2018 REGIONAL ECONOMIC LABOR OUTLOOK ALIGNMENT

Southern Tier

Prepared by the CTE Technical Assistance Center of NY

www.nyctecenter.org
### National Career Clusters

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<td>Agriculture, Food and National Resources</td>
<td>Strong industry cluster in agriculture. Since 2011, employment in key industries of strength for the Southern Tier has risen steadily. Employment in Food Manufacturing/Agriculture has increased by 16.5%, and the average wage has risen with it to $54,527, which was more than a 27% increase. With $5.2B in output — representing almost 10% of the region's total economy — the food and agriculture industry (including food service) is a significant tradable sector in the Southern Tier that continues to grow. Given its proximity to key East Coast markets, the Southern Tier's expertise in food production, combined with and local, regional and state support to increase capacity, Southern Tier food processors could expand market share.</td>
<td>Farming, Fishing, and Forestry Occupations (5.6%) - Agricultural Workers (8.7%)</td>
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| Architecture and Construction     | As part of its Strategic Investment Plan, the Elmira LPC identified the following goals and strategies to advance its vision to create a vibrant downtown:  
  Goal: Develop a high-quality physical environment (e.g., Increase downtown housing options with new mixed-use development and renovations of existing historic structures, create an identifiable series of walkable urban blocks and public spaces that host a wide variety of activities, improve walkable connections between downtown and adjacent neighborhoods and institutions, provide ongoing management and maintenance for downtown). | Construction and Extraction Occupations (13.8%)  
- Supervisors of Construction and Extraction Workers (14.3%)  
- Construction Trades Workers (14.9%)  
- Helpers, Construction Trades (21.4%) | Construction of Buildings  
- Carpenters  
- Construction Laborers  
- First-line Supervisors of Construction Trades and Extraction Work  
- General Operations Managers  
- Helpers—Carpenters  
- Construction Managers  
- Cost Estimators | Skilled trade occupations comprise much of the employment within the construction of buildings (NAICS Industry 236) industry category. The region’s job growth rate in this industry category (11.1%) was higher than all but one of the other nine labor market regions throughout the state over the 2009-2014 time period.  
Looking ahead over the next decade, the impending retirement of many baby boomers will contribute to job opportunities in this industry, especially among the skilled trades. |
<p>| Arts, A/V Technology &amp; Communications |                                                      |                                                                             |                                                                          |                                               |</p>
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| Business Management & Administration          | The Southern Tier life sciences strategy will focus on supporting entrepreneurs in life science fields. Providing access to incubators and mentorships is one part of the strategy, but there continues to be room for growth in providing funding and startup capital. Since life science entrepreneurs often face high costs for extended periods of time before they generate revenue, strategic support through state programs and regional resources can provide critical support for these entrepreneurs. One example of a key initiative that has contributed to the Life Sciences Cluster is Cornell University’s McGovern Center, the university’s incubator for life science companies. The McGovern Family Center for Venture Development continues to support leaders in life science innovation in the Southern Tier. The companies supported by the McGovern Center have created 18 local jobs in the past year and generated $47 million in investment in technology commercialization. | Management Occupations (6.7%)  
- Advertising, Marketing, Promotions, Public Relations, and Sales Managers (10.3%)  
- Operations Specialties Managers (8.2%)  
Business and Financial Operations Occupations (9.2%)  
- Business Operations Specialists (8.5%) | Professional, Scientific, and Technical Services  
- Secretaries and Administrative Assistants, Except Legal, Medical, and Executive  
- Receptionists and Information Clerks  
Management of Companies and Enterprises  
- Bookkeeping, Accounting, and Auditing Clerks  
- Secretaries and Administrative Assistants, Except Legal, Medical, and Executive  
- Billing and Posting Clerks and Machine Operators  
- Maintenance and Repair Workers, General  
- Accountants and Auditors | Professional, scientific, and technical services (NAICS Industry 541) and management of companies and enterprises (NAICS Industry 551) are industries that both tend to sell to other businesses rather than consumers. Both industries gained jobs between 2009 and 2014. Their workforce counts are expected to continue to expand in the coming years. Professional, scientific, and technical services ($71,700) and management of companies and enterprises ($117,700) both pay above-average annual wages. |
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<td>Education and Training</td>
<td>Education, Training, and Library Occupations (7.4%)</td>
<td>Educational Services</td>
<td>With more than 42,000 jobs between the public and private sectors, educational services (NAICS Industry 611), has, by far, the most employment of any “significant industry”. Growth in educational services is driven more by demographics than by economic conditions; however, since 2010, many local school districts throughout New York State have faced severe budget pressures. Many may need to reduce or, at the very least, hold overall staff levels steady as these pressures remain. Most job opportunities will likely lie in the replacement of retiring baby boomers within the industry.</td>
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<td>Finance</td>
<td>Business and Financial Operations Occupations (9.2%)</td>
<td>Management of Companies and Enterprises</td>
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#### National Career Clusters

- **Education and Training**
  - The Southern Tier is home to 11 American Job Centers. These federally funded facilities mesh state and local staffing with an array of partner resources to train and connect regional talent with regional job opportunities. Services include: career counseling, resume development, career workshops, computers/Internet access, computer workshops, adult basic education/English as a second language, phones, faxes and copiers, career resource library, job search resources and job placement assistance, vocational classroom training (for those who qualify) and Internet-based job/talent bank.
  - Education, Training, and Library Occupations (7.4%)
    - Postsecondary Teachers (12.3%)
  - Educational Services
    - Educational, Guidance, School, and Vocational Counselors
    - Instructional Coordinators
    - Teacher Assistants

- **Finance**
  - Business and Financial Operations Occupations (9.2%)
    - Financial Specialists (9.9%)
  - Management of Companies and Enterprises
    - Bookkeeping, Accounting, and Auditing Clerks
    - Accountants and Auditors
  - Professional, Scientific, and Technical Services
    - Accountants and Auditors
    - Bookkeeping, Accounting, and Auditing Clerks
Growth in healthcare industry employment is driven more by demographics than by overall economic conditions. Almost all healthcare occupations are expected to be in demand over the next decade as the Southern Tier’s population continues to age.

The health care sector consists of three main components:
- **Ambulatory health care services** (NAICS Industry 621)
- **Hospitals** (NAICS Industry 622)
- **Nursing and residential care facilities** (NAICS Industry 623)

Of these, hospitals was the only sector to add jobs between 2009 and 2014. Cumulatively, these three industries employed over 33,000 which represent nearly 13 percent of all Southern Tier Region jobs in 2014. Ambulatory health care services ($59,300) and hospitals ($49,200) have wage levels above the all-industry annual average.
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| Hospitality & Tourism   | Tourism, a critical component of the Southern Tier Soaring regional strategy, continues to be big business in the Southern Tier, attracting more tourists every year. Visitor spending reached $916 million in 2016, a 2.2% increase from a year earlier. As part of its Strategic Investment Plan, the Elmira LPC identified the following goals and strategies to advance its vision to create a vibrant downtown: Goal: Strengthen identity celebrating heritage, culture and arts and new opportunities (e.g., Strengthen arts and cultural attractions, Protect and renovate historic structures, foster public events and activities, increase role of waterfront in downtown). | Food Preparation and Serving Related Occupations (8.0%)  
- Supervisors of Food Preparation and Serving Workers (10.9%)  
- Food and Beverage Serving Workers (9.8%)  
Personal Care and Service Occupations (14.2%)  
- Entertainment Attendants and Related Workers (8.5%) | | |

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- Supervisors of Food Preparation and Serving Workers (10.9%)  
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|                                                     | Community and Social Service Occupations (12.0%)      | - Counselors, Social Workers, and Other Community and Social Service Specialists (12.2%)  
- Religious Workers (10.0%)  
Building Cleaning and Pest Control Workers (9.9%)  
- Supervisors of Building and Grounds Cleaning and Maintenance Workers (7.6%)  
- Building Cleaning and Pest Control Workers (10.1%)  
- Grounds Maintenance Workers (10.2%)  
Personal Care and Service Occupations (14.2%)  
- Supervisors of Personal Care and Service Workers (18.2%)  
- Animal Care and Service Workers (14.0%)  
- Personal Appearance Workers (9.6%) | Nursing and Residential Care Facilities  
- Nursing Assistant  
- Home Health Aides  
- Personal Care Aides  
- Maids and Housekeeping Cleaners  
- Food Servers, Non-restaurant  
- Childcare Workers  
- First-Line Supervisors of Personal Service Workers  
- Recreation Workers | Annual average wage levels at nursing and residential care facilities ($32,500) in 2009 were below the statewide annual average ($43,700). This is largely a reflection of the mix of occupations in each health care industry. In nursing and residential care facilities, for example, the three most common occupations are relatively low-paying. They include nursing assistant, home health aide, and personal care aide. |
|                                                     |                                                     |                                                                              |                                                                          |                                             |

### Information Technology

| Information Technology | Computer and Mathematical Occupations (8.2%)  
- Computer Occupations (8.0%) |
|------------------------|--------------------------------------------------------------------------------|

### Law, Public Safety, Corrections and Security

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| Manufacturing           | The manufacturing industry continues to shift. There is a greater focus on STEM operations through more advanced manufacturing processes, requiring slightly fewer people with more advanced skills. The average wage has increased 15.3% since 2011 to $75,867 in 2017. Total regional employment in advanced manufacturing has experienced a 14% increase since 2011. The Southern Tier continues to have significant strength and specialization in manufacturing. This is even more pronounced in the advanced transportation equipment manufacturing cluster. In addition, manufacturing is the largest export industry in the region, representing nearly a third of all the region’s exports. The average wage in the transportation equipment manufacturing industry increased almost 15% since 2011 to $86,285 in 2017. A focus on advanced manufacturing and the transportation industry sector will result in the Southern Tier being recognized as a destination for manufacturing business development, distinguished by its concentration of multi-national anchor companies, advanced infrastructure to support innovation and technology, rich education and research resources, specialized skilled workforce and vibrant communities. | Food Manufacturing  
- Packaging and Filling Machine Operators and Tenders  
- Food Cooking Machine Operators and Tenders  
- Food Batchmakers  
- Separating, Filtering, Clarifying, Precipitating, and Still Machine Setters, Operators, and Tenders  
- Industrial Machinery Mechanics  
- Maintenance and Repair Workers  
- Cleaners of Vehicles and Equipment  
**Machinery Manufacturing**  
- Machinists  
- Team Assemblers  
- Industrial Engineers  
- Inspectors, Testers, Sorters, Samplers, and Weighers | The region’s **food manufacturing** (NAICS Industry 311) industry charted a notable 900-job gain between 2009-2014. This represents an advance of 36 percent which led all regions. Employment gains are anticipated between 2012 and 2022. The average annual wage ($47,600) was more than the all-industry average annual wage ($43,700) in 2014. The **Machinery manufacturing** (NAICS Industry 333) industry experienced above-average job growth from 2009-2014 and paid above-average wages in 2014. Although **computer and electronic product manufacturing** (NAICS Industry 334) lost jobs from 2009 to 2014, it employs a significant number of high-paying jobs throughout the Region. |
## SOUTHERN TIER
REGIONAL ECONOMIC LABOR OUTLOOK ALIGNMENT

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<td>Marketing, Sales and Service</td>
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| Science, Technology, Engineering & Mathematics | The average wage in the life science industry increased almost 25% since 2011 to $94,115 in 2017. The total regional employment increased 2.3% to 4,900 jobs since 2016. | Computer and Mathematical Occupations (8.2%)  
  - Mathematical Science Occupations (18.2%)  
  Architecture and Engineering Occupations (6.8%)  
  - Engineers (7.1%)  
  Life, Physical, and Social Science Occupations (9.6%)  
  - Life Scientists (10.3%)  
  - Physical Scientists (10.9%)  
  - Social Scientists and Related Workers (13.69%)  
  - Life, Physical, and Social Science Technicians (8.5%) |                                                                       |                                               |

The average wage in the life science industry increased almost 25% since 2011 to $94,115 in 2017. The total regional employment increased 2.3% to 4,900 jobs since 2016.
The Southern Tier will be a world-recognized leader in agriculture technology and serve as a key food supplier for the East Coast of the United States. A strategic mix of projects will transform and grow agriculture and food production, processing and distribution across the region, while also strengthening links to growing tourism and manufacturing industries.

In 2017, there were 9,466 jobs in the distribution sector, which represented a 4% increase since 2011. Wages increased nearly 14% since 2011 to $60,166 in 2017.

### Transportation, Distribution & Logistics

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| Transportation, Distribution & Logistics | The Southern Tier will be a world-recognized leader in agriculture technology and serve as a key food supplier for the East Coast of the United States. A strategic mix of projects will transform and grow agriculture and food production, processing and distribution across the region, while also strengthening links to growing tourism and manufacturing industries. In 2017, there were 9,466 jobs in the distribution sector, which represented a 4% increase since 2011. Wages increased nearly 14% since 2011 to $60,166 in 2017. | Installation, Maintenance, and Repair Occupations (8.7%)
- Supervisors of Installation, Maintenance, and Repair Workers (8.0%)
- Vehicle and Mobile Equipment Mechanics, Installers, and Repairers (9.0%) | Warehousing and Storage
- Laborers and Freight, Stock, and Material Movers, Hand
- First-Line Supervisors of Transportation and Material-Moving Mach | Warehousing and storage (NAICS Industry 493) is part of the broader transportation and warehousing sector. The number of jobs within this sector represents a relatively small amount of total employment regionally, but the breakneck growth rate (150%; 600 jobs) and favorable job outlook deepen this sector’s regional imprint. |