

MICHIGAN STATE
U N I V E R S I T Y

October 26, 2012

MEMORANDUM

To: Board of Trustees Finance Committee

From: Fred Poston
Kim Wilcox

Subject: The 2013-14 Appropriation Request

RECOMMENDATION:

BE IT RESOLVED that the Trustee Finance Committee recommends to the Board of Trustees adoption of the Appropriation Request, including needs for the University General Fund, the AgBioResearch and the Michigan State University Extension.

BACKGROUND:

The Appropriation Request provides parameters that will guide development of MSU requests through the 2013-14 appropriation cycle. Action on the request authorizes the administration to respond to the Michigan Department of Management and Budget reporting requirements.

Attachments

C: Board of Trustees Policy Committee
President Lou Anna Kimsey Simon
William Beekman, Secretary to the Board
Mark Burnham, Vice President for Governmental Affairs
Robert A. Noto, Vice President for Legal Affairs and General Counsel
David Byelich, Assistant Vice President and Director



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Michigan State University 2013–14 Appropriation Request

Michigan State University (MSU) ranks in the top 100 universities in the world in two different global rankings. It provides the undergraduate and graduate education, research, and outreach to compete and innovate in the global knowledge-based economy for the benefit of Michigan. The university continues to work with a broad array of stakeholders to target quality outcomes, productivity, affordability, and economic impact.

MSU's economic impact of approximately \$4.3 billion is essential to Michigan's current and future growth, whether by assisting in the creation of jobs for thousands of people, attracting funding for research that can change and save lives, educating the next generation of science and business leaders, or simply enhancing contributions to the coffers of the State of Michigan (State) because its alumni earn high-end salaries.

The three University Research Corridor (URC) universities, including Michigan State University, serve as engines for economic recovery in the State, making a \$15.2 billion impact on Michigan's economy in FY10. The URC expended more than \$1.87 billion in Research and Development (R&D), helped cultivate 14 start-ups, and 72,713 jobs in Michigan were directly and indirectly supported by the URC's operations in the State in FY10.

MSU provides world-class graduate and undergraduate education and is uniquely positioned to foster emerging bioeconomy and alternative energy research in the agricultural and manufacturing sectors of the economy. In addition, MSU seeks to partner with the State to promote growth within the business community through increased numbers of engineering graduates. MSU is prepared to meet society's expectations for a global university, helping to build the local and national economy with breakthrough discoveries and new knowledge with worldwide impact. Through collaborations with leaders in Michigan and throughout the nation as well as private sector collaborations, MSU is working to find solutions for the key problems facing society and serve as a critical conduit for sustaining Michigan's new economic model.

Recent economic circumstances and current fiscal realities demand our continued attention. In the face of significantly reduced funding over time and increasing student demands, MSU must focus carefully on our priorities and modify our activities, attitudes, and culture to continue to constrain expenditures.

MSU is changing the way we work, but not the quality of the work we do for our students and others in communities close to home and around the world. This kind of transformational change is necessary to preserve the quality of our academic programs over the long term as we continue to recruit highly talented students and faculty.

MSU requests recurring FY14 appropriations support for the general fund, MSU AgBioResearch (MABR), and MSU Extension (MSUE) sufficient to sustain FY13 programming levels and invest in Michigan's economic future.

"The dogmas of the quiet past are inadequate to the stormy present. ... As our case is new, so we must think anew and act anew."

—Abraham Lincoln, 16th President of the United States

Emerging themes

In order to assure that MSU remains a best value for students and other stakeholders, the university has undertaken a number of reductions including \$100 million in cuts, moratoria placed upon or elimination of more than 40 academic programs, trimmed benefit programs, and foregone salary increases. These efforts resulted in significant changes to the academic enterprise, student services, employee compensation and benefits, purchasing and business processes, and other areas. The university will continue working to improve operational processes and target quality outcomes, productivity, affordability, and economic impact.

MSU funding

MSU continues to be a leader in creating knowledge for the 21st century and as such is recognized as one of the world's top 100 universities. MSU received \$502 million in external funding during FY12 of which about 67 percent was research related. The federal share of research funding was approximately 82 percent. Research and scholarly work of this magnitude has a significant impact on the Michigan economy, both in expenditures and jobs. MSU actively pursues economic growth through programs across the university. Examples include the MSU Center for Community and Economic Development, which provides training and consulting services to Michigan communities.

The university is also a key player in the development of Michigan's health care and life science sector including educating both nurses and physicians. MSU is involved in partnerships with dozens of hospitals to train physicians, while bringing federal graduate medical education funding into those communities. The College of Human Medicine has campuses in seven communities including Grand Rapids and Traverse City; the College of Osteopathic Medicine has campus locations in East Lansing, Detroit, and Macomb County.

Recently, MSU combined the diverse resources for business outreach, technology commercialization, and new business formation under one roof: the MSU Innovation Center. The Innovation Center is MSU's single site for economic value creations from MSU innovations. Entrepreneurs and established businesses work with Business-CONNECT, MSU's portal for engagement with the business community; they access patented technologies at MSU Technologies (the university's technology transfer office); and they engage in company creation and investment at Spartan Innovations L3C, which focuses on creating sustainable MSU start-ups.

Additionally, the Product Center at MSU helps Michigan entrepreneurs develop and commercialize high-value, consumer-responsive products and businesses in the agriculture, natural resources, and bioeconomy sectors. Since it began in 2004, the Product Center has provided a wide range of venture development services to more than 2,125 clients. It has assisted in the formation of more than 1,232 ventures for new and existing firms, leading to the realized launch or expansion of 254 businesses across Michigan that generated \$315 million in annual sales, more than \$317 million in investment in Michigan, and the creation/retention of nearly 1,460 jobs.

Funding also impacts the students MSU is able to attract and retain. Entering student GPA/ACT scores are up over the last ten years. MSU has 27 academic programs in the top 20 nationally and four graduate programs rank number 1. At MSU, 90 percent of graduating seniors who responded last year to the National Survey of Student Engagement rated their educational experience as good or excellent, and an equal proportion said they would attend MSU if they had to do it over again. Ninety-six percent of seniors affirmed that MSU provides support for student success.

MSU's six-year graduation rate for the class of 2011 was 77 percent, which is 14 percentage points higher than the rate predicted by *U.S. News & World Report* based on incoming student characteristics. MSU's plus-14 rate is not only the highest in the State, but also second-highest in the Big Ten, exemplifying MSU's willingness to take risks when investing in a student's potential. Moreover, it is a measure of quality that demonstrates how well MSU is using its educational resources to graduate students, even in difficult budgetary times.

MSU is accountable to Michigan citizens. It has the highest number of in-state students among Michigan public universities. Michigan is always the first beneficiary of MSU's graduates as it delivers high-quality academic programs and global networks with Michigan applications.

In order to sustain and build upon the significant contributions made to the state by MSU, it is imperative to arrive at a stable, predictable approach to funding and essential to recognize the differential costs associated with world-ranked instruction and research missions. Performance funding pools using evidence-based graduation rate, degree completions, institutional support as a percentage of core expenditures, and tuition restraint should recognize relative institutional size to provide equitable incentives for all institutions. Additionally, performance funding metrics should recognize institutional standing versus appropriate peers as well as institutional progress. Unfortunately, the final performance funding model used by the state last year favored smaller universities and did not recognize the value that major research universities provide, or graduate education.

State reductions in higher education appropriations through FY12 resulted in reductions to MSU appropriations of 25 percent since FY01, representing a loss of over \$330 million in operational resources over 12 years. Over the last five years, Michigan ranks 48th among the states in changes to appropriations and currently trails national appropriation per-student levels by 18 percent.

MSU requests recurring appropriations support for the general fund, MABR, and MSUE sufficient to sustain FY13 programming levels and invest in Michigan's economic future. More than ever, it is essential that every available dollar work on behalf of the people of Michigan in ways that will bring the greatest value and return, strengthen communities, fuel the economy, and provide all citizens with a better quality of life.

Financial aid: assuring opportunity

MSU is committed to assuring opportunity to higher education for Michigan students. Over 80 percent of undergraduate students and over 74 percent of all students come from Michigan's 83 counties. Three quarters of MSU students come from families with incomes less than \$125,000. For FY13, MSU continued to increase financial aid at a rate greater than increases

to tuition with approximately \$110.2 million budgeted in financial aid programs, representing a total increase of more than 6.7 percent.

In FY12, 69 percent of all MSU students received some form of financial aid and 25 percent of undergraduate students received a Pell Grant. MSU is also one of only two Big Ten institutions to maintain its population of Pell-eligible students over the decade. In addition to high-need students, MSU carefully monitors the distribution of its student family income and focuses significant aid resources at the students with family income just above Pell levels.

MSU AgBioResearch and MSU Extension

As Michigan's premier land-grant university, MSU is committed to working with our stakeholders to meet the needs of our agriculture industry and has a programmatic presence in communities across the state. The annual economic impact of the food system and agribusiness sector exceeds \$71 billion and is a force for economic stability in Michigan. With agribusiness among the fastest growing and largest sectors in the state's economy, MSU, through the research and educational efforts of MSU AgBioResearch and MSU Extension, contributes to Michigan's economy with significant research, educational programs, and a community presence to boost economic development and growth related to agriculture and natural resources, community vitality, entrepreneurship, and career preparation for young people. Therefore, it is essential that full recurring support be provided to both MSU AgBioResearch and MSU Extension, including inflationary increases.

MSU Extension focuses its educational efforts on four statewide program areas:

- Greening Michigan: Leveraging Natural and Human Assets for Prosperity
- Enhancing Michigan's First Green Industry: Agriculture and Agribusiness
- Preparing Michigan's Children and Youth for the Future
- Improving the Health and Nutrition of Michigan Residents

MSU AgBioResearch is focusing on the following research areas:

- Food and health
- Environmental stewardship and natural resource policy and management
- Enhancing profitability in agriculture and natural resources
- Securing food and fiber systems
- Families and community vitality

In an era of significantly reduced state funding and increasing expenses, MSU is seeking to change how it works while holding true to core values and commitments. This process is aimed at building value and ensuring quality. It seeks to build a new model that will transform the way we are building value and ensuring quality. It seeks to build a new model that will transform the way we work on behalf of our students, stakeholders, and the communities we serve, both locally and globally, to shape a shared future of sustainable prosperity.

In addition to supporting our ongoing Extension and AgBioResearch programs, MSU is working with Michigan Department of Agriculture & Rural Development (MDARD) to develop an initiative to help grow the agricultural industry. Further, MSU proposes creation of an emergency fund within MDARD to respond to any rapidly emerging threats to the agricultural industry.

Facility for Rare Isotope Beams

MSU continues working with the U.S. Department of Energy (DOE) developing the Facility for Rare Isotope Beams (FRIB), continues to manage against the annual plan prepared by MSU and approved by DOE, continues on track towards CD-2/3A approval. The centerpiece of the new user facility will be a superconducting linear accelerator that will increase dramatically the reach of rare isotope research in the United States. The accelerator will produce isotopes that normally exist only in the most extreme environments in the universe and will expand the usefulness of isotopes in a broad range of applications from modeling stars to understanding the workings of nanoscale electronic devices.

FRIB is an important project for American science and the State that not only will keep MSU on the cutting edge of nuclear science, but will ensure the training of the nuclear scientists of tomorrow while bolstering the economies of mid-Michigan and the entire State. FRIB will cost approximately \$679 million to design and build. A \$1.2 million appropriation for FY12 was made to cover the state's share. Construction began in 2012 and will be completed by 2020. It is projected to create hundreds of jobs in mid-Michigan while bringing in more than \$1 billion of economic activity to Michigan in the next 20 years. MSU looks forward to continuing its partnership with the State of Michigan to assure the successful completion of this project.

MSU is seeking to secure stable funding from the state for the community cost share portion of the project.

Capital outlay

Prior Capital Outlay request identified the Plant Science Facilities-Bioeconomy/Bio Engineering Facility as our highest priority project. In June 2012 the State passed a construction authorization for the Bio Engineering Facility with a total authorized cost of \$40,340,200. The State share is \$30,000,000 and the Michigan State University share is \$10,340,200. Given the extraordinary circumstances of the 2010 capital outlay bill, favorable construction climate, and the university's continued emphasis on biomedical and engineering research, we will seek leave to amend our submission later in 2012. We anticipate any such adjustments to include a combination of completed and shelled space that would approximately double the gross square footage of the building. The project goals and justification would remain unchanged, and the State share would remain as originally authorized.

The capital outlay requests support programs that have strong national reputations, expanding research bases, and high enrollment demand that will sustain the university and its contributions to Michigan. Funding of these requests will provide economic development in the state, now and in the long term.

New construction

New construction is needed to support high-priority programs ranging from the sciences to academic/administrative technology. Our highest priority for new construction is the Interdisciplinary Science and Technology building. The facilities are needed to support current and future programmatic initiatives with an emphasis on support for the biomedical, biological and engineering sciences, and economic development of Michigan, now and in the long term.

Renovations and additions

Requests for renovations and/or additions address extensive programmatic and maintenance improvements required by buildings previously funded by the State. Renovations may be needed to reconfigure space in order to support the work of the programs housed in those facilities, upgrades to building systems, and provisions for barrier-free access. In other cases, due to program requirements, condition, age, and long-term value, entire renovation of a building is warranted.

Requests for major renovations and/or additions include the Plant Sciences-Bioeconomy, Biological Sciences, and Music facilities.

Major systems replacement

Current forecasts anticipate general fund facility and infrastructure needs of approximately \$99 million over the next five years. In view of the extensive facility needs it faces, MSU has had to draw upon an increasing amount of internal university resources to address the most critical facility maintenance and programmatic requirements. The ability to continue the trend of self-funding these capital improvements is not sustainable without impact on other programs.

The university seeks funding for more targeted and specific building systems maintenance and instructional space facility upgrades. Examples of systems in need of repair or replacement include roofing, windows, electrical, mechanical, chiller, refrigeration, steam, fire, security, and barrier-free access. Instructional space upgrades may include furniture, ceilings, lighting, painting, power, data and technology support, and lab benches and fume hoods.

Conclusion

MSU, among the best research universities in the world, is uniquely positioned to contribute to critical challenges facing Michigan and the nation. It is a site for creativity, invention, and discovery, all contributing to a long-standing tradition of innovation and a diverse range of partnerships that align resources to produce the greatest impact for the greatest benefit.

State support remains critical to making this happen. MSU requests recurring appropriations support for the general fund, MABR, and MSUE sufficient to sustain FY13 programming levels and invest in Michigan's economic future.

During times of increasingly strained financial resources, MSU continues to reinvest in the academic core of the university while ensuring that its strategic imperatives are integrated into broader academic and financial decisions. MSU applies technology for greater effectiveness in instruction and administration, emphasizes cost-saving measures, and manages its physical plant wisely.

MSU will continue to transform its activities in ways that create greater efficiency and effectiveness as it builds a new model to achieve its goals while making sure the transformation does not come at the expenses of its core values—quality, inclusion, and connectivity. It will continue to recruit highly talented students and faculty, concentrate on research and development activities, and work to facilitate public and private sector collaborations and an efficient system to transfer technology from the classroom to industry.

MSU continues to be a leader as a global agenda for American higher education takes shape, building on its extraordinary foundation to look across disciplines and boundaries to help solve problems and prepare students to compete globally in a knowledge-based economy.

Michigan State University is committed to Michigan businesses, students, and families and continues to be a critical conduit for sustaining Michigan's reinvention and economic transformation.