

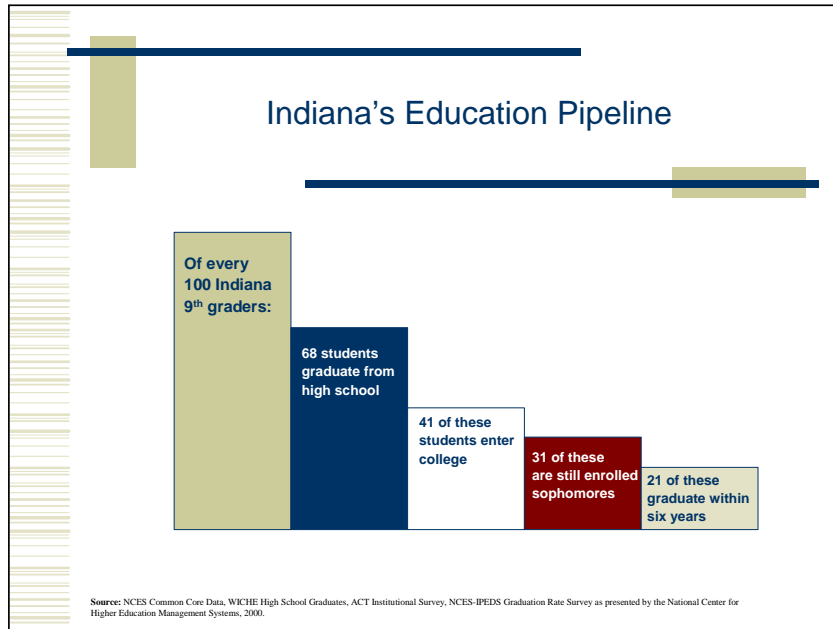


INDIANA *for* COMMISSION  
HIGHER EDUCATION

# A SNAPSHOT OF EDUCATION IN INDIANA

Updated: November 7, 2005

# Indiana's Education Pipeline

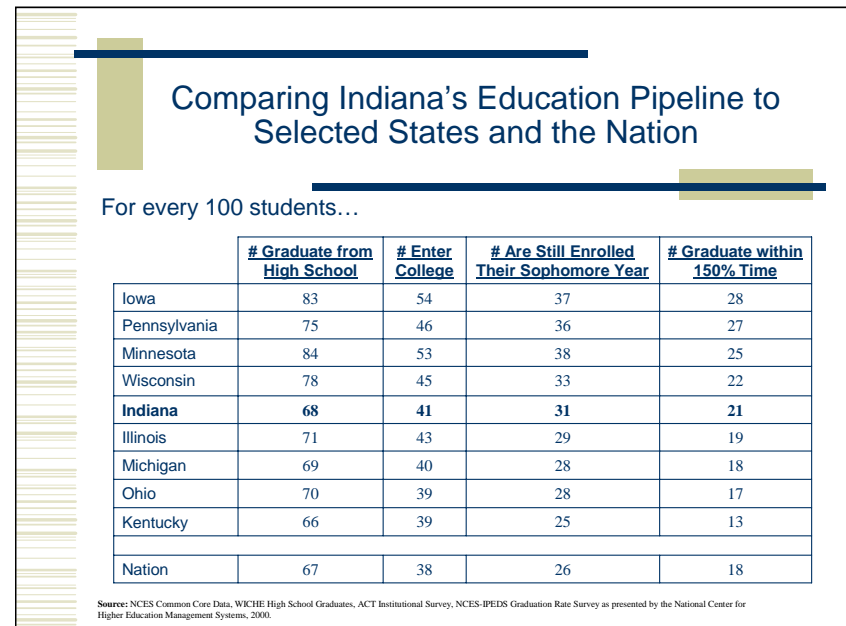


Indiana, like many industrial states, never sent a very large percentage of its students to college. They did not need more than a high school education because high-wage, low-skill jobs were plentiful. However, the current economic reality requires a highly skilled, technologically literate workforce with a vast majority of Hoosiers completing education beyond high school.

Today, 62% of Indiana's high school graduates go directly to college, the 10th highest percentage among the 50 states. Critical to this transformation has been Indiana's work in recent years to align the academic standards and expectations of its secondary and postsecondary systems much more closely than in the past. Doing so has sent a strong message to students and their families about the importance of education beyond high school.

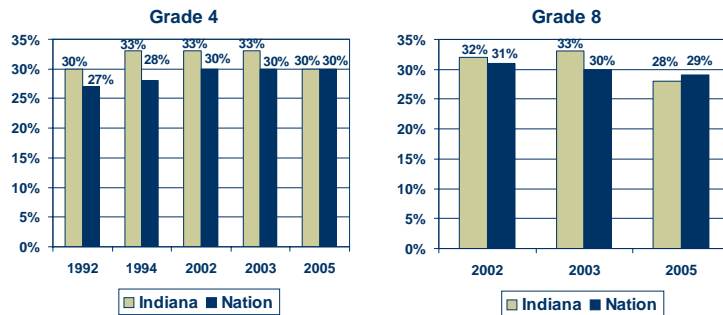
Even with these efforts, there are still many Hoosier students who simply are unsuccessful in their educational pursuits. Out of every 100 Hoosier 9<sup>th</sup> grade students, 32 will not graduate high school and 79 will not graduate college.

Now more than ever, Indiana's economic vitality depends on an educated workforce. Success will only be realized if Indiana's entire education system is geared to prepare and enable all students to achieve at high levels.



# National Assessment for Educational Progress

## NAEP Reading: Percent of Students Performing At or Above the Proficient Achievement Level



Source: National Assessment for Educational Progress, 2003.

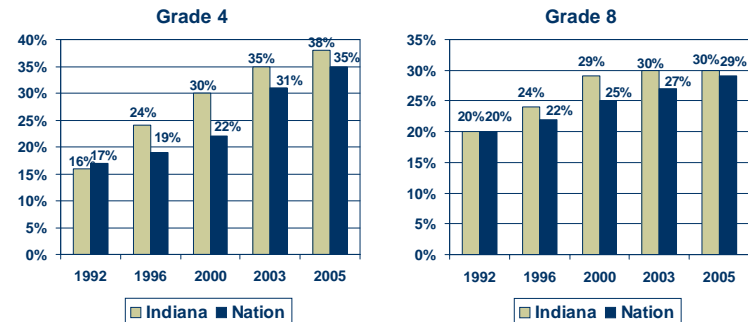
The National Assessment of Educational Progress (NAEP) is the only ongoing, nationally representative assessment in various subject areas.

Referred to as The Nation's Report Card, NAEP results are provided through scale scores and percentage of students placed in four performance categories (Below Basic, Basic, Proficient, and Advanced).

The NAEP examinations are a centerpiece of President Bush's education plan, which calls for yearly NAEP testing to be used as a yardstick of student achievement.

NAEP tests a representative sample of students across the nation and in participating states and territories.

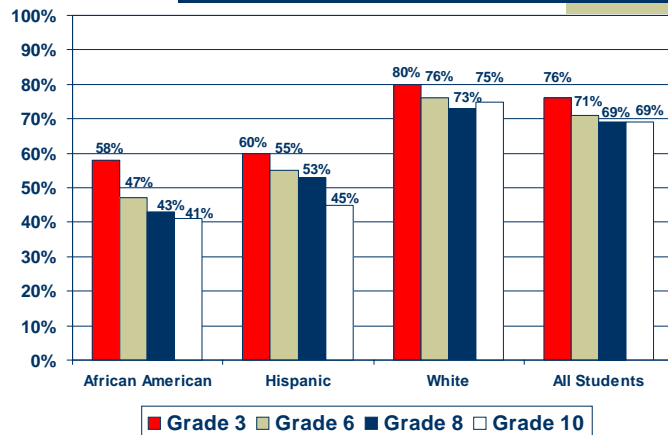
## NAEP Math: Percent of Students Performing At or Above the Proficient Achievement Level



Source: National Assessment for Educational Progress, 2003.

# ISTEP+

Percent of Students Passing ISTEP+ in **English** by Race, 2004-05



Source: Indiana Department of Education, ASAP.

Overall ISTEP scores in 2004 showed improvement over 2003 scores with the largest improvement in math.

Although Indiana continues to see improvement in ISTEP+ scores, achievement gaps continue to persist between students of different race and socioeconomic status.

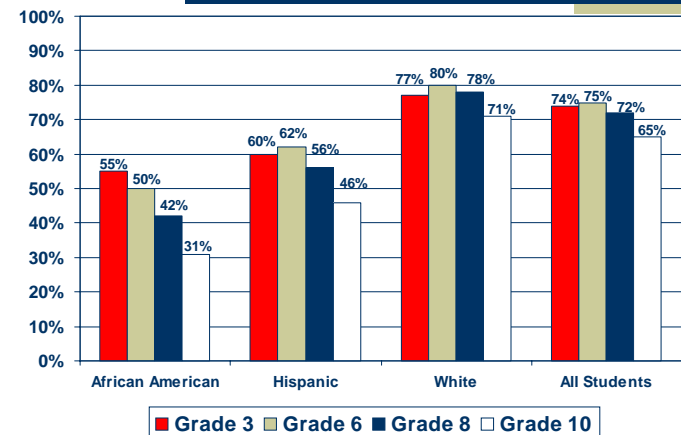
Trend data and disaggregated data are available at <http://www.doe.state.in.us/asap>.

Indiana's K-12 academic standards in English/language arts, math, science, and social studies were developed by Hoosier educators, business and community leaders, and parents.

Ranked among the very best in the nation, these standards spell out what students are expected to know and be able to do as they advance through school.

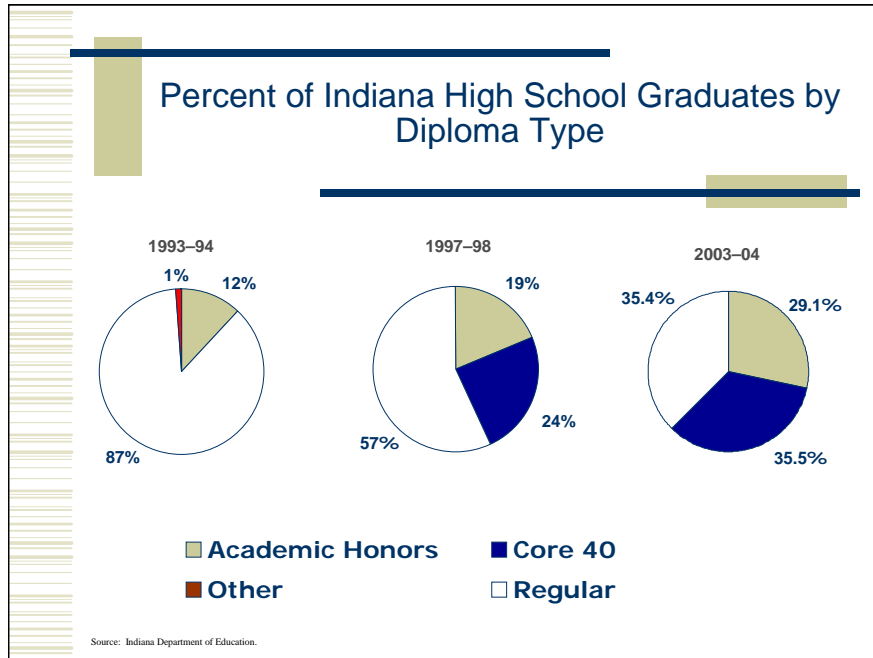
Using these standards, the Indiana Statewide Test of Educational Progress (ISTEP+) measures student performance annually in grades 3 through 10 in reading, writing, math, and science (with social studies to be added).

Percent of Students Passing ISTEP+ in **Math** by Race, 2004-05



Source: Indiana Department of Education, ASAP.

# Core 40



In 1994, leaders from Indiana's K-12, higher education, and business communities came together to develop and support the Core 40 curriculum, which is composed of rigorous, college-prep coursework.

Indiana adopted Core 40 as the single high school curriculum designed to give students the best foundation for success in college and the workforce.

Research has revealed that a rigorous academic curriculum is the single most important factor in determining a student's success in college.

With recent actions by the Indiana General Assembly, Indiana is now one of only four states to establish a rigorous default curricula designed to prepare all students for success in work and postsecondary education. All Hoosier students will be required to complete Core 40 unless they, together with their parents and counselors, opt out.

Additionally, Indiana's four-year public colleges and universities will require all Hoosier students to complete Core 40 as a minimum admission requirement.

**INDIANA**  
**CORE40**

Effective beginning with students who enter high school in 2007-08

Course and Credit Requirements	
<b>English/ Language Arts</b>	<b>8 credits</b> Credits must include literature, composition, and speech
<b>Mathematics</b>	<b>6 credits</b> 2 credits: Algebra I* 2 credits: Geometry* 2 credits: Algebra II* <small>(*For complete integrated math series) (I, II, and III for 6 credits) (All students are required to take a math or physics course during their senior or senior year)</small>
<b>Science</b>	<b>6 credits</b> 2 credits: Biology I 2 credits: Chemistry I or Physics I or Integrated Chemistry-Physics 2 credits: any Core 40 science course
<b>Social Studies</b>	<b>6 credits</b> 2 credits: U.S. History 1 credit: U.S. Government 1 credit: Economics 2 credits: World History/Civilization or Geography/History of the World
<b>Directed Electives</b>	<b>5 credits</b> World Languages Fine Arts Career/Technical
<b>Physical Education</b>	<b>2 credits</b>
<b>Health and Wellness</b>	<b>1 credit</b>
<b>Electives*</b>	<b>6 credits</b> <small>(*Specify the number of electives required by the state. High school schedules provide time for many more electives during the high school years.)</small>
<b>40 Total State Credits Required</b>	

**CORE40 with Academic Honors** (minimum 47 credits)

For the Core 40 with Academic Honors diploma, students must:

- Complete all requirements for Core 40.
- Earn 2 additional Core 40 math credits.
- Earn 6-8 Core 40 world language credits.
- Earn 2 Core 40 fine arts credits.
- Earn a grade of 'C' or above in courses that will count toward the diploma.
- Have a grade point average of 'B' or above.
- Complete one of the following:
  - Two Advanced Placement courses and corresponding AP exams
  - Academic, transferable dual high school/college courses resulting in 6 college credits
  - One Advanced Placement course and corresponding AP exam and academic transferable dual high school/college course(s) resulting in 3 college credits
  - Score 1200 or higher combined SAT math and critical reading\*\*\*
  - Score a 26 composite ACT
  - An International Baccalaureate Diploma.

\*\*\*SAT requirements will be modified with the addition of the writing section.

**CORE40 with Technical Honors** (minimum 47 credits)

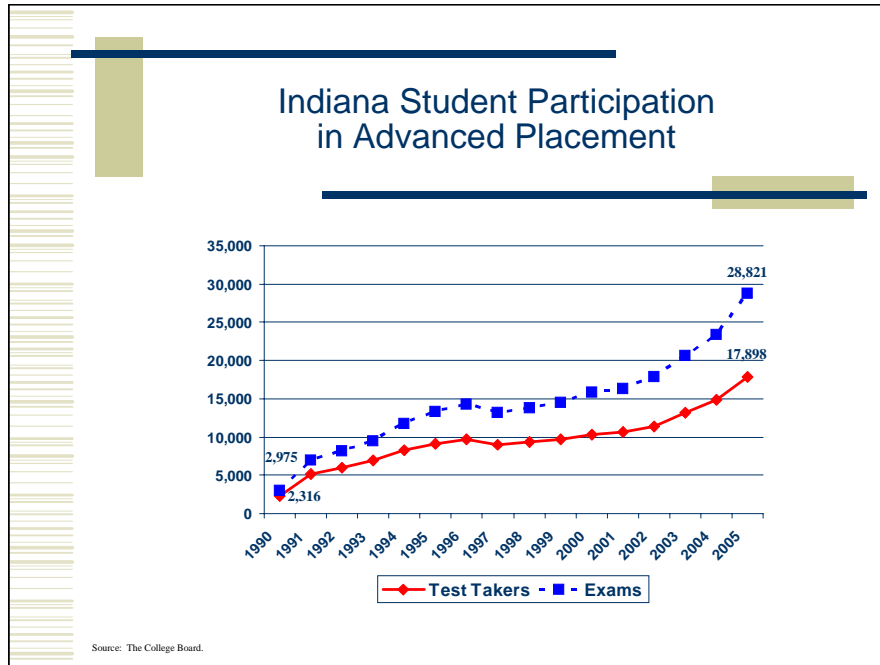
For the Core 40 with Technical Honors diploma, students must:

- Complete all requirements for Core 40.
- Earn a grade of 'C' or above in courses that will count toward the diploma.
- Have a grade point average of 'B' or above.
- Complete a career-technical program resulting in 8-10 credits.
- The student must earn a state-recognized certification or certificate of technical achievement in the career-technical program.

\* All students are strongly encouraged to complete a Career Academic Sequence (selecting electives in a deliberate manner) to take full advantage of career exploration and preparation opportunities. Schools may have additional local graduation requirements.

(updated 9/23/05)

# Advanced Placement

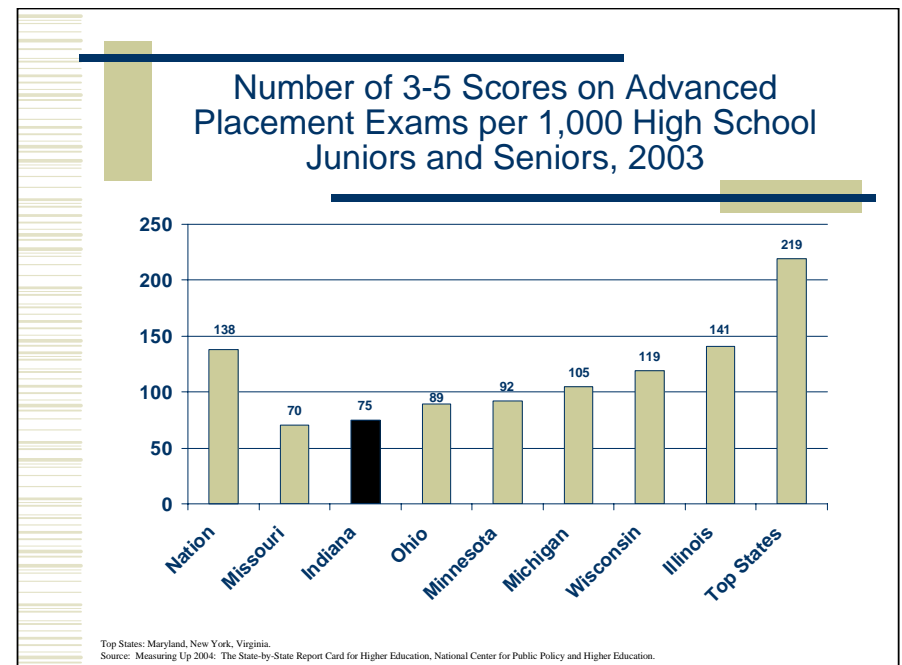


The Advanced Placement (AP) program provides students with an opportunity to take college level courses in high school.

AP courses count towards a student's high school diploma, and provide a student with an opportunity to get a "jump-start" on a college degree. Not only are AP tests often an indicator of a state's success with its best and brightest students, but they can also qualify students to receive college credit dependent on the scores.

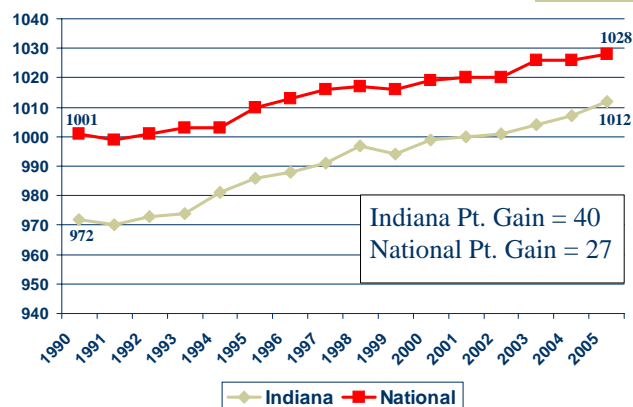
State appropriations support students taking AP exams in math, science, statistics, and English/composition. The State also funds summer professional development institutes for AP teachers.

Although Indiana has experienced rapid growth in the number of Advanced Placement courses offered and the number of participating students, Indiana currently ranks 35<sup>th</sup> nationally in the number of students scoring a 3 or higher on the AP exams.



# SAT

Average Combined SAT Scores for Indiana and the Nation, 1990-2005



Source: The College Board.

Indiana high schools encourage students to take the SAT, which is evident in the state's participation rates.

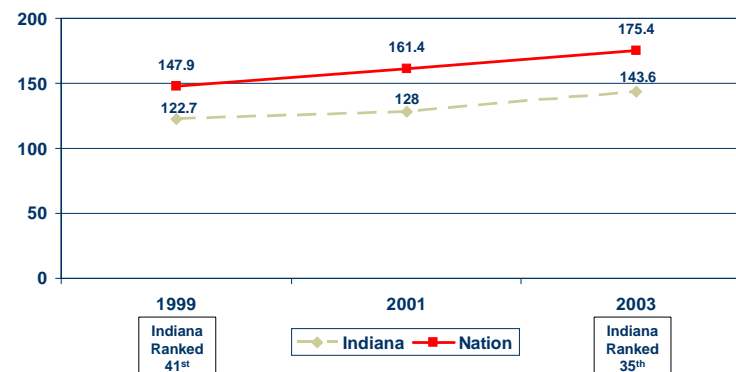
Approximately 62% of Indiana's seniors take the SAT each year, which is significantly higher than surrounding and other Midwestern states.

Since the SAT is a college-bound admission test, a high percentage of student participation indicates that more and more students are considering college in their post-high school plans.

For the past several years, Indiana has paid the test fees for students taking the PSAT, a preliminary test to the SAT. Students taking the PSAT score 67 to 136 points better on the SAT than students who have not taken this test.

As with the PSAT, the percentage of Indiana students taking the SAT also has increased to approximately 64%. Although more and more students are taking the SAT, Indiana has continued to show steady improvement in SAT scores over the past decade.

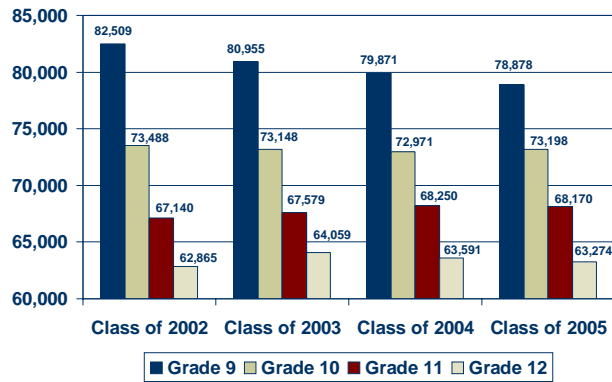
Number of ACT Scores 26+ and SAT Scores 1200+ per 1,000 High School Graduates



Source: Measuring Up 2004: The State-by-State Report Card for Higher Education, National Center for Public Policy and Higher Education.

# High School Graduation

## Indiana Public High School Enrollment



Source: Indiana Department of Education.

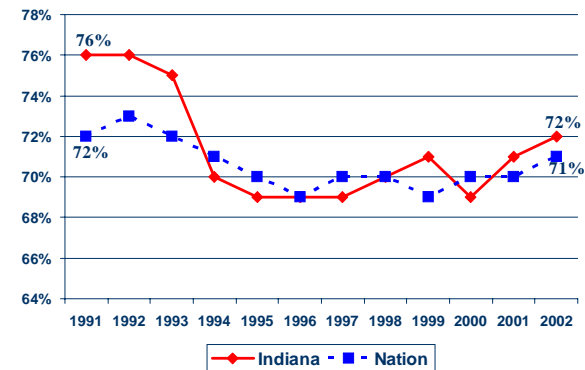
In Indiana, there are approximately 80,000 students in each grade level. With a graduation rate of 72%, 57,600 of those students will graduate. But, 22,400 Indiana students each year will be left without a high school diploma and with very few prospects for a good job.

Over 25 to 30 years, a dropout student can cost a community as much as \$500,000 in public assistance, health care, and incarceration costs.

Estimates of the social benefits (social savings from reduced crime only) of a 1% increase in male U.S. high school graduation rates would amount to \$1.4 billion.

Completing high school raises average annual earnings by approximately \$7,216. Additional annual Indiana income tax per graduate is \$245 per year or approximately \$9,800 over the working lifetime per graduate.

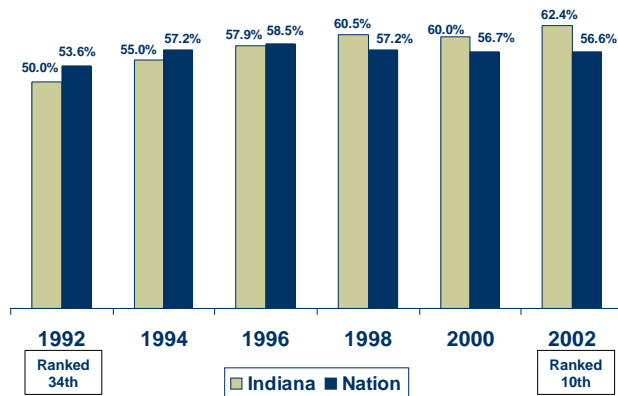
## High School Graduation Rates



Source: Greene, J.P. & Winters, M.A. Public High School Graduation and College-Readiness Rates: 1991-2002. Education Working Paper, (8), February 2005, Manhattan Institute.

# Participation

Percent of High School Graduates Enrolled the Next Fall in Postsecondary Education



Source: Postsecondary Education Opportunity, Oskaloosa, Iowa.

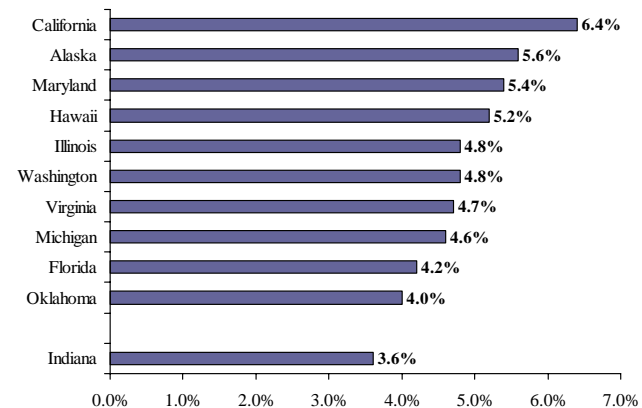
Over the past decade, the **college-going rate** (the rate in which Indiana high school seniors enroll in college in the fall semester immediately following graduation) has increased significantly.

Indiana places among the top third of states for percentage gains in college attendance of high school graduates over the past ten years.

Nevertheless, the proportion of Indiana's adult population (age 25+) participating in postsecondary education is significantly below the national average and neighboring states. In order to meet the national average, Indiana would need to enroll an additional 30,000 students per year.

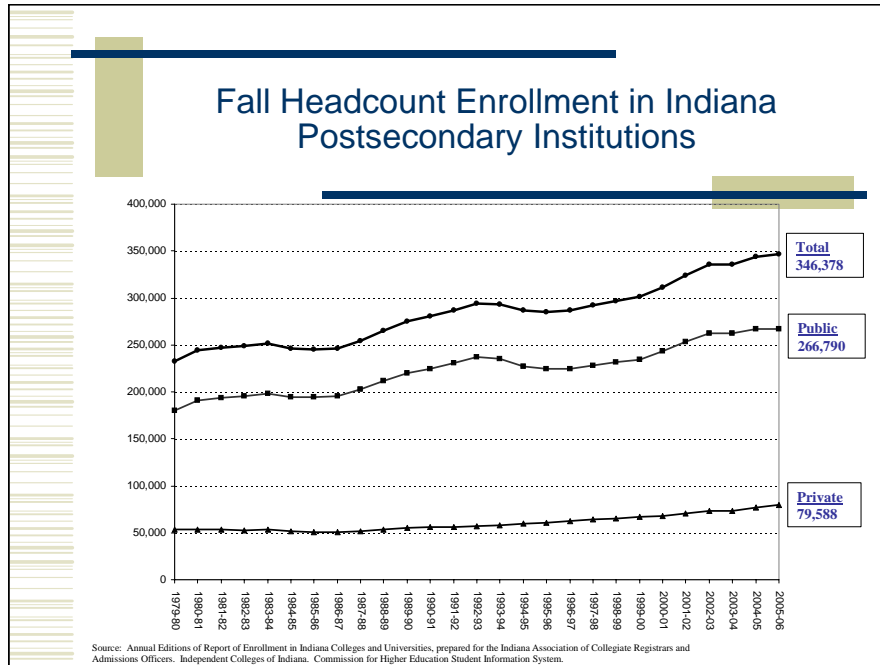
In 2000, Indiana launched the community college initiative as an effort to expand higher education statewide and increase adult participation. The initiative has produced impressive results with unprecedented enrollment growth.

Adult Participation in Postsecondary Education for Indiana and Selected States



Source: U.S. Census Bureau, Decennial Census, 2000.

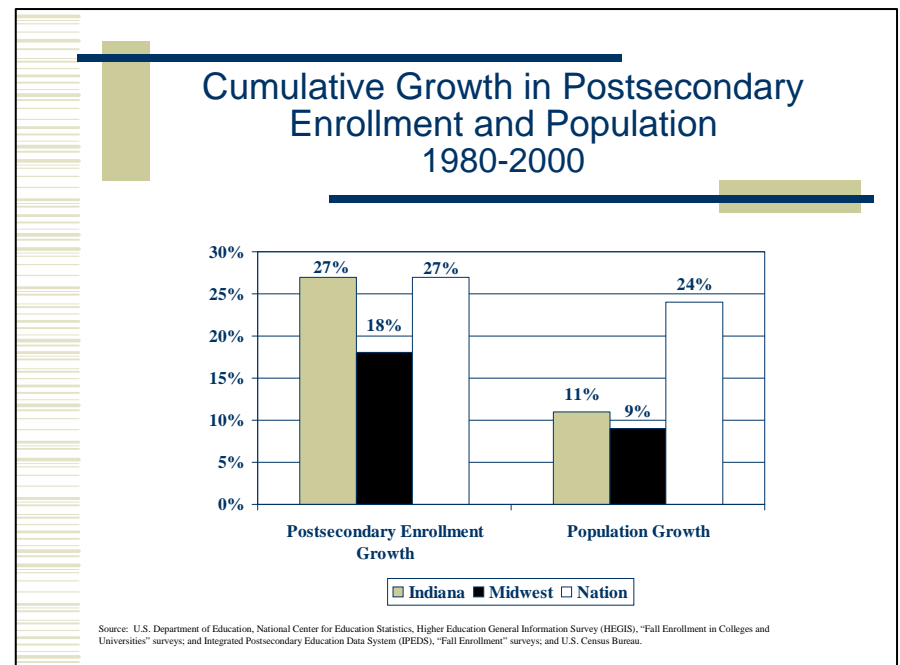
# Enrollment in Higher Education



Indiana's postsecondary enrollment growth has outpaced the growth in other Midwestern states and perhaps more importantly has outpaced Indiana's own modest population growth.

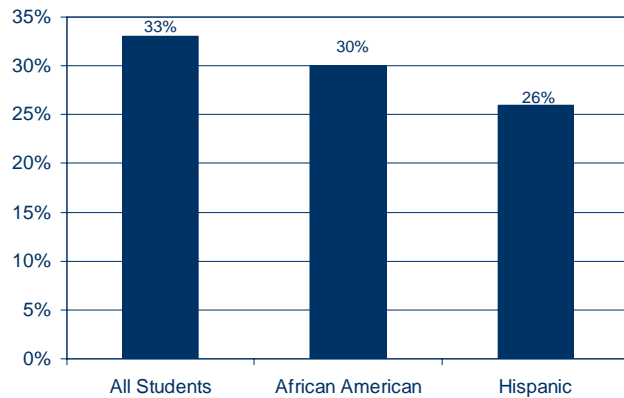
Enrollment levels are a key indicator of the condition of higher education in any state.

Indiana has made steady progress over the past two decades with steady, unprecedented records in college enrollment.



# College Degree Completion

Degree-Completion Rates (within three years) for Full-time, **Associate** Degree-Seeking Students at Indiana's Two-Year Institutions



Source: National Center Education Statistics 2003 IPEDS Graduation rate Survey. (2000 Cohort).

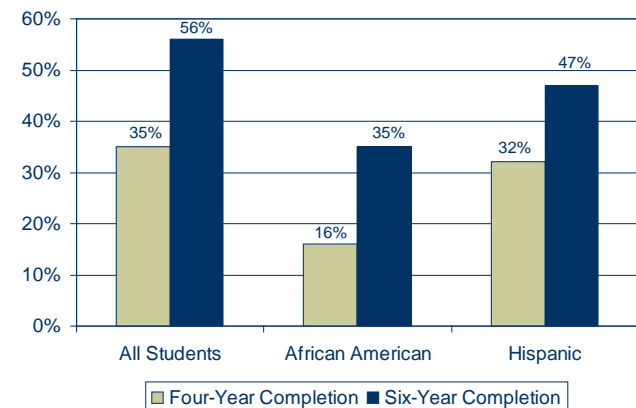
Although persistence rates from the freshman to sophomore years have improved, degree completion rates have been stagnant.

Approximately one-third of students seeking an associate degree actually complete their degrees.

Slightly more than half of students seeking a baccalaureate degree complete their degrees.

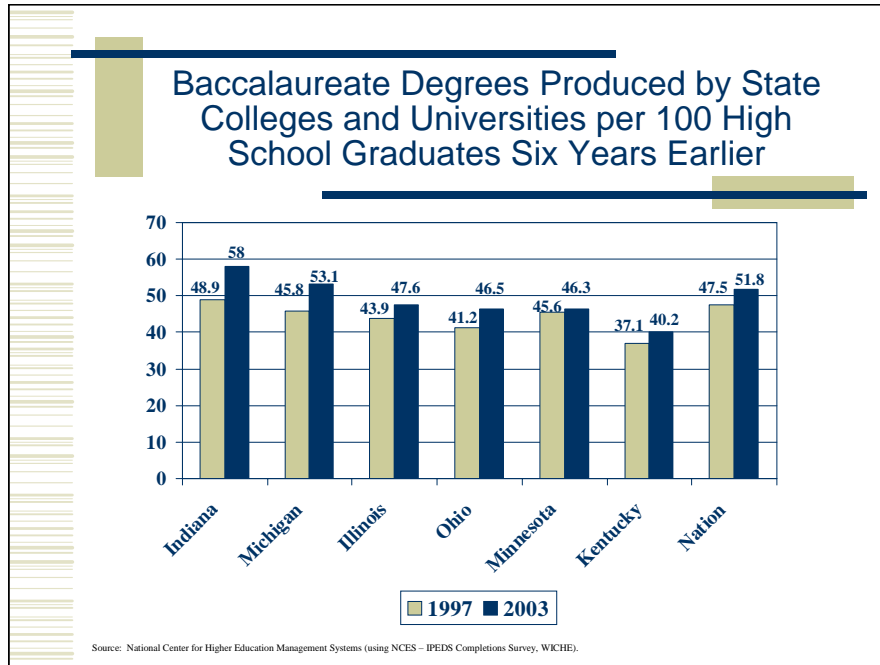
Most efforts to increase completion rates have been targeted toward students in the first year of collegiate study. By providing formal and deliberate support services to students early in their academic pursuits, it is expected that students will persist to the second year of study and ultimately complete at higher rates. In 2002, 77.1% of freshman students returned their sophomore year at Indiana's colleges and universities, ranking Indiana 24th nationally.

Degree-Completion Rates for Full-time, **Baccalaureate** Degree-Seeking Students at Indiana's Four-Year Institutions Indiana by Race



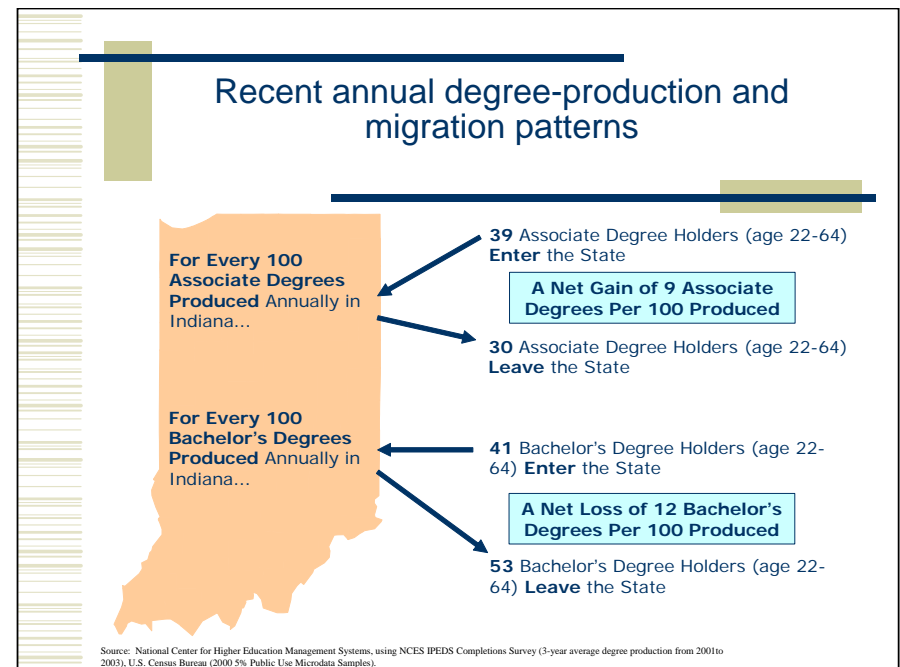
Source: National Center Education Statistics 2003 IPEDS Graduation rate Survey. (2000 Cohort).

# Educated Workforce

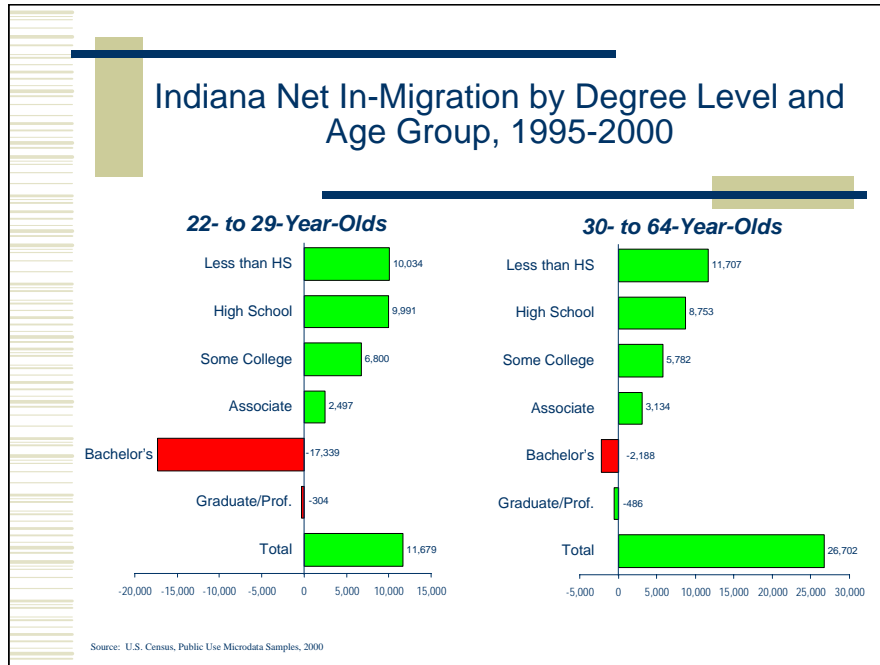


Although Indiana's colleges and universities perform well in relation to other states on the number of degrees awarded each year, many of these graduates continue an ongoing trend of migrating out of the state following graduation.

A well-educated workforce is critical to economic development and quality of life. Indiana currently ranks 12<sup>th</sup> nationally in the number of bachelor's degrees awarded as a percent of high school graduates six years earlier. This statistic is positively influenced by nonresident students coming to Indiana for postsecondary study.



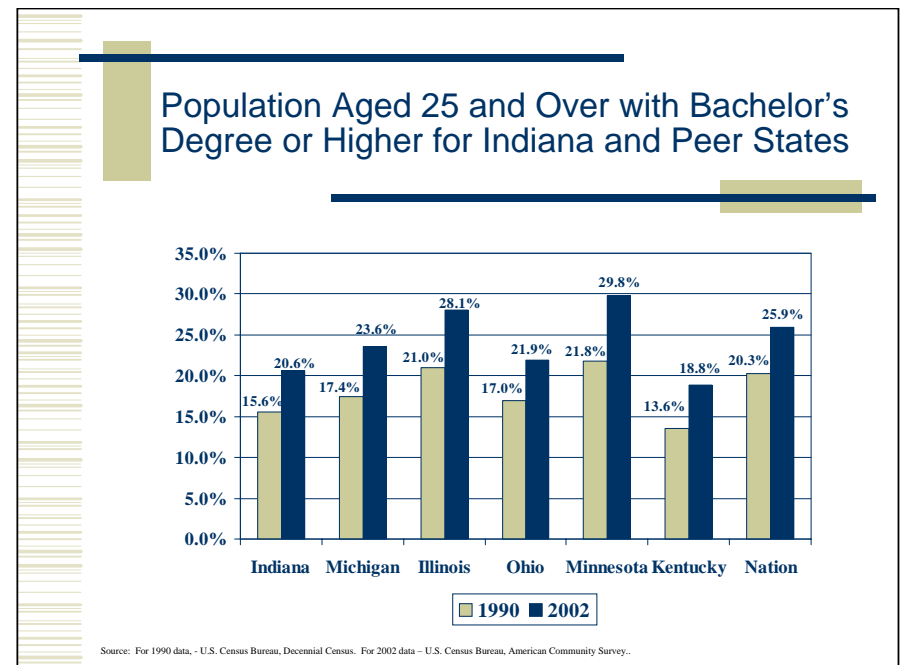
# Educated Workforce (cont'd)



Indiana is a net-importer of residents with associate degrees and a net-exporter of residents with associate degrees and a net-exporter of residents with a bachelor's degree or higher.

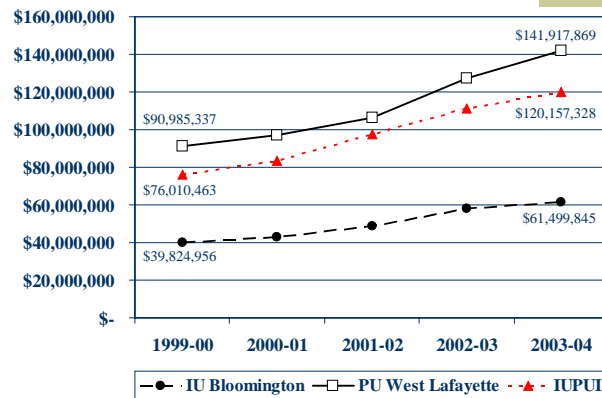
Indiana also experiences a large net in-migration of less-educated residents (those with a high school diploma or a high school diploma but no college).

Correspondingly, Indiana does not fare well when comparing the states in terms of the educational attainment of its populace. Indiana currently ranks 44<sup>th</sup> nationally in this regard. This low educational attainment has a direct impact on the economic vitality of the state.



# Research

## Total Federal Science and Engineering Research and Development Expenditures

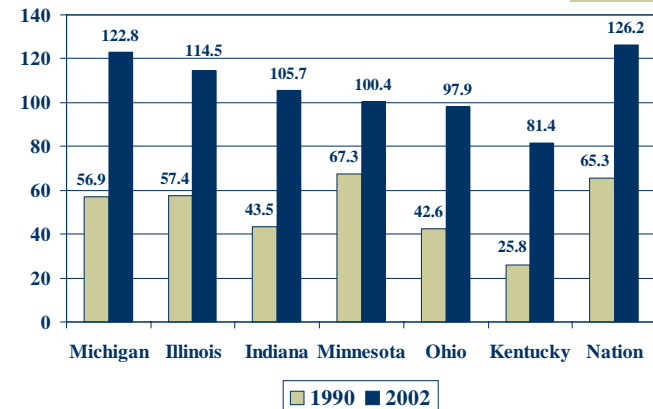


Source: Indiana's public postsecondary institutions.

Although Indiana's universities have grown their research base over the past five years, Indiana still ranks low (32<sup>nd</sup>) nationally in terms of the total research and development expenditures per capita. As a means to catch up with other competitive states and encourage continued growth in research, Indiana has supported a variety of initiatives and degree programs including the Indiana 21st Century Research & Technology fund and the Research Support Adjustment.

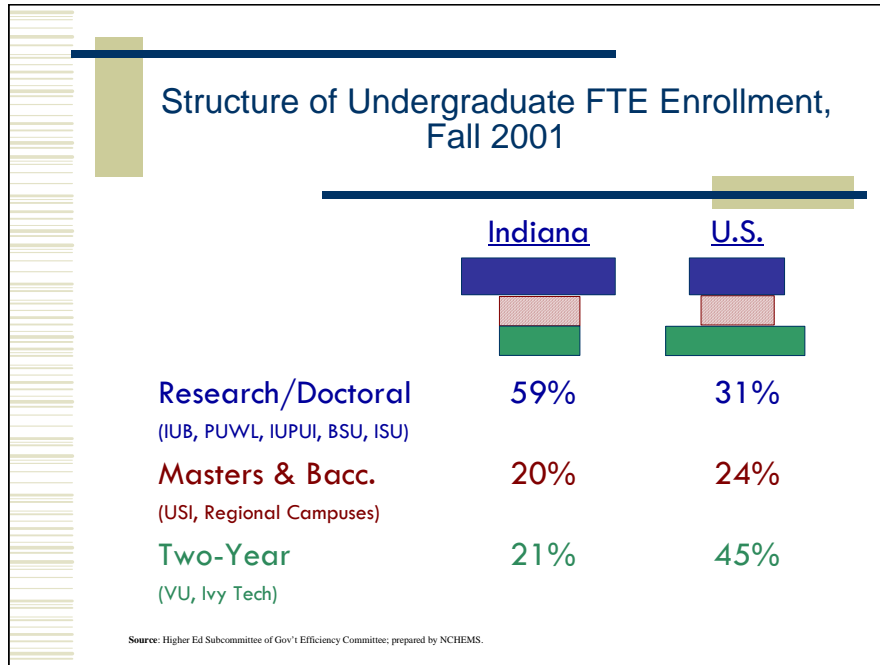
Indiana is fortunate to have two major public research universities on three campuses. These institutions play an important role in the State's economic development through their research programs. A commonly used statistic to compare major research universities is research and development expenditures funded from federal science and engineering grants. Increasing these expenditures will play an important role in the State's economic development, particularly in life sciences, engineering, and technology.

## Total Institutional Research & Development Expenditures Per Capita



Source: National Center for Higher Education Management Systems (using National Science Foundation; U.S. Census Bureau).

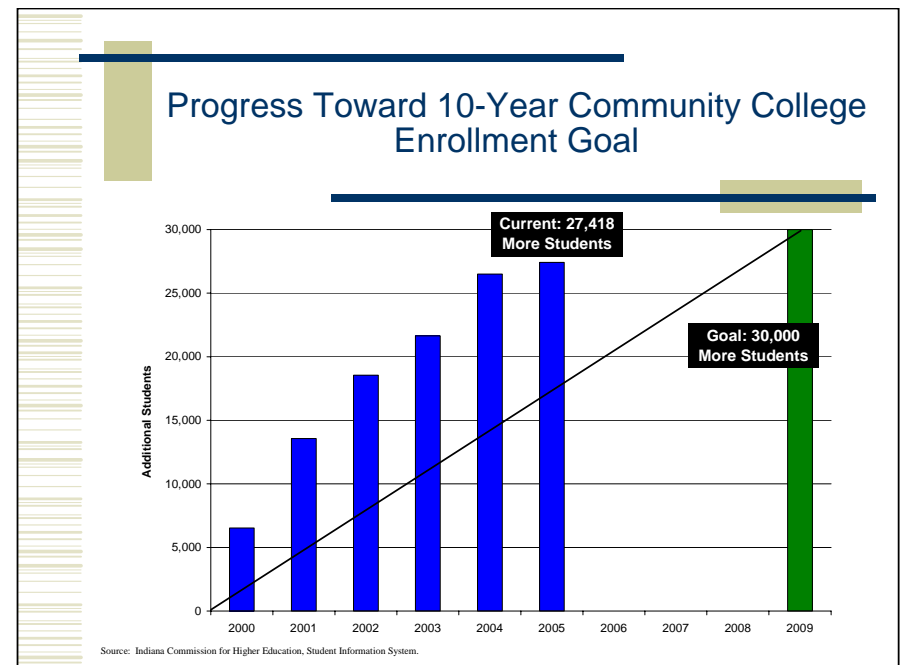
# Structural Efficiency



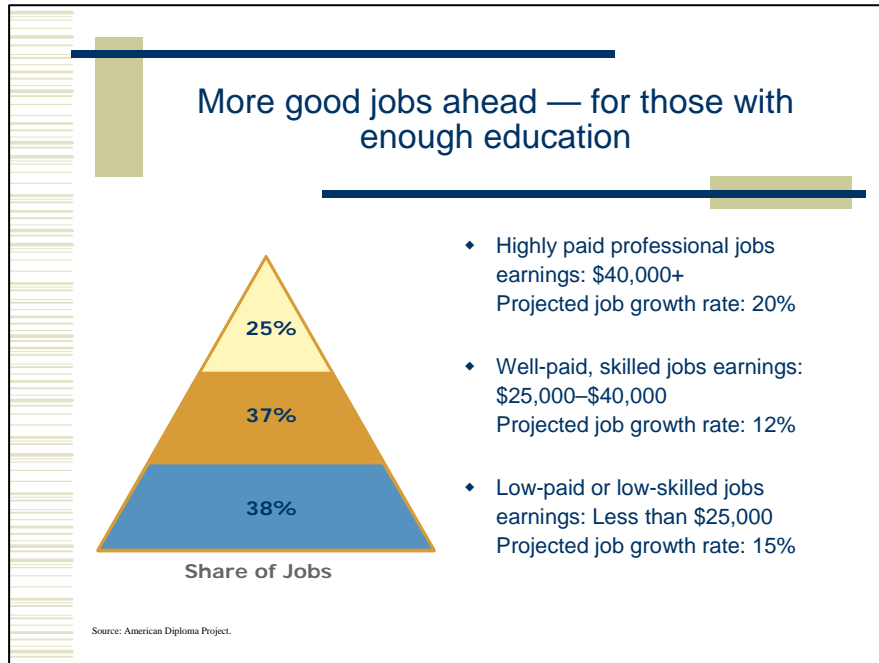
Indiana's public higher education system historically has resembled an "inverted pyramid," reflecting the proportionately smaller enrollment in two-year institutions. While it is not the intent to restructure Indiana's higher education system as a "pyramid," it is important for new enrollment growth to occur at Indiana's community college and regional campuses.

The majority of Indiana's public sector students are educated in doctorate-granting postsecondary institutions, which are the most expensive sector of any state system. Many of these students are educated in Indiana's two major research institutions. This is in sharp contrast to most other states whose systems reflect the dominant "pyramid" pattern that enrolls most students in community colleges.

States with pyramid structures benefit from significantly increased levels of participation at the least cost per student. A pyramid structure also allows states to widely educate broad numbers of students and at the same time have the best public research universities in the nation.



# Benefits of Investment



Research has demonstrated that more highly educated citizens tend to 1) pay more taxes, 2) vote at higher levels, 3) be more likely to donate to charity, and 4) be more involved in their communities.

**B**achelor's degree recipients earn an average of \$2.1 million in their lifetimes, compared to an average of \$1.2 million in lifetime earnings for individuals with only a high school diploma.

If 10,000 additional students were to earn an associate degree, it could add as much as \$78 million per year to Indiana's economy.

If 10,000 additional students earned a bachelor's degree, it could add as much as \$267 million per year to Indiana's economy.

