University of Missouri

2008 CAMPUS MASTER PLAN

Shaping a "smart-growth" strategy at MU

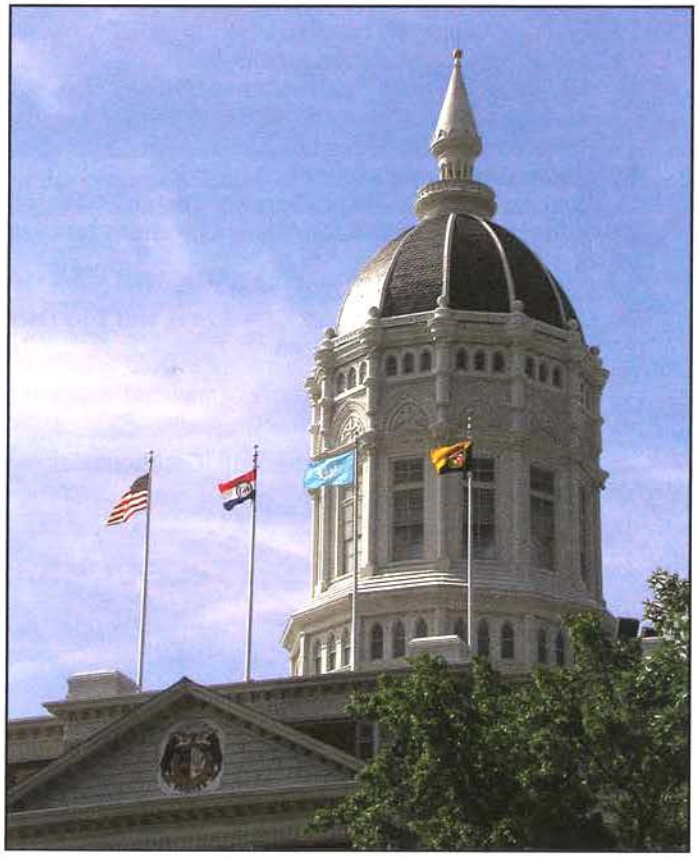
Like many public flagship universities in the United States, MU continues to face an uncertain future for the capital funding of facilities necessary to maintain its mission as the provider of high-level teaching, research, service and economic development for the state.

Funding uncertainties have to be reconciled with MU's mission to provide facilities supporting institutional growth and change if the University is to undergird the state's competitive edge in the global economy. Facilities are increasingly built in response to research priorities, enhancements in the quality of campus functions and student life and the level of services provided to the public. The University's prominence in education and research will undoubtedly be reflected in continuing facilities growth and renewal, as will interdisciplinary teaching and research ventures among MU's colleges.

Future Smart Growth: Helping to overcome fiscal uncertainty

While the growth of future facilities will continue, the unpredictable nature of capital funding, however, requires MU to be increasingly prudent in calculating fiscal effects of future facilities. A critical part of this calculation is anticipating infrastructure investment in the utilities, roads, and parking necessary to support campus growth. Further, it is incumbent that future development occurs in a cost-effective, sustainable and productive way. Such "productivity" includes the stewardship of the resources and qualities that distinguish the Mizzou campus and its relationship to the Columbia community. This is smart growth!

Based on an assessment of the fiscal and resource impacts of various patterns of facilities growth, the university is developing a "Smart Growth Strategy." A key planning initiative, this major new refinement of the annually updated Campus Master Plan will provide technically and financially rigorous guidelines for future campus growth.



Smart Growth modeling

Several models of future campus growth, redevelopment and preservation are under study. Models include projections of building density, land use and open space that, from the standpoint of land capacity, are appropriate for areas of campus.

Models also indicate an additional future building capacity in the order of 4 million to 6 million gross square feet. The existing campus building area is 14.6 million gross square feet, of which 6.5 million gross square feet has been constructed in the last 25 years. Density and use projections are also geared to strengthen relationships between teaching, research, residential and social functions.

Projected, too, is new development that can be accommodated before central heating and cooling plants must be upgraded or expanded, and where localized constraints in utility distribution networks require new investment to support facilities development. Similarly, road improvements and parking required to serve new facilities growth are also projected.

The intent of the Smart Growth Strategy is to defer and/or reduce additional infrastructure investment by identifying ways of more efficiently utilizing land and infrastructure resources and optimizing development. With objective principles for development phasing, campus densities, land use, and conservation patterns, this strategy allows a rigorous framework for determining where, when and how to locate new facilities. With the overlay of the Smart Growth Strategy, the campus plan will make the stewardship of campus resources an integral part of the quality of campus and community life.

MU Campus Master Plan

Main Campus

Projects Recently Completed

1 Schweitzer Hall addition/renovation
2 Upgrade Hitt Street closed-campus barriers
3 Clinical Support & Education Building
4 Brain Imaging Center
5 Pulsed Power Laboratory
6 Research Reactor Center addition
7 International Institute for Nano & Molecular Medicine
8 Research Park Chiller Plant

Mizzou Botanic Garden Project

9 Coneflower Garden

Projects in Design or Construction

10 Regional Biocontainment Laboratory
11 Elm Street entrance improvements
12 Donald W. Reynolds Journalism Institute
13 Thomas & Nell Lafferre Hall addition/renovation
14 Power Plant upgrades
15 Steam Tunnel upgrade
16 National Plant & Genetics Security Center [USDA facility]
17 Student Center expansion/Brady Commons renovation
18 Mid-Campus Housing
19 Parking Structure #7 - Southeast Gateway
20 University Hospital Patient Care Tower and Ellis Fischel Cancer Center
21 UMHC Orthopaedic Institute
22 Virginia Avenue extension
23 Mick Deaver Drive extension
24 Life Science Incubator
25 Bike lane and bike route marking [GetAbout Columbia Project]

Mizzou Botanic Garden Projects

26 Plant Evaluation Site
27 Eighth Street Circle Planting

Projects in the Planning Stage

28 East Campus Chiller Plant
29 Equine Facility
30 Proposed Bike Trail [GetAbout Columbia Project]
31 Rothwell Plaza
32 School of Music/Performing Arts Center
33 Stadium Road Substation expansion
Child & Family Sciences (to be sited)
School of Health Professions (to be sited)
School of Nursing (to be sited)
State Historical Society of Missouri (to be sited)

Mizzou Botanic Garden Projects

34 Ericaceous Garden
35 McAlester Arboretum
36 Hosta Collection
37 Stephens Pond site improvements

Existing Buildings

A Jesse Hall
B Mizzou Arena
C Ellis Library
D Memorial Union
E Bond Life Sciences Center
F Research Reactor
G Heinkel Building
H Agriculture Building
J Clydesdale Hall
K Student Recreation Complex
L Reynolds Alumni Center

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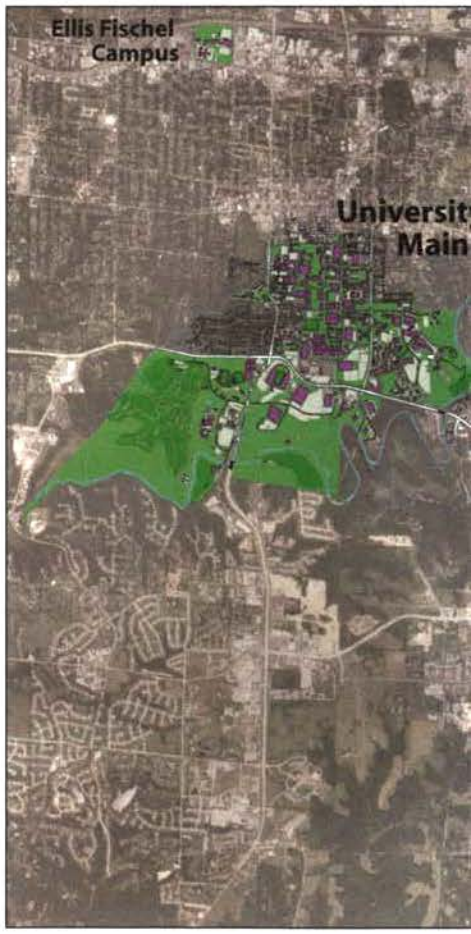
Comments and questions should be sent to the chair of the Camp
142C Stanley Hall; e-mail address: TofleR@missouri.edu. Revised
For more information, see the MU Campus Master Plan web site a
masterplan/index.html.

Regional Overview

us Planning Committee,
dition scheduled for March 2009.
: http://www.cf.missouri.edu/



Base Maps Legend

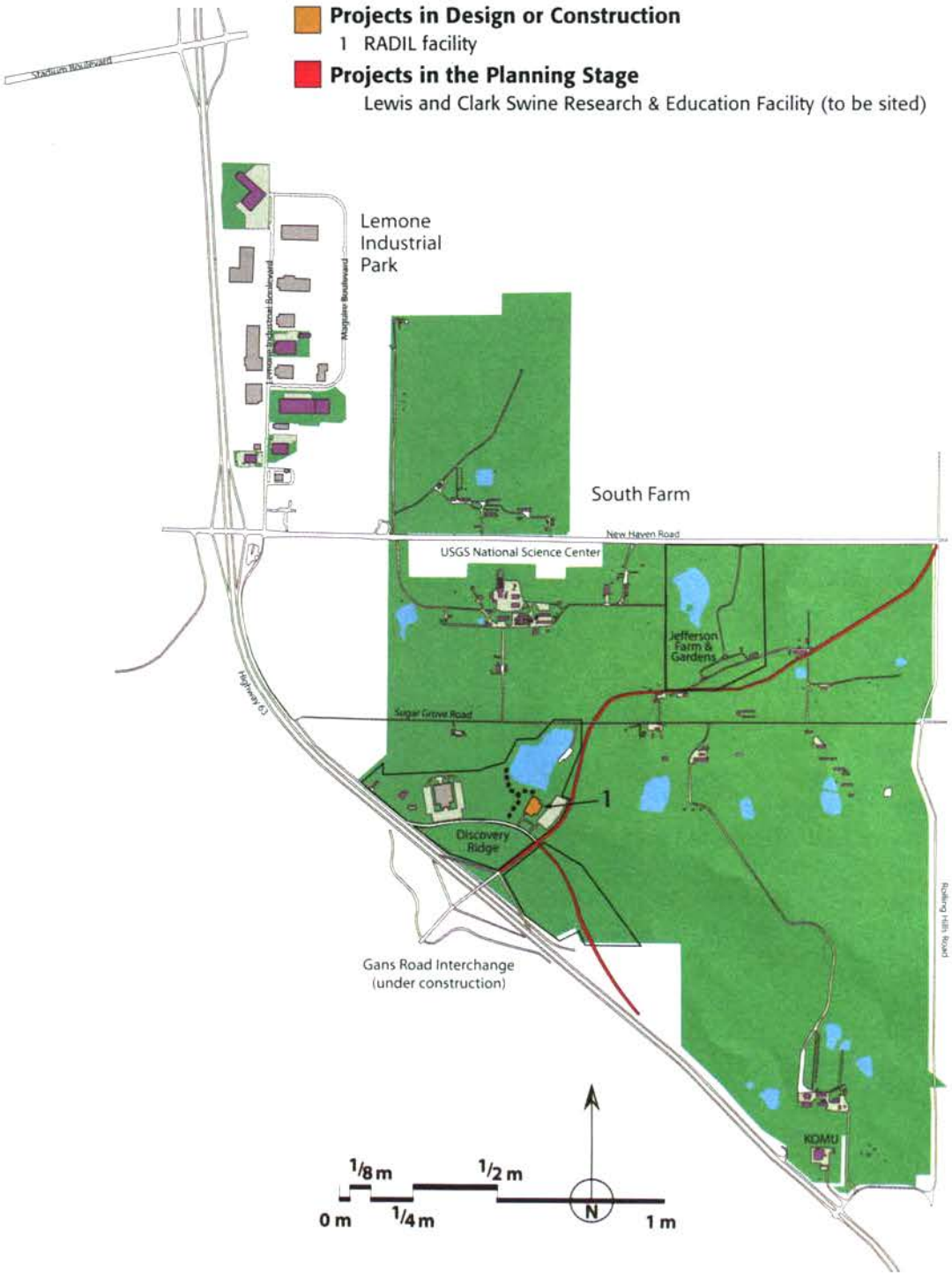
- University land, largely pedestri
small parking areas
- Existing university buildings
- Possible future structures
- Parking
- Parking structures
- Major walks*
- Major bikeways*

*Note: Many walkways and bikeways are shown s
curved and shaped to topography, planting and b

South Farm & Lemone Industrial Park

an but including service drives and

raight for diagrammatic clarity; in actuality many will be
uildings.



Campus and community to benefit from expanded arts facilities

A planning study and concept design have been completed for a new School of Music/Performing Arts Center and expanded visual arts facilities that will add a welcome new vibrancy to MU's core academic environment.

The facility, to be located at the northeast corner of Hitt Street and University Avenue, will house not only music school faculty, staff and students, but will also feature a 1,000-seat concert hall and a 350-seat recital hall. Diagonally across the street, the existing Fine Arts Building will be renovated and expanded to include much-needed teaching, performance, studio and gallery spaces for the Department of Theatre and the Department of Art.

The new facilities are long overdue. The music school, art and theatre departments currently share the nearly 50-year-old Fine Arts Building, which long ago ceased to adequately support the missions of these three disciplines; each department came to rely on remote facilities, none of which meets existing facility standards.

New building makes connections

The new concert hall and its public lobbies will be situated along Hitt Street to reinforce a cultural connection to the city; the School of Music and recital hall will be located along University Avenue, reinforcing the building's academic relationship with the campus.

The building will also feature shared service and support space, individual lobby and lounge space, individual-and group-practice instrument and voice space, classrooms and library space.

Administrative and departmental support space for the School of Music will be organized around a central atrium extending to the second level of the building.

Display, studio space to expand

The Fine Arts Building, which will continue to house theatre and art personnel and facilities, will be expanded and renovated to provide needed space and increased visibility. The existing art gallery will be replaced by an enlarged, multistory display gallery that will also serve as shared lobby and reception space for both departments. Additional studio space will be added for art department functions; and an interior connection from the new lobby to the south end of the building will provide a functional and aesthetic enclosure connecting the art and theatre departments.

An architectural concept of the proposed School of Music/Performing Arts Center shows the entrance at the northeast corner of Hitt Street and University Avenue.

Completion of the SOM/PAC planning study and concept design parallels a 2006 joint urban-study plan among MU, the City of Columbia and Stephens College. Planners seek to develop the area between downtown Columbia and the north edge of campus along Elm Street to effect a town-gown regeneration and revitalization distinctive to Columbia.

Planning ensures infrastructure capacity meets future expansion needs

Building space on the MU campus has grown by an average of about 2 percent per year over the last 20 years, requiring prudent planning of utility supply and infrastructure capacity upgrades to meet increasing campus needs.

Power Plant capacity upgrade

Electric generation capacity added in 2001 should meet campus needs for 15-20 years, but a Combined Heat and Power upgrade project, replacing an existing boiler, is needed to meet campus steam needs for another 15-20 years. The new boiler is designed to burn greater quantities of renewable fuels, such as wood chips. Several other Power Plant projects in design include replacing cooling towers and fuel-handling systems that will facilitate the use of renewable fuels and improve energy efficiency.

A major steam capacity upgrade project — included in the campus capital plan for several years and scheduled to begin this summer — will add needed capacity for future utility needs. Built in the early 1920s, the last upgrade to this system occurred in the mid-1950s.

Utility distribution

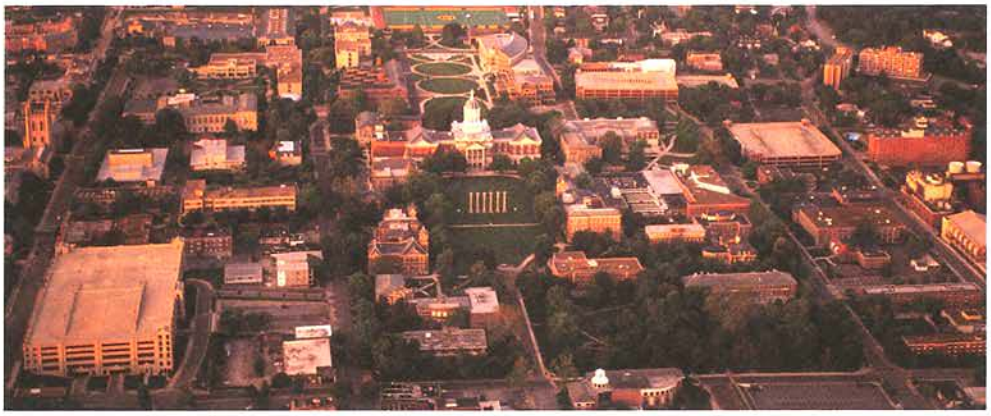
As in all areas of campus, utility production and distribution capacity is a "50-year" planning decision. Computer modeling is used to identify needed capacity improvements in electric, steam and water distribution systems, critical to campus growth.

Future campus growth areas

Two major, long-term growth areas of the campus, the Southeast Gateway and the East Campus, have sufficient steam distribution capacity to accommodate foreseeable building expansion. Upgrades in distribution lines will eventually be necessary to serve the long range "build-out" capacity of these areas, based on projections of appropriate building density and use.

Examining the character and capacity of MU's "central campus"

MU's "central campus" is generally defined as that part of the campus between Elm Street on the north and Rollins Street on the south. The area includes the original Red and White campuses built through the 1930s, undergraduate instruction facilities, the university's major common facilities, e.g. Jesse Hall, Brady Commons, Memorial Union and Ellis Library, and other spaces and buildings since developed that serve the university's expanding core academic programs.



MU's "central campus," generally framed by Elm Street on the north and Rollins Street on the south, is the focus of an urban design study. *(Photo courtesy of Publications & Alumni Communication)*

Sustaining MU's flagship campus character

This area is the subject of a focused urban design study intended to both confirm the central campus' capacity to accommodate future academic facilities, and ensure that future development is consistent with the established character of this most-iconic-and-memorable part of Mizzou. The need to confirm future central campus capacity is essential in sustaining Mizzou's role as a dynamic and enduring flagship campus. The urban design study defines potential building areas that can be achieved by renovations and expansion of existing buildings and by redevelopment of currently underutilized sites in the area.

The study's principal goal is to position future buildings to frame and animate the pedestrian open-space environment in much the same way as Francis Quadrangle and Carnahan Quadrangle are handsomely framed by architecture. Recognizing that 21st century buildings are typically larger than most buildings in this historic campus area, it is important to ensure that future buildings are compatible in scale with surrounding building and spaces. Maintaining a compact campus where academic and community interaction is strengthened by proximity is critical.

Defining edges and corridors

To further these principles, priority investigations to date look at how to 1) complete the architectural edges of Carnahan Quad on the west side of the Arvard Strickland Building and south of Rollins Street; 2) define the future edges and landscape character of Kuhlman Court and 3) enhance the clarity of the pedestrian corridor between Kuhlman Court and the Christopher S. Bond Life Sciences Center. During the course of this year, the central campus urban design study will expand to include future building sites as far north as Elm Street, addressing those sites in the context of the open spaces they are intended to define.

PLANNING PRINCIPLES

REINFORCE THE UNIVERSITY MISSION & VALUES: Organize facilities and places to promote MU's mission and values.

PRIDE OF THE STATE: Express the importance of the campus to the state, nation and world.

DIVERSITY WITH THE UNITY: Create and maintain campus settings that bring together the diversity of people, heritages and culture.

STRONG 'SENSE OF PLACE': Make the campus a distinctively meaningful and memorable place for all members of the University community and for the citizens of Missouri.

RESPECT NATURAL & ARCHITECTURAL HERITAGE: Design facilities to respect the scale, materials and textures embodied in the historic architecture and natural landscape of the campus.

ENVIRONMENTAL SUSTAINABILITY: Embrace suitable strategies in promoting sustainable sites, water efficiency, energy and atmosphere, materials and resources, and indoor environmental quality.

RECRUITMENT-RETENTION: Emphasize the qualities of the campus that help attract and keep students, faculty and staff.

PLANNING & DESIGN INTEGRITY: Provide facilities and grounds that meet the functional needs of the institution and that comply with the intent of the Design Principles to provide an overall aesthetical and pleasing campus experience.

ENHANCE COMMUNITY SPIRIT: Locate campus functions in close proximity to enhance scholarly activities and social interaction within a safe and secure campus.

ALLOW FOR PRUDENT EXPANSION OF CAMPUS FUNCTIONS: Provide for facilities expansion in ways that respect neighbors and effectively utilize limited land resources, while conserving and protecting natural resources.

PEDESTRIAN DOMINANCE: Maintain a pedestrian-dominant campus recognizing and gracefully accommodating the need for bicycles and vehicles.

TRANSPORTATION & VEHICLE CIRCULATION: Maintain a safe, functional and aesthetically compatible system of transportation, vehicle circulation and parking.

RESPOND TO ACCESSIBILITY NEEDS: Continue the tradition of providing optimal access to persons with disabilities.

FACILITIES & GROUNDS STEWARDSHIP: Preserve the quality and utility of existing facilities for sustainable use of established resources.

Additional Information

MU CAMPUS MASTER PLAN ONLINE:
http://www.cf.missouri.edu/masterplan/index.html

The 2008 Campus Master Plan public forum will be from 10 a.m. to 11 a.m., Wednesday, March 12, in Mark Twain Room, Memorial Union.