

Central Naugatuck Valley *Economic Profile: 2013*



COUNCIL of GOVERNMENTS
CENTRAL NAUGATUCK VALLEY

February, 2014



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PHOTO CREDITS

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DATA DISCLAIMER

This document presents data from the U.S. Census Bureau’s LEHD Origin-Destination Employment Statistics (LODES), a product of the Longitudinal Employer-Household Dynamics (LEHD) program. The LODES dataset combines wage records, employer reports, administrative and demographic information, and records from the U.S. Census Bureau. The most recent dataset was available for the year 2011. The LODES dataset offers an unprecedented level of geographic and demographic detail compared to other economic datasets. Employment locations are aggregated to the Census Block geography to protect privacy and are for general planning purposes only. LODES data was supplemented with data from the Connecticut Department of Labor and U.S. Bureau of Labor Statistics. Statistics from the different data sources do not match up perfectly due to differing data collection methods. For example, the Connecticut Department of Labor data classifies all government employees into one category while the LODES dataset separates them by function (public school teachers would be considered “educational services” employees). These discrepancies were marked in the report with an asterisk.

DATA SOURCES

Dataset	Source
Employment	U.S. Census Bureau, LODES dataset, Area Profile for All Jobs, 2011
Employment Change	U.S. Census Bureau, LODES dataset, 2002 and 2011, COGCNV staff calculations
Percent of Employment:	U.S. Census Bureau, LODES dataset, 2011, COGCNV staff calculations
Location Quotient:	U.S. Census Bureau, LODES dataset, 2011, COGCNV staff calculations
Number of Establishments:	Connecticut Department of Labor, LAUS Employment Statistics, by Town, 2011
Average Establishment Size:	Connecticut Department of Labor, LAUS Employment Statistics, by Town, 2011
Average Annual Wage:	Connecticut Department of Labor, LAUS Employment Statistics, by Town, 2011
Median Worker Age (Years):	U.S. Bureau of Labor Statistics, Median Worker Age (Nationally) by Sector, 2012
State Employment Projections	Connecticut Department of Labor, Connecticut Occupational Projections: 2010-2020
National Employment Projections	U.S. Bureau of Labor Statistics, Industry Employment and Output Projections to 2020

Summary of Major Findings

- The Central Naugatuck Valley Region (CNVR) had a total employment of 98,453 in 2011, a loss of 5,100 jobs (-4.9%) from 2002. Comparatively, there were 130,968 employed persons living in the region, a net export of over 32,500 workers. Half of all CNVR residents now work outside the region and over 40 percent of all CNVR workers live outside the region.
- Recovery from the 2007-2009 economic recession has been slow, particularly for goods-producing sectors. Regional employment peaked at 104,492 in 2007 and declined to a low of 96,423 in 2010. Employment has grown slowly since 2010 but only education and health services has exceeded pre-recession employment levels.
- Service-producing sectors now make up nearly 80 percent of the region's total employment. The service sector contains a mix of low paying jobs (accommodation and food services, retail trade) and high paying jobs (finance and insurance, management of companies and enterprises).
- The region has high concentrations of manufacturing, retail trade, wholesale trade, and health care and social assistance employment compared to other parts of the state.
- The region has very low concentrations of employment in the finance and insurance, arts, entertainment and recreation, management of companies and enterprises, and information sectors compared to other parts of the state.
- The wholesale trade sector was identified as the strongest major sector of the CNVR economy. It saw employment growth from 2002-2011, has a high job concentration relative to the state and nation, and has seen positive regional trends. Much of the wholesale trade employment in the region is found in Cheshire Industrial Park near the I-84 and I-691 interchange.
- After decades of decline, manufacturing employment is projected to stay relatively stable from 2010 to 2020. Manufacturing subsectors such as plastics and rubber product manufacturing and chemical manufacturing are projected to add jobs statewide.

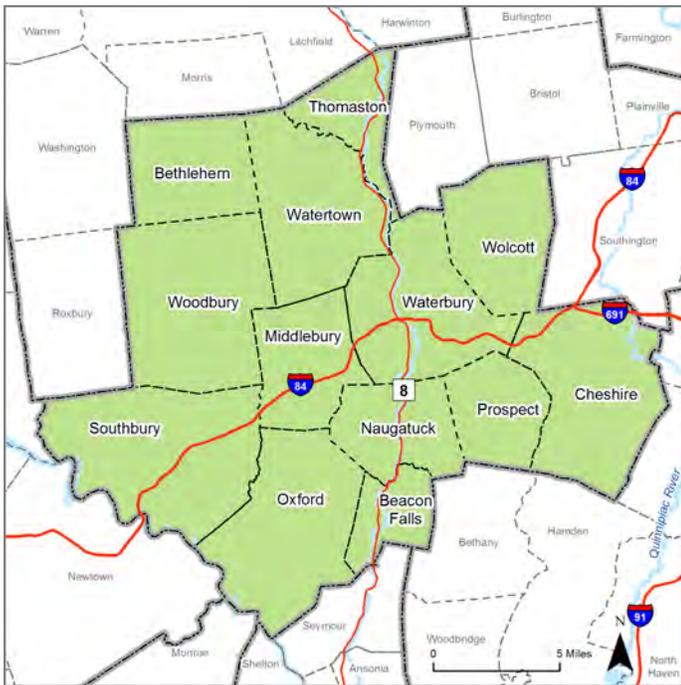
Part I: Introduction

This report presents an overview of the economy in the Central Naugatuck Valley Region (CNVR). Each sector of the region's economy is examined, highlighting past trends and projections for future economic growth.

The Central Naugatuck Valley

The Central Naugatuck Valley Region is comprised of thirteen municipalities in west central Connecticut: Beacon Falls, Bethlehem, Cheshire, Middlebury, Naugatuck, Oxford, Prospect, Southbury, Thomaston, Waterbury, Watertown, Wolcott, and Woodbury. Waterbury, the fifth largest city in the state, anchors the region and is surrounded by a mix of suburban and 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 City is 80 miles to the southwest, and Boston is 130 miles to the northeast.

The Central Naugatuck Valley Region



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 CNVR economy has diversified significantly since its

manufacturing heyday. Healthcare, educational services, retail, and professional and business services now dominate the economy. Fabricated metal production remains an important component of the economy.

The second half of the 20th century saw extraordinary population and employment growth in the CNVR's suburban and rural communities. Despite suburbanization, Waterbury remains the social, cultural, institutional, and employment center of the region. Today, residents of the CNVR are more mobile than ever before. As of 2011, a majority of residents worked outside the region, with many commuting to New Haven, Hartford, and Fairfield County. Similarly, over 40 percent of the CNVR workforce lives outside the region. The increasing interplay between Connecticut's regions suggests that partnerships outside our borders are a key component to the region's future economic growth.

Impact of the Great Recession

Like the state and nation, the Central Naugatuck Valley Region saw significant job losses during the Great Recession of 2007-2009. Employment peaked in 2007 at 104,492 and declined to a low of 96,423 in 2010, a loss of 7,752 jobs (Figure 1). During that same time period, unemployment more than doubled from 5.3% in 2007 to 10.8% in 2010.

The goods-producing sectors, notably manufacturing and construction, were the hardest hit parts of the region's economy, losing a combined 5,339 jobs from 2007 to 2010. From 2010 to 2011 the trend was reversed and employment grew by 550 employees. Not all sectors contracted in the wake of recession. Education and health services added nearly 1,000 jobs from 2007 to 2010.

Since 2010, the region's economy has slowly recovered. From 2010 to 2011, the region gained back 2,000 jobs. By 2012, the unemployment rate dropped to 9.7%, but remained above state and national averages. Likewise, Connecticut's recovery from the Great Recession has been slow and it will take many years to regain all the jobs that were lost.

Figure 1. Total Employment in the CNVR: 2002-2011

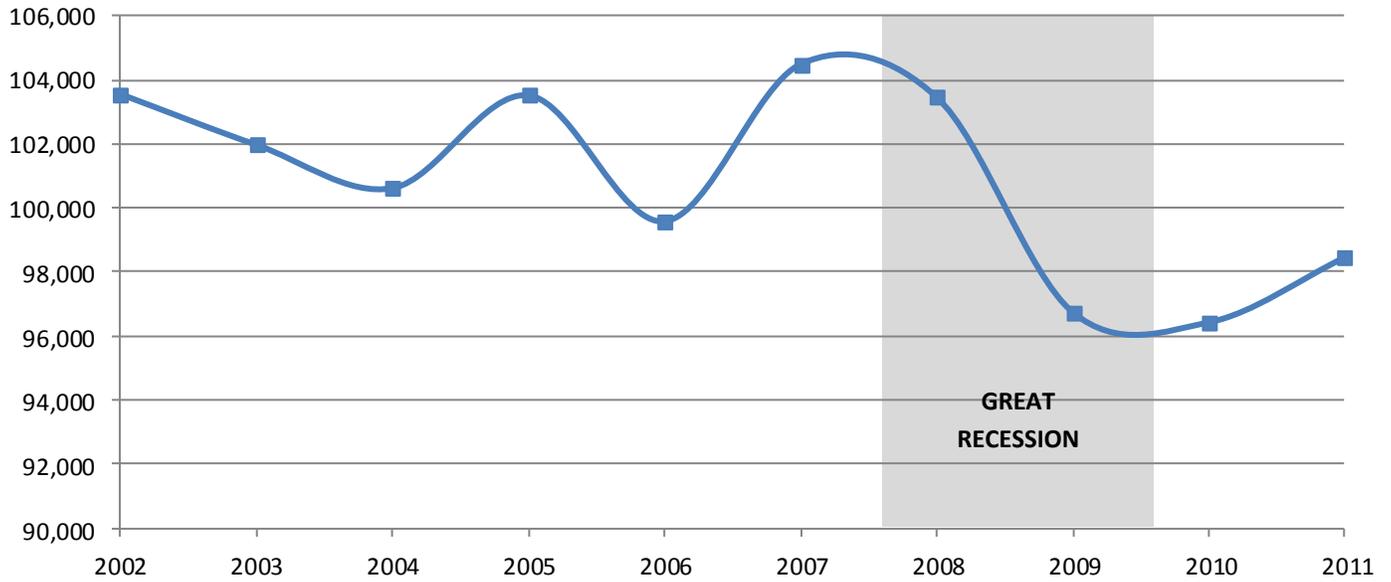
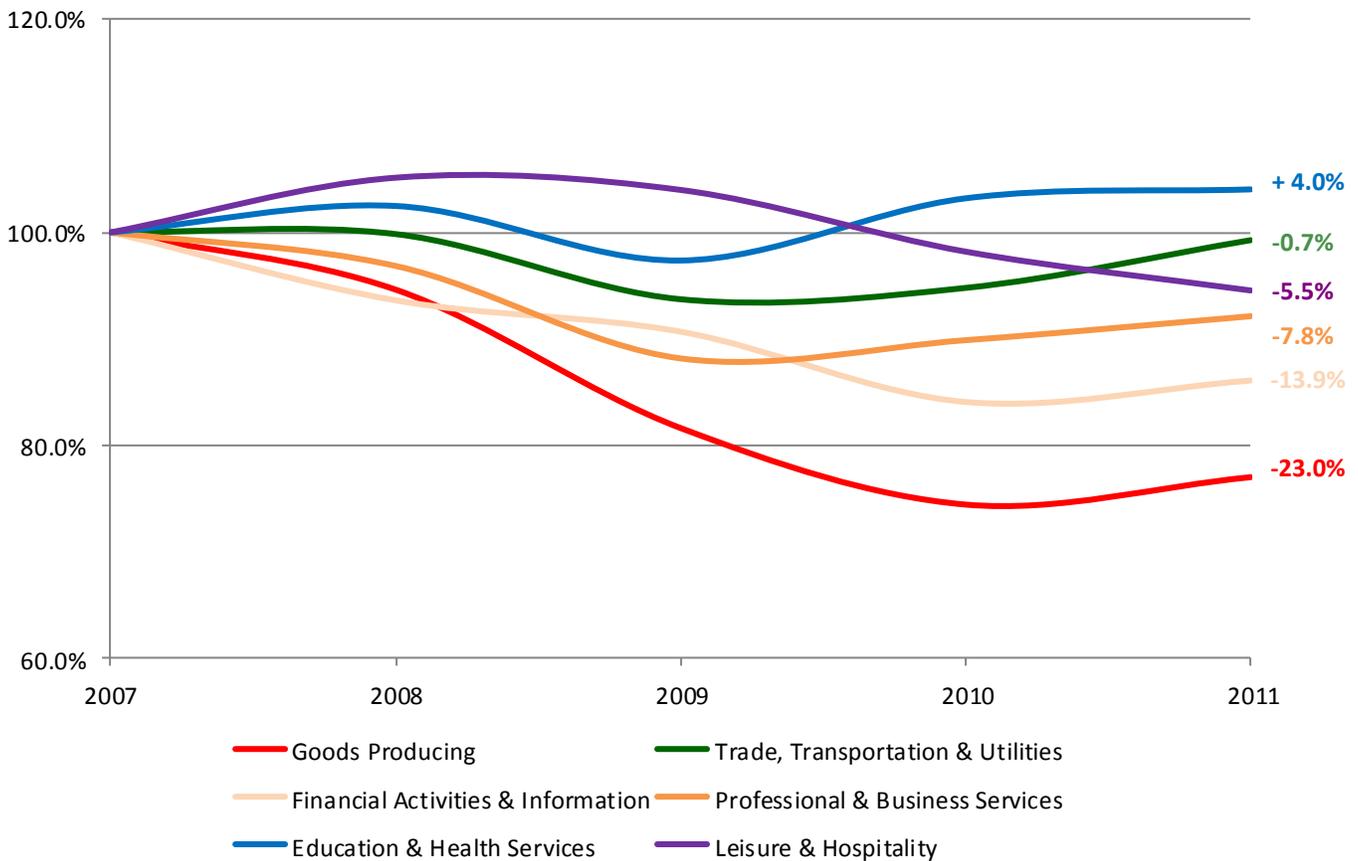


Figure 2. Employment as a Percentage of Pre-Recession Employment, by Super Sector: 2007-2011



Sources: U.S. Census Bureau, On The Map, LODS Dataset: Area Profile for All Jobs 2002 - 2011

Part II: Analysis of Regional Economic Conditions

Employment Trends

Between 2002 and 2011, the Central Naugatuck Valley Region saw its employment drop from 103,553 to 98,453 resulting in a loss of 5,100 jobs (-4.9%). During that same time period, the state as a whole grew slowly and added 2,521 jobs (0.2% increase). The four largest sectors of the region's economy, health care and social assistance (19,921), retail trade (12,666), manufacturing (11,935), and educational services (11,400), comprised 56.8% of the region's total jobs. Employment in the health care and social assistance and educational services sectors both increased from 2002 to 2011 while manufacturing and retail trade employment declined. Manufacturing (-5,575) and construction (-1,178) saw the largest net job losses from 2002 to 2011 while educational services (1,449) and health care and social assistance (1,412) saw the largest net gains. Employment trends for all sectors can be seen in Table 1.

Employment vs. Workforce

The CNVR has a significant employment to workforce mismatch. 98,453 people work in the region, compared to 130,968 employed residents (workforce) living in the region, a net export of over 32,500 workers. As a result, an increasing number of CNVR residents work outside of the region. The sectors with the largest net exports were manufacturing (-4,751), health care and social assistance (-4,721), and finance and insurance (-3,712). Only the



The employment to workforce mismatch has led to an increase in inter-regional commuting, notably on the I-84 and Route 8 corridors

Employment vs. Workforce in the CNVR, by Town: 2011

Municipality	Employment	Workforce	Ratio
Beacon Falls	1,489	3,019	0.49
Bethlehem	689	1,665	0.41
Cheshire	15,053	14,243	1.06
Middlebury	3,494	3,659	0.95
Naugatuck	7,400	17,282	0.43
Oxford	2,938	6,087	0.48
Prospect	1,988	5,154	0.39
Southbury	7,463	7,814	0.96
Thomaston	2,753	4,195	0.66
Waterbury	41,510	43,503	0.95
Watertown	8,240	11,163	0.74
Wolcott	2,792	8,879	0.31
Woodbury	1,985	4,268	0.47

Employment vs. Workforce in Connecticut Cities: 2011

Municipality	Employment	Workforce	Ratio
Hartford	121,334	42,770	2.84
New Haven	82,658	43,823	1.89
Stamford	72,101	54,747	1.32
Danbury	45,394	32,739	1.39
Norwalk	44,466	42,855	1.04
Bridgeport	44,197	52,176	0.85
Waterbury	41,510	43,503	0.95

Sources: U.S. Census Bureau, On The Map, LODS Dataset: All Jobs 2011

utilities, and agriculture, forestry, fishing, and hunting sectors (two of the smallest sectors of the region's economy) saw net imports of workers from other regions. A comparison of employment and workforce by sector can be seen in Table 2 and Figure 3.

The employment to workforce ratio is calculated by dividing employment (people working in a municipality) by workforce (employed people living in a municipality). Ratios of 1.00 or over indicate that a municipality is a net importer of workers while values less than 1.00 indicate net exporters. Ratios vary significantly between CNVR municipalities. Cheshire is the only town in the region is a net importer of workers (ratio of 1.06). Southbury, Waterbury, and Middlebury each have ratios between 0.95 and 1.00 indicating that they are small ex-

porters. The remaining municipalities have ratios ranging from 0.74 to 0.31 and are large exporters of workers.

Most large cities in Connecticut are net importers of workers from their surrounding suburban towns. Hartford (2.84), New Haven (1.89), Stamford (1.32), and Danbury (1.39) are the largest employment centers in the state and have high employment to workforce ratios. Despite being among the largest employment centers in the state, Bridgeport (0.85) and Waterbury (0.95) are both net exporters of workers.

The sectors with the lowest employment to workforce ratios were finance and insurance (0.42), information (0.47), and management of companies and enterprises (0.49). CNVR 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 mean that the sector has a higher job concentration than the reference area, while values between 0 and 1 indicate a lower concentration.

Nine of the twenty sectors of the region's economy, including the four largest sectors, had higher job concentration than the state. Mining, quarrying and oil and gas extraction (4.8) and agriculture, forestry, fishing, and hunting (1.5) had the two highest location quotients but do not indicate strong performing sectors since employment is so low. The wholesale trade sector had the highest concentration (1.4) of any major sector. The lowest concentrated sectors were finance and insurance (0.4), management of companies and enterprises (0.5), and arts, entertainment, and recreation (0.5). 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 growth, national growth, and industry

trends, and how much is due to regional characteristics (regional share). Sectors with a positive regional share have a higher growth rate than national, state, and industry averages and are becoming more competitive.

Wholesale trade and "other services" were the only two major sectors that had positive regional shares compared to both the state and the nation. These industries grew at a faster rate than can be explained by state, national, or industry trends. The health care and social assistance and manufacturing sectors had the largest negative regional shares indicating that they contracted faster (manufacturing) or grew slower (health care and social assistance) compared to state, national, and industry averages. A complete shift-share analysis for all sectors can be seen in Table 4 and Table 5.

Identifying Regional Strengths

Regional strengths were identified using the industry targeting analysis decision tree (Figure 5), which uses location quotients, employment trends, and shift-share analysis 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.



Cheshire Industrial Park, located near the I-84 and I-691 interchange is home to much of the region's wholesale trade employment.

Table 1. Change in Employment in the CNVR, by Sector: 2002-2011

Sector	Regional Employment			State Employment		
	2002	2011	Percent Change	2002	2011	Percent Change
Agriculture, Forestry, Fishing and Hunting	433	413	-4.6%	5,400	4,503	-16.6%
Mining, Quarrying, and Oil and Gas Extraction	170	155	-8.8%	654	534	-18.3%
Utilities	429	700	63.2%	9,803	8,649	-11.8%
Construction	4,909	3,731	-24.0%	63,731	51,703	-18.9%
Manufacturing	17,510	11,935	-31.8%	219,118	172,367	-21.3%
Wholesale Trade	5,384	5,438	1.0%	67,097	65,808	-1.9%
Retail Trade	12,985	12,666	-2.5%	188,448	174,890	-7.2%
Transportation and Warehousing	2,722	2,540	-6.7%	38,944	40,380	3.7%
Information	1,874	1,367	-27.1%	44,233	36,415	-17.7%
Finance and Insurance	3,295	2,697	-18.1%	118,028	118,683	0.6%
Real Estate and Rental and Leasing	1,145	933	-18.5%	21,173	19,340	-8.7%
Professional, Scientific, and Technical Services	5,746	5,008	-12.8%	91,404	90,029	-1.5%
Management of Companies and Enterprises	1,117	1,029	-7.9%	27,587	30,925	12.1%
Administration & Support, Waste Management and Remediation	3,875	4,167	7.5%	80,071	81,512	1.8%
Educational Services	9,951	11,400	14.6%	158,987	183,975	15.7%
Health Care and Social Assistance	18,509	19,921	7.6%	223,236	265,251	18.8%
Arts, Entertainment, and Recreation	1,245	1,170	-6.0%	43,862	41,462	-5.5%
Accommodation and Food Services	5,544	5,810	4.8%	96,254	109,602	13.9%
Other Services (excluding Public Administration)	3,187	3,806	19.4%	54,410	58,116	6.8%
Public Administration	3,523	3,567	1.2%	58,307	59,124	1.4%
Total All Jobs	103,553	98,453	-4.9%	1,610,747	1,613,268	0.2%

Sources: U.S. Census Bureau, On The Map, LODES Dataset: Area Profile for All Jobs, 2002 and 2011

Table 2. Employment to Workforce Ratio in the CNVR, by Sector: 2011

Sector	Employment		Workforce		Difference		Ratio
	Count	Percent	Count	Percent	Count	Percent	
Agriculture, Forestry, Fishing and Hunting	413	0.4%	294	0.2%	119	28.8%	1.40
Mining, Quarrying, and Oil and Gas Extraction	155	0.2%	74	0.1%	81	52.3%	2.09
Utilities	700	0.7%	780	0.6%	-80	-11.4%	0.90
Construction	3,731	3.8%	4,991	3.8%	-1,260	-33.8%	0.75
Manufacturing	11,935	12.1%	16,686	12.7%	-4,751	-39.8%	0.72
Wholesale Trade	5,438	5.5%	5,715	4.4%	-277	-5.1%	0.95
Retail Trade	12,666	12.9%	15,035	11.5%	-2,369	-18.7%	0.84
Transportation and Warehousing	2,540	2.6%	3,261	2.5%	-721	-28.4%	0.78
Information	1,367	1.4%	2,933	2.2%	-1,566	-114.6%	0.47
Finance and Insurance	2,697	2.7%	6,410	4.9%	-3,713	-137.7%	0.42
Real Estate and Rental and Leasing	933	0.9%	1,543	1.2%	-610	-65.4%	0.60
Professional, Scientific, and Technical Services	5,008	5.1%	6,222	4.8%	-1,214	-24.2%	0.80
Management of Companies and Enterprises	1,029	1.0%	2,114	1.6%	-1,085	-105.4%	0.49
Administration & Support, Waste Management and Remediation	4,167	4.2%	6,136	4.7%	-1,969	-47.3%	0.68
Educational Services	11,400	11.6%	14,524	11.1%	-3,124	-27.4%	0.78
Health Care and Social Assistance	19,921	20.2%	24,642	18.8%	-4,721	-23.7%	0.81
Arts, Entertainment, and Recreation	1,170	1.2%	1,730	1.3%	-560	-47.9%	0.68
Accommodation and Food Services	5,810	5.9%	8,196	6.3%	-2,386	-41.1%	0.71
Other Services (excluding Public Administration)	3,806	3.9%	4,737	3.6%	-931	-24.5%	0.80
Public Administration	3,567	3.6%	4,945	3.8%	-1,378	-38.6%	0.72
Total All Jobs	98,453	100.0%	130,968	100.0%	-32,515	-33.0%	0.75

Sources: U.S. Census Bureau, On The Map, LODES Dataset: Area Profile for All Jobs 2002 and 2011

Figure 3. Net Difference Between CNVR Workers and Employed CNVR Residents, by Sector: 2011



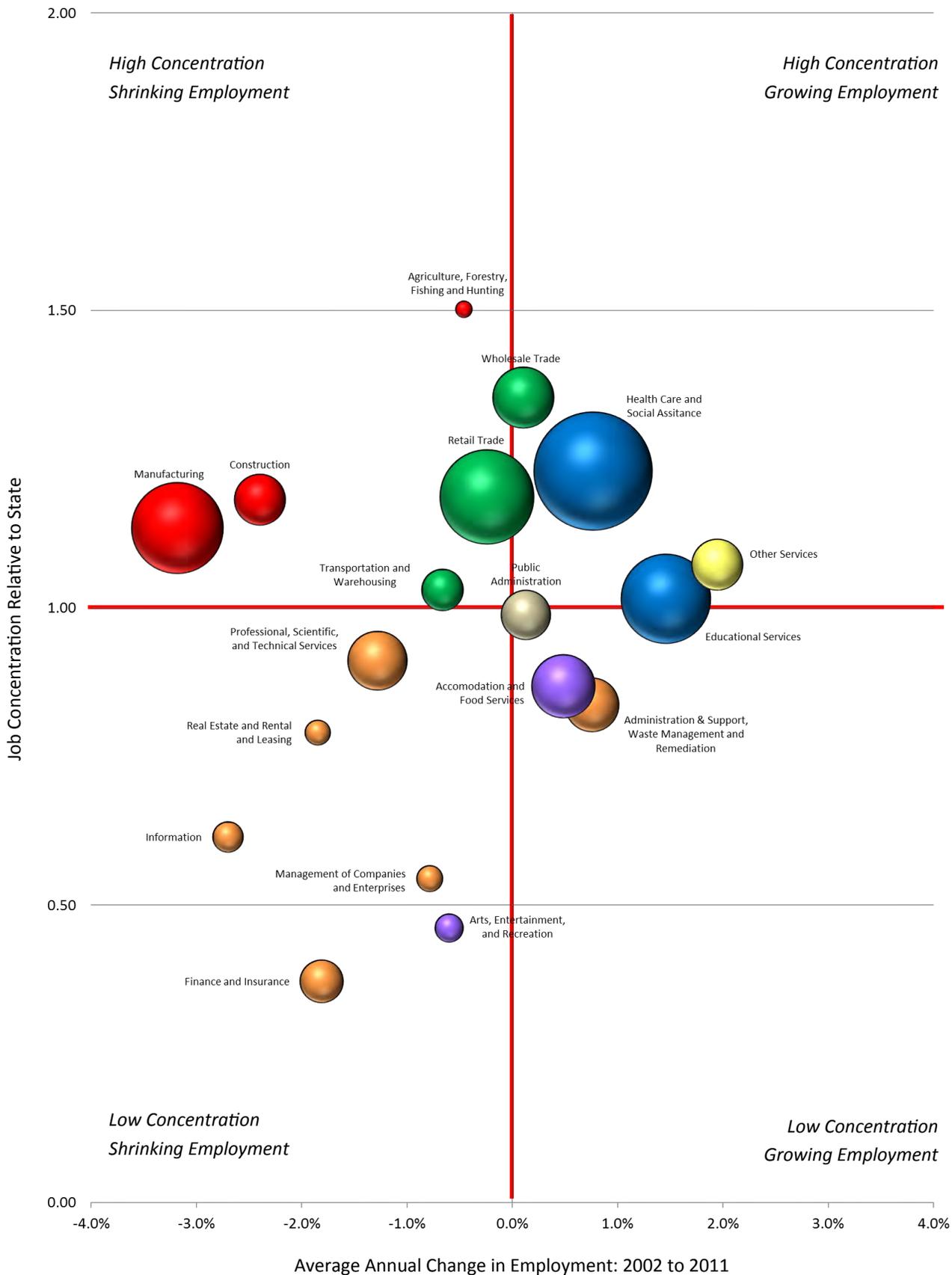
Sources: U.S. Census Bureau, On The Map, LODS Dataset: Area Profile for All Jobs 2002 and 2011

Table 3. Location Quotients in the CNVR, by Sector: 2011

Sector	Employment (2011)				Location Quotients	
	Regional		State		State	National
	Count	Percent	Count	Percent		
Agriculture, Forestry, Fishing and Hunting	413	0.4%	4,503	0.3%	1.5	0.5
Mining, Quarrying, and Oil and Gas Extraction	155	0.2%	534	0.0%	4.8	0.3
Utilities	700	0.7%	8649	0.6%	1.3	1.1
Construction	3,731	3.8%	51,703	3.3%	1.2	0.9
Manufacturing	11,935	12.1%	172,367	11.1%	1.1	1.3
Wholesale Trade	5,438	5.5%	65,808	4.2%	1.4	1.3
Retail Trade	12,666	12.9%	174,890	11.3%	1.2	1.1
Transportation and Warehousing	2,540	2.6%	40,380	2.6%	1.0	0.8
Information	1,367	1.4%	36,415	2.3%	0.6	0.6
Finance and Insurance	2,697	2.7%	118,683	7.6%	0.4	0.6
Real Estate and Rental and Leasing	933	0.9%	19340	1.2%	0.8	0.6
Professional, Scientific, and Technical Services	5,008	5.1%	90,029	5.8%	0.9	0.8
Management of Companies and Enterprises	1,029	1.0%	30,925	2.0%	0.5	0.7
Administration & Support, Waste Management and Remediation	4,167	4.2%	81,512	5.2%	0.8	0.7
Educational Services	11,400	11.6%	183,975	11.8%	1.0	1.2
Health Care and Social Assistance	19,921	20.2%	265,251	17.1%	1.2	1.4
Arts, Entertainment, and Recreation	1,170	1.2%	41,462	2.7%	0.5	0.7
Accommodation and Food Services	5,810	5.9%	109,602	7.1%	0.9	0.7
Other Services (excluding Public Administration)	3,806	3.9%	58,116	3.7%	1.1	1.1
Public Administration	3,567	3.6%	59,124	3.7%	1.0	0.7
Total All Jobs	98,453	100.0%	1,554,144	100.0%	-	-

Source: U.S. Census Bureau, On The Map, LODS Dataset: Area Profile for All Jobs, 2011

Figure 4. Employment Growth and Job Concentration in the CNVR Relative to State, by Sector: 2002-2011



This figure shows average annual change in employment from 2002 to 2011 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.

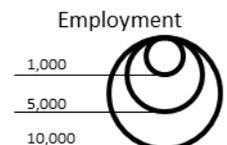


Table 4. CNVR Employment Shift-Share Relative to State, by Sector: 2002-2011

Sector	Regional Employment				State Employment	Employment Shift-Share		
	2002	2011	Change	Percent Change	Percent Change	Total State Growth	State Industry Trends	Regional Share
Agriculture, Forestry, Fishing and Hunting	433	413	-20	-4.6%	-16.6%	0.5	-72.4	51.9
Mining, Quarrying, and Oil and Gas Extraction	170	155	-15	-8.8%	-18.3%	0.2	-31.4	16.2
Utilities	429	700	271	63.2%	-11.8%	0.5	-51.0	321.5
Construction	4,909	3,731	-1,178	-24.0%	-18.9%	5.4	-931.9	-251.5
Manufacturing	17,510	11,935	-5,575	-31.8%	-21.3%	19.2	-3,755.2	-1,839.1
Wholesale Trade	5,384	5,438	54	1.0%	-1.9%	5.9	-109.3	157.4
Retail Trade	12,985	12,666	-319	-2.5%	-7.2%	14.3	-948.5	615.2
Transportation and Warehousing	2,722	2,540	-182	-6.7%	3.7%	3.0	97.4	-282.4
Information	1,874	1,367	-507	-27.1%	-17.7%	2.1	-333.3	-175.8
Finance and Insurance	3,295	2,697	-598	-18.1%	0.6%	3.6	14.7	-616.3
Real Estate and Rental and Leasing	1,145	933	-212	-18.5%	-8.7%	1.3	-100.4	-112.9
Professional, Scientific, and Technical Services	5,746	5,008	-738	-12.8%	-1.5%	6.3	-92.7	-651.6
Management of Companies and Enterprises	1,117	1,029	-88	-7.9%	12.1%	1.2	133.9	-223.2
Administration & Support, Waste Management and Remediation	3,875	4,167	292	7.5%	1.8%	4.3	65.5	222.3
Educational Services	9,951	11,400	1,449	14.6%	15.7%	10.9	1,553.1	-115.0
Health Care and Social Assistance	18,509	19,921	1,412	7.6%	18.8%	20.3	3,463.2	-2,071.6
Arts, Entertainment, and Recreation	1,245	1,170	-75	-6.0%	-5.5%	1.4	-69.5	-6.9
Accommodation and Food Services	5,544	5,810	266	4.8%	13.9%	6.1	762.7	-502.8
Other Services (excluding Public Administration)	3,187	3,806	619	19.4%	6.8%	3.5	213.6	401.9
Total—All Industries	103,553	98,453	-5,100	-4.9%	0.1%	109.8	-191.4	-5,062.4

 Sectors highlighted in green have performed much better than state and industry trends from 2002 to 2011

 Sectors highlighted in red performed much worse than state and industry trends from 2002 to 2011

Sources: U.S. Census Bureau, On The Map, LODS Dataset: Area Profile for All Jobs, 2002 and 2011
 U.S. Bureau of Labor Statistics, Quarterly Census of Employment and Wages, 2002 and 2011

Table 5. CNVR Employment Shift-Share Relative to Nation, by Sector: 2002-2011

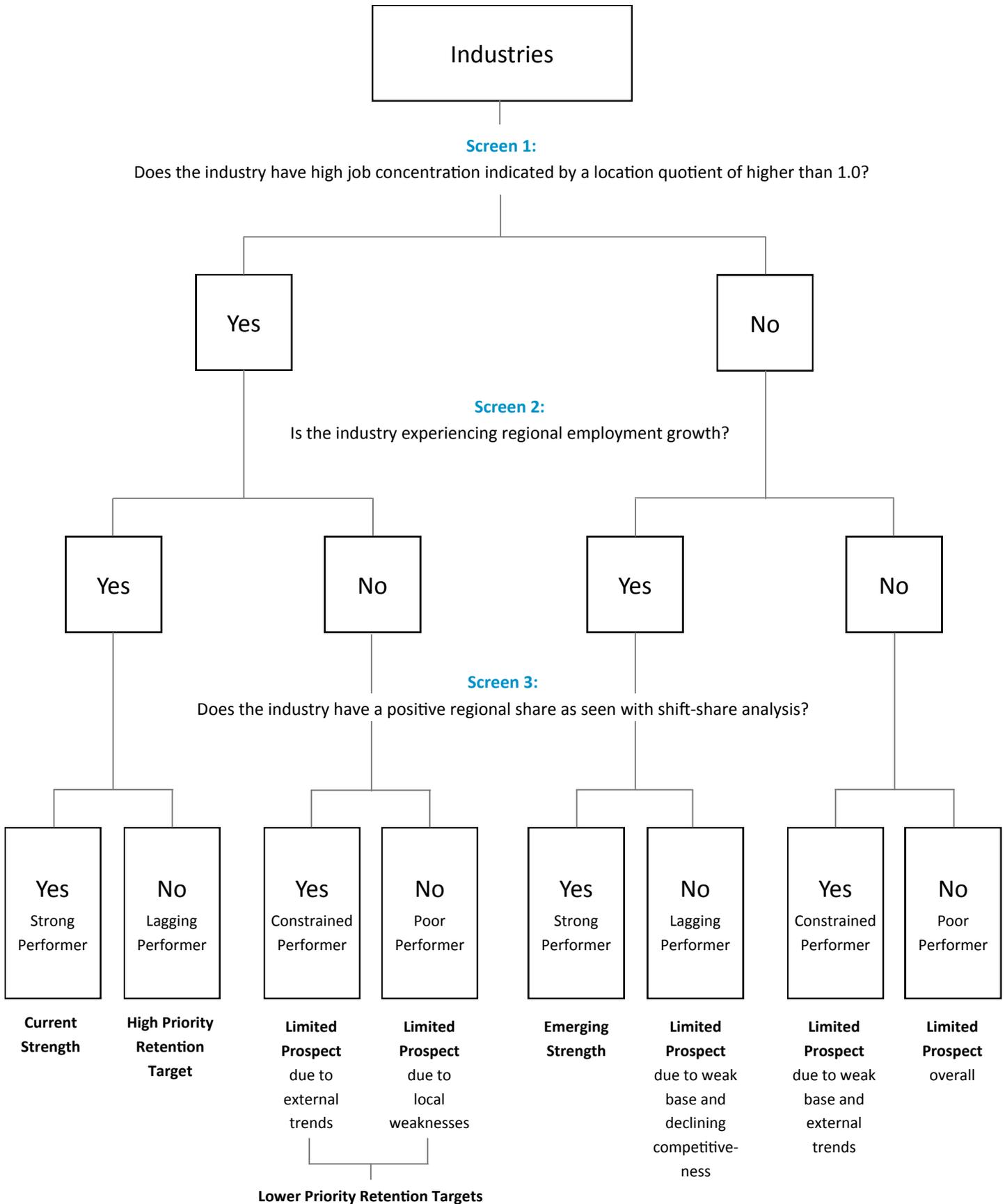
Sector	Regional Employment				National Employment	Employment Shift-Share		
	2002	2011	Change	Percent Change	Percent Change	Total National Growth	National Industry Trends	Regional Share
Agriculture, Forestry, Fishing and Hunting	433	413	-20	-4.6%	0.4%	3.9	-62.8	38.9
Mining, Quarrying, and Oil and Gas Extraction	170	155	-15	-8.8%	44.3%	1.6	66.1	-82.7
Utilities	429	700	271	63.2%	-7.1%	3.9	-9.5	276.6
Construction	4,909	3,731	-1,178	-24.0%	-18.1%	44.8	-913.7	-309.1
Manufacturing	17,510	11,935	-5,575	-31.8%	-23.1%	159.7	-4,307.1	-1,427.6
Wholesale Trade	5,384	5,438	54	1.0%	-1.3%	49.1	-264.0	268.9
Retail Trade	12,985	12,666	-319	-2.5%	-2.3%	118.4	-224.8	-212.7
Transportation and Warehousing	2,722	2,540	-182	-6.7%	1.7%	24.8	374.5	-581.3
Information	1,874	1,367	-507	-27.1%	-20.5%	17.1	-236.9	-287.2
Finance and Insurance	3,295	2,697	-598	-18.1%	-3.0%	30.1	-301.3	-326.8
Real Estate and Rental and Leasing	1,145	933	-212	-18.5%	-5.8%	10.4	-67.0	-155.4
Professional, Scientific, and Technical Services	5,746	5,008	-738	-12.8%	15.3%	52.4	668.2	-1,458.6
Management of Companies and Enterprises	1,117	1,029	-88	-7.9%	12.9%	10.2	-7.2	-91.0
Administration & Support, Waste Management and Remediation	3,875	4,167	292	7.5%	1.6%	35.3	473.9	-217.3
Educational Services	9,951	11,400	1,449	14.6%	30.5%	90.8	2,430.0	-1,071.7
Health Care and Social Assistance	18,509	19,921	1,412	7.6%	23.1%	168.8	3,755.2	-2,512.1
Arts, Entertainment, and Recreation	1,245	1,170	-75	-6.0%	6.9%	11.4	128.4	-214.7
Accommodation and Food Services	5,544	5,810	266	4.8%	11.5%	50.6	781.1	-565.6
Other Services (excluding Public Administration)	3,187	3,806	619	19.4%	3.8%	29.1	-169.2	759.1
Total—All Industries	103,553	98,453	-5,100	-4.9%	0.6%	912.5	2,113.9	-8,170.3

 Sectors highlighted in green have performed better than national and industry trends from 2002 to 2011

 Sectors highlighted in red performed much worse than national and industry trends from 2002 to 2011

Sources: U.S. Census Bureau, On The Map, LODS Dataset: Area Profile for All Jobs, 2002 and 2011
 U.S. Bureau of Labor Statistics, Quarterly Census of Employment and Wages, 2002 and 2011

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



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

Regional Strengths

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 1.1 or higher), employment growth of 50 or more employees from 2002 to 2011, and a 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 2002 to 2011.

Relative to State

- Wholesale Trade
- Utilities
- Other Services

Relative to Nation

- Wholesale Trade
- Utilities
- Other Services

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 1.0), job growth of 50 or more employees from 2002 to 2011, and a negative regional share in the shift-share analysis. The negative regional share indicates that the sector is losing competitiveness.

Relative to State

- Health Care & Social Assistance
- Educational Services

Relative to Nation

- Health Care & Social Assistance
- Educational Services

Emerging Strengths

Emerging Strength sectors have low job concentration relative to the state and national averages (location quotient of less than 1.1), job growth of 50 or more employees from 2002 to 2011, 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 2002 to 2011.

Relative to State

- Administration and Support, Waste Management and Remediation

Relative to Nation

Goods Producing Sectors

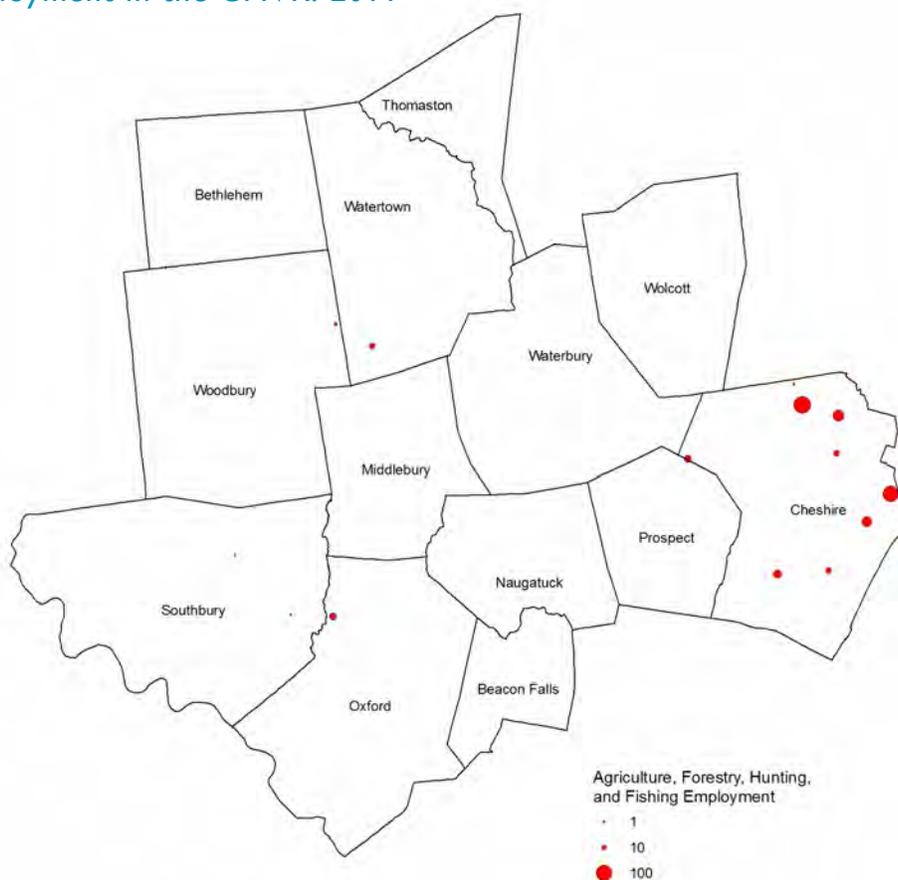


Agriculture, Forestry, Fishing, & Hunting

The agriculture, forestry, fishing, and hunting sector has 413 employees in the CNVR, constituting 0.4% of all jobs. Nearly all of the region's employment is found in Cheshire, which is home to several commercial greenhouses and nurseries. Forestry, hunting, and fishing employment in the region is negligible. Statewide, greenhouses and nurseries account for 49% of all agricultural receipts^a. While agriculture is a small sector in terms of employment, its secondary impacts such as tourism, environmental benefits, and food security solidify its importance. Regional, state, and local plans of conservation and development all list farmland preservation as an important goal.

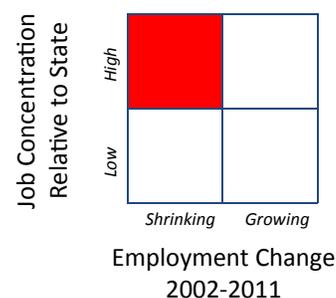
From 2002 to 2011, employment in the agriculture, forestry, fishing, and hunting sector contracted by 4.6%, resulting in a loss of 20 jobs. Despite a projected decline (-0.6%) in employment on the national level from 2010 to 2020, statewide employment in the agriculture, forestry, fishing, and hunting sector is projected to grow at 14.8%. Local farmers markets and the statewide CT Grown Program have helped lead a resurgence in locally produced agricultural products.

Agriculture, Forestry, Hunting, and Fishing Employment in the CNVR: 2011



Sources: Connecticut Department of Labor, U.S. Census Bureau, U.S. Bureau of Labor Statistics
^a Economic Impacts of Connecticut's Agricultural Industry (2010), The CT for Economic Analysis

Regional Trends



Industry Profile

Employment (2011):	413
Employment Change (2002-2011):	-4.6%
Percent of Employment:	0.4%
Location Quotient:	1.1
Number of Establishments:	9
Average Establishment Size:	37
Average Annual Wage:	\$30,009
Median Worker Age (Years):	47.5

Major Subsectors

- Crop production
- Animal production
- Forestry and logging
- Support activities for agriculture & forestry

Industry Outlook 2010—2020

National:	-0.6% Decline
State:	14.8% Growth

Quarrying, Mining, and Oil & Gas Extraction

Like Connecticut as a whole, the quarrying, mining, and oil & gas extraction sector is a minor player in the Central Naugatuck Valley economy. Nationally, it was the fastest growing sector from 2002 to 2011 due to the discovery of large natural gas deposits in Appalachia and the Western United States. Statewide, most of the employment in this sector is in quarrying.

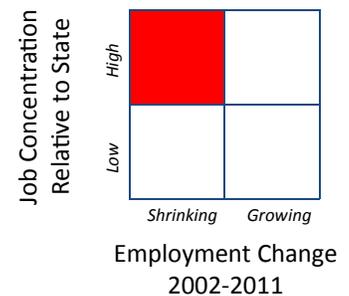
The quarrying, mining, and oil & gas extraction sector is the smallest sector of the region's economy, with just 115 employees, or 0.2% of total. A vast majority of the employment is located in the northern part of Southbury. It has the highest location quotient of any sector, with 4.8, meaning it is 4.8 times more concentrated in the region than it is statewide. However, the location quotients are skewed because the sector has so few jobs statewide. Despite the high location quotient, the quarrying, mining, and oil & gas extraction sector will continue to be a minor player in the region's economy. The state is pushing a Comprehensive Energy Strategy to make natural gas available to an additional 300,000 Connecticut homes and businesses by 2020. The jobs created by this initiative will primarily involve the construction of new infrastructure and the transportation of natural gas to market.

Quarrying, Mining, and Oil & Gas Extraction Employment in the CNVR: 2011



Sources: Connecticut Department of Labor, U.S. Census Bureau, U.S. Bureau of Labor Statistics

Regional Trends



Industry Profile

Employment (2011):	155
Employment Change (2002-2011):	-8.8%
Percent of Employment:	0.2%
Location Quotient:	4.8
Number of Establishments:	3
Average Establishment Size:	5
Average Annual Wage:	\$17,021
Median Worker Age (Years):	41.5

Major Subsectors

- Non-metallic mineral mining & quarrying

Industry Outlook 2010—2020

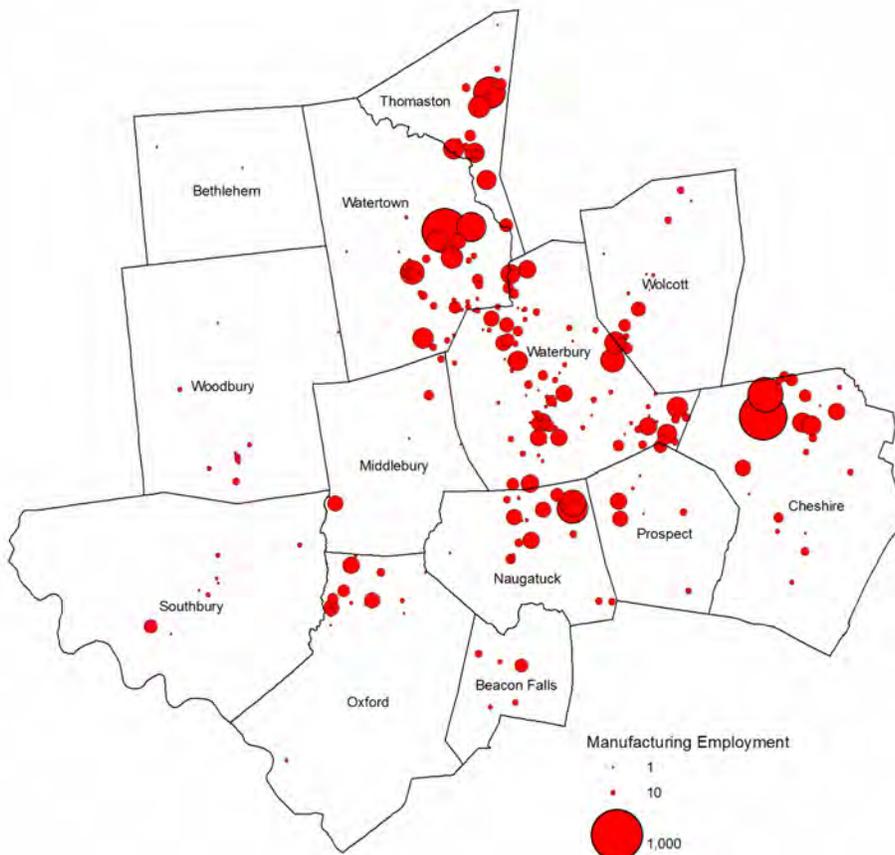
National:	4.0% Growth
State:	2.5% Growth

Manufacturing

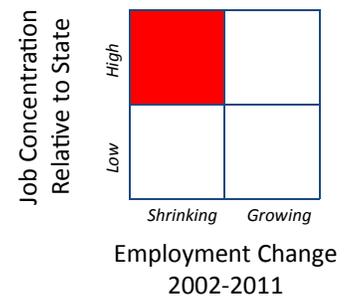
Manufacturing has historically been the backbone of the Central Naugatuck Valley economy, but has changed dramatically over the last half century with plastics replacing brass and other metals, and manufacturing jobs moving to lower cost locations in the Southern United States and abroad. Despite sharp declines in employment over the last several decades, nationwide manufacturing output has stayed relatively stable and worker productivity has increased significantly. Traditionally concentrated in central cities, many manufacturers are now located in suburban towns where undeveloped land is more readily available. Tripper bus service connects the City of Waterbury to industrial parks in surrounding towns.

In 2011, there were 11,935 manufacturing jobs, representing 12.1% of the region's total employment. However, from 2002 to 2011, manufacturing employment in the region contracted by -31.8%, resulting in a loss of 5,575 jobs. Both state and national projections show manufacturing employment staying relatively stable from 2010 to 2020, with decreases of -0.6% and -2.3% respectively. The median age for manufacturing workers is 44.7 years old, one of the oldest median ages of any sector. Partnerships with higher education, such as NVCC's Advanced Manufacturing Technology Center, are working to replace an aging manufacturing workforce with a younger generation of skilled employees.

Manufacturing Employment in the CNVR: 2011



Regional Trends



Industry Profile

Employment (2011):	11,935
Employment Change (2002-2011):	-31.8%
Percent of Employment:	12.1%
Location Quotient:	1.1
Number of Establishments:	507
Average Establishment Size:	23
Average Annual Wage:	\$62,053
Median Worker Age (Years):	44.7

Major Subsectors

- Fabricated Metal Products
- Computers and Electronics
- Transportation Equipment
- Machinery Manufacturing

Industry Outlook 2010—2020

National:	-0.6% Decline
State:	-2.3% Decline

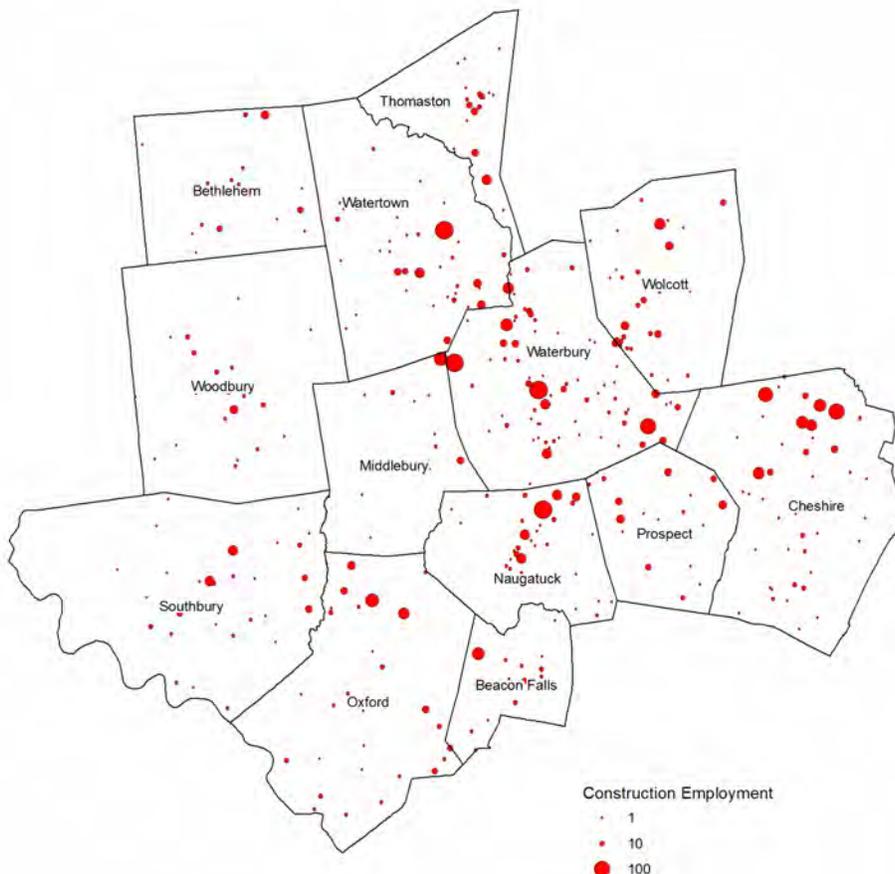
Sources: Connecticut Department of Labor, U.S. Census Bureau, U.S. Bureau of Labor Statistics

Construction

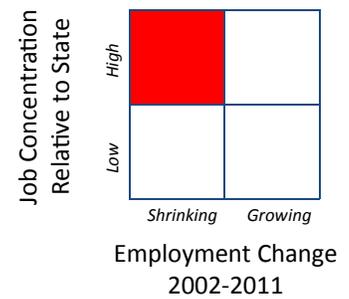
In 2011, there were 3,731 workers in the construction sector, representing 3.8% of the region's employment. With a location quotient of 1.2, it is slightly more concentrated in the Central Naugatuck Valley Region than the state as a whole. Small construction businesses are scattered throughout the region and larger establishments are concentrated near industrial parks in Cheshire, Naugatuck, Waterbury, and Watertown. The average annual wage for the construction sector is \$56,656, which is higher than the regional average.

Similar to state and national trends, the construction industry has been hard hit by the late 2000s housing bubble and recession. The sector saw regional employment drop by 24% from 2002 to 2011, resulting in a loss of 1,178 jobs. A majority of construction job losses can be attributed to the slowing of residential construction. The number of new housing units built in the region has dropped from a high of 894 in 2005 to just 151 in 2012. From 2010 and 2020, state and national projections show growth rates of 20.0% and 33.3% respectively. Even with a 20.0% increase up to 2020, the number of construction jobs will still fall short of their pre-recession levels.

Construction Employment in the CNVR: 2011



Regional Trends



Industry Profile

Employment (2011):	3,731
Employment Change (2002-2011):	-24.0%
Percent of Employment:	3.8%
Location Quotient:	1.2
Number of Establishments:	656
Average Establishment Size:	5
Average Annual Wage:	\$56,656
Median Worker Age (Years):	42.6

Major Subsectors

- Specialty Trade Construction
- Construction of Buildings
- Heavy & Civil Engineering Construction

Industry Outlook 2010—2020

National:	33.3% Growth
State:	20.0% Growth

Trade, Transportation, and Utilities

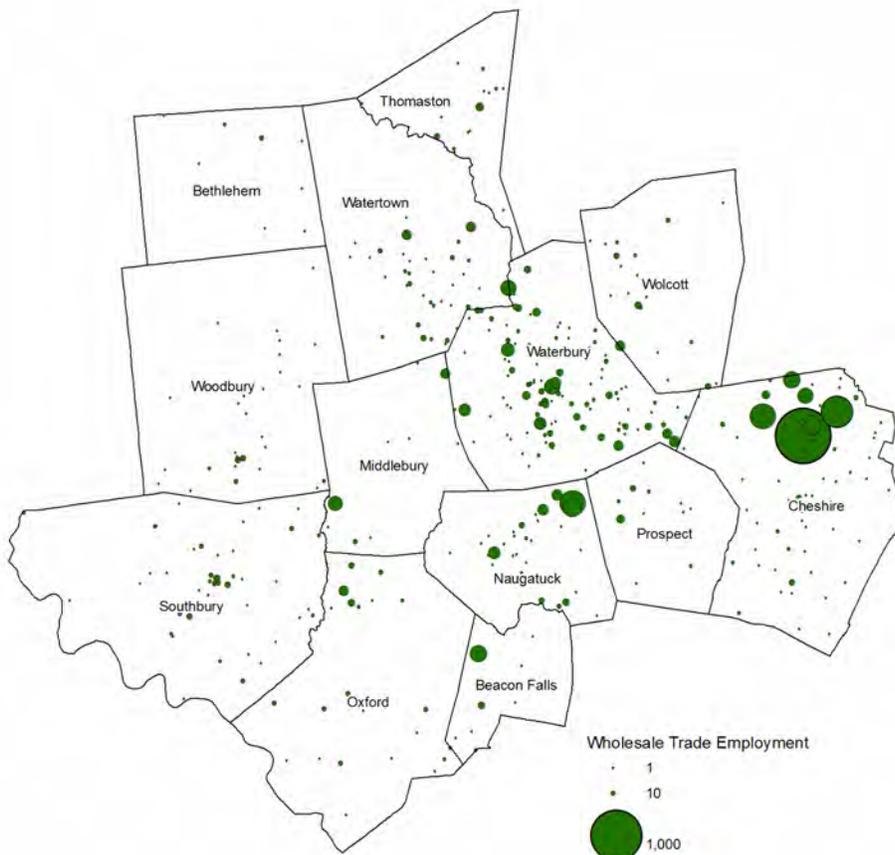


Wholesale Trade

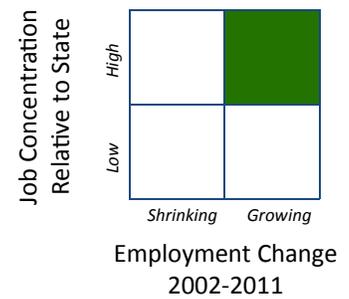
The wholesale trade sector is one of the region's current economic strengths relative to the state and nation. It has seen a gain in employment from 2002 to 2011, has a higher job concentration than the state and nation, and has seen a positive regional employment share. Located at the crossroads of I-84, I-691, and Route 8, the Central Naugatuck Valley's location offers easy access to major markets in Connecticut as well as the New York and Boston metropolitan areas. A particularly high concentration of wholesale trade employment can be found in the Cheshire Industrial Park, adjacent to the I-84/ I-691 interchange.

In 2011, the sector had 5,438 employees, accounting for 5.5% of the region's employment. With a location quotient of 1.4, the wholesale trade sector has the highest concentration of any major sector of the region's economy. From 2002 to 2011, wholesale trade employment grew by 1.0%. Both state and national projections show the sector growing from 2010 to 2020, with increases of 9.9% and 13.6% respectively. The I-84 widening projects and I-84/Route 8 Interchange project will help alleviate traffic congestion in the Central Naugatuck Valley and could bolster our region's comparative advantages as a wholesale trade center.

Wholesale Trade Employment in the CNVR: 2011



Regional Trends



Industry Profile

Employment (2011):	5,438
Employment Change (2002-2011):	1.0%
Percent of Employment	5.5%
Location Quotient:	1.4
Number of Establishments:	541
Average Establishment Size:	10
Average Annual Wage:	\$63,904
Median Worker Age :	43.8

Major Subsectors

- Electronic Markets, Agents, and Brokers
- Wholesalers—Durable Goods
- Wholesalers—Non-durable Goods

Industry Outlook 2010—2020

National: 13.6% Growth

State: 9.9% Growth

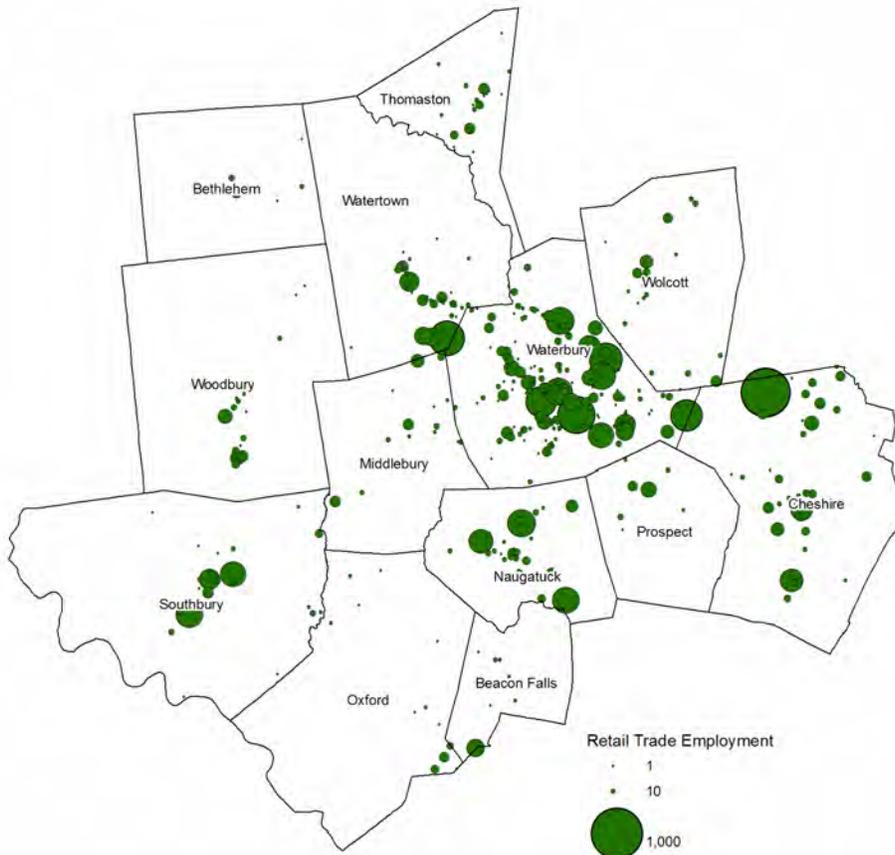
Sources: Connecticut Department of Labor, U.S. Census Bureau, U.S. Bureau of Labor Statistics

Retail Trade

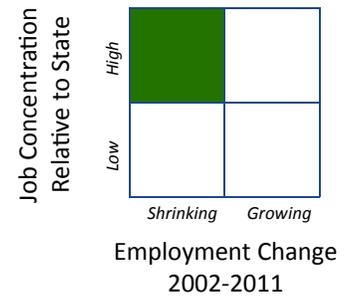
Retail trade is the second largest sector of the Central Naugatuck Valley economy, with 12,666 employees, comprising 12.9% of the region's workforce. Waterbury, which is home to the Brass Mill Center Mall, has the highest concentration of retail trade employment followed by Cheshire, Naugatuck, Southbury, and Watertown. Retail trade workers are among the youngest (median age of 37.9 years old) and have the second lowest average wage (\$26,849) of any sector.

The retail trade sector was hard-hit by the late 2000s recession due to declines in discretionary income and lower retail sales. From 2002 to 2011, retail trade employment declined by 2.5%, resulting in a loss of 319 jobs. Job losses peaked in 2008 and 2009 and have remained relatively stagnant since. However, as the economy continues to recover from recession, employment is expected to increase. Projections show the sector growing by 12.3% nationally and 5.1% statewide between 2010 and 2020. State projections show furniture stores (24.9%) and lawn and garden stores (16.5%) having the largest employment gains and book and music stores (-42.3%) and department stores (-15.7%) having the sharpest declines. The declining subsectors can be attributed to the rise of e-commerce, especially for smaller items such as books, music, and clothing.

Retail Trade Employment in the CNVR: 2011



Regional Trends



Industry Profile

Employment (2011):	12,666
Employment Change (2002-2011):	-2.5%
Percent of Employment:	12.9%
Location Quotient:	1.2
Number of Establishments:	851
Average Establishment Size:	14
Average Annual Wage:	\$26,849
Median Worker Age (Years):	37.9

Major Subsectors

- Food and Beverage Stores
- General Merchandise Stores
- Motor Vehicle and Parts Dealers
- Clothing and Accessories Stores

Industry Outlook 2010—2020

National: 12.3% Growth

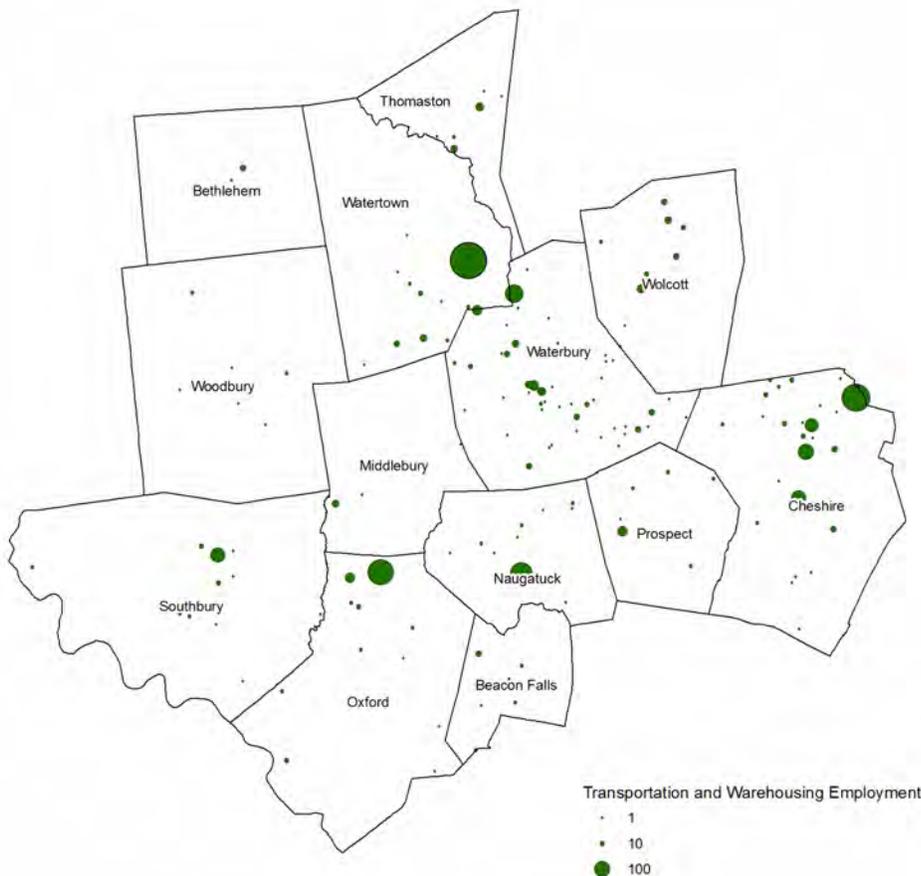
State: 5.1% Growth

Transportation and Warehousing

The transportation and warehousing sector had an employment of 2,540 in 2011, representing 2.6% of regional employment. The largest concentrations of transportation and warehousing employment can be found in industrial parks in Cheshire, Naugatuck, Oxford, and Watertown near Route 8, I-84, I-691 and Waterbury-Oxford Airport. Like the wholesale trade sector, the transportation and warehousing sector is closely tied to the transportation system. Despite the region's central location relative to major markets in the Northeast, it has performed poorly over the last decade.

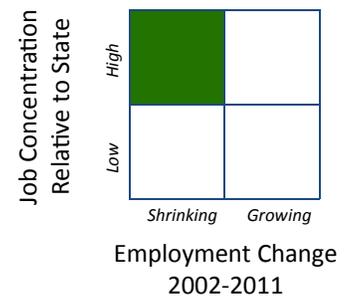
From 2002 to 2011, regional employment in the transportation and warehousing sector declined by 6.7%, a loss of 182 jobs. During that same time period, the state as a whole added 1,436 jobs, an increase of 3.7%. From 2010 to 2020 the sector is projected to grow by 20.4% nationally and 13.4% statewide. Some of the highest concentrations of transportation and warehousing employment in the state can be found near airports such as Bradley International in Windsor Locks, and general aviation airports such as Hartford-Brainard, Groton-New London, and Sikorsky Memorial in Stratford. The Waterbury-Oxford Airport and its newly designated airport incentive zone have potential to become a growth pole for transportation and warehouse employment in the state.

Transportation and Warehousing Employment in the CNVR: 2011



Sources: Connecticut Department of Labor, U.S. Census Bureau, U.S. Bureau of Labor Statistics

Regional Trends



Industry Profile

Employment (2011):	2,540
Employment Change (2002-2011):	-6.7%
Percent of Employment:	2.6%
Location Quotient:	1.0
Number of Establishments:	108
Average Establishment Size:	14
Average Annual Wage:	\$46,953
Median Worker Age (Years):	46.2

Major Subsectors

- Truck Transportation
- Transit & Ground Passenger Transport
- Warehousing and Storage

Industry Outlook 2010—2020

National:	20.4% Growth
State:	13.2% Growth

Utilities

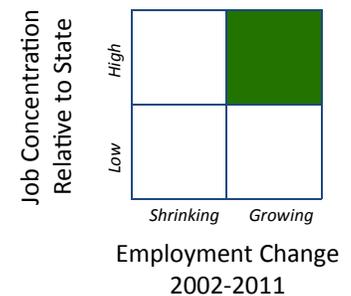
As of 2011, the utilities sector had 700 employees, representing 0.7% of the region's workforce. The sector was identified as one of the three current strengths of the region's economy, but its small employment make it an unlikely source of future economic growth. The highest concentrations of employment are found in Waterbury and Cheshire, with smaller concentrations in Naugatuck and Middlebury. With a location quotient of 1.3, job concentration was higher than the state as a whole.

From 2002 to 2011, utilities grew faster than any sector (63.2%), resulting in 271 new jobs. During that same time period, the sector declined by 11.8% statewide. Projections show employment declining 0.6% nationally and 11.3% statewide from 2010 to 2020. Renewable energy and natural gas will be two emerging utilities up to 2020. The 2013 Connecticut Comprehensive Energy Strategy aims to make natural gas available to an additional 300,000 Connecticut homes and businesses by 2020. In addition to lower energy costs, the Department of Energy and Environmental Protection (DEEP) anticipates that natural gas expansion could create up to 7,000 jobs in the utilities and construction sectors^a. In addition, the state's Renewable Portfolio Standard (RPS) calls for 20% of the state's electricity to be produced by renewable resources by 2020^a.

Utilities Employment in the CNVR: 2011



Regional Trends



Industry Profile

Employment (2011):	700
Employment Change (2002-2011):	63.2%
Percent of Employment:	0.7%
Location Quotient:	1.3
Number of Establishments:	4
Average Establishment Size:	60
Average Annual Wage:	\$114,610
Median Worker Age (Years):	46.7

Major Subsectors

- Electric power generation & transmission
- Natural gas distribution
- Water, sewage, and other systems

Industry Outlook 2010—2020

National:	-0.6% Decline
State:	-11.3% Decline

Sources: Connecticut Department of Labor, U.S. Census Bureau, U.S. Bureau of Labor Statistics

^a 2013 Connecticut Comprehensive Energy Strategy. Connecticut DEEP.

Financial Activities and Information

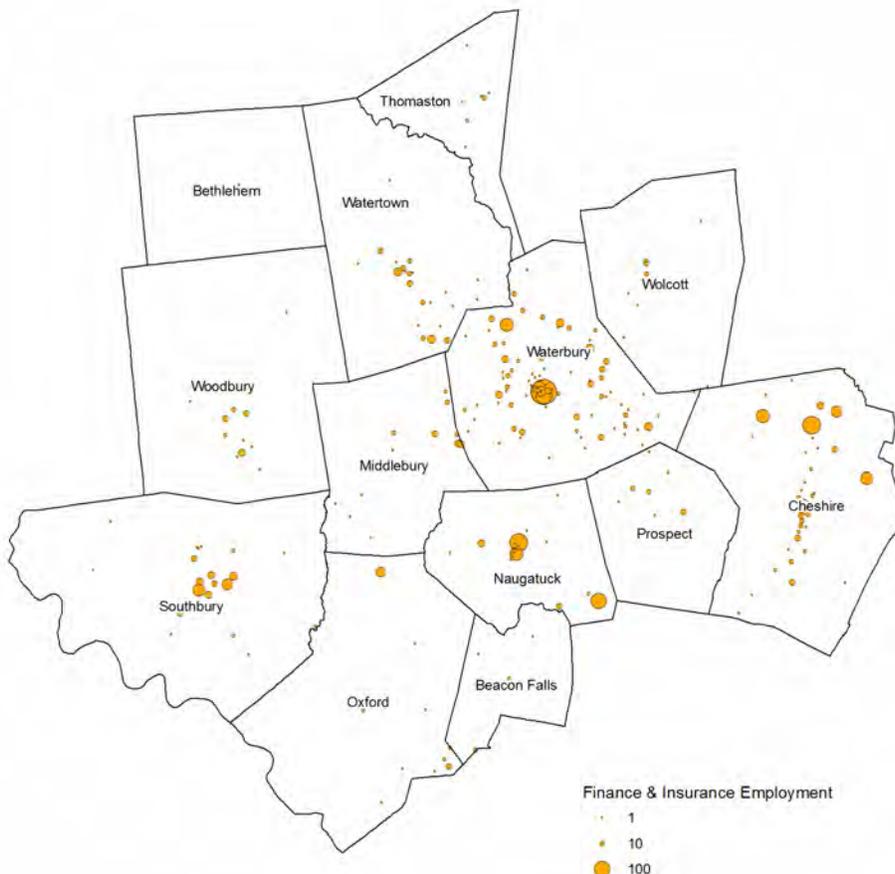


Finance and Insurance

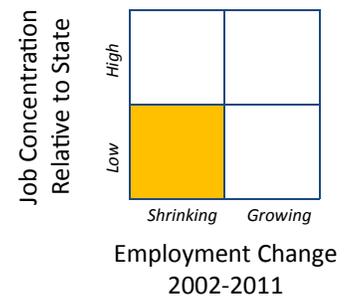
Finance and insurance is one of the most important sectors of Connecticut's economy. Connecticut has the highest concentration of insurance employment in the nation, much of which is located in the Greater Hartford Region. The insurance cluster hasn't spilled over to the Central Naugatuck Valley and many regional banks have consolidated in the last few decades. Finance and insurance has the lowest location quotient (0.4) out of any sector of the region's economy, meaning it has a very low concentration of jobs relative to the state as a whole. In 2011, there were 2,697 finance and insurance jobs in the region, representing 2.7% of the total. By comparison, Greater Hartford had 56,932 finance and insurance employees (12.7% of total). Many CNVR residents employed in the finance and insurance sectors commute to jobs in Greater Hartford or Fairfield County.

From 2002 to 2011, finance and insurance employment declined by 18.1% resulting in a loss of 598 jobs. During that same time period, the sector grew statewide. Between 2010 and 2020, national and state projections show growth rates of 10.2% and 5.0% respectively. Transportation projects such as the I-84 widening project and CT Fastrak will improve connections with Greater Hartford and could allow the Central Naugatuck Valley to draw on a skilled finance and insurance workforce.

Finance and Insurance Employment in the CNVR: 2011



Regional Trends



Industry Profile

Employment (2011):	2,697
Employment Change (2002-2011):	-18.1%
Percent of Employment:	2.7%
Location Quotient:	0.4
Number of Establishments:	314
Average Establishment Size:	8
Average Annual Wage:	\$70,607
Median Worker Age (Years):	42.7

Major Subsectors

- Credit intermediation
- Insurance carriers
- Funds, trusts, and other financial vehicles

Industry Outlook 2010—2020

National:	10.2% Growth
State:	5.0% Growth

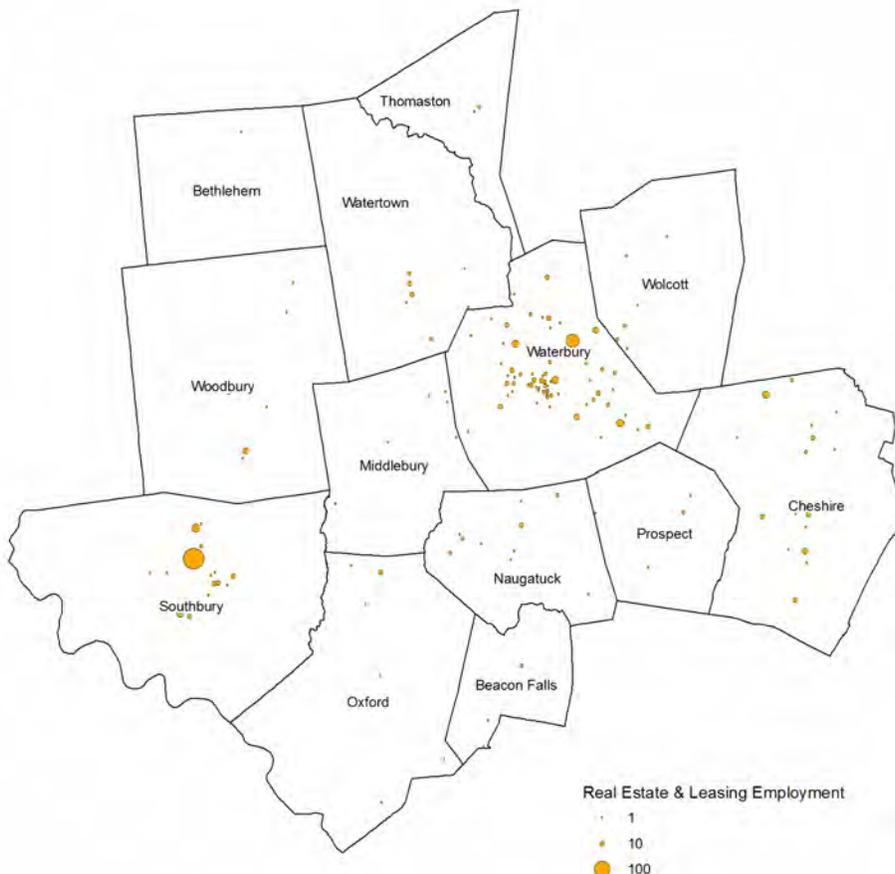
Sources: Connecticut Department of Labor, U.S. Census Bureau, U.S. Bureau of Labor Statistics

Real Estate and Rental and Leasing

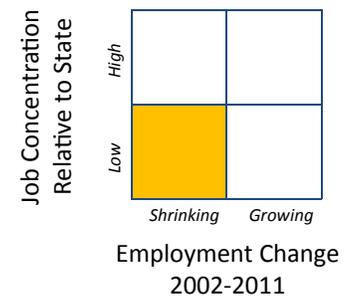
The real estate and rental and leasing sector had 933 employees in 2011, comprising 0.9% of the region's total. The largest clusters of employment can be found in the Heritage Village section of Southbury and in Waterbury. From 2007 to 2011, 68.2% of CNVR residents lived in owner-occupied housing units while 31.8% lived in renter-occupied units. The majority of renter-housing units are found in Waterbury.

Like the construction sector, the real estate and rental and leasing sector has been hard hit by the late 2000s housing crisis and recession. An analysis of home sales in the Waterbury Labor Market area found that there were 330 home sales in 2012, down from a high of 716 in 2004^a. As a result, regional employment contracted by 18.5% from 2002 to 2011, a loss of 212 jobs. During this same period, the state saw an 8.7% decline. As the housing market recovers, the sector is projected to grow at both the state (9.3%) and national (10.2%) levels from 2010 to 2020. Rental and leasing services is projected to be the fastest growing subsector statewide. Two population groups will drive rental housing demand over the coming decades. Many retiring baby boomers are shifting to the rental market and younger generations ("echo boomers") are purchasing homes at a slower rate than their predecessors.

Real Estate and Rental and Leasing Employment in the CNVR: 2011



Regional Trends



Industry Profile

Employment (2011):	933
Employment Change (2002-2011):	-18.5%
Percent of Employment:	0.9%
Location Quotient:	0.8
Number of Establishments:	202
Average Establishment Size:	4
Average Annual Wage:	\$39,252
Median Worker Age (Years):	47.1

Major Subsectors

- Real estate
- Rental and leasing services
- Lessors of nonfinancial intangible assets

Industry Outlook 2010—2020

National: 10.2% Growth

State: 9.3% Growth

Sources: Connecticut Department of Labor, U.S. Census Bureau, U.S. Bureau of Labor Statistics

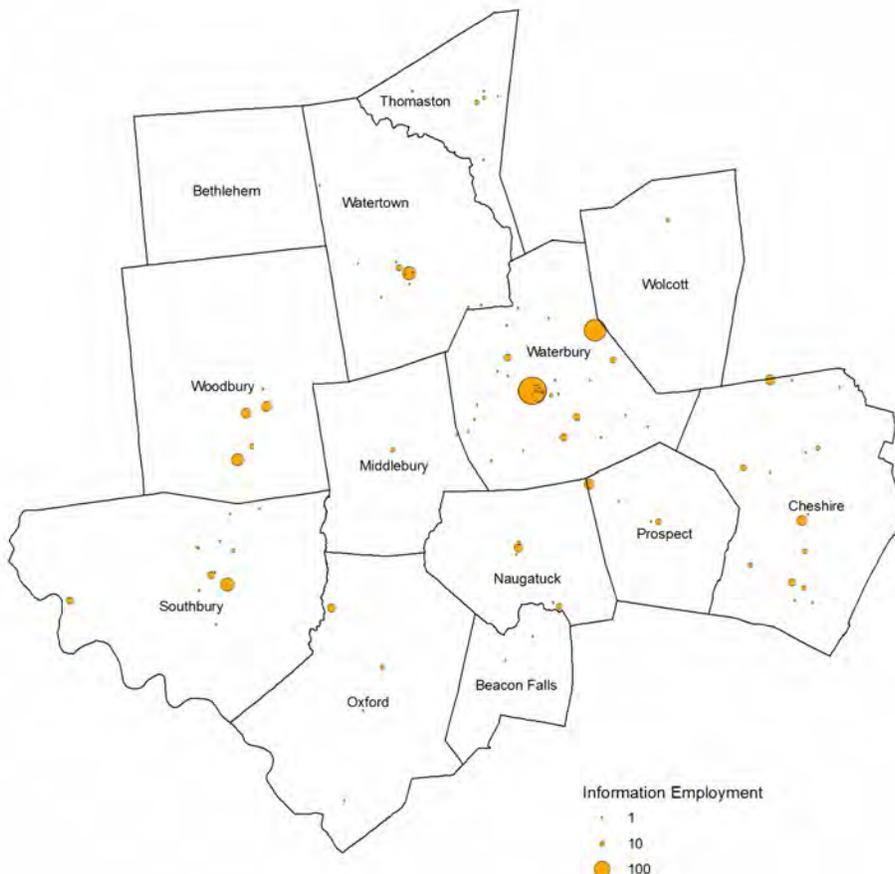
^a Center for Real Estate and Urban Economic Studies, University of Connecticut

Information

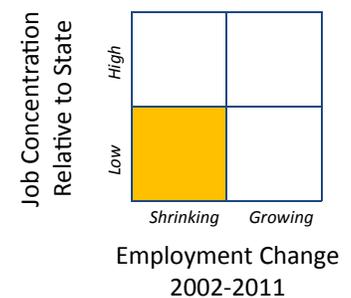
There are 1,367 employees in the information sector in the CNVR, or 1.4% of the total. The highest concentration of information sector jobs is found in Waterbury, which is home to regional media outlets. The Central Naugatuck Valley is part of a larger television media market that includes Hartford and New Haven. Many media companies locate in Connecticut's larger cities, which can partially explain the low job concentration (LQ of 0.6) relative to the state.

The information sector has changed dramatically over the last decade with the growing importance of digital media. The result has been declines in traditional information services (such as print media) and gains in web-based information services. The largest collection of information employment in the state is located in neighboring Bristol, which is home to ESPN's headquarters. Employment in the CNVR contracted by 27.1% from 2002 to 2011, resulting in a loss of 507 jobs. During that same time period, the sector contracted by 17.7% statewide. From 2010 to 2020, employment is projected to grow by 5.2% nationally and just 1.2% statewide. State projections show declines in publishing industries and telecommunications, and gains in internet service providers and broadcasting.

Information Employment in the CNVR: 2011



Regional Trends



Industry Profile

Employment (2011):	1,367
Employment Change (2002-2011):	-27.1%
Percent of Employment:	1.4%
Location Quotient:	0.6
Number of Establishments:	59
Average Establishment Size:	14
Average Annual Wage:	\$56,833
Median Worker Age (Years):	41.4

Major Subsectors

- Publishing Industries
- Telecommunications
- ISPs, search portals, & data processing

Industry Outlook 2010—2020

National:	5.2% Growth
State:	1.2% Growth

Sources: Connecticut Department of Labor, U.S. Census Bureau, U.S. Bureau of Labor Statistics

Professional and Business Services

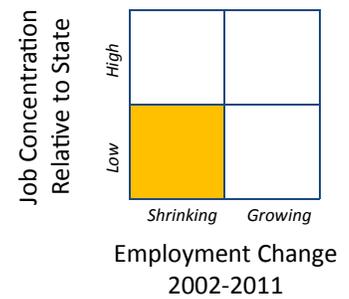


Professional, Scientific, and Technical Services

The professional, scientific, and technical services sector employed 5,008 people in the Central Naugatuck Valley, representing 5.1% of the region's employment. The largest concentration of employment is in Southbury, home to an IBM corporate center. Other concentrations can be found along Route 10 in Cheshire and in downtown Waterbury. The sector has high educational requirements and a majority of the occupations require a college degree.

The sector contracted by 12.8% from 2002 to 2011, a loss of 738 jobs. Some of the job loss can be attributed to downsizing at IBM's Southbury office in the last decade. Comparatively, the state as a whole saw a 1.5% decline in the sector a loss of 1,375 jobs. The sector is projected to grow by 19.4% in the state from 2010 to 2020, making it one of the fastest growing sectors of the state economy. The largest gains are projected to be in computer systems design (38.3%) and scientific research and development services (34.5%). The State of Connecticut has instituted two industry cluster initiatives in the professional, scientific, and technical services sector: Bioscience and Software & Information Technology. The cluster initiatives are aimed at key industries that will drive future economic growth in the state.

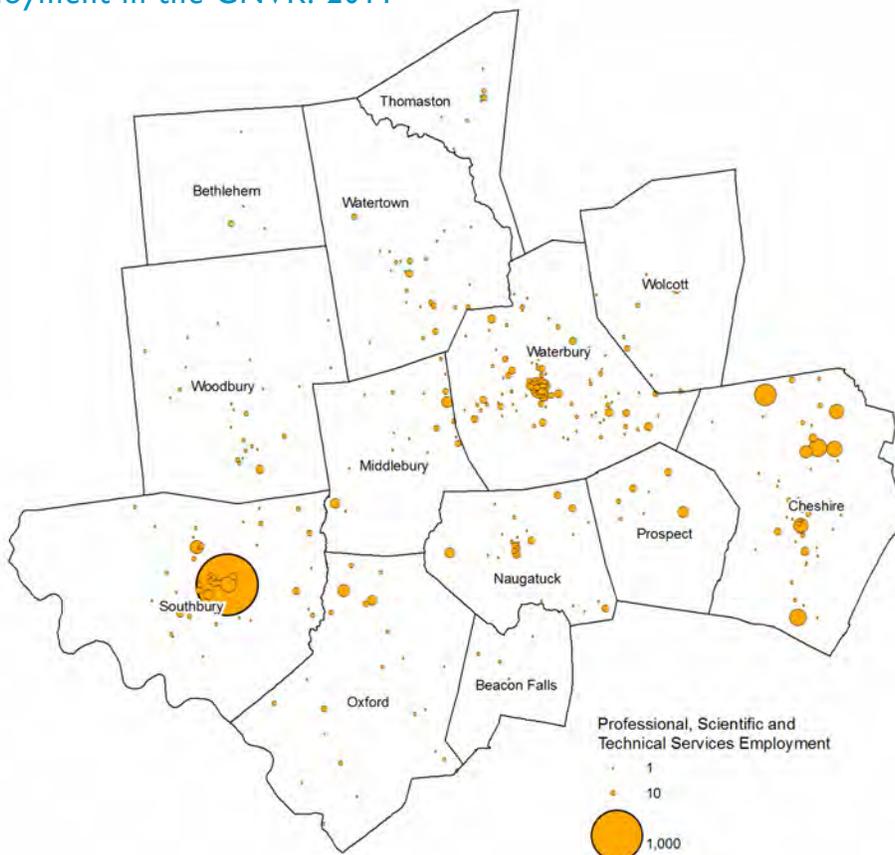
Regional Trends



Industry Profile

Employment (2011):	5,008
Employment Change (2002-2011):	-12.8%
Percent of Employment:	5.1%
Location Quotient:	0.9
Number of Establishments:	495
Average Establishment Size:	5
Average Annual Wage:	\$54,313
Median Worker Age (Years):	43.4

Professional, Scientific, and Technical Services Employment in the CNVR: 2011



Major Subsectors

- Accounting, tax prep, and payroll
- Legal services
- Architectural, and engineering services
- Computer systems design

Industry Outlook 2010—2020

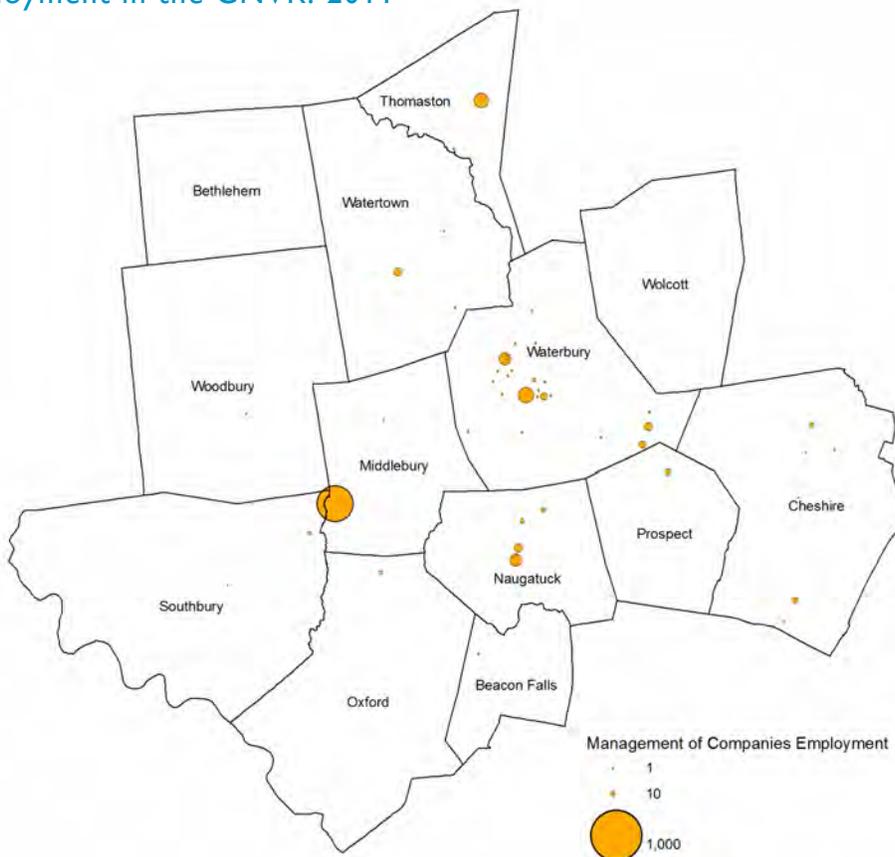
National:	29.0% Growth
State:	19.4% Growth

Management of Companies & Enterprises

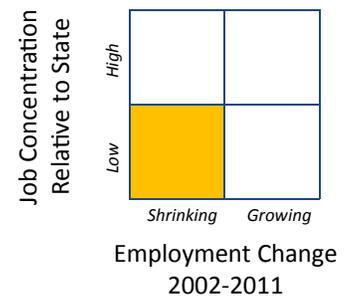
The management of companies and enterprises sector makes up just 1.0% of the region's employment, with 1,029 jobs. With a location quotient of 0.5, the job concentration means that sector is much more prevalent in other parts of the state. For example, the management of companies and enterprises sector constitutes 3.3% of all employment in Fairfield County (LQ of 1.7). The highest concentration of employment in the CNVR can be found in Middlebury which is home to Timex Group and Chemtura. Other concentrations can be found in Naugatuck, Thomaston, and Waterbury. The sector has an average annual wage of \$112,649, the second highest of any sector.

From 2002 to 2011, the employment in the management of companies and enterprises sector declined by 7.9%, resulting in a loss of 88 jobs. During that same time period, the sector grew by 12.1% statewide. National and state projections both show modest growths from 2010 to 2020 with 5.9% and 4.2% growth rates respectively. Since corporate headquarters are located in larger metropolitan areas (New York, Boston, Hartford, and Fairfield County), the region will struggle to attract outside companies and should instead focus on maintaining existing companies that have strong historic ties to the area.

Management of Companies and Enterprises Employment in the CNVR: 2011



Regional Trends



Industry Profile

Employment (2011):	1,029
Employment Change (2002-2011):	-7.9%
Percent of Employment:	1.0%
Location Quotient:	0.5
Number of Establishments:	18
Average Establishment Size:	41
Average Annual Wage:	\$112,649
Median Worker Age (Years):	45.2

Major Subsectors

- Management of companies & enterprises

Industry Outlook 2010—2020

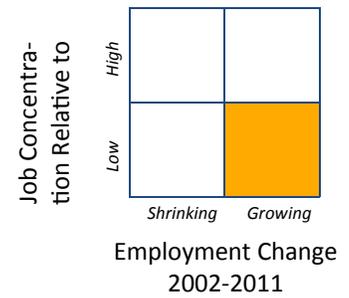
National:	5.9% Growth
State:	4.2% Growth

Administration & Support, Waste Management & Remediation

The administration and support, waste management and remediation sector was identified as an emerging strength of the region's economy. With 4,167 employees in 2011, it comprised 4.2% of the region's employment. High concentrations of employment are found in Beacon Falls*, Waterbury, Middlebury, Naugatuck, and Cheshire. The sector was identified as being an emerging strength relative to the state as a whole, indicating that it has become more competitive in the last decade but still has a lower job concentration compared to the state and nation.

The administration and support, waste management and remediation sector grew by 7.5% from 2002 to 2011 resulting in 292 new jobs. It was the largest of the four sectors of the region's economy to grow at a faster rate than the state. The sector is projected to grow nationally (21.2%) and statewide (15.4%) from 2010 to 2020. Employment in the remediation and other waste services subsector is projected to be nearly double the statewide figure.

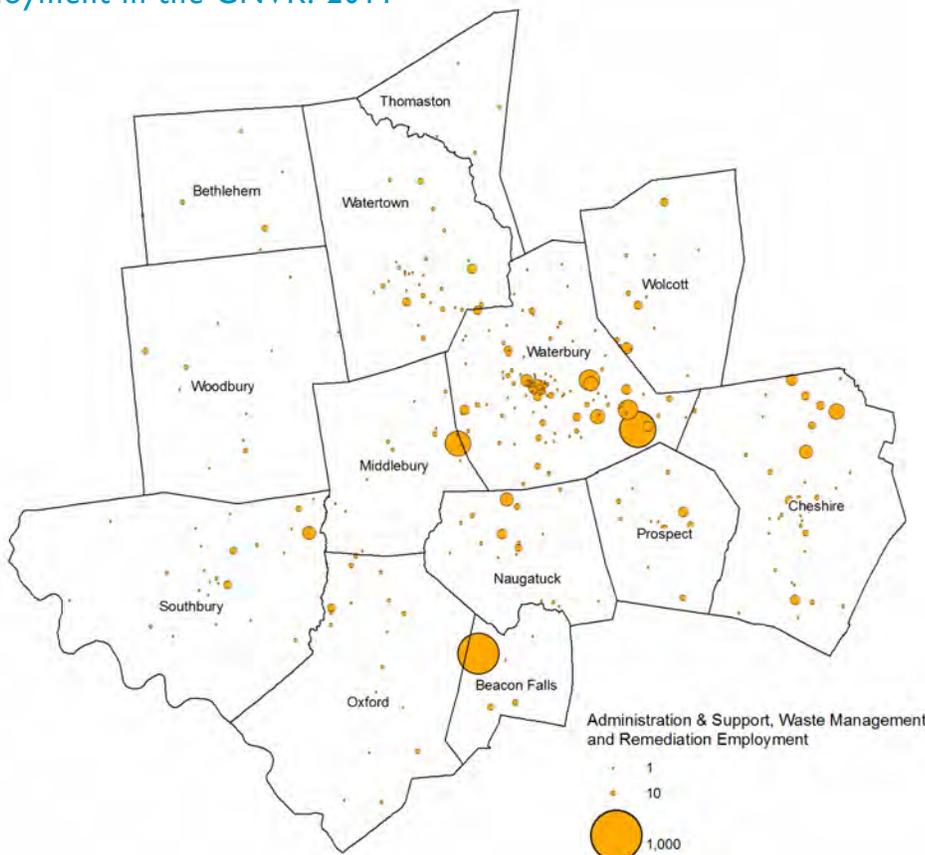
Regional Trends



Industry Profile

Employment (2011):	4,167
Employment Change (2002-2011):	7.5%
Percent of Employment:	4.2%
Location Quotient:	0.8
Number of Establishments:	290
Average Establishment Size:	9
Average Annual Wage:	\$33,319
Median Worker Age (Years):	41.3

Administration & Support, Waste Management & Remediation Employment in the CNVR: 2011



Major Subsectors

- Employment services
- Services to buildings and dwellings
- Waste collection
- Remediation and other waste services

Industry Outlook 2010—2020

National:	21.2% Growth
State:	15.4% Growth

Sources: Connecticut Department of Labor, U.S. Census Bureau, U.S. Bureau of Labor Statistics

* After reviewing other employment datasets, COGCNV staff has concerns about the validity of the large employment concentration in Beacon Falls

Education and Health Services



UCONN
Waterbury

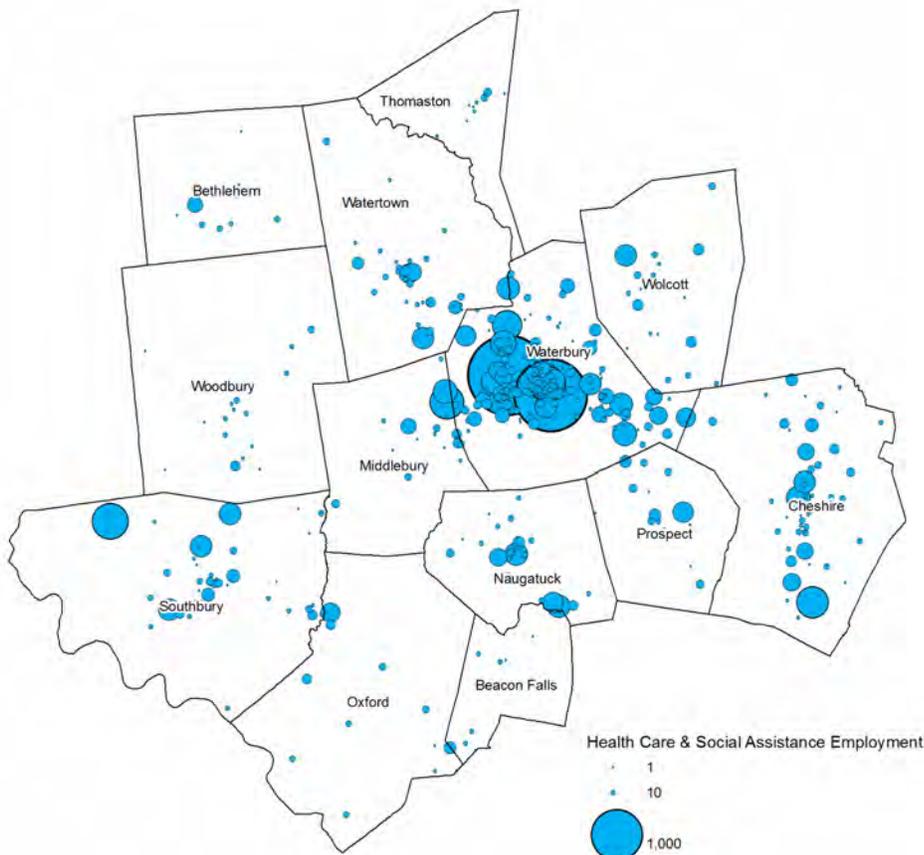


Health Care and Social Assistance

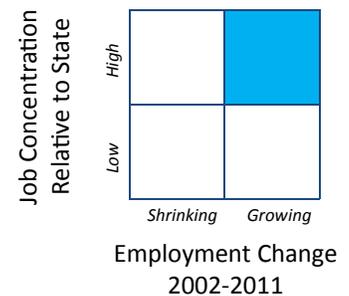
Health care and social assistance is the largest employment sector in the Central Naugatuck Valley, with 19,921 jobs (20.2% of total employment). Employment is concentrated in the City of Waterbury, home of St. Mary's Hospital and Waterbury Hospital, with other centers in Cheshire and Southbury. The health care and social assistance sector is resilient and historically has been immune from economic downturns. The sector even saw employment increases during the late 2000s economic recession, despite significant declines in other sectors.

The health care and social assistance sector grew by 7.6% from 2002 to 2011, an increase of 1,412 jobs. It is projected to be the fastest growing sector of the state and national economies between 2010 and 2020, with 21.6% growth statewide and 34.4% growth nationally. Personal care aides, registered nurses, and home health aides are projected to be three of the four fastest growing occupations over that same time period. The aging of the baby boomers will dramatically increase the demand for health care and social services in the next decade. The region's population of persons age 65 years and older is projected to increase from 41,774 in 2010 to 55,889 in 2020, an increase of 33.8%. State and national healthcare policy has expanded insurance coverage and will further increase demand for health care and social services.

Health Care & Social Assistance Employment in the CNVR: 2011



Regional Trends



Industry Profile

Employment (2011):	19,921
Employment Change (2002-2011):	7.6%
Percent of Employment:	20.2%
Location Quotient:	1.2
Number of Establishments:	744
Average Establishment Size:	24
Average Annual Wage:	\$42,654
Median Worker Age (Years):	43.2

Major Subsectors

- Ambulatory health care services
- Hospitals
- Nursing and residential care facilities
- Social assistance

Industry Outlook 2010—2020

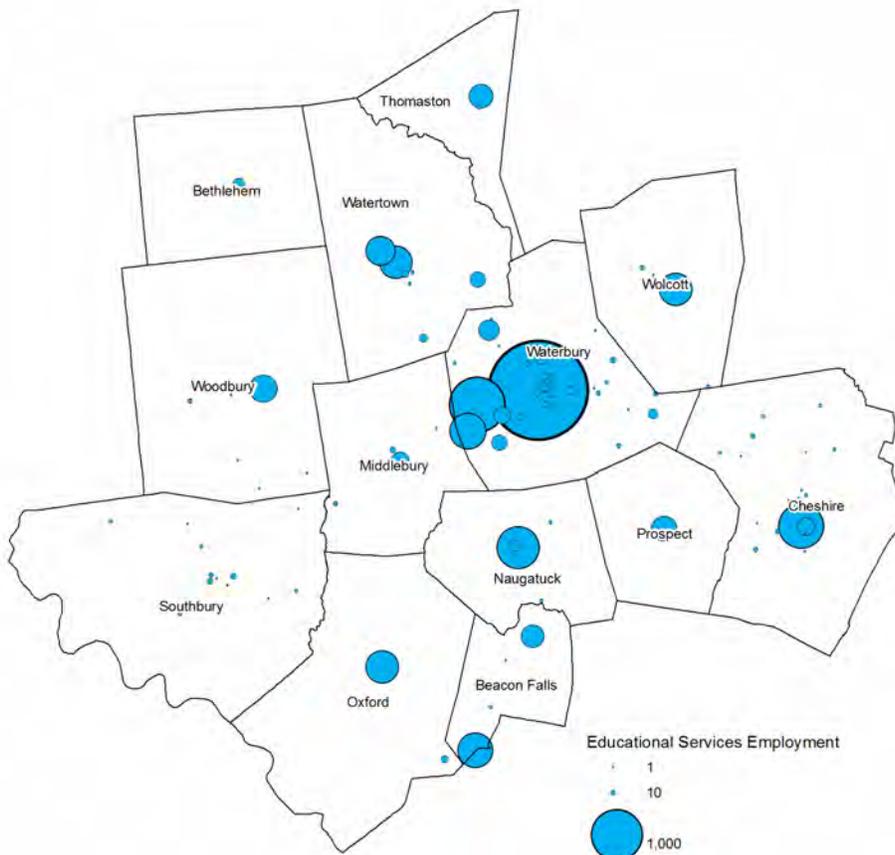
National:	34.4% Growth
State:	21.6% Growth

Educational Services

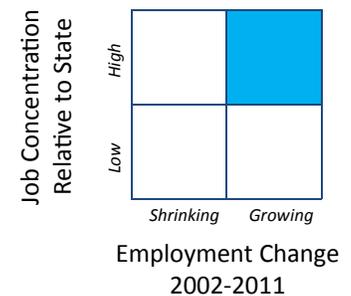
Educational services is the fourth largest sector of the region's economy with 11,400 jobs, comprising 11.6% of total employment. 2,076 educational services jobs (18.2%) were private sector while the remaining 9,324 (81.8%) were public sector. Like health care and social services, the educational services sector is more resilient to economic fluctuations than many other sectors, and employment increased during the Great Recession.

The educational services sector had the highest growth from 2002 to 2011, increasing by 14.6% and resulting in 1,449 new jobs. National and state employment projections show continued growth in the sector from 2010 to 2020, with growth rates of 26.0% and 12.5% respectively. However, during that same time period, regional population projections show the number of persons under the age of 20 declining by 8.8% from 75,946 in 2010 to 69,254 in 2020. This could lead to smaller school enrollments and lower demand for public school teachers. The region has three higher-education institutions with a combined enrollment of approximately 8,800 students: Naugatuck Valley Community College, the University of Connecticut—Waterbury, and Post University. Emerging sectors such as bioscience, nanotechnology, and advanced manufacturing rely on higher education for both research and development and workforce training.

Educational Services Employment in the CNVR: 2011



Regional Trends



Industry Profile

Employment (2011):	11,400
Employment Change (2002-2011):	14.6%
Percent of Employment:	11.6%
Location Quotient:	1.0
Number of Establishments*:	85
Average Establishment Size*:	20
Average Annual Wage*:	\$40,882
Median Worker Age (Years):	44.4

* Only includes private-sector employment

Major Subsectors

- Elementary and secondary school teachers
- Teacher assistants
- Colleges, universities, & professional
- Other schools and instruction

Industry Outlook 2010—2020

National:	26.0% Growth
State:	12.5% Growth

Sources: Connecticut Department of Labor, U.S. Census Bureau, U.S. Bureau of Labor Statistics

Leisure and Hospitality

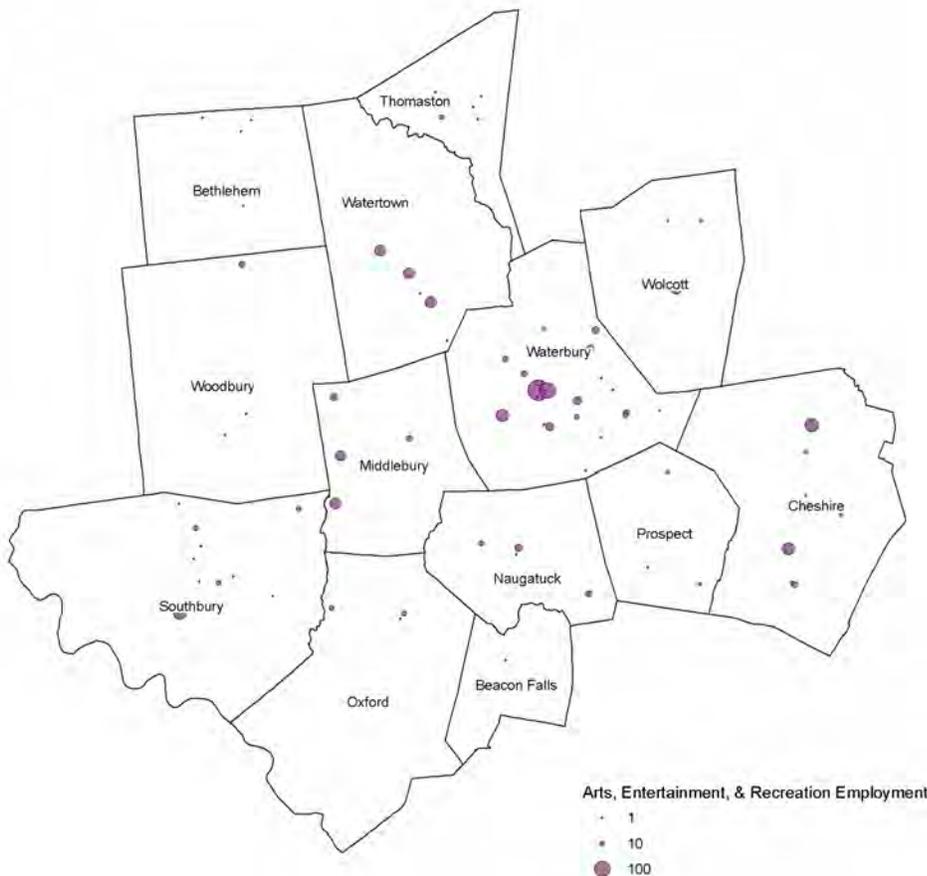


Arts, Entertainment, and Recreation

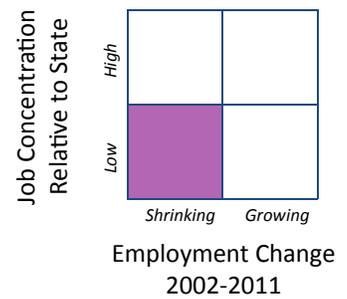
The arts, entertainment, and recreation sector had 1,170 employees, comprising 1.2% of the region's total. Downtown Waterbury had the highest concentration of employment followed by Watertown, Middlebury, and Cheshire. With a location quotient of 0.5, job concentration is much lower than the state as a whole, suggesting that CNVR residents travel to other parts of the state for arts, entertainment, and recreation. Over one-third of all employees in the sector work at the state's two casinos: Foxwoods and Mohegan Sun, which can partially explain the low location quotient. Average annual wages were \$20,320, making it the one of the lowest paying sectors of the region's economy.

From 2002 to 2011, the arts, entertainment, and recreation sector lost 75 jobs, a 6.0% decline. This is similar to the 5.5% decline seen statewide. The high unemployment rate and ensuing decline in consumer spending during the last recession can largely explain the declines in employment. As the region recovers from the recession and consumer spending increases, job growth is expected statewide (8.8%) and nationally (18.1%) from 2010 to 2020. Job growth in the sector is often a result of multiplier effects from other sectors. If other sectors of the economy are doing well and income increases, households will have more discretionary income to spend on arts, entertainment and recreation.

Arts, Entertainment, & Recreation Employment in the CNVR: 2011



Regional Trends



Industry Profile

Employment (2011):	1,170
Employment Change (2002-2011):	-6.0%
Percent of Employment:	1.2%
Location Quotient:	0.5
Number of Establishments:	62
Average Establishment Size:	11
Average Annual Wage:	\$20,320
Median Worker Age (Years):	38.2

Major Subsectors

- Amusement, gambling, and recreation
- Performing arts and spectator sports
- Museums and historical sites

Industry Outlook 2010—2020

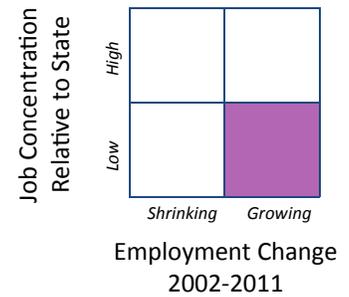
National:	18.1% Growth
State:	8.8% Growth

Accommodation and Food Services

The accommodation and food services sector comprises 4.8% of the region's employment with 5,810 jobs. Employment patterns closely follow population and retail patterns with the highest concentration in Waterbury, and smaller concentrations in Southbury, Naugatuck, Cheshire, and Watertown. With an average annual wage of \$15,677, the sector has the lowest pay of any sector in the region. Coincidentally, the median age of workers is 30.0 years, the youngest of any sector.

The accommodation and food services sector was one of the few sectors to grow from 2002 to 2011, adding 266 jobs, an increase of 4.8%. Employment grew significantly from 2002 to 2008, peaking at 6,372 in 2008. Since 2008 however, the sector has lost over 500 jobs. Similar to other leisure and hospitality industries, job losses can be attributed to the recession and declines in consumer spending. As the economy continues to recover, employment is expected to increase. Employment projections show the accommodation and food services sector growing by 9.2% nationally and 7.8% statewide from 2010 to 2020.

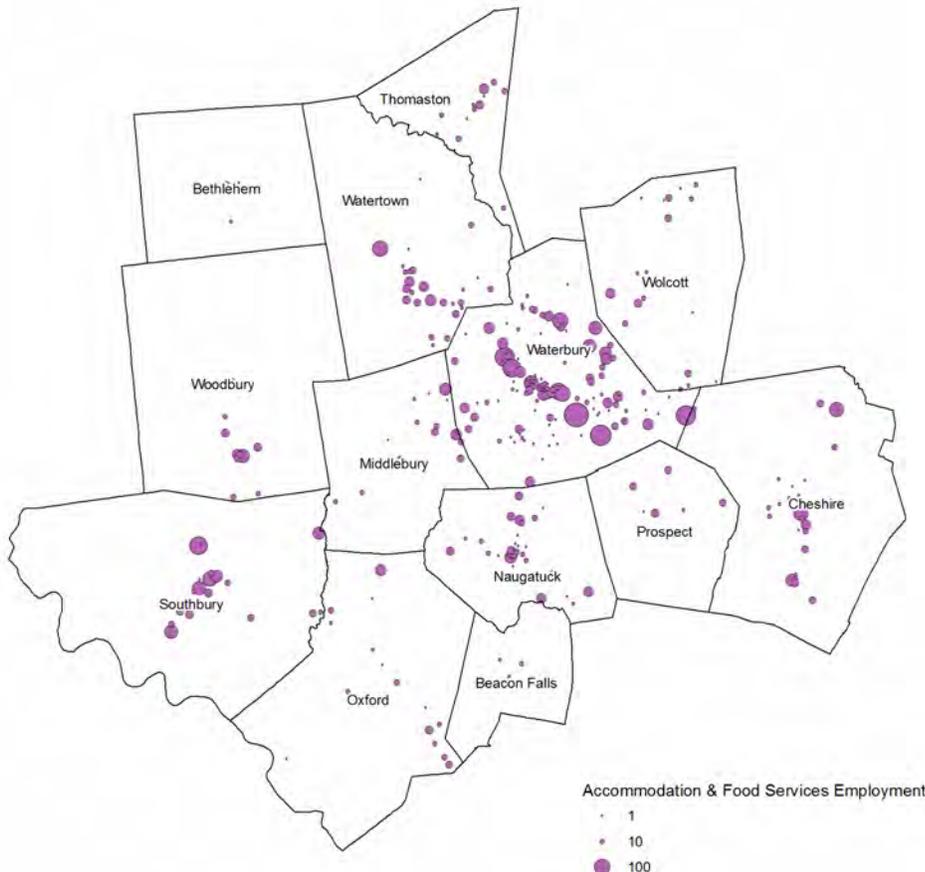
Regional Trends



Industry Profile

Employment (2011):	5,810
Employment Change (2002-2011):	4.8%
Percent of Employment:	5.9%
Location Quotient:	0.9
Number of Establishments:	483
Average Establishment Size:	12
Average Annual Wage:	\$15,677
Median Worker Age (Years):	30.0

Accommodation and Food Services Employment in the CNVR: 2011



Major Subsectors

- Accommodation
- Food services and drinking places

Industry Outlook 2010—2020

National:	9.2% Growth
State:	7.8% Growth

Sources: Connecticut Department of Labor, U.S. Census Bureau, U.S. Bureau of Labor Statistics

Other Services

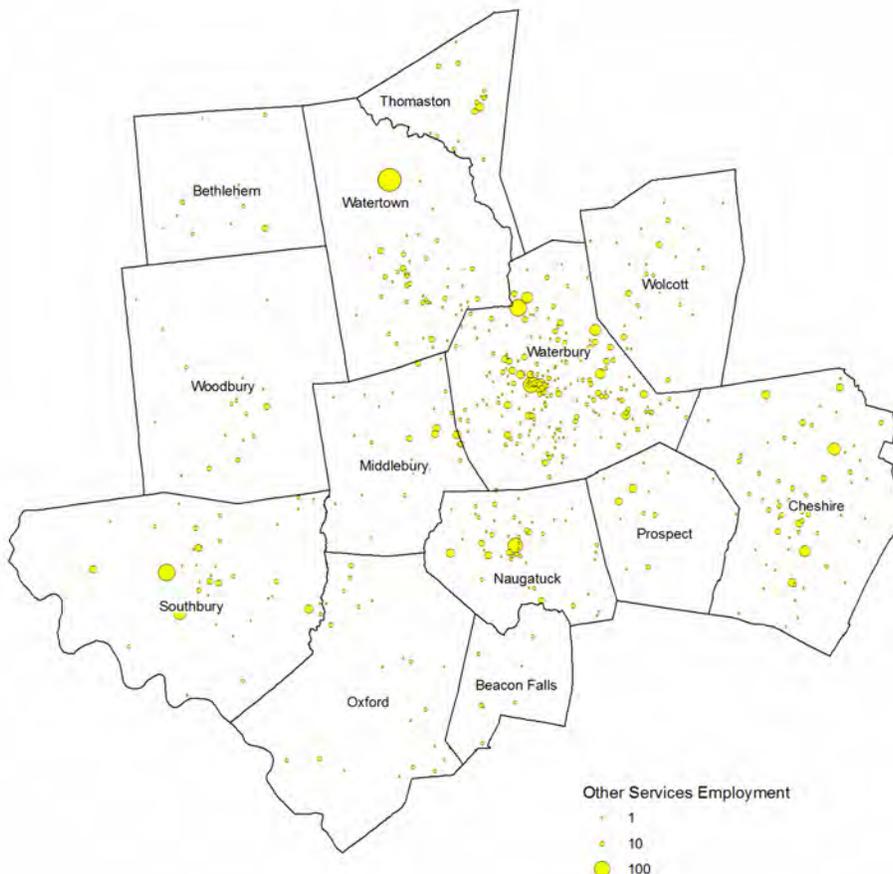


Other Services

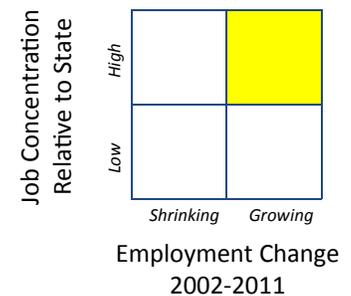
The “other services” sector contains industries that do not fit into other NAICS categories such as non-profit organizations, repair and maintenance facilities, personal and laundry services, and private households. This sector had 3,806 employees in 2011, comprising 3.6% of the region’s workforce. Employment patterns closely follow population patterns, with the highest concentration in Waterbury and smaller concentrations in Cheshire, Naugatuck, Southbury, and Watertown. The average annual wage was \$24,337, which is 49.6% less than the regional average.

From 2002 to 2011, the “other services” sector grew by 19.4%, the highest growth rate of any sector and an increase of 619 jobs. The region grew much faster than the state, which grew by 6.8% during the same time period. The sector is projected to continue growing from 2010 to 2020 with a 13.6% increase nationally and 10.5% statewide. The “other services” sector was identified as one of the three current strengths of the region’s economy. However, because the sector is so broad, economic development strategies should focus on particular subsectors as opposed to the sector as a whole.

Other Services Employment in the CNVR: 2011



Regional Trends



Industry Profile

Employment (2011)	3,806
Employment Change (2002-2011)	19.4%
Percent of Employment	3.9%
Location Quotient	1.1
Number of Establishments:	918
Average Establishment Size:	4
Average Annual Wage:	\$24,337
Median Worker Age (Years):	43.1

Major Subsectors

- Religious, professional and civic orgs.
- Repair and maintenance
- Personal and laundry services
- Private households

Industry Outlook 2010—2020

National:	13.6% Growth
State:	10.5% Growth

Sources: Connecticut Department of Labor, U.S. Census Bureau, U.S. Bureau of Labor Statistics

Public Administration



Public Administration

The public administration sector includes federal, state, and local government employees that manage and oversee public programs. In 2011 there were a total of 3,567 employees in the public administration sector accounting for 3.6% 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. The largest concentration of employment is found in Waterbury, followed by Cheshire (home of two state correctional institutions) and Naugatuck. Public administration employment generally follows population patterns, with larger municipalities having more employees. The region has a location quotient of 1.0, which is consistent with other parts of the state.

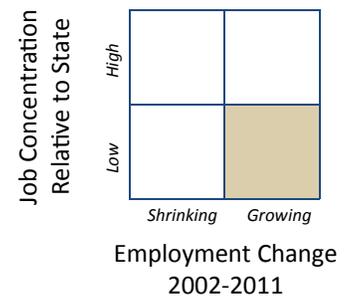
Public administration employment stayed stable from 2002 to 2011, growing 1.2%, an increase of 44 jobs. From 2010 to 2020 employment is expected to contract by 1.2% statewide and grow by 5.6% nationally. State and local government employment is expected to grow by 4.0% while federal government employment is expected to drop by -24.4%. Most of the federal job losses are postal service workers lost through layoffs or attrition.

Public Administration Employment in the CNVR: 2011



Sources: Connecticut Department of Labor, U.S. Census Bureau, U.S. Bureau of Labor Statistics

Regional Trends



Industry Profile

Employment (2011)	3,567
Employment Change (2002-2011)	1.2%
Percent of Employment	3.6%
Location Quotient	1.0
Number of Establishments: [*]	235
Average Establishment Size: [*]	65
Average Annual Wage: [*]	\$55,967
Median Worker Age (Years):	45.3

^{*} Includes all public sector employment

Major Subsectors

- Executive, legislative, and other government support
- Justice, public order, and safety
- Administration of government programs

Industry Outlook 2010—2020

National: 5.6% Growth

State: -1.2% Decline