

Testimony of MSU President Lou Anna K. Simon

Michigan House of Representatives/Senate Appropriations

Higher Education Subcommittees

March 23, 2011

Thank you for inviting me to come before you today. I appreciate the opportunity to talk about Michigan State University and the work we do on behalf of the citizens of Michigan.

All of us have a right to be proud of Michigan's diverse public higher education system, where each university plays an important role. Michigan State is Michigan's land-grant institution and our legacy mission is our commitment to making a world-class education available to Michigan's sons and daughters. We're a university that strives to be good enough for the proudest and open to the poorest, but that means more than excellent teaching. Land grant is a model positioned to compete with the "brand name" institutions, connecting students and our stakeholders around Michigan to cutting-edge knowledge of the sort increasingly necessary in a global knowledge economy.

Michigan State's reputation for quality in the global higher education community reflects well on Michigan. Our lines of business — talent development, knowledge discovery, and innovation — align perfectly with what I think we all agree will be key drivers for Michigan's prosperity in the 21st century.

Focused on student success

We've been committed to this level of globally-benchmarked quality for more than 50 years at Michigan State. My predecessor, John Hannah, foresaw a flattening world as far back as World War II and he started us down this road, while keeping us firmly anchored in Michigan and focused on its prosperity. Today we are a top university both for study abroad and for hosting international students — one way we're bringing the best of the world to Michigan and the best of Michigan to the world.

We are committed to maintaining access to Michigan students while continuing to improve quality and enhance the value of an MSU degree. We enroll 17 percent of all Michigan students attending public four-year institutions and keep our proportion of state resident enrollment at a high level. Today we have the same state resident entering class enrollment proportion as we did in 1960, about 80 percent, while student transfers and other factors push up our total undergraduate resident proportion to about 83 percent at present.

Not every institution has maintained such fidelity to its stakeholders because there is a price to pay, economically and in the quality of the undergraduate body. If MSU's undergraduate residency profile were to reflect the average of the Big Ten, for example, we would enjoy \$85 million more tuition revenue annually. That's one way to measure the cost we bear, you could say, of our commitment to Michigan families. It should be no surprise, then, that we operate with about the lowest total tuition, fees, and appropriations per student in the Big Ten.

But we are working very diligently to not allow financial pressures to compromise our quality. We've cut the student-to-faculty ratio to 16-to-1, which is a little better than the Big Ten average. We're at or near the top of the Big Ten, moreover, for the proportion of expenses related to instruction, research and public service. These benchmarks show how we have maintained access to state residents, without surrendering to trade-offs in building quality.

Here's another measure. Over the past decade, MSU is one of only two schools in the Big Ten that maintained its general proportion of high need, Pell eligible students. In the last year, in part because of the difficult economy, we've gone up from 19 percent of our students to 23 percent who are Pell eligible. That's about 9,500 students eligible for government assistance on the basis of significant need. Three-quarters of our undergraduates receive some type of financial aid now, and that figure is about 89 percent for in-state freshmen.

Three-quarters of our students come from families with incomes of \$125,000 or less, and we work hard to maintain access for the children of Michigan's middle class families. It's for that reason our general fund financial aid allocations have more than doubled, to \$93.4 million, in the last decade.

Still, about half our graduating seniors carry debt, averaging about \$19,700 — that's up from \$18,500 five years ago. Historically, our students had significant support from Michigan's student financial aid programs. Today, this state has all but eliminated financial aid, which in our case has cut support for needy students \$18 million annually in the past three years alone. This is on top of cuts to the university, which then make it difficult for us to continue the level of access we all want and keep the debt our graduates are burdened with low.

Still, we rank first in the Big Ten for students having the lowest average debt at graduation, but we remain very concerned. One positive note is that the default rates for our students' loans over the last five years range between a third to half of the national average, or approximately 1.7 percent.

And the students keep coming. Over the last generation or so we have increased enrollments by 7,000 to accommodate rising applications, some 4,000 more students in

the last 10 years alone. Applications in our last cycle rose past 26,900, an all-time high, but we're on track to break the record again this year.

We've also improved the quality of the students we admit. While our 2010 entering class of 7,200 was 900 students larger than the 1980 group, their collective GPA rose from 3.19 to 3.61 and their ACT scores rose from 22.1 to 25.4

Important student outcomes are reflected in our graduation rates. We exceed the average graduation rates for our peer institutions across the county by 8 percent and persistence rates by 4 percent. At 77 percent, our six-year graduation rate exceeds the predicted rate — based on the academic credentials of our incoming freshmen — by 13 percentage points, as calculated in the most recent *U.S. News* rankings.

We are putting a large focus on improving student engagement starting at the undergraduate level. At least a quarter of our seniors work with faculty outside of class on research projects, something we are trying to make an integral part of every student's experience. Half of our graduating seniors today have worked in an internship.

We survey graduates every year, and of the 73 percent last year's graduates who responded, 82 percent said they are employed — mostly in Michigan — or are continuing their education. Most said their jobs were either directly related to their career goals or are stepping stones. In fact, 25 students told us that they were starting businesses upon graduation, just a small example of the entrepreneurial spirit the students of today demonstrate and we encourage.

We are constantly looking for ways to improve our program for students, giving them the tools to succeed in college and the experiences they will need to be competitive when they leave us. We work very closely with employers to gauge their needs as well, to inform the work we do and keep it relevant for today's world.

The vast majority of our graduating seniors have told us they would like nothing more than to pursue their careers in Michigan. It's true many do find their first jobs out of state — we strive, after all, to make them globally competitive in their careers. But keeping them here is our problem and not theirs, and it's one of the reasons Michigan State works so hard to promote economic development and quality of life here in Michigan.

The land-grant legacy

As the nation's pioneer land-grant institution, we take very seriously our obligation to the people of Michigan ... which includes providing access to a world-class education to even those of the most modest means. We do this not just to open vast personal opportunity to every resident but as a matter of public good ... understanding that the rising tide of achievement lifts all of our boats.

Our nation's founding fathers understood the importance of extending education to the general population when they drafted the Northwest Ordinance of 1787. That document specified that America's expansion would come by means of admitting new states and – critically — linked the nation's prosperity to public education by setting aside public land in each county for that purpose.

What a radical notion —providing the opportunity for humble people to rise to the elite class! Some fourscore years later, other foresighted people, including President Abraham Lincoln, saw fit to extend that concept to higher education by creating the Land-grant system through the passage of the Morrill Act.

Lincoln and the Congress did that despite the cost, and in the middle of a civil war that was going very badly, because they knew that you have to invest in the future even when times are difficult. It is a testament to the innovative spirit of our state that a new, struggling college in the “Old Northwest” state of Michigan would become the pioneer for a model for the entire nation to serve a new age.

The concept was radical: to provide the means to create a university with the mission of transforming the economy and the society itself through the conduct of research and the integration of that research into the critical industries of the day. That mission continues today.

The land-grant movement fostered many great universities across the nation and truly helped make the 20th century the “American Century.” So, as we approach next year's sesquicentennial of the Morrill “land grant” Act, it's worth reflecting on the value —and the values — of land-grant institutions in the 21st century. It is especially important to remember that when the land-grant act was passed, the nation was at a crossroads. War, debt, and crisis were the words of the day, but despite those brutal realities, the nation and its leadership invested in the future.

Critical elements of public engagement

Community outreach and public engagement are part of the DNA of a land-grant institution, and account for a great proportion of effort for MSU. We define outreach and engagement as scholarship that cuts across teaching, research, and service. It involves generating, transmitting, applying, and preserving knowledge for the direct benefit of external audiences in ways that are consistent with our values and our mission.

The net impact of our engagement enterprise is difficult to measure, but MSU is a data-driven organization. Our most recent annual survey of faculty and academic staff determined that our people devoted at least \$16 million of their salaries in 2009 to addressing issues of public concern – and close to half of the 827 respondents said they did so working with external partners.

Our engagement mission starts at the undergraduate level and our student service-learning program, coming up on its 50th anniversary. For the past 42 years it has been coordinated by our Center for Service-Learning and Civic Engagement, which was honored with the 2008 Presidential Award for General Community Service and last year registered 16,000 students.

This ethos continues after graduation, we've found. Michigan State is a top source of Peace Corps volunteers and Teach for America was a top destination for MSU graduates last year.

Our engagement mission as you know includes our Extension service, which partners with local stakeholders to promote prosperity in every corner of Michigan, urban as well as rural, in all 83 counties. We reorganized Extension last year to streamline operations and to devote more resources to knowledge delivery and to focus on Michigan's 21st century priorities.

We've repositioned the Agricultural Experiment Station network as MSU AgBioResearch to better represent the breadth of its research program. It is these researchers who are finding novel ways to fight invasive species from the sea lamprey to the deer tick ... who are doing the very difficult work of coaxing fuel from waste wood and cornstalks ... and supporting Michigan's 100-plus bio-economy companies.

MSU's leadership in specialty crop research has yielded three significant USDA grant awards in as many years, totaling \$23.8 million. That is funding toward improving the quality, yield, hardiness, and diseases resistance of potatoes and tomatoes; of apples, peaches, cherries, and strawberries; and of the common bean, of which Michigan is a top producer.

Using state funding to leverage these funding opportunities is critical not just to MSU but to Michigan. We're also very concerned about the effects of proposed revenue sharing cuts on our partner communities' ability to support cooperative Extension services — I emphasize the word "cooperative" here, because that's how we make it work. We have to have buy-in from our local partners.

A statewide medical education presence

When we discuss our outreach and engagement mission, I need to point out that it includes our medical education programs. Michigan State University educates medical students at nearly 40 sites across the state, from Detroit to Houghton. That includes five main campuses for first- and second-year students and 32 sites affiliated with hospitals, physicians and other health-care providers for our third- and fourth-year students.

You are probably aware of the Secchia Center in Grand Rapids, which our College of Human Medicine opened last year in cooperation with our local partners. There, we are stepping up our medical teaching and research. But we're also in places like Macomb County through our College of Osteopathic Medicine.

MSU's affiliated hospitals count approximately 2,500 residency positions and MSU provides academic oversight for most of those. Between our two medical schools, we can claim as many medical residents as any health care organization in the state. More than half our medical graduates, moreover, remain to practice in Michigan.

We're the only university in the country to support three medical schools, in fact, counting our College of Veterinary Medicine. Our vet school is one of the few in the world studying lung and upper airway function in large domestic animals, and that allows us to conduct award-winning respiratory research for the benefit of humans and animals.

MSU's Diagnostic Center for Population and Animal Health is a full-service veterinary diagnostic laboratory we run, handling more than 220,000 cases involving approximately 1.5 million tests annually. Its faculty and staff work with national, state, and local officials to research and counter threats such as bird flu, bovine tuberculosis, West Nile virus, and chronic wasting disease.

And our College of Nursing is expanding our facilities on campus to enhance teaching and research. To help address the national nursing shortage, College of Nursing undergraduate enrollment increased more than 110 percent from 2003 to 2007. Seventy percent of the college's more than 4,250 alumni reside in Michigan, making important contributions to communities and the health care profession in the state.

Economic gardening and the entrepreneurial ecosystem

We pay special attention to our economic engagement with our stakeholders throughout Michigan. We've maintained the MSU Center for Community and Economic Development in downtown Lansing since 1969 to provide training and consulting services to communities around the state. Our Land Policy Institute last summer worked with Extension staff and local partners to convene 99 "new economy" training sessions. Together they mapped regional economic and quality of life assets and draft strategies to position the local communities statewide for public and private investment.

Earlier this year we re-launched the Prima Civitas Foundation to expand its "network of networks" concept statewide, and in doing so we are drawing closer to the C.S. Mott Foundation in Flint to help it address a range of issues in its community. The MSU Product Center has assisted more than 1,000 Michigan entrepreneurs to develop business concepts around food and other natural resources since 2004. In that time it

has helped create some 164 businesses, generate \$300 million in annual sales and create or retain 747 jobs.

A lot is made today about entrepreneurship and how we need to do a better job promoting it in Michigan. You'll get no argument here – we've been a knowledge partner for "agricultural and mechanical" entrepreneurs since 1855 and we continue to promote what we today call an entrepreneurial ecosystem. Every new insect-resistant variety of crop coming out of our greenhouses, every hardy blueberry hybrid ... represents technology transfer no less than the bio-sensor, nano-material, and energy technologies coming out of our engineering labs.

But we need to step up our game. We know this. That's why we reorganized our tech transfer and business engagement offices in the last few years to build seamless channels between our faculty researchers and the private sector. Since MSU Technologies was launched in 2007, approximately 400 invention disclosures have been filed, encompassing the work of more than 600 campus and collaborating innovators. In 2009 alone we were awarded 41 patents and executed 44 licenses. Today we have 359 active technology licenses.

The value of entrepreneurialism is alive throughout our undergraduate and graduate curricula. Our Broad College of Business full-time MBA program is ranked second in the country and seventh in the world for return on its students' investment by *Bloomberg Businessweek*. Our supply chain management & logistics program is ranked second. Broad's Institute for Entrepreneurship promotes successful startups by focusing on stage-two and -three companies and high-tech firms, where the greatest potential for job creation and economic impact lie.

Last fall we kicked off MSU ENet, an entrepreneur education and support network open to students and non-students alike. And we've thus far accumulated \$1.6 million in endowments focused solely on supporting student business startup concepts.

External validation

So, how does this land-grant institution rate? We're among the nation's 50 "best value" public universities as ranked both by the *Princeton Review* and by *Kiplinger's*. (*London Times Higher Education* ranked us among the global top 100 universities based on academic reputation.

We are one of 63 members of the Association of American Universities, having been accepted in 1964. The AAU is regarded as the top research-intensive institutions in North America. We are ranked among the top 100 universities in the world by Shanghai Jiao Tong University and among the top 50 research universities by the University of

Western Australia. Research and the culture that supports it are the kinds of things that set universities such as MSU apart.

I should note here that our research enterprise continues to grow. We increased our sponsored research to \$495 million last year, up \$90 million from the prior year. That included \$36 million in ARRA awards. This money buys equipment and hires graduate staff and supports the region's knowledge economy ... and our capacity for knowledge discovery and transmission.

I'll point out that the decentralized nature of our medical education program masks the greater magnitude of Michigan State's sponsored programs. The graduate medical education money that flows to our affiliated hospitals around Michigan to support medical resident positions we estimate to be perhaps another quarter billion dollars, funds that don't show up on our ledger because we don't operate a medical center.

Finally, I should note that these numbers also don't include our \$615 million DOE Facility for Rare Isotope Beams project, which is only now getting under way. We're working with the Lansing community to build an international recruiting program around the FRIB, one that will position mid-Michigan as the home of a world-class scientific community focused on rare-isotope research. That research will help us discover new medicines, create new homeland security capabilities, and unlock the mysteries of the universe.

Just last week four of our graduate programs were reaffirmed to be the best in the country in the well-known *U.S. News & World Report* rankings – including nuclear physics (once again besting MIT) and elementary and secondary education.

University Research Corridor

Yes, we're competitive. But we're also cooperative, and we think that's critical for the development of Michigan's knowledge economy. With our University Research Corridor partners — the University of Michigan and Wayne State University — we represent nearly a \$15 billion annual impact. We're working together to bring jobs to Michigan, such as with the new relationship we're forming with Procter & Gamble to streamline research contracting.

Together, we comprise a regional innovation cluster that is competitive with any other group in the country. And our alumni base represents a worldwide asset, including a half million of URC Alumni in the state of Michigan alone.

We're also working together on the kinds of quality of life and place-making programs that will be fundamental to Michigan's ability to prosper, such as the National Children's Study. In that huge federally funded study, we will work across the state over the next

generation to develop an unprecedented level of awareness of personal and environmental influences on children's health. This knowledge could go far to reduce chronic health problems and the associated costs to the public treasury.

Shaping the Future

What concerns all of us, of course, is whether the quality and opportunity represented by Michigan State will remain within reach of Michigan's families. So let me describe what Michigan State is doing to ensure not only its continued status as a top world university, but to recognize that financial resources are limited while the need to remain accessible to Michigan residents is not.

We saw Michigan's financial difficulties coming for a long time, as the state's structural deficit remained an unresolved issue. Because we work with multi-year financial planning horizons, we've been able to anticipate the magnitude of the proposed state appropriations cut, if not the exact amount. We didn't rely on non-recurring funds, for example, to support core operating functions.

This is something we've been coping with for 10 years now, as Michigan's economic problems impacted state higher education appropriations more than in about every other state in the union. Simply cutting our own operations across the board would be the easy response, but that's poor management – as Governor Snyder himself said during his campaign.

We resolved early on that two primary tenets will guide us. First, we cannot simply cut back what we are doing today. We must modify our activities in ways that create greater efficiency and effectiveness. We must work differently, adapting our culture and our attitudes to build a new model for the way we achieve our goals.

Second, our fundamental goals and our measures of success will not change. Boldness by Design, the strategic framework I introduced on our sesquicentennial in 2005, remains our guide to interpret our land-grant mission in a new era. Again, it's about talent development, knowledge discovery, and innovation.

Neither will our sculpting come at the expense of our core values—quality, inclusion, and connectedness. Nor will it come at the expense of being among the best research universities in the world, one that is locally relevant and globally engaged. And we are doing it fully engaged with our faculty, staff, and external stakeholders.

And so we call the resulting process Shaping the Future, a means to help us realize that vision in spite of the financial constraints that confront us. We are not standing still. We are not digging in, much less retreating. We aim to come out of Michigan's economic situation better than we entered it, as we have at other difficult times in the

past. Our two-year budgeting and financial planning are an integral part of this, but not the only part.

Maintaining our quality means continuing to invest in the enterprise, even when we must cut back elsewhere. Every good business person knows this — when they're in it for the long haul. We invest — in facilities, in programs, and in talent — because being competitive in our global league demands it. We're expanding several buildings on campus to boost our capabilities in plant science, nursing education, and international studies, for example. We recently replaced our legacy system with a new central enterprise business system that represents a significant strategic investment that positions us well for the future.

Financial planning

We started early to absorb the painful cutbacks we saw coming. We've made some \$122 million in base reductions and reallocations since fiscal 2000, and we'll make more.

We aren't just shifting costs, but making structural changes in operations and costs — with the full participation of our employees. Our vice presidents and deans last year donated their salary increases to student scholarship funds and this year, together with all 10 university based employee unions, submitted to wage freezes.

We have been very deliberate about our faculty compensation, which for the record does not include any cost-of-living adjustment, but is based strictly on merit. Our faculty compensation sits in the middle of the Big Ten, which we've judged to be adequate to give us the range to recruit and retain the people we need to maintain or improve our competitive position. It's a delicate balance, because we compete for talent not just in Michigan, but around the country and around the world. As with our physical plant and other assets, we need to continually invest in talent to remain competitive.

Over the last decade we've worked very hard to rein in our health care costs, limiting them to 5.5 percent, which compares to approximately 9 percent for the private sector. But last year we asked our faculty and staff to step up and help us further cut costs through a restructured package. They responded by agreeing to several impactful changes in health plan design and cost sharing. With that, we've slashed our health costs 10 percent and, further, capped the university's exposure to future annual cost increases to 5 percent. This strategy not only limits our future cost burden and produces a plan design to balance quality and cost, but adds real incentive to control utilization. And because we view benefits in the context of a total compensation package, this also gives us additional flexibility across the institution's compensation structure. We've also discontinued funded post-retirement health care for all new employees, after having

earlier discontinued it for family members. I'm very proud of the way Team MSU has rallied together in the service of the people of Michigan.

Through energy conservation and strategic investments, last year we avoided \$24 million in fuel costs. We set goals to cut energy use 15 percent by 2015 and landfill by 30 percent, and we are well on our way to meeting these goals, as of this March 1, we have cut our electricity usage by 7 percent for the last 12 months. The addition of a natural gas burning capability at our power plant is saving us as much as \$1 million, and avoiding perhaps 20,000 tons of carbon dioxide emissions.

We are annually imposing a 1 percent efficiency factor reduction on all operating units, mandating that they continue to improve efficiency as a matter of practice. And our efforts to find operating efficiencies and savings across the institution will continue without pause.

Finally, we have initiated comprehensive review of campus academic programs, including accelerating our schedule for consolidations and discontinuations. We restructured MSU Extension to streamline administration and focus resources on Michigan's priority concerns. We still have some loose ends, for example restructuring our College of Agriculture and Natural Resources. These reorganizations can get messy and there always will be criticism. But we can't let that stand in the way of making necessary changes for operating in the 21st century.

Benchmarking success

We do all this in as transparent a manner as possible. We have devoted a special website to Shaping the Future to encourage engagement with our program. And as a data-driven organization, we constantly benchmark our metrics. Compared to our Big Ten peers:

- We operate with the least amount of tuition and appropriations support per student, yet our student-to-faculty ratio is about the Big Ten average.
- We rank seventh in total number of employees and second to last in students per employee.
- We're at or near the top for the proportion of expenses related to instruction, research, and public service.
- We have the lowest total unit cost for energy.

- And we are the most efficient for custodial, maintenance, and grounds staffing ... which I don't believe you would notice walking around our beautiful campus, thanks to our dedicated employees.

Affordability, access, and state support

Still, the issue of whether we are and will continue to be accessible to Michigan students is of constant concern.

Michigan State has substantially increased its institutional student financial aid — by 58 percent over the past five years. The net result is that we've boosted financial aid levels that exceed tuition on an annual basis by an average of 7.5 percent.

It is a difficult balance, but in doing so, we have managed to keep a stable or rising proportion of high-need students while still maintaining the long-term, middle-class oriented economic mix of our undergraduate population, despite economic circumstances.

Here's the brutal reality: If the currently proposed levels of state funding are approved, it will mean a decline for us of upwards of 25 percent in state support since 2000. Based on that decline and our increased enrollment, we're looking at a reduction of over 30 percent in per-student support over the last decade, even as most other states have increased support. Put another way, today we're looking at 1989 levels in state funding for fiscal 2012, and corrected for inflation, it's more like 1970.

You can take your pick of comparisons, but Michigan's rates of support for higher education over the last decade have been among the lowest in the country, and not just general fund outlays. Over the last 10 years, state capital outlay support totaled just \$20 million — compared to \$169 million over the 1990s. Deferred maintenance is also a difficult issue, given the lack of state support and the difficulty of finding long-term financing.

Caution on funding formulas

I know that there has been some discussion about adopting per-student funding formulas for higher education in Michigan. I urge you to be very careful about how you handle this world-class higher education system that Michigan has built up over generations, one that has already gone through a decade of dwindling public support.

Each Michigan university serves a particular group or area, and that diversity is a strength — not a weakness. The three intensive research institutions that carry Michigan’s flag around the world — your University Research Corridor institutions — do not operate with the same cost structures as your other public universities. These institutions represent embedded assets built up over many, many years, with corresponding cultures of expectation for teaching and research and the human and physical infrastructure to support it.

This distinction is recognized in the national Carnegie Classification system. All 15 universities are classified among their actual peers across the nation, against whom they can be benchmarked. This is a far more meaningful comparison than lumping every Michigan university together as a group.

Homogenized milk is great — it’s one of many innovations Michigan State is proud of. But homogenizing Michigan’s universities would only promote mediocrity, which will not make Michigan a world-competitive state in the 21st century.

We welcome benchmarking against the best in our peer groups. Hold us accountable, but offer incentives, not disincentives. To try to impose tuition caps or similar “command economy” measures ties the hands of our very capable and publicly accountable university controlling boards. These are people who fully appreciate the need to ensure access as well as protect the value of a university degree.

Michigan’s research universities have carefully built global reputations for quality over many generations —brands, if you will, in which we all have substantial investment and from which we all stand to continue to benefit. But reputations are fragile, especially in this era of instant online communications. They deserve careful, thoughtful handling.

Thus, before we begin a process of creating a formula funding structure for higher education, there are a few critical principles which I believe are crucial to the future prosperity of the state of Michigan. First, do no harm. Do not create a system that simply drives down the quality of an education, or reduces our ability to innovate.

Second, measure us against true peers. Under the Carnegie Classification system, every institution in the state has a set of national peers which can be benchmarked against. This structure takes into account the various missions and student populations we serve. Third, incentivize each to become the best in class, rather than use simplistic calculations which will create disincentives to seek quality.

Our universities prospered when the state prospered, and now we're being called to sacrifice as the rest of the state sacrifices. Michigan State is prepared to take our share of pain. We do this with the expectation that the era of state retreat from support for public higher education will finally come to a close ... as Michigan finds its footing for sustainable prosperity.

I am convinced that such prosperity will be accelerated and enhanced through the talent development, knowledge discovery, and innovation assets of an engaged and vibrant Michigan State University.

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