

University Investment Commission

Final Report

November 2002

Updated October 2003

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Prepared by
Public Sector Consultants Inc.
Lansing, Michigan
www.pscinc.com

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Commission Members

Paul Hillegonds (Chair), President, Detroit Renaissance

Dr. Lillian Bauder, V.P. for Corporate Affairs, Masco Corporation

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Vernice Davis Anthony, Executive Director, Greater Detroit Area Health Council

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Richard Whitmer, President & CEO, Blue Cross Blue Shield of Michigan

Wayne H. Wood, President, Michigan Farm Bureau

HIGHLIGHTS

The University Investment Commission proposes a new compact between the state and its public universities, a shared responsibility to strengthen Michigan’s world-class lineup of higher education institutions: The state increases appropriations for public universities in return for their assuming greater accountability for spending and constraining costs. A university’s operating revenue comes largely from state appropriations and student tuition. Lower appropriations explicitly lead to higher tuition costs. Higher appropriations and university cost containment restrain tuition increases, making higher education more affordable for Michigan families.

Our future is at stake. We see great opportunities and significant returns on investment if Michigan expands public resources for higher education: a stronger, more resilient economy, innovation and research that creates jobs and spurs private investment, more and better-paying jobs, an enhanced civic and cultural life, and restrained increases in tuition.

Over time, Michigan’s public and political leaders have built world-class public universities. We believe this support must continue even as the state faces fiscal challenges in the months ahead. Understanding universities’ roles in giving our state a competitive edge in the global fight for jobs and economic development will be critical. Key to our future is that Michigan’s public universities keep pace with their counterparts in competitive states.

Michigan’s economic security, civic fabric, and social progress all depend heavily on the state’s public universities and their graduates. The state must meet two pressing challenges: (1) State funding for higher education must rise to the level of neighboring and competitive states, and (2) We must anticipate and produce greater numbers of people—particularly those underrepresented today in higher education—holding four-year and higher degrees.

An essential underpinning of the new compact is a coherent, long-term higher education development strategy. We have organized this report to set out the basic components of such a strategy. We urge the next governor to convene a statewide summit of university, political, business, labor, and civic leaders to assist in fashioning it.

Here are the strategic goals we propose to make this new compact a reality:

- The state will increase its investment in our public universities to hold down tuition increases, expand access, and improve infrastructure.
- Each public university annually will report information that measures its progress in achieving economies, effectiveness, and quality that advance the mission of the university and add value to the state.
- More Michigan residents and greater numbers of socioeconomically disadvantaged people will achieve four-year and higher degrees to keep us competitive and more economically secure.

In October the National Center for Public Policy and Higher Education issued its second state-by-state report card on higher education. Summarizing Michigan, the center found that the state is a “top performer in the economic benefits (of higher education) to the state.” The Michigan Economic Development Corporation (MEDC) found that the state’s investment of \$1.5 billion in higher education in 1999 produced a net economic impact of \$39 billion, 12.6 percent of Michigan’s gross state product. Much of any state’s research and innovation springs from its universities, which are strong magnets for entrepreneurs, companies, and capital.

The center also found that the proportion of Michigan residents who have a bachelor’s degree is “fair.” Our economy needs more knowledge held by more workers. We take into consideration that there are alternative methods to formal degrees that advance workers’ skills (work-study, co-op, internships, associate’s degrees, and others). Such methods complement greater numbers of people holding a bachelor’s or higher degree.

As we achieve higher levels of four-year and higher degrees, we absolutely must assure that graduates come from all corners of the world and all segments of our society. We must help secondary school students believe that college is within their reach, regardless of the neighborhood in which they live, the limited means of their families, or self-limiting stereotypes. Universities need to make room for many thousands of newcomers in the decades ahead and extend a welcoming and supportive atmosphere.

We call for a summit among universities, community colleges, K–12 school districts, and early childhood programs to develop a gradient encompassing the learning needs from birth into adulthood. Our new century calls out for seamless transitions of learning. Brain science research documents the critical impact on lifelong learning of nurturing, care, and education from birth to age five. Adults far into old age will never stop learning. In between, K–12 and higher education play increasingly critical roles. As British novelist E. M. Forster wrote: “Only connect!”

How best to motivate the C+ high school student, whose household income is below the median, whose parent or parents never attended college, and who has not been encouraged to consider higher education? How to provide an incentive for families to encourage their children to work hard in school and enroll in college? These are questions that must be tackled by universities and the K–12 school systems. The universities must engage K–12 school leaders in facilitating the transition of high school students into higher education.

Our recommendations are directed to the universities, the new governor, and new state policymakers. We urge readers to view the individual recommendations as part of a coherent development strategy and, as such, inseparable from one another.

To Presidents and Governing Boards of Michigan’s Public Universities:

1. Document the uses and benefits of resources. The public and its political leaders deserve transparency of information, especially with regard to tuition and state appropriations. What is the relationship between tuition rates and state appropriations? For what purposes is increased revenue spent? What cost savings have been achieved or planned, and how have they advanced learning and

research? Accountability metrics should be a central part of the message described below.

2. Create and deliver, under the aegis of the Presidents Council of State Universities of Michigan, an annual State of Public Universities Message. The 15 universities must show a united front to capture the aggregate benefits to the entire state of their distinct missions and collaborative efforts.
3. Plan together how to make room for additional undergraduate and graduate students each year as Michigan moves toward the national average of degreed population. The Presidents Council of State Universities of Michigan should compile individual university plans to increase enrollment among socioeconomically challenged young people. Focus on increasing graduation rates. Although ranking among the high-performing states in graduating students, Michigan has room to improve: 45 percent of students entering Michigan's colleges do not complete a bachelor's degree within six years of university enrollment. Collaborate with community colleges and distance learning organizations.
4. Build strong relationships to K–12 schools. We cannot grow the university-eligible population without increasing the number of high school students who are prepared for higher education. Universities need to review admission requirements and tests to ensure that they are valid and reliable indicators of a student's likelihood of success. Once this review is completed, universities, the state, and K–12 schools need to work together to make sure that college admission requirements, tests, and K–12 subject standards and curricula are aligned. Considerable responsibility for growing the university-eligible population rests on our colleges of education, which produce K–12 teachers.

To the New Governor:

1. Annually convene a statewide summit of university, political, business, labor, and civic leaders to receive the State of Public Universities message.
2. Review routes to making higher education more affordable. Advocate strongly for increased federal aid to students through Pell Grants and other programs. Survey high school seniors and college students regarding perceived financial obstacles. Thoroughly reexamine existing state programs to aid students.
3. Recommend state budgets that recognize public universities' contributions to the state's future and, at the same time, encourage universities to keep costs under control and tuition increases within bounds, without sacrificing the education of students and research. Mindful of concerns about higher education's economics, the commission commends the universities for taking measures to restrain costs at the same time as advancing their missions.

To Incoming State Policymakers:

1. Recognizing that any budget contains both development and maintenance components, emphasize the development side. Public funds for higher education

trigger significant economic and other returns on investment and restrain tuition increases.

2. Create a multi-year strategy to achieve aggregate per-student appropriations for public universities that at least rise to the average of Great Lakes and competing states.
3. Articulate and support policies to achieve higher numbers of four-year and advanced degrees, particularly among socioeconomically disadvantaged people.
4. The state must create a regular, dependable funding stream to meet universities' capital needs. New construction and renovation costs draw precious capital from learning and research. Combining predictable and periodic appropriations for maintenance, remodeling, and new construction with annual appropriations for ongoing technology and infrastructure would result in an improved learning environment and reduced pressure on tuition. Policymakers might probe the feasibility of a statewide bond issue to support capital needs.

Members of the commission are proud of Michigan's range and quality of public higher education options. Generations of taxpayers have given generously to the campuses. Hardworking Michigianians who never attended college nonetheless root for college teams, stroll college campuses and museums, and of course hope that one day their child will enter and graduate from the university. It is very much part of the American Dream.

Michigan's public universities have powered our economy and lifted us up culturally. We are a stronger, more civil society for them. They have added immeasurably to our social progress. Autonomy has advanced their vitality and diversity. Today's university and political leaders can strengthen higher education, and state government and public universities carry separate constitutional responsibilities to do so.

Driving that future, we envision a new compact setting forth the mutual responsibilities of state government and our public universities: Central Michigan University, Eastern Michigan University, Ferris State University, Grand Valley State University, Lake Superior State University, Michigan State University, Michigan Technological University, Northern Michigan University, Oakland University, Saginaw Valley State University, University of Michigan, University of Michigan-Dearborn, University of Michigan-Flint, Wayne State University, and Western Michigan University.

The empires of the future are the empires of the mind.

—Winston Churchill, in a speech at Harvard University, 1943.

WHY A UNIVERSITY INVESTMENT COMMISSION?

Business, labor, and other leaders have scrutinized Michigan's support of public universities roughly every decade. In 1984, Gov. James Blanchard named a group headed by former United States Attorney James Robinson for this purpose; in 1992, Federal Judge Damon Keith chaired a panel.

In the spring of 2002, the Presidents Council of State Universities of Michigan affirmed that another outside review of public higher education is warranted by changes in higher education since 1992 and the forced retirement, due to term limits, of virtually all state government's experienced policymakers following the 2002 election. Members of the 2002 University Investment Commission are convinced that Michigan faces an exceptionally difficult budgetary environment and that investing in higher education pays off handsomely.

COMMISSION COMPOSITION

The members of the commission are:

Paul Hillegonds (Chair), President, Detroit Renaissance

Dr. Lillian Bauder, V.P. for Corporate Affairs, Masco Corporation

Matthew P. Cullen, General Manager, General Motors Enterprise Activities Group

Vernice Davis Anthony, Executive Director, Greater Detroit Area Health Council

Deborah Dingell, Chairman, General Motors Foundation

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Richard Whitmer, President & CEO, Blue Cross Blue Shield of Michigan

Wayne H. Wood, President, Michigan Farm Bureau

COMMISSION CHARGE

Throughout the nation, strong higher education institutions and advanced levels of education correlate to strong communities and successful individuals. Completing a college degree is a successful strategy for individuals seeking economic independence. Strengthening universities bolsters communities seeking long-term vitality.

Michigan enjoys a constellation of independently governed state universities with broad offerings of internationally recognized academic programs. These universities serve a diverse population. With over 275,000 students receiving education from our public universities each year, the successes of our universities propel the long-term economic, cultural, and civic health of the state and its communities.

The commission examines Michigan's strengths in higher education and makes recommendations to further enhance Michigan's public universities to ensure that in the decades to come they yield support for residents, families, businesses, and communities.

A glossary of terms used in this report is found in Appendix A.

STRATEGY

The commission's strategy to strengthen public universities stresses three goals:

- State investment should increase.
- Universities should report information that measures progress in achieving programmatic quality and cost effectiveness.
- More Michigan residents—especially socioeconomically disadvantaged students—should earn four-year and advanced degrees.

All the above are crucial to a long-term, cohesive, and effective strategy. Each goal is inseparable from the others.

RATIONALE FOR THE STRATEGY

The commission starts with the premise that higher education is vitally important to Michigan's progress: economically, socially, and culturally. Michigan's 15 public universities comprise one of the world's finest arrays of public higher education. They are among the state's crown jewels. They educate our children. They provide competitive advantages for our companies. They support community development. Their research provides intellectual capital for a prosperous future for us all. Their autonomy from political interference in policies, programs, and curricula is a blessing.

The costs of higher education challenge state and family resources. When state appropriations level off or decline, students and their families incur dramatic increases in tuition. Over the past 25 years, Michigan has migrated from students paying about one-third to about one-half of their education costs. Appendix B charts recent fluctuations in tuition and appropriations. The inverse relationship between the two is obvious.

Michigan state government provides \$1.725 billion to public universities annually. While this support is substantial, we rank below the average levels of aggregate per-student

support in comparable states. That differential drives up tuition borne by students and their families. The state should set a goal of attaining and then exceeding the per-student public support offered by our competitors.

Higher education legitimately claims public resources. Improving quality—offering more varied subjects, more hands-on teaching, and smaller class sizes and recruiting internationally recognized scientists—comes at a cost, either borne by public appropriation or tuition fees. However, increased state support must be complemented by university accountability. By reporting regularly on how they are spending new dollars, what returns are anticipated, how quality of instruction will be improved, and where savings or program reductions or elimination are undertaken, the universities will account for and be held accountable for progress. Universities provided commissioners with examples of recent operational savings. These examples merit wide dissemination.

Better-educated people generally have better-paying jobs that generate more taxes. When the state puts more money in higher education, it receives a handsome return on investment. Growing the degreed population impels Michigan's economic vitality.

Michigan's economic security demands that we produce more college graduates. People who are educated here overwhelmingly opt to stay in Michigan. As a percentage of our total population, the 23 percent of Michiganians who hold a four-year degree lags behind the national average of 25 percent. Our shortfall is 150,000 people. Attaining and thereafter exceeding the national average will create a larger pool of well-educated people: residents whose income levels far exceed those of people with less educational attainment and whose skills attract capital and employers.

IMPERATIVE TO INNOVATE AND PROMOTE

Strong public universities propel Michigan's economic and social progress. Talented faculty and students, employers, and highly skilled workers from all over the world move into our state to be on or near our campuses. For every problem facing Michigan—the need for high-quality and affordable health care, stronger K–12 student achievement, more and better-paying jobs, environmental protection, agricultural productivity, and urban revitalization—public universities contribute to solutions through leadership, talented graduates, loan of academic talent, and research. Unfortunately, our universities' contributions to the security of Michiganians are generally well-kept secrets. Far more visible are their campus buildings, roads, and sports facilities and teams.

Every institution faces and makes necessary adjustments as we embrace an economy where skills, knowledge, and technology—and the application of all three in the advanced manufacturing, agricultural, and service sectors—increasingly will determine economic success. Every worker needs to be a knowledge worker. Higher education is not immune from this leap; indeed, it ought to be a primary leader and beneficiary of the new knowledge-centered economy.

Outcomes and benefits in our new age trump inputs and features. Universities must clearly communicate their achieved outcomes and ensuing benefits to the state. The universities must show elected officials, opinion leaders, and the public how and where investments and savings take place. In the business of creating knowledge and

innovating, the universities are most capable of documenting their contributions to society and the uses of public and tuition funds.

A collective voice is needed to convey the strength of the whole. It takes all 15 public universities to communicate the sum of their benefits to Michigan. Surely, as state resources remain limited and the competition increases for scarce state funds, unity among public universities will be critical to preserving and expanding state funds.

We must view learning as lifelong and work toward the seamless transition from early childhood to K–12 to community colleges and universities and workforce skill-building. Connections must be built among early childhood, K–12, higher education, workers' skill-building, and adult continuing education. Michigan's public universities must play a crucial role in fostering those connections.

Benefits of Higher Education

Economic

Strong public universities provide irreplaceable benefits to Michigan's \$308-billion economy and its communities. If it were a nation, Michigan's economy would rank 16th in the world, exceeding that of Argentina, Belgium, Switzerland, and Russia. The state competes globally for employers who search out locations close to vibrant universities and the well-educated talent that universities produce.

According to the Michigan Economic Development Corporation (MEDC), the state's investment of \$1.5 billion in higher education in 1999 produced a net economic impact of \$39 billion, 12.6 percent of Michigan's gross state product. Nearly two-thirds of this sum represents the higher differential wages and spending by college graduates compared to those who lack a four-year degree. Spending by the universities, faculty, students, and visitors rounds out the sources of economic activity.

In October, the National Center for Public Policy and Higher Education issued its second state-by-state report card on higher education. Summarizing Michigan, the center found that "the state is a top performer in the economic benefits [of higher education] to the state". The center found, however, that the proportion of Michigan residents who have a bachelor's degree is "fair."

In order to continue economic benefits, Michigan must increase its proportion of residents with four-year and higher degrees. The MEDC finds that a shortage of labor poses the most serious long-term problem to the state's economy. Ninety percent of new jobs will be created in the service sector, with many of those jobs requiring higher education. Increases in advanced manufacturing technology require a significantly higher level of education for future manufacturing workers. This is particularly true for Michigan because of technology advances in vehicle manufacturing and attempts to position the state in attracting high-technology manufacturing industries through research and development in automotive fuel cell technology. Similarly, the state seeks to bolster the state's attractiveness to life sciences industries.

Michigan can provide these highly skilled workers by retaining college students, graduating them in higher numbers, and attracting out-of-state and international students.

When we educate our college students, they overwhelmingly opt to stay in Michigan. Among Michigan's high school seniors who attend college, 89 percent stay in the state after graduation. That compares very favorably to a national figure of 79 percent. While we rank among the high-performing states in graduating students within six years of university enrollment, there is room for improvement: 45 percent of students entering Michigan's colleges do not complete a bachelor's degree within six years. Finally, Michigan must embrace brainpower immigration. Currently, we suffer a slim negative balance: 93 more students **leave** Michigan for college than out-of state residents **come to** the state for higher education. Given the strengths of our public universities, we should show a large and positive balance.

University research adds value to Michigan's entrepreneurs and corporate leaders, some of whom relocated here to access research. Engineering, bio-medical and other life sciences, agriculture, advanced manufacturing, packaging, and many other fields benefit directly from research talent and facilities on campuses, and, in turn, employ growing numbers of people and add to the state's gross state product.

U.S. and international employers also seek out university-based communities for reasons apart from access to skilled workers and research. When corporate decision makers relocate, they move not only their offices, plants, and many workers, but also themselves and their families. Access to the humanities, culture, recreational outlets, and intellectual stimulation provided by universities are critically important factors in their choice of a new location.

Finally, job stability is an additional benefit of higher education. Only 8 percent of the nation's unemployed people have a bachelor's or advanced degree, although they represent 25 percent of the population.

Community

Communities benefit from universities through vibrant and challenging cultural offerings, sports, "hip" neighborhoods, demographic diversity, and intellectual capital loaned to civic, economic development, and charitable causes. University communities are magnets for single professionals, empty nesters, and retirees. In virtually every list of "best places in America to live," the areas encompass universities.

Supplementing the vast array of cultural organizations in the nonprofit sector, Michigan's universities provide artistic and cultural opportunities for local residents as well as the university community. Through "in-residence" programs and performance and lecture settings, great musicians, artists, authors, poets, playwrights, composers, and dancers hold public events. Superb museums welcome the public.

Scholars lend their talent to easing a dizzying array of community problems. As problem solvers, they provide help in easing traffic congestion, alleviating neighborhood distress, improving the efficiency and effectiveness of police and fire services, creating fairer and more balanced local taxes, and managing sensitive environmental issues.

In all communities, residents are most concerned about K-12 schools. Michigan's public universities produce more K-12 teachers than virtually any state, and the vast majority of

K–12 teachers received their undergraduate or graduate education in the state’s public universities.

Intangibles

Although their impact is difficult or impossible to quantify, universities enhance the quality of life far beyond the utilitarian benefits of better-paying jobs for their graduates and cultural opportunities for the public. They enrich the civic fabric.

In disproportion to their numbers, university graduates serve civic causes, exhibit strong communications skills, tolerate different outlooks, study and engage in public affairs, and connect the ever-increasing facets and details of the world. Many teach not only in classrooms but also in the workplace. They smooth out the rough edges of political and social dialogue, exerting a critically beneficial role of making public speech and behavior more sophisticated and less judgmental. Social progress hinges on the involvement of university graduates in civic matters.

During their university life, students build lifetime friendships. Students frame and remold their opinions, attitudes, and values. Future and current leaders interact and enrich their outlooks and contributions through the sharing of higher education experiences.

It is an essential and inherent good to have a deep and rich culture. As coarseness, pandering, and crudeness increase in society, a countervailing opportunity must be fostered. An educated citizenry is essential for that to happen. Otherwise, we risk becoming a society based on consumption for consumption’s sake without any larger purpose being served.

Martin Luther King Jr. spoke eloquently to the altruistic and economic ends of education in his famous “Purpose of Education” speech at Morehouse College in 1948:

Education has a twofold function to perform in the life of man and in society: the one is utility and the other is culture. Education must enable a man to become more efficient, to achieve with increasing facility the legitimate goals of his life.

Education must also train one for quick, resolute, and effective thinking. To think incisively and to think for one’s self is very difficult. Education must enable one to sift and weigh evidence, to discern the true from the false, the real from the unreal, and the facts from the fiction.

The function of education, therefore, is to teach one to think intensively and to think critically. But education that stops with efficiency may prove the greatest menace to society. The most dangerous criminal may be the man gifted with reason, but with no morals.

We must remember that intelligence is not enough. Intelligence plus character—that is the goal of true education. The complete education gives one not only the power of concentration, but worthy objectives upon which to concentrate.

KEY AUDIENCES

The commission provides recommendations for three key audiences: the presidents and governing boards of public universities; the new governor; and incoming state policymakers including both the new governor and legislators. Each university—and the 15 as a whole—can and must take certain steps to broaden support from leaders and the public. The new governor and legislature likewise can take steps to strengthen the public higher education system. With shared responsibility, university and state political leaders can strengthen universities and communicate broadened public benefits while preserving the universities' autonomy.

RECOMMENDATIONS

We direct the following recommendations to the presidents and governing boards of Michigan's public universities.

1. Document the uses and benefits of resources.

The public and political leaders deserve transparency of information, especially with regard to tuition and state appropriations. What is the relationship between tuition rates and state funding? For what purposes is increased revenue spent? What cost savings have been achieved or planned? Have universities ensured that cost savings have not undermined education and research? Accountability metrics should be a central part of the message discussed below.

Increasingly, private and public bodies compile data that can be benchmarked or defined initially and then measured over time to indicate progress toward organizational goals. With regard to strengthening public higher education in Michigan, two sets of metrics can assist: (1) accountability reports compiled by the universities and (2) public investment reports comparing Michigan to other states. One way of capturing efficiency is via throughput reports. In some ways similar to monitoring each step of a manufacturing process, the universities would gather information centered on the costs associated with the advancing achievements of their students. A few examples of such metrics follow. A more comprehensive list of metrics can be found in Appendix C.

University accountability or efficiency reports

- Allocation of general funds above projected inflation
- List of efficiency measures taken
- Impact on education and research of efficiency measures
- Institutional response to changes in admission pressure (increase/decrease)
- Graduation rates and trends
- Overhead expenses per enrolled student
- Methods used to reach out to socioeconomically disadvantaged students

Public investment metrics

- Comparison of state appropriations for Michigan public universities as a percentage of total state revenues by decade
- Updated graph of annual relationship of percentage changes in tuition and state appropriations over time in Michigan
- Michigan's ranking in the Milken Institute's *State Technology and Science Index* (provided in Appendix D)

Metrics can also serve a meaningful purpose in examining capital outlay needs. In the assessment of those needs, one might use the square footage of facilities by decade built (age); immediate and projected remodeling and special maintenance needs; university general funds budgeted or planned to meet remodeling and special maintenance needs; and classroom utilization patterns of buildings.

2. Create and deliver, under the aegis of the Presidents Council of State Universities of Michigan, an annual State of Public Universities message. The 15 universities must show a united front to demonstrate the aggregate benefits to the entire state of their distinct missions and collaborative efforts.

Leaders of Michigan's public universities must convey to state residents a sense of unity, coherence, social benefit, and cost effectiveness. As no one institution can do, the group can spell out their overall benefits to the economy and collective efforts to solve social problems and assist communities. This statewide view of public higher education need not sacrifice the identity of any university.

As heads of public bodies, university presidents and their boards must balance their individual institutional goals with statewide public goals. Speaking with a single voice contributes to public understanding of how universities' missions and activities advance public goals.

The state universities' governing boards and key administrators must support presidents who answer political leaders' calls for accountability. Communications between and among universities must improve on all levels: the presidents, governing board members, and academic leaders.

Federation around a common set of objectives—be it speaking with a unified voice or collaborating on instructional or support services—bolsters autonomy because it strengthens public support. Each institution preserves its front-end goals of policymaking and mission. Stretching scarce resources in back-end activities through joint purchasing or collaborative instruction should be undertaken whenever it makes sense.

3. Plan together how to make room for additional students as Michigan moves toward the national average of degreed population.

Michigan must move toward and exceed the national average in the percentage of its residents who hold a four-year degree. The state would have to add 150,000 additional persons to the ranks of those with a four-year degree just to reach

today's national average, one that certainly will rise in years to come. Just as compelling is the state's need to support more people earning graduate and professional degrees.

Michigan has made real and relative progress in extending college. In 1990, only 17.4 percent of our population had a bachelor's degree or higher, compared to 20.3 percent nationally. In 2000, the Michigan and national averages were respectively 23 and 25 percent. We need strategies and policies that eliminate the gap.

By 2012, Michigan should achieve the national average of its population holding a four-year degree. Thereafter, we should achieve levels found in the best performing states (e.g., California, Washington, Colorado, Virginia, New York, and Minnesota), currently ranging from 28–33 percent.

Every person with a bachelor's or higher degree will add value to the Michigan economy. We know that talent attracts capital. Employers will locate close to workforce talent and quality of life imperatives of culture, humanities, entertainment, and people of comparable success. Social and civic rewards come, as well.

As we achieve higher levels of four-year and advanced degrees, we absolutely must assure that graduates come from all corners of the world and all segments of our society. We must help secondary school students believe that college is within their reach, regardless of the neighborhood in which they live, the limited means of their family, or self-limiting stereotypes. Universities need to make room for many thousands of newcomers in the decades ahead and extend a welcoming and supportive atmosphere.

Ever greater numbers achieving and extending education are hallmarks of America. At the founding of the nation, only a very small number received any formal education. A hundred years later, many people experienced some schooling. By 1960, 41 percent of people were graduating from high school. Today, 83 percent of state residents have at least graduated from high school. By century's end, nearly that percentage will hold a four-year degree. More people will attain higher levels of formal education; that is inevitable and beneficial.

We wrestle with many contemporary social problems with roots in educational deprivation. The widening income gap between rich and poor inherently is an education gap. In the overall economy, better fortunes come with more education. Degreed residents achieve much higher salaries and are much sought after by employers the state must attract. Michigan desperately needs "high status" workers, not just for its economy but also for its social, cultural, and civic reinvigoration.

Achieving and surpassing the national average requires coordinated and intense work of educators at all levels. One's capacity to learn is set in early childhood, well before kindergarten entry. Parents and early childhood educators start the road toward our goal. K–12 teachers and their curricula affect considerably the

aspirations and learning capabilities of the young. At high school graduation, the road forks in various directions: the workplace, community college, vocational training, or the university.

To increase the number of degreed residents, state universities are challenged to increase rates of graduation. Complex reasons, primarily related to students' personal desires, intervene. However, the fact that less than 50 percent of freshmen in some public universities have graduated by their sixth year suggests that financial means, inadequate counseling, or inflexible course scheduling play roles.

As greater numbers of high school graduates become academically eligible and financially able to enroll in universities, public universities must work together to assure that there is space to accommodate them or work with state policymakers to create new buildings and support added faculty and other resources.

4. Build strong relationships with K–12 schools.

As recruiters of K–12 graduates and producers of K–12 teachers, the universities play critical roles. They can provide clear eligibility expectations and incentives to secondary school students. They can help build strong curricula. Through the quality of instruction in their colleges of education, they can provide K–12 schools with teachers who inspire high levels of student achievement and provide critical professional development to teachers.

Colleges of education and university leaders should work with K–12 leaders to stretch the benefits and returns of the \$14 billion spent on elementary and secondary education. Michigan's colleges of education rank third among all states in producing K-12 teachers, more than 6,200 in 2002. The colleges of education thereby assume a major responsibility for the quality of instruction that leads to higher student achievement in K–12.

We direct the following recommendations to the new governor.

1. Convene a statewide summit of university, political, business, labor, and civic leaders to receive the State of Public Universities message.

We urge the new governor to convene a statewide summit of university, political business, labor, and civic leaders to receive the State of Public Universities message. The group should discuss the goals we recommend, most notably heightened public investment, cost containment, and greater numbers of degrees. The universities' message on accountability deserves the largest audience. The governor is the appropriate leader to provide that audience.

Yearly, the process of appropriating funds to state universities begins with a "big picture" documentation of financial, enrollment, and other information. State Capitol insiders receive this information. Rarely does it seep into public notice. Following the governor's budget recommendations, legislators receive individual reports from each school, with each making its strongest case for additional funds.

By the close of the budget process, the universities are tugging at one another as well as decision makers.

First, we want to see a much broader dissemination of information. How and who we educate, how funds are spent, where savings have been achieved, and where lie the benefits of higher education are matters of interest to the Michigan public, not just its political leaders. Persuade the public through compelling stories and the political leaders will be empowered to invest in our state's future.

Second, Michigan needs to have a long-term strategy toward higher education, one that encompasses various goals and has attached to each measurable objectives and meaningful time frames. Partisan whims and fragmenting tactics occur in the vacuum of strategy.

Third, university leaders must adopt a united front. Developing and co-owning a long-term strategy establish a focus on strengthening **all** universities and earning increased public investment.

The governor should work with the universities to create metrics that will prompt the gathering and inclusion in the message of information and portray progress toward goals. Likewise, benchmarks for Michigan's public investment in higher education should be laid out. Specific state investment goals, immediate and long term, would be based upon key public investment metrics.

2. Review routes to making higher education more affordable.

Higher state appropriations are the best means of restraining tuition increases. Beyond appropriations decisions, means of increasing affordability include increasing federal Pell and other grants and low-interest loans to college students. Many states, including Michigan, have extended aid to high-achieving high school students. Others base assistance more on financial need than merit.

Research on college students' financial condition, needs, and barriers would be an important step toward developing new means of assistance or establishing that the state's current system is working well. A statewide survey of high school seniors and college students would be a valuable tool in such policy analysis. Thereafter, there should be a thorough reexamination of the ways in which the state provides financial assistance to students.

3. Recommend state budgets that strengthen public universities.

The governor initiates the annual state budget process by making recommendations to the legislature. We urge the governor to recognize public universities' contributions to the state's future. We urge, too, that the governor consider the inverse relationship between state appropriations and tuition levels. Keeping higher education affordable starts with sufficient appropriations. At the same time, we encourage universities to keep costs under control and tuition increases within bounds. Mindful of concerns about higher education's economics, the commission commends the universities for taking measures to restrain costs.

We direct the following recommendations to incoming state policymakers.

1. Recognizing that any budget contains both development and maintenance components, emphasize the development side.

Commission members understand the pressures on the public purse of Michigan. In 2002–03 and immediate budget years to come, the governor and legislature face unenviable choices. Former Michigan State University President Clifton Wharton urged policymakers to view a budget as a set of explicit choices between development (investment in the future) and maintenance (short-term holding action). The long- and short-term benefits of adding funds to the development side of a budget—certainly including higher education—far outweigh spending on criminal remediation and prison. Dollars invested return dollars to the economy, communities, and families. When we incarcerate more black men in prisons than we enroll in colleges and universities, we are paying the price for yesteryear’s poor investment choices.

2. Create a multi-year strategy to achieve aggregate per-student appropriations for public universities that at least rise to the average of Great Lakes and competing states.

Increasing state support is central to making higher education more affordable and accessible, properly maintaining and renovating campus buildings, retaining and recruiting faculty, increasing research capabilities, acquiring learning technology, helping students and faculty to learn best uses of technology, and offering students qualitative benefits that include lower student-to-teacher class ratio and wider curriculum offerings.

Benchmarking and evaluating Michigan’s level of public support may best be accomplished by comparing aggregate per-student appropriations in other states. One group could be Great Lakes/Big Ten states. Another group might include states that compete economically with Michigan, for example North Carolina, New York, Texas, Virginia, and California. New York and California certainly are high-cost areas compared to North Carolina, Texas, and Virginia. Adding together the Great Lakes states and economically competitive states mentioned above, the average level of public support for state universities is \$6,735 per student. Michigan’s aggregate per-student level of support is nearly a \$1,000 less—\$5,795.

Considering all the above states, Michigan ranks next to last (trailed only by Wisconsin) in state per-student support. By some future date, Michigan should set as its goal the attainment of the average. Thereafter, Michigan should achieve a level of aggregate state support at the 75th percentile of those states. Moving toward those goals, however, depends on the universities documenting cost savings and achieving efficiencies as noted above. Combining increased public support with institutional savings will contribute mightily to restraining tuition increases, increasing quality, and expanding accessibility.

3. Articulate and support policies to achieve higher numbers of four-year and advanced degrees.

Fifty-three percent of Michigianians have attended college. That is a high accomplishment, but it is insufficient to drive tomorrow's economy and provide our state a competitive edge.

As mentioned earlier, we are only decades away from attaining the same rates of college education as we have achieved in high school graduation. Currently, approximately 14 percent of Michigianians hold a bachelor's degree and another 8 percent hold a graduate or professional degree.

The children of those Michigianians (47 percent of the population) who never attended college must be encouraged by leaders to consider college and other postsecondary education options that hone skills and open new doors of opportunity. By considering continuing education an attainable goal, many will be encouraged to achieve higher performance in high school.

As greater numbers earn four-year degrees, so too, greater numbers will earn advanced degrees. The Milken Institute assesses the relative preparedness of states to compete for science and technology industries. Criteria include the number of advanced degrees, Ph.D.'s, doctoral scientists and engineers, science and engineering post doctorates, master's degrees in science and engineering, and recent Ph.D.'s in the fields.

The bully pulpits of state political leaders are capable of raising the expectations of students and their families. They must support a vision of our future in which 75 percent of people have attended college and 40 percent have won baccalaureate or higher degrees.

A vision must be completed by policies that support and nurture higher education. Some deal with funding for universities and community colleges, which certainly will increase with ever-larger enrollment. Others deal with funding and setting high standards for K–12 education, for without more academically qualified students, enrollment increases cannot be justified.

4. Support capital needs on campuses.

The university campus bears striking similarity to a good-sized city, replete with housing, roads, waste systems, public buildings, and information and energy infrastructure. Maintaining this infrastructure on any campus costs \$20 million or more annually. Beyond maintenance, older buildings require extensive modernization to meet safety, technological, environmental, and educational demands. Finally, new buildings will be erected to replace those that cannot be renovated or house new programs and students. New capital needs, required by breathtaking advances in biology, physics, engineering, information technology, and medicine, add billions more.

Universities regularly lay out future capital needs but there is no regular or dependable funding stream from state government to match or meet them. The

infusion of new and stable funding will promote shrewder, long-term strategic investment decisions. Michigan must regularize and make more predictable and dependable its capital outlay decisions.

Critical to the success of our public university students is the learning environment, the technology, and physical plant of our campuses. Michigan's public universities deliver modern instruction and research in aging facilities, which require maintenance and replacement on a regular and relatively predictable basis. Regular and special maintenance of existing buildings combined with periodic, new construction create pressures on operating budgets and, in turn, tuition levels.

To improve campuses' physical plants and better manage costs, all universities engage in sophisticated capital outlay planning processes, which extend out five years. Each governing board reviews such plans, which then are provided yearly to state policymakers. This has become a very successful planning process resulting in better allocating state and tuition revenues.

Missing from this process are regular, periodic, state capital outlay appropriations. The value of a regular capital outlay bill is predictability. Predictability and reliability in capital appropriations, dovetailing with the five-year planning process, allow for the most effective and efficient allocation of limited tuition and state operating funds.

Many states in the Midwest and across the country appropriate money on a *regular, predictable* basis for new university construction and major renovations. Equally important, many states appropriate funds annually for ongoing maintenance and technology upgrades, as Michigan did until recently. A renewed appropriation for ordinary maintenance of all public university buildings—a sum that can be allocated to them separately on the basis of square footage of space—would help universities refocus their tight budgets to meet educational needs and would enhance planning and efficiency.

Combining predictable and periodic appropriations for major maintenance, remodeling, and new construction with annual appropriations for ongoing technology and infrastructure would result in an improved learning environment and reduced pressure on tuition.

North Carolina voters enacted in 2000 a statewide bond issue for renovating and constructing new buildings on college campuses. That state's universities have been the foundation of the Research Triangle and accompanying economic investment. A statewide bond merits consideration, although it cannot replace ongoing funds for modernization and other needs. Also worthy of study are options including the conditional sale to and lease-back of space from private firms and certificates of participation.

Campus buildings, representing enormous fixed costs, frequently are underutilized in the summer or weekends. University leaders should view them as assets and derive income from their use twelve months a year and seven days a week.

CONCLUSION

The commission members are very proud of Michigan's public higher education options, among the finest in the world.

Michigan housed a public university 20 years before it gained statehood, and 20 years after statehood it invented the land grant commitment of public service, expanded class offerings, and access to everyone. Generations within families have built loyalty to one or more public university. Generations of taxpayers and private donors have given generously to the campuses. Hardworking Michiganians who never attended college nonetheless root for their teams, stroll their campuses and museums, and of course hope that one day their child will enter and graduate from the university. It is very much part of the American Dream.

Michigan's public universities have powered our economy and lifted us up culturally. We are a stronger, more civil society for them. They have added immeasurably to our social progress. Today's university and political leaders can strengthen higher education. We all will benefit greatly from that. So too will generations to come.

APPENDIX A: *Glossary of Terms*

■ **Certificates of participation**

A private developer plans to erect a new building. The developer enters into a long-term lease with a public body, guaranteeing a cash flow sufficient to recoup the developer's original investment and ongoing maintenance costs. The developer then gains bonding. At a predetermined, future date, the public body gains ownership of the building, without having its cost contribute to the body's long-term debt.

■ **College degrees**

A bachelor's or baccalaureate degree is the lowest degree predominately conferred by four-year colleges and universities. The next highest degree is master of arts or master of science, which involves an integrated course of study and typically requires two years of work beyond a bachelor's degree. Beyond a master's degree are doctorate (Ph.D.) and professional (such as medical, dental, pharmacological, and law) degrees. Degrees above the baccalaureate frequently are referred to as postgraduate degrees. With less than four years of study, a college student may be awarded a diploma or an associate's degree. Some universities carry out community college responsibilities in their geographical areas, providing a wide variety of course offerings and associate's degrees.

■ **Distance learning**

Instruction of students who are not in a classroom with a teacher. The Internet and interactive video are technologies used in distance learning.

■ **Gross state product**

The total value of goods and services produced by the residents of a state.

■ **Metrics**

Measures of specific progress toward goals or objectives using factors that can be reduced to numbers.

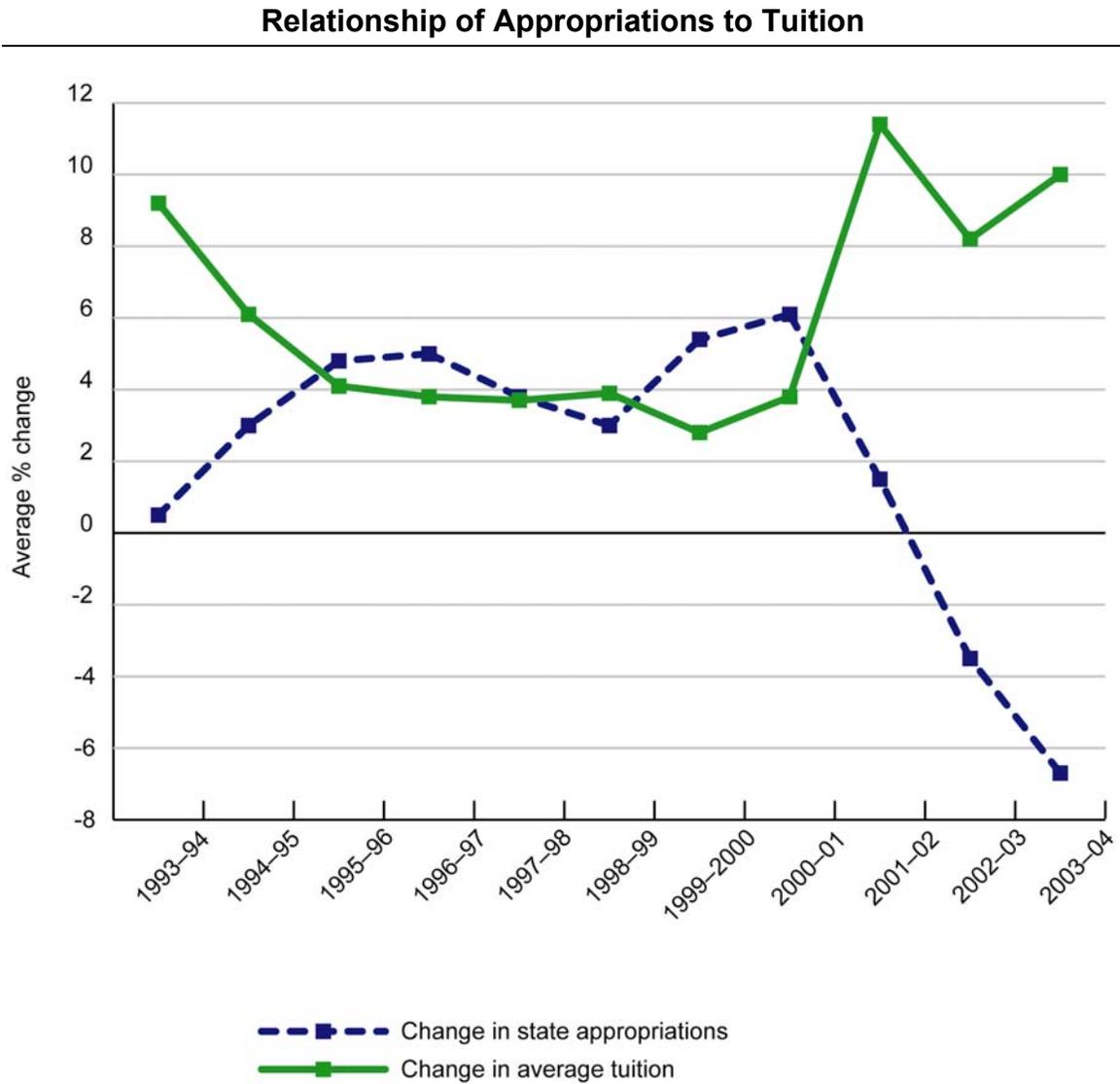
■ **Public higher education**

Community colleges and four-year universities that were created by state government and are supported by taxes and state appropriations.

■ **Throughput**

As used in this report, a process of examining each step of the process by which a student achieves graduation. The term is frequently used in manufacturing, computing, and other fields to describe the processes required to achieve a final outcome.

APPENDIX B: *Relationship of Appropriations to Tuition*



Source: Presidents Council, State Universities of Michigan.

APPENDIX C:

Metrics

UNIVERSITY ACCOUNTABILITY OR EFFICIENCY REPORTS

- Pattern of internal reallocations before increases in appropriations and tuition
- List of cuts or reductions from the university's general fund base budget
- Total percentage increase/decrease in general funds
- Allocation of general funds above projected inflation
- List of efficiency measures taken
- Impact on education and research of efficiency measures
- Institutional response to changes in admission pressure (increase/decrease)
- Graduation rates and trends (normed)

PUBLIC INVESTMENT METRICS

- Comparison of state appropriations for Michigan public universities as a percentage of total state revenues by decade
- Updated graph of annual relationship of percentage changes in tuition and state appropriations over time in Michigan
- Comparison from 1970 to current year, in decades, of (a) CPI, (b) Higher Education Price Index, (c) university general funds/student percentage change (averaging all universities), and (d) appropriation/student percentage change
- University general fund (tuition/appropriations) chart, by decade, starting with 1970
- Michigan's ranking in the Milken Institute's State Technology and Science Index (See Appendix D)

APPENDIX D:

Milken Institute's State Technology and Science Index

The Milken Institute has developed a State Technology and Science Index to assess the relative preparedness of the 50 states for the new economy. Shown below is a ranking of the states in the 2002 index. Scores are based on research and development inputs, risk capital and entrepreneurial infrastructure, human capital investment, technology and science workforce, and technology concentration and dynamism. The complete report can be found at <http://www.milkeninstitute.org/poe.cfm?point=pub03>.

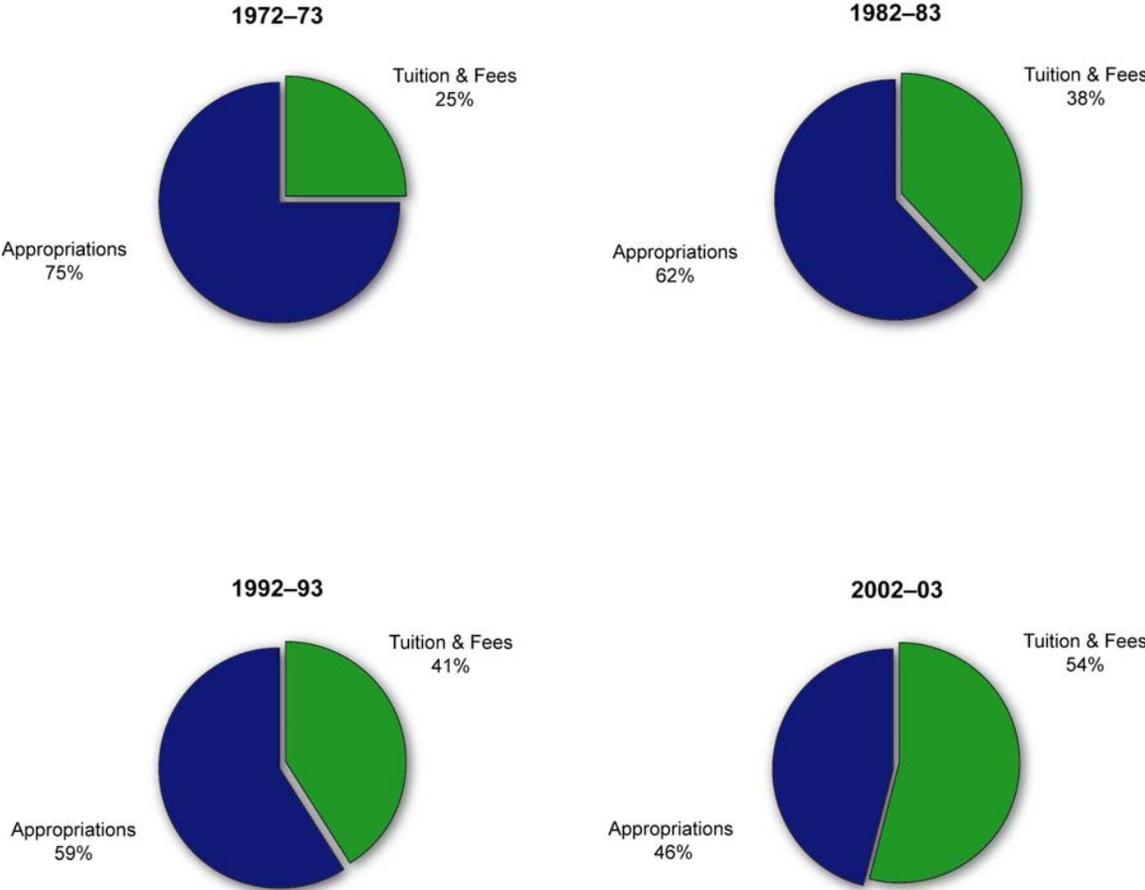
Rank	State	Score	Rank	State	Score
1	MA	84.90	26	ID	51.01
2	COLO	80.58	27	OHIO	49.24
3	CALIF	80.37	28	MO	47.49
4	MD	77.86	29	FLA	46.47
5	VA	73.33	30	IND	46.09
6	WASH	71.81	31	VT	46.06
7	NJ	69.95	32	NEB	44.97
8	CT	68.58	33	ALABAMA	44.97
9	UTAH	68.26	34	MT	44.14
10	MINN	65.87	35	IOWA	42.54
11	DE	65.54	36	MAINE	40.53
12	NY	64.54	37	OK	40.29
13	NH	63.44	38	WYO	39.53
14	TEX	60.35	39	ALASKA	39.53
15	GA	60.16	40	TENN	39.46
16	PA	59.82	41	SC	38.98
17	NC	58.91	41	NEV	38.61
18	AZ	58.60	43	HA	33.98
19	ILL	58.38	44	LA	32.45
20	NM	57.89	45	ND	31.72
21	RI	57.30	46	KY	31.12
22	KAN	56.90	47	SD	30.50
23	ORE	55.54	48	WV	30.17
24	MI	54.52	49	MS	28.73
25	WISC	53.74	50	AR	22.80

Source: Milken Institute, September 2002, *State Technology and Science Index*.

APPENDIX E:

Sources of General Fund Operating Revenues

Sources of General Fund Operating Revenues Michigan Public Universities



Source: Presidents Council, State Universities of Michigan
