A Policymaker's Guide to Higher Education in Ohio: 2004

Ohio… A heritage of leadership.

Frequently Asked Questions

Preparing for a bright future.

www.OhioKnowledgeEconomy.org

"At some point – and sooner is preferred – the state must restore funding support to Ohio Colleges and institutions. Otherwise, the state is performing the intellectual equivalent of eating its seed corn, and any hope for keeping Ohio competitive and stopping the brain drain will be lost."

Toledo Blade
March 15, 2004

"In the four decades since Rhodes called for a better-educated citizenry for a stronger economy, Ohio's ranking in percentage of residents with a baccalaureate degree has fallen, to 39th among the states. Ohioans' per capita personal income was above the national average in the early 1960s; now, it is below the national average. This picture won't brighten until lawmakers and higher-education officials are willing to spend money and make changes to get more Ohioans the education they need to hold the best jobs of the 21st century."

Columbus Dispatch
May 10, 2004

"The idea that to make it, workers need to update their skills routinely, keep up with new knowledge and combine the broad range of information in practical and efficient new ways is very much a part of the modern workplace."

Akron Beacon Journal
June 30, 2003

Ohio Board of Regents

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Executive Summary

The Ohio Board of Regents has prepared this document to provide detailed but easy to use information about higher education and the role that it plays in shaping Ohio's economy. We have tried to anticipate questions that might be asked of policymakers by their constituents. We have assembled the information that you will need to answer those questions, gathering data from a variety of well-documented sources.

Ohio's higher education community is comprised of more than 150 degree-granting colleges and universities, including 38 public colleges and universities that are individually governed by their own boards of trustees. Ohio's public colleges and universities enroll more than 449,000 students; more than 127,000 enroll in independent colleges and universities.

This document is divided into three primary areas – higher education, Ohio's economy, and the benefits of advanced learning. At the beginning of each section, key points summarize and highlight significant facts of the section. Each section's content offers statistics and facts, as well as sources to use for more in-depth research.

An electronic copy of this publication is posted on the web at www.ohioknowledgeeconomy.org. The electronic copy will provide direct links to many of this publication's sources.

The Ohio Board of Regents was created in 1963 to provide a state-level perspective on all higher education matters. The 11-member board, appointed by the governor for nine-year terms, considers the higher education needs of all Ohioans, as well as the role of

individual public and independent colleges and universities in meeting those needs. The chairs of the Ohio General Assembly's Education Committees serve as *ex-officio* members of the Board.

The Regents appoint a Chancellor to serve as their chief executive officer. Since Jan. 1, 1998, that position has been held by Roderick G. W. Chu. In recent years, the Chancellor and his staff have focused their attentions on three primary goals: educating more Ohioans, developing a more skilled workforce, and encouraging technological research and commercialization.

The Regents have a direct, non-governing relationship with all of Ohio's colleges and universities. Working in partnership with Ohio's higher education community, the Regents:

- Advocate for and recommend how to best direct the state's investments in higher education
- Work with the State Board of Education, through a Joint Council, to develop a seamless primary, secondary and higher education system to prepare citizens for the challenges and opportunities of the 21st century
- Develop and advocate policies to maximize higher education's contributions to the state and its citizens
- Authorize and approve new degree programs
- Manage state-funded financial aid programs for students.

More information about the Regents and their programs can be found on the Web at www.regents.state.oh.us. If you have questions or comments about this publication or any other Regents program, please contact Deborah Gavlik, the associate vice chancellor for finance and governmental relations, at 614-466-6000.

We hope you find this document valuable and we welcome your feedback.

Success Strategies for the Knowledge Economy

At the beginning of the 21st century, a new knowledge-based economy is emerging – growing along side the agricultural and manufacturing economies that have dominated our state for the past 200 years.

Innovative technology and knowledge-based companies are changing the way we do business and redefining the forces that contribute to economic success.

At the center of this knowledge- and idea-based economy are knowledge workers who will fill the high-skill, high-wage jobs that will be used to measure our future prosperity. Driving this emerging economy are colleges and universities that train these workers and generate the discoveries that fuel economic growth and create new opportunities.

The leaders in this Knowledge Economy will be those organizations and states that understand and invest in ideas, innovation and technology.

Ohio must be among those leaders. Our challenge is clear: To make Ohio a fierce competitor in the Knowledge Economy – to capitalize on our state's heritage of leadership and to prepare for a bright future.

Participation

Learning Aspirations

Key Points:

- ***Ohio's high school graduation rate is higher than the national average.***
- ***The percentage of Ohio high school graduates who go on to college is below the national average.***
- ***Many Ohio students with the potential to succeed in college never attend because they and their families do not have the aspiration to pursue educational opportunities beyond high school.***

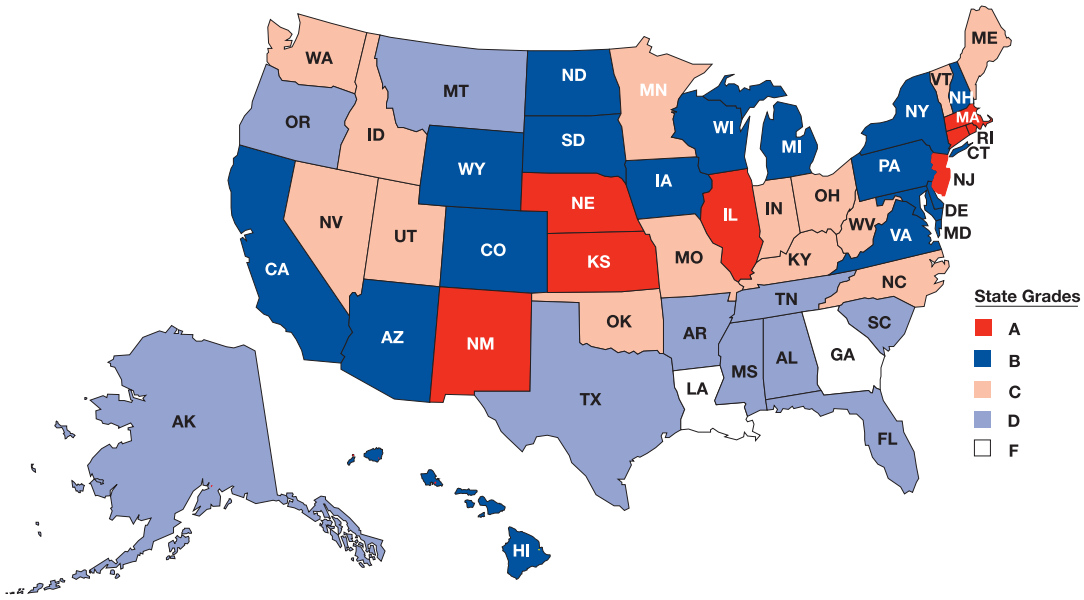
How does Ohio measure up to other states in the area of college participation?

In Measuring Up 2002, the second state-by-state report card on higher education issued by the National Center for Public Policy and Higher Education, Ohio received a grade of a C+ on participation, an increase from the C- Ohio received in the 2000 report. The report stated that, "Although a large percentage of young adults (ages 18-24) are enrolled in education or training beyond high school, only a fair percentage of Ohio's high school students go on to college immediately after high school." The proportion of high school students in Ohio who go on to college immediately after high school remains only fair – consistent with the results of Measuring Up 2000. A good percentage of young adults (ages 18-24) enroll in college-level education. The proportion of working-age adults (ages 25 to 49) enrolled part-time in education or training beyond high school has increased, but remains low.

[1] National Center for Public Policy and Higher Education. *Measuring Up 2002, The State-By-State Report Card for Higher Education.*

National Grades on Participation

Measuring Up 2002



The map above shows the grades each state received in the area of participation.

What percentage of students are graduating from Ohio's high schools?

- National Center for Education Statistics data show that in 2002, Ohio's high school graduation rate was 72.3% compared with a national average of 68.3%.
- While Ohio's high school graduation rate is somewhat higher than the national average, the percentage of Ohio high school graduates who go on to college is lower than the national average.

How does Ohio's college-going rate compare to the rest of the nation?

- National Center for Education Statistics data for 2000 show that 56.1% of Ohio high school graduates continued on to college compared with a national average of 56.7%.
- In the year 2002, 47% of Ohio's citizens had completed some college compared to 53% for the nation.
- To bring the percentage of Ohioans who have completed any college up to the national average, 439,071 more Ohioans would have to enroll in some form of higher education.
- In the year 2002, Ohio ranked 40th among all states on the percentage of the state's population who had completed a bachelor's degree or higher – 21.9% vs. 25.9% for the nation. Only nine states had a lower baccalaureate attainment rate.

Source: American Community Survey, 2002

Why don't more of our high school students go to college?

Analysis done by the Board of Regents suggests that many students with the potential to succeed in college do not participate in higher education for the following reasons:

- College is not affordable, or the student and the student's family believe, incorrectly, that a college education – even at a state community or technical college – is beyond the family's financial reach. This belief is not true.
- The student lacks adequate academic preparation to cope with the academic rigor of college.
- **The student and the student's family do not have the aspiration to pursue education beyond high school.**

Conceptually, the lack of a "college-going aspiration" is the most complex of these three reasons. Following is a short list of factors that inhibit the development of an aspiration to pursue a college education:

- The state's historic manufacturing economy has created a mindset that leads many Ohioans to believe they do not need education beyond high school to achieve economic prosperity.
- The need for a college education to compete successfully in the workplace of the 21st century and other benefits of higher education have not been systematically promoted throughout the state.
- Many students face formidable social and cultural barriers that discourage the pursuit of a college education.
- Many low- and moderate-income families lack information about need-based financial aid opportunities and continue to believe that college is only for "the elite."
- Many students who have the potential to succeed in college lack significant academic success in K-12 and believe, incorrectly, that they are not intellectually equipped for the rigors of college.
- Too often, parents, teachers and other significant role models fail to provide encouragement and other emotional reinforcement to students that can foster the aspiration to pursue higher education.

Preparation for College and K-16 Performance

Key Points:

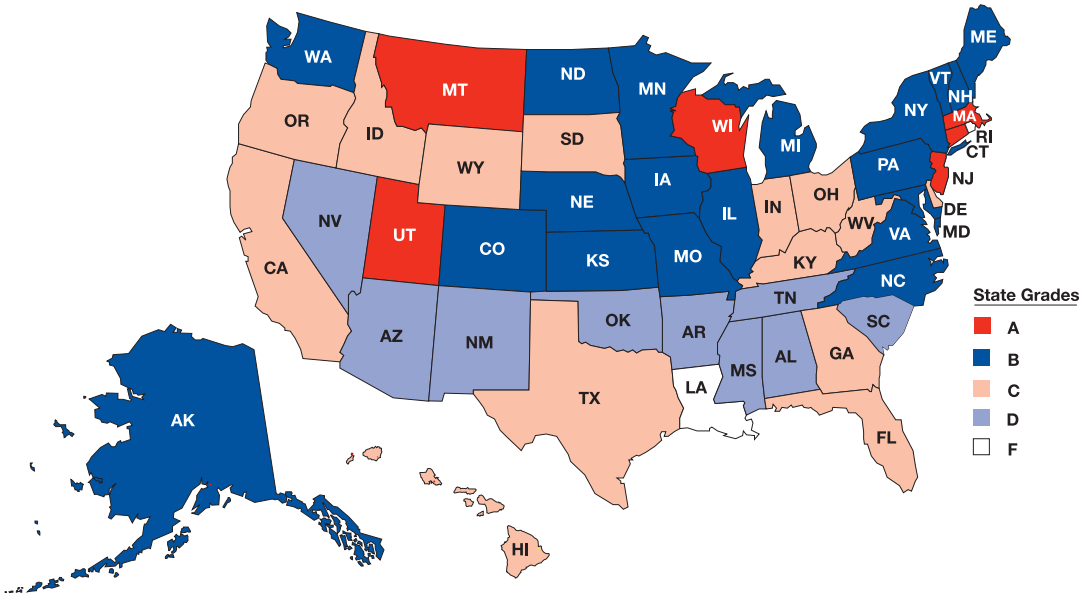
- ***While a high percentage of Ohio's young adults earn a high school degree, only 47% take an upper level math course and only 20% take an upper level science course.***
- ***Ohio is doing many of the right things to improve the performance of its primary and secondary schools.***

Are Ohio's students prepared for college?

- In the report mentioned in the previous section, *Measuring Up 2002: The State-by-State Report Card for Higher Education*,[2] Ohio received a grade of C+ on preparation for college. The same grade as Ohio earned in the 2000 report. The report stated that a very high proportion of Ohio's young adults earn a high school diploma or a General Education Development (GED) diploma by age 24. Nearly half of Ohio's of high school students enroll in upper-level math, although the percentage enrolling in upper-level science is low. A very high proportion of 11th and 12th graders perform well on college entrance tests, but a very small proportion score well on Advanced Placements tests.

National Grades on Preparation

Measuring Up 2002



[2] National Center for Public Policy and Higher Education. *Measuring Up 2002, The State-By-State Report Card for Higher Education.*

The Ohio Board of Regents report entitled "Making the Transition from High School to College in Ohio" issued in July 2002 further confirms this information. The report states that students who have completed a specified high school core curriculum of English, mathematics, science and social studies are far more likely to succeed in college than those who do not take the core. Half of all students who do not take the core will require remedial course work in college. Therefore, about 38 percent of Ohio high school students will require remedial level work in college.

What factors did Measuring Up 2002 take into consideration in assessing how prepared a state's students are for college?

The chart below shows the factors the study used to assess preparation for college. The chart shows Ohio's statistics compared to the top rated states on preparation.

Factors Used in *Measuring Up 2002* to Assess Preparation for College Ohio Data Compared to Top States

Factor		Ohio	Top States*
High School Completion			
18 to 24 year olds with a high school credential		89%	94%
K-12 Course Taking			
9th to 12th graders taking at least one upper-level math course		47%	57%
9th to 12th graders taking at least one upper level science course		20%	39%
8th grade students taking algebra		22%	30%
K-12 Student Achievement			
8th graders at or above "proficient" on the national assessment exam:	in math	31%	34%
	in reading	n/a	38%
	in writing	n/a	31%
	in science	41%	42%
Low income 8th graders scoring at or above "proficient" on the national assessment exam in math**		10%	21%
Number of scores in the top 20% nationally on SAT/ACT college entrance exams per 1,000 high school graduates		190	201
Number of scores that are 3 or higher on an Advanced Placement subject test per 1,000 high school juniors and seniors		77	197

* *Measuring Up 2002* lists the top states in preparation: Connecticut, Massachusetts, Montana, New Jersey, Utah and Wisconsin.

** Source: U.S. Department of Education, *National Assessment of Educational Progress*, 2000.

How well is Ohio's K-12 system performing?

- The answer to this question probably depends on your perspective.
  - Here's the good news: The Ohio Department of Education's annual report on education (most recently issued in January 2003) confirms that student achievement is improving. It also shows that more and more schools are doing a better job and a substantially lower number of school districts are now in "Academic Emergency" or "Academic Watch."
  - The less than good news: The rate of improvement is too slow. Compared to other states, Ohio is "in the middle" on most performance measures.
  - And here's the bad news: There is a substantial gap – an "achievement gap" – between Ohio's white and minority students. There is a similar gap among students from middle/high-income families and students from low-income families.
- Viewed from another perspective, there is substantial evidence that far too many of Ohio's high school graduates do not have the knowledge and skills required for success in college or the workplace. A few years ago, the Ohio Skill Gap Initiative – a study conducted jointly by the Ohio Business Roundtable, the Ohio Department of Education and ACT, Inc. – found that only one in seven Ohio high school graduates meets workplace expectations in reading and mathematics.
- Similar gaps exist for those entering college. As a result, Ohio's colleges and universities continue to provide a large percentage of remedial work for students, particularly in mathematics and science. About 38 percent of Ohio high school students going into college will require remedial level work.

What is Ohio doing to build the capacity and improve the performance of its primary and secondary schools? And what role is higher education playing in these efforts?

- Ohio is doing many of the right things to improve its schools.
  - Setting clear, rigorous expectations (i.e., academic standards) for ALL students – defining what students need to know and be able to do grade-by-grade.
  - Creating new tests to give teachers and parents better information to assist learning.
  - Working to improve the capacity of Ohio's teaching force to help their students.
  - Increasingly holding schools and school districts accountable for student results.
  - Developing new curricula aligned with the state's academic standards.
  - Investing in school infrastructure – buildings and technology to make school environments more conducive to learning.
- Through standards-based reform, Ohio's education policy leaders are working to ensure that students have different ways of preparing for future careers – including options such as College Tech Prep, that closely tie the work of the high school junior and senior to career preparation at the postsecondary level.

- Ohio's higher education community has been and continues to be involved in many of the initiatives. For example, higher education faculty are intimately involved in the development of Ohio's new academic standards. They also are involved in virtually all aspects of the effort to improve the preparation of teachers, expand opportunities for professional development, and develop new curricula and innovative instructional strategies.
- The Ohio Resource Center for Mathematics, Science and Reading – a virtual resource for these disciplines – provides Ohio educators with a single access point to best practices tied to Ohio's Academic Content Standards.

ENROLLMENT/COMPLETION

Key Points:

- ***Almost 600,000 students are enrolled at Ohio's public and private colleges and universities.***
- ***Students at Ohio's campuses generally reflect the diversity of Ohio's population.***
- ***During the 2001-2002 academic year, colleges and universities in Ohio awarded 94,972 degrees and 5,870 certificates.***

How many students are enrolled at Ohio's colleges and universities?

- In the Fall of 2002, there were a total of 461,492 students enrolled at Ohio's public institutions of higher education and 127,646 enrolled at Ohio's independent institutions of higher education.

Sector	Undergrads	Master's and Professional	Doctoral	Total
Community Colleges	71,693	0	0	71,693
State Community Colleges	65,368	0	0	65,368
Technical Colleges	25,115	0	0	25,115
Univ. Branch Campuses	44,445	1,806	120	46,371
Univ. Main Campuses	198,668	41,922	12,355	252,945
Subtotal Public Campuses	*391,263*	*42,394*	*11,981*	*445,638*
Independent Colleges	99,428	23,633	4,585	127,646
Total All Campuses	***504,717***	***65,674***	***16,489***	***589,138***

Source: *"Ohio's Colleges and Universities 2003: Profile of Student Outcomes, Experiences and Campus Measures", Ohio Board of Regents*

How diverse is the student population at Ohio's colleges and universities?

- In terms of ethnic diversity, the demographics of undergraduates at Ohio's state-supported colleges and universities are similar to national ones. The exception to this is that the Hispanic, American Indian, and Asian student populations in Ohio reflect the resident populations of these groups in Ohio rather than national percentages.

- Compared to the U.S. average, Ohio has a greater percentage of part-time students, and a greater proportion of students over 24 years of age.

Diversity of Undergraduate Students at Ohio State-Supported Colleges and Universities Compared to U.S. Undergraduates and the Ohio Population

	US Undergrads	Ohio Undergrads	Ohio Residents
Ethnic Diversity	**2000**	**2002**	**2000**
Native American	1%	<1%	<1%
Asian/Pacific Islander	6.4%	2%	1.77%
Black	11.3%	11%	11.62%
Hispanic/Latino	9.5%	2%	2.25%
Foreign Student	3.5%	1%	NA
White	68.3%	80%	83.27%
Race Unknown	NA	4%	NA
Other Measures of Diversity			
Part-Time Students	28%	40%	NA
Student Over 24 Years of Age	28%	32%	NA
Female Students	55%	56%	51.5%
Out-of-State U.S. Students	NA	6%	NA

Source: *"Ohio's Colleges and Universities 2003: Profile of Student Outcomes, Experiences and Campus Measures," Ohio Board of Regents*

How many degrees are awarded at Ohio's colleges and universities?

- During the 2001-2002 academic year, colleges and universities in Ohio awarded the following degrees and certificates.

Degrees Awarded at Ohio's Colleges and Universities
FY 2002

Type of Award	Number	Percent of State Total
Less than one-year certificate	3,127	53.3%
At least one-year, but less than two-year certificate	2,743	46.7%
Certificate Total	***5,870***	***100%***
Associate degree	19,666	20.7%
Bachelor's degree	52,286	55.1%
Master's degree	17,994	18.9%
First professional degree	3,133	3.3%
Doctoral degree	1,893	2.0%
Degree Total	***94,972***	***100%***

What is the persistence rate of first year students at Ohio's colleges and universities?

- Many factors may determine whether a first-year student is still enrolled one year after beginning college. A full-time degree-seeking student may:
  - "Stop out" of higher education due to economic reasons or family circumstances with the intention of returning later.
  - Decide that his or her career interests are best met outside of higher education.
  - Transfer to another institution.
- Important factors to consider when looking at an institution's persistence rate (traditionally considered the percentage of an entering class of full-time degree seekers who are enrolled the following year).
  - In Ohio, many students who enter a two-year college seeking an associate degree will transfer before degree completion to attend a four-year college or university in pursuit of a bachelor's degree.

- Some students who enroll do not have a declared intention of seeking a college degree.
- Colleges and universities vary greatly in their admissions practices. Some campuses are considered "open admissions," meaning they will accept any student with a high school degree, while others are "selective admissions," meaning they usually admit students who are have received better academic preparation which might result in a higher rate of persistence.

Persistence Rates* for In-State, Full-Time Degree-Seeking, First Year Students 2001-2002

Admissions Policy	Type of College	Persistence Rate	
		Same College	Any Ohio College
Open	Community Colleges	58%	62%
	State Community Colleges	54%	60%
	Technical Colleges	55%	59%
	University Branch Campuses	63%	72%
Open and Selective	University Main Campuses	76%	85%
Statewide Totals		***70%***	***78%***

Source: *"Ohio's Colleges and Universities 2003: Profile of Student Outcomes, Experiences and Campus Measures," Ohio Board of Regents*

* Persistence rate is defined as the percentage of an entering class of full-time degree seekers who are enrolled the following year.

Continuous Learning/Training

Key Points:

- ***Many Ohio workers have not expanded their skills – the key to higher income levels and advancement.***
- ***Less than one half of Ohio companies provide employee training programs.***
- ***Many times learning options are not available at a time and place that suits the needs of individuals, although this issue is being addressed as a growing number of campuses are expanding their non-traditional course offerings.***

Are the continuous improvement needs of Ohio's workforce being met?

- The need of many Ohio workers to earn more is being stifled because they have not expanded their skills set. Higher skill levels are the key to higher income levels and advancement.
- There are many obstacles that individuals confront as they consider skill development. Among those commonly cited are time, cost, fear, inadequate information, complexity, and inconvenience. As a result, the demand for learning opportunities is not what it should be.
- Many times learning options are not available at a time and place that suits the needs of individuals, although this issue is being addressed as a growing number of campuses are expanding their non-traditional course offerings. Information and advice needed to make an informed decision in a marketplace with many learning options is often not easily found. Without the needed support and encouragement, many workers conclude that learning is "not for them."

How are the continuous learning needs of Ohio's workforce being met?

- The skill development needs of some workers are addressed and funded by employers. However, less than half of all companies provide employee training programs.
- According to the American Society for Training and Development, the majority of employees receiving training paid for by companies are at the supervisory and executive levels.
- In addition to established public and private training providers, there is a growing number of new for-profit providers entering the marketplace.

Why is it important for Ohio's workforce to learn continuously throughout life?

- We are in a knowledge-driven economy. There is growing recognition that knowledge is more valuable and more powerful to the success of businesses than physical and financial assets.

- Knowledge and skills gained from continuous learning are the key to prosperity for every worker, business, and community. When workers continuously gain and apply higher skills – everyone benefits. Employers and employees succeed by transforming ideas into new products, services, and improvements in the production and delivery of those products and services. Ideas and innovations create value in products and services that drive income for workers and employers.
- Our collective challenge is to equip the workforce with the new and better skills required for success.
- Higher Education matters. The twenty occupations with the highest earnings all require at least a bachelor's degree. Throughout the economy, occupations that require a college degree are growing twice as fast as other occupations.

  Source: U.S. Dept. of Labor Futurework – Trends and Challenges for Work in the 21st Century.

- There is mounting evidence that companies that invest in the development of their employees can see improvements in productivity, quality, retention, safety and shareholder return. Companies get their competitive edge by growing and using every workers' knowledge.

What are other states and countries doing to ensure that the skills of their workers keep pace with changing workplace needs?

Every state provides some form of training incentive grants to encourage companies to invest in the skills of their workers. Distance learning opportunities are a growing focus. Perhaps the most aggressive public policy support for continuous learning is the comprehensive approach found in the United Kingdom and Scotland in particular. To become a nation of highly skilled workers, Scotland has a comprehensive strategy which is supported by a national Internet site – http://www.learndirectscotland.com.

Key elements are:

- aggressive marketing to stimulate the demand for learning and generate inquiries to their national helpline
- universal, impartial, free information and advice on all forms of learning opportunities
- personal advice and encouragement from trained learning advisors expanding access to quality information about learning resources
- Internet access
- expanding the number of community learning centers
- stimulating employer commitment to employee training and development
- maximizing public investment in lifelong learning by ensuring complementary action by key public sector bodies

Internet Resources
www.lifelonglearning.co.uk
www.learndirectscotland.com

1. University of Akron
2. Allegheny Wesleyan College
3. Antioch College/Antioch University McGregor
4. Ashland University
5. Baldwin Wallace College
6. Bluffton College
7. Bowling Green State University
8. Capital University
9. Case Western Reserve University
10. Cedarville University
11. Central State University
12. Cincinnati Bible College & Seminary
13. University of Cincinnati
14. Circleville Bible College
15. Cleveland Institute of Art
16. Cleveland State University
17. University of Dayton
18. Defiance College
19. Denison University
20. Myers University (formerly David Myer College)
21. University of Findlay
22. Franciscan University of Steubenville
23. Franklin University
24. Heidelberg College
25. Hiram College
26. John Carroll University
27. Kent State University
28. Kenyon College
29. Kettering College of Medical Arts (Kettering, OH)
30. Lake Erie College
31. Lourdes College
32. Malone College
33. Marietta College
34. Medical College of Ohio at Toledo
35. Mercy College of Northwest Ohio
36. Miami University
37. College of Mount St. Joseph
38. Mount Union College
39. Mt. Vernon Nazarene University
40. Zane State College
41. Northeastern Ohio Universities College of Medicine
42. Notre Dame College
43. University of Northwestern Ohio
44. Oberlin College
45. Ohio Dominican University
46. Ohio Northern University
47. The Ohio State University
48. Ohio University
49. Ohio Wesleyan University
50. Otterbein College
51. Pontifical College Josephinum
52. University of Rio Grande
53. Saint Mary Seminary and Graduate School
54. Shawnee State University
55. Temple Baptist College
56. Tiffin University
57. University of Toledo
58. The Union Institute and University
59. Tri-State Bible College
60. Urbana University
61. Ursuline College
62. Walsh University
63. Wilberforce University
64. Wittenberg University
65. Wilmington College
66. The College of Wooster
67. Wright State University
68. Xavier University
69. Youngstown State University

Campuses

FOUR-YEAR CAMPUSES

CAMPUSES

Key Points:

- ***Ohio has a rich heritage of public and private colleges and universities.***
- ***Contrary to common belief, Ohio actually has fewer public institutions for its population than the national average.***

How many four-year campuses are there in Ohio?

There are 13 public four-year campuses in Ohio and two free standing medical colleges. There are also 58 independent colleges in Ohio. The map above shows the location of each of these campuses.

TWO-YEAR CAMPUSES

1. Agricultural Technical Institute – OSU
2. University of Akron – Wayne
3. Belmont Technical College
4. Bowling Green State University – Firelands
5. Central Ohio Technical College
6. Chatfield College
7. Cincinnati State Community & Technical College
8. University of Cincinnati – Clermont
9. University of Cincinnati – Raymond Walters
10. Clark State Community College
11. Columbus State Community College
12. Cuyahoga Community College – Eastern
13. Cuyahoga Community College – Metropolitan
14. Cuyahoga Community College-Western
15. Edison State Community College
16. Hocking Technical College – Nelsonville
17. Hocking Technical College – New Lexington
18. James A. Rhodes State College
19. Jefferson Community College
20. Kent State University – Ashtabula
21. Kent State University – East Liverpool
22. Kent State University – Geauga
23. Kent State University – Salem
24. Kent State University – Stark
25. Kent State University-Trumbull
26. Kent State University – Tuscarawas
27. Lakeland Community College
28. Lorain County Community College
29. Marion Technical College
30. Miami University – Hamilton
31. Miami University – Middletown
32. Muskingum Area Technical College
33. North Central State College
34. Northwest State Community College
35. The Ohio State University – Lima
36. The Ohio State University – Mansfield
37. The Ohio State University – Marion
38. The Ohio State University – Newark
39. Ohio University – Belmont
40. Ohio University – Chillicothe
41. Ohio University – Ironton
42. Ohio University – Lancaster
43. Ohio University – Zanesville
44. Owens Community College-Findlay
45. Owens Community College – Toledo-area
46. Rio Grande Community College
47. Sinclair Community College
48. Southern State Community College – South
49. Southern State Community College – Central
50. Southern State Community College – Washington Courthouse
51. Southern State Community College – North
52. Stark State College of Technology
53. Terra Community College
54. Washington State Community College
55. Wright State University – Lake Campus

How many two-year campuses are there in Ohio?

There are 24 community and technical colleges, 23 university branch campuses and five independent two-year campuses in Ohio. The map above shows the location of each of these campuses.

Are there too many public campuses in Ohio?

- No. Ohio actually has fewer institutions for its population than the national average.
- And the reality is – today's working students appreciate the availability of higher education close to where they live and work.
- In addition, Ohio is an under-educated state. Our baccalaureate attainment rate of 21.9% is 84.6% of the national average.
- To bring our educational attainment rate up to the U.S. average, 361,954 additional Ohioans would need to obtain some post-secondary education.

How does Ohio compare to the rest of the nation in terms of public institutions of higher education per capita?

- Ohio has 0.21 public 4-year institutions of higher education per 100,000 population. This is slightly higher than the national average of 0.22.
- Ohio has 0.33 public 2-year institutions of higher education per 100,000 population, which is below the national average of 0.38.

Public Institutions of Higher Education
U.S. and Ohio
Per 100,000 Population

	United States		Ohio	
	Number of Institutions	Institutions per 100,000	Number of Institutions	Institution per 100,000
Public 4-Year	632	0.22	27[1]	0.24
Public 2-Year	1,155	0.40	34	0.30
Total	1,787	0.62	61	0.53

Source: U.S. Census Bureau and IPEDS Institutional Characteristics Survey, Fall 2002

[1] The number used by IPEDS includes 13 main campuses, 12 branch campuses, and two medical colleges.

Source: NCES, Census Bureau

Does Ohio have an excess of public higher education space?

- In determining whether Ohio has an excessive amount of public higher education space, one should consider the following:
  - ♦ The amount of Instructional and General space per full-time equivalent student compared to other states.
  - ♦ Whether enrollment in growing or declining.
  - ♦ National data about the amount of square feet per student are not readily available. However, compared to states for which data was available, Ohio appears to be about average in the amount of Instructional and General space per full-time equivalent student at public four-year and two-year institutions.
  - ♦ Enrollment at Ohio's public two-year campuses increased by 20.2% from 1991 to 2002. The National Center for Education Statistics projects that college enrollment will increase by 15% nationally from 2000 to 2012.
- Available data suggest that Ohio public higher education institutions do not have an excess of space.

E-Learning in Ohio

Key Points:

- **E-Learnng is offered increasingly by Ohio's colleges and universities.**
- **Some institutions are offering entire degree programs via distance e-learning.**
- **The Ohio Learning Network coordinates e-learning activities of Ohio's colleges and universities.**

What is e learning?

- E-learning and distance learning refer to any type of learning where the teacher and student are separated. E-Learning uses a variety of technologies to connect teacher and students outside of traditional settings. Students "attend" courses while at home, at work, the library, or even a nearby campus, while the instructor is located elsewhere. Degrees, credit and non credit courses, workshops, and seminars are all offered at a distance.

How are the courses delivered by Ohio's colleges and universities?

- E-learning courses and degrees in the OhioLearns! catalog are delivered through a variety of means – World Wide Web (www), interactive video, DVD and CD, television, correspondence and other means.

How many courses are offered at a distance in Ohio?

- E-learning has increased tremendously in the past three years and will continue to grow for several years to come. As one measure alone, the OhioLearns! catalog opened in December, 1999 with 517 courses from fewer than 20 colleges and universities. Today, 117 full degrees and more than 5300 individual courses are available from 64 colleges and universities in Ohio.
- Some colleges – Columbus State Community College and Franklin University – offer more than 1500 courses online!
- Many colleges offer hundreds of courses online.
- Many types of degrees are available in many disciplines – Associate of Arts, Bachelor and Master's degrees and a doctoral degree are offered online in Ohio.
- Disciplines include accounting, arts, business, computer science, engineering, marketing, nursing, social work and more.
- More than 50,000 students are taking courses at a distance.
- Any Ohioan who wants to try e-learning for free can do so at http://www.e4meohio.org. The Ohio Learning Network offers a five-unit, month-long course designed to help Ohioans decide if e-learning is for them.

What organization coordinates post-secondary distance education in Ohio?

- The Ohio Learning Network (http://www.oln.org) is a consortium of 64 colleges and universities in Ohio, all working together to expand access to learning opportunities for the citizens of Ohio.
- OLN arose out of a 1996 recommendation of a statewide steering committee – jointly created by the Ohio Board of Regents and the Ohio Department of Education.

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Financial Support

State Support

Key Points:

- ***In the last 20 years, policy makers in Ohio have dedicated more resources to corrections and local government than higher education.***
- ***Higher education's share of the budget used to be 17% - it's now 12.6%.***
- ***Devoting an increasing share of the state budget to higher education will pay off down the road – the more educated our citizens become, the better quality of life they will enjoy.***

What is the total state budget?

Ohio's total General Revenue Fund budget in FY 2004 is $20.6 billion.
This includes lottery funds and local government funds; it does not include federal funds.

State of Ohio Budget
FY 2003-2004

Department	2003 % of Budget*	2004 % of Budget*
Primary and Secondary Education	39.4%	38.6%
Human Services	25%	27.1%
Higher Education	12.3%	11.9%
Other State Government	8.3%	8.1%
Corrections	8.2%	8.1%
Local Government	6.8%	6.2%

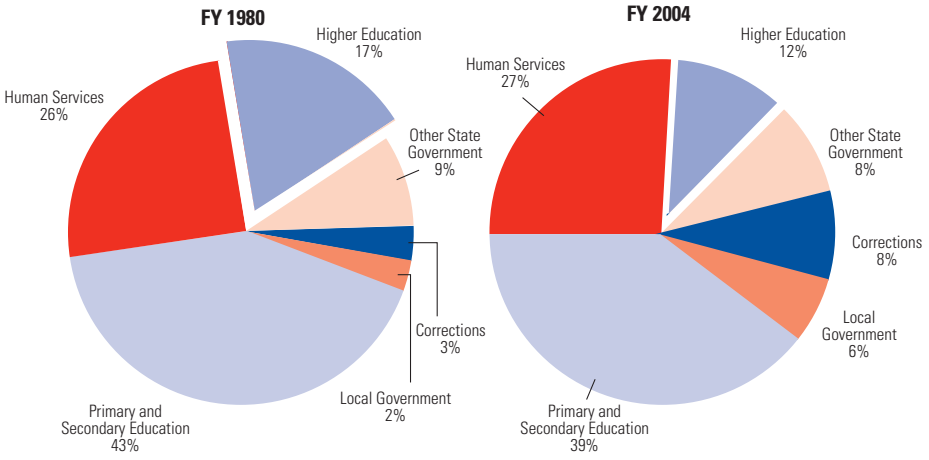
*includes Executive Order reductions Source: Ohio Legislative Budget Office

Did higher education always receive around 12 percent of the state budget?

- No, in the late 1970s and early 1980s, higher education received around 17 percent of the state budget. A five percentage point difference in budget shares is equal to approximately one billion in FY 2004.
- Higher education's share has declined, while support for local governments, corrections, and other state government has increased.

- The following pie charts show the distribution of the state budget, FY 1980 and FY 2004.

Higher Education's Share of the State Budget has declined since 1980

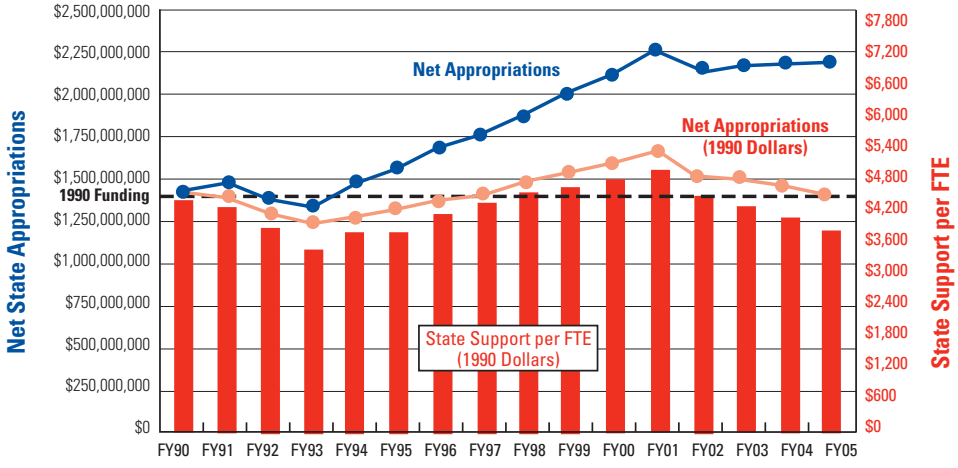


Source: Office of Budget and Management, Ohio Board of Regents

How have appropriations to higher education changed in the last 10 to 12 years?

- When the appropriations are adjusted for inflation, higher education is actually receiving less in total state support in FY 2004 and FY 2005, than it did in FY 1990.
- When adjusted for inflation, higher education is receiving 9% less per pupil in FY 2004 than it did in FY 1990.
- The following chart shows appropriations to higher education per pupil since 1990. The graph shows total appropriations, appropriations adjusted for inflation, and adjusted appropriations per FTE.

State Support for Higher Education 1988 to 2003



Source: Office of Budget and Management, Ohio Board of Regents

With the bleak economic situation we're facing, how can Ohio hope to invest enough additional monies in higher education to make a difference?

- The goal of the Knowledge Economy Awareness Initiative (KEA) has been to change Ohio's state of mind about higher education. The KEA offers a presentation to community leaders that examines the relationship between higher education and the economy.
- We hope to plant the seed throughout the state that if Ohio is to compete in the knowledge economy, higher education is vital.
- Other states have made difficult choices in difficult times and now is the time for Ohio to choose its future.
- Information about the KEA is available at www.ohioknowledgeeconomy.org.

Federal Support

Key Points:

- ***Ohio is lagging the national average and the region in federal academic Research and Development (R&D) performance.***
- ***If Ohio were at the national per capita average for R&D performance, each year an additional $299 million would be invested in Ohio and an additional 10,600 Ohioans would be employed in jobs directly related to research.***

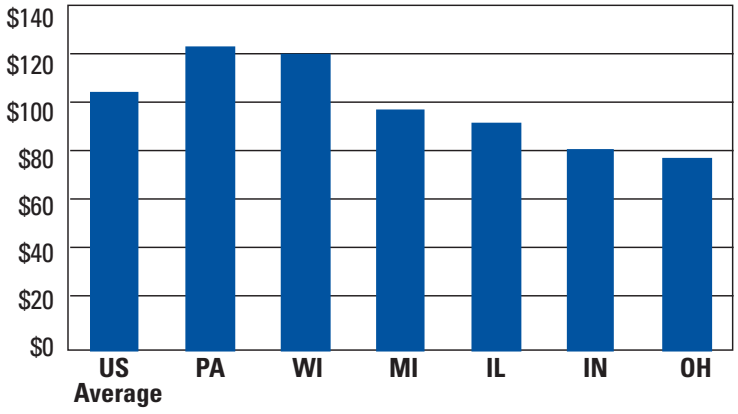
What fraction of the research done in Ohio universities is supported by federal funds?

In FY 2000, Ohio universities had $919 million in total research and development expenditures. Over one-half of this total, $499 million, came from federal agencies. That sounds like a lot of money, but it is not compared to other states.

How does Ohio compare to other states in this region in terms of the amount of academic Research and Development dollars our universities receive and spend?

- Since Ohio is a big state, the raw numbers alone do not tell the story. To make sense of the numbers, it is best to look at the dollars in per capita terms.
- On a per capita basis, Ohio lags the national average and the region in per capita R&D expenditures. (Since National Science Foundation and National Institutes of Health grants are often made over several years, expenditure data rather than award data is reported.)
- The graph on the next page shows the amount of academic research dollars Ohio and surrounding states spend on R&D per person. The national average is approximately $105, and Ohio is at $80 per person. Pennsylvania and Wisconsin are above the national average, while Michigan, Illinois, Indiana, and Ohio are below the national average. Of the four states in the region below the national average, Ohio is the farthest below.

Per Capita R&D Expenditures
Ohio and Surrounding States, FY 2000



Why does it matter that Ohio is below the national per capita average for R&D performance?

- Research and the creation of new knowledge are at the heart of economic development in a knowledge economy.
- If Ohio were at the national per capita average for R&D performance, each year an additional $299 million in federal and industrial R&D funding would be invested in Ohio.
- If Ohio were at the national per capita average for R&D performance, an additional 10,600 Ohioans would be supported in jobs directly related to R&D.
- These figures do not include the economic spin-off that would occur from additional federal investment.
- Federal research dollars are growing at a rapid pace, but Ohio needs to do more to secure its share of federal dollars. For example, funding to the National Institutes of Health is anticipated to exceed $115 billion over the next seven years. These federal programs are highly competitive. Ohio will have to work harder and invest more effectively if it will be a significant player.

Source: *National Science Foundation*

Local Support

Key Points:

- ***Only six campuses (community colleges) receive local levy support in Ohio.***
- ***Local levy funding is used to support local needs such as special facilities and reduced student tuition.***

Why do some colleges enjoy local levy support while others do not?

- Enabling legislation for two-year community colleges *permits* managing authorities for those campuses to seek local levy support through ballot initiatives.
- Such local support is common for two-year campuses in a number of states around the nation. It allows very focused attention by the campus to specific community needs.
- As relatively new institutions on the higher education scene, two-year campuses typically lack the support that other funding sources provide for senior, four-year institutions.

How many two-year campuses currently have local levy support?

- At present, only six:
  Cuyahoga Community College
  Jefferson Community College
  Lakeland Community College
  Lorain County Community College
  Rio Grande Community College
  Sinclair Community College

Why don't more campuses have a local levy?

- The decision is very much a local one. Each local Board of Trustees or other governing authority must assess its area's own unique needs and issues. Some obvious concerns are:
  - ♦ What are local needs that could be met via a levy?
  - ♦ Given our service district, how would voters likely receive a ballot initiative?
  - ♦ Do we want to potentially compete with other ballot initiatives?
  - ♦ Do we want to invest the necessary time and attention to do this?
  - ♦ Can we raise the necessary private funds to conduct a levy campaign?
- Those colleges that sought a levy at the founding of the institution allowed voters to in essence "buy" a college. If this opportunity is missed initially, it may be missed forever.
  - ♦ A majority of institutions having single county service districts do have levies. In these situations, the colleges can more easily connect with voters than those colleges with multiple county service districts, where the campus might be more remote to at least some voters.

- Institutions that have local levies tend to stay very "connected" to their local communities to ensure continuity of support.
- Ohio's levy laws tend to make a local levy a somewhat problematic funding source. Specifically, funding tends to remain relatively flat over a levy's voted life since the levy recipient does not benefit from property revaluations that result from inflation. This often leads to a need to seek a "replacement" levy (with updated valuations) vs. a simple renewal (maintain old valuations).

How much do local levies contribute to institutional resources?

- As of 2002, local levies provided from 10% to 39% of resources at the six institutions that currently have them.

How do the institutions use local levy funding?

- To support local needs and initiatives. Examples include:
  - Reduced student fees, targeted financial aid and scholarships
  - Academic programming (especially in expensive areas) to support local needs (e.g. health care, information technologies, etc.)
  - Special facilities to support/enhance local needs or quality of life (e.g. – manufacturing centers, theatres, K-12 support, etc.)
  - Non-credit educational and personal enrichment programs not offered by other institutions in the community.

Can local funding be substituted for state support?

- Voters are unlikely to support local levy initiatives that simply substitute one tax source for another. There would be no incentive to a college to invest the time and raise the funds for a local levy campaign if revenues were simply substituted. Local voters are approving funds for "something" that the state is not supporting (certain academic programs, lower tuition, targeted financial aid, etc.).

Private Support – College and University Endowments

Key Points:

- ***Endowment earnings represent only a small share of an institution's overall budget – often less than 1%.***
- ***Donors usually specify how their donations are to be spent – often for scholarships or particular academic programs.***

What is an endowment?

- An aggregation of assets donated to a college or university over many years by private citizens to be used for specific purposes, often to be used at the direction of the donor.

How do endowments benefit higher education institutions?

- *Provide Stability* – Because the principal is not spent, endowments provide earnings year after year. This reliable stream of earnings allows institutions to make strategic plans many years into the future.
- *Lead to Higher Quality Institutions* – Endowments allow institutions to provide a higher level of quality than would otherwise be possible. Without endowments, institutions would have to raise tuition or seek additional public funding in order to enhance current programs or to simply maintain programs at current prices.
- *Encourage Innovation* – Endowments enable research institutions to take intellectual risks that may lead to important discoveries in science, medicine, education, and other fields.

How are endowment funds invested?

- Endowments are invested most heavily in marketable securities such as stocks and bonds.
- Most endowment earnings are exempt from taxation.
- From 1992 to 2002, the average return on public college and university endowments was 9.3%. In FY 2002 the average return was -6.3%. (NACUBO's "Business Officer" magazine)

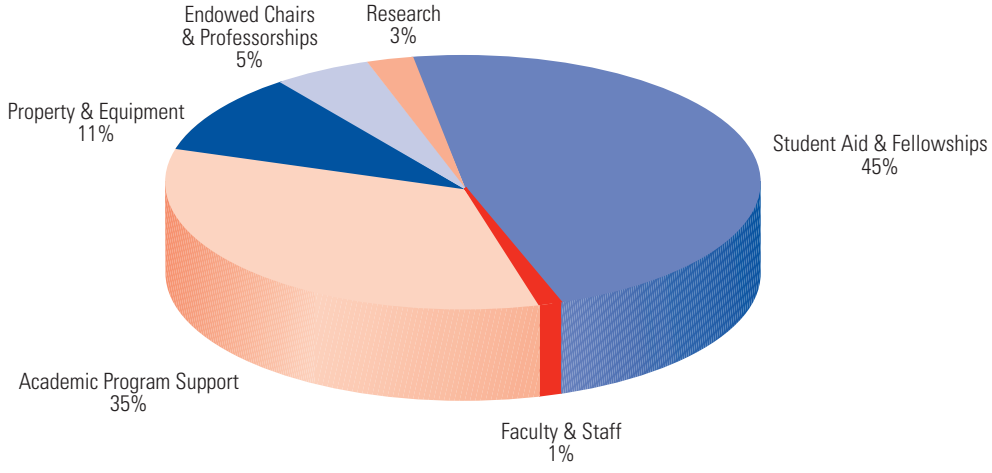
Why do institutions with endowments continue to raise tuition?

- While endowment fund balances at some campuses might seem substantial, endowment income – the only expendable portion of endowments – represents a relatively small share of an institution's overall operating budget. In FY 2000, for instance, average endowment earnings represented only about 0.8% of total revenues at the Ohio public campuses that reported endowment income.
- Donor gifts are often directed towards *enhancing* academic programs, not simply bringing down their costs.
- Donor gifts often provide valuable funds for construction of a building, while not covering maintenance or operating costs.
- Endowments *do* provide financial aid to students who cannot afford full tuition.

How do colleges and universities use endowment funds?

The chart below shows the range or purposes for which endowment funds are used at one of Ohio's public universities.

Programs and Activities by Endowment Funds
Bowling Green State University



Access Issues

Cost to Educate a Student

Key Points:

- ***The cost to educate a student in Ohio is close to the national average.***
- ***Students pay a higher share in Ohio because public support from the state is lower than the national average.***

How much does it cost to educate a student in Ohio?

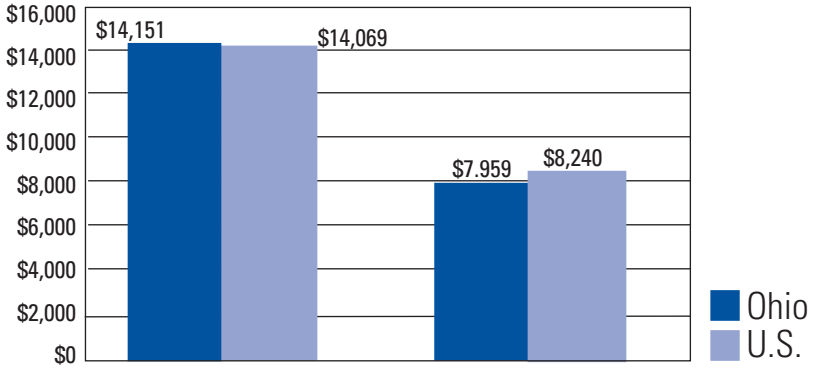
- On average, the annual cost to educate a student at a four-year public campus was $14,151 in FY 2001.*
- The annual cost to educate a student at a two-year public campus was $8,240 in FY 2001.
- Tuition alone does not pay for the total cost to educate a student. Both tuition and state appropriations are required to pay the total cost of educating a student.

How do Ohio's costs for higher education compare to others states' costs?

- Ohio's costs are **about average**.
- In FY 2001, the U.S. average cost per full-time equivalent (FTE) student (Instructional and General Expenditures) was $14,069; **Ohio's costs per FTE (full time equivalent student) were only slightly higher at $14,151.**
- The U.S. average cost per FTE at two-year campuses was $7,959; Ohio's average costs per FTE at two-year campuses were slightly higher at $8,240.

Source: U.S. Department of Education, FT 2001 IPEDS data.

Average FY 2001 Cost to Educate a Student
Ohio Compared to U.S.



* These costs do not include room and board.

- Because public support for higher education is so low in Ohio, much of the cost of higher education is passed on to students. Ohio ranked 36th in state and local appropriations per FTE in 2002-2003 at $4,351 per FTE, compared to the U.S. level of $5,823.
- In student tuition, we ranked 10th highest at $4,426 per FTE, compared to the U.S. average of $2,872.

Source: State Higher Education Executive Officers Finance Survey

What are some of the "cost drivers" at Ohio's public campuses?

Students and Expectations: Today's students have high expectations of their college experience. They want state-of-the art recreational facilities, dorms wired for computers, a complete range of course offerings, and low faculty/student ratios. All of these things cost money. In addition, college campuses now have more part-time and older students. These students bring nontraditional needs with them that can increase costs. The need to offer remedial courses to students also contributes to increasing costs. Thirty-five percent of all entering first-year students enroll in remedial mathematics and almost one-fifth enroll in remedial English.

Technology: Technology costs money. To accommodate for technology, campuses must provide equipment for faculty and students along with the necessary infrastructure. The demand for up-to-date technology services has increased significantly since the early 1990s and this has increased costs for colleges and universities.

Human Resources Costs: The majority of expenses at college campuses are for human resources costs. This includes salaries, medical, and other fringe benefits. Higher education in Ohio and elsewhere is a labor-intensive enterprise. Faculty and staff compensation make up about 80% of an average campus's annual expenditures. Most of these employees are highly educated with salaries and benefits that reflect the competitive forces of a national marketplace. Additionally, Ohio's colleges and universities must compete in a more general "information-age" economic environment that rewards well educated and highly skilled people. Ohio competes for faculty and staff in the national marketplace where employees could easily be recruited.

TUITION

Key Points:

- ***Tuition in Ohio is considerably above national average.***
- ***This is primarily due to the fact that state support for higher education is so low.***

How much is tuition at Ohio's public colleges and universities?

- On average, statewide undergraduate in-state annualized tuition and fees at state-supported four-year universities in 2003-2004 was $6,822.
- At two-year public colleges, statewide undergraduate tuition and fees in 2003-2004 were $2,966.
- To view actual tuition and fees at each public college and university in Ohio, click on http://www.regents.state.oh.us/financial/Survey2002.pdf
- Average undergraduate tuition and fees at four-year private colleges in 2002-2003 was $17,720.

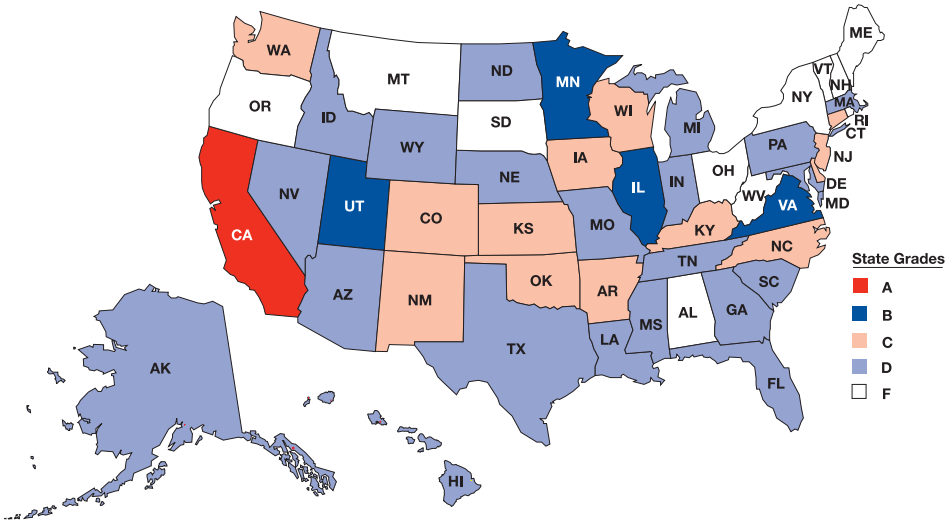
How does tuition at Ohio's public colleges and universities compare to tuition in other states?

- Tuition in Ohio is among the highest in the nation.
- *In Measuring Up 2002: The State Report Card for Higher Education*, Ohio received a grade of F in the area of affordability,[3] down from the grade of D- in the 2000 report. The map on the following page shows the grades each state received in this category.
- The College Board reported the national 2003-2004 average undergraduate in-state annualized tuition and fees for public four-year colleges at $4,964; Ohio's tuition was higher at $6,822.

[3] National Center for Public Policy and Higher Education: *Measuring Up 2002: The State-By-State Report Card for Higher Education.*

- The College Board reported U.S. average undergraduate in-state annualized tuition and fees for 2003-2004 for public two-year colleges at $1,905; Ohio's tuition was $2,966.
- The College Board reports U.S. four-year private college tuition and fees for 2002-2003 at $18,596. Ohio's tuition at private colleges during this year was $ 17,720.

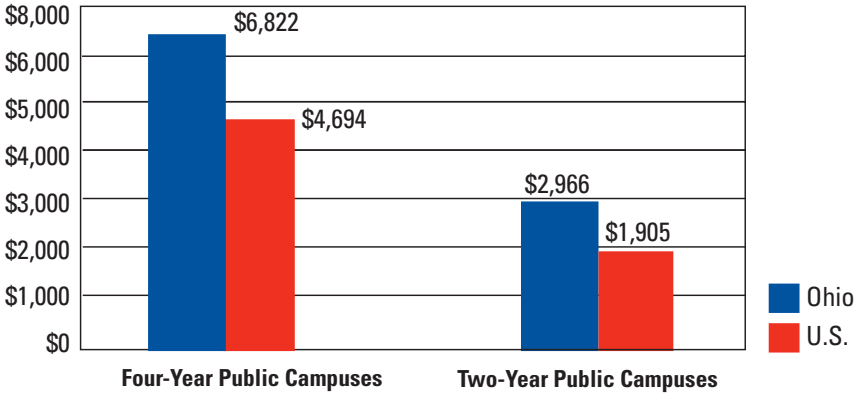
National Grades on Affordability
Measuring Up 2002



Why is tuition in Ohio at this level?

- Tuition is high at Ohio's public campuses because state support is low.
- Ohio ranks 41st in the amount of state support per pupil received by public colleges and universities.

Tuition in Ohio Compared to the U.S. Average
2003 – 2004



Financial Aid

Key Points:

- ***Ohio requires families to devote a large share of family income, even after financial aid, to attend its public two- and four-year colleges.***
- ***Ohio does not provide much financial aid for low-income students and families.***

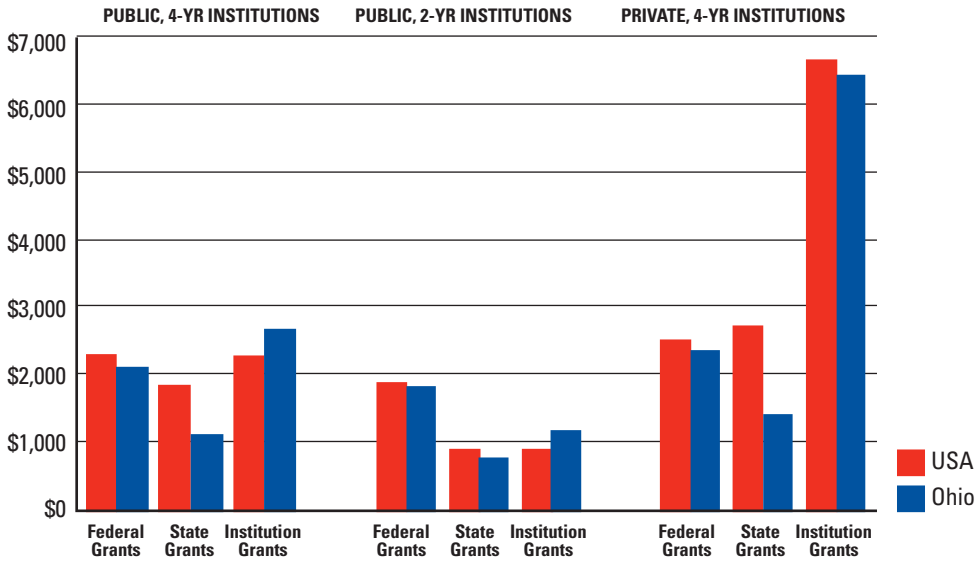
What percentage of freshman receive some type of financial aid in Ohio?

- In Ohio, in the 2001-2002 academic year, 87% of full-time freshmen enrolled in Ohio public four-year universities received either state aid, federal aid (including guaranteed loans) or institutional aid or some combination of these three.
- The comparable percentages for full-time freshmen receiving financial aid enrolled in public two-year institutions (including university branch campuses) and private nonprofit institutions are 70% and 88% respectively. (Note that these Ohio numbers may be somewhat inflated by the 12th Grade Proficiency Test Scholarship which has been discontinued.)

How much financial aid does the average student receive in Ohio?

- In 2001-2002, at public four-year campuses, of full-time freshmen receiving federal grants, the average student received $2,730, about $100 less than average than the national average. Of full-time freshman receiving state grants, the average student received $831, about $1,286 less than the national average. However, of full-time freshman receiving institutional grants, the average student received $3,141, $461 more than the national average.
- In 2001-2002, at public two-year campuses, of full-time freshmen receiving federal grants, the average student received $2,429, about $69 less than the national average. Of full-time freshman receiving state grants, the average student received $956, $91 less than the national average. However, of full-time freshman receiving institutional grants, the average student received $1,118, $96 more than the national average.
- In 2001-2002, at private nonprofit four-year campuses, of full-time freshmen receiving federal grants, the average student received $2,802, about $210 less than the national average. Of full-time freshman receiving state grants, the average student received $1,647, $1,330 less than the national average. Of full-time freshman receiving institutional grants, the average student received $7,616, $37 less than the national average.
- The graph on the next page shows average grant awards to full-time freshman that received financial aid in 2001-2002.

Average Award of Financial Aid
Average Award Amounts for Full Time Freshman Receiving Such Awards
Ohio Compared to National Average



How does financial aid in Ohio compare to the rest of the country?

- In the *Measuring Up 2002* report, Ohio received a grade of F in the area of affordability. The report's summary on this measure concluded:

  Since Measuring Up 2000, families in Ohio now spend a smaller share of income, after financial aid, to attend public two- and four-year colleges and universities – yet that share remains high compared with other states. Also, students and families must spend a very large share of family income to attend private colleges and universities. Ohio invests very little in financial aid for low-income students and families. Because other states improved more in this category, Ohio's grade dropped.

What factors did Measuring Up 2002 Report take into consideration to assess Ohio's affordability at Ohio's colleges and universities?

- The chart on the next page shows the factors the study used. The chart shows Ohio's statistics compared to the top-rated states on the measure of affordability.

Factors Used in *Measuring Up 2002* to Assess Affordability for College
Ohio Data Compared to Top States

Factor	Ohio	Top States
Family ability to pay		
Percent of income needed to pay for college expenses minus financial aid:		
At community colleges	24%	16%
At public Four-Year colleges/universities	29%	18%
At private Four-Year colleges/universities	54%	32%
Strategies for affordability		
State grant aid targeted to low-income families as a percent of federal Pell grant aid to low-income families	38%	108%
Share of income		
that poorest families need to pay for tuition at lowest priced colleges	19%	8%
Reliance on Loans Average loan amount that students borrow each year	$3,378	$2,928

How much debt are Ohio students incurring?

- In the 2001-2002 academic year, 46% of full-time freshmen enrolled in Ohio public four-year universities received loans. The average amount of these loans was $3,506.
- At Ohio public two-year institutions (including university branch campuses), 28% of full-time freshmen received loans with an average value of $2,697.
- At Ohio private nonprofit four-year institutions, 65% of full-time freshmen received loans with an average value of $4,186.
- Comparable numbers for the nation are 41% for public universities, 16% for public two-year institutions and 59% for private nonprofit four-year institutions.

Is the burden of tuition higher now than it was in the past?

- Because increases in Ohio public tuition have outpaced increases in state and federal grant assistance, families must contribute a significant and growing percentage of their income to achieve financial access to college or students must borrow more. For example, between 1992 and 2001, average tuition at Ohio public universities rose by 62% while the average Pell Grant and average Ohio Instructional Grant awards rose by only 30% and 59% respectively. Ohio median per capita income rose by approximately 42% in this period.

Performance

Accountability

Key Points:

- ***80% of graduates who received an associate degree from one of Ohio's public campuses were employed in Ohio in the year after graduation.***
- ***A significant amount of campus appropriations are performance-based.***
- ***A significant proportion of first-time, full-time college students receive their bachelor's degree within five years.***

How are campuses being held accountable for the funds they currently receive?

- Each institution's Board of Trustees is accountable for how money received by the institution is spent.
- The Board of Regents evaluates each institution's financial health using a standardized method modeled by Klynveld, Peat, Marwick and Goerdeler (KPMG) accounting firm. Three financial ratios and acceptable threshold ranges for each ratio are used to gauge an institution's financial condition.
- A significant proportion of campus appropriations is performance-based. The largest portion of state funds, the State Share of Instruction, is based on statewide average costs, and campuses have an incentive to keep costs low.

What are some specific examples of how campuses are using money effectively?

- In calendar year 2003 alone, Jobs Challenge funds helped over 4,305 Ohio companies receive training and assessment services, and over 263,088 Ohioans upgrade their job skills through training and instruction at one of Ohio's public two-year campuses.
- Research Challenge funds have helped Ohio's public and independent universities leverage millions of dollars in federal matching grants.
- Research Challenge funds have helped Ohio's public and independent universities invest in research to create medical breakthroughs and to develop technologies with the greatest potential for commercialization.

What are some of the results/outcomes of the money being used for higher education?

- Ohio's public universities are successfully graduating and preparing students to enter the workforce: schools like Ohio University and Miami University boast respective 6 year graduation rates of 70% and 81%.
- In academic year 2001-2002, Ohio's public campuses awarded 101,388 degrees, including 19,666 associate degrees, 52,286 bachelor's degrees, and 17,994 masters degrees.
- In *Measuring Up 2002: The State-By-State Report Card*, Ohio received a grade of B- in the area of completion lower than the grade of B in the 2000 report.[4] The report stated.
- 69% of graduates who received a bachelor's degree from one of Ohio's public universities were employed in Ohio in the year after graduation.
- 80% of graduates who received an associate degree from one of Ohio's public campuses were employed in Ohio in the year after graduation.

High proportions of Ohio's first-year students at two-year colleges and at four-year colleges return for their second year, but those figures have declined since Measuring Up 2000. The proportion of students who complete certificates and degrees relative to the number enrolled remains fair. A good proportion of first-time, full-time college students earn a bachelor's degree within five years of finishing high school.

[4] National Center for Public Policy and Higher Education: *Measuring Up 2002: The State-By-State Report Card for Higher Education.*

Efficiency/Cost Savings

Key Points:

- ***Campuses have taken actions such as statewide shared purchasing and insurance joint risk pools to make their operations more efficient.***
- ***The Board of Regents estimates that public campuses saved over $500 Million from FY 1993 to FY 2002 through the "Managing for the Future" initiative.***

What are colleges and universities doing to be more efficient? How are they doing more with less?

- Ohio's public campuses have taken several steps in the past and particularly in the last decade to become more efficient. Just a few of the existing cost-cutting initiatives are:
  - Managing for the Future Initiatives
  - Administrative and Related Cost Savings
  - Doctoral Program Review
  - Law School Review
  - Statewide Shared Purchasing Consortium
  - Statewide Collaborations
  - Efficiency-Oriented Distribution Formulas

Managing for the Future

- In response to a request from then-Governor Voinovich, in the early 1990s the higher education community launched a long-term statewide strategic cost-reduction effort that paralleled the state's *Management Improvement Task Force.*
- The higher education effort was called "Managing for the Future," and the state is still benefiting from these tough choices.

Administrative & Related Cost Savings.

As part of their critically important contributions to this effort, state colleges and universities undertook a wide range of actions to make their own operations more efficient, including:

- identifying key priorities at each college and university campus
- developing strategic planning activities
- undertaking cost containment initiatives, and
- implementing best practices

- As a result of campus-specific efforts, $212.9 million in cost savings were documented from 1993 through 1996. The table on the next page provides a quick breakdown of these savings.
  - All campuses and sectors contributed equally to this effort, as the cost savings reported above are roughly proportionate to the size of each sector's operating budget.
  - Many of these cost containment efforts continue at Ohio's public campuses, and many more have been implemented. Total savings from FY 1993 through FY 2002 are conservatively estimated at $533.1 million.

Managing for the Future Cost Savings
FY 1993 – 1996

Institution	Savings, 1993-1996
Universities & Regional Campuses	$163.4 million
Medical Colleges	$13.7 million
Community Colleges	$27.1 million
Technical Colleges	$ 8.8 million
Total	**$212.9 million**

Doctoral Program Review.

One "Managing for the Future" report identified the then-recent increase in doctoral enrollments as one area of state expense that merited review.

- In 1994, the Regents began to review state university doctoral programs to assess strengths and weaknesses with a goal of eliminating state subsidy for doctoral programs that were deemed to be unnecessarily duplicative.
- The outcomes of the review were direct and dramatic, such as the recommendation that state funding for six of eight existing doctoral programs in History be discontinued. State funding was also withdrawn from several programs and/or program components in English and Educational Administration.
- To the best of our knowledge, no other state has undertaken such a thorough top-to-bottom review of its state-funded doctoral programs.
- These doctoral review decisions generated savings of about $14.8 million in FY 1998. Total cumulative savings are conservatively estimated at $78.6 million from FY 1998 through FY 2002.

Law School Review.

In 1996, the Board of Regents completed a review of state-supported legal education in Ohio.

- The results of the review led to the conclusion that Ohio's level of public expenditures for legal education was higher than needed to secure an appropriate number of law school graduates.
- The results also led to the conclusion that a more careful and stringent set of academic standards was needed to ensure that graduates of law programs were adequately prepared to pass the bar exam and join the profession.
- The Regents' plan called for a reduction of between 366-426 full-time equivalent students at the state's five public law schools. The plan, however, was never fully implemented. Instead, the legislature created a Commission on Public Legal Education, which found that many of the concerns which motivated the Board of Regents' plan had "been met or ameliorated."
- Since then, the Regents have continued their discussions with law school deans to improve the overall quality of Ohio's public law schools and increase performance-based accountability of all law schools.

- These efforts have brought dividends – first-time bar passage rates rose sharply in July 2001 to 82% from 75% the previous year. Much of this improvement is attributable to tough decisions made by the deans to decrease the size of entering classes, improve the quality of programs, and avoid increases in state outlays for legal education.

Statewide Shared Purchasing Consortium

- The Inter-University Council (IUC) is the state association of the thirteen four-year universities and two medical colleges. The IUC has for decades managed several very successful cooperative purchasing programs that reduce costs at state-supported universities and colleges. Two-year campuses have similar cost-saving arrangements. These joint purchasing activities include:
  - Group purchasing agreements to take advantage of high-volume purchases
  - Pooled joint risk pool for lower-cost property and casualty insurance
  - A large volume statewide enterprise agreement with Microsoft
  - Joint prescription drug purchasing arrangements
- These programs help Ohio's campuses save millions of dollars per year.

Statewide Collaborations

- The Board of Regents supports a number of innovative cost-efficient statewide collaborations. Two of these, in the area of information management and library operations, have received national recognition:
  - **OhioLINK** is the state's premier electronic library system that enables statewide sharing of all college and university library resources. OhioLINK helps minimize duplication in the purchase of library resources and enables the state to take advantage of economies of scale in the purchase of resource databases.
  - The state's five **Regional Library Depositories** enable public campuses to store infrequently used documents in low-cost, high-density, environmentally sound facilities, freeing up more expensive library space on campus for instructional or other use. The construction of these depositories has helped the state avoid having to build expensive new libraries, all the while ensuring that important documents are stored in a safe manner and are easily retrievable.
- Most recently, many campuses are investigating the merits of collaborative arrangements in Information Technology and more generally, in administrative computing.

Efficiency-Oriented Distribution Formulas

- It's not well-known that the primary state operating and capital formulas are designed to reward efficiency and hold down costs. For example, allocations of the state operating formula (called the State Share of Instruction) are based on statewide average costs. The use of statewide average costs rewards efficiency: campuses with lower-than-average costs benefit and those with higher-than-average costs do not.
- In the capital formula, campuses earn capital resources through a formula based on enrollments and the age of their facilities. By establishing a 'price' for state capital appropriations and a reward for moderate requests, the formula discourages campuses from over-investing in capital resources.
- Other changes in state subsidy policy give campuses an incentive in renovating and rehabilitating existing facilities instead of building new buildings.

Higher education is committed to quality and efficiency. The vignettes provided above provide just a glimpse on the depth and breadth of this commitment, which has helped save hundreds of millions of dollars in the recent past.

Economic Growth Factors

A Profile of Ohio's Economy

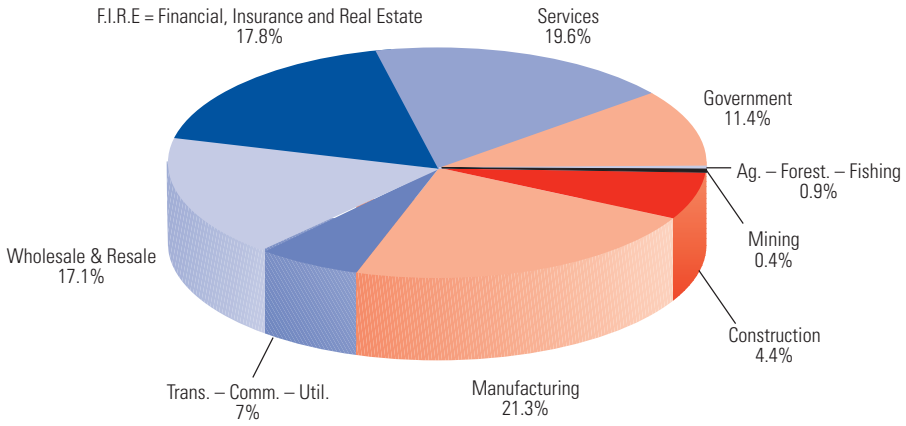
Key Points:

- ***Manufacturing continues to be the largest segment of Ohio's economy in terms of gross state product.***
- ***The services sector employs the most individuals in Ohio and is the fastest in employment growth, although average earnings in this sector are substantially below those in the manufacturing sector as well as Financial, Insurance and Real Estate (F.I.R.E.) and other business sectors.***

What is the largest sector of the economy in Ohio?

The largest sector is manufacturing, which comprised 21.3% of the state's gross state product in 2002. The pie chart below shows Ohio's gross state product by sector.

Ohio Gross State Product by Sector
2002



Source: Ohio Department of Development

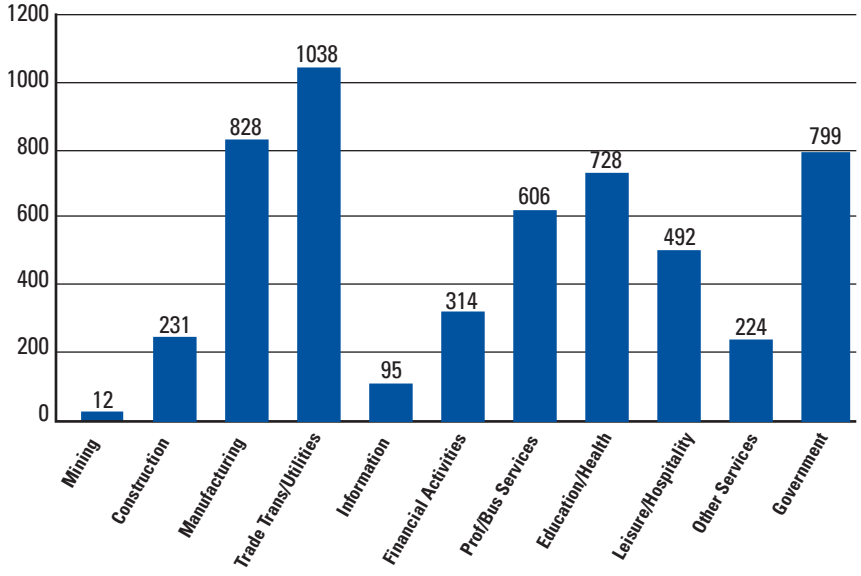
Motor vehicle companies including General Motors, Delphi Automotive, Ford Motor Company, Honda Motor Company, and Daimler Chrysler Corporation dominated the top manufacturing companies.

The second largest industry is the services sector, which comprised 18.3% of the state's gross state product in 2001. The services sector includes health and legal services, educational services, social services, personal services, and auto repair services. The services sector is the major source of job growth in Ohio.

Which economic sector employs the most people in Ohio?

The services sector employs the most people – 1,609,000 workers or approximately 29% of Ohio's workforce (as of February 2002). After the services sector, the retail trade and manufacturing sectors employ the most workers at 18.7% and 18.2%, respectively. The table below shows the number of employees employed in each sector.

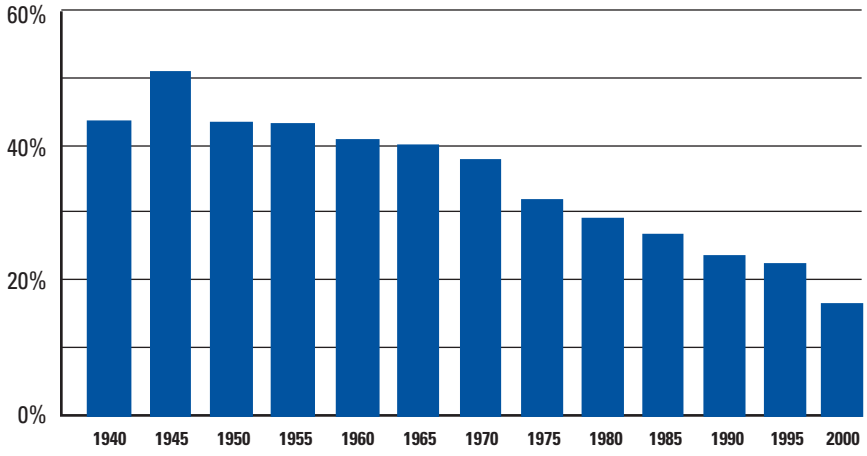
Employment in Ohio by Industrial Sector
February 2004



Source: Ohio Department of Development

While the manufacturing sector continues to employ a significant number of Ohio's workers, the percentage of jobs in this sector has dramatically declined since the 1940s and 1950s, when over 40 percent of all jobs in Ohio were in manufacturing. The chart on the next page shows manufacturing jobs as a percentage of all jobs in Ohio over the past 55 years.

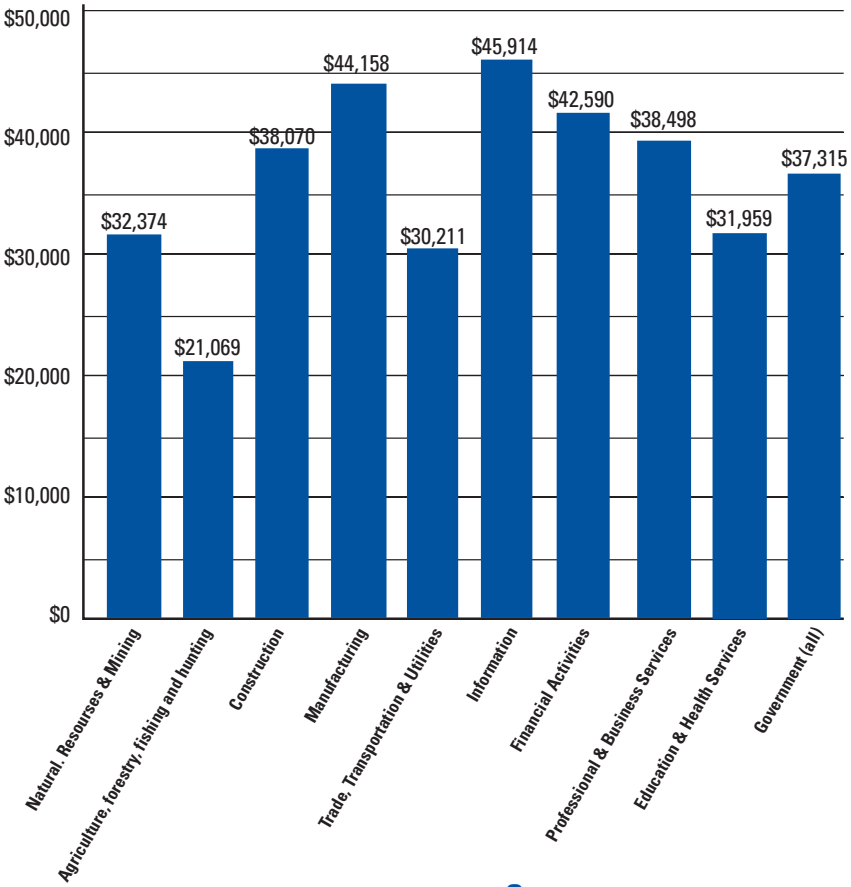
Manufacturing Jobs as a Percentage of All Jobs in Ohio
1940 – 1995



How much does a worker earn in each sector?

In 2000, average annual earnings ranged from a low of $20,707 in agriculture, forest and fishing to a high of $42,989 in manufacturing. Average earnings in Ohio's fastest growing sector, services, were $28,515 in 2000. The chart below shows average earnings in each sector in 2000.

Average Annual Earnings by Industrial Sector
2002



How have the various economic sectors of Ohio's economy fared in the last decade?

Ohio's gross state product (GSP), ranked the seventh largest in the nation, grew only 18.3% (adjusted for inflation) from 1992 to 2001 compared to the U.S. GSP growth rate of 29.3%.

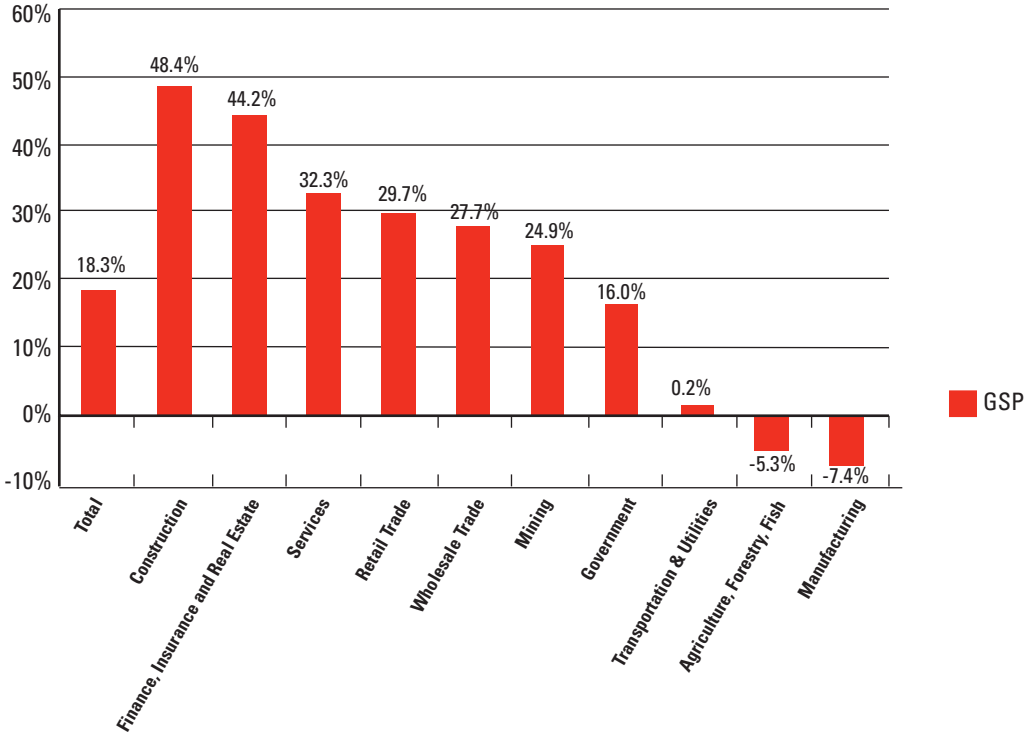
Ranked third in the nation, Ohio manufacturing is 5.6% of the nation's manufacturing output. However, after adjusting for inflation, the real value of manufacturing production in Ohio fell by 7.4% over this time period. The only other sector to experience a reduction in real output was agriculture, forestry, and fishing, which fell by 5.3%.

This is evidence that the Ohio economy is shifting away from areas of traditional strength.

The following chart illustrates by industry sector the change in GSP – after adjustments for inflation – from 1992 to 2001.

(Source: Bureau of Economic Analysis)

Percent Change in Real Ohio Gross State Product
1992– 2001



Economic Growth Compared to Other States

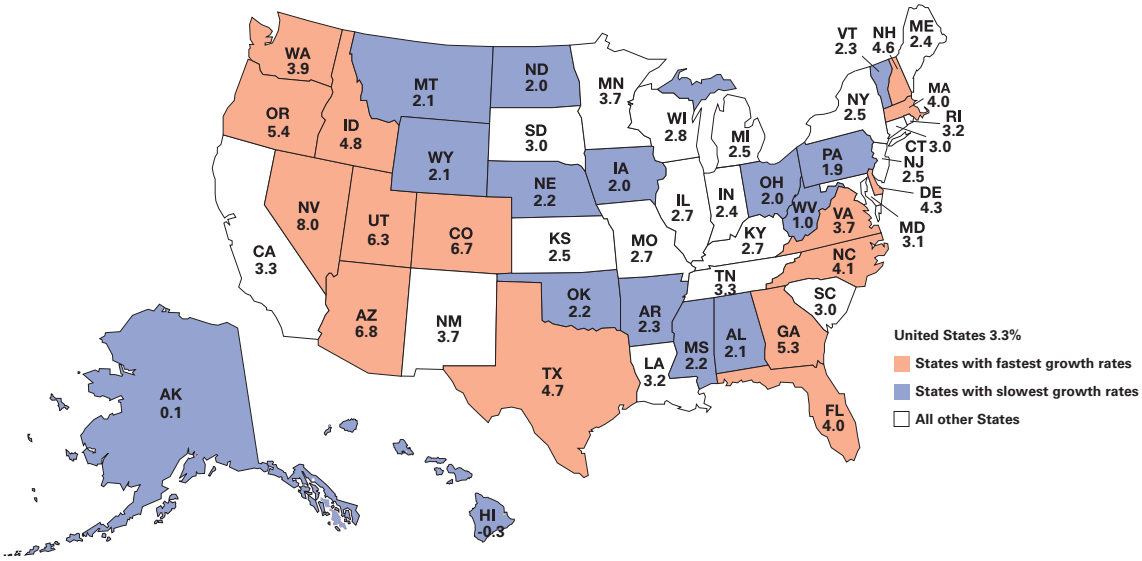
Key Points:

- ***From 1992 through 1999, Ohio lagged the national average in growth in real Gross State Product and labor productivity.***

How does economic growth in Ohio compare to other states?

- There are several ways to measure economic growth. Two common ways are real gross state product (GSP) growth rates and real GSP per employee.
- The map below shows the average annual percent change in real GSP from 1992 through 2001. Ohio's average annual percent change of 2.7% puts Ohio below the national average of 3.3%. Ohio ranks only 44th among the 50 states.

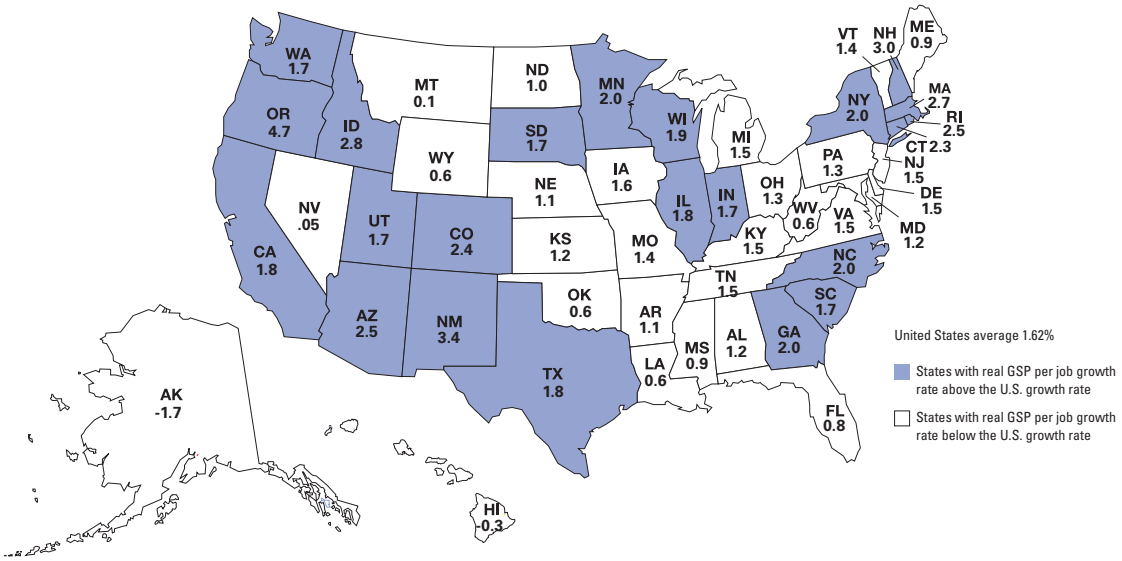
Average Annual Percent Change in Real Gross State Product
1992 – 2001



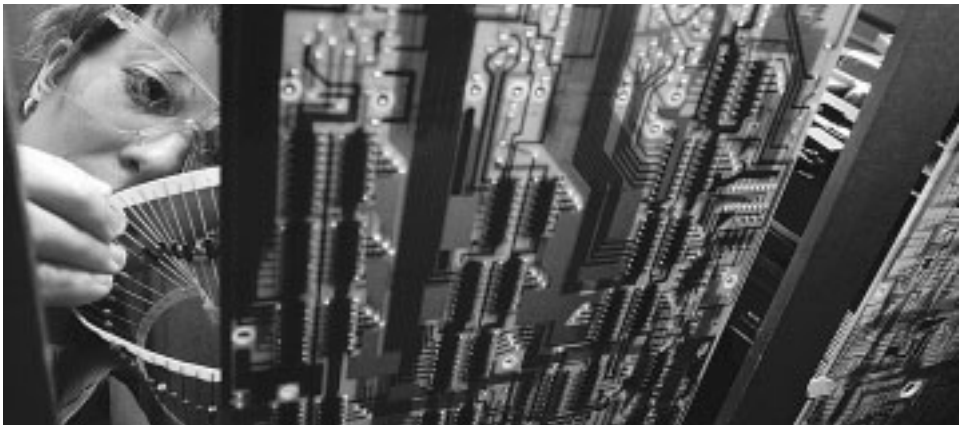
Source: Bureau of Economic Analysis

- The second map is a measure of labor productivity. It shows the average annual percent change in real gross state product per employee from 1992 through 2001.
- The national average on this measure was a growth rate per employee of 1.6%. Ohio's rate of growth of 1.3% was slightly behind the national average.
- In 2001, real GSP per employee ranged from $70,119 in the state of New York to $36,533 in Montana. Ohio's real GSP per employee in 2001 was $51,398; the national average in that year was $55,715.

Average Annual Percent Change in Real Gross State Product Per Employee
1992 – 2001



Source: Bureau of Economic Analysis



Personal Income

Key Points:

- ***Ohio's per capita income was 5.3% below the national average in 2003.***
- ***If Ohio's per capita personal income were equal to the national average, the state would have had over $19 billion in additional state income last year.***

What is total personal income?

Personal income is defined as the income that is received by persons from participation in production, from both government and business transfer payments, and from government interest. It is calculated as the sum of wage and salary disbursements, other labor income, proprietors' income with inventory valuation and capital consumption adjustments, rental income of persons with capital consumption adjustment, personal dividend income, personal interest income, and transfer payments to persons less personal contributions for social insurance.

Source: Bureau of Economic Analysis

What is Ohio's total personal income?

Ohio's 2003 total personal income was $342.4 billion.

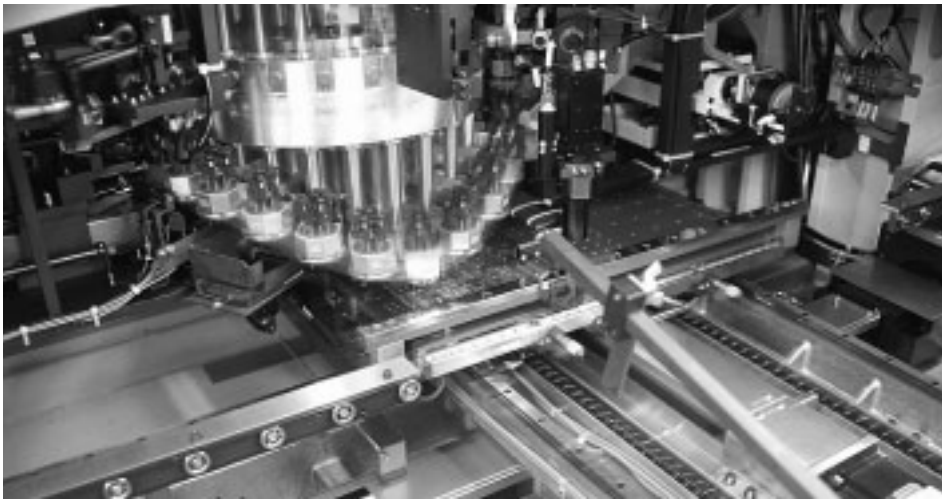
What is per capita income?

Per capita income is the total personal income for an area divided by the population of that area.

What is Ohio's per capita income?

Ohio's 2003 per capita income was $29,944.

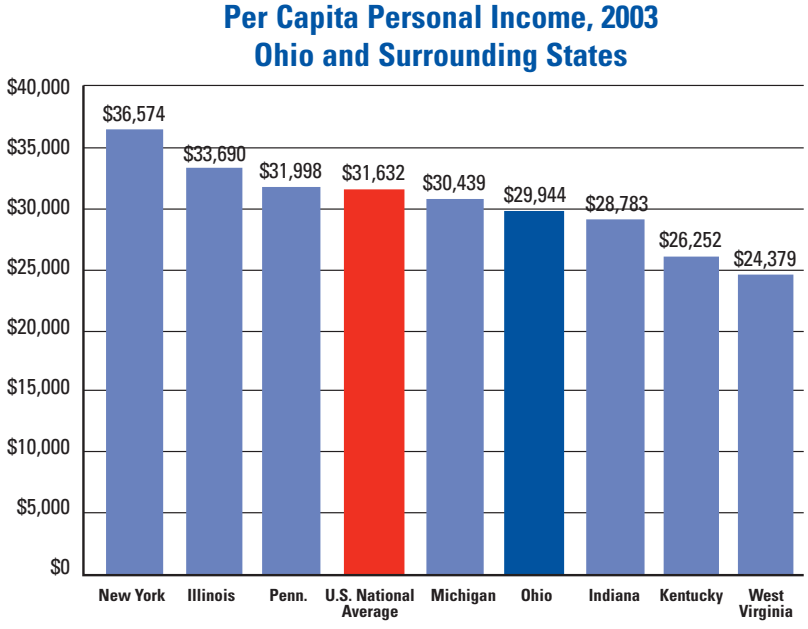
Source: Bureau of Economic Analysis



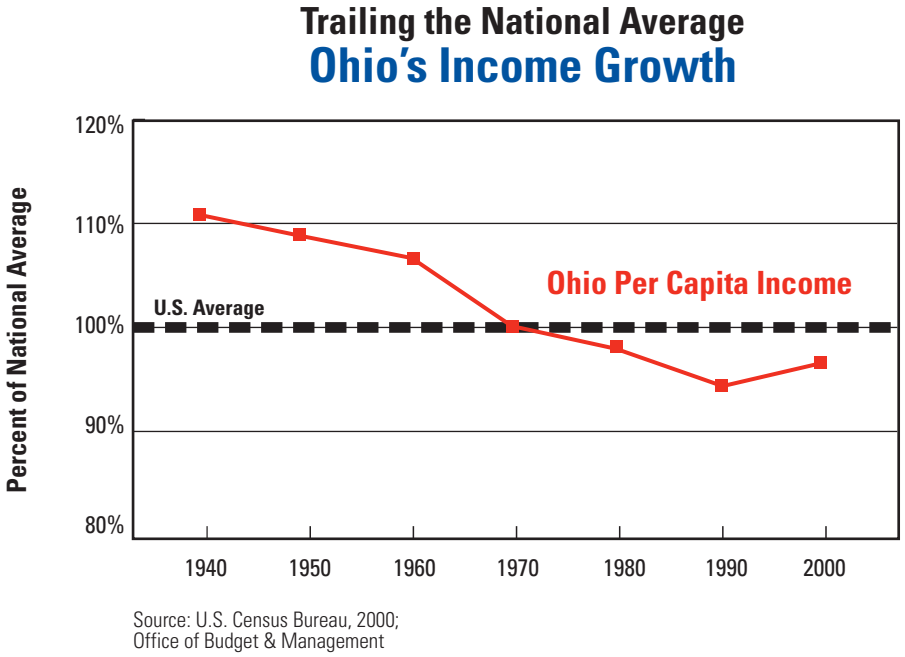
How does Ohio's per capita income compare to the rest of the country?

- U.S. per capita income in 2003 was $31,632. Ohio's per capita income is 5.3% below the national average in 2003. The following chart shows Ohio's per capita income as compared to surrounding states.
- Ohio's per capita is less than Michigan's per capita.

Source: Bureau of Economic Analysis

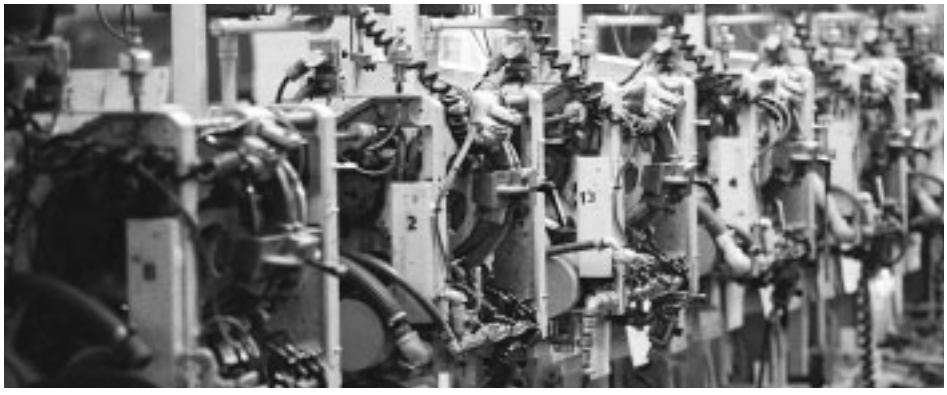


How does Ohio's per capita income compare to the nation over the past half-century?



Source: U.S. Census Bureau, 2000;
Office of Budget & Management

- Ohio's per capita income used to be well above the national average.
- This began to change in the 1970s, and now Ohioans' per capita income is below the national average.
- This year every citizen in Ohio is earning almost $1,700 less than the average American.
- That is why Ohio's leaders have called for a new economic growth strategy – one that reverses the $19 billion loss in total state income during just the past year.



Gross State Product

Key Points:

- ***Ohio's gross state product per capita was 7.7% below the national average in 2001.***

What is gross state product (GSP)?

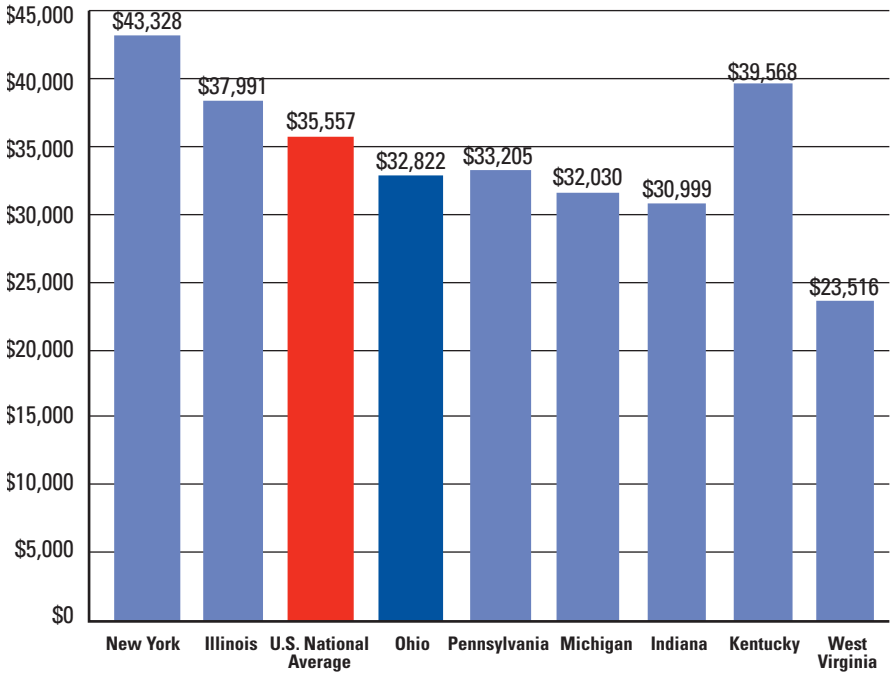
Gross state product (GSP) is the value added in production by the labor and property located in a state. GSP is often considered the state counterpart of the nation's gross domestic product (GDP), the most comprehensive measure of U.S. economic activity.

What is Ohio's gross state product?

Ohio's GSP in 2001 was $373.7 billion. Ohio's GSP per capita in 2001 was $32,822.19.

How does Ohio's gross state product compare to the rest of the country?

Gross State Product Per Capita, 2001
Ohio and Surrounding States



GSP per capita for the nation in 2001 was $35,557. Ohio's per capita GSP is 7.7% below the national average. The chart above shows Ohio's gross state product per capita as compared to surrounding states.

Source: Bureau of Economic Analysis

State and Local Tax Policy

Where Ohio Stands

Key Points:

- ***Ohio's state tax burden is at the national average, but Ohio's local tax burden is higher than the national average. From 1992 to 2002, Ohio's growth in state taxes was a little higher than the national level, but Ohio's growth in personal income was less than the national level.***

How does Ohio's tax burden compare to other states?

State/Local Tax Burden – In 2002, Ohio's state and local taxes were 11% of personal income compared to 10.4% for the United States. However, the difference between the U.S. and Ohio is due to a higher local tax burden in Ohio. In both Ohio and the U.S., state taxes are 6.2% of personal income, but Ohio's local taxes are 4.9% of personal income and local taxes in the U.S. are 4.2% of personal income. Ohio ranks 29th in state tax burden, 3rd in local tax burden and 11th in combined state and local tax burden.

Source: Census and Bureau of Economic Analysis

How does Ohio's distribution of taxes compare to other states?

As is true with the majority of states, Ohio relies on the general sales tax (32.6%) and the individual income tax (42.5%) as the major sources of revenue. Compared to all states, Ohio relies slightly less on the sales tax than the nation as a whole (33.5%) and more on the individual income tax than the nation as a whole (34.7%). The distribution by type of tax for all states and selected states is shown in the table below.

Tax burden is usually defined as a combination of federal, state and local taxes as a percentage of income.

State Tax Distribution by Type of Tax
Selected States • FY 2002

State	General Sales & Use	Individual Income	Corporate Income	Motor Fuels	Licenses	All Other
All States	33.5%	34.7%	4.9%	6.0%	6.6%	14.3%
Ohio	32.6%	42.5%	3.9%	7.0%	8.0%	6.1%
Michigan	35.6%	28.0%	9.4%	5.0%	5.9%	16.0%
Pennsylvania	33.1%	30.4%	5.4%	7.9%	9.4%	13.7%
New York	19.9%	59.1%	5.2%	1.1%	2.4%	12.2%
Illinois	28.6%	30.9%	9.2%	6.1%	8.5%	16.7%
Indiana	38.0%	35.4%	6.7%	6.7%	3.0%	10.2%
Kentucky	29.0%	33.6%	3.8%	5.8%	6.8%	21.1%
West Va.	27.1%	29.1%	6.2%	8.4%	4.9%	24.2%
California	30.6%	42.5%	6.9%	4.2%	7.3%	8.4%

Source: Tax Foundation (http://taxfoundation.org/statefinance.html)

How does the growth in state taxes in Ohio compare to the growth in personal income over the past 10 years?

Ohio's average annual tax growth from FY 1992-2002 in real 2002 dollars was 2.6%, compared to an average rate of 2.3% rate for all states. Ohio's average personal income growth in the same time period was 2%. The average annual growth for all states during this period was 3%.

Source: Census and Bureau of Economic Analysis

Knowledge Economy Status

GROWTH IN INNOVATION-BASED SECTOR

Key Points:

- ***Ohio is not among the leaders in high technology.***
- ***The states that are leaders in high technology economic development emphasize two factors in their economic development efforts:***
  - ***University research***
  - ***A highly qualified workforce***

What is the Knowledge Economy?

The term Knowledge Economy is used to describe the increased importance of knowledge in today's global economy. For the past 200 years, America's predominately agricultural and industrial economies relied on labor, capital and machinery. Human hands did the work; however, today the human mind is doing more of the work. The American industries which drive the nation's economy today either produce knowledge itself (industries such as software, information technology hardware, and biotechnology) or manage, process and distribute knowledge (industries including telecommunications, financial services, advertising, law, medicine, sales, government and education)*.

According to the Milken Institute, an economic think tank whose mission is "to explore and explain the dynamics of world economic structure, conduct, and performance," in the knowledge economy, the skills, experience, and innovation potential of the workforce have greater value than the capital equipment or even capital itself. The Milken Institute further states that a successful business must access, create, and utilize knowledge to sustain competitive advantage and must also provide the required training, information technology, direction and motivation to its employees to ensure that they build new knowledge and value.

Which states are considered to be leaders in high technology economic development?

- Those most often cited are: California, Texas, North Carolina, Georgia, Massachusetts, Washington, and Colorado. Of these, all but Colorado cluster their economic development around universities and research institutions.

* Source: *The Knowledge Economy: Knowledge Producers and Knowledge Users*; Progressive Policy Institute (http://www.neweconomyindex.org/knowledge.html)

- In addition, Minnesota, Wisconsin, Illinois, Michigan and Pennsylvania are launching very aggressive higher education-based economic development initiatives. All of these states complement research-centered development with efforts to provide a highly qualified workforce.
- North Carolina, which has had exceptional economic growth over the last three decades, is known for its success in both research and workforce development.

Where does Ohio stand in high technology economic development?

- Ohio is not among the leaders in high technology. In a recent survey by the Milken Institute, not one Ohio metropolitan area ranked among the top 50 high-tech metros relative to high-tech real output growth from 1990 to 1998.

  Source: Milken Institute, *America's High-Tech Economy, Growth, Development and Risks for Metropolitan Areas*, July 13, 1999

Why is high technology development important?

- The Milken Institute study reports that the high tech sector has doubled its share of the U.S. economy in the past 20 years.
- The same report shows that 65% of the difference in growth between metropolitan areas in the 1990s can be explained by high-tech activity.
- In a metropolitan economy, the high tech sector also stimulates the non-high tech sector.

What are the factors that high-tech firms consider when deciding where to locate?

According to the Milken Institute study, high tech-firms want the following:

- Access to a trained workforce
- Close proximity to research institutions
- A network of suppliers
- Access to venture capital
- A good quality of life

Do Ohioans need to have a four-year degree in information systems or the sciences to be competitive in the Knowledge Economy?

- No. But more Ohioans need education beyond high school to get the tools and information competencies needed to succeed in the knowledge economy. Even professions once regarded as blue collar now require at least some technological skills – a trend expected to continue. The state must sustain a 21st century workforce capable of continuously upgrading its skills and knowledge to meet the demands of the rapidly changing global landscape.

How does the education level of Ohioans compare to the rest of the nation?

- National Center for Education Statistics data for 2000 show that 56.1% of Ohio high school graduates continued on to college compared with a national average of 56.7%.
- In the year 2002, 47% of Ohio's citizens had completed some college compared to 53% for the nation.
- To bring the percentage of Ohioans who have completed any college up to the national average, 439,071 more Ohioans would have to enroll in some form of higher education.
- In the year 2002, Ohio ranked 40th among all states on the percentage of the state's population who have completed a bachelor's degree or higher – 21.9% versus 25.9% for the nation. Only ten states have a lower baccalaureate attainment rate.

What skills will be needed to be competitive in the 21st century workforce?

- Students need to develop flexible and cross-functional skills in problem solving, communication, and analytical thinking.
- They also need basic information competency skills. This involves not just an ability to use computers, but an understanding of the kinds of information needed for particular projects, knowledge about where good information might be found, and an ability to assess the quality of information.

Does Ohio's workforce have these skills?

- Some of Ohio's workers have these skills.
- More Ohio workers need these skills.

How can we make sure that we are not educating another state's workforce?

Data shows that Ohio is not exporting an inordinate number of Ohio science and engineering graduates to other states – that is, we retain these graduates – both undergraduate and graduate – at the same rates as national averages. We rank 22nd on retention of scientists and engineers. Ohio needs improvement, however, in the number of graduates we are able to attract from other states. On the "attraction index" (ability to attract science and engineering graduates to Ohio), we rank 39th among the states.

Source: Gottlieb, Paul "The Problem of Brain Drain in Ohio and Northeastern Ohio"
Center for Regional Economic Issues, Case Western Reserve

Impact of Advanced Learning

INDIVIDUAL EARNINGS

Key Points:

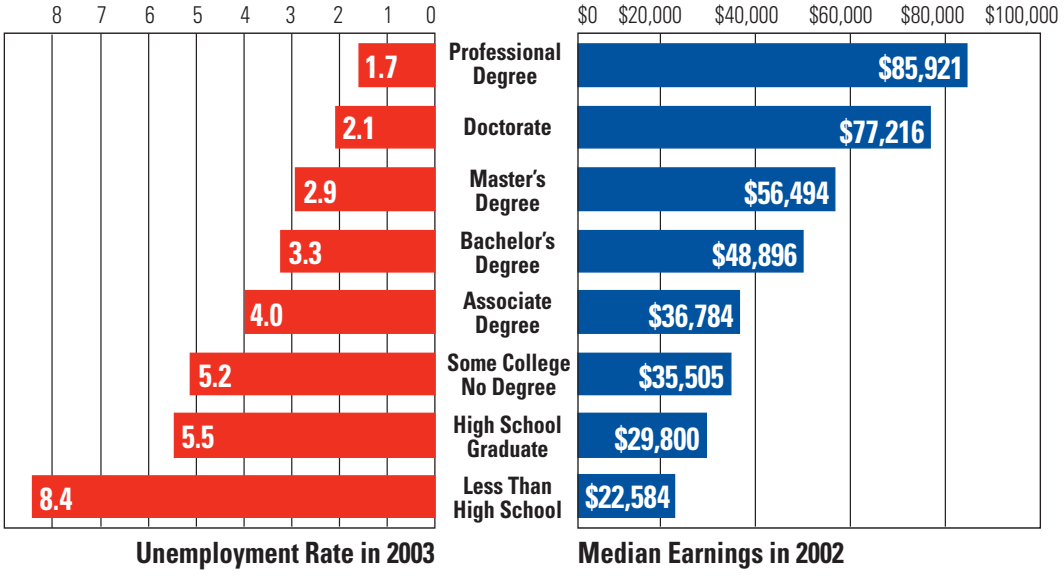
- ***In today's world, those with education beyond high school will earn more money.***
- ***An individual with a bachelor's degree earns $19,096 more a year than an individual with a high school diploma. An individual with an associate degree earns $6,984 more than a high school graduate.***

How much more does a person with a college education earn compared to a person with a high school diploma?

- In 2002, an individual with a college degree earned $19,096 a year more than an individual with a high school diploma. A person with an associate degree earned $6,984 more than an individual with a high school diploma.
- The chart below graphically tells the story: higher learning equals higher earning.

Higher Learning
Equals Higher Earning

In today's world, those with a higher education will benefit most.



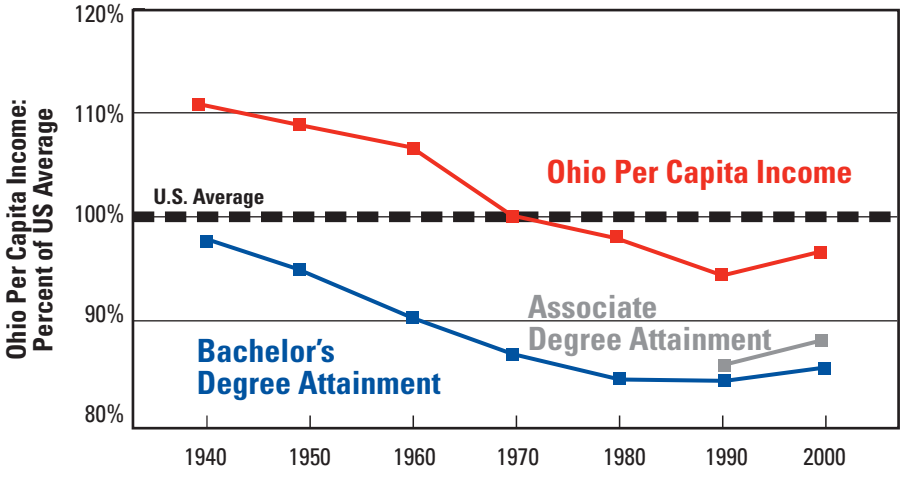
Source: Postsecondary Education OPPORTUNITY

Did individuals always need a college education to earn a decent living?

- No. In the heyday of the industrial era, Ohioans could earn decent salaries as workers in the manufacturing industry.
- As recently as the 1960s, Ohioans' average per capita income was *well above* the national average, even though the percentage of Ohioan's attaining a bachelor's degree was *below* the national average.
- But times have changed. To succeed in the Knowledge Economy, Ohioans need a better education. They must have the advanced knowledge job skills needed to succeed and prosper.
- The graph below shows that the percentage of Ohioans with a bachelor's degree was falling at precisely the same rate as the decline in our per capita income.
- Even with a substantial increase in bachelor and associate degree attainment in the last decade, Ohio is significantly below the national average in Associate Degree attainment and Bachelor's Degree attainment.
- In an economy that is increasingly dependent on knowledge and skill, ours needs to become more educated to be more competitive.

Confirming the Connection
Income and Education

Compared to the National Average, Decline in Percent of Population with Bachelor's Degree Parallels Decline in Ohio's Per Capita Income



Source: U.S. Census Bureau, 2000

Economic Growth

Key Points:

- ***Ideas that students bring to their places of employment increase productivity.***
- ***Profits of companies that employ well-educated workers often increase as those workers strive to improve products and processes.***
- ***According to the Inter-American Development Bank, each additional year of average education in a nation increases its economic output from 5 percent to as much as 20 percent.***

What impact does advanced learning have on economic growth?

- Some experts who study economic growth say that technology, human capital and the creation of new ideas all work to produce a virtuous circle that continuously spurs economic growth. They say that *knowledge itself* can be separated out from existing models of production and that its impact on promoting technological advances is *key.*

  (Source: *America's High Tech Economy, Growth, Development and Risks for Metropolitan Areas,* Milken Institute, 1999)

- The correlation between advanced learning and per capita income is dramatic in Ohio's economy. On average, individuals with a bachelor's degree can expect to earn $1 million more over a lifetime than individuals with no education beyond high school.

- In a recent study, it was reported that among the 50 states, Massachusetts has the highest percentage of citizens with a bachelor's degree. Maryland had the greatest increase in total personal income as a result of the percentage of its population with a bachelor's degree.

  (Source: *Measuring Up 2002: The State-by-State Report Card for Higher Education*, National Center for Public Policy and Higher Education)

Quality of Life

Key Points:

- ***People with some college education have better health, and are more likely to vote.***
- ***People with some college education rely less on public financial aid.***
- ***People with some college education are more likely to participate in the electoral process.***

How do better-educated citizens contribute to society and the quality of life in a community?

- Typically, a college education leads to the following benefits to society:
  - ♦ greater community service
  - ♦ increased volunteer work and charitable donations
  - ♦ less criminal activity
  - ♦ less dependency on governmental assistance
  - ♦ higher voting rates
- People with some college education*:
  - ♦ read more to their children
  - ♦ tend to find their work more enjoyable, interesting, and challenging
  - ♦ are less likely to receive welfare or Social Security disability benefits
- The "profits" of higher education do not just accrue to individuals; communities, cities and states reap the benefits as well.
- A recent study by the National Center for Public Policy and Higher Education states that in Minnesota, a state in which nearly one-third of the population has a bachelor's degree, the percentage of the residents who vote is the highest in the nation.
- The study also reports that in New York and New Jersey, two states in which nearly one third of the population has a bachelor's degree, 93% of residents who itemize their deductions for federal income tax purposes, declare charitable gifts. This percentage is the highest in the nation.

*Source: Illinois Higher Education. *Building the Economy, Shaping Society*

Tax Revenues

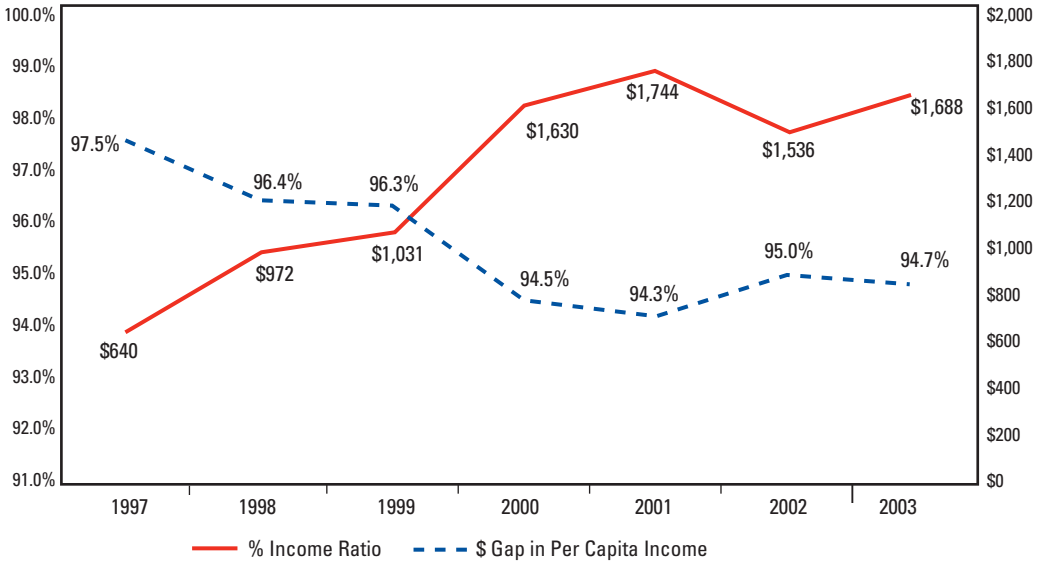
Key Points:

- ***If more Ohioans attained associate and baccalaureate degrees, significant new revenues would accrue to the state without any additional tax burden.***
- ***Individuals with associate and baccalaureate degrees earn higher salaries and their high salaries produce more state income revenues.***

What impact does advanced learning have on tax revenues?

- It is fairly easy to document the loss in tax revenues. Ohio is suffering because of low per capita income.
- The chart below shows that in every year from 1997 to 2002, per capita income in Ohio has been less than the national average. In 1997, Ohio per capita income was 97.5% of the national level and the dollar gap in per capita income was $640. By 2002, Ohio per capita income fell 95% of the national level, and the dollar gap rose to $1,536.
- By attaining or exceeding the national level of per capita income through increases in educational attainment, significant revenues would accrue to the state without additional tax burden.

Gap in Per Capita Income, Ohio vs. U.S.

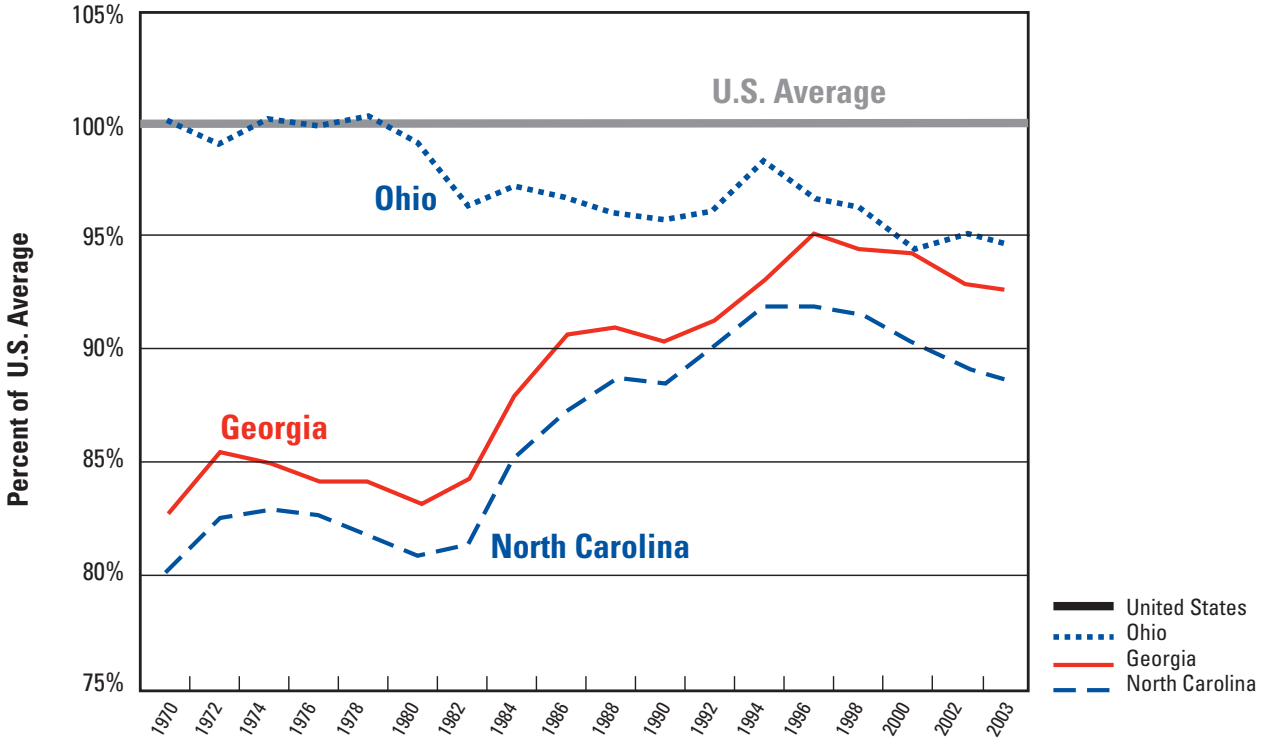


Source: *Bureau of Economic Analysis*

What impact has advanced learning had on other state's revenues?

- Georgia and North Carolina both made significant investments in higher education in the late 1970s and early 1980s.
- Georgia's per capita income, which was about 17% below the national average in 1980, has been steadily increasing. In 1998, it was only 5% below the national average.
- Likewise, North Carolina, which was worse off than Georgia in per capita income in 1980 (19% below the national average), made significant gains in the last 20 years. In 1998, North Carolina's per capita income had improved substantially, making it only 8% below the national average.
- The chart below shows these dramatic changes in North Carolina's and Georgia's per capita income. When people earn higher salaries, tax revenues also increase – without any additional tax burden to taxpayers.

State Per Capita Income: % of U.S. Average



Source: U.S. Department of Commerce, Bureau of Economic Analysis

Business/University Partnerships

Key Points:

- ***Across Ohio, businesses and universities are working together to develop new products, improve existing products, shorten the time it takes to develop the results of university research into viable products, and build the skills of the workforce.***

How are businesses and colleges/universities working together in Ohio?

Across Ohio, technology partnerships between businesses and universities are changing the way we do business. The Northeast Ohio Technology Coalition is supporting the work of the University of Akron in expanding talent pools, enhancing research capabilities and fostering an entrepreneurial environment. A "knowledge management hub" is also being established to accommodate the area's polymer industry. Diagnostic Hybrids, Inc. (DHI), located in the Science and Technology Park on Ohio University's campus, engages in the development, manufacture, and marketing of cell culture products for various applications in diagnostic virology and endocrine disease. DHI collaborates closely with the Edison Biotechnology Center and other departments at the university.

Several tenants of the Hamilton County Business Center, a technology-oriented business incubation program in Norwood, employ University of Cincinnati College of Engineering graduates through the University of Cincinnati Engineering Co-op program. The 40 client companies have in the past year collectively generated more than $25 million in revenue. Lastly, Dr. Hamish Fraser at the Ohio State University works with businesses to develop new technologies that provide new and improved materials at low cost and in short development cycles. Lockheed Martin, Ford, Honda, Alcan, Pechinney Reference Metals, Brush Wellman, Ladish and FEI/Philips are some of the industrial partners at Dr. Fraser's Center for the Accelerated Maturation of Materials at the Ohio State University. These are just a few examples of the many partnerships that exist in Ohio today.

BENEFITS FOR BUSINESSES AND COMMUNITIES

Key Points:

- ***College education and research provide immense benefits for businesses and society including:***
  - ***increased profits***
  - ***improved products***
  - ***lower prices***
  - ***a better standard of living***

How does university research benefit businesses?

- Innovations developed through research produce new businesses that use and further develop state-of-the-art products and processes.
- Businesses that use new techniques and innovations developed through research often increase their profits.
- All businesses must make use of new ideas and innovations developed through research if they want to stay viable and profitable.

How does university research benefit society?

- Innovations brought about through research produce better products.
- Since businesses that want to stay profitable have to keep up with new knowledge, and all viable businesses have to compete, the result for society and consumers is lower prices.
- People living in an educated society enjoy the prestige of living in a nation in which research has brought advances in the quality of life.

K-16 Partnerships

Key Points:

- ***Increasingly, K-12 education and higher education are working together to make a college education accessible to more and more students.***

How are primary and secondary education and higher education working together to increase levels of learning for all students?

- Pressed by the need for an increasingly sophisticated workforce capable of meeting the needs of a knowledge economy, K-12 education and higher education have worked together to ensure that students can move seamlessly through Ohio's systems of education from pre-school through college.
- Students from primary and secondary education must be academically prepared to meet the expectations of higher education. By the same token, higher education is working to develop high quality teachers with the capacity to create opportunities for students to achieve academically.
- Some recent examples of this type of collaboration can be found in projects such as:
  - The development of academic content standards for students
  - Ohio's College Tech Prep initiative. http://www.regents.oh.us/techprep/
  - Efforts to identify college preparatory requirements for students
  - The collaborative development of Ohio's Resource Center for Mathematics, Science and Reading to provide resources for all of Ohio's teachers, students and student teachers http://ohiorc.org/
  - The Ohio College Access Network (OCAN) helps Ohio students pursue postsecondary education by creating local college access programs throughout Ohio. http://ohiocan.org/

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Customer Satisfaction Assessment

1. How helpful was this guide to you in studying the issue of higher education in Ohio?

1	2	3	4	5
Not Helpful		*(circle one number)*		Very Helpful

2. How can we make this document more useful?

3. Can you easily locate information in this document?

4. Is this document too long, or too short, for your needs?

Please send completed form to: Maureen Nedved, Ohio Board of Regents, 30 East Broad St., 36th Floor, Columbus, OH 43215-3414 or fax to 614-728-4643.

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