# Delaware Annual Economic Report 2007

written by

George Sharpley, Ph.D.

Labor Market Economist



Office of Occupational and Labor Market Information Delaware Department of Labor 27 June 2008

## **Table of Contents**

2007 State Economic Overview4	
State Gross Domestic Product and Personal Income5	
Teenage Workers7	
Older Workers8	ì
Location Quotients1	0
Educational Attainment1	1
Delaware and US Job Change, 2000 – 20081	2
Delaware and US Employment by Industry1	3
Industry Sector Details	5

## Introduction

This is the second annual economic report for the state of Delaware from the Delaware Department of Labor, Office of Occupational and Labor Market Information. Our purpose in writing it is twofold: to provide comprehensive and objective facts as they relate to the state's economy and, we hope, to help educate.

To meet our first goal, we use only original source data from the Bureau of the Census, the Bureau of Labor Statistics, the Bureau of Economic Analysis, and the Delaware Department of Labor. We provide only enough analysis of the data for it to be put into context and leave any conclusions to be drawn to the reader. We have attempted to provide all relevant data necessary for the reader to make an accurate and fair assessment of the state of Delaware's economy.

For the second goal, instead of adding one year of data to each of the sections from last year's report, we have added some new topics and dropped others. It is hoped that by doing so we will introduce non-economists to ways of looking at the economy which are new to them. Anyone seeking an update of material from last year's publication which is not included in this year's report may obtain it by contacting our office. Likewise, any suggestions for future topics pertinent to the state of Delaware's economy are most welcome.

There are no projections or forecasts in this report. Its intent is to provide current data, along with enough historical data to put the present into context. Those interested in our forecasts of industry and occupation employment changes up to the year 2016 can find our long-term forecasts on our website at:

#### http://www.delawareworks.com/OOLMI/Resources/projections2016.pdf

Hardcopies of this publication, as well as our short-term forecasts to the year 2009, can be obtained by contacting our office.

#### **Contact Information**

George Sharpley, Ph.D. Labor Market Economist Office of Occupational and Labor Market Information Fox Valley Annex 19 West Lea Blvd. Wilmington, DE 19802

Phone: 302-761-8060 Fax: 302-761-6598 Email: george.sharpley@state.de.us 3

## 2007 State Economic Overview

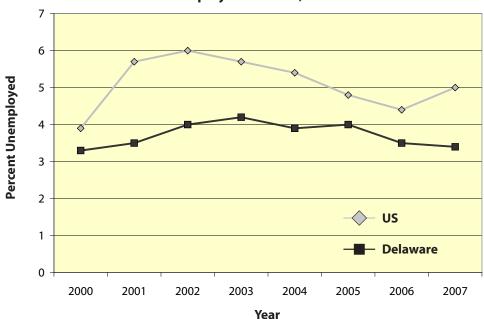
Probably the two most familiar economic data series are the residential employment statistics, which include the unemployment rate, and the business establishment data, which include the number of area jobs. As they come from different sources, they frequently send somewhat conflicting signals, as they did in Delaware last year.

The residential employment statistics program, officially known as the Local Area Unemployment Statistics (LAUS) program, generates estimates of the labor force, employment, unemployment, and unemployment rate for residents in the state, each county, and cities with populations of 25,000 and above (Wilmington, Newark, and Dover in Delaware's case). It is based on a survey of about 900 households in the state, which is supplemented by an econometric model that incorporates similar data from seven other states in the region, plus Washington, D.C. The average annual LAUS data for 2007 show that the number of employed Delaware residents rose by 3,976 over 2006 levels, while the number of unemployed residents fell by 590, making the labor force, which is the sum of the employed

and the unemployed, rise by 3,386. The unemployment rate, which was 3.5 percent in 2006, fell to 3.4 percent in 2007.

The business establishment data, officially known as the Current Employment Statistics (CES) program, surveys over 1,200 business establishments in the state each month. Where the LAUS program counts state residents, the CES program counts jobs in the state. The data from the CES surveys are reconciled at the beginning of each year to employment reports which must be submitted by virtually all businesses. The CES data show economic growth slowing in 2007, with Delaware generating 800 net additional jobs that year, after adding 4,900 in 2006. The state's annual average from 1990 through 2007 is 5,300 net new jobs per year.

There are additional measures available, which we detail throughout the text of this report. Two of the broadest measures of economic activity are state Gross Domestic Product (GDP), which is the total economic value produced, and personal income, which is the value of all income received. Data on these are presented in the next section of this report.



#### Annual Unemployment Rates, US and Delaware

## **State Gross Domestic Product and Personal Income**

The two broadest measures of state economic activity are state gross domestic product (GDP) and state personal income. Both measures are produced by the US Bureau of Economic Analysis (BEA) as parts of their regional economic accounts. Delaware ranked at the very top of all states for 2007 GDP per capita, while it was 12<sup>th</sup> in per capita personal income. So which is the better representation of the standard of living for the average Delaware resident? The answer is personal income and the reason is that while all of personal income accrues to state residents, a very large component of state GDP flows out of the state.

State	2006	2007	Percent Change
Delaware	\$58,242	\$56,496	-3.0%
Maryland	38,950	39,596	1.7
New Jersey	44,649	45,052	0.9
Pennsylvania	34,699	35,153	1.3

#### **Real GDP per Capita**

State	2006	2007	Percent Change
Delaware	\$39,131	\$40,608	3.8%
Maryland	43,788	46,021	5.1
New Jersey	46,763	49,194	5.2
Pennsylvania	36,825	38,788	5.3

**Personal Income per Capita** 

#### State GDP has three components. First, there is compensation of employees, which is the wages, salaries, bonuses, and any other supplements paid to the workers (including management). Second is taxes on production and imports, less subsidies, which are the state and local taxes, such as property taxes and gross receipts or sales taxes, which are chargeable to business entities. Subtracted from the taxes are

any cash subsidies provided from government to businesses. Finally, there is gross operating surplus, which is what is left from revenue after workers compensation and business taxes are paid. It is gross profit, plus capital expenses.

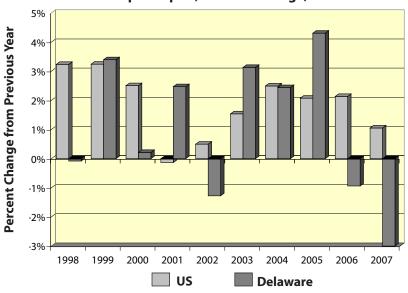
In 2006, the latest year for which detailed GDP data are available, the US average for compensation of employees was 56.7 percent of GDP. In Delaware, 42.4 percent of state GDP went to employees, the lowest percentage of any state. The US average tax rate on business production was 7.0 percent of GDP. In Delaware the average rate of 4.1 percent was the secondlowest in the nation; only Oregon, at 4.0 percent, had a lower rate. The final component of GDP, gross operating surplus, averaged 36.3 percent of GDP in the US and 53.5 percent of state GDP in Delaware. This was the highest of any state and Delaware was the only state with over half its GDP going to capital and profits. In any state, but particularly a small state like Delaware, a great deal of capital comes from other locations, so a large portion of gross operating surplus flows back out of the state. This is why personal income should be considered a better measure of economic well-being than GDP. (Note: The industry descriptions in a later portion of this report were written before the 2006 detailed GDP data were available, so they use 2005 data.)

#### **Employee Compensation as a Percent of GDP**

State	2006
Delaware	42.4%
Maryland	60.6
New Jersey	57.4
Pennsylvania	58.9

BEA defines personal income as the income received by all persons from all sources. It can be broken into earned (from current labor) and unearned income (dividends, interest, rent, and government transfer payments), with adjustments for pensions, insurance, and social security contributions. While some workers in Delaware live elsewhere, and some state residents work elsewhere, BEA adjusts for this to provide estimates for income by state of residence. Given two areas with similar costs of living, the one with higher per capita personal income would be considered to offer a higher standard of living.

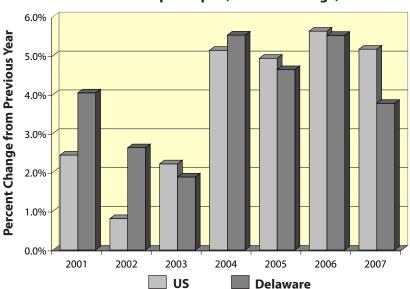
Where the overall GDP and personal income data rank Delaware somewhat differently, their changes per year are generally similar. That was the case in 2007, when both show the Delaware economy to be in a weakened state. For the US as a whole, per capita personal income rose by 5.2 percent in 2007. In Delaware, it grew by 3.8 percent, third slowest in the nation. Only Tennessee and Arizona, both at 3.4 percent, grew more slowly. GDP growth paints an even darker picture. While national real GDP growth slowed to 2.0 percent in 2007, Delaware was



Real GDP per Capita, Percent Change, US and DE

one of three states with falling real GDP. New Hampshire's GDP change was just slightly negative (-0.01 percent), Michigan's fell by 1.2 percent, and Delaware's fell by 1.6 percent. BEA attributes this performance to "a large decline in finance and insurance, and secondarily due to a decline in construction."

In 2006, there were also three states with negative



Personal Income per Capita, Percent Change, US and DE

real GDP growth, and Delaware was not among them. However, Delaware had the smallest gain in real GDP among all the rest of the states. When population change is included, there were seven states with declining GDP per capita in 2006. Delaware had the largest decline, with its real GDP per capita falling by \$550 from 2005 to 2006.

Over the last decade, GDP for both Delaware and the US has had its ups and downs, as the chart above shows. State GDP has been more volatile, as might be expected when comparing a small state against the entire nation. Over the ten-year period, annual real per capita GDP growth averaged 1.9 percent in the US and 1.1 percent in Delaware. The data begin in 1997 because that is the first year of data under the changed industry classification system; BEA strongly cautions against combining pre-1997 data with the current series.

## **Teenage Workers**

For the four quarters ended June 30<sup>th</sup>, 2007, there was an average of 14,297 teens from 14 through 18 years old employed in the Delaware economy. Teen participation in the state's workforce has trended downward in recent years, with less than half of all teens working or seeking work. The 2007 labor force participation rate for males aged 16 to 19 was 43.9 percent; the average from 1998 through 2007 was 50.6 percent. Among females in this age group, 45.2 percent were working or seeking work in 2007, compared with an average of 52 percent over the last ten years. (Labor force participation data come from the Current Population Survey, which uses an age range of 16 to 19. The rest of the data in this section come from the Local Employment Dynamics program, which uses an age range of 14-18.)

There were more teen girls than boys in the state's workforce, 7,811 to 6,486. The boys

had higher average monthly earnings, \$793 to \$638. New Castle County had the greatest number of working teens, with 9,259, and the highest average pay, at \$721.75 per month. Sussex County came next in both categories, with 2,773 teens working at an average monthly wage of \$695.50. Kent County had 2,264 teen workers, earning an average of \$653 per month.

Nearly two-thirds of all teen workers in the state work in just two industries: Accommodation and Food Services and Retail Trade. Construction, with average monthly wages of \$1,456.75, was the highest-paying sector hiring a substantial number of teens. It is interesting to note that one-quarter of the teen workers in Construction were female and their average monthly pay of \$1,586.50 was higher than that of male teens in the industry.

NAICS	Industry Sector Name	Workers 14-18	Average Monthly Earnings
72	Accomodation and Food Services	4,671	\$606.00
44-45	Retail Trade	4,478	599.75
62	Health Care and Social Assistance	841	724.75
81	Other Services	669	568.00
71	Arts, Entertainment, and Recreation	598	470.25
23	Construction	568	1,456.75
56	Administrative and Waste Services	552	1,047.50
54	Professional, Scientific, and Technical Services	387	1,268.25
61	Educational Services	356	387.00
31-33	Manufacturing	236	1,433.50
53	Real Estate and Rental and Leasing	154	770.00
92	Public Administration	143	749.75
42	Wholesale Trade	137	1,058.00
51	Information	137	705.75
48-49	Transportation and Warehousing	129	955.00
52	Finance and Insurance	119	1,477.75
11	Covered Agriculture	57	1,073.50
55	Management of Companies and Enterprises	57	1,458.50
22	Utilities	0	

#### **Teen Employment by Industry**

## **Older Workers**

In future years, older Delawarean's are bound to play an increasing role in the state's economy. Projections for the year 2018 by the Delaware Population Consortium have Delaware residents aged 16 to 64 increasing by 29,662, or 5.2 percent, while residents aged 65 and above will increase by 44,751, or 35.8 percent. These vastly different growth rates will change the demand for goods and services within the state, as older individuals have different consumption patterns. The composition of the workforce will also probably change, as businesses turn to older workers in reaction to the slowing growth of the more traditional workforce.

For the four quarters ended June 30<sup>th</sup>, 2007, Delaware's workforce averaged 15,707 workers aged 65 and over, 3.8 percent of the total average workforce for that period. This was not simply people remaining in their jobs until retirement – there was an average of 1,309 new hires per quarter. Although women are more numerous than men in that age group, there were a little over 1,000 more men working, 8,394, with 7,313 women over 64 employed.

Labor force participation among those 65 and older has increased. In 2007, 18.6 percent of all men and 13.4 percent of all women in that age group were in the labor force. (The labor force consists of the employed plus those actively seeking work.) Over the last ten years, men in this age group have averaged 17.4 percent labor force participation, and women have averaged 12 percent. Unemployment rates for older residents have been relatively low, but appear to be increasing. The 2007 monthly average for men was 8,950 employed and 125 unemployed, for an average unemployment rate of just 1.4 percent. Among women, the monthly averages were 7,725 employed and 350 unemployed, an average unemployment rate of 4.3 percent. Through May of 2008, men 65 and older have an average unemployment rate of 4 percent and women 5.7 percent. However, the source of these data, the Current Population Survey (CPS), has a small sample size, so estimates for smaller groups over a period of less than a year should be viewed cautiously.

The average monthly earnings in this age group were \$2,445.50. Men earned an average of \$3,056.50 per month, while women earned \$1,751.75. Most of the workers 65 and older worked in New Castle County, where employment averaged 10,151 workers, at an average monthly wage of \$2,744.25. Sussex County had the next largest contingent, with 3,063 workers in this age group earning an average of \$1,817.75 per month. Kent County had 2,492 workers 65 and older, earning an average of \$1,983.75 per month.

The industry sector with the greatest number of workers aged 65 and over is Retail Trade, which employs 2,766 of these older workers. This industry is one of the lowestpaying sectors, but it also has among the highest proportions of part-time workers of any industry sector in the state. The highest-paying sector, Utilities, pays older workers an average monthly wage 3.5 times that of Retail Trade, but it also employs the smallest number of older workers, with only 22 employed.

NAICS	Industry Sector Name	Workers 65+	Average Monthly Earnings
44-45	Retail Trade	2,766	\$1,577.75
62	Health Care and Social Assistance	2,018	2,666.25
61	Educational Services	1,210	2,657.50
56	Administrative and Waste Services	1,170	1,722.50
23	Construction	934	3,117.75
72	Accomodation and Food Services	933	1,375.00
92	Public Administration	927	2,494.50
54	Professional, Scientific, and Technical Services	853	4,737.25
81	Other Services	782	1,752.25
31-33	Manufacturing	765	3,668.50
71	Arts, Entertainment, and Recreation	653	1,278.50
48-49	Transportation and Warehousing	595	2,074.00
42	Wholesale Trade	580	2,982.00
52	Finance and Insurance	499	4,622.00
53	Real Estate and Rental and Leasing	477	2,322.75
55	Management of Companies and Enterprises	287	2,570.00
51	Information	117	2,583.00
11	Covered Agriculture	112	2,160.75
22	Utilities	22	5,444.25

## Older Worker Employment by Industry

## **Location Quotients**

A location quotient is the ratio of one geographic area's percentage of total employment in a particular industry divided by a larger reference area's percentage in the same industry. Location quotients are generally used to indicate which area industries produce output for export outside the area (thus bringing outside dollars into the area) and which are producing output mostly for local consumption. The assumption is that a local industry with a higher proportion of employment than the reference area must be exporting some of its output.

Here, we take the state of Delaware as the local area and the United States as the reference area. As an example, at the industry sector level, Manufacturing employs 12.52 percent of the total US workforce and 9.13 percent of Delaware's workforce. The location quotient for manufacturing is then 9.13 divided by 12.52, or 0.73. A location quotient of one or less is presumed to indicate that the industry is not as important a source of local exports as industries with location quotients over one. (Because these are relative measures, if at least one industry location quotient is less than one, one or more industries must have location quotients greater than one.) All data in this section refer to the 2006 annual average, as national 2007 data are as vet unavailable.

The economic development community tends to focus their attention on industries with location quotients greater than one, in the belief that doing so will increase income flowing into the area. However, the limitations of location quotients need to be addressed. As a simple and crude measure, they can provide a rough guide, and no more. The Delaware manufacturing location quotient of 0.73 would indicate that most of the industry's output is for use within the state. That is not the case. Delawareans do not drive most of the cars assembled here, nor do they eat most of the chickens processed here. Location quotient well below one notwithstanding, Delaware manufacturers sell most of their product outside the state. The location quotient is useful as a tool; it is not definitive.

At the broadest industry sector level, the sector in Delaware with the highest location quotient was Management of Companies and Enterprises, at 2.08. This industry is comprised of units which administer, oversee, and manage the firm's operations. Also included are holding companies, legal entities which hold securities of other firms, but perform no other economic functions. At the end of 2007, Delaware had 3,790 people listed as employees of its 2,538 holding companies. This is a much higher percentage of employment than the national average; the location quotient for Delaware holding companies is 63.

The industry sector in the state with the second-highest location quotient is Finance and Insurance. Employing 10.31 percent of Delaware workers in 2006, versus the national average of 5.33 percent, Finance and Insurance has a location quotient of 1.93. The sector with the third-highest location quotient, Arts, Entertainment, and Recreation, was quite a bit further back, at 1.43.

At the more detailed industry subsector level, *Credit intermediation and related activities* (i.e. banking) has the highest location quotient, at 2.80. A more surprising number two is *Museums, historical sites, zoos, and parks*, at 2.22. The rest of the top five are provided in the table below.

NAICS	Industry Subsector	Location Quotient
522	Credit intermediation & related activities	2.80
712	Museums, historical sites, zoos, & parks	2.22
551	Management of companies & enterprises	2.08
311	Food manufacturing	1.95
325	Chemical manufacturing	1.62
442	Furniture & home furnishings stores	1.62

## **Educational Attainment**

Data from the decennial census of 1990 and 2000, along with the 2006 American Community Survey conducted by the US Bureau of the Census, show that average educational attainment for persons 25 years old and over has increased across the board. In the nation, the state, and in every Delaware county, the percentage of people with less than a high school diploma or equivalency has decreased, and the percentage of people with some type of college degree has increased.

Of course, the degree of change for varying levels of educational attainment is different for different areas. Delaware had a lower percentage of individuals failing to complete high school throughout the entire period, but this was entirely due to New Castle County educational attainment. Both Kent and Sussex counties had higher percentages of high school non-completers than the nation in all three years.

While the proportion of persons with some degree beyond high school increased in Delaware, it did so at a slower pace than was the case nationally. In 1990, 27.9 percent in Delaware and 26.5 percent in the US had some college degree. In 2000, Delaware again was above the national average, 31.6 percent to 30.7 percent. With the latest data in 2006, Delaware is below the national average, 33.8 percent to 34.4 percent.

Economists are in almost universal agreement that increasing education levels is the key to achieving and sustaining economic growth. While increasing education clearly helps the individual to get ahead, it also helps the overall economy by increasing productivity.

		US		Delaware			
	1990	2000	2006	1990	2000	2006	
Less than high school graduate	24.8	19.6	15.9	22.5	17.4	14.5	
High school graduate (includes equivalency)	30	28.6	30.2	32.7	31.4	33.9	
Some college, no degree	18.7	21.1	19.5	16.9	19.5	17.7	
Associate's degree	6.2	6.3	7.4	6.5	6.6	6.9	
Bachelor's degree	13.1	15.5	17.1	13.7	15.6	16.4	
Graduate or professional degree	7.2	8.9	9.9	7.7	9.4	10.5	

#### Educational Attainment, Percentage of Population 25+

#### Educational Attainment, Percentage of Population 25+

	Kent			New Castle			Sussex		
	1990	2000	2006	1990	2000	2006	1990	2000	2006
Less than high school graduate	26.9	20.6	16.1	19.4	14.5	12.7	30.3	23.5	18.1
High school graduate (inc. equivalency)	33.9	32.9	36.7	31.1	29.6	32.0	37.3	35.6	37.0
Some college, no degree	18.2	21.3	21.5	17.5	19.5	16.6	13.7	18.2	17.7
Associate's degree	6.0	6.5	6.2	6.8	6.8	7.1	5.7	6.1	7.0
Bachelor's degree	9.4	11.6	12.9	16.0	18.5	18.9	8.8	10.1	12.5
Graduate or professional degree	5.6	7.0	6.5	9.2	11.0	12.7	4.2	6.5	7.6

## Delaware and US Job Change, 2000 – 2008

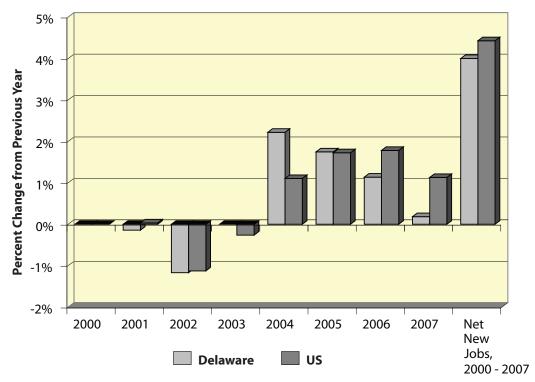
The period from 2000 through 2007 probably represents one complete business cycle. The year 2000 was at the end of a long economic expansion, with jobs peaking in Delaware that year. March 2001 marked the end of the expansion for the nation and November 2001 was the end of the recession, according to the Business Cycle Dating Committee of the National Bureau of Economic Research (NBER), widely recognized as the authoritative voice in these matters. The number of jobs in Delaware did not exceed the 2000 peak until 2004. For the US, jobs peaked in 2001 and were back to that peak and beyond by 2005. It appears as though 2007 may represent another peak. As of May, 2008, jobs in both Delaware and the US were below their respective 2007 averages.

Delaware jobs represent about one-third of one percent (0.32 percent) of the total jobs in the nation. Delaware gained 16,800 net new jobs from 2000 through 2007, an increase of 4 percent for the entire period. The nation added 5,838,000 jobs, which amounts to a 4.4 percent increase for the period.

#### **Total Nonfarm Jobs, in Thousands**

	2000	2001	2002	2003	2004	2005	2006	2007	May 2008	Net New Jobs, 2000-2007
Delaware	420	419.4	414.5	414.5	423.7	431.1	436	436.8	435.4	16.8
US	131,785	131,826	130,341	129,999	131,435	133,703	136,086	137,623	137,754	5,838

Percent Change in Jobs, 2000–2007



In order to gain some perspective, we begin by looking at employment changes by industry sector, comparing Delaware and the US from 2001 to 2007. At the turn of the millennium, there was some debate as to whether 2000 or 2001 should be considered the first year. Here, the point is moot, because a new industry classification system put in place in 2001 makes industry data comparisons with years prior to 2001 invalid. (Some data series have been "backcast" to re-create the data back to 1990 as if they were under the new system, but others have not.) When looking at industry data, the beginning year is dependent on which data series is being used. Overall, total job growth in Delaware lagged a little behind the nation, Delaware averaging 0.68 percent in net new jobs per year from 2001 through 2007, versus 0.72 percent for the US as a whole. If we started in 2000 it would be much the same; 0.56 average annual job growth in Delaware versus 0.62 percent in the US.

The industry comparisons here come from the Current Employment Statistics (CES) program, a survey of business establishments directed by the US Bureau of Labor Statistics (BLS). This data source was backcast, so industry data from the year 2000 are available. We use this data series here because 2007 data from the more complete Quarterly Census of Employment and Wages (QCEW) are not yet available for the nation. Employment numbers for Delaware industries in the detailed section which follows are from the QCEW (which begins under the current industry classification system in 2001). Data from places of employment in Delaware are collected and estimated by the Delaware Department of Labor, Office of Occupational and Labor Market Information, under the guidance of BLS. Businesses with multiple locations are requested to provide their employment levels for each location separately. Different locations of the same firm are classified in different industries if they perform distinct functions and the firm reports their employment separately. In Delaware, this reporting is voluntary, and sometimes firms decide to stop reporting each location's employment,

and report just one number for the entire firm. When this occurs, as it did in 2007, it can distort the industry data; the numbers do not accurately represent what is happening on the ground. This is known as a non-economic code change. In 2007, a substantial number of employees in the Professional, Scientific, and Technical Services industry had to be re-classified into the Finance and Insurance industry. This made it look like Professional, Scientific, and Technical Services was shrinking and Finance and Insurance growing, when, in fact, the opposite was the case. For purposes of comparison with changes in the US labor market in this section, we have adjusted the Delaware data to remove these non-economic changes, and thus provide a truer comparison.

Rates of industry sector job change were the same for the US and Delaware in four industries, and within three percentage points in four others. (The Mining sector is negligible in Delaware, and the US does not report on Agriculture in these data series, so there are 18 sectors available for comparison.) The two industry sectors with the largest differences were Administrative and Waste Services, and Finance and Insurance. In both cases, Delaware lost employment while the US gained employment, and the difference between them was 16 percentage points. The largest difference where Delaware grew faster was in Public Administration, where state employment increased by 14 percent while the nation added 5 percent more jobs. (Public Administration is public-sector employment that does not fit into any other industry sector. Government refers to all public-sector employment, without regard to activity. Typical industry sectors where government, but not Public Administration workers, would be employed include Educational Services, Health Care and Social Assistance, Transportation and Warehousing, and Construction. Unfortunately, some data sources report Public Administration and others report Government, which makes the combination of data from different sources tricky.) Outside of Public Administration, industry sectors where state job growth was strong relative to the US

were Wholesale Trade, Other Services, and Retail Trade. The state also fared better in Information, but that was a case of fewer job losses. Jobs in Delaware grew notably more slowly in Real Estate, Rental, and Leasing, Management of Companies and Enterprises, and Professional, Scientific, and Technical Services.

Next, we compare average wages in the US and Delaware from 2001 to 2006, stopping at 2006 because 2007 data are not yet available for the nation. Nominal wages (unadjusted for inflation) across all industries in Delaware rose by 20.5 percent over those five years, compared with 17.4 percent for the US. The real wage (adjusted for inflation) increased by essentially the same amount for the state and the nation. Real wages went up by 3.5 percent in Delaware and by 3.6 percent across the US; inflation was a little over three percentage points higher locally.

Four industry sectors in Delaware had double-digit real wage gains from 2001 to 2006:

Wholesale Trade (21%), Finance and Insurance (21%), Administrative and Waste Services (22%), and Public Administration (17%). The first and last of these industries gained substantial employment over this period; the middle two lost substantial employment. Three industry sectors had large declines in their average real wage: Arts, Entertainment, and Recreation (-10%), Information (-9%), and Professional, Scientific, and Technical Services (-7%). Workers in Real Estate and Rental and Leasing fared better in other states - real wage gains were 14 percent in the US versus 0 percent in Delaware. There was a similar situation in Management of Companies and Enterprises, where workers across the US had average real wage gains of 15 percent, while those in Delaware lost 3 percent. Delaware workers were relatively better off in Wholesale Trade (up 21% vs. up 5%), Finance and Insurance (up 21%) vs. up 10%), Administrative and Waste Services (up 22% vs. up 6%), and Public Administration (up 17% vs. up 7%). Full details are provided in the table below.

Job and Wage changes by madsh y, Delaware and 05										
	Job Cha 2001-2	-	Real Wage 2001-2	-						
Industry Sector	Delaware	US	Delaware	US						
Utilities	-5%	-8%	n.a.	n.a.						
Construction	12	12	5%	2%						
Manufacturing	-16	-16	7	6						
Wholesale Trade	11	4	21	5						
Retail Trade	7	2	-2	-1						
Transportation and Warehousing	3	2	1	-1						
Information	-12	-17	-9	1						
Finance and Insurance	-10	7	21	10						
Real Estate and Rental and Leasing	4	11	0	14						
Professional, Scientific, and Technical Services	-1	12	-7	3						
Management of Companies and Enterprises	-7	4	-3	15						
Administrative and Waste Services	-8	8	22	6						
Educational Services	20	17	5	2						
Health Care and Social Assistance	19	17	2	6						
Arts, Entertainment, and Recreation	9	8	-10	4						
Accomodation and Food Services	12	13	-1	1						
Other Services	11	4	-3	2						
Public Administration	14	5	17	7						

#### Job and Wage Changes by Industry, Delaware and US

## **Industry Sector Details**

This section presents detailed data on Delaware's industry sectors. The current industrial classification system used in the United States, Canada, and Mexico is known as the North American Industry Classification System (NAICS). It places all business and public sector units into a structure of increasing detail, the broadest level being the two-digit industry sector. There are 20 industry sectors, which we report on here ranked in descending order of each sector's contribution to Delaware's earned personal income. The next level of industry detail is the three-digit subsector. There are 99 subsectors overall; we report on those which are especially important to the state's economy, or otherwise show changes which are notable.

The data elements presented and their sources are: industry employment and wages, taken from the Quarterly Census of Employment and Wages (QCEW), gross domestic product (GDP) and personal income data from the US Bureau of Economic Analysis (BEA), and employment and pay by gender, taken from the Local Employment Dynamics (LED) program, which is coordinated by the US Bureau of the Census. Additional data in the Agriculture segment come from the American Community Survey (ACS) and Current Population Survey (CPS), both conducted by the US Bureau of the Census.

#### Government

One complication in dealing with economic data is the handling of ownership versus industry. Government is an ownership concept, encompassing any function performed by public sector entities. Functions that are only performed by the public sector, such as legislation and law enforcement, are in the industry Public Administration. However, government entities also operate in industries, such as Transportation, Construction, Education, and Health Care, alongside private firms. In Delaware, these make up the majority of government workers; there were 20,143 workers in the Public Administration industry sector in 2007, out of a total 51,463 Government employees. Government (public sector establishments classified in any industry sector) contributed 14.8 percent of the state's total nonfarm earnings in 2007, an amount larger than any single industry sector.

The federal government employs the smallest number of government workers in Delaware, with 5,507 civilian workers in 2007. Their average wage is \$55,372, 17 percent above the \$47,204 average for all private sector workers. Postal workers make up 40 percent of the federal government total, with most of the rest in Public Administration. There are 3,164 federal workers employed in New Castle County, 1,790 in Kent County, and 553 in Sussex County. In 2001, federal government employment was slightly higher at 5,570 civilian workers.

The 28,636 state government workers made up 6.6 percent of Delaware's total nonfarm workforce in 2007. Their \$47,656 average wage is one percent higher than the average for private sector workers. Public Administration makes up the largest state government industry sector, with 11,424 workers, or 39.9 percent of the state government total. The 9,693 Education workers make up the second-largest segment. Charter school and state college and university employees are considered state government workers. Health Care and Social Assistance, with 4,769 state workers, and Construction, with 1,462, are the two other industry sectors with large state worker contingents. By area, New Castle County has the largest number of state government workers, with 15,236. Kent County has 11,633, while there are 1,695 in Sussex County. State government employment has grown by over 3,000 workers since 2001, when the total was at 25,599.

There were 24,629 local government workers in 2007, earning an average wage of \$46,668, 1.1 percent below the private sector average. Seventy percent, or 17,320 workers, are employed in the Education sector, with most of the rest, 5,929, in Public Administration. There are 14, 568 local government workers in New Castle County, 4,650 in Kent County, and 5,411 in Sussex County. Local government employment has grown by more than 3,000 workers since 2001, when there were 22,193 employed.

Data on government workers by gender are only available for those working in Public Administration, not other industry sectors. In the 12 months ended 30 June 2007, males made up 56 percent of the workforce. Men also had higher wages, earning an average \$51,159 annually. Women earned an average of \$39,120. Compensation of employees made up 80.8 percent of government's contribution to state GDP in 2005. The average for the nation as a whole was 89.1 percent.

#### **Finance and Insurance**

Finance and Insurance was the secondlargest contributor to Delaware's nonfarm earned income, accounting for 14.1 percent in 2007, but it was far and away the largest industry in terms of GDP, producing 32.8 percent of the state's total output. The discrepancy is due to the large share of industry output going to gross operating surplus. In Delaware, 77.4 percent of the industry's GDP went to gross operating surplus, compared to 39.4 percent nationally. Compensation of employees took up 20.7 percent of GDP in the state, while it averaged 56.2 percent in the US. The final component of GDP, taxes less subsidies, amounted to 1.95 percent of industry GDP in Delaware, versus 4.46 percent for the US.

Although there was an apparent healthy increase of 1,129 workers, or 3.0 percent, from 2006 to 2007, in actuality, industry employment declined again in 2007, by almost 500 workers. This apparent contradiction was caused by the reclassification of about 1,600 workers out of the Professional, Scientific, and Technical Services industry sector into the Finance and Insurance sector, due to a change in company reporting. There was no actual change in where these employees worked or in what they did. The banking component of this industry, with all of the recent mergers and acquisitions, is notoriously difficult to keep track of. There has been a decline of over 4,000 workers in Finance and Insurance in Delaware since 2001, second only to the loss of 6,200 Manufacturing jobs over that period.

Employment in the Finance and Insurance sector was 39.4 percent male and 60.6 percent female for the 12 months ended June 30<sup>th</sup>, 2007. Men were paid an average of \$87,549, while women earned an average of \$52,692. In 2001, industry employment was 34 percent male, and men were paid 75.4 percent more on average than women, a larger gap than the current 66.2 percent.

Industry subsectors *Insurance carriers* and *Securities and financial investments* both added workers in 2007, *Insurance* adding 450 (6.5 percent growth), while the *Securities* subsector added 200 (5.2 percent growth). Average pay went up in both subsectors as well, while falling in the industry as a whole. Average pay in the Finance and Insurance sector fell from \$84,592 in 2006 to \$80,856 in 2007. In the *Insurance* subsector, it rose from \$62,360 to \$65,380, while the *Securities* subsector remained Delaware's highest-paying, going from an average \$111,152 in 2006 to \$12,900 in 2007.

In looking at employment by county, there were again classification changes which are not reflected in the reported numbers. Over 1,100 workers who had been reported in Sussex County, but were actually working in New Castle County, were reclassified into New Castle County. Between these two classification changes, what appears as an extraordinarily strong 2,661 job gain is revealed to be a very slight decrease in the number of Finance and Insurance jobs in the county.

Kent County experienced an actual decline of 573 jobs in Finance and Insurance during 2007, bringing the total number of jobs there to 1,691. Although they rose by almost three percent last year, average wages remain below the state average, at \$49,988 in 2007.

After accounting for the reclassification explained above, Finance and Insurance employment in Sussex County remained steady, much as it has for the last four years, when it has fluctuated between 2,700 and 2,800 jobs. The average wage in the state's southernmost county fell from \$39,716 in 2006 to \$38,532 in 2007.

#### Professional, Scientific, and Technical Services

Professional, Scientific, and Technical Services, which includes legal, accounting, engineering, advertising, and scientific research services, was the third-largest source of earned income in 2007, generating 11.6 percent of the state total. Its relative contribution to state GDP was much smaller, at 5.9 percent in 2006. This reflects the high proportion of industry output going to employee compensation, 68.6 percent. The average for this industry across the country is 66.6 percent. Taxes on production amounted to 0.8 percent of GDP in Delaware and 1.7 percent nationally, while gross operating surplus was 30.6 percent in the state and 31.7 percent for the US.

There is an apparent drop in employment in 2007 of 1,186 in this industry sector, but in reality, there was a gain of about 400 jobs, due to a classification change (explained more fully in the Finance and Insurance section above). Even taking this into account, jobs in this industry have declined by about 1,400 since 2001. Average pay rose by over four percent in 2007, going from \$73,452 in 2006 to \$76,544.

Employment was 51 percent male and 49 percent female for the 12 months ended June 30<sup>th</sup>, 2007, with men being paid 64.7 percent more than women, on average. In 2001, the breakdown was 52.9 percent male and 47.1 percent female, and men earned 69 percent more.

The large majority of employment in this sector is in New Castle County, where there were about 23,000 jobs, after adjustment. There has been essentially zero growth here in the last four years. The average wage was \$81,116 in 2007. Kent County had 1,759 jobs in 2007, about the same as in 2006, but up by 200 since 2004. The average wage there was \$47,944 in 2007. In Sussex County, there was a bit of a decline in employment in 2007; the 1,548 jobs there were 81 jobs below the 2006 total, and about the same as in 2004. The average wage there was \$49,388 in 2007.

#### Manufacturing

Manufacturing was the fourth-biggest contributor to earned income in 2007, just edging out Health Care and Social Assistance. It accounted for 10.5 percent of the state's earned income, and 7.5 percent of its GDP. In Delaware, 53.4 percent of Manufacturing's output value went to compensation of employees; for the US, the average was 61.7 percent. Taxes on production took 1.8 percent of GDP in Delaware, about half the 3.4 percent average for the US, while gross operating surplus was 44.8 percent in the state, compared to 35 percent nationally.

The number of jobs was essentially unchanged in 2007, falling by 65 from 33,246 to 33,181. It is quite a different story going a little further back; there were 39,388 Manufacturing jobs in Delaware in 2001, so the state has averaged over 1,000 jobs lost annually since then. The average wage was \$59,780 in 2007, 26.6 percent above the overall state average.

Industry employment is 69.6 percent male and 30.4 percent female, with men being paid 39.4 percent more, on average. In 2001, Manufacturing employment was 70.2 percent male and 29.8 percent female, with men earning 41.3 percent more.

Among the subsectors which gained jobs in 2007 were *Electrical equipment manufacturing*, which added 119 workers, *Food manufacturing*, which added 99 jobs, and *Computer and electronic*  product manufacturing, which added 89 jobs. Chief among the shrinking subsectors were *Transportation equipment manufacturing*, which shed 314 jobs, and *Plastics manufacturing*, which declined by 115 jobs.

The majority of Manufacturing jobs are found in New Castle County, although Sussex County is catching up. There were 16,393 jobs in New Castle County in 2007, a decline of 1,008 from the previous year and 2,256 jobs below the 2004 level. Almost two-thirds of the decline since then has been in *Chemicals manufacturing*, but it still remains one of the top three subsectors, along with *Transportation equipment manufacturing* and *Computer and electronic equipment manufacturing*. The average wage for all of Manufacturing in New Castle County was \$79,040 in 2007.

Kent County has by far the smallest number of jobs in this sector, with 3,661 in 2007, an increase of 84 over 2006. Manufacturing has declined here, too, over a longer period, losing 644 jobs since 2004. The average wage was \$48,376 in 2007. Manufacturing in Kent County is dominated by the *Food, Paper,* and *Fabricated metal* subsectors, each with about an equal share.

Manufacturing in Sussex County is dominated by *Food product manufacturing*, mainly poultry processing. There were 13,118 jobs in the entire Manufacturing sector in the county in 2007, an increase 895 jobs from the previous year. Manufacturing employment has increased pretty steadily there, with 1,544 jobs gained since 2004. The average wage was \$38,864 in 2007.

#### **Health Care and Social Assistance**

Health Care and Social Assistance generates 10.5 percent of Delaware's nonfarm income, and 5.1 percent of its state GDP. Compensation of employees accounts for 82.8 percent of the industry's GDP; the average across the US is 77.2 percent. Taxes on production take in 0.4 percent of GDP in Delaware and 1.2 percent nationally, while gross operating surplus amounts to 16.8 percent of GDP within the state and 21.7 percent across the US.

This is now the largest industry in Delaware by number of jobs, having surpassed Retail Trade in 2007. Employment grew by 2,181 positions in 2007, to a total of 55,265. There has been a long period of growth for this industry in the state, with 8,800 jobs gained since 2001. The average wage was \$45,440 in 2007, 3.7 percent below the state's overall average.

Employment in Health Care and Social Assistance in the state is 80.5 percent female and 19.5 percent male, with men being paid 84.7 percent more, on average. In 2001, industry employment was 81.4 percent female, and men were paid 188.4 percent more than women. This large reduction in the pay disparity was most likely due to a relative increase in the number of women in practitioner positions, as opposed to the lower-paid support positions.

Most of the increase in employment was in New Castle County, where the majority of jobs are located. There were 38,306 jobs in this sector there in 2007, an increase of 1,574 over 2006. The average pay was \$48,652. Kent County saw faster relative growth, adding 557 jobs for a total of 7,977. Average pay there was \$35,116. The number of jobs in this sector actually declined slightly in Sussex County, falling by 32 to a total of 8,744. Average pay there was \$41,088.

There are four subsectors in this industry, and all gained in employment in 2007. The fastest growing was *Nursing and residential care facilities*, which added 664 jobs in 2007. This 8.0 percent gain brought total employment to 8,964. The average wage in this subsector was \$29,692. The other three grew at about the same rate, with *Hospitals* gaining 610 jobs to bring their total employment to 19,150. Average pay at Delaware hospitals was \$55,340 in 2007. *Ambulatory health care services* (practitioner offices) added 565 jobs in the state last year, increasing total employment to 16,328. Average pay was \$55,932. Finally, *Social assistance* employment also grew at a better than 3 percent rate, adding 343 jobs. Employment in this subsector was at 10,824 in 2007, and the average wage was \$25,140.

#### Construction

The Construction industry generated 6.5 percent of Delaware's nonfarm income in 2007 and 3.4 percent of the state's GDP in 2004, the latest year available for this industry. Employee compensation accounted for 70.2 percent of GDP, more than the 65.9 percent average for this industry in the country as a whole. The percentage going towards taxes was also higher in Delaware, at 1.6 percent versus 1.3 percent. Gross operating surplus was 32.8 percent for the US and 28.3 percent in Delaware.

Employment fell substantially in 2007, going from 30,803 jobs in 2006 to 29,017 jobs, a drop of 1,786, or 5.8 percent. This decline ended a period of job gains where nearly 5,000 jobs were added. There were 25,929 jobs in 2001.

Construction is a male-dominated industry, with 84.2 percent of the workers male and 15.8 percent female. Men are paid 34.5 percent more, on average. In 2001, employment in the industry was 87.5 percent male, 12.5 percent female, and men earned 39.7 percent more, on average.

The bulk of the state's construction jobs are in New Castle County, where there were 18,117 jobs in 2007, a decline of 776 from 2006. The average wage there was \$50,336 per year. Kent County has the fewest construction jobs in the state, at 4,377 in 2007, but it also lost the fewest jobs last year, dropping by 72 jobs. Wages averaged \$40,152 in Kent County in 2007. Sussex County had the largest percentage decline in Construction employment last year, when it fell by 12.1 percent. The 5,944 Construction jobs there paid an average \$36,372 in 2007.

#### **Retail Trade**

The Retail Trade industry contributed 6.2 percent of Delaware's nonfarm earned income in 2007 and 4.1 percent of its GDP in 2006. Almost two-thirds of industry GDP, 66.2 percent, went towards employee compensation, compared with 56.8 percent nationally. Taxes took 12.1 percent of GDP in Delaware, less than the 21.5 percent average across the US. Industry gross operating surplus was 21.7 percent in the state and the nation. Average annual pay at Delaware's Retail Trade establishments was \$25,452 in 2007.

Employment is about evenly split between genders, 50.9 percent female and 49.1 percent male. The average wage for men is 63.9 percent above the average wage for women. In 2001, industry employment was 51.3 percent female, 48.7 percent male. Men were paid 71.4 percent more than women on average then.

Chief among the retail subsectors gaining employment were *Health and personal care stores*, which added 214 jobs (5.5 percent growth), *General merchandise stores*, which added 182 jobs (1.9 percent growth), and *Motor vehicle and parts dealers*, which added 172 jobs (2.4 percent growth). The subsectors which declined in size were *Furniture and home furnishings stores*, which had a net loss of 113 jobs (3.7 percent drop), *Miscellaneous store retailers*, which dropped by 109 jobs (3.2 percent), and *Electronics and appliance stores*, which fell by 36 jobs (1.9 percent).

Retail Trade employment fared quite differently in each of the counties. In New Castle County, there was a net loss of 434 jobs in 2007, the second straight year of job losses there. Most of the decline was in *Food and beverage stores* and *General merchandise stores*. There were 32,085 jobs in this sector there in 2007. Kent County had a virtual explosion of retail jobs, adding 1,014 in 2007, an 11.2 percent growth rate. *General merchandise stores* and *Food and beverage stores* led the job gains there. Kent County has added 1,482 jobs in Retail Trade over the last three years, to get to a total of 10,098 jobs. The retail sector in Sussex County showed little change in the number of jobs, adding 53, for a total of 11,266. Here, gains in *Food and beverage store* and *Health and personal care store* employment were offset by losses at *General merchandise stores*.

#### Wholesale Trade

Wholesale Trade was the source of 4.5 percent of Delaware's nonfarm earned income in 2007, and 3.8 percent of its GDP in 2006. Employees receive 58.5 percent of industry GDP as compensation in the state, compared with 52.3 percent for the US. Taxes amounted to 19 percent of GDP in Delaware and averaged 22 percent for the nation. Gross operating surplus was 22.5 percent in the state and 25.6 percent in the US.

Women make up just over one-third of the industry's workforce, at 35.2 percent. Men were paid 5.9 percent more, on average. In 2001, less than one-third of the workforce, 32.7 percent, was female, and men earned 28.4 percent more than women, on average.

Employment declined by 239 jobs in 2007, leaving the sector with a workforce of 14,889. Average pay is high; at \$70,368 in 2007, it is 49.1 percent above the state's overall average.

There are three subsectors in Wholesale Trade, the more traditional *Merchant wholesalers of durable goods* and *Merchant wholesalers of nondurable goods*, and the newer *Wholesale electronic markets and agents and brokers*. Although the first two remain larger, it is *Wholesale electronic markets* which is growing, bucking the overall trend by adding 148 jobs (5.2 percent) in 2007. Total jobs in this subsector rose to 2,975 in 2007.

Most of the people in Delaware's Wholesale Trade sector work in New Castle County. There were 10,423 jobs there in 2007, 180 fewer than in 2006. The average wage there was \$76,864. Kent County had 1,566 jobs in the sector, 87 fewer than in 2006. The workers there received average pay of \$46,332 in 2007. Sussex County showed the only job growth in Wholesale Trade, adding 60 jobs to get to 1,399. Average pay there was \$45,268.

#### **Management of Companies and Enterprises**

The industry sector Management of Companies and Enterprises has no subsectors, but it consists of two different types of outfits: holding companies and corporate or regional managing offices. It generated 3.7 percent of Delaware's nonfarm earnings in 2007, and 4.8 percent of its GDP in 2006. The percentage of its GDP going towards employee compensation, 40.8 percent, was barely more than half the average for this industry across the US, which was 78.2 percent. Taxes in Delaware took 15.1 percent of this sector's GDP, compared to 1.6 percent for the nation. Gross operating surplus averaged 44.2 percent in Delaware and 20.1 percent in the US.

Men make up 53 percent of the industry's workers. They earn 44.6 percent more than women, on average. In 2001, women were the majority at 51.6 percent of the industry's workers. Men at that time were paid 59.7 percent more, on average.

Employment fell considerably in 2007, from 12,016 jobs to 11,405, a drop of 611 jobs, or 5.1 percent. The average pay of \$80,420 is 70.4 percent above the state's overall average. Almost all of the employment in this industry is located in New Castle County, where there were 11,096 jobs in 2007. Kent County had just over 100 jobs, while Sussex County was home to slightly fewer than 200.

#### **Administrative and Waste Services**

This industry sector, whose full title is Administrative and Support and Waste Management and Remediation Services, was responsible for 3.3 percent of Delaware's nonfarm earned income in 2007, and 1.8 percent of its GDP. Nearly three-quarters, 74.8 percent, of its GDP goes towards employee compensation, compared with 72.5 percent nationally. Delaware taxes take 0.8 percent of industry GDP; the average is 2.5 percent across the US. The gross operating surplus percentage was similar, at 24.5 percent of GDP in Delaware and 25 percent in the US.

Employment is 46.5 percent female and 53.5 percent male, with average earnings for men 29.3 percent higher. In 2001, women made up 47.1 percent of the workforce, while the men were paid 34.8 percent more.

Employment fell slightly in 2007, dropping by 154 jobs to a total of 23,681. The average pay in this industry is on the low side; at \$30,676, it is 35 percent below Delaware's overall average.

The *Waste management and remediation services* subsector is the smaller one by far, with 1,028 workers in 2007. It does, however, have a higher average wage, at \$44,184. The much larger *Administrative and support services* subsector includes functions such as temporary help services, telephone call centers, travel agencies, janitorial services, and landscaping. It had 22,652 workers in the state in 2007, earning an average of \$30,064.

New Castle County has the bulk of this industry's employment, with 17,383 workers in 2007, 485 fewer than in 2006. The average wage there was \$32,264 in 2007. Kent County was the only one to gain jobs, it added 49, but it remains smallest, with 2,312 jobs. Average pay there was also the lowest of the three counties, at \$27,144. Sussex County shed 86 jobs in this industry in 2007, ending with 2,655 jobs. The average wage there was \$34,972.

#### **Other Services**

The industry sector Other Services generated 2.8 percent of the state's nonfarm earned income in 2007, and 1.7 percent of its GDP in 2006. Nearly two-thirds (64.3 percent) of its GDP goes to paying its workers. This is lower than the national average of 70.5 percent. The tax take was over twice as high in Delaware, at 14.6 percent of industry GDP, versus 7.2 percent for the nation. Gross operating surplus percentages were similar, 21.1 percent in Delaware and 22.4 percent for the US.

Industry employment is majority female, with 55.2 percent of the workers being women. The average wage for men is 56.5 percent above that of women. In 2001, women made up just over half of all workers, at 50.4 percent, and men were paid 24.9 percent more.

The number of jobs grew by 142 in 2007, going from 13,299 to 13,441. Average pay is 42.9 percent below Delaware's overall average, at \$26,956 in 2007.

As the name suggests, this industry sector is made up of largely unrelated industries which don't fit in well anywhere else. It has four subsectors: Repair and maintenance, Personal and laundry services, Religious, grantmaking, civic, professional, and similar organizations, and Private households. Repair and maintenance, which includes automotive, appliance, machinery, and shoe repair services, had a total employment in the state of 3,596 jobs in 2007, down by 109 from 2006. The average pay across these varied fields was \$37,384. Personal and laundry services, which includes beauty salons, funeral homes, dry cleaners, and parking garages, had a total of 4,301 workers in 2007, up by 65 from 2006. Average pay in this subsector was \$22,564 in 2007. The subsector Religious, grantmaking, civic, professional, and similar organizations, which pretty well describes its component industries, grew by 168 jobs in 2007, to a total of 4,782. Average pay there is \$23,720. There were 762 jobs reported at Private households in 2007, up from 745 in 2006. The average pay in this subsector is \$22,856.

Most of the employment, along with the highest wages, can be found in New Castle County, where there were 9,062 jobs in this sector, paying an average of \$28,636 in 2007. Employment fell by 24 jobs from 2006 levels. Kent County was the only one with job growth, adding 151 jobs to get to 1,853. The average wage was \$22,960. Employment in Other Services fell marginally in Sussex County, where there were 2,366 jobs, 11 fewer than in 2006. The average wage there was \$22,556.

#### Accommodation and Food Services

Accommodation and Food Services generated 2.5 percent of Delaware's nonfarm earned income, and 1.7 percent of its GDP. Compensation of employees took up 70.7 percent of industry GDP, compared with 63.3 percent for the US as a whole in this industry. Taxes accounted for 6.4 percent of GDP in Delaware and 12 percent in the US, while gross operating surplus was 22.9 percent of GDP in the state and 24.7 percent in the nation.

The majority of workers in this sector are female, at 55.7 percent. Average wages for men are 39.2 percent above those of women. In 2001, women made up a slightly smaller majority, at 54.1 percent, and there was a slightly smaller gap between earnings by gender. Men were paid 35.6 percent more than women in this industry in 2001.

Accommodation and Food Services is Delaware's fifth-largest industry in terms of employment, but only its eleventh-largest in terms of personal income generation. This is due to the low average wages in the industry; at \$16,852 in 2007, the average wage is 64.3 percent below the overall state average. There were 32,602 jobs in the industry in 2007, 404 more than in 2006. This 1.3 percent annual growth rate was well above the overall employment growth rate for the state.

There are two subsectors in this industry, *Accommodation*, which includes lodging from luxury hotels through campgrounds, had 2,968 workers in 2007, an increase of 35 over 2006. They earned an average of \$19,568. *Food services and drinking places* includes fast food and full-service restaurants, as well as caterers and bars. It is about ten times as large, with 29,634 workers in 2007, up by 369 from 2006. The workers there received an average of \$16,580 in pay.

New Castle County has most of the jobs, with 19,145 in 2007, 311 more than in 2006. Average pay there is \$18,025, and jobs are up by just over 1,000 since 2004. Kent County has the fewest jobs in this industry, with 4,741, but it grew the fastest, adding 225 jobs in 2007. Average annual pay in Kent County is \$12,842. Sussex County had 8,607 jobs in 2007, but employment in this industry has stagnated there recently, dropping by 146 jobs in 2007 and down by 55 jobs since 2004. Average pay there is \$16,356.

#### **Transportation and Warehousing**

Transportation and Warehousing was responsible for 2.2 percent of Delaware's earned nonfarm income and 1.2 percent of its GDP. Three-quarters of industry GDP goes towards employee compensation, which is substantially more than the 65.2 percent nationally. Taxes take 2 percent of GDP in the state and 5.4 percent across the nation. Gross operating surplus is higher elsewhere, at 29.3 percent for the US and 22.9 percent in Delaware.

Employment in the industry is 71 percent male and 29 percent female, with the men earning an average 56.5 percent more. In 2001, there were even fewer women, 23.9 percent, and the wage gap was a little larger, at 57.6 percent.

Growth in Transportation and Warehousing employment was 1.7 percent in 2007, with the 241 jobs added bringing total employment to 14,069. The industry average wage of \$40,348 is 14.5 percent below the overall state average.

There are 11 subsectors in this industry but most of them either have very little employment

in Delaware, or are mostly government-owned. Two major subsectors, *Truck transportation* and *Warehousing*, moved in opposite directions in 2007. *Truck transportation* gained 121 jobs, a solid 4.2 percent. There were 2,991 jobs based throughout the state in this subsector, paying an average wage of \$40,348. *Warehousing* lost 194 jobs, a decline of 7.8 percent. There were 2,281 jobs at an average wage of \$38,744 in this subsector in 2007.

Job growth in Transportation and Warehousing in 2007 was concentrated in New Castle and Sussex Counties, with Kent County losing jobs. There were 9,145 jobs in this sector in New Castle County, up 205 from 2006, but still down by about 250 jobs from 2004. Average wages here were \$43,604. Kent County saw 177 jobs lost, leaving 2,523 jobs at an average wage of \$34,588. Sussex County added 209 jobs, a substantial 9.1 percent gain. This sector has grown by 433 jobs here since 2004. There were a total of 2,288 jobs in 2007 at an average wage of \$33,744.

#### Information

The industry sector Information, which includes newspaper publishing, cable television, and data processing, generated 1.9 percent of Delaware's nonfarm earned income in 2007, and 1.8 percent of its GDP. It is a fairly capitalintensive industry, with employee compensation claiming 41.6 percent of industry GDP, a little less than the 43.2 percent national average. Taxes took 3.2 percent of GDP in Delaware and 7.6 percent in the US, while gross operating surplus was 55.1 percent in the state and 49.1 percent in the nation.

Workers in Information are 57.1 percent male, 42.9 percent female, with the men enjoying 25.6 percent higher average earnings. In 2001, industry employment was 54.6 percent male, and the average wage for men was 32.1 percent higher than that of women. There were 7,119 jobs in the industry in 2007, 206 more than in 2006, a 3 percent increase. The average wage was \$55,144, 16.8 percent above Delaware's overall average. The subsector *Internet service providers and data processing*, where the average pay is much higher at \$77,532, lost 75 jobs in 2007. Employment there stands at 1,707 workers.

There were employment gains in Information in all three counties in 2007. New Castle County added 124 jobs to bring total industry jobs there to 5,616. However, this number is still lower by nearly 300 than the 2004 total. Average wages in the Information sector there were \$56,840 in 2007. Kent County increased its job total to 919 by adding 41 jobs. Average wages there are \$50,288. Sussex County had the largest percentage gain, adding 32 jobs for a total of 515. Average pay is lower there, at \$40,132.

#### **Real Estate and Rental and Leasing**

This industry sector generates 1.8 percent of Delaware's nonfarm earned income, and 11.8 percent of its GDP. How an industry ranks 14th out of 20 in income and  $2^{nd}$  in GDP merits some explanation. Much of this industry's output value (GDP) comes from the imputed rental value of residential homes. An owner-occupied home which could be rented for \$2,000 per month generates that much in housing value, which is counted as GDP in the Real Estate and Rental and Leasing industry sector. No income is actually generated, so GDP far exceeds income. The national average for this sector is 2.5 percent of all nonfarm earnings and 12.8 percent of GDP, so Delaware is not far from the US average here. The very high capital content of output means that employee compensation is a very low percentage of GDP: 4.5 percent in Delaware and 6.5 percent in the US. Taxes, which include residential property taxes, are 8.2 percent in Delaware and 13.9 percent in the nation. Gross operating surplus comes to 87.3 percent of GDP in the State and 79.6 percent in the US.

Industry employment is majority male, 56.6 percent, to 43.4 percent female. Average wages are 36.4 percent higher for men. In 2001, 44.5 percent of the workers were women and 56.5 percent men, and the men were paid 40.2 percent more, on average.

This industry includes residential and nonresidential building sales and leasing. It also includes car rental, consumer goods rental, and equipment rental. Total employment in Delaware was 6,787 in 2007, an increase of 171 jobs over 2006. The average wage was \$39,948 in 2007. The subsector *Real estate* accounted for 5,013 of the total jobs and 125 of the 2007 annual job gain.

All of the employment gains in this industry were in New Castle County, as the southern two counties largely cancelled each other. New Castle County added 177 jobs to bring the total there to 4,051. Average pay was \$43,760. Kent County's job total was 656 in 2007, 33 above the 2006 level. Average pay is the lowest of the three counties at \$32,100. The industry in Sussex had 1,783 jobs in 2007, a decline of 37 from the previous year. Average pay there is \$34,776.

#### Agriculture

From an economic statistics standpoint, Agriculture is unique. The US Bureau of Labor Statistics establishment employment programs specifically exclude most agricultural employment. The state Unemployment Insurance (UI) records, from which the Delaware industry employment figures in this report are derived, also exclude most agricultural employment. The Bureau of Economic Analysis national income product accounts, the source of GDP and personal income data in this report, while including farm output, count it separately from other industries. If we add Delaware farm income to income from the forestry, fishing, and agricultural support sector (as is commonly done), the combined income represents 1.1 percent of the total earned income in the state. This would

place Agriculture 16<sup>th</sup> out of the 20 industry sectors. Delaware farm GDP was \$430 million in 2006, 0.7 percent of the state's \$59.6 billion total GDP. For the nation as a whole, farm income was also 0.7 percent of national GDP. Employee compensation took up only 8.6 percent of farm GDP in the state, versus 23.7 percent nationally; presumably, income accruing to farm owners is a higher percentage in Delaware. Net taxes were a negative \$55 million in the state, as subsidies of \$61 million far outweighed tax revenue. These subsidies amounted to 12.8 percent of state farm GDP, lower than the 14.3 percent national average. Due to the subsidies, gross operating surplus amounted to 104 percent of GDP in the state; they were 83.6 percent of national farm GDP.

Employment in the portions of Agriculture covered by the state UI program amounted to only 1,307 jobs in 2007. For a better estimate of total sector employment, we must turn to other sources. The monthly survey used to help calculate national and state unemployment rates includes an estimate of total agricultural employment. Due to the small sample size in Delaware (approximately 900 households), monthly and even annual estimates contain considerable statistical variability. A three-year average is more reliable. For the years 2005-2007, the CPS estimate was 4,196 agricultural workers. This is corroborated by the American Community Survey, a separate survey conducted by the Census Bureau also, which finds 4,134 agricultural workers in the state in 2006. Employment in Agriculture is a little less than one percent of state total employment.

#### Arts, Entertainment, and Recreation

The Arts, Entertainment, and Recreation industry sector generated 1.0 percent of Delaware's nonfarm earned income in 2007 and 0.6 percent of its GDP. Over two-thirds, 68.5 percent, of its GDP went to employee compensation, more than the 59.3 percent national average for this industry. Taxes were much lower in Delaware, at 1.7 percent of GDP versus 10.5 percent for the US. Gross operating surplus rates were similar, 29.9 percent in the state and 30.3 percent in the nation.

Employment is just over half female, at 50.8 percent. Average wages for men are 42.4 percent above those of women. In 2001, women made up 46.5 percent of the workers and men were paid 52.6 percent more, on average.

There were substantial job losses in this sector in 2007, as employment fell by 633 jobs (7.1 percent) to a level of 8,266. Average pay is low; at \$23,892, it is 49.4 percent below the overall state average. There are three subsectors in the industry: *Performing arts, spectator sports, and related industries, Museums, historical sites, and similar institutions*, and *Amusement, gambling, and recreation industries*. This third subsector has over 80 percent of the overall industry's employment in Delaware.

Most of the job losses came in Kent County, where employment fell by 547 jobs (19.5 percent). The remaining 2,265 jobs there pay an average annual wage of \$24,032. The number of jobs fell in New Castle County, also, but not as precipitously. The 5,070 jobs there were 139 fewer than in 2006. Average pay in New Castle County is \$24,476. There were 46 jobs gained in Sussex County, but the total number remains lower than in the other two counties, at 913. Average pay there was \$20,484 in 2007.

#### **Educational Services**

Educational Services generated 1.0 percent of Delaware's nonfarm earned income in 2007 and 0.5 percent of its GDP. It is important to note that this is for private firms only; public schools and universities are not included in the industry income and GDP data (they are included under Government), but the employment data below do include public as well as private institutions. Employee compensation takes up 87.8 percent of industry GDP in the state and 88.7 percent in the nation. Taxes are a similar 1.1 percent in Delaware and 1.2 percent in the US, while gross operating surplus is a little higher in Delaware, 11.5 percent to the US' 10.1 percent.

Two-thirds (67 percent) of the employees in the industry (including public sector employees) are women, but average wages for men are 21.8 percent higher than those of women. In 2001, 70 percent of the jobs were held by women and average earnings for men were 14.6 percent above those of women.

Most of the employment in Educational Services is at local government institutions, mostly public elementary and secondary schools. They employed 17,320 workers in 2007, at an average wage of \$46,516. State government schools, which include charter schools, community colleges and public universities, had 9,693 employees at an average wage of \$52,936. Private institutions employed 4,400 workers; the average at these schools was \$36,192. Overall, the number of jobs in this sector rose by 195 (0.6 percent), to a total of 31,413 in 2007.

All of the job growth in 2007 came in Sussex County, where 287 jobs were added, bringing the total there to 4,818. Average wages were \$40,440. Kent County employment was essentially flat, dropping by 3 jobs to 6,011. Average wages were a little lower there, at \$39,772. New Castle County had 20,568 Educational Service jobs in 2007, 94 fewer than in 2006. The average wage there was \$50,740.

#### Utilities

The Utilities sector, which includes power generation and distribution, along with water supply and waste treatment, contributed 0.9 percent of Delaware's nonfarm earnings, and 1.8 percent of its GDP. Compensation of employees took up 23.7 percent of industry GDP, compared with 22.2 percent nationally. Taxes were 8 percent of GDP in Delaware and 16.6 percent in the US, while gross operating surplus was 68.2 percent in the state and 61.2 percent in the nation. Employment in Utilities is mostly male, at 77.1 percent, with men earning average wages 32.2 percent above those of women. In 2001, 76.9 percent of the jobs were held by men and they were paid 40.9 percent more than women, on average.

Employment declined by 48 jobs in 2007, for a statewide total of 2,135. Average wages were the highest of any industry sector in the state. At \$83,500, the average wage was 76.9 percent above the overall state average.

All of the job losses occurred in New Castle County; the southern two counties gained employment. Employment declined by 76 positions in New Castle County, leaving 1,550 Utilities jobs. There was a gain of 18 jobs in Kent County, bringing the total number of jobs in the industry there to 201. Sussex County had 383 positions filled in 2007, 9 more than in 2006.

#### Mining

Mining is the smallest industry sector in Delaware, with fewer than 100 workers. It is so small, that there is little data that can be provided without violating confidentiality rules. Both GDP and earned income for the industry amounted to less than 0.1 percent of their respective state totals.