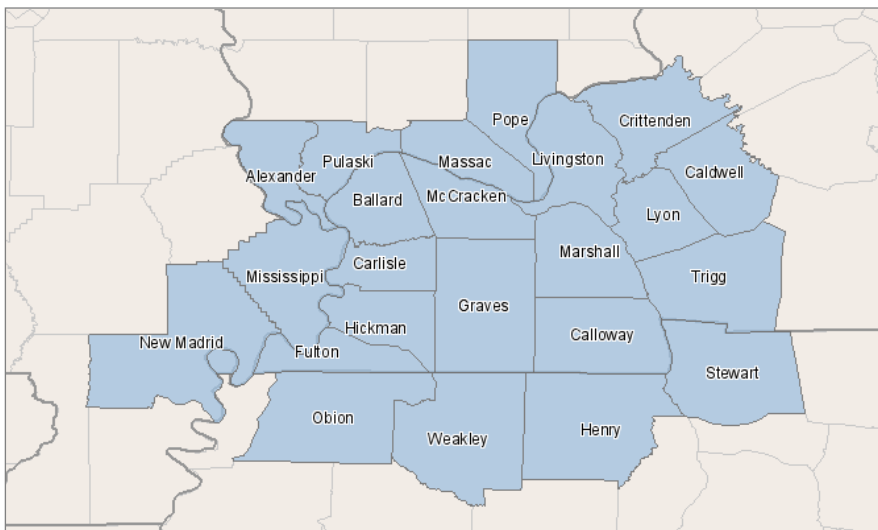




# REGIONAL SCAN & PROGRAM DEMAND REPORT

WEST KENTUCKY COMMUNITY AND TECHNICAL COLLEGE



## Contents

<i>Executive Summary</i> .....	3
<i>Regional Population Summary</i> .....	4
<i>Population: Detailed Data</i> .....	5
<i>Educational Attainment</i> .....	7
<i>Regional Industry Summary</i> .....	10
<i>Regional Industries: Detailed Data</i> .....	11
<i>Regional Occupation Summary</i> .....	22
<i>Regional Occupations: Detailed Data</i> .....	23
<i>Occupation Demand &amp; Program Comparison</i> .....	27
<i>About EMSI &amp; the Data</i> .....	32

## Introduction

This report is designed to integrate and analyze data from multiple sources with the goal of helping community and technical colleges (and other regional stakeholders) with their strategic planning efforts. The overall goal is to help colleges align their program offerings with the demographic and economic characteristics of their service regions. To do this, the report provides an overview of the region's population, economy, and workforce, using state and national comparisons where appropriate to highlight unique regional characteristics.

The industry and occupation employment numbers are based on numerous published sources from the federal Bureau of Labor Statistics, Bureau of Economic Analysis, Bureau of the Census, and the National Center for Education Statistics. In addition, the report integrates industry/occupation data and projections created by the labor market information agencies of the individual state(s) included in the selected region.

These data sources have been specially processed and harmonized to provide more complete and detailed data than any individual source used. For more information, see the final page of this report.

## PREPARED FOR:

West Kentucky Community And Technical College

## REGION DEFINITION (COUNTIES):

WKCTC - Greater Service Region:

Alexander, Massac, Pope, Pulaski, Ballard, Caldwell, Calloway, Carlisle, Crittenden, Fulton...

## Key Terms and Concepts

Understanding the following terms is crucial to interpreting the data included in this report.

**Earnings:** For industries, 2009 total annual earnings per worker is reported; these earnings include wages, salaries, profits, and benefits. Occupational earnings are reported as 2009 median hourly wage only.

**Industry:** A category of business activity defined by the North American Industry Classification System (NAICS).

**Jobs:** Full-time and part-time positions held by proprietors and payroll employees in the public or private sector. May exceed actual worker count.

**Location Quotient (LQ):** A measure of how "concentrated" a particular industry, occupation, or demographic group is in a region as compared to a larger reference region, e.g., state or nation.

**Occupation:** A category of workers defined by the Standard Occupational Classification (SOC).

**Openings (Annual):** The sum of new jobs and replacement jobs for a given occupation.

**Programs:** Courses of postsecondary study defined by CIP (Classification of Instructional Programs) codes.

**Projections:** Estimates of future job or population numbers based on (1) recent regional trends and (2) published forecasts created by a consensus of state and federal agencies

**Replacement Jobs:** The estimated number of job openings in an occupation due to retirement, turnover, and other factors aside from job growth. Based on national percentages by occupation.

# EXECUTIVE SUMMARY

## Regional Demographics

From 2007 to 2013, the region can expect the total population to change by -13 persons, or -0%. The age groups with the highest growth are:

Age Group	Change in Persons
30 to 34 years	4,279
65 to 69 years	2,942
60 to 64 years	2,292
70 to 74 years	2,284
55 to 59 years	1,697

Similarly, the racial/ethnic groups with the highest expected population growth are:

Group	Change in Persons
White Hispanic	1,687
Two or more races	1,123
Asian	750

Detailed tables are on pages 4-6.

## Educational Attainment

Total regional attainment of a college degree (any level) is below average compared to the state and below average compared to the nation. Detailed tables are on pages 7 through 10.

## High-Growth Industries

The following industries show the highest total job growth from 2007 to 2013:

- Private households
- Full-service restaurants
- General medical and surgical hospitals
- Janitorial services
- Offices of physicians
- Limited-service eating places
- Local government
- Warehouse clubs and supercenters
- Home centers
- Landscaping services

## Critical Occupations in High-Growth Industries

The following occupations show the most growth within the top ten high-growth industries. Detailed tables begin on p. 18.

- Maids and housekeeping cleaners
- Waiters and waitresses
- Registered nurses
- Combined food preparation and serving workers, including fast food
- Retail salespersons
- Child care workers
- Janitors and cleaners, except maids and housekeeping cleaners
- Cooks, restaurant
- Nursing aides, orderlies, and attendants
- First-line supervisors/managers of food preparation and serving workers

## High-Growth Occupations (Across All Industries)

These occupations show the most total growth across all industries. Detail table is on p. 26.

- Registered nurses
- Real estate sales agents
- Nursing aides, orderlies, and attendants
- Property, real estate, and community association managers
- Licensed practical and licensed vocational nurses
- Personal financial advisors
- Elementary school teachers, except special education
- Chief executives
- Management analysts
- Medical secretaries

## College Programs

For a quick comparison of the college's completers from the Department of Education's IPEDS database related to the region's high-growth occupations, turn to page 28.

# REGIONAL POPULATION SUMMARY

Knowing regional demographics can help colleges provide more targeted services. For example, regions with an aging population may require more classes for older residents to update their job skills. And, of course, a projected rise or decline in total population has serious implications for college enrollment, funding, and facilities planning. Note that nearly all regional numbers are compared to state or national averages—this gives an idea of the unique situation facing the region.

## Regional Change Comparison

### TOTAL POPULATION CHANGE

Total regional population change is below the state average.

	2007 Total	2013 Total	Change	% Change
Region	423,405	423,392	-13	0%
State	29,129,156	30,264,266	1,135,110	4%

### CHANGE IN POPULATION AGE 55+

The percentage of people age 55 and over in the region is expected to rise. It is above average compared to the state and above average compared to the nation.

	Total in Region	Total in State	% of Region	% of State	% of Nation
2007	123,441	6,869,716	29%	24%	23%
2013	133,041	7,906,441	31%	26%	26%

### CHANGE BY RACE, 2007 – 2013

Race/Ethnicity	2007 Total	Region Change	State Change	Nation Change
White, Non-Hispanic	372,272	-1%	1%	2%
White Hispanic	6,639	25%	20%	20%
Non-White Hispanic	483	21%	22%	20%
Black or African American	35,635	0%	4%	6%
American Indian or Alaska Native	941	7%	10%	8%
Asian	3,049	25%	20%	19%
Native Hawaiian and other Pacific Islander	78	-1%	18%	13%
Two or more races	4,308	26%	22%	21%

1. Note: for regions that include areas in multiple states, “state” data uses the sum or average of all states involved.

## “Concentrated” Groups

These tables show which regional demographic groups have an above-average presence in the region compared to the state and nation. This is calculated using location quotients or LQs (see p. 2). An LQ of 1.0 indicates a group accounts for an average percentage of the total population.

### AGE GROUPS

Above-average presence compared to state:

Age	2007 LQ (State)
85 years and over	1.41
80 to 84 years	1.35
75 to 79 years	1.32
70 to 74 years	1.30
65 to 69 years	1.29

Above-average presence compared to nation:

Age	2007 LQ (Nation)
85 years and over	1.39
80 to 84 years	1.33
65 to 69 years	1.32
70 to 74 years	1.32
75 to 79 years	1.30

### RACE/ETHNICITY GROUPS

Above-average presence compared to state:

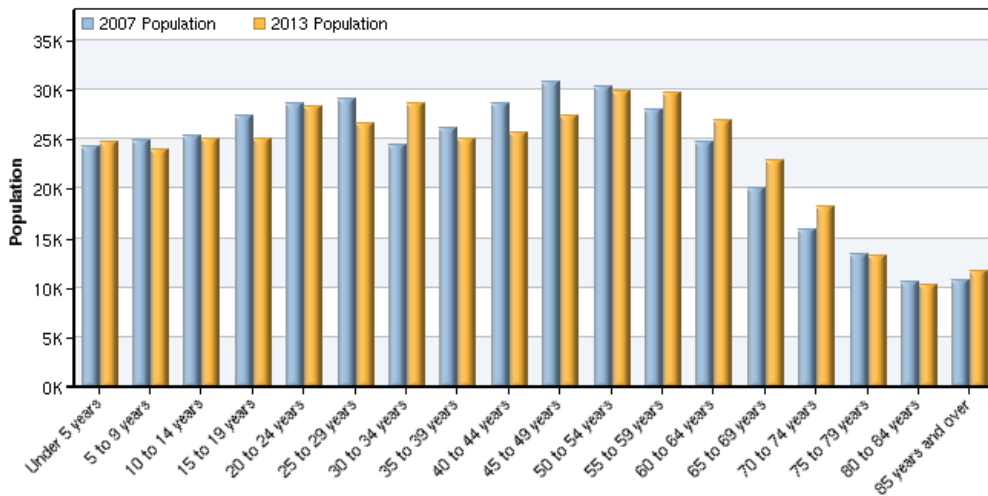
Group	2007 LQ (State)
White, Non-Hispanic	1.18

Above-average presence compared to nation:

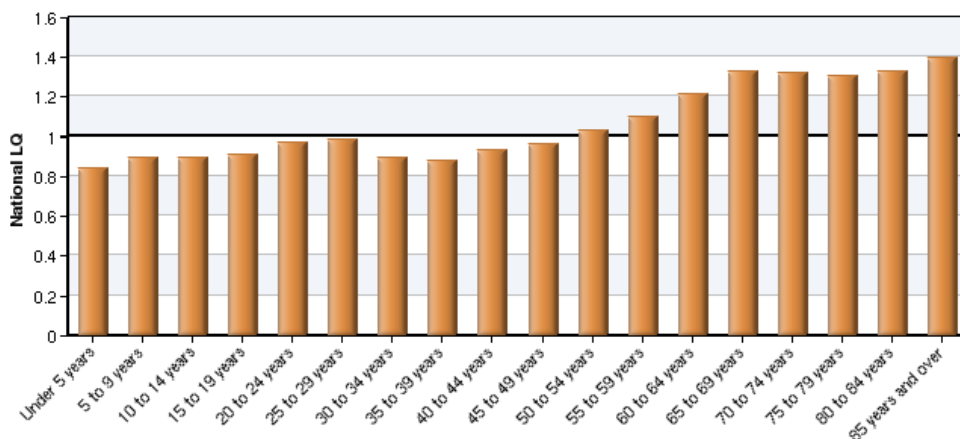
Group	2007 LQ (Nation)
White, Non-Hispanic	1.33

# POPULATION: DETAILED DATA

## Population by Age Details

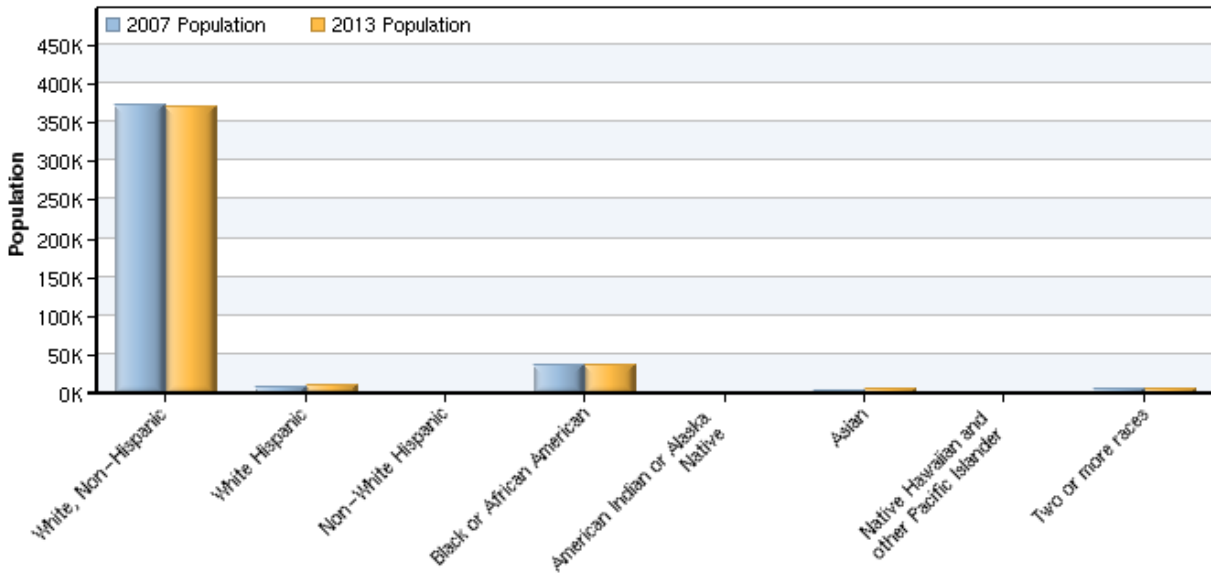


Age	2007 Population	2013 Population	Change	Change %	2007 LQ (State)	2007 LQ (Nation)
Under 5 years	24,333	24,774	441	2%	0.85	0.84
5 to 9 years	24,847	23,986	-861	-3%	0.89	0.89
10 to 14 years	25,416	24,976	-440	-2%	0.89	0.89
15 to 19 years	27,330	25,030	-2,300	-8%	0.92	0.91
20 to 24 years	28,640	28,238	-402	-1%	0.99	0.97
25 to 29 years	29,121	26,672	-2,449	-8%	0.96	0.99
30 to 34 years	24,389	28,668	4,279	18%	0.88	0.89
35 to 39 years	26,141	25,086	-1,055	-4%	0.89	0.88
40 to 44 years	28,574	25,733	-2,841	-10%	0.93	0.93
45 to 49 years	30,876	27,343	-3,533	-11%	0.96	0.96
50 to 54 years	30,297	29,844	-453	-1%	1.02	1.03
55 to 59 years	28,041	29,738	1,697	6%	1.09	1.10
60 to 64 years	24,684	26,976	2,292	9%	1.20	1.21
65 to 69 years	19,996	22,938	2,942	15%	1.29	1.32
70 to 74 years	15,927	18,211	2,284	14%	1.30	1.32
75 to 79 years	13,418	13,216	-202	-2%	1.32	1.30
80 to 84 years	10,610	10,258	-352	-3%	1.35	1.33
85 years and over	10,766	11,706	940	9%	1.41	1.39
<b>Total</b>	<b>423,405</b>	<b>423,392</b>	<b>-13</b>	<b>0%</b>		

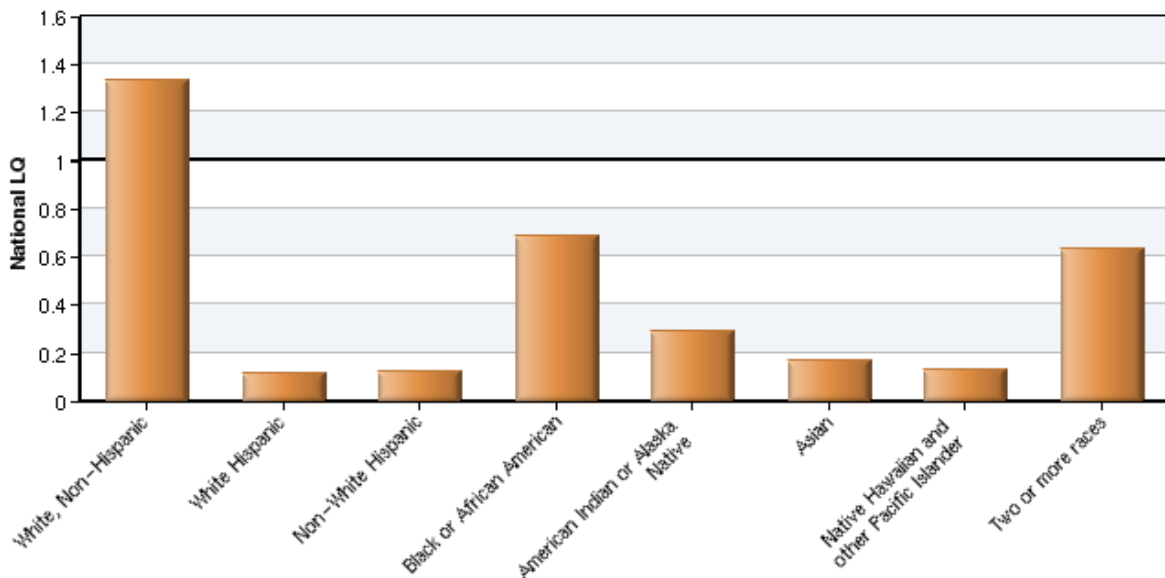


Source: EMSI Complete Employment - 2nd Quarter 2009 v. 2.

## Population by Race/Ethnicity Details



Race/Ethnicity	2007 Population	2013 Population	Change	Change %	2007 LQ (State)	2007 LQ (Nation)
White, Non-Hispanic	372,272	368,501	-3,771	-1%	1.18	1.33
White Hispanic	6,639	8,326	1,687	25%	0.20	0.11
Non-White Hispanic	483	585	102	21%	0.29	0.12
Black or African American	35,635	35,667	32	0%	0.63	0.69
American Indian or Alaska Native	941	1,006	65	7%	0.87	0.29
Asian	3,049	3,799	750	25%	0.28	0.17
Native Hawaiian and other Pacific Islander	78	77	-1	-1%	0.45	0.13
Two or more races	4,308	5,431	1,123	26%	0.88	0.63



Source: EMSI Complete Employment - 2nd Quarter 2009 v. 2.

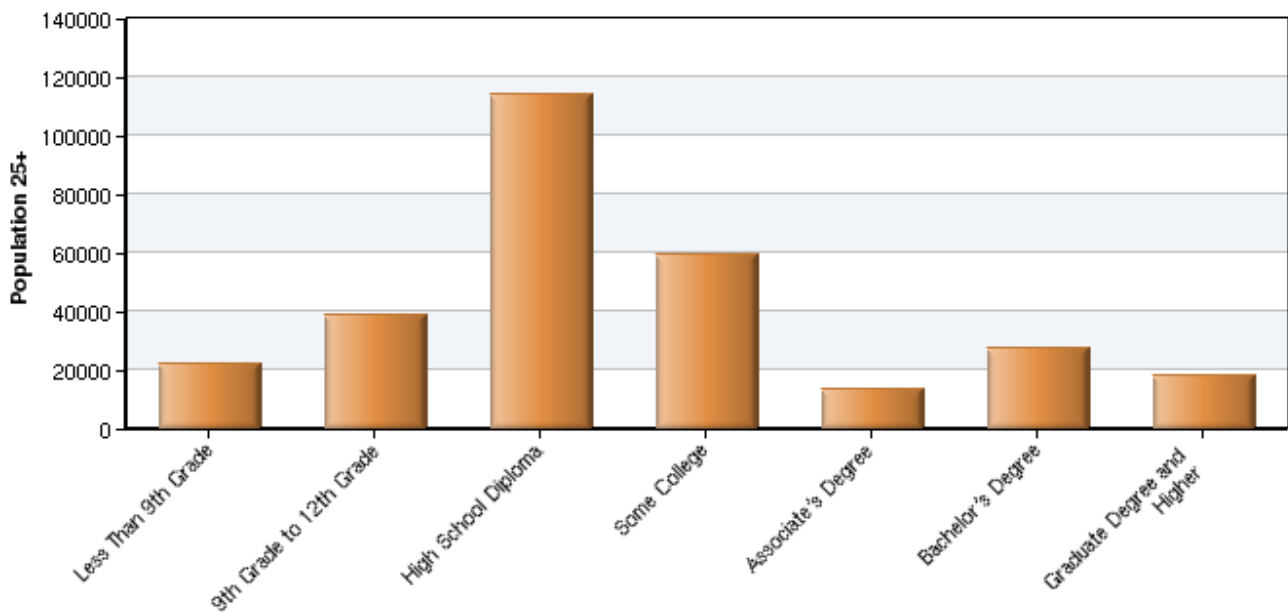
# EDUCATIONAL ATTAINMENT

In today's competitive knowledge economy, advanced education, training, and skills are more vital than ever. Studies also show that higher education levels are strongly tied to higher earnings, lower unemployment rates, and improved lifestyles. Regional educational attainment levels help colleges identify educational gaps in the region's workforce (especially in comparison to state and national levels). This helps state, college, and regional policymakers form a targeted plan to increase workforce education. Note that attainment is only tracked for persons age 25 and older.

## Educational Attainment Summary

In the region, college degree attainment is below average compared to the state and below average compared to the nation.

	% of Region	% of State	% of Nation
Less Than High School Diploma	20.6%	16.1%	15.5%
High School Diploma or Some College	59.3%	52.9%	50.6%
College Degree	20.1%	31.1%	33.9%



## Educational Attainment Totals, Detail

Educational Level	2007 Total (age 25+)	% of Region (age 25+)	% of State (age 25+)	% of Nation (age 25+)
Less Than 9th Grade	21,762	7.4%	6.0%	5.8%
9th Grade to 12th Grade	38,652	13.2%	10.0%	9.7%
High School Diploma	114,231	39.0%	30.8%	28.5%
Some College	59,379	20.3%	22.1%	22.1%
Associate's Degree	13,111	4.5%	5.6%	6.4%
Bachelor's Degree	27,445	9.4%	16.2%	17.5%
Graduate Degree and Higher	18,260	6.2%	9.3%	10.0%
	<b>292,839</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

Source: EMSI Complete Employment - 2nd Quarter 2009 v. 2.

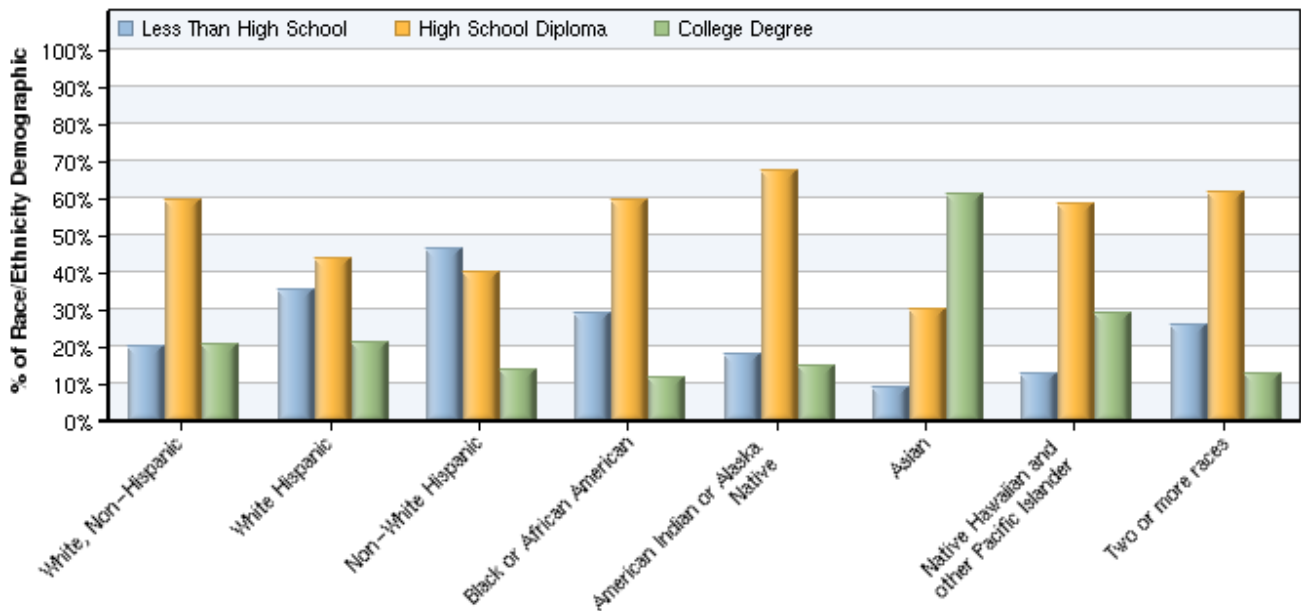
## Educational Attainment by Race/Ethnicity

### COMPARISON OF COLLEGE DEGREE ATTAINMENT TO STATE AND NATION

Differences are expressed in percentage points. Positive numbers indicate higher attainment levels in the region compared to the state or nation; negative numbers indicate lower attainment levels in the region.

Race/Ethnicity	Difference in College Attainment (State)	Difference in College Attainment (Nation)
White, Non-Hispanic	-11.5	-15.9
White Hispanic	1.2	1.3
Non-White Hispanic	-2.0	-1.7
Black or African American	-11.9	-13.2
American Indian or Alaska Native	-8.8	-7.6
Asian	-8.5	0.1
Native Hawaiian and other Pacific Islander	-3.2	2.4
Two or more races	-18.2	-20.7

### REGIONAL ATTAINMENT BY RACE/ETHNICITY, DETAIL



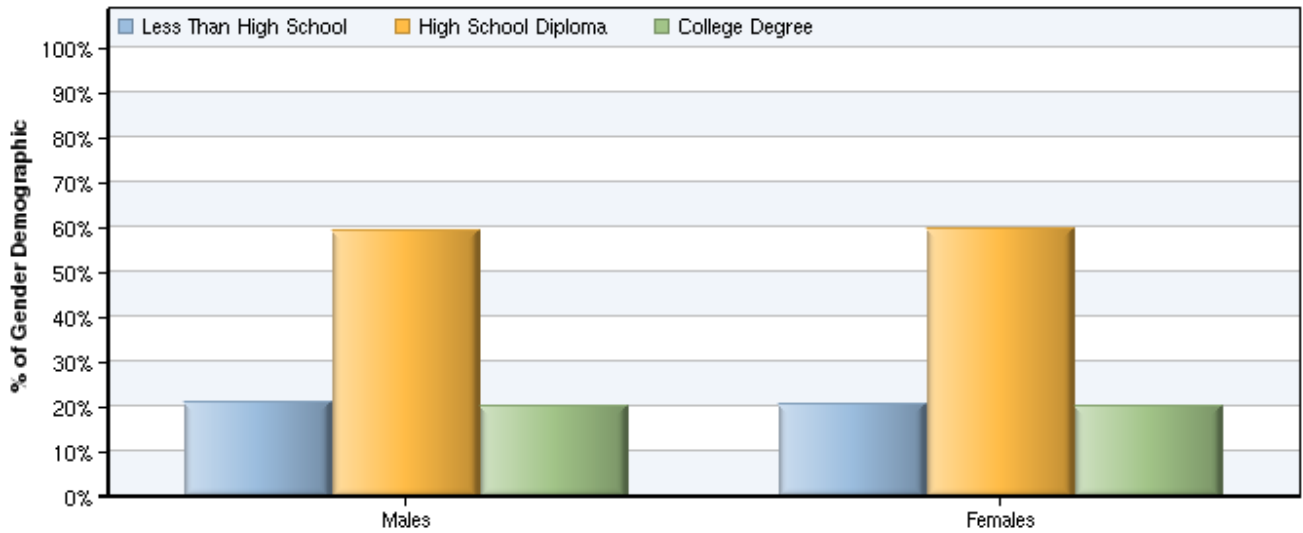
Race/Ethnicity	2007 Persons (age 25+)	Less Than High School	HS Diploma or Some College	College Degree
White, Non-Hispanic	263,264	52,097	157,190	53,977
White Hispanic	3,617	1,284	1,574	760
Non-White Hispanic	266	124	107	36
Black or African American	20,985	6,113	12,479	2,392
American Indian or Alaska Native	683	124	459	100
Asian	2,151	193	648	1,309
Native Hawaiian and other Pacific Islander	53	7	31	15
Two or more races	1,821	472	1,122	226
	<b>292,839</b>	<b>60,414</b>	<b>173,610</b>	<b>58,815</b>

Source: EMSI Complete Employment - 2nd Quarter 2009 v. 2.

## Educational Attainment by Gender

In the region, females have higher high school attainment rates and equal college degree attainment rates compared to males.

	2007 Total (age 25+)	Less Than High School	High School Diploma	College Degree
Males	139,321	20.9%	59.0%	20.1%
Females	153,518	20.4%	59.5%	20.1%



Source: EMSI Complete Employment - 2nd Quarter 2009 v. 2.

## REGIONAL INDUSTRY SUMMARY

Part of a college's mission is to support the workforce needs of vital regional industries. By using several different metrics for identifying such industries, this section of the report provides a map of the region's economy, thus helping colleges allocate workforce training resources. The listing of critical occupations within high-growth industries (right column) highlights high-growth occupations in these industries. Because these occupations are not filtered by education level, they may be served by non-credit continuing education, for-credit certificate or associate's track courses, or courses designed for transfer to four-year institutions.

### Industries with the Most Jobs

- Local government
- Crop and animal production
- State government
- Limited-service eating places
- Full-service restaurants

### High-Growth Industries

- Private households
- Full-service restaurants
- General medical and surgical hospitals
- Janitorial services
- Offices of physicians

### Concentrated Industries

These industries have an above-average share of total regional employment (compared to the U.S.):

- Navigational services to shipping
- Tire manufacturing
- Inland water transportation
- Rubber and plastics hose and belting mfg.
- Other basic inorganic chemical manufacturing

### Competitive Industries

These industries are outperforming national trends:

- Full-service restaurants
- Other rubber product manufacturing
- General medical and surgical hospitals
- Private households
- Tire manufacturing

### Critical Occupations in High-Growth Industries

Private households:

- Maids and housekeeping cleaners
- Child care workers
- Personal and home care aides
- Laborers and freight, stock, and material movers, hand
- Building cleaning workers, all other

Full-service restaurants:

- Waiters and waitresses
- Cooks, restaurant
- First-line supervisors/managers of food preparation and serving workers
- Hosts and hostesses, restaurant, lounge, and coffee shop
- Dishwashers

General medical and surgical hospitals:

- Registered nurses
- Nursing aides, orderlies, and attendants
- Pharmacy technicians
- Maids and housekeeping cleaners
- Radiologic technologists and technicians

Janitorial services:

- Janitors and cleaners, except maids and housekeeping cleaners
- Building cleaning workers, all other
- First-line supervisors/managers of housekeeping and janitorial workers
- Maids and housekeeping cleaners
- Laundry and dry-cleaning workers

Offices of physicians:

- Physicians and surgeons
- Registered nurses
- Medical assistants
- Receptionists and information clerks
- Licensed practical and licensed vocational nurses

## REGIONAL INDUSTRIES: DETAILED DATA

## Industry Sectors, Region and State, 2007 – 2013

The following table summarizes the region's economy in comparison to the state's. Broad industry sectors are sorted by total 2007 jobs.

NAICS Code	Description	REGION				EPW	STATE			
		2007 Jobs	2013 Jobs	Change	% Change		State 2007	State 2013	State % Change	State EPW
90	Government	33,238	33,751	513	2%	\$43,913	2,119,514	2,200,761	4%	\$54,985
31-33	Manufacturing	28,681	24,690	-3,991	-14%	\$59,415	1,654,154	1,433,306	-13%	\$71,444
44-45	Retail trade	27,236	27,490	254	1%	\$26,441	1,803,444	1,775,977	-2%	\$27,956
62	Health care and social assistance	20,372	23,337	2,965	15%	\$35,714	1,728,406	1,979,567	15%	\$44,364
11	Agriculture, forestry, fishing and hunting	16,518	16,048	-470	-3%	\$14,372	451,864	439,483	-3%	\$16,221
72	Accommodation and food services	14,372	15,868	1,496	10%	\$13,464	1,143,787	1,209,798	6%	\$18,052
23	Construction	14,305	14,688	383	3%	\$32,280	1,045,128	1,004,314	-4%	\$48,052
81	Other services, except public administration	12,331	13,253	922	7%	\$14,518	884,396	925,514	5%	\$22,742
48-49	Transportation and warehousing	11,474	11,847	373	3%	\$50,545	800,559	813,793	2%	\$53,468
56	Administrative and waste services	8,956	10,382	1,426	16%	\$22,399	1,098,488	1,154,468	5%	\$31,122
42	Wholesale trade	7,498	7,566	68	1%	\$49,133	693,048	690,802	0%	\$70,142
54	Professional and technical services	6,292	7,250	958	15%	\$38,601	996,404	1,082,924	9%	\$72,040
52	Finance and insurance	5,895	6,274	379	6%	\$37,891	843,389	888,221	5%	\$75,559
53	Real estate and rental and leasing	5,452	6,458	1,006	18%	\$20,560	673,631	753,437	12%	\$27,080
71	Arts, entertainment, and recreation	3,469	4,152	683	20%	\$27,852	312,168	329,952	6%	\$29,538
51	Information	2,454	2,457	3	0%	\$40,017	299,762	298,390	0%	\$66,118
61	Educational services	1,374	1,816	442	32%	\$14,286	365,071	409,135	12%	\$37,230
22	Utilities	1,031	1,050	19	2%	\$138,446	47,424	45,075	-5%	\$139,981
21	Mining	883	955	72	8%	\$59,029	59,087	67,800	15%	\$75,857
55	Management of companies and enterprises	641	742	101	16%	\$78,473	213,489	225,175	5%	\$112,755
		<b>222,473</b>	<b>230,074</b>	<b>7,601</b>	<b>3%</b>	<b>\$34,866</b>	<b>17,233,215</b>	<b>17,727,892</b>	<b>3%</b>	<b>\$47,368</b>

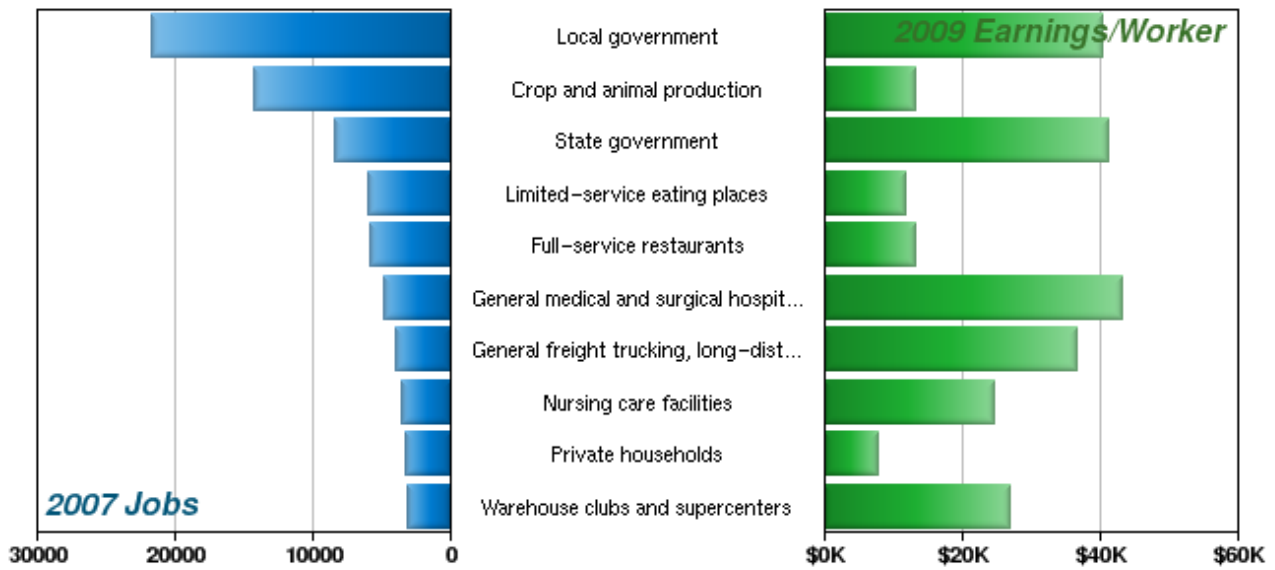
Source: EMSI Complete Employment - 2nd Quarter 2009 v. 2.

EPW stands for "earnings per worker," which is the total wage, salary, bonuses, and other compensation paid in the industry divided by the number of workers. Note that for regions including areas in multiple states, the "State" values are the sum or average of the values for all states involved.

Industry sectors and specific industries in the following sections are listed by NAICS code. For more information, see <http://www.bls.gov/bls/naics.htm>.

## Regional Industries Providing the Most Jobs, 2007

This section shows industries at a much greater level of detail than the sectors on the previous page.

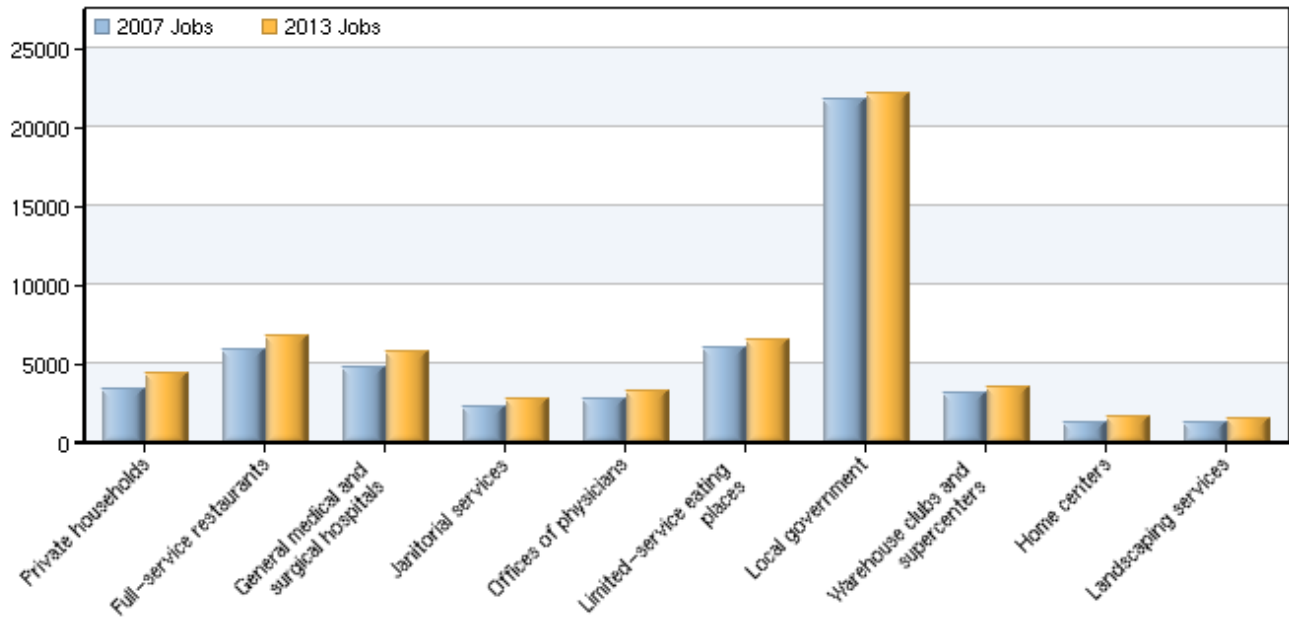


NAICS Code	Description	2007 Jobs	2013 Jobs	Change	% Change	2009 EPW
93000	Local government	21,701	22,168	467	2%	\$40,419
11A00	Crop and animal production	14,350	13,874	-476	-3%	\$13,070
92000	State government	8,372	8,461	89	1%	\$41,112
72221	Limited-service eating places	6,051	6,540	489	8%	\$11,622
72211	Full-service restaurants	5,836	6,808	972	17%	\$13,120
62211	General medical and surgical hospitals	4,812	5,721	909	19%	\$43,193
48412	General freight trucking, long-distance	3,987	4,112	125	3%	\$36,501
62311	Nursing care facilities	3,522	3,767	245	7%	\$24,432
81411	Private households	3,339	4,343	1,004	30%	\$7,852
45291	Warehouse clubs and supercenters	3,100	3,471	371	12%	\$26,805
81311	Religious organizations	2,847	3,118	271	10%	\$12,187
62111	Offices of physicians	2,788	3,306	518	19%	\$71,388
44511	Supermarkets and other grocery stores	2,563	2,342	-221	-9%	\$21,701
56132	Temporary help services	2,338	1,961	-377	-16%	\$18,781
32621	Tire manufacturing	2,323	2,093	-230	-10%	\$81,496
62441	Child day care services	2,297	2,234	-63	-3%	\$8,880
56172	Janitorial services	2,193	2,713	520	24%	\$9,707
31161	Animal slaughtering and processing	2,087	2,161	74	4%	\$33,293
52211	Commercial banking	2,019	1,924	-95	-5%	\$42,155
23611	Residential building construction	2,005	2,062	57	3%	\$34,221

Source: EMSI Complete Employment - 2nd Quarter 2009 v. 2.

## Highest Growth Regional Industries, 2007 – 2013

These industries are projected to add the most total jobs.



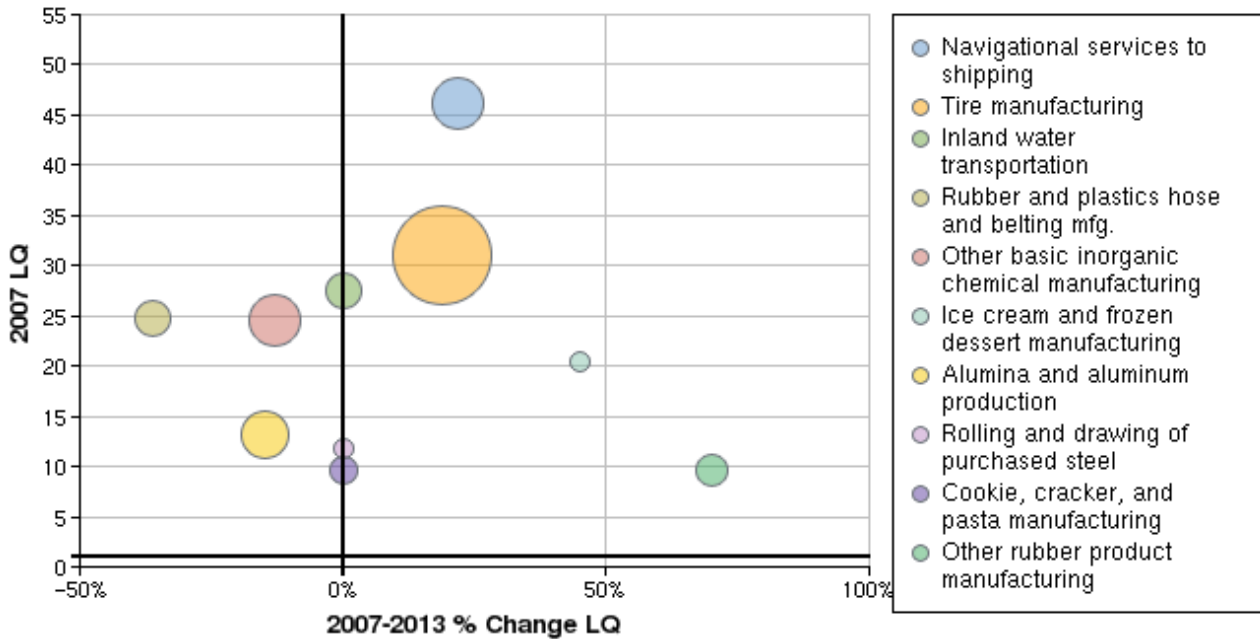
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56172	Janitorial services	2,193	2,713	520	24%	\$9,707
62111	Offices of physicians	2,788	3,306	518	19%	\$71,388
72221	Limited-service eating places	6,051	6,540	489	8%	\$11,622
93000	Local government	21,701	22,168	467	2%	\$40,419
45291	Warehouse clubs and supercenters	3,100	3,471	371	12%	\$26,805
44411	Home centers	1,220	1,568	348	29%	\$30,728
56173	Landscaping services	1,238	1,541	303	24%	\$12,948
53111	Lessors of residential buildings	1,416	1,713	297	21%	\$19,872
81311	Religious organizations	2,847	3,118	271	10%	\$12,187
53139	Other activities related to real estate	807	1,073	266	33%	\$12,527
62311	Nursing care facilities	3,522	3,767	245	7%	\$24,432
56111	Office administrative services	389	608	219	56%	\$18,898
54169	Other technical consulting services	381	599	218	57%	\$50,013
23899	All other specialty trade contractors	923	1,140	217	24%	\$18,155
53121	Offices of real estate agents and brokers	1,328	1,539	211	16%	\$11,274
71391	Golf courses and country clubs	401	586	185	46%	\$14,345
54194	Veterinary services	358	540	182	51%	\$27,176

Source: EMSI Complete Employment - 2nd Quarter 2009 v. 2.

## Most Concentrated Regional Industries, 2007 – 2013

Location quotients (LQs) are a way of measuring an industry’s regional concentration. A region with an average presence (or concentration) of a certain industry, compared to the national economy, will have an LQ of 1.0 for that industry. High-LQ industries are generally ones that are important to the region’s economic base—that is, they bring money into the region rather than circulating what is already there. As such, they are important targets for retention, expansion, and workforce development efforts.

Note: circle size indicates number of jobs in the industry.



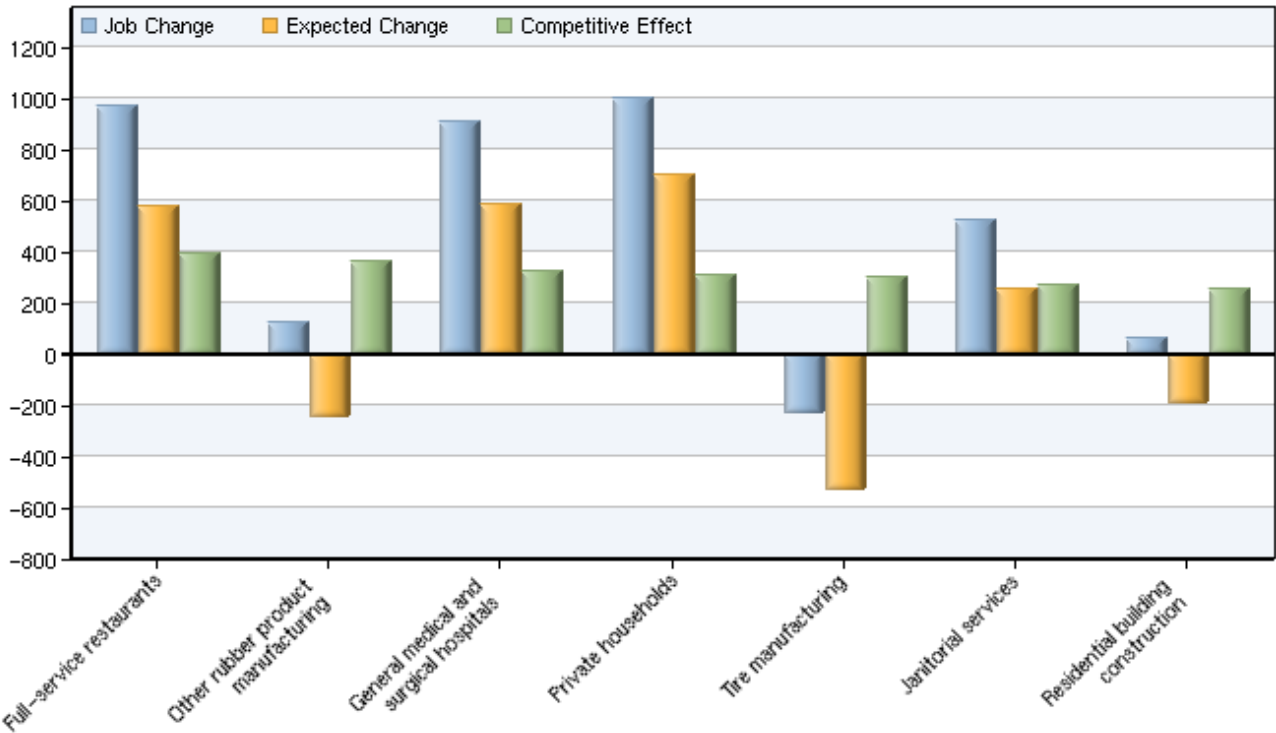
NAICS Code	Description	2007 Jobs	2013 Jobs	2007 LQ	2007-2013 % Change in LQ	2009 EPW
48833	Navigational services to shipping	1,291	1,410	46.15	22%	\$72,948
32621	Tire manufacturing	2,323	2,093	31.00	19%	\$81,496
48321	Inland water transportation	894	879	27.49	0%	\$91,859
32622	Rubber and plastics hose and belting mfg.	858	529	24.84	-36%	\$39,512
32518	Other basic inorganic chemical manufacturing	1,297	1,022	24.50	-13%	\$136,026
31152	Ice cream and frozen dessert manufacturing	510	657	20.40	45%	\$52,975
33131	Alumina and aluminum production	1,198	759	13.22	-15%	\$84,928
33122	Rolling and drawing of purchased steel	504	428	11.84	0%	\$137,673
31182	Cookie, cracker, and pasta manufacturing	668	628	9.65	0%	\$39,483
32629	Other rubber product manufacturing	756	876	9.61	70%	\$31,059
32742	Gypsum product manufacturing	168	160	9.38	33%	\$111,560
33636	Motor vehicle seating and interior trim mfg.	677	493	8.98	-22%	\$50,737
33361	Turbine and power transmission equipment mfg.	1,123	1,021	8.68	-11%	\$41,506
33311	Agricultural implement manufacturing	782	395	7.80	-50%	\$25,107
32731	Cement manufacturing	166	150	7.51	-13%	\$109,185
48839	Other support activities for water transport.	99	50	7.47	-43%	\$58,453
71321	Casinos, except casino hotels	994	1,057	7.44	14%	\$64,948
32512	Industrial gas manufacturing	169	160	7.31	29%	\$168,900
32613	Laminated plastics plate, sheet, and shapes	176	89	7.01	-43%	\$92,760
21231	Stone mining and quarrying	484	568	6.84	14%	\$60,357

Source: EMSI Complete Employment - 2nd Quarter 2009 v. 2.

## Most Competitive Regional Industries, 2007 – 2013

The regional competitiveness of an industry can be quantified using the standard “shift share” method. This method generates a “competitiveness effect” for the industry, which is basically regional job growth in the industry that exceeded national trends. These national trends include the percent growth of the U.S. economy and the percent growth of the given industry at the national level. The higher the competitiveness effect, the more the regional industry is outperforming national averages. Industries with a high competitiveness effect can give clues about the region’s comparative advantages, and are prime targets for regional workforce initiatives.

### INDUSTRIES WITH HIGHEST COMPETITIVE EFFECT



NAICS Code	Description	Job Change	Ind. Mix Effect	Natl. Effect	Expected Change	Competitive Effect
72211	Full-service restaurants	973	297	283	580	392
32629	Other rubber product manufacturing	120	-280	37	-244	363
62211	General medical and surgical hospitals	909	350	233	583	326
81411	Private households	1,003	535	162	697	306
32621	Tire manufacturing	-230	-640	113	-527	296
56172	Janitorial services	520	144	106	250	270
23611	Residential building construction	58	-293	97	-196	253
48833	Navigational services to shipping	119	-168	63	-105	224
31152	Ice cream and frozen dessert manufacturing	147	-62	25	-37	184
32192	Wood container and pallet manufacturing	170	-21	8	-13	183
53111	Lessors of residential buildings	297	55	69	124	173
44411	Home centers	348	117	59	176	172
81311	Religious organizations	271	-38	138	100	171
23899	All other specialty trade contractors	217	19	45	64	153
56173	Landscaping services	303	93	60	153	150
45211	Department stores	78	-111	45	-65	144
23622	Commercial building construction	148	-37	49	12	136
42491	Farm supplies merchant wholesalers	139	-13	23	10	129

## Industries With Highest Competitive Effect (Cont.)

NAICS Code	Description	Job Change	Ind. Mix Effect	Natl. Effect	Expected Change	Competitive Effect
23822	Plumbing and HVAC contractors	133	-70	78	9	124
48412	General freight trucking, long-distance	125	-192	193	2	123

Source: EMSI Complete Employment - 2nd Quarter 2009 v. 2.

### NOTE ON SHIFT SHARE TERMINOLOGY

In shift share analysis, “expected” job growth is based on the total regional industry jobs at the beginning of the timeframe, the regional jobs that could be attributed to the growth rate of the national economy during the timeframe (“national growth effect”), and the regional jobs that could be attributed to the growth rate of the same industry at the national level during the timeframe (“industry mix effect”). The difference between this expected job change and actual job change is called the regional “competitiveness effect.”

## Critical Occupations in High-Growth Industries

The following tables show the highest-growth occupations within each of the highest-growth regional industries from 2007 to 2013. They provide a business-oriented view of the most in-demand jobs over that timeframe, and the demand-driven college will seek to align its offerings accordingly. Many jobs found here, especially with an education level of “short-term or moderate-term on-the-job training” (ST OJT or MT OJT), are likely to be good candidates for industry-oriented continuing education programs.

Education level abbreviations:

ST OJT: Short-term on-the-job training; MT OJT: Moderate-term on-the-job training; LT OJT: Long-term on-the-job training; Exp. in Field: Work experience in a related field; PS Award: Postsecondary award; Associate's: Associate's degree; Bachelor's: Bachelor's degree; DG + Exp.: Degree plus work experience; Master's: Master's degree; Doctoral: Doctoral degree; Prof. DG: First professional degree

## Critical Occupations: Private households

Occupation	Job Growth (In Industry)	Median Hourly Wage (All Industries)	Average Education
Maids and housekeeping cleaners	603	\$7.54	ST OJT
Child care workers	250	\$7.12	ST OJT
Personal and home care aides	112	\$7.59	ST OJT
Laborers and freight, stock, and material movers, hand	9	\$10.27	ST OJT
Building cleaning workers, all other	9	\$6.73	ST OJT
Personal care and service workers, all other	5	\$7.61	ST OJT
Managers, all other	< 5	\$12.67	Exp. in Field
First-line supervisors/managers of housekeeping and janitorial workers	< 5	\$9.98	Exp. in Field
Landscaping and groundskeeping workers	< 5	\$9.01	ST OJT
Cooks, private household	< 5	\$6.99	LT OJT

Source: EMSI Complete Employment - 2nd Quarter 2009 v. 2.

## Critical Occupations: Full-service restaurants

Occupation	Job Growth (In Industry)	Median Hourly Wage (All Industries)	Average Education
Waiters and waitresses	421	\$7.99	ST OJT
Cooks, restaurant	157	\$9.31	LT OJT
First-line supervisors/managers of food preparation and serving workers	60	\$10.90	Exp. in Field
Hosts and hostesses, restaurant, lounge, and coffee shop	55	\$8.27	ST OJT
Dishwashers	54	\$8.27	ST OJT
Food service managers	46	\$11.82	Exp. in Field
Bartenders	33	\$10.62	ST OJT
Food preparation workers	30	\$7.93	ST OJT
Cooks, short order	27	\$7.94	ST OJT
Combined food preparation and serving workers, including fast food	18	\$7.32	ST OJT

Source: EMSI Complete Employment - 2nd Quarter 2009 v. 2.

## Critical Occupations: General medical and surgical hospitals

Occupation	Job Growth (In Industry)	Median Hourly Wage (All Industries)	Average Education
Registered nurses	289	\$24.23	Associate's
Nursing aides, orderlies, and attendants	116	\$9.30	PS Award
Pharmacy technicians	59	\$11.15	MT OJT
Maids and housekeeping cleaners	40	\$7.54	ST OJT
Radiologic technologists and technicians	23	\$20.00	Associate's
Medical and health services managers	17	\$27.95	DG + Exp.
Surgical technologists	17	\$15.87	PS Award
Respiratory therapists	17	\$18.75	Associate's
Interviewers, except eligibility and loan	16	\$11.32	ST OJT
Medical secretaries	13	\$11.11	PS Award

Source: EMSI Complete Employment - 2nd Quarter 2009 v. 2.

## Critical Occupations: Janitorial services

Occupation	Job Growth (In Industry)	Median Hourly Wage (All Industries)	Average Education
Janitors and cleaners, except maids and housekeeping cleaners	220	\$9.46	ST OJT
Building cleaning workers, all other	99	\$6.73	ST OJT
First-line supervisors/managers of housekeeping and janitorial workers	69	\$9.98	Exp. in Field
Maids and housekeeping cleaners	61	\$7.54	ST OJT
Laundry and dry-cleaning workers	11	\$8.16	MT OJT
Pest control workers	9	\$11.53	MT OJT
Chief executives	< 5	\$22.60	DG + Exp.
Maintenance and repair workers, general	< 5	\$16.06	MT OJT
Sales representatives, services, all other	< 5	\$15.54	MT OJT
Commercial divers	< 5	\$10.60	MT OJT

Source: EMSI Complete Employment - 2nd Quarter 2009 v. 2.

## Critical Occupations: Offices of physicians

Occupation	Job Growth (In Industry)	Median Hourly Wage (All Industries)	Average Education
Physicians and surgeons	92	\$65.83	Prof. DG
Registered nurses	73	\$24.23	Associate's
Medical assistants	71	\$12.25	MT OJT
Receptionists and information clerks	32	\$10.14	ST OJT
Licensed practical and licensed vocational nurses	27	\$16.19	PS Award
Medical secretaries	25	\$11.11	PS Award
Office clerks, general	20	\$10.26	ST OJT
Radiologic technologists and technicians	15	\$20.00	Associate's
Billing and posting clerks and machine operators	14	\$13.04	MT OJT
First-line supervisors/managers of office and administrative support workers	11	\$15.96	Exp. in Field

Source: EMSI Complete Employment - 2nd Quarter 2009 v. 2.

## Critical Occupations: Limited-service eating places

Occupation	Job Growth (In Industry)	Median Hourly Wage (All Industries)	Average Education
Combined food preparation and serving workers, including fast food	324	\$7.32	ST OJT
First-line supervisors/managers of food preparation and serving workers	52	\$10.90	Exp. in Field
Cooks, fast food	32	\$7.32	ST OJT
Food preparation workers	25	\$7.93	ST OJT
Waiters and waitresses	17	\$7.99	ST OJT
Food service managers	10	\$11.82	Exp. in Field
Cooks, short order	8	\$7.94	ST OJT
Counter attendants, cafeteria, food concession, and coffee shop	5	\$8.38	ST OJT
Cooks, institution and cafeteria	5	\$9.32	MT OJT
Truck drivers, light or delivery services	< 5	\$11.08	ST OJT

Source: EMSI Complete Employment - 2nd Quarter 2009 v. 2.

## Critical Occupations: Local government

Occupation	Job Growth (In Industry)	Median Hourly Wage (All Industries)	Average Education
Elementary school teachers, except special education	83	\$26.96	Bachelor's
Postsecondary teachers	30	\$30.62	N/A
Middle school teachers, except special and vocational education	28	\$27.35	Bachelor's
Special education teachers, preschool, kindergarten, and elementary school	20	\$26.67	Bachelor's
Registered nurses	20	\$24.23	Associate's
Police and sheriff's patrol officers	19	\$15.19	LT OJT
Correctional officers and jailers	17	\$13.33	MT OJT
Child care workers	16	\$7.12	ST OJT
Highway maintenance workers	13	\$12.64	MT OJT
Kindergarten teachers, except special education	12	\$24.21	Bachelor's

Source: EMSI Complete Employment - 2nd Quarter 2009 v. 2.

## Critical Occupations: Warehouse clubs and supercenters

Occupation	Job Growth (In Industry)	Median Hourly Wage (All Industries)	Average Education
Retail salespersons	147	\$8.93	ST OJT
Cashiers, except gaming	78	\$7.78	ST OJT
First-line supervisors/managers of retail sales workers	61	\$12.78	Exp. in Field
Customer service representatives	15	\$13.86	MT OJT
Stock clerks and order fillers	11	\$9.51	ST OJT
Combined food preparation and serving workers, including fast food	8	\$7.32	ST OJT
Demonstrators and product promoters	5	\$7.65	MT OJT
Pharmacists	5	\$52.70	Prof. DG
Bookkeeping, accounting, and auditing clerks	5	\$12.19	MT OJT
Shipping, receiving, and traffic clerks	< 5	\$13.45	ST OJT

Source: EMSI Complete Employment - 2nd Quarter 2009 v. 2.

## Critical Occupations: Home centers

Occupation	Job Growth (In Industry)	Median Hourly Wage (All Industries)	Average Education
Retail salespersons	148	\$8.93	ST OJT
First-line supervisors/managers of retail sales workers	31	\$12.78	Exp. in Field
Cashiers, except gaming	21	\$7.78	ST OJT
Industrial truck and tractor operators	15	\$14.50	ST OJT
Truck drivers, light or delivery services	14	\$11.08	ST OJT
Laborers and freight, stock, and material movers, hand	12	\$10.27	ST OJT
Truck drivers, heavy and tractor-trailer	10	\$14.84	MT OJT
Glaziers	7	\$13.58	LT OJT
Bookkeeping, accounting, and auditing clerks	6	\$12.19	MT OJT
Team assemblers	6	\$13.68	MT OJT

Source: EMSI Complete Employment - 2nd Quarter 2009 v. 2.

## Critical Occupations: Landscaping services

Occupation	Job Growth (In Industry)	Median Hourly Wage (All Industries)	Average Education
Landscaping and groundskeeping workers	105	\$9.01	ST OJT
Tree trimmers and pruners	46	\$7.86	ST OJT
Pesticide handlers, sprayers, and applicators, vegetation	41	\$7.22	MT OJT
Grounds maintenance workers, all other	40	\$7.09	ST OJT
First-line supervisors/managers of landscaping, lawn service, and groundskeeping workers	27	\$11.20	Exp. in Field
Janitors and cleaners, except maids and housekeeping cleaners	19	\$9.46	ST OJT
Chief executives	< 5	\$22.60	DG + Exp.
Managers, all other	< 5	\$12.67	Exp. in Field
Sales representatives, services, all other	< 5	\$15.54	MT OJT
Bookkeeping, accounting, and auditing clerks	< 5	\$12.19	MT OJT

Source: EMSI Complete Employment - 2nd Quarter 2009 v. 2.

## REGIONAL OCCUPATION SUMMARY

Employment outlooks organized by occupation provide a more workforce-oriented (rather than industry-oriented) perspective. These are jobs that are in demand across all industries in the region.

All tables except those showing major occupation groups have been filtered to include only occupations with an average education level between "Moderate-term on-the-job training" and "Bachelor's degree" inclusive. These jobs can be well-served through the development of for-credit certificate, associate's, or transfer programs.

### Occupation Groups Providing the Most Jobs

The major occupation groups accounting for the most total regional jobs in 2007 are:

- Sales and related occupations
- Office and administrative support occupations
- Management occupations
- Production occupations
- Transportation and material moving occupations

### Specific Occupations Providing the Most Jobs

The largest specific occupations are:

- Registered nurses
- Nursing aides, orderlies, and attendants
- Farm, ranch, and other agricultural managers
- Elementary school teachers, except special education
- General and operations managers

### High-Growth Occupations

The occupations with the most total new jobs from 2007 to 2013 are:

- Registered nurses
- Real estate sales agents
- Nursing aides, orderlies, and attendants
- Property, real estate, and community association managers
- Licensed practical and licensed vocational nurses

### Occupations with Most Total Openings

The occupations with the most estimated openings (new jobs plus replacement jobs) are:

- Registered nurses
- Real estate sales agents
- Nursing aides, orderlies, and attendants
- Elementary school teachers, except special education
- Licensed practical and licensed vocational nurses

## REGIONAL OCCUPATIONS: DETAILED DATA

## Major Occupation Groups, Region and State, 2007 – 2013

The following table summarizes regional occupations by major group, sorted by total 2007 jobs.

SOC Code	Description	REGION					STATE			
		2007 Jobs	2013 Jobs	Change	% Change	Repl. Jobs	Median Earnings	State 2007	State 2013	State Median Earnings
41	Sales and related occupations	26,772	28,057	1,285	5%	4,528	\$10.82	2,143,377	2,211,576	\$12.58
43	Office and administrative support occupations	25,214	25,809	595	2%	3,387	\$12.25	2,470,816	2,498,558	\$14.07
11	Management occupations	24,030	24,501	471	2%	2,664	\$14.33	1,392,347	1,429,254	\$23.13
51	Production occupations	22,824	20,167	-2,657	-12%	3,154	\$15.50	1,314,558	1,173,641	\$14.39
53	Transportation and material moving occupations	18,831	18,723	-108	-1%	2,575	\$14.10	1,227,084	1,195,412	\$14.18
35	Food preparation and serving related occupations	15,230	16,895	1,665	11%	3,079	\$8.45	1,137,297	1,215,297	\$8.54
47	Construction and extraction occupations	12,437	12,717	280	2%	1,211	\$13.23	889,572	861,800	\$19.08
25	Education, training, and library occupations	11,902	12,500	598	5%	1,399	\$22.21	924,869	993,520	\$25.32
37	Building and grounds cleaning and maintenance occupations	9,541	11,212	1,671	18%	1,065	\$8.38	660,541	727,456	\$9.42
49	Installation, maintenance, and repair occupations	9,407	9,425	18	0%	901	\$16.05	620,135	624,864	\$17.62
29	Healthcare practitioners and technical occupations	9,309	10,702	1,393	15%	1,151	\$26.31	802,282	901,393	\$29.25
39	Personal care and service occupations	7,071	7,424	353	5%	1,044	\$8.05	537,331	570,348	\$8.93
13	Business and financial operations occupations	5,594	6,087	493	9%	572	\$16.75	807,943	862,721	\$22.86
31	Healthcare support occupations	5,087	5,774	687	14%	338	\$10.54	369,066	423,934	\$11.64
33	Protective service occupations	3,559	3,813	254	7%	598	\$14.38	305,069	327,245	\$17.93
27	Arts, design, entertainment, sports, and media occupations	3,336	3,635	299	9%	504	\$10.35	396,455	408,123	\$14.43
45	Farming, fishing, and forestry occupations	3,275	3,153	-122	-4%	518	\$10.75	76,252	75,419	\$10.70
21	Community and social services occupations	2,981	3,219	238	8%	317	\$13.42	229,507	250,809	\$15.09
17	Architecture and engineering occupations	1,743	1,712	-31	-2%	234	\$27.94	204,916	204,651	\$30.15
55	Military Occupations	1,420	1,384	-36	-3%	197	\$8.86	162,769	160,524	\$14.24
15	Computer and mathematical science occupations	1,087	1,204	117	11%	160	\$19.39	310,349	344,665	\$30.52
19	Life, physical, and social science occupations	1,078	1,156	78	7%	159	\$21.39	127,960	137,590	\$24.78
23	Legal occupations	746	806	60	8%	79	\$21.03	122,722	129,091	\$36.50
		<b>222,473</b>	<b>230,074</b>	<b>7,601</b>	<b>3%</b>	<b>29,833</b>	<b>\$13.82</b>	<b>17,233,215</b>	<b>17,727,892</b>	<b>\$16.86</b>

Source: EMSI Complete Employment - 2nd Quarter 2009 v. 2.

Note: For regions including areas in multiple states, state values are the sum or average of all states involved.

## Top-Ranked Occupations by Total Jobs, 2007

Occupations have been filtered by average education level to include only those between “Moderate-term on-the-job training” and “Bachelor’s degree” inclusive.

SOC Code	Description	2007 Jobs	2013 Jobs	Change	% Change	Repl. Jobs	Median Earnings	Education Level
29-1111	Registered nurses	2,937	3,410	473	16%	304	\$24.23	Associate's
31-1012	Nursing aides, orderlies, and attendants	2,693	2,960	267	10%	148	\$9.30	PS Award
11-9011	Farm, ranch, and other agricultural managers	2,491	2,443	-48	-2%	110	\$9.61	DG + Exp.
25-2021	Elementary school teachers, except special education	2,222	2,319	97	4%	286	\$26.96	Bachelor's
11-1021	General and operations managers	2,089	2,068	-21	-1%	292	\$30.25	DG + Exp.
25-2031	Secondary school teachers, except special and vocational education	1,400	1,395	-5	0%	242	\$28.54	Bachelor's
41-9022	Real estate sales agents	1,357	1,661	304	22%	133	\$6.83	PS Award
11-1011	Chief executives	1,342	1,438	96	7%	217	\$22.60	DG + Exp.
49-3023	Automotive service technicians and mechanics	1,334	1,285	-49	-4%	152	\$10.75	PS Award
29-2061	Licensed practical and licensed vocational nurses	1,323	1,439	116	9%	222	\$16.19	PS Award
11-9021	Construction managers	1,189	1,238	49	4%	103	\$11.18	Bachelor's
13-2011	Accountants and auditors	1,169	1,241	72	6%	123	\$16.11	Bachelor's
25-2022	Middle school teachers, except special and vocational education	1,032	1,064	32	3%	133	\$27.35	Bachelor's
11-9141	Property, real estate, and community association managers	894	1,080	186	21%	76	\$10.80	Bachelor's
41-3021	Insurance sales agents	822	861	39	5%	108	\$11.74	Bachelor's
25-2011	Preschool teachers, except special education	690	703	13	2%	66	\$10.49	PS Award
11-3031	Financial managers	620	652	32	5%	54	\$26.87	DG + Exp.
21-1021	Child, family, and school social workers	606	628	22	4%	75	\$17.29	Bachelor's
43-6013	Medical secretaries	568	645	77	14%	57	\$11.11	PS Award
13-1199	Business operation specialists, all other	529	585	56	11%	35	\$22.57	Bachelor's

Source: EMSI Complete Employment - 2nd Quarter 2009 v. 2.

## Top-Ranked Occupations by Total Growth, 2007 – 2013

Occupations have been filtered by average education level to include only those between “Moderate-term on-the-job training” and “Bachelor’s degree” inclusive.

SOC Code	Description	2007 Jobs	2013 Jobs	Change	% Change	Repl. Jobs	Median Earnings	Education Level
29-1111	Registered nurses	2,937	3,410	473	16%	304	\$24.23	Associate's
41-9022	Real estate sales agents	1,357	1,661	304	22%	133	\$6.83	PS Award
31-1012	Nursing aides, orderlies, and attendants	2,693	2,960	267	10%	148	\$9.30	PS Award
11-9141	Property, real estate, and community association managers	894	1,080	186	21%	76	\$10.80	Bachelor's
29-2061	Licensed practical and licensed vocational nurses	1,323	1,439	116	9%	222	\$16.19	PS Award
13-2052	Personal financial advisors	426	535	109	26%	25	\$8.45	Bachelor's
25-2021	Elementary school teachers, except special education	2,222	2,319	97	4%	286	\$26.96	Bachelor's
11-1011	Chief executives	1,342	1,438	96	7%	217	\$22.60	DG + Exp.
13-1111	Management analysts	399	486	87	22%	44	\$16.46	DG + Exp.
43-6013	Medical secretaries	568	645	77	14%	57	\$11.11	PS Award
13-2011	Accountants and auditors	1,169	1,241	72	6%	123	\$16.11	Bachelor's
13-2021	Appraisers and assessors of real estate	312	375	63	20%	38	\$9.84	PS Award
41-3031	Securities, commodities, and financial services sales agents	330	393	63	19%	54	\$14.94	Bachelor's
25-3099	Teachers and instructors, all other	488	544	56	11%	32	\$16.26	Bachelor's
13-1199	Business operation specialists, all other	529	585	56	11%	35	\$22.57	Bachelor's
39-9031	Fitness trainers and aerobics instructors	248	301	53	21%	33	\$8.47	PS Award
29-1123	Physical therapists	191	242	51	27%	15	\$35.72	Master's
25-3011	Adult literacy, remedial education, and GED teachers and instructors	245	295	50	20%	16	\$13.12	Bachelor's
11-9021	Construction managers	1,189	1,238	49	4%	103	\$11.18	Bachelor's
11-9111	Medical and health services managers	399	444	45	11%	46	\$27.95	DG + Exp.

Source: EMSI Complete Employment - 2nd Quarter 2009 v. 2.

## Top-Ranked Occupations by New + Repl. Jobs, 2007 – 2013

Occupations have been filtered by average education level to include only those between “Moderate-term on-the-job training” and “Bachelor’s degree” inclusive.

SOC Code	Description	2007 Jobs	2013 Jobs	New + Repl. Jobs	Median Earnings	Education Level
29-1111	Registered nurses	2,937	3,410	777	\$24.23	Associate's
41-9022	Real estate sales agents	1,357	1,661	437	\$6.83	PS Award
31-1012	Nursing aides, orderlies, and attendants	2,693	2,960	415	\$9.30	PS Award
25-2021	Elementary school teachers, except special education	2,222	2,319	383	\$26.96	Bachelor's
29-2061	Licensed practical and licensed vocational nurses	1,323	1,439	338	\$16.19	PS Award
11-1011	Chief executives	1,342	1,438	313	\$22.60	DG + Exp.
11-1021	General and operations managers	2,089	2,068	271	\$30.25	DG + Exp.
11-9141	Property, real estate, and community association managers	894	1,080	262	\$10.80	Bachelor's
25-2031	Secondary school teachers, except special and vocational education	1,400	1,395	237	\$28.54	Bachelor's
13-2011	Accountants and auditors	1,169	1,241	195	\$16.11	Bachelor's
25-2022	Middle school teachers, except special and vocational education	1,032	1,064	165	\$27.35	Bachelor's
11-9021	Construction managers	1,189	1,238	152	\$11.18	Bachelor's
41-3021	Insurance sales agents	822	861	147	\$11.74	Bachelor's
13-2052	Personal financial advisors	426	535	134	\$8.45	Bachelor's
43-6013	Medical secretaries	568	645	134	\$11.11	PS Award
13-1111	Management analysts	399	486	131	\$16.46	DG + Exp.
41-3031	Securities, commodities, and financial services sales agents	330	393	117	\$14.94	Bachelor's
49-3023	Automotive service technicians and mechanics	1,334	1,285	103	\$10.75	PS Award
13-2021	Appraisers and assessors of real estate	312	375	101	\$9.84	PS Award
21-1021	Child, family, and school social workers	606	628	97	\$17.29	Bachelor's

Source: EMSI Complete Employment - 2nd Quarter 2009 v. 2.

# OCCUPATION DEMAND & PROGRAM COMPARISON

This section compares regional occupations with the most annual openings to the college's completers from the Department of Education's IPEDS database, with the goal of indicating where the college might look to increase its capacity. The occupations are taken directly from the "Top-Ranked Occupations by New + Repl. Jobs" table on the previous page. "Related programs" associated with occupations are identified using a crosswalk developed by the U.S. Department of Education with some customizations by EMSI. College enrollment numbers by CIP code are provided by West Kentucky Community And Technical College.

## Summary: High-Demand Occupations and Related Enrollment

Description	2007-2013 Avg. Annual Openings	Median Hourly Earnings	2008 Completers, All Related Programs (West Kentucky Community And Technical College)	2008 Completers, All Related Programs (Region)
Registered nurses	130	\$24.23	77	275
Real estate sales agents	73	\$6.83	0	0
Nursing aides, orderlies, and attendants	69	\$9.30	23	138
Elementary school teachers, except special education	64	\$26.96	0	228
Licensed practical and licensed vocational nurses	56	\$16.19	443	558
Chief executives	52	\$22.60	141	721
General and operations managers	45	\$30.25	141	721
Property, real estate, and community association managers	44	\$10.80	0	0
Secondary school teachers, except special and vocational education	40	\$28.54	0	167
Accountants and auditors	32	\$16.11	0	117
Middle school teachers, except special and vocational education	27	\$27.35	0	119
Construction managers	25	\$11.18	141	710
Insurance sales agents	24	\$11.74	0	0
Personal financial advisors	22	\$8.45	0	21
Medical secretaries	22	\$11.11	0	3
Management analysts	22	\$16.46	141	710
Securities, commodities, and financial services sales agents	19	\$14.94	0	0
Automotive service technicians and mechanics	17	\$10.75	0	1
Appraisers and assessors of real estate	17	\$9.84	0	0
Child, family, and school social workers	16	\$17.29	0	73
Medical and health services managers	15	\$27.95	0	0

Source: EMSI Complete Employment - 2nd Quarter 2009 v. 2.

Note that many occupations have multiple related programs and vice versa, so students enrolled in a program may be included in more than one row in the table above. "Average annual openings" is total new and replacement jobs divided by the number of years in the given timeframe.

## Detail: High-Demand Occupations and Related Program Enrollment

Occupation	2007-2013 Avg. Annual Openings	Median Hourly Earnings	Related Programs	2008 Completers at College
Registered nurses	130	\$24.23	TOTAL, ALL RELATED PROGRAMS	77
			Pre-Nursing Studies	
			Health/Medical Preparatory Programs, Other	
			Nursing/Registered Nurse (RN, ASN, BSN, MSN)	77
			Adult Health Nurse/Nursing	
			Nurse Anesthetist	
			Family Practice Nurse/Nurse Practitioner	
			Maternal/Child Health and Neonatal Nurse/Nursing	
			Nurse Midwife/Nursing Midwifery	
			Nursing Science (MS, PhD)	
			Pediatric Nurse/Nursing	
			Psychiatric/Mental Health Nurse/Nursing	
			Public Health/Community Nurse/Nursing	
			Perioperative/Operating Room and Surgical Nurse/Nursing	
Clinical Nurse Specialist				
Critical Care Nursing				
Occupational and Environmental Health Nursing				
Nursing, Other				
Real estate sales agents	73	\$6.83	TOTAL, ALL RELATED PROGRAMS	0
			Real Estate	
Nursing aides, orderlies, and attendants	69	\$9.30	TOTAL, ALL RELATED PROGRAMS	23
			Nurse/Nursing Assistant/Aide and Patient Care Assistant	23
			Health Aide	
Elementary school teachers, except special education	64	\$26.96	TOTAL, ALL RELATED PROGRAMS	0
			Education, General	
			Elementary Education and Teaching	
			Teacher Education, Multiple Levels	
			Montessori Teacher Education	
			Waldorf/Steiner Teacher Education	
Licensed practical and licensed vocational nurses	56	\$16.19	TOTAL, ALL RELATED PROGRAMS	443
			Pre-Nursing Studies	
			Licensed Practical/Vocational Nurse Training (LPN, LVN, Cert, Dipl, AAS)	373
			Licensed Practical/Vocational Nurse Training (LPN, LVN, Cert, Dipl, AAS)	70
Chief executives	52	\$22.60	TOTAL, ALL RELATED PROGRAMS	141
			Public Administration	
			Public Policy Analysis	
			Public Administration and Social Service Professions, Other	
			Business/Commerce, General	
			Business Administration and Management, General	120
			Business Administration and Management, General	5
			Business Administration and Management, General	16
			Entrepreneurship/Entrepreneurial Studies	
International Business/Trade/Commerce				
General and operations managers	45	\$30.25	TOTAL, ALL RELATED PROGRAMS	141

**Regional Scan & Program Demand Report | West Kentucky Community And Technical College**

<b>Occupation</b>	<b>2007-2013 Avg. Annual Openings</b>	<b>Median Hourly Earnings</b>	<b>Related Programs</b>	<b>2008 Completers at College</b>
			Public Administration	
			Business/Commerce, General	
			Business Administration and Management, General	120
			Business Administration and Management, General	5
			Business Administration and Management, General	16
			Entrepreneurship/Entrepreneurial Studies	
			International Business/Trade/Commerce	
Property, real estate, and community association managers	44	\$10.80	TOTAL, ALL RELATED PROGRAMS	0
			Real Estate	
Secondary school teachers, except special and vocational education	40	\$28.54	TOTAL, ALL RELATED PROGRAMS	0
			Education, General	
			Junior High/Intermediate/Middle School Education and Teaching	
			Secondary Education and Teaching	
			Teacher Education, Multiple Levels	
			Montessori Teacher Education	
			Waldorf/Steiner Teacher Education	
			Agricultural Teacher Education	
			Art Teacher Education	
			Business Teacher Education	
			Driver and Safety Teacher Education	
			English/Language Arts Teacher Education	
			Foreign Language Teacher Education	
			Health Teacher Education	
			Family and Consumer Sciences/Home Economics Teacher Education	
			Technology Teacher Education/Industrial Arts Teacher Education	
			Sales and Marketing Operations/Marketing and Distribution Teacher Education	
			Mathematics Teacher Education	
			Music Teacher Education	
			Physical Education Teaching and Coaching	
			Reading Teacher Education	
			Science Teacher Education/General Science Teacher Education	
			Social Science Teacher Education	
			Social Studies Teacher Education	
			Computer Teacher Education	
			Biology Teacher Education	
			Chemistry Teacher Education	
			Drama and Dance Teacher Education	
			French Language Teacher Education	
			German Language Teacher Education	
			Health Occupations Teacher Education	
			History Teacher Education	
			Physics Teacher Education	
			Spanish Language Teacher Education	
			Speech Teacher Education	
			Geography Teacher Education	
			Latin Teacher Education	
			Psychology Teacher Education	

## Regional Scan & Program Demand Report | West Kentucky Community And Technical College

Occupation	2007-2013 Avg. Annual Openings	Median Hourly Earnings	Related Programs	2008 Completers at College
			Teacher Education and Professional Development, Specific Subject Areas, Other	
			Teaching French as a Second or Foreign Language	
Accountants and auditors	32	\$16.11	TOTAL, ALL RELATED PROGRAMS	0
			Accounting and Computer Science	
			Accounting	
			Auditing	
			Accounting and Finance	
			Accounting and Business/Management	
			Taxation	
Middle school teachers, except special and vocational education	27	\$27.35	TOTAL, ALL RELATED PROGRAMS	0
			Education, General	
			Junior High/Intermediate/Middle School Education and Teaching	
			Montessori Teacher Education	
			Waldorf/Steiner Teacher Education	
			Art Teacher Education	
			English/Language Arts Teacher Education	
			Foreign Language Teacher Education	
			Health Teacher Education	
			Family and Consumer Sciences/Home Economics Teacher Education	
			Technology Teacher Education/Industrial Arts Teacher Education	
			Mathematics Teacher Education	
			Music Teacher Education	
			Physical Education Teaching and Coaching	
			Reading Teacher Education	
			Science Teacher Education/General Science Teacher Education	
			Social Science Teacher Education	
			Social Studies Teacher Education	
			Computer Teacher Education	
			Health Occupations Teacher Education	
			History Teacher Education	
			Teacher Education and Professional Development, Specific Subject Areas, Other	
Construction managers	25	\$11.18	TOTAL, ALL RELATED PROGRAMS	141
			Construction Engineering Technology/Technician	
			Business/Commerce, General	
			Business Administration and Management, General	120
			Business Administration and Management, General	5
			Business Administration and Management, General	16
			Operations Management and Supervision	
Insurance sales agents	24	\$11.74	TOTAL, ALL RELATED PROGRAMS	0
			Insurance	
Personal financial advisors	22	\$8.45	TOTAL, ALL RELATED PROGRAMS	0
			Finance, General	
			Financial Planning and Services	
Medical secretaries	22	\$11.11	TOTAL, ALL RELATED PROGRAMS	0
			Medical Office Assistant/Specialist	

## Regional Scan & Program Demand Report | West Kentucky Community And Technical College

Occupation	2007-2013 Avg. Annual Openings	Median Hourly Earnings	Related Programs	2008 Completers at College
			Medical Insurance Specialist/Medical Biller	
			Medical Administrative/Executive Assistant and Medical Secretary	
Management analysts	22	\$16.46	TOTAL, ALL RELATED PROGRAMS	141
			Business/Commerce, General	
			Business Administration and Management, General	120
			Business Administration and Management, General	5
			Business Administration and Management, General	16
Securities, commodities, and financial services sales agents	19	\$14.94	TOTAL, ALL RELATED PROGRAMS	0
			Financial Planning and Services	
			Investments and Securities	
			Business and Personal/Financial Services Marketing Operations	
Automotive service technicians and mechanics	17	\$10.75	TOTAL, ALL RELATED PROGRAMS	0
			Automotive Engineering Technology/Technician	
			Automobile/Automotive Mechanics Technology/Technician	
			Vehicle Emissions Inspection and Maintenance Technology/Technician	
			Medium/Heavy Vehicle and Truck Technology/Technician	
			Alternative Fuel Vehicle Technology/Technician	
Appraisers and assessors of real estate	17	\$9.84	TOTAL, ALL RELATED PROGRAMS	0
			Real Estate	
Child, family, and school social workers	16	\$17.29	TOTAL, ALL RELATED PROGRAMS	0
			Juvenile Corrections	
			Social Work	
			Youth Services/Administration	
			Social Work, Other	
Medical and health services managers	15	\$27.95	TOTAL, ALL RELATED PROGRAMS	0
			Health/Health Care Administration/Management	
			Hospital and Health Care Facilities Administration/Management	
			Health Unit Manager/Ward Supervisor	
			Health Information/Medical Records Administration/Administrator	
			Medical Staff Services Technology/Technician	
			Health and Medical Administrative Services, Other	
			Nursing Administration (MSN, MS, PhD)	
			Public Health, General (MPH, DPH)	
			Community Health and Preventive Medicine	
			Health Services Administration	
			Public Health, Other	

Source: EMSI Complete Employment - 2nd Quarter 2009 v. 2.

## ABOUT EMSI & THE DATA

Economic Modeling Specialists Inc. (EMSI) is a professional services firm that specializes in integrated, value-added datasets, web-based analysis tools (Strategic Advantage), data-driven reports, and custom consulting. EMSI's comprehensive dataset is generated from over 70 state, federal, and private sources.

### Population Data

EMSI's custom population data and projections are based on several sources, including the 1990 and 2000 Census, U.S. Census Bureau annual estimates (including net migration), localized fertility/mortality rates by race/ethnicity and gender from the U.S. Health Department, and even projected regional job growth estimated from state and national employment projections, on the assumption that people will follow jobs.

### Educational Attainment Data

EMSI's educational attainment numbers are based on Census 1990, Census 2000, the Current Population Survey, and EMSI's demographic data. By combining these sources, EMSI interpolates for missing years and projects data at the county level. Educational attainment data cover only the population aged 25 years or more and indicate the highest level achieved.

### High School Graduation Data

High school graduation data are created by EMSI using the U.S. Department of Education's National Center for Education Statistics (NCES), as well as from EMSI's own demographic projections. Because the race/ethnicity categories used by NCES are somewhat different from EMSI's standard categories, they are converted to EMSI's categories. In addition, every year there are some U.S. counties with missing data, so EMSI generates estimates based on a regression of demographically and economically similar counties. Finally, the original numbers do not include private school graduations, so EMSI adds in estimates of these numbers based on a state-level NCES data source, using interpolation techniques to distribute the numbers to the county level.

### Industry Data

In order to capture a complete picture of industry employment, EMSI basically combines covered employment data from Quarterly Census of Employment and Wages (QCEW) produced by the Department of Labor with total employment data in Regional Economic Information System (REIS) published by the Bureau of Economic Analysis (BEA), augmented with County Business Patterns (CBP) and Nonemployer Statistics (NES) published by the U.S. Census Bureau. Projections are based on the latest available EMSI industry data combined with past trends in each industry and the industry growth rates in national projections (Bureau of Labor Statistics) and states' own projections, where available.

### Occupation Data

Organizing regional employment information by occupation provides a workforce-oriented view of the regional economy. EMSI's occupation data are based on EMSI's industry data and regional staffing patterns taken from the Occupational Employment Statistics program (U.S. Bureau of Labor Statistics). Wage information is partially derived from the American Community Survey. The occupation-to-program (SOC-to-CIP) crosswalk is based on one from the U.S. Department of Education, with customizations by EMSI.