The University of Michigan – Ann Arbor
Cost Containment Efforts
July 2014
TABLE OF CONTENTS

Executive Summary

Introduction

Cost Pressures at Research Institutions

U-M Cost Containment Principles

Cost Containment Strategies and Approach

Conclusion
Executive Summary

Over the last eleven years, the University of Michigan has demonstrated remarkable resilience in the face of intense financial pressures. On the revenue side, we have seen an unprecedented decline in our state appropriation. State support to U-M per student has declined by 40 percent since we started cost containment efforts in fiscal year 2004, adjusting for inflation. After many years of reductions in our state appropriation, including the historic reduction in fiscal year 2012 of $47.5 million, we are appreciative that this year’s state appropriation reflects an increase of 5.8 percent (enacted), but the overall loss of state support remains very large. To deal with our constrained financial circumstances, we have engaged in aggressive cost containment efforts. In two phases, we achieved the targeted general fund recurring expenditure reductions and cost avoidance of more than $235 million. We are committed to continuing these efforts and have targeted an additional $120 million in recurring revenue enhancements and/or general fund reductions by fiscal year 2017.

<table>
<thead>
<tr>
<th>Phase 1</th>
<th>FY 2004 – FY 2009</th>
<th>$135 million</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phase 2</td>
<td>FY 2010 – FY 2012</td>
<td>$100 million</td>
</tr>
<tr>
<td>Phase 3</td>
<td>FY 2013 – FY 2017</td>
<td>$120 million</td>
</tr>
</tbody>
</table>

The cost of doing business at a university follows a higher trajectory than it does in much of the economy, as our costs are subject to increases beyond the normal forces of inflation. This is largely because teaching and research are more labor-intensive than most activities in the economy, and it is generally the case that labor costs rise faster than other costs. In addition, universities make substantial investments in a broad range of new technologies and facilities to conduct leading-edge research and prepare students adequately for careers in a broad and growing spectrum of fields. These are expensive investments that are central to our mission but typically do not increase revenues or create efficiencies. At the same time, the volume of activity continues to rise, further driving up costs.

Despite the continuing challenges of the economy, the University of Michigan – Ann Arbor remains on a stable financial path largely because of our disciplined approach to financial management, which emphasizes multi-year budget planning, on-going cost containment, continual reallocation of resources toward our highest priorities and seeking new revenue sources. During the recent economic recession when many of our competitors were experiencing dire fiscal constraints, we were able to make strategic investments in faculty expansion, and we continue to invest in need-based financial aid and academic programs.
These are key principles that have guided our strategic financial choices:

- Keeping a U-M education affordable by investing heavily in student financial aid
- Maintaining the excellence of the university by recruiting and retaining top faculty
- Enhancing the student learning experience with efforts including innovative new academic programming and experiential learning

In implementing cost containment steps, we have been resolute and strategic about protecting and strengthening the academic mission, while adopting the following principles:

- Protect and invest in our core educational and research missions
- Remain competitive for the best faculty, staff, and students
- Leverage our size and scale
- Maintain high quality essential services
- Eliminate duplicate and lower priority activities
- Shift costs from the General Fund to other funding sources, where appropriate
- Avoid short-term reductions that will raise costs or undercut quality in the long-term
- Introduce centralization and greater sharing of resources in cases where this will result in higher quality services and/or more effective use of high quality facilities
- Consider insourcing and outsourcing, when that leads to improvements in service at the same or lower costs
- Take advantage of advanced technologies to achieve efficiency of operations

These principles have directed us to pursue a broad range of strategies to achieve cost reductions and long-term efficiencies in our operational areas.

Although we have made much progress, we recognize the fiscal environment remains challenging. In particular, the state of Michigan continues to experience financial challenges and must make difficult choices that will impact our state appropriation, and thus the funding environment for the future remains uncertain. As we carefully position the university to meet future challenges, we will need to continue to collaborate across the university to address our budget challenges and maintain our unwavering commitment to the quality of the institution both inside and outside of the classroom.

While we continue to control costs, our fundamental missions of academic excellence and affordability remain our highest priorities; on this we cannot and will not compromise. This generation of students expects their Michigan education to be the same quality and deliver the same positive impact in their lives as all those who have come before them, and our job is to deliver on that promise.
The University of Michigan – Ann Arbor
Cost Containment Efforts

Introduction

Over the last decade, the University of Michigan has demonstrated remarkable resilience in the face of intense financial pressures. On the revenue side, we have seen large declines in our state appropriation. State support to U-M per student has declined by 40 percent since fiscal year 2004, adjusting for inflation. After many years of reductions in our state appropriation, including the historic reduction in fiscal year 2012 of $47.5 million, we are appreciative that this year’s state appropriation reflects a modest increase of 5.8 percent (enacted), but the overall loss of state support remains very large. To deal with our constrained financial circumstances, we have engaged in aggressive cost containment efforts. In two phases, we achieved general fund recurring expenditure reductions and cost avoidance of more than $235 million. Phase 1 was implemented between fiscal years 2004 and 2009; Phase 2 between fiscal years 2010 and 2012. Our cost containment efforts have focused on several areas including becoming more energy-efficient, using technology to increase administrative process efficiencies, sharing the costs of health benefits with our employees, standardizing our procurement practices, and more. We are committed to continuing these efforts and are targeting an additional $120 million in recurring revenue enhancements and/or general fund reductions by 2017.

The cost of doing business at a university follows a higher trajectory than it does in much of the economy, as our costs are subject to increases beyond the normal forces of inflation. This is largely because teaching and research are more labor-intensive than most activities in the economy, and it is generally the case that the costs of labor rise faster than other costs. In addition, universities make substantial investments in a broad range of new technologies and facilities to conduct leading-edge research and prepare students adequately for careers in a broad spectrum of fields. These are expensive investments that are central to our mission but typically do not increase revenues or create efficiencies. At the same time, the volume of activity continues to rise, further driving up costs.

We have been able to minimize tuition increases during this difficult period because of our ability to contain costs, reduce expenditures and reallocate expenses within the General Fund budget. The university’s ability to invest strategically in our future requires us to aggressively focus on cost containment as part of our annual budget/planning process. Thus, we incorporate an assumed level of reduction and reallocation (typically 1-2 percent of the budget) in each year’s General Fund budget proposal.

During recent times, this aggressive approach to containing costs and optimizing the use of limited revenue has been essential in order to innovate, invest in and advance the excellence of the institution. More specifically, our cost containment efforts have enabled us to:

- Keep a U-M education affordable by investing in student financial aid

The ability of admitted students to attend the university without regard to family financial circumstances remains a top objective of the University of Michigan. The
longstanding policy of the Ann Arbor campus to meet the full demonstrated financial need of all of its Michigan resident undergraduate students will continue.

The fiscal year 2015 budget includes an increase of $18.5 million in centrally awarded financial aid for a new total allocation of $183.4 million. The majority of this increased funding ($15.7 million) is for need-based aid for undergraduate students, a 13.4 percent increase in that budget, with the rest going to graduate students. In fact, improvements in operating efficiency have enabled the university to achieve double-digit percentage increases in the central undergraduate financial aid budget in nine of the last ten years, even while support from the state has been deteriorating. This year’s financial aid investment is sufficient to cover the full increase in the cost of attendance (tuition and fees, housing, textbooks and incidentals) with grant aid for the typical resident undergraduate students with financial need, resulting in no increase in packaged loan burden for those students.

- Maintain the excellence of the university by recruiting and retaining top faculty

The quality of our faculty is one of the most important factors contributing to the success of our academic enterprise and the recruitment and retention environment remains highly competitive. The University of Michigan – Ann Arbor has one of the nation’s most outstanding faculties, and over the past nine years a total of 620 faculty members received offers from other institutions and chose to remain at Michigan, a retention rate of nearly 56 percent. In addition, the university has successfully recruited nearly 930 faculty members from other leading universities during that same nine year timeframe. The institutions we compete with most often for faculty include Harvard, UC-Berkeley, Stanford, University of Chicago, and University of Pennsylvania, to name a few.

The fiscal year 2015 budget provides the necessary resources to support a modest salary program for faculty in order to maintain our competitive position within our peer group. In addition, this year we began a new initiative to hire between 60 - 80 new faculty members with a primary goal of enhancing undergraduate education. This program builds on previous faculty expansion programs designed to reduce our student-faculty ratio and to ensure our competitiveness by fostering key interdisciplinary areas of education.

- Enhance the student learning experience

Providing Michigan students with new venues, new perspectives and new opportunities to learn and engage is the essence of our work as a university. Innovation in teaching and research are critical elements of a top university, and no university can keep up with the rapidly evolving needs of our students and society without new and innovative academic initiatives. By reallocating funds from lower priority activities, we will be able to invest in academic initiatives such as these:

- Beginning in fall of 2014, the College of Engineering will offer interdisciplinary master and doctoral programs in robotics, an area of technology that is generating
much attention. This new program will integrate knowledge from the fields of mechanical engineering, computer science, artificial intelligence and biomedical engineering for applications specific to robotics. A specialized introductory class will offer students a hands-on experience with robotics.

- The School of Information will launch a Bachelor of Science in Information degree. This program is richly interdisciplinary, and examines information as the central object of study, using a combination of social, behavioral and technological sciences.

- The College of Literature, Sciences and Arts has introduced a new major in Cognitive Science that focuses on both biological and social aspects. Students will be introduced to the broad interdisciplinary focus of the major through four areas of study that combine cognition with computation, decision, language and philosophy.

- The university is launching a new campus-wide entrepreneurship program open to all undergraduate students that will integrate classes offered by various units, along with co-curricular events and activities to provide an exceptional educational experience.

- The School of Art and Design is moving forward constructing its new two-year Master of Design degree. It will be a research intensive program that aligns with the existing Fine Arts graduate degree while responding to the growing demand for critical design-related skills.

Cost Pressures at Research Universities

The cost of doing business at a university follows a higher trajectory than it does in the rest of the economy, and research universities are especially subject to cost increases beyond the normal forces of inflation. We can identify four factors contributing to cost increases that have significant impact at a top research university like the University of Michigan.

1. Teaching and research are more labor-intensive than most activities in the economy, and it is generally the case that the costs of labor rise faster than other prices. In addition, U-M is engaged in a fierce national competition for faculty and high-level professional staff with elite private universities who have very substantial resources that they can bring to bear on recruitment and retention. Consequently, the university’s costs for salary and benefits (which make up 54 percent of the most recent fiscal year’s expenditures) tend to consistently grow at a rate that is higher than inflation.

2. Universities make substantial investments in a broad range of new technology and facilities in order to conduct leading-edge research and prepare students adequately for careers in a full spectrum of fields. These are costly investments that typically do not reduce costs, increase revenues or create efficiencies – although they are essential to providing a world-class education to our students and to enabling our faculty to
conduct ground-breaking research. Companies, by contrast, make technology investments that support their business and create efficiencies or enhance revenue flow. One instructive example is the Lurie Nanofabrication Facility. This cutting edge cleanroom facility cost the university nearly $50M to construct and another $25M to equip. It delivers a superior technical capability to our faculty and students, as well as to regional businesses, allowing them to operate at the frontier in this area. Only one or two other research universities can boast a facility that rivals this one, so it not only advances the academic work on our campus but it also helps us attract excellent faculty and students to the university and high tech businesses to our region. For those academic reasons, it is well worth the significant investment; however, the facility will not substantially add to revenue or reduce costs for the university.

(3) The volume of activity continues to rise, further driving up costs. Since fall 2005, total headcount enrollment at the University of Michigan – Ann Arbor has grown by nearly 13 percent, and U-M’s volume of research expenditures had been expanding rapidly (although it has flattened out recently) and was $1.3 billion in fiscal year 2013. This growth leads to commensurate expansion of work and infrastructure needs.

(4) Beyond the growth in levels of activity, it is important to recognize that the sum of human knowledge and creative expression grows every year. The university, unlike most private enterprises, has an obligation to preserve the past as well as to invest in the future. We must provide museums, libraries, and laboratories as well as classrooms. The costs of museums and other repositories of knowledge grow in part because their collections grow, and the cost of staying on the cutting edge is always high. For example, the University Library contains one of the nation’s finest collections, a collection that serves as a crucial resource for our faculty, students and public in the state of Michigan. To maintain the value of this collection, we must retain its current content and add new knowledge and materials each year. In fiscal year 2013, we are again investing in the Library’s collections budget to ensure that the collection maintains its current value and distinction.

**U-M Cost Containment Principles**

The practice of reducing General Fund expenditures each year (typically 1-2 percent) to enable innovation and to moderate tuition increases is one that we intend to continue in our future budgetary planning. However, consistently cutting and reallocating at a level higher than our rate of new investment could jeopardize the quality of the institution and requires careful monitoring. In seeking efficiencies, we have adopted the following principles:

- Protect and invest in our core educational and research missions
- Remain competitive for faculty/staff/students
- Leverage our size and scale
- Maintain high quality essential services
- Eliminate duplicate and lower priority activities
- Shift costs from the general fund to other funding sources, where appropriate
• Avoid short-term reductions with long-term cost and/or quality implications
• Introduce centralization and greater sharing of resources in cases where this will result in higher quality services and/or more effective use of high quality facilities
• Consider insourcing and outsourcing, when that leads to improvements in service at the same or lower costs
• Take advantage of advanced technologies to achieve efficiency of operations

These principles direct us to pursue a broad range of strategies to achieve cost reductions and long-term efficiencies in our operational areas. Within the academic enterprise, these principles direct us to take actions, like the elimination of duplicate activities and the better alignment of high-end facilities with campus needs, which create efficiencies while avoiding negative impacts on teaching and learning.

Cost Containment Strategies and Approach

Below is a summary of our cost containment strategy and approach, organized into three phases of effort.

Phase I: Fiscal Year 2004 through Fiscal Year 2009
We successfully reduced recurring General Fund expenditures by over $135 million, reallocating some savings to our highest priorities. This equates to an average of about $22 million per year for each of the six years. Much of our cost containment efforts during this period of time were focused on several areas including purchasing, energy efficiency, health benefits, and facilities operations. For example we used the university’s scale as a purchaser to negotiate strategic supplier contracts with favorable pricing. In the area of energy efficiency, constant efforts are made to control utility costs through the installation of new campus systems, retrofitting existing facilities to achieve efficiencies, and encouraging behavior changes among faculty, staff and students. Significant health benefit cost containment/avoidance strategies have been implemented such as aligning our benefit offerings with the market to ensure the appropriate level of cost sharing with employees. The university continues to focus on effective space utilization as another means of containing operational costs. In February 2007, the university implemented a formal Space Utilization Initiative to plan and manage General Fund facilities on the Ann Arbor campus more effectively. The purpose of the initiative was to contain operating costs and to better meet the university’s academic and research mission and needs. Actions taken during Phase 1, along with approximate General Fund savings are categorized and shown in Figure 1.
For our Phase II efforts, we announced a goal of achieving an additional $100 million in General Fund reductions, cost avoidance, and reallocations by the end of fiscal year 2012. This equates to an average of over $33 million per year in each of the three years, significantly more than the prior six years, but we felt this level of reduction was essential to maintaining our commitments to excellence and access for students. Through disciplined management and effort across the campus by faculty, staff and administrators at all levels of the organization, we have met this challenge and achieved this three-year goal.

With a continued primary focus on lowering operational costs, changes involved a deeper effort in the areas listed above and have included further health care cost containment, energy purchasing strategies, reduced energy usage across campus, consolidation of our central IT units, facilities maintenance restructuring, travel and hosting reform, and improved procurement processes and pricing. In fiscal year 2012, we needed to move deeper in the academic enterprise for cost savings. Efforts taken to reduce costs and improve efficiency in the academic units included reducing travel budgets, retirement buyouts and not replacing departing staff. Several academic units offered lower enrollment courses less frequently, and some units suspended planned investments in their programs. As much as we seek to protect the academic enterprise, tough decisions had to be made. At the same time, we were careful not to jeopardize the quality of the academic experience, and made these decisions only after very careful analysis. Actions taken during Phase 2, along with approximate General Fund savings are categorized and shown in Figure 2:
We are now in our third phase of cost containment efforts, targeting an additional $120 million in recurring revenue enhancements and/or general fund reductions by fiscal year 2017. To achieve this new goal we will be required to look deeper into the academic enterprise for efficiency opportunities, but we continue to make every effort to protect the excellence of the educational experience as we make reductions.

We have identified and implemented recurring reductions and reallocations of more than $78 million as of fiscal year 2015, as shown in Figure 3. We have restructured departments leading to decreases in administrative services costs; implemented strategic sources for computers, office supplies, and janitorial supplies; consolidated staff and deployed inventory control in our facilities operations; limited the retirement savings contribution to a percentage of base pay; realized energy rate savings by effective management of reserves; and put in place a range of other cost-cutting steps, such as reducing travel expenditures, extending equipment replacement cycles, consolidating leases, and eliminating certain programs and workshops. As gift funds continue to be raised, we are able to shift student support and faculty costs off general funds.
We are currently implementing a major initiative to rationalize, remove redundancy, and thus lower the costs of our IT services across campus. This centralization will focus on a consolidation of desktop, network, server, storage, security, and helpdesk support into a single organization. We also are implementing cloud-based collaboration tools that enable our work with colleagues around the globe and reduce the cost of purchasing third-party proprietary software.

A second major initiative is an implementation of a Shared Service Center. Following a detailed study of our human resources and financial operations services, we have identified the potential for increased efficiency through consolidation. By transitioning these transactional activities from individual units into a consolidated center, we will achieve an increase in the efficient flow of processes, and build proficiency in completing the tasks that can be shared campus-wide. The investment in the Shared Service Center is occurring in FY 2015, with savings due to the efficiencies to be realized in the following years.

Conclusion

Working to achieve this level of cost containment has been both difficult and disruptive, but also necessary for us to achieve our central goals:

- offering excellent, innovative educational programs that enable our students’ long-term success and ensure the value of their education;
- attracting and retaining world-class faculty on the Ann Arbor campus; and
- providing a high level of financial aid to our students so that a University of Michigan education remains accessible.

Consistently cutting and reallocating at a level higher than our rate of new investment will ultimately have a negative impact on the quality of the institution, but we are committed to doing everything we can to operate as efficiently as possible, with the goals of providing high levels of financial aid to our students, attracting and retaining world-class faculty on the Ann Arbor campus, and developing and offering innovative educational programs that will enable our students’ long-term success.