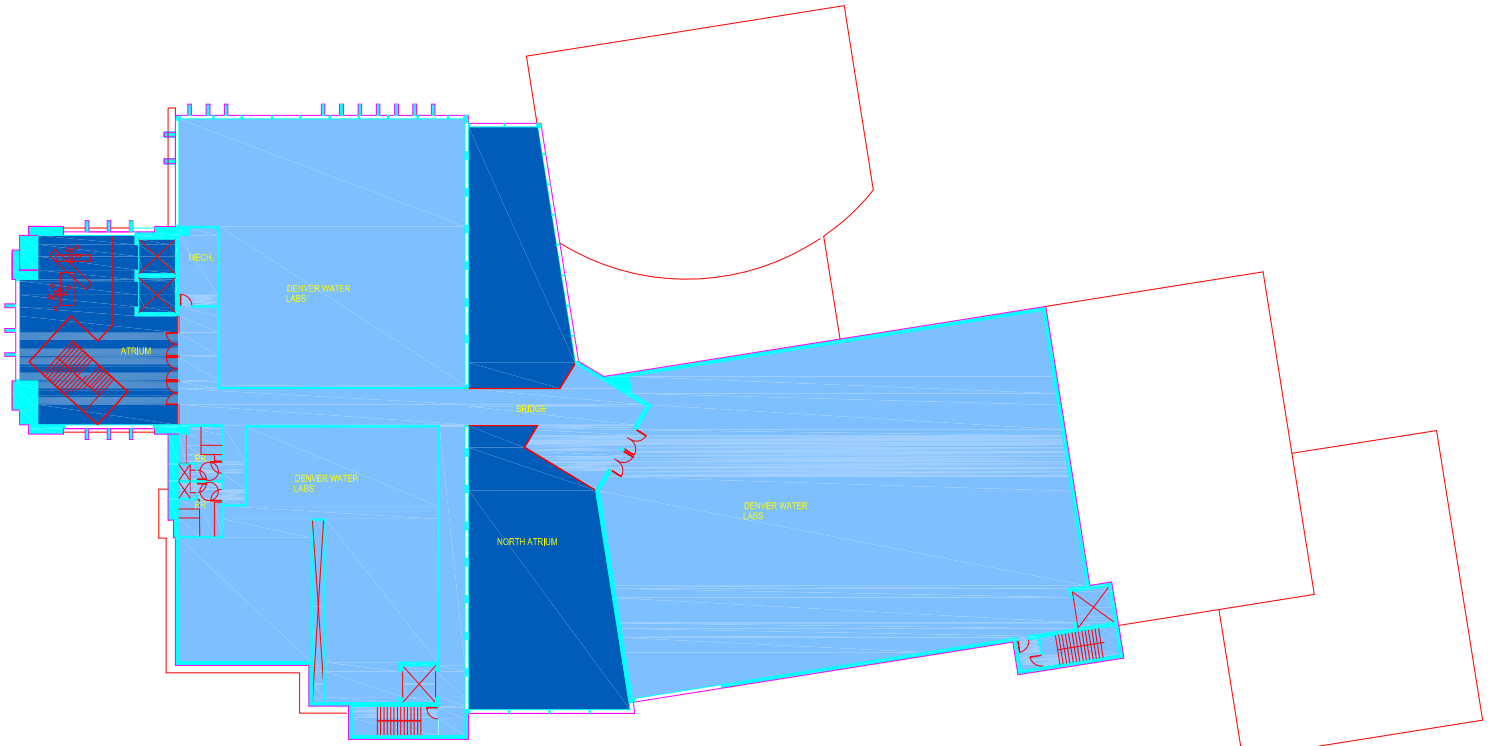


COLORADO STATE UNIVERSITY WATER CENTER AT THE DENVER NATIONAL WESTERN COMPLEX



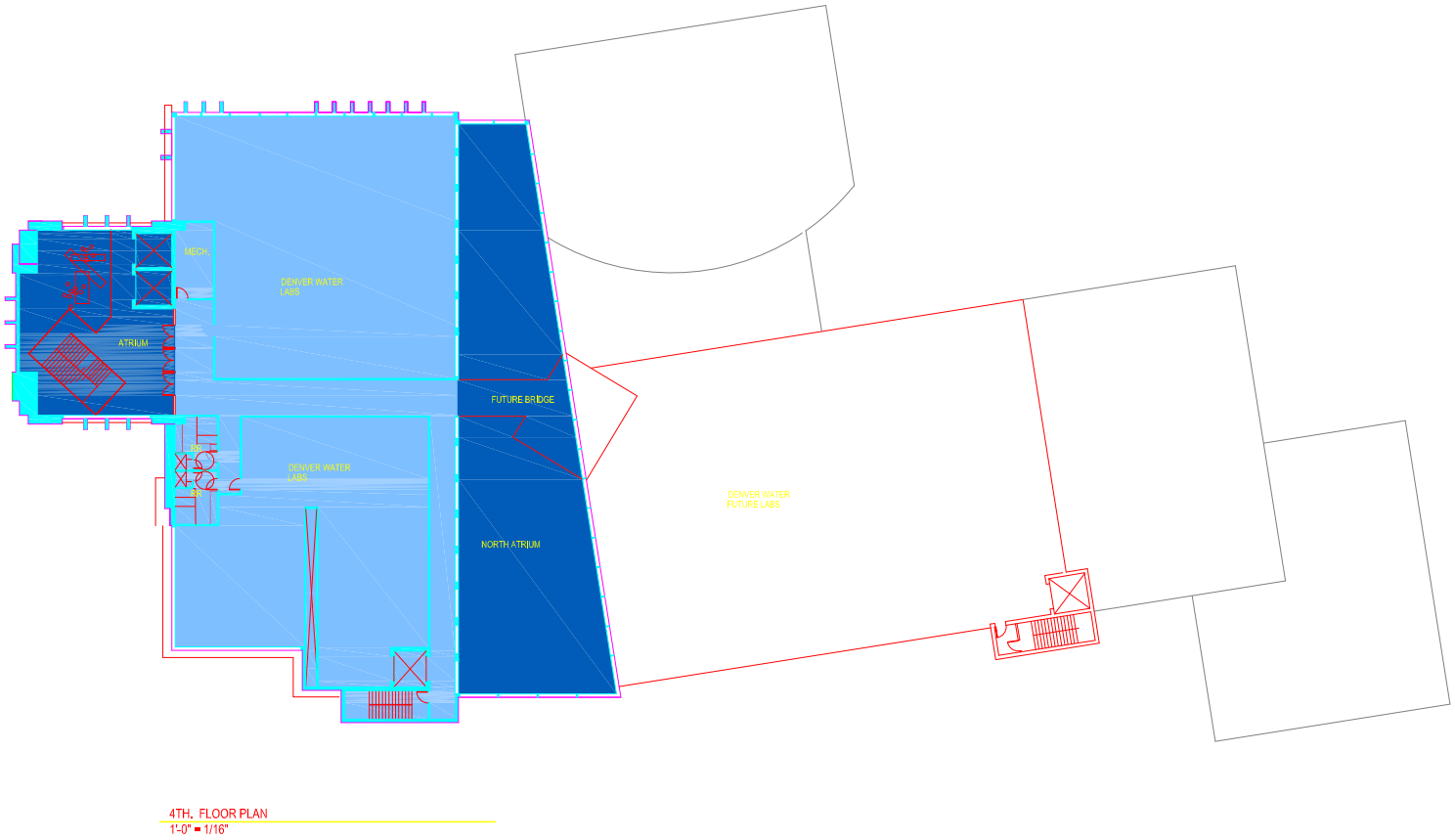
2ND. FLOOR PLAN
1'-0" = 1/16"

COLORADO STATE UNIVERSITY WATER CENTER AT THE DENVER NATIONAL WESTERN COMPLEX



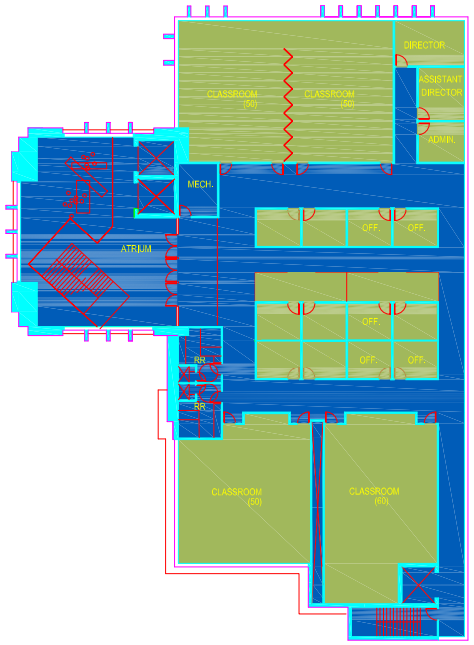
3RD. FLOOR PLAN
1'-0" = 1/16"

COLORADO STATE UNIVERSITY WATER CENTER AT THE DENVER NATIONAL WESTERN COMPLEX

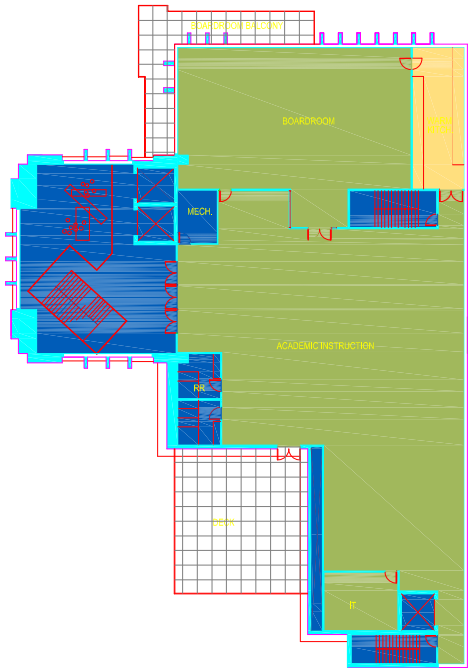


4TH. FLOOR PLAN
1'-0" = 1/16"

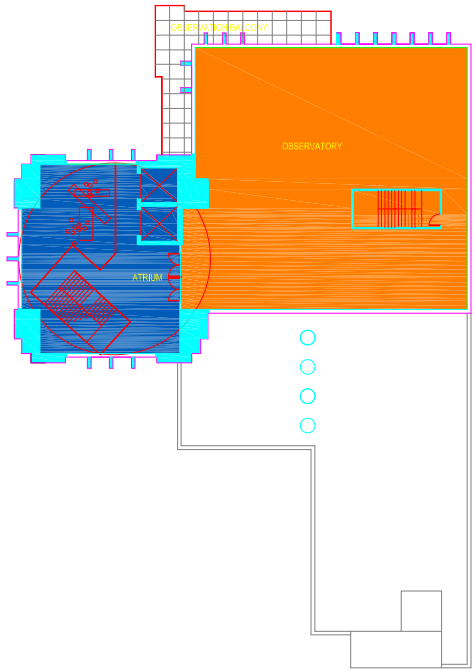
COLORADO STATE UNIVERSITY WATER CENTER AT THE DENVER NATIONAL WESTERN COMPLEX



5TH. FLOOR PLAN
1'-0" = 1/16"



6TH. FLOOR PLAN
1'-0" = 1/16"



7TH. FLOOR PLAN
1'-0" = 1/16"

COLORADO STATE UNIVERSITY WATER CENTER AT THE DENVER NATIONAL WESTERN COMPLEX

Colorado State University System
Five-Year Projection of Need
FY 2018-19 through FY 2022-23

Project Title	Fund Source	FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	Totals
Colorado State University							
Capital Construction (Current Year)							
Anatomy/Zoology East Wing Revitalization (Capital Renewal)	CCF	$15,784,650	$0	$0	$0	$0	$15,784,650
	CF	0	0	0	0	0	$0
Chemistry B and C Wing Renovation (Capital Renewal)	CCF	24,951,150	0	0	0	0	$24,951,150
	CF	0	0	0	0	0	$0
Shepardson Building Renovation and Expansion	CCF	4,527,223	13,482,700	15,794,996	0	0	$33,804,919
	CF	0	0	9,000,000	0	0	$9,000,000
Capital Construction (National Western COP Projects: Second Issuance)							
Water Resources Center (National Western Center COP)	CCF	91,312,205	0	0	0	0	$91,312,205
	CF	28,200,000	0	0	0	0	$28,200,000
Capital Construction (Out Year)							
CSU Center (National Western Center COP)	CCF	0	0	0	0	78,487,795	$78,487,795
	CF	0	0	0	0	0	$0
District Chiller Expansion	CCF	0	17,400,000	0	0	0	$17,400,000
	CF	0	0	0	0	0	$0
Education Building Revitalization	CCF	0	0	0	20,000,000	0	$20,000,000
	CF	0	0	0	0	0	$0
Equine and Community Clinics (National Western Center COP)	CCF	0	30,200,000	0	0	0	$30,200,000
	CF	0	0	0	0	0	$0
Engineering Research Center Renovation	CCF	0	0	0	0	20,000,000	$20,000,000
	CF	0	0	0	0	0	$0
San Luis Valley Research Center	CCF	$0	$0	$4,800,000	$0	$0	$4,800,000
	CF	0	0	0	0	0	$0
CSU Capital Construction Subtotals	CCF	*136,575,228*	*61,082,700*	*20,594,996*	*20,000,000*	*98,487,795*	*$336,740,719*
	CF	*28,200,000*	*0*	*9,000,000*	*0*	*0*	*$37,200,000*

Colorado State University System (Cont.)
Five-Year Projection of Need
FY 2018-19 through FY 2022-23

Project Title	Fund Source	FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	Totals
Colorado State University – Pueblo							
Capital Construction (Current Year)							
Psychology Building Renovation and Addition	CCF	$16,812,751	$0	$0	$0	$0	$16,812,751
	CF	0	0	0	0	0	$0
Capital Construction (Out Year)							
Administration Building Renovation and Addition	CCF	0	0	0	15,000,000	0	$15,000,000
	CF	0	0	0	0	0	$0
Art/Music Building Renovation and Addition	CCF	0	0	18,000,000	0	0	$18,000,000
	CF	0	0	0	0	0	$0
Facilities Management Building Renovation and Addition	CCF	0	0	0	0	15,000,000	$15,000,000
	CF	0	0	0	0	0	$0
Technology Building Renovation and Addition	CCF	0	16,100,000	0	0	0	$16,100,000
	CF	0	0	0	0	0	$0
CSU – Pueblo Capital Construction Subtotals	CCF	*16,812,751*	*16,100,000*	*18,000,000*	*15,000,000*	*15,000,000*	*$80,912,751*
	CF	*0*	*0*	*0*	*0*	*0*	*$0*
Capital Construction Subtotals	CCF	*153,387,979*	*77,182,700*	*38,594,996*	*35,000,000*	*113,487,795*	*$417,653,470*
	CF	*28,200,000*	*0*	*9,000,000*	*0*	*0*	*$37,200,000*
Controlled Maintenance Subtotals	CCF	*7,275,496*	*See OSA Annual Report.*				*$7,275,496*
Total: State Funds		*160,663,475*	*77,182,700*	*38,594,996*	*35,000,000*	*113,487,795*	*$424,928,966*
Grand Total: All Fund Sources		**$160,663,475**	**$77,182,700**	**$47,594,996**	**$35,000,000**	**$113,487,795**	**$433,928,966**

Source: Department of Higher Education and Office of the State Architect

COVER PAGE
Fort Lewis College

FY 2018-19 CAPITAL CONSTRUCTION REQUESTS (LISTED IN OSPB PRIORITY ORDER)
NOT RECOMMENDED FOR FUNDING BY OSPB:

- Whalen Gymnasium Expansion and Renovation, Exercise Science *(previously requested)*

TOTAL: FY 2018-19 CAPITAL CONSTRUCTION STATE-FUNDED REQUEST AMOUNT = $3,003,260

FY 2018-19 CONTROLLED MAINTENANCE REQUESTS (2)
NOT RECOMMENDED FOR FUNDING BY OSPB:
LEVEL II:

- Replace North Campus Heating and Cooling Line, Ph 1 of 2 ($1,406,141)

LEVEL III:

- Replace Roof, Aquatic Center ($526,697)

HISTORY OF STATE FUNDING

- **$32.1 million** has been appropriated to the college on behalf of capital projects since FY 2013-14. This represents **3.4 percent** of the total amount appropriated on behalf of all capital construction and controlled maintenance projects during this period.

- **$0.2 million** was appropriated in **FY 2017-18**.

- An additional **$1.5 million** was authorized through Senate Bill 17-267 for controlled maintenance.

INVENTORY OF GENERAL FUND SUPPORTED FACILITIES

- The General Fund supported inventory of college facilities totals **590,896 GSF**. This total represents **1.2 percent** of the entire General Fund supported inventory of state buildings.

RECENT CDC VISITS

- Campus tour (October 2015)

Fiscal Year 2018-19 Capital Construction Request

Fort Lewis College

Whalen Gymnasium Expansion and Renovation for Exercise Science, South

PROGRAM PLAN STATUS

2007-130

Approved Program Plan? Yes **Date Approved:** June 3, 2016

PRIORITY NUMBERS

Prioritized By	Priority	
DeptInst	1 of 1	
CCHE	7 of 34	
OSPB	22 of 53	Not recommended for funding.

PRIOR APPROPRIATION AND REQUEST INFORMATION

Fund Source	Prior Approp.	FY 2018-19	FY 2019-20	Future Requests	Total Cost
CCF	$0	$3,003,260	$24,912,121	$0	$27,915,381
CF	$0	$333,696	$2,768,013	$0	$3,101,709
Total	$0	**$3,336,956**	$27,680,134	$0	$31,017,090

ITEMIZED COST INFORMATION

Cost Item	Prior Approp.	FY 2018-19	FY 2019-20	Future Requests	Total Cost
Land Acquisition	$0	$0	$0	$0	$0
Professional Services	$0	$3,336,956	$1,217,633	$0	$4,554,589
Construction	$0	$0	$23,480,739	$0	$23,480,739
Equipment	$0	$0	$576,453	$0	$576,453
Miscellaneous	$0	$0	$241,327	$0	$241,327
Contingency	$0	$0	$2,163,982	$0	$2,163,982
Software Acquisition	$0	$0	$0	$0	$0
Total	$0	**$3,336,956**	$27,680,134	$0	$31,017,090

PROJECT STATUS

This is the second request for funding. The project has appeared on the university's five-year projection of need each year since FY 2006-07. A new program plan was approved in June 2016 that encompasses two discrete projects: (1) the current project to house the Exercise Science Program; and (2) a two-phase renovation of additional Whalen space and an expansion to the north of the facility to house the Athletics Department, which the university's five-year projection of need indicates will be requested in FY 2019-20 and FY 2020-21.

PROJECT DESCRIPTION / SCOPE OF WORK

Fort Lewis College (FLC) is requesting state funds and cash funds spending authority for the first phase of a two-phase project to renovate 6,800 GSF within Whalen Gymnasium and construct a 45,043-GSF expansion to the south and east of the building for use by the Exercise Science Program. Coupled with the companion project to renovate other portions of Whalen Gymnasium and expand it to the north to house the Athletics Program, the college says the projects will create a single facility to serve as home for two departments that share an emphasis on organized physical activity as a basis for study, competition, research, and exploration. This year's request for Phase I designs the Exercise Science project and provides schematic design work for the Athletics Department

project to ensure that infrastructure needs are adequately accounted for and to avoid future duplication of efforts. Phase II will construct and equip the Exercise Science space. Spaces to be constructed under this project include:

- an auxiliary gymnasium;
- a human performance laboratory;
- a biometrics laboratory;
- a 1,750-ASF dance and yoga studio;
- three teaching laboratory classrooms totaling 850 ASF;
- other teaching and study areas;
- specialized storage areas;
- faculty offices;
- new mechanical, instructional technology, and electrical systems; and
- a new entrance and lobby on the building's east side, which the college says will greatly improve access and enhance the facility's prominence in the current central campus location.

Cost assumption. The cost assumption was determined through the program planning process by university architects and outside consultants. The project cost is $598 per GSF for both the renovation and addition. The project cost accounts for future inflation at a rate of 5 percent per year through the construction midpoint. The project is in compliance with the High Performance Certification and Art in Public Places Programs.

PROJECT JUSTIFICATION

The Exercise Science Program occupies space in both Whalen Gymnasium and Skyhawk Hall, which FLC says is both insufficient in size and inadequate in terms of its suitability for the program. In addition, the college says the program is popular and growing, resulting in overutilization of its existing space. According to the college, construction of modern facilities for the Exercise Science Program will assist in recruiting and retaining students and faculty, and help the college keep pace with peer institutions. The college feels that failure to provide such facilities signals a lack of commitment to the success of students and athletes.

Inadequacy of current program space. Enrollment in the Exercise Science Program has recently increased 39 percent from fall 2011 to fall 2017, and FLC says the program's current space cannot accommodate further growth. A space utilization assessment conducted on behalf of the college found the space used by the department to be over-scheduled, and revealed a low square footage-per-student ratio based on accepted standards. Over-programming has led to some activities not being planned and others being scheduled early or late in the day; over-use of the gym in Whalen results in warm-up activities taking place in lobby and circulation areas, which FLC says creates potentially unsafe conditions. The college further explains that the laboratory spaces in Skyhawk Hall are not sufficiently specialized for the program, pointing to the technological obsolescence of learning areas and lack of space for certain programs; for instance, Skyhawk Hall does not have a space with adequate ceiling clearance for activities such as dance and yoga.

FLC also lists problems associated with the layout of the current space occupied by Exercise Science. Departmental offices in Whalen are said to be too small for proper use and remotely located from the main departmental spaces, while locker space is inadequate and poorly located, with circulation pathways through this area creating confusion. The main entry hall to Whalen's gym is too small to comfortably accommodate spectators and participant ingress and egress. Skyhawk Hall's layout does not allow for any discernible entryway to be created, resulting in a loss of department identity; the circulation path between the building's two entry points is a wide corridor with no functional spaces opening to it. Due to these layout deficiencies, FLC is unable to configure a proper lobby and reception area with contiguous spaces such as study and resource areas for the Exercise Science Program.

Project alternatives. In lieu of constructing additions to the existing building, FLC considered renovating the existing program space or relocating some programs to a new building. The college says renovating the existing space is not feasible due to utility system, structural, and energy efficiency limitations and relocating programs to a new building will not allow for important adjacencies among programs focusing on organized physical activity.

Fiscal Year 2018-19 Capital Construction Request

Fort Lewis College

Whalen Gymnasium Expansion and Renovation for Exercise Science, South

PROGRAM INFORMATION

The Exercise Science Department enrolls students in three majors: Exercise Physiology, Exercise Specialist, and Sports Administration, with Exercise Physiology seeing the greatest increases in recent enrollment. The program prepares students for graduate study and careers in teaching, coaching, sport administration, personal training, physical therapy, and other athletic, recreation, fitness, and wellness professions. Current enrollment for the department is 268 students.

PROJECT SCHEDULE

	Start Date	Completion Date
Design	May 2018	August 2019
Construction	September 2019	July 2021
Equipment	July 2021	August 2021
Occupancy	August 2021	December 2021

SOURCE OF CASH FUNDS

The source of cash funds for the project is a combination of fund raising and college reserves. The college has initiated the fund-raising campaign.

STAFF QUESTIONS AND ISSUES

All responses to staff questions have been incorporated into the project write-up.

OPERATING BUDGET

Operating costs are paid from institutional sources. FLC anticipates the project will result in an increase in utility costs due to the increase in square footage. The college does not plan to authorize additional FTE or request additional operating dollars as a result of the project.

Fort Lewis College
Five-Year Projection of Need
FY 2018-19 through FY 2022-23

Project Title	Fund Source	FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	Totals
Capital Construction (Current Year)							
Whalen Gymnasium Expansion and Renovation for Exercise Science, South	CCF	$3,003,260	$24,912,122	$0	$0	$0	$27,915,382
	CF	333,696	2,768,013	0	0	0	$3,101,709
Capital Construction (Out Year)							
Noble Hall Reconstruction and Classroom Improvements	CCF	0	0	0	2,000,000	7,000,000	$9,000,000
	CF	0	0	0	0	1,000,000	$1,000,000
Reed Library Expansion and Renovation	CCF	0	0	2,000,000	17,000,000	1,000,000	$20,000,000
	CF	0	0	0	0	0	$0
Theater Hall Expansion and Renovation	CCF	0	0	0	3,500,000	10,750,000	$14,250,000
	CF	0	0	0	0	10,750,000	$10,750,000
Whalen Gymnasium Expansion and Renovation for Athletics, South	CCF	0	1,582,151	22,574,956	0	0	$24,157,107
	CF	0	395,537	5,643,740	0	0	$6,039,277
Capital Construction Subtotals	CCF	*3,003,260*	*26,494,273*	*24,574,956*	*22,500,000*	*18,750,000*	*$95,322,489*
	CF	*333,696*	*3,163,550*	*5,643,740*	*0*	*11,750,000*	*$20,890,986*
Controlled Maintenance Subtotals	CCF	*1,932,838*	*See OSA Annual Report.*				*$1,932,838*
Total: State Funds		*4,936,098*	*26,494,273*	*24,574,956*	*22,500,000*	*18,750,000*	*$97,255,327*
Grand Total: All Fund Sources		**$5,269,794**	**$29,657,823**	**$30,218,696**	**$22,500,000**	**$30,500,000**	**$118,146,313**

Source: Department of Higher Education and Office of the State Architect

COVER PAGE
University of Colorado System

FY 2018-19 CAPITAL CONSTRUCTION REQUESTS (LISTED IN OSPB PRIORITY ORDER)
RECOMMENDED FOR FUNDING BY OSPB:

- Colorado Center for Personalized Medicine Building (CU Denver, Anschutz) *(previously requested)*

NOT RECOMMENDED FOR FUNDING BY OSPB:

- Hellems Arts and Sciences Building Renovation (CU Boulder) *(previously requested)*
- Engineering and Physical Sciences Building (CU Denver, Auraria) *(previously requested)*
- Guggenheim Geography Building Renovation (CU Boulder)
- College of Nursing and Student Services Renovation (CU Denver, Anschutz) *(new)*
- Engineering and Applied Science (EAS) Renovation (UCCS) (*previously requested*)

TOTAL: FY 2018-19 CAPITAL CONSTRUCTION STATE-FUNDED REQUEST AMOUNT = $46,273,252

FY 2018-19 CONTROLLED MAINTENANCE REQUESTS (10)
RECOMMENDED FOR FUNDING BY OSPB:
LEVEL I:

- Replace Campus Fire Alarm Control Panels, Ph 1 of 3 (CU Boulder) ($763,713)

NOT RECOMMENDED FOR FUNDING BY OSPB:
LEVEL II:

- Replace Chillers, Engineering Building (UCCS) ($740,809)
- Replace HVAC Systems, Ramaley Building, Ph 1 of 4 (CU Boulder) ($1,963,513)
- Replace Perimeter Heating System, Building 500, Ph 1 of 4 (CU Denver, Anschutz) ($1,849,896)
- Modernize Elevators, Safety and Code Deficiencies, Ph 1 of 3 (UCCS) ($116,917)
- Replace HVAC Systems, Porter Hall, Ph 1 of 3 (CU Boulder) ($1,981,154)
- Modernize Bathrooms, Building 500, Ph 1 of 2 (CU Denver, Anschutz) ($1,525,628)
- Replace Office Air Handling Units and Return Air, Columbine Hall (UCCS) ($447,471)

LEVEL III:

- Replace Windows, North Wing, Building 500, Ph 1 of 3 (CU Denver, Anschutz) ($1,397,211)
- Replace Roof, Columbine Hall, Ph 1 of 2 (UCCS) ($334,441)

COVER PAGE (Cont.)
University of Colorado System

HISTORY OF STATE FUNDING

- **$93.5 million** has been appropriated to the system on behalf of capital projects since FY 2013-14. This represents **10.0 percent** of the total amount appropriated on behalf of all capital construction and controlled maintenance projects during this period.

- **$3.5 million** was appropriated in **FY 2017-18**.

- An additional **$20.0 million** was authorized through Senate Bill 17-267 for controlled maintenance.

INVENTORY OF GENERAL FUND SUPPORTED FACILITIES

- The General Fund supported inventory of University of Colorado System facilities totals **11,016,051 GSF**. This total represents **22.9 percent** of the entire General Fund supported inventory of state buildings.

RECENT CDC VISITS

- CU Boulder (August 2015)
- UCCS (June 2015)
- CU Denver, Anschutz (August 2017, August 2016, October 2015 and August 2014)

Fiscal Year 2018-19 Capital Construction Request

University of Colorado Denver

Colorado Center for Personalized Medicine and Behavioral Health

2015-014

PROGRAM PLAN STATUS

Approved Program Plan? Yes **Date Approved:** October 29, 2015

A program plan amendment was approved on November 16, 2017.

PRIORITY NUMBERS

Prioritized By	Priority	
CCHE	2 of 34	
OSPB	10 of 53	Recommended for funding.

PRIOR APPROPRIATION AND REQUEST INFORMATION

Fund Source	Prior Approp.	FY 2018-19	FY 2019-20	Future Requests	Total Cost
CCF	$0	$12,346,906	$19,846,986	$21,859,241	$54,053,133
CF	$32,270,515	$144,313,093	$11,405,000	$0	$187,988,608
Total	$32,270,515	**$156,659,999**	$31,251,986	$21,859,241	$242,041,741

ITEMIZED COST INFORMATION

Cost Item	Prior Approp.	FY 2018-19	FY 2019-20	Future Requests	Total Cost
Land Acquisition	$0	$0	$0	$0	$0
Professional Services	$32,270,515	$0	$0	$0	$32,270,515
Construction	$0	$148,467,672	$22,519,997	$0	$170,987,669
Equipment	$0	$0	$5,570,735	$19,966,836	$25,537,571
Miscellaneous	$0	$117,296	$1,343,002	$1,892,405	$3,352,703
Contingency	$0	$8,075,031	$1,818,252	$0	$9,893,283
Software Acquisition	$0	$0	$0	$0	$0
Total	$32,270,515	**$156,659,999**	$31,251,986	$21,859,241	$242,041,741

PROJECT STATUS

This is the fifth request for funding. Funding was first requested on behalf of the project for FY 2014-15.

An amendment to the project's program plan approved in June 2015 increased the scope of the project from 72,000 GSF to 220,000 GSF, and expanded the number of centers, departments, and units to be housed by the new facility from 3 to 14. A second program plan amendment approved in June 2017 increased the scope of the project from 220,000 GSF to 390,914 GSF, and expanded the number of units to be housed in the building from 14 to 33.

On August 21, 2017, the committee approved $32.3 million in cash funds spending authority to initiate design and preconstruction on the project. A letter dated November 1, 2017, to the chairs of the CDC and JBC (Attachment A) explains that, in response to a feasibility inquiry from the Governor's Office, the university has added a third phase to the project without changing its scope. Adding a third phase carries a cost increase of $2.0 million due to projected construction inflation.

PROJECT DESCRIPTION / SCOPE OF WORK

The University of Colorado Denver (CU Denver) Anschutz Medical Campus is requesting a combination of state

funds and cash funds spending authority for a three-phase project to construct a new, ten-story, 390,914-GSF Colorado Center for Personalized Medicine and Behavioral Health Building. Since design and preconstruction of the project have already been initiated using cash funds, this year's request for Phase I initiates construction, including site remediation and core and shell construction. Phase II will complete construction and initiate interior build-out, commissioning, and equipment, and Phase III will finish equipping and furnishing the building. A 100-foot pedestrian bridge and unfinished basement will connect the new building to Research Tower II. The first five floors of the building will be connected by a central atrium intended to facilitate occupant collaboration. The new building will house the following functions and features:

- a new tier 3 data center, along with four IT staff workstations (8,643 GSF);
- the Colorado Center for Personalized Medicine (CCPM), (55,717 GSF);
- Behavioral Health, including education, research, and clinical space for the School of Medicine, the Colorado School of Public Health, and the University of Colorado Hospital (62,130 GSF);
- the Colorado Clinical and Translational Sciences Institute (CCTSI), including education, training, career development, laboratory and imaging services, and clinical and translational spaces (31,378 GSF);
- the Simulation Educational HUB, under the Center for Advanced Professional Education (CAPE), including operating room and emergency response/trauma simulation labs and debriefing rooms, patient exam rooms, and skills labs/classrooms (21,964 GSF);
- office and support space, including 160 clinical faculty offices, 57 research faculty offices, support staff offices and workstations, and conference and meeting rooms (52,888 GSF); and
- auxiliary space, including three 150-seat active learning classrooms, a café, health science exhibit space, individual and group study classrooms, and event space (100,325 GSF).

The new building will help the university develop the next generation of groundbreaking therapies and interventions, according to CU Denver. The goal of the CCPM is to integrate predictive, personalized, preventative, and participatory medicine into CU's existing healthcare delivery system. The new building will be the university's home for medical informaticists who work with patient records, bioinformaticists who work with DNA sequence data, computational biologists who develop analytic algorithms, and other medical professionals focused on the application and implementation of personalized medicine, which is the tailoring of medical treatments to individual patients.

The Simulation HUB will allow the university to simulate real-world clinical settings that support the health sciences curriculum and continued professional development without risking patient lives. CU Denver says simulation is a critical curriculum tool that is increasingly used by academic health sciences centers nationwide.

Space dedicated to the Behavioral Health mission will provide education, research, and patient care areas to address mental health and substance abuse issues. Departments to be housed in this space include Psychiatry, Family Medicine, and the Colorado School of Public Health. CCTSI's mission is to improve health and reduce health disparities by accelerating prevention and treatment discoveries and by training clinical and translational investigators. Translational research uses resources, expertise, and techniques from across various health care disciplines to convert basic scientific findings into potential treatments.

The new data center will enable the university to provide reliable, available, and maintainable computing services to over 22,000 faculty, staff, and students across the entire campus. According to the university, data centers typically quantify their operations using a tier system of 1 through 4 as defined by the American National Institute of Standards and the Telecommunications Infrastructure Standards. Tier 1 is the most basic type of server room and tier 4 is the most complex, mission-critical server system; tier 3 is selected by most modern data centers.

Cost assumption. The cost assumption was determined through the program planning process. The cost per GSF is $619, including the cash funds already approved for design and preconstruction. The project cost accounts for future inflation at a rate of 6 percent. The project meets the Art in Public Places and High Performance Certification Program requirements.

PROJECT JUSTIFICATION

CU Denver says it has experienced continued growth in student enrollment and the number of faculty and staff. The

university reports that, in the last ten years, health professional student enrollment has grown by over 75 percent, while total faculty has more than doubled. The total campus population has grown by over 59 percent since 2001. The functions to be housed in the new building are particularly poised for growth. Additionally, rapid changes to health care and health sciences education and research have led to the creation of new programs, centers, and institutes. This has resulted in an increasing space deficit, especially for specialized space, such as the CCPM, the Simulation HUB, and the Data Center. The 2012 Anschutz Medical Campus Facilities Master Plan documents the 658,164-GSF space deficiency that exists for the campus.

The functions comprising the CCPM are housed in various facilities across campus, leading to the displacement of faculty, staff, and students. CU Denver says the CCPM programs do not have space on campus to grow and there is no existing space to accommodate all of the programs' necessary components, including complex hardware used for analyzing data. The project will create a centralized home for the program that will improve operational efficiencies while preparing for accelerated growth. The other programs that will occupy the new building are also stand-alone units, and the university says placing the programs in one building will encourage engagement, communication, and collaboration between these programs, mixing together students, faculty, and clinical practitioners in one dynamic environment. On the teaching side, CU Denver says the CCPM's multi-disciplinary approach will revolutionize medicine instruction, bringing together clinical, computational, epidemiological, laboratory, and counseling training in a manner that could be the first of its kind in the nation.

The university says the existing simulation facilities are small compared to peer institutions and overused, and have no capacity for expansion. Furthermore, the labs do not replicate the size and configuration of the operating and emergency rooms found in today's hospitals, and the patient practice rooms are inadequate to accommodate student assessments. According to CU Denver, the new Simulation HUB will accommodate enrollment growth, improve operational efficiencies, allow the university to repurpose the existing simulation space, and allow it to vacate leased space.

Occupying only 500 ASF and 22 years old, the university says the existing data center in Building 500 is too small for its mission and is obsolete, with no room for future expansion. The existing server room is unreliable and not energy efficient, and these limitations are creating a computing-demand deficiency for the university. The university says that data access, storage, and delivery are critical to modern academics, research, and clinical care. CU Denver further notes that the data center's current location was initially a temporary solution given the facility's outdated infrastructure and limited space.

The university has identified a shortage of offices to accommodate faculty members, many of whom have no dedicated space of their own. The addition of about 220 faculty offices, along with associated support spaces and conference rooms, will help to address the current shortage, as well as a projected faculty growth rate of 21 percent over the next ten years.

Project alternatives. The university considered constructing multiple smaller, dedicated buildings for each need, but it was determined that combining programs with interdisciplinary functions would be more beneficial, allowing for a more appropriately sized building, generating economies of scale, and creating an infill project at a central campus location. The university also considered leasing equivalent space off campus, but it deems this alternative to be costly and undesirable considering the level of technology and specialty design that is required for modern medical research and instruction. Finding existing space on campus for the programs to be housed in the new building is also undesirable, since existing space is at a premium and ill-suited for program mission, and program collaboration would continue to be hindered by the dispersal of various units across the campus. Slowing or halting program growth would stifle innovation and could jeopardize patient care.

PROGRAM INFORMATION

The University of Colorado Denver Anschutz Medical Campus (AMC) is a 217-acre campus located on the former Fitzsimons Army Medical Center in northwest Aurora. The University of Colorado Denver occupies about 3.0 million GSF of the AMC, which is devoted to research, education, clinical activities, a library, and administrative space. The University of Colorado Hospital occupies the remaining 1.8 million GSF of the AMC.

In 2012, the University of Colorado Hospital, Children's Hospital, CU Medicine, and the Colorado School of Medicine committed $100 million to the creation of the CCPM. The center was created in 2015, and works at the intersection

of information science, computer science, social science, behavioral science, and health care projects, such as deciphering the human genome. Biomedical informatics, a focal point for the CCPM, works at the intersection of multiple high-tech disciplines to help generate knowledge useful to such fields as drug design. Other CCPM initiatives to be housed in the new facility include COMPASS, a data warehouse where genomic tests are developed to promote optimal, individualized patient care; Computational Biology Core/Advanced Analytics, which uses computing technology for research into sequence analysis and systems biology; Biostatistics and Health Informatics, which uses analytical methods such as statistics and probability to develop clinical trials, observational and longitudinal studies, and genomics; the DNA Bank, for collection, storage, extraction, and genotype sequencing of samples; and the Genomics Core Lab.

Another pillar of the project is Behavioral Health, which brings together the School of Medicine, Department of Psychiatry, School of Public Health, and the Department of Family Medicine around mental health and substance-abuse issues. The university considers behavioral health a top campus priority, and the building will bring researchers together to develop new approaches for identifying and treating mental illness and addiction, to study root causes, to make use of emerging technologies, and for suicide prevention initiatives. The Department of Psychiatry also operates an outpatient mental health practice that will occupy the facility.

PROJECT SCHEDULE

	Start Date	Completion Date
Design	August 2017	August 2018
Construction	August 2018	June 2021
Equipment	June 2021	August 2021
Occupancy		August 2021

SOURCE OF CASH FUNDS

The source of cash funds for the project is campus reserve funds; gifts, grants, and donations; and university debt issuance. Movement of the CCTSI, the largest grant-funded initiative at the campus, to the new facility will free up almost $1.0 million per year for debt service.

STAFF QUESTIONS AND ISSUES

1. The request information indicates that a portion of the university's cash match will come from gifts. Has the university initiated a fundraising campaign for the project? If so, what is the status of the campaign?

The gift campaign for the Colorado Center for Personalized Medicine and Behavioral Health continues, to date we have secured commitments for $20 million.

OPERATING BUDGET

Operating expenses are paid from institutional sources. The university anticipates the project to increase annual operating costs by $21 per square foot.

University of Colorado
Boulder | Colorado Springs | Denver | Anschutz Medical Campus

Office of Budget and Finance
1800 Grant, Suite 800
Denver, CO 80203-0000

t 303 860 5640
f 303 860 5610

November 1, 2017

The Honorable Kent Lambert
Chair, Joint Budget Committee
Colorado General Assembly
200 E. 14th Avenue, Third Floor
Legislative Services Building
Denver, CO 80203

The Honorable Randy Baumgardner
Chair, Capital Development Committee
Colorado General Assembly
200 E. Colfax Avenue
State Capitol Building
Denver, CO 80203

RE: CU Anschutz - Colorado Center for Personalized Medicine & Behavioral Health
FY 2018-19 Capital Construction Request

Dear Senators Lambert and Baumgardner:

Pursuant to a request from the Governor's Office, the University of Colorado (CU) was asked if it would be feasible to further phase the FY 2018-19 state capital construction request for the Colorado Center for Personalized Medicine and Behavioral Health (CCPM&BH) at the CU Anschutz Medical Campus. CU has determined that it would be able to split the project and request for state funds from a two year phasing to a three year phasing.

This adjustment does not change the scope of the project but rather changes the sequencing associated with the construction of the project. Due to the extension of state funding from FY 2018-19 and FY 2019-20 into FY 2020-21, there is a marginal increase in the project cost due to estimated construction inflation.

The table on the following page identifies these differences, and reconciles to the revised CC-C form associated with this project dated November 1, 2017.

CU sincerely appreciates Governor Hickenlooper including this important project in the FY 2018-19 Budget Request. We look forward to working with the CDC and the JBC as funding for the project is considered during the upcoming legislative session. CU Anschutz physicians provided over 2,600,000 treatments to over 475,000 patients in the most recent fiscal year. Construction of this facility will help us to enhance and expand care to millions of Coloradans over the years to come.

University of Colorado
Boulder | Colorado Springs | Denver | Anschutz Medical Campus

Office of Budget and Finance
1800 Grant, Suite 800
Denver, CO 80203-0000

t 303 860 5640
f 303 860 5610

Initial Request	FY 2018-19	FY 2019-20	FY 2020-21	Total
State	25,262,562	26,778,316	-	52,040,878
University	144,313,093	11,405,000	-	155,718,093
Total	*169,575,655*	*38,183,316*	-	*207,758,971*
Revised Request	**FY 2018-19**	**FY 2019-20**	**FY 2020-21**	**Total**
State	12,346,906	19,846,986	21,859,241	54,053,133
University	144,313,093	11,405,000	-	155,718,093
Total	*156,659,999*	*31,251,986*	*21,859,241*	*209,771,226*
Difference	**FY 2018-19**	**FY 2019-20**	**FY 2020-21**	**Total**
State	(12,915,656)	(6,931,330)	21,859,241	2,012,255
University	-	-	-	-
Total	*(12,915,656)*	*(6,931,330)*	*21,859,241*	*2,012,255*

Thank you for your consideration.

Sincerely,

Todd Saliman
Vice President for Budget and Finance and Chief Financial Officer
University of Colorado System

cc: Representative Millie Hamner, Joint Budget Committee Vice-chair
Senator Kevin Lundberg, Joint Budget Committee
Senator Dominick Moreno, Joint Budget Committee
Representative Dave Young, Joint Budget Committee
Representative Bob Rankin, Joint Budget Committee
Representative Daneya Esgar, Capital Development Committee Vice-chair
Senator Jerry Sonnenberg, Capital Development Committee
Senator John Kefalas, Capital Development Committee
Representative Chris Hansen, Capital Development Committee
Representative Jon Becker, Capital Development Committee
Mr. Alfredo Kemm, Joint Budget Committee staff
Ms. Kori Donaldson, Capital Development Committee staff
Mr. Henry Sobanet, Director, Governor's Office of State Planning and Budgeting
Ms. Alexis Senger, Governor's Office of State Planning and Budgeting staff
Dr. Kim Hunter-Reed, Executive Director, Colorado Department of Higher Education
Mr. Andrew Rauch, Colorado Department of Higher Education staff

Fiscal Year 2018-19 Capital Construction Request

University of Colorado at Boulder

Hellems Arts and Sciences Building Renovation

2004-120

PROGRAM PLAN STATUS

Approved Program Plan? Yes **Date Approved:** October 23, 2017

PRIORITY NUMBERS

Prioritized By	Priority	
CCHE	4 of 34	
OSPB	19 of 53	Not recommended for funding.

PRIOR APPROPRIATION AND REQUEST INFORMATION

Fund Source	Prior Approp.	FY 2018-19	FY 2019-20	Future Requests	Total Cost
CCF	$0	$3,180,000	$9,540,000	$19,080,000	$31,800,000
CF	$0	$4,065,000	$13,320,000	$25,815,000	$43,200,000
Total	$0	**$7,245,000**	$22,860,000	$44,895,000	$75,000,000

ITEMIZED COST INFORMATION

Cost Item	Prior Approp.	FY 2018-19	FY 2019-20	Future Requests	Total Cost
Land Acquisition	$0	$0	$0	$0	$0
Professional Services	$0	$6,453,607	$1,428,000	$2,857,228	$10,738,835
Construction	$0	$95,065	$17,865,382	$35,059,842	$53,020,289
Equipment	$0	$0	$1,302,848	$2,529,058	$3,831,906
Miscellaneous	$0	$43,399	$203,595	$402,873	$649,867
Contingency	$0	$652,929	$2,060,175	$4,045,999	$6,759,103
Software Acquisition	$0	$0	$0	$0	$0
Total	$0	**$7,245,000**	$22,860,000	$44,895,000	$75,000,000

PROJECT STATUS

This is the seventh request for funding. Funding was requested on behalf of the project for FY 2003-04, FY 2006-07, FY 2009-10 through FY 2011-12, and FY 2017-18. The project has been listed on the university's five-year projection of need in the intervening years. Previous years' requests have been for a capital renewal project. A new program plan for the project published in May 2017 rescoped the project to combine the capital renewal elements with a number of program-driven renovations.

PROJECT DESCRIPTION / SCOPE OF WORK

The University of Colorado at Boulder (CU Boulder) is requesting a combination of state funds and cash funds spending authority for the first phase of a four-phase project to address concerns with various electrical and mechanical systems within the 95,065-GSF Hellems Arts and Sciences Building, and to renovate the building's interior to address programming. The university says the project will preserve and protect the nearly 100-year-old building, which is structurally sound but requires modernization and interior reorganization to address life-safety and code issues and to more efficiently accommodate academic needs. The scope of the project includes improvements to the adjacent, outdoor Mary Rippon Theatre. This year's request for Phase I will design the project, while each subsequent phase will renovate one of the building's three wings.

The building assessment will include a materials test and an asbestos and environmental report.

Deferred maintenance to be addressed by the project includes:

- replacing the exterior windows;
- installing a new HVAC system, including associated duct work, grills, shafts, and controls, and integration of a cooling system into the building to enhance year-round building use;
- replacing the electrical system distribution;
- fire-alarm additions and modifications, and upgrading associated safety features;
- upgrading electrical panels;
- replacing interior lighting fixtures;
- roofing improvements, including replacing roof underlaying; insulating the roof underside; restoring damaged gutters and downspouts; and testing, and possibly abating, hazardous materials;
- abating hazardous materials in surfaces and finishes in the building's interior;
- rehabilitating exterior doors;
- exterior masonry repointing and cleaning;
- foundation waterproofing;
- restoring exterior flagstone stairs;
- providing ADA-accessible restrooms with new fixtures;
- correcting stair enclosures for better life-safety accessibility and ADA compliance; and
- updating finishes throughout the building's interior.

Interior renovations to improve program delivery include resizing of office space to create additional classroom space, and reconfiguring the building's layout for operational and energy efficiency purposes. Upgrades to the Mary Rippon Theatre will address functionality, safety, and ADA issues. Considering the age of the facility, both interior and exterior improvements will conform to the building's historical character.

Cost assumption. The cost assumption was determined through the program planning process. The cost per GSF is $789. A 6 percent inflation factor is applied to the project cost based on the recent regional inflation index. The project meets the High Performance Certification and Art in Public Places program requirements.

PROJECT JUSTIFICATION

CU Boulder says the project upgrades a facility that is structurally sound in order to address repairs and renovations necessary for code and ADA compliance, energy efficiency, and program functionality. According to the university, upgrading the systems within the Hellems Arts and Sciences Building will significantly improve building operational deficiencies, reduce negative environmental impacts, save energy and utility costs, and contribute to occupant safety. In addition, the university says the upgrade will greatly enhance occupant comfort and program delivery. If the project is not funded, the university says multiple academic programs will be severely affected.

A facility audit conducted in July 2016 gave the Hellems Arts and Sciences Building a Facility Condition Index rating (FCI) of 41, well below the Office of the State Architects' target rating of 85 for state buildings. This rating is a ratio of a facility's deficiencies to its current replacement value. Upon completion of the project the building is expected to have an FCI in the range of 90 to 95. The audit cited major deficiencies in functionality, building integrity, building and fire code compliance, and hazardous materials contamination for asbestos. Minor deficiencies were reflected in appearance, access, energy systems, and exterior systems.

Project alternatives. The university considered the following alternatives to this budget request:

- Proceed with the original capital renewal project without programmatic renovations. While this option achieves the deferred maintenance goal, the university says it is not responsive to critical academic program need; and

- Reduce the current project to a single phase. This option would reduce the project's time frame by 12-18 months,

but would require relocation of all of the building's occupants during construction. The university says it does not have sufficient swing space for this displacement.

PROGRAM INFORMATION

The Hellems Arts and Sciences Building is a three-story building, with a full basement, containing classrooms, academic offices, and lecture halls. The central portion of the building was constructed in 1921, with two wings added in 1937. The building was designed by Charles Klauder in the Colorado Tuscan Vernacular style, which the university says the campus is known for internationally, and comprises part of a national historic district.

The university conducts core curriculum coursework in Hellems, and the university says that each of its over 31,000 students benefits from the building at some point during their studies at CU Boulder. Components of several departments are housed in the building, including English, Linguistics, Philosophy, and History, along with the ALTEC Language Lab and the College of Media, Communication, and Information. An additional 37 academic departments use the teaching spaces in the building. During the fall 2016 semester, programs housed in the building had an enrollment of 13,246, with 56 percent of freshmen taking a class in Hellems in the 2016-17 school year. The university notes that the occupancy rate in Hellems is above the national average for university classroom buildings. The facility also currently provides office and support space for 225 faculty, staff, and graduate students. The Mary Rippon Theatre hosts the annual Shakespeare Festival, which is staged from Hellems.

PROJECT SCHEDULE

	Start Date	Completion Date
Design	July 2018	July 2019
Construction	July 2019	November 2022
Equipment		
Occupancy		December 2022

SOURCE OF CASH FUNDS

The source of cash funds for the project is campus cash funds, primarily derived from various uncommitted, unrestricted net assets for program improvements.

STAFF QUESTIONS AND ISSUES

1. By including in the scope of the project the renovations to improve academic programming, the project's cost per square foot has gone from $316 to $789. What is driving this large increase?

The initial scope which generated the $316 cost per square foot, addressed critical life safety and building system upgrades to extend the building life cycle by 20-25 years, with limited update of building, structure, configuration, and finishes. The current proposed project is more robust and will be a complete renovation of the building intended to address all building systems, including structural systems, complete plumbing, electrical, building envelope, and interior wall systems along with reconfiguration of the building layout to extend the building lifecycle by 50 to 60-plus years. The campus acknowledges the increase in cost per square foot but the building's planned lifecycle is also more than doubling.

2. The program plan states that the cash funds contributed to the project derive from "...various uncommitted, unrestricted net assets for program improvements." How did these assets accrue to the university? Does the university have this $43.2 million in hand, or is it still accruing this sum?

The CU Boulder campus established a Capital Asset Management Program (CAMP) in 2014 with the intention of

helping address its deferred maintenance backlog. The CAMP plan prioritizes and redirects university resources over time to address some of the many deferred maintenance needs on the campus. We estimate the need on the Boulder Campus is in excess of $1 billion. Some of the funds for the Hellems project are currently on hand. Depending on timing, the balance will either come from accrued CAMP funds or from borrowing. If the university funds are not spent on Hellems, they will be diverted to other crucial deferred maintenance needs on the campus.

OPERATING BUDGET

Operating expenses are paid from institutional sources. The university expects the project to result in no new operating costs.

Fiscal Year 2018-19 Capital Construction Request

University of Colorado Denver

Engineering and Physical Sciences Building

2015-061

PROGRAM PLAN STATUS

Approved Program Plan? Yes **Date Approved:** October 29, 2015

PRIORITY NUMBERS

Prioritized By	Priority	
CCHE	8 of 34	
OSPB	23 of 53	Not recommended for funding.

PRIOR APPROPRIATION AND REQUEST INFORMATION

Fund Source	Prior Approp.	FY 2018-19	FY 2019-20	Future Requests	Total Cost
CCF	$0	$13,210,182	$28,090,233	$10,670,472	$51,970,887
CF	$0	$4,403,394	$9,363,411	$3,556,824	$17,323,629
Total	$0	**$17,613,576**	$37,453,644	$14,227,296	$69,294,516

ITEMIZED COST INFORMATION

Cost Item	Prior Approp.	FY 2018-19	FY 2019-20	Future Requests	Total Cost
Land Acquisition	$0	$0	$0	$0	$0
Professional Services	$0	$9,331,021	$0	$0	$9,331,021
Construction	$0	$7,436,377	$28,433,528	$10,879,650	$46,749,555
Equipment	$0	$0	$6,442,103	$1,820,754	$8,262,857
Miscellaneous	$0	$7,436	$794,506	$233,501	$1,035,443
Contingency	$0	$838,742	$1,783,507	$1,293,391	$3,915,640
Software Acquisition	$0	$0	$0	$0	$0
Total	$0	**$17,613,576**	$37,453,644	$14,227,296	$69,294,516

PROJECT STATUS

This is the third request for funding. Funding was first requested on behalf of the project for FY 2016-17. A 2017 program plan amendment moved the planned location of the new building from adjacent to the North Classroom Building to southeast of the Science Building, facing Speer Boulevard.

PROJECT DESCRIPTION / SCOPE OF WORK

The University of Colorado Denver (CU Denver) is requesting a combination of state funds and cash funds spending authority for the first phase of a three-phase project that constructs a 60,000-GSF, three-story academic building adjacent to the Auraria Science Building on the Auraria Higher Education Center (AHEC) campus, and renovates 38,368 GSF in the nearby North Classroom Building. CU Denver says the project will allow for growth and consolidation of the College of Engineering and Applied Sciences (CEAS) in a new, state-of-the-art facility, and will update existing space for use by the College of Liberal Arts and Sciences (CLAS).

The new building will include instructional labs, high-bay labs for the testing of large-scale projects, computer labs, research labs, classrooms, academic offices, and support space for CEAS. Approximately 80 percent of the assignable area within the new building will be used for instructional purposes, while the remaining 20 percent will be used for academic support and service functions. The new building will provide space for the following departments

and functions:

- Civil Engineering (1,784 ASF);
- Electrical Engineering (6,408 ASF);
- Mechanical Engineering (6,930 ASF);
- Computer Science and Engineering (5,661 ASF);
- Bioengineering (1,620 ASF);
- other class and open labs (3,910 ASF);
- student services (3,527 ASF);
- IT/facilities space (1,120 ASF); and
- Interdisciplinary Innovation Hub (5,040 ASF).

The space currently used by CEAS in the North Classroom Building will be vacated and renovated for use by CLAS. Several CLAS departments, such as Health and Behavioral Sciences, are located in disparate areas of the Auraria campus. Relocating these departments to the North Classroom Building will consolidate faculty and students within CU Denver's neighborhood on the Auraria campus. The renovations will include 21,000 ASF for a CLAS Student Success Hub, which the university says will serve as a "one stop" center where students in its largest college can find the support resources they need to succeed. CEAS will also relocate some functions that are currently housed in the Boulder Creek and Administration Buildings. Space will also be freed up in three other university buildings as a result of the programming consolidations that will take place under the project, but the university has not yet allocated this space.

Cost assumption. The cost assumption was determined through the program planning process. The cost per GSF for both the renovation and new construction is $704. The project meets the Art in Public Places and High Performance Certification Program requirements.

PROJECT JUSTIFICATION

According to CU Denver, the project addresses critical instructional space challenges by replacing obsolete, heavily used lab and classroom space for growing programs with state-of-the-art, larger, and more innovative environments, and by renovating space in the North Classroom Building containing outdated building systems into a consolidated humanities hub. The university says the new lab space will vastly improve the current CEAS labs, some of which have had no improvements in the last 20 years. CU Denver also says that the programs impacted by the project have seen significant enrollment growth in recent years, and that space occupied by these programs is dispersed across several areas, making collaboration among students and faculty very challenging.

CU Denver says the current facilities that house CEAS and CLAS programs are severely overcrowded and overutilized, and do not have capacity to grow. CEAS has had a 25 percent increase in enrollment over the last five years and has reached maximum facility capacity. The deficiency of research space has made the recruitment and retention of faculty and graduate students difficult. The college has also been unable to fully support opportunities for undergraduate research. The university projects that CEAS will grow by 59 percent over the next ten years. CLAS freshman enrollment grew 148 percent from 2010 to 2016, and undergraduate and graduate enrollment is expected to grow another 8 percent by 2025.

According to CU Denver, space occupied by CEAS and CLAS in the North Classroom building is obsolete and does not meet modern teaching and research needs. Issues with the labs include deficient HVAC systems, outdated audio/visual equipment, poor visibility for students, and dated furnishings. Additionally, many of the lab spaces were not originally built as labs and do not effectively advance engineering instruction or investigation. Numerous code issues exist in the building related to fire safety, emergency lighting, the building's generator, and compliance with the Americans with Disabilities Act. Furthermore, the distribution of CEAS and CLAS programs across the AHEC campus, in downtown Denver, and on the CU Anschutz Medical Campus impedes collaboration and interdisciplinary learning, according to the university.

Project alternatives. CU Denver says the demand for additional labs and support spaces can only be met through new construction or the lease of comparable space off-campus. According to the university, leasing off-campus

space would be more costly. When modeled over a 25-year timeframe, the university estimates the total life-cycle costs of leased space to be $6.0 million more than the construction of a new facility. Furthermore, it is unrealistic to find leasable space with the specialized needs of engineering research labs within close proximity to campus, according to CU Denver. The university also considered five alternate sites for the new building, but the preferred site proved to be the best for reasons ranging from cost to poor access to displacement of other programs.

PROGRAM INFORMATION

CEAS at CU Denver offers undergraduate and graduate programs in bioengineering, civil engineering, electrical engineering, mechanical engineering, and computer science and engineering. CEAS had a fall 2017 enrollment of 883 undergraduates and 409 graduate students. Graduate programs include a master of science, master of engineering, and doctor of philosophy degree. CEAS also offers professional training and continuing education classes on engineering topics. CLAS offers numerous undergraduate and graduate degrees in the humanities, natural and physical sciences, social sciences, and integrated sciences. CLAS had a fall 2017 enrollment of 6,143 undergraduates and 502 graduate students.

AHEC is comprised of three separate higher education institutions, the Community College of Denver, Metropolitan State University of Denver, and CU Denver, all of which share classroom space, parking, and general services on the campus. AHEC manages campus facilities and non-academic functions, including the library, the child care center, classroom and event scheduling, and campus police and security.

PROJECT SCHEDULE

	Start Date	Completion Date
Design	July 2018	June 2019
Construction	July 2019	July 2021
Equipment		
Occupancy		July 2021

SOURCE OF CASH FUNDS

The source of cash funds is capital reserves and donations. The university indicates that the project may be financed through a future bond issuance. The interest rate and term will be determined by market conditions at the time of issuance.

STAFF QUESTIONS AND ISSUES

1. Is the source of cash funds still capital reserves and donations? If so, has the university initiated a fundraising campaign for the project?

CU Denver Advancement is laying the groundwork and is in the initial stages of a fundraising campaign to support the Engineering building. The new CEAS Dean will join the university on January 1, 2018 and is tasked with this as a top priority. We have hired a new associate director of development to work with the college; she has experience working on capital campaigns as well.

University of Colorado Denver

Engineering and Physical Sciences Building

OPERATING BUDGET

Operating expenses are paid from institutional sources. The college anticipates an increase in operating costs of $21 per assignable square foot annually, or $781,200.

Fiscal Year 2018-19 Capital Construction Request

University of Colorado at Boulder

Guggenheim Geography Building Renovation

PROGRAM PLAN STATUS

2008-056

Approved Program Plan? Yes **Date Approved:** October 23, 2017

PRIORITY NUMBERS

Prioritized By	Priority	
CCHE	13 of 34	
OSPB	28 of 53	Not recommended for funding.

PRIOR APPROPRIATION AND REQUEST INFORMATION

Fund Source	Prior Approp.	FY 2018-19	FY 2019-20	Future Requests	Total Cost
CCF	$0	$985,612	$8,903,221	$0	$9,888,833
CF	$0	$1,478,416	$13,354,813	$0	$14,833,229
Total	$0	**$2,464,028**	$22,258,034	$0	$24,722,062

ITEMIZED COST INFORMATION

Cost Item	Prior Approp.	FY 2018-19	FY 2019-20	Future Requests	Total Cost
Land Acquisition	$0	$0	$0	$0	$0
Professional Services	$0	$2,211,363	$1,733,879	$0	$3,945,242
Construction	$0	$0	$17,249,465	$0	$17,249,465
Equipment	$0	$0	$1,220,303	$0	$1,220,303
Miscellaneous	$0	$39,040	$223,856	$0	$262,896
Contingency	$0	$213,625	$1,830,531	$0	$2,044,156
Software Acquisition	$0	$0	$0	$0	$0
Total	$0	**$2,464,028**	$22,258,034	$0	$24,722,062

PROJECT STATUS

This is a new, never-before-requested project. Elements of the project have appeared on the university's five-year projection of need as a capital renewal project since 2006. A June 2017 program plan changed the scope of the project to include programmatic renovations.

PROJECT DESCRIPTION / SCOPE OF WORK

The University of Colorado at Boulder (CU Boulder) has requested a combination of state funds and cash funds spending authority for the first phase of a two-phase project to renovate the Guggenheim Geography Building (22,908 GSF). The project combines $9.9 million in capital renewal system upgrades with $14.8 million in academic/programmatic improvements. The university says the project will revitalize an antiquated building with a low Facilities Condition Index (FCI) rating and facilitate greater operational and energy efficiency. This year's request for Phase I will design the project, while Phase II will perform the renovations.

CU Boulder says the capital renewal elements of the project will address the following systems and issues in Guggenheim:

- the HVAC system, including installing air conditioning in the building;

- utility distribution lines;
- fire-rated doors, fire alarm systems, and fire-rated wall penetrations;
- the electrical system, including the transformer, panel boards, and feeder;
- exterior windows, including skylights;
- lighting systems;
- wood carpentry;
- the sanitary waste system;
- elevator motors;
- plumbing;
- telephone systems;
- roofing and gutters;
- interior doors and associated hardware;
- asbestos mitigation;
- construction of additional fire exits;
- soffit renewal;
- exterior grading to address water intrusion; and
- exterior wall cleaning and restoration.

The project also performs programmatic renovations of the building's interior by resizing offices, reconfiguring the classrooms and offices to consolidate tenants, and upgrading corridors and the overall building layout to improve traffic patterns.

Cost assumption. The cost assumption was determined through the program planning process, which relied upon campus costs for the recently completed Ketchum Arts and Sciences Renovation project. The Ketchum project was similar to the Guggenheim project in that it revitalized an historic building (built in 1938) with structural integrity that needed renewal of its basic building systems. The cost per GSF is $1,079. The project meets the Art in Public Places and High Performance Certification Program requirements.

PROJECT JUSTIFICATION

According to CU Boulder, Guggenheim, which was constructed in 1908 and has received minimal improvements over the years, requires an overhaul of its systems to address life-safety, code, deferred maintenance, and tenant comfort issues. Program-based renovations will consolidate the scattered Department of Geography, increase the operational efficiency of the building, and provide modern facilities in support of the social science programs housed in the building.

Building system improvements. The university explains that, although Guggenheim has not received a wholesale renovation since its construction, the historic building remains structurally sound but in need of upgrades to its basic systems. A professional audit performed in February 2014 gave the building an FCI of 43, well below the Office of the State Architect's target rating of 85 for state buildings. This rating is a ratio of facility deficiencies to current replacement value. The project's capital renewal improvements will address various life-safety and code compliance issues. For instance, a metal ladder extending down the south side of the three-story building provides fire egress; the project will mitigate this issue by developing fire-rated egress pathways that meet code, and will upgrade other fire-related systems to increase safety. The project also abates asbestos, improves ADA accessibility, and enhances room capacity. Installation of a cooling system in Guggenheim will improve occupant comfort. The systems improvements will also address deferred maintenance, energy efficiency, worn finishes, preservation of key historical elements, and the building's appearance.

Program-related improvements. The university says that Guggenheim's current layout is a legacy of its original construction, with classroom and lab spaces scattered around the building, intermingling with faculty offices. Office configurations create inefficient layouts on each floor, and the offices are much larger than current standards, resulting in multiple occupants being assigned to single offices. Narrow corridors access offices, and configurations have been further compromised by retrofits to accommodate more modern building systems and life-safety

measures. Under the project, the building's interior will be reconfigured with an eye toward operational efficiency, with high-traffic classroom areas on the main level of the building where they are easily accessible by students, and semi-private office areas and graduate student suites positioned away from the high-traffic areas. Spaces will also be consolidated by academic type, providing for greater efficiency and easier access for students to classroom and study space. Currently, the Department of Geography is housed in four different buildings across campus. The programmatic renovations will allow Geography to centralize its operations.

PROGRAM INFORMATION

Built in 1908, the Guggenhiem Geography Building housed the School of Law until 1959 when the Geography Department occupied it. Geography offers BA, MA, and PhD degrees, and conducts theoretical and applied work in human geography, environment and society geography, physical geography, and geographic information science. Although the Geography Department is the primary occupant in Guggenheim, in fall 2016 the building hosted 23 departments that offered at least one course in it, of which three departments offered graduate instruction in the building. Overall, 2,900 students studied in the building in fall 2016, with 286 graduate credit hours undertaken. Guggenheim provides office and support space for almost 100 faculty, staff, and graduate students.

PROJECT SCHEDULE

	Start Date	Completion Date
Design	July 2018	July 2019
Construction	July 2019	December 2020
Equipment		
Occupancy		January 2021

SOURCE OF CASH FUNDS

The source of cash funds for the project is various uncommitted, unrestricted net assets.

STAFF QUESTIONS AND ISSUES

1. The program plan states that the cash fund source for the project is "various uncommitted, unrestricted net assets". Can you please briefly elaborate?

The CU Boulder campus established a Capital Asset Management Program (CAMP) in 2014 with the intention of helping address its deferred maintenance backlog. The CAMP plan prioritizes and redirects university resources over time to address some of the many deferred maintenance needs on the campus. We estimate the need on the Boulder Campus is in excess of $1 billion. Some of the funds for the Guggenheim project are currently on hand. Depending on timing, the balance will either come from accrued CAMP funds or from borrowing. If the university funds are not spent on Guggenheim, they will be diverted to other crucial deferred maintenance needs on the campus.

2. What accounts for the high cost-per-GSF ($1,079) for this project?

The proposed project will be a complete renovation of the building intended to address all building systems, including structural systems, complete plumbing, electrical, building envelope and interior wall systems along with reconfiguration of the building layout to extend the building lifecycle by 50 to 60-plus years. In addition to planning for a longer lifecycle through this renovation, the building is within the Norlin Quadrangle Historic district and will need to comply with state and national policies for building renovation. Building location on campus provides limited access in a congested area of campus along with wood frame floor and roof construction create challenging conditions for construction to meet current life safety codes.

University of Colorado at Boulder

Guggenheim Geography Building Renovation

OPERATING BUDGET

Operating expenses are paid from institutional sources. The university expects the project to result in no new operating costs; the recently completed renovations to the Ketchum building resulted in a reduction in energy use to about one third of former usage, and CU Boulder expects similar results after the Guggenheim renovation.

Fiscal Year 2018-19 Capital Construction Request

University of Colorado Denver

College of Nursing and Student Services Renovation

2019-004

PROGRAM PLAN STATUS

Approved Program Plan? Yes **Date Approved:** October 23, 2017

PRIORITY NUMBERS

Prioritized By	Priority	
CCHE	22 of 34	
OSPB	36 of 53	Not recommended for funding.

PRIOR APPROPRIATION AND REQUEST INFORMATION

Fund Source	Prior Approp.	FY 2018-19	FY 2019-20	Future Requests	Total Cost
CCF	$0	$8,145,216	$0	$0	$8,145,216
CF	$0	$8,145,216	$0	$0	$8,145,216
Total	$0	**$16,290,432**	$0	$0	$16,290,432

ITEMIZED COST INFORMATION

Cost Item	Prior Approp.	FY 2018-19	FY 2019-20	Future Requests	Total Cost
Land Acquisition	$0	$0	$0	$0	$0
Professional Services	$0	$1,971,176	$0	$0	$1,971,176
Construction	$0	$9,542,095	$0	$0	$9,542,095
Equipment	$0	$3,697,720	$0	$0	$3,697,720
Miscellaneous	$0	$303,706	$0	$0	$303,706
Contingency	$0	$775,735	$0	$0	$775,735
Software Acquisition	$0	$0	$0	$0	$0
Total	$0	**$16,290,432**	$0	$0	$16,290,432

PROJECT STATUS

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

PROJECT DESCRIPTION / SCOPE OF WORK

The University of Colorado Denver (CU Denver) is requesting a combination of state funds and cash funds spending authority to renovate 56,888 GSF in three buildings on the Anschutz Medical Campus: (1) Health Sciences Library; (2) Education Building 2 North; and (3) Education Building 1. The university says the renovations will increase capacity in existing buildings to accommodate student, faculty, and staff growth; provide modern instructional and research spaces for growing health care-related functions; and consolidate the Department of Student Affairs in one location while preventing the division of the College of Nursing.

The university explains that the buildings subject to space renovation under the project are in excellent condition structurally, each having a Facility Condition Index rating above 90; no building systems will require updating under the project. Rather, space within the buildings will be reconfigured and remodeled for more efficient allocation to growing programs. Following are the types of spaces that will result from the renovations, and the functions that will occupy the space, by building affected:

- Health Sciences Library: Building administration and staff — 8,711 GSF for an information desk and work space; Office of the Bursar — 561 GSF for work space and a service area; Financial Aid and Scholarship Office — 1,732 GSF for work space and a service area; Office of the Registrar — 2,802 GSF for work space and a service area; Office of Diversity and Inclusion — 1,597 GSF for work space; Office of Equity — 1,390 GSF for work space; Disability Resources Services — 1,124 GSF for work space and a service area; Visualization and teaching labs — 3,365 GSF; and Student learning commons — 3,007 GSF.

- Education Building 2 North: College of Nursing — 19,000 GSF for an educational simulation center and 10,200 GSF for faculty and staff work space; Area Health Education Center — 3,000 GSF for staff work space; and Office of Information Technology — 2,300 GSF for staff work space.

- Education Building 1: School of Medicine — 4,021 GSF for classrooms.

Cost assumption. The cost assumption was determined through the program-planning process and utilizing data from a comparable renovation project. The cost per GSF is $286. The project cost does not account for future inflation. The project meets the Art in Public Places program requirements. The project is not required to comply with the requirements of the High Performance Certification Program because the anticipated cost of the renovation is less than 25 percent of the current replacement value of the building.

PROJECT JUSTIFICATION

Although the buildings subject to renovation under the project were completed and occupied in 2007, CU Denver says many of the interior instructional and workplace spaces are outdated and no longer adequately support intended functions. The Anschutz campus has run out of facility space, while academic, clinical, and research programs continue to grow, along with administrative functions. The university is seeking to increase capacity by renovating existing space, transitioning old environments housing disused functions into modern workplaces and flexible learning environments to help alleviate the space shortage.

Since 2001, student enrollment at the Anschutz campus has doubled. In response to a physician shortage in Colorado and nationwide, the School of Medicine's enrollment has increased by 15 percent since 2014. The university says the shortage of nurses is even more significant, and it is committed to growing the College of Nursing's enrollment accordingly. Doing so would overwhelm already heavily utilized laboratories and instructional support spaces. By renovating underutilized space in the Health Sciences Library, CU Denver will be able to consolidate the Department of Student Affairs in that space while allowing the health care-related functions to expand into modern, renovated space vacated by the student affairs functions. When the renovations are complete, the College of Nursing will have a better-quality, co-located space to support its mission and establish a presence for the college on campus.

Under the project, CU Denver will transition the Health Sciences Library from a traditional library to a digital library and learning commons, with a reduced emphasis on physical storage of, and access to, paper-based resources. The transition from physical to digital allows the library to accomplish its purpose in a reduced footprint, freeing up the space once occupied by stacks of books to be used for another purpose.

Project alternatives. The university has considered leasing off-campus space for the College of Nursing, but it does not consider this to be a sustainable long-term option, and doing so would split the college's functions among multiple locations, negatively impacting program delivery. The university could also cap enrollment and limit new faculty hires for the College of Nursing, which is inadvisable considering the current nursing shortage.

PROGRAM INFORMATION

The three buildings to be partially renovated under the project were among seven buildings constructed on the Anschutz campus in 2007 through certificates of participation (COP) repaid from a combination of General Fund moneys and proceeds from the Tobacco Master Settlement Agreement. Lease payments for the COPs are scheduled through FY 2030-31.

Established in 1898, the CU College of Nursing offers bachelor's of science, master of science, doctor of nursing

practice, and doctor of philosophy degrees. Graduate specialties include adult-gerontology nurse practitioner and nurse specialist, certified nurse midwife, family nurse practitioner, pediatric primary care and acute care nurse practitioner, psychiatric mental health nurse practitioner, and women's health nurse practitioner. The university says the college is annually recognized by U.S. News and World Report as among the nation's leaders in nursing education.

The offices within the Department of Student Services assist students in navigating various aspects of university life, including billing; financial aid; enrolling for classes; and cultural, equity, and disability issues.

PROJECT SCHEDULE

	Start Date	Completion Date
Design	August 2018	March 2019
Construction	April 2019	August 2020
Equipment		
Occupancy		August 2020

SOURCE OF CASH FUNDS

The source of cash funds for the project is university cash reserves and gifts.

STAFF QUESTIONS AND ISSUES

1. The request information indicates that a portion of the university's cash match will come from gifts. Has the university initiated a fund-raising campaign for the project? If so, what is the status of the campaign?

While the request information indicates that a portion of the university's cash will come from gifts, it is not an area that donors have been likely to support in the past, as it is almost entirely educational and student support service focused. The CU Anschutz campus will continue to work to identify alternate sources to fund the project from university cash if gifts do not materialize.

OPERATING BUDGET

Operating expenses are paid from institutional sources. The university expects the project to result in no new operating costs, since no new square footage is being added to the campus by the project.

Fiscal Year 2018-19 Capital Construction Request

University of Colorado at Colorado Springs

Engineering and Applied Science (EAS) Renovation

2015-062

PROGRAM PLAN STATUS

Approved Program Plan? Yes **Date Approved:** May 8, 2015

PRIORITY NUMBERS

Prioritized By	Priority	
CCHE	29 of 34	
OSPB	43 of 53	Not recommended for funding.

PRIOR APPROPRIATION AND REQUEST INFORMATION

Fund Source	Prior Approp.	FY 2018-19	FY 2019-20	Future Requests	Total Cost
CCF	$0	$8,405,336	$24,261,773	$0	$32,667,109
Total	$0	**$8,405,336**	$24,261,773	$0	$32,667,109

ITEMIZED COST INFORMATION

Cost Item	Prior Approp.	FY 2018-19	FY 2019-20	Future Requests	Total Cost
Land Acquisition	$0	$0	$0	$0	$0
Professional Services	$0	$638,509	$1,971,723	$0	$2,610,232
Construction	$0	$5,766,946	$18,011,441	$0	$23,778,387
Equipment	$0	$1,054,107	$1,698,049	$0	$2,752,156
Miscellaneous	$0	$181,653	$374,944	$0	$556,597
Contingency	$0	$764,121	$2,205,616	$0	$2,969,737
Software Acquisition	$0	$0	$0	$0	$0
Total	$0	**$8,405,336**	$24,261,773	$0	$32,667,109

PROJECT STATUS

This is the third request for funding. Funding was first requested on behalf of the project for FY 2016-17.

PROJECT DESCRIPTION / SCOPE OF WORK

The University of Colorado at Colorado Springs (UCCS) is requesting state funds for the first phase of a two-phase project to renovate the 74,022-GSF Engineering and Applied Sciences (EAS) Building to address building deficiencies and to improve classroom and research areas. This year's request for Phase I makes improvements in the 20,000-GSF research and office wing of the building to improve energy efficiency, reallocate space to support additional research functions, and update finishes in existing research and teaching spaces. Phase II will renovate the remainder of the building.

Specifically, Phase I of the project improves the energy efficiency of the research and office wing by replacing the chillers and cooling towers, installing a better-insulated roof, and extending the existing direct digital control system to improve heating and cooling. It also replaces worn finishes in public spaces and offices and reconfigures research areas to address deficiencies. Phase II of the project addresses concerns with ADA accessibility in some public spaces, replaces the railings in the atrium to reduce the risk of falls, and replaces worn finishes in the remainder of the building.

Cost assumption. The cost assumption was determined through the program planning process. The cost per GSF is $441. The project cost accounts for future inflation at a rate of 6 percent per year. The project meets the Art in Public Places and High Performance Certification Program requirements. The university plans to renovate the building to the LEED Gold standard.

PROJECT JUSTIFICATION

UCCS says that enrollment in engineering programs housed in the EAS Building more than doubled between the fall of 2007 and the fall of 2015. It attributes this growth to multiple factors, including the creation of Bachelor of Innovation and Bachelor of Science in Engineering Education programs, which have attracted more students than projected; efforts to recruit and retain students and faculty; and the quality of the programming. In addition, the university says it is growing its externally funded research activities, with expectations that this funding will double in the next five to seven years, creating research space pressures. The university says that, in its current state, the EAS Building is insufficient to accommodate this growth, its systems and amenities are obsolete and not code compliant, and its classrooms show three decades of heavy use.

UCCS explains that the type of research conducted in the EAS Building has changed significantly in the last 30 years and that many of the research spaces, particularly the clean room and associated support spaces, are inadequate for the type of research now underway. The university contends that improved research spaces and building finishes will support growing enrollment in engineering programs and aid in the recruitment and retention of highly qualified faculty and students. It will also increase the opportunities for external grant funding for research conducted in the building. The newly renovated research and office wing will allow for the expansion of programs such as battery control research, propulsion research, and research related to cyber security. For instance, UCCS notes that it was recently named one of eight members of a cyber-security consortium created under House Bill 16-1453. The university expects this consortium to have a major impact on its Computer Science and Computer Engineering programs, which will drive a demand for cyber-security education, thus creating additional space demands in the EAS Building.

According to UCCS, the EAS Building has received minimal improvements since it was originally constructed in 1985 and it has the highest energy utilization index of all buildings on campus, noting that the 8 percent of space in the building dedicated to research uses over 33 percent of the building's total energy. The university reports that the Facilities Condition Index (FCI) of the building is 56, well below the Office of the State Architect's target rating of 85 for state buildings. This rating is a ratio of a facility's deficiencies to its current replacement value. The project will update the building to correct ADA and life-safety code issues that pose a risk of injury to the building's users, and replace inefficient heating and cooling equipment to improve energy efficiency. The university says it sees no alternative to renovating the EAS Building.

PROGRAM INFORMATION

The EAS Building houses two of the three academic departments in the College of EAS: Computer Science and Electrical and Computer Engineering (ECE). A third department, Mechanical and Aerospace Engineering (MAE), is located in a different building. The EAS Building also houses the Department of Mathematics. UCCS says the ECE and MAE Departments are nationally recognized for their battery control and propulsion research activities. The east wing of the EAS Building has two large research laboratories, including a microelectronics lab and an electromagnetic lab. The Vision and Security Technology Laboratory in the EAS Building hosts more than 20 students and researchers at all levels.

Fiscal Year 2018-19 Capital Construction Request

University of Colorado at Colorado Springs

Engineering and Applied Science (EAS) Renovation

PROJECT SCHEDULE

	Start Date	Completion Date
Design	July 2018	May 2019
Construction	June 2019	August 2021
Equipment		August 2021
Occupancy		August 2021

SOURCE OF CASH FUNDS

This project is not funded from cash sources.

STAFF QUESTIONS AND ISSUES

1. Since the university says it is increasing its externally funded research activities, did it consider contributing a cash funding portion to the project based on the proceeds of these activities?

UCCS does understand the importance of supporting a project by contributing a cash component, as we have done for many capital projects, and we are still pursuing potential alternative cash funding sources for this project. When submitting this request, using indirect cost recovery (ICR) to fund a portion of the project was a consideration, however current research activity would not support this type of project. Once this engineering space is remodeled we anticipate research opportunities will be improved and future funding may become available through indirect cost recovery for campus needs.

OPERATING BUDGET

Operating expenses are paid from institutional sources. UCCS anticipates the project will result in a 10 to 15 percent reduction in building energy costs, or a savings of about $25,000 per year.

University of Colorado System
Five-Year Projection of Need
FY 2018-19 through FY 2022-23

Project Title	Fund Source	FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	Totals
University of Colorado at Boulder							
Capital Construction (Current Year)							
Hellems Arts and Sciences Building (Capital Renewal)	CCF	$3,180,000	$9,540,000	$9,540,000	$9,540,000	$0	$31,800,000
	CF	4,065,000	13,320,000	12,908,060	12,906,940	0	$43,200,000
Guggenheim Hall (Capital Renewal)	CCF	985,612	8,903,221	0	0	0	$9,888,833
	CF	1,478,416	13,354,813	0	0	0	$14,833,229
Capital Construction (Out Year)							
Henderson Building (Capital Renewal)	CCF	0	9,086,744	0	0	0	$9,086,744
	CF	0	0	0	0	0	$0
CU Boulder Capital Construction Subtotals	CCF	*4,165,612*	*27,529,965*	*9,540,000*	*9,540,000*	*0*	*$50,775,577*
	CF	*5,543,416*	*26,674,813*	*12,908,060*	*12,906,940*	*0*	*$58,033,229*
University of Colorado at Colorado Springs							
Capital Construction (Current Year)							
Engineering and Applied Science (EAS) Renovation	CCF	8,405,336	24,261,773	0	0	0	$32,667,109
	CF	0	0	0	0	0	$0
UCCS Capital Construction Subtotals	CCF	*8,405,336*	*24,261,773*	*0*	*0*	*0*	*32,667,109*
	CF	*0*	*0*	*0*	*0*	*0*	*0*
University of Colorado Denver							
Capital Construction (Current Year)							
Building 500 Partial Renovation	CCF	5,266,449	0	0	0	0	$5,266,449
	CF	5,266,449	0	0	0	0	$5,266,449
College of Nursing and Student Services Renovations	CCF	8,145,216	0	0	0	0	$8,145,216
	CF	8,145,216	0	0	0	0	$8,145,216
Colorado Center for Personalized Medicine Building	CCF	12,346,906	19,846,986	21,859,241	0	0	$54,053,133
	CF	144,313,093	11,405,000	0	0	0	$155,718,093
Engineering and Physical Sciences Building	CCF	13,210,182	28,090,233	10,670,472	0	0	$51,970,887
	CF	4,403,394	9,363,411	3,556,824	0	0	$17,323,629

University of Colorado System (Cont.)
Five-Year Projection of Need
FY 2018-19 through FY 2022-23

Project Title	Fund Source	FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	Totals
University of Colorado Denver (Cont.)							
Capital Construction (Out Year)							
CU Denver Building Renovation	CCF	$0	$0	$25,688,468	$0	$0	$25,688,468
	CF	0	0	25,688,467	0	0	$25,688,467
Health Science Library and Education Buildings Renovation	CCF	0	0	8,329,024	0	0	$8,329,024
	CF	0	0	2,776,341	0	0	$2,776,341
Instructional Lab Wing	CCF	0	12,216,831	0	0	0	$12,216,831
	CF	0	12,216,830	0	0	0	$12,216,830
CU Denver Capital Construction Subtotals	CCF	*38,968,753*	*60,154,050*	*66,547,205*	*0*	*0*	*$165,670,008*
	CF	*162,128,152*	*32,985,241*	*32,021,632*	*0*	*0*	*$227,135,025*
Capital Construction Subtotals	CCF	*51,539,701*	*111,945,788*	*76,087,205*	*9,540,000*	*0*	*$249,112,694*
	CF	*167,671,568*	*59,660,054*	*44,929,692*	*12,906,940*	*0*	*$285,168,254*
Controlled Maintenance Subtotals	CCF	*11,120,753*	*See OSA Annual Report.*				*$11,120,753*
Total: State Funds		*62,660,454*	*111,945,788*	*76,087,205*	*9,540,000*	*0*	*$260,233,447*
Grand Total: All Fund Sources		**$230,332,022**	**$171,605,842**	**$121,016,897**	**$22,446,940**	**$0**	**$545,401,701**

Source: Department of Higher Education and Office of the State Architect

COVER PAGE
University of Northern Colorado

FY 2018-19 CAPITAL CONSTRUCTION REQUESTS (LISTED IN OSPB PRIORITY ORDER)
NOT RECOMMENDED FOR FUNDING BY OSPB:

- Replace Heating Plant Boiler #3 (Capital Renewal) *(previously requested)*
- Gray Hall Mechanical Systems Improvements (Capital Renewal) (previously requested)

TOTAL: FY 2018-19 CAPITAL CONSTRUCTION STATE-FUNDED REQUEST AMOUNT = $6,820,769

FY 2018-19 CONTROLLED MAINTENANCE REQUESTS (3)
NOT RECOMMENDED FOR FUNDING BY OSPB:
LEVEL II:

- Replace Chiller, McKee Hall ($470,837)
- Replace Windows, Frasier Hall ($1,094,476)

LEVEL III:

- Replace Roof, Arts Annex, Ross, and Skinner Buildings ($548,493)

HISTORY OF STATE FUNDING

- **$45.3 million** has been appropriated to the university on behalf of capital projects since FY 2013-14. This represents **4.8 percent** of the total amount appropriated on behalf of all capital construction and controlled maintenance projects during this period.

- **$1.6 million** was appropriated in **FY 2017-18**.

- An additional **$2.1 million** was authorized through Senate Bill 17-267 for controlled maintenance.

INVENTORY OF GENERAL FUND SUPPORTED FACILITIES

- The General Fund supported inventory of university facilities totals **1,528,707 GSF**. This total represents **3.2 percent** of the entire General Fund supported inventory of state buildings.

RECENT CDC VISITS

- Campus tour (June 2015)

Fiscal Year 2018-19 Capital Construction Request

University of Northern Colorado

Replace Heating Plant Boiler #3 (Capital Renewal)

2015-126

PROGRAM PLAN STATUS

Approved Program Plan? N/A **Date Approved:**

PRIORITY NUMBERS

Prioritized By	Priority	
CCHE	11 of 34	
OSPB	26 of 53	Not recommended for funding.

PRIOR APPROPRIATION AND REQUEST INFORMATION

Fund Source	Prior Approp.	FY 2018-19	FY 2019-20	Future Requests	Total Cost
CCF	$0	$3,533,110	$0	$0	$3,533,110
Total	$0	**$3,533,110**	$0	$0	$3,533,110

ITEMIZED COST INFORMATION

Cost Item	Prior Approp.	FY 2018-19	FY 2019-20	Future Requests	Total Cost
Land Acquisition	$0	$0	$0	$0	$0
Professional Services	$0	$307,840	$0	$0	$307,840
Construction	$0	$2,904,079	$0	$0	$2,904,079
Equipment	$0	$0	$0	$0	$0
Miscellaneous	$0	$0	$0	$0	$0
Contingency	$0	$321,191	$0	$0	$321,191
Software Acquisition	$0	$0	$0	$0	$0
Total	$0	**$3,533,110**	$0	$0	$3,533,110

PROJECT STATUS

This is the second request for funding. Funding was requested on behalf of the project from FY 2014-15 to FY 2016-17 under the controlled maintenance process.

PROJECT DESCRIPTION / SCOPE OF WORK

The University of Northern Colorado (UNC) is requesting state funds for a capital renewal project to replace an aging boiler in order to provide redundancy for the two main campus boilers. The capital renewal approach focuses on upgrading building systems, infrastructure, and the basic building components within existing academic buildings on a building-by-building basis, rather than project by project. The existing #3 boiler is a high-temperature hot water generator that the university says has exceeded its useful life. The replacement boiler will be more energy efficient, which the university says will reduce operating costs. In addition to purchasing the new boiler, the project also:

- demolishes and abates the existing boiler, mechanical equipment, and piping;
- demolishes and replaces sections of the roof and structure in the heating plant to create a path for installing the new boiler;
- installs the boiler; and
- connects the new boiler infrastructure and piping to the plant main lines.

Fiscal Year 2018-19 Capital Construction Request

University of Northern Colorado

Replace Heating Plant Boiler #3 (Capital Renewal)

Cost assumption. The cost assumption was determined by an engineering firm hired by the university. The project cost does not account for future inflation. As a capital renewal request, the project is not required to meet the Art in Public Places or High Performance Certification Program requirements.

PROJECT JUSTIFICATION

According to UNC, boiler #3, which was installed in 1971, has exceeded its useful life and utilizes old technology. In June 2015, this boiler developed several leaking tubes, which the university was able to repair. In addition, several of boiler #3's infrastructure components do not meet current National Fire Protection Association code.

Boiler #3 provides redundancy to the two main boilers, both of which are used to serve the campus load during peak energy use. Failure of one of the main boilers would require operation of boiler #3 which, if not available, could cause significant damage to campus facilities and operations.

PROGRAM INFORMATION

UNC operates the 8,682-GSF Central Heating Plant with three boilers to provide its campus heating and cooling needs, serving all major buildings (about 2.8 million square feet). Boiler #3 is a 60 million BTU Riley Stoker high temperature hot water generator. Boilers #1 and #2 were replaced in 2006 and 1996, respectively.

PROJECT SCHEDULE

	Start Date	Completion Date
Design	July 2018	February 2019
Construction	April 2019	October 2019
Equipment		
Occupancy	October 2019	December 2019

SOURCE OF CASH FUNDS

This project is not funded from cash sources.

STAFF QUESTIONS AND ISSUES

None.

OPERATING BUDGET

Operating costs are paid from institutional sources. UNC does not expect the project to impact operating costs.

Fiscal Year 2018-19 Capital Construction Request

University of Northern Colorado

Gray Hall Mechanical Systems Improvements (Capital Renewal)

2017-049

PROGRAM PLAN STATUS

Approved Program Plan? No **Date Approved:**

PRIORITY NUMBERS

Prioritized By	Priority	
CCHE	17 of 34	
OSPB	33 of 53	Not recommended for funding.

PRIOR APPROPRIATION AND REQUEST INFORMATION

Fund Source	Prior Approp.	FY 2018-19	FY 2019-20	Future Requests	Total Cost
CCF	$0	$3,287,659	$0	$0	$3,287,659
Total	$0	**$3,287,659**	$0	$0	$3,287,659

ITEMIZED COST INFORMATION

Cost Item	Prior Approp.	FY 2018-19	FY 2019-20	Future Requests	Total Cost
Land Acquisition	$0	$0	$0	$0	$0
Professional Services	$0	$368,819	$0	$0	$368,819
Construction	$0	$2,619,962	$0	$0	$2,619,962
Equipment	$0	$0	$0	$0	$0
Miscellaneous	$0	$0	$0	$0	$0
Contingency	$0	$298,878	$0	$0	$298,878
Software Acquisition	$0	$0	$0	$0	$0
Total	$0	**$3,287,659**	$0	$0	$3,287,659

PROJECT STATUS

This is the second request for funding. The project has previously appeared on the university's five-year projection of need list.

PROJECT DESCRIPTION / SCOPE OF WORK

The University of Northern Colorado (UNC) is requesting state funds for a capital renewal project to upgrade various mechanical systems in the 27,531-GSF Gray Hall. The capital renewal approach focuses on upgrading building systems, infrastructure, and the basic building components within existing academic buildings on a building-by-building basis, rather than project by project. Specifically, the project upgrades the HVAC system and associated infrastructure, installs a sprinkler system, and installs air conditioning in certain areas of the building. Work to be completed in association with the main objectives of the project includes:

- creating wall openings and constructing walled enclosures for ductwork and piping;
- repairing and replacing ceilings;
- removing window-mounted air conditioning units and replacing window sashes;
- replacing the plumbing system;
- upgrading the building's electrical service and modifying the electrical systems to accommodate the new

mechanical systems;

- painting;
- removing all steam components from the building and installing a new connection to the campus hot water system; and
- extending chilled water lines to existing utility infrastructure.

Cost assumption. The cost assumption was determined by university architects and a consultant study. The cost per GSF of construction improvement is $119. The project cost has been adjusted for inflation. The project is not required to meet the Art in Public Places Program requirement; the project is not required to comply with the requirements of the High Performance Certification Program because the anticipated cost of the renovation is less than 25 percent of the current replacement value of the building.

PROJECT JUSTIFICATION

UNC explains that Gray Hall, which was constructed in 1913, contains many outdated mechanical systems and supporting components, some of them original to the building and all at the end of their useful life. Additionally, the university has constructed a number of additions and renovations to the building over the years, resulting in a mix of mechanical system technologies. The project will bring these disparate technologies into alignment. UNC further says that the building is cooled in only a few areas, so the project adds air conditioning via a newly constructed central campus chilled water plant. Concerns expressed by the university's insurance carrier prompted the addition of a fire sprinkler system to the scope of the project. The domestic water system is experiencing high iron levels, so the university is using bottled water in the building until the plumbing system is replaced.

The most recent Facility Condition Index (FCI) audit, conducted in April 2015, placed Gray Hall's FCI at 65, short of the 85 target FCI established by the Office of the State Architect. The university has cash-funded several infrastructure improvements to the building, including replacing a buried steam line and air conditioning units that cool information technology infrastructure. UNC says failure to replace the building's mechanical systems will result in continued high maintenance costs to keep the current systems operational.

PROGRAM INFORMATION

Gray Hall houses the UNC campus police department, a major telephone and data hub, a black box theater, classrooms, and offices.

PROJECT SCHEDULE

	Start Date	Completion Date
Design	July 2018	April 2019
Construction	April 2019	April 2020
Equipment		
Occupancy	April 2020	July 2020

SOURCE OF CASH FUNDS

This project is not funded from cash sources.

STAFF QUESTIONS AND ISSUES

None.

OPERATING BUDGET

Operating costs are paid from institutional sources. UNC anticipates the project will result in a decrease in its operating costs.

University of Northern Colorado
Five-Year Projection of Need
FY 2018-19 through FY 2022-23

Project Title	Fund Source	FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	Totals
Capital Construction (Current Year)							
Gray Hall Mechanical Systems Improvements (Capital Renewal)	CCF	$3,287,659	$0	$0	$0	$0	$3,287,659
	CF	0	0	0	0	0	$0
Replace Heating Plant Boiler #3 (Capital Renewal)	CCF	3,533,110	0	0	0	0	$3,533,110
	CF	0	0	0	0	0	$0
Capital Construction (Out Year)							
Crabbe Hall Renovation	CCF	0	6,000,000	0	0	0	$6,000,000
	CF	0	0	0	0	0	$0
Capital Construction Subtotals	CCF	*6,820,769*	*6,000,000*	*0*	*0*	*0*	*$12,820,769*
	CF	*0*	*0*	*0*	*0*	*0*	*$0*
Controlled Maintenance Subtotals	CCF	*2,113,806*	*See OSA Annual Report.*				*$2,113,806*
Total: State Funds		*8,934,575*	*6,000,000*	*0*	*0*	*0*	*$14,934,575*
Grand Total: All Fund Sources		**$8,934,575**	**$6,000,000**	**$0**	**$0**	**$0**	**$14,934,575**

Source: Department of Higher Education and Office of the State Architect

COVER PAGE
Western State Colorado University

FY 2018-19 CAPITAL CONSTRUCTION REQUESTS (LISTED IN OSPB PRIORITY ORDER)

NOT RECOMMENDED FOR FUNDING BY OSPB:

- Vehicle Maintenance and Mountain Search and Rescue Garage *(new)*

TOTAL: FY 2018-19 CAPITAL CONSTRUCTION STATE-FUNDED REQUEST AMOUNT = $3,662,912

FY 2018-19 CONTROLLED MAINTENANCE REQUESTS (1)

NOT RECOMMENDED FOR FUNDING BY OSPB:

LEVEL II:

- Mitigate Storm Water, Northeast Campus ($1,258,956)

HISTORY OF STATE FUNDING

- **$28.5 million** has been appropriated on behalf of capital projects at Western State Colorado University since FY 2013-14. This represents **3.0 percent** of the total amount appropriated on behalf of all capital construction and controlled maintenance projects during this period.

- **$1.0 million** was appropriated in **FY 2017-18**.

- An additional **$1.4 million** was authorized through Senate Bill 17-267 for controlled maintenance.

INVENTORY OF GENERAL FUND SUPPORTED FACILITIES

- The General Fund supported inventory of institution facilities totals **711,028 GSF**. This total represents **1.5 percent** of the entire General Fund supported inventory of state buildings.

RECENT CDC VISITS

- Campus tour (June 2015)

Fiscal Year 2018-19 Capital Construction Request

Western State Colorado University

Vehicle Maintenance and Mountain Search and Rescue Garage

2019-005

PROGRAM PLAN STATUS

Approved Program Plan? Yes **Date Approved:** July 1, 2017

PRIORITY NUMBERS

Prioritized By	Priority	
DeptInst	1 of 1	
CCHE	6 of 34	
OSPB	21 of 53	Not recommended for funding.

PRIOR APPROPRIATION AND REQUEST INFORMATION

Fund Source	Prior Approp.	FY 2018-19	FY 2019-20	Future Requests	Total Cost
CCF	$0	$3,462,912	$0	$0	$3,462,912
CF	$0	$200,000	$0	$0	$200,000
Total	$0	**$3,662,912**	$0	$0	$3,662,912

ITEMIZED COST INFORMATION

Cost Item	Prior Approp.	FY 2018-19	FY 2019-20	Future Requests	Total Cost
Land Acquisition	$0	$0	$0	$0	$0
Professional Services	$0	$303,553	$0	$0	$303,553
Construction	$0	$2,961,307	$0	$0	$2,961,307
Equipment	$0	$219,234	$0	$0	$219,234
Miscellaneous	$0	$29,328	$0	$0	$29,328
Contingency	$0	$149,490	$0	$0	$149,490
Software Acquisition	$0	$0	$0	$0	$0
Total	$0	**$3,662,912**	$0	$0	$3,662,912

PROJECT STATUS

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

PROJECT DESCRIPTION / SCOPE OF WORK

Western State Colorado University (WSCU) is requesting a combination of state funds and cash funds spending authority to construct a 13,635-GSF garage facility and to renovate 2,398 GSF in an existing office building for the vehicle maintenance and mountain search and rescue programs. The project addresses concerns with unsafe working conditions in the existing garage and inadequate space for both programs.

The new garage planned under the project will have multiple service bays, including a drive-through bay for large vehicles, two regular services bays, a tire bay, a wash bay, and vehicle storage bays for the search and rescue program. It also constructs an overhead beam hoist, restroom facilities, secure storage for both programs, and work benches. Attachment A is an architectural rendering of the planned facility.

The renovation planned under the project constructs a reception and vehicle rental office, two offices for full-time

mechanics, storage, a mapping/strategy office for the search and rescue program, two sleeping areas, and a shared classroom. Each program will have a separate, dedicated entrance to the space. The project only renovates about half of the building; the remainder of the building is leasable office space.

The project also paves and widens an access road to accommodate larger vehicles and repaves parking lots adjacent to the new garage and office building.

Cost assumption. The cost assumption was determined through the program planning process. It does not include any cost escalation for inflation. The cost per GSF is $228. The project meets the Art in Public Places and High Performance Certification Program requirements.

PROJECT JUSTIFICATION

WSCU first identified a space deficit for the vehicle maintenance and mountain search and rescue programs in its 2011 facilities master plan. A more serious concern with inadequate ventilation in the existing garage surfaced in recent months after the head mechanic and a student worker both passed out on the same day. The university says that an industrial hygienist from its insurance agency assessed the existing garage and recommended extensive ventilation work. The university considered renovating the existing space to address the identified deficiencies, but determined that the programmatic needs of the vehicle maintenance and search and rescue programs were significant enough to warrant constructing a new garage and renovating part of an existing office building.

The existing garage was originally built as a storage space and was converted to a garage more than 50 years ago. Specific concerns — in addition to poor ventilation — with the garage include:

- no vehicle bay large enough to service oversized vehicles such as the athletic team touring buses and shuttles. University mechanics must conduct repairs on oversized vehicles outside, in all weather conditions, or have the vehicles towed to shops on the Front Range;
- an undersized and outdated electrical system;
- insufficient storage, including a lack of safe storage for combustible materials;
- deficient fire safety measures, including no fire sprinklers or explosion-proof lights and electrical panels;
- a congested work area and lack of reception area, which is dangerous for workers and customers alike;
- an inadequate storage and disposal option for used chemicals and vehicle fluids; and
- a steep slope leading from the garage doors that is difficult to navigate in winter conditions.

The Mountain Search and Rescue Team is housed in the basement of a residence hall. Due to space limitations, some of its equipment and gear is stored off campus or in vehicles parked outside. WSCU says a residence hall is not appropriate for some types of storage, such as fuel or medical supplies. Additionally, the training space used by the program is not well configured because it is tiered and does not offer enough level space for some classes.

The new garage will provide storage, a work bench to prepare packs before search and rescue operations, lockers for personal items, rope drying racks, and indoor vehicle storage, all of which should shorten the team response time. The renovated office space will provide better training space and a dedicated office for mapping and strategizing rescue operations.

PROGRAM INFORMATION

The Fleet Maintenance and Transportation Services program services and repairs vehicles and equipment used by the campus community, including grounds equipment for lawn maintenance and snow removal, a fleet of 15-passenger vans, and other passenger vehicles. The program employees three full-time staff. It also offers driving and CPR classes. In addition to servicing campus vehicles, the program also provides services to other governmental entities such as Colorado Parks and Wildlife, the U.S. Forest Service, and Gunnison County Probation. The program is located in a garage on the northwest corner of the campus. It houses two tandem service bays and a raised storage area.

The Mountain Search and Rescue Team is the primary search and rescue team for Gunnison County, which includes

1.7 million acres of public lands. The team conducts an average of 35 to 40 rescue missions a year, including assisting in out-of-county searches. All team members are volunteers. There are between 25 and 30 active team members, 20 of whom are students. The other team members are recent graduates and community members. Team members volunteer between 200 and 1,300 hours a year between training and actual rescue missions and are certified in wilderness search, low angle rescue, vertical rescue, avalanche rescue, and winter technical rescue.

PROJECT SCHEDULE

	Start Date	Completion Date
Design	May 2018	October 2018
Construction	April 2019	December 2019
Equipment	January 2020	
Occupancy	January 2020	

SOURCE OF CASH FUNDS

The source of cash funds is university reserves.

STAFF QUESTIONS AND ISSUES

1. Who are the tenants in the leasable office building? Is this anticipated to change after the project is complete?

CSU is the current tenant. They will remain, but functions currently sublet to the county (a private mosquito company and county weed-control staff) will not remain.

2. Will the existing building occupants be relocated for any part of the renovation?

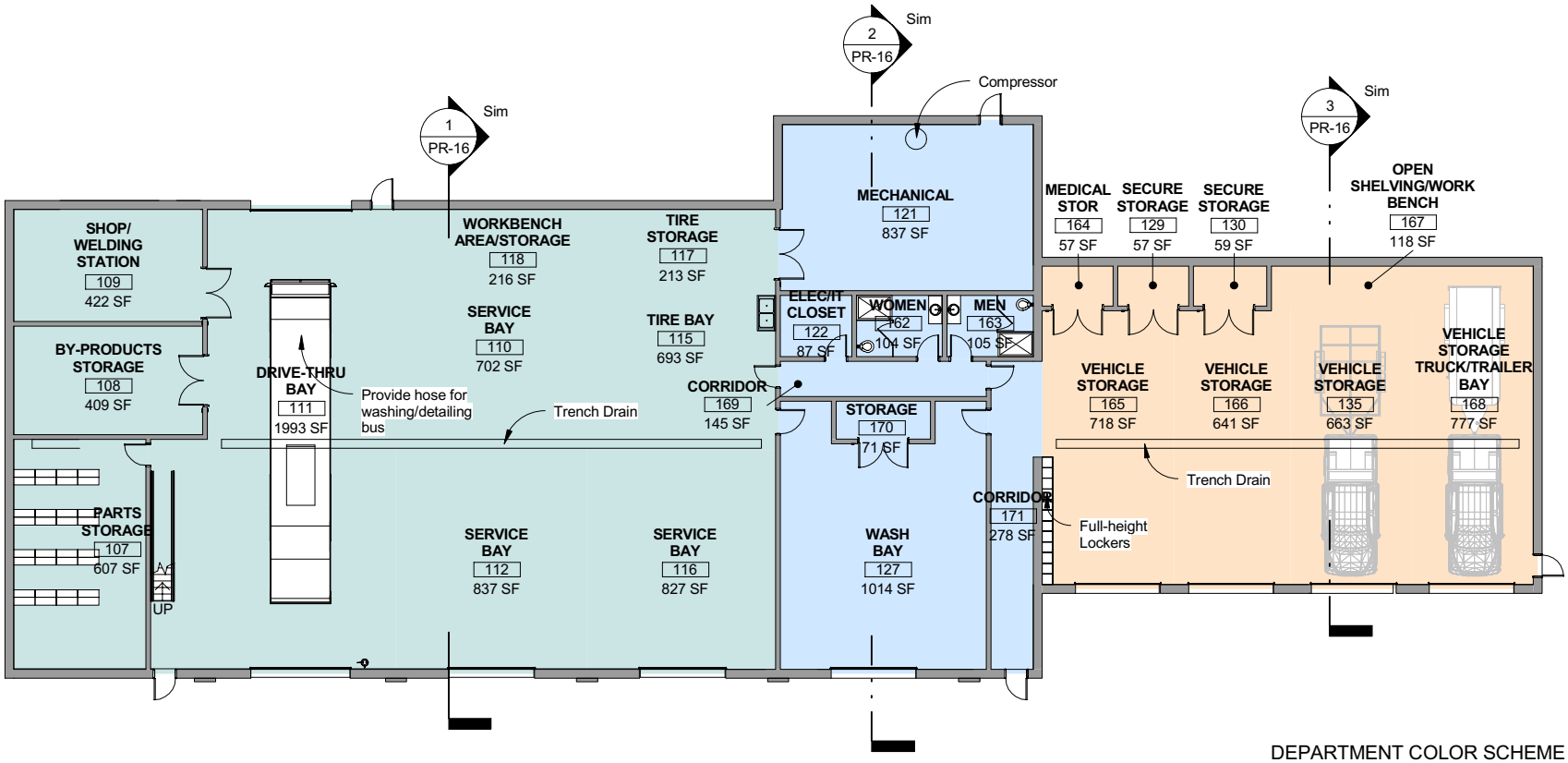
The county tenants are relocating permanently. Depending on the extent of the renovations, the CSU staff may need to be temporarily relocated, but that is only two full time staff members.

3. Will the existing garage be demolished after the new garage facility is constructed?

No, it definitely will not be torn down. We are limited on storage, and it's likely the existing garage will be used for storage of small equipment.

OPERATING BUDGET

Operating expenses are paid from institutional sources. WSCU anticipates that its utility costs will increase after the new garage is in service.



DEPARTMENT COLOR SCHEME

- Maintenance Garage
- Mountain Search & Rescue
- Shared/Support Spaces

1 First Floor Plan

1/16" = 1'-0"

1331 Nineteenth Street
Denver, CO. 80202
P 303.607.0977
www.hcm2.com

Western State Colorado University
Five-Year Projection of Need
FY 2018-19 through FY 2022-23

Project Title	Fund Source	FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	Totals
Capital Construction (Current Year)							
Fleet Garage/Mountain Search and Rescue	CCF	$3,662,912	$0	$0	$0	$0	$3,662,912
	CF	200,000	0	0	0	0	$200,000
Capital Construction (Out Year)							
Press Box Expansion and Renovation	CCF	0	0	0	3,900,912	0	$3,900,912
	CF	0	0	0	0	0	$0
Savage Library Renovation	CCF	0	8,758,560	0	0	0	$8,758,560
	CF	0	0	0	0	0	$0
Turf Field	CCF	0	0	2,500,000	0	0	$2,500,000
	CF	0	0	0	0	0	$0
Capital Construction Subtotals	CCF	*3,662,912*	*8,758,560*	*2,500,000*	*3,900,912*	*0*	*$18,822,384*
	CF	*200,000*	*0*	*0*	*0*	*0*	*$200,000*
Controlled Maintenance Subtotals	CCF	*1,258,956*	*See OSA Annual Report.*				*$1,258,956*
Total: State Funds		*4,921,868*	*8,758,560*	*2,500,000*	*3,900,912*	*0*	*$20,081,340*
Grand Total: All Fund Sources		**$5,121,868**	**$8,758,560**	**$2,500,000**	**$3,900,912**	**$0**	**$20,281,340**

Source: Department of Higher Education and Office of the State Architect

Department of Agriculture
Five-Year Projection of Need
FY 2018-19 through FY 2022-23

Project Title	Fund Source	FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	Totals
Capital Construction (Out Year)							
Replace HVAC and Exhaust Systems, Event Center (Capital Renewal)	CCF	$0	$0	$0	$0	$785,172	$785,172
	CF	0	0	0	0	0	$0
Capital Construction Subtotals	CCF	*0*	*0*	*0*	*0*	*785,172*	*$785,172*
	CF	*0*	*0*	*0*	*0*	*0*	*$0*
Controlled Maintenance Subtotals	CCF	*888,932*	*See OSA Annual Report.*				*$888,932*
Total: State Funds		*888,932*	*0*	*0*	*0*	*785,172*	*$1,674,104*
Grand Total: All Fund Sources		**$888,932**	**$0**	**$0**	**$0**	**$785,172**	**$1,674,104**

Source: Office of the State Architect

Department of Military and Veterans Affairs
Five-Year Projection of Need
FY 2018-19 through FY 2022-23

Project Title	Fund Source	FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	Totals
Capital Construction (Out Year)							
Joint Forces Headquarters	CCF	$0	$240,483	$2,765,000	$0	$0	$3,005,483
	FF	0	4,957,517	57,000,000	0	0	$61,957,517
Billeting Building, Montrose Readiness Center	CCF	0	1,500,000	0	0	0	$1,500,000
	FF	0	0	0	0	0	$0
Veterans Memorial Cemetery Columbarias and Steam Filter System	CCF	0	2,094,000	0	0	0	$2,094,000
	FF	0	0	0	0	0	$0
New Readiness Center Construction	CCF	0	0	590,250	6,666,750	0	$7,257,000
	FF	0	0	1,770,750	20,000,250	0	$21,771,000
Fort Lupton Readiness Center Expansion	CCF	0	0	4,661,000	0	0	$4,661,000
	FF	0	0	3,483,000	0	0	$3,483,000
Capital Construction Subtotals	CCF	*0*	*3,834,483*	*8,016,250*	*6,666,750*	*0*	*18,517,483*
	FF	*0*	*4,957,517*	*62,253,750*	*20,000,250*	*0*	*$87,211,517*
Controlled Maintenance Subtotals	CCF	*1,536,215*	*See OSA Annual Report.*				*$1,536,215*
Total: State Funds		*1,536,215*	*3,834,483*	*8,016,250*	*6,666,750*	*0*	*$20,053,698*
Grand Total: All Fund Sources		**$1,536,215**	**$8,792,000**	**$70,270,000**	**$26,667,000**	**$0**	**$107,265,215**

Source: Office of the State Architect

Department of Revenue
Five-Year Projection of Need
FY 2018-19 through FY 2022-23

Project Title	Fund Source	FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	Totals
Capital Construction (Out Year)							
Repair/Replace Exterior Concrete and Parking Lot, 1881 Pierce Street (Capital Renewal)	CCF	$0	$2,382,082	$2,382,082	$0	$0	$4,764,164
	CF	0	0	0	0	0	$0
Capital Construction Subtotals	CCF	*0*	*2,382,082*	*2,382,082*	*0*	*0*	*$4,764,164*
	CF	*0*	*0*	*0*	*0*	*0*	*$0*
Controlled Maintenance Subtotals	CCF	*887,068*	*See OSA Annual Report.*				*$887,068*
Total: State Funds		*887,068*	*2,382,082*	*2,382,082*	*0*	*0*	*$5,651,232*
Grand Total: All Fund Sources		**$887,068**	**$2,382,082**	**$2,382,082**	**$0**	**$0**	**$5,651,232**

Source: Office of the State Architect

Department of Personnel and Administration
Five-Year Projection of Need
FY 2018-19 through FY 2022-23

Project Title	Fund Source	FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	Totals
Capital Construction (Out Year)							
Asphalt Repairs, Camp George West (Capital Renewal)	CCF	$0	$2,550,479	$2,550,479	$2,550,479	$0	$7,651,437
	CF	0	0	0	0	0	$0
Capitol Annex Building (1375 Sherman Street) Renovation	CCF	0	35,952,866	0	0	0	$35,952,866
	CF	0	0	0	0	0	$0
Centennial Building (1313 Sherman Street) Renovation	CCF	0	0	62,952,866	0	0	$62,952,866
	CF	0	0	0	0	0	$0
New State Office Building at Colfax and Lincoln	CCF	0	0	215,138,034	0	0	$215,138,034
	CF	0	0	0	0	0	$0
Tunnel Repairs, Capitol Complex	CCF	0	4,130,733	4,130,733	4,130,733	0	$12,392,199
	CF	0	0	0	0	0	$0
Interior Door and Hallway Renovation, State Capitol	CCF	0	0	0	0	3,571,249	$3,571,249
	CF	0	0	0	0	0	$0
Capital Construction Subtotals	CCF	*0*	*42,634,078*	*284,772,112*	*6,681,212*	*3,571,249*	*$337,658,651*
	CF	*0*	*0*	*0*	*0*	*0*	*$0*
Controlled Maintenance Subtotals	CCF	*6,099,755*	*See OSA Annual Report.*				*$6,099,755*
Total: State Funds		*6,099,755*	*42,634,078*	*284,772,112*	*6,681,212*	*3,571,249*	*$343,758,406*
Grand Total: All Fund Sources		**$6,099,755**	**$42,634,078**	**$284,772,112**	**$6,681,212**	**$3,571,249**	**$343,758,406**

Source: Office of the State Architect