ECONOMIC REVIEW OF PENNSYLVANIA

2012

CENTER FOR WORKFORCE INFORMATION & ANALYSIS

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PREFACE

Pennsylvania's future depends upon the development of a workforce able to compete in today's global economy. Understanding potential obstacles the future workforce will have to overcome is necessary when developing policies and strategies for Pennsylvania to remain economically competitive.

The National Bureau of Economic Research (NBER) declared that a national economic recession began in December 2007 and ended in June of 2009. Labor markets tend to lag behind output markets, so that the peak monthly unemployment rate in Pennsylvania (8.7 percent) occurred in February and March of 2010. On an annual basis, the unemployment rate in Pennsylvania also peaked at 8.4 percent in 2010, its highest level since 1984. The annualized number of unemployed Pennsylvanians also peaked in 2010, at 538,000. The recession left nearly all industries in Pennsylvania with job losses in 2009 and 2010. Pennsylvania's average employment in 2010 was 5,855,000, its lowest level since 2003. Since then, Pennsylvania's labor market has shown signs of the subsequent recovery. In 2012 Pennsylvania's average employment rose to 5,973,000, an increase of 80,000 from 2011, and an increase of 118,000 from 2010. The average unemployment rate in 2012 was 7.9 percent which was unchanged from 2011, but 0.5 percent lower than in 2010. Hopefully, the economic recovery continues and accelerates and the task turns to effective workforce and economic development to ensure that the economic turnaround takes hold and Pennsylvania's 519,000 unemployed (as of December 2012) find sustainable employment.

Workers from the front-end of the baby-boom generation are moving into their 60s and, beginning in 2011, were expected to start the wave of retirement from the workforce in large numbers. However, due to the weak economy, many have chosen to remain in the workforce, thus complicating the jobs outlook horizon for younger workers. Inevitably, as another economic expansion develops, baby-boomers will leave the workforce in large numbers taking with them key skills that kept industry growing and prosperous. Unfortunately, based on Pennsylvania's demographics, far fewer youth are available to enter the labor market to replace those who will be leaving. While technology and global competition will help alleviate the need for workers, there will still be a shortage of workers, which will force greater efficiencies and competition for key skills.

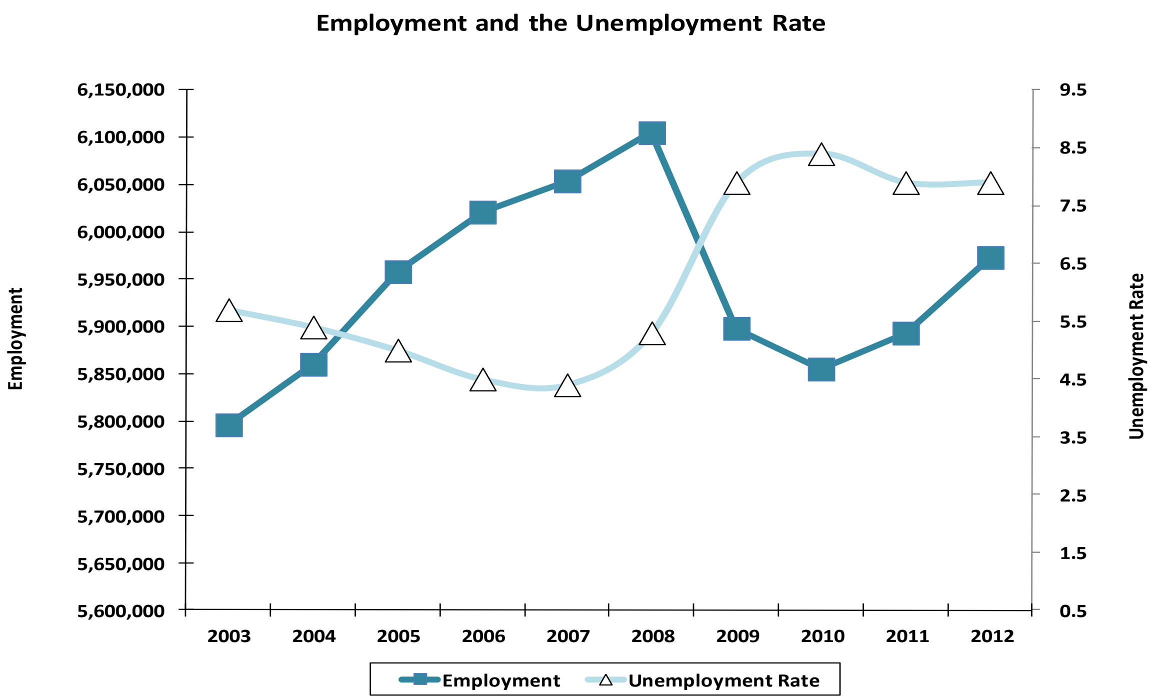
LABOR FORCE STATISTICS

Employment

Pennsylvania's average employment was 5,973,000 in 2012. Over-the-year, employment was up by 80,000, or 1.4 percent, more than double the over-the-year increase of 2011. In comparison, the United States average employment in 2012 was 142,469,000, up 2,600,000 from 2011, or almost 1.9 percent. In 2012, Pennsylvania's employment was 97.8 percent of its previous annual high, while the country was at 97.6 percent, of its previous annual high.

Unemployment Rate

Pennsylvania's average annual unemployment rate remained at 7.9 percent in 2012, after falling by 0.5 percent in the previous year. The United States unemployment rate in 2012 was 8.1 percent, eight-tenths of a percentage point lower than in 2011.



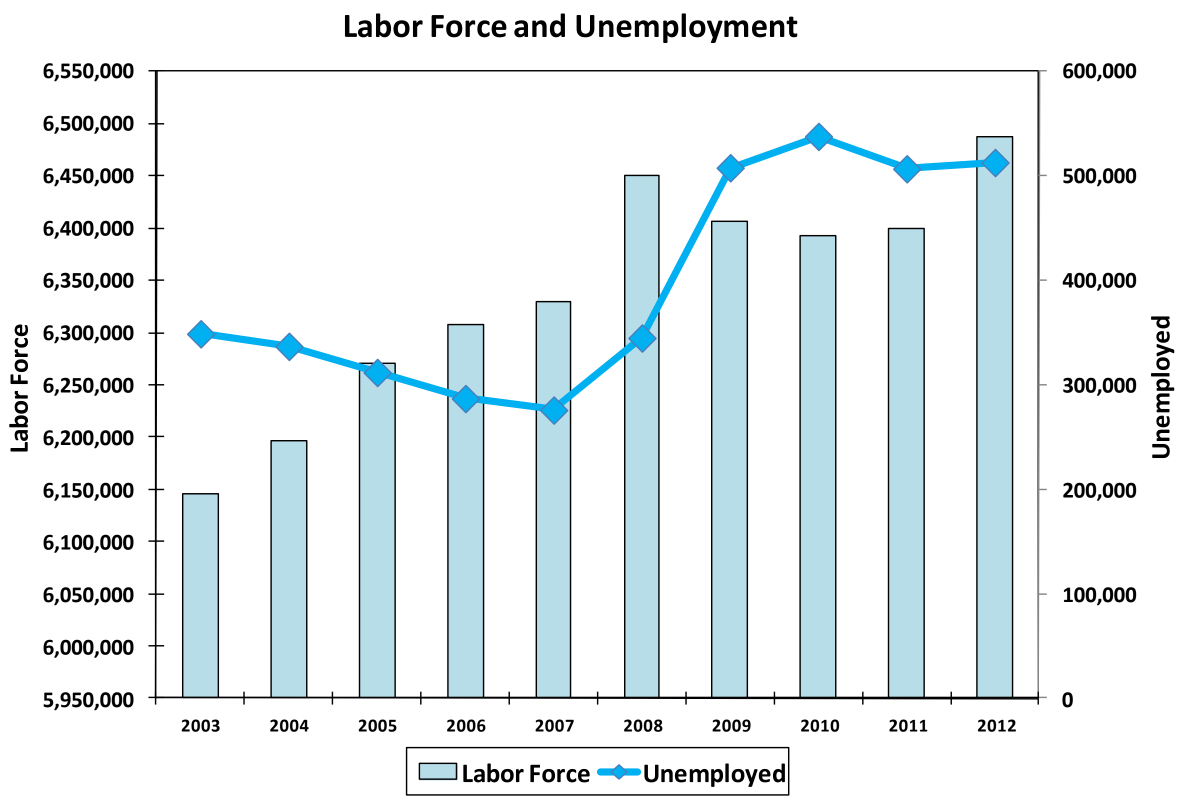
Source: Pennsylvania Local Area Unemployment Statistics

Labor Force

Pennsylvania's average labor force was 6,487,000 in 2012, up 87,000 from 2011, or 1.4 percent. This was the second year in a row the labor force has increased. The U.S. labor force was 154,975,000 in 2012, up 1,358,000 from 2011, or 0.9 percent.

Unemployed

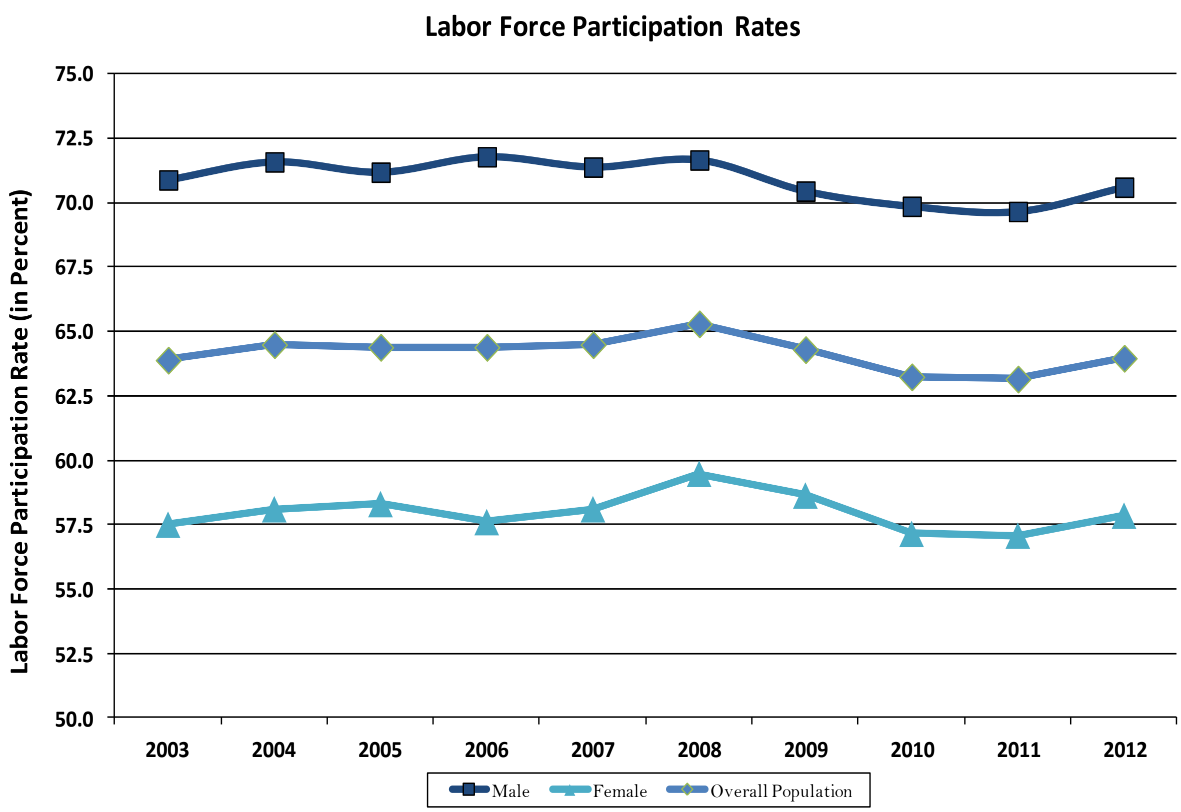
The average number of unemployed Pennsylvanians in 2012 increased by 6,000, or 1.2 percent, to 513,000. The United States unemployment level in 2012 was 12,506,000, down 1,241,000 or 9.0 percent from 2011.



Source: Pennsylvania Local Area Unemployment Statistics

Labor Force Participation

Pennsylvania's labor force participation rate was 64.0 percent in 2012, up 0.2 of a percentage point from 2011. Over the last 10 years, the peak rate was 65.3 percent, in 2008. The rate is a measure of people who are working or who want to work, as a percentage of the relevant population. In addition to being affected by demographic changes, it tends to go up when employment or the prospect of employment increases. In 2012, the male labor force participation rate was 70.6 percent, up 0.9 of a percentage point from the previous year, and the female rate was 57.9 percent, up 0.8 percent from 2011. During the same period, the nation's average labor force participation rate was 63.7 percent, down 0.4 of a percentage point from 2011.



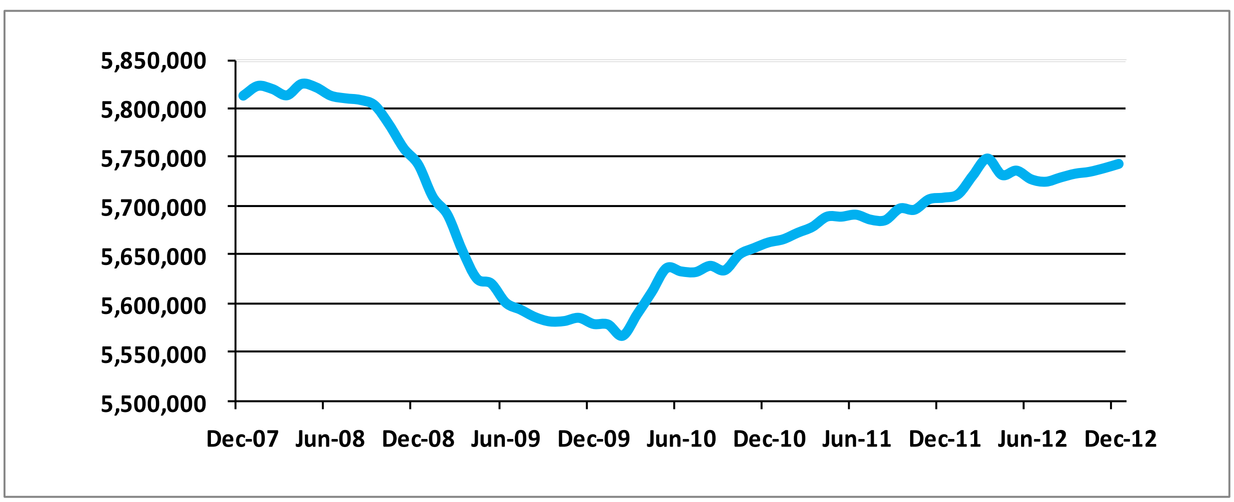
Source: Census' Current Population Survey

INDUSTRY EMPLOYMENT

Jobs

Pennsylvania's total nonfarm jobs were at 5,742,600 in December 2012, up 34,600 (<1%) from one year before and up 176,200 since the most recent jobs low in February 2010. However, the December 2012 jobs count was still down 82,000 from the most recent jobs high in April 2008 of 5,824,600. Pennsylvania was still down 69,900 (-1.2%) from the official start of the recession in December of 2007. U.S. nonfarm jobs were at 134.7 million in December 2012, up 2.2 million jobs from one year prior or 1.7 percent. The U.S. was down 3.4 million jobs since the start of the recession, or -2.4 percent. A glance at the chart below shows that Pennsylvania is currently in a jobs recovery period, which began in early 2010. Measured by its percentage of pre-recession jobs, Pennsylvania has fared better than the nation in its jobs recovery since the start of the recession. The state jobs count is down 1.2 percent versus the nation's 2.4 percent decrease since December 2007. The state's total private jobs are up 42,900, or less than one percent, since one year prior, while government jobs have decreased by 8,300, or 1.1 percent. Since December 2007, Pennsylvania's private jobs decreased by only 0.9 percent, while government jobs were down 3.5 percent. United States private jobs were down 2.5 percent during the same time frame, with government jobs down 2.2 percent.

PA Total Nonfarm Jobs December 2007 to December 2012 (Seasonally Adjusted)



	December 2012	OTY Change	PA Change from December 2007		US Change from December 2007
			Volume	Percent	Percent
Total Non-farm Jobs	5,742,600	34,600	-69,900	-1.2%	-2.4%
Total Private Jobs	5,021,800	42,900	-44,000	-0.9%	-2.5%
Government	720,800	-8,300	-25,900	-3.5%	-2.2%

Source: Pennsylvania and U.S. Current Employment Statistics

Goods Producing Jobs

Goods Producing jobs in Pennsylvania in December 2012, were unchanged from one year prior, but were still down 105,800 or 11.3 percent since the start of the recession. Once again, the state fared better than the nation, which was down 15.7 percent in good producing jobs since December 2007. Mining & Logging in Pennsylvania was down 2.1 percent over the year, but up nearly 72 percent since December 2007, far outpacing the nation. Construction was up less than 1 percent over the year, but down 12.2 percent since 2007; roughly half of the percentage decline in the nation. Jobs in the state's manufacturing industry fell slightly over the year as durable goods rose by 1.0 percent while nondurable goods fell by 1.9% percent. While Pennsylvania's construction industry at the close of 2012 was closer to its pre-recession jobs level than was the nation, the state's manufacturing industry was faring slightly worse than the nation's due to a larger percentage decline in nondurable jobs (13.2 percent vs. 11.5 percent).

Pennsylvania Goods Producing Industries Nonagricultural Wage & Salary Employment (Seasonally Adjusted)

Industry	December 2012	OTY Change	PA Change from Dec '07		US Change from Dec '07
			Volume	Percent	Percent
Goods Producing Industries	**830,500**	**0**	**-105,800**	**-11.3%**	**-15.7%**
Mining & Logging	36,600	-800	15,300	71.8%	16.2%
Construction	228,100	1,300	-31,700	-12.2%	-23.8%
Manufacturing	565,800	-500	-89,400	-13.6%	-13.1%
Durable Goods	348,600	3,600	-56,400	-13.9%	-13.9%
Nondurable Goods	217,200	-4,100	-33,000	-13.2%	-11.5%

Source: Pennsylvania and U.S. Current Employment Statistics

Service Providing Jobs

In December 2012, Pennsylvania's Service Providing jobs were up 34,600 from one year prior, and up 35,900 jobs or 0.7 percent since December 2007. In addition, the state is performing better than the nation, which was up only 0.1 percent since the start of the recession. Pennsylvania's best performing service providing industries since the start of the recession were Management of Companies; Health Care & Social Assistance; Educational Services; and Arts, Entertainment, and Recreation. Compared to the U.S., Pennsylvania was performing better in about half of all service providing industries. Industries with the greatest underperformance included: Educational Services; Federal Government; Information; and Real Estate & Rental &Leasing. Finally, as of December 2012, the Service Providing industries in both Pennsylvania and the nation had more jobs than at the recession's start, while jobs in the Goods Producing industries were still substantially below their pre-recession levels.

Pennsylvania Service Providing Industries Nonagricultural Wage & Salary Employment
(Seasonally Adjusted)

Industry	December 2012	OTY Change	PA Change from Dec '07		US Change from Dec '07
			Volume	Percent	Percent
Service Providing Industries	**4,912,100**	**34,600**	**35,900**	**0.7%**	**0.1%**
Trade, Transp. & Utilities	1,105,500	9,000	-29,000	-2.6%	-3.5%
Wholesale Trade	224,600	-2,800	-15,600	-6.5%	-5.3%
Retail Trade	634,900	5900	-20,900	-3.2%	-3.6%
Transp., Warehouse & Utilities	246,000	5,900	7,500	3.1%	-1.1%
Information	90,200	200	-18,100	-16.7%	-11.5%
Financial Activities	309,700	1,300	-22,200	-6.7%	-5.4%
Finance & Insurance	251,400	1400	-13,800	-5.2%	-4.2%
Real Estate & Rental & Leasing	58,300	-100	-8,400	-12.6%	-9.0%
Professional & Business Services.	733,700	8,100	21,800	3.1%	0.6%
Professional & Technical Services	317,100	5,200	3,000	1.0%	2.5%
Management of Companies	131,800	3,900	20,900	18.8%	6.1%
Admin & Waste Services	284,800	-1,000	-2,100	-0.7%	-2.5%
Education & Health Services	1,174,500	15,000	89,800	8.3%	10.5%
Educational Services	236,300	-1,300	14,500	6.5%	12.4%
Health Care & Social Assistance	938,200	16,300	75,300	8.7%	10.1%
Leisure & Hospitality	520,700	6,400	17,400	3.5%	2.6%
Arts, Entertainment & Recreation	90,100	-2,700	4,400	5.1%	-0.5%
Accommodations & Food Services	430,600	9,100	13,000	3.1%	3.1%
Other Services	257,000	2900	2100	0.8%	-0.8%
Government	720,800	-8,300	-25,900	-3.5%	-2.2%
Federal Government	99,500	-2,400	-4,200	-4.1%	1.6%
State Government	161,200	1,900	400	0.2%	-1.9%
Local Government	460,100	-7,800	-22,100	-4.6%	-3.1%

Source: Pennsylvania and U.S. Current Employment Statistics

Industry Highlights

The number of Pennsylvania companies that have increased their employment by at least 10 percent for four consecutive quarters totaled 1,910 in the fourth quarter of 2012. This compares favorably to the 545 companies that have decreased their employment by at least 10 percent for four consecutive quarters during the same time frame. In comparison, in the fourth quarter of 2011, the number of such growing companies tallied 2073, and the number of declining companies totaled 1,109. The ratio of the number of companies with increases in employment to those with decreases almost doubled from 2011 to 2012 as declining companies decreased dramatically; one indication that the employment situation had improved over that interval.

Other Economic Indicators

New Hires

The number of new workers hired at companies increased by 30,300 in the fourth quarter of 2012, which represented a 7 percent increase from the same quarter in 2011. The Transportation, Warehouse & Utilities sector increased by 181 percent over this period and accounted for more than two thirds of the total increase in volume. Other notable sectors showing an increase in new hires from the prior year were in Education & Health Services and Leisure and Hospitality.

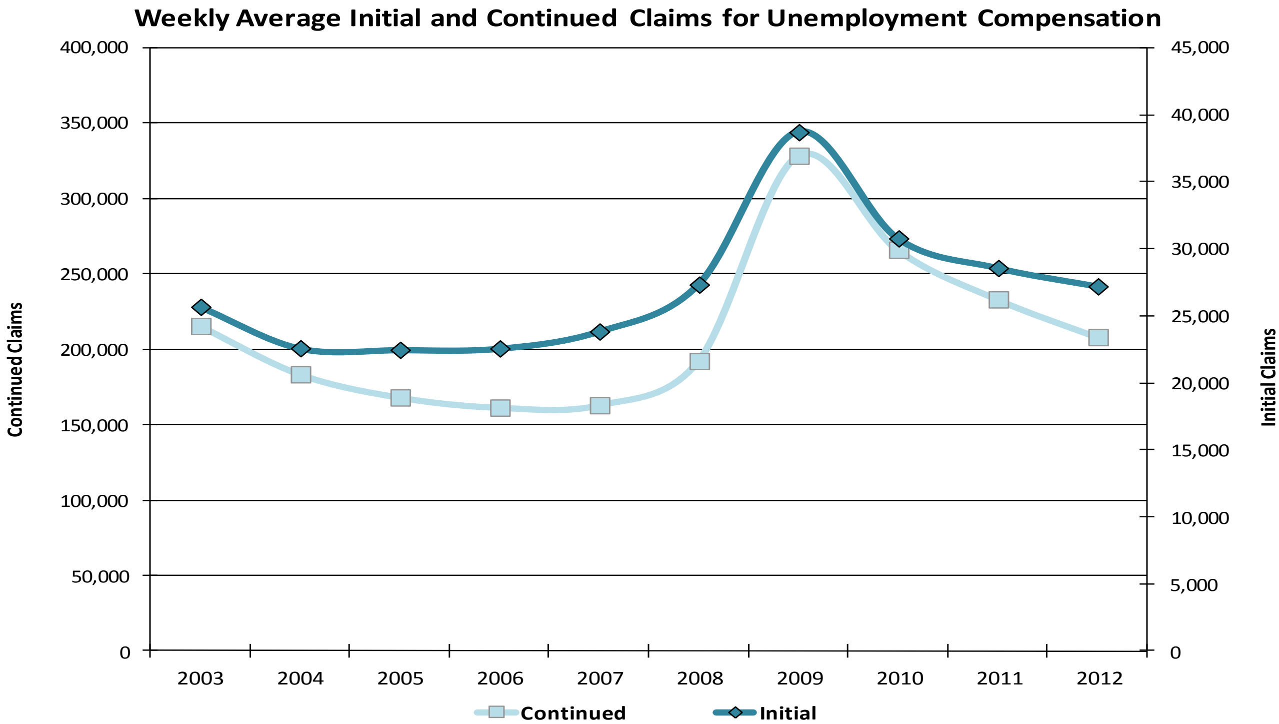
Pennsylvania New Hires, 2011 to 2012, 4th Quarter

Industry Sector	2012 Q4	2011 Q4	Change from 2011 Q4	
			Volume	Percent
Total New Hires	**489,200**	**458,900**	**30,300**	**7%**
Goods-Producing Industries	**44,700**	**49,100**	**-4,400**	**-9%**
Ag, Forestry, Fishing, Hunt.	1,500	1,600	-100	-6%
Mining	1,300	2,700	-1,400	-52%
Construction	19,500	20,700	-1,200	-6%
Manufacturing	22,400	24,100	-1,700	-7%
Service-Providing Industries	**405,200**	**384,200**	**21,000**	**5%**
Trade, Transp. & Utilities	112,700	89,500	23,200	26%
Wholesale Trade	10,800	10,900	-100	-1%
Retail Trade	69,600	67,100	2,500	4%
Transp., Warehouse & Utilities	32,300	11,500	20,800	181%
Information	5,000	6,000	-1,000	-17%
Financial Activities	12,200	11,600	600	5%
Finance & Insurance	9,000	8,300	700	8%
Real Estate & Rental & Leasing	3,200	3,300	-100	-3%
Professional & Business Services	121,200	127,000	-5,800	-5%
Professional & Technical Services	17,500	18,200	-700	-4%
Management of Companies	2,900	2,900	0	0%
Admin & Waste Services	100,800	105,900	-5,100	-5%
Education & Health Services	81,000	77,600	3,400	4%
Educational Services	30,500	25,600	4,900	19%
Health Care & Social Assistance	50,500	52,000	-1,500	-3%
Leisure & Hospitality	61,500	61,000	500	1%
Arts, Entertainment & Recreation	17,600	13,300	4,300	32%
Accommodation & Food Services	43,900	47,700	-3,800	-8%
Other Services	9,600	9,400	200	2%
Government	2,000	2,100	-100	-5%
Unclassified Industry	39,200	25,800	13,400	52%

Source: Pennsylvania New Hire Reporting Program

Weekly Claims for Unemployment Compensation

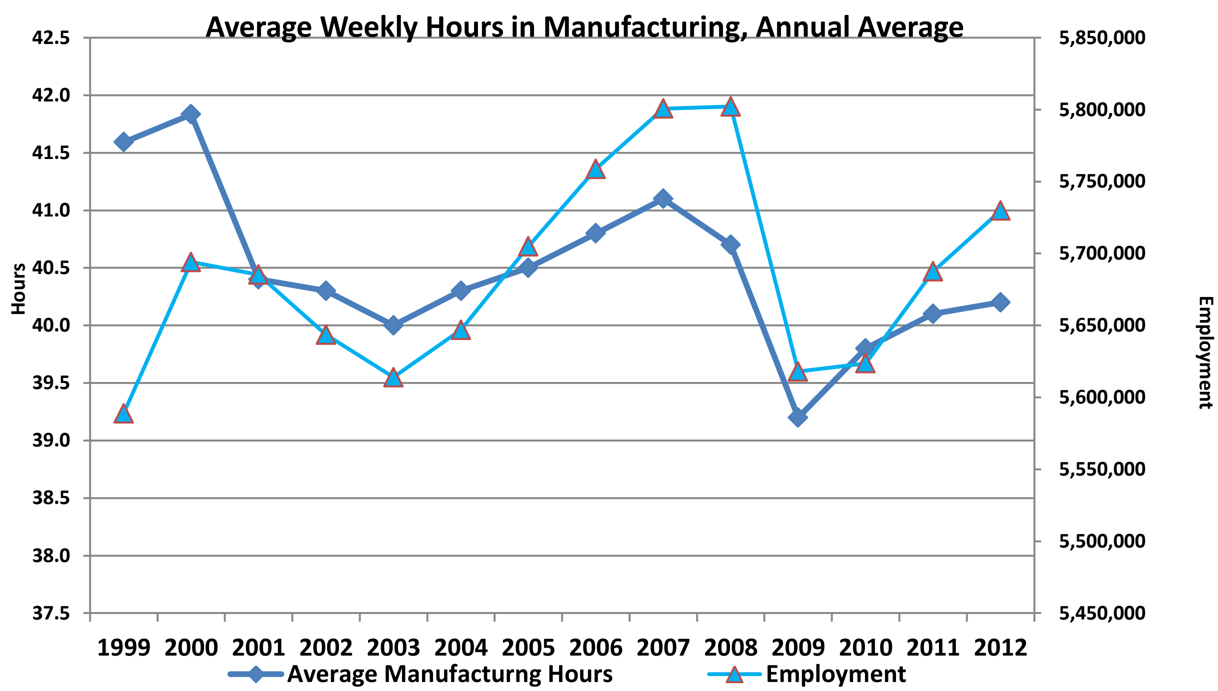
Pennsylvania's average weekly number of initial claims continued to decrease in 2012, after peaking in 2009. The state's average weekly number of continued claims also decreased during the same period. The decline in initial claims indicates that fewer workers are being laid off, while the decrease in continuing claims indicates that covered unemployed workers are having an easier time finding jobs.



Source: Pennsylvania Unemployment Compensation data

Average Weekly Hours in Manufacturing

Average weekly hours are a leading indicator, often forecasting the direction of the state's economy. As the economy begins to grow out of a recession (e.g. in 2004), employers will tend to hold off on hiring new workers until they are more confident that economic growth is improving and will instead have their existing employees work more hours. Eventually, as the economy continues to improve, businesses will be forced to add more workers, and this increase in employment will reinforce the positive trend in economic growth (e.g. in 2005 to 2006). In contrast, when the economy is just beginning to slow down, employers wishing to maintain employee loyalty will try to keep their workers by reducing hours worked, rather than immediately laying-off workers (e.g. in 2001). If the slowdown deepens, eventually businesses are forced to lay off workers, which reinforces the negative trend in economic growth (e.g. in 2002 to 2003). The annual average of weekly hours in manufacturing turned down in 2007 and 2008, signaling that employers were reducing hours due to the economic recession. Now once again, as the economy begins to grow out of the recent recession, employers are holding off on hiring new workers and are having existing employees work more hours until they are more confident in the current economic recovery.



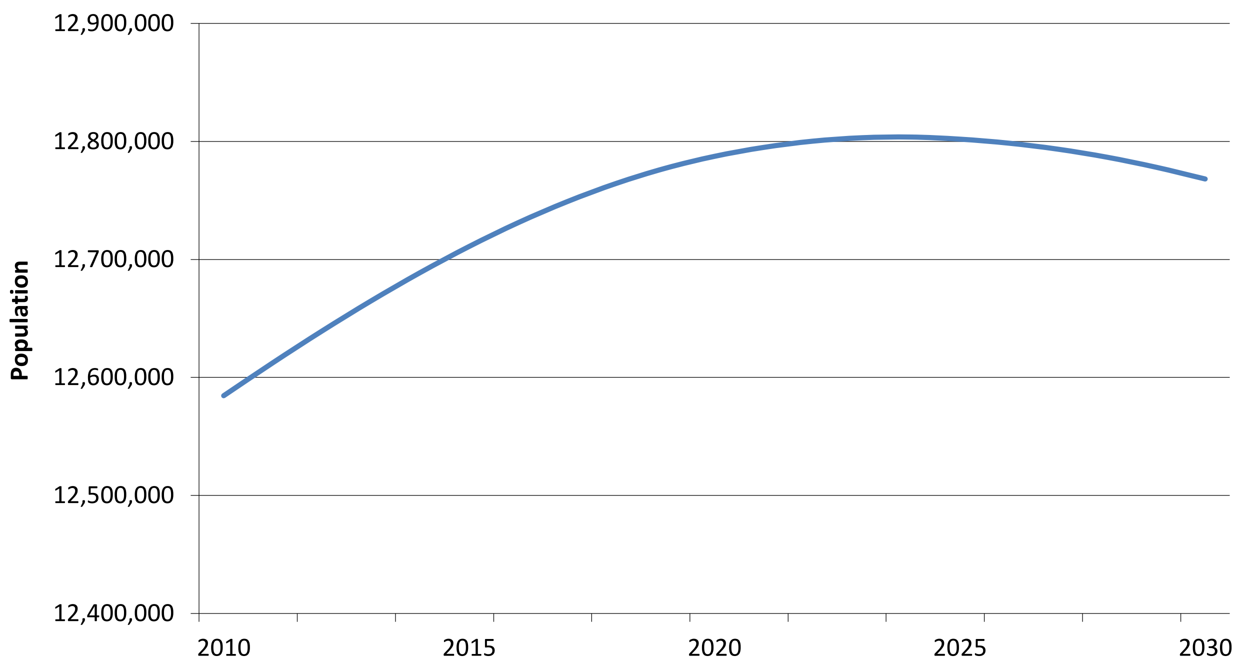
Source: Bureau of Labor Statistics, Current Employment Statistics

DEMOGRAPHICS

Population

Population change is the underlying force that moves the economy. Over the next ten years, 2012 to 2022, Pennsylvania's population is projected to grow by just one percent. In comparison, the nation's population will grow by nearly nine percent. While the state's population growth will be relatively static in the years to come, the demographic changes within Pennsylvania's population will be dynamic.

Pennsylvania's Projected Population 2010 to 2030

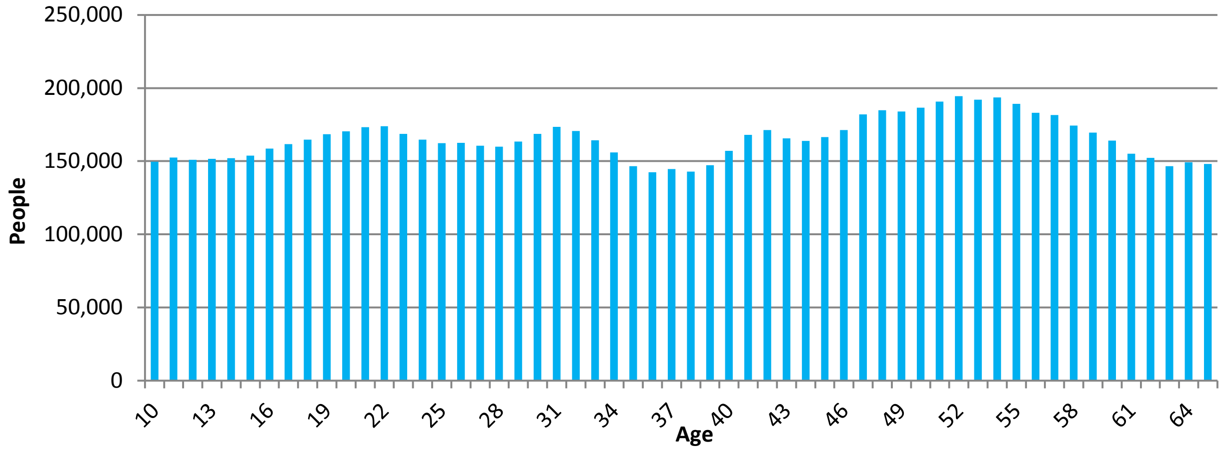


Source: U.S. Census Bureau

Age

Pennsylvania's population is growing older. The number of Pennsylvanians age 65 and over was 2.0 million in 2012. The state's percentage of those age 65 and over is the fourth highest in the nation (16.0 percent) – only Florida (18.3), West Virginia (16.6), and Maine (16.4) are higher. This is largely a by-product of the aging of the population born during the Baby Boom period after World War II (1946 to 1964). The oldest of the baby boom generation turned 65 in 2011 (now age 66) and the youngest will turn 65 in 2029 (now age 48). Thus, a large wave of Baby Boomers will be leaving the workforce over the next few decades. Since the number of births from the mid-1960s until the mid-1980s was lower than that during the Baby Boom years, the natural increase in the workforce population (entrants) will be insufficient to replace those leaving it (separations).

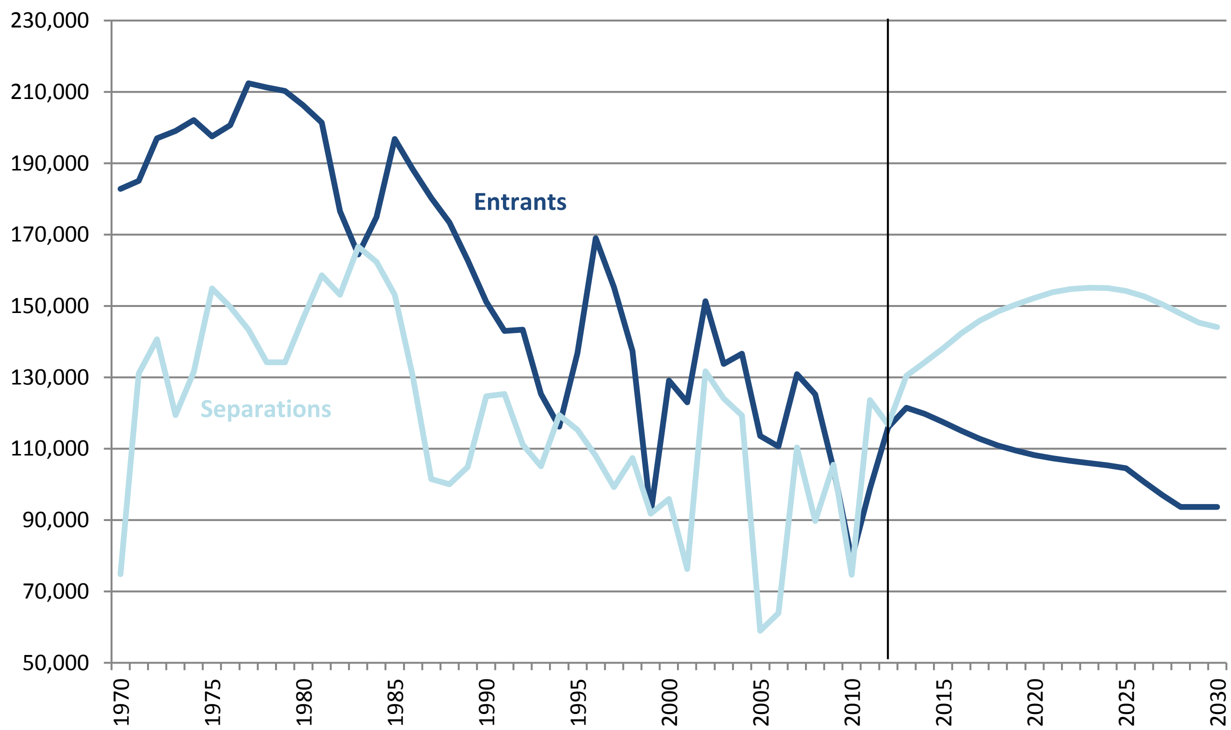
Pennsylvania Population: Age 10 to 65 in 2012



Source: U.S. Census Bureau

While the overall population will increase modestly, the workforce population will shrink barring a substantial in-migration of workers. Beginning around 2015, the total working age population (age 25 to 64) will decline annually until at least 2030. This will result in worker shortages in the coming years with some areas, industries, and occupations being affected sooner and harder than others. However, due to the stock market crash of 2008, many Baby Boomers who had lost significant wealth may elect to stay in the job market and thus make up some of the coming shortfall of younger workers.

Pennsylvania Labor Force Entrants and Separations, 1970-2030



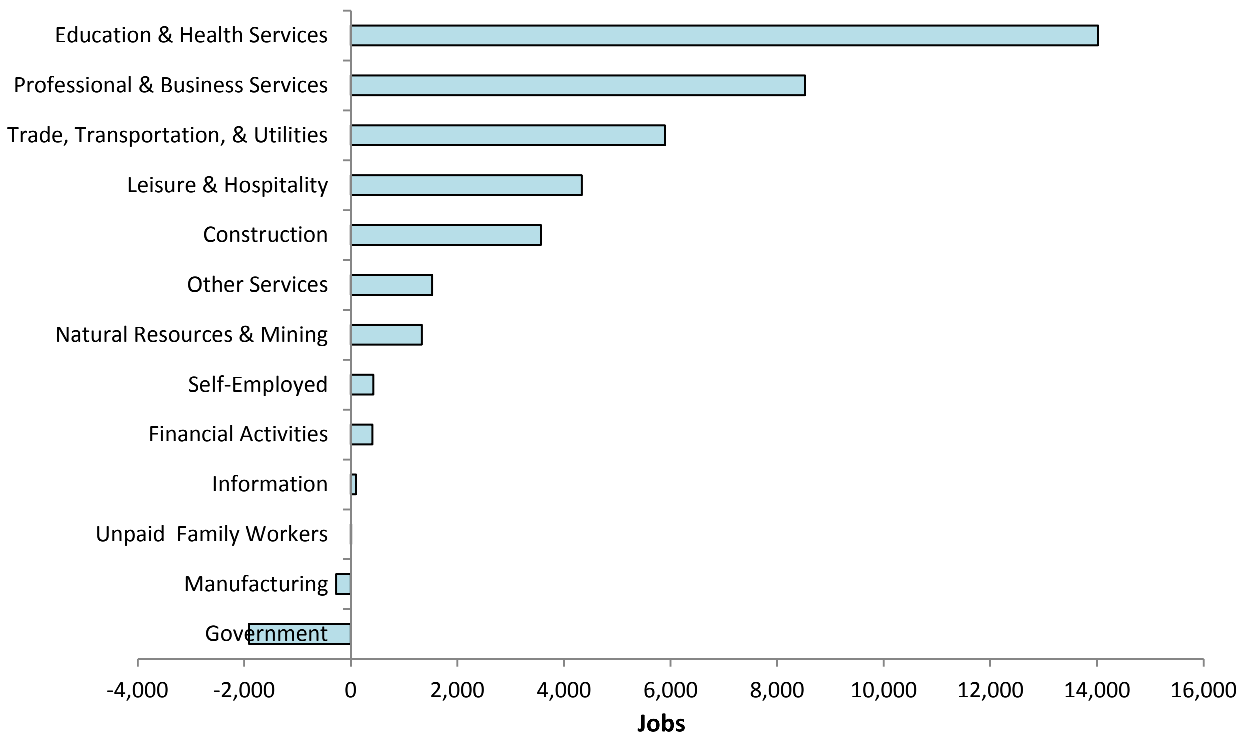
Source: Center for Workforce Information & Analysis

PROJECTIONS

Industry

Pennsylvania's Education & Health Services, Professional & Business Services, and Trade, Transportation & Utilities sectors are anticipated to account for 70 percent of all annual employment growth through 2020. The Government and Manufacturing sectors are the only two sectors forecast to lose jobs annually. These sectors reflect the dynamics of an aging population's need for more health care, the gradual transition of the Baby Boom generation out of the workforce and into an active retirement, and the continued transformation of the state's economy from that of a goods producer to a service provider.

Annual Employment Change by Industry Sector to 2020



Source: Center for Workforce Information & Analysis

Growing Industries

The list of growing industries is dominated by Health Care and Social Assistance. Other industries forecast to grow are in Professional Services, Business Services, Hospitality, and Transportation. Added this year to the list of growing industries were Employment Services, Support Activities for Mining, Building Equipment Contractors, Management & Technical Consulting Services, Investigation & Security Services, and Specialized Freight Trucking.

Top 25 Growing Industries in Pennsylvania through 2020, by Volume

Industry	Annual Employment Growth
General Medical & Surgical Hospitals	2,600
Individual & Family Services	1,800
Full-Service Restaurants	1,600
Home Health Care Services	1,600
Employment Services	1,500
Community Care Facilities For The Elderly	1,300
Colleges, Universities & Professional Schools	1,300
Management Of Companies & Enterprises	1,100
Services To Buildings & Dwellings	1,000
Offices Of Physicians	900
Computer Systems Design & Rel. Services	900
Other General Merchandise Stores	900
Nursing Care Facilities	900
Support Activities For Mining	900
Limited-Service Eating Places	900
Outpatient Care Centers	900
Building Equipment Contractors	800
Offices Of Other Health Practitioners	800
Architectural, Engineering & Rel. Services	800
General Freight Trucking	700
Management & Technical Consulting Services	700
Investigation & Security Services	700
Other Amusement & Recreation Ind.	700
Child Day Care Services	600
Specialized Freight Trucking	600

Source: Center for Workforce Information & Analysis

Declining Industries

The list of industries projected to decline is dominated by Manufacturing. Other industries on this list are Retail Trade, Financial Activities, and Government.

Top 25 Declining Industries in Pennsylvania through 2020, by Volume

Industry	Annual Employment Loss
Postal Service	-900
Elementary & Secondary Schools	-900
Department Stores	-900
Local Government, Except Education & Hospitals	-700
Depository Credit Intermediation	-500
Cut & Sew Apparel Mfg	-300
Book, Periodical & Music Stores	-200
Nondepository Credit Intermediation	-200
Federal, Except USPS	-200
Motor Vehicle Body & Trailer Mfg	-200
Business Support Services	-200
Other Miscellaneous Mfg	-200
Printing & Rel. Support Activities	-200
Converted Paper Product Mfg	-200
Iron & Steel Mills & Ferroalloys	-200
Office Supplies, Stationery & Gift Stores	-200
Office Administrative Services	-200
Drinking Places	-200
Florists	-100
Private Households	-100
Other Wood Product Mfg	-100
Bakeries & Tortilla Mfg	-100
Insurance Carriers	-100
Misc Nondurable Goods Merchant Wholesalers	-100
Glass & Glass Product Mfg	-100

Source: Center for Workforce Information & Analysis

Emerging Industries

Pennsylvania has forecast a number of emerging industries through 2020. An emerging industry is defined as having statewide employment less than 15,000 and projected to have at least 60 annual openings through 2020. The emerging industries are spread throughout most industry sectors, with Manufacturing, Financial Activities, and Mining leading the pack.

Top 50 Emerging Industries in Pennsylvania through 2020

Industry	Annual Employment Gain
Support Activities For Mining	870
Gambling Industries	570
Oil & Gas Extraction	320
Highway, Street & Bridge Construction	310
Waste Collection	260
Other Electrical Equip. & Component Mfg	250
Misc Durable Goods Merchant Wholesalers	230
Ag., Construction & Mining Machinery Mfg	200
Other Support Services	190
Activities Rel. To Credit Intermediation	190
Foundries	170
Educational Support Services	170
Motor Vehicle Parts Mfg	160
Other Financial Investment Activities	160
Railroad Rolling Stock Mfg	160
Aerospace Product & Parts Mfg	150
Other Schools & Instruction	140
Social Advocacy Organizations	140
Medical & Diagnostic Laboratories	140
Other Miscellaneous Store Retailers	130
Machinery & Equip. Rental & Leasing	130
Commercial Machinery Repair/Maintenance	120
Other General Purpose Machinery Mfg	120
Remediation & Other Waste Services	120
Forging & Stamping	110

Source: Center for Workforce Information & Analysis

Top 50 Emerging Industries in Pennsylvania through 2020 (continued)

Industry	Annual Employment Gain
Museums, Parks & Historical Sites	100
Nonmetallic Mineral Mining & Quarrying	100
Other Information Services	100
Motion Picture & Video Ind.	100
Other Residential Care Facilities	90
Cement & Concrete Product Mfg	90
Rail Transportation	90
Specialty Food Stores	90
Consumer Goods Rental	90
Other Investment Pools & Funds	90
Facilities Support Services	80
Freight Transportation Arrangement	80
Electrical Equipment Mfg	80
Performing Arts & Sports Promoters	80
Activities Rel. To Real Estate	80
Used Merchandise Stores	80
Support Activities For Road Transportation	80
Semiconductor & Electronic Component Mfg	70
Other Heavy Construction	70
Offices Of Real Estate Agents & Brokers	70
Automotive Equip. Rental & Leasing	70
Software Publishers	70
Other Support Activities For Transportation	60
Securities & Commodity Contracts Intermediation & Brokerage	60
Hardware & Plumbing Merchant Wholesalers	60

Source: Center for Workforce Information & Analysis

Occupations

While the current economic environment remains challenging, jobs in most major occupational groups will be plentiful in the years to come for current and future labor market participants. Modest economic growth coupled with an aging workforce will create opportunities for job seekers. However, the best paying jobs will go to those with more than a high school education. Major occupational groups seeing the best total opportunities will be in Office &

Administrative Support; Sales & Related Occupations; Food Preparation & Serving Related; Transportation & Material Moving; and Healthcare Practitioners & Technical Occupations. Major occupational groups not already mentioned and having the best opportunities due to growth will be Healthcare Support Occupations; Personal Care & Service; Construction & Extraction Occupations; Business & Financial Operations Occupations; and Installation, Maintenance, & Repair Occupations. Major occupational groups not already listed and having the best opportunities due to replacements (mainly those leaving due to retirement) will be Production Occupations; Education, Training, & Library Occupations; Management Occupations; Building & Grounds Cleaning & Maintenance Occupations; and Protective Service Occupations.

Annual Employment Change by Major Occupation Group to 2020

	Annual Change through 2020		
Occupational Group	**Total**	**Due to Replacements**	**Due to Growth**
Office & Administrative Support Occupations	24,900	21,200	3,800
Sales & Related Occupations	22,100	19,400	2,600
Food Preparation & Serving Related Occupations	19,800	16,500	3,300
Transportation & Material Moving Occupations	13,700	10,300	3,400
Healthcare Practitioners & Technical Occupations	12,800	7,500	5,300
Production Occupations	9,400	8,000	1,400
Personal Care & Service Occupations	8,900	5,700	3,200
Education, Training, & Library Occupations	8,900	7,600	1,300
Construction & Extraction Occupations	8,500	5,300	3,200
Business & Financial Operations Occupations	8,200	5,400	2,700
Installation, Maintenance, & Repair Occupations	7,600	5,400	2,300
Management Occupations	6,800	6,000	800
Healthcare Support Occupations	6,700	3,000	3,700
Building & Grounds Cleaning & Maintenance Occupations	5,200	4,000	1,200
Community & Social Services Occupations	4,000	2,800	1,100
Computer & Mathematical Occupations	3,900	2,400	1,400
Protective Service Occupations	3,700	3,000	700
Architecture & Engineering Occupations	3,100	2,200	900
Arts, Design, Entertainment, Sports, & Media Occupations	2,800	2,300	500
Life, Physical, & Social Science Occupations	1,800	1,200	500
Farming, Fishing, & Forestry Occupations	1,600	1,600	0
Legal Occupations	1,200	800	400

Source: Center for Workforce Information & Analysis
Totals may not sum due to rounding.

Occupations Detail

There will be job opportunities in many different occupations across all industries over the next decade as Baby Boomers retire. Seventy-six percent of all annual job openings will be due to replacements for workers leaving the workforce. Labor market participants will have their pick of jobs and occupations as they begin or change careers.

Annual Employment Change by Minor Occupation Group to 2020

	Annual Change through 2020		
Occupational Title	Total	Due to Replacements	Due to Growth
Retail Sales Workers	14,800	13,400	1,400
Food & Beverage Serving Workers	12,300	10,100	2,200
Construction & Extraction Occupations	8,500	5,300	3,200
Health Diagnosing & Treating Practitioners	7,800	4,400	3,400
Information & Record Clerks	7,700	6,500	1,200
Material Moving Workers	7,500	6,000	1,500
Construction Trades Workers	6,100	3,900	2,100
Motor Vehicle Operators	5,000	3,400	1,600
Other Personal Care & Service Workers	5,000	3,000	2,100
Primary, Secondary, & Special Education School Teachers	5,000	4,500	500
Business Operations Specialists	5,000	3,100	1,800
Nursing, Psychiatric, & Home Health Aides	5,000	1,900	3,000
Other Office & Administrative Support Workers	4,700	3,700	1,000
Health Technologists & Technicians	4,500	2,700	1,800
Material Recording, Scheduling, Dispatching, & Distributing Workers	4,200	4,000	200
Other Installation, Maintenance, & Repair Occupations	4,000	2,600	1,400
Cooks & Food Preparation Workers	3,800	3,100	800
Financial Clerks	3,700	3,100	600
Computer Specialists	3,600	2,200	1,400
Counselors, Social Workers, & Other Community & Social Service Spec.	3,500	2,500	1,100
Building Cleaning & Pest Control Workers	3,300	2,900	400
Financial Specialists	3,200	2,300	900
Other Management Occupations	3,200	2,700	500
Other Food Preparation & Serving Related Workers	2,900	2,700	200
Sales Representatives, Wholesale & Manufacturing	2,900	2,200	700
Other Production Occupations	2,700	2,400	300
Secretaries & Administrative Assistants	2,700	2,200	500
Vehicle & Mobile Equipment Mechanics, Installers	2,500	1,900	700
Metal Workers & Plastic Workers	2,500	1,800	700
Engineers	2,100	1,400	600
Other Protective Service Workers	2,000	1,300	700
Sales Representatives, Services	1,800	1,400	400
Supervisors, Office & Administrative Support Workers	1,800	1,500	200
Entertainment Attendants & Related Workers	1,700	1,300	400

Source: Center for Workforce Information & Analysis
Totals may not sum due to rounding.

Emerging Occupations

Pennsylvania has forecast a number of emerging occupations through 2020. An emerging occupation is defined as having statewide employment less than 10,000 and projected to have at least 100 annual openings through 2020. The occupations are ranked in descending order from the highest annual percentage change. The emerging occupations are concentrated in the following major groups: Healthcare Practitioners & Technical Occupations; Construction & Extraction Occupations; Business & Financial Operations Occupations; Installation, Maintenance, & Repair Occupations; Personal Care & Service Occupations.

Top 50 Emerging Occupations in Pennsylvania through 2020

	Annual Change through 2020			
Occupational Title	**Total**	**Pct. Chg.**	**Due to Replacements**	**Due to Growth**
Service Unit Operators, Oil, Gas, & Mining	130	105%	20	110
Rotary Drill Operators, Oil & Gas	130	100%	20	110
Roustabouts, Oil & Gas	140	96%	30	110
Wellhead Pumpers	110	76%	30	80
Gaming Dealers	220	71%	80	140
Veterinary Technologists & Technicians	190	58%	60	130
Meeting & Convention Planners	120	40%	40	80
Medical Scientists, Except Epidemiologists	260	34%	40	220
Security & Fire Alarm Systems Installers	160	33%	70	90
Diagnostic Medical Sonographers	100	31%	40	70
Logisticians	210	29%	90	130
Veterinarians	100	27%	50	60
Physical Therapist Assistants	170	25%	70	100
Cargo & Freight Agents	140	24%	70	70
Health Educators	120	23%	60	60
Nonfarm Animal Caretakers	290	23%	140	150
Medical Equipment Repairers	110	23%	60	50
Refuse & Recyclable Material Collectors	330	22%	190	140
Pest Control Workers	130	22%	90	40
Cost Estimators	390	22%	180	200
Electrical Power-Line Installers & Repairers	260	22%	170	100
Computer-Controlled Machine Tool Operators, Metal & Plastic	250	22%	120	130
Brickmasons & Blockmasons	210	22%	100	100
Respiratory Therapists	200	21%	100	100
Physical Therapists	310	21%	120	200

Source: Center for Workforce Information & Analysis
Totals may not sum due to rounding.

Top 50 Emerging Occupations in Pennsylvania through 2020 (continued)

Occupational Title	Annual Change through 2020			
	Total	Pct. Chg.	Due to Replacements	Due to Growth
Cardiovascular Technologists & Technicians	100	20%	50	60
Private Detectives & Investigators	110	20%	60	50
Occupational Therapists	240	20%	120	120
Coaches & Scouts	390	20%	230	160
First-Line Supervisors/Managers of Helpers, Laborers, & Material Movers	250	20%	140	120
Training & Development Specialists	330	19%	160	170
Database Administrators	140	19%	70	70
Personal Financial Advisors	220	18%	90	130
Paralegals & Legal Assistants	270	18%	120	150
Dental Hygienists	310	18%	170	140
Medical & Public Health Social Workers	340	18%	200	140
Mobile Heavy Equipment Mechanics, Except Engines	210	17%	130	80
Drywall & Ceiling Tile Installers	100	17%	70	40
Cement Masons & Concrete Finishers	140	17%	70	70
Entertainment Attendants & Related Workers, All Other	130	17%	110	30
Excavating & Loading Machine & Dragline Operators	110	16%	80	30
Architects, Except Landscape & Naval	130	16%	80	50
Dispatchers, Except Police, Fire, & Ambulance	200	15%	120	80
Healthcare Practitioners & Technical Workers, All Other, w/Genetic Counselors	250	15%	190	60
Dietitians & Nutritionists	170	13%	120	40
Mental Health & Substance Abuse Social Workers	350	13%	230	110
Physician Assistants	150	12%	90	60
Meat, Poultry, & Fish Cutters & Trimmers	130	12%	90	40
Manicurists & Pedicurists	130	12%	80	50
Construction & Building Inspectors	240	12%	170	70

Source: Center for Workforce Information & Analysis
Totals may not sum due to rounding.

Conclusion

Pennsylvania's average employment was 5,973,000 in 2012, an increase of 80,000 jobs from 2011, or 1.4 percent. In 2012, the average unemployment rate was 7.9 percent, unchanged from 2011, but 0.2 percentage points lower than the U.S. average rate. Pennsylvania's total nonfarm jobs were at 5,742,600 in December 2012, up 34,600 (<1%) from one year before and up 176,200 since the most recent jobs low in February 2010. However, the December 2012 jobs count was still down 82,600 from the most recent jobs high in April 2008 of 5,825,200. Pennsylvania's jobs count was still down 69,900 (-1.2%) from the official start of the recession in December of 2007**.** However, at the end of 2012, Pennsylvania was closer to its pre-recession job level than the nation, which was still 2.4 percent below its jobs level of December 2007. The good news is that Pennsylvania is moving in a positive direction, with jobs and employment growing even as its labor force participation rate increases and average hours in manufacturing (a leading indicator) is on the rise. This is occurring in an environment where Pennsylvania's economy continues to adapt and transform itself from goods-producing to service-providing industries.

Workers from the baby-boom generation are moving into their 60s and will be retiring in large numbers over the coming years. They will take key skills with them. Beginning around 2015, Pennsylvania's total working age population (age 25 to 64) is projected to decline annually until at least 2030. Far fewer youth will be available to enter the labor market, forcing greater efficiencies and competition for key skills. Therefore, there will be worker shortages in the coming years and some areas, industries, and occupations will be affected sooner and harder than others. However, with the stock market crash of 2008, many Baby Boomers who lost significant wealth may elect to stay in the job market and thus make up for some of the coming shortfall of younger workers.

Once the jobs recovery intensifies and we enter the next economic expansionary period, jobs in most major occupational groups will be plentiful for current and future labor market participants. Modest economic growth coupled with an aging workforce will create opportunities for anyone seeking a job. The best paying jobs will go to those achieving more than a high school education.

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