

Renewing MU's valuable building resources

he University of Missouri campus contains over 6 million gross square feet (GSF) of building space classified as Educational & General (E&G) housing teaching, research and administrative support. Nearly 70 percent of this space is over 30 years old and over 40 percent exceeds 50 years. These older structures constitute a resource that, in future years, will prove exceptionally valuable to MU. That value can be realized by a partnership of campus interests dedicated to achieving the most effective use of existing facilities to further MU's academic mission.

New E&G space represents 25 percent of the total building area added to the campus since 1980. Student activity functions, residential, athletic, medical, research and parking facilities constitute most of the building area growth during this period. Like other U.S. flagship universities, MU's expansion was a response to a host of demands for services and support activities to maintain its mission and comply with changing standards and mandates.

Challenging economic climate

In the current economic climate, new facilities construction has slowed and will remain so for the indefinite future. A scarcity of public and private funds for capital development affects U.S. institutions of higher education.

The new-construction slowdown presents a challenging opportunity for MU's academic mission leaders and facilities managers to collaborate in giving new purpose to these older resources with the following shared goals in mind:

- alleviate the need for new buildings, other than those required to meet critical mission priorities
- accommodate MU's academic mandates in more efficient, sustainable ways
- reposition existing facilities with a minimum increase in operating cost
- preserve historical investments already made in the campus environment



The Donald W. Reynolds Journalism Institute project renovated two historic buildings – the Sociology Building and Walter Williams Hall – and built a connecting addition to house modern media technology.

- further MU's strong stewardship of campus facilities
- advance the state's economic health

Renovations preserve resources

Thirty-four campus buildings have been identified as priority candidates for renovation. While age and obsolescence make them prime choices for renovation, their resource value to MU is paramount: These buildings occupy key locations in the historic fabric of MU; many are irreplaceable icons essential to the campus' unique character; many are among the university's most heavily used academic buildings; and, comprising two million square feet, the buildings represent one-third of MU's total inventory of E&G space.

A comprehensive renovation strategy is critically important in remedying deferred maintenance, new code requirements, and mechanical, spatial, material and occupant-comfort deficiencies that come with aging buildings.

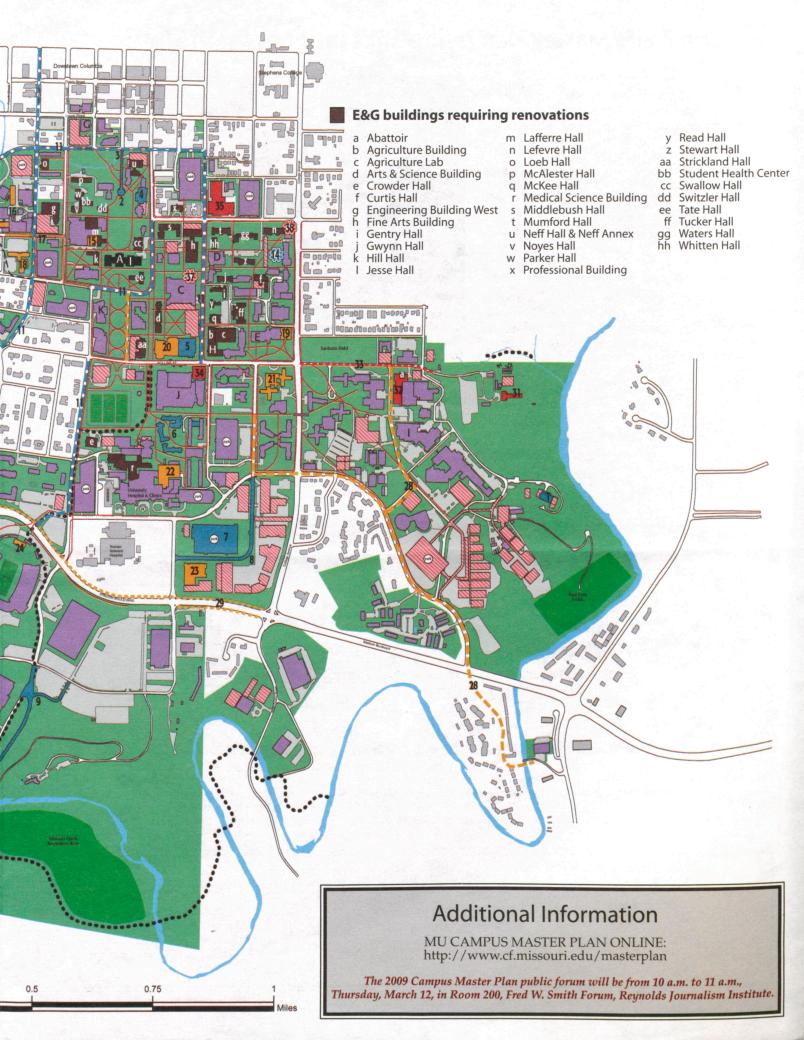
The renovation investment can also be leveraged in other ways. Where it proves economically impractical to maintain old uses,

space can be adapted and reprogrammed for new uses. Departments with space scattered across the campus can be consolidated in renovated buildings and some renovated facilities can be expanded with additions rather than building wholly new structures. Recent examples of this include Townsend, Schweitzer and Lafferre halls, and the Reynolds Journalism Institute.

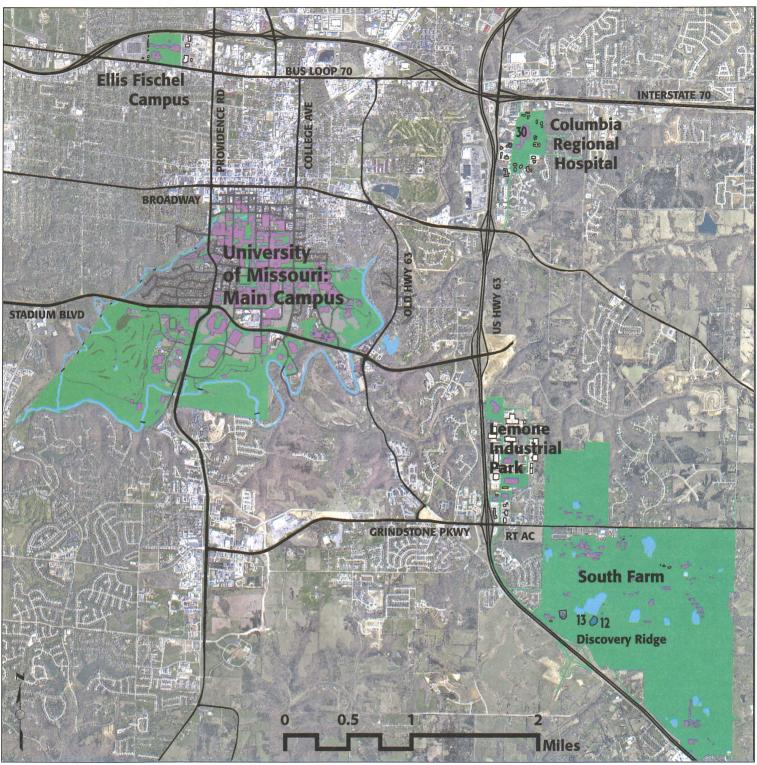
Where renovation candidates no longer utilize prime sites to greatest effect, those sites can be redeveloped for new uses. Combinations of these measures will represent a high level of campus stewardship and sustainability.

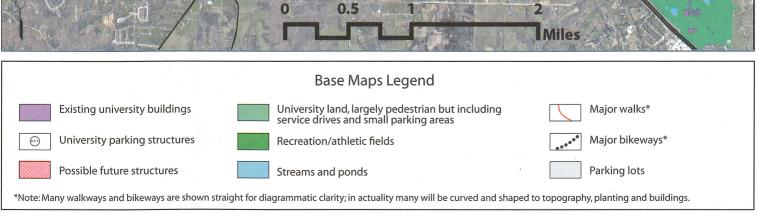
Through a rigorous determination of MU's mission and needs, administrative and academic leadership will ultimately determine which uses and programs will occupy renovated E&G buildings. The MU Campus Master Plan provides the university with sound planning principles and stewardship guidance in making older campus buildings its newest resources for the future.





Regional Overview





Multi-faceted construction projects provide new campus space

administrative space-needs increase on campus, solutions have become multi-faceted. Construction now includes full and partial demolition, renovation, restoration and new construction.

Renovation/additions renew space

Three recent examples include the Schweitzer Hall addition and renovation, the Reynolds Journalism Institute (RJI), and the Student Center/Brady Commons expansion. The design for each project included renovation of existing space and addition of new space to meet current and projected needs.

The Schweitzer Hall addition and renovation included renovating existing space to create new biochemistry research labs and constructing a connecting bridge or link to Schlundt Annex to physically join and consolidate the biochemistry department.

The RJI project involved the construction of a new building within the preserved structure of the historic Sociology Building and the addition of a link connecting this building to the renovated, historic Walter Williams Hall.

The Student Center/Brady Commons expansion project required a phased implementation to allow the bookstore and the Center for Student Involvement to relocate prior to demolishing a portion of the existing complex, and then renovating and building new space.

Blending the new with the old

All campus projects are carefully evaluated to ensure compatibility with adjacent buildings and the campus environment. The RJI and Schweitzer projects, for example, were designed using the architectural vocabulary of adjacent neighbors; the Student Center project assembled a palette of materials, colors and textures common to the surrounding neighborhood and incorporated them in a contemporary manner to establish this facility as a distinct student-oriented destination.

Stewardship and sustainability incorporating 1) recycling and repurposing where appropriate, 2) designing for future flexibility and 3) the use of innovative technology and construction materials appropriate to fulfill the mission of the university, are emphasized in all campus projects.



The first phase of the Student Center expansion/ **Brady Commons** renovation project built a 102,550 GSF addition to the east of Brady Commons. Subsequent phases will renovate the older building and connect it to the new addition. When completed, the complex will serve as a dynamic gathering place for MU students.

Completed in 2007, the Schweitzer Hall addition/renovation project added new space on the south side of the existing building, constructed a bridge over a major walkway to Schlundt Annex and renovated existing space. Exterior materials used for the new construction blend with the facade of the original building, constructed in 1912. The project helped consolidate campus biochemistry efforts on the east side of the White Campus.



Infrastructure renovation integral to future growth

Thile many older but functional teaching and research structures require renovation to meet changing campus needs, MU's utility infrastructure also requires renovation to maintain dependable service.

In place for decades in many areas of campus, steam, electric, water, and sewer systems making up MU's utility infrastructure are continually evaluated for needed improvements. Planning and renovation to maintain operating efficiency and reliability are ongoing.

Steam tunnel upgrade

One of the most visible renovation projects on campus involves the main steam tunnel exiting the MU power plant on Stewart Road. A major project being built in phases, the tunnel proceeds east to Sixth Street, then south to Conley Avenue, from which it will proceed east to Maryland Avenue.

The existing steam tunnel was built in the early 1920s and has since deteriorated significantly. While campus steam needs have grown dramatically, the once-adequate tunnel piping is now severely undersized. When complete, the new tunnel will provide increased steam system capacity and reliability.

Piping in the tunnel carries steam that provides heat for campus buildings and drives large chillers to cool them. Steam is also critical for medical and animal research: equipment sterilization, cleaning of animal cages, instruments, utensils, etc., and other campus operations.

Future utility renovations

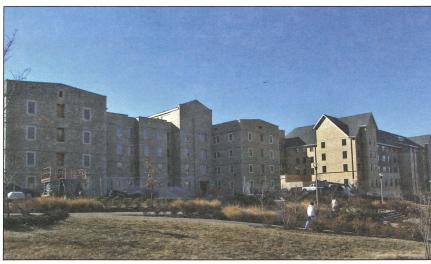
Campus Facilities – Energy Management is planning other utility renovation projects, including the replacement of leaking water mains and aged, underground high-voltage cable.

Residential Life Master Plan refurbishes facilities for the future

U's Residential Life Master Plan, approved in 2001 by the university's Board of Curators to replace and/or renovate 19 residence halls over 17 years, remains on track. Three new residence hall complexes, with a total of eight new halls, are now operational: Virginia Avenue Housing, Southwest Campus Housing and College Avenue Housing. The Mid-Campus Housing complex, comprising three halls, will open this fall.

Hatch, McDavid and Schurz halls have been renovated and are operational. Renovation will soon begin on Hudson and Gillett, and design is under way for renovation of Mark Twain Hall.

The Mid-Campus Housing complex is unique among new residential hall construction as it incorporates Defoe and Graham halls in adaptive-reuse construction. The two buildings are being co-joined by a newly constructed link wherein both will function and feel like a single hall in the new complex. Baker-Park and Gardner-Hyde



The Mid-Campus Housing project replaced two obsolete residence halls with three new structures, renovated Graham and Defoe halls and built a new connection between the two older residence halls.

halls were razed in 2007 to make room for the Mid-Campus project.

Refurbishing these aged facilities ensures the financial viability of MU's residential life system, keeps MU competitive with peer institutions and promotes the continued success of "Res Life's" unique Living-Learning programs.

Lafferre Hall project renews historic campus building complex





The \$24.3-million "Lafferre Hall-Reconstruct 1922 Addition" project replaces 25,000 gross square feet (GSF) of substandard space with 60,000 GSF of new construction in a four-story building. The project is the first of a multiphase, \$150 million College of Engineering Master Plan to renovate and improve general circulation, accessibility, way-finding, classroom and research space. Phases VI and VII of the plan are for the renovation of Engineering Building West across Sixth Street from the Lafferre Hall complex, and the construction of a five-story building containing 124,620 GSF of teaching and laboratory research space for the entire college.

PLANNING PRINCIPLES

Reinforce the University Mission & Values Pride of the State Diversity with Unity Strong 'Sense of Place' Respect Natural & Architectural Heritage

Environmental Sustainability
Recruitment-Retention
Planning & Design Integrity
Enhance Community Spirit
Allow for Prudent Expansion of Campus Functions

Pedestrian Dominance
Transportation & Vehicle Circulation
Respond to Accessibility Needs
Facilities & Grounds Stewardship