Consistently ranked among the world’s top universities, Michigan State University nevertheless remains among the most efficient of its peer research institutions. As the nation’s pioneer land-grant university, MSU embraces its special mission of world-class instruction, research, and public service and resolves to enhance its impact even in a financially constrained, increasingly competitive environment.

Michigan State starts its budget planning from a lean position, ranking third from last among its Big Ten peers in total financial resources per student. The combination of state appropriations, tuition, and fees per MSU student approximates $21,580, about $2,000 less than the Big Ten median.

MSU consults with hundreds of internal stakeholders, including trustees, deans, academic governance, student groups, organized labor, and others, over a two-year period to ensure a transparent, collaborative budget-planning process.

The recent economic downturn and resulting cuts in state support forced spending cuts of $110 million, including $28 million in health care coverage savings worked out with employee groups and $32 million in forgone wage increases. If state appropriations had just kept pace with inflation for the past 10 years, tuition could be cut 21.5 percent from today’s level. If appropriations had kept pace with the overall state budget, that would still amount to an 18.5 percent tuition cut.

Today’s higher education marketplace focuses ever more tightly on value, an effect demonstrated every year by MSU’s increasing applications for admission and by postgraduation outcomes and employer validation. Maintaining Michigan students’ access to world-class higher education is an ongoing priority, constraining MSU revenue by $66 million, or 8.5 percent of total tuition revenue, when comparing to the average student residency profile in the Big Ten.

Having confronted economic challenges without compromising its values and standards, MSU now is poised to seize new opportunities. President Lou Anna K. Simon’s Boldness by Design initiative, framed in 2005, aligned MSU’s collective work toward five imperatives (see Graphic 1), each founded on the institution’s core values of quality, inclusiveness and connectivity. As the financial circumstances of the state and the nation wors-

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**Graphic 1: Bolder by Design Establishes Framework for the Future**

**BOLDER BY DESIGN**

**ADVANCE OUR CULTURE OF HIGH PERFORMANCE**

- Dual Operating Systems
- Culture
- Habits

**Boldness by Design**

- ENHANCE the student experience
- ENRICH community, economic, and family life
- EXPAND international reach
- INCREASE research opportunities
- STRENGTHEN stewardship

**Quality**

**Inclusiveness**

**Connectivity**
ened in 2007 with resulting cuts in appropriations, MSU responded with Shaping the Future, an initiative to streamline the institution without compromising the value of an MSU degree or undercutting the institution’s platform for future innovation.

Today, university leaders are building the framework to be Bolder by Design (see Graphic 1), challenging all of MSU to once again lead the transformation of higher education and, as part of the process, adding a sixth imperative: advance our culture of high performance. Bolder by Design establishes the foundation for MSU to continue its role as the world’s preeminent land-grant university.

Coupled with a multiyear planning horizon, MSU utilizes a data-driven, metrics-oriented approach to budget and planning, benchmarking against relevant peers in order to assess efficacy in each of its goals. This approach allows MSU to focus resource allocations in a manner best suited to achieve the programmatic outcomes necessary to fulfill its mission.

**Imperative 1: Enhance the Student Experience**

Talent development is perhaps the most fundamental role of higher education, and access is its foundation. MSU enrolls 17 percent of all Michigan public university students, a group that claims 82 percent of MSU’s undergraduate enrollment. More than $110 million is dedicated in the 2012-13 budget to financial aid, helping allow MSU to enroll 4,300 more students than 10 years ago (see Graphic 2).

More than transmitting knowledge and skills needed to launch a career, an MSU degree certifies that graduates own a foundation for a lifetime of growth and achievement. One study found that 86 percent of college graduates judged it a good investment for them personally. Graduates estimated they earn about $20,000 more per year as a result of having earned a degree, a figure that matches 2010 U.S. Census Bureau estimates of the actual earnings differential.

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. Some 96 percent of seniors also affirmed that MSU provides support for student success.

Our students’ experiences are underscored in our increasing national and international prominence. In the most recent *U.S. News & World Report* ranking, MSU improved seven spots, ranking 72nd nationally, up from 79th two years ago.

Today, Michigan State boasts 24 academic programs in the top 20 nationally, more than 10 percent of the 200 programs offered. Such quality would count for little if students couldn’t complete...
their studies, but in that regard MSU excels. Michigan State outperforms U.S. News-predicted graduation rates by 14 percentage points—first in the academically formidable Big Ten conference for this category. Further, MSU’s 77 percent six-year graduation rate is 9 percentage points better than the average for similar institutions (Carnegie).

Bolder by Design will help enhance such outcomes through the residential hall neighborhood program, addressing the challenges of persistence, retention, and graduation rates by bringing academic and health support services to where students live. Michigan State also continues to strive to become a recognized center for interdisciplinary, experiential education by leveraging its leadership in study abroad and undergraduate research. The goal is to develop “T-shaped graduates”—people whose frame of reference and skills are both broad and deep—equipping them to thrive in a rapidly changing world where not just knowledge but flexibility and creativity are increasingly important.

To best balance the requirements of a world-competitive education and student access, fiscal year 2014 tuition is proposed to increase by a composite 2.8 percent for resident undergraduates, with lower division resident undergraduate tuition increasing by 1.9 percent and upper division resident undergraduate tuition increasing by 3.6 percent. Each respective increase represents an amount below the threshold present in prevailing legislative formulas.

Financial aid outlays continue to increase at a rate greater than resident undergraduate tuition and fees, amounting to a 59 percent increase over the last five years. For 2013-14, financial aid is anticipated to increase 4.5 percent, exceeding the composite resident undergraduate tuition increase. The impact of approximately $110 million in institutional financial aid pushes the university’s effective tuition rate approximately 14 percent below published levels.

MSU is a vital engine of Michigan’s prosperity, leaving an annual $4.7 billion economic footprint that includes spending nearly $400 million each year with state businesses. We train physicians at 38 partner hospitals and operate 14 AgBioResearch centers from Benton Harbor to Saginaw to Escanaba. After graduation, Spartans become leaders, entrepreneurs, volunteers, and contributors to their communities, fulfilling the intent of our 19th-century founders.

MSU gathers students from all 83 Michigan counties, all 50 U.S. states, and more than 130 countries—bringing the best of the world to Michigan and the best of Michigan to the world. Beyond geography, it also is committed to maintaining access to students whose financial situations fall along all points of the economic scale. MSU strives to preserve the income distribution of its students through financial aid and other means (see Graphic 3).

### Graphic 3: Preserving Access Across Income Levels

Distribution represented in 2012 inflation-adjusted dollars
Some 69 percent of MSU students receive some form of financial aid. MSU is one of only two Big Ten institutions to maintain its population of Pell-eligible students over the decade with 28 percent of undergraduates now receiving a Pell Grant. MSU also carefully monitors the distribution of its student family income and focuses significant aid resources on students with family income just above Pell levels.

At a time when concerns mount nationally over the cost of higher education and the effects of student debt, MSU outperforms national benchmarks for the proportion of graduates leaving with debt, overall indebtedness, and the default rate of its graduates. Forty-six percent of MSU students graduate with debt, with an average debt load of $24,987. That compares to the 61 percent of graduates nationally who leave school with an average debt of $27,253.

We want our graduates to enter a healthy job market in Michigan, and that requires economically healthy communities. We were working with farmers to improve productivity even before the government began to fund Extension and agricultural experiment stations a century ago, so outreach is part of our land-grant DNA. Today, we’re active locally and across the state, assisting community developers, entrepreneurs, and large employers alike.

In partnership with MSU, the Prima Civitas Foundation recently expanded its “networks of networks” concept statewide. More locally, MSU continues its support of the Lansing Economic Area Partnership, dedicated to revitalizing business in the capital city area.

Since 2004, the Product Center Food-Ag-Bio has helped 2,125 Michigan entrepreneurs create or expand some 254 businesses, generate $315 million in annual sales, and create or retain 1,460 jobs.

The recently reorganized and streamlined MSU Extension and MSU AgBioResearch are positioned to build upon their roles as key economic partners for the state. AgBioResearch and MSU Extension anticipate a 2 percent increase in direct, operational appropriations. In addition, AgBioResearch will receive allocations of an additional $1 million to fund critical research projects aimed at improving the bioeconomy and agriculture sectors of the state’s economy.

In the last five years, MSU has refreshed its approach to intellectual property and the creation of economic value from innovation. We reorganized our tech transfer office into MSU Technologies in 2007. In 2009, MSU developed Business-CONNECT for more effective engagement with the private sector. Last year, we rolled out Spartan Innovations, which we created in partnership with the MSU Foundation, as the “third leg” to our enterprise. Now, all three of these units are organized under the MSU Innovation Center.

MBI is a biobased technology scale-up plant in Lansing associated with MSU that focuses on de-risking technologies for faculty and corporate research partners, including cellulosic ethanol development scale-up. The MSU Bioeconomy Institute in Holland is a former Pfizer plant and labs devoted to research and development of biobased technologies. It also houses a regional technology business incubator, operated in cooperation with Lakeshore Advantage.

The MSU Entrepreneurship Network is an innovation-focused course leading to a certificate in entrepreneurship that also is open to nonstudents. The university oversees $1.6 million in endowed funds to capitalize qualifying student business plans. Michigan State’s student start-up initiative also is supported by a student business incubator. The Hatch, a campus/community cooperative project, is located in the East Lansing Technology Incubation Center close to MSU Innovation Center offices.
Imperative 3: Expand International Reach

In 1956, when MSU President John Hannah established the nation’s first Office of International Studies and Programs with its own dean on campus, the university made clear its commitment to international engagement. MSU today has more than 25 internationally focused centers, institutes, offices, and programs and is home to five internationally focused centers designated as national resource, language resource, or area study centers through the U.S. Department of Education Title VI program.

MSU is one of only four higher education institutions in the nation to rank in the top 10 for study abroad participation and international student enrollment. MSU has more than 41,000 living international alumni in 172 foreign countries now. During the most recent academic year, moreover, some 2,500 students studied abroad.

By redefining and enriching study abroad through research, internships, and community engagement, we hope every MSU student will have international experience prior to graduating. Such experience will help graduates succeed in a world that is increasingly global. MSU is engaged in research and outreach activity on all seven continents, building networks from which benefits will accrue to Michigan.

Imperative 4: Increase Research Opportunities

MSU continues as a leader in creating knowledge in the 21st century. MSU’s momentum across the research enterprise is evidenced by its rapidly growing funding. With more than $500 million in funding in 2011–12 (see Graphic 4), MSU’s sponsored programs have grown 24 percent since 2008–09, despite the economic challenges during the period.

Among the university’s research centers of excellence is its nuclear science program. MSU has supported nuclear science and isotope research since the 1960s, and today U.S. News ranks the university as the nation’s top nuclear physics graduate program, above other notable centers including the Massachusetts Institute of Technology.

Graphic 4: MSU Contractual Support Up 24 Percent in Three Years

The Facility for Rare Isotope Beams (FRIB), now in preconstruction, will be an important part of Michigan’s future as well as that of MSU. It’s a $680 million cultural game changer for the state, demonstrating the state’s and university’s commitment to tomorrow’s knowledge economy. Total economic activity for FRIB over the next decade is estimated at $1 billion, with $187 million in new tax revenues; 5,000 construction jobs; employment of 400 scientists, engineers, and other staff; and attraction of 800 scientists from around the world to Michigan annually.

Beyond nuclear science, MSU’s research momentum rests on continuing excellence across the institution in addition to significant achievements in specific fields. Recently established interdisciplinary initiatives include the Bio/computational Evolution in Action CONsortium, or BEACON; the Great Lakes Bioenergy Research Center; the Center for Advancing Microbial Risk Assessment; the MSU Global Water Initiative; the Plant Science
Excellence Initiative and Molecular Plant Sciences Building, which opened last spring; and the Center for Systems Integration and Sustainability. Each of these examples illustrates MSU’s leadership across a diverse set of disciplines.

Moving forward, MSU will focus its efforts on leading the nation in nuclear, plant, and brain science, expanding and maintaining distinctive competencies in food safety, water quantity and quality, bioeconomy-related products and processes, agriculture, engineering, education, and health sciences.

It is critical, however, that MSU attract and retain the world-class faculty capable of producing the key discoveries of the 21st century. Currently, MSU’s faculty salaries rank 11th of 12 Big Ten institutions (see Graphic 5).

To improve competitive standing, current 2013–14 budget planning indicates a general merit allocation of 1.5 percent, a 0.75 percent college-level market increase, and a 0.5 percent central market increment.

MSU has navigated through the most challenging economic period in its history in large part due to its commitment to its foundational values, passion for excellence, determination, and innovation.

Currently, MSU receives appropriations per student equal to 1990 values on a nominal basis that predate 1980 amounts when adjusting for inflation. In addition, over the last 10 years, MSU appropriations have been reduced by more than $81 million, an amount that represents in excess of $450 million in lost resources (see Graphic 6).

MSU seeks to further its efforts in efficiency and stewardship, streamlining daily operations in order to have the nation’s model university workforce. MSU consistently ranks among the leaders in the Big Ten in employee-to-student ratio, energy cost and consumption, and landscape and facility maintenance area per full-time-equivalent staff.

Leadership in operational efficiency comes from a long-term commitment to a forward-leaning, multiyear, evidence-based approach to planning and management across the university. MSU encourages a culture of accountability, aimed to
produce habits, practices, and discipline for delivering high-impact, high-value results. MSU’s dedication in this area is evidenced by an average core budget change of 1.69 percent over the last five years, better than the Higher Education Price Index for the five years concluding 2012.

In addition, MSU has averaged 2.4 percent in budget growth over the same period related to positive growth in on-campus enrollment, targeted off-campus and virtual academic program expansion, indirect cost revenue increases related to research growth, and increased investment in institutional financial aid to assure access.

Environmental stewardship is a priority also, with future aspirations laid out in the Energy Transition Plan approved last year. Bolder by Design calls for sustainability leadership as a matter of conservation and cost savings and as a means to extend the university’s applied research leadership.

Encouraging financial support among its stakeholders and alumni base is another stewardship priority for Michigan State as its traditional base of public support erodes. Seeking capital support for financial aid and related student-centered purposes is a particular priority going forward.

Imperative 6: Advance Our Culture of High Performance

MSU’s long-term success relies on the institution’s ability to fulfill the goals laid out in Bolder by Design. The cultural component of the framework includes raising expectations; focusing on the most vital issues and opportunities; improving measurement and assessment; reforming work habits; and even managing innovations that nurture more than incremental operating improvements.

In order to remain a leading institution in a world where other states and nations are investing heavily in higher education, MSU also will need to focus investments in the areas with the most impact by annually leveraging institutional and interdisciplinary assets through constant improvement in efficiency and effectiveness. To this end, the 1 percent program efficiency reinvestment fund will continue to be assessed across MSU operating units, annually generating in excess of $4 million for strategic reinvestment across disciplines.

In addition, due to MSU’s ability to constrain certain expenditures from previously forecasted levels, MSU’s operational efficiency allows for an increased investment in faculty salaries and a recurring $2 million allocation to fund academic competitiveness initiatives.

Summary budget development information is presented below (see Graphic 7).

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*Includes 1.5% general merit, 0.5% college market, and 0.5% provost market pool
**Includes 1.5% general merit, 0.75% college market, and 0.5% provost market pool
***Infrastructure financing.