

(\$ in thousands)

Project Title	Rank Fund		Project Requests for State Funds			Gov's Rec	Gov's Planning Estimates	
			2020	2022	2024	2020	2022	2024
Higher Education Asset Preservation and Replacement (HEAPR)	1	GO	200,000	0	0	125,000	125,000	125,000
Child Development Building Replacement	2	GO	29,200	0	0	29,200	0	0
A.B. Anderson Hall Capital Renewal	3	GO	4,400	0	0	4,400	0	0
Chemistry Undergraduate Teaching Laboratory	4	GO	65,600	0	0	65,600	0	0
Clinical Research Facility Design	5	GO	18,000	0	0	0	0	0
Total Project Requests			317,200	0	0	224,200	125,000	125,000
General Obligation Bonds (GO) Total			317,200	0	0	224,200	125,000	125,000

AT A GLANCE

- Five Campuses (Crookston, Duluth, Morris, Rochester, Twin Cities)
- Twelve Research and Outreach Centers throughout the state
- Budget: \$3.8 billion (FY18)
- 20,389 faculty & staff; 6,511 graduate student & professionals in training employees (as of 10/17)
- Enrollment: 67,949 (Fall 2017 Total)
 - 44,544 Undergraduate
 - 13,283 Graduate
 - 3,860 First Professional
 - 6,262 Non-Degree
- Degrees awarded: 15,985 (2017)
- Sponsored research awards: \$793 million (FY18)

PURPOSE

The University of Minnesota's statutory mission is to offer undergraduate, graduate, and professional instruction through the doctoral degree and be the primary state supported academic agency for research and extension service (MN Statute 135A.052). The University's mission is threefold: research and discovery, teaching and learning, and outreach and public service. The University of Minnesota is the state's only land grant and research institution, and has a unique responsibility to better the lives of Minnesotans. As one of the nation's top research institutions, the University is a venue where human talent, ideas and innovations, and discoveries and services converge to fuel Minnesota's economy and improve our quality of life. In carrying out its mission on five campuses and research and outreach centers throughout the state, the University contributes to all eight of the state's outcome areas through knowledge generation and by providing services, but advances most directly the following statewide outcomes:

- A thriving economy that encourages business growth and employment opportunities;
- Minnesotans have the education and skills needed to achieve their goals;
- All Minnesotans have optimal health; and
- Sustainable options to safely move people, goods, services, and information.

STRATEGIES

President Joan Gabel's initiatives aim to strengthen University of Minnesota research, education, and service to lift our state's communities and ensure that Minnesota's land-grant university stands as a beacon of inclusion, preparing students for lives well lived. In fall 2016, the University began systemwide strategic planning to better align its resources and leverage system strengths - a system including five unique campuses and an array of Extension and Outreach centers and services effecting people statewide. As examples, the University will capitalize on the following:

- **Crookston campus:** Known for its focus on experiential learning for its campus-based students, the University of Minnesota Crookston is also one of the nation's pioneers in online and distance education.
- **Duluth campus:** The University of Minnesota Duluth is a highly-ranked, regional research and liberal arts university with a global reputation for freshwater research. With over 160 majors and minors and eight pre-professional programs, UMD offers an expansive array of high-quality academic choices for students. In addition, UMD's Large Lakes Observatory is the only institute in the country dedicated to the study of large lakes throughout the world.

- **Morris campus:** The University of Minnesota Morris is a nationally ranked, undergraduate-focused liberal arts campus with a deep commitment to environmental sustainability and diversity. The “Morris experience” emphasizes faculty-student collaborative research, study abroad opportunities, and service learning.
- **Rochester campus:** The University of Minnesota Rochester prepares health science professionals and maintains unique collaborations with world-renowned medical organizations in the community. This includes high quality, more individualized instruction. To date, 100 percent of Rochester’s Bachelor of Science in Health Professions graduates have passed the exams for their professions and are employed in their chosen fields.
- **Twin Cities campus:** The University of Minnesota Twin Cities campus is the University’s flagship campus and is one of only five campuses in the country with schools of engineering, medicine and veterinary medicine, law, and agriculture on a single campus. Because of the Twin Cities campus size and scope of programs, unique opportunities exist for interdisciplinary education, research, and outreach. The Twin Cities campus will continue its excellence in:
 - Education: The Twin Cities campus attracts high caliber students from across the globe due to its world-renowned faculty and staff. As an example, 84.3 percent of freshman are admitted from the top 25 percent of their class and the average freshman ACT score is greater than 28.
 - Research: Twin Cities campus faculty led *Forbes* magazine to name Minneapolis one of the top 10 innovative cities. Examples of innovations include: the invention and patent of the “black box” flight recorder in the United States; the development of Ziagen, one of the world’s most effective AIDS drugs; medical firsts such as the first open-heart surgery and first pancreas and human bone marrow transplants, and nearly 30 new apple varieties including the beloved Honeycrisp.
 - Outreach: The Twin Cities campus continues its vast array of outreach efforts through initiatives and partnerships such as its mobile dental clinic and the Community-University Health Care Center partnership.
- **Minnesota Extension:** Extension researchers and educators engage individuals and organizations in asking the challenging questions to discover science-based answers that make a difference. As an example, Extension’s Regional Sustainable Development Partnerships serve Greater Minnesota with 145 active sustainable development projects across the state.

To capitalize on these strengths, the Systemwide Strategic Plan will guide the direction and priorities of the University, aligning the unique strengths of the University’s five campuses to best serve the state. This plan will yield an academic program investment strategy and a long-term financial framework with the following focus areas: Teaching and Learning; Research and Discovery; Outreach and Public Service; Medicine and Health; and Supporting the Mission. The Board is expected to review and take action on the complete Systemwide Strategic Plan in the upcoming academic year.

Through these strategic planning efforts, the University will make decisions on investments that strengthen student success, enhance knowledge transfer between the University and Minnesota and communities and businesses, build upon research opportunities affecting Minnesotans, and align the University’s health sciences work with Minnesota’s health policy and workforce needs. The University is committed to providing high-value education and research to improve outcomes for all Minnesotans and to optimize communications with Minnesota communities to deliver useful, actionable information to stakeholders.

At A Glance

- The statutory mission of the University of Minnesota is to "offer undergraduate, graduate, and professional instruction through the doctoral degree, and be the primary state-supported academic agency for research and extension services" (M.S. 135A.052, subd. 1).
- University of Minnesota facilities comprise about 30 million gross square feet including classrooms, research labs, clinics, offices, libraries, performance space, student unions, housing, and utilities. Responsible stewardship of this portfolio requires ongoing renewal investments.
- The University has incorporated five strategic objectives into its long-range capital planning process.
 - Address poor and critical backlog
 - Advance the health sciences
 - Modernize laboratories on the Twin Cities campus in St. Paul
 - Expand capacity in STEM programs
 - Repositioning libraries for the 21st century

Factors Impacting Facilities or Capital Programs

For more than 150 years, the University of Minnesota has met the changing needs of the state's citizens, businesses, farmers, and public institutions. The University must continuously strengthen its role as the state's only major research university, as its land grant institution, and as its magnet for students, faculty, professionals, entrepreneurs, and civic and artistic leaders.

As a large, multi-faceted research institution, a variety of factors affect the University's demand for facilities and capital programs. Five issues that are relevant to the 2020 capital request and future capital plans are outlined below:

1. Address Poor and Critical Backlog

University of Minnesota facilities comprise approximately 30 million gross square feet (GSF) including classrooms, research labs, clinics, offices, libraries, performance space, student unions, housing, and utilities. Owning and operating this large and diverse portfolio of more than 900 facilities is fundamental to supporting the University's mission of teaching, research and outreach.

Despite diligent efforts to keep buildings clean and well maintained, all systems and equipment eventually age out. With the average building age now exceeding 50 years, and several constructed before 1900, the University's portfolio is comprised of numerous buildings beyond their useful life. Through a comprehensive third party Facility Condition Assessment (FCA) the relative health of each building is defined on a scale from Excellent down to Poor and Critical. The University Board of Regents has set forth a goal to reduce Poor and Critical space. It is unacceptable to have people study, live, work, or receive care in buildings classified as "Poor" or "Critical".

To meet this goal, results from the independent FCA are combined with an internal operational assessment that evaluates maintenance and operations costs, utility consumption, and space utilization to name a few. Based on conclusions from both efforts, each building is assigned to a strategic renewal path: Keep Up, Catch Up, Sustain, or Dispose. This strategy ensures that funding is directed to the most essential facilities that need it most.

Beginning with the 2018 capital requests, this plan puts a strong emphasis on reinvestment into existing infrastructure, and to "catching up" poor and critical buildings. Higher Education Asset Preservation and Replacement (HEAPR) funding remains at the core of this strategy.

2. Advance the Health Sciences

The University is home to Minnesota's only public medical school in addition to health science schools for dentistry, public health, pharmacy, nursing and veterinary medicine. The University offers 62 accredited professional degrees in the health sciences, educates 6,400 students, and plays a key role in educating Minnesota's health care workforce, with alumni accounting for two-thirds of the state's health professionals. The University's long-range capital plan proposes investments in improving the educational and clinical research spaces for the Medical School and the other health science colleges, including design funds for a clinical research project, and other investments that advance the goal of removing the Mayo Building.

3. Modernize laboratories on the Twin Cities campus in St. Paul

The University's long-range capital plan continues the vision first set out in the 2013 Six-Year Capital Plan to renovate, construct, and decommission targeted laboratories on the Saint Paul campus. The State provided funding to replace the Veterinary Isolation Facility in the 2015 session and the Biological Sciences Greenhouse in the 2017 session. Additional projects are planned in future years. The University is completing a strategic facilities plan for the campus that will prioritize future capital investments. Additional investments are planned with HEAPR funds in the Food Science and Nutrition building, Biosystems and Agricultural Engineering and Alderman Hall.

4. Expand Capacity in STEM Programs

Student demand as well as state performance measures related to STEM degrees has increased the need for additional laboratory facilities. Chemistry is a core component of STEM programs and an inadequate supply of chemistry labs is restricting the University's ability to meet demand and move students through the necessary course sequences. The State provided funding in 2017 to construct the Heikkila Chemistry and Advanced Materials Science building at UMD. The 2020 capital request includes funds for Chemistry Undergraduate Teaching Laboratories on the Twin Cities campus. The Six Year Capital Plan also includes a major investment for the Duluth campus Chemistry Building as well as major HEAPR investments in the Mechanical Engineering building and Food Sciences and Nutrition building.

5. Repositioning Libraries for the 21st Century

Library spaces are in high demand by the campus community. Investments will provide for materials that remain accessible, but are no longer housed in prime campus real estate. This will ensure existing libraries remain the center of campus scholarship and exchange by creating flexible teaching, learning, and collaboration spaces.

Self-Assessment of Agency Facilities and Assets

The University's Facility Condition Assessment (FCA) identifies a facility's physical condition and needs. This process looks at each building across the system and identifies deferred, non-recurring, and projected renewal needs to determine a facility condition needs index (FCNI). The FCNI (ten-year projected needs divided by the estimated replacement value of the facility) determines the relative health of each building on a scale that starts at 0.0 (new building, excellent) and extends to 1.0 (significant needs, critical.) This industry standard assessment is conducted by a third-party under contract.

As previously stated, the University supplements the FCA with an internal operational assessment that evaluates numerous quantitative and qualitative metrics of a building, from operating and maintenance costs to usability and adaptability for programs. This rigorous approach ensures alignment between infrastructure and programmatic investments, and focuses scarce funding into the right facilities at the right time.

Agency Process for Determining Capital Requests

Long range strategic facility planning at the University of Minnesota begins with the academic planning process. Each year Vice Presidents, Chancellors, and Deans are asked to identify their most important program priorities and the facility improvements necessary to support those programs as part of the budget process. Through the academic planning process, academic leadership establishes the priorities for each college and campus. Facilities Management simultaneously evaluates the current condition of the buildings and infrastructure that support all academic programs. The capital planning process merges the academic priorities, available financial resources, facility needs, and facility conditions into an institution-level strategic facility plan (six-Year Capital Plan) that is reviewed and approved by the Board of Regents every year.

In addition to academic priority and facility condition, factors included in the long-range strategic facility plan include:

- Projected size of future bonding bills
- Debt and operating cost impact
- Private fundraising capacity
- Timing and sequencing of projects
- Impact on academic programs
- Health, safety, and regulatory requirements
- Geographic distribution

The resulting Six-Year Capital Plan advances the University's highest capital priorities while retaining flexibility in support of emerging strategic initiatives. Investments are targeted to programs with academic strategic value.

Major Capital Projects Authorized in 2018 and 2019

2018 Appropriation	(\$ in Thousands)
HEAPR	\$45,000
Pillsbury Hall Capital Renewal	\$24,000
Greater Minnesota Academic Renewal	\$6,400
Glensheen Capital Renewal	\$4,000

Higher Education Asset Preservation and Replacement (HEAPR)**AT A GLANCE****2020 Request Amount:** \$200,000**Priority Ranking:** 1**Project Summary:** This request is for funds to renew existing campus facilities and infrastructure in accordance with Minnesota Statutes, section 135A.046.**Project Description**

The purpose and use of Higher Education Asset Preservation and Replacement (HEAPR) funds is defined in statute 135A.046 Asset Preservation and Replacement. Funds are intended to preserve and renew existing campus facilities by supporting five categories of projects: Accessibility, Health and Safety (e.g. hazardous material abatement, building code compliance), Building Systems (e.g. exterior envelope, mechanical, and electrical systems), Energy Efficiency, and Infrastructure. HEAPR funds are used throughout the University of Minnesota system. Funds are allocated to campuses and research stations based on facility need and overall quantity of space. The University regularly reports on the status of its HEAPR funding to Minnesota Management and Budget and the Legislature.

Project Rationale

HEAPR funds are essential in supporting the University of Minnesota's mission of teaching and learning, research and discovery, and outreach and public service. This mission will be compromised without continued, sustained reinvestment in buildings and infrastructure to extend and maximize useful life while ensuring the health, safety, and well-being of facility occupants and visitors.

Rigorous process ensures every HEAPR dollar supports the most urgent and impactful needs. Individual projects are identified and prioritized through the University's Facility Condition Assessment (FCA). The FCA is a comprehensive systemwide evaluation of the condition of campus facilities and infrastructure portfolio. FCA data is used to triage existing buildings into those that need long-term investments, those that need short-term investments, and those where no investment is required, in alignment with academic priorities.

HEAPR funds are used throughout the University of Minnesota system and are allocated to campuses and research stations based on facility need and overall space. Funds keep people safe and make the campuses accessible for all Minnesotans. Funds leverage the State's past investment in buildings and infrastructure by extending the functionality and useful life of those assets. HEAPR projects are green, since renewing an existing facility and maximizing useful life is always more sustainable than new construction. HEAPR dollars are flexible, allowing the University to respond quickly to emergencies and to respond to unique opportunities. Regulatory compliance items, e.g. elevators, storm water and building code compliance are funded with HEAPR allocations. HEAPR projects move faster, put people to work quicker, and provide different firms an opportunity to participate in design and construction at the University of Minnesota.

Project Timeline

As noted in previous HEAPR requests the timeline will vary by project. The University estimates that approximately 85% of the funds would be designed, bid or under construction within the first 12 months, and the remaining 15% encumbered or spent in less than 24 months.

Other Considerations

None.

Impact on Agency Operating Budgets

No anticipated impact on operating budget.

Description of Previous Appropriations

The University includes HEAPR in each capital request. The University received no appropriation in 2019, \$45 million in 2018, \$20.6 million in 2017, no appropriation in 2016, no appropriation in 2015, \$42.5 million in 2014, no appropriation in 2013 and \$50 million in 2012.

Project Contact Person

Brian Burnett
Senior Vice President
612-624-3557
burnett@umn.edu

Governor's Recommendation

The Governor recommends \$125 million in general obligation bonds for this request. Also included are budget estimates of \$125 million for each planning period for 2022 and 2024.

(\$ in thousands)

Higher Education Asset Preservation and Replacement (HEAPR)

PROJECT FUNDING SOURCES

Funding Source	Prior Years	FY 2020	FY 2022	FY 2024
State Funds Requested				
General Obligation Bonds	\$ 0	\$ 200,000	\$ 0	\$ 0
Funds Already Committed				
Pending Contributions				
TOTAL	\$ 0	\$ 200,000	\$ 0	\$ 0

TOTAL PROJECT COSTS

Cost Category	Prior Years	FY 2020	FY 2022	FY 2024
Property Acquisition	\$ 0	\$ 0	\$ 0	\$ 0
Predesign Fees	\$ 0	\$ 0	\$ 0	\$ 0
Design Fees	\$ 0	\$ 16,000	\$ 0	\$ 0
Project Management	\$ 0	\$ 7,500	\$ 0	\$ 0
Construction	\$ 0	\$ 176,500	\$ 0	\$ 0
Relocation Expenses	\$ 0	\$ 0	\$ 0	\$ 0
One Percent for Art	\$ 0	\$ 0	\$ 0	\$ 0
Occupancy Costs	\$ 0	\$ 0	\$ 0	\$ 0
Inflationary Adjustment	\$ 0	\$ 0	\$ 0	\$ 0
TOTAL	\$ 0	\$ 200,000	\$ 0	\$ 0

IMPACT ON STATE OPERATING COSTS

Cost Category	FY 2020	FY 2022	FY 2024
IT Costs	\$ 0	\$ 0	\$ 0
Operating Budget Impact (\$)	\$ 0	\$ 0	\$ 0
Operating Budget Impact (FTE)	0.0	0.0	0.0

SOURCE OF FUNDS FOR DEBT SERVICE PAYMENTS

	Amount	Percent of Total
General Fund	\$ 200,000	100 %
User Financing	\$ 0	0 %

STATUTORY REQUIREMENTS

The following requirements will apply to projects after adoption of the bonding bill.

Is this project exempt from legislative review under M.S. 16B.335 subd. 1a?	Yes
Predesign Review (M.S. 16B.335 subd. 3):	
Does this request include funding for predesign?	N/A
Has the predesign been submitted to the Department of Administration?	N/A
Has the predesign been approved by the Department of Administration?	N/A
Will the project design meet the Sustainable Building Guidelines under M.S. 16B.325?	Yes
Will the project designs meet applicable requirements and guidelines for energy conservation and alternative energy sources (M.S. 16B.335 subd. 4 and 16B.32)?	Yes
Have Information Technology Review Preconditions been met (M.S. 16B.335 subd. 5 & 6 and 16E.05 subd. 3)?	N/A
Will the project comply with the targeted group purchasing requirement (M.S. 16C.16 subd. 13)?	Yes
Will the project meet public ownership requirements (M.S. 16A.695)?	Yes
Will a use agreement be required (M.S. 16A.695 subd. 2)?	No
Will program funding be reviewed and ensured (M.S. 16A.695 subd. 5)?	Yes
Will the matching funds requirements be met (M.S. 16A.86 subd. 4)?	Yes
Will the project be fully encumbered prior to the Cancellation Deadline (M.S. 16A.642): December 31, 2024?	Yes
M.S. 16A.502 and M.S. 16B.31 (2): Full Funding Required	Yes
M.S. 473.4485: Guideway Project	
Is this a Guideway Project?	N/A
Is the required information included in this request?	N/A

Child Development Building Replacement

AT A GLANCE

2020 Request Amount: \$29,200

Priority Ranking: 2

Project Summary: This project will predesign, design, renovate, construct, furnish and equip a reimagined 76,000 sf facility to allow the University of Minnesota’s world leading Institute of Child Development to advance cutting edge interdisciplinary research in human development and early education.

Project Description

The Institute of Child Development (ICD) building program, at the conclusion of predesign, is approximately 76,702 GSF of total space; 46,852 GSF new and 29,850 GSF renovated space. Approximately 16,000 GSF will be demolished in the existing 1968 addition.

The future program is planned to accommodate 123 staff (regular and temporary) and 20 faculty. 15 faculty are existing employees and 5 will be new hires. Each new faculty hire is assumed to include 3 additional graduate assistants.

The building program is conceived as a full renovation of the 1913 C. H. Johnston building and a four-story new addition with mechanical and electrical penthouse. The programmatic spaces to be included are Research (41,000 GSF), Seminar and Learning Space (6,800 GSF), Administrative and Outreach (10,500 GSF), Faculty and Graduate Student Space (6,800 GSF), Community Space (5,000 GSF) and Technology (1,400 GSF).

The final scheme encompasses four stories with one level partially above grade, forming an elevated plaza. The lower level will have the faculty and graduate student suites in addition to some support rooms. A side entrance will be provided by utilizing low retaining walls to mitigate the grade difference compared to the floor finish elevation. The first floor will have the main entrance to the building, monumental stair, conferencing facilities, multipurpose rooms, administrative suites, post doc and student services in addition to a large conference room. The second and third levels will be dedicated to research suites, testing and control rooms. Research areas will include laboratories, observational testing rooms, shielded electro physiology rooms and an MRI simulation room.

Placement of the new addition will preserve the view corridors towards the river and create a building with enough transparency to allow visual stimulation at the edge of the Knoll area.

Project Rationale

The Institute of Child Development (ICD), founded in 1925, is considered the premier department for the study of child and adolescent development in the United States. The Institute is the #1 ranked developmental psychology program in the country (U.S. News and World Report, 2018) and is recognized worldwide for its faculty and their discoveries. ICD houses undergraduate and graduate

programs in developmental psychology and early childhood education, as well as a certificate program in infant and early childhood mental health.

The Center for Early Education and Development (CEED) contributes to ICD's community outreach by providing professional development and training to early education professionals. CEED also provides program evaluation services to community organizations, so they can achieve the best outcomes for children in the communities in which they serve.

Within the next five years, one fourth of ICD's faculty will become emeritus faculty, including two University Regents Professors and one McKnight Presidential Chair. Recruiting the next generation of faculty who will lead the field in cutting edge research and training is essential to the continuation of the mission and priorities of ICD. This proposed state-of-the-art research facility is instrumental in recruiting and retaining top caliber faculty.

ICD is the Number One-Ranked Ph.D. program in developmental psychology in the country and attracts the best graduate student applicants to the Ph.D. program. However, these outstanding students are also heavily recruited by other top public and private universities whose research, training and office facilities greatly surpass ours. Top-notch students turn away from the University because of the gross inadequacies of the existing building.

In fiscal year 2017, the Institute of Child Development was responsible for 18%, or nearly \$7.5 million, of sponsored expenditures in the College of Education and Human Development. Over the past five fiscal years, ICD has contributed over \$40 million in sponsored expenditures. ICD leads all other academic programs within the College for sponsored expenditure earnings, while having less than 9% of the college's faculty.

An external Review of the ICD in 2009 found that "The most surprising aspect about ICD is the lab and office space situation. The incongruity between the sterling national reputation of this jewel in the University's crown and the insufficient and shabby space is astonishing. Even more remarkable is the fact that ICD faculty and students have been able to be so productive over the years given space limitations. This is now an acute problem, given the greater lab space demands of current developmental research."

Project Timeline

Design: July 2020 - September 2021

Construction: October 2021 - April 2023

Completion: April 2023

Other Considerations

Investment in this facility will advance the master plan guiding principles for stewardship of historic buildings and landscapes, providing a compatible and distinctive built environment designed to respond to the needs of current programs, and strengthening connections to adjacent communities.

The development framework of the 2009 Master plan identifies this facility for "Potential Demolition." This designation indicates buildings that are candidates for removal and calls for analysis of physical, environmental and adaptive re-use capability as well as campus-wide benefits prior to making

decisions about removing campus buildings. Review and analysis by University staff and design professionals determined that the original 1913 facility is well suited to reinvestment and reuse.

The original 1913 facility is identified for renewal in the University's strategic facility renewal plan. The renewal category directs University staff to maintain the building for emergency and life safety conditions while redirecting limited renewal funds to other priorities, in anticipation of a future full building renewal project.

The mission of the Institute of Child Development is to contribute to knowledge about human development through research and related scholarly activities; promote the welfare and optimal development of children and youth from all cultural backgrounds in the context of family, school, and community settings; and contribute to the advancement of human development as an interdisciplinary, basic, and applied science.

Impact on Agency Operating Budgets

Facility and operating expenses are anticipated to increase by approximately \$144,000 annually, or \$1.87 per SF, over the existing conditions in the Institute of Child Development.

Description of Previous Appropriations

No previous appropriations.

Project Contact Person

Brian Burnett
Senior Vice President
612-624-3557
burnett@umn.edu

Governor's Recommendation

The Governor recommends \$29.2 million in general obligation bonds for this request.

(\$ in thousands)

Child Development Building Replacement

PROJECT FUNDING SOURCES

Funding Source	Prior Years	FY 2020	FY 2022	FY 2024
State Funds Requested				
General Obligation Bonds	\$ 0	\$ 29,200	\$ 0	\$ 0
Funds Already Committed				
Other Funding	\$ 0	\$ 14,600	\$ 0	\$ 0
Pending Contributions				
TOTAL	\$ 0	\$ 43,800	\$ 0	\$ 0

TOTAL PROJECT COSTS

Cost Category	Prior Years	FY 2020	FY 2022	FY 2024
Property Acquisition	\$ 0	\$ 0	\$ 0	\$ 0
Predesign Fees	\$ 0	\$ 245	\$ 0	\$ 0
Design Fees	\$ 0	\$ 2,148	\$ 0	\$ 0
Project Management	\$ 0	\$ 633	\$ 0	\$ 0
Construction	\$ 0	\$ 38,439	\$ 0	\$ 0
Relocation Expenses	\$ 0	\$ 0	\$ 0	\$ 0
One Percent for Art	\$ 0	\$ 143	\$ 0	\$ 0
Occupancy Costs	\$ 0	\$ 2,192	\$ 0	\$ 0
Inflationary Adjustment*	\$ 0	\$ 0	\$ 0	\$ 0
TOTAL	\$ 0	\$ 43,800	\$ 0	\$ 0

*Inflation is already included in project costs.

IMPACT ON STATE OPERATING COSTS

Cost Category	FY 2020	FY 2022	FY 2024
IT Costs	\$ 0	\$ 0	\$ 0
Operating Budget Impact (\$)	\$ 0	\$ 0	\$ 0
Operating Budget Impact (FTE)	0.0	0.0	0.0

SOURCE OF FUNDS FOR DEBT SERVICE PAYMENTS

	Amount	Percent of Total
General Fund	\$ 29,200	100 %
User Financing	\$ 0	0 %

STATUTORY REQUIREMENTS

The following requirements will apply to projects after adoption of the bonding bill.

Is this project exempt from legislative review under M.S. 16B.335 subd. 1a?	No
Pre-design Review (M.S. 16B.335 subd. 3):	
Does this request include funding for pre-design?	Yes
Has the pre-design been submitted to the Department of Administration?	No
Has the pre-design been approved by the Department of Administration?	No
Will the project design meet the Sustainable Building Guidelines under M.S. 16B.325?	Yes
Will the project designs meet applicable requirements and guidelines for energy conservation and alternative energy sources (M.S. 16B.335 subd. 4 and 16B.32)?	Yes
Have Information Technology Review Preconditions been met (M.S. 16B.335 subd. 5 & 6 and 16E.05 subd. 3)?	N/A
Will the project comply with the targeted group purchasing requirement (M.S. 16C.16 subd. 13)?	Yes
Will the project meet public ownership requirements (M.S. 16A.695)?	Yes
Will a use agreement be required (M.S. 16A.695 subd. 2)?	No
Will program funding be reviewed and ensured (M.S. 16A.695 subd. 5)?	N/A
Will the matching funds requirements be met (M.S. 16A.86 subd. 4)?	N/A
Will the project be fully encumbered prior to the Cancellation Deadline (M.S. 16A.642): December 31, 2024?	Yes
M.S. 16A.502 and M.S. 16B.31 (2): Full Funding Required	Yes
M.S. 473.4485: Guideway Project	
Is this a Guideway Project?	N/A
Is the required information included in this request?	N/A

A.B. Anderson Hall Capital Renewal**AT A GLANCE****2020 Request Amount:** \$4,400**Priority Ranking:** 3**Project Summary:** This project will renovate and restore mechanical systems, life safety equipment, fire protection and architectural finishes throughout A. B. Anderson Hall on the Duluth campus.**Project Description**

A. B. Anderson Hall (ABAH) was completed in 1970 as a classroom and office building. It currently houses faculty from the departments of Communication, Philosophy, History, and Art. The bottom floor is composed of fine arts studios, kilns, and art workspaces, while floors 2-4 are occupied by academic offices as well as ten classrooms.

The 37,000 sf facility will be renovated to include a modern mechanical system, life safety systems, and architectural finishes. A fire protection system will ensure a high level of life safety standards is met. Architectural work that is ancillary to mechanical system renovation includes new ACT ceilings, new door panels, patching/painting of walls, and ADA compliant handrail extensions. Electrical work involves power to new equipment and new lighting at offices and classrooms.

Project Rationale

A. B. Anderson Hall serves nearly 500 majors across its various departments and also carries a large Liberal Education mission for the Duluth campus. In any given week during the fall and spring terms, a minimum of 4,500 students access ABAH classrooms. It also houses nearly 40 faculty offices. Because of the role ABAH plays on campus, it contributes greatly to the work of the College of Liberal Arts and the School of Fine Arts. Neither college would be able to deliver their complete curriculum without this facility. Due to the fact that ABAH is central to so many different programs and classes, major consideration will have to take into account the displacement of activities while ABAH is closed for renovation.

A. B. Anderson Hall is a structurally solid building, but does not meet the standard of space for the University. To aid in meeting curricular and learning goals, the spaces will be aesthetically updated, including better lighting and updated finishes at the ceiling, floor, and walls. The project will also address critical life safety concerns for the building as well as the classrooms. The building will be outfitted with an automatic fire protection sprinkler system and some minor accessibility features to better serve the student and staff population.

Beyond these needs, the primary objective for the A. B. Anderson Hall renovation is a full mechanical system replacement. An updated HVAC system will allow the building to be utilized in the late summer and fall as a teaching, learning, and research space. It will provide classroom and office occupants a greater degree of thermal comfort and adequate ventilation.

Project Timeline

Design: July 2020 - February 2021

Bidding: March 2021 - April 2021

Construction: May 2021 - December 2021

Other Considerations

No other considerations.

Impact on Agency Operating Budgets

The current average operating cost is \$8.53 per sf at the Duluth campus. An annual increase of \$2.50 to \$3.00 per sf in A. B. Anderson Hall is anticipated upon project completion.

Description of Previous Appropriations

No previous appropriations.

Project Contact Person

Brian Burnett
Senior Vice President
612-624-3557
burnett@umn.edu

Governor's Recommendation

The Governor recommends \$4.4 million in general obligation bonds for this request.

(\$ in thousands)

A.B. Anderson Hall Capital Renewal

PROJECT FUNDING SOURCES

Funding Source	Prior Years	FY 2020	FY 2022	FY 2024
State Funds Requested				
General Obligation Bonds	\$ 0	\$ 4,400	\$ 0	\$ 0
Funds Already Committed				
Other Funding	\$ 0	\$ 2,200	\$ 0	\$ 0
Pending Contributions				
TOTAL	\$ 0	\$ 6,600	\$ 0	\$ 0

TOTAL PROJECT COSTS

Cost Category	Prior Years	FY 2020	FY 2022	FY 2024
Property Acquisition	\$ 0	\$ 0	\$ 0	\$ 0
Predesign Fees	\$ 0	\$ 50	\$ 0	\$ 0
Design Fees	\$ 0	\$ 556	\$ 0	\$ 0
Project Management	\$ 0	\$ 180	\$ 0	\$ 0
Construction	\$ 0	\$ 5,297	\$ 0	\$ 0
Relocation Expenses	\$ 0	\$ 150	\$ 0	\$ 0
One Percent for Art	\$ 0	\$ 0	\$ 0	\$ 0
Occupancy Costs	\$ 0	\$ 367	\$ 0	\$ 0
Inflationary Adjustment*	\$ 0	\$ 0	\$ 0	\$ 0
TOTAL	\$ 0	\$ 6,600	\$ 0	\$ 0

*Inflation is already included in project costs.

IMPACT ON STATE OPERATING COSTS

Cost Category	FY 2020	FY 2022	FY 2024
IT Costs	\$ 0	\$ 0	\$ 0
Operating Budget Impact (\$)	\$ 0	\$ 0	\$ 0
Operating Budget Impact (FTE)	0.0	0.0	0.0

SOURCE OF FUNDS FOR DEBT SERVICE PAYMENTS

	Amount	Percent of Total
General Fund	\$ 4,400	100 %
User Financing	\$ 0	0 %

STATUTORY REQUIREMENTS

The following requirements will apply to projects after adoption of the bonding bill.

Is this project exempt from legislative review under M.S. 16B.335 subd. 1a?	No
Pre-design Review (M.S. 16B.335 subd. 3):	
Does this request include funding for pre-design?	Yes
Has the pre-design been submitted to the Department of Administration?	No
Has the pre-design been approved by the Department of Administration?	No
Will the project design meet the Sustainable Building Guidelines under M.S. 16B.325?	Yes
Will the project designs meet applicable requirements and guidelines for energy conservation and alternative energy sources (M.S. 16B.335 subd. 4 and 16B.32)?	Yes
Have Information Technology Review Preconditions been met (M.S. 16B.335 subd. 5 & 6 and 16E.05 subd. 3)?	N/A
Will the project comply with the targeted group purchasing requirement (M.S. 16C.16 subd. 13)?	Yes
Will the project meet public ownership requirements (M.S. 16A.695)?	Yes
Will a use agreement be required (M.S. 16A.695 subd. 2)?	No
Will program funding be reviewed and ensured (M.S. 16A.695 subd. 5)?	N/A
Will the matching funds requirements be met (M.S. 16A.86 subd. 4)?	N/A
Will the project be fully encumbered prior to the Cancellation Deadline (M.S. 16A.642): December 31, 2024?	Yes
M.S. 16A.502 and M.S. 16B.31 (2): Full Funding Required	Yes
M.S. 473.4485: Guideway Project	
Is this a Guideway Project?	N/A
Is the required information included in this request?	N/A

Chemistry Undergraduate Teaching Laboratory**AT A GLANCE****2020 Request Amount:** \$65,600**Priority Ranking:** 4**Project Summary:** This project will demolish obsolete facilities and predesign, design, renovate and build an addition to Fraser Hall to advance process-oriented and active learning for undergraduate chemistry on the Twin Cities campus.**Project Description**

The program for the Chemistry Undergraduate Teaching Laboratory in Fraser Hall comprises approximately 101,600 GSF of new and renovated space. The building is conceived as a five-story addition with a mechanical and electrical penthouse. The programmatic spaces will include 18 chemistry teaching laboratories with associated collaboration space, lab prep and support space, tutoring space, and 9 offices for faculty, TA's, and students. The 2 existing large general purpose lecture halls will also be updated.

The building creates community for the undergraduate chemistry students and faculty throughout. The first level supports commons, study and TA spaces and faculty offices to make visible the life of the building to passers-by and to students. The new entry across from Walter Library creates a transparent volume of student-centered spaces overlooking the river. It is fronted by a landscape courtyard that activates Pleasant and reinforces the Cass Gilbert Masterplan. Instructional laboratory spaces are mainly housed within the addition, with organic chemistry labs on the lowest level of the addition as well as the top two floors. The general chemistry labs are grouped together on the second level, with three of the labs located within the original law library reading room.

Project Rationale

The Chemistry department serves students from every college on the Twin Cities campus. Greater than 10% of the entire UMN undergraduate population enroll in lab courses that will be taught in the proposed facility each semester and more than 90% of students who take chemistry courses are pursuing degrees outside of chemistry. With fall semester enrollment in undergraduate chemistry lab courses projected to rise more than 14% from 2018 to 2020, the Fraser Hall renovation project is critical to serving future undergraduate admissions growth.

Currently, chemistry laboratory courses are taught in Smith and Kolthoff Halls. These facilities are not optimized for modern chemistry laboratory teaching, which involves students working in teams using active, collaborative, and/or process-oriented and project-based learning methods in an environment that meets the University's standards for safety and energy efficiency.

The undergraduate chemistry teaching pedagogy has evolved to an interactive, guided-inquiry, group teaching methodology which requires collaborative space that is not present in the chemistry

laboratories being used today; many of which, while partially renovated in the 1980's, are nearly 100 years old. The current chemistry instructional labs include only class lab and class lab service space. The proposed teaching labs are designed to incorporate collaborative space components into this module.

Project Timeline

Design: July 2020 - October 2021

Construction: November 2021 - June 2023

Other Considerations

Fraser Hall is identified as a future renewal building in the University's strategic facility renewal plan. This category directs University staff to maintain the building for emergency and life safety conditions while redirecting limited renewal funds to other priorities, in anticipation of a future full building renewal project.

The project supports the education mission of the University of Minnesota through modern teaching labs to support improvements to undergraduate education that reflects current evidence based instructional methods and learning spaces to allow collaboration between students and faculty in a less formal environment.

The strategic plan for the Department of Chemistry includes accommodating sufficient capacity for current and future projections of student demand for laboratory instruction in the core physical sciences. Modern chemistry teaching laboratories will enable the Chemistry department to undertake substantial improvements in undergraduate education that reflect current evidence based instructional methods, while creating improved spaces for student teacher interaction.

Undergraduate chemistry serves a very large population of students in STEM and STEM related fields such as the health sciences. MN Department of Employment and Economic Development projects significant continued growth in employment across all of these sectors and sub-disciplines. As examples, these professions include physicians, veterinarians, nurses, dentist, pharmacists, chemists, chemical engineers, materials scientists, biologists, biochemists, pharmacologists, environmental health and safety officers, laboratory technicians in industry, health care, and state regulatory agencies, patent attorneys, science policy experts, and high school chemistry teachers.

Impact on Agency Operating Budgets

Annual facility and utility expenses are projected to increase by approximately \$990,000.

Description of Previous Appropriations

No previous appropriations.

Project Contact Person

Brian Burnett
Senior Vice President
612-624-3557
burnett@umn.edu

Governor's Recommendation

The Governor recommends \$65.6 million in general obligation bonds for this request.

(\$ in thousands)

Chemistry Undergraduate Teaching Laboratory

PROJECT FUNDING SOURCES

Funding Source	Prior Years	FY 2020	FY 2022	FY 2024
State Funds Requested				
General Obligation Bonds	\$ 0	\$ 65,600	\$ 0	\$ 0
Funds Already Committed				
Other Funding	\$ 0	\$ 32,800	\$ 0	\$ 0
Pending Contributions				
TOTAL	\$ 0	\$ 98,400	\$ 0	\$ 0

TOTAL PROJECT COSTS

Cost Category	Prior Years	FY 2020	FY 2022	FY 2024
Property Acquisition	\$ 0	\$ 0	\$ 0	\$ 0
Predesign Fees	\$ 0	\$ 425	\$ 0	\$ 0
Design Fees	\$ 0	\$ 4,506	\$ 0	\$ 0
Project Management	\$ 0	\$ 800	\$ 0	\$ 0
Construction	\$ 0	\$ 89,969	\$ 0	\$ 0
Relocation Expenses	\$ 0	\$ 250	\$ 0	\$ 0
One Percent for Art	\$ 0	\$ 200	\$ 0	\$ 0
Occupancy Costs	\$ 0	\$ 2,250	\$ 0	\$ 0
Inflationary Adjustment*	\$ 0	\$ 0	\$ 0	\$ 0
TOTAL	\$ 0	\$ 98,400	\$ 0	\$ 0

*Inflation is already included in project costs.

IMPACT ON STATE OPERATING COSTS

Cost Category	FY 2020	FY 2022	FY 2024
IT Costs	\$ 0	\$ 0	\$ 0
Operating Budget Impact (\$)	\$ 0	\$ 0	\$ 0
Operating Budget Impact (FTE)	0.0	0.0	0.0

SOURCE OF FUNDS FOR DEBT SERVICE PAYMENTS

	Amount	Percent of Total
General Fund	\$ 65,600	100 %
User Financing	\$ 0	0 %

STATUTORY REQUIREMENTS

The following requirements will apply to projects after adoption of the bonding bill.

Is this project exempt from legislative review under M.S. 16B.335 subd. 1a?	No
Pre-design Review (M.S. 16B.335 subd. 3):	
Does this request include funding for pre-design?	Yes
Has the pre-design been submitted to the Department of Administration?	No
Has the pre-design been approved by the Department of Administration?	No
Will the project design meet the Sustainable Building Guidelines under M.S. 16B.325?	Yes
Will the project designs meet applicable requirements and guidelines for energy conservation and alternative energy sources (M.S. 16B.335 subd. 4 and 16B.32)?	Yes
Have Information Technology Review Preconditions been met (M.S. 16B.335 subd. 5 & 6 and 16E.05 subd. 3)?	N/A
Will the project comply with the targeted group purchasing requirement (M.S. 16C.16 subd. 13)?	Yes
Will the project meet public ownership requirements (M.S. 16A.695)?	Yes
Will a use agreement be required (M.S. 16A.695 subd. 2)?	No
Will program funding be reviewed and ensured (M.S. 16A.695 subd. 5)?	N/A
Will the matching funds requirements be met (M.S. 16A.86 subd. 4)?	N/A
Will the project be fully encumbered prior to the Cancellation Deadline (M.S. 16A.642): December 31, 2024?	Yes
M.S. 16A.502 and M.S. 16B.31 (2): Full Funding Required	Yes
M.S. 473.4485: Guideway Project	
Is this a Guideway Project?	N/A
Is the required information included in this request?	N/A

Clinical Research Facility Design**AT A GLANCE****2020 Request Amount:** \$18,000**Priority Ranking:** 5**Project Summary:** This project will fund design, land acquisition, site preparation, and preconstruction services for the Clinical Research Facility.**Project Description**

This project will complete design and construction documents, acquire land and begin site preparation and preconstruction services for a clinical research facility.

The new Clinical Research Facility will connect a broad array of clinical research units and activities from across the University, providing a consolidated home for the Clinical Translational Science Institute and providing new patient-centered clinics that facilitate patient participation in clinical research. This project is the second in a series envisioned by the 2015 Blue Ribbon Task Force, following the Health Sciences Education Center, scheduled to open in 2020.

Project Rationale

The University is home to Minnesota's only public medical school in addition to health science schools for dentistry, public health, pharmacy, nursing and veterinary medicine. The University offers 62 accredited professional degrees, educates 6,400 students, and plays a key role in educating Minnesota's health care workforce. More than 60% of the state's health professionals are educated at the University. The health of Minnesota families and the economic vitality of the state depend on access to well-trained health providers, innovative health discoveries, quality health care and accessible public health programs. The University has significant responsibilities to ensure this is possible.

Today, health care requires an interdisciplinary approach to care delivery along a full continuum of primary to specialized care. This mandates full integration of health education/training, research, and clinical care. In order to meet future workforce needs, inter-professional and team-based practices will be more integrated into all levels of academic curriculum, from undergraduate to post graduate stages, as well as in clinical care and clinical research trials.

The University of Minnesota has the foundational elements to continue to be a national leader in areas of clinical and outcomes-based research. The clinical research enterprise is strong, but lacks a singular space where various teams, projects, partners and individuals can converge.

The mission of a new Clinical Research Facility is to advance clinical and outcomes focused research with cross-collaborative teams and projects. The new facility will serve as a visible symbol of the importance of clinical research at the University, become a unifying place of identity for the community of health sciences translational researchers, and serve as a connector for the broad array of interdisciplinary clinical research activities.

Relocation of programs to the new Clinical Research Facility provides the catalyst for a series of strategic moves and the opportunity to reinvest in key facilities within the Health Sciences core.

Project Timeline

Design: July 2020 - March 2022

Other Considerations

The University's System-wide Strategic Priorities document calls for investing in programs that "accelerate improvements in the standard of care to improve health through innovation, patient-centered care, prevention of disease, and high-quality interprofessional training across Minnesota." This program is intended as a partnership with the State of Minnesota to support clinical research across the health sciences necessary to improve human health and elevate the Medical School nationally. The program will consolidate dispersed programs, create operational efficiencies, and improve faculty, student and clinical research participant interaction.

The University of Minnesota Medical School and its partners contributed more than \$2.5 billion to the state's economy in 2010, according to a 2015 report by Minnesota Gov. Mark Dayton's blue ribbon commission on the Medical School. Its doctors and students care for more than 1 million people annually — spanning every county in Minnesota.

Impact on Agency Operating Budgets

Impact on operating budgets to be determined within predesign and design process.

Description of Previous Appropriations

State legislation enacted in 2015 related to the refunding of the Series 2006 Stadium Debt required the Board of Regents to allocate sufficient funds from the savings realized from the refunding transaction to provide \$10,000,000 for the predesign and design of the Health Sciences Education Center (HSEC) and for the predesign of the Clinical Research Facility (CRF).

Project Contact Person

Brian Burnett
Senior Vice President
612-624-3557
burnett@umn.edu

Governor's Recommendation

The Governor does not recommend capital funding for this request.

(\$ in thousands)

Clinical Research Facility Design

PROJECT FUNDING SOURCES

Funding Source	Prior Years	FY 2020	FY 2022	FY 2024
State Funds Requested				
General Obligation Bonds	\$ 0	\$ 18,000	\$ 0	\$ 0
Funds Already Committed				
Other Funding	\$ 0	\$ 9,000	\$ 0	\$ 0
Pending Contributions				
TOTAL	\$ 0	\$ 27,000	\$ 0	\$ 0

TOTAL PROJECT COSTS

Cost Category	Prior Years	FY 2020	FY 2022	FY 2024
Property Acquisition	\$ 0	\$ 9,800	\$ 0	\$ 0
Predesign Fees	\$ 0	\$ 0	\$ 0	\$ 0
Design Fees	\$ 0	\$ 12,500	\$ 0	\$ 0
Project Management	\$ 0	\$ 300	\$ 0	\$ 0
Construction	\$ 0	\$ 4,400	\$ 0	\$ 0
Relocation Expenses	\$ 0	\$ 0	\$ 0	\$ 0
One Percent for Art	\$ 0	\$ 0	\$ 0	\$ 0
Occupancy Costs	\$ 0	\$ 0	\$ 0	\$ 0
Inflationary Adjustment*	\$ 0	\$ 0	\$ 0	\$ 0
TOTAL	\$ 0	\$ 27,000	\$ 0	\$ 0

*Inflation is already included in project costs.

IMPACT ON STATE OPERATING COSTS

Cost Category	FY 2020	FY 2022	FY 2024
IT Costs	\$ 0	\$ 0	\$ 0
Operating Budget Impact (\$)	\$ 0	\$ 0	\$ 0
Operating Budget Impact (FTE)	0.0	0.0	0.0

SOURCE OF FUNDS FOR DEBT SERVICE PAYMENTS

	Amount	Percent of Total
General Fund	\$ 18,000	100 %
User Financing	\$ 0	0 %

STATUTORY REQUIREMENTS

The following requirements will apply to projects after adoption of the bonding bill.

Is this project exempt from legislative review under M.S. 16B.335 subd. 1a?	No
Pre-design Review (M.S. 16B.335 subd. 3):	
Does this request include funding for pre-design?	No
Has the pre-design been submitted to the Department of Administration?	No
Has the pre-design been approved by the Department of Administration?	No
Will the project design meet the Sustainable Building Guidelines under M.S. 16B.325?	Yes
Will the project designs meet applicable requirements and guidelines for energy conservation and alternative energy sources (M.S. 16B.335 subd. 4 and 16B.32)?	Yes
Have Information Technology Review Preconditions been met (M.S. 16B.335 subd. 5 & 6 and 16E.05 subd. 3)?	N/A
Will the project comply with the targeted group purchasing requirement (M.S. 16C.16 subd. 13)?	Yes
Will the project meet public ownership requirements (M.S. 16A.695)?	Yes
Will a use agreement be required (M.S. 16A.695 subd. 2)?	No
Will program funding be reviewed and ensured (M.S. 16A.695 subd. 5)?	N/A
Will the matching funds requirements be met (M.S. 16A.86 subd. 4)?	N/A
Will the project be fully encumbered prior to the Cancellation Deadline (M.S. 16A.642): December 31, 2024?	Yes
M.S. 16A.502 and M.S. 16B.31 (2): Full Funding Required	Yes
M.S. 473.4485: Guideway Project	
Is this a Guideway Project?	N/A
Is the required information included in this request?	N/A