

Background Briefing for Commission Members

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THE COMMISSION'S CHALLENGE

Michigan's economic future depends on enhanced levels of education. New knowledge and innovation are the key to a growing standard of living. Michigan must educate its young people and citizens to be the best educated in the world, keep them here, and attract the top talent in the world to Michigan.

Facing this economic imperative, the governor and lieutenant governor challenge us to meet these goals:

1. Build a dynamic workforce of employees who have the talents and skills needed for success in the 21st century
2. Double the percentage of citizens who attain postsecondary degrees or other credentials that link them to success in Michigan's economy
3. Improve the alignment of Michigan's institutions of higher education with emerging employment opportunities in the state's economy

THE CASE FOR COLLEGE: POSTSECONDARY EDUCATION FOR ALL

During the industrial revolution Michigan succeeded through innovation *and* hard work. Michigan invented the auto industry and became a world leader in advanced manufacturing, pharmaceuticals, furniture and other industries. Our success attracted migrants from the nation and world to make this "splendid peninsula" home.

Today we are in a knowledge revolution. To thrive economically Michigan must innovate again, but we must do more than count on our tradition of hard work to compete. Michigan has to *work smart*.

Only the skilled survive in today's interdependent economy—highly educated individuals and skilled communities. In a global marketplace where "talent centers" are the places job growth occurs, Michigan must catch up with and pass the best-educated regions on earth. Only by Michigan citizens reaching enhanced levels of education can we maintain and increase good paying jobs and a growing standard of living for Michigan families and their children.

A better-educated citizenry will make Michigan a stronger magnet of opportunity, where firms and employers thrive and where new ideas and industries are incubated based on the talent and know-how of highly educated people.

For some time in Michigan, based on our early lead in the industrial revolution, high wages were available with relatively little formal education. Today, however, education levels determine Michigan citizens' income levels as well as our opportunity for future economic gains. Two-thirds of the jobs that will be created in the next decade will require postsecondary education and training.

The economic payoff for Michigan citizens reaching higher levels of education is huge. The single most significant factor influencing potential worker earning is a college degree

(Carey, 2004). Those earning bachelor's degrees can be expected to earn 60 percent more than those with high school diplomas while those with associate's degrees earn 25 percent more than high school graduates.

The ratio of earnings among persons with a high school diploma, some college, a bachelor's degree, and an advanced degree has been widening since 1975 (*U.S. Census Bureau, Current Population Survey 1975-2001*). This gap in earnings has grown even as the supply of college-educated workers has risen.

- According to the Economic Policy Institute, the increase in real hourly wages from 1973–2001 for people with a college degree was \$3.09 while for those with some college but no degree was just \$.21

Today the difference in income and employment rate and opportunities based on education levels is stark:

Professional degree

- Median earnings: \$82,421
- Unemployment rate: 1.6%

Bachelor's degree

- Median earnings: \$46,969
- Unemployment rate: 3.1%

Associate's degree

- Median earnings: \$36,999
- Unemployment rate: 4% (2001, US DOL)

In Michigan we know this story all too well, having been on the front lines of economic change in which “brawn work” is being replaced by “brain work.”

- In Michigan, workers' average weekly wages from 1979–2000 grew from \$514 to \$542, but for those without a high school diploma, real wages fell from \$392 to \$292 (*Blank, 2003*).

It is not just the fact that people with higher levels of education earn more, but these individuals create jobs, and help Michigan attract more jobs. Better-educated people as well as higher education institutions are part of the overall economic leverage and job/wealth creation of a state. Research demonstrates “agglomeration effects”—which is the concentration of economic entities and activities within a geographic region, and the synergies of educated people with job creation and new business startups (*Varga 2000*).

Richard Florida, a professor of regional development at the Heinz School of Public Policy and Management at Carnegie Mellon University, has theorized that regional economic growth is dependent on what he calls “the creative class.” Florida documents that knowledge workers congregate in places with other knowledge workers. People working in knowledge-based professions, such as scientists, engineers, artists, designers, and academics, lead to innovation and problem solving, as well as the incubation of new

ideas and new businesses.

In addition Michigan's employers have always, but increasingly in recent years, viewed a skilled workforce as one of their single most significant competitive needs.

MICHIGAN'S CURRENT POSITION

To become a world center of knowledge work and creation, Michigan has to tackle two related challenges: capturing and educating to high levels young adults in the current educational "pipeline," while increasing the skills and credentials of the fastest growing segment of Michigan's population—adults already in the labor market and new immigrants.

- Among these populations today 22 percent of Michigan adults have attained bachelor's or advanced degrees—4 percent below the national average and more than 10 percent below the states that are leading the nation in terms of both educational attainment and economic growth—ranking Michigan as 34th nationally (*www.higheredinfo.org, 2000*). (*2002, US Census*)
- Only 34 percent of Michigan citizens between the ages of 25 and 34 have obtained postsecondary degrees
- 23 percent of the Michigan's current adult population (1.57 million) does not have a high school diploma (*Michigan Adult Education Reporting System*)
- An estimated 44 percent of all Michigan adults function at a literacy level one or two in the national Adult Literacy Survey, levels considered too low to function adequately in today's society. (*Working for a Living, 2003*)
- Michigan also faces serious regional and race/ethnic gaps in education attainment based on historic patterns of segregation

In addition, relative to other states Michigan's population is aging, with a very slowly growing labor force, and a current significant "brain drain" of young college graduates aged 25–34, seeking new experiences and dynamic regional economies outside of Michigan.

- During the 1990s, Michigan's population grew only 6.9 percent, while the country grew over 13 percent. Older workers grew fastest in relative terms: Those aged 35 to 44 grew 13 percent and those aged 45–64 grew 28 percent in Michigan.
- Meanwhile Michigan lost slightly more than 13 percent of its 25–34-year-olds.
- Of the state's 6.9 percent growth in population between 1990 and 2000, 26 percent of that growth came from foreign-born immigrants.

Dealing with this challenge, getting more Michigan young people "to and through college," and making sure working adults move on to improve their skills and get better degrees and credentials, requires action to meet Michigan's particular challenges on four levels:

- Increasing the solid preparation for higher education, life and work
- Increasing participation in higher education opportunities
- Ensuring completion of degrees and credentials of value

■ Enhancing the economic benefits of higher education

Michigan is not the only state working to be among the best educated in the world. We must address head-on the central issues that inhibit high levels of education achievement. We must ask and answer questions critical to illuminating the most direct and effective path to a better-educated citizenry.

As the commission conducts further analysis of Michigan's unique assets and its particular challenges in reaching the goals identified by the governor and lieutenant governor, it will need to examine the power and applicability of key strategies being pursued here and around the country, and answer key questions regarding the ability of strategies to meet the goal(s) identified.

The Executive Order creating the commission charges us with examining strategies that help Michigan succeed in:

1. **Preparation:** Increasing the number of students in Michigan who attain the skills critical to postsecondary success before graduating from high school
2. **Participation:** Increasing the number of Michigan residents who attend postsecondary institutions
3. **Completion:** Increasing the number of students who successfully complete their postsecondary studies and obtain bachelor's degrees and other credentials relevant to existing and emerging economic opportunities
4. **Economic Benefits:** Maximizing the benefits that higher education brings to Michigan's economy.

For initial discussion we have organized our work around these four topic areas. For each of these commission work groups the discussion following is intended as a pump primer, laying out an initial statement of:

- The challenge facing Michigan—how we stack up right now
- Key questions the work groups need to address
- Strategies we might consider given our unique Michigan challenges and leading-edge practice here and elsewhere

PREPARATION

The Challenge Michigan Faces

Michigan faces a significant challenge in increasing Michigan youth's completion of high school and their successful transition to career-building postsecondary education. A requisite for moving young people to higher education is successful completion of high school with skills necessary for postsecondary education, work, and other next steps.

- Estimates of Michigan's graduation rates vary, but the most reliable estimates suggest that only 73 percent of Michigan ninth graders graduate from high school four years later "*Public High School Graduation and College Readiness Rates in the United*

States.” (Greene and Forster, 2003)

- The same study suggests that only 32 percent of Michigan high school students graduate with college-ready transcripts, putting us below the national average of 36 percent and well behind lead states (49 percent). In addition only 15 percent and 18 percent of our Hispanic and black youth respectively are college-ready.
- Nationally at least one in three entering college freshmen take at least one remedial course, and in urban community colleges that percentage can rise to about three in every four students (*Kazis, 2003*). Michigan higher education institutions report that significant percentages of Michigan high school graduates attending college or community college are enrolled in remedial courses.
- One in four of young adults (18–24) in Michigan, and a third of young adults in Detroit, were school dropouts without the barest requisites for successful futures. (*Kids Count, 2004*).

Key Questions to Address in This Work Group

- What is the baseline skill set all young people need to be prepared for higher education and the next steps?
- In what location and among what racial/ethnic groups are the largest gaps as well as greatest opportunity for gains?
- What successfully motivates young people to take the next step to higher education?
- Are teachers throughout the state adequately prepared to best serve the needs of a growing college-going population?
- Can schools provide the necessary upper level courses to better prepare more students for college and the workforce? In particular, are students encouraged to pursue four years of math and science?
- Do the state minimum curricular standards for high school graduation align with the baseline state university admissions expectations and employer expectations?
- How can assessment during the high school years increase student aspiration for higher education and make students better prepared for post secondary success?
- Are students receiving the necessary guidance counseling in school and at an early enough age to have the right information about college going options?
- How can the K–12 system support planning and preparation for college and next steps?
- What information, tools, resources and/or support networks are needed?
- What factors, policies and responses most dramatically support high school completion, and continuation to college and advanced learning?

Strategies for Consideration

We are not starting from scratch in addressing these issues. The following are areas of potential strategic action the commission may consider, distilled from examination of Michigan and national leading practices:

- Create high school and higher education partnerships to increase student knowledge about, relationship with, and motivation to pursue higher education.

- Develop high school curriculum assessment and graduation requirements based on college/employer expectations and rigorous academic standards.
- Educate parents and students about college opportunities including financial options and purposes/benefits of college attendance.
- Develop accelerated, blended institutions that integrate high school and college and accelerate learning for all students, including at-risk students.
- Create incentives for smaller high schools, more personalized and effective smaller learning environments, particularly for at-risk students.

PARTICIPATION

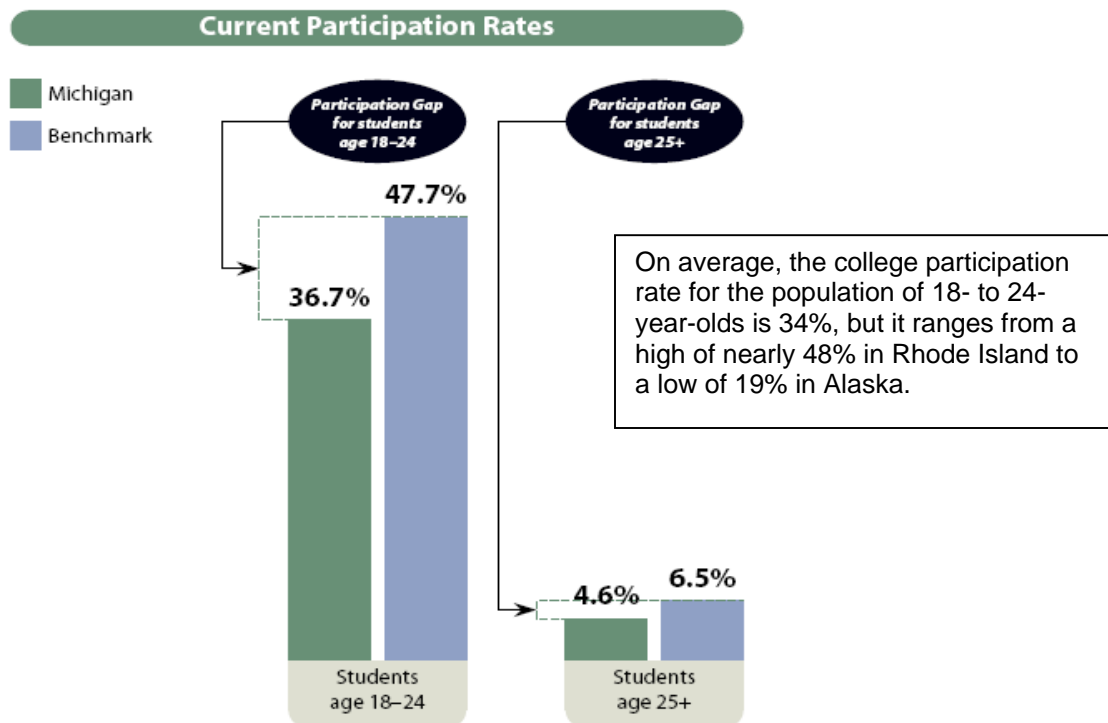
The Challenge Michigan Faces

In the State of Michigan, citizens are participating in college at significantly lower rates than other states in the Union. Currently, the State of Michigan has a participation gap in the number of students aged 18–24 and students aged 25 and older who participate in college, as compared to the benchmark states of Rhode Island and California. The “Participation Gap” is defined as the total number of additional students that state would need to enroll by 2015, given demographic projections, if it were to match the participation rates of the best-performing states (<http://www.ecs.org/>).

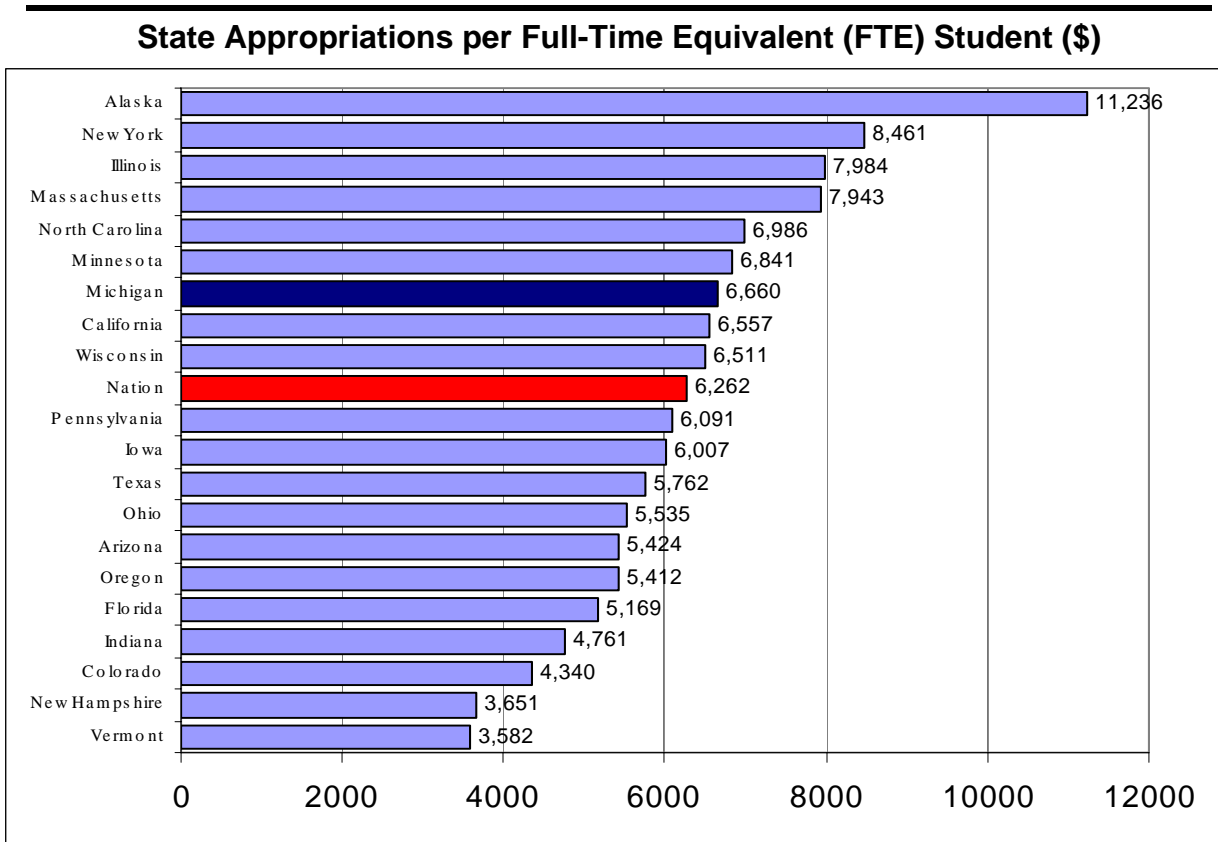
Postsecondary Participation in the State of Michigan

Student age	# of students in 2000	projected # of students in 2015 at current rate	% change 2000–15 at current rate	projected # of students in 2015 at benchmark rate	% change 2000–15 to reach benchmark	Participation Gap in 2015
18–24	341,047	343,321	+1%	446,893	+31%	103,572
25+	293,160	301,119	+3%	419,918	+43%	118,799
All (18+)	634,207	644,440	+2%	866,811	+37%	222,371

Based on the U.S. Census 2000 questionnaire, postsecondary participation means a person residing in the state attended a public or private degree-granting college or university at any time since February 2000.



- The recent Education Commission of the States report (see charts above) estimated that Michigan must enroll 222,000 more postsecondary students by 2015 to match the higher education participation rates of benchmark states.
- Meanwhile only 42 percent of high school freshman in Michigan enroll in college four years later; and only 4.2 percent of adults 25–44 in Michigan are enrolled in some form of part-time postsecondary education (*National Center for Public Policy and Education report, Measuring Up 2002*).
- Michigan’s adult learners today are more often than not working and going to school part-time, managing a career and/or family, and/or are new immigrants seeking the tools to participate in the economy.
- Recent studies also point to significant higher education participation gaps among socioeconomic and racial groups.
- 90 percent of 8th graders say they want to go to college, but ultimately less than half do so. Many Michigan young people do not fully realize the resources already available to assist them, and Michigan’s Partnership for Learning reports 25 percent of students who don’t go to college indicate they would have if they knew how much aid would cover the costs.
- In terms of resources applied to higher education, Michigan provides funding on a par with or slightly better than most states:



Source: The National Information Center for Higher Education Policymaking and Analysis (2003)

Key Questions to Address in This Work Group

- What are the chief barriers to young adults taking the next step to pursue higher education?
- In what location and among what racial/ethnic groups are the largest gaps as well as greatest opportunity for gains?
- What are the factors (financial, knowledge, motivation, culture) that affect participation?
- What are the most powerful incentives for enhancing participation?
- What best supports the pursuit of additional degrees and credentials among Michigan's existing workforce?
- What are the barriers as well as effective practices to increase and support participation among adults?
- Is there additional capacity at Michigan higher education institutions and if so, how can it be tapped?

Strategies for Consideration

The following are areas of potential strategic action the commission may consider,

distilled from examination of Michigan and national leading practices:

- Coordinate appropriations, tuition, and financial aid policies to increase participation.
- Assist higher education institutions in helping students manage a plan to a credential of value.
- Expand AP and/or dual enrollment offerings, accelerating experience and higher education next steps for more students.
- Enhance the role of community colleges as the gateway to postsecondary degrees, including four-year degrees.
- Expand non-traditional means of college course delivery (e.g., virtual, flexible scheduling) to meet the needs of full-time workers.
- Utilize GED programs and adult education courses as a steppingstone into community college programs.
- Enhance financing tools and resources.
- Develop public education/social marketing around the notion that education and degrees of value really matter.
- Increase affordability through productivity/efficiency gains.
- Encourage community-driven partnerships.

COMPLETION

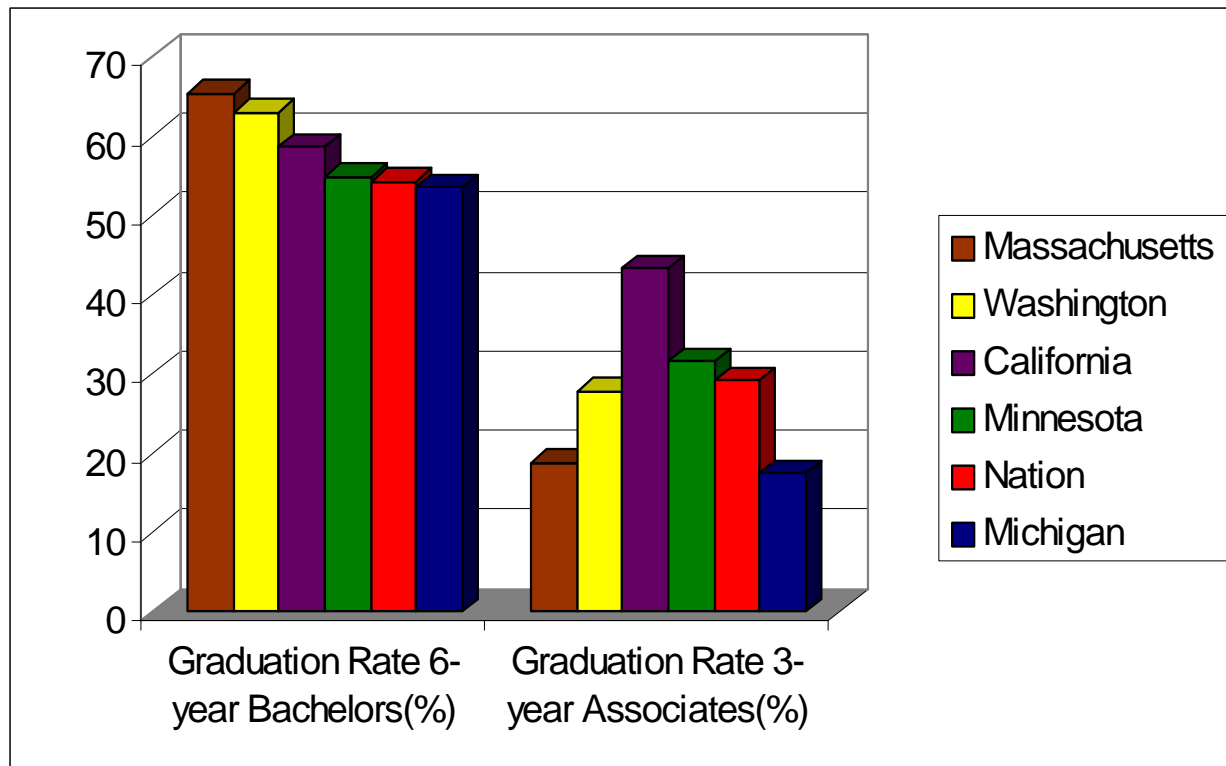
The Challenge Michigan Faces

Michigan is home to 179 colleges, universities, and vocational technical institutions (National Center for Education Statistics, 2004b) and as many as 632,000 students.

Half of the students who enter college will not complete a college degree. Applied in Michigan, that means that more than 300,000 of the students currently enrolled will not achieve at least an associate's degree.

- Fewer than 20 percent of Michigan's full-time, 2-year-degree students at community colleges graduate within three years, ranking Michigan 33rd in the country.
- Only 49 percent of first-year community college students return the second year in Michigan, a return rate below the national median of 52 percent, and behind the rate in lead states of over 60 percent (*Working for a Living, 2003*).
- Approximately 300,000 students are enrolled in four-year institutions in Michigan and the overall completion rate is 50–55 percent. Among four-year institutions completion rates range from a high of 80–90 percent at the University of Michigan, to 60–70 percent at Michigan State University, to under 50 percent at most Michigan institutions of higher learning (<http://nces.ed.gov/ipeds>).
- While percentages for some of Michigan's private colleges are slightly better (68.4 percent at Albion College, 73.1 percent at Calvin College, and 73.9 percent at Kalamazoo College), clearly quite a few students are lost from the state's educational pipeline.
- Michigan's overall graduation rates are not as strong as competitor states:

Graduation Rates for Selected States by Type of Degree Attained



Source: The National Information Center for Higher Education Policymaking and Analysis (2003) and the IPEDS Graduation Rate Survey (2004).

- Completion disparities exist based on race and income. In Michigan, more than 37 percent of Hispanics over the age of 25 have less than a high school diploma while the same is true for 26 percent of African Americans and only 14 percent of whites (*Ruppert, 2003*). While 28.7 percent of state residents have at least an Associates degree, only 18 percent of African American and Hispanic residents have the same.
- Only 10.5 percent of Michigan postsecondary students enrolled in vocational programs earn a degree or certificate (*Working for Living, 2003*).

Key Questions to Address in This Work Group

- What factors and conditions inhibit timely completion of a degree or credential of value?
- What is an appropriate amount of time to degree for 2- and 4-year degrees?
- What are the best practices for ensuring that all individuals who enter college complete their education, regardless of the path they follow to get there?
- What is the interplay among different types of institutions (community colleges, universities) and how does it affect completion?
- What motivates someone with one degree or credential of value to gain another?
- What are the racial and socioeconomic differences in completion? What has

effectively been done with key groups to improve completion?

- What policies, incentives, supports and approaches effectively increase completion?
- How can we best meet the needs of nontraditional age adults who have returned to school and ensure their completion of degree or credential?
- Are colleges training people in the fields with the greatest needs in the state (i.e., nursing and teaching)?

Strategies for Consideration

The following are areas of potential strategic action the commission may consider, distilled from examination of Michigan and national leading practices:

- Create “lifelong learning” data system to be able to track and report on degree completion and earnings from K–12, higher education, workforce training experiences—used to guide continuing policy decisions.
- Develop statewide benchmarks for college attainment, reporting, and progress.
- Develop a state strategy for linking/articulating community college programs with 4-year degrees.
- Develop short-term milestone credentials of value (certificates, associate’s degrees, skill standard certifications) to encourage adult students to continue working toward degree completions.
- Increase retention programs on campuses, including academic advising, mentoring, internships.
- Establish institutional completion incentives or other means to reward increased completion.
- Enhance leverage of employer-paid tuition programs such as auto-UAW joint funds for degree completion and advancement in the labor market.
- Develop student completion incentives.
- Facilitate degree acceptance/completion for new immigrants to better attract them to Michigan and take advantage of education and skill levels.

ECONOMIC BENEFITS

The Challenge Michigan Faces

Higher education is the “jet fuel” of our economy, not only in creating new knowledge and research that leverages new jobs and companies, but as producers of a well-educated workforce that makes Michigan a competitive place to do business.

Better-educated people as well as higher education institutions are a major part of the overall economic leverage and job/wealth creation of a state. Higher education has both direct and indirect benefits on the state’s economy:

- producing graduates in key sectors and disciplines that fuel economic growth;
- creating new technologies, path-breaking research, and incubating new ideas and industries;

- fostering dynamic communities with rich creative and cultural aspects that are magnets for knowledge workers from around the globe.

Michigan has benefited historically from a strong higher education system and its links with employers and job creation. Michigan's higher education system has contributed significantly to economic growth, and supported Michigan's overall high relative ranking nationally in terms of new and expanding facilities, total capital investment and rank among the leaders in the nation in total employment in high-tech industries.

- Michigan's state and local R&D investment per capita (\$34.3) for 2001 is above the national average (\$30.7) and ahead of many competitor states in this region, including New York, while lagging behind other competitor states (Iowa, Wisconsin, Illinois).

State & Local R&D Expenditures, 2001

	R&D Per Capita (\$)	Change from 2000 (\$)	Expenditures (in \$ 1000s)	R&D Expenditures (in \$ 1000s)	Total Population
Iowa	55.6	\$ 0.60	\$ 59,668	\$ 103,688	2,936,760
Wisconsin	45.4	\$ 4.00	\$ 40,423	\$ 206,671	5,441,196
Indiana	40.5	\$ 5.50	\$ 45,456	\$ 203,717	6,159,068
California	34.4	\$ 3.20	\$ 255,051	\$ 954,309	35,116,033
Michigan	34.3	\$ 3.60	\$ 66,764	\$ 278,153	10,050,446
Missouri	33.4	\$ 5.40	\$ 25,166	\$ 164,074	5,672,579
Illinois	31.3	\$ 2.90	\$ 82,742	\$ 311,854	12,600,620
Nation	30.7	\$ 1.90	\$ 2,310,643	\$ 6,540,543	288,368,698
New York	28.3	\$ 3.10	\$ 127,737	\$ 413,608	19,157,532
Minnesota	27.9	\$ 2.70	\$ 58,468	\$ 81,784	5,019,720
Ohio	23.9	\$ 0.70	\$ 80,268	\$ 193,173	11,421,267
Pennsylvania	21.1	\$ 1.00	\$ 51,467	\$ 208,810	12,335,091
Massachusetts	18.4	\$ (2.80)	\$ 38,180	\$ 80,007	6,427,801
West Virginia	17.7	\$ 2.60	\$ 2,471	\$ 29,429	1,801,873

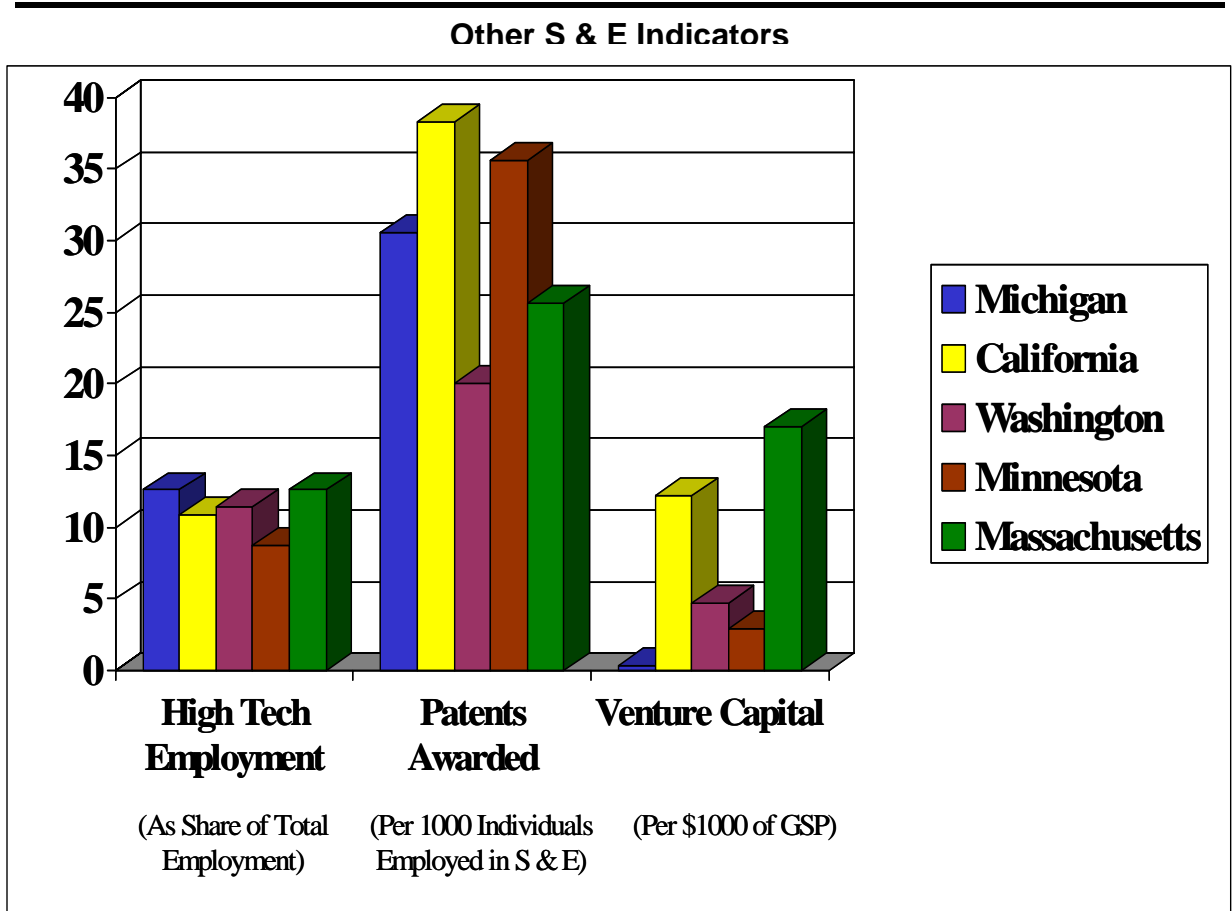
Source: National Science Foundation, Division of Science Resources Studies

But Michigan has the need and the opportunity to do significantly better if it is to capitalize and leverage the economic benefits from higher education and a better-educated citizenry:

- The Milken Institute's State Technology and Science Index compare the 50 states in terms of the technology and science assets that can be leveraged to promote economic development. Michigan ranks 25th in the nation, down one spot from the 2002 index. This places Michigan in the second of the report's four tiers. Michigan is not only behind national leaders like Massachusetts and California and other East and West Coast states, but also behind other states in the Midwest, such as Minnesota, Pennsylvania, and Illinois (DeVol & Koepp, 2004).
- In the 2002 New Economy Index, created by the Progressive Policy Institute, Michigan ranks 23rd in the nation. Our index value is below the national average and

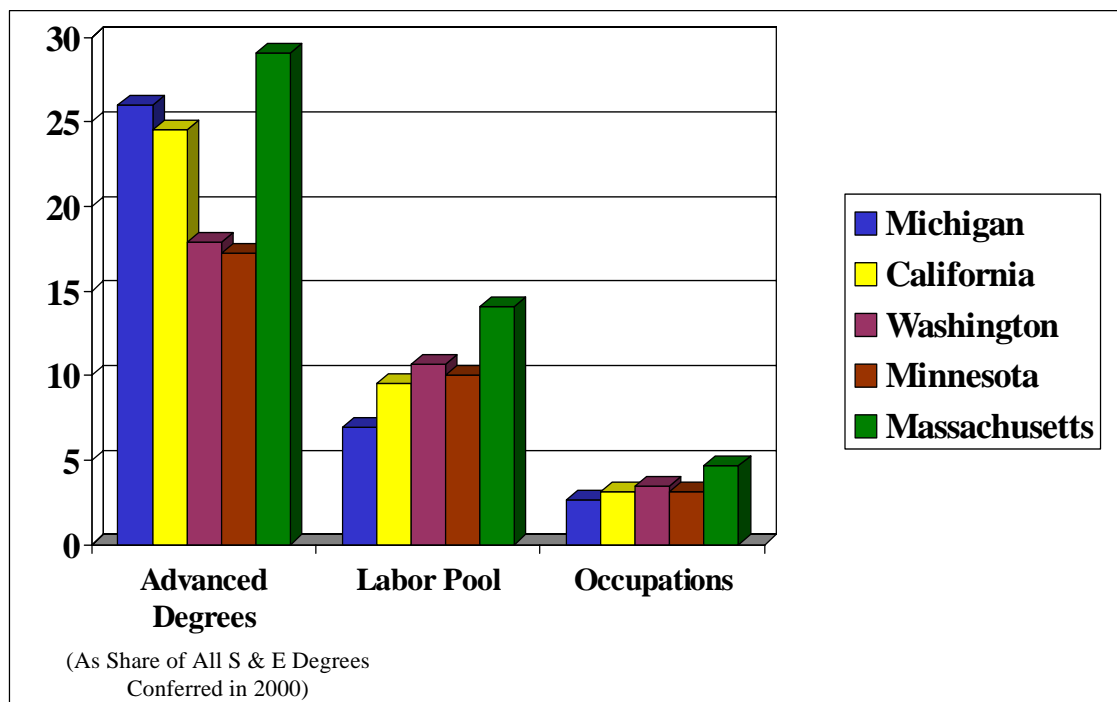
below the state of Georgia, which is experiencing in-migration of highly educated young people.

- Michigan ranks in the first quartile nationally for people employed in high-tech occupations as a share of total state employment. Michigan is also ranked in the first quartile in number of patents awarded per 1,000 individuals employed in science and engineering. However, Michigan is ranked in the third quartile for venture capital per \$1,000 of Gross State Product, separating itself from these other states, which rank in the first quartile.



Source: National Science Board (2004) Science and Engineering Indicators 2004. Washington, DC. National Science Foundation.

- Bottom line: Michigan has valuable human capital in science and engineering producing a significant number of patents each year, but without the venture capital to support these efforts Michigan will lag behind these other top performing states in high-tech industries and the occupations that attract and support them.
- Michigan ranked in the first quartile nationally for awarding advanced degrees in science and engineering. But Michigan lags behind Massachusetts other states in share of the state workforce with science and engineering degrees, ranking in the third quartile.



Source: National Science Board (2004) Science and Engineering Indicators 2004. Washington, DC. National Science Foundation.

Science and Engineering and the Workforce

- Michigan also lags behind these same first quartile ranked states in the percentage of people employed in science and engineering occupations in the workforce, ranking in the second quartile. Bottom line: Michigan is a producer of some of the best talent in science and engineering fields, but does not keep them here or attract others.
- Everywhere in Michigan out-migration is significant, losses offset only by international migration. Michigan residents between the ages of 22 and 29 with a college degree or higher show out-migration of 43.5 percent (*www.higheredinfo.org, 2000*). Michigan also ranks near the bottom nationally in terms of attracting graduates from other states into the state (*The Partnership for Economic Progress, November 2001*).
- Michigan does have a relatively high rate of retaining high-tech grads of its *public universities*: 79 percent of graduates from in-state and 55 percent of graduates from out-of-state remain in the state to live and work.

Key Questions to Address in This Work Group

- How do we understand accurately the economic growth benefits of higher education levels?
- What are the contributions of our higher education institutions to the state's economy and to the particular preparation of individuals for key sectors of economic activity?
- What information about employment outcomes should Michigan institutions be expected to produce for prospective students (in order to help them make more

informed decisions about courses of study most needed to benefit our economy)?

- Are there disproportionate payoffs to the economy and individuals from particular degrees and credentials?
- What are cost-effective ways to leverage higher education assets into new job creation?
- What are effective strategies for attracting and keeping talent in Michigan, and contributing to new innovation, new job creation?

Strategies for Consideration

The following are areas of potential strategic action the commission may consider, distilled from examination of Michigan and national leading practices:

- Develop strategies that support R&D workers attraction and retention in Michigan.
- Increase support for the commercialization of university research.
- Create incentives for key degrees/sectors of occupations linked to economic sectors of need/growth.
- Foster regional skill alliances as partnerships with employers and higher education institutions in key sectors of growth and occupational need and demand.
- Create rewards for being educated at state institution and remaining in state after graduation by key sector (like proposed engineering incentive).
- Enhance higher education institutions roles and relationships as part of community revitalization efforts, e.g., education institutions' role as physical, cultural centerpiece of "cool cities" and related urban/community development.
- Develop a state policy steering, communication, and coordination mechanism to routinely examine and guide state policy vis-à-vis role and direction of higher education institutions and their programming, areas of strategic need and opportunity regarding key economic sectors of interest.
- Enhance entrepreneurship education efforts.

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Additional Electronic Resources

U.S. Census Bureau –<http://www.census.gov/>. CensusScope is another source of census data and is particularly useful to look at trend data. It will bring up data from 1980 and 1990 as well as 2000. This data can be found at [http://www.censuscope.org](http://www.censusscope.org).

Bureau of Labor Statistics (BLS) – <http://www.bls.gov/>.

Common Core of Data (CCD) – This is the most comprehensive source of national data on K-12 schools throughout the nation and can be accessed at <http://nces.ed.gov/ccd/schoolsearch/>.

Integrated Postsecondary Education Data System (IPEDS) – IPEDS is the higher education equivalent of the CCD, can be accessed in a variety of ways but most easily through <http://nces.ed.gov/ipeds/cool/>.

Annie E. Casey Kids Count – KIDS COUNT, a project of the Annie E. Casey Foundation, is a national and state-by-state effort to track the status of children in the U.S. The pages can be accessed at <http://www.aecf.org/kidscount/>.

Lumina Foundation Policy Resources – Lumina has set up a resource webpage for Higher Education policy makers, which can be found at <http://www.luminafoundation.org/issues/policyresources.html>.

The National Collegiate Athletic Association (NCAA) – This is the definitive source of college graduation rates for all schools that participate in some level of NCAA athletic competition. It can be accessed at http://www.ncaa.org/grad_rates/.

Pathways to College Network - The mission of the Pathways to College Network is to focus research-based knowledge and resources on improving college preparation, access, and success for under-served populations, including low-income, underrepresented minority, and first-generation students. It can be found at <http://www.pathwaystocollege.net/index.html>

The National Center for Public Policy and Higher Education - Authors of Measuring Up. <http://www.highereducation.org/>

State Higher Education Executive Officers (SHEEO) - A site that has links to many other data sources for higher ed is available from SHEEO--it's called SOAR. <http://www.sheeo.org/soar/>

State-Level Data

Michigan Department of Education – data can be found at <http://www.michigan.gov/mde>. To access MEAP scores <http://treasure.secure.state.mi.us/meritaward/mma/results.htm>.

Michigan Economic Development Corporation (MEDC) –All of this can be accessed at <http://jobs.michigan.org/MIEconomy/regions/>.

State of the Cities Data Systems – SOCDS is another method of accessing BLS data for areas within the state. This data source allows us to look at 16 cities in the state of Michigan and provides similar information for other states. It can be accessed at http://socds.huduser.org/BLS_LAUS/BLS_LAUS_Home.htm

Standard and Poor's – Currently the site does education for only three states but Michigan is one of them. The data can be found at <http://www.ses.standardandpoors.com/>

Local -Level Data

Lansing State Journal (LSJ) –At <http://www.lsj.com/communities/> you can find sketches for each community in the Lansing area and it gives some incredible summaries of local specific education data including MEAP results and graduation rates from high school.

Epodunk – Data is organized by county and can be found at http://www.epodunk.com/counties/mi_county.html. In addition to employment, census and education data, you can also find the number of cemeteries, crime rates, and a business guide among others.

Battle Creek Enquirer –Here you can find brief profiles of each community in the surrounding area (presumably its service area) and you can find relevant news stories for those communities <http://www.battlecreekenquirer.com/communities/index.html>.

Detroit Free Press (DFP) – The DFP is probably as useful for state level data and can be found at <http://www.freep.com>.

Michigan Jobs – a subset of the MEDC pages (see the description above). It is worth mentioning here because it was the single most useful tool for finding county-by-county economic profile information. <http://jobs.michigan.org/MIEconomy/regions/>

Michigan State University Extension – the link below is an example of a promotional piece that the MSUE puts together for the communities they serve. It might be another version of much of the data we have seen but it is cast in a way that is intended to appeal to that local community and for that reason is particularly useful.
[http://www.co.bay.mi.us/bay/home.nsf/public/981AC54FDCE31CA785256CD1006ECBF E/\\$file/Bay.pdf](http://www.co.bay.mi.us/bay/home.nsf/public/981AC54FDCE31CA785256CD1006ECBF E/$file/Bay.pdf)

Mlive – news source <http://www.mlive.com/> links to local newspapers across the state. This source saves the time by bringing 7 or 8 news sources together under one.

Stats Indiana – this is a tool developed by the Indiana University school of business and it provides similar economic indicators available elsewhere. The difference is that they also provide national, state, and county level data so they are able to rank states according to their economic indicators. http://www.stats.indiana.edu/uspr/a/us_profile_frame.html

FedStats.gov – this source is an attempt to bring together a variety of national data sources to make them more available. The specific page used here is for crime rates by county <http://www.fedstats.gov/qf/states/26000.html>.

Michigan Department of Community Health – this is a tremendous source of community health data that can be disaggregated by both county and health district. It includes birth defects, sexually transmitted diseases and other health related demographics. It can be found at <http://www.mdch.state.mi.us/pha/osr/CHI/BirthDefects/FROME.ASP>. One page in particular, <http://www.mdch.state.mi.us/pha/osr/abortion/pregbycoteen.asp>, has data for teen pregnancy.