

# Lancaster County Base Labor Market Analysis



South Carolina  
Department of  
Commerce  
Labor Market Information



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## EXECUTIVE SUMMARY

### Population

*Lancaster County's population has grown faster than the state's in recent years.*

Future growth is expected to be slightly slower than the state's.

*Over 60% of Lancaster County's workers live within the county.*

### Income

*Per capita income growth has been slower than the state and the nation.*

Lancaster County's per capita income remains below the state level.

Average wages in Lancaster County are higher than the state average in the following occupational groups: business and financial operations, computer and mathematical science, sales and related, and office and administrative support.

### Education

*The number of degrees awarded by area post-secondary institutions has increased substantially.*

The greatest increase has been in the business field.

### Occupations

*Most major occupational groups are expected to grow faster in Lancaster County than in the state.*

*Requirements for Lancaster County's workers are expected to grow in the following levels of education and experience:*

Work experience in a related field, associate's degree and bachelor's degree.

### Industry

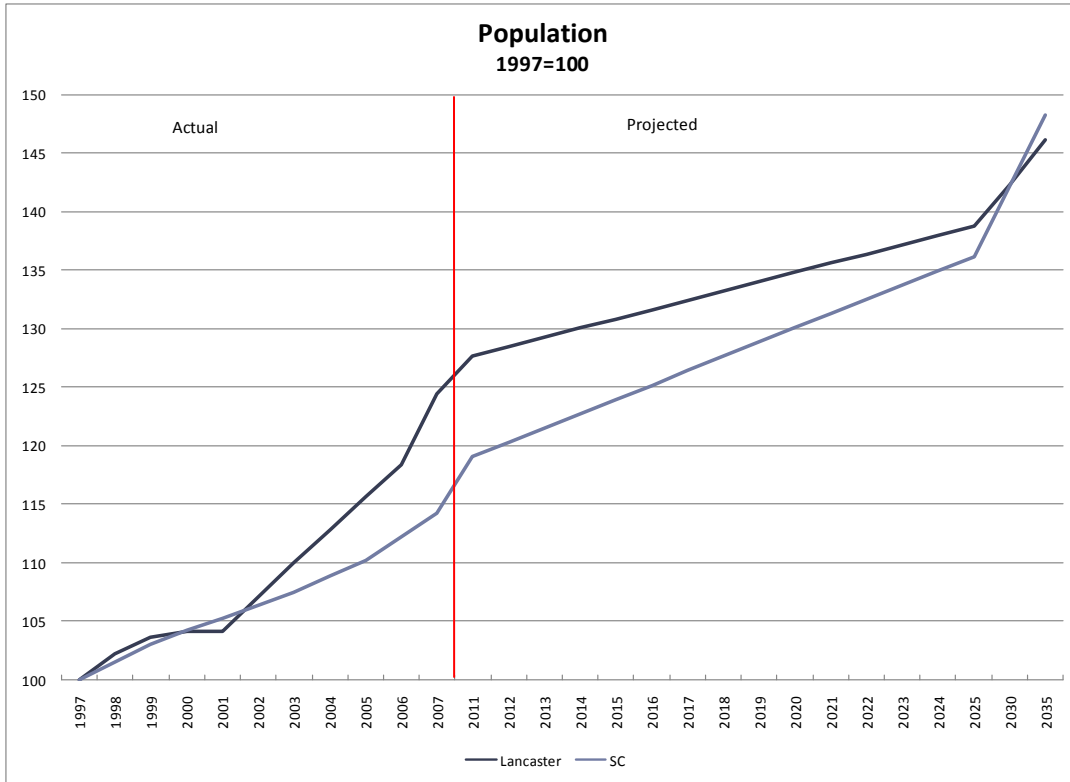
*Sectors rated as having high potential in Lancaster County are as follows:*

Nonmetallic mineral product manufacturing, fabricated metal product manufacturing, construction of buildings, miscellaneous manufacturing, and merchant wholesalers, durable goods.

# POPULATION

## Growth

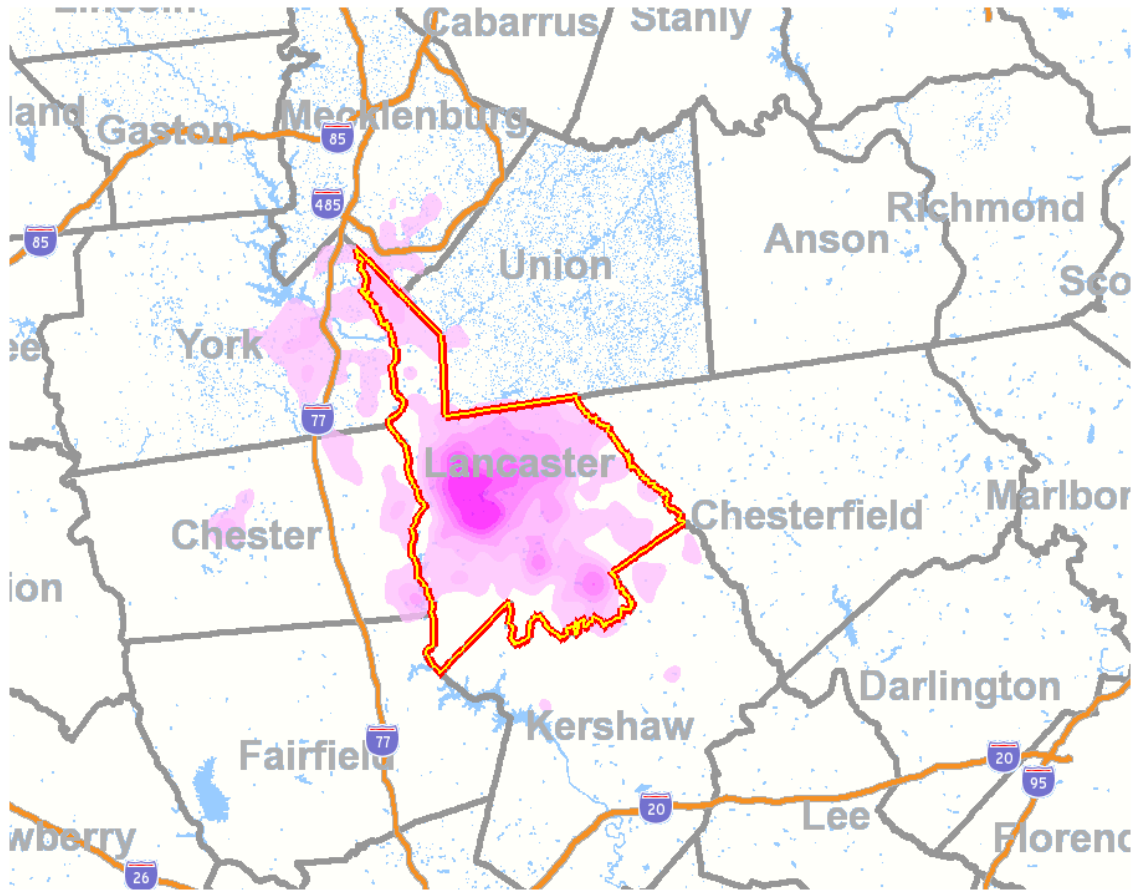
Lancaster County's 2007 population was 73,393. The county population has grown by 24.5% since 1997, compared to 14.2% growth for South Carolina. Lancaster's future population growth is expected to be a bit slower than the state's.



Source: U.S. Census Bureau (estimates) and SC Budget & Control Board/Office of Research and Statistics (projections).

## LABORSHED

The map below shows where Lancaster County workers come from (in 2006, latest available data). Over 60% of Lancaster County's workers live within the county.



Source: U.S. Census Bureau, Local Employment Dynamics.

### Characteristics of Workers

#### Age of Workers:

30 or younger	22.0%
31 to 54	59.4%
55 or older	18.6%

#### Earnings of Workers:

\$1,200 per month or less	25.0%
\$1,201 to \$3,400 per month	49.7%
More than \$3,400 per month	25.2%

**States Where Workers Live:**

South Carolina	92.5%
North Carolina	7.2%
All other locations	0.3%

**Counties Where Workers Live:**

Lancaster, South Carolina	62.5%
York, South Carolina	7.9%
Chester, South Carolina	5.4%
Mecklenburg, North Carolina	4.1%
Kershaw, South Carolina	2.8%
Union, North Carolina	2.0%
Spartanburg, South Carolina	2.0%
Richland, South Carolina	1.9%
Chesterfield, South Carolina	1.0%
Lexington, South Carolina	1.0%
All Other Locations	9.6%

**Cities Where Workers Live:**

Lancaster, South Carolina	8.0%
Elgin, South Carolina	3.5%
Charlotte, North Carolina	3.5%
Rock Hill, South Carolina	2.6%
Springdale, South Carolina	2.5%
Kershaw, South Carolina	1.5%
Lancaster Mill, South Carolina	1.4%
Irwin, South Carolina	1.3%
Heath Springs, South Carolina	1.0%
Great Falls, South Carolina	0.7%
All Other Locations	74.1%

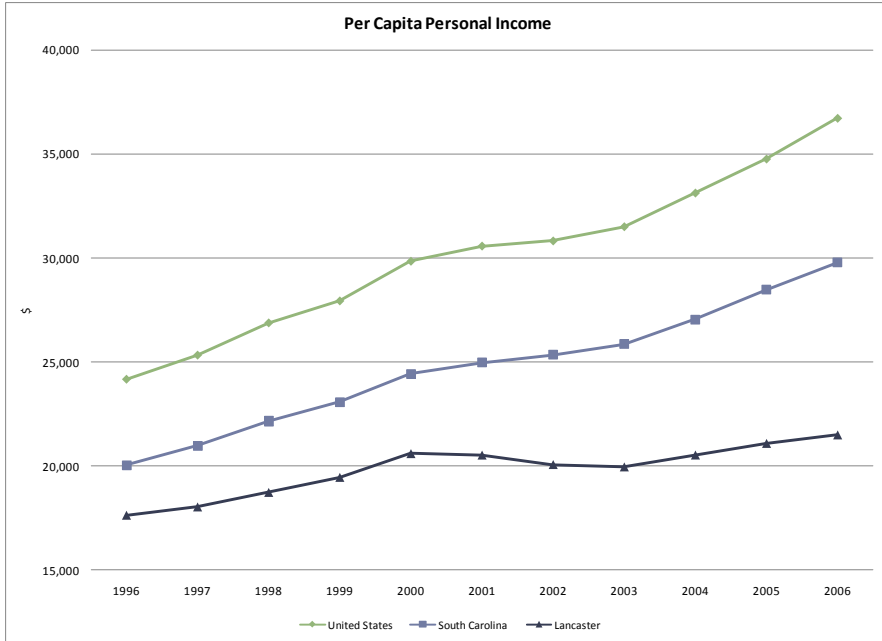
*Source: U.S. Census Bureau, Local Employment Dynamics.*



# INCOME

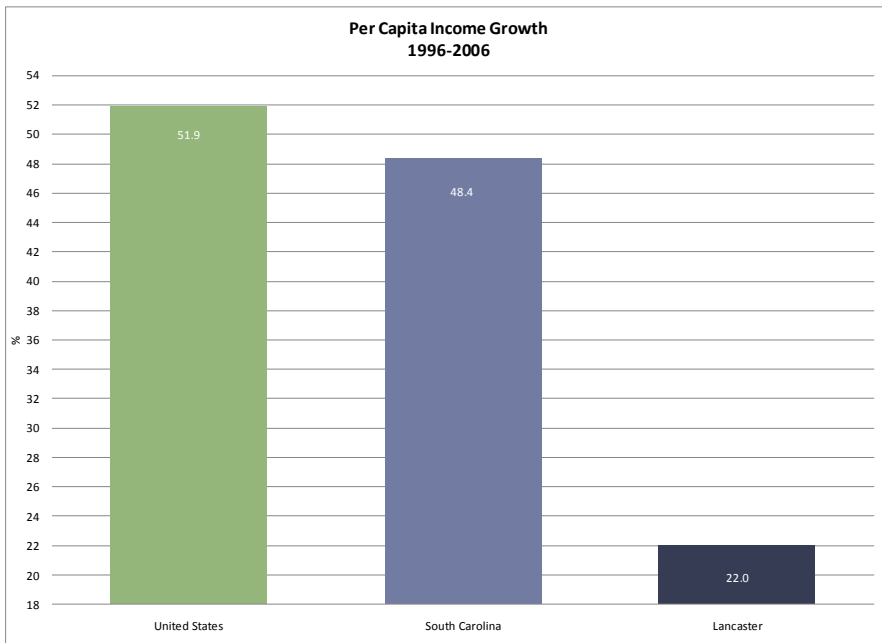
## Per Capita Income

Lancaster County's per capita income has fallen farther below the state and national levels.



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

Lancaster County's per capita income has grown much slower than South Carolina's and the nation's. This is due to above-average population growth coupled with below-average income growth.



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

## Wages by Industry

Lancaster County's average wages are below those of South Carolina (\$664 vs. \$680 in 2007). Average wages were up 22% in Lancaster County over the past five years, compared to 18% for the state. All major sectors except arts, entertainment and recreation had growth, led by waste management.

Industry	NAICS Code	2007 Average Weekly Wage (\$)	2002 Average Weekly Wage (\$)	% Change
Total, Private and Government		664	543	22
Construction	23	572	478	20
Manufacturing	31-33	855	728	17
Retail Trade	44-45	419	341	23
Transportation and Warehousing	48-49	NA	NA	
Information	51	853	700	22
Finance and Insurance	52	1,232	655	88
Real Estate and Rental and Leasing	53	573	508	13
Administration & Support & Waste Management & Remediation Services	56	672	275	144
Arts, Entertainment, and Recreation	71	438	443	-1
Accommodation and Food Services	72	221	194	14
Other Services (Except Public Administration)	81	404	367	10
Federal Government		881	705	25
State Government		632	624	1
Local Government		611	479	28

Source: U.S. Department of Labor, Bureau of Labor Statistics, Quarterly Census of Employment and Wages.

## Wages by Occupation

Average wages in Lancaster County are higher than the state average in the following occupational groups:

- Business and financial operations
- Computer and mathematical science
- Sales and related
- Office and administrative support

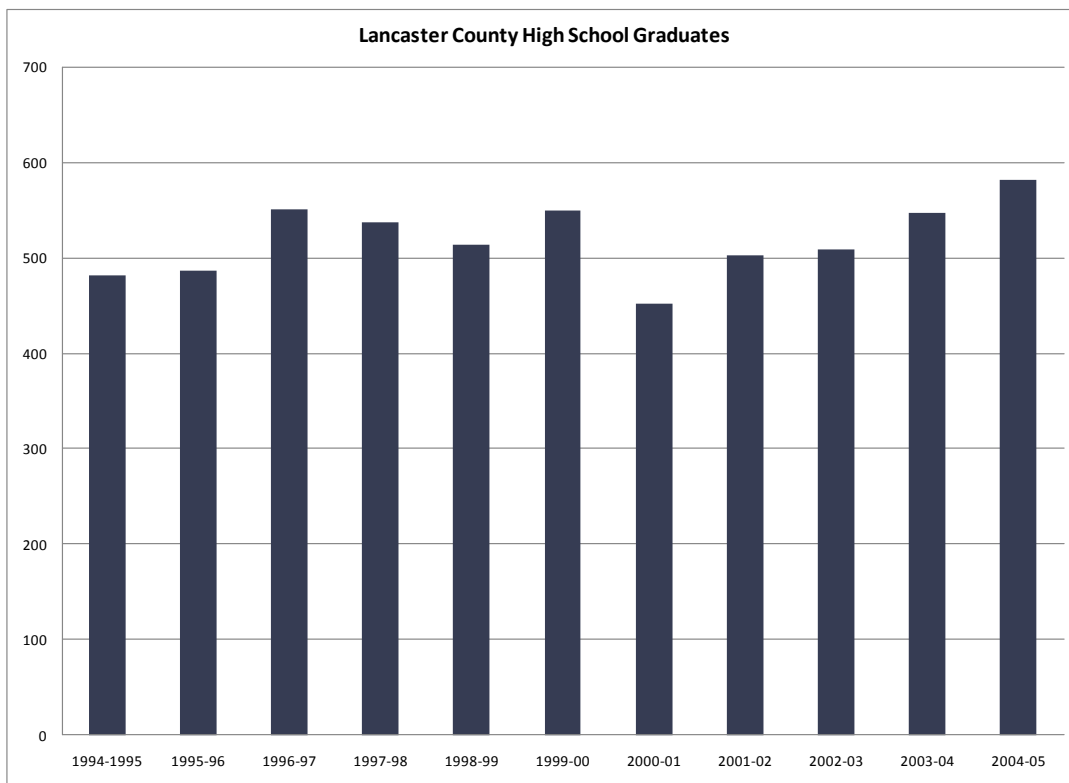
Occupation	2007 Lancaster County Median Hourly Wage (\$)	2007 SC Median Hourly Wage (\$)
Management occupations	23.90	28.78
Business and financial operations occupations	23.66	20.28
Computer and mathematical science occupations	31.73	26.20
Architecture and engineering occupations	21.29	30.22
Life, physical and social science occupations	19.29	22.76
Community and social services occupations	12.07	13.18
Legal occupations	20.84	30.68
Education, training and library occupations	19.23	24.42
Arts, design, entertainment, sports and media occupations	11.24	12.66
Healthcare practitioners and technical occupations	29.57	30.64
Healthcare support occupations	9.69	10.55
Protective service occupations	12.95	13.87
Food preparation and serving related occupations	7.74	7.90
Building and grounds cleaning and maintenance occupations	7.52	8.42
Personal care and service occupations	7.30	8.39
Sales and related occupations	14.11	13.48
Office and administrative support occupations	13.58	13.22
Farming, fishing, and forestry occupations	11.86	13.07
Construction and extraction occupations	14.06	16.51
Installation, maintenance and repair occupations	13.53	16.88
Production occupations	14.67	15.21
Transportation and material moving occupations	11.39	12.94

Source: *Economic Modeling Specialists, Inc.*

## EDUCATION

### High School Graduates

From 1995 to 2005 (latest data available), the number of Lancaster County students receiving high school diplomas rose by 101 (21%). In South Carolina, the number of high school diplomas increased 9% from 1995 to 2005. A total of 583 people received high school diplomas in Lancaster County in 2005. Lancaster County had 163 more 12<sup>th</sup> grade students in 2004-05 than in 1994-95. The number of Lancaster County students not passing the exit exam who received a certificate of completion instead of a diploma increased by 48 (to 55) over the 1995-2005 period.



Source: National Center for Education Statistics.

## Higher Education Graduates

Over 4,000 more students graduated from higher educational institutions in the Catawba area in 2006 than in 1996, an increase of 52%. The greatest numerical increase was in the business and related field.

Program	1996	2006	Change	% Change
Agriculture, agriculture operations & related sciences	11	16	5	45
Architecture and related services	73	81	8	11
Area, ethnic, cultural & gender studies	3	43	40	1,333
Biological & biomedical sciences	242	283	41	17
Business, management, marketing & related support services	1,734	2,608	874	50
Communication, journalism & related programs	103	395	292	283
Communications technologies/technicians & support services	4	13	9	225
Computer & information sciences & support services	159	373	214	135
Construction trades	25	29	4	16
Education	806	1,237	431	53
Engineering technologies/technicians	237	217	-20	-8
Engineering	239	293	54	23
English language & literature/letters	301	311	10	3
Family & consumer sciences/human sciences	35	105	70	200
Foreign languages, literatures & linguistics	82	130	48	59
Health professions & related clinical sciences	778	1,301	523	67
Legal professions & studies	65	103	38	58
Liberal arts & sciences, general studies & humanities	567	933	366	65
Mathematics & statistics	81	62	-19	-23
Mechanic & repair technologies/technicians	48	196	148	308
Multi/interdisciplinary studies	32	49	17	53
Parks, recreation, leisure & fitness studies	40	125	85	213
Personal & culinary services	47	486	439	934
Philosophy & religious studies	44	93	49	111
Physical sciences	112	102	-10	-9
Precision production	109	104	-5	-5
Psychology	342	436	94	27
Public administration & social service professions	191	161	-30	-16
Security & protective services	339	290	-49	-14
Social sciences & history	766	833	67	9
Theology & religious vocations	13	33	20	154
Visual & performing arts	240	484	244	102
<b>TOTAL</b>	<b>7,868</b>	<b>11,925</b>	<b>4,057</b>	<b>52</b>

Source: National Center for Education Statistics (Integrated Post Secondary Education System).

Data for these schools: Belmont Abbey College (NC), Brookstone College (NC), Central Piedmont Community College (NC), Davidson College (NC), DeVry University-North Carolina, Gardner-Webb University (NC), Gaston College (NC), ITT Technical Institute-Charlotte, Johnson & Wales University-Charlotte, Johnson C Smith University (NC), Mercy School of Nursing (NC), Northeastern Technical College, Queens University of Charlotte, The Art Institute of Charlotte, University of North Carolina at Charlotte, University of Phoenix-Charlotte Campus, University of South Carolina-Lancaster, University of South Carolina-Union, Wingate University (NC) and Winthrop University.

## OCCUPATIONS

### Occupational Projections

Most occupational groups are projected to grow faster in Lancaster County than in the state.

See **Appendix A** for detailed occupational information.

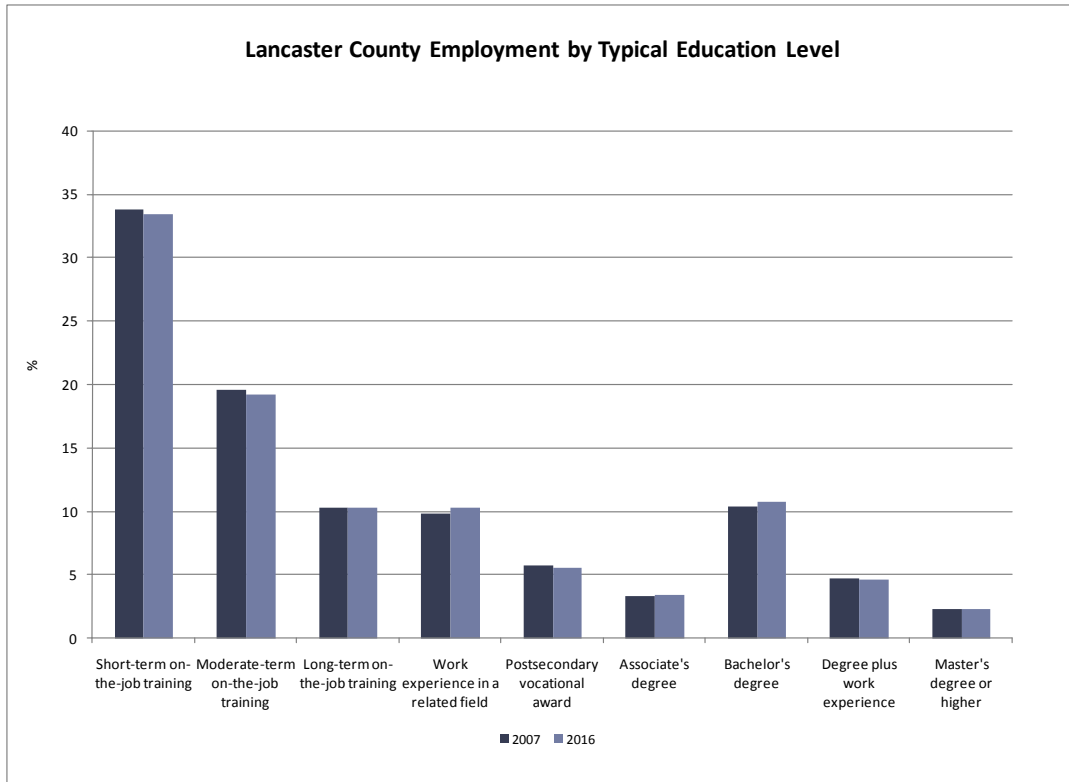
Occupation	2007-2016 Lancaster County Projected Growth (%)	2007-2016 SC Projected Growth (%)
Management occupations	19	17
Business and financial operations occupations	28	22
Computer and mathematical science occupations	25	23
Architecture and engineering occupations	31	15
Life, physical and social science occupations	18	15
Community and social services occupations	13	15
Legal occupations	33	21
Education, training and library occupations	16	16
Arts, design, entertainment, sports and media occupations	22	17
Healthcare practitioners and technical occupations	20	24
Healthcare support occupations	17	25
Protective service occupations	45	18
Food preparation and serving related occupations	9	13
Building and grounds cleaning and maintenance occupations	32	23
Personal care and service occupations	3	7
Sales and related occupations	21	19
Office and administrative support occupations	18	13
Farming, fishing and forestry occupations	22	16
Construction and extraction occupations	23	19
Installation, maintenance and repair occupations	23	17
Production occupations	14	10
Transportation and material moving occupations	18	11

Source: *Economic Modeling Specialists, Inc.*

## Occupational Education Requirements

The trend for occupational growth shows that there will be growth in jobs across skill levels. However, based on employment projections, more of Lancaster County's job growth will be in these categories of education and experience:

- Work experience in a related field
- Associate's degree
- Bachelor's degree



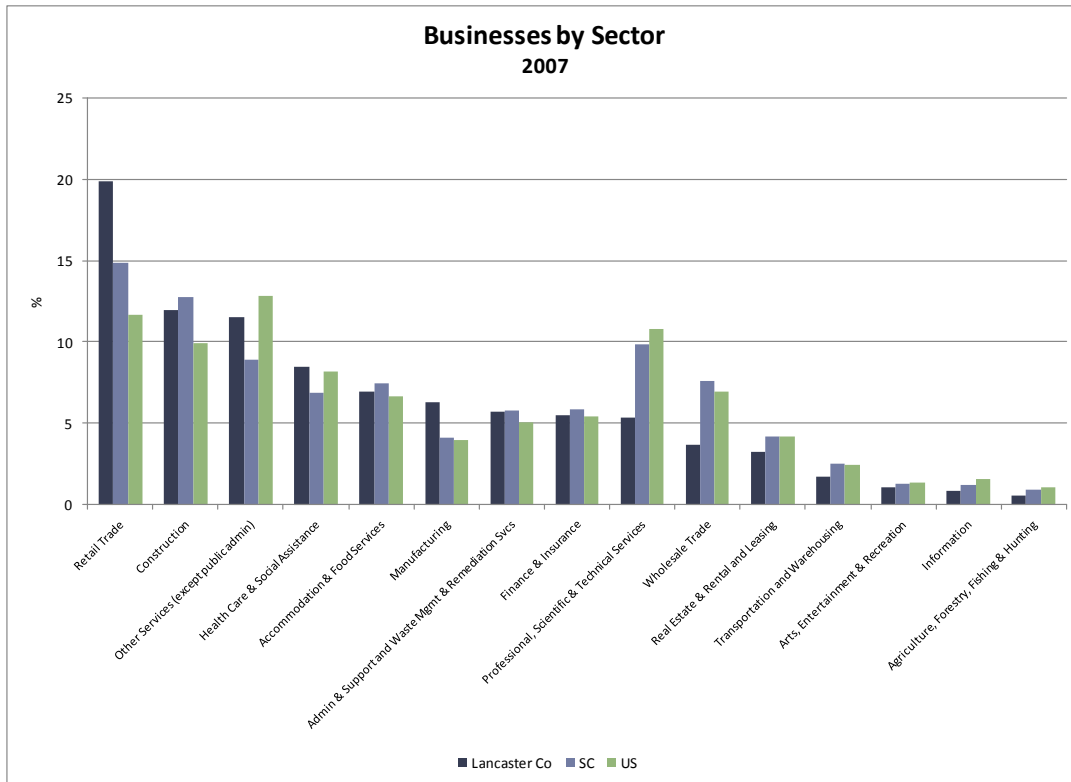
Source: Economic Modeling Specialists, Inc

## INDUSTRY

### Businesses by Sector

Lancaster County had higher percentages of businesses than South Carolina or the nation in the following sectors:

- Retail trade
- Health care & social assistance
- Manufacturing



Source: U.S. Department of Labor, Bureau of Labor Statistics.



## Growth in Number of Businesses

The number of private businesses in Lancaster County fell by 10% from 2002 to 2007, compared to a 2% drop for the state. For industry definitions, this analysis uses the North American Industry Classification System (NAICS), the U.S. standard for industry classification.

At the three-digit NAICS code level, Lancaster County had higher growth in seven industries compared to South Carolina and the U.S. Below is a list of those seven industries along with their respective growth rates.

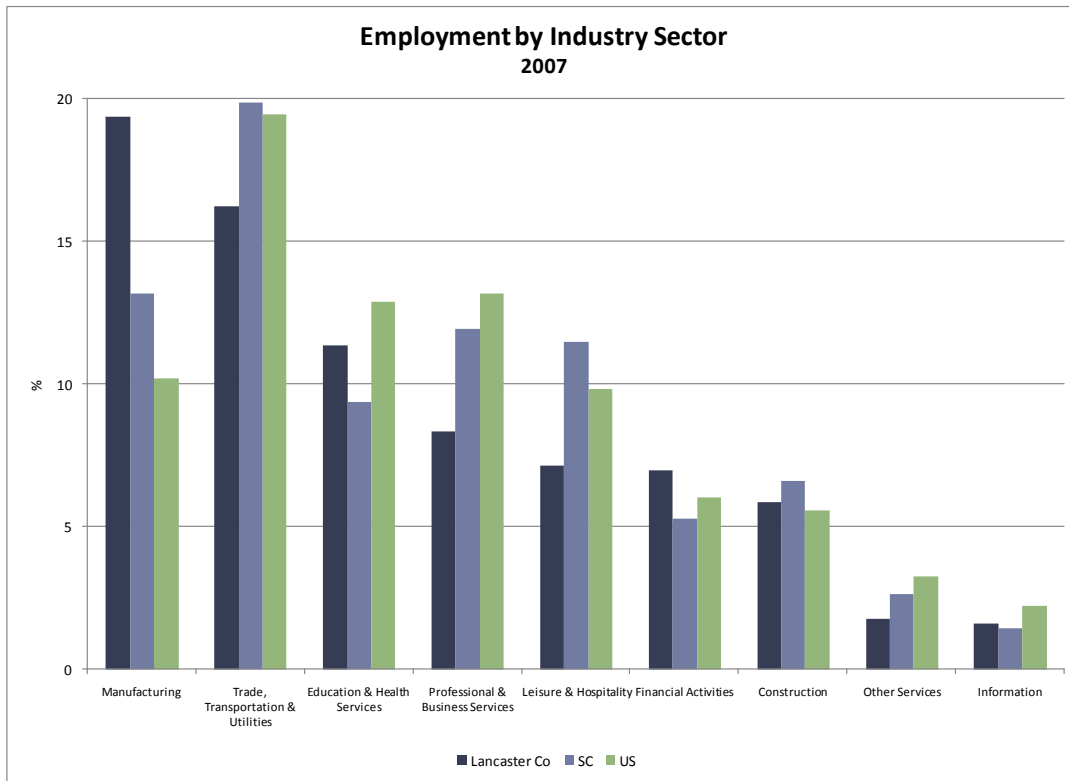
See **Appendix B** for information on all industries.

Industry	2002-2007 Growth (%)		
	Lancaster Co.	SC	US
Nonmetallic mineral product manufacturing	25.0	4.0	3.0
Furniture & home furnishings stores	11.1	-11.3	3.8
Electronics & appliance stores	7.1	-16.7	-4.7
Truck transportation	7.7	-5.1	5.4
Educational services	133.3	14.1	23.7
Accommodation	50.0	-3.4	3.5
Private households	119.0	4.6	24.9

Source: U.S. Department of Labor, Bureau of Labor Statistics.

## Employment by Sector

Compared to the state and nation, Lancaster County has a higher share of jobs in manufacturing and financial activities.



Source: U.S. Department of Labor, Bureau of Labor Statistics.

# Industry Analysis

## Screening Criteria

Industry sectors were rated on six factors:

- 2002-2007 employment growth Competitive effect<sup>1</sup>
- 2002-2007 employment growth rate Average annual wage
- Location quotient<sup>2</sup> Projected growth

Using those factors, sectors were awarded “stars” based on meeting the following criteria:

- 2002-2007 employment growth of 50 or more (Did the sector add a significant number of jobs?)
- 2002-2007 employment growth rate greater than 0 (since the county lost jobs over the period) (Did the sector add jobs?)
- Location quotient of at least 1.25 (Does the sector have a significant concentration in the county?)
- Competitive effect greater than 0 (Did the sector add jobs beyond national growth overall and in the sector?)
- Average annual wage greater than \$34,547 (2007 average for the county) (Does the sector pay wages greater than average for the county?)
- Average or above average projected growth (Is the sector expected to add jobs?)

## Industries of Note

Based on these criteria, these are “six star” sectors in Lancaster County:

- Nonmetallic mineral product manufacturing
- Fabricated metal product manufacturing

Industry sectors that generate wealth from outside the area are referred to as the region’s base economy. Base economy sectors are important to an area’s economic well-being. Both the above sectors are generally considered to be base economy sectors.

The following are “five star” sectors in Lancaster County:

- Construction of buildings (with only below average wages)
- Miscellaneous manufacturing (below average projected growth)
- Merchant wholesalers, durable goods (low location quotient)
- Building material and garden equipment and supplies dealers (below average wages)
- Health and personal care stores (below average wages)
- General merchandise stores (below average wages)

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<sup>1</sup> *Competitive Effect: based on shift-share analysis; represents the change in employment in the sector in the county after accounting for overall US employment growth and growth/decline in the sector in the US.*

<sup>2</sup> *Location Quotient: percentage of employment in the sector in the county divided by the percentage of employment in that sector in the US; gives an indication of how concentrated employment in the sector is in the county compared to the US; based on 2007 data.*

- Credit intermediation and related activities (below average projected growth)
- Ambulatory health care services (low location quotient)

Building construction, manufacturing and wholesaling are generally base economy sectors. Health care can be a base economy sector to the extent the area serves as a regional center for health care services.

*Appendix C has information on all factors for all sectors for Lancaster County.*

## MOVING FORWARD

The South Carolina Department of Commerce appreciates the opportunity to provide this base analysis of Lancaster County's labor market. We hope that it will help in advancing the progress of Lancaster County's economic development.

### What's been done so far?

This analysis identifies the region's assets—both current and future—at a macro level. Labor Market Information (LMI) at the S.C. Department of Commerce developed a Base Labor Analysis report providing an overview of the region's population, industries, occupations, and educational assets. Additionally, these findings were benchmarked against the state and the nation.

### What's next?

Because local knowledge is required to interpret and apply the findings appropriately, the Lancaster Base Labor Analysis should be used with local stakeholders to identify and define key, targeted industry clusters. Some items to consider when defining these clusters may include the following.

#### 1. *What is Lancaster's economic base?*

In order for an economy to grow, it must have a base (export) sector that generates wealth from beyond its borders. Industries in the economic base (manufacturing, scientific and technology services, warehouse and distribution, financial services, regional healthcare, etc.) typically provide occupations with higher pay and benefits as well as better human capital development and promotion opportunities. A successful economic base stimulates the development of the non-base sector (housing, schools, retail, restaurants, personal services, etc.). It also propels the local tax base which, in turn, provides support to community services.

#### 2. *What are strategies to assist low-wage citizens in non-base economy jobs?*

Although the economic base is the driver for long-term growth in a region, implementable strategies for developing job opportunities for low-skilled individuals is a priority for community economic well-being. This need must also be kept in mind when defining target industry clusters.

#### 3. *What other factors are vital to Lancaster and its community?*

Over and above pure economic considerations, what is important to the citizens of the Lancaster community? How does Lancaster want to be perceived? What quality of life issues affect Lancaster? These questions may impact the types of industries desired for the area.

## How Labor Market Information at the S.C. Department of Commerce can help.

Once local stakeholders have identified key industry clusters vital to the future economic development of the region, LMI can provide more in-depth analysis of each of these industries, their occupations, business establishments, and educational requirements.

### 1. Detailed Industry Analysis

For each identified industry, LMI can develop a detailed analysis of each sector, including employment, projected growth, staffing patterns, location quotients, and employers. Additionally, the analysis will examine the largest, fastest growing, and declining sectors within the industry cluster.

### 2. Detailed Occupational Analysis

At this point, the occupations—classified by SOC codes—that make up each of the identified industry clusters can be analyzed in detail. This analysis will include employment, average earnings, educational requirements, projected growth, and completers from available local training programs. It will culminate in identifying gaps between the number of occupations required to sustain and advance industry growth and the number of skilled workers (as identified by educational requirements and program completers) available to fulfill these positions.

### 3. Identification of Implementable Recommendations

LMI will utilize the findings of the analyses to develop a set of implementable recommendations. These may include recommendations to align community college programs with economic development goals along with others. Finally, local knowledge will once again be called upon to review the findings and develop an action plan for the implementation of feasible solutions.

## Appendix A: Occupational Projections for Lancaster County

SOC Code	Description	2007 Jobs	2016 Jobs	Change	% Change	2007 National LQ	2007 Median Hourly Earnings (\$)	Typical Education & Experience Level
11-2021	Marketing managers	18	25	7	39	0.62	30.23	Degree plus work experience
11-2022	Sales managers	30	39	9	30	0.60	35.13	Degree plus work experience
11-3011	Administrative services managers	20	24	4	20	0.59	28.71	Degree plus work experience
11-3021	Computer and information systems managers	21	27	6	29	0.54	40.64	Degree plus work experience
11-3031	Financial managers	90	121	31	34	0.95	49.54	Degree plus work experience
11-3051	Industrial production managers	32	40	8	25	1.46	38.57	Work experience in a related field
11-3071	Transportation, storage, and distribution managers	10	14	4	40	--	--	Work experience in a related field
11-9011	Farm, ranch, and other agricultural managers	105	107	2	2	2.15	5.85	Degree plus work experience
11-9012	Farmers and ranchers	525	534	9	2	2.19	5.85	Long-term on-the-job training
11-9021	Construction managers	131	173	42	32	1.26	16.42	Bachelor's degree

SOC Code	Description	2007 Jobs	2016 Jobs	Change	% Change	2007 National LQ	2007 Median Hourly Earnings (\$)	Typical Education & Experience Level
11-9032	Education administrators, elementary and secondary school	43	48	5	12	1.01	41.01	Degree plus work experience
11-9033	Education administrators, postsecondary	14	16	2	14	0.52	24.55	Degree plus work experience
11-9041	Engineering managers	25	33	8	32	0.95	34.19	Degree plus work experience
11-9051	Food service managers	111	177	66	59	1.76	8.45	Work experience in a related field
11-9111	Medical and health services managers	55	67	12	22	1.30	30.04	Degree plus work experience
11-9141	Property, real estate, and community association managers	110	157	47	43	0.68	12.08	Bachelor's degree
11-9199	Managers, all other	212	266	54	25	0.95	46.74	Work experience in a related field
11-1011	Chief executives	172	214	42	24	1.10	39.20	Degree plus work experience
11-1021	General and operations managers	287	325	38	13	1.11	36.32	Degree plus work experience
11-1031	Legislators	42	45	3	7	4.78	8.31	Degree plus work experience
13-1022	Wholesale and retail buyers, except farm products	16	19	3	19	0.67	26.05	Work experience in a related field



SOC Code	Description	2007 Jobs	2016 Jobs	Change	% Change	2007 National LQ	2007 Median Hourly Earnings (\$)	Typical Education & Experience Level
13-1023	Purchasing agents, except wholesale, retail, and farm products	32	41	9	28	0.77	21.77	Work experience in a related field
13-1031	Claims adjusters, examiners, and investigators	29	38	9	31	0.68	30.87	Long-term on-the-job training
13-1041	Compliance officers, except agriculture, construction, health and safety, and transportation	14	16	2	14	0.43	19.38	Long-term on-the-job training
13-1051	Cost estimators	18	23	5	28	0.53	18.21	Work experience in a related field
13-1071	Employment, recruitment, and placement specialists	14	19	5	36	0.50	19.30	Bachelor's degree
13-1073	Training and development specialists	26	34	8	31	0.85	19.41	Bachelor's degree
13-1111	Management analysts	56	72	16	29	0.40	13.75	Degree plus work experience
13-1199	Business operation specialists, all other	33	43	10	30	0.22	16.98	Bachelor's degree
13-2011	Accountants and auditors	152	201	49	32	0.70	22.22	Bachelor's degree
13-2021	Appraisers and assessors of real estate	44	61	17	39	0.74	15.38	Postsecondary vocational award
13-2041	Credit analysts	12	13	1	8	1.21	36.45	Bachelor's degree
13-2051	Financial analysts	15	22	7	47	0.32	30.37	Bachelor's degree
13-2052	Personal financial advisors	44	66	22	50	0.44	26.76	Bachelor's degree
13-2053	Insurance underwriters	36	49	13	36	2.35	24.94	Bachelor's degree

SOC Code	Description	2007 Jobs	2016 Jobs	Change	% Change	2007 National LQ	2007 Median Hourly Earnings (\$)	Typical Education & Experience Level
13-2071	Loan counselors	11	13	2	18	1.46	64.15	Bachelor's degree
13-2072	Loan officers	121	140	19	16	2.22	32.82	Bachelor's degree
13-2082	Tax preparers	12	14	2	17	0.72	12.54	Moderate-term on-the-job training
13-2099	Financial specialists, all other	12	10	-2	-17	--	--	Bachelor's degree
15-1021	Computer programmers	45	45	0	0	0.66	32.30	Bachelor's degree
15-1031	Computer software engineers, applications	22	31	9	41	0.30	40.92	Bachelor's degree
15-1032	Computer software engineers, systems software	20	26	6	30	0.38	44.44	Bachelor's degree
15-1041	Computer support specialists	34	41	7	21	0.43	17.65	Associate's degree
15-1051	Computer systems analysts	24	32	8	33	0.34	34.10	Bachelor's degree
15-1061	Database administrators	11	15	4	36	0.62	30.29	Bachelor's degree
15-1071	Network and computer systems administrators	18	25	7	39	0.41	28.93	Bachelor's degree
15-1081	Network systems and data communications analysts	12	19	7	58	0.30	30.42	Bachelor's degree
17-2051	Civil engineers	18	21	3	17	0.45	23.31	Bachelor's degree
17-2071	Electrical engineers	15	18	3	20	0.71	20.62	Bachelor's degree
17-2112	Industrial engineers	83	125	42	51	2.90	28.28	Bachelor's degree
17-2141	Mechanical engineers	21	27	6	29	0.65	28.63	Bachelor's degree

SOC Code	Description	2007 Jobs	2016 Jobs	Change	% Change	2007 National LQ	2007 Median Hourly Earnings (\$)	Typical Education & Experience Level
17-3013	Mechanical drafters	15	21	6	40	1.35	22.44	Postsecondary vocational award
17-3023	Electrical and electronic engineering technicians	54	67	13	24	2.21	9.18	Associate's degree
17-3026	Industrial engineering technicians	13	17	4	31	1.22	15.92	Associate's degree
17-3031	Surveying and mapping technicians	10	12	2	20	0.85	10.43	Moderate-term on-the-job training
19-3021	Market research analysts	12	15	3	25	0.31	19.69	Bachelor's degree
19-3031	Clinical, counseling, and school psychologists	12	13	1	8	0.48	22.48	Doctoral degree
21-1012	Educational, vocational, and school counselors	35	41	6	17	0.95	21.29	Master's degree
21-1015	Rehabilitation counselors	12	13	1	8	0.58	13.34	Master's degree
21-1021	Child, family, and school social workers	65	72	7	11	1.54	12.70	Bachelor's degree
21-1022	Medical and public health social workers	34	37	3	9	1.83	14.35	Bachelor's degree
21-1023	Mental health and substance abuse social workers	14	16	2	14	0.74	13.96	Master's degree
21-1029	Social workers, all other	11	13	2	18	1.04	16.79	Bachelor's degree
21-1093	Social and human service assistants	21	25	4	19	0.42	9.76	Moderate-term on-the-job training
21-2011	Clergy	60	68	8	13	1.74	6.29	Master's degree
21-2021	Directors, religious activities and education	22	25	3	14	1.71	5.97	Bachelor's degree

SOC Code	Description	2007 Jobs	2016 Jobs	Change	% Change	2007 National LQ	2007 Median Hourly Earnings (\$)	Typical Education & Experience Level
21-2099	Religious workers, all other	10	11	1	10	--	--	Bachelor's degree
23-1011	Lawyers	39	55	16	41	0.33	24.67	First professional degree
23-1023	Judges, magistrate judges, and magistrates	15	16	1	7	4.08	22.92	Degree plus work experience
23-2011	Paralegals and legal assistants	16	22	6	38	0.45	16.19	Associate's degree
25-1099	Postsecondary teachers	97	118	21	22	0.44	39.95	Doctoral degree
25-2011	Preschool teachers, except special education	95	95	0	0	1.31	6.41	Postsecondary vocational award
25-2012	Kindergarten teachers, except special education	31	37	6	19	1.17	26.35	Bachelor's degree
25-2021	Elementary school teachers, except special education	223	261	38	17	0.96	25.42	Bachelor's degree
25-2022	Middle school teachers, except special and vocational education	160	185	25	16	1.59	24.45	Bachelor's degree
25-2031	Secondary school teachers, except special and vocational education	115	127	12	10	0.75	25.94	Bachelor's degree
25-2032	Vocational education teachers, secondary school	21	21	0	0	1.37	27.34	Degree plus work experience
25-2041	Special education teachers, preschool, kindergarten, and elementary school	27	33	6	22	0.83	27.16	Bachelor's degree
25-2042	Special education teachers, middle school	17	21	4	24	1.16	24.88	Bachelor's degree
25-2043	Special education teachers, secondary school	20	23	3	15	1.01	25.69	Bachelor's degree
25-3011	Adult literacy, remedial education, and GED teachers and instructors	36	51	15	42	1.72	11.22	Bachelor's degree

SOC Code	Description	2007 Jobs	2016 Jobs	Change	% Change	2007 National LQ	2007 Median Hourly Earnings (\$)	Typical Education & Experience Level
25-3021	Self-enrichment education teachers	45	60	15	33	1.20	9.59	Work experience in a related field
25-3099	Teachers and instructors, all other	209	259	50	24	2.19	9.95	Bachelor's degree
25-4021	Librarians	24	26	2	8	1.06	23.46	Master's degree
25-4031	Library technicians	23	27	4	17	1.37	8.78	Postsecondary vocational award
25-9031	Instructional coordinators	17	21	4	24	0.84	24.43	Master's degree
25-9041	Teacher assistants	196	215	19	10	0.99	9.62	Short-term on-the-job training
27-1023	Floral designers	15	13	-2	-13	1.04	11.96	Moderate-term on-the-job training
27-1024	Graphic designers	16	23	7	44	0.47	12.06	Bachelor's degree
27-2022	Coaches and scouts	17	19	2	12	0.61	11.95	Long-term on-the-job training
27-2041	Music directors and composers	17	20	3	18	0.74	5.91	Degree plus work experience
27-2042	Musicians and singers	26	30	4	15	0.82	6.21	Long-term on-the-job training
27-3011	Radio and television announcers	19	29	10	53	2.47	7.40	Long-term on-the-job training

SOC Code	Description	2007 Jobs	2016 Jobs	Change	% Change	2007 National LQ	2007 Median Hourly Earnings (\$)	Typical Education & Experience Level
27-3022	Reporters and correspondents	10	13	3	30	--	--	Degree plus work experience
27-3031	Public relations specialists	14	17	3	21	0.37	10.87	Bachelor's degree
27-3043	Writers and authors	20	25	5	25	0.37	6.07	Bachelor's degree
27-3091	Interpreters and translators	14	16	2	14	0.69	16.26	Long-term on-the-job training
27-3099	Media and communication workers, all other	13	15	2	15	0.70	16.38	Long-term on-the-job training
27-4021	Photographers	83	91	8	10	0.79	13.70	Long-term on-the-job training
29-1021	Dentists, general	13	15	2	15	0.95	63.65	First professional degree
29-1031	Dietitians and nutritionists	11	11	0	0	1.06	20.41	Bachelor's degree
29-1051	Pharmacists	28	38	10	36	0.80	66.01	First professional degree
29-1069	Physicians and surgeons	102	126	24	24	0.87	88.87	First professional degree
29-1111	Registered nurses	489	608	119	24	1.40	25.39	Associate's degree
29-1122	Occupational therapists	18	20	2	11	1.20	30.95	Master's degree
29-1123	Physical therapists	22	23	1	5	0.80	30.97	Master's degree

SOC Code	Description	2007 Jobs	2016 Jobs	Change	% Change	2007 National LQ	2007 Median Hourly Earnings (\$)	Typical Education & Experience Level
29-1126	Respiratory therapists	24	30	6	25	1.69	21.03	Associate's degree
29-1127	Speech-language pathologists	15	17	2	13	0.84	23.66	Master's degree
29-2011	Medical and clinical laboratory technologists	33	36	3	9	1.42	18.23	Bachelor's degree
29-2012	Medical and clinical laboratory technicians	19	22	3	16	0.91	14.00	Associate's degree
29-2021	Dental hygienists	19	24	5	26	0.80	17.59	Associate's degree
29-2034	Radiologic technologists and technicians	41	48	7	17	1.50	19.80	Associate's degree
29-2041	Emergency medical technicians and paramedics	34	47	13	38	1.20	18.04	Postsecondary vocational award
29-2052	Pharmacy technicians	42	31	-11	-26	1.03	14.56	Moderate-term on-the-job training
29-2055	Surgical technologists	22	28	6	27	1.86	15.17	Postsecondary vocational award
29-2061	Licensed practical and licensed vocational nurses	128	145	17	13	1.23	16.22	Postsecondary vocational award
29-2071	Medical records and health information technicians	18	21	3	17	0.76	11.17	Associate's degree
29-2081	Opticians, dispensing	11	14	3	27	1.00	8.86	Long-term on-the-job training
31-1011	Home health aides	164	206	42	26	1.37	8.17	Short-term on-the-job training

SOC Code	Description	2007 Jobs	2016 Jobs	Change	% Change	2007 National LQ	2007 Median Hourly Earnings (\$)	Typical Education & Experience Level
31-1012	Nursing aides, orderlies, and attendants	267	297	30	11	1.28	9.21	Postsecondary vocational award
31-2021	Physical therapist assistants	10	11	1	10	1.21	20.39	Associate's degree
31-9091	Dental assistants	41	51	10	24	1.04	12.34	Moderate-term on-the-job training
31-9092	Medical assistants	59	80	21	36	0.98	11.13	Moderate-term on-the-job training
31-9094	Medical transcriptionists	13	16	3	23	0.97	13.50	Postsecondary vocational award
31-9099	Healthcare support workers, all other	20	23	3	15	0.70	9.99	Short-term on-the-job training
33-1012	First-line supervisors/managers of police and detectives	10	12	2	20	0.79	21.09	Work experience in a related field
33-1099	First-line supervisors/managers, protective service workers, all other	10	17	7	70	--	--	Work experience in a related field
33-2011	Fire fighters	29	35	6	21	0.73	15.76	Long-term on-the-job training
33-3012	Correctional officers and jailers	101	135	34	34	1.70	12.32	Moderate-term on-the-job training
33-3021	Detectives and criminal investigators	11	14	3	27	0.79	17.01	Work experience in a related field



SOC Code	Description	2007 Jobs	2016 Jobs	Change	% Change	2007 National LQ	2007 Median Hourly Earnings (\$)	Typical Education & Experience Level
33-3051	Police and sheriff's patrol officers	101	119	18	18	1.11	14.67	Long-term on-the-job training
33-9032	Security guards	125	240	115	92	0.85	10.18	Short-term on-the-job training
33-9099	Protective service workers, all other	12	15	3	25	1.01	12.72	Short-term on-the-job training
35-1011	Chefs and head cooks	15	21	6	40	0.82	9.75	Work experience in a related field
35-1012	First-line supervisors/managers of food preparation and serving workers	120	144	24	20	0.98	10.29	Work experience in a related field
35-2011	Cooks, fast food	91	97	6	7	1.02	7.36	Short-term on-the-job training
35-2012	Cooks, institution and cafeteria	108	113	5	5	1.86	7.99	Moderate-term on-the-job training
35-2014	Cooks, restaurant	99	107	8	8	0.83	8.29	Long-term on-the-job training
35-2015	Cooks, short order	65	63	-2	-3	2.26	7.65	Short-term on-the-job training
35-2019	Cooks, all other	11	11	0	0	3.30	9.00	Moderate-term on-the-job training
35-2021	Food preparation workers	89	94	5	6	0.70	8.14	Short-term on-the-job training

SOC Code	Description	2007 Jobs	2016 Jobs	Change	% Change	2007 National LQ	2007 Median Hourly Earnings (\$)	Typical Education & Experience Level
35-3011	Bartenders	27	30	3	11	0.37	8.35	Short-term on-the-job training
35-3021	Combined food preparation and serving workers, including fast food	324	367	43	13	0.92	6.97	Short-term on-the-job training
35-3022	Counter attendants, cafeteria, food concession, and coffee shop	40	43	3	8	0.53	8.05	Short-term on-the-job training
35-3031	Waiters and waitresses	218	231	13	6	0.65	6.79	Short-term on-the-job training
35-3041	Food servers, nonrestaurant	15	16	1	7	0.59	8.92	Short-term on-the-job training
35-9011	Dining room and cafeteria attendants and bartender helpers	16	18	2	13	0.28	7.60	Short-term on-the-job training
35-9021	Dishwashers	47	49	2	4	0.65	7.77	Short-term on-the-job training
35-9031	Hosts and hostesses, restaurant, lounge, and coffee shop	25	28	3	12	0.51	7.42	Short-term on-the-job training
37-1011	First-line supervisors/managers of housekeeping and janitorial workers	81	99	18	22	1.50	7.58	Work experience in a related field
37-1012	First-line supervisors/managers of landscaping, lawn service, and groundskeeping workers	50	70	20	40	2.32	13.88	Work experience in a related field
37-2011	Janitors and cleaners, except maids and housekeeping cleaners	363	409	46	13	1.11	6.80	Short-term on-the-job training

SOC Code	Description	2007 Jobs	2016 Jobs	Change	% Change	2007 National LQ	2007 Median Hourly Earnings (\$)	Typical Education & Experience Level
37-2012	Maids and housekeeping cleaners	366	510	144	39	1.42	6.66	Short-term on-the-job training
37-2019	Building cleaning workers, all other	102	140	38	37	1.46	6.14	Short-term on-the-job training
37-2021	Pest control workers	15	23	8	53	1.12	8.44	Moderate-term on-the-job training
37-3011	Landscaping and groundskeeping workers	200	282	82	41	1.35	9.49	Short-term on-the-job training
37-3012	Pesticide handlers, sprayers, and applicators, vegetation	42	61	19	45	2.84	7.67	Moderate-term on-the-job training
37-3013	Tree trimmers and pruners	37	55	18	49	2.51	7.34	Short-term on-the-job training
37-3019	Grounds maintenance workers, all other	40	58	18	45	2.83	7.18	Short-term on-the-job training
39-1021	First-line supervisors/managers of personal service workers	45	39	-6	-13	1.29	9.59	Work experience in a related field
39-2011	Animal trainers	15	11	-4	-27	1.08	6.27	Moderate-term on-the-job training
39-2021	Nonfarm animal caretakers	67	39	-28	-42	1.28	6.34	Short-term on-the-job training
39-3091	Amusement and recreation attendants	39	37	-2	-5	1.12	8.61	Short-term on-the-job training

SOC Code	Description	2007 Jobs	2016 Jobs	Change	% Change	2007 National LQ	2007 Median Hourly Earnings (\$)	Typical Education & Experience Level
39-4021	Funeral attendants	25	32	7	28	5.58	7.15	Short-term on-the-job training
39-5012	Hairdressers, hairstylists, and cosmetologists	71	27	-44	-62	0.90	6.82	Postsecondary vocational award
39-6031	Flight attendants	12	26	14	117	0.87	20.68	Long-term on-the-job training
39-9011	Child care workers	212	257	45	21	0.92	5.93	Short-term on-the-job training
39-9021	Personal and home care aides	111	153	42	38	0.91	7.14	Short-term on-the-job training
39-9031	Fitness trainers and aerobics instructors	15	19	4	27	0.42	11.23	Postsecondary vocational award
39-9032	Recreation workers	33	39	6	18	0.66	7.47	Short-term on-the-job training
39-9099	Personal care and service workers, all other	19	12	-7	-37	1.14	6.58	Short-term on-the-job training
41-1011	First-line supervisors/managers of retail sales workers	431	519	88	20	1.37	20.29	Work experience in a related field
41-1012	First-line supervisors/managers of non-retail sales workers	121	151	30	25	0.92	24.25	Work experience in a related field
41-2011	Cashiers, except gaming	737	756	19	3	1.47	8.14	Short-term on-the-job training

SOC Code	Description	2007 Jobs	2016 Jobs	Change	% Change	2007 National LQ	2007 Median Hourly Earnings (\$)	Typical Education & Experience Level
41-2012	Gaming change persons and booth cashiers	12	17	5	42	1.29	26.57	Short-term on-the-job training
41-2021	Counter and rental clerks	64	75	11	17	0.93	6.97	Short-term on-the-job training
41-2022	Parts salespersons	19	19	0	0	0.55	14.19	Moderate-term on-the-job training
41-2031	Retail salespersons	660	836	176	27	0.94	10.81	Short-term on-the-job training
41-3011	Advertising sales agents	25	44	19	76	0.78	11.75	Moderate-term on-the-job training
41-3021	Insurance sales agents	187	216	29	16	1.81	16.00	Bachelor's degree
41-3031	Securities, commodities, and financial services sales agents	39	57	18	46	0.41	44.11	Bachelor's degree
41-3099	Sales representatives, services, all other	42	56	14	33	0.41	16.28	Moderate-term on-the-job training
41-4011	Sales representatives, wholesale and manufacturing, technical and scientific products	47	60	13	28	0.64	45.52	Moderate-term on-the-job training
41-4012	Sales representatives, wholesale and manufacturing, except technical and scientific products	152	191	39	26	0.66	29.70	Moderate-term on-the-job training
41-9011	Demonstrators and product promoters	10	14	4	40	0.57	9.28	Moderate-term on-the-job training
41-9021	Real estate brokers	178	254	76	43	0.75	11.72	Work experience in a related field

SOC Code	Description	2007 Jobs	2016 Jobs	Change	% Change	2007 National LQ	2007 Median Hourly Earnings (\$)	Typical Education & Experience Level
41-9022	Real estate sales agents	194	273	79	41	0.76	11.59	Postsecondary vocational award
41-9091	Door-to-door sales workers, news and street vendors, and related workers	164	197	33	20	1.04	5.88	Short-term on-the-job training
41-9099	Sales and related workers, all other	40	48	8	20	0.80	13.44	Moderate-term on-the-job training
43-1011	First-line supervisors/managers of office and administrative support workers	186	211	25	13	0.86	20.97	Work experience in a related field
43-2011	Switchboard operators, including answering service	24	24	0	0	0.94	10.63	Short-term on-the-job training
43-3011	Bill and account collectors	39	48	9	23	0.63	15.92	Short-term on-the-job training
43-3021	Billing and posting clerks and machine operators	79	89	10	13	1.02	12.55	Moderate-term on-the-job training
43-3031	Bookkeeping, accounting, and auditing clerks	284	351	67	24	0.89	13.98	Moderate-term on-the-job training
43-3051	Payroll and timekeeping clerks	37	43	6	16	1.24	13.41	Moderate-term on-the-job training
43-3071	Tellers	62	82	20	32	0.71	12.42	Short-term on-the-job training
43-4031	Court, municipal, and license clerks	14	16	2	14	0.92	11.36	Short-term on-the-job training

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43-4041	Credit authorizers, checkers, and clerks	11	11	0	0	1.13	25.09	Short-term on-the-job training
43-4051	Customer service representatives	270	369	99	37	0.85	15.80	Moderate-term on-the-job training
43-4071	File clerks	37	27	-10	-27	1.09	10.54	Short-term on-the-job training
43-4081	Hotel, motel, and resort desk clerks	11	14	3	27	0.35	11.54	Short-term on-the-job training
43-4111	Interviewers, except eligibility and loan	15	17	2	13	0.45	14.23	Short-term on-the-job training
43-4121	Library assistants, clerical	10	11	1	10	--	--	Short-term on-the-job training
43-4131	Loan interviewers and clerks	32	36	4	13	0.87	27.03	Short-term on-the-job training
43-4151	Order clerks	17	15	-2	-12	0.44	10.96	Short-term on-the-job training
43-4161	Human resources assistants, except payroll and timekeeping	28	35	7	25	1.19	18.13	Short-term on-the-job training
43-4171	Receptionists and information clerks	113	136	23	20	0.68	10.95	Short-term on-the-job training
43-4181	Reservation and transportation ticket agents and travel clerks	11	13	2	18	0.47	9.77	Short-term on-the-job training

SOC Code	Description	2007 Jobs	2016 Jobs	Change	% Change	2007 National LQ	2007 Median Hourly Earnings (\$)	Typical Education & Experience Level
43-4199	Information and record clerks, all other	12	13	1	8	0.37	14.05	Short-term on-the-job training
43-5021	Couriers and messengers	50	77	27	54	1.14	6.66	Short-term on-the-job training
43-5031	Police, fire, and ambulance dispatchers	17	20	3	18	1.17	12.14	Moderate-term on-the-job training
43-5032	Dispatchers, except police, fire, and ambulance	10	12	2	20	0.37	13.58	Moderate-term on-the-job training
43-5051	Postal service clerks	10	11	1	10	0.90	21.84	Short-term on-the-job training
43-5052	Postal service mail carriers	52	55	3	6	1.09	20.66	Short-term on-the-job training
43-5061	Production, planning, and expediting clerks	64	82	18	28	1.55	14.75	Short-term on-the-job training
43-5071	Shipping, receiving, and traffic clerks	107	134	27	25	0.98	13.08	Short-term on-the-job training
43-5081	Stock clerks and order fillers	210	217	7	3	0.85	8.97	Short-term on-the-job training
43-6011	Executive secretaries and administrative assistants	120	146	26	22	0.50	15.75	Moderate-term on-the-job training
43-6012	Legal secretaries	33	43	10	30	0.65	14.17	Postsecondary vocational award



SOC Code	Description	2007 Jobs	2016 Jobs	Change	% Change	2007 National LQ	2007 Median Hourly Earnings (\$)	Typical Education & Experience Level
43-6013	Medical secretaries	74	87	13	18	1.06	11.43	Postsecondary vocational award
43-6014	Secretaries, except legal, medical, and executive	286	309	23	8	1.00	12.15	Moderate-term on-the-job training
43-9011	Computer operators	16	15	-1	-6	0.88	17.07	Moderate-term on-the-job training
43-9021	Data entry keyers	25	35	10	40	0.50	10.90	Moderate-term on-the-job training
43-9041	Insurance claims and policy processing clerks	115	133	18	16	3.06	15.01	Moderate-term on-the-job training
43-9051	Mail clerks and mail machine operators, except postal service	17	18	1	6	0.76	13.32	Short-term on-the-job training
43-9061	Office clerks, general	361	430	69	19	0.78	10.67	Short-term on-the-job training
45-2092	Farmworkers and laborers, crop, nursery, and greenhouse	11	14	3	27	0.26	9.08	Short-term on-the-job training
45-4022	Logging equipment operators	11	10	-1	-9	1.79	13.13	Moderate-term on-the-job training
47-1011	First-line supervisors/managers of construction trades and extraction workers	167	211	44	26	1.09	16.34	Work experience in a related field
47-2021	Brickmasons and blockmasons	64	67	3	5	2.82	14.85	Long-term on-the-job training

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47-2031	Carpenters	293	367	74	25	1.19	13.66	Long-term on-the-job training
47-2044	Tile and marble setters	18	21	3	17	1.55	12.80	Long-term on-the-job training
47-2051	Cement masons and concrete finishers	23	25	2	9	0.68	9.18	Moderate-term on-the-job training
47-2061	Construction laborers	181	224	43	24	0.89	11.93	Moderate-term on-the-job training
47-2073	Operating engineers and other construction equipment operators	56	63	7	13	0.90	10.83	Moderate-term on-the-job training
47-2081	Drywall and ceiling tile installers	10	13	3	30	0.39	15.27	Moderate-term on-the-job training
47-2111	Electricians	102	123	21	21	0.96	18.01	Long-term on-the-job training
47-2141	Painters, construction and maintenance	74	94	20	27	0.91	15.65	Moderate-term on-the-job training
47-2151	Pipelayers	16	21	5	31	0.99	14.56	Moderate-term on-the-job training
47-2152	Plumbers, pipefitters, and steamfitters	116	152	36	31	1.62	15.84	Long-term on-the-job training
47-2181	Roofers	22	28	6	27	0.81	12.21	Moderate-term on-the-job training

SOC Code	Description	2007 Jobs	2016 Jobs	Change	% Change	2007 National LQ	2007 Median Hourly Earnings (\$)	Typical Education & Experience Level
47-2211	Sheet metal workers	13	18	5	38	0.48	13.99	Long-term on-the-job training
47-3011	Helpers, brickmasons, blockmasons, stonemasons, and tile and marble setters	42	42	0	0	4.48	8.49	Short-term on-the-job training
47-3012	Helpers, carpenters	28	31	3	11	1.85	8.90	Short-term on-the-job training
47-3013	Helpers, electricians	13	15	2	15	0.85	12.08	Short-term on-the-job training
47-3015	Helpers, pipelayers, plumbers, pipefitters, and steamfitters	28	36	8	29	2.27	11.90	Short-term on-the-job training
47-4011	Construction and building inspectors	13	15	2	15	0.69	16.72	Work experience in a related field
49-1011	First-line supervisors/managers of mechanics, installers, and repairers	60	70	10	17	0.90	15.89	Work experience in a related field
49-2011	Computer, automated teller, and office machine repairers	12	14	2	17	0.46	8.88	Postsecondary vocational award
49-2022	Telecommunications equipment installers and repairers, except line installers	32	46	14	44	1.07	15.69	Long-term on-the-job training
49-2097	Electronic home entertainment equipment installers and repairers	18	20	2	11	2.22	8.48	Postsecondary vocational award
49-3021	Automotive body and related repairers	30	32	2	7	1.11	10.31	Long-term on-the-job training

SOC Code	Description	2007 Jobs	2016 Jobs	Change	% Change	2007 National LQ	2007 Median Hourly Earnings (\$)	Typical Education & Experience Level
49-3023	Automotive service technicians and mechanics	169	197	28	17	1.42	13.21	Postsecondary vocational award
49-3031	Bus and truck mechanics and diesel engine specialists	29	34	5	17	0.71	11.78	Postsecondary vocational award
49-3042	Mobile heavy equipment mechanics, except engines	10	11	1	10	--	--	Postsecondary vocational award
49-3093	Tire repairers and changers	17	24	7	41	1.15	8.00	Short-term on-the-job training
49-9021	Heating, air conditioning, and refrigeration mechanics and installers	33	43	10	30	0.70	15.71	Long-term on-the-job training
49-9031	Home appliance repairers	14	17	3	21	1.18	6.50	Long-term on-the-job training
49-9041	Industrial machinery mechanics	95	121	26	27	2.57	15.54	Long-term on-the-job training
49-9042	Maintenance and repair workers, general	291	361	70	24	1.44	13.85	Moderate-term on-the-job training
49-9043	Maintenance workers, machinery	37	44	7	19	3.20	13.91	Short-term on-the-job training
49-9051	Electrical power-line installers and repairers	10	11	1	10	0.63	15.79	Long-term on-the-job training
49-9052	Telecommunications line installers and repairers	23	30	7	30	0.91	18.63	Long-term on-the-job training

SOC Code	Description	2007 Jobs	2016 Jobs	Change	% Change	2007 National LQ	2007 Median Hourly Earnings (\$)	Typical Education & Experience Level
49-9091	Coin, vending, and amusement machine servicers and repairers	11	14	3	27	1.15	9.20	Moderate-term on-the-job training
49-9098	Helpers--Installation, maintenance, and repair workers	28	32	4	14	1.20	10.43	Short-term on-the-job training
51-1011	First-line supervisors/managers of production and operating workers	181	212	31	17	1.80	24.65	Work experience in a related field
51-2021	Coil winders, tapers, and finishers	15	15	0	0	4.61	19.84	Short-term on-the-job training
51-2022	Electrical and electronic equipment assemblers	70	66	-4	-6	2.29	18.59	Short-term on-the-job training
51-2031	Engine and other machine assemblers	11	19	8	73	1.76	12.73	Short-term on-the-job training
51-2041	Structural metal fabricators and fitters	22	36	14	64	1.53	16.79	Moderate-term on-the-job training
51-2092	Team assemblers	245	317	72	29	1.37	14.63	Moderate-term on-the-job training
51-2099	Assemblers and fabricators, all other	24	34	10	42	0.56	15.73	Moderate-term on-the-job training
51-3011	Bakers	11	11	0	0	0.52	9.00	Long-term on-the-job training
51-4011	Computer-controlled machine tool operators, metal and plastic	17	26	9	53	0.86	16.28	Moderate-term on-the-job training

SOC Code	Description	2007 Jobs	2016 Jobs	Change	% Change	2007 National LQ	2007 Median Hourly Earnings (\$)	Typical Education & Experience Level
51-4021	Extruding and drawing machine setters, operators, and tenders, metal and plastic	76	93	17	22	5.69	14.03	Moderate-term on-the-job training
51-4031	Cutting, punching, and press machine setters, operators, and tenders, metal and plastic	42	55	13	31	1.09	10.43	Moderate-term on-the-job training
51-4032	Drilling and boring machine tool setters, operators, and tenders, metal and plastic	50	59	9	18	8.37	15.65	Moderate-term on-the-job training
51-4033	Grinding, lapping, polishing, and buffing machine tool setters, operators, and tenders, metal and plastic	51	77	26	51	3.58	18.24	Moderate-term on-the-job training
51-4034	Lathe and turning machine tool setters, operators, and tenders, metal and plastic	42	53	11	26	4.49	14.45	Moderate-term on-the-job training
51-4041	Machinists	96	135	39	41	1.75	18.06	Long-term on-the-job training
51-4072	Molding, coremaking, and casting machine setters, operators, and tenders, metal and plastic	26	28	2	8	1.18	13.56	Moderate-term on-the-job training
51-4081	Multiple machine tool setters, operators, and tenders, metal and plastic	24	36	12	50	1.78	16.07	Moderate-term on-the-job training
51-4111	Tool and die makers	14	20	6	43	0.97	21.41	Long-term on-the-job training
51-4121	Welders, cutters, solderers, and brazers	64	96	32	50	1.11	14.71	Long-term on-the-job training
51-4122	Welding, soldering, and brazing machine setters, operators, and tenders	17	27	10	59	1.71	14.54	Moderate-term on-the-job training


SOC Code	Description	2007 Jobs	2016 Jobs	Change	% Change	2007 National LQ	2007 Median Hourly Earnings (\$)	Typical Education & Experience Level
51-4193	Plating and coating machine setters, operators, and tenders, metal and plastic	21	29	8	38	3.53	13.73	Moderate-term on-the-job training
51-5021	Job printers	13	18	5	38	1.72	13.77	Long-term on-the-job training
51-5023	Printing machine operators	34	35	1	3	1.19	9.37	Moderate-term on-the-job training
51-6011	Laundry and dry-cleaning workers	35	39	4	11	0.92	7.95	Moderate-term on-the-job training
51-6021	Pressers, textile, garment, and related materials	56	47	-9	-16	5.03	12.02	Short-term on-the-job training
51-6031	Sewing machine operators	163	155	-8	-5	4.67	13.94	Moderate-term on-the-job training
51-6051	Sewers, hand	15	17	2	13	1.46	7.66	Short-term on-the-job training
51-6052	Tailors, dressmakers, and custom sewers	15	18	3	20	1.13	7.76	Long-term on-the-job training
51-6061	Textile bleaching and dyeing machine operators and tenders	214	188	-26	-12	74.29	12.65	Moderate-term on-the-job training
51-6062	Textile cutting machine setters, operators, and tenders	22	22	0	0	7.87	11.68	Moderate-term on-the-job training
51-6063	Textile knitting and weaving machine setters, operators, and tenders	281	329	48	17	48.69	16.92	Long-term on-the-job training

SOC Code	Description	2007 Jobs	2016 Jobs	Change	% Change	2007 National LQ	2007 Median Hourly Earnings (\$)	Typical Education & Experience Level
51-6064	Textile winding, twisting, and drawing out machine setters, operators, and tenders	175	162	-13	-7	27.29	13.41	Moderate-term on-the-job training
51-6091	Extruding and forming machine setters, operators, and tenders, synthetic and glass fibers	13	15	2	15	5.04	15.36	Moderate-term on-the-job training
51-6093	Upholsterers	13	15	2	15	0.92	7.96	Long-term on-the-job training
51-6099	Textile, apparel, and furnishings workers, all other	14	11	-3	-21	4.12	10.27	Short-term on-the-job training
51-7011	Cabinetmakers and bench carpenters	12	14	2	17	0.59	11.55	Long-term on-the-job training
51-8031	Water and liquid waste treatment plant and system operators	22	26	4	18	1.45	16.30	Long-term on-the-job training
51-9011	Chemical equipment operators and tenders	10	10	0	0	--	--	Moderate-term on-the-job training
51-9023	Mixing and blending machine setters, operators, and tenders	50	48	-2	-4	2.49	11.78	Moderate-term on-the-job training
51-9032	Cutting and slicing machine setters, operators, and tenders	16	19	3	19	1.40	10.84	Moderate-term on-the-job training
51-9051	Furnace, kiln, oven, drier, and kettle operators and tenders	16	22	6	38	4.26	13.32	Moderate-term on-the-job training
51-9061	Inspectors, testers, sorters, samplers, and weighers	301	328	27	9	4.29	12.44	Moderate-term on-the-job training



SOC Code	Description	2007 Jobs	2016 Jobs	Change	% Change	2007 National LQ	2007 Median Hourly Earnings (\$)	Typical Education & Experience Level
51-9071	Jewelers and precious stone and metal workers	11	15	4	36	1.52	30.16	Postsecondary vocational award
51-9111	Packaging and filling machine operators and tenders	68	68	0	0	1.24	11.42	Short-term on-the-job training
51-9121	Coating, painting, and spraying machine setters, operators, and tenders	24	25	1	4	1.58	12.88	Moderate-term on-the-job training
51-9122	Painters, transportation equipment	14	13	-1	-7	1.75	13.89	Long-term on-the-job training
51-9123	Painting, coating, and decorating workers	18	31	13	72	3.61	12.99	Short-term on-the-job training
51-9198	Helpers--Production workers	164	193	29	18	2.13	9.27	Short-term on-the-job training
53-1021	First-line supervisors/managers of helpers, laborers, and material movers, hand	30	38	8	27	1.15	22.60	Work experience in a related field
53-1031	First-line supervisors/managers of transportation and material-moving machine and vehicle operators	20	24	4	20	0.62	21.46	Work experience in a related field
53-3022	Bus drivers, school	69	94	25	36	1.00	9.20	Short-term on-the-job training
53-3031	Driver/sales workers	60	75	15	25	0.67	9.83	Short-term on-the-job training
53-3032	Truck drivers, heavy and tractor-trailer	191	234	43	23	0.70	12.36	Moderate-term on-the-job training

SOC Code	Description	2007 Jobs	2016 Jobs	Change	% Change	2007 National LQ	2007 Median Hourly Earnings (\$)	Typical Education & Experience Level
53-3033	Truck drivers, light or delivery services	125	161	36	29	0.74	10.30	Short-term on-the-job training
53-3041	Taxi drivers and chauffeurs	17	21	4	24	0.38	7.19	Short-term on-the-job training
53-7051	Industrial truck and tractor operators	153	167	14	9	1.68	11.95	Short-term on-the-job training
53-7061	Cleaners of vehicles and equipment	30	35	5	17	0.59	9.24	Short-term on-the-job training
53-7062	Laborers and freight, stock, and material movers, hand	377	443	66	18	1.09	10.13	Short-term on-the-job training
53-7063	Machine feeders and offbearers	48	48	0	0	2.27	11.65	Short-term on-the-job training
53-7064	Packers and packagers, hand	155	134	-21	-14	1.29	11.07	Short-term on-the-job training
53-7081	Refuse and recyclable material collectors	78	114	36	46	3.75	10.47	Short-term on-the-job training
		24,578	29,266	4,688	19		15.24	

 at least 1.25 greater than \$15.24

Source: EMSI

## Appendix B: Businesses by 3-Digit NAICS Codes

Lancaster County								
Industry	NAICS Code	2002	2007	Average Size	Change		SC % change	US % change
					#	%		
Forestry and Logging	113	9	4	8	-5	-55.6	-26.0	-15.2
Support Activities for Agriculture and Forestry	115	4	3	--	-1	-25.0	-13.0	1.8
Mining (except Oil and Gas)	212	4	2	--	-2	-50.0	-14.3	-2.1
Construction of Buildings	236	55	44	6	-11	-20.0	-0.4	15.4
Heavy and Civil Engineering Construction	237	10	8	14	-2	-20.0	-2.0	-2.3
Specialty Trade Contractors	238	116	84	7	-32	-27.6	-6.4	12.9
Apparel Manufacturing	315	3	1	--	-2	-66.7	-40.1	-33.0
Printing and Related Support Activities	323	4	2	--	-2	-50.0	-15.0	-12.3
Plastics and Rubber Products Manufacturing	326	5	2	--	-3	-60.0	-5.6	-11.4
Nonmetallic Mineral Product Manufacturing	327	4	5	27	1	25.0	4.0	3.0
Fabricated Metal Product Manufacturing	332	14	12	23	-2	-14.3	-6.1	-3.0
Machinery Manufacturing	333	8	6	8	-2	-25.0	-23.7	-11.1
Furniture and Related Product Manufacturing	337	6	6	4	0	0.0	-8.8	-5.8
Miscellaneous Manufacturing	339	6	6	23	0	0.0	9.5	-0.9
Merchant Wholesalers, Durable Goods	423	24	17	9	-7	-29.2	0.6	-5.6
Merchant Wholesalers, Nondurable Goods	424	13	12	10	-1	-7.7	-5.0	-3.5
Motor Vehicle and Parts Dealers	441	42	39	6	-3	-7.1	-11.6	2.2
Furniture and Home Furnishings Stores	442	9	10	5	1	11.1	-11.3	3.8
Electronics and Appliance Stores	443	14	15	4	1	7.1	-16.7	-4.7
Building Material and Garden Equipment and Supplies Dealers	444	17	15	19	-2	-11.8	-8.8	0.9
Food and Beverage Stores	445	45	30	12	-15	-33.3	-18.2	-0.5
Health and Personal Care Stores	446	15	16	9	1	6.7	9.1	10.2
Gasoline Stations	447	46	42	5	-4	-8.7	-2.8	-1.9
Clothing and Clothing Accessories Stores	448	51	23	7	-28	-54.9	-5.3	4.6
Sporting Goods, Hobby, Book, and Music Stores	451	8	5	3	-3	-37.5	-11.1	-6.5
General Merchandise Stores	452	13	12	51	-1	-7.7	17.5	13.3
Miscellaneous Store Retailers	453	26	16	3	-10	-38.5	-23.9	-8.6
Nonstore Retailers	454	7	4	3	-3	-42.9	-17.9	11.9
Truck Transportation	484	13	14	3	1	7.7	-5.1	5.4
Credit Intermediation and Related Activities	522	33	40	15	7	21.2	12.2	23.8
Real Estate	531	25	26	3	1	4.0	18.8	23.8
Administrative and Support Services	561	61	62	--	1	1.6	2.2	13.0
Waste Management and Remediation Services	562	4	3	--	-1	-25.0	3.9	15.6

Lancaster County									
Industry	NAICS Code	2002	2007	Average Size	Change		SC % change	US % change	
					#	%			
Educational Services	611	3	7	4	4	133.3	14.1	23.7	
Ambulatory Health Care Services	621	63	63	7	0	0.0	7.4	13.3	
Nursing and Residential Care Facilities	623	7	6	68	-1	-14.3	0.4	8.8	
Accommodation	721	4	6	6	2	50.0	-3.4	3.5	
Food Services and Drinking Places	722	72	73	14	1	1.4	-0.2	12.2	
Repair and Maintenance	811	62	53	3	-9	-14.5	-18.3	-0.4	
Personal and Laundry Services	812	30	24	4	-6	-20.0	-2.4	7.2	
Religious, Grantmaking, Civic, Professional, and Similar Organizations	813	9	9	3	0	0.0	-2.0	3.3	
Private Households	814	21	46	1	25	119.0	4.6	24.9	

growth rate exceeds both SC and US growth rates

Source: Bureau of Labor Statistics

## Appendix C: Lancaster County Employment by Industry Sector

Industry	NAICS code	Employment		2002-2007 Change		Location Quotient	Competitive Effect	2007 Average Annual Wage (\$)	Projected Growth
		2002	2007	#	%				
Total		18,823	16,621	-2,202	-11.7			34,547	19%

<i>6 star sectors</i>									
Industry	NAICS code	Employment		2002-2007 Change		Location Quotient	Competitive Effect	2007 Average Annual Wage (\$)	Projected Growth
		2002	2007	#	%				
Nonmetallic Mineral Product Manufacturing	327	4	137	133	3,325	2.38	133	40,719	A
Fabricated Metal Product Manufacturing	332	14	277	263	1,879	1.55	263	36,263	A

<i>5 star sectors</i>									
Industry	NAICS code	Employment		2002-2007 Change		Location Quotient	Competitive Effect	2007 Average Annual Wage (\$)	Projected Growth
		2002	2007	#	%				
Construction of Buildings	236	55	259	204	371	1.27	197	29,942	A
Miscellaneous Manufacturing	339	6	135	129	2,150	1.83	129	36,724	BA
Merchant Wholesalers, Durable Goods	423	24	150	126	525	0.42	125	45,299	AA
Building Material and Garden Equipment and Supplies Dealers	444	17	285	268	1,576	1.90	266	27,612	A
Health and Personal Care Stores	446	15	148	133	887	1.29	132	31,861	AA
General Merchandise Stores	452	13	608	595	4,577	1.75	594	18,121	A
Credit Intermediation and Related Activities	522	33	608	575	1,742	1.84	573	79,765	BA
Ambulatory Health Care Services	621	63	460	397	630	0.73	386	49,979	AA

<i>4 star sectors</i>									
Industry	NAICS code	Employment		2002-2007 Change		Location Quotient	Competitive Effect	2007 Average Annual Wage (\$)	Projected Growth
		2002	2007	#	%				
Specialty Trade Contractors	238	116	609	493	425	1.10	476	29,678	A
Merchant Wholesalers, Nondurable Goods	424	13	114	101	777	0.48	101	30,497	A
Gasoline Stations	447	46	211	165	359	2.13	167	16,587	BA
Truck Transportation	484	13	47	34	262	0.28	33	36,695	A
Nursing and Residential Care Facilities	623	7	409	402	5,743	1.21	401	22,068	A
Repair and Maintenance	811	62	141	79	127	0.98	79	23,914	A

<i>3 star or fewer sectors</i>									
Industry	NAICS code	Employment		2002-2007 Change		Location Quotient	Competitive Effect	2007 Average Annual Wage (\$)	Projected Growth
		2002	2007	#	%				
Forestry and Logging	113	9	33	24	267	4.37	25	27,056	D
Heavy and Civil Engineering Construction	237	10	109	99	990	0.96	98	29,781	BA
Machinery Manufacturing	333	8	47	39	488	0.34	39	46,546	BA
Motor Vehicle and Parts Dealers	441	42	241	199	474	1.10	198	27,726	BA
Food and Beverage Stores	445	45	346	301	669	1.05	301	17,915	BA
Clothing and Clothing Accessories Stores	448	51	165	114	224	0.96	107	21,059	BA
Nonstore Retailers	454	7	11	4	57	0.22	4	57,390	BA
Real Estate	531	25	65	40	160	0.38	37	31,505	AA
Educational Services	611	3	26	23	767	0.10	22	28,574	A
Food Services and Drinking Places	722	72	1,056	984	1,367	0.96	975	11,246	BA
Personal and Laundry Services	812	30	94	64	213	0.62	63	17,480	BA
Religious, Grantmaking, Civic, Professional, and Similar Organizations	813	9	26	17	189	0.17	17	34,958	BA
Private Households	814	21	38	17	81	0.60	13	9,422	A
Furniture and Related Product Manufacturing	337	6	26	20	333	0.43	21	20,146	BA
Furniture and Home Furnishings Stores	442	9	50	41	456	0.76	40	22,762	BA
Electronics and Appliance Stores	443	14	62	48	343	0.99	48	14,884	BA
Sporting Goods, Hobby, Book, and Music Stores	451	8	17	9	113	0.22	9	12,067	BA

3 star or fewer sectors		Employment		2002-2007 Change		Location Quotient	Competitive Effect	2007 Average Annual Wage (\$)	Projected Growth
Industry	NAICS code	2002	2007	#	%				
Miscellaneous Store Retailers	453	26	55	29	112	0.55	32	29,220	BA
Accommodation	721	4	34	30	750	0.16	30	19,722	BA

## Methodology and Sourcing

### Projected Growth Grading Scale:

AA=above average

A=average

BA=below average

D=decline

**Sectors are rated on 6 factors:** 2002-2007 employment growth, 2002-2007 employment growth rate, location quotient, competitive effect, average annual wage, and projected growth.

**Stars are based on:** 2002-2007 employment growth of 50 or more, 2002-2007 employment growth rate greater than 0 (since overall county job growth was negative), location quotient of at least 1.25, competitive effect greater than 0, average annual wage greater than \$34,547 (2007 average for all jobs in the county), and average or above average projected growth.

**Location Quotient:** percentage of employment in the sector in the county divided by the percentage of employment in that sector in the US; gives an indication of how concentrated employment in the sector is in the county; based on 2007 data.

**Competitive Effect:** based on shift-share analysis; represents the change in employment in the sector in the county after accounting for overall US employment growth and growth/decline in the sector in the US.

**Source:** Bureau of Labor Statistics; projections based on data from EMSI and SC Department of Commerce.









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