The capital planning process approved at the September 2017 Board of Curators meeting includes development of a five-year capital plan that will be reviewed and approved annually by the Board of Curators. This process allows for execution of the current year plan and will provide additional time for fundraising, working with legislature, and additional due diligence during years two through five. The capital plan will assist in driving any official fundraising campaigns for capital projects. Major capital projects will have to be approved by the Board of Curators before being incorporated into any approved capital plans, budget plans, or long-range business plans. Major capital projects include any new construction over \$5 million in project cost or any renovation/infrastructure improvements over \$8 million in project cost.

The first step (Gate A) completed in September 2018, approved the projects recommended to be included in the preliminary capital plan. Campuses presented the preliminary Capital Plan with the campus priority projects including the reasoning for the priority order and how the projects supported the campus strategic and master plans.

The current step (Gate B) is the review and approval of projects to be included in the Campuses Capital Plans which will be recommended for approval to the Board of Curators in April. Project information includes project description; project justification; funding strategies such as donor support, internal funding, debt, or State funding; and the facilities stewardship index (FSI).

Facilities stewardship is about taking a long and broad view of an institution's past and future. The University of Missouri System is comprised of over 1,500 buildings, four primary campuses and a hospital. Total valuation is over \$10 billion. Investment in these facilities over the past 15 years has not been sufficient for the University. UM education and general (E&G) facilities now have over \$1.76 billion in facilities needs (FCN). Due to continued limited funding, we must be deliberate in setting capital priorities to uphold our stewardship responsibility. The new capital planning process is a critical in ensuring we uphold that responsibility.

Beginning with the capital planning process in the fall of 2019, this process will be integrated with the financial transformation initiative underway. This will provide a direct linkage between capital projects and the University's strategic and financial plans. Projects will be identified as being part of the financial plan or aspirational projects. The financial transformation initiative will incorporate the University's strategies, capital plans and deferred maintenance needs into a strategic financial plan. To the extent that the strategic financial projections do not support the financial performance targets, the University will need to identify tradeoffs and balance strategic priorities with financial realities.

Campus Facilities Stewardship Index

Mission

Program Plan: The degree to which a project directly supports the campus's programmatic goals and objectives as stated in the campus strategic plan. Examples may include projects that affect programs identified for enhancement, projects that affect accreditation and projects that will affect external funding for research. Other strategic plan considerations may include projects that correct space deficiencies and/or increase instructional capacity. The weighting should reflect the project's impact on students, faculty, programs, and the institution, the effect on revenue and cost, including any anticipated cost avoidance, economies, and economic payback.

State, Regional, and Community Impact: The degree to which a project can demonstrate:

- Alignment with state priorities (STEM, education of healthcare professionals, etc.), and/or
- o Positive impact on state and regional job creation and economic development beyond the immediate impact of the construction spending support, and/or
- Creation of partnerships between state higher educational institutions, and other public and private entities, both statewide and regional, that display support for the project.

Sustainability

Facilities Renewal: The degree to which a project reuses and improves existing space, improves the building and/or campus Facilities Condition Needs Index [FCNI], razes obsolete space, and/or economically eliminates leased space.

Infrastructure and Functional Sustainability: The degree to which a project is supported by existing campus infrastructure, removes deficiencies in existing campus infrastructure, improves campus energy efficiency, and/or improves campus sustainability.

Strategic Space Management: The degree to which the project allows the campus to strategically and economically reallocate and/or repurpose space to advance the campus strategic plan. For example, a new construction project creates the opportunity to build space better suited for the program than can be gained through renovation and/or created less expensively than through renovation, freeing that existing space for repurposing at a lower cost.

Funding

Funding Support: The degree to which a project includes identified and secured funding.

Operating Cost Support: The degree to which funding for operating costs has been identified for a project

MU Health Care Facilities Project Criteria

<u>Strategic</u>: This includes operating unit growth initiatives, system wide strategic initiatives, speed-to-market considerations, imminent competitive threats, and the need for capacity and potential opportunity costs that could lead to gains for the hospital's competitors.

<u>Risk migration and critical need</u>: These include the ability to upgrade standards of care and improve infrastructure.

Financial: This includes capital cost and potential return on investment.

<u>Operational and physical improvements</u>: These include improved access, an image enhancement, flexibility and adaptability, measures to achieve best practices and support new models of care, and improvements to process, flow and throughput.

Included herein is the FY 2020 - 2024 Capital Project Plans for review and approval. The enclosed information includes:

- Facilities Stewardship information with historic spending as well as anticipated spending on facilities needs.
- Summary Table of all proposed projects by category (new construction or renovation/infrastructure) with campus priority, project cost, and the year anticipated for Curator approval.
- For each campus, their proposed capital plan and target facilities condition needs (FCN) spending for each fiscal year is shown with the campus anticipated spending towards that target each year.
- An executive summary of each project including campus priority, project type, building information, department information, space type, planning and programming study (PPS) including date completed and firm used, project schedule, project cost, project funding, operating cost, total gross square feet, and facilities condition needs expense (\$) impacted by the project. A project description and project justification has been provided with a funding strategy of each project that details how each campus plans to fund the project.
- The Facilities Stewardship Index (FSI) information is provided for each proposed project.

Recommended Action - Five-year Capital Plan for MU, MU Health Care, Missouri S&T, UMKC, and UMSL

It was recommende	ed by Chancellor Cartwrigh	nt, Chancellor Agrawal, Interim
Chancellor Maples and Ch	ancellor George, endorsed	by President Choi, recommended
by the Finance Committee,	moved by Curator	and seconded by
Curator	, that the:	

Capital Plans:

- MU: Ellis Library Student Experience Center Facilitated by the Library Depository Expansion, Satellite Boiler Plant – Research Commons, District Cooling Capacity Addition, Veterinary Medical Diagnostic Laboratory Replacement, Center for Student Health & Well-Being, New Journalism Building – Replace and Redevelop Neff Hall & Addition Site, Manor House – Renovate for Community Style Living, and Honors College – New Building
- UMKC: Conservatory of Music and Dance, Spencer Chemistry-Biological Science Renovation Phase II, and Health Sciences Interprofessional Education and Research Building, Bloch Heritage Hall Renovation and Addition, New Student Housing, and Epperson House Renovation
- Missouri S&T: Schrenk Hall Addition and Renovation Phase III, Engineering Research Lab Addition and Renovation, Library/Learning Commons, and McNutt Hall Addition
- UMSL: Space Consolidation & Infrastructure, Social Science Building Renovation, and Stadler Hall Renovation
- MU Health Care: Inpatient Expansion Women's & Children's Hospital, Ambulatory Facility/MOB, and Inpatient Expansion – University Hospital

be approved for further planning and development as described in the following materials.

Roll call vote of the Committee:	YES	NO
Curator Brncic		
Curator Chatman		
Curator Layman		
Curator Steelman		
The motion		
Roll call vote of Board of Curators:	YES	NO
Curator Brncic		
Curator Chatman		
Curator Farmer		
Curator Graham		
Curator Layman		
Curator Phillips		
Curator Snowden		
Curator Steelman		
Curator Sundvold		
The motion .		

UM Facilities Stewardship

Executive Order 28

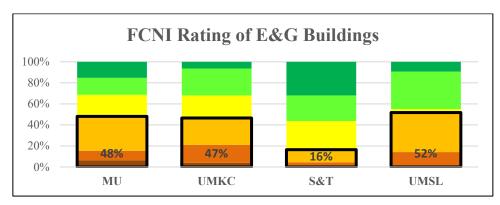
Executive Order #28 (EO 28) was issued in 1994 to address the growing deferred maintenance and repair issues on the Universities campuses. EO 28 mandated that each campus begin budgeting and reporting expenses for preventive maintenance and major repair. In 2012, Executive Order 28 was modified to maintain a Facilities Condition Needs Index (FCNI) of 0.30 or lower. The FCNI is calculated as the sum of the total cost of capital renewal, deferred maintenance, and plant adaption divided by the estimated replacement cost of the buildings.

Historical Five Year Spend on Executive Order 28

University of Missouri System has \$1.76 billion in Facilities Condition Needs and a Facilities Condition Needs Index (FCNI) of 0.30. 45% half of the E&G facilities

on the campuses fall in the category of Below Average Condition, Poor Condition, or Replacement is recommended.

	2014	2015	2016	2017	2018
EO 28 Target	\$83,652,000	\$92,882,000	\$117,110,000	\$83,652,000	\$118,414,000
Total Actual Spend	\$76,686,000	\$88,421,000	\$83,029,000	\$76,686,000	\$91,523,000
Recurring Actual Spend	\$44,277,000	\$38,293,000	\$42,897,000	\$44,277,000	\$39,617,000
One-Time Actual Spend	\$32,409,000	\$50,128,000	\$40,132,000	\$32,409,000	\$51,906,000



Facility Condition Needs Index									
Excellent Condition, typically new construction (0.000 - 0.100)									
Good Condition, renovations occur on schedule (0.101 - 0.200)									
Fair Condition, in need of normal renovation (0.201 - 0.300)									
Below Average Condition, major renovation required (0.301 - 0.500)									
Poor Condition, total renovation indicated (0.501 - 0.600)									
Replacement Recommended (0.600 and Higher)									

Budgeted Five Year Spend on Executive Order 28

Executive Order 28 has a ten year goal of maintaining current campus FCNI or achieving campus FCNI of 0.30 in ten years. Below is a summary of campus funds designed for maintenance and repair and if the funds will be spent on capital repairs or daily service for E&G facilities.

	2020	2021	2022	2023	2024
EO 28 Target	\$134,426,000	\$139,796,000	\$143,267,000	\$150,844,000	\$156,526,000
Total Spend Projected E&G Only	\$60,985,000	\$48,985,000	\$58,320,000	\$47,195,000	\$58,610,000
Capital Spend E&G FO and all other E&G projects	\$33,865,000	\$21,149,000	\$29,649,000	\$17,664,000	\$28,193,000
Non Capital Daily Service E&G FO only	\$27,026,000	\$27,836,000	\$28,671,000	\$29,531,000	\$30,417,000

Fiscal Year 2020 – 2024 Capital Plan for University of Missouri System

			2019*	2020	2021	2022	2023	2024
	Campus	Priority	Current Year	Year 1	Year 2	Year 3	Year 4	Year 5
New Construction								
Translational Precision Medicine	MU		200,000,000					
Center								
Ellis Library – Student	MU	1		\$7,000,000				
Experience Center facilitated by								
the Library Depository Expansion								
Veterinary Medical Diagnostic	MU	4			\$57,980,000			
Laboratory Replacement								
New Journalism Building -	MU	5				\$45,000,000		
Replace and Redevelop Neff Hall								
& Addition Site								
Honors College – New Building	MU	6		\$47,500,000				
Center for Student Health &	MU	7		\$30,000,000				
Well-Being								
Conservatory of Music & Dance	UMKC	1		\$100,000,000				
Health Sciences Interprofessional	UMKC	3				\$130,000,000		
Education and Research Building								
Bloch Heritage Hall Renovation	UMKC	4			\$5,400,000			
and Addition								
New Student Housing	UMKC	5				\$45,000,000		
Advanced Construction Material	S&T		\$6,502,638					
Laboratory								
Student Classroom	S&T		\$7,657,675					
Schrenk Hall Addition and	S&T	1		\$44,600,000				
Renovation								
Engineering Research Lab	S&T	3				\$43,026,000		
Addition and Renovation								
McNutt Hall Addition	S&T	4					\$10,434,292	
New Construction Total			\$214,160,313	\$229,100,000	\$63,380,000	\$263,026,000	\$10,434,292	\$0
Renovation/Infrastructure								
School of Nursing – Renovation	MU		\$20,000,000					
& Addition								
Medical Science Building-	MU		12,900,000					
Upgrade & Maintenance of								
Research Vivarium				***				
District Cooling Capacity	MU	2		\$21,725,000				

			2019*	2020	2021	2022	2023	2024
	Campus	Priority	Current Year	Year 1	Year 2	Year 3	Year 4	Year 5
Addition								
Satellite Boiler Plant – Research	MU	3			\$8,800,000			
Commons								
Manor House	MU	8			\$13,000,000			
Spencer Chemistry & Biological	UMKC	2		\$37,657,000				
Science Renovation Phase II								
Health Sciences Interprofessional	UMKC	3				\$20,000,000		
Education and Research Building								
Bloch Heritage Hall Renovation	UMKC	4			\$6,600,000			
and Addition								
Epperson House Renovation	UMKC	6						\$20,000,000
Library/Learning Commons	S&T	2			\$10,318,000			
Space Consolidation &	UMSL	1		\$10,000,000				
Infrastructure								
Social Science Building	UMSL	2		\$42,500,000				
Renovation								
Stadler Hall Renovation	UMSL	3				\$34,100,000		
Renovation/Infrastructure			\$22,000,000	¢111 002 000	\$38,718,000	\$54 100 000	\$0	\$20,000,000
Total			\$32,900,000	\$111,882,000	\$30,710,000	\$54,100,000	\$0	\$20,000,000

^{*}Projects listed under 2019 are projects anticipated to have project approval during FY19.

<u>Fiscal Year 2020 – 2024 Capital Plan Spend Summary for University of Missouri System</u>

	 2019*	2020	2021	2022	2023	2024
	Current Year	Year 1	Year 2	Year 3	Year 4	Year 5
New	\$214,160,313	\$229,100,000	\$63,380,000	\$263,026,000	\$10,434,292	\$0
Construction						
Renovation	\$32,900,000	\$111,882,000	\$38,718,000	\$54,100,000	\$0	\$20,000,000
Total	\$247,060,313	\$340,982,000	\$102,098,000	\$317,126,000	\$10,343,292	\$20,000,000

^{*}Projects listed under 2019 are projects anticipated to have project approval during FY19.

University of Missouri System Capital Projects Funding for Fiscal Year 2020-2024

Edu	cational and General Facilities							Fun	ding Strategy		
				Facility							
#	Title	Campus	Type	Needs	FCNI	Total Cost	Debt	Gifts	Internal	Federal	State
1	Ellis Library – Student Experience Center facilitated by the Library Depository Expansion	MU	NC/RE	\$0M	0.00	\$7,000,000	\$0	\$0	\$7,000,000	\$0	\$0
2	District Cooling Capacity Addition	MU	Utility	\$0M	0.00	\$21,725,000	\$0	\$0	\$21,725,000	\$0	\$0
3	Satellite Boiler Plant – Research Commons	MU	Utility	\$0M	0.00	\$8,800,000	\$0	\$0	\$8,800,000	\$0	\$0
4	Veterinary Medical Diagnostic Laboratory Replacement	MU	NC/RE	\$12.5M	0.51	\$57,980,000	\$0	\$12,760,000	\$6,375,000	\$0	\$38,845,000
5	New Journalism Building - Replace and Redevelop Neff Hall & Addition Site	MU	NC/RE	\$8.4M	0.63	\$45,000,000	\$0	\$45,000,000	\$0	\$0	\$0
6	Honors College – New Building	MU	NC	\$0M	0.00	\$47,500,000	\$0	\$47,500,000	\$0	\$0	\$0
7	Center for Student Health & Well- Being	MU	NC/RE	\$0M	0.00	\$30,000,000	\$0	\$20,000,000	\$10,000,000	\$0	\$0
8	Manor House	MU	RE	\$12.7M	0.60	\$13,000,000	\$13,000,000	\$0	\$0	\$0	\$0
1	Conservatory of Music & Dance	UMKC	NC	\$0M	0.00	\$100,000,000	\$0	\$50,000,000	\$0	\$0	\$50,000,000
2	Spencer Chemistry & Biological Science Renovation Phase II	UMKC	RE	\$17.7M	0.42	\$37,657,000	\$0	\$4,600,000	\$0	\$0	\$33,057,000
3	Health Sciences Interprofessional Education and Research Building	UMKC	NC/RE	\$12.5M	0.25- 0.51	\$150,000,000	\$0	\$75,000,000	\$0	\$0	\$75,000,000
4	Bloch Heritage Hall Renovation and Addition	UMKC	NC/RE	\$4.5M	0.26	\$12,000,000	\$0	\$12,000,000	\$0	\$0	\$0
5	New Student Housing	UMKC	NC	\$0M	0.00	\$45,000,000	\$45,000,000	\$0	\$0	\$0	\$0
6	Epperson House Renovation	UMKC	RE	\$10M	1.00	\$20,000,000	\$0	\$20,000,000	\$0	\$0	\$0
1	Schrenk Hall Addition and Renovation – Phase III	S&T	NC/RE	\$19.1M	0.57	\$44,600,000	\$0	\$8,920,000	\$0	\$0	\$35,680,000
2	Library/Learning Commons	S&T	RE	\$5M	0.28	\$10,318,000	\$0	\$5,318,000	\$5,000,000	\$0	\$0
3	Engineering Research Lab Addition and Renovation	S&T	NC/RE	\$13.0M	0.49	\$43,026,000	\$33,026,000	\$0	\$10,000,000	\$0	\$0
4	McNutt Hall Addition	S&T	NC	\$0	0.00	\$10,434,292	\$0	\$10,434,292	\$0	\$0	\$0

Pro	ject			Funding Strategy							
				Facility							
#	Title	Campus	Type	Needs	FCNI	Total Cost	Debt	Gifts	Internal	Federal	State
1	Space Consolidation &	UMSL	RE	\$20.5M	0.38-	\$10,000,000	\$0	\$0	\$2,000,000	\$0	\$8,000,000
	Infrastructure				0.49						
2	Social Science Building Renovation	UMSL	RE	\$35.3M	0.54	\$42,500,000	\$0	\$0	\$8,500,000	\$0	\$34,000,000
3	Stadler Hall Renovation	UMSL	RE	\$26.7M	0.53	\$34,100,000	\$0	\$0	\$6,800,000	\$0	\$27,300,000
	Total					\$790,640,292	\$91,026,000	\$311,532,292	\$86,200,000	\$0	\$301,882,000

Fiscal Year 2020 – 2024 Capital Plan for MU Health Care

			2019*	2020	2021	2022	2023	2024
	Campus	Priority	Current Year	Year 1	Year 2	Year 3	Year 4	Year 5
New Construction								
Primary Care Clinic	MUHC		\$13,000,000					
Inpatient Expansion – Women's & Children's	MUHC	1			\$100,000,000			
Hospital **								
Ambulatory	MUHC	2				\$50,000,000		
Facility/Medical Office								
Building**								
Inpatient Expansion –	MUHC	3						\$100,000,000
University Hospital ***								
New Construction Total			\$13,000,000	\$0	\$100,000,000	\$50,000,000	\$0	\$100,000,000
Renovation/Infrastructure								
Women's & Children's	MUHC		\$15,000,000					
Building Exterior								
Renovation/Infrastructure			\$15,000,000	\$0	\$0	\$0	\$0	\$0
Total								

Fiscal Year 2020 – 2024 Capital Plan Spend Summary for MU Health Care

	2019	2020	2021	2022	2023	2024
	Current Year	Year 1	Year 2	Year 3	Year 4	Year 5
New Construction	\$13,000,000	\$0	\$100,000,000	\$50,000,000	\$0	\$100,000,000
Renovation	\$15,000,000	\$0	\$0	\$0	\$0	\$0
Total	\$28,000,000	\$0	\$100,000,000	\$50,000,000	\$0	\$100,000,000

^{*}Projects listed under 2019 are projects anticipated to have project approval during FY19.

**The WCH Inpatient Expansion could move to 2020 and the Ambulatory Facility could move to 2021 based on the outcomes of other Health Care initiatives.

^{***}The UH Inpatient Expansion could move to 2023 and the scope may be subject to change based on the outcomes of the Health Care initiatives.

Fiscal Year 2020 – 2024 MU Health Care Capital Projects Funding

Pro	Project							Funding Strategy	7	
			Facility							
#	Title	Type	Needs	FCNI	Total Cost	Debt	Gifts	Internal	Federal	State
1	Inpatient Expansion –	NC	\$0M	0.26	\$100,000,000	\$100,000,000	\$0	\$0	\$0	\$0
1	University Hospital									
2	Ambulatory Facility/Medical	NC	\$0M	0.00	\$50,000,000	\$50,000,000	\$0	\$0	\$0	\$0
2	Office Building									
	Inpatient Expansion –	NC	\$0	0.28	\$100,000,000	\$95,000,000	\$5,000,000	\$0	\$0	\$0
3	Women's & Children's									
	Hospital									
	Total				\$250,000,000	\$245,000,000	\$5,000,000	\$0	\$0	\$0

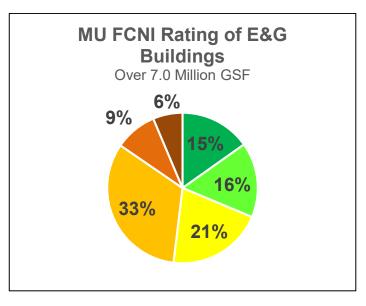
University of Missouri – Columbia Fiscal Year 2020 – 2024 Capital Plan

University of Missouri - Columbia Facilities Stewardship

University of Missouri – Columbia Historical Five Year Spend on Executive Order 28

MU has \$811.8 million in Facilities Condition Needs and a Facilities Condition Needs Index (FCNI) of 0.30. 48% of the E&G facilities on the MU campus fall in the category of Below Average Condition, Poor Condition, or Replacement is recommended.

	2014	2015	2016	2017	2018
EO 28 Target	\$35,207,000	\$46,111,000	\$51,583,000	\$52,622,000	\$52,434,000
Total Actual Spend	\$25,315,000	\$41,195,000	\$50,180,000	\$47,463,000	\$29,926,000
Recurring Actual Spend	\$19,196,000	\$17,521,000	\$21,423,000	\$20,116,000	\$17,267,000
One-Time Actual Spend	\$6,119,000	\$23,674,000	\$28,757,000	\$27,347,000	\$12,659,000



Facility Condition Needs Index Excellent Condition, typically new construction (0.000 - 0.100) Good Condition, renovations occur on schedule (0.101 - 0.200) Fair Condition, in need of normal renovation (0.201 - 0.300) Flow Average Condition, major renovation required (0.301 - 0.500)

Below Average Condition, major renovation required (0.301 - 0.500)

Poor Condition, total renovation indicated (0.501 - 0.600)

Replacement Recommended (0.600 and Higher)

University of Missouri - Columbia Budgeted Five Year Spend on Executive Order 28

Executive Order 28 has a ten year goal of maintaining current campus FCNI or achieving campus FCNI of 0.30 in ten years. Below is a summary of campus funds designed for maintenance and repair and if the funds will be spent on capital repairs or daily service for E&G facilities.

	2020	2021	2022	2023	2024
EO 28 Target	\$58,491,000	\$61,103,000	\$63,761,000	\$66,468,000	\$69,224,000
Total Spend Projected E&G Only	\$16,070,000	\$16,552,000	\$17,049,000	\$17,560,000	\$18,087,000
Capital Spend E&G FO and all other E&G projects	\$7,042,000	\$7,253,000	\$7,471,000	\$7,695,000	\$7,926,000
Non Capital Daily Service E&G FO only	\$9,028,000	\$9,299,000	\$9,578,000	\$9,865,000	\$10,161,000

<u>University of Missouri – Columbia Fiscal Year 2020-2024 Capital Plan</u>

MU	2019*	2020	2021	2022	2023	2024
	Current Year	Year 1	Year 2	Year 3	Year 4	Year 5
New Construction	\$200,000,000	\$84,500,000	\$57,980,000	\$45,000,000	\$0	\$0
Translational Precision Medicine Center	\$200,000,000					
Ellis Library – Student Experience Center facilitated by the		\$7,000,000				
Library Depository Expansion						
Veterinary Medical Diagnostic Laboratory Replacement			\$57,980,000			
New Journalism Building - Replace and Redevelop Neff Hall				\$45,000,000		
& Addition Site						
Honors College – New Building		\$47,500,000				
Center for Student Health & Well-Being		\$30,000,000				
		-	-		1	
Renovation/Infrastructure	\$32,900,000	\$21,725,000	\$21,800,000	\$0	\$0	\$0
School of Nursing – Renovation & Addition	\$20,000,000					
Medical Science Building- Upgrade & Maintenance of	\$12,900,000					
Research Vivarium						
District Cooling Capacity Addition		\$21,725,000				
Satellite Boiler Plant - Research Commons			\$8,800,000			
Manor House - Renovate for Community Style Living			\$13,000,000			
Total Project Cost	\$232,900,000	\$106,225,000	\$79,780,000	\$45,000,000	\$0	\$0

^{*}Projects listed under 2019 are projects anticipated to have project approval during FY19.

<u>University of Missouri – Columbia Fiscal Year 2020 – 2024 Capital Projects Funding</u>

						T	T				
Pro	ect							Fun	ding Strategy		
#	Title	Campus	Type	Facility Needs	FCNI	Total Cost	Debt	Gifts	Internal	Federal	State
1	Ellis Library – Student Experience Center facilitated by the Library Depository Expansion	MÛ	NC/RE	\$0M	0.00	\$7,000,000	\$0	\$0	\$7,000,000	\$0	\$0
2	District Cooling Capacity Addition	MU	Utility	\$0M	0.00	\$21,725,000	\$0	\$0	\$21,725,000	\$0	\$0
3	Satellite Boiler Plant – Research Commons	MU	Utility	\$0M	0.00	\$8,800,000	\$0	\$0	\$8,800,000	\$0	\$0
4	Veterinary Medical Diagnostic Laboratory Replacement	MU	NC/RE	\$12.5M	0.51	\$57,980,000	\$0	\$12,760,000	\$6,375,000	\$0	\$38,845,000
5	New Journalism Building - Replace and Redevelop Neff Hall & Addition Site	MU	NC/RE	\$8.4M	0.63	\$45,000,000	\$0	\$45,000,000	\$0	\$0	\$0
6	Honors College – New Building	MU	NC	\$0M	0.00	\$47,500,000	\$0	\$47,500,000	\$0	\$0	\$0
7	Center for Student Health & Well-Being	MU	NC/RE	\$0M	0.00	\$30,000,000	\$0	\$20,000,000	\$10,000,000	\$0	\$0
8	Manor House	MU	RE	\$12.7M	0.60	\$13,000,000	\$13,000,000	\$0	\$0	\$0	\$0
	Total					\$231,005,000	\$13,000,000	\$125,260,000	\$53,900,000	\$0	\$38,845,000

University of Missouri - Columbia Ellis Library - Student Experience Center facilitated by the Library Depository Expansion Executive Summary

Campus Priority: 1 Project Type New Construction

Building Profile

Building Name: Ellis Library

Facility Age: TBD Total GSF: TBD

Total Facilities Condition Needs:

TBD

FCNI: TBD

Department

Student Success Center Depts., Financial Aid, Registrar, Cashiers, MU Library

Space Type

Library, student support, museums. 25,000 - 33,000 students.

Program Planning Study

Master Planning 2017, Depository Planning 2018, Space Reduction Planning

Project Schedule

Summer 2021

Project Cost

\$7,000,000

Project Funding

Internal \$7,000,000 Bonds \$0 Gifts \$0 Federal \$0 State \$0

Operating Expenses TBD

GSF Impacted by Project HD +GM to determine

FCN Addressed in Project \$52.4M after all facilitated projects are complete

Project Description

The redistribution of space in the heart of the Mizzou Campus to create the Student Experience Center will be facilitated by expanding the University of Missouri Library Depository (UMLD) located off-campus on LeMone Boulevard in Columbia, Missouri. This project will construct a 15,000-20,000 gross square foot addition to consolidate the mass storage collection, University Archives collection, and support functions of digitization and material conservation. The UMLD original design anticipated a future expansion to the south of the existing building. This new project includes the installation of high-bay storage racks similar to the existing facility, work spaces for staff responsible for the MU Archive collection and the digitization and conservation of the Library collection.

Project Justification

Chancellor Cartwright has charged campus leadership to develop a one-stop-shop comprised of academic services and transactional functions necessary for student success. MU has invested in support to re-imagine the Mizzou student experience, improving student success, engagement, access, and recruitment. The Student Experience Center is a major component in that endeavor. Providing most of these services in a central location will improve ease of use, collaboration, and enhanced stewardship of resources leading to an improved student experience. The Student Experience Center will include key student services such as the Registrar, Financial Aid, Cashiers, the Office of Student Employment, Career Center, the Center for Academic Success and Excellence, Learning Center, and more. Ellis Library is a major footprint in the heart of campus supporting scholarly activity, thus an appropriate central campus location to house the Student Experience Center.

With the State Historical Society of Missouri (SHSMO) vacating Ellis Library in 2019 and the expansion of the depository, core campus space will be available for students and faculty and will facilitate strategic space reduction plans. Starting with an area on the ground floor of Ellis Library near the west entry, a large area of underutilized office space will be modified and reassigned for a component of the Student Experience Center. The Library Depository Addition will house the displaced library supporting functions currently located in the Ellis space, along with University Archives from Lewis Hall, and elimination of leased space for the collection storage.

The former SHSMO space in Ellis Library will be incrementally transformed into the remaining components of the Student Experience Center and occupied with academic services including those currently in the Student Success Center (SSC). The former SSC building will then be renovated as the new home for the MU Museum of Art and Archaeology (MAA), previously displaced from Pickard Hall; and the MU Museum of Anthropology, moved from Swallow Hall to co-locate with MAA. Both museums are currently located at Mizzou North. In support of the strategic space reduction plan, the campus will divest from Mizzou North to eliminate \$52M of facility needs and over \$1M in operating costs per year. Relocation of various office-based departments in Mizzou North started in Fall 2018. The relocation of the Museums will follow the renovation at SSC with a target completion to close Mizzou North by Fall 2021.

Funding Strategy

The \$7,000,000 project cost is anticipated to be funded from Internal funds.

Criteria	FSI	FSI Justification
Mission	8	Project will allow the program to grow and will have positive effects on enrollment. First steps towards the strategic plan to improve space efficiencies for the campus.
Sustainability	9	Project will facilitate the elimination of leased space and obsolete space.
Funding	8	Project cost funds is secured.

University of Missouri - Columbia District Cooling Capacity Addition Executive Summary

Campus Priority: 2 Project Type Utility

Building ProfileBuilding Name: N/A
Facility Age: N/A
Total GSF: N/A

Total Facilities Condition Needs:

NA FCNI: N/A

Department

Campus Facilities - Energy Management

Space Type Utility

Program Planning StudyStudy initiated summer 2018

Project Schedule

Complete before summer 2022, required for operation of TPMC

Project Cost \$21,725,000

Project Funding

Internal \$21,725,000 Bonds \$0 Gifts \$0 Federal \$0 State \$0

Operating Expenses TBD

GSF Impacted by Project 3,700 GSF

FCN Addressed in Project N/A

Project Description

This project will construct a 3,700 square feet building addition to the chiller plant located at the campus power plant to house two steam turbine driven chillers, cooling towers, and associated auxiliaries, to provide 4,400 tons of necessary chiller capacity to the campus district cooling system to serve planned and forecasted cooling demands of new campus buildings and support chiller retirements within the cooling system.

Project Justification

Planned campus buildings, including the Translational Precision Medicine Complex (TPMC) and the Nursing School, will add approximately 1,900 tons of new cooling demand by the summer 2022. Also, retiring chillers in this same period will reduce system capacity by 2,500 tons, yielding a chiller capacity need of 4,400 tons.

The steam turbine driven chillers will be powered with available summer steam capacity from the power plant in lieu of using electric chillers. This reduces impact to the campus limited electric capacity and will improve the efficiency of the combined heat and power plant. Several chillers in the cooling system need to be retired due to age, poor reliability and inefficiency. Two of the retiring chillers are located in academic spaces, including Ellis Library and Veterinary Medicine. Relocating this capacity to a dedicated chiller plant reduces the health and safety exposure risk of refrigerants and chemicals to students, faculty and staff.

Funding Strategy

The project budget of \$21,725,000 will be funded from reserves.

Criteria	FSI	FSI Justification
Mission	9	Project is necessary to maintain the utility system and supply existing and new facilities.
Sustainability	10	Utility project will eliminate equipment that is past its life cycle and is not efficient.
Funding	7	Project cost funding is partially secured.

University of Missouri - Columbia Satellite Boiler Plant - Research Commons Executive Summary

Campus Priority: 3 Project Type: Utility

Building Profile

Building Name: N/A Facility Age: N/A Total GSF: N/A

Total Facilities Condition Needs:

NA

FCNI: N/A

Department

Campus Facilities - Energy Management

Space Type Utility

Program Planning Study

Study completed January 2018, by Burns and McDonnell

Project Schedule

Complete by fall 2021 to support operation of TPMC

Project Cost

\$8,800,000

5,200 gsf

Project Funding

Internal \$8,800,000 Bonds \$0 Gifts \$0 Federal \$0 State \$0

Operating Expenses TBD

GSF Impacted by Project

FCN Addressed in Project \$N/A

Project Description

This project will provide a 5,200 square foot satellite steam boiler facility located in the southern portion the Research Commons area to serve as a source of steam capacity for the campus. The boiler facility will provide up to 75,000 pounds per hour of reliable steam capacity for current and future growth of the campus. Key benefits of this project is the opportunity to avoid the expense of replacing both a failing north steam main and end of life boiler in the power plant, while providing added steam supply resiliency for the campus.

Project Justification

In addition to reliably serving steam service for the current and master planned growth of Research Commons, the boiler facility will provide an additional 33,000 pounds per hour of steam to the main campus for new facilities, such as Translational Precision Medicine Complex. This project creates up to \$14.6 Million of utility cost avoidance by not having to replace the failing north steam main serving the Research Commons area (\$8.3 million) and a boiler replacement in the power plant (\$6.3 million). This project also enhances the campus steam supply resiliency by placing a portion of the steam capacity in a location other than the power plant.

Funding Strategy

The project budget of \$8,800,000 will be funded from reserves.

Criteria	FSI	FSI Justification
Mission	9	Project is necessary to maintain the utility system and supply existing and new facilities.
Sustainability	10	Utility project will eliminate equipment that is past its life cycle and is not efficient.
Funding	10	Project cost funds have been secured.

University of Missouri - Columbia Veterinary Medical Diagnostic Laboratory Replacement Executive Summary

Campus Priority: 4 Project Type: Replacement

Building Profile

Building Name: Veterinary Medicine Diagnostic Laboratory, Veterinary Science Building

Facility Age: 43-70 Total GSF: 21,140 gsf

Total Facilities Condition Needs:

\$12.5M FCNI: 0.51

Department

College of Veterinary Medicine and campus wide resource

Space Type

High level laboratory spaces. 400+ CVM students, others involved with campus research

Program Planning Study Summer 2018

Project Schedule

Phase 1: 30.5 Months; Phase 2: continue with 9.5 months

Project Cost \$57,980,000

Project Funding

Internal \$6,375,000 Bonds \$0 Gifts \$12,760,000 Federal \$TBD State \$38,845,000

Operating Expenses

\$1,001,000 (only \$876,000 Net New cost due to bldg. removal)

GSF Impacted by Project

85,000 new gsf; 61,500 demo gsf net new GSF 23,500)

FCN Addressed in Project \$12.5M

Project Description

The Veterinary Medical Diagnostic Laboratory (VMDL) Replacement project will construct a new facility of approximately 80,000 - 85,000 gross square feet (GSF) and demolish two existing buildings. A two-phase scenario allows VMDL operations to continue without interruption or expense of temporary space. Phase One includes a new approximately 40,000 GSF building directly adjacent to the existing VMDL. The key operational elements include a new necropsy & biocontainment suite, incinerator, and diagnostic laboratories. Upon occupancy of Phase One, Phase Two will demolish the existing 21,140 GSF VMDL and replace it with an addition of similar size to Phase One. Phase Two will house additional diagnostic laboratories, classroom spaces, and support spaces to complete the program consolidation. After Phase Two occupancy, the nearby 40,350 GSF Veterinary Science Building, built in 1948 will be demolished. The project consolidates current VMDL functions from four buildings thus improving safety, minimizing potential contamination, and improving operational efficiencies.

The overall development enhances the public face of the Veterinary Medicine campus by improving pedestrian accessibility between buildings while better segregating and securing biohazards from Clydesdale Hall's and VMDL's shared service yard.

Project Justification

The VMDL is Missouri's only veterinary laboratory accredited by the American Association of Veterinary Laboratory Diagnosticians. Each year, the VMDL performs in excess of 100,000 diagnostic tests, many for agricultural animals as well as companion animals. The VMDL is a major resource to State and national networks to monitor and investigate potential outbreaks of animal diseases such as avian influenza and foot-and-mouth disease; human diseases such as West Nile virus and rabies; cases of brucellosis, salmonellosis, and other diseases that have an impact on animal and public health. The VMDL has established a new collaboration with the Missouri Department of Conservation and is certified to test chronic wasting disease in wild and captive animals.

In addition to serving the people of Missouri, the VMDL plays a critical role in fulfilling the teaching and research mission of the College of Veterinary Medicine. The faculty includes nationally recognized leaders in diagnostic pathology, immunology, microbiology, molecular biology, virology and toxicology, who take an interdisciplinary approach to resolving agricultural issues.

The existing VMDL, is outdated and incapable of supporting the current needs of MU and the College of Veterinary Medicine in a safe and efficient manner. Current standards demand biosecurity protocols that cannot be implemented. During a 2016 AAVLD Laboratory Accreditation Site Visit, auditors identified a number of facility deficiencies related to laboratory biosecurity and risk management. These deficiencies must be addressed in a timely manner in order for the VMDL to retain accreditation and provide service to its clients. The project will eliminate over \$12.5 million of facilities needs.

Funding Strategy

The project will be funded from \$6,375,000 of internal funds, \$12,760,000 of gifts, and from a \$38,845,000 State request.

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Criteria	FSI	FSI Justification
Mission	10	Currently the lab accreditation is at risk. College of Veterinary Medicine is the only veterinary school in the state of Missouri, VMDL is the only accredited veterinary diagnostic lab in the state.
Sustainability	10	The project will remove two buildings past their recommended life cycle and is replacing them with a building that will be more efficient and meet the program needs.
Funding	2	Project cost funding is not secured.

University of Missouri - Columbia New Journalism Building - Replace and Redevelop Neff Hall & Addition Site Executive Summary

Campus Priority: 5 Project Type: Redevelopment

Building Profile

Building Name: Neff Hall &

Addition

Facility Age: 59 - 100 years Total GSF: 40,322 gsf

Total Facilities Condition Needs:

\$8.4M FCNI: 0.63

Department

School of Journalism

Space Type

Multi-platform newsroom class lab, media studio class labs, strategic communications class labs, behavioral research suite, auditorium, academic offices & MU Visitor's Center.

1,600 - 5,000 students per year

Program Planning Study

Complete Fall 2018

Project Schedule 30 - 40 months

Project Cost \$45,000,000

Project Funding

Internal \$0 Bonds \$0 Gifts \$45,000,000 Federal \$0 State \$0

Operating Expenses TBD

GSF Impacted by Project 65,000 - 75,000 gsf

FCN Addressed in Project \$8.4M

Project Description

The New Journalism Building project will demolish two poor condition, low density buildings and construct a new 65,000-75,000 gross square foot, five story building at a key portal to the campus at the "Avenue of the Columns" and the vibrant 9th Street corridor. It provides an opportunity for a new MU Visitor's Center to be positioned on the first floor and serve as a starting point for on-campus recruitment of future students for the entire campus. The key component of the facility will bring together the MU media brands of KOMU, KBIA, Missourian, and Vox to create a multi-platform class lab environment along with other programs such as strategic communications, documentary journalism, and leadership.

Project Justification

Since its founding in 1908, applied learning within professional settings has been the cornerstone of the Missouri School of Journalism. Through newsrooms and communication agencies, hands-on learning environments have fueled the School's success and its prestigious global reputation. This famed "Missouri Method" has attracted talented students and faculty from across the country and around the world, which has ultimately strengthened MU.

MU consistently hears from media leaders, including alumni working around the world, that the industry is demanding professionals who are able to collaborate and be capable of working across multiple platforms—print, digital, video, audio and social media. This journalist-of-all-trades expectation demands that students are exposed to all manner of reporting and production platforms. Specializing in only one platform is no longer the key to professional success.

With this project, the School will consolidate the programs into one building and vacate space in three buildings. This will allow the vacated space to be utilized by other Journalism School functions not requiring co-location or other academic programs. Spaces equipped for a multi-platform environment will allow students to seamlessly work across currently divided disciplines. Having all of these academic programs in one facility provides maximum opportunity and efficiency for all journalism students to interact with many aspects of the field.

The project will eliminate \$8.4 million in facilities needs.

Funding Strategy

The project will be funded by \$45,000,000 in gifts

Criteria	FSI	FSI Justification
Mission	9	Project has a significant impact for the School of Journalism by providing cross platform active learning for highly regarded academic program.
Sustainability	10	Project will remove two buildings and replace it with a more efficient building.
Funding	2	Project cost funding is not secured.

University of Missouri - Columbia Honors College - New Building Executive Summary

Campus Priority: 6 Project Type: New Construction -Redevelopment

Building Profile

Building Name: TBD Facility Age: TBD Total GSF: TBD

Total Facilities Condition Needs:

TBD FCNI: TBD

Department: Honors College

Space Type:

Classrooms, collaboration space, work areas for faculty & students. 2,500

Program Planning Study NA

Project Schedule

Dependent on location

Project Cost: \$47.5M

Project Funding

Internal \$0 Bonds \$0 Gifts \$47,500,000 Federal \$0 State \$0

Operating Expenses

TBD

GSF Impacted by Project TBD

FCN Addressed in Project **\$TBD**

Project Description

Construct a 50,000 - 60,000 gross square feet new facility within the core of the MU academic campus to house the Honors College. Locations in the core campus will be evaluated through the MU Master Planning process.

Project Justification

MU is home to the nation's first Honors College, founded in 1958. The Honors College serves over 2,500 students a year, has an alumni base of over 12,000, an offers almost 200 unique courses each year. With a faculty of 200 of MU's most accomplished scholars, and more than \$1.6 million in endowed scholarships, the Honors College seeks to serve a diverse group of high-achieving students, with majors in nearly every discipline from Engineering to Art, allowing them the opportunity to excel in all facets of their education.

Construction of a new building for the Honors College will enhance the ability to provide students with the services and engagement similar to a smaller college within the breadth of a large, pluralistic, and distinguished research institution. The Honors College has its own highly developed curriculum and works closely with departments and colleges on campus to provide a wide range of exciting, engaging, and challenging honors courses, academic programs, and extra-curricular events and activities.

Funding Strategy

The project will be funded by \$47,500,000 in gifts.

Criteria	FSI	FSI Justification
Mission	8	Project will enhance the Honors College program.
Sustainability	10	Project will use the MU Master Plan as a guidance for redevelopment locations.
Funding	1	Funding will be through philanthropy.

University of Missouri - Columbia Center for Student Health & Well-Being Executive Summary

Campus Priority: 7 Project Type: New Construction

Building Profile

Building Name: Parker Hall (to vacate completely)

Facility Age: 118 years Total GSF: 27,377 gsf

Total Facilities Condition Needs:

\$4M FCNI: 0.56

Department

Multiple related to student health & wellbeing

Space Type

Physician/practitioner clinic spaces, individual/group counseling rooms, staff spaces for program delivery Student Impact 25,000 - 33,000

Program Planning Study Initiate Fall 2018

Project Schedule TBD.

Project Cost \$30,000,000

Project Funding

Internal \$10,000,000 Bonds \$0 Gifts \$20,000,000 Federal \$0 State \$0

Operating Expenses TBD

GSF Impacted by Project TBD

FCN Addressed in Project \$4M

Project Description

The Center for Student Health and Well-Being will be a new facility slated for the area near the MU Student Center, Ellis Library and many key classroom buildings and residence halls. The MU Master Plan process will guide the campus decision making in site selection based on functional adjacencies, access for students, and land use appropriateness.

This center will bring together programs currently located in multiple buildings at the edges of the academic campus such as the Counseling Center in Parker Hall and the Student Health Center in MU Health Care University Physicians Medical Building. The Center's ultimate program co-location concept will bring multiple services together, such as functions which support students with disabilities, promote students' financial well-being, and wellness services. Upon completion, the vacated spaces will be used for other programs or demolished.

Project Justification

As is true at many colleges and universities across North America, demand for student health and wellness services (inclusive, but not limited to, mental and behavioral care) continue to increase at Mizzou, as have the complexity and acuity of students' psychological concerns. Health problems create barriers to learning, undermine retention, and reduce student engagement and success. Currently, the separate and outdated medical, wellness, counseling, and mental health facilities at Mizzou cause confusion, limit collaboration, and lack a unified approach to supporting students' health and well-being.

Mizzou has a transformational opportunity to strengthen students' health and wellbeing; (and better support their learning, retention, and success); while making the highest and best use of limited resources by creating a new Center for Student Health and Wellbeing. To enhance the potential for successful outcomes, a central campus location allows for easy access and appeal for student engagement with the programs and services. The Center will consolidate all student health, counseling, and wellness-related services and provide a single point of entry for health and wellness services to facilitate access and make it easier for students to get help

The new Center will advance a holistic, inter-professional, and truly student-centered approach to health and wellness that better aligns resources with needs, ensures collaboration, prioritizes coordination of care and services, supports continuous quality improvement, and eliminates the problems caused by separately located, independently-functioning, and duplicative services. A unified portfolio of services will respond more effectively to both crisis situations and campus-wide health prevention and health promotion needs. By creating the Center, Mizzou demonstrates the priority for student health, wellbeing, and success, underscoring the commitment to an exceptional, world-class student experience.

The project will eliminate over \$4 million in facilities needs.

Funding Strategy

Funding will be provided by \$10,000,000 of internal funds and \$20,000,000 from gifts.

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Criteria	FSI	FSI Justification
Mission	10	Reports shows that Mizzou should seek to ensure that health-related programs and services for students are student-centered, highly responsive, and easily accessible.
Sustainability	8	Project will move programs to one location and will vacate one building.
Funding	1	Project cost funding is not secured.

University of Missouri - Columbia Manor House - Renovate for Community Style Living Executive Summary

Campus Priority: 8 Project Type: Redevelopment

Building Profile

Building Name: Manor House Facility Age: 56 years Total GSF: 59,143 gsf Total Facilities Condition Needs:

\$12.7M

FCNI: 0.60

Department

Residential Life

Space TypeStudent Housing up to 210 students

Program Planning Study Res Life Master Plan Update 2012, Mackey Mitchell Associates

Project Schedule TBD

Project Cost \$13,000,000

Project Funding

Internal \$0 Bonds \$0 Gifts \$0 Federal \$0 State \$0 P3 \$13,000,000

Operating Expenses TBD

GSF Impacted by Project 59,143 gsf

FCN Addressed in Project \$12.7M

Project Description

Manor House is an eight story brick apartment building located at the corner of Hitt and Pacquin Streets at the northern boundary of central campus. The 58,868 square foot building faces the Hitt Street Parking Garage to the west and is bordered by privately owned rental properties to the north and east. Residential Life had previously examined the cost of a full renovation of this building as an apartment building and found it cost prohibitive, due to the limited number of apartments in the building. Repurposing the building as a residence hall will provide community-style housing for up to 210 residents. Residential Life anticipates this facility could be attractive to upper class students – given the proximity to downtown Columbia - the Journalism Institute and Fine Arts facilities.

Project Justification

Manor House was constructed in 1963 by a private developer and purchased in 1996 by the University of Missouri, Department of Residential Life. Improvements made to the building include roof replacement in 2002 and replacement of two passenger elevators in 2010. Since the modifications to this building have been extremely limited, the style and condition of the apartments are inconsistent with current market offerings of the new apartment facilities surrounding the campus. In addition to the functionality concerns, facility issues exist such as inadequate ventilation, deteriorating plumbing and electrical distribution, and the lack of a fire sprinkler system, and accessibility issues. The location and project type provide the opportunity for a Public/Private Partnership (P3).

Funding Strategy

Engage a private partner to renovate and manage the facility.

Criteria	FSI	FSI Justification
Mission	6	Project will correct space deficiencies.
Sustainability	10	Project will eliminate the financial liability of a portion of the Residential Life portfolio.
Funding	10	A P3 delivery provides access to outside capital.

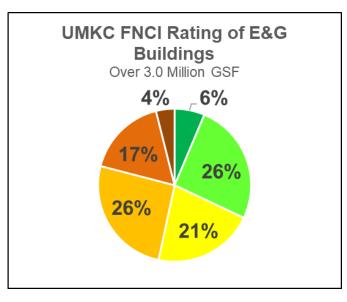
University of Missouri – Kansas City Fiscal Year 2020 – 2024 Capital Plan

University of Missouri – Kansas City Facilities Stewardship

<u>University of Missouri – Kansas City Historical Five Year Spend on Executive Order 28</u>

UMKC has \$416.7 million in Facilities Condition Needs and a Facilities Condition Needs Index (FCNI) of 0.30. 47% of the E&G facilities on the UMKC campus fall in the category of Below Average Condition, Poor Condition, or Replacement is recommended.

	2014	2015	2016	2017	2018
EO 28 Target	\$10,414,000	\$12,008,000	\$20,146,000	\$22,316,000	\$24,672,000
Total Actual Spend	\$9,872,000	\$15,943,000	\$14,804,000	\$14,182,000	\$24,947,000
Recurring Actual Spend	\$7,237,000	\$5,832,000	\$5,689,000	\$6,854,000	\$6,971,000
One-Time Actual Spend	\$2,635,000	\$10,111,000	\$9,115,000	\$7,328,000	\$17,976,000



Facility Condition Needs Index Excellent Condition, typically new construction (0.000 - 0.100) Good Condition, renovations occur on schedule (0.101 - 0.200) Fair Condition, in need of normal renovation (0.201 - 0.300) Below Average Condition, major renovation required (0.301 - 0.500) Poor Condition, total renovation indicated (0.501 - 0.600) Replacement Recommended (0.600 and Higher)

University of Missouri – Kansas City Budgeted Five Year Spend on Executive Order 28

Executive Order 28 has a ten year goal of maintaining current campus FCNI or achieving campus FCNI of 0.30 in ten years. Below is a summary of campus funds designed for maintenance and repair and if the funds will be spent on capital repairs or daily service for E&G facilities.

	1 1	J J			
	2020	2021	2022	2023	2024
EO 28 Target	\$26,362,000	\$27,512,000	\$26,681,000	\$29,871,000	\$31,081,000
Total Spend Projected E&G Only	\$26,740,000	\$13,811,000	\$22,090,000	\$9,878,000	\$20,174,000
Capital Spend E&G FO and all other E&G projects	\$17,700,000	\$4,500,000	\$12,500,000	\$0	\$10,000,000
Non Capital Daily Service E&G FO only	\$9,040,000	\$9,311,000	\$9,590,000	\$9,878,000	\$10,174,000

<u>University of Missouri – Kansas City Fiscal Year 2020-2024 Capital Plan</u>

University of Missouri – Kansas City	2019*	2020	2021	2022	2023	2024
	Current Year	Year 1	Year 2	Year 3	Year 4	Year 5
New Construction	\$0	\$100,000,000	\$5,400,000	\$130,000,000	\$45,000,000	\$0
Conservatory of Music & Dance		\$100,000,000				
Health Sciences Interprofessional Education and Research Building				\$130,000,000		
Bloch Heritage Hall Renovation and Addition			\$5,400,000			
New Student Housing					\$45,000,000	
Renovation/Infrastructure	\$0	\$37,657,000	\$6,600,000	\$20,000,000	\$0	\$20,000,000
Spencer Chemistry & Biological Science Renovation Phase II		\$37,657,000				
Health Sciences Interprofessional Education and Research Building				\$20,000,000		
Bloch Heritage Hall Renovation and Addition			\$6,600,000			
Epperson House Renovation						\$20,000,000
Total Project Cost	\$0	\$137,657,000	\$12,000,000	\$150,000,000	\$45,000,000	\$20,000,000

^{*}Projects listed under 2019 are projects anticipated to have project approval during FY19.

<u>University of Missouri – Kansas City Fiscal Year 2020 – 2024 Capital Projects Funding</u>

Projects						Funding Strategy					
#	Title	Campus	Туре	Facility Needs	FCNI	Total Cost	Debt	Gifts	Internal	Federal	State
1	Conservatory of Music & Dance	UMKC	NC	\$0M	0.00	\$100,000,000	\$0	\$50,000,000	\$0	\$0	\$50,000,000
2	Spencer Chemistry & Biological Science Renovation Phase II	UMKC	RE	\$17.7M	0.42	\$37,657,000	\$0	\$4,600,000	\$0	\$0	\$33,057,000
3	Health Sciences Interprofessional Education and Research Building	UMKC	NC/RE	\$12.5M	0.25- 0.51	\$150,000,000	\$0	\$75,000,000	\$0	\$0	\$75,000,000
4	Bloch Heritage Hall Renovation and Addition	UMKC	NC/RE	\$4.5M	0.26	\$12,000,000	\$0	\$12,000,000	\$0	\$0	\$0
5	New Student Housing	UMKC	NC	\$0M	0.00	\$45,000,000	\$45,000,000	\$0	\$0	\$0	\$0
6	Epperson House Renovation	UMKC	RE	\$10M	1.00	\$20,000,000	\$0	\$20,000,000	\$0	\$0	\$0
	Total					\$364,657,000	\$45,000,000	\$161,600,000	\$0	\$0	\$158,057,000

University of Missouri - Kansas City Conservatory of Music and Dance Executive Summary

Campus Priority: 1
Project Type:

New Construction/Renovation

Building Profile

Building Name: Conservatory of

Music and Dance Facility Age: New

Total GSF: 225,000 - 250,000 gsf Total Facilities Condition Needs:

\$0

FCNI: 0.00

Department

Conservatory of Music and Dance

Space Type

Rehearsal Studios, Practice Rooms, Classrooms, Faculty Studios, Ensemble Rooms, Support Space, possible Performance Space. Impacts 620 students per week

Program Planning Study Helix/HGA 2015

Project Schedule

60 months

Project Cost \$100,000,000

Project Funding

Internal \$0
Bonds \$0
Gifts \$50,000,000
Federal \$0
State \$50,000,000

Operating Expenses \$1,600,000

GSF Impacted by Project 225,000 - 250,000 gsf

FCN addressed in project \$0

Project Description

This project will construct a new facility of approximately 225,000 gross square feet on the Volker Campus to meet the programmatic requirements for the Conservatory of Music and Dance.

Project Justification

The Conservatory of Music and Dance at the University of Missouri - Kansas City is one of the oldest in the country, founded in 1906 one year after Juilliard. It has long been a primary source of energy, creativity, and talent, nurturing culture in Kansas City, and throughout western Missouri, through its renowned programs in music, dance, theater, and visual arts. Most of the premiere performing arts organizations in the region -- including the Kansas City Symphony, Kansas City Ballet, Lyric Opera and Kansas City Repertory Theatre, Heart of America Shakespeare Festival, Unicorn Theatre, New Theatre Restaurant, Wylliams/Henry Contemporary Dance Company and many more -- trace their roots to UMKC's performing arts schools. For more than 30 years, UMKC has been the designated performing arts campus for the University of Missouri System. One of the six primary goals for UMKC, set out in the university's strategic plan, is to "excel in the visual and performing arts." Preserving and enhancing UMKC's strengths in the performing arts are not just regional priorities, they are a System priority as well.

Its accreditors have documented concerns of health risks associated with inadequate, outdated space. A new facility for the merged UMKC Conservatory and Theatre programs would address several University and community needs. The Conservatory and Theatre program both need additional space and improved facilities. The Conservatory enrollment has outgrown its current 54,000 net assignable square feet currently housed in two separate locations.

The Conservatory enrolls more than 500 students in professional degree programs in vocal and instrumental performance, composition, music theory and musicology; dance; music education, and music therapy. In a new, expanded facility, enrollment is planned to increase by 24 percent, to 620 students. The merging of the Department of Theatre adds over 100 students to that enrollment.

Funding Strategy

The project budget of \$100,000,000 will be funded by \$50,000,000 from gifts and a State request of \$50,000,000.

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Criteria	FSI	FSI Justification
Mission	10	Project is necessary to keep the accreditation for the Conservatory of Music and Dance. Programs builds relationships with Arts Association Groups through the city, state, and nation.
Sustainability	5	Project will eliminate obsolete space and requires minimal investment to improve existing infrastructure.
Funding	5	Project cost funding is partially secured.

University of Missouri - Kansas City Spencer Chemistry and Biological Sciences Renovation - Phase II Executive Summary

Campus Priority: 2 Project Type: Renovation

Building Profile

Building Name: Spencer Chemistry Building and Biological Sciences Building Facility Age: 50 years Total GSF: 154,000 gsf Total Facilities Condition Needs: \$35.2M (upon Phase I completion) FCNI: 0.42 (upon Phase I completion)

Department

College of Arts & Sciences Department of Chemistry and School of Biological Sciences

Space Type

Teaching Labs, Classrooms, Research Labs, Support Space Impacts 1,000 students

Program Planning Study PGAV Architects, 2016

Project Schedule

36 months

Project Cost \$37,657,000

Project Funding

Internal \$0 Bonds \$0 Gifts \$4,600,000 Federal \$0 State \$33,057,000

Operating Expenses

GSF Impacted by Project 75,000 gsf

FCN Addressed in Project \$17.7M

Project Description

This project would continue the renovation of the 153,827 gross square feet (GSF) Biological Sciences Building and Spencer Chemistry Building. The second phase will renovate approximately 75,000 GSF in both Spencer Chemistry and the Biological Sciences Building. This project will build upon the first phase, which is nearing completion and funded by the State with the Board of Public Buildings Bond as the primary funding source. The current phase is substantially complete as of August 2018. The Phase II renovation will address additional deferred maintenance, research space, teaching spaces, and other facility deficiencies that were beyond reach of the Phase I budget. The renovation will provide state of the art teaching laboratories and support spaces, while providing improved laboratory systems to support research activities, support student retention, meet current laboratory standards, and encourage student collaborative learning.

Project Justification

The Spencer Chemistry and Biological Sciences Buildings were originally constructed in 1968 and had not been renovated or updated since the 1980's prior to the Phase One renovation which is nearing completion. These buildings serve Chemistry and Biology undergraduate and graduate majors, as well as those who go into professional schools or graduate studies in medical and dental. They also serve as part of the teaching mission for our Pharmacy, Medicine, and Nursing Programs. The facility is outdated, inadequate space for teaching, and does not meet current safety codes and standards.

The project will eliminate \$17.7 million of facilities needs.

Funding Strategy

The project budget of \$37,657,000 will be funded by \$4,600,000 in gifts and a State request of \$33,057,000.

The campus can include the project in the institution's State Capital Budget Request or they can pursue other financing through private gifts in the next UMKC Capital Campaign as a part of the broader Health Sciences Capital Campaign if State funding isn't appropriated.

April 11, 2019

	1	
Criteria	FSI	FSI Justification
Mission	9	Project is necessary for the growth of the program, project will complete the current Spencer Chemistry & Biological Sciences project.
Sustainability	10	The project is a full renovation of Spencer Chemistry and Biological Sciences buildings, it does not require additional infrastructure.
Funding	6	Project cost funding is not secured.

University of Missouri - Kansas City Health Sciences Interprofessional Education and Research Building Executive Summary

Campus Priority: 3
Project Type:

New Construction/Renovation

Building Profile

Building Name: Health Sciences Interprofessional Education Building and Health Sciences Research Building Facility Age: New Total GSF: 246,800 gsf Facility Age: 47-51 years Total GSF: 66,000 gsf Total Facilities Condition Needs: \$106,2M

FCNI: 0.25 - 0.51

Department

UMKC Health Sciences District and Schools of Medicine, Dentistry, Pharmacy and Nursing and Health Sciences

Space Type

Classroom, Teaching Labs, Health Sciences Library, Research Labs, Patient Simulation Labs, Patient Treatment and Support Spaces Impacts 3,370 students per year

Program Planning Study BNIM/ 2010 and The Clark

Enersen Partners/ 2010

Project Schedule

60 months

Project Cost

\$150,000,000

Project Funding

Internal \$0 Bonds \$0 Gifts \$75,000,000 Federal \$0 State \$75,000,000

Operating Expenses \$1,700,000

GSF Impacted by Project 739,800 gsf

FCN addressed in project \$12.5M

Project Description

This integrated project consists of co-located new Interprofessional and research buildings, and two partial building renovations, combines elements from prior Health Sciences Program Planning Studies for the School of Dentistry completed in December 2010, and the School of Medicine completed in November 2010. The project is consistent with the Campus Master Plan.

Interprofessional Education Building: The primary function of the 201,800 gross square feet (GSF) Interprofessional Education Building would be to provide shared classrooms, meeting spaces, teaching labs and patient simulation labs which will utilize the latest teaching technology for health care professional training. The project would also co-locate existing and developing centers that support UMKC Health Sciences Initiatives. The project will also include a consolidation and substantial expansion of the UMKC Health Sciences Library. Skywalks connecting the Pharmacy/Nursing Building will also be constructed which will span over Holmes Street and Charlotte Street to connect the UMKC Health Sciences District buildings.

School of Medicine Building Renovation: The project would renovate approximately 33,000 gross square feet (GSF) of the 256,300 gross square feet existing building. The renovation will improve building systems, student spaces and research spaces to meet current standards. This project will address approximately \$8.3 million in facilities needs.

School of Dentistry Building Renovation: The project would renovate approximately 33,000 gross square feet (GSF) of the 272,759 gross square feet existing building. This project will address approximately \$4.2 million in facilities needs.

Health Sciences Research Building: The Health Sciences Research Building on the Hospital Hill Campus will be a collaborative research facility for basic and translational research. The primary use is flexible adaptable laboratory space for wet and dry research activities. To support the research, there will be Administrative Offices and Support Space, Core Facilities, Specialized Research including a large animal facility and areas for Institutional Partners, Research and Technology Transfer and Incubation. The current project is programmed at 45,000 gross square feet (GSF).

Project Justification

The UMKC Health Sciences Interprofessional Education and Research Building will have state-of-the-art capabilities to conduct research in biomedical informatics and Big Data initiatives in addition to laboratories for clinical research and basic biomedical research in selected areas. These capabilities will complement and enhance the work planned for the MU Translational Precision Medicine Center (TPMC). The new building in Kansas City will enable UMKC School of Medicine and School of Dentistry to be more competitive in the recruitment of high-caliber physician-scientists and dentist-scientists with a track record of extramural grantfunding (primarily NIH funding) and via carefully planned collaborations and combined efforts, enhance the competitiveness of faculty at MU TPMC to compete for extramural grant funding.

This project has the potential to catalyze new collaborations across our region and among University of Missouri academic campuses, and the potential to attract industry partnerships and One Health partnerships to focus on advanced treatments for cancer and cardiovascular disease, and to advance the fields of biomedical engineering, tissue regeneration, and Big Data. The long-term impact of the collaboration between UMKC and MU TPMC will be to accelerate both discovery and implementation of prevention and treatment of disease that will result in improved health outcomes for Missourians.

Funding Strategy

The project budget of \$150,000,000 will be funded by \$75,000,000 in gifts and a State request of \$75,000,000.

This project would focus on private gifts from the significant alumni base of the UMKC Health Sciences Schools. This is the cornerstone project in the first phase of the next UMKC Capital Campaign.

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Criteria	FSI	FSI Justification
Mission	9	Project is necessary to provide modern standards for the programs supported through the Health Sciences Interprofessional Educational and Research Building.
Sustainability	5	Project will be a partial renovation and will need additional investment to expand the university's infrastructure.
Funding	3	Project cost funding is not secured.

University of Missouri - Kansas City Bloch Heritage Hall Renovation and Addition Executive Summary

Campus Priority: 4 Project Type:

New Construction/Renovation

Building Profile

Building Name: Bloch Heritage

Hall

Facility Age: 31 years Total GSF: 73,422 gsf

Total Facilities Condition Needs:

\$7.5M FCNI: 0.26

Department

Henry W. Bloch School of Management

Space Type

Classrooms, Student Support Space

Impacts 1,800 students per week

Program Planning Study BNIM Architects, 2018

Project Schedule

36 months

Project Cost \$12,000,000

Project Funding

Internal \$0 Bonds \$0 Gifts \$12,000,000 Federal \$0 State \$0

Operating Expenses

\$51,000

GSF Impacted by Project 73,422 - 250,000 gsf

FCN addressed in project \$4.5M

Project Description

This project would renovate the 73,422 gross square feet (GSF) Bloch Heritage Hall, which is one of two buildings that house the Henry W. Bloch School of Management. Bloch Heritage Hall includes the historic Shield Mansion built in 1909 and a significant building addition that was completed in 1987. The second building for the School is the Henry W. Bloch Executive Hall for Entrepreneurship and Innovation, which opened in 2013.

The Bloch Heritage Hall project will update the interior finishes, furnishings, and technology throughout the building; including in classrooms and student support spaces. The project will also provide a second elevator to increase accessibility in this five story building, and reconfigure the interior atrium space to create a more usable and effective public space.

A modest 8,500 gross square foot (GSF) addition will be constructed to the building to provide for classroom space to meet current teaching standards, enhance student services and encourage student collaborative learning.

Project Justification

The Bloch School of Management is the only school in the Kansas City region accredited by both AACSB and NASPAA. The Bloch School's business administration programs are accredited by AACSB International (Association to Advance Collegiate Schools of Business), and the public administration programs are accredited by the Network of Schools of Public Policy, Affairs, and Administration (NASPAA).

The renovated and expanded Bloch Heritage Hall project and the Bloch Executive Hall are intended to strategically accommodate planned growth in the Bloch School from the current enrollment of approximately 1,300 undergraduate/500 graduate student population to a planned 2,000 undergraduate/1,000 graduate student population.

Funding Strategy

The funding will provided by \$12,000,000 in gifts.

Criteria	FSI	FSI Justification
Mission	5	Project will update spaces for the programs within the Bloch Heritage Hall.
Sustainability	9	Project will be a partial renovation and will not need additional investment to expand the university's infrastructure.
Funding	7	Project cost funding is partially secured.

University of Missouri - Kansas City New Student Housing Executive Summary

Campus Priority: 5 **Project Type: New Construction**

Building Profile

Building Name: Student Housing

Facility Age: New Total GSF: 150,000 gsf

Total Facilities Condition Needs:

FCNI: 0.00

Department

Residential Life

Space Type

Student Housing, Student Support

500 students

Program Planning Study

TBD

Project Schedule

48-60 Months

Project Cost

\$45,000,000

Project Funding

Internal \$0

Bonds \$0

Gifts \$0

Federal \$0

State \$0

P3 \$45,000,000

Operating Expenses

\$900,000

GSF Impacted by Project

150,000 gsf

FCN addressed in project

\$0

Project Description

This project would construct 500 beds of new student housing primarily focused on undergraduate students in either suite style or community living style configurations. The site and configuration of the housing will be determined in future market studies and master plan site studies. It is anticipated that the project will be developed through a public private partnership model (P3).

Project Justification

The on-campus living experience has been a key recruitment driver for undergraduate enrollment growth at UMKC since 2005. As UMKC's on-campus housing capacity grew from about 360 to almost 1,500 beds, undergraduate enrollment increased about 20% from 6,813 students in Spring 2006 to 8,233 students in Fall 2017. A diversity of housing options allow students at all levels to extend their on-campus experience. UMKC desires to continue to grow their on campus living capacity as a strategic means of continued enrollment growth. Housing on the UMKC Volker campus currently consists of the 559 bed Oak Street Residence Hall and the 329 bed Herman and Dorothy Johnson Residence Hall. Both of these buildings provide suite style living and predominately house undergraduate students.

At the present time, the Oak Place Apartments, which housed upper division undergraduate students and graduate students, is off-line due to water damage resulting from design and construction deficiencies in the P3 project. While this project is off-line, UMKC is leasing about 170 beds of off-campus housing. The UMKC Health Sciences District at Hospital Hill has the 243 bed Hospital Hill Apartment project.

Funding Strategy

A developer will be solicited to develop and manage needed housing.

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Criteria	FSI	FSI Justification
Mission	6	Project is necessary to fulfill a need for student housing at University of Missouri - Kansas City.
Sustainability	2	Project will eliminate obsolete space, require minimal investment to improve infrastructure and sustainability.
Funding	3	Project cost funding is not secured.

University of Missouri - Kansas City Epperson House Renovation Executive Summary

Campus Priority: 6 Project Type: Renovation

Building Profile

Building Name: Epperson House

Facility Age: 96 years Total GSF: 24,179 gsf

Total Facilities Condition Needs:

\$10M FCNI: 1.00

Department

Chancellor's Office Strategic

Initiative

Space Type TBD

Program Planning Study

Helix Architects, 2005

Project Schedule

36 months

Project Cost

\$20,000,000

Project Funding

Internal \$0 Bonds \$0 Gifts \$20,000,000

Federal \$0 State \$0

Operating Expenses

GSF Impacted by Project 24,179 gsf

FCN Addressed in Project \$10M

Project Description

This project renovation would fully complete the historic restoration and programmatic adaptive reuse of the 24,179 gross square feet (GSF) Epperson House. The historic structure was gifted to the University in 1942 and its initial use was as a residence hall for Naval Aviation Cadets in training for World War II service. Over the years, the house has been used by the Conservatory, the School of Education and the College of Arts and Sciences Department of Architecture, Urban Planning and Design. The building is currently vacant, but a committee charged by the Chancellor with examining the future use of Epperson House will deliver their recommendation in early March 2019.

Project Justification

The Epperson House is a recognized historic feature and focus for the UMKC campus, even though it has been vacant for almost a decade. The restoration of the house and its next use has been long speculated on both inside and outside of the campus. The facility is very outdated, has many significant repair needs and does not meet current safety codes and standards, including ADA. Yet, the fine woodwork and plaster detailing of the original interiors are surprisingly intact and will provide a firm foundation for the new programmatic uses. The project will include the full historic restoration of the building exterior and major public spaces, while also adapting the interior spaces and grounds for the technology and program needs of today. The project will also provide additional parking and access drives to serve the new programmatic needs.

The project will eliminate \$10 million of facilities needs.

Funding Strategy

The funding will provided by \$20,000,000 in gifts.

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Criteria	FSI	FSI Justification
Mission	6	Project programming is still being defined, but the use is intended to serve the Five Pillars of the campus Strategic Plan.
Sustainability	10	The project is a full renovation of Epperson House, it does not require additional infrastructure.
Funding	3	Project cost funding is not secured.

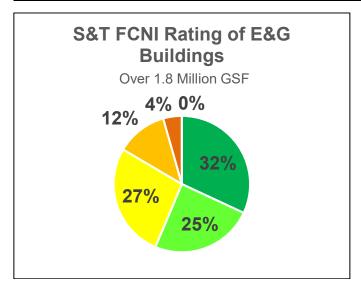
Missouri University of Science and Technology Fiscal Year 2020 – 2024 Capital Plan

Missouri University of Science and Technology Facilities Stewardship

Missouri University of Science and Technology Historical Five Year Spend on Executive Order 28

S&T has \$154.1 million in Facilities Condition Needs and a Facilities Condition Needs Index (FCNI) of 0.19. 16% of the E&G facilities on the S&T campus fall in the category of Below Average Condition, Poor Condition, or Replacement is recommended.

	2014	2015	2016	2017	2018
EO 28 Target	\$10,693,000	\$6,851,000	\$15,749,000	\$16,412,000	\$16,193,000
Total Actual Spend	\$29,043,000	\$16,763,000	\$9,678,000	\$16,934,000	\$14,507,000
Recurring Actual Spend	\$10,319,000	\$7,140,000	\$8,241,000	\$8,741,000	\$8,983,000
One-Time Actual Spend	\$18,724,000	\$9,623,000	\$1,437,000	\$8,193,000	\$5,524,000



Facility Condition Needs Index Excellent Condition, typically new construction (0.000 - 0.100) Good Condition, renovations occur on schedule (0.101 - 0.200) Fair Condition, in need of normal renovation (0.201 - 0.300) Below Average Condition, major renovation required (0.301 - 0.500) Poor Condition, total renovation indicated (0.501 - 0.600) Replacement Recommended (0.600 and Higher)

Missouri University of Science and Technology Budgeted Five Year Spend on Executive Order 28

Executive Order 28 has a ten year goal of maintaining current campus FCNI or achieving campus FCNI of 0.30 in ten years. Below is a summary of campus funds designed for maintenance and repair and if the funds will be spent on capital repairs or daily service for E&G facilities.

	2020	2021	2022	2023	2024
EO 28 Target	\$17,727,000	\$18,438,000	\$19,164,000	\$19,906,000	\$20,663,000
Total Spend Projected E&G Only	\$7,621,000	\$7,849,000	\$8,085,000	\$8,327,000	\$8,577,000
Capital Spend E&G FO and all other E&G projects	\$3,875,000	\$3,991,000	\$4,111,000	\$4,234,000	\$4,361,000
Non Capital Daily Service E&G FO only	\$3,746,000	\$3,858,000	\$3,974,000	\$4,093,000	\$4,216,000

Missouri University of Science and Technology Fiscal Year 2020 - 2024 Capital Plan

Missouri S&T	2019*	2020	2021	2022	2023	2024
	Current Year	Year 1	Year 2	Year 3	Year 4	Year 5
New Construction	\$14,160,313	\$44,600,000	\$0	\$43,026,000	\$10,434,292	\$0
Advanced Construction Material Laboratory	\$6,502,638					
Student Classroom	\$7,657,675					
Schrenk Hall Addition and Renovation - Phase III		\$44,600,000				
Engineering Research Lab Addition and Renovation				\$43,026,000		
McNutt Hall Addition					\$10,434,292	
Renovation/Infrastructure	\$0	\$0	\$10,318,000	\$0	\$0	\$0
Library/Learning Commons			\$10,318,000			
Total Project Cost	\$14,160,313	\$44,600,000	\$10,318,000	\$43,026,000	\$10,434,292	\$0

^{*}Projects listed under 2019 are projects anticipated to have project approval during FY19.

Missouri University of Science and Technology Fiscal Year 2020 – 2024 Capital Projects Funding

Pro	jects							Fun	ding Strategy		
				Facility							
#	Title	Campus	Type	Needs	FCNI	Total Cost	Debt	Gifts	Internal	Federal	State
1	Schrenk Hall Addition and Renovation – Phase III	S&T	NC/RE	\$19.1M	0.57	\$44,600,000	\$0	\$8,920,000	\$0	\$0	\$35,680,000
2	Library/Learning Commons	S&T	RE	\$5M	0.28	\$10,318,000	\$0	\$5,318,000	\$5,000,000	\$0	\$0
3	Engineering Research Lab Addition and Renovation	S&T	NC/RE	\$13.0M	0.49	\$43,026,000	\$33,026,000	\$0	\$10,000,000	\$0	\$0
4	McNutt Hall Addition	S&T	NC	\$0	0.00	\$10,434,292	\$0	\$10,434,292	\$0	\$0	\$0
	Total					\$108,378,292	\$33,026,000	\$24,672,292	\$15,000,000	\$0	\$35,680,000

Missouri University of Science and Technology Schrenk Hall Addition and Renovation - Phase III (Biosciences Building) Executive Summary

Campus Priority: 1
Project Type:

New Construction/Renovation

Building Profile

Building Name: Schrenk Hall East

Facility Age: 80 years Total GSF: 59,000 gsf

Total Facilities Condition Needs:

\$19.1 M FCNI: 0.57

Department

Chemistry and Biosciences

Space Type

Teaching and Research laboratory space, support space and departmental offices.
Impacts the number of students:

Program Planning Study

Completed by: The Clark Enersen

Partners March 2016

Project Schedule

26 months for design and

construction

Project Cost \$44,600,000

Project Funding

Internal \$0 Bonds \$0 Gifts \$8,920,000 Federal \$0 State \$35,680,000

Operating Expenses

\$217,000

GSF Impacted by Project

108,000 gsf

FCN Addressed in Project

\$19.1 M

Project Description

The Schrenk Hall Addition and Renovation – Phase III will renovate Schrenk Hall (1938 &1973) to accommodate the Chemistry and Biological Sciences departments. This will be the final phase with the renovation of 17,600 gross square feet of the west wing and the replacement of the east wing with a new 90,400 gross square feet facility and atrium. This project will provide new teaching laboratories, research laboratories, and support space. The project also takes into consideration growth and consolidation of department entities that are spread over multiple buildings on campus.

Project Justification

This project is the final phase of an interdisciplinary complex dedicated to providing world-class education and research in biological sciences, chemistry, and chemical and biochemical engineering. Equipped with expanded research space, open-concept research labs and improved accessibility, this facility will leverage Missouri S&T's strengths in computational science, environmental engineering, and materials science and engineering to advance medical, environmental, and biomedical research. The building will also be home to an interdisciplinary Center for Research in Biomaterials, where students and faculty will conduct research in bio-active, bio-inspired, and bio-mimetic materials for a variety of applications. The facility will be an integral component of the student experience at Missouri S&T, since almost every student will take at least one course in one or more important foundational area of biological sciences or chemistry.

Funding Strategy

Funding for the \$44,600,000 project consists of a \$35,680,000 request from the State and \$8,920,000 in gifts.

Criteria	FSI	FSI Justification
Mission	10	The project will be an integral component of the student experience; every student takes at least one course in one or more foundational areas of biological sciences or chemistry.
Sustainability	10	Project will remove obsolete space and allow upgrades in electric and geothermal applications which will result in better efficiencies and improve campus environment and sustainability.
Funding	5	Project cost is not secured.

Missouri University of Science and Technology Library/Learning Commons Executive Summary

Campus Priority: 2 Project Type: Renovation

Building Profile

Building Name: Curtis Laws

Library

Facility Age: 50 years Total GSF: 91,980 gsf

Total Facilities Condition Needs:

\$10M FCNI: 0.28

Department

Academic Library

Space Type

Library/Learning Commons/Computer Learning Center.

Student Impact: 8,000

Program Planning Study

Completed by: Arcturis, May

2016

Project Schedule

36-60 Months for design and construction (dependent on phasing)

Project Cost \$10,318,000

Project Funding

Internal \$5,000,000 Bonds \$0 Gifts \$5,318,000 Federal \$0 State \$0

Operating Expenses

\$15,000

GSF Impacted by Project

91,980 gsf

FCN addressed in project

\$5M

Project Description

Based on current trends in academic library design, the Curtis Laws Wilson Library needs major renovations to meet the future needs of the students, staff, and faculty. This renovation will incorporate a Learning Commons featuring flexible, collaborative spaces for students and faculty; wayfinding improvements include relocating the service desk and staff office space, opening the buildings east-west axis, and reconfiguring the IT help desk area; update technology throughout the building; and relocate non-library functions to other buildings.

Project Justification

The Library/Learning Commons Renovation will impact the entire Missouri University of Science and Technology (Missouri S&T) campus, serving all students, staff, and faculty. One of the major goals of the project is to implement a Learning Commons, with additional spaces for groups to convene. We see a Learning Commons as a place for individuals to share, meet, learn, and get help. The Wilson Library Renovation Project will address life safety codes - energy conservation measures and associated cost savings; handicapped accessibility - quality improvement, capacity and/or environmental impact, and all applicable federal regulations

Funding Strategy

The project budget of \$10,318,000 is anticipated to be funded by \$5,000,000 in internal funds and \$5,318,000 in gifts.

Criteria	FSI	FSI Justification
Mission	9	Project will impact the entire campus, serving all students, staff, and faculty.
Sustainability	10	Project is a full renovation and requires no additional infrastructure investment.
Funding	9	Project cost funding is partially secured.

Missouri University of Science and Technology Engineering Research Lab (ERL) Addition and Renovation Executive Summary

Campus Priority: 3
Project Type:

New Construction/Renovation

Building Profile

Building Name: Engineering

Research Lab

Facility Age: 50 years Total GSF: 46,000 gsf

Total Facilities Condition Needs:

\$13M FCNI: 0.49

Department

All degree programs

Space Type

Research space 1,300 students per year

Program Planning Study

Completed by: Dickinson Hussman Architects, March 2013

Project Schedule

36 months for design and construction

Project Cost

\$43,026,000

Project Funding

Internal \$10,000,000 Bonds \$33,026,000 Gifts \$0 Federal \$0 State \$0

Operating Expenses

\$230,000 annually

GSF Impacted by Project

163,000 gsf

FCN Addressed in Project \$13M

Project Description

The Engineering Research Laboratory (ERL) Addition and Renovation project will construct approximately 86,470 gross square feet (GSF) on the east side of ERL and connect to the north side the Straumanis-James Hall. This will create a research center of approximately 162,540 (GSF) that will aesthetically anchor the northeast corner of the campus. The project will also will address life safety code issues, energy conservation measures and associated cost savings, accessibility issues and upgrade systems in the ERL.

Project Justification

This building will provide additional interdisciplinary research space which has been identified as a high priority in both the Strategic Plan and Campus Master Plan. Since this project will house interdisciplinary research, its impact will be felt campus-wide and affects all degree programs. The project will address approximately \$13 million of facilities needs. Additional operating costs are estimated to be \$230,000 annually and funded by the Campus operating budget. Estimated number of students impacted annually will be 1300.

Funding Strategy

Funding for the \$43,026,000 project will be \$10,000,000 in internal funds, and \$33,026,000 in debt with a revenue stream from research and sponsored programs awards, licenses, grants and contracts with outside partners.

Criteria	FSI	FSI Justification
Mission	10	Project is necessary for interdisciplinary research and aligns with state priorities in STEM research activities.
Sustainability	10	Project is a full renovation, remove leased space, and requires no additional infrastructure investment.
Funding	4	Project cost is not secured.

Missouri University of Science and Technology McNutt Hall Addition Executive Summary

Campus Priority: 4
Project Type:
New Construction

Building Profile

Building Name: McNutt Hall Facility Age: 31 years Total GSF: 153,984 gsf Total Facilities Condition Needs:

\$36.9M

FCNI: 0.42

Department

Materials Science and Engineering

Space Type

Lab spaces. 250-500

Program Planning StudyAnthony Duncan Architect

Project Schedule

18 months

Project Cost \$10,434,292

Project Funding

Internal \$0 Bonds \$0 Gifts \$10,434,292 Federal \$0 State \$0

Operating Expenses

\$36,000

GSF Impacted by Project 18,315 gsf

FCN Addressed in Project \$0

Project Description

The current program calls for the addition of 18,315 gross square feet to the north side of McNutt Hall to expand the glassblowing and metal working laboratories on campus. The addition will also provide public spaces for exhibition, events, offices, and student collaboration rooms and act as a new highly visible public entry plaza on the north end of campus off of Highway 63.

The design focuses on the craft and production process of student work by exhibiting the shop space to visitors. The shops may be viewed by visitors from walkways above the shop floor or from the dedicated viewing areas separated from the shops with glass partitions. Students will have an expanded shop area for completing glass projects in a hot, warm, and cold shop. Metal working students will have forges, tools, and special finishing areas available to them.

Project Justification

The inclusion of experiential learning is a unique educational opportunity at Missouri University of Science and Technology. The University has a desire to integrate application with education, and part of the University strategy is to provide experiential learning to all students. Additionally, the University has a broad initiative to connect arts and sciences in unique ways to augment student education. Student interest in applied glass forming and metal working has increased, and there is significant impetus for shop space dedicated and designed specifically for student exploration of these materials. Dedicated glassblowing and metal working shop space will allow programs and experiential learning on campus to expand. It will also offer a tangible way to link materials engineering science to the deeper human history of art and craft.

There will be a strong emphasis on exhibition and display of student, faculty, and visiting faculty work. Additionally, exhibits through the project will provide ways to educate visitors regarding the process and the history of each craft as an art and science.

Funding Strategy

The funding will provided by \$10,434,292 in gifts.

Criteria	FSI	FSI Justification
Mission	5	Project will integrate application with education, provide experiential learning to all students. Economic development and partnerships will be impacted throughout the region as this facility serves many activities for the surrounding communities and other interests outside the university.
Sustainability	8	Project will move programs to more efficient space and will eliminate obsolete space.
Funding	6	Project cost is partially secured.

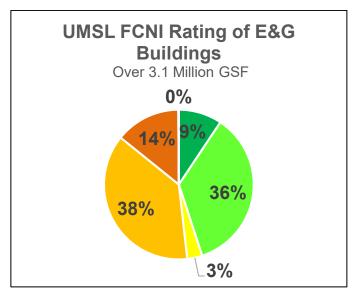
University of Missouri – St. Louis Fiscal Year 2020 – 2024 Capital Plan

University of Missouri – St. Louis Facilities Stewardship

<u>University of Missouri – St. Louis Historical Five Year Spend on Executive Order 28</u>

UMSK has \$375.8 million in Facilities Condition Needs and a Facilities Condition Needs Index (FCNI) of 0.30. 52% of the E&G facilities on the UMSL campus fall in the category of Below Average Condition, Poor Condition, or Replacement is recommended.

	2014	2015	2016	2017	2018
EO 28 Target	\$27,339,000	\$27,913,000	\$29,632,000	\$31,682,000	\$25,114,000
Total Actual Spend	\$12,457,000	\$14,521,000	\$8,368,000	\$7,163,000	\$22,143,000
Recurring Actual Spend	\$7,525,000	\$7,800,000	\$7,545,000	\$3,480,000	\$6,396,000
One-Time Actual Spend	\$4,932,000	\$6,721,000	\$823,000	\$3,683,000	\$15,747,000



Facility Condition Needs Index Excellent Condition, typically new construction (0.000 - 0.100) Good Condition, renovations occur on schedule (0.101 - 0.200) Fair Condition, in need of normal renovation (0.201 - 0.300) Below Average Condition, major renovation required (0.301 - 0.500) Poor Condition, total renovation indicated (0.501 - 0.600) Replacement Recommended (0.600 and Higher)

<u>University of Missouri – St. Louis Budgeted Five Year Spend on Executive Order 28</u>

Executive Order 28 has a ten year goal of maintaining current campus FCNI or achieving campus FCNI of 0.30 in ten years. Below is a summary of campus funds designed for maintenance and repair and if the funds will be spent on capital repairs or daily service for E&G facilities.

		1 1	1		
	2020	2021	2022	2023	2024
EO 28 Target	\$31,846,000	\$32,743,000	\$33,661,000	\$34,599,000	\$35,558,000
Total Spend Projected E&G Only	\$10,460,000	\$10,773,000	\$11,096,000	\$11,430,000	\$11,772,000
Capital Spend E&G FO and all other E&G projects	\$5,248,000	\$5,405,000	\$5,567,000	\$5,735,000	\$5,906,000
Non Capital Daily Service E&G FO only	\$5,212,000	\$5,368,000	\$5,529,000	\$5,695,000	\$5,866,000

<u>University of Missouri – St. Louis Fiscal Year 2020 - 2024 Capital Plan</u>

University of Missouri – St. Louis	2019*	2020	2021	2022	2023	2024
	Current Year	Year 1	Year 2	Year 3	Year 4	Year 5
New Construction	\$0	\$0	\$0	\$0	\$0	\$0
Renovation/Infrastructure	\$0	\$52,500,000	\$0	\$34,100,000	\$0	\$0
Space Consolidation & Infrastructure		\$10,000,000				
Social Science Building Renovation		\$42,500,000				
Stadler Hall Renovation				\$34,100,000		
Total Project Cost	\$0	\$52,500,000	\$0	\$34,100,000	\$0	\$0

^{*}Projects listed under 2019 are projects anticipated to have project approval during FY19.

<u>University of Missouri – St. Louis Fiscal Year 2020 – 2024 Capital Projects Funding</u>

Pro	Projects						Funding Strategy				
				Facility							
#	Title	Campus	Type	Needs	FCNI	Total Cost	Debt	Gifts	Internal	Federal	State
1	Space Consolidation &	UMSL	RE	\$20.5M	0.38-	\$10,000,000	\$0	\$0	\$2,000,000	\$0	\$8,000,000
	Infrastructure				0.49						
2	Social Science Building Renovation	UMSL	RE	\$35.3M	0.54	\$42,500,000	\$0	\$0	\$8,500,000	\$0	\$34,000,000
3	Stadler Hall Renovation	UMSL	RE	\$26.7M	0.53	\$34,100,000	\$0	\$0	\$6,800,000	\$0	\$27,300,000
	Total					\$86,600,000	\$0	\$0	\$17,300,000	\$0	\$69,300,000

University of Missouri - St. Louis Space Consolidation and Infrastructure Executive Summary

Campus Priority: 1 Project Type: Renovation

Building Profile

Building Name: Arts Administration Building, Education Administration, Bellerive Hall, Music Building, and Woods Hall Facility Age: 44 to 61 years Total GSF: 83,000 gsf Total Facilities Condition Needs:

\$20.5M FCNI: 0.38 to 0.49

Department

Human Resources, College of Education Dean, School of Social Work, and Department of Music

Space Type

Teaching, Offices, and Support Areas Impacts 1,400 students per semester

Program Planning Study TBD

Project Schedule

24 months for design and construction

Project Cost \$10,000,000

Project Funding

Internal \$2,000,000 Bonds \$0 Gifts \$0 Federal \$0 State \$8,000,000

Operating Expenses

Reduction of \$516,000 annually

GSF Impacted by Project

83,000 gsf

FCN Addressed in Project

\$20.5M

Project Description

This project will consolidate underutilized space campus-wide and provide repairs to campus buildings. The project will relocate the College of Education Dean's suite from the Education Administration Building (EAB) and decommission the EAB; relocate the School of Social Work from Bellerive Hall (BH) and demolish BH; relocate the Department of Music from the Music Building (MB) and demolish MB; and relocate Human Resources from Arts Administration Building into Woods Hall. These relocations will facilitate synergies between programs and will improve utilization rates of space in the renovated buildings.

Project Justification

According to a Space Needs and Utilization Analysis study performed in 2016, UMSL has more program space per student than peer campuses. UMSL can lower its operating costs and deferred maintenance by reducing the campus' occupied square footage. Bellerive Hall, Music Building, and Education Administration Building are underutilized buildings that are in poor condition. As such, they are good candidates for decommissioning or demolition, thereby reducing campus operating expenses and deferred maintenance. The proposed repairs will extend the life of the capital improvements, improve safety and enhance campus appearance while reducing facilities needs. This project provides significant financial benefit to the campus by eliminating \$20.5 million in facilities needs (\$6M through repairs and renovations, \$11 million through demolition of BH and MB and \$3.5 million by decommissioning EAB) and by reducing annual operating costs by \$516,000.

In addition to the above financial benefits, the entire campus will benefit from improved space utilization, safety, reliability, and efficiency. The increased density will also enhance the student experience by providing a more vibrant, energized environment.

Funding Strategy

The project budget of \$10,000,000 will be funded by \$2,000,000 of internal funds and a State request of \$8,000,000.

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Criteria	FSI	FSI Justification
Mission	9	Project is necessary to begin steps in the strategic plan to improve space efficiencies.
Sustainability	10	Project will extend the life of the capital improvements, improve safety and enhance campus appearance while reducing facilities needs.
Funding	5	Project cost funding is partially secured, operation cost will be lower when project is complete.

University of Missouri - St. Louis Social Science Building Renovation Executive Summary

Campus Priority: 2 Project Type: Renovation

Building Profile

Building Name: Social Science

Building

Facility Age: 50 years
Total GSF: 136,600 gsf

Total Facilities Condition Needs:

\$35.3M FCNI: 0.54

Department

Business Administration, Economics, Political Science, Public Policy Administration, Office of International Studies, Mathematics & Computer Science

Space Type

Classrooms, Laboratories, Conference/Lounge/Offices, Other Support Areas Impacts 6,272 students per semester

Program Planning Study TBD

Project Schedule

36 months for design and construction

Project Cost

\$42,500,000

Project Funding

Internal \$8,500,000 Bonds \$0 Gifts \$0 Federal \$0 State \$34,000,000

Operating Expenses TBD

GSF Impacted by Project 136,600 gsf

130,000 gs1

FCN Addressed in Project \$35.3M

Project Description

This project will renovate the Social Science Building. The project provides for state-of-the-art classrooms and lecture hall facilities to be used as a campus resource. The renovation includes a substantial replacement and upgrade of HVAC, electrical and plumbing equipment, systems, fixtures and controls. The project also provides for an extensive renovation and upgrade of building interior, accessibility provisions and building envelope. Exterior improvements include replacement/upgrade of sidewalks, accessible routes and steps.

Project Justification

The Social Science Business Building provides 136,600 gross square feet (GSF) of classroom, lab, and administrative/support space for faculty and staff and thousands of students who major in various disciplines such as business administration (currently housed in this building), economics, political science and public policy administration. Students were enrolled in a total of 38,680 credit hours that were taught in this building in FY2018.

Constructed in 1968, this building has a FCNI of 0.54. Delaying replacement and upgrades of these systems will cause further deterioration of assets resulting in repairs becoming increasingly frequent and costly. Continued use of outdated, inadequately sized/configured and equipped classrooms and lecture halls for current pedagogies will increase renovation cost. The project will address code and standards issues, implement energy conservation measures, address accessibility issues, replace building systems that have exceeded their life expectancy, and will eliminate \$35.3 million of facilities needs.

Funding Strategy

The project budget of \$42,500,000 will be funded by \$8,500,000 of internal funds and a State request of \$34,000,000.

Criteria	FSI	FSI Justification
Mission	9	Project is necessary to begin steps in the strategic plan to improve space efficiencies.
Sustainability	10	Project is a full renovation of Social Sciences Building resulting with building systems being more efficient.
Funding	5	Project cost funding is not secured.

University of Missouri - St. Louis Stadler Hall Renovation Executive Summary

Campus Priority: 3 Project Type: Renovation

Building Profile

Building Name: Stadler Hall Facility Age: 52 years Total GSF: 82,500 gsf

Total Facilities Condition Needs:

\$26.7M FCNI: 0.53

Department

Biology, Psychology, and Biochemistry

Space Type

Classrooms, Laboratories, Offices, Other Support Areas. Impacts 1,013 students per semester

Program Planning Study TBD

Project Schedule

36 months for design and construction

Project Cost

\$34,100,000

Project Funding

Internal \$6,800,000 Bonds \$0 Gifts \$0 Federal \$0 State \$27,300,000

Operating Expenses TBD

GSF Impacted by Project 82,500 gsf

FCN Addressed in Project \$26.7M

Project Description

Stadler Hall Renovation project will renovate the 82,500 gross square feet (GSF) building to bring it up to current buildings codes and design standards to serve the primarily uses of research, class-labs, classrooms, clinic, animal facilities, and office/support spaces. This will provide consolidated, more efficient, and sustainable environment. Stadler Hall, when renovated, will provide critically needed state of the art technology, equipped and flexible classrooms of various seating capacities, research laboratories, class laboratories, seminar rooms, study areas, collaborative venues, and other student spaces.

Project Justification

The space in Stadler Hall is utilized to teach in six different disciplines. Students enrolled in a total of 4,462 credit hours that were taught in this building in FY2018. The renovation improvement will help attract and retain students, faculty, and researchers. Stadler Hall was constructed in 1967, the original design and existing conditions of the building does not meet current codes and standards. Building systems in Stadler are old, inefficient, and in many cases have surpassed their expected useful life. Delaying replacement of these systems will allow them to continue to age and deteriorate and could eventually result in abandoning the building as repairs will become increasingly frequent and costly. Modern building systems will be significantly more efficient and less costly to operate than the current systems.

Currently the space has a FCNI of 0.53. When complete, the renovation of Stadler Hall will eliminate an estimated \$26.7M of facilities needs.

Funding Strategy

The project budget of \$34,100,000 will be funded by \$6,800,000 of internal funds and a State request of \$27,300,000.

Criteria	FSI	FSI Justification
Mission	9	Project is necessary for the growth of the program, project will complete the current Benton/Stadler Building Complex.
Sustainability	10	Project is a full renovation of Stadler Hall and building systems will be more efficient.
Funding	5	Project cost funding is not secured.

MU Health Care Fiscal Year 2020 – 2024 Capital Plan

MU Heath Care Fiscal Year 2020 – 2024 Capital Plan

	2019*	2020	2021	2022	2023	2024
	Current Year	Year 1	Year 2	Year 3	Year 4	Year 5
New Construction	\$13,000,000	\$0	\$100,000,000	\$50,000,000	\$0	\$100,000,000
Primary Care Clinic	\$13,000,000	\$0				
Inpatient Expansion – Women's & Children's Hospital			\$100,000,000			
**						
Ambulatory Facility/Medical Office Building**				\$50,000,000		
Inpatient Expansion – University Hospital ***						\$100,000,000
Renovation/Infrastructure	\$15,000,000	\$0	\$0	\$0	\$0	\$0
Women's & Children's Building Exterior	15,000,000					
Total	\$28,000,000	\$0	\$100,000,000	\$50,000,000	\$0	\$100,000,000

^{*} Projects listed under 2019 are projects anticipated to have project approval during FY19.

^{**}If the SSM purchase does not occur, the WCH Inpatient Expansion would move to 2020 and the Ambulatory Facility/Medical Office Building would move to 2021.

^{***}If the SSM purchase does not occur, the UH Inpatient Expansion would move to 2023 and the scope of the project may be subject to change.

<u>MU Health Care Fiscal Year 2020 – 2024 Capital Projects Funding</u>

Pro	ject							Funding Strateg	y	
			Facility							
#	Title	Type	Needs	FCNI	Total Cost	Debt	Gifts	Internal	Federal	State
1	Inpatient Expansion –	NC	\$0M	0.26	\$100,000,000	\$100,000,000	\$0	\$0	\$0	\$0
1	University Hospital									
2	Ambulatory Facility/Medical	NC	\$0M	0.00	\$50,000,000	\$50,000,000	\$0	\$0	\$0	\$0
	Office Building									
	Inpatient Expansion –	NC	\$0	0.28	\$100,000,000	\$95,000,000	\$5,000,000	\$0	\$0	\$0
3	Women's & Children's									
	Hospital									
	Total				\$250,000,000	\$245,000,000	\$5,000,000	\$0	\$0	\$0

MU Health Care Inpatient Expansion - Women's & Children's Hospital Executive Summary

Campus Priority: 1 Project Type New Construction

Building Profile

Building Name: Women's & Children's Hospital Facility Age: 47 years Total GSF: 224,000

Total Facilities Condition Needs:

\$30.9M FCNI: 0.20

DepartmentMU Health Care

Space Type

Patient rooms, OR Suites, Clinical Services, Diagnostic Services, Support areas

Program Planning Study TBD

Project Schedule TBD

Project Cost \$100,000,000

Project Funding

Internal \$0 Bonds \$95,000,000 Gifts \$5,000,000 Federal \$0 State \$0

Operating Expenses TBD

GSF Impacted by Project TBD

FCN Addressed in Project \$0

Project Description

This project will address inpatient expansion at Women's & Children's Hospital (WCH). The new construction will allow MU Health Care to meet current codes and standards for clinical functions and will ensure adequate space for clinical care. The expansion would create an approximately 92,000 sq. ft. addition and renovation of existing space per the MUHC Master Facility Space Plan study completed by CannonDesign.

Project Justification

The WCH facility was originally constructed in 1972. A detailed analysis of the current WCH facilities through the MUHC Master Facility Space Planning Study indicates WCH does not meet contemporary standards for clinical functions. The inpatient beds do not meet contemporary benchmarks in both room and department sizing; and inequalities in room sizing and quality can create patient satisfaction and safety issues. The layout of the surgical department is inefficient and many of the operating rooms are undersized.

WCH provides a high-risk obstetrics program that has increased the number of babies delivered and subsequently admitted to the neonatal intensive care unit (NICU). The number of babies delivered at WCH has increased 32% in the last three years (FY15 to FY18). The average daily census in the NICU has increased 41% over this same three years. The emergency department is also exceeding capacity and has seen patient visits increase 15% since FY15. WCH is the market leader for women's health, pediatrics, and neonatology in the 25 county service area but is exceeding capacity limitations and has limited ability to expand programs or to accommodate additional growth.

Funding Strategy

The project budget of \$100,000,000 will be debt financed.

MU Health Care Ambulatory Facility/Medical Office Building Executive Summary

Campus Priority: 2 Project Type New Construction

Building Profile

Ambulatory Facility/MOB Facility Age: New Total GSF: 120,000

Total Facilities Condition Needs:

New FCNI: 0.00

Department

MU Health Care

Space Type

Clinics

Program Planning Study TBD

Project Schedule TBD

Project Cost \$50,000,000

Project Funding

Internal \$0 Bonds \$50,000,000 Gifts \$0 Federal \$0 State \$0

Operating Expenses TBD

120,000

GSF Impacted by Project

FCN Addressed in Project

Project Description

The MU Health Care Ambulatory Facility/MOB project will construct a four-story clinic building with up to approximately 120,000 gross square feet to accommodate medicine and surgical specialty clinics and departments. The building will likely be on the University Hospital campus.

Project Justification

A current study conducted by Cannon Design indicates multiple specialty clinics are nearing or exceeding target utilization, creating significant limitations in terms of growth. Some of the specialty clinics are in prime, high-cost hospital space. A couple of clinics have had to split off into two locations, some of which have required adding leased space, to accommodate physician recruitment needed to meet growing demand.

University Hospital currently has a shortage of space needed for high revenuegenerating, hospital-based services such as diagnostic cardiology, cardiac catheterization labs, interventional radiology labs, endoscopy labs, etc. This has a negative impact on access and, consequently, patient and referring physician satisfaction.

A new ambulatory building will allow for growth of medicine and surgical specialties; decant outpatient services to allow for more profitable, hospital-based services; abate leases secured for short-term solutions; and create synergies and efficiencies by consolidating clinics, especially those that now have two locations due to capacity constraints.

Funding Strategy

The project budget of \$50,000,000 will be debt financed.

MU Health Care Inpatient Expansion - University Hospital Executive Summary

Campus Priority: 3 Project Type New Construction

Building Profile

Building Name: University

Hospital

Facility Age: 63 years Total GSF: 444,000

Total Facilities Condition Needs:

\$63.3M FCNI: 0.28

DepartmentMU Health Care

Space Type

Patient rooms, OR Suites, Clinical Services, Diagnostic Services, Support areas

Program Planning Study TBD

Project Schedule TBD

Project Cost \$100,000,000

Project Funding

Internal \$0 Bonds \$100,000,000 Gifts \$0 Federal \$0 State \$0

Operating Expenses TBD

GSF Impacted by Project TBD

FCN Addressed in Project \$0

Project Description

This project will replace the original 1956 hospital with a new inpatient facility. The new construction will allow MUHC to meet current codes and standards for clinical functions and ensure adequate space for clinical care. The specific size of this expansion is being assessed as part of the MUHC Master Facility Space Planning Study.

Project Justification

University Hospital is the flagship hospital for MUHC and provides the highest-level services and training for Trauma, Heart Attack, Stroke and many other high complexity medical services. Expanding UH inpatient facilities has been identified as a strategic priority as a continued mechanism for growth of MUHC services. The hospital currently operates at greater than 85% occupancy when optimal efficiency is closer to 70% occupancy to allow the free flow of patients through the system. Operating at such a high occupancy has hindered referral relationships, patient transfers, decreased staff and physician satisfaction and limited the ability of the system to add new patients and services. Additionally, most of the rooms are significantly less square feet for contemporary patient care rooms with some rooms being so small that you cannot accommodate a patient and a walker in the same bathroom space creating many quality and safety challenges. There are significant operational and engineering challenges in maintaining a building over 60 years old for contemporary, complex patient care.

The buildings which are least suitable for future health care facilities at UH complex are the original University Hospital patient tower and McHaney Hall, both constructed in the mid- 1950s. These buildings have limited floor to floor height, limited adaptability for modern health care standards, lack future expandability, and have dated mechanical, electrical, plumbing, and fire protection systems. As a result, the original UH 1950 patient tower is no longer suitable for contemporary patient care. The master plan process will identify the appropriate location for new patient services to capitalize on recent expansion implementation with the Patient Care Tower/Ellis Fischel Cancer Center. The study will evaluate options to either demolish or reuse the existing facilities.

Funding Strategy

The project budget of \$100,000,000 will be debt financed.

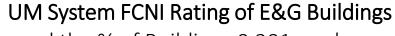
University of Missouri System Board of Curators April 4, 2019 Finance Committee

Five-year Capital Plan for MU, MU Health Care
Missouri S&T, UMKC, and UMSL
UM

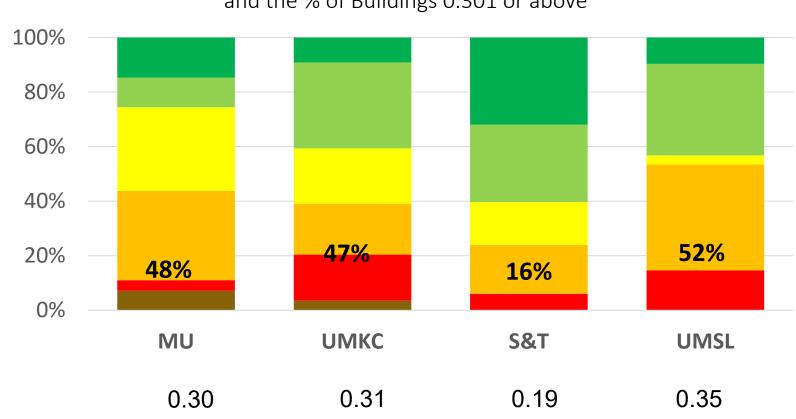


Facilities' Conditions

\$1.7 Billion in Facilities Needs



and the % of Buildings 0.301 or above



Facility Condition Needs Rating

Excellent Condition, typically new construction (0.000 - 0.100)

Good Condition, renovations occur on schedule (0.101 - 0.200)

Fair Condition, in need of normal renovation (0.201 - 0.300)

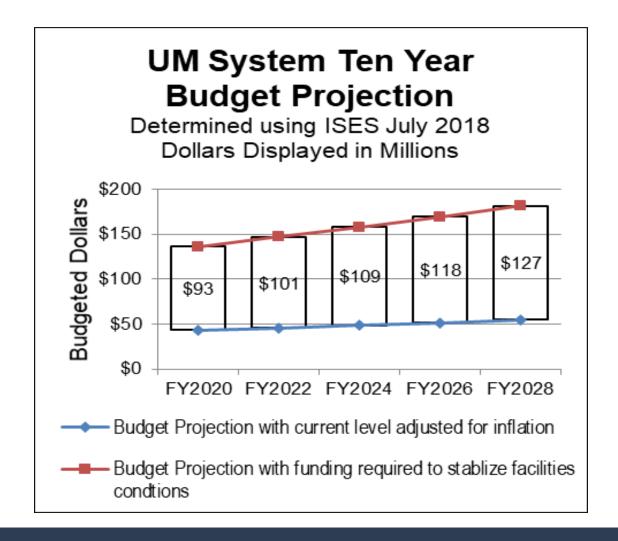
Below Average Condition, major renovation required (0.301 - 0.500)

Poor Condition, total renovation indicated (0.501 - 0.600)

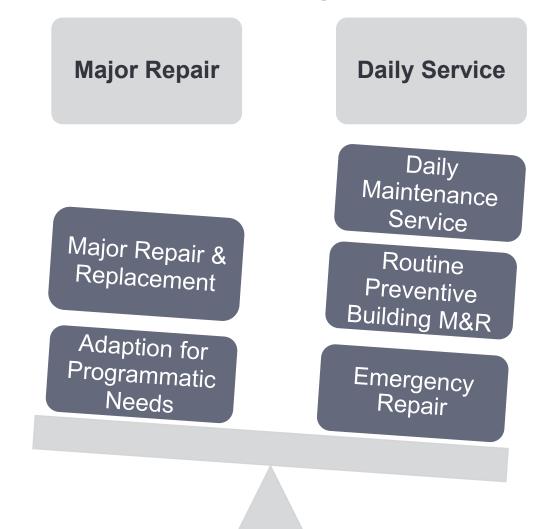
Replacement Recommended (0.600 and Higher)

Current Budget vs. Target Budget

For FY2020, the projected budget for UM Facilities is \$93M less than the target needed to maintain the building portfolio at a 0.3 FCNI (fair condition).



Increased Investment Required to Balance Needs



Needs

To be competitive and address funding gap, the University must:

- Reduce space and maximize space utilization to reduce costs
- Include cost of deferred maintenance projects in financial planning instead of reacting to events with one-time funds
- Reallocate funds for capital investment to address facilities needs

MU FY2020 –FY2024 Capital Plan

University of Missouri - Columbia	2020	2021	2022	2023	2024
	Year 1	Year 2	Year 3	Year 4	Year 5
New Construction	\$84,500,000	\$57,980,000	\$45,000,000	\$0	\$0
Ellis Library–Student Experience Center facilitated by Library Depository Expansion	\$7,000,000				
Vet Medical Diagnostic Lab Replacement		\$57,980,000			
New Journalism Building - Replace and Redevelop Neff Hall & Addition Site			\$45,000,000		
Honors College – New Building	\$47,500,000				
Center for Student Health & Well-Being	\$30,000,000				
Renovation/Infrastructure	\$21,725,000	\$21,800,000	\$0	\$0	\$0
District Cooling Capacity Addition	\$21,725,000				
Satellite Boiler Plant-Research Commons		\$8,800,000			
Manor House-Renovate for Community Style Living		\$13,000,000			
Total Project Cost	\$106,225,000	\$79,780,000	\$45,000,000	\$0	\$0

UMKC FY2020- FY2024 Capital Plan

University of Missouri–Kansas City	2020	2021	2022	2023	2024
	Year 1	Year 2	Year 3	Year 4	Year 5
New Construction	\$100,000,000	\$5,400,000	\$130,000,000	\$45,000,000	\$0
Conservatory of Music & Dance	\$100,000,000				
Health Sciences Interprofessional Education and Research Building			\$130,000,000		
Bloch Heritage Hall Ren & Addition		\$5,400,000			
New Student Housing				\$45,000,000	
Renovation/Infrastructure	\$37,657,000	\$6,600,000	\$20,000,000	\$0	\$20,000,000
Spencer Chemistry & Biological Science Renovation Phase II	\$37,657,000				
Health Sciences Interprofessional Education and Research Building			\$20,000,000		
Bloch Heritage Hall Ren & Addition		\$6,600,000			
Epperson House Renovation					\$20,000,000
Total Project Cost	\$137,657,000	\$12,000,000	\$150,000,000	\$45,000,000	\$20,000,000

Missouri S&T FY2020 - FY2024 Capital Plan

Missouri S&T	2020	2021	2022	2023	2024
	Year 1	Year 2	Year 3	Year 4	Year 5
New Construction	\$44,600,000	\$0	\$43,026,000	\$10,434,292	\$0
Schrenk Hall Addition and Renovation - Phase III	\$44,600,000				
Engineering Research Lab Addition and Renovation			\$43,026,000		
McNutt Hall Addition				\$10,434,292	
Renovation/Infrastructure	\$0	\$10,318,000	\$0	\$0	\$0
Library/Learning Commons		\$10,318,000			
Total Project Cost	\$44,600,000	\$10,318,000	\$43,026,000	\$10,434,292	\$0

UMSL FY2020- FY2024 Capital Plan

University of Missouri – St. Louis	2020	2021	2022	2023	2024
	Year 1	Year 2	Year 3	Year 4	Year 5
New Construction	\$0	\$0	\$0	\$0	\$0
Renovation/Infrastructure	\$52,500,000	\$0	\$34,100,000	\$0	\$0
Space Consolidation & Infrastructure	\$10,000,000				
Social Science Building Renovation	\$42,500,000				
Stadler Hall Renovation			\$34,100,000		
Total Project Cost	\$52,500,000	\$0	\$34,100,000	\$0	\$0

MU Health Care FY20 – FY24 Capital Plan

MU Health Care	2020	2021	2022	2023	2024
	Year 1	Year 2	Year 3	Year 4	Year 5
New Construction	\$0	\$100,000,000	\$50,000,000	\$0	\$100,000,000
Inpatient Expansion – Women's & Children's Hospital		\$100,000,000			
Ambulatory Facility/Medical Office Building			\$50,000,000		
Inpatient Expansion – University Hospital New Student Housing					\$100,000,000
Renovation/Infrastructure	\$0	\$0	\$0	\$0	\$0
Total Project Cost	\$0	\$100,000,000	\$50,000,000	\$0	\$100,000,000

Path Forward: Strategic Financial Plan

Integrate capital planning with financial transformation

Identify planned capital projects versus aspirational capital projects

 Include deferred maintenance requirements in 5 year strategic financial plan

Balance strategic priorities with financial realities



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