

Naugatuck Valley Economic Profile 2014

A Report by the Naugatuck Valley Council of Governments

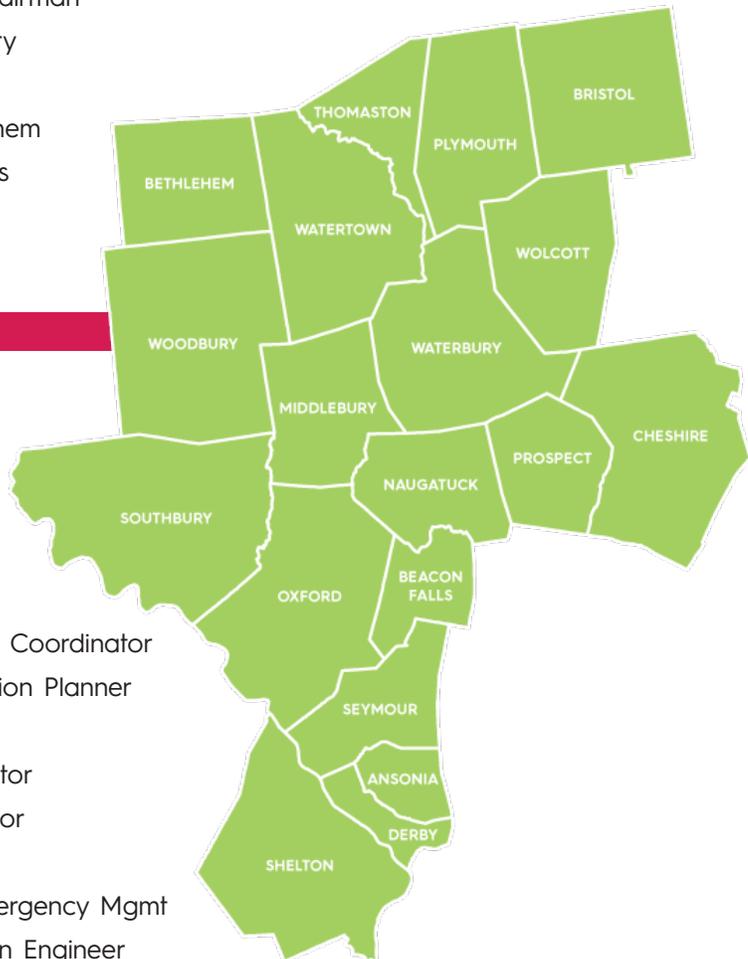
Naugatuck Valley Council of Governments

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- ▶ Joanna Rogalski, Regional Planner / Emergency Mgmt
- ▶ Karen Svetz, P.E., Regional Transportation Engineer



Sources of Copies

- ▶ Naugatuck Valley Council of Governments
49 Leavenworth Street, 3rd Floor
Waterbury, CT 06702
- ▶ Phone: (203) 757-0535
- ▶ Email: nvcog@nvcogct.org
- ▶ Website: www.nvcogct.org
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Acknowledgments & Errata

- ▶ Cover Photo: Post University Building Detail, Waterbury, CT
- ▶ All photos are from NVCOG staff unless otherwise noted.
- ▶ This report is based on COGCNV's Economic Profiles.

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Summary & Data Sources

Summary of Major Findings

- ▶ The Naugatuck Valley Region had a total employment of 165,277 in 2014, an increase of 807 jobs (0.5%) from 2005. Comparatively, there were 219,250 employed persons living in the region, a net export of 53,973 workers.
- ▶ Recovery from the 2007-2009 recession continues to be slow. Regional employment peaked in 2007 and declined to a low in 2012. Employment has grown steadily since 2012, with the Leisure & Hospitality, Education & Health, and Professional Services sectors reaching or surpassing their peak employment levels and Trade & Utilities and Financial Activities nearing theirs. Only Goods Producing sectors have failed to reclaim their lost jobs, though these fields are slowly growing.
- ▶ The region has very high concentrations of Information employment compared to the state at large, and fairly high concentrations of Manufacturing, Retail & Wholesale Trade, and Health Care & Social Assistance employment.
- ▶ The region has very low concentrations of employment in Finance & Insurance, Arts & Recreation, and Professional Services compared to other parts of the state.
- ▶ Health Care & Social Assistance is a dominant force in the regional economy, making up 18.4% of the region's employment and 17.8% of the region's workforce. However, growth in this sector has slowed relative to growth state- and nation-wide, indicating that this industry may be losing competitiveness. This industry has been identified in this report as a High Priority Retention Area.
- ▶ The Information and Retail Trade sectors are the strongest large sectors of the local economy, as they have both seen significant growth in employment and are more concentrated in the region compared with other portions of the state. The Information sector is largely made up of a single company, whereas Retail Trade is spread across the region.
- ▶ The Education sector is a rapidly growing major industry in the region, outpacing state- and nation-wide growth rates. Much of this growth is attributable to expansions in several higher educational institutions regionally. The Naugatuck Valley towns should consider working to encourage growth in this sector, as it is a substantial Emerging Strength.
- ▶ The state has made investments to develop the Manufacturing workforce by creating an Advanced Manufacturing program at Naugatuck Valley Community College. Waterbury has made complementary investments by creating a manufacturing program at a local high school. Manufacturing employment is projected to remain stable into the next decade, as plastics, rubber, and chemical manufacturing grow statewide, offsetting the decline in machine parts manufacturing.

Data Sources

- ▶ U.S. Census Bureau, LODES dataset, Work Area Profile for All Jobs, 2005-2014
- ▶ Connecticut Department of Labor, LAUS Employment Statistics, by Town, 2014
- ▶ Connecticut Department of Labor, Connecticut Occupational Projections: 2012-2022
- ▶ Connecticut Economic Resource Center, Town Profiles: 2014
- ▶ U.S. Bureau of Labor Statistics, Industry Employment and Output Projections to 2024
- ▶ U.S. Bureau of Labor Statistics, Median Work Ages by Sector, 2014
- ▶ Naugatuck Valley Council of Governments Staff, Photographs & Graphics



New Hampshire

Vermont

Manchester

Nashua

Lowell

Boston

Worcester

Brockton

Massachusetts

Springfield

Providence

New Bedford

Rhode Island

Torrington

Hartford

Waterbury

New London

Poughkeepsie

Danbury

New Haven

Bridgeport

Norwalk

Stamford

Long Island Sound

New York

New York

Atlantic Ocean

Area Profile

Naugatuck Valley

The Naugatuck Valley Region is composed of nineteen municipalities in west-central Connecticut: Ansonia, Beacon Falls, Bethlehem, Bristol, Cheshire, Derby, Middlebury, Naugatuck, Oxford, Plymouth, Prospect, Seymour, Shelton, Southbury, Thomaston, Waterbury, Watertown, Wolcott, & Woodbury. Waterbury—the 5th largest city in the state—is a major anchor for the region, while other municipalities range from smaller urban centers to predominantly rural towns. The region is centrally located within Connecticut and the Northeast. Hartford, New Haven, and Bridgeport are all within a 30 mile radius. New York is 80 miles to the southwest, and Boston is 130 miles to the northeast.

The 20th Century

Historically, the region was the center of American brass manufacturing, producing products such as clocks, buttons, munitions, and machines. During the post-WWII years, brass producers moved west, and eventually abroad, and plastics replaced brass in many products.

The Flood of 1955 had a major impact on the region, flooding the centers of many of towns directly along the river and causing roughly \$380 million in damage (2016 dollars) across most of the towns in the region. The flood quickened the decline of manufacturing in the region by destroying many existing factories, and coincided with the rise of suburbanization more broadly, setting off a period of economic malaise for the urban centers in the area.

The latter half of the 20th century saw great



population and employment growth in the suburban and rural communities in the region. Despite suburbanization, Waterbury remains a major institutional and employment center of the region.

Today

The Naugatuck Valley economy has diversified since its manufacturing heyday. Manufacturing still makes up a large proportion of the region's economy, but Health Care & Social Assistance jobs make up a larger portion, and Retail and Educational Services have met Manufacturing employment levels. Hospitality is the fastest growing industry sector in the region.

In 2015, the Central Naugatuck Valley Region (COGCNV) and the Valley Region (VCOG) were merged along with portions of the Central Connecticut RPA (CCRPA), to create the fully constituted Naugatuck Valley region. This merger has created new relationships between towns in the area and new opportunities for cooperation on all fronts among municipalities.

Naugatuck Valley Fast Facts

- ▶ Population (2014): 448,745 people
- ▶ Median Home Price: \$231,738.58
- ▶ Area State Parks: 10
- ▶ National Register of Historic Sites: 110
- ▶ Amusement Parks: 2

A Slow Recovery

Like the state and the nation, the Naugatuck Valley saw significant job losses during the Great Recession of 2007-2009. Total jobs peaked in 2007 at 167,098 and declined to a low of 154,809 jobs in 2009, a loss of 12,289 jobs (Figure 1). The region saw a particularly slow recovery period through 2012, which included a new low of 154,328 jobs. During that same period unemployment more than doubled from 5.3% in 2007 to 10.8% in 2010.

The Goods Producing sector—notably Manufacturing and Construction—was the hardest hit parts of the region's economy, losing a combined 8,464 jobs from 2007 to 2010. Not all sectors contracted during the recession, however. Education & Health services added 1,998 jobs from 2007 to 2010.

Economic growth as a whole stagnated between the end of the recession and 2012, as different industry super sectors fluxed dramatically (Figure 2). Since 2012, however, the recovery has begun to pick up steam. From 2010 to 2014, the region gained 9,846 jobs. By 2014, the unemployment rate was 7.4%, but remained above state (6.6%) and

Figure 1: Total Employment in the Naugatuck Valley 2005-2014

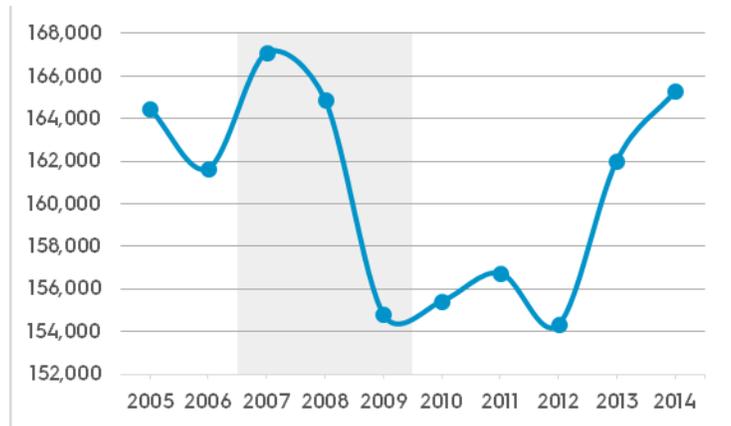
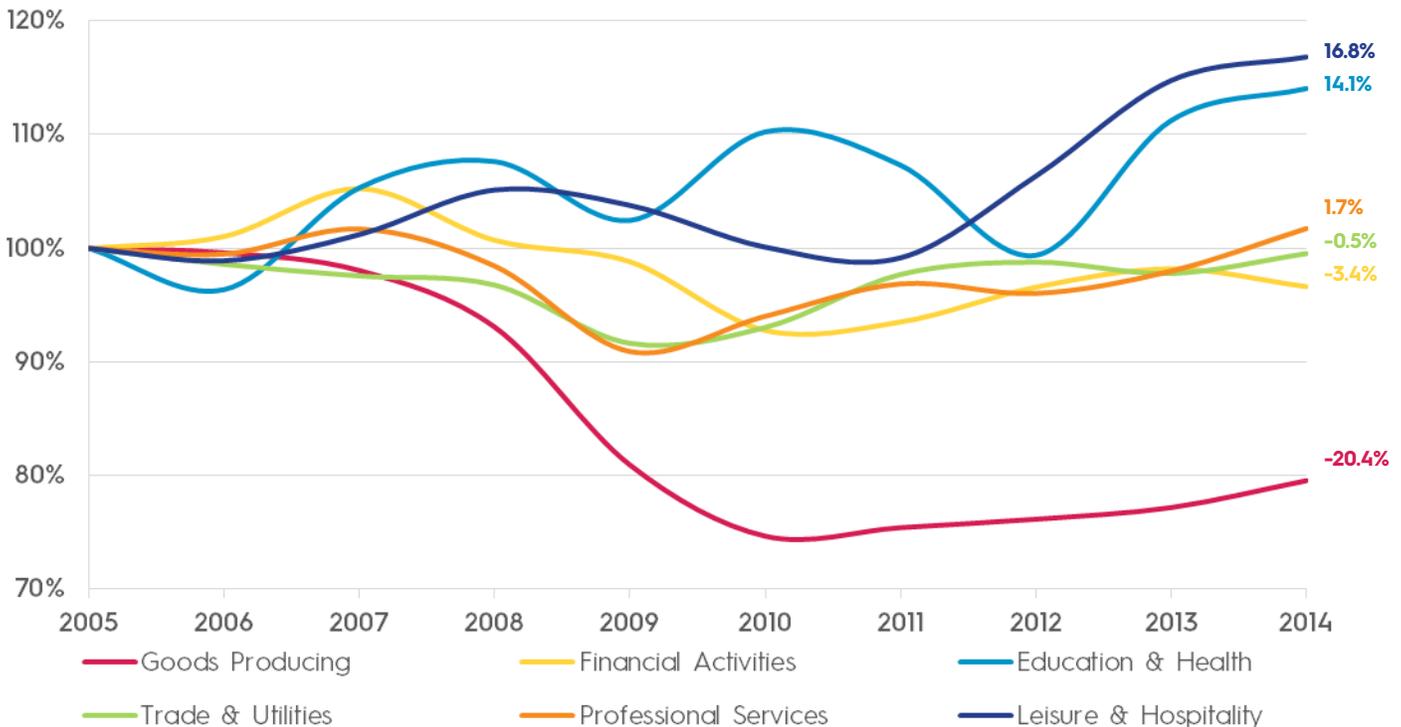


Figure 2: Employment as a Percentage of Total Employment, by Super Sector 2005-2014



national (6.2%) averages.¹ The best-performing super sectors continue to be Leisure & Hospitality and Education & Health, which have each seen near 15% increases in total jobs.² Goods-producing industries have made meager gains since the depth of the recession, but growth has been proportionally slow in these fields. All other industry super sectors have remained fairly level.

Regional Conditions

Employment Trends

Between 2005 and 2014, the Naugatuck Valley saw its employment grow from 164,470 to 165,277 resulting in a small gain of 807 jobs (0.5%). During that same time period, the state as a whole grew much more quickly, adding 45,261 jobs (a 2.8% increase). The four largest sectors of the region's economy, Health Care & Social Assistance (30,481 jobs), Manufacturing (22,413 jobs), Retail Trade (21,115 jobs), and Educational Services (15,880 jobs) comprised 54.2% of the region's total jobs. Employment in the Health Care & Social Assistance, Educational Services, and Retail Trade industries all increased from 2005 to 2014, while Manufacturing employment declined. Manufacturing (-6,223) and Finance and Insurance (-1,726) saw the largest net job losses from 2005 to 2014, while Health Care & Social Assistance (3,969) and Accommodation & Food Services (1,842) saw the largest net gains. Employment trends for all sectors can be seen in Table 2.

Employment vs. Workforce

The Naugatuck Valley has a significant employment to workforce mismatch. There are 165,277 jobs in the region, compared to 219,250 employed residents (workforce) living in the region, a net export of 53,973 workers. As a result, a large number of Naugatuck Valley residents work outside of the region. The sectors with the largest net exports were Health Care & Social Assistance (-8,542, or 21.9% of the regional workforce), Educational Services (-7,575, or 32.3%), and Finance & Insurance (-5,924, or 52.1%). Only the Information (1,152, or 16.7% of regional employment), Agriculture,

Forestry, & Fishing (84, or 19.2%), and Mining & Gas Extraction (33, or 21.4%) industries saw net imports of workers from other regions. A comparison of employment and workforce by sector can be seen in Table 2 and in Figure 3.

Table 1: Employment vs. Workforce by Town, 2014

Municipality	Employment	Workforce	Ratio
Ansonia	3,189	8,913	0.36
Beacon Falls	1,087	3,225	0.34
Bethlehem	704	1,782	0.40
Bristol	23,685	32,623	0.73
Cheshire	16,290	14,545	1.12
Derby	5,350	5,611	0.95
Middlebury	3,870	3,965	0.98
Naugatuck	8,149	16,452	0.50
Oxford	3,145	6,224	0.51
Plymouth	2,257	6,783	0.33
Prospect	1,964	5,397	0.36
Seymour	4,266	8,224	0.52
Shelton	24,581	20,601	1.19
Southbury	7,716	8,738	0.88
Thomaston	2,900	4,356	0.67
Waterbury	42,276	45,535	0.93
Watertown	8,919	12,264	0.73
Wolcott	2,875	9,397	0.31
Woodbury	2,054	4,615	0.45
Region	165,277	219,250	0.75

Municipality	Employment	Workforce	Ratio
Hartford	113,963	46,766	2.44
New Haven	84,792	45,936	1.85
Stamford	77,115	57,606	1.34
Danbury	42,531	36,291	1.17
Norwalk	44,476	43,896	1.01
Waterbury	42,434	45,537	0.93
Bridgeport	44,773	55,503	0.81

The employment to workforce ratio is calculated by dividing employment (the number of jobs in a municipality) by workforce. Ratios of 1.00 and over indicate that a municipality is a net importer of workers, while values less than 1.00 indicate net exporters. Ratios vary significantly between municipalities in the region. Shelton (1.19) and Cheshire (1.12) are the only towns in the region that

1 As of 2016, Connecticut's unemployment rate has remained stubbornly high, and is now both the highest and the slowest falling in New England. Unemployment in the Naugatuck Valley is inherently tied to employment rates statewide. The Waterbury MSA also now has the highest unemployment rate out of all New England MSAs, at 7.7%.

2 The Other Services sector has also seen its employment increase 14.8% since 2005. While this sector is small, its continued growth may indicate increases in non-profit work or difficulty classifying new forms of work. NAICS codes are reviewed every five years, and the next revision is scheduled for 2017.

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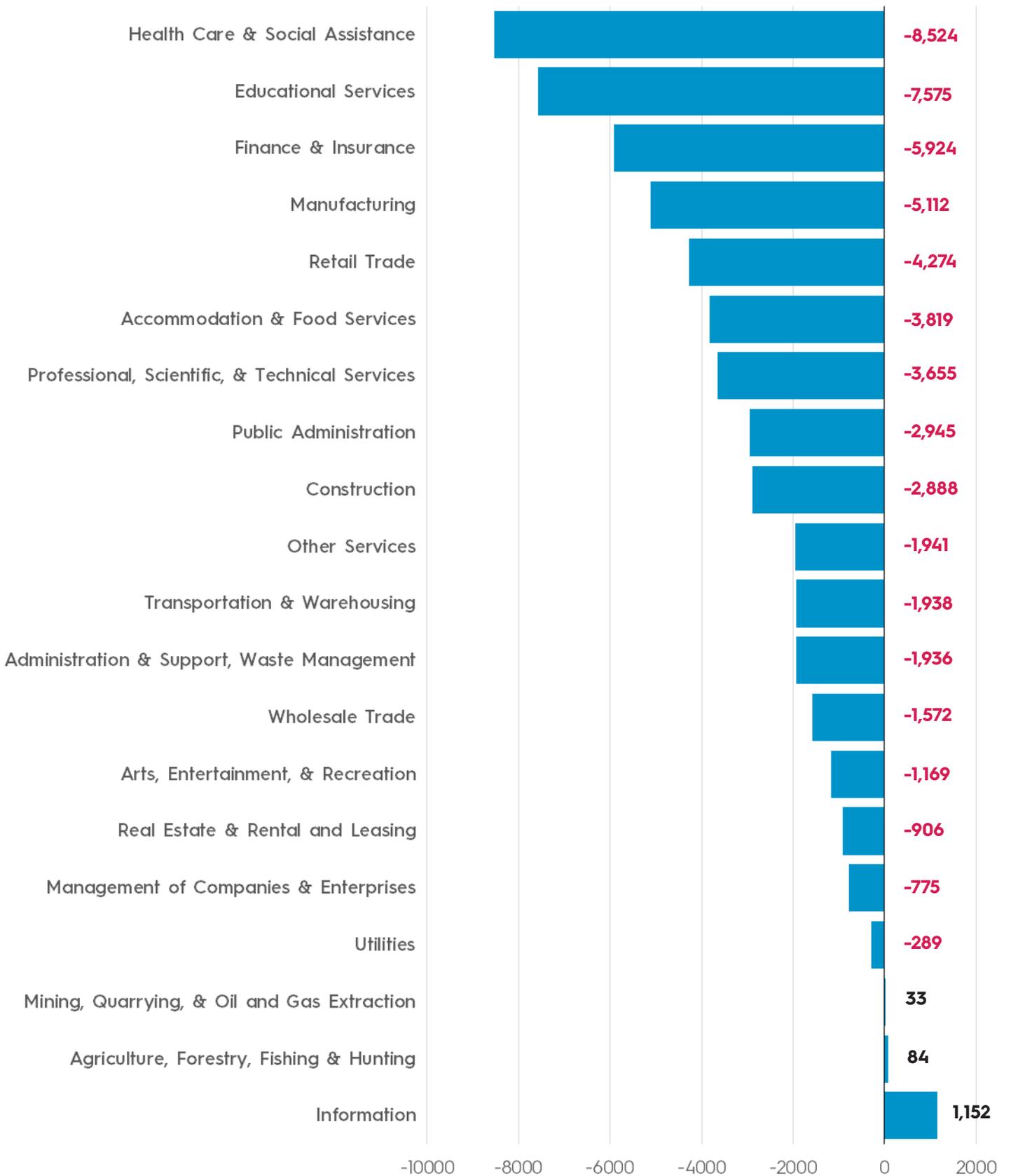
Table 2: Change in Employment in the Naugatuck Valley, 2005-2014

Sector	Regional Employment			State Employment		
	2005	2014	Change	2005	2014	Change
Agriculture, Forestry, Fishing and Hunting	470	437	-7.0%	5,019	4,588	-8.6%
Mining, Quarrying, and Oil & Gas Extraction	200	154	-23.0%	651	529	-18.7%
Utilities	938	766	-18.3%	10,127	7,712	-23.8%
Construction	7,188	6,088	-15.3%	64,865	56,476	-12.9%
Manufacturing	28,366	22,143	-21.9%	198,715	167,045	-15.9%
Wholesale Trade	7,679	7,721	0.5%	67,138	65,013	-3.2%
Retail Trade	20,624	21,115	2.4%	188,903	185,268	-1.9%
Transportation and Warehousing	3,939	3,424	-13.1%	40,647	43,173	6.2%
Information	5,430	6,888	26.9%	41,840	37,002	-11.6%
Finance and Insurance	7,179	5,453	-24.0%	118,940	111,855	-6.0%
Real Estate and Rental and Leasing	1,773	1,556	-12.2%	20,967	19,746	-5.8%
Professional, Scientific, and Technical Services	8,493	7,385	-13.0%	86,657	96,999	11.9%
Management of Companies and Enterprises	1,967	3,032	54.1%	25,599	33,037	29.1%
Administration & Support, Waste Management and Remediation	8,300	8,670	4.5%	82,935	86,034	3.7%
Educational Services	14,137	15,880	12.3%	167,381	182,530	9.1%
Health Care and Social Assistance	26,512	30,481	15.0%	224,299	266,944	19.0%
Arts, Entertainment, and Recreation	2,226	2,310	3.8%	46,400	41,813	-9.9%
Accommodation and Food Services	9,219	11,061	20.0%	102,313	120,784	18.1%
Other Services (excluding Public Administration)	4,964	5,696	14.7%	55,391	60,986	10.1%
Public Administration	4,866	5,017	3.1%	53,169	596,673	12.2%
Total All Jobs	164,470	165,277	0.5%	1,601,946	1,647,207	2.8%

Table 3: Employment to Workforce Ratio in the Naugatuck Valley by Sector, 2014

Sector	Employment		Workforce		Difference		Ratio
	Count	Percent	Count	Percent	Count	Percent	
Agriculture, Forestry, Fishing and Hunting	437	0.3%	353	0.2%	84	19.2%	1.24
Mining, Quarrying, and Oil & Gas Extraction	154	0.1%	121	0.1%	33	21.4%	1.27
Utilities	766	0.5%	1,055	0.5%	-289	-37.7%	0.73
Construction	6,088	3.7%	8,976	4.1%	-2,888	-47.4%	0.68
Manufacturing	22,143	13.4%	27,255	12.4%	-5,112	-23.1%	0.81
Wholesale Trade	7,721	4.7%	9,293	4.2%	-1,572	-20.4%	0.83
Retail Trade	21,115	12.8%	25,389	11.6%	-4,274	-20.2%	0.83
Transportation and Warehousing	3,424	2.1%	5,362	2.4%	-1,938	-56.6%	0.64
Information	6,888	4.2%	5,736	2.6%	1,152	16.7%	1.20
Finance and Insurance	5,453	3.3%	11,377	5.2%	-5,924	-108.6%	0.48
Real Estate and Rental and Leasing	1,556	0.9%	2,462	1.1%	-906	-58.2%	0.63
Professional, Scientific, and Technical Services	7,385	4.5%	11,040	5.0%	-3,655	-49.5%	0.67
Management of Companies and Enterprises	3,032	1.8%	3,807	1.7%	-775	-25.6%	0.80
Administration & Support, Waste Management and Remediation	8,670	5.2%	10,606	4.8%	-1,936	-22.3%	0.82
Educational Services	15,880	9.6%	23,455	10.7%	-7,575	-47.7%	0.68
Health Care and Social Assistance	30,481	18.4%	39,005	17.8%	-8,524	-28.0%	0.78
Arts, Entertainment, and Recreation	2,310	1.4%	3,479	1.6%	-1,169	-50.6%	0.66
Accommodation and Food Services	11,061	6.7%	14,880	6.8%	-3,819	-34.5%	0.74
Other Services (excluding Public Administration)	5,696	3.4%	7,637	3.5%	-1,941	-34.1%	0.75
Public Administration	5,017	3.0%	7,962	3.6%	-2,945	-58.7%	0.63
Total All Jobs	165,277	100.0%	219,250	100.0%	-53,973	-32.7%	0.75

Figure 3: Net Difference between NVCOG Workforce & Employment by Sector, 2014



are net importers of workers. Waterbury, the largest employment center in the region, has seen the employment to workforce ratio continue to deteriorate. Middlebury (0.98) and Derby (0.95) each have ratios between 0.95 and 1.00, indicating that they are small exporters. The remaining municipalities have ratios ranging from 0.31 to 0.93 and are all exporters of workers. Ratios for all towns can be seen in Table 1.

Most large cities in Connecticut are net importers of workers from their surrounding suburban towns. Hartford (2.44), New Haven (1.85), Stamford (1.34), and Danbury (1.17) are among the largest employment centers in the state and have high employment to workforce ratios. Despite being among the largest employment centers in the state, Waterbury (0.93) and Bridgeport (0.81) are both net exporters of workers.

Mining & Gas Extraction (1.27) and Agriculture, Forestry, & Fishing (1.24) continue to have high employment to workforce ratios.

The sectors with the lowest employment to workforce ratios are Finance & Insurance (0.48), Public Administration (0.63), and Real Estate & Rental (0.63). Naugatuck Valley residents who work in these sectors are most likely to commute to jobs outside the region. Ratios for all sectors can be seen in Table 2.

Location Quotients

Location quotients (LQs) are a measurement of regional job concentration relative to a reference area (usually the state or nation). LQs are calculated by dividing the percentage of regional employment in a sector by the percentage of state or national employment in that same sector. Values over 1.00 mean that the sector has a higher job concentration than the reference area, while values between 0.00 and 1.00 indicate a lower concentration.

6 of the 20 sectors of the region's economy—including the three largest sectors Health Care & Social Assistance (1.14), Manufacturing (1.32), and Retail Trade (1.14)—had higher job concentrations than the state. Mining, Quarrying, & Oil and Gas Extraction (2.90) had the highest location quotient, but does not necessarily indicate a strong-performing sector since employment is so low (154 total). The Information sector (1.86) had the second-highest location quotient, and also represents a large increase in its share of the region's employment (6,888 jobs, up from 5,430 in 2005). The lowest concentrated sectors were Finance & Insurance (0.49) and Arts, Entertainment, & Recreation (0.55).

Relative to the nation, the Naugatuck Valley shows strengths in Information (1.87), Manufacturing (1.48), and Health Care & Social Assistance (1.26). A complete list of location quotients by sector can be found in Table 3.

Shift-Share Analysis

Shift-share analysis is a technique used to determine how much employment change in the region is attributable to state, national, and broad industrial growth, and how much is due to regional characteristics (or regional share). Sectors with a positive regional share have a higher growth rate than can be explained by growth in the larger economy, and are becoming more



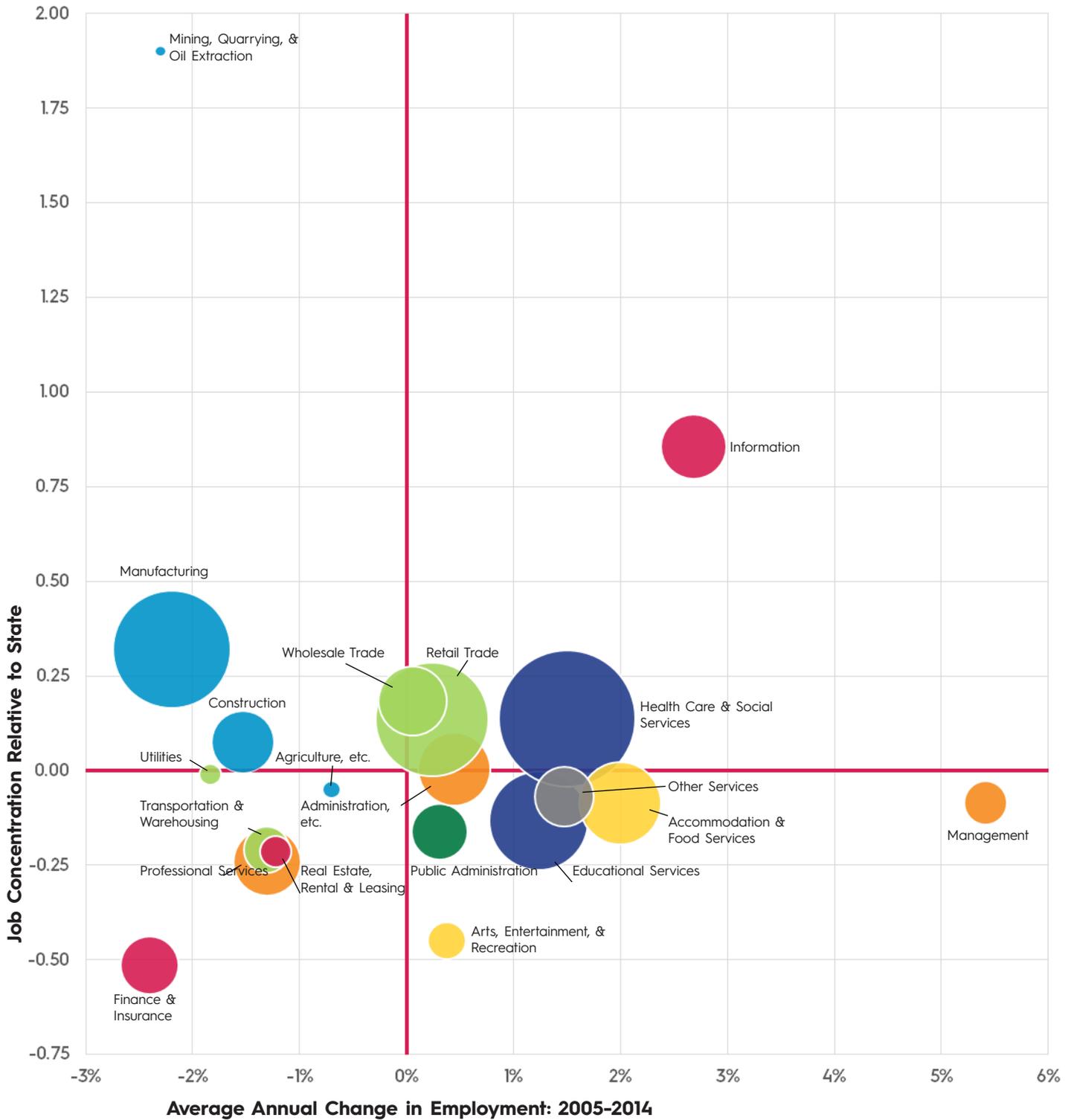
Old Pin Shop, Watertown

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Table 4: Location Quotients in the Naugatuck Valley by Sector, 2014

Sector	Regional		Connecticut		Location Quotients	
	Count	Percent	Count	Percent	State	National
Agriculture, Forestry, Fishing and Hunting	437	0.3%	4,588	0.3%	0.95	0.31
Mining, Quarrying, and Oil and Gas Extraction	154	0.1%	529	0.0%	2.90	0.16
Utilities	766	0.5%	7,712	0.5%	0.99	0.79
Construction	6,088	3.7%	56,476	3.4%	1.07	0.81
Manufacturing	22,143	13.4%	167,045	10.1%	1.32	1.48
Wholesale Trade	7,721	4.7%	65,013	3.9%	1.18	1.08
Retail Trade	21,115	12.8%	185,268	11.2%	1.14	1.14
Transportation and Warehousing	3,424	2.1%	43,173	2.6%	0.79	0.59
Information	6,888	4.2%	37,002	2.2%	1.86	1.87
Finance and Insurance	5,453	3.3%	111,855	6.8%	0.49	0.78
Real Estate and Rental and Leasing	1,556	0.9%	19,746	1.2%	0.79	0.61
Professional, Scientific, and Technical Services	7,385	4.5%	96,999	5.9%	0.76	0.71
Management of Companies and Enterprises	3,032	1.8%	33,037	2.0%	0.91	1.07
Administration & Support, Waste Management and Remediation	8,670	5.2%	86,034	5.2%	1.00	0.84
Educational Services	15,880	9.6%	182,530	11.1%	0.87	1.01
Health Care and Social Assistance	30,481	18.4%	266,944	16.2%	1.14	1.26
Arts, Entertainment, and Recreation	2,310	1.4%	41,813	2.5%	0.55	0.80
Accommodation and Food Services	11,061	6.7%	120,784	7.3%	0.91	0.73
Other Services (excluding Public Administration)	5,696	3.4%	60,986	3.7%	0.93	1.09
Public Administration	5,017	3.0%	59,673	3.6%	0.84	0.63
Total All Jobs	165,277	100.0%	1,647,207	100.0%		

Figure 4: Employment Growth & Job Concentration in the Naugatuck Valley Relative to Connecticut, 2005–2014



This figure shows average annual change in employment from 2005–2014 and job concentration (LQs) relative to the state. The figure is divided up into four quadrants based on job concentration (higher or lower than state) and employment change (growing or shrinking). Bubbles are scaled by the number of employees in each sector. Larger bubbles indicate sectors with larger employment. Bubbles are colored based on their NAICS super-sector classification.

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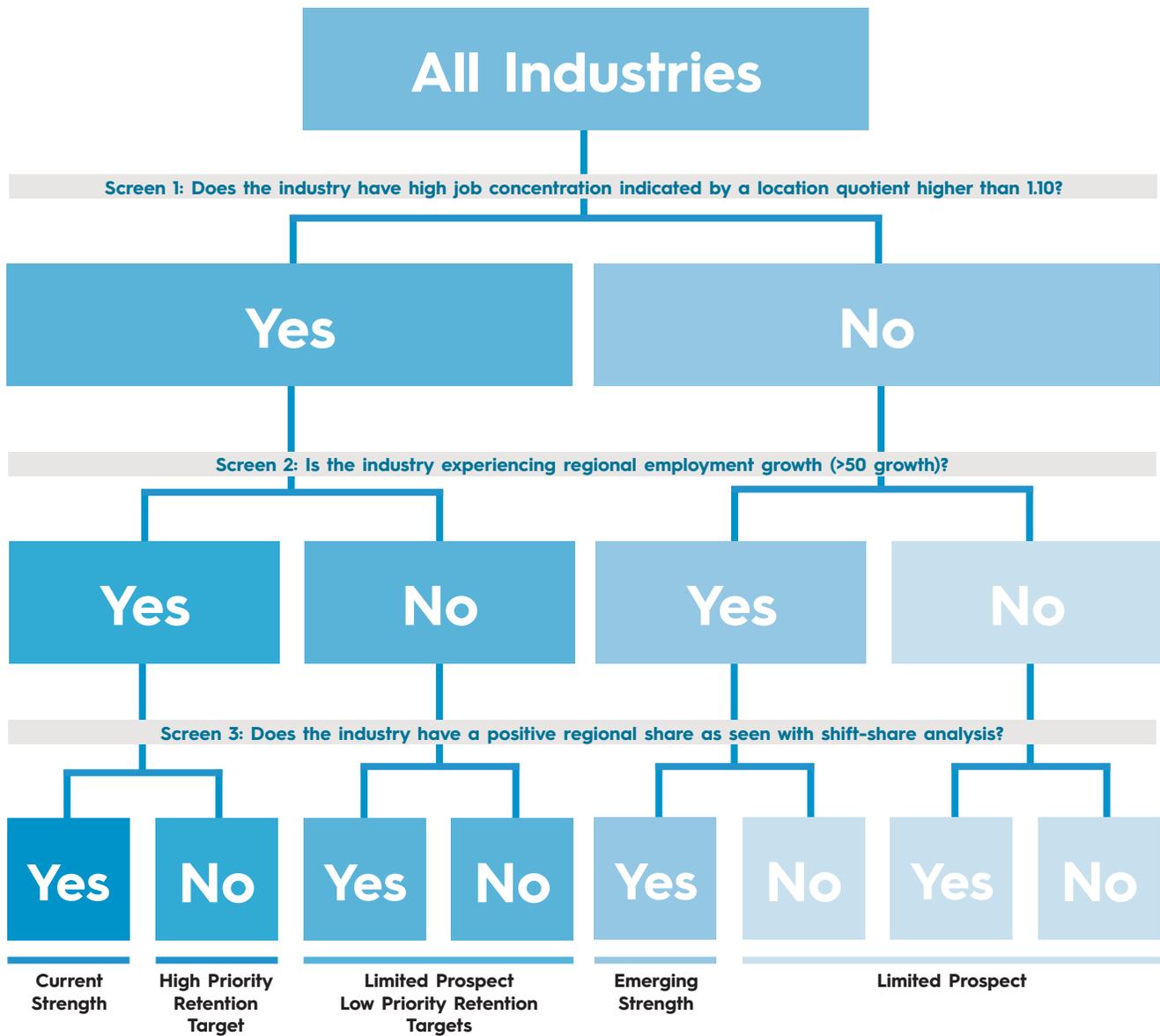
Table 5: Shift-Share Analysis of the Naugatuck Valley by Sector, Relative to Connecticut, 2005–2014

Sector	Regional Employment				State % Change	Employment Shift-Share		
	2005	2014	Change	Percent		State Growth	Industry Trends	Region Share
Agriculture, Forestry, Fishing and Hunting	470	437	-33	-7.0%	-8.6%	13	-54	7
Mining, Quarrying, and Oil and Gas Extraction	200	154	-46	-23.0%	-18.7%	6	-43	-9
Utilities	938	766	-172	-18.3%	-23.8%	27	-250	52
Construction	7,188	6,088	-1,100	-15.3%	-12.9%	203	-1,133	-170
Manufacturing	28,366	22,143	-6,223	-21.9%	-15.9%	801	-5,322	-1,702
Wholesale Trade	7,679	7,721	42	0.5%	-3.2%	217	-460	285
Retail Trade	20,624	21,115	491	2.4%	-1.9%	583	-980	888
Transportation and Warehousing	3,939	3,424	-515	-13.1%	6.2%	111	133	-760
Information	5,430	6,888	1,458	26.9%	-11.6%	153	-781	2,086
Finance and Insurance	7,179	5,453	-1,726	-24.0%	-6.0%	203	-630	-1,298
Real Estate and Rental and Leasing	1,773	1,556	-217	-12.2%	-5.8%	50	-153	-115
Professional, Scientific, and Technical Services	8,493	7,385	-1,108	-13.0%	11.9%	240	774	-2,122
Management of Companies and Enterprises	1,967	3,032	1,065	54.1%	29.1%	56	516	493
Administration & Support, Waste Management and Remediation	8,300	8,670	370	4.5%	3.7%	235	76	60
Educational Services	14,137	15,880	1,743	12.3%	9.1%	399	880	464
Health Care and Social Assistance	26,512	30,481	3,969	15.0%	19.0%	749	4,292	-1,072
Arts, Entertainment, and Recreation	2,226	2,310	84	3.8%	-9.9%	63	-283	304
Accommodation and Food Services	9,219	11,061	1,842	20.0%	18.1%	260	1,404	178
Other Services (excluding Public Administration)	4,964	5,696	732	14.7%	10.1%	140	361	231
Public Administration	4,866	5,017	151	3.1%	12.2%	137	458	-444
Total All Jobs	164,470	165,277	807	0.5%	2.8%	4,647	N/A	-3,840

Table 6: Shift-Share Analysis of the Naugatuck Valley by Sector, Relative to the Nation, 2005–2014

Sector	Regional Employment				U.S. % Change	Employment Shift-Share		
	2005	2014	Change	Percent		U.S. Growth	Industry Trends	Region Share
Agriculture, Forestry, Fishing and Hunting	470	437	-33	-7.0%	9.0%	13	29	-75
Mining, Quarrying, and Oil and Gas Extraction	200	154	-46	-23.0%	47.2%	6	89	-140
Utilities	938	766	-172	-18.3%	4.3%	27	14	-212
Construction	7,188	6,088	-1,100	-15.3%	-8.3%	203	-796	-507
Manufacturing	28,366	22,143	-6,223	-21.9%	-11.9%	801	-4,179	-2,846
Wholesale Trade	7,679	7,721	42	0.5%	3.7%	217	69	-244
Retail Trade	20,624	21,115	491	2.4%	4.3%	583	311	-402
Transportation and Warehousing	3,939	3,424	-515	-13.1%	10.3%	111	294	-920
Information	5,430	6,888	1,458	26.9%	-0.8%	153	-198	1,502
Finance and Insurance	7,179	5,453	-1,726	-24.0%	3.3%	203	37	-1,966
Real Estate and Rental and Leasing	1,773	1,556	-217	-12.2%	-1.1%	50	-70	-197
Professional, Scientific, and Technical Services	8,493	7,385	-1,108	-13.0%	26.1%	240	1,980	-3,328
Management of Companies and Enterprises	1,967	3,032	1,065	54.1%	28.8%	56	511	499
Administration & Support, Waste Management and Remediation	8,300	8,670	370	4.5%	12.9%	235	835	-699
Educational Services	14,137	15,880	1,743	12.3%	12.3%	399	1,337	7
Health Care and Social Assistance	26,512	30,481	3,969	15.0%	31.5%	749	7,595	-4,375
Arts, Entertainment, and Recreation	2,226	2,310	84	3.8%	17.0%	63	316	-295
Accommodation and Food Services	9,219	11,061	1,842	20.0%	19.7%	260	1,557	25
Other Services (excluding Public Administration)	4,964	5,696	732	14.7%	2.5%	140	-19	610
Public Administration	4,866	5,017	151	3.1%	27.1%	137	1,181	-1,167
Total All Jobs	164,470	165,277	807	0.5%	10.5%	4,647	N/A	-16,462

Figure 5: Industry Targeting Analysis, Decision Tree: Identifying Economic Strengths & Weaknesses



Source: McLean, Mary L, and Kenneth P. Voytek (1992). Understanding Your Economy. Planners Press

competitive.³

Information (2,086 relative to the state; 1,502 relative to the nation) is the only industry which saw a major regional advantage in shift-share, with all of its growth explainable by regional factors. Management of Companies & Enterprises (493; 499) and Other Services (231; 610) are other industries which saw proportionally large positive regional shares. These industries grew at a faster rate than can be explained by state, national, or industry trends.

Public Administration (-444; -1,167), Professional, Scientific, & Technical Services (-2,122; -3,328), and Transportation & Warehousing (-760; -920) had the proportionally largest negative regional shares, indicating that they contracted faster or grew more slowly compared to state, national, and industry averages. 6 of the 8 remaining industries all had

³ The shift-share analysis attempts to look not just at absolute shares, but at proportional shares. In short, the analysis looks at the size of the regional share compared to the absolute change in employment over the study period.

proportionally minor negative regional shares, listed here in proportional order:

- ▶ Finance & Insurance (-1,298, -1,966)
- ▶ Real Estate, Rental, & Leasing (-115, -197)
- ▶ Health Care & Social Assistance (-1,072 -4,375)
- ▶ Manufacturing (-1,702, -2,846)
- ▶ Construction (-170, -507)
- ▶ Mining, Quarrying, & Gas Extraction (-9, -140)

Of particular note is the Health Care & Social Assistance sector, which is one of the fastest-growing sectors in the Naugatuck Valley, is still growing more slowly than the state and the national industry. NVCC is presently expanding its Allied Health program to better support this sector's workforce development needs.

A complete shift-share analysis for all sectors can be seen in Tables 4 and 5.



Naugatuck Valley Community College Advanced Manufacturing Technology Center

Regional Strengths

Regional strengths were identified using the industry targeting analysis decision tree (Figure 5), which uses location quotients, employment trends, and shift-share analyses to identify high-performing and low-performing sectors. Sectors were classified into four categories: regional strengths, high priority retention targets, emerging strengths, and limited prospects. Regional strengths, high priority retention targets, and emerging strengths are the best-performing sectors and have the most potential for future economic growth. Limited prospects have performed poorly in the past and are unlikely to be drivers of future economic growth without changes to economic structure, technology, or policy changes.

Current Strengths

Current Strengths refer to sectors of the regional economy that have higher job concentration than the state and national averages (location quotient of 1.10 or higher), employment growth of 50 or more employees from 2005 to 2014, and positive regional share in the shift-share analysis. This indicates that a sector has high job concentration, high growth, and has become more competitive from 2005 to 2014.

Relative to State

- ▶ Information
- ▶ Retail Trade

Relative to Nation

- ▶ Information

High Priority Retention Targets

High Priority Retention Targets are strong economic sectors that are in danger of becoming less competitive. They are characterized by high job concentration relative to the state and national averages (location quotient of higher than 1.10), job growth of 50 or more employees from 2005 to 2014, and a negative regional share in the shift-share analysis. The negative regional share indicates that the sector is losing competitiveness. Health Care & Social Assistance, the only industry sector in this category, will be a turbulent one in the near future, with two major hospitals in Waterbury undergoing ownership changes. Preserving competitiveness through this process is key to maintaining this sector's strength.

Relative to State

- ▶ Health Care & Social Assistance

Relative to Nation

- ▶ Health Care & Social Assistance

Emerging Strengths

Emerging Strength sectors have low job concentration relative to the state and national averages (location quotient of less than 1.10), job growth of 50 or more employees from 2005 to 2014, and a positive regional share in the shift-share analysis. This indicates that while the sector has lower job concentration relative to the state and nation, it is growing and has become more competitive from 2005 to 2014.

Relative to State

- ▶ Management of Companies
- ▶ Administration & Support
- ▶ Educational Services
- ▶ Arts, Entertainment, & Recreation
- ▶ Accommodation & Food Services
- ▶ Other Services

Relative to Nation

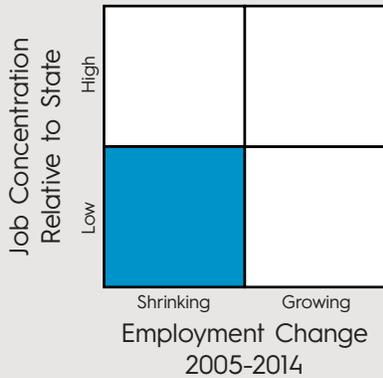
- ▶ Educational Services
- ▶ Accommodation & Food Services



Industrial Profiles

Agriculture, Forestry, Fishing, & Hunting

Regional Trends



Agriculture, forestry, fishing, and hunting provides 437 jobs in the Naugatuck Valley, or 0.3% of all employment, putting our region about on par with the state for proportional employment. (It is important to note that this sector only includes non-farm employment, so it does not represent all agriculture jobs.) This sector is primarily made up of nurseries and greenhouses. Virtually all employment is based out of Cheshire, which houses several large nurseries serving the wholesale and retail gardening markets.

From 2005-2014, employment in the agriculture, forestry, fishing, and hunting sector contracted by 7.0%, or a loss of 33 jobs. Nationally, this industry is forecast to decline 5.5%, though Connecticut forecasts a growth of 11.3% statewide. The Naugatuck Valley may look to improve the competitive advantage of Cheshire's businesses in this industry, though regionally this sector is not expected to be responsible for much employment growth.

Industry Profile

- ▶ Employment: 437
- ▶ Employment Change: -7.0%
- ▶ Percent of Employment: 0.3%
- ▶ Location Quotient: 0.95
- ▶ Number of Establishments: 11
- ▶ Average Establishment Size: 28
- ▶ Average Wage: \$32,556
- ▶ Median Worker Age: 47.9

Major Subsectors

- ▶ Nurseries & Greenhouses
- ▶ Forestry & Logging

Industry Outlook 2014-2024

- ▶ National: **-5.5% Decline**
- ▶ State: **11.3% Growth**

Map 1: Agriculture, Forestry, Fishing, & Hunting Employment, 2014



Quarrying, Mining, and Oil/Gas Extraction

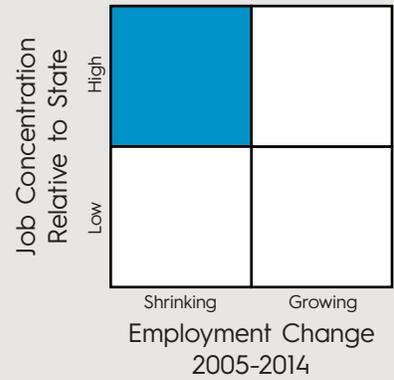
While quarrying and mining is a very small sector in the Naugatuck Valley, with only 154 jobs and 0.1% of all regional employment, this makes up 29.1% of all jobs in the sector in the state. Most of the employment in this sector in our region—and statewide—is in quarrying, with the vast majority of employment in this sector located in northern Southbury at O&G's Southbury Sand & Gravel Yard (headquartered in nearby Torrington). There are also smaller quarrying locations in Woodbury, Naugatuck, and Waterbury. Because of the focus on quarrying in this sector, employment is tied to the construction sector and the real estate market.

Nationally, this sector is expected to grow as investment in natural gas continues. How the current slump in oil prices will affect this industry nationally is unclear, though the Naugatuck Valley's quarry-oriented businesses in this sector are less likely to be affected by these national trends.

Map 2: Quarrying, Mining, and Oil/Gas Extraction Employment, 2014



Regional Trends



Industry Profile

- ▶ Employment: 154
- ▶ Employment Change: -23.0%
- ▶ Percent of Employment: 0.1%
- ▶ Location Quotient: 2.90
- ▶ Number of Establishments: N/A
- ▶ Average Establishment Size: N/A
- ▶ Average Wage: N/A
- ▶ Median Worker Age: 40.5

Major Subsectors

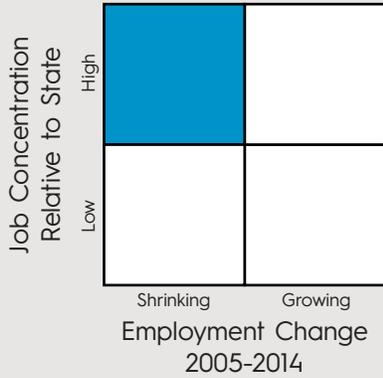
- ▶ Quarrying & Mining

Industry Outlook 2014-2024

- ▶ National: **9.5% Growth**
- ▶ State: **13.9% Growth**

Manufacturing

Regional Trends



Manufacturing has historically been the backbone of the Naugatuck Valley's economy, but has changed dramatically over the last half century. Smaller niche manufacturers have been replacing larger companies, and jobs have been moving to lower cost locations in the United States and abroad. Despite sharp declines in employment over the last several decades, statewide manufacturing employment is anticipated to remain steady.

In 2014, there were 22,143 manufacturing jobs, representing 13.4% of the region's total employment. Between 2005 and 2014, the total number of jobs in manufacturing has contracted 21.9%, however most of that contraction occurred during the Great Recession. Since the recession, employment has steadily risen, although at a rate slower than the national and state averages. Despite this slow rise, Manufacturing remains the second-most concentrated major industry in the region. The state and region have both invested heavily in developing Advanced Manufacturing as an industry in the region.

Industry Profile

- ▶ Employment: 22,143
- ▶ Employment Change: -21.9%
- ▶ Percent of Employment: 13.4%
- ▶ Location Quotient: 1.32
- ▶ Number of Establishments: 791
- ▶ Average Establishment Size: 26
- ▶ Average Wage: \$71,981
- ▶ Median Worker Age: 44.6

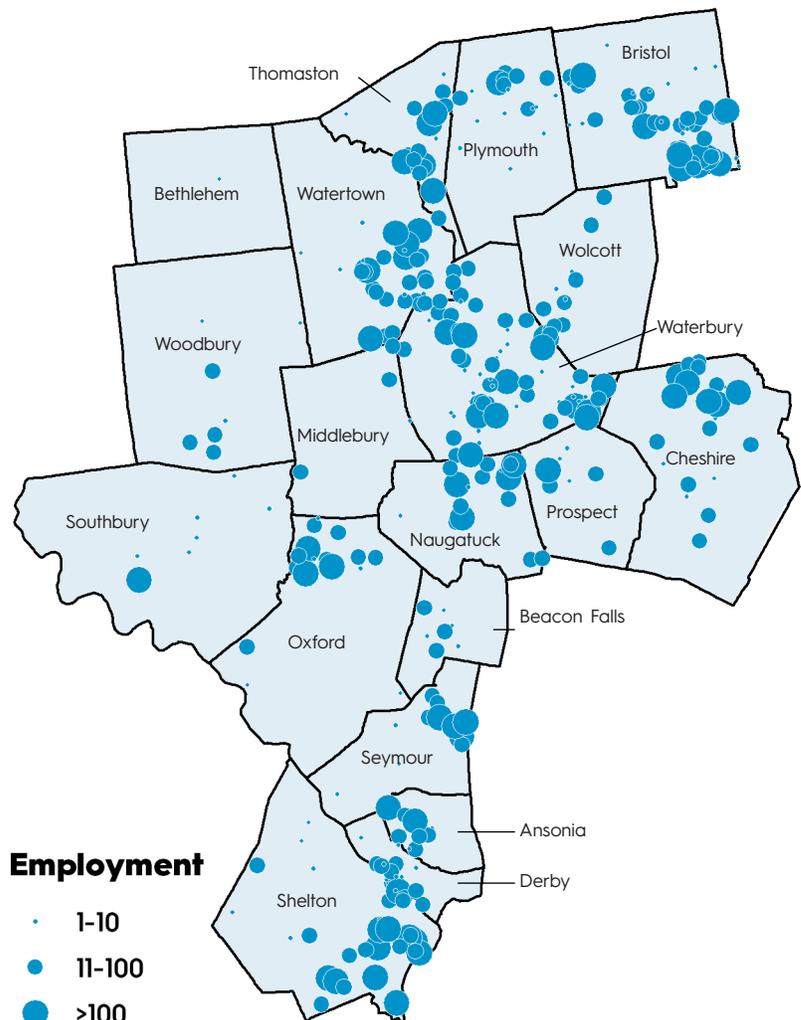
Major Subsectors

- ▶ Fabricated Metals
- ▶ Machinery Manufacturing
- ▶ Plastics & Rubber
- ▶ Computers & Electronics

Industry Outlook 2014-2024

- ▶ National: **-6.7% Decline**
- ▶ State: **0.8% Growth**

Map 3: Manufacturing Employment in the Naugatuck Valley, 2014



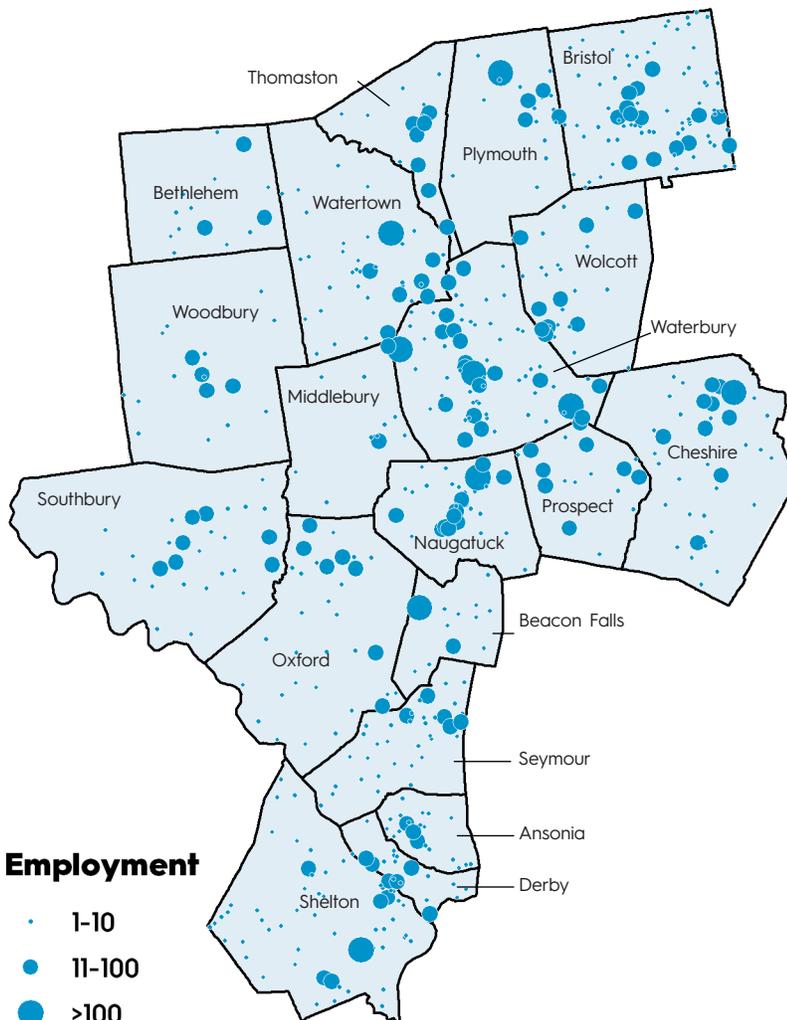
Construction

In 2014, there were 6,088 jobs in the construction sector, representing 3.7% of the region's employment. This is roughly on par with the state proportion. Jobs in this sector are widespread throughout the region, with few large firms and many smaller ones.

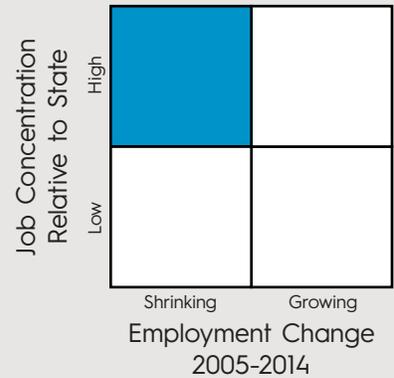
The construction industry has seen many fluctuations in employment over the past decade as the housing industry recovers from the Great Recession. In the Naugatuck Valley, the sector saw an overall drop in employment of 15.3%, or 1,100 jobs. Because of the many factors built into construction, this industrial sector affects the health of several others, most notably for our region quarrying and agriculture.

Regionally, there were 454 housing permits issued in 2014, down from 1,676 in 2005, but up from the low of 298 in 2011. The 5-year rolling average change in housing permits (2009-2014) was an increase of 5.1%.

Map 4: Construction Employment in the Naugatuck Valley, 2014



Regional Trends



Industry Profile

- ▶ Employment: 6,088
- ▶ Employment Change: -15.3%
- ▶ Percent of Employment: 3.7%
- ▶ Location Quotient: 1.07
- ▶ Number of Establishments: 935
- ▶ Average Establishment Size: 9
- ▶ Average Wage: \$56,720
- ▶ Median Worker Age: 42.5

Major Subsectors

- ▶ Specialty Contracting
- ▶ Construction of Buildings

Industry Outlook 2014-2024

- ▶ National: **12.9% Growth**
- ▶ State: **22.9% Growth**

Wholesale Trade

Regional Trends



Employment in wholesale trade has remained stable in the Naugatuck Valley over the past decade, with employment growing 0.5%. Wholesale trade makes up 4.7% of employment in the region, and it is a local strength. Furthermore, the average wages in this industry are higher than the median wage. The region's employment is scattered on the edge of urbanized areas along Route 8 in southern Shelton, around the East End and in Waterville in Waterbury, and near the interchange between I-84 and I-691 in Cheshire.

This sector accounts for 4.7% of the regional employment, and is a minor strength for the region. Slow growth in this industry indicates that the Naugatuck Valley may fall behind Connecticut in the coming years, as the state projects a 9.9% growth rate in this industry. Increased access for these industries may be a helpful way to encourage regional growth in this sector.

Industry Profile

- ▶ Employment: 7,721
- ▶ Employment Change: 0.5%
- ▶ Percent of Employment: 4.7%
- ▶ Location Quotient: 1.18
- ▶ Number of Establishments: 702
- ▶ Average Establishment Size: 9
- ▶ Average Wage: \$72,589
- ▶ Median Worker Age: 44.9

Major Subsectors

- ▶ Durable Goods Merchants
- ▶ Perishable Goods Merchants

Industry Outlook 2014-2024

- ▶ National: **5.6% Growth**
- ▶ State: **9.9% Growth**

Map 5: Wholesale Trade Employment in the Naugatuck Valley, 2014



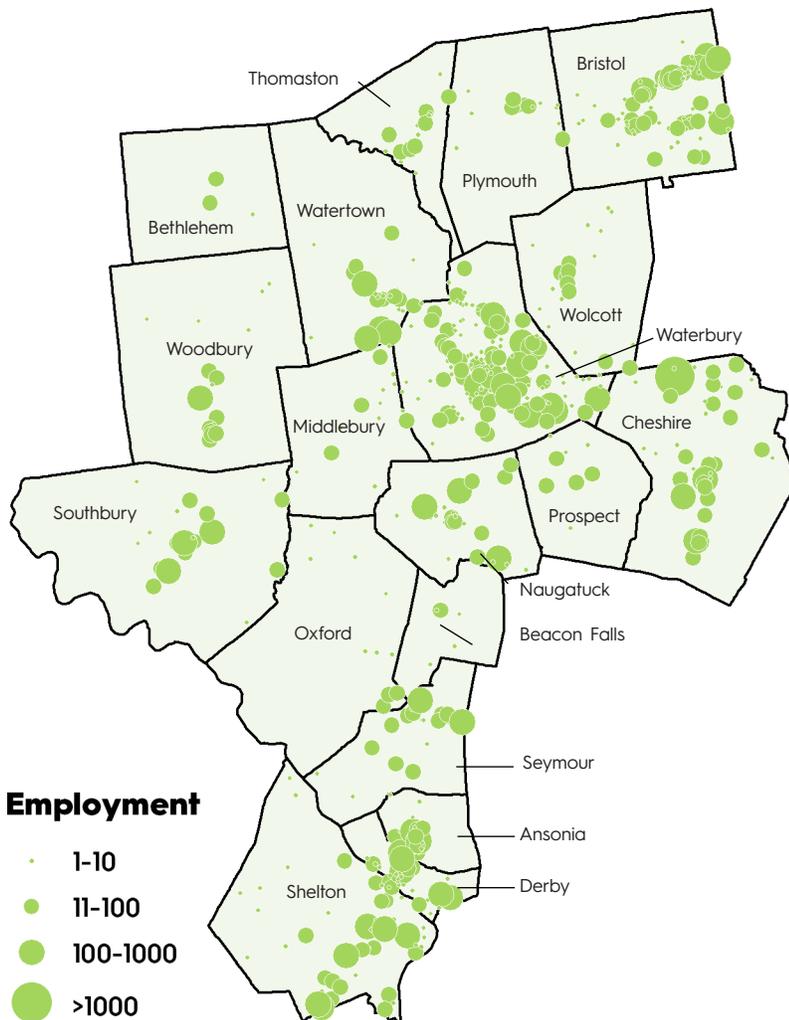
Retail Trade

Retail trade is one of the region's economic strengths relative to the state, and is the third largest sector of the regional economy at 12.8% of total employment. Waterbury remains the retail center of the region, though Bristol and Ansonia-Derby-Shelton also maintain large retail outposts relative to the region. This sector is growing, particularly in fast-growing towns in the region such as Cheshire, Southbury, and Woodbury.

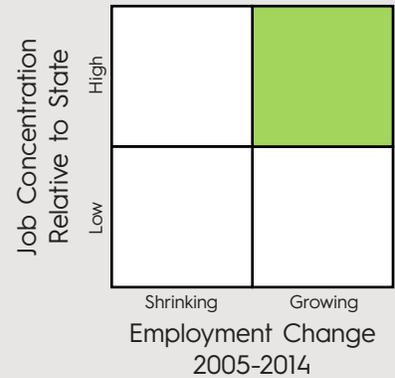
Despite growth, Connecticut and the nation are projecting faster rates of growth in retail trade than the Naugatuck Valley. These projections are at odds with recent growth rates statewide and nationally, however, as Retail Trade has continued to grow more concentrated in the Naugatuck Valley.

This sector has low pay for the region, with an average salary of \$29,928. Because of the low wages, growth in this industry will not significantly improve the earning potential of the region's workers.

Map 6: Retail Trade Employment in the Naugatuck Valley, 2014



Regional Trends



Industry Profile

- ▶ Employment: 21,115
- ▶ Employment Change: 2.4%
- ▶ Percent of Employment: 12.8%
- ▶ Location Quotient: 1.14
- ▶ Number of Establishments: 1,230
- ▶ Average Establishment Size: 15
- ▶ Average Wage: \$29,928
- ▶ Median Worker Age: 38.2

Major Subsectors

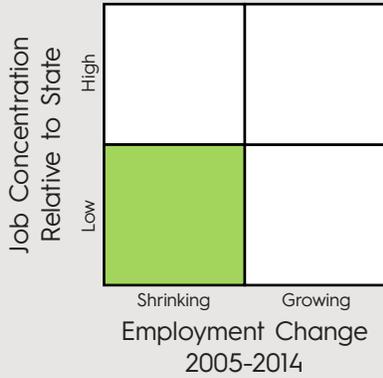
- ▶ Food & Beverage Stores
- ▶ Clothing Stores
- ▶ Building Materials & Gardens

Industry Outlook 2014-2024

- ▶ National: **5.0% Growth**
- ▶ State: **5.5% Growth**

Transportation and Warehousing

Regional Trends



The transportation and warehousing sector represents 2.1% of the regional economy. This industry is one of the weakest for the Naugatuck Valley, with a location quotient of 0.79 (and 0.59 relative to the nation) and shrinking employment.

Some of the highest concentrations of employment in the region are surrounding the Oxford airport, along industrial parks in northern Cheshire, in downtown Ansonia, and scattered along Route 8.

Despite a large decline regionally, Connecticut and the nation are expecting growth in this sector. Due to the regional infrastructure and access to other cities, there is potential to improve in this industry, but it is currently classified as a Limited Prospect due to a low concentration and declining employment.

Industry Profile

- ▶ Employment: 3,424
- ▶ Employment Change: -13.1%
- ▶ Percent of Employment: 2.1%
- ▶ Location Quotient: 0.79
- ▶ Number of Establishments: 151
- ▶ Average Establishment Size: 17
- ▶ Average Wage: \$49,901
- ▶ Median Worker Age: 46.1

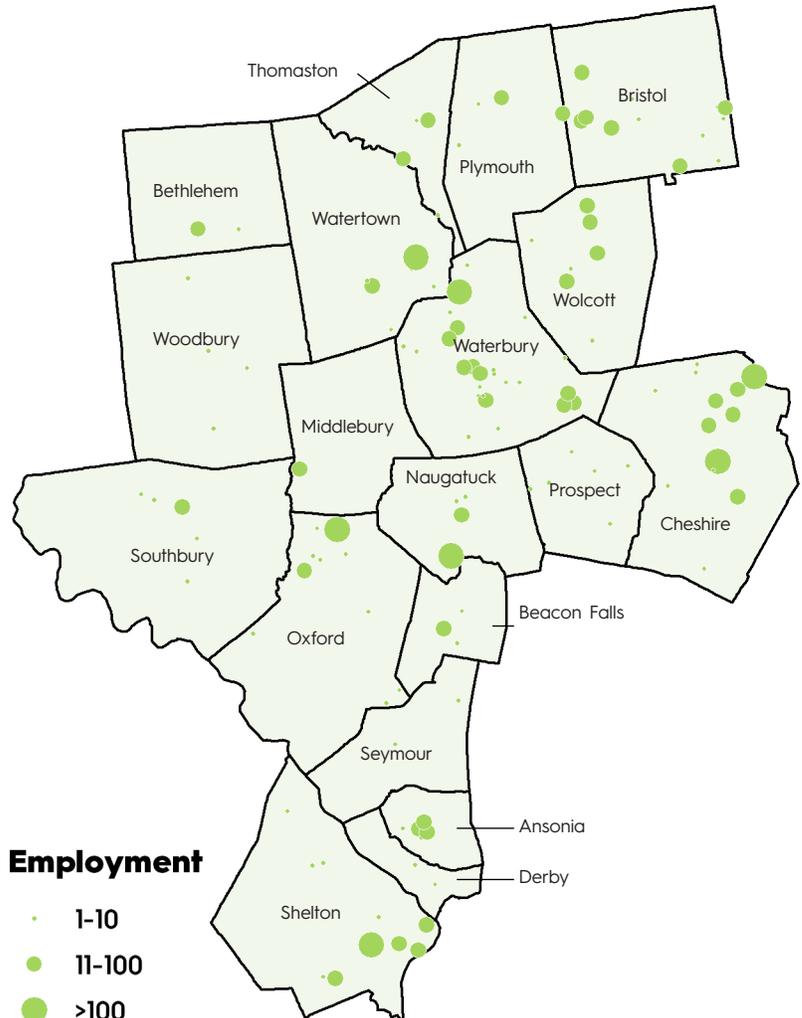
Major Subsectors

- ▶ Truck Transportation
- ▶ Air Transportation
- ▶ Warehousing & Storage

Industry Outlook 2014-2024

- ▶ National: **2.9% Growth**
- ▶ State: **8.0% Growth**

Map 5: Transportation and Warehousing Employment, 2014



Utilities

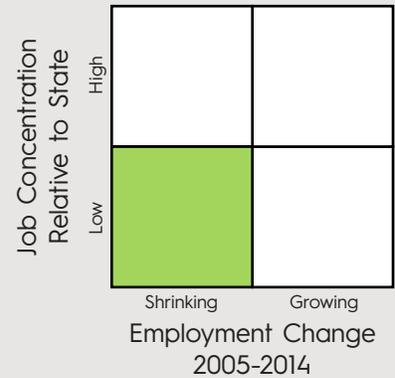
The utilities sector was one of the worst performing sectors in the 2005-2014 time period, with a loss of 18.3% of employment. Because this sector is very small, the impact felt by this sector's fluctuations is small. However, the average wages in this industry indicate that the loss of employment may be reducing the buying power of workers in our region.

Proportionally, employment in this sector is roughly the same as statewide. The state is expecting 24.3% growth in this sector over the coming decade, despite an anticipated decline nationally. This is likely due to continued growth at Eversource, which has recently merged with another major regional utility company to create a regional powerhouse. Despite these statewide trends, Eversource is closing its primary Waterbury facility to consolidate operations in Cheshire. This consolidation will likely mean a continued decrease in overall employment in this sector regionally.

Map 6: Utilities Employment in the Naugatuck Valley, 2014



Regional Trends



Industry Profile

- ▶ Employment: 766
- ▶ Employment Change: -18.3%
- ▶ Percent of Employment: 0.5%
- ▶ Location Quotient: 0.99
- ▶ Number of Establishments: 10
- ▶ Average Establishment Size: 35
- ▶ Average Wage: \$99,288
- ▶ Median Worker Age: 46.1

Major Subsectors

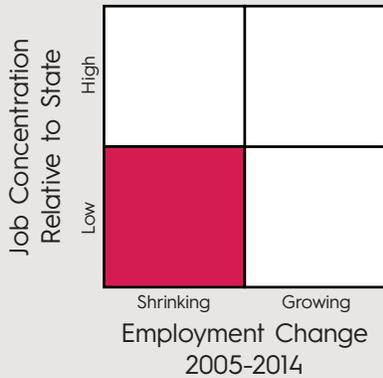
- ▶ Utilities

Industry Outlook 2014-2024

- ▶ National: **-8.7% Decline**
- ▶ State: **24.3% Growth**

Finance & Insurance

Regional Trends



The finance and insurance sector is one of the most important sectors to Connecticut's economy, but that strength doesn't correlate to a regional strength within the Naugatuck Valley. The Naugatuck Valley's workforce in finance and insurance is more than double its employment, with many residents of the region commuting to work in the Hartford and Bridgeport areas.

Webster Bank, a regional banking institution, maintains its headquarters in downtown Waterbury. However many of the jobs at the headquarters count in other categories such as Management rather than being concentrated in Finance & Insurance.

Greater transportation connections between the Naugatuck Valley and surrounding finance and insurance powerhouses will ease the commutes of these workers, and may spur firms to consider the Naugatuck Valley for satellite offices or relocation. Additionally, investment in transit-oriented development and improvement of the Waterbury Branch Line may ease access for these workers.

Industry Profile

- ▶ Employment: 5,453
- ▶ Employment Change: -24.0%
- ▶ Percent of Employment: 3.3%
- ▶ Location Quotient: 0.49
- ▶ Number of Establishments: 480
- ▶ Average Establishment Size: 9
- ▶ Average Wage: \$91,198
- ▶ Median Worker Age: 43.0

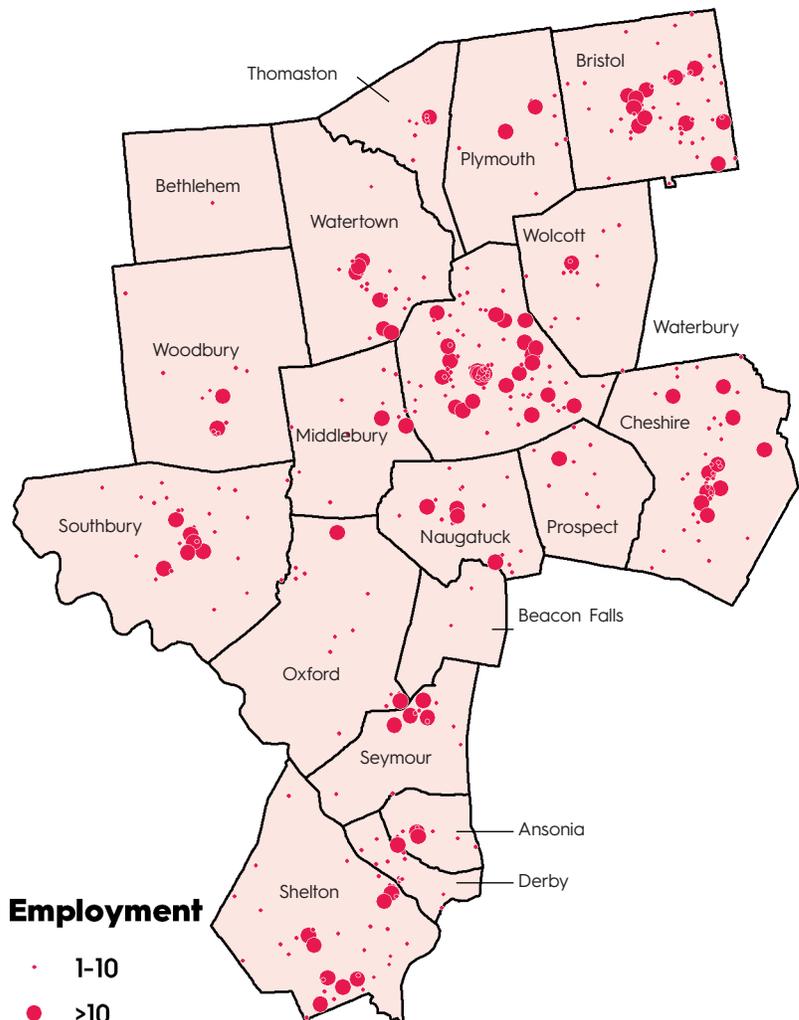
Major Subsectors

- ▶ Securities & Investments
- ▶ Insurance Carriers
- ▶ Credit Intermediation
- ▶ Personal Banking

Industry Outlook 2014-2024

- ▶ National: **6.9% Growth**
- ▶ State: **3.0% Growth**

Map 7: Finance & Insurance Employment in the Naugatuck Valley, 2014



Real Estate & Rental and Leasing

The real estate, rental, and leasing sector had 1,556 jobs in the Naugatuck Valley in 2014, a decrease of 12.2% over the last decade. Much of this job loss occurred during the Great Recession, which heavily impacted the housing markets. While this industry is not currently a strong performer for the Naugatuck Valley, it is likely to increase in strength over the coming years, as transit-oriented developments are planned and developed along the Waterbury Branch Line and retirees downsize or move into retirement communities.

This industry also includes non real estate rental and leasing, though that sector of the industry doesn't make up a large proportion of employment in the Naugatuck Valley region.

Notable centers for this industry regionally are Southbury, in their Heritage Village development, and in Shelton near office parks on the southern side of the city.

Map 7: Real Estate & Rental and Leasing Employment, 2014



Regional Trends



Industry Profile

- ▶ Employment: 1,556
- ▶ Employment Change: -12.2%
- ▶ Percent of Employment: 0.9%
- ▶ Location Quotient: 0.79
- ▶ Number of Establishments: 280
- ▶ Average Establishment Size: 4
- ▶ Average Wage: \$56,632
- ▶ Median Worker Age: 47.8

Major Subsectors

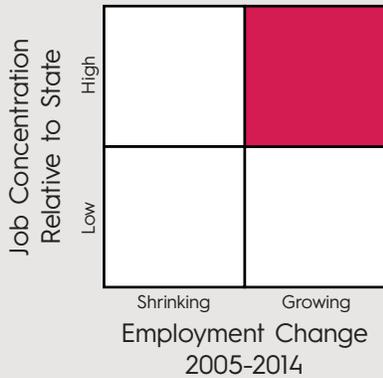
- ▶ Real Estate Sales
- ▶ Rental Administration
- ▶ Rental & Leasing Services

Industry Outlook 2014-2024

- ▶ National: **4.9% Growth**
- ▶ State: **9.6% Growth**

Information

Regional Trends



The Information industry is one of the Naugatuck Valley's strengths, though employment in this industry is heavily concentrated in the offices of a single firm—ESPN's headquarters lie on the edge of Bristol. ESPN accounts for nearly 4,000 of the 6,888 jobs in this industry in the region, and has grown since 2005 after a large campus expansion in 2013. Because of the relative size of ESPN to other media outlets, the Naugatuck Valley has a fairly high location quotient of 1.86 (1.87 nationally). Outside of ESPN, employment in this sector is primarily in local media outlets.

Because this industry is so heavily concentrated in a single global headquarters, there is both risk in relying on a single highly mobile employer and opportunity to diversify related and supportive jobs in the northeastern portions of the region.

The City of Waterbury established an Information Technology Zone in downtown Waterbury in 2005, though as of yet this initiative has not realized major gains in employment.

Industry Profile

- ▶ Employment: 6,888
- ▶ Employment Change: 1,458
- ▶ Percent of Employment: 4.2%
- ▶ Location Quotient: 1.86
- ▶ Number of Establishments: 109
- ▶ Average Establishment Size: 53
- ▶ Average Wage: \$119,750
- ▶ Median Worker Age: 40.9

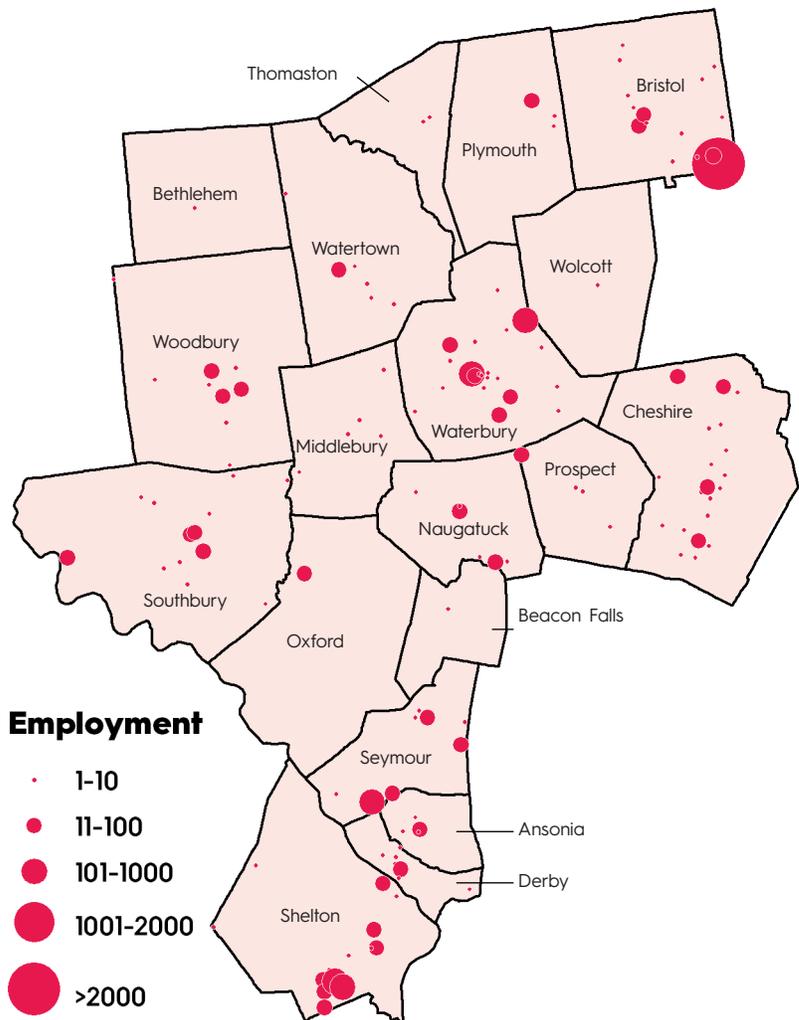
Major Subsectors

- ▶ Broadcasting
- ▶ Publishing Industries
- ▶ Motion Pictures
- ▶ Data Processing

Industry Outlook 2014-2024

- ▶ National: **-1.0% Decline**
- ▶ State: **-1.8% Decline**

Map 8: Information Employment in the Naugatuck Valley, 2014



Professional & Scientific Services

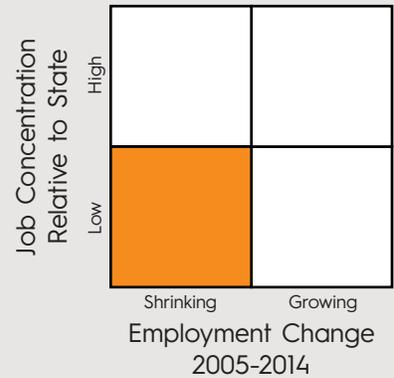
The professional, scientific, and technical services sector is one of the Naugatuck Valley's weaknesses, with a 0.76 location quotient and a declining employment. The largest employment center for this sector is an IBM office located in Southbury, which employs over 1,000 workers. Several smaller offices in Shelton together make another large center. The past decade has seen departures of national and regional headquarters from the state, raising the potential of a departure of these offices. Major players in this sector nationally have called for more urban locations for their workforce, which creates opportunity for land use changes near these facilities or for promotion of transit-oriented development projects in more urban locations.

There are additional clusters of employment in this sector spread fairly evenly across the more urbanized portions of the region. As the state and nation project growth in this sector, and the average wages are relatively high, the Naugatuck Valley may be interested in encouraging growth in this particular industry.

Map 9: Professional, Scientific, & Technical Services Employment, 2014



Regional Trends



Industry Profile

- ▶ Employment: 7,358
- ▶ Employment Change: -1,108
- ▶ Percent of Employment: 4.5%
- ▶ Location Quotient: 0.76
- ▶ Number of Establishments: 812
- ▶ Average Establishment Size: 6
- ▶ Average Wage: \$72,719
- ▶ Median Worker Age: 43.2

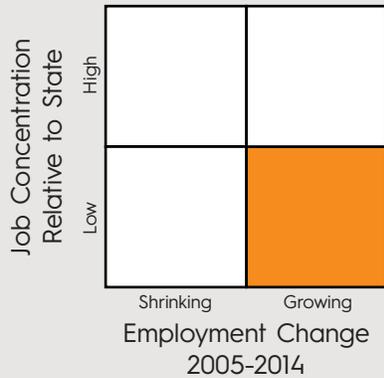
Major Subsectors

Industry Outlook 2014-2024

- ▶ National: **12.5% Growth**
- ▶ State: **19.6% Growth**

Management of Companies & Enterprises

Regional Trends



Management makes up only 1.8% of employment in the Naugatuck Valley, though this industry has an outsize impact on the economy because of the extremely high average wages. Additionally, growth in this industry can often be seen as a marker of local strength, giving this industry an outsize impact on economic development plans as well.

The Naugatuck Valley region has seen growth in the management sector over the past decade, as several companies headquartered in the region have expanded. This sector has been classified as an Emerging Strength for the region, with a concentration nearing par with the state (LQ of 0.91) and heavy growth. Currently, the largest employers in the region in this sector are Timex, headquartered in Middlebury, and Bic, headquartered in Shelton. Shelton has corporate and regional headquarters of a number of smaller companies, and has shown most of the growth in this sector regionally. Other companies are located in Cheshire and in Bristol, with a smaller number in Waterbury and Naugatuck.

Industry Profile

- ▶ Employment: 3,032
- ▶ Employment Change: 54.1%
- ▶ Percent of Employment: 1.8%
- ▶ Location Quotient: 0.91
- ▶ Number of Establishments: 42
- ▶ Average Establishment Size: 45
- ▶ Average Wage: \$281,493
- ▶ Median Worker Age: 43.3

Major Subsectors

- ▶ Management of Corporations
- ▶ Management of Small Firms

Industry Outlook 2014-2024

- ▶ National: **4.1% Growth**
- ▶ State: **2.6% Growth**

Map 10: Management of Companies & Enterprises Employment, 2014



Administration and Waste Management

The administration and waste management sector has been a steadily growing portion of the regional economy, and is at par with the state proportionally (LQ of 1.00). This sector is a difficult one to compare, as the state as a whole is losing competitiveness on this sector nationally, but the Naugatuck Valley is improving its share of employment in the sector statewide. As a result, this sector is becoming a strength of the Naugatuck Valley with reference to Connecticut, but still shows a large negative share of growth when compared to the nation at large (-699).

Regionally, employment in this sector is widespread, with concentrations near business parks and in downtown Shelton, activity across Waterbury, and clusters in Cheshire, Bristol, and Terryville in Plymouth.

Regional Trends



Industry Profile

- ▶ Employment: 8,670
- ▶ Employment Change: 4.5%
- ▶ Percent of Employment: 5.2%
- ▶ Location Quotient: 1.00
- ▶ Number of Establishments: 513
- ▶ Average Establishment Size: 15
- ▶ Average Wage: \$32,517
- ▶ Median Worker Age: 41.5

Major Subsectors

- ▶ Business Administration
- ▶ Waste Management

Industry Outlook 2014-2024

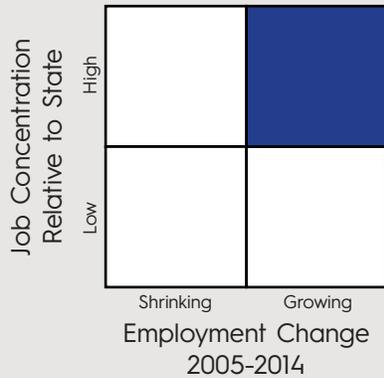
- ▶ National: **8.8% Growth**
- ▶ State: **15.0% Growth**

Map 11: Administration & Support, Waste Management Employment, 2014



Healthcare and Social Assistance

Regional Trends



Healthcare and social assistance is the largest employment sector in the Naugatuck Valley, with 30,481 jobs (18.4% of total employment). Employment is concentrated in Waterbury (home of St. Mary's Hospital and Waterbury Hospital), in Derby at the Griffin Hospital, and at the Bristol Hospital. Smaller concentrations exist along Route 8 in Shelton and through Cheshire, with smaller centers in most towns in the region.

The Naugatuck Valley has a large employment-workforce mismatch in this sector, with 28.0% fewer jobs than workers. This indicates that a large number of Naugatuck Valley residents are already working in this industry but commuting outside for work.

While growth has been strong in this sector, particularly through the Great Recession, the region's performance is now lagging behind statewide and national growth. This industry has been identified as a High Priority Retention Target in this report. Focusing regional resources of maintaining and developing our strength in this industry is an important effort moving forward.

Industry Profile

- ▶ Employment: 30,481
- ▶ Employment Change: 15.0%
- ▶ Percent of Employment: 18.4%
- ▶ Location Quotient: 1.14
- ▶ Number of Establishments: 1,066
- ▶ Average Establishment Size: 25
- ▶ Average Wage: \$44,333
- ▶ Median Worker Age: 43.1

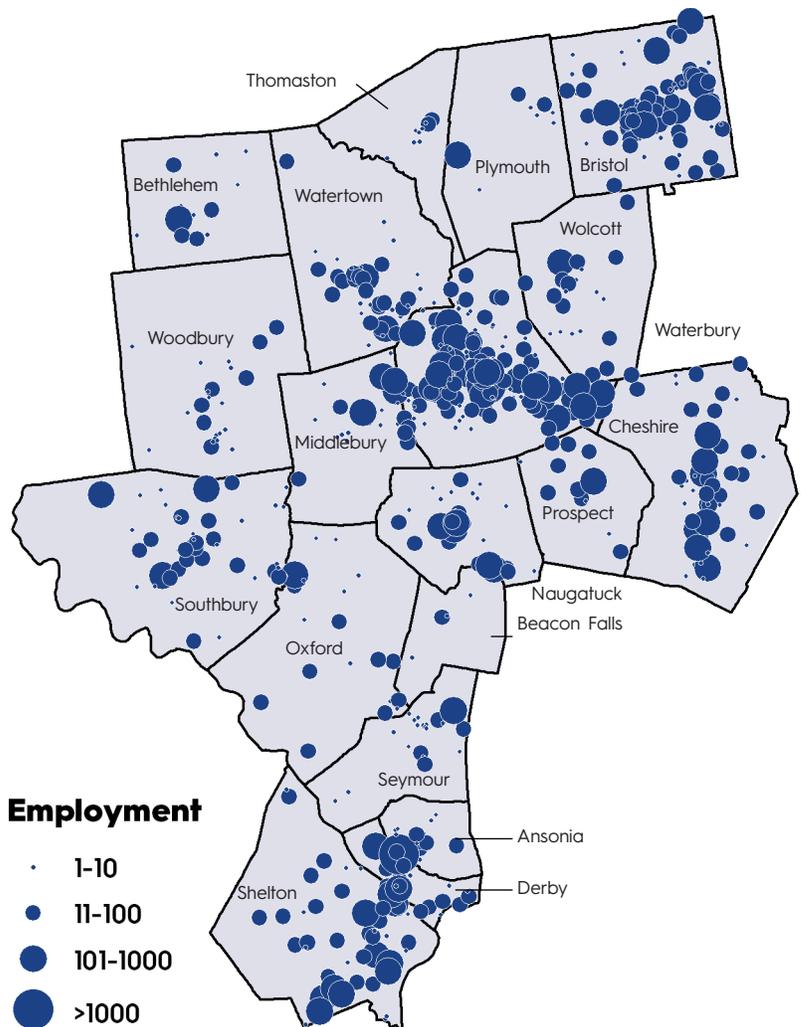
Major Subsectors

- ▶ Hospitals
- ▶ Urgent / Primary Care Centers
- ▶ Nursing & Residential Care
- ▶ Social Services

Industry Outlook 2014-2024

- ▶ National: **19.8% Growth**
- ▶ State: **9.9% Growth**

Map 12: Healthcare and Social Assistance Employment, 2014



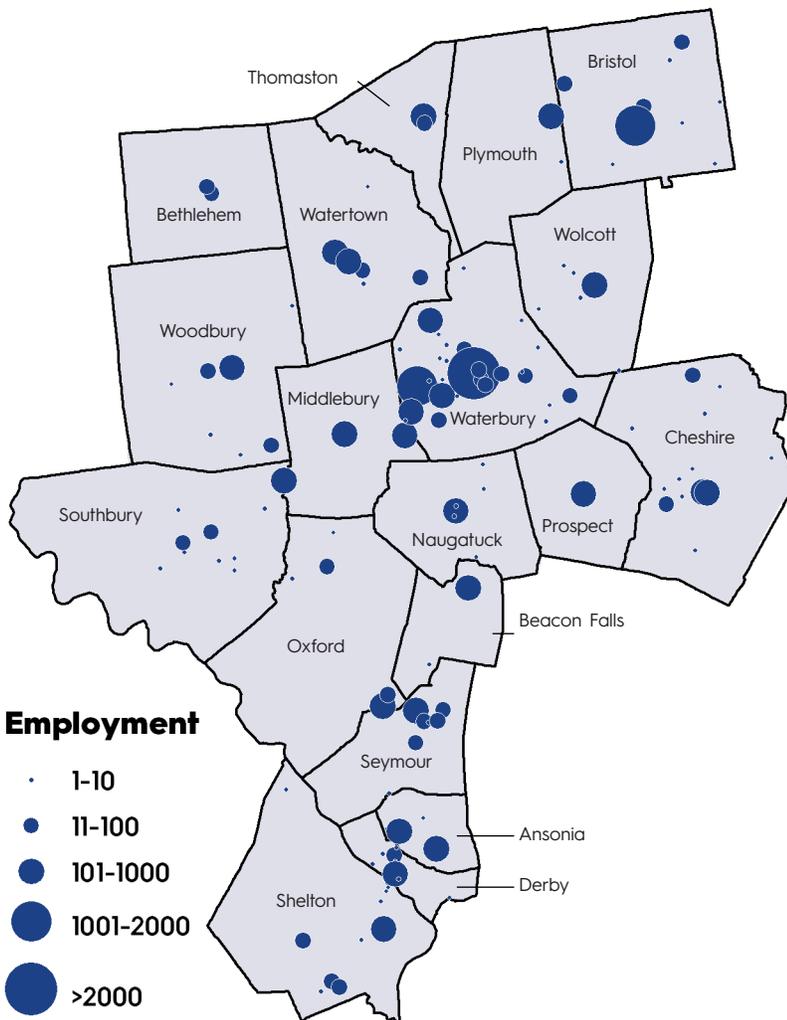
Educational Services

Education is one of the region's emerging strengths, both statewide and nationally. Much of the region's employment in education is in the individual towns' public school systems. Additional major players are UConn, which has continued expansion of its Waterbury campus (relocated to an expanded campus downtown in 2003), Naugatuck Valley Community College (NVCC, the second largest community college by enrollment in Connecticut), and Post University.

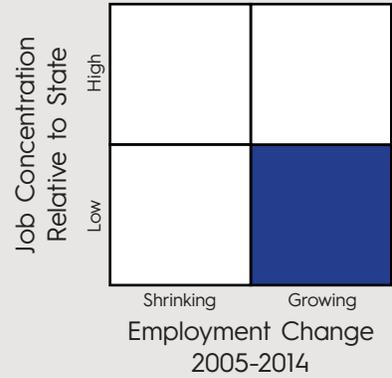
Much of the growth in this sector has been in the expansion of higher education facilities across the region. This includes a new Advanced Manufacturing educational facility at NVCC. The growth in this sector may be leveraged into growth in other sectors, as there is potential to encourage more students to stay in the region post-education to work or start businesses.

Because of the large growth in this sector the Naugatuck Valley towns could work to expand employment opportunities in this industry.

Map 13: Educational Services Employment in the Naugatuck Valley, 2014



Regional Trends



Industry Profile

- ▶ Employment: 15,880
- ▶ Employment Change: 12.3%
- ▶ Percent of Employment: 9.6%
- ▶ Location Quotient: 0.87
- ▶ Number of Establishments: 114
- ▶ Average Establishment Size: 19
- ▶ Average Wage: \$41,578
- ▶ Median Worker Age: 44.2

Major Subsectors

- ▶ Primary and Secondary Education
- ▶ Higher Education

Industry Outlook 2014-2024

- ▶ National: **6.4% Growth**
- ▶ State: **9.8% Growth**

Arts, Entertainment, and Recreation

Regional Trends



Arts, entertainment, and recreation is a growing sector for the Naugatuck Valley, with a positive shift-share compared against the state. However, the region's proportional employment in this sector is very low against the rest of Connecticut, meaning this sector must grow much faster to have a major impact on the regional economy. The majority of workers in this sector in Connecticut work at the two casinos—Foxwoods and Mohegan Sun—which can partially explain the low concentration of employment in our region.

Much of this sector is based in downtown Waterbury and Bristol, with a smattering of small organizations located in southern Shelton as well. While this sector is an emerging strength for the region, special care should be taken to ensure that new growth opportunities in this sector improve average wages, as arts, entertainment, and recreation jobs in the Naugatuck Valley have some of the lowest average wages.

Industry Profile

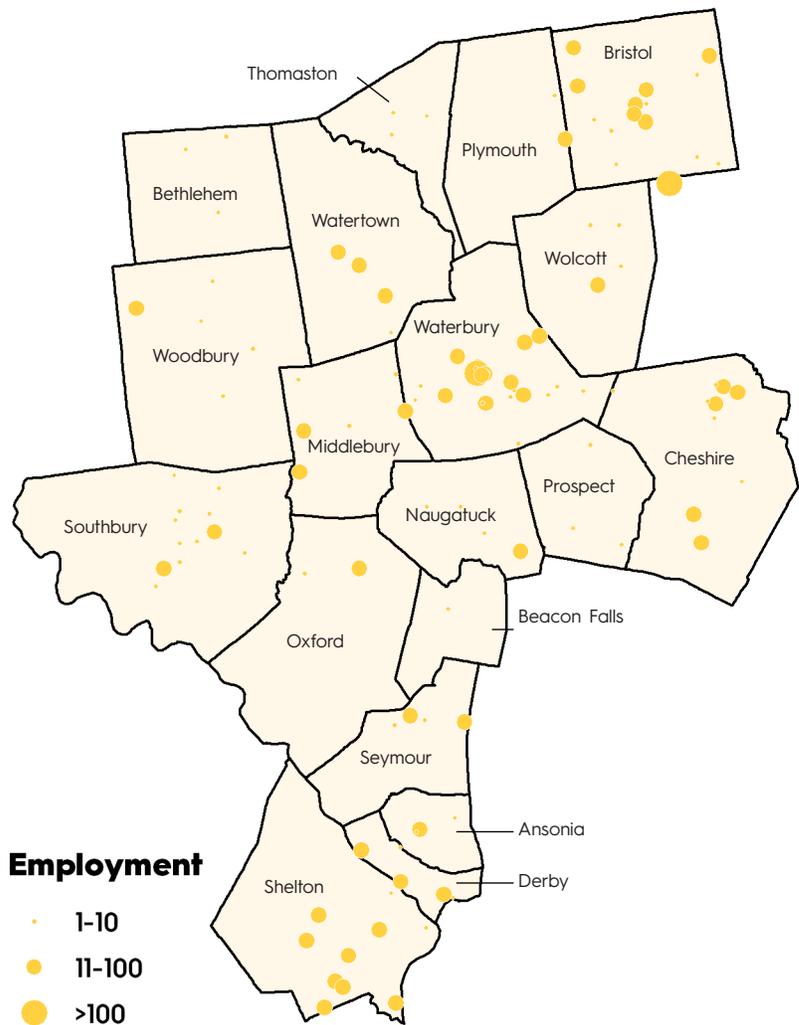
- ▶ Employment: 2,310
- ▶ Employment Change: 3.8%
- ▶ Percent of Employment: 1.4%
- ▶ Location Quotient: 0.55
- ▶ Number of Establishments: 62
- ▶ Average Establishment Size: 13
- ▶ Average Wage: \$21,343
- ▶ Median Worker Age: 38.4

Major Subsectors

Industry Outlook 2014-2024

- ▶ National: 7.1% Growth
- ▶ State: -1.7% Decline

Map 14: Arts, Entertainment, and Recreation Employment, 2014



Accommodation and Food Services

Accommodation and food services is a relatively large and growing sector of the regional economy, with 11,061 jobs and a growth rate of 20.0%. This high growth rate makes the sector an emerging strength relative to both Connecticut and the nation at large. The sector is fairly distributed throughout the region, closely tracking the population levels.

This sector has the lowest pay among any sector of the economy, indicating that its massive growth may be stunting wages regionally. The Naugatuck Valley towns should maintain an eye towards increasing the average wages in this sector when investigating opportunities to strengthen the industry.

Regional Trends



Map 15: Accommodation and Food Services Employment, 2014



Industry Profile

- ▶ Employment: 11,061
- ▶ Employment Change: 20.0%
- ▶ Percent of Employment: 6.7%
- ▶ Location Quotient: 0.91
- ▶ Number of Establishments: 808
- ▶ Average Establishment Size: 13
- ▶ Average Wage: \$16,927
- ▶ Median Worker Age: 30.1

Major Subsectors

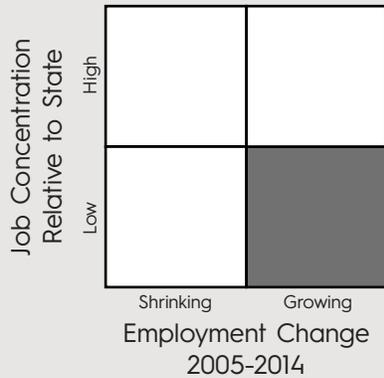
- ▶ Restaurants
- ▶ Fast Food
- ▶ Hotels

Industry Outlook 2014-2024

- ▶ National: **6.3% Growth**
- ▶ State: **9.0% Growth**

Other Services

Regional Trends



The other services sector contains industries that do not fit into other NAICS categories such as non-profit organizations, repair and maintenance facilities, personal and laundry services, and private households. This sector had 5,696 employees in 2014, comprising 3.4% of the region's employment. Employment patterns largely follow population patterns, with the highest concentrations in Waterbury, Bristol, and Shelton.

From 2005 to 2014 this sector grew by 14.7%, with an increase of 732 jobs. This is much faster than the state's increase of 10.1%, identifying this sector as an emerging strength for the region at large. To support the expansion of aspects of this "sector," economic development policies must look at individual components, as few of them are directly related to one another. Of particular note in the Naugatuck Valley are religious and civic organizations, which serve many of the recent immigrants to the region.

Industry Profile

- ▶ Employment: 5,696
- ▶ Employment Change: 732
- ▶ Percent of Employment: 3.4%
- ▶ Location Quotient: 0.93
- ▶ Number of Establishments: 1,348
- ▶ Average Establishment Size: 4
- ▶ Average Wage: \$23,967
- ▶ Median Worker Age: 43.1

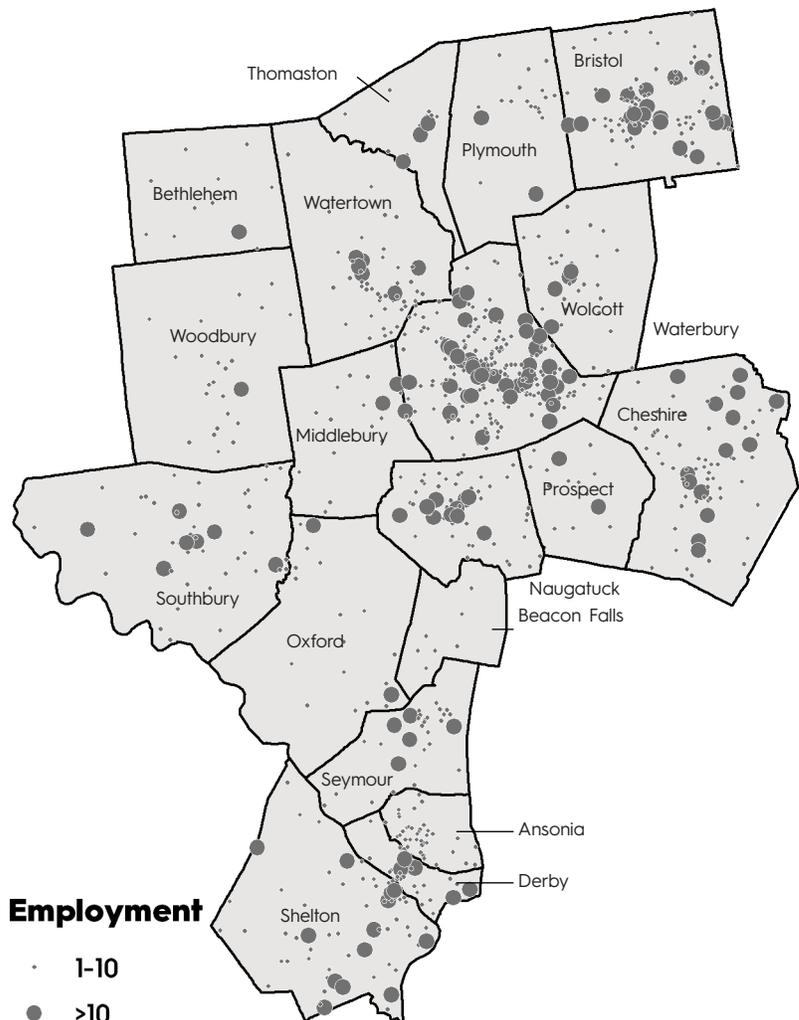
Major Subsectors

- ▶ Repair & Maintenance
- ▶ Religious & Civic Organizations
- ▶ Private Households

Industry Outlook 2014-2024

- ▶ National: **4.2% Growth**
- ▶ State: **10.8% Growth**

Map 16: Other Services Employment in the Naugatuck Valley, 2014

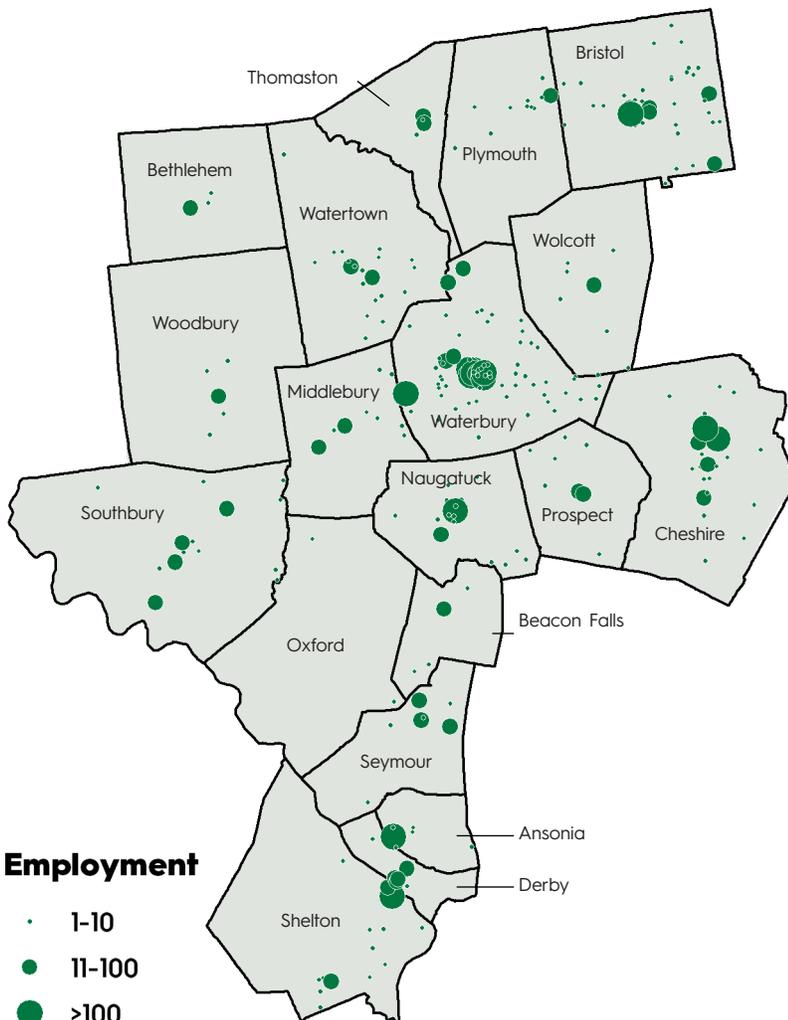


Public Administration

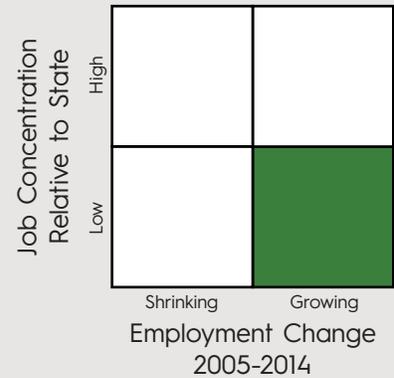
The public administration sector includes federal, state, and local government employees that manage and oversee public programs. In 2014 there were a total of 5,017 employees in the public administration sector, accounting for 3.0% of total employment. Public school teachers, who are counted as employees in the educational services sector, are not included in the public administration employment totals, though they are included in average wages and establishment sizes (to the right).

The largest concentration of employment is found in Waterbury, with smaller concentrations in Bristol, downtown Derby-Shelton, and Cheshire (home of two state correctional institutions). Because of the recent trends in downsizing both state and federal government employment, and due to the fact that employment in this sector is typically out of the hands of local and regional government, it is unlikely that the region can lean on this sector for continued growth prospects.

Map 17: Public Administration Employment in the Naugatuck Valley, 2014



Regional Trends



Industry Profile

- ▶ Employment: 5,017
- ▶ Employment Change: 151
- ▶ Percent of Employment: 3.0%
- ▶ Location Quotient: 0.84
- ▶ Number of Establishments: 328
- ▶ Average Establishment Size: 57
- ▶ Average Wage: \$55,932
- ▶ Median Worker Age: 45.5

Major Subsectors

- ▶ Local Government
- ▶ Federal Government

Industry Outlook 2014-2024

- ▶ National: **-1.2% Decline**
- ▶ State: **1.2% Growth**



NVCOG

49 Leavenworth St, 3rd Floor
Waterbury, CT 06702
203-757-0535 · nvcogct.org