

## COVER PAGE

### Colorado State University System

#### FY 2019-20 CAPITAL CONSTRUCTION REQUESTS (LISTED IN OSPB PRIORITY ORDER)

##### RECOMMENDED FOR FUNDING BY OSPB:

- Shepardson Building Renovation and Addition (*continuation*)
- Lease-Purchase Payments, National Western Center COP
- CSU Center (National Western Center COP)
- Animal Health Building (National Western Center COP)

##### NOT RECOMMENDED FOR FUNDING BY OSPB:

- Anatomy/Zoology East Wing Revitalization (Capital Renewal)
- Technology Building Renovation (CSU-Pueblo)
- Chemistry B and C Wing Renovation (Capital Renewal)

TOTAL: FY 2019-20 CAPITAL CONSTRUCTION STATE-FUNDED REQUEST AMOUNT = **\$89,587,317**

#### FY 2019-20 CONTROLLED MAINTENANCE REQUESTS (15)

##### RECOMMENDED FOR FUNDING BY OSPB:

###### LEVEL I:

- Replacement of Wastewater Treatment Plant, Mountain Campus
- Replace Emergency Generator, Police Services Building
- Replace Domestic Water Line, University Avenue

###### LEVEL II:

- Replace Multiple Primary Electric Switchgears, Main Campus
- Modernize Elevators, Atmospheric Science and Eddy Hall
- Repair Building Envelope, Hasan School of Business (CSU-Pueblo)
- Replace Campus Water Lines (CSU-Pueblo)
- Replace ARDEC Farm Bridge

##### NOT RECOMMENDED FOR FUNDING BY OSPB:

###### LEVEL II:

- Replace Roofs, Buell Communication Center and Administration Building Walkway (CSU-Pueblo)
- Replace Roof, B Wing, Engineering Building
- Refurbish Water Wells, Pumps, Ditches, ARDEC

###### LEVEL III:

- Replace Electric Service, Foothills Campus
- Refurbish Elevators, Three Buildings (CSU-Pueblo)
- Upgrade Fire Alarm Voice Notification System
- Upgrade Campus Exterior Lighting

## COVER PAGE

### Colorado State University System (Cont.)

#### HISTORY OF STATE FUNDING

- **\$97.7 million** has been appropriated to the system on behalf of capital projects since FY 2014-15. This represents **9.8 percent** of the total amount appropriated on behalf of all capital construction and controlled maintenance projects during this period.
  
- **\$35.3 million** was appropriated in FY 2018-19, including \$12.8 million 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 **7,394,299 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 2019-20 Capital Construction Request

## Colorado State University

*Shepardson Building Renovation and Addition*

### PROGRAM PLAN STATUS

2008-071

Approved Program Plan?  Yes

Date Approved:

### PRIORITY NUMBERS

Prioritized By	Priority	
DeptInst	1 of 6	
CCHE	3 of 40	
OSPB	5 of 62	Recommended for funding.

### PRIOR APPROPRIATION AND REQUEST INFORMATION

<u>Fund Source</u>	<u>Prior Approp.</u>	<u>FY 2019-20</u>	<u>FY 2020-21</u>	<u>Future Requests</u>	<u>Total Cost</u>
CCF	\$4,527,223	\$29,677,857	\$0	\$0	\$34,205,080
CF	\$0	\$9,000,000	\$0	\$0	\$9,000,000
<b>Total</b>	<b>\$4,527,223</b>	<b>\$38,677,857</b>	<b>\$0</b>	<b>\$0</b>	<b>\$43,205,080</b>

### ITEMIZED COST INFORMATION

<u>Cost Item</u>	<u>Prior Approp.</u>	<u>FY 2019-20</u>	<u>FY 2020-21</u>	<u>Future Requests</u>	<u>Total Cost</u>
Land Acquisition	\$0	\$0	\$0	\$0	\$0
Professional Services	\$3,805,053	\$0	\$0	\$0	\$3,805,053
Construction	\$0	\$31,071,619	\$0	\$0	\$31,071,619
Equipment	\$0	\$3,844,121	\$0	\$0	\$3,844,121
Miscellaneous	\$125,638	\$245,948	\$0	\$0	\$371,586
Contingency	\$596,532	\$3,516,169	\$0	\$0	\$4,112,701
Software Acquisition	\$0	\$0	\$0	\$0	\$0
<b>Total</b>	<b>\$4,527,223</b>	<b>\$38,677,857</b>	<b>\$0</b>	<b>\$0</b>	<b>\$43,205,080</b>

### PROJECT STATUS

This is a continuation request. Please note that the request was submitted in each of the last two years as a three-phase request and in both years the Governor's Office of State Planning and Budgeting (OSPB) directed the university to revise the request to two phases. Attachment A shows the revised totals as recommended by OSPB. The staff analysis reflects the budget request as originally submitted by the university. See the Staff Questions and Issues section for further explanation.

### PROJECT DESCRIPTION / SCOPE OF WORK

Colorado State University (CSU) is requesting state funds and cash funds spending authority for the second phase of a two- or 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

# Fiscal Year 2019-20 Capital Construction Request

## Colorado State University

### *Shepardson Building Renovation and Addition*

condition of classrooms, studios, and labs.

**Cost assumption.** The cost assumption was determined by a third-party consultant. The cost per GSF is \$456. 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 highly 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 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.

**Project alternatives.** The university identified project alternatives early in the program planning process. CSU determined that solely renovating the building would 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 2019-20 Capital Construction Request

## Colorado State University Shepardson Building Renovation and Addition

### PROJECT SCHEDULE

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

### SOURCE OF CASH FUNDS

The source of cash funds is proceeds from bonds that will be issued under the Higher Education Revenue Bond Intercept Program, pending further legislative review and approval by the Capital Development Committee. The bonds will be repaid from university funds.

### 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.

### STAFF QUESTIONS AND ISSUES

1. Does the university have a preference as to whether the project is presented as two- or three-phase? Either way, the staff analysis will make a note of the approach and any discrepancy either from the original submittal by CSU or the revised submittal requested by OSPB.

*CSU would prefer a two-phase project. Since the first submission we have developed a strategy to vacate the existing building, relocating faculty and staff to other facilities recently identified. The original planning for the project had staff remaining in the building while we built the addition (phase 2). Then they would move into the addition while the renovation occurred (phase 3). This was less than ideal for the building occupants and the overall project. Benefits of the revised phasing include:*

- In vacating the existing building in its entirety, the renovation scope can be combined with the building addition scope to accommodate enhanced efficiencies for design-build activities.*
- With construction funding in one phase we anticipate we will see a reduction in overhead and manpower costs with more efficient trade stacking and associated work flows.*
- We expect that fees that to complete the work, as well as the cost of current construction market escalation, will be significantly reduced.*

*These savings will be plowed into better quality specifications for mechanical, electrical, and plumbing systems to produce lower operating and maintenance costs over the new lifecycle of the building. CSU will be able to reduce the duration of the disruption to current faculty and staff by 6 – 8 months.*

*If a change to two phases is not approved, CSU requests the ability to escalate each phase.*

# Fiscal Year 2019-20 Capital Construction Request

## Colorado State University

*National Western Center Lease Payments*

### PROGRAM PLAN STATUS

2020-020

Approved Program Plan?  Date Approved:

### PRIORITY NUMBERS

Prioritized By	Priority	
Dept/Inst	NP of 6	
CCHE	NP of 40	
OSPB	15 of 62	Recommended for funding.

### PRIOR APPROPRIATION AND REQUEST INFORMATION

<u>Fund Source</u>	<u>Prior Approp.</u>	<u>FY 2019-20</u>	<u>FY 2020-21</u>	<u>Future Requests</u>	<u>Total Cost</u>
CCF	\$0	\$16,570,927	\$18,300,000	\$54,900,000	\$89,770,927
<b>Total</b>	<b>\$0</b>	<b>\$16,570,927</b>	<b>\$18,300,000</b>	<b>\$54,900,000</b>	<b>\$89,770,927</b>

### ITEMIZED COST INFORMATION

<u>Cost Item</u>	<u>Prior Approp.</u>	<u>FY 2019-20</u>	<u>FY 2020-21</u>	<u>Future Requests</u>	<u>Total Cost</u>
Land Acquisition	\$0	\$0	\$0	\$0	\$0
Professional Services	\$0	\$0	\$0	\$0	\$0
Construction	\$0	\$0	\$0	\$0	\$0
Equipment	\$0	\$0	\$0	\$0	\$0
Miscellaneous	\$0	\$16,570,927	\$18,300,000	\$54,900,000	\$89,770,927
Contingency	\$0	\$0	\$0	\$0	\$0
Software Acquisition	\$0	\$0	\$0	\$0	\$0
<b>Total</b>	<b>\$0</b>	<b>\$16,570,927</b>	<b>\$18,300,000</b>	<b>\$54,900,000</b>	<b>\$89,770,927</b>

### PROJECT STATUS

This is an ongoing request for an annual lease payment. The FY 2018-19 payment was paid through capitalized interest. This is the first year a lease payment will be appropriated through a budget bill.

### PROJECT DESCRIPTION / SCOPE OF WORK

Colorado State University (CSU) is requesting state funds to make an annual lease payment for the first tranche of certificates of participation (COPs) issued to finance the construction of buildings on the National Western Center campus and affiliated buildings on the main CSU campus. The first issuance financed land acquisition for the CSU buildings on the National Western Center campus, part of the construction of the Water Resources Building, and three buildings on the Fort Collins campus.

The COP issuances are contingent upon project-specific review and approval by the Colorado Commission on Higher Education, the Governor's Office of State Planning and Budgeting, and the CDC. Additionally, no lease-purchase agreements could be issued until the voters of the City and County of Denver approved an extension of the lodging and car rental taxes, or another similar tax, to generate sufficient funding for development of the National Western Center, which occurred at the November 2015 election.

# Fiscal Year 2019-20 Capital Construction Request

## Colorado State University

### National Western Center Lease Payments

A second tranche of COPs, which is anticipated no sooner than spring 2019, will pay for most or all of the remaining projects, including two FY 2019-20 capital budget submissions. The FY 2019-20 request amount is more than the amount required to make the lease payment CSU explains that it requested about \$2.5 million over and above the existing payment amount in order to allow for an additional issuance and corresponding lease payment for FY 2019-20.

#### PROJECT JUSTIFICATION

House Bill 15-1344 authorized the State Treasurer to enter into one or more lease-purchase agreements on behalf of CSU for a period of up to 20 years to construct facilities at the National Western Center and the CSU main campus. The bill authorized the issuance of COPs in the amount of \$250 million, plus reasonable administrative expenses for the costs of issuance and monitoring.

#### PROGRAM INFORMATION

The National Western Center project redevelops the National Western Stock Show grounds and surrounding area in north Denver. The existing 130-acre campus will be expanded to 250 acres and will add a number of buildings and uses to the campus. A master plan for the redevelopment, completed in December 2014, was undertaken by the National Western Center Partnership, which consists of the National Western Stock Show, the City and County of Denver, CSU, the Denver Museum of Nature and Science, and History Colorado.

Sitework is underway at the National Western Center.

#### PROJECT SCHEDULE

This request makes an annual lease payment for FY 2019-20. COP payments for the issuance will continue through June 2039.

#### SOURCE OF CASH FUNDS

The source of cash funds is the National Western Center Trust Fund, created in Section 23-31-902 (2), C.R.S. The trust fund consists of money transferred from the General Fund for lease-payments due during the fiscal year.

**Funding for lease-purchase agreements.** The state is currently making annual lease payments for COPs issued to finance the construction of the Centennial Correctional Facility expansion project. The COP payments will continue through FY 2018-19. The average annual payment for the remaining term of the COPs is \$20.3 million. HB 15-1344 repurposes the amount anticipated to be paid on behalf of the annual lease payments in the years following the retirement of the Centennial Correctional Facility COP. In other words, the \$20 million that has otherwise been set aside for the Centennial Correctional Facility COP payment will be made available for the National Western Center COP payments and projects in the Capitol Complex.

#### OPERATING BUDGET

Operating costs are paid from institutional sources. The construction of new facilities will increase operating costs.

#### STAFF QUESTIONS AND ISSUES

1. The narrative states that the second tranche will be issued to fund the remainder of the costs for the Water Resource Center and the Animal Health Building. Will a third tranche be issued to fund the costs of the CSU Center?

*The original narrative was written before the addition of the CSU Center to this year's budget request. It is possible that there will only be two tranches, and it is also possible that the remaining \$118 million will be divided into two more issuances. The next issuance will be for the remainder of the Water Center and some or all of the Animal Health and CSU Center. We will work with the State Treasurer to determine the best structure for the state to have debt service savings. Other factors to take into account will be interest rates, and when CSU gets title to the land.*

# Fiscal Year 2019-20 Capital Construction Request

## Colorado State University

*CSU Center (National Western Center COP)*

### PROGRAM PLAN STATUS

2017-061

Approved Program Plan?  Yes

Date Approved:

### PRIORITY NUMBERS

Prioritized By	Priority	
Dept/Inst	NP of 6	
CCHE	NP of 40	
OSP/B	16 of 62	Recommended for funding.

### PRIOR APPROPRIATION AND REQUEST INFORMATION

Fund Source	Prior Approp.	FY 2019-20	FY 2020-21	Future Requests	Total Cost
CCF	\$0	\$48,503,374	\$0	\$0	\$48,503,374
<b>Total</b>	<b>\$0</b>	<b>\$48,503,374</b>	<b>\$0</b>	<b>\$0</b>	<b>\$48,503,374</b>

### ITEMIZED COST INFORMATION

Cost Item	Prior Approp.	FY 2019-20	FY 2020-21	Future Requests	Total Cost
Land Acquisition	\$0	\$0	\$0	\$0	\$0
Professional Services	\$0	\$5,567,136	\$0	\$0	\$5,567,136
Construction	\$0	\$31,212,627	\$0	\$0	\$31,212,627
Equipment	\$0	\$4,001,800	\$0	\$0	\$4,001,800
Miscellaneous	\$0	\$5,412,126	\$0	\$0	\$5,412,126
Contingency	\$0	\$2,309,685	\$0	\$0	\$2,309,685
Software Acquisition	\$0	\$0	\$0	\$0	\$0
<b>Total</b>	<b>\$0</b>	<b>\$48,503,374</b>	<b>\$0</b>	<b>\$0</b>	<b>\$48,503,374</b>

### 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 was authorized by House Bill 15-1344, which concerned funding for the National Western Center and Capitol Complex projects. The requested project constructs a three-story, 64,000-GSF, multiuse building on the National Western Center campus. The new building will support programming for students of all ages in fields related to food systems. Specifically, the building will house:

- classroom, exhibit, and event spaces;
- a K-12 Agricultural Discovery Center;
- laboratories for soil, water, and plant testing;
- the Metropolitan Extension Center; and
- the Metropolitan Agricultural Experiment Station.



# Fiscal Year 2019-20 Capital Construction Request

## Colorado State University CSU Center (National Western Center COP)

The building will be connected to the Water Resources Center via a pedestrian bridge over National Western Drive.

**Cost assumption.** The cost assumption was determined through the program planning process. The cost per GSF is \$758. The project cost includes 4 percent inflation through the midpoint of construction. The project meets the High-Performance Certification and Art in Public Places Program requirements.

**Funding for lease-purchase agreements.** The state is currently making annual lease payments for COPs issued to finance the construction of the Centennial Correctional Facility expansion project. The COP payments will continue through FY 2018-19. The average annual payment for the remaining term of the COPs is \$20.3 million. HB 15-1344 repurposes the amount anticipated to be paid on behalf of the annual lease payments in the years following the retirement of the Centennial Correctional Facility COP. In other words, the \$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. The annual lease payments will be offset by state funds.

### PROJECT JUSTIFICATION

The university says the CSU Center is a key component of the National Western Center redevelopment project. The center will provide community outreach through programs focused on food systems. For instance, the Metropolitan Extension Center will offer services tailored to meet community education needs such as 4-H programming, master gardner courses, and cooking and nutrition classes. The soil, water, and plant testing labs, currently housed on the main CSU campus, will be moved to the CSU Center and will provide fee-for-service testing for the public and industry. The center will also include sensory testing services for CSU researchers and private-sector partners to support new food and beverage product development. Finally, the Metropolitan Agricultural Experiment Station will offer research services tailored to local interests like food insecurity and urban and vertical agriculture.

### PROGRAM INFORMATION

The National Western Center redevelopment project is a collaboration between members of the National Western Center Partnership. The National Western Center Partnership consists of the National Western Stock Show, the City and County of Denver, CSU, the Denver Museum of Nature and Science, and History Colorado. CSU is constructing three buildings at the National Western Center including the Animal Health Building, the CSU Center, and the Water Resources Center.

### PROJECT SCHEDULE

	Start Date	Completion Date
Design	July 2019	March 2020
Construction	March 2020	October 2021
Equipment		November 2021
Occupancy		December 2021

### SOURCE OF CASH FUNDS

This project is not funded from cash sources.

### OPERATING BUDGET

Operating costs are paid from institutional sources.

### STAFF QUESTIONS AND ISSUES

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

# Fiscal Year 2019-20 Capital Construction Request

## Colorado State University

*Animal Health Building (National Western Center COP)*

### PROGRAM PLAN STATUS

2017-062

Approved Program Plan?  Yes  No

Date Approved:

### PRIORITY NUMBERS

Prioritized By	Priority	
Dept/Inst	NP of 6	
CCHE	NP of 40	
OSPB	17 of 62	Recommended for funding.

### PRIOR APPROPRIATION AND REQUEST INFORMATION

Fund Source	Prior Approp.	FY 2019-20	FY 2020-21	Future Requests	Total Cost
CCF	\$0	\$60,018,401	\$0	\$0	\$60,018,401
<b>Total</b>	<b>\$0</b>	<b>\$60,018,401</b>	<b>\$0</b>	<b>\$0</b>	<b>\$60,018,401</b>

### ITEMIZED COST INFORMATION

Cost Item	Prior Approp.	FY 2019-20	FY 2020-21	Future Requests	Total Cost
Land Acquisition	\$0	\$0	\$0	\$0	\$0
Professional Services	\$0	\$6,993,854	\$0	\$0	\$6,993,854
Construction	\$0	\$47,984,153	\$0	\$0	\$47,984,153
Equipment	\$0	\$1,750,000	\$0	\$0	\$1,750,000
Miscellaneous	\$0	\$432,375	\$0	\$0	\$432,375
Contingency	\$0	\$2,858,019	\$0	\$0	\$2,858,019
Software Acquisition	\$0	\$0	\$0	\$0	\$0
<b>Total</b>	<b>\$0</b>	<b>\$60,018,401</b>	<b>\$0</b>	<b>\$0</b>	<b>\$60,018,401</b>

### 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 was authorized by House Bill 15-1344, which concerned funding for the National Western Center and Capitol Complex projects. The project constructs a 108,000-GSF clinical treatment space for small animals and horses to support programs at the National Western Center, the Temple Grandin Equine Center for equine-assisted therapy, and the surrounding communities. Specifically, the project constructs:

- indoor and outdoor arenas;
- horse barns;
- an equine sports medicine clinic;
- equine-assisted therapy program spaces;
- a companion-animal clinic operated by a partner institution such as PetAid or the Denver Dumb Friends League;

## Fiscal Year 2019-20 Capital Construction Request

### Colorado State University

*Animal Health Building (National Western Center COP)*

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- classrooms and offices; and
- short-term living spaces for students and researchers.

The facility has been designed in such a way that it will reduce known stressors for equine clients, with careful attention paid to ingress and egress to treatment spaces, traffic patterns, lighting, and potential environmental disturbances.

**Cost assumption.** The cost assumption was determined through the program planning process. The cost per GSF is \$556. The project cost includes inflation through the midpoint of construction. The project meets the High-Performance Certification and Art in Public Places Program requirements.

**Funding for lease-purchase agreements.** The state is currently making annual lease payments for COPs issued to finance the construction of the Centennial Correctional Facility expansion project. The COP payments will continue through FY 2018-19. The average annual payment for the remaining term of the COPs is \$20.3 million. HB 15-1344 repurposes the amount anticipated to be paid on behalf of the annual lease payments in the years following the retirement of the Centennial Correctional Facility COP. In other words, the \$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. The annual lease payments will be offset by state funds.

### PROJECT JUSTIFICATION

The university says the Animal Health Building is a key component of the National Western Center redevelopment project. The programs housed in the building will promote connections between people and animals. The equine sports medicine clinic will add much needed space for veterinarians who support equine shows hosted at the National Western Center. CSU says the existing on-campus facilities are limited in terms of size and equipment and that the Western Stock Show Association plans to increase the number of equestrian and livestock shows on the campus in future years.

The center will provide community outreach through educational programming and the companion animal clinic. The companion animal clinic will serve neighborhood clients and offer donor-subsidized services for qualifying individuals. The clinic will provide spay and neuter services as well as other basic veterinary care. The clinic will also offer educational opportunities to CSU students.

The Temple Grandin Equine Center, which is already operating on a small scale on the campus, offers equine-assisted activities and therapies to individuals with physical, emotional, and developmental challenges. According to CSU, locating the center in the Denver Metro area increases accessibility to public transportation for participants. It also provides a larger potential population of practitioners, patients, clients, and volunteers. In turn, increased participation is anticipated to lead to large-scale programming which could significantly advance research and education efforts for the industry.

### PROGRAM INFORMATION

The National Western Center redevelopment project is a collaboration between members of the National Western Center Partnership. The National Western Center Partnership consists of the National Western Stock Show, the City and County of Denver, CSU, the Denver Museum of Nature and Science, and History Colorado. CSU is constructing three buildings at the National Western Center including the Animal Health Building, the CSU Center, and the Water Resources Center.

# Fiscal Year 2019-20 Capital Construction Request

## Colorado State University

*Animal Health Building (National Western Center COP)*

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### PROJECT SCHEDULE

	Start Date	Completion Date
Design	July 2019	March 2020
Construction	March 2020	July 2021
Equipment		July 2021
Occupancy		August 2021

### SOURCE OF CASH FUNDS

This project is not funded from cash sources.

### OPERATING BUDGET

Operating costs are paid from institutional sources.

### STAFF QUESTIONS AND ISSUES

All responses to staff questions are included in the project write-up.

# Fiscal Year 2019-20 Capital Construction Request

## Colorado State University

*Anatomy/Zoology East Wing Revitalization (Capital Renewal)*

### PROGRAM PLAN STATUS

2006-160

Approved Program Plan?  Yes  No

Date Approved:

### PRIORITY NUMBERS

Prioritized By	Priority	
Dept/Inst	2 of 6	
CCHE	22 of 40	
OSPB	42 of 62	Not recommended for funding.

### PRIOR APPROPRIATION AND REQUEST INFORMATION

Fund Source	Prior Approp.	FY 2019-20	FY 2020-21	Future Requests	Total Cost
CCF	\$0	\$16,717,169	\$0	\$0	\$16,717,169
<b>Total</b>	<b>\$0</b>	<b>\$16,717,169</b>	<b>\$0</b>	<b>\$0</b>	<b>\$16,717,169</b>

### ITEMIZED COST INFORMATION

Cost Item	Prior Approp.	FY 2019-20	FY 2020-21	Future Requests	Total Cost
Land Acquisition	\$0	\$0	\$0	\$0	\$0
Professional Services	\$0	\$1,913,006	\$0	\$0	\$1,913,006
Construction	\$0	\$13,284,420	\$0	\$0	\$13,284,420
Equipment	\$0	\$0	\$0	\$0	\$0
Miscellaneous	\$0	\$0	\$0	\$0	\$0
Contingency	\$0	\$1,519,743	\$0	\$0	\$1,519,743
Software Acquisition	\$0	\$0	\$0	\$0	\$0
<b>Total</b>	<b>\$0</b>	<b>\$16,717,169</b>	<b>\$0</b>	<b>\$0</b>	<b>\$16,717,169</b>

### PROJECT STATUS

This is the sixth 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 (CSU) 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 sprinkler system.

# Fiscal Year 2019-20 Capital Construction Request

## Colorado State University

### *Anatomy/Zoology East Wing Revitalization (Capital Renewal)*

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 \$206, an increase of \$11 per GSF, or 5.9 percent, over the FY 2018-19 submission. 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. In similar building revitalizations, the university has recorded over 25 percent decreased electrical use and over 50 percent decreased water use. 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 biology; biomedical sciences; fish, wildlife, and conservation; biochemistry; and part of the Office of the Vice President for Research.

### PROJECT SCHEDULE

	Start Date	Completion Date
Design	July 2019	October 2019
Construction	October 2019	December 2020
Equipment		
Occupancy	January 2021	

### SOURCE OF CASH FUNDS

This project is not funded from cash sources.

### OPERATING BUDGET

Operating costs are paid from institutional sources. CSU anticipates the project will decrease its operating costs.

### STAFF QUESTIONS AND ISSUES

1. Discuss the relationship between this request and the Health Education Outreach Center funded through the first tranche of the National Western Center COPs. The CDC staff analysis of the Health Education Outreach Center stated: "The project constructs a four-story, 39,600-GSF addition to the Anatomy/Zoology Building on the main

## Fiscal Year 2019-20 Capital Construction Request

### Colorado State University

#### *Anatomy/Zoology East Wing Revitalization (Capital Renewal)*

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campus.”

*The Health Education and Outreach Center is connected to the Anatomy/Zoology east wing at the first and third floors, and minimal construction was done at those connections. The mechanical system for this building is completely separate from AZ, as the existing system could not accommodate the increased load. In summary, the existing AZ building remains virtually untouched by the Health Education and Outreach Center construction, and revitalization of the AZ east wing is still required.*

# Fiscal Year 2019-20 Capital Construction Request

## Colorado State University — Pueblo

### Technology Building Renovation

#### PROGRAM PLAN STATUS

2008-093

Approved Program Plan?  Yes

Date Approved:

#### PRIORITY NUMBERS

<u>Prioritized By</u>	<u>Priority</u>	
DeptInst	1 of 1	
CCHE	24 of 40	
OSPB	44 of 62	Not recommended for funding.

#### PRIOR APPROPRIATION AND REQUEST INFORMATION

<u>Fund Source</u>	<u>Prior Approp.</u>	<u>FY 2019-20</u>	<u>FY 2020-21</u>	<u>Future Requests</u>	<u>Total Cost</u>
CCF	\$0	\$16,417,170	\$0	\$0	\$16,417,170
CF	\$0	\$165,830	\$0	\$0	\$165,830
<b>Total</b>	<b>\$0</b>	<b>\$16,583,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$16,583,000</b>

#### ITEMIZED COST INFORMATION

<u>Cost Item</u>	<u>Prior Approp.</u>	<u>FY 2019-20</u>	<u>FY 2020-21</u>	<u>Future Requests</u>	<u>Total Cost</u>
Land Acquisition	\$0	\$0	\$0	\$0	\$0
Professional Services	\$0	\$2,392,627	\$0	\$0	\$2,392,627
Construction	\$0	\$12,085,754	\$0	\$0	\$12,085,754
Equipment	\$0	\$869,885	\$0	\$0	\$869,885
Miscellaneous	\$0	\$489,385	\$0	\$0	\$489,385
Contingency	\$0	\$745,349	\$0	\$0	\$745,349
Software Acquisition	\$0	\$0	\$0	\$0	\$0
<b>Total</b>	<b>\$0</b>	<b>\$16,583,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$16,583,000</b>

#### PROJECT STATUS

This project was first requested for funding in FY 2007-08. Between FY 2009-10 and FY 2018-19 the project was listed on the five-year projection of need.

#### PROJECT DESCRIPTION / SCOPE OF WORK

Colorado State University – Pueblo is requesting state funds to renovate 57,654 GSF of the Technology Building. The project will remedy existing deficiencies in space and building conditions and will accommodate predicted enrollment growth. The building will house four departments: Teacher Education, Engineering, Civil Engineering Technology, and Automotive Industry Management. The project upgrades the building’s technological, electrical, and mechanical systems in order to meet current building codes and academic standards. The project also includes the following improvements:

- organized circulation “way-finding” within the building;
- modifications to the western entrance to improve accessibility for persons with disabilities;
- sound transmission reduction and insulation in classrooms;



# Fiscal Year 2019-20 Capital Construction Request

## Colorado State University — Pueblo

### Technology Building Renovation

- variable lighting control in classrooms;
- modernization of building exterior appearance;
- addition of data, information technology, and digital capabilities throughout the building, including wireless internet and cable television;
- adequate gathering spaces; and
- clustering of departmental faculty offices, work areas for departmental support staff, and departmental conference spaces.

**Cost assumption.** The cost assumption was determined through the planning process. The cost per GSF is \$288. The project accounts for future inflation. The project meets the Art in Public Places and High-Performance Certification Program requirements.

#### PROJECT JUSTIFICATION

The university says the 29-year-old building is short on space due to increased student demand and programmatic changes. Since 2013, enrollment in Construction Management has increased from 34 to 108 full-time enrollees, and enrollment in Civil Engineering Technology has increased from 65 to 79 full-time enrollees. According to the university, the programs housed in the Technology Building currently have enrollment limits due to limited available classroom and laboratory space.

A building physical condition audit conducted by the university in September 2006 rated the Facility Condition Index (FCI) as 61. The FCI is a measure of the cost of remedying building deficiencies compared to a building's current replacement value, and the state architect's target FCI for all buildings is 85.

The university did not provide an explanation of potential alternatives.

#### 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 Technology Building was built in 1981 and houses four departments of the College of Education, Engineering, and Professional Studies: Teacher Education, Engineering, Civil Engineering Technology, and Automotive Industry Management.

#### PROJECT SCHEDULE

	Start Date	Completion Date
Design	July 2019	December 2020
Construction	January 2020	November 2021
Equipment	July 2021	November 2021
Occupancy	December 2021	N/A

#### SOURCE OF CASH FUNDS

The source of cash fund is institutional reserves.

# Fiscal Year 2019-20 Capital Construction Request

## Colorado State University — Pueblo

### *Technology Building Renovation*

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#### OPERATING BUDGET

Operating expenses are paid from institutional sources. According to the university, once completed, the Technology Building will increase operating costs by about \$80,000 annually.

#### STAFF QUESTIONS AND ISSUES

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

# Fiscal Year 2019-20 Capital Construction Request

## Colorado State University

*Chemistry B and C Wing Renovation (Capital Renewal)*

### PROGRAM PLAN STATUS

2008-088

Approved Program Plan?

Date Approved:

### PRIORITY NUMBERS

Prioritized By	Priority	
Dept/Inst	3 of 6	
CCHE	28 of 40	
OSPB	48 of 62	Not recommended for funding.

### PRIOR APPROPRIATION AND REQUEST INFORMATION

Fund Source	Prior Approp.	FY 2019-20	FY 2020-21	Future Requests	Total Cost
CCF	\$0	\$26,399,351	\$0	\$0	\$26,399,351
<b>Total</b>	<b>\$0</b>	<b>\$26,399,351</b>	<b>\$0</b>	<b>\$0</b>	<b>\$26,399,351</b>

### ITEMIZED COST INFORMATION

Cost Item	Prior Approp.	FY 2019-20	FY 2020-21	Future Requests	Total Cost
Land Acquisition	\$0	\$0	\$0	\$0	\$0
Professional Services	\$0	\$3,025,196	\$0	\$0	\$3,025,196
Construction	\$0	\$20,974,214	\$0	\$0	\$20,974,214
Equipment	\$0	\$0	\$0	\$0	\$0
Miscellaneous	\$0	\$0	\$0	\$0	\$0
Contingency	\$0	\$2,399,941	\$0	\$0	\$2,399,941
Software Acquisition	\$0	\$0	\$0	\$0	\$0
<b>Total</b>	<b>\$0</b>	<b>\$26,399,351</b>	<b>\$0</b>	<b>\$0</b>	<b>\$26,399,351</b>

### PROJECT STATUS

This is the third request for funding. The project was listed on the five-year projection of need from FY 2007-08 through FY 2016-17.

**Associated projects.** Colorado State University (CSU) 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.

### PROJECT DESCRIPTION / SCOPE OF WORK

CSU is requesting state funds to upgrade or replace multiple systems in the 128,100-GSF B and C wing of the

# Fiscal Year 2019-20 Capital Construction Request

## Colorado State University

### *Chemistry B and C Wing Renovation (Capital Renewal)*

Chemistry Building. 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. The project updates mechanical, electrical, and plumbing systems, installs a new roof, abates asbestos, and upgrades the fire alarm and suppression 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 \$206. 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 ten 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. Vacated space in the Chemistry Building has been backfilled by several programs, including chemistry research, additional teaching labs, and part of the Office of the Vice President for Research.

## PROJECT SCHEDULE

	Start Date	Completion Date
Design	July 2019	October 2019
Construction	October 2019	December 2020
Equipment		
Occupancy	January 2021	

## SOURCE OF CASH FUNDS

This project is not funded from cash sources.

# Fiscal Year 2019-20 Capital Construction Request

## Colorado State University

*Chemistry B and C Wing Renovation (Capital Renewal)*

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### OPERATING BUDGET

Operating costs are paid from institutional sources. CSU anticipates the project will decrease its operating costs. CSU says that similar projects have decreased electrical use by 25 percent and water use by 50 percent.

### STAFF QUESTIONS AND ISSUES

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

**Colorado State University System  
Five-Year Projection of Need  
FY 2019-20 through FY 2023-24**

Project Title	Fund Source	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24	Totals
<b>Colorado State University</b>							
<b>Capital Construction (Current Year)</b>							
Anatomy/Zoology East Wing Revitalization (Capital Renewal)	CCF	16,717,169	0	0	0	0	\$16,717,169
	CF	0	0	0	0	0	\$0
Chemistry B and C Wing Renovation (Capital Renewal)	CCF	26,399,351	0	0	0	0	\$26,399,351
	CF	0	0	0	0	0	\$0
Shepardson Building Renovation and Expansion	CCF	13,482,700	16,195,157	0	0	0	\$29,677,857
	CF	9,000,000	0	0	0	0	\$9,000,000
<b>Capital Construction (National Western COP Projects)</b>							
Animal Health Building (National Western Center COP)	CCF	0	0	0	0	0	\$0
	CF	0	0	0	0	0	\$0
CSU Center (National Western Center COP)	CCF	0	0	0	0	0	\$0
	CF	0	0	0	0	0	\$0
National Western Center Lease Payments	CCF	16,570,927	18,300,000	18,300,000	18,300,000	18,300,000	\$89,770,927
	CF	0	0	0	0	0	\$0
<b>Capital Construction (Out Year)</b>							
Clark Building Revitalization (Capital Renewal)	CCF	0	15,000,000	15,000,000	15,000,000	0	\$45,000,000
	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
District Heating Plant Replacement	CCF	0	0	0	0	38,000,000	\$38,000,000
	CF	0	0	0	0	0	\$0
Education Building Revitalization	CCF	0	0	22,000,000	0	0	\$22,000,000
	CF	0	0	0	0	0	\$0
Engineering Research Center Revitalization	CCF	0	0	0	26,000,000	0	\$26,000,000
	CF	0	0	0	0	0	\$0

**Colorado State University System (Cont.)**  
**Five-Year Projection of Need**  
**FY 2019-20 through FY 2023-24**

Project Title	Fund Source	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24	Totals
<b>Colorado State University (Cont.)</b>							
<b>Capital Construction (Out Year) (Cont.)</b>							
San Luis Valley Research Center	CCF	0	7,500,000	0	0	0	\$7,500,000
	CF	0	0	0	0	0	\$0
<b>CSU Capital Construction Subtotals</b>	<b>CCF</b>	<b>73,170,147</b>	<b>74,395,157</b>	<b>55,300,000</b>	<b>59,300,000</b>	<b>56,300,000</b>	<b>\$318,465,304</b>
	<b>CF</b>	<b>9,000,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>\$9,000,000</b>
<b>Colorado State University – Pueblo</b>							
<b>Capital Construction (Current Year)</b>							
Technology Building Renovation and Addition	CCF	16,417,170	0	0	0	0	\$16,417,170
	CF	165,830	0	0	0	0	\$165,830
<b>Capital Construction (Out Year)</b>							
Administration Building Renovation and Addition	CCF	0	0	16,200,000	0	0	\$16,200,000
	CF	0	0	1,800,000	0	0	\$1,800,000
Art/Music Building Renovation and Addition	CCF	0	16,200,000	0	0	0	\$16,200,000
	CF	0	1,800,000	0	0	0	\$1,800,000
Facilities Management Building Renovation and Addition	CCF	0	0	0	14,400,000	0	\$14,400,000
	CF	0	0	0	1,600,000	0	\$1,600,000
<b>CSU – Pueblo Capital Construction Subtotals</b>	<b>CCF</b>	<b>16,417,170</b>	<b>16,200,000</b>	<b>16,200,000</b>	<b>14,400,000</b>	<b>0</b>	<b>\$63,217,170</b>
	<b>CF</b>	<b>165,830</b>	<b>1,800,000</b>	<b>1,800,000</b>	<b>1,600,000</b>	<b>0</b>	<b>\$5,365,830</b>
<b>Capital Construction Subtotals</b>	<b>CCF</b>	<b>89,587,317</b>	<b>90,595,157</b>	<b>71,500,000</b>	<b>73,700,000</b>	<b>56,300,000</b>	<b>\$381,682,474</b>
	<b>CF</b>	<b>9,165,830</b>	<b>1,800,000</b>	<b>1,800,000</b>	<b>1,600,000</b>	<b>0</b>	<b>\$14,365,830</b>
<b>Controlled Maintenance Subtotals</b>	<b>CCF</b>	<b>10,420,310</b>	<i>See OSA Annual Report.</i>				<b>\$10,420,310</b>
<i>Total: State Funds</i>		<i>100,007,627</i>	<i>90,595,157</i>	<i>71,500,000</i>	<i>73,700,000</i>	<i>56,300,000</i>	<i>\$392,102,784</i>
<b>Grand Total: All Fund Sources</b>		<b>\$109,173,457</b>	<b>\$92,395,157</b>	<b>\$73,300,000</b>	<b>\$75,300,000</b>	<b>\$56,300,000</b>	<b>\$406,468,614</b>

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