

The Brookings Institution

Metropolitan Policy Program

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Higher Education In Pennsylvania: A Competitive Asset For Communities

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Higher Education as a Competitive Asset

I

Pennsylvania must bolster its economic competitiveness by reinvesting in older places and in high-wage service industries

II

The state's many higher ed institutions are one of its best competitive assets

III

Higher ed institutions play an important role in helping to promote economic prosperity

IV

The state can take a few steps to help bolster the role of higher ed in community redevelopment



What is the general link between higher education and economic competitiveness?



The shift to a knowledge economy is placing greater reliance on highly-educated and highly-skilled workers

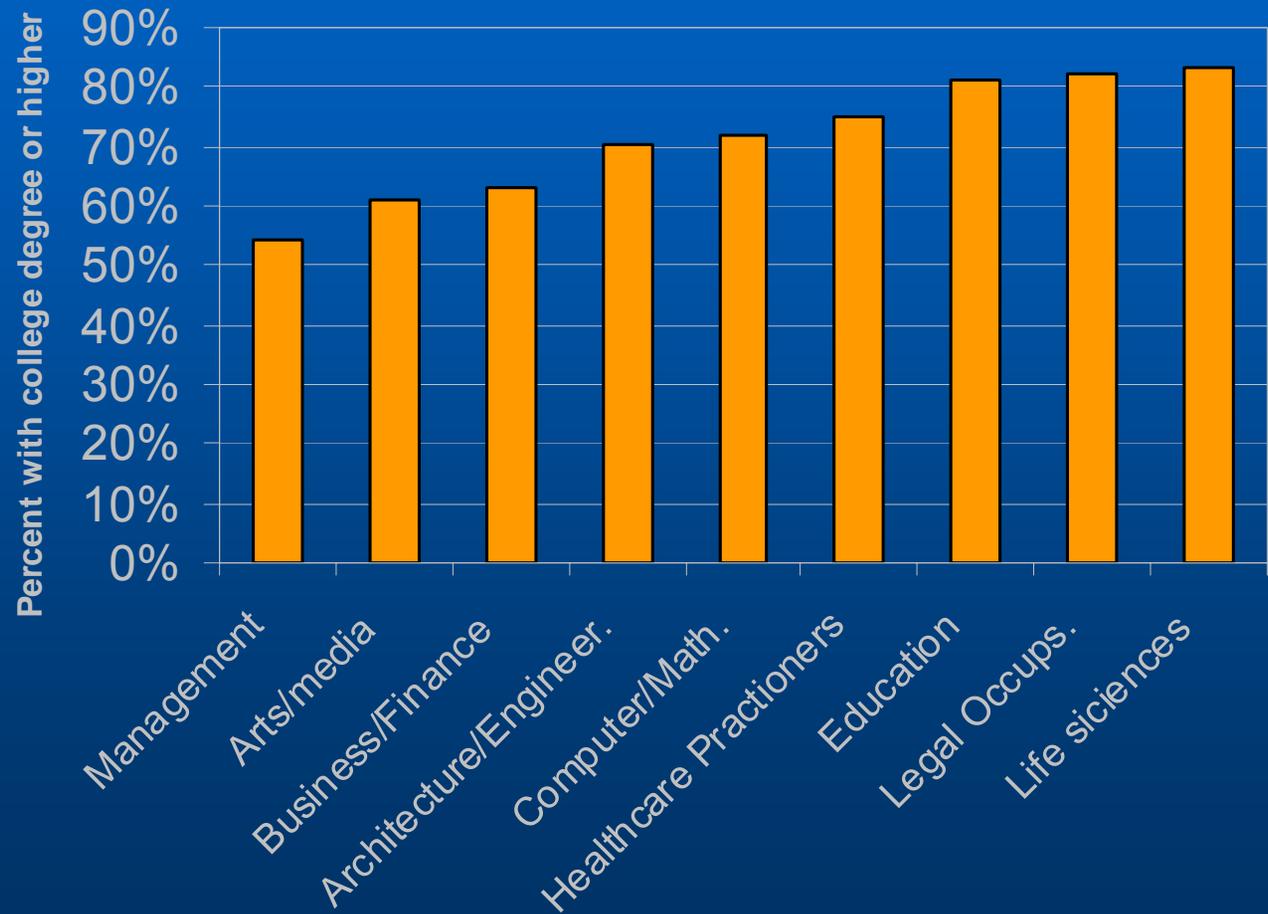
- Ideas, innovation, and creativity now drive the economy
- Economic success requires large numbers of people with a post-secondary education and high skills



Many service positions today are filled by college graduates

Percentage of workers with a college degree or higher, select occupations, 2002

Source: National Education and Attainment, National Bureau of Labor





And a degree impacts income. Nationally, the more you learn, the more you earn

Work-life earnings estimates (millions), 1979-1999

Source: "The Big Payoff: Educational Attainment and Estimates of Work-Life Earnings," U.S. Census Bureau





Educated workers are often drawn to places with:

- Vibrant and distinctive downtowns
- Plentiful amenities
- A “thick” job market
- A positive, tolerant culture



But Pennsylvania's transition from a manufacturing to a services economy is leaning towards low wage sectors

- In 2000, over 61 percent of Pennsylvania's workers were employed in low wage jobs (avg. less than \$27,000 per year) compared to 50 percent nationally
- Wal-Mart is the largest private employer in 25 states, including Pennsylvania
- Meanwhile, many older communities are struggling to hold on to jobs, people, and amenities



There has been some economic progress since 2000, but challenges remain



Pennsylvania is the 6th most populous state in the union

Population,
2004

Source:
U.S. Census Bureau,
Population Estimates

	Population	Rank
California	33,871,648	1
Texas	20,851,820	2
New York	18,976,457	3
Florida	15,982,378	4
Illinois	12,419,293	5
Pennsylvania	12,281,054	6
Ohio	11,353,140	7
Michigan	9,938,444	8
Georgia	8,186,453	9
New Jersey	8,414,350	10



...but ranks 46th among the 50 states for population growth between 2000 and 2004, a slight improvement in overall ranking (48th) between 1990 and 2000

Percent change in population, 2000 to 2004

Source: U.S. Census Bureau, Population Estimates

	Population Change	Rank
Michigan	1.8%	41
Kansas	1.7%	42
New York	1.3%	43
Massachusetts	1.1%	44
Louisiana	1.0%	45
Pennsylvania	1.0%	46
Iowa	1.0%	47
Ohio	0.9%	48
West Virginia	0.4%	49
North Dakota	-1.2%	50
United States	4.3%	



Between 2000 and 2004, net out-migration continued; the state lost another 12,000 residents to other parts of the U.S.

Domestic in-migration and out-migration, 2000 to 2004

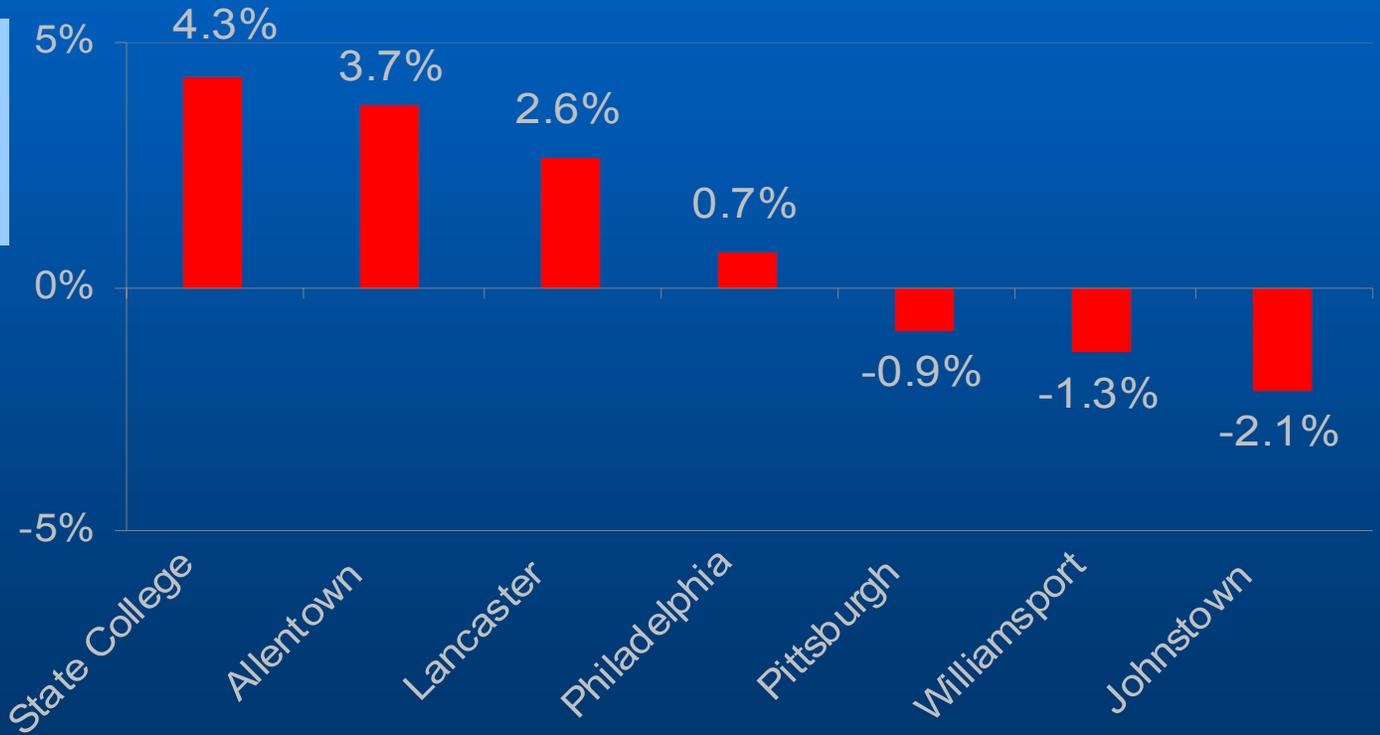
Source: IRS





Population growth within the state since 2000 is uneven; some metropolitan areas are growing while others are losing population

Population change for selected PA metros, 2000 to 2003



Source: Population Estimates



Median household income in the state has decreased in real dollars since 2000, as has the nation's

Median household income, 2000 and 2004 (in 2004 dollars)



Source: U.S. Census Bureau (ACS and SF3)



Pennsylvania added nearly 60,000 non-farm jobs between 2000 and 2004, ranking 40th among 50 states in employment growth between (up from 45th in 2000)

Percent change in nonfarm employment growth, 2000 to 2004

	Percent change in employment growth	Rank
Pennsylvania	0.9%	40
Oklahoma	0.8%	41
Missouri	0.7%	42
Iowa	0.4%	43
Kentucky	0.1%	44
Mississippi	0.1%	45
Indiana	-0.6%	46
Massachusetts	-1.3%	47
Ohio	-1.4%	48
Illinois	-1.4%	49
Michigan	-2.9%	50
U.S.	2.1%	

Source: Bureau of Economic Analysis



In short, since the economy's downturn in 2000, the state is:

- still experiencing sluggish population growth
- facing continued net out-migration of residents
- coping with stagnant incomes, similar to that of the nation as a whole
- generating new jobs, at a relatively better pace than previous decade



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We looked at higher education institutions as defined by the Pennsylvania Department of Education

4-year institutions

Private Colleges & Universities, State Universities, State-Related Commonwealth Universities (including Branch Campuses), Private State-Aided Institutions, Other College or University

2-year institutions

Community Colleges, Private 2-year colleges, Specialized Associate Degree Granting, Colleges of Technology

Other institutions

Business Program, Trade Program, Private Licensed School, Other Approved School

Categories not included in this study: correspondence schools, theological seminaries, administrative offices



Pennsylvania has the highest number of public four-year institutions in the country (45) and the third highest total number of institutions of higher learning (260)

Post-secondary institutions, by state: 2001-2002

State	Public 4-year Postsecondary Institutions	Public 2-year Postsecondary Institutions	Private 4-year Postsecondary Institutions	Private 2-year Postsecondary Institutions	Total Number of Institutions	Institutions Per 1,000,000 Capita
California	32	111	186	84	413	12.19
New York	41	39	167	62	309	16.28
Pennsylvania	45	23	98	94	260	21.17
Texas	42	67	56	33	198	9.50
Ohio	19	42	70	47	178	15.68
Florida	12	28	83	43	166	10.39
Minnesota	11	41	40	22	114	23.17
Tennessee	10	13	45	19	87	15.29
New Jersey	14	19	20	4	57	6.77
Vermont	5	1	17	4	27	44.35
Wyoming	1	7	0	1	9	18.23

SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), "Institutional Characteristics, 2001-02" survey.



Including vocational schools, there are more than 500 higher educational institutions in the state

Category	Number of Institutions	Share of Total Institutions
4 Year Colleges & Universities	148	29.4%
2 Year Colleges	102	20.2%
Other Higher Education	254	50.4%
Total	504	100.0%

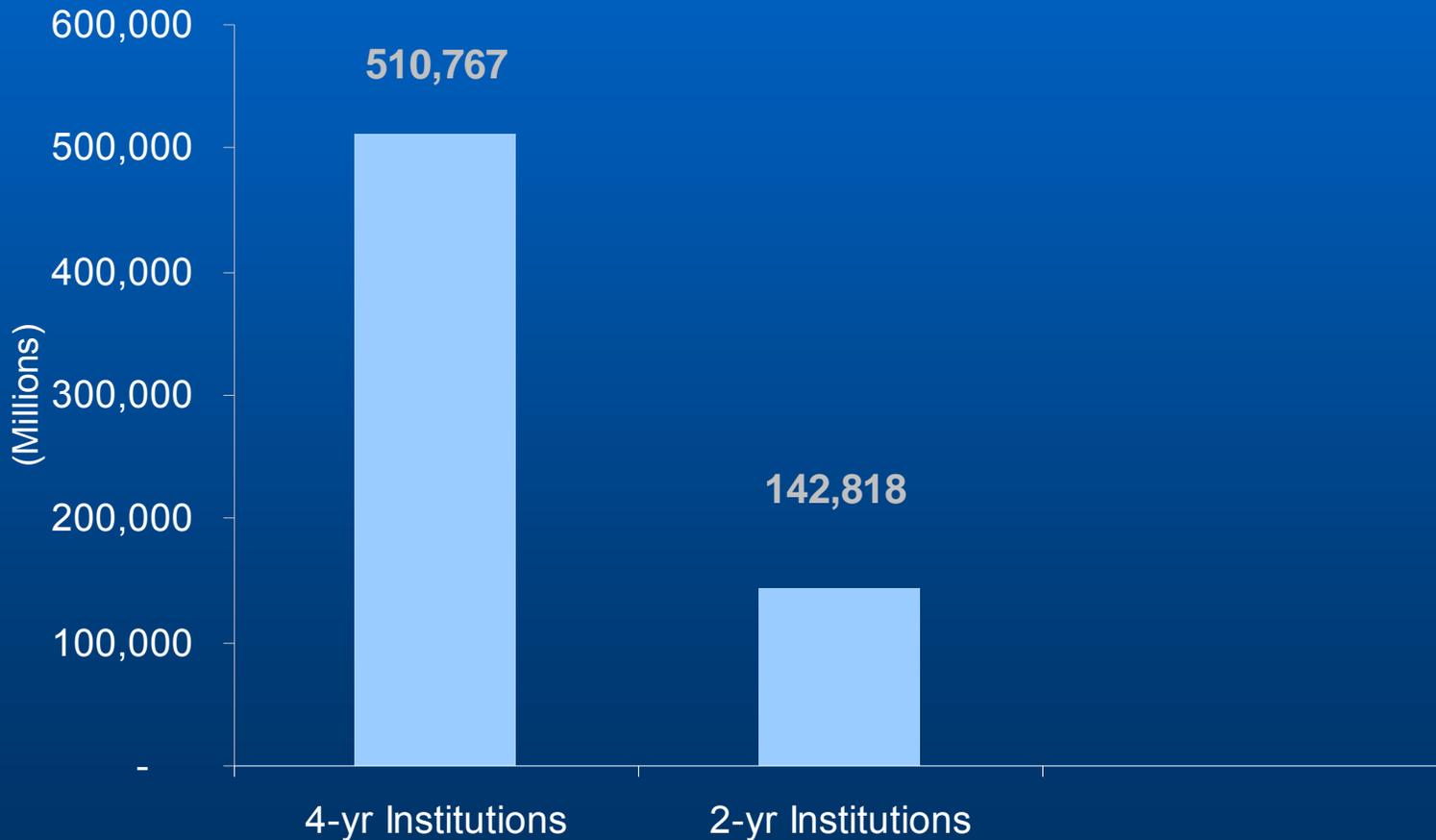
Chart source: Institution Count: Pennsylvania Department of Higher Education, author's calculations; Enrollment: U.S Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS) College Opportunities On-line (COOL) database



In 2002, over 650,000 students were enrolled in the state's four- and two-year institutions

Number of students enrolled, 2001-2002

Source: PDOE





But most colleges and universities in Pennsylvania are quite small

- Only four institutions have enrollments over 20,000:

University of Pennsylvania

Penn State (State College)

Temple University

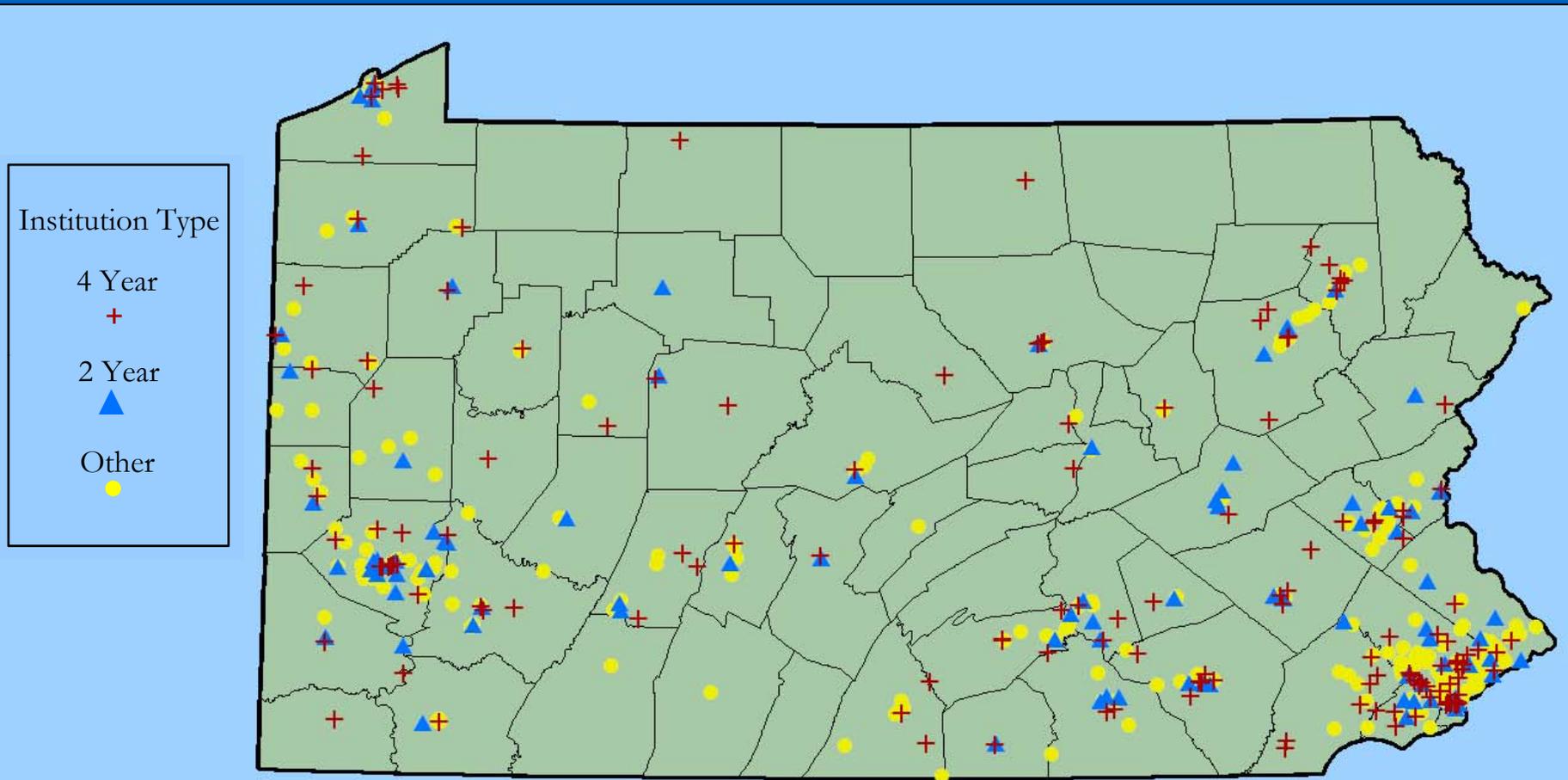
University of Pittsburgh

- Average enrollment at four-year schools: 3,450
- Average enrollment at two-year schools: 1,400

Chart source: Institution Count: Pennsylvania Department of Higher Education, author's calculations; Enrollment: U.S Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS) College Opportunities On-line (COOL) database



Pennsylvania's 504 institutions of higher education are distributed across the state



Source: U.S. Census Bureau and the Pennsylvania Department of Education



Seventy-nine percent of Pennsylvania's counties have at least one college, university, or vocational school; 70 percent have at least one four-year school

Number of institutions
by type (select counties)

Counties in PA	4 Year Colleges & Universities	2 Year Colleges	Other Education Institutions	Total
Philadelphia	19	9	47	75
Allegheny	10	18	27	55
Montgomery	11	6	20	37
Delaware	10	5	10	25
Lancaster	6	4	10	20
Lehigh	4	4	12	20
Erie	6	4	8	18
Westmoreland	5	6	6	17
Lackawanna	6	1	7	14
Dauphin	3	4	4	11
Cambria	3	2	4	9
Beaver	2	1	4	7
Centre	1	1	3	5
All counties	148	102	254	504

Source: Pennsylvania Department of
Education



Almost 90 percent of all post-secondary institutions are located in Pennsylvania's 14 metropolitan areas

Metro Area	Number of Institutions	Share of Total Institutions	Share of 4 Year Colleges & Universities	Share of State Population
In Metro Areas	447	88.7%	85.8%	84.6%
Allentown	29	5.8%	4.7%	5.2%
Altoona	5	1.0%	0.7%	1.1%
Erie	18	3.6%	4.0%	2.3%
Harrisburg	27	5.4%	6.0%	5.1%
Johnston	10	2.0%	2.0%	1.9%
Lancaster	20	4.0%	4.1%	3.8%
Newburg	1	0.2%	0.0%	0.4%
Philadelphia (PA only)	171	33.9%	32.2%	31.3%
Pittsburgh	96	19.1%	14.8%	19.2%
Reading	11	2.2%	2.7%	3.0%
Scranton	30	5.9%	8.1%	5.1%
Sharon	8	1.6%	2.0%	1.0%
State College	5	1.0%	0.7%	1.1%
Williamsport	5	1.0%	2.0%	1.0%
York	11	2.2%	1.3%	3.1%
In Non-Metro Areas	57	11.3%	14.2%	15.4%

Source: Pennsylvania Department of Education



And nearly 74 percent of higher ed institutions are found in the state's many older communities

Share of Total Higher Ed Institutions

OLDER	73.6%
Cities	38.5%
Boroughs	21.8%
1st Class Townships	13.3%
2nd Class Townships	26.4%
<hr/>	
	100%



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Higher education institutions play an important role in promoting economic prosperity

Inherent economic roles:

- ✓ As educators
- ✓ As major employers
- ✓ As spenders/procurers



Higher education institutions are **educators** of the state's future workforce

- In 2001, nearly 79 percent of Pennsylvania residents who received a baccalaureate degree the year before attended a school in the state
- 22.4 percent of 25+ year olds have a college degree or higher, ranking the state 30th
- 29.1 percent of 25-34 year olds have a B.A. or higher, ranking the state 16th

Source: The Federal Reserve Bank of Cleveland, *Economic Trends*, 2004. Analysis based on data collected from the National Center for Education Statistics Baccalaureate and Beyond Survey



And higher education has economic payoffs for workers

- Reduces unemployment rates
 - In 2004, a Pennsylvania resident with a BA was twice as likely to be employed than a PA resident with a high school diploma
- Increases incomes
 - In 2004, a PA college graduate earned \$51,162 compared to \$24,422 for a high school graduate
- Increases consumer spending; boosts state and local revenues

Source: Institute for Higher Education Policy, 2005

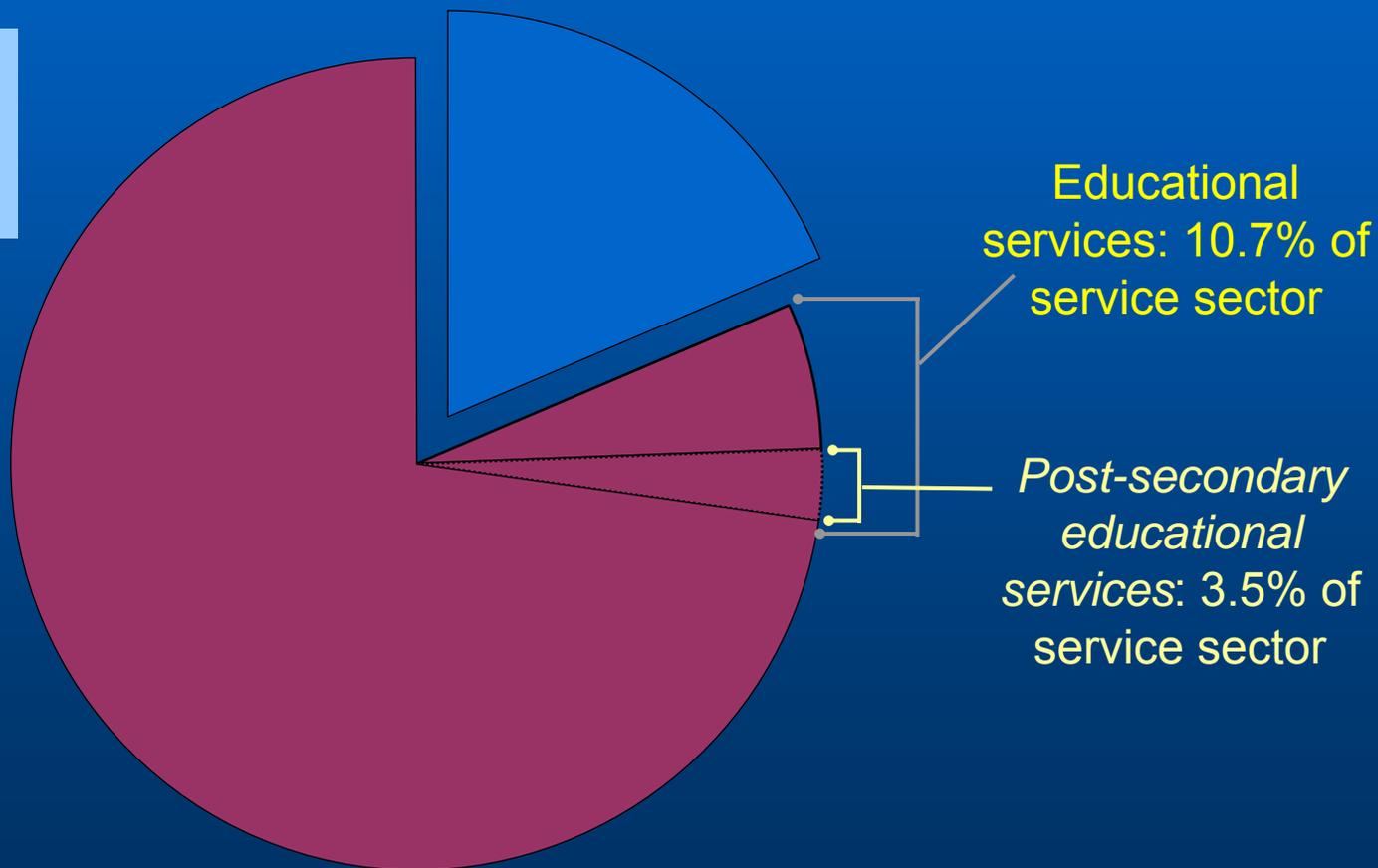


Higher education institutions are important **employers**: Over 158,000 people worked for post-secondary institutions in Pennsylvania in 2003...

Shares of total employment, by select sector, 2003

Source: BLS Quarterly Census of Employment and Wages

- Service sector
- Goods producing sector





...and they were the largest employers in several counties.

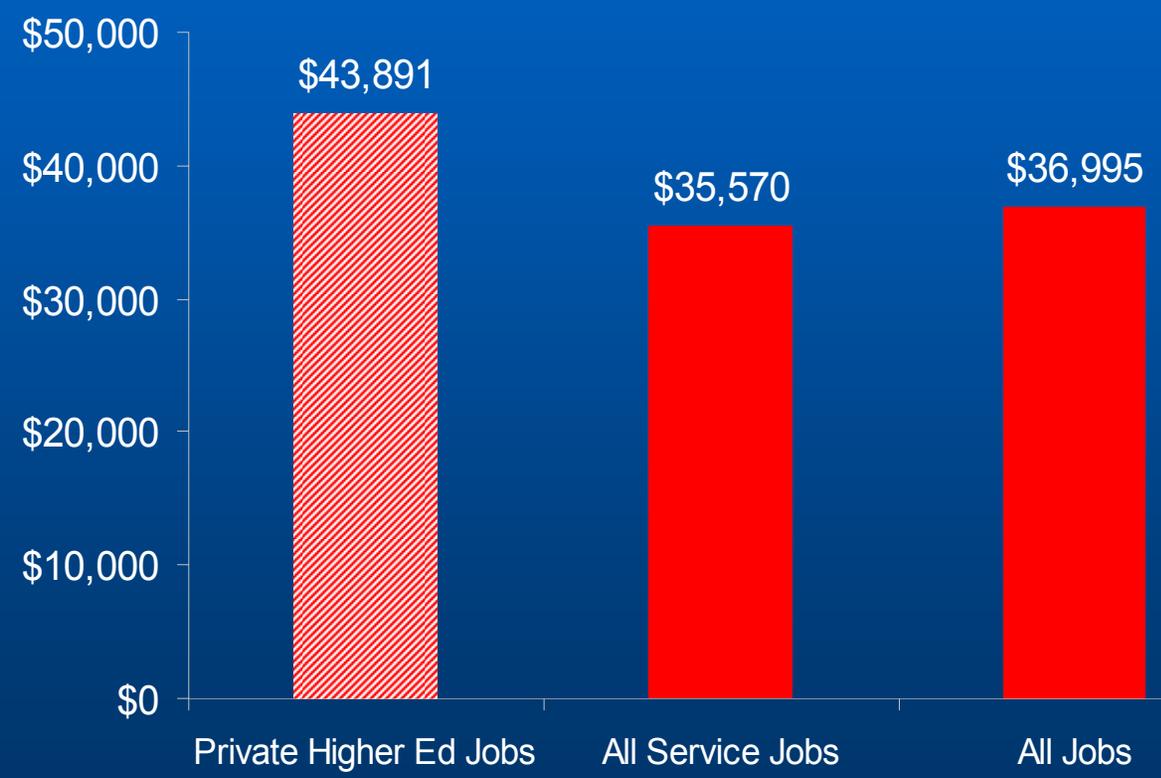
- 36 percent of state's 4- and 2-year institutions are among the top 50 employers in counties; 10 percent are in the top 10
- Six of Pennsylvania's state universities are among the largest 5 employers in their county (e.g., Clarion, Bloomsburg, Mansfield)
- University of Pittsburgh, Gettysburg College, and Bucknell University are the second largest employers in their counties
- Temple and U-Penn are among the top five employers in the city of Philadelphia



Jobs in higher ed are generally high-paying

Average annual wages in PA by sector, 2003

Source: Bureau of Labor Statistics





Higher ed institutions are **economic engines**, serving as purchasers of goods and services and investors/owners in real estate

PA's **independent institutions of higher learning** directly employ 71,000 people statewide, spend \$3.1 billion per year in direct purchases; and students, staff, visitors add nearly \$4 billion; these schools planned on spending \$486 million on construction and renovation in 2004-2005

A 2004 **Penn State** study found that the total economic impact of the university's 24 campuses was \$6.1 billion annually; locally, faculty and staff at Erie campus spent \$12.3 million in the county

An October 2005 study by **Widener University** found the economic impact of its expenditures to be worth nearly \$407 million for the Philadelphia area and over \$27 million for the Harrisburg area



Higher education institutions play an important role in promoting economic prosperity

Emerging, pro-active economic roles:

- ✓ Tech transfer and commercialization
- ✓ Small business development
- ✓ Community revitalization



Research institutions are increasingly focused on commercialization and business creation

Penn State has offices/programs focused on business assistance and technology transfer, including:

- a technical assistance office for helping small businesses
- a 118-acre innovation park
- a commercialization office that spins-off firms from university-based research

Carnegie Mellon's Center for Technology Transfer has helped spawn 50 firms since 1993, 70 percent of which have remained in the Pittsburgh area

In the 2003 fiscal year, the **University of Pennsylvania** tied for fourth among universities nationwide in business start-ups created



A number of smaller institutions, including community colleges, have formed partnerships with industry to promote **entrepreneurship and innovation**

Franklin and Marshall College

→ F&M is the first university in the state to receive Keystone Innovation Zone (KIZ) status

→ The KIZ includes a partnership with Lancaster General Hospital, James Street Improvement District, the county's workforce and economic development agencies

→ KIZ will focus on healthcare, biotechnology, communication/information technology, and agriculture/food processing

→ The designation is intended to spur business development and investment, as well as create 50,000 new square feet of real estate in northwest Lancaster City



Finally, higher ed institutions are increasingly engaging in **community revitalization**

University of Pennsylvania

By 1990s, UPenn was situated in a distressed neighborhood; crime rates were high, buildings were vacant, shops were closing

In the mid-1990s, UPenn launched a partnership with West Philadelphia to comprehensively turn around the neighborhood: safer streets, new retail, better housing, better public schools

The results are wide, deep, and visible: Penn is the major commercial developer on 40th and Walnut, with a large grocery store, small merchants, and an art cinema

Penn has facilitated faculty and staff to purchase homes in University City; Penn has also rehabbed 20 vacant properties and returned them to the private marketplace



Small schools can be important generators of community renewal

Seton Hill University

→ The university has partnered with the City of Greensburg, the Westmoreland Trust, and the Greensburg Salem School District to create a vibrant arts and cultural district downtown

→ With a \$5 million grant from the state's Redevelopment Assistance Capital Program (RACP) and other funds, the university is set to begin construction of a 73,000 square foot Center for the Arts this fall

→ The arts theatre and music hall will be used by the university and the larger local community



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Establish a Higher Education Advisory Board

GOAL: Create a unified vision for how the overall impact of higher education can and should be leveraged

ACTION STEPS:

- Establish a Higher Education Advisory Board, composed of state agencies, higher education (including community colleges) and local leaders
- Like the state planning board, issue recommendations to the governor on how to better partner with higher ed to meet the state's economic goals, esp. in community redevelopment



Target state investments near colleges and universities

GOAL: Promote redevelopment around fixed community assets, like eds and meds

ACTION STEPS:

- Build upon new Keystone Principles and Criteria for Growth, Investment, and Resource Conservation
- Expand “preferential criteria” to include a preference for projects in proximity to and/or in partnership with anchor institutions



Create a new grant program to facilitate university partnerships in community development

GOAL: Provide resources to universities to partner in community redevelopment efforts

ACTION STEPS:

- Establish a new grant program modeled after the federal community outreach partnership grants or the grants to HBCUs
- Ensure eligible activities such as: land acquisition, housing renovations, entrepreneurship, and community planning



Consider establishing a state “payment-of-lieu-of-taxes” (PILOT) program

GOAL: Provide some fiscal relief to municipalities to enhance their capacity in university partnerships

ACTION STEPS:

- Establish a PILOT program modeled after the one in Connecticut—there, the state pays municipalities approximately 77 percent of projected lost property tax revenues

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