

Fiscal Year 2022-23 Capital Construction Request

Colorado Mesa University
Robinson Theater Replacement

PROGRAM PLAN STATUS

2023-026

Approved Program Plan

No

Date Approved:

September 5, 2019

PRIORITY NUMBERS

Prioritized By	Priority	
CMU	1 of 5	
CCHE	5 of 34	
OSPB	28 of 27	Not recommended for funding.

PRIOR APPROPRIATIONS AND REQUEST INFORMATION

Fund Source	Prior Approp.	FY 2022-23	FY 2023-24	Future Requests	Total Costs
CCF	\$0	\$39,454,194	\$0	\$0	\$39,454,194
CF	\$0	\$4,432,562	\$0	\$0	\$4,432,562
Total	\$0	\$43,886,756	\$0	\$0	\$43,886,756

ITEMIZED COST INFORMATION

Cost Item	Prior Approp.	FY 2022-23	FY 2023-24	Future Requests	Total Cost
Land Acquisition	\$0	\$0	\$0	\$0	\$0
Professional Services	\$0	\$4,317,084	\$0	\$0	\$4,317,084
Construction	\$0	\$35,719,611	\$0	\$0	\$35,719,611
Equipment	\$0	\$1,800,000	\$0	\$0	\$1,800,000
Miscellaneous	\$0	\$321,119	\$0	\$0	\$321,119
Contingency	\$0	\$1,728,942	\$0	\$0	\$1,728,942
Total	\$0	\$43,886,756	\$0	\$0	\$43,886,756

PROJECT STATUS

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

Fiscal Year 2022-23 Capital Construction Request

Colorado Mesa University
Robinson Theater Replacement

PROJECT DESCRIPTION / SCOPE OF WORK

Colorado Mesa University (CMU) is requesting a combination of state funds and cash funds spending authority to reconstruct the 600-seat Robinson Theater within the Moss Performing Arts Center, and improve several auxiliary spaces within the center. The university says the project will address numerous life-safety, code, functional, and operating issues in a facility that serves as the performing arts epicenter for western Colorado.

CMU explains that Robinson Theater's shortcomings cannot be addressed by a renovation, largely due to the grade of the seating, and thus must be completely demolished and rebuilt. The rebuild encompasses the following:

- replacing inefficient and noisy mechanical and electrical systems;
- installing LED lighting;
- fixing safety issues, such as installing a front-of-house catwalk to address student technician safety and replacing noncompliant stage rigging;
- addressing code issues, including bringing the facility into compliance with the structural and seismic codes;
- addressing accessibility issues, such as orchestra pit egress, control booth accessibility, and audience seating dispersion;
- improving acoustics, including installing sound blocking between lobby and performance spaces;
- improving the audience experience, including expanding seating capacity, improving sightlines by reconstructing the floor slab, and upgrading reception/refreshment areas and the box office;
- expanding dressing rooms and associated performer space to accommodate larger casts and provide down-time accommodations; and
- constructing an orchestra shell for music performances.

Additional elements of the project include:

- installing dedicated lighting, a variable acoustic system, and digital projection in Love Recital Hall, along with expanding its lobby;
- constructing a rehearsal studio, expanded lobby, a suite of dressing rooms, and a green room for Moss Experimental Theater;
- constructing an additional dance studio;
- constructing a rehearsal studio/classroom of the same size as the largest stage area; and
- adding one design lab.

Cost assumption. The cost estimates for the project are based on the fourth quarter 2020 Mortenson Construction Denver Cost Index with a 2.0 percent inflation factor to 2021. The cost is \$611 per GSF. The project complies with Art in Public Places and High Performance Certification program requirements.

Fiscal Year 2022-23 Capital Construction Request

Colorado Mesa University
Robinson Theater Replacement

PROJECT JUSTIFICATION

CMU says the project will remedy numerous safety, code, and functionality issues in Robinson Theater and other Moss Performing Arts Center spaces, making it a more inviting venue for students, performers, and patrons from across the Western Slope. The university further says the project will enhance educational offerings at CMU and drive economic development.

Moss Performing Arts Center has not been renovated since 1968, making it the oldest un-renovated building on campus. The Facility Condition Index (FCI) rating for the Robinson Theater portion of the facility is 41.9. FCI measures the cost of remedying a building's deficiencies compared to its currently replacement value, and the Office of the State Architect's target FCI for all state buildings is 85. Among the numerous deficiencies in the center, CMU cites elements around the stage that create hazards, such as a lack of a front-of-house catwalk, noncompliant stage rigging, and lack of proper orchestra pit egress. Several areas in the theater are not ADA compliant, audience seating dispersion is not compliant, and lighting issues have resulted in injury claims in recent years. Programs using the Moss Performance Arts Center are facing space limitations. The building lacks sufficient dressing room, rehearsal, and down-time space, burdening lobbies and other swing spaces. The building has no green room, and lacks sufficient dance space to accommodate the wide range of dance disciplines taught at CMU. Due to space shortages, there are many scheduling conflicts between the departments that use Moss. The mechanical systems are beyond their useful life.

The project will mitigate a large backlog of deferred maintenance, provide space for the specialized programming and instruction that takes place in Moss, and create a showpiece for attracting academic talent, instructors, performers, and patrons, according to the university. CMU explains that the current facility is a barrier to recruitment, since many high schools have better facilities and equipment. The facility will also be better suited for multi-media presentations, recording and video projects, and other initiatives, and will increase course and degree offerings to students.

Project alternative. CMU considered renovating Moss rather than performing a rebuild, but determined that the cost of a comprehensive renovation would be about 90 percent of the rebuild option.

PROGRAM INFORMATION

The Moss Performing Arts Center hosts about 15,000-20,000 visitors per year, including up to 1,200 K-12 students. Since there is no concert hall in Grand Junction, the university says the Robinson Theater is the performance focal point for the community and region. The facility hosts over 40 theatre and dance performances and over 40 concerts and recitals per year.

The center is home to the Department of Theatre Arts, which includes, theatre, dance, and speech. The facility also hosts the Music Department, which sponsors three K-12 music camps per year.

Robinson Theatre is CMU's only venue for larger audiences and has the only stage large enough for music ensembles, full-scale dance concerts, and theatre productions with large scenery and musical elements. Love Recital Hall is a music recital venue with 290 seats. The Moss Experimental Theater is a multi-format flexible theater with up to 125 seats. It hosts both theatre and dance productions.

PROJECT SCHEDULE

	Start Date	Completion Date
Design	June 2022	December 2022
Construction	January 2023	June 2023
Equipment	June 2023	August 2023
Occupancy	August 2023	

Fiscal Year 2022-23 Capital Construction Request

Colorado Mesa University
Robinson Theater Replacement

SOURCE OF CASH FUNDS

The source of cash funds for the project is campus reserves and fund-raising. The university says no student fee revenues will be dedicated to the project.

OPERATING BUDGET

Operating expenses are paid from institutional sources. The university expects the project to result in additional operating costs of \$61,459 per year, based upon \$4.62 per square foot of expanded space.

STAFF QUESTIONS AND ISSUES

1. Is the university claiming money spent on program planning for the project as part of its cash contribution?
2. The request documents state that the Robinson Theater was constructed in 1958 and 1968. Which one is it?
3. The operating expense portion of the request documents say that the project will increase operating costs by \$61,459, or \$4.62 per square foot for the "expanded portion of the building." Does this mean that the Moss Performing Arts Complex will grow by about 13,300 square feet as a result of the project?

Fiscal Year 2022-23 Capital Construction Request

Colorado Mesa University
Maverick Center Renovation and Expansion

PROGRAM PLAN STATUS

2023-025

Approved Program Plan

Yes

Date Approved:

May 1, 2021

PRIORITY NUMBERS

<u>Prioritized By</u>	<u>Priority</u>	
CMU	2 of 5	
CCHE	18 of 34	
OSPB	Not Prioritized	Not recommended for funding.

PRIOR APPROPRIATIONS AND REQUEST INFORMATION

<u>Fund Source</u>	<u>Prior Approp.</u>	<u>FY 2022-23</u>	<u>FY 2023-24</u>	<u>Future Requests</u>	<u>Total Costs</u>
CCF	\$0	\$38,026,716	\$0	\$0	\$38,026,716
CF	\$0	\$4,272,189	\$0	\$0	\$4,272,189
Total	\$0	\$42,298,905	\$0	\$0	\$42,298,905

ITEMIZED COST INFORMATION

<u>Cost Item</u>	<u>Prior Approp.</u>	<u>FY 2022-23</u>	<u>FY 2023-24</u>	<u>Future Requests</u>	<u>Total Cost</u>
Land Acquisition	\$0	\$1,847,262	\$0	\$0	\$1,847,262
Professional Services	\$0	\$3,929,856	\$0	\$0	\$3,929,856
Construction	\$0	\$33,775,260	\$0	\$0	\$33,775,260
Equipment	\$0	\$684,624	\$0	\$0	\$684,624
Miscellaneous	\$0	\$303,640	\$0	\$0	\$303,640
Contingency	\$0	\$1,758,263	\$0	\$0	\$1,758,263
Total	\$0	\$42,298,905	\$0	\$0	\$42,298,905

PROJECT STATUS

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

Fiscal Year 2022-23 Capital Construction Request

Colorado Mesa University *Maverick Center Renovation and Expansion*

PROJECT DESCRIPTION / SCOPE OF WORK

Colorado Mesa University (CMU) is requesting a combination of state funds and cash funds spending authority to renovate 10,790 GSF in the Maverick Center, and construct a 72,000-GSF sports arena in the Maverick Center Complex. The project also constructs nine tennis courts and supporting buildings on the edge of campus for dual use between the university and Grand Junction High School. The project supports the university's athletics program, numerous health care- and fitness-related academic disciplines, and special events.

The renovations will convert the 1,800-seat Brownson Arena to large classroom and general-purpose-learning flex spaces for use by health care and sports and recreation programs, and to house the student wellness center. This space currently serves as the arena for CMU sports teams, club sports, and area high school athletic events.

The new arena will feature 300 bleachers for a student section, 1,100 fixed chairbacks, 1,100 telescopic chairbacks, and four 20-seat suites. Associated spaces include locker rooms, a staging area, a concourse and lobby, an event terrace, a concession area, a service yard and loading zone, parking, and an entry plaza. The arena will be connected to the Maverick Center and will rely on the center for base support facilities.

Cost assumption. The cost estimates for the project are based on the fourth quarter 2020 Mortenson Construction Denver Cost Index with a 2.0 percent inflation factor to 2021. The cost per GSF is \$247. The project complies with Art in Public Places and High Performance Certification program requirements.

PROJECT JUSTIFICATION

CMU says construction of a new arena will help alleviate a space shortage for competitive and recreational athletics, support the Athletics program, and allow the university to host numerous campus and community events. CMU notes the importance of athletics to successes in academics, ethics, leadership, student retention, and community cohesion, and creation of career paths. The university also sponsors a robust Club Sport Department and intramural program, and explains that growth and participation in these programs is limited by demands on space, particularly when inclement weather places the needs of the Athletics program over those of club and intramural sports. The current Brownson Arena is not adequate to host graduations when weather precludes outdoor ceremonies.

The repurposed Brownson Arena will provide academic and flex space for programs in nursing, health information technology, radiology, kinesiology, fitness and health, outdoor recreation, occupational therapy, and other disciplines with in-demand career paths. CMU explains that the new space will allow it to engage in public/private partnerships, with students focusing on interdisciplinary learning experiences with regional employers and organizations. Partners include the VA Western Colorado Health Care System, Special Olympics, and Community Hospital. The renovations will allow the new classroom space to morph into a group exercise and staging area for use in kinesiology, sport performance, and other programs requiring large spaces, and the new space will host seminars, panel discussions, interprofessional and collaborative learning experiences, and continuing medical education programs. The new space will be located conveniently adjacent to other campus features used by the affected academic programs, such as the natatorium and Human Performance Center. Finally, CMU says the new space will provide a new home for the Student Wellness Center, which it says is currently housed in deteriorating leased space located off campus. This arrangement hinders the provision of services in areas such as stress and mental and behavioral health, the demands on which have increased recently.

CMU currently collaborates with Grand Junction High School and Grand Junction Parks and Recreation to share certain sports-related facilities. By constructing new tennis courts on the edge of campus near the site of the planned new high school, the university says it will be able to share resources and reduce costs.

Fiscal Year 2022-23 Capital Construction Request

Colorado Mesa University
Maverick Center Renovation and Expansion

PROGRAM INFORMATION

Brownston Hall was constructed in 1968 as the university's indoor sports arena, and additionally hosts many community events such as high school basketball and wrestling tournaments, banquets, and concerts.

For academic year 2019-20 the university's Department of Health Sciences delivered about 12,000 credit hours of instruction, had 1,648 student majors, and awarded 271 degrees across its programs. The Department of Kinesiology delivered about 15,000 credit hours of instruction, had 861 student majors, and awarded 146 degrees. The university says about 18 percent of its student body will be served by the project's renovations.

The Athletics program has almost 800 athletes in 28 sports. The Club Sports Department consists of 500 students in 23 sports, and intramurals consists of 3,200 participants. Overall enrollment at the university is 6,800 undergraduate students.

PROJECT SCHEDULE

	Start Date	Completion Date
Design	June 2022	December 2022
Construction	January 2023	December 2023
Equipment	January 2024	March 2024
Occupancy	March 2024	

SOURCE OF CASH FUNDS

The source of cash funds for the project is internal resources, along with prior cash contributions to program planning and land purchase. The university says none of its cash contribution derives from student fees.

OPERATING BUDGET

The university expects the expansion elements of the project to result in increased operating costs of \$740,078 per year, which it is prepared to accommodate without affecting state operating requests.

STAFF QUESTIONS AND ISSUES

1. Has the land for the expansion portion of the project already been purchased? If so, when was it purchased? Is the university claiming the \$1.8 million for the land purchase as part of its cash contribution to the project?

Some of the land has already been purchased. Of CMU's cash match portion \$843,032.97 (\$1,124,044 x 75%) will be from prior cash contributions spent on program plan development and the purchase of land, less revenue generated in the meantime. These properties were purchased from 2016 to 2020. It should be noted that there was an additional \$355k of land costs that were not included as cash match because they were purchased before the five years prior to the request submission deadline, per the Department of Higher Education's instructions on land as cash match. \$1,847,262 has yet to be spent on needed future land acquisitions to support the project.

2. Does the CMU Athletic Department generate sufficient revenues to contribute a greater portion to the sports arena construction?

No, because CMU's Division II athletics program is intended to support the individual as a student first, CMU's Athletic Department doesn't generate net revenues. Funds for CMU's cash match will be coming from CMU internal sources.

Fiscal Year 2022-23 Capital Construction Request

Colorado Mesa University
Electrical and Computer Engineering Building

PROGRAM PLAN STATUS

2020-037

Approved Program Plan

Yes

Date Approved:

October 12, 2018

PRIORITY NUMBERS

Prioritized By	Priority	
CMU	3 of 5	
CCHE	32 of 34	
OSPB	Not Prioritized	Not recommended for funding.

PRIOR APPROPRIATIONS AND REQUEST INFORMATION

Fund Source	Prior Approp.	FY 2022-23	FY 2023-24	Future Requests	Total Costs
CCF	\$0	\$21,029,766	\$0	\$0	\$21,029,766
CF	\$0	\$2,362,633	\$0	\$0	\$2,362,633
Total	\$0	\$23,392,399	\$0	\$0	\$23,392,399

ITEMIZED COST INFORMATION

Cost Item	Prior Approp.	FY 2022-23	FY 2023-24	Future Requests	Total Cost
Land Acquisition	\$0	\$500,800	\$0	\$0	\$500,800
Professional Services	\$0	\$1,601,813	\$0	\$0	\$1,601,813
Construction	\$0	\$18,924,475	\$0	\$0	\$18,924,475
Equipment	\$0	\$1,081,256	\$0	\$0	\$1,081,256
Miscellaneous	\$0	\$170,131	\$0	\$0	\$170,131
Contingency	\$0	\$1,113,924	\$0	\$0	\$1,113,924
Total	\$0	\$23,392,399	\$0	\$0	\$23,392,399

PROJECT STATUS

This is the fourth request for funding. Funding for the project was first requested for FY 2019-20. Colorado Mesa University (CMU) sought funding to construct a building for its Engineering and Computer Science programs in FY 2016-17. When the project was not funded, the university constructed the building using cash funds, rescoping the project to house the Engineering Department and the John McConnell Math and Science Center. The new building, now called Confluence Hall, opened in spring 2018.

Fiscal Year 2022-23 Capital Construction Request

Colorado Mesa University
Electrical and Computer Engineering Building

PROJECT DESCRIPTION / SCOPE OF WORK

CMU is requesting a combination of state funds and cash funds spending authority to construct a three-story, 38,481-GSF academic building to house its Electrical and Computer Engineering program and the Computer Science Department, and to provide space for growing engineering programs housed in the adjacent Confluence Hall. The new building will provide specialized learning space for several of the university's growing STEM programs, while freeing up vacated space for other growing disciplines. The new building includes:

- eight group study rooms;
- a 1,200-GSF multipurpose classroom;
- four computer labs;
- four project labs;
- two team shops;
- 14 student/faculty interactive spaces;
- a conference room;
- specialty labs, including labs for Unix/Linux, radio frequency, power measurement, circuits, servers, welding, and robotics;
- administrative support spaces; and
- food service space.

Laboratory space features program-specific equipment and work stations to facilitate collaborative, hands-on learning. The new building also includes a bridge connecting it to Confluence Hall.

Cost assumption. The cost assumption was determined through the program planning process and by using the costs for building Confluence Hall, escalated for inflation. The cost per square foot is \$608. The project meets the Art in Public Places and High-Performance Certification Program requirements.

PROJECT JUSTIFICATION

The university says its campus lacks sufficient space to accommodate the growth of several of its engineering and computer science disciplines, and the space currently dedicated to these programs is operating at maximum capacity and is inadequate for the types of instruction involved. Growth in these programs is being driven by workforce demand for engineers and other STEM graduates on the Western Slope and beyond. The building's location will also supplement a growing campus engineering and computer science nexus, and help support partnerships with businesses located in a nearby enterprise zone. CMU also foresees growth in its Eureka! program as a result of the building's placement. This program brings math and science programming to K-12 students in the university's 14-county region. Finally, space vacated by programs moving to the new building will benefit other growing campus programs, including the Departments of Biology, Math and Statistics, and Physical and Environmental Sciences.

Project alternatives. CMU considered allocating space in Confluence Hall to new engineering programs, but this would have left the Computer Science Department in Wubben Hall, which is a third of a mile away, and would not have allowed for expansion of programs in Wubben. Confluence Hall's design reserved about 10,000 GSF to accommodate the Civil and Mechanical Engineering programs, but the addition of the Electrical and Computer Engineering program has outstripped the building's capacity. Finally, the university looked into renovating a nearby church for Electrical and Computer Engineering, but the building is not large enough to fit the entire program, and splitting the program between buildings would create inefficiencies. The university says it may be able to phase the project.

Fiscal Year 2022-23 Capital Construction Request

Colorado Mesa University
Electrical and Computer Engineering Building

PROGRAM INFORMATION

CMU offers five engineering degree options: Bachelor of Science degrees in Mechanical Engineering, Civil Engineering, Electrical and Computer Engineering, and Mechanical Engineering Technology; and an Associate of Applied Science degree in Mechanical Engineering Technology. The university says it is one of only a handful of universities in the nation that offers this array of degrees within a single department. The last two years of CMU's bachelors degrees in Mechanical Engineering, Civil Engineering, and Electrical and Computer Engineering are conducted jointly with the University of Colorado at Boulder, and faculty from the latter institution teach in residence at CMU. Graduates of the new Electrical and Computer Engineering program will have comprehensive knowledge and experience in the concepts and design of electrical, electronic, and computer devices, circuits, and systems, as well as experience in software development, according to the university.

The Computer Science Department offers a Bachelor of Science in Computer Science, an Associate of Science Liberals Arts Computer Science emphasis, and a Minor in Computer Science. CMU says co-locating Computer Science with Electrical and Computer Engineering will lead to efficiencies, since the engineering field draws heavily on computer science principles and students take classes across the two departments.

PROJECT SCHEDULE

	Start Date	Completion Date
Design	May 2022	August 2022
Construction	August 2022	June 2023
Equipment	June 2023	July 2023
Occupancy		July 2023

SOURCE OF CASH FUNDS

The source of cash funds for this project is campus reserves and fundraising, along with prior cash contributions for land purchase and program planning. CMU notes that no student fee revenues will be used for the project.

OPERATING BUDGET

Operating expenses are paid from institutional sources. CMU estimates that the new building will cost \$4.62 per square foot to operate, or \$177,782 per year, and has budgeted for this cost.

STAFF QUESTIONS AND ISSUES

1. When did the university purchase the land upon which the new building will be sited?

Some of the land has already been purchased. Of CMU's cash match portion, \$622,457.97 (\$829,943.96 x 75%) will be from prior cash contributions spent on program plan development and the purchase of land, less revenue generated in the meantime. These properties were purchased from 2016 to 2020. There was an additional \$729k of land costs that were not included as cash match because they were purchased before the five years prior to the request submission deadline, per the Department of Higher Education's instructions on land as cash match. \$500,800 has yet to be spent on future land acquisitions to support the project.

Fiscal Year 2022-23 Capital Construction Request

Colorado Mesa University
Energy Independence at CMU

PROGRAM PLAN STATUS

2015-008

Approved Program Plan

Yes

Date Approved:

July 19, 2019

PRIORITY NUMBERS

Prioritized By	Priority	
CMU	4 of 5	
CCHE	33 of 34	
OSPB	Not Prioritized	Not recommended for funding.

PRIOR APPROPRIATIONS AND REQUEST INFORMATION

Fund Source	Prior Approp.	FY 2022-23	FY 2023-24	Future Requests	Total Costs
CCF	\$0	\$6,785,071	\$0	\$0	\$6,785,071
CF	\$0	\$762,283	\$0	\$0	\$762,283
Total	\$0	\$7,547,354	\$0	\$0	\$7,547,354

ITEMIZED COST INFORMATION

Cost Item	Prior Approp.	FY 2022-23	FY 2023-24	Future Requests	Total Cost
Land Acquisition	\$0	\$0	\$0	\$0	\$0
Professional Services	\$0	\$2,426,580	\$0	\$0	\$2,426,580
Construction	\$0	\$1,079,670	\$0	\$0	\$1,079,670
Equipment	\$0	\$3,672,000	\$0	\$0	\$3,672,000
Miscellaneous	\$0	\$9,706	\$0	\$0	\$9,706
Contingency	\$0	\$359,398	\$0	\$0	\$359,398
Total	\$0	\$7,547,354	\$0	\$0	\$7,547,354

PROJECT STATUS

This is the eighth request for funding. Funding has been requested for the project each year since FY 2014-15, except for FY 2019-20, though the scope of the request has changed over time.

Fiscal Year 2022-23 Capital Construction Request

Colorado Mesa University
Energy Independence at CMU

PROJECT DESCRIPTION / SCOPE OF WORK

Colorado Mesa University (CMU) is requesting state funds and cash funds spending authority to expand the campus-wide geo-exchange and solar panel systems for power generation. The geo-exchange system will provide a cleaner, more energy-efficient means of heating, cooling, and providing domestic hot water. The solar panel system installs 1.1 megawatts of rooftop solar panels, 2,000 kilowatt hours (kWh) of battery capacity, and a 500 kW two-way inverter/charger. This system will collect and store energy to be used during periods of peak demand, and will thereby allow CMU to avoid high-demand charges.

For the geo-exchange system, the project will install an additional loop field, heat pumps, central loop systems, and necessary hardware elements (vaults, pumps, valves, sensors, and controls). The new loop field will connect to existing loop fields, existing boilers, and cooling towers. The existing boilers and cooling towers will only be used to either add energy (boilers) to or take energy away (cooling towers) from the system during periods of peak demand.

The system will also connect the campus's irrigation ditch water to the geo-exchange loop via a heat exchanger (HX). As the Colorado River (irrigation water) flows by the campus, a series of vaults, pumps, filters, and open plate heat exchangers will be used to capture colder river temperatures to help modulate temperatures in the central loop. The existing diversion vault will be used to capture the water that is warmed up during this process so that it will be used on campus and not sent down stream. This system will be most effective in the springtime because the colder river temperatures will allow the geo-exchange system to pre-cool the ground and the loop fields between April and July. This will provide extremely efficient HVAC cooling on hot summer days. The system would then be used in the late fall to charge the loop fields for the winter. A cooling tower will also be added to help modulate temperatures in the central loop when the irrigation system is not being used.

The project may include one or more building HVAC system replacements to connect to the geo-exchange system.

CMU may submit later phases of the project that will convert every existing building on campus from traditional heating and cooling systems to the more efficient heat pump systems; however, as a building's conversion requires the entire building to be off-line, CMU will need to take a phased approach to avoid shutting down large parts of campus at the same time.

Cost assumption. The cost assumption was determined through the planning process in a joint effort between the campus energy manager and outside consultants. The project meets the Art in Public Places and High Performance Certification Program requirements.

PROJECT JUSTIFICATION

The university says the additions to the geo-exchange system will improve the performance and safety of the existing system, which is at capacity. The system cannot currently meet the cooling demands of the connected load during peak demand. Campus electrical demand is also rapidly approaching the maximum capacity of the existing electrical feeds to the site from Xcel Energy. According to CMU, the combination of solar panel system and battery storage is crucial to avoiding installation of a costly new electrical feed to the campus.

Project alternatives. The university formerly submitted this project with a significant trigeneration component, which captures and uses waste energy from a gas-driven turbine, in lieu of geo-exchange and solar power generation. CMU says it has returned to focus on geothermal and solar as the economics of green energy sources have changed. The university also considered extending an additional electrical feed to the main campus, though CMU does not favor this option as it would not reduce CMU's dependence on traditional energy sources.

The university is still considering two possible alternative options to the preferred option outlined in the project description. One alternative would be to construct a photovoltaic solar farm on a 13.4-acre parcel owned by CMU. Power from the farm would be added to Xcel Energy's power grid, and CMU would take some energy from the grid. A second alternative would be to create energy independence for the Western Colorado Community College campus using a combined geo-exchange loop system and photovoltaic array similar to the project's primary option. The community college is a division of CMU.

Fiscal Year 2022-23 Capital Construction Request

Colorado Mesa University
Energy Independence at CMU

PROGRAM INFORMATION

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

CMU's current geo-exchange loop is comprised of seven loop fields, with one new field currently under consideration. The loop is connected to a total of 15 buildings and provides 89 percent of the energy needed to heat and cool these buildings.

PROJECT SCHEDULE

	Start Date	Completion Date
Design	June 2022	September 2022
Construction	September 2022	August 2025
Equipment		
Occupancy		August 2025

SOURCE OF CASH FUNDS

The source of cash funds for the project is reserves and fundraising. The university notes that none of the cash funding is derived from student fees.

OPERATING BUDGET

Operating expenses are paid from institutional sources. According to the university, increased operating costs resulting from hiring highly skilled technical support staff will be offset by long-term energy savings.

STAFF QUESTIONS AND ISSUES

1. Is there a "break even" point in terms of length of time when the amount of energy savings generated by the project will recoup the cost of the project?

It is difficult to calculate the breakeven point of this request as it anticipates several variances to the current structure and regulations of how solar farms are structured. This request is intended to support the State's goal of reducing the carbon footprint and cost efficiencies in higher ed.

Fiscal Year 2022-23 Capital Construction Request

Colorado Mesa University
Student Parking Garage

PROGRAM PLAN STATUS

2013-024

Approved Program Plan

Yes

Date Approved:

October 12, 2018

PRIORITY NUMBERS

<u>Prioritized By</u>	<u>Priority</u>	
CMU	5 of 5	
CCHE	31 of 34	
OSPB	Not Prioritized	Not recommended for funding.

PRIOR APPROPRIATIONS AND REQUEST INFORMATION

<u>Fund Source</u>	<u>Prior Approp.</u>	<u>FY 2022-23</u>	<u>FY 2023-24</u>	<u>Future Requests</u>	<u>Total Costs</u>
CCF	\$0	\$22,842,301	\$0	\$0	\$22,842,301
CF	\$0	\$2,566,265	\$0	\$0	\$2,566,265
Total	\$0	\$25,408,566	\$0	\$0	\$25,408,566

ITEMIZED COST INFORMATION

<u>Cost Item</u>	<u>Prior Approp.</u>	<u>FY 2022-23</u>	<u>FY 2023-24</u>	<u>Future Requests</u>	<u>Total Cost</u>
Land Acquisition	\$0	\$0	\$0	\$0	\$0
Professional Services	\$0	\$2,779,024	\$0	\$0	\$2,779,024
Construction	\$0	\$20,915,118	\$0	\$0	\$20,915,118
Equipment	\$0	\$316,465	\$0	\$0	\$316,465
Miscellaneous	\$0	\$188,027	\$0	\$0	\$188,027
Contingency	\$0	\$1,209,932	\$0	\$0	\$1,209,932
Total	\$0	\$25,408,566	\$0	\$0	\$25,408,566

PROJECT STATUS

This is the third request for funding. State funds was requested for this project for FY 2020-21 and FY 2021-22. Colorado Mesa University (CMU) requested cash funds spending authority in 2012 and 2016 to build a student parking garage, but the project was never initiated.

Fiscal Year 2022-23 Capital Construction Request

Colorado Mesa University
Student Parking Garage

PROJECT DESCRIPTION / SCOPE OF WORK

CMU is requesting a combination of state funds and cash funds spending authority to construct a 265,000-GSF, five-level, 818-space parking garage on the eastern end of the main campus to alleviate a commuter student parking deficit that has been exacerbated by construction on former surface lots. The garage will be made of pre-cast concrete and feature a panelized facade with a masonry aesthetic to blend with the existing campus architecture. All levels will be above grade and accessible through stairs and elevators. The new structure will be built on the site of an existing surface parking lot.

Cost assumption. The cost assumption was determined through the program planning process, and by consulting with contractors with experience building similar facilities for other universities. These contractors indicate that CMU can expect to pay \$22,000 per space for construction. The cost per square foot \$96. The project accounts for inflation at a rate of 2.0 percent, based upon the fourth quarter Mortenson Construction Denver Cost Index Report. The project meets the Art in Public Places and High-Performance Certification Program requirements.

PROJECT JUSTIFICATION

The CMU campus has a commuter parking deficit of 661 spaces based on a demand analysis focusing on the commuter population, and will continue to have a 151-space deficit after the new parking garage is built. Surface parking lots have been lost due to construction of Engineering Center, the PA/PT/OT Center, and Aspen Apartments, and the development of the East/West Mall. CMU projects continued strong student population growth, both commuter and residential, particularly with the addition of several new academic programs. The university explains that there is limited land available near campus for expansion. A multi-level garage will allow vehicles to be consolidated into higher density parking, freeing up surface lots and parcels acquired by the university as sites for the construction of additional academic and residential facilities. The consolidation will also allow for easier parking enforcement.

Project alternatives. CMU considers building more surface parking lots to be the only alternative to the project, which the university does not consider the best use of available land. Additionally, the university says accelerated property acquisition will likely drive up land prices, and notes that surface parking lots are not optimal in terms of safety, campus aesthetics, and cost of upkeep.

PROGRAM INFORMATION

The CMU main campus parking inventory includes two parking garages and 13 residential, 13 commuter, five mixed, three value, two reserved, three faculty, six pay-to-park, and two retail surface parking lots with a total of 3,955 spaces. CMU says its commuter population is 7,601.

PROJECT SCHEDULE

	Start Date	Completion Date
Design	September 2022	November 2022
Construction	November 2022	November 2023
Equipment	November 2023	December 2023
Occupancy		December 2023

SOURCE OF CASH FUNDS

The source of cash funds for this project is university internal funds or fundraising. The university notes that no student fee moneys will be used for the project.

OPERATING BUDGET

Operating expenses are paid from institutional sources. CMU estimates operating expenses at \$3.04 per square foot, or \$644,480 per year. The university says it has budgeted for these expenses.

Prepared by Legislative Council Staff

Fiscal Year 2022-23 Capital Construction Request

Colorado Mesa University
Student Parking Garage

STAFF QUESTIONS AND ISSUES

1. Other institutions often cash fund parking garages using bonds to be repaid by parking revenues. Why has the university chosen not to do this?

The university's parking system generates \$530k in net revenues per year. The university has already funded the construction of two parking structures with bonds, repaid by net auxiliary revenues. The university has determined that, at this time, it is not financially able to fund additional parking structures with bond proceeds through parking fees. In recent years, CMU has had to fund its own academic buildings (e.g Engineering, PA/PT/OT) thereby depleting resources available for other projects. Furthermore, the added parking is intended to serve primarily academic buildings which traditionally have been considered a responsibility of the state.