

## TOP PRIORITIES

### Lewis and Clark Discovery Initiative

Dept	Institution	Project	One-Time Amt	Description/Justification
DHE	UM	Lewis & Clark Discovery Projects		The \$74 million in funding for the projects listed below was appropriated as part of the Lewis and Clark Discovery Initiative and have been permanently put on hold until new funding is identified.
DHE	UMSL	Benton/Stadler Halls	28,530,767	For planning, design, renovation, and construction of Benton and Stadler Halls on the St. Louis campus
DHE	MU	Ellis Fischel Cancer Center	31,182,000	For planning, design, renovation and construction of a new Ellis Fischel Cancer Center on the Columbia campus
DHE	MU		2,500,000	Approximately 15,000 sq ft of space to conduct applied research on processing of new varieties of soybeans and other crops
DHE	MU	Greenley Learning and Discovery Park	1,859,737	For planning design, construction and/or renovation.
DHE	MU	Delta Research Center Plant Science Greenhouse	1,726,810	Approx. 10,000 sq. ft of greenhouse space designed to enhance the Delta Center's ability to grow and study new plant varieties.
DHE	MU	Graves-Chapple Farm	579,754	Meeting and Education Facility located in Atchison and Holt counties.
DHE	MU	Horticulture & Agroforestry Research Center	2,998,231	Agroforestry Education/Research Center and meeting and education facilities located in Howard county.
DHE	MU	Thompson Farm	671,254	Headquarters building and meeting room located in Grundy county.
DHE	MU	Wurdack Farm	527,102	Meeting and Education Facility located in Crawford county.
DHE	MU	Southwest Center	3,059,190	Education and Outreach Center addition will consist of approx. 12,000 sq. ft. allowing for additional meeting and classroom space to further meet the needs of the community and researchers at the university.
DHE	MU	McCredie Farm	600,000	Swine Research Isolation Facility located in Callaway county.

**TOP PRIORITIES**

**UNIVERSITY OF MISSOURI - PRIORITIZED NEW CONSTRUCTION PROJECTS BY CAMPUS**

<b>Priority</b>	<b>Dept</b>	<b>Institution</b>	<b>Project</b>	<b>One-Time Amt</b>	<b>Description/Justification</b>
1	DHE	Missouri S&T	Biological Sciences/Chemical Engineering building	\$ 40,000,000	A new 125,000 gsf building to house teaching and research in the biological sciences and chemical engineering. This is phase one and two of the FY2010 appropriation request for a Biological Science/Chemistry/Chemical Engineering Addition and renovation.
2	DHE	Missouri S&T	Emerson Electric Co. Hall Addition	\$ 16,611,000	For the Electrical Engineering Program; 40,000 GSF Addition
3	DHE	Missouri S&T	Innovation Park Technology Development Center/Child Development Center	\$ 3,500,000	This would provide funding for a technology development center building and partnership with a private developer at Missouri S&T Innovation Park as well as a child development center to service employees on both the campus and at the Innovation Park. There is a severe shortage of licensed child development facilities in Rolla. Missouri S&T needs a child development center to attract and retain high quality faculty. A child development center
1	DHE		University Hospital Patient Tower	\$ 173,000,000	The requested action is to construct the proposed University Hospital Patient Tower for \$153 million in conjunction with the Ellis Fischel Cancer Center scheduled for funding through Lewis and Clark Discovery Initiative. The Patient Tower construction site preparation can start in 45 days if funding is approved, since demolition and utility packages are ready for public bidding. Plans are nearly complete for a new building of 250,000 square feet that would be built adjacent to the existing hospital. Expansion would be provided for inpatient rooms, twelve surgical suites, and ancillary service spaces.

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2	DHE	UMHC	Relocate University of Missouri Health Care Children's Hospital to Columbia Regional Hospital	\$ 18,000,000	The total project is currently estimated at \$30 million, with approximately \$12 million available for the first phase of relocation. This request asks for an additional \$18 million so that completion of all phases can be accelerated in order to maintain critical healthcare delivery to the youngest of Missouri residents. Plans have been completed to devote nearly 73,500 square feet on the Columbia Regional Hospital campus to Children's Hospital inpatient, outpatient, and ancillary services. Existing Children's Hospital is currently located in woefully inadequate and undersized areas of University Hospital on the MU campus. The planned relocation will consolidate pediatric clinics and faculty offices on the CRH campus, thereby strengthening the women's obstetrical programs based at CRH. The project designs will be complete in about 45 days. Construction is slated to begin in April 2009.
1	DHE	MU	Install New Biomass Boiler at the MU Combined Heat and Power Plant	\$ 62,000,000	This project is necessary for steam capacity for combined heat and power at the MU campus and will significantly increase the use of renewable (biomass) fuel and reduce projected annual utility costs.
2	DHE	MU	Lafferre Hall Renovation of 1892 Addition	\$ 6,382,180	Complete interior renovation of the three story 20,465 gsf 1892 structure of the Lafferre Hall to support contemporary educational needs. Exterior improvements include: slate roof replacement, masonry repair and repointing and window replacement.

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2	DHE	MU	Greenhouses - Preparing for the Future	\$ 12,400,000	These greenhouses with their state-of-the-art environmental controls are the key piece lacking to enable MU faculty to understand how plants respond/adapt to changing environments, to predict how those responses may change in the future as global warming continues, and to develop new plant varieties that will thrive under environmental extremes, those environmental extremes are upon us! The plants will be both crop varieties and plants that can potentially be used for biofuels. With these greenhouses in place MU faculty will be in an excellent position to complete for extramural funds in the area of energy development and future agriculture. We will also be uniquely placed to compete for extramural funds to build the planned one-of-a-kind Biotron that was designed as a part of the larger MU Greenhouses Master Plan. The greenhouses will be built with green technology, appropriate for a facility designed to study environmental questions.
1	DHE	UMSL	Optometry/Nursing	\$ 70,000,000	Design and construction of new state-of-the-art facility.
2	DHE	UMSL	Business	\$ 30,000,000	Design and construction of new state-of-the-art facility.
1	DHE	UMKC	Miller Nichols Library Addition & Interactive Learning Center	\$ 61,430,000	High Density Collection Storage, Information Commons Renovation and Enhancement of Instructional Capacity - Classrooms
2	DHE	UMKC	School of Dentistry Addition	\$ 20,180,000	40,000 GSF Addition; Teaching, Clinical and Research Labs
1	DHE	UMSystem	FLW Research Park Buildings	\$5,000,000	We could begin immediately on this and have it completed in 24 months. This would basically duplicate the first two buildings which we financed and which have 100% occupancy and would provide us with enough cash flow to pay off the prior loan in half the time, Thereafter the cash flow will allow us to reinvest in commercialization of University IP
2	DHE	UMSystem/UMKC	4747 Troost UMKC Accelerator and Innovation Center	\$13,300,000	Currently there does not exist either incubator or accelerator space in and around the UMKC campus although UMKC discoveries and IP are at record levels and are expected to rise over the next 5 years. Funding will provide a 33,000 GSF Accelerator and Innovation Center with both office, job training and laboratories

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3	DHE	UMSystem/MST	MST Research Park Facilities	\$5,000,000	The MST Research Park was approved by the curators with potential tenants GE Aerospace and spin off companies from MST technology. We have worked with several developers over the last year and we are never going to get affordable private financing for a spec office building in Rolla. This might be our only chance to build such a facility with credit markets drying up. .
4	DHE	UMSystem/UMC	Infrastructure at Discovery Ridge	\$8,800,000	The Research Park at Discovery Ridge is in the process of being expanded to 550 acres. Infrastructure such as earthwork, roadways, storm water holding basins, sewer, water, electricity, trails and telecom need to be completed in the new areas to make the sites shovel ready for marketing.
1	DHE	State Historical Society	State Historical Society Building & Museum	\$ 54,622,000	This is a five-story building of 149,320 GSF to accommodate the research, curatorial and educational functions and services of the State Historical Society of Missouri (SHSMo) and the Western Historical Manuscript Collection-Columbia (WHMC). The SHSMo and the WHMC hold vast collections of artwork, documents, manuscripts, microfilm and photographs that are used regularly by University of Missouri faculty and students, as well as by researchers from all over the state and nation.

## TOP PRIORITIES

### UNIVERSITY OF MISSOURI MAINTENANCE AND REPAIR PRIORITIZED BY CAMPUS

Priority	Dept	Institution	Project	One-Time Amt	Description/Justification
1	DHE	UM	Critical Facility Capital Repair, Renovation and Renewal Needs	\$34,545,416	The University of Misooluri has \$344 million of deferred maintenance and repair, \$353 million of capital renewal work, and \$110 million of Plant adaptation. Of this approximately \$34.5 million is currently critical.
1	DHE	MU	Life Safety Compliance & Security Improvements (the amount cited is the total amount needed to comprehensively address all of these issues across the campus. Any amount up to the \$87.85 million could be used for this purpose.)	\$87,850,000	This project will install/update fire alarms, sprinkler systems, exit lighting and other exit corridor modifications in 85 Educational and General Buildings as necessary to comply with Life Safety Standards. It rehabilitates/replaces 532 outdated fumehood systems in 31 buildings and will install automated exterior remote locking capability on all Educational and General Facilities to provide increased campus security.
1	DHE	UMKC	Medical School Renovation	\$20,484,000	Renovation of 62,500 gsf of teaching space and research labs
2	DHE		Campus infrastructure repair and replacement	\$14,650,000	Replace Electrical Distribution System, steam lines, steam plant, retaining walls, elevators, emergency signage, capital renewal
1	DHE	Missouri S & T	Campus infrastructure repair and replacement	\$ 14,790,301	Mechanical, electrical, and HVAC system repair, replacements and upgrades; exterior building repairs; roofs.
1	DHE	UMSL	Fine Arts & Communication (former GSB)	\$11,000,000	Renovation
1	DHE	UMSL	HVAC, Electrical, Plumbing, Exterior,	\$21,603,203	Capital Renewal

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### General Campus Academic and Research Equipment/Infrastructure Prioritized by Campus

Priority	Dept	Institution	Project	One-Time Amt	Description/Justification
1	DHE	UM	Engineering Equipment	\$7,600,000	To address a backlog of need to replace and update engineering equipment resulting from no appropriations for this purpose since 2001.
1	DHE	MU	Translational Medicine	\$15,800,000	Required infrastructure for major thrust in translational medicine
2	DHE	MU	Brain Imaging Center	\$2,800,000	Functional Brain Imager (MEG) system to provide state of the art equipment to complement MRI
3	DHE		Teaching & Research Equipment	\$6,700,000	To address the need to replace aging equipment or secure new equipment to further teaching and research efforts and effectiveness.
4	DHE	MU	Agriculture Experiment Station Equipment	\$3,700,000	To address equipment needs across 20 centers, farms and forests.
1	DHE	Missouri S&T	Undergraduate engineering/science teaching laboratories upgrades	\$11,900,000	In the absence of equipment and replacement support for the last decade, these laboratories are in critical need of upgrades. Over 90% of our students take laboratories in chemistry, physics, engineering, biology, etc.
2	DHE	Missouri S&T	Research laboratory equipment	\$10,000,000	Our sponsored research volume is increasing dramatically. Federal agencies assume that basic research equipment is already present on the University campus or they expect the campus to provide substantive matching funds to purchase new equipment. Funding these equipment purchases will allow us to attract more externally funded research to continue the University's growth.
1	DHE	UMSL	IT Enterprises (ITe) small-business incubator expansion	\$10,000,000	To quickly enhance economic growth and job creation through building out lab space for start-up biotech and IT companies; expanding the incubator's High Performance Computing Center capacity to enhance research; funding discounted lease rates for new start-up tenant companies to help them grow; and paying off debt on ITe facilities.
2	DHE	UMSL	Major Research Instrumentation, Center for Nanoscience	\$10,000,000	To make key purchases of scientific instrumentation for use in a centralized lab in UMSL's Center for Nanoscience, a cross-disciplinary center designed to translate breakthrough scientific discoveries into practical applications in energy, food and health. Such instrumentation will better position the University for external funding to advance cutting-edge research.
1	DHE	UMHC	MU Health Care Equipment	\$24,623,000	High priority diagnostic and clinical equipment needs for Orthopedic Institute, Children's Hospital and University Hospital.

## TOP PRIORITIES

### Technology and Broadband Enhancements Prioritized by Campus

Priority	Dept	Institution	Project	One-Time Amt	Description/Justification
1	DHE	UM	Telepresence Renovation and Start Up Costs	\$2,000,000	Room renovations and initial gear purchase
2	DHE	UM	Oracle Licenses	\$4,000,000	License True Up and New Initiatives
3	DHE	UM	Next Generation Network (NGN)	\$10,000,000	
4	DHE		Disaster Recovery	\$5,000,000	
5	DHE	UM	Future Unfunded Mandates	\$1,000,000	
6	DHE	UM	Email Archival	\$1,000,000	
1	DHE	MU	Technology Infrastructure	\$8,000,000	Upgrades in technology for academic units plus replacement of telecommunications fiber throughout the campus
1	DHE	UMKC	IT Building Infrastructures, Security and Disaster Recovery	\$2,994,808	Buildings include those that were wired in the early 1980's with category 3, 10 Megabit cable. The infrastructure upgrade costs include bringing each building up to current wiring standards with category 6 cable, providing 1 Gigabit connectivity to every jack. This would provide high speed, reliable networking for student, faculty and research use and allow for more reliable disaster recovery backups and redundancy of campus exchange servers.
2	DHE	UMKC	Enhance and Improve the Number of ILE Classrooms, Renovate Computing Labs, Improve Connectivity to e-Learning Environments, and Relocate Call and Desktop Support Center	\$2,225,000	Improve ILE Hybrid Installations, Renovate student computing labs, Improve student access to e-Learning applications, and relocate IT support to improve access to services.
1	DHE	Missouri S&T	Classroom technology enhancements and upgrades	\$10,600,000	A technological learning environment is essential for today's students in engineering and science. Over 70% of our classrooms have no technology enhancement. In addition, our existing tech classrooms lack digital video capabilities and are relying on antiquated analog systems. Technology and distance enabled classrooms would permit the University to expand its student services on-campus and throughout the State of Missouri.

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Priority	Dept	Institution	Project	One-Time Amt	Description/Justification
1	DHE	UMSL	Classroom technology enhancements and upgrades	\$ 5,000,000	Adaptation of space and introduction of technology and other systems to create additional learning studios (state-of-the-art teaching/learning spaces) as described in the journal article "The Space is the Message: First Assessment of a Learning Studio," <i>Educause Quarterly</i> , Volume 31, Number 2, 2008.
2	DHE	UMSL	Telephone and voice mail systems upgrades	\$ 5,000,000	Upgrade current outdated telephone switching equipment (PBX) which has components 15+ years old, voice mail system technology and related infrastructure to state-of-the-art voice over internet protocol (VOIP) technology.
1	DHE	MOREnet	Core Router Technology Refresh	\$2,323,000	The current Cisco 12000 series backbone routers and Cisco 10000 series aggregation routers went into production in 1999. A technology refresh is needed to maintain performance and support the growth in bandwidth, as well as to support the new Internet addressing standards (IPv6). The growth in Internet access, the continued increase of Internet security risks and the need to connect directly with content providers to reduce Internet costs require that we add new network equipment that connects the MOREnet backbone to the Internet.
2	DHE	MOREnet	Video Equipment	\$ 1,201,000	A video equipment refresh is needed to support the increased use of video services, to support new video standards, including high-definition two-way videoconferencing, and to improve performance and reliability of the video service.
3	DHE	MOREnet	Video Software	\$282,000	Video software is needed to automate event scheduling and reporting for nearly 20,000 video events supported each year. With the software, the scheduling process will be improved and members will be able to self-schedule events and receive advanced reporting capabilities not currently available with the existing system.

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### Academic Support Prioritized

Priority	Dept	Institution	Project	One-Time Amt	Description/Justification
1	DHE	UM	eLearning	\$3,000,000	Start-up funds for a system-wide eLearning initiative
2	DHE	UM	Economic Development	\$1,500,000	Investment in technology transfer infrastructure
3	DHE	UM	Employee Performance Recognition	\$32,000,000	One-time salary and wage awards in recognition of performance in order to recognize and retain faculty and staff in light of no recurring salary increases.
1	DHE		Healthy Lifestyles-Fighting Obesity	\$1,000,000	Continuation of current Extension program
2	DHE	MU	Taking Energy Technology to the Community	\$1,000,000	Next phase of current program in Extension