



# REGIONAL ECONOMIC LABOR OUTLOOK ALIGNMENT

**East Greenbush  
Capital Region**

**Prepared by the CTE Technical Assistance Center of NY**

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## CAPITAL REGION REGIONAL ECONOMIC LABOR OUTLOOK ALIGNMENT

National Career Clusters	Regional Economic Development Council Focus Industries <sup>1</sup>	Regional Industry Jobs with Strong Projected Growth (> 7% from 2012 through 2022) <sup>2</sup>	Jobs in Significant Industries with Strong Projected Growth through 2022 <sup>3</sup>	Further Description of Significant Industries
<b>Agriculture, Food and National Resources</b>		<b>Agriculture, Forestry, Fishing and Hunting (13.9%)</b> - Animal Production (26.2%) <b>Mining (14.1%)</b> - Mining – except oil and gas (14.1%)		
<b>Architecture and Construction</b>  <b>Construction</b> <b>Heating Ventilation and Air Conditioning</b>  <b>Woods</b>	<ul style="list-style-type: none"> <li>Urban Revitalization – Physical structures in underserved neighborhoods.</li> </ul>	<b>Construction (18.9%)</b> - Construction of Buildings (14.8%) - Specialty Trade Contractors (23.3%)	<b>Heavy and Civil Engineering Construction</b> - Laborers - Operating Engineers and Other Construction Equipment Operators - Carpenters - Structural Iron and Steel Workers - Excavating and Loading Machine and Dragline Operator - Cement Masons and Concrete Finishers  <b>Specialty Trade Contractors</b> - Electricians - Plumbers, Pipefitters, and Steamfitters - Construction Laborers - Carpenters - Painters - HVAC Mechanics and Installers	Skilled trade occupations comprise much of the employment within both the <b>heavy and civil engineering construction</b> (NAICS Industry 237) and <b>specialty trade contractors</b> (NAICS Industry 238) industries. However, these industries are sensitive to fluctuations in economic conditions. Not unexpectedly, employment levels rose in both industries between 2009 and 2014 due in part to recovery from the “Great Recession.” Looking ahead over the next decade, the impending retirement of many Baby Boomers and a need to upgrade existing infrastructure will contribute to job opportunities in these industries, especially among the skilled trades.

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<b>Arts, A/V Technology &amp; Communications</b>  <b>Photography</b> <b>Cartooning and Illustration</b> <b>Practical English</b> <b>Professional Writing</b>		<b>Information (0.2%)</b> - Motion Picture and Sound Recording Industries (9.2%) - Other Information Services (62.2%)  <b>Arts, Entertainment, and Recreation (33.6%)</b> - Performing Arts, Spectator Sports, and Related Industries (21.2%)		
<b>Business Management &amp; Administration</b>  <b>Management and Marketing (Focus)</b>	<ul style="list-style-type: none"> <li>Entrepreneurship – Leverage the Region’s strong base of institutions of higher education and local corporate talent to launch and nurture small businesses.</li> <li>Professional Services is one of the Region’s most productive sectors that has shown growth over time.</li> </ul>	<b>Professional and Business Services (23.4%)</b> - Management of Companies and Enterprises (19.7%) - Administrative and Support Services (16.2%) - Waste Management and Remediation Service (41.4%) - Professional, Scientific, and Technical Services (28.0%)	<b>Professional, Scientific, Technical Service</b> - Accountants and Auditors - Paralegals and Legal Assistants - Software Developers, Applications - Management Analysts - Market Research Analysts and Marketing Specialists	One industry from the professional and business services supersector is on the significant industries list -- professional, scientific, and technical services (NAICS Industry 541). This sector itself contains a diverse list of industries including consulting, legal, IT and veterinary services, and this is where we find many of the Capital Region’s “high tech” service related jobs. Professional, scientific, and technical services (+28.0%) is projected to out-perform the total for all industries (12.0%) in terms of job growth percentage between 2012 and 2022. The industry also pays above-average wages (\$79,200).

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<b>Education and Training</b>	<ul style="list-style-type: none"> <li>Higher Education – Make strategic investments in the Region’s education cluster to bridge the gap between job-seekers, employers and educational institutions</li> </ul>	<b>Educational Services (8.0%)</b>		
<b>Finance</b>  <b>Accounting (Focus)</b>	<ul style="list-style-type: none"> <li>Finance and Insurance is one of the Region’s most productive sectors that has shown growth over time.</li> </ul>	<b>Finance and Insurance (1.1%)</b> <ul style="list-style-type: none"> <li>- Real Estate (11.1%)</li> <li>- Rental and Leasing Services (9.6%)</li> </ul>	<b>Securities, Commodity Contracts, and other Financial Investment and Related Activities</b> <ul style="list-style-type: none"> <li>- Personal Financial Advisors</li> <li>- Accountants and Auditors</li> </ul> <b>Insurance Carriers and Related Activities</b> <ul style="list-style-type: none"> <li>- Customer Service Representatives</li> <li>- Accountants and Auditors</li> </ul> <b>Professional, Scientific, Technical Service</b> <ul style="list-style-type: none"> <li>- Accountants and Auditors</li> </ul>	Financial Activities is the region’s second largest industry sector as measured by gross regional product. Though the sector lost 100 jobs over the 2009 to 2014 period, two industries bucked that trend and added jobs. Securities, commodity contracts, and other financial investments and related activities added 300 jobs (+15.0%) while insurance carriers and related activities added 800 jobs (+6.1%). Both industries pay annual wages well above the region’s average, and insurance carriers and related activities has one of the region’s highest job counts.
<b>Government &amp; Public Administration</b>	<ul style="list-style-type: none"> <li>Urban Revitalization – Economic structures to support underserved neighborhoods.</li> <li>Government is a top sector for employment in the Region but potential for growth is limited due to local population size and it being a largely non-tradable sector.</li> </ul>			

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<p><b>Health Science</b></p> <p><b>Nurse Assisting</b></p> <p><b>CPR (as part of Health)</b></p>	<ul style="list-style-type: none"> <li>Healthcare is a top sector for employment in the Region.</li> </ul>	<p><b>Health Care and Social Assistance (20.6%)</b></p> <ul style="list-style-type: none"> <li>Ambulatory Health Care Services (26.4%)</li> <li>Hospitals (8.0%)</li> <li>Nursing and Residential Care Facilities (25.6%)</li> </ul>	<p><b>Ambulatory Health Care Services</b></p> <ul style="list-style-type: none"> <li>Home Health Aides</li> <li>Registered Nurses</li> <li>Personal Care Aides</li> <li>Medical Assistants</li> <li>Dental Assistants</li> <li>Physicians and Surgeons, All Other</li> <li>Licensed Practical and Licensed Vocational Nurses</li> </ul> <p><b>Hospitals</b></p> <ul style="list-style-type: none"> <li>Registered Nurses</li> <li>Nursing Assistants</li> <li>Physicians and Surgeons, All Other</li> <li>Medical and Health Services Managers</li> <li>Licensed Practical and Licensed Vocational Nurses</li> <li>Medical and Clinical Laboratory Technologists</li> </ul>	<p>Growth in health care industry employment is driven more by demographics than by overall economic conditions. Almost all health care occupations are expected to be in demand over the next decade as the Capital Region's population continues to age. Two industries from the health care sector are on the significant industry list: ambulatory health care services (NAICS Industry 621) and hospitals (NAICS Industry 622).</p>
<p><b>Hospitality &amp; Tourism</b></p> <p><b>Culinary Arts</b></p> <p><b>Hospitality and Lodging</b></p>	<ul style="list-style-type: none"> <li></li> </ul>	<p><b>Arts, Entertainment, and Recreation (33.6%)</b></p> <ul style="list-style-type: none"> <li>Museums, Historical Sites, and Similar Institution (18.2%)</li> <li>Amusement, Gambling, and Recreation Industries (37.6%)</li> </ul> <p><b>Accommodation and Food Services (25.4%)</b></p> <ul style="list-style-type: none"> <li>Accommodation, including Hotels and Motels (21.9%)</li> <li>Food Services and Drinking Places (26.1%)</li> </ul>		

Columbia High School has a number of career related courses. Most are individual courses and not part of a program of study or career pathway. Several are programs and are indicated on the chart as programs or Focus. All BOCES offerings are programs of study that lead to a technical credential or equivalent test and a Regents diploma with technical endorsement.

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<b>Human Services</b>  <b>Cosmetology</b>	<ul style="list-style-type: none"> <li>Urban Revitalization – Social structures to benefit underserved neighborhoods.</li> </ul>	<b>Health Care and Social Assistance (20.6%)</b> <ul style="list-style-type: none"> <li>Nursing and Residential Care Facilities (25.6%)</li> <li>Social Assistance (25.7%)</li> </ul> <b>Other Services – except Government (21.2%)</b> <ul style="list-style-type: none"> <li>Personal and Laundry Services (14.9%)</li> <li>Religious, Grantmaking, Civic, Professional, and Similar Organizations (26.1%)</li> </ul>		
<b>Information Technology</b>  <b>Information Technology</b> <b>IT Essentials (Networking)</b> <b>Computer Programing (Three Levels)</b> <b>Information Technology (Focus/Business)</b>	<ul style="list-style-type: none"> <li>Information is one of the Region’s most productive sectors that has shown growth over time.</li> </ul>	<b>Information (0.2%)</b> <ul style="list-style-type: none"> <li>Other Information Services (62.2%)</li> </ul>	<b>Professional, Scientific, Technical Service</b> <ul style="list-style-type: none"> <li>Software Developers, Applications</li> </ul>	
<b>Law, Public Safety, Corrections and Security</b>  <b>Criminal Justice</b> <b>Forensics</b> <b>Criminology</b> <b>Criminal Justice</b>	<ul style="list-style-type: none"> <li></li> </ul>		<b>Professional, Scientific, Technical Service</b> <ul style="list-style-type: none"> <li>Paralegals and Legal Assistants</li> </ul>	

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<p><b>Manufacturing</b></p> <p>Metals Modern Mechanisms CADD I and II (Not operating 2016-17)</p>	<ul style="list-style-type: none"> <li>Manufacturing is a sector that has shown high productivity but growing only in specific industries, primarily computer and electronic products.</li> </ul>	<p><b>Manufacturing (11.1%)</b></p> <ul style="list-style-type: none"> <li>Wood Product Manufacturing (12.5%)</li> <li>Fabricated Metal Product Manufacturing (8.9%)</li> <li>Computer and Electronic Product Manufacturing (90.8%)</li> </ul> <p><b>Other Services – except Government (21.2%)</b></p> <ul style="list-style-type: none"> <li>Repair and Maintenance (13.8%)</li> </ul>	<p><b>Chemical; Fabricated Metal Product; Machinery; and Computer and Electronic Product Manufacturing</b></p> <ul style="list-style-type: none"> <li>Inspectors, Testers, Samplers and Weighers</li> <li>Chemists</li> <li>Industrial Machinery Mechanics</li> <li>Chemical Technicians</li> <li>Extruding, Forming, Pressing and Compacting Machine Setters, Operators and Tenders</li> <li>Machinists</li> <li>Team Assemblers</li> <li>Welders, Cutters, Solderers and Brazers</li> <li>Computer-Controlled Machine Tool Operators (Metal and Plastic)</li> <li>Structural Metal Fabricators and Fitters</li> <li>Machinists</li> <li>Mechanical Engineers</li> <li>Tool and Die Makers</li> <li>Electrical and Electronic Equipment Assemblers</li> <li>Electrical and Electronics Engineers and Engineering Technicians</li> <li>Industrial Engineers</li> <li>Software Developers, Systems Software and Applications</li> </ul>	<p>Manufacturing is the largest industry sector in the Capital Region as measured by gross regional product. The sector added over 3,000 jobs (+11.5%) in this region from 2009 to 2014. Four specific manufacturing industries are found on the significant industries list. <b>Chemical manufacturing, fabricated metal product manufacturing, machinery manufacturing, and computer and electronic product manufacturing</b> all added jobs over the period and pay annual wages well above the regional average.</p>



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<p><b>Marketing, Sales and Service</b></p> <p><b>Management and Marketing (Focus)</b></p>	<ul style="list-style-type: none"> <li>Wholesale trade is one of the Region’s most productive sectors that has shown growth over time.</li> <li>Retail trade is a top sector for employment in the Region.</li> </ul>	<p><b>Wholesale Trade (8.7%)</b></p> <ul style="list-style-type: none"> <li>Merchant Wholesalers, Durable Goods (11.0%)</li> <li>Wholesale Electronic Markets and Agents and Brokers (8.6%)</li> </ul> <p><b>Retail Trade (9.3%)</b></p> <ul style="list-style-type: none"> <li>Motor Vehicle and Parts Dealers (11.1%)</li> <li>Furniture and Home Furnishings Stores (15.7%)</li> <li>Electronics and Appliance Stores (12.5%)</li> <li>Building Material and Garden Equipment and Supplies Dealers (11.0%)</li> <li>Health and Personal Care Stores (17.8%)</li> <li>General Merchandise Stores (16.6%)</li> </ul>	<p><b>Merchant Wholesalers, Nondurable Goods</b></p> <ul style="list-style-type: none"> <li>Sales Representatives, Wholesale and Manufacturing (except technical and scientific products)</li> <li>Laborers and Freight, Stock and Material Movers, Hand</li> <li>Customer Service Representatives</li> <li>Driver/Sales Workers</li> <li>General and Operations Managers</li> </ul> <p><b>Professional, Scientific, Technical Service</b></p> <ul style="list-style-type: none"> <li>Market Research Analysts and Marketing Specialists</li> </ul>	<p>Merchant wholesalers, nondurable goods (NAICS Industry 424) is the only trade, transportation and utilities industry on the list. Unlike many jobs in retail trade, the industry pays above average wages and generally provides superior benefit packages. The industry was able to grow by a double-digit rate from 2009 to 2014, and is expected to grow by a more sustainable 4.8 percent from 2012 to 2022.</p>
<p><b>Science, Technology, Engineering &amp; Mathematics</b></p> <p><b>Project Lead the Way coursework Design Drawing and Production</b></p>	<ul style="list-style-type: none"> <li>High-tech clusters in healthcare, government, clean technologies, and advanced analytics.</li> <li>Urban Revitalization – Physical structures in underserved neighborhoods.</li> <li>Professional Services is one of the Region’s most productive sectors that has shown growth over time.</li> </ul>		<p><b>Chemical; Fabricated Metal Product; Machinery; and Computer and Electronic Product Manufacturing</b></p> <ul style="list-style-type: none"> <li>Chemists</li> <li>Chemical Technicians</li> <li>Mechanical Engineers</li> <li>Electrical and Electronics Engineers and Engineering Technicians</li> </ul>	



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<b>Transportation, Distribution &amp; Logistics</b>  <b>Auto Service</b> <b>Auto Technologies</b> <b>Aviation Maintenance Technician</b>	<ul style="list-style-type: none"> <li>Transport and Logistics – Leverage the Region’s unique geographical location and transportation hubs to better link local businesses with external markets.</li> </ul>	<b>Transportation and Warehousing (13.7%)</b> <ul style="list-style-type: none"> <li>- Rail Transportation (14.8%)</li> <li>- Truck Transportation (9.9%)</li> <li>- Transit and Ground Passenger Transportation (20.2%)</li> <li>- Support Activities for Transportation (7.9%)</li> <li>- Warehousing and Storage (21.9%)</li> </ul>		The Capital Region is an almost perfect transportation hub due to the confluence of east-west and north-south superhighway, rail, and water routes.

<sup>1</sup> 2015 Progress Report - CAPITAL REGION ECONOMIC DEVELOPMENT COUNCIL <http://regionalcouncils.ny.gov/sites/default/files/regions/capitalregion/CapREDC-2015-Progress-Report.pdf>

<sup>2</sup> New York State Department of Labor Long-Term Industry Employment Projections, 2012-2022 <http://labor.ny.gov/stats/2012-2022-long-term-industry-projections.xls>

<sup>3</sup> Significant Industries - New York State Department of Labor <https://labor.ny.gov/stats/Significant-Industries.shtm>