

Fiscal Year 2021-22 Capital Construction Request

Metropolitan State University of Denver
Health Institute

PROGRAM PLAN STATUS

2020-012

Approved Program Plan

Yes

Date Approved:

October 22, 2020

PRIORITY NUMBERS

Prioritized By	Priority	
MSUD	1 of 1	
CCHE	6 of 30	
OSPB	33 of 53	Not recommended for funding.

PRIOR APPROPRIATIONS AND REQUEST INFORMATION

Fund Source	Prior Approp.	FY 2021-22	FY 2022-23	Future Requests	Total Costs
CCF	\$0	\$7,156,624	\$67,496,116	\$0	\$74,652,740
CF	\$0	\$0	\$7,575,000	\$7,717,610	\$15,292,610
Total	\$0	\$7,156,624	\$75,071,116	\$7,717,610	\$89,945,350

ITEMIZED COST INFORMATION

Cost Item	Prior Approp.	FY 2021-22	FY 2022-23	Future Requests	Total Cost
Land Acquisition	\$0	\$0	\$10,000	\$0	\$10,000
Professional Services	\$0	\$7,156,624	\$1,647,376	\$295,207	\$9,099,207
Construction	\$0	\$0	\$63,921,013	\$6,079,980	\$70,000,993
Equipment	\$0	\$0	\$5,168,568	\$710,006	\$5,878,574
Miscellaneous	\$0	\$0	\$749,344	\$220,339	\$969,683
Contingency	\$0	\$0	\$3,574,815	\$412,078	\$3,986,893
Total	\$0	\$7,156,624	\$75,071,116	\$7,717,610	\$89,945,350

PROJECT STATUS

This is the second request for funding. The project was first requested for funding in FY 2020-21.

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PROJECT DESCRIPTION / SCOPE OF WORK

Metropolitan State University Denver (MSUD) is requesting state funds for the first phase of a four-phase project that constructs a 144,219-GSF (93,720-ASF) Health Institute on the Auraria Higher Education Center (AHEC) campus to house health-related programs, and that renovates 32,937 ASF in other buildings for program back-fill. The university says the new facility will help to address growing needs in Colorado for health-related professionals such as nursing. This year's request for Phase I will design the project; Phase II will construct and shell the building; Phase III will finish office space for faculty, staff, and administrators; and Phase IV will renovate vacated spaces.

The new building, to be located along Auraria Parkway, will house programs from several diverse, health-related disciplines, an arrangement the university says fosters inter-professional education and collaboration. Once complete, the new facility will include the following features and functions:

- simulation and innovation space to facilitate nursing program and allied health program growth;
- a 10,000 square foot health clinic, allowing the university to work with industry partners to provide health services to the community;
- behavioral health clinic space for training in social work, human services, counseling, and psychology, and to provide counseling services to the community;
- classrooms designed for active learning, including a teaching kitchen, an exercise classroom, and EMT training space;
- retail and tenant space for partnering with industry;
- circulation, support, and collaboration spaces;
- rooftop study spaces; and
- covered patient parking.

The renovations to vacated buildings will allow expansion of programs in cybersecurity, aviation and aerospace, career services, and teacher education.

Cost assumption. The cost assumption was determined by a third-party design team, including an architectural firm that designed another AHEC project along with other projects across higher education. The cost per square foot for the project is \$508. The project meets the High Performance Certification Program and Art in Public Places requirements.

PROJECT JUSTIFICATION

MSUD says the new Health Institute Building will help the university mitigate an increasing demand for health professionals in Colorado. According to the university, Colorado is experiencing a skilled health workforce crisis, with shortages in the fields of nursing, social work, addiction counseling, speech pathology, health navigation, and others. To help meet demand, MSUD says it requires additional space to train more students in these fields, explaining that, for example, only 29 percent of qualified nursing applicants are accepted and 100 qualified social work master's degree applicants are denied entry each year. Once inside the new building, the affected programs will gain up to 50 percent more space. Specialty instruction space, such as the nursing simulation space, will allow for better training of more students.

MSUD also says bringing together programs from a number of health-related disciplines in one building will facilitate inter-professional education and collaboration. The programs in the university's Health Institute are currently distributed across several AHEC buildings, and the university says this inhibits the interdisciplinary work that is central to modern health education and the institute's mission. According to the university, the Health Institute approaches health from the "whole person" perspective, recognizing that many factors affect one's health, including behavior, nutrition, exercise, and medical treatments. Thus, health should be approached in a comprehensive way. Locating the institute in one building will advance this goal. A new building with state-of-the-art technology will also allow programs to partner with industry to engage in training and innovation, and to transition students into industry positions.

Finally, renovations to vacated space will allow other programs currently constrained by space to grow.

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PROGRAM INFORMATION

Programs in MSUD's Health Institute represent about 5,700 students and 30 percent of the university's degree-seeking population. The following programs will be impacted by the project:

- Biology and Chemistry, including pre-med and pre-dental;
- Health Professions, including integrative health care, therapeutic recreation, lifestyle medicine, health navigation, wellness coaching, EMT, and pre-med;
- Human Performance and Sport, including athletic training, exercise science, wellness coaching, pre-physical therapy, and pre-physician assistant;
- Human Services and Counseling, including certified addiction counseling, youth and mental health counseling, and nonprofit and emergency response administration;
- Nursing;
- Nutrition and Dietetics;
- Clinical/Counseling Psychology;
- Social Work; and
- Speech Language Hearing Sciences.

MSUD says 95 percent of its students are from Colorado, and 80 percent stay in Colorado after graduation. The student body is 56 percent first-generation college, 31 percent Pell-eligible, and 46 percent student-of-color. The university recently received standing as a Hispanic-serving institution.

PROJECT SCHEDULE

	Start Date	Completion Date
Design	April 2021	May 2022
Construction	July 2022	December 2025
Equipment		
Occupancy		

SOURCE OF CASH FUNDS

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

OPERATING BUDGET

Operating costs are paid from institutional sources. MSUD anticipates the project to increase operating costs by \$1.1 million per year plus one FTE starting in 2024. It expects the operating budget to increase as result of the project due to enrollment increases and public-private partnerships.

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STAFF QUESTIONS AND ISSUES

1. Last year's request for this project included a first year request of \$8.5 million and a total project cost of \$112.3 million. This year's request includes a first year request of \$7.2 million and a total project cost of \$90.0 million. Has the project scope changed? Please explain the reduction in costs and describe any project scope changes.

In 2020, MSU Denver and the Design Team were able to evaluate several cost savings strategies, primarily focused on reducing building size, in light of program developments that have occurred since 2019. These strategies are described in Section IX.3 in the Appendix of the formally submitted Program Plan and Conceptual Design Report, dated May 6, 2020. [Attached to the end of this write-up as Appendix A].

2. Please explain why the request does not apply an inflation percentage for "Professional Services" costs on Form CC_CR-C, including in out-year phases.

The Professional Services budgets indicated in Form CC_CR-C are based on industry standard percentages of Total Construction Costs from Form CC_CR-C. Because Total Construction Costs incorporate inflation percentages, including in out-year phases, no additional inflation percentage is applied to Professional Services.

IX.3 COST SAVING STRATEGIES

The baseline programming, concept design and cost modeling phase for the Health Institute occurred in the second quarter of 2019. The 2019 process included identifying possibilities for shared use of spaces among departments in order to minimize overall program size and corresponding costs. In the second quarter of 2020, MSU Denver and the Design Team were able to re-evaluate the 2019 findings to consider strategies for further reducing costs, based on developments which have occurred between 2019 and 2020. The team considered a variety of possible strategies and MSU Denver accepted the following:

Strategy 1B: Share Staff Private Offices, 1.5 Occupants per Office

During the 2019 Programming and Concept Design phase, the concept of sharing private offices was discussed at length. Please refer to the Office Studies portion of the Conceptual Design section of this report for studies of the shared office configuration. MSU Denver has, in 2020, accepted a strategy of sharing private offices in order to reduce building area. The accepted ratio of 1.5 occupants per office means generally that, for every (4) offices, one would be non-assigned and available for quiet work and (3) would be assigned for double occupancy at 60 sf per occupant.

Strategy 2: Relocate Parking to Surface Lot

The 2019 Programming and Concept Design study includes covered parking directly adjacent to clinic space. This proximity of parking to clinic is important for an Urgent Care Clinic, which was under consideration in 2019. MSU Denver has, in 2020, accepted a strategy of pursuing a Community Clinic use for the clinic space. This use, while still requiring dedicated parking, allows for parking which can be slightly removed from the building, which in turn saves cost because the parking can be planned as surface parking. Please see the Parking Options portion of the Concept Design section of this report for studies of surface parking options.

Strategy 3: Combine Tenant Lease for Healthcare Technology Start-up with Clinic Lease Space

The 2019 Programming and Concept Design study designates separate tenant lease spaces for healthcare technology and for clinic use, with a combined assignable area of approximately 8,200 sf. Due to expanded use of tele-medicine in the industry, MSU Denver believes that the clinic footprint can be slightly reduced and combined with area designated for healthcare technology lease space. The combined assignable area will be 6,500 sf. Combining the two uses in one zone affords MSU Denver maximum flexibility in leasing to tenants in the future.

Strategy 5: Delete Health Professions Greenhouse

The 2019 Programming and Concept Design study includes a greenhouse for Health Professions. MSU Denver has determined, in 2020, that the greenhouse can be pursued as a separate, stand-alone project. A location for the greenhouse is being considered on the Ballfield site, outside of the footprint of the future Health Institute. This location could provide affinities with a planned outdoor food production garden as part of the Health Institute and should allow for a less expensive greenhouse installation.

Strategy 11: Assume Quality Reduction

The 2019 Programming and Concept Design phase includes a conceptual cost estimate. This estimate is based on buildings of similar type to the Health Institute, with adjustments to reflect the Denver marketplace and the narratives for building systems described in the 2019 Report. An important touchstone for the Health Institute is MSU Denver's recently completed Aerospace & Engineering Sciences Building (AES) which is a building of similar complexity, materials and systems to what is envisioned for the Health Institute. The 2019 conceptual cost estimate for the Health Institute indicates a building cost per sf which is approximately equivalent to the escalated AES building cost per sf. Because the Health Institute design will be developed and defined in a future phase, MSU Denver is comfortable in 2020 assuming a small quality reduction for the Health Institute to reduce costs, while still maintaining a cost/sf which is comparable to AES. It is assumed that this quality reduction can occur in a way that does not adversely affect program or building performance.

The following tables describe the calculations for cost savings. The baseline cost estimate is expressed in construction cost for second quarter 2019. For consistency, the cost savings strategies are also expressed in construction cost, for second quarter 2019. Escalation and "soft costs" are accounted for elsewhere in University calculations for state funding requests. In addition to the strategies noted here for new construction, MSU Denver has also elected to assume that backfill renovation work will be less intensive than previously assumed, until the goals for the backfill space can be better defined. Backfill improvements remain a priority for the University.

HEALTH INSTITUTE
 Metropolitan State University of Denver
COST REDUCTION STRATEGIES
 MSU DENVER ACCEPTED STRATEGIES
 Anderson Mason Dale Architects
 4/30/2020

Strategy 1B: Share Staff Private Offices, 1.5 Occupants per Office

Program Number	Space	Baseline Room Quantity	Room Quantity Change	Baseline Room Size (SF)	Assignable Area Change (SF)	Circulation Factor (SF)	Gross Area (SF)	Unit Cost	Projected Construction Cost Change (Q2 2019 \$)
			0.33			135%	65%		
	Nursing Offices	24	(7.9)	120	(950)	(333)	(1,974)	\$ 376.26	\$ (742,694)
	Social Work Offices	59	(19.3)	120	(2,317)	(811)	(4,811)	\$ 376.26	\$ (1,810,317)
	Human Services Offices	12	(4.0)	120	(479)	(168)	(995)	\$ 376.26	\$ (374,442)
	Human Perf Offices	13	(4.4)	120	(523)	(183)	(1,086)	\$ 376.26	\$ (408,482)
	Health Prof Offices	15	(5.1)	120	(610)	(213)	(1,267)	\$ 376.26	\$ (476,562)
	Nutrition Offices	13	(4.4)	120	(523)	(183)	(1,086)	\$ 376.26	\$ (408,482)
	S, L, HS Offices	9	(3.0)	120	(356)	(125)	(740)	\$ 376.26	\$ (278,510)
	Associate Dean Offices	2	(0.7)	120	(79)	(28)	(164)	\$ 376.26	\$ (61,891)
	Subtotal	147	(49)		(5,837)	(2,043)	(12,123)		\$ (4,561,380)

Strategy 2: Relocate Parking to Surface Lot

Program Number	Space	Baseline Room Quantity	Room Quantity Change	Baseline Room Size (SF)	Assignable Area Change (SF)	Circulation Factor (SF)	Gross Area (SF)	Unit Cost	Projected Construction Cost Change (Q2 2019 \$)
	Parking						(13,335)	\$ 132.00	\$ (1,760,220)
	Subtotal						(13,335)		\$ (1,760,220)

Strategy 3: Combine Tenant Lease Space For Healthcare Technology Startup with Clinic Lease Space

Program Number	Space	Baseline Room Quantity	Room Quantity Change	Baseline Room Size (SF)	Assignable Area Change (SF)	Circulation Factor (SF)	Gross Area (SF)	Unit Cost	Projected Construction Cost Change (Q2 2019 \$)
H-1.18	Lease Space	1	(1)	1,707	(1,707)		(2,625)	\$ 275	\$ (721,981)
	Subtotal				(1,707)		(2,625)		(721,981)

Strategy 5: Delete Health Professions Greenhouse

Program Number	Space	Baseline Room Quantity	Room Quantity Change	Baseline Room Size (SF)	Assignable Area Change (SF)	Circulation Factor (SF)	Gross Area (SF)	Unit Cost	Projected Construction Cost Change (Q2 2019 \$)
HEPRO-1.01	Herbal Medicine Greenhouse	3	(3)	288	(864)		(1,329)	\$ 1,069	\$ (1,421,288)
HEPRO-1.02	Herbal Medicine Greenhouse Headhouse	1	(1)	396	(396)		(609)	\$ 1,069	\$ (651,424)
	Subtotal				(1,260)		(1,938)	2,139	\$ (2,072,711)

Strategy 11: Assume Quality Reduction

Program Number	Space	Baseline Room Quantity	Room Quantity Change	Baseline Room Size (SF)	Assignable Area Change (SF)	Circulation Factor (SF)	Gross Area (SF)	Unit Cost	Projected Construction Cost Change (Q2 2019 \$)
									\$ (935,000)

Total Health Institute Phase 2 Accepted Construction Savings Q2 2019					(10,847) ASF	(30,022) GSF	(8,823,760)
Baseline Health Institute Phase 2 Cost New Construction Q2 2019					104,566 ASF	174,241 GSF	\$ 62,181,298
Subtotal Phase 2					93,720 ASF	144,219 GSF	\$ 53,357,538

Total Health Institute Phase 3 Accepted Construction Savings Q2 2019						(12,123) GSF	\$ (1,227,532)
Baseline Health Institute Phase 3 Cost New Construction Q2 2019						67,956 GSF	\$ 5,832,880
Subtotal Phase 3						55,832 GSF	\$ 4,605,348

Total Health Institute Revised Cost New Construction Q2 2019					93,720 ASF	144,219 GSF	\$ 57,962,886
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