

Infrastructure and Academic Support

Vision

The University's infrastructure will support, enable, and enhance the work of its faculty, staff, and students. Its people and processes will be responsive and customer oriented. Its facilities and its information resources and technologies will fully support its missions of teaching, scholarship, and community outreach and engagement. The quality and attractiveness of the overall work environment will assist in the recruitment and retention of outstanding faculty, students, and staff.

In ten years time the University will have made substantial progress towards becoming a showcase for environmental sustainability. It will have slashed energy use, expanded green spaces, dramatically reduced its carbon footprint, and built and retrofitted buildings to strict environmental standards. Complementing these concrete actions with its teaching, research, and development efforts in energy science and policy, smart growth, environmental mapping, sustainable agriculture, and other fields, the institution will be widely recognized as a national model for a Green University.

Goals

- **Goal 1: Energy Use and Sustainability.** Substantially reduce energy use and greenhouse gas emissions and become a model for environmental stewardship. As the third largest "city" in the state, the university will have a significant impact, both as a participant and as a showcase, in addressing energy issues.
- **Goal 2: Physical Infrastructure Renewal.** Renew the University's basic infrastructure by building new facilities and substantially renovating existing ones. This includes buildings, roads, utilities, grounds and landscaping, student housing, and information technology resources needed to fully support the University's mission. Accomplish the goals of the Facilities Master Plan while ensuring the highest environmental standards in this process.
- **Goal 3: Administrative Process Improvement.** Streamline administrative processes to decrease the time to completion and to increase the quality of critical as well as routine projects across campus.
- **Goal 4: Learning and Research Environment.** Maintain up-to-date teaching and research facilities, equipment, and technological tools to support the University's mission.
- **Goal 5: An Enhanced Information Environment.** Raise the quality of the information environment for research and teaching. Provide the next generation of integrated access to reservoirs of knowledge and maximum connectivity to research and teaching networks.

Strategies

1. Energy Use and Sustainability:

- Continue to develop and implement strategies to reduce institutional energy use, such as the use of efficient lighting, heating, and cooling systems; the deployment of smart

environmental controls; encouraging responsible energy use; and development and use of advanced systems for energy generation and storage.

- With the Office of Sustainability as coordinator, develop and execute a bold plan to become carbon neutral. This will require a fundamental rethinking of how the university does business. It will include, among other elements, completing and keeping current a comprehensive inventory of all greenhouse gas emissions, developing a strategy for reducing unnecessary institutional travel, expanding recycling and the use of recycled materials, holding new construction and renovation to stringent LEED standards, expanding campus green spaces, and discouraging automobile traffic to and from the University. This plan will include all aspects of the American College and University Presidents' Climate Commitment.

2. Physical Infrastructure Renewal:

- Work aggressively to secure funding for construction of the new facilities that will reduce our substantial space deficit and adequately support our mission of outstanding teaching and world class research. Seek targeted capital gifts that can facilitate state approval and funding.
- Continue to plan campus development in accord with the Facilities Master Plan, as supplemented with its Environmental Stewardship Guidelines.
- Develop a strategic facilities and information technology renovation plan tied to campus academic and administrative priorities to modernize research and office space and to upgrade classrooms to promote quality teaching, learning and research. Continue working towards the goal of devoting 2% of the replacement value of facilities annually for facilities renewal. Aggressively pursue private and federal funds for renovations and new buildings.
- Increase the number of available undergraduate and graduate student beds to meet student demand. Support a combination of state owned and public-private partnerships on campus and private projects off campus to increase the quality and amount of student housing.
- Preserve and enhance the architectural heritage of the campus through the continued development of open spaces, gathering places, vistas of green lawn and trees, and groupings of buildings that promote a sense of community. Plan the built and natural environment to preserve the beauty of the campus and protect the environment as the implementation of a Landscape Master Plan.

3. Administrative Process Improvement:

- Create an efficient, effective and integrated state-of-the-art administrative applications suite that provides 24x7 access to university services and minimizes the effort required for each transaction. Automation of administrative transactions and the use of information technology will be keys to success.

- Reengineer business processes as needed to increase efficiency and avoid duplication of effort. Establish a culture in all service units that gives the highest priorities to customer satisfaction and to the timely completion of all projects with high quality and within budget.
- Empower units that have the capability to operate procurement processes at the highest allowed levels to be authorized for those levels.

4. Learning and Research Environment:

- Make classrooms technologically “smart” and physically attractive. Create special purpose information technology enhanced classrooms and laboratories to support next generation instruction capabilities. Students must experience and use the technologies of the future to ensure their success in later life. Physically attractive classrooms are more conducive to learning. New teaching facilities, such as the University Teaching Center, must be built and should incorporate state-of-the-art technology.
- Support the development of special purpose facilities and the procurement of specialized equipment that will enable the establishment of promising research programs in high priority areas. As one example, significantly upgrade animal care facilities.
- Develop high performance computing and networking facilities to support computational modeling, simulation, and other computing intensive applications in science, technology, and mathematics research and education programs.
- Create a robust “virtual presence” infrastructure to support distance learning, research collaborations, international programs, and daily business activities. Even where face to face meetings are feasible, virtual presence saves valuable time otherwise wasted in travel and also can significantly reduce the University’s carbon footprint.
- Create a campus-wide partnership to deploy an IT security infrastructure that is both supportable and extendable as new technology is developed. Ensure a secure and reliable campus infrastructure that is protected from attacks, redundant for critical operations, and resistant to failures.

5. An Enhanced Information Environment:

- Identify strategies to achieve an information rich environment for research and teaching even as costs are rising precipitously. We must ensure the availability of key informational resources at a time when a new generation of library products promises to magnify the efficiency of effective research and teaching. Access to databases is a critical component for effective teaching and research.
- Investigate consortia and other economic structures to maximize cost savings while providing students and faculty access to the full range of information resources necessary to accomplish top tier research and teaching.

- Develop a strategy to align information resources with the strategic research and teaching priorities of the University.
- Maximize efficient access to the information environment including maximum availability of resources through the desktop and laptop.
- Provide second generation search and access capabilities to faculty and students, enhancing their ability to link their research needs to established reservoirs of knowledge.
- Promote innovative arrangements for peer evaluation and internet based distribution networks, such as DRUM, to promote general dissemination of the university's research productivity.
- Make every effort to fulfill responsibilities of libraries at a top research institution to providing reservoirs of knowledge broadly accessible in cooperative institutional arrangements benefiting our university and others. Such provision includes attention to rare books, primary collections, and making resources available in appropriate formats.