

# The 2020-2025 Tioga County Workforce Development Strategy



June 2020





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## Executive Summary

Communities across the United States are undertaking strategic initiatives to create a coordinated response for employers and jobs seekers; one that serves to mitigate the skills gaps and mismatches, drives innovative workforce development policies and programs, and aligns and adapts in response to the evolving workforce environment.

By taking a leadership role in shaping its continued evolution, Tioga County is joining these innovative communities in leveraging the opportunities for workforce development. As a human-resource based holistic approach to economic growth, a strategic workforce development plan gives consideration to labor supply and the influencing factors that sway their decisions on where they chose to work and live.

This 2020-2025 Tioga County Workforce Development Strategy is Tioga County's response to facilitate connections between and among local school districts, higher learning institutions, local and major employers. This strategy outlines a roadmap to realize a highly qualified and skilled talent pipeline that supports alignment with local employer needs. It is an integrated approach that accounts for the current level of planning support and provides direction in the form of short, medium, and longer-term actions to guide the County's workforce initiatives for the next five years.

Identified as a key goal in the 2018 & 2019 Tioga County Economic Development & Planning Annual Report, the project was completed over two phases. Phase I; completed in May 2019, included a community profile of Tioga County, as well as a workforce pipeline analysis, to assess the demand for workers in the next five years. The study focused on five key industries for the Tioga County economy, including advanced manufacturing; health care services; warehousing and distribution; hospitality; and professional services. The Phase 1 report, *Identifying the Labor & Talent Supply Report*, is presented as an Appendix to the Strategy. Among the key findings of this study, it is worth noting:

- The population in Tioga County has decreased by 4.8% in the last decade.
- A third of the people in the County are over 55 years of age.
- 8% of the County's total talent supply has not graduated high school. The participation rate of this group reached 56% in 2017, the lowest of all groups; this group also registered the largest unemployment rate with 12%.
- The top employment industry sectors in Tioga are manufacturing (13.6%), educational services (13.6%), retail trade (13.5%) and health care and social assistance (13.1%).
- The sector that added more jobs to Tioga County was accommodation and food services (514 employees), followed by mining, quarrying and oil/gas extraction (175 employees), and real estate, rental, and leasing (171 employees).
- The highest employing occupations in Tioga County are management, business, science, and arts occupations, accounting for 35% of total employment.
- 79% of all establishments in Tioga County employ 1 to 9 people.
- By 2015, 59% of Tioga's County labor force worked outside the region. Only 22% of Tioga's labor force live and work within the County.



- 30 out of 33 businesses surveyed said they had experienced challenges in recruiting, hiring, and retaining talent, according to the respondents, the most difficult occupations to hire or retain are engineers, nurses, and machine operators.

Phase II of the Strategy was formulated in 2020 by Tioga County Economic Development and Planning (TEAM Tioga) and the Tioga County Rural Economic Area Partnership LDC through a USDA Rural Business Development Grant. As identified in the 2019 Tioga County Economic Development & Planning Annual Report, the key goals of the Strategy include:

- A strategic action plan that will identify priorities and actions needed to help employers attract and develop talent and workforce supply for today and the future
- Strategies that will connect local school districts and higher learning institutions, with employers, to create a highly qualified and skilled workforce pipeline
- A labor strategy vision for Tioga County

Upon the completion of the validation session, the Strategy was refined, and performance metrics for achieving outcomes were developed. Evident throughout the research and consultation undertaken for this Strategy is a clear recognition for a more coordinated approach to workforce development. TEAM Tioga is envisioned at the center of this effort along with strengthened partnerships with Local School Districts, Post-Secondary Institutions, Career & Educational Services, other local economic development and workforce development organizations and community partners. In addition, to greater/improved collaboration and communication, stakeholder insights also called for a focus on aligning worker skills with local employer needs, providing support for the local workforce, and raising awareness of employment opportunities in the County.

Driven through research, four distinct themes emerged for the 2020-2025 Tioga County Workforce Development Strategy. They are collectively termed the '4-C's for Workforce Development' and are illustrated below.

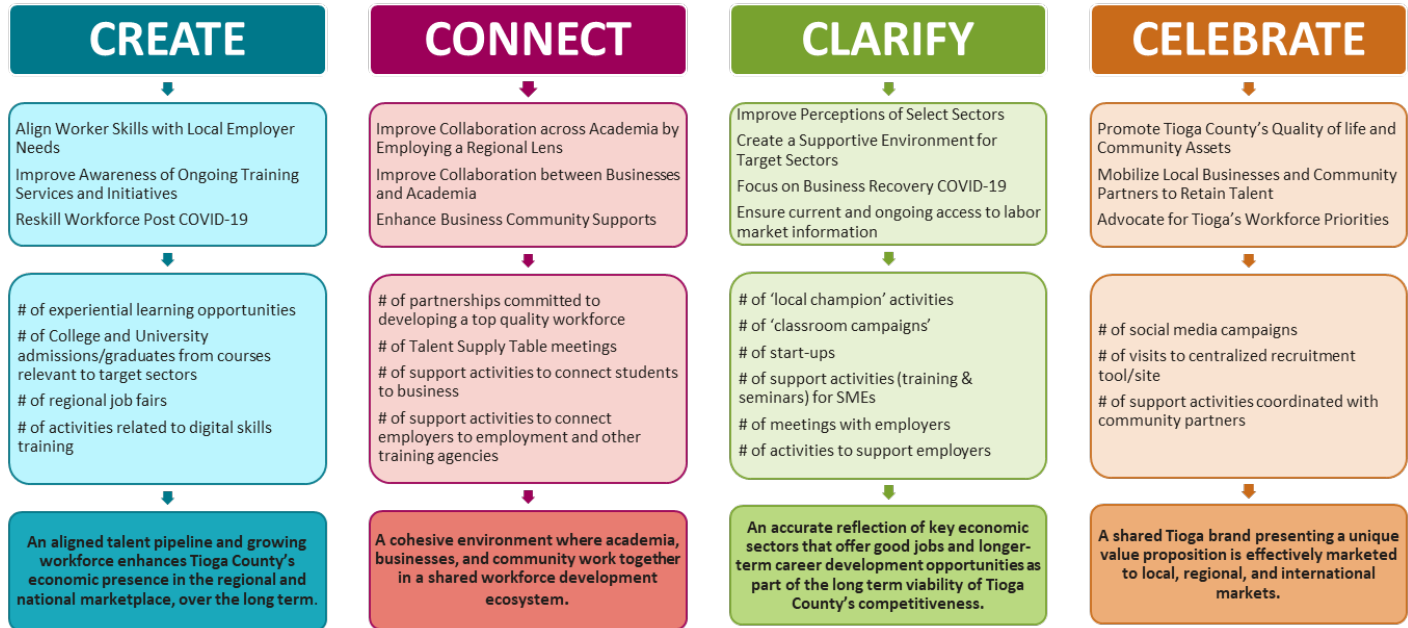
#### Strategic Themes - '4-C's for Workforce Development'



Actions identified under each of the strategic themes either support or build on existing initiatives that are underway across the County. Implementation will be a collective effort, particularly given the structure of TEAM Tioga. In addition, key performance indicators measure performance.



## Key Performance Indicators for Workforce Actions



The Tioga County Workforce Development Strategy is intended as a living document for the community as it shapes the current and future local workforce to meet local economic needs now and into the future. In implementing these actions, Tioga County envisions to be a community that exemplifies creativity and innovation, driving success and competitive positioning for our labor force and the economy.



# 1. Introduction

## 1.1 Aim of the Strategy

Tioga County Economic Development and Planning in recognizing the importance of workforce development, commissioned the development of the 2020-2025 Tioga County Workforce Development Strategy. The Workforce Strategy was one of the key goals identified in the 2018 & 2019 Tioga County Economic Development & Planning Annual Report.

The Workforce Strategy was completed in two Phases. Phase I was completed in May 2019. This included a community profile of Tioga County, as well as a workforce pipeline analysis, to assess the demand for workers in the next five years. Phase II of the Strategy was formulated in 2020 by Tioga County Economic Development and Planning (TEAM Tioga) and the Tioga County Rural Economic Area Partnership LDC through a USDA Rural Business Development Grant.

The 2020-2025 Tioga County Workforce Development Strategy is a forward-thinking document that serves to connect local school districts, higher learning institutions, local employers, and major employers in contiguous counties, to realize a highly qualified and skilled workforce pipeline. The Strategy is an integrated approach that takes into consideration the current level of planning support and provides direction in the form of short, medium, and long-term actions to guide the County's workforce initiatives for the next five years. As identified in the 2019 Tioga County Economic Development & Planning Annual Report, the key goals of the Strategy include:

- A strategic action plan that will identify priorities and actions needed to help employers attract and develop talent and workforce supply for today and the future
- Strategies that will connect local school districts and higher learning institutions, with employers, to create a highly qualified and skilled workforce pipeline
- A labor strategy vision for Tioga County

Upon the completion of the validation session, the Strategy was refined, and performance metrics for achieving outcomes were developed. The Strategy is premised on active cooperation and collaboration between key stakeholders and through continued leadership from Tioga County Economic Development and Planning.

## 1.2 Tioga County

Tioga County is located in the Southern Tier Region of Upstate New York, directly north of the Pennsylvania border, and adjacent to Cortland County, Broome County, Chemung County and Tompkins County in New York; and Susquehanna County and Bradford County in Pennsylvania (Figure 1). The County is home to nine towns, namely, Barton, Berkshire, Candor, Newark Valley, Nichols, Owego, Richford, Spencer, and Tioga and six villages of Candor, Newark Valley, Nichols, Owego, Spencer, and Waverly. The majority of the County's population (60%) is concentrated in the three towns (Barton, Nichols, and Owego) that lie on the southern border of the County and through which State Route 17 passes (I-86 designation pending)<sup>1</sup>.

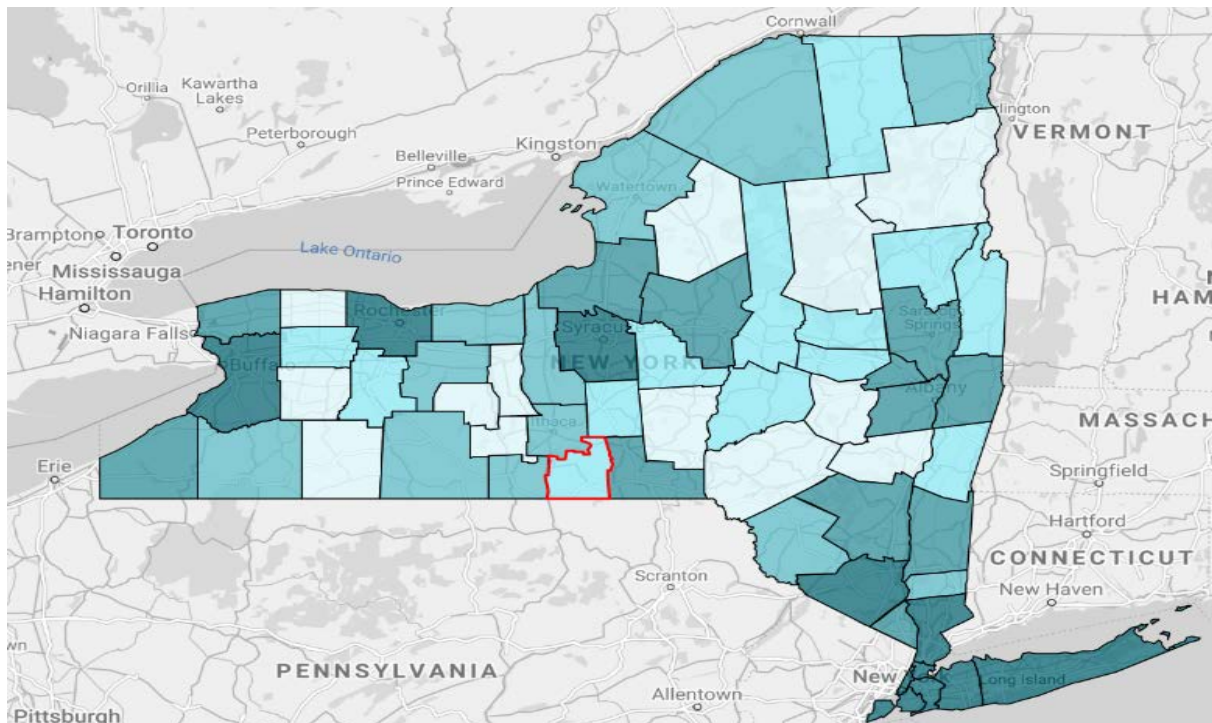
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<sup>1</sup> Tioga County 2020 Strategic Plan.



Tioga County has a rich heritage shaped by the First Nations, settlement patterns, agriculture, and farming operations. The County today is a mix of urban and rural living with over 49,045 residents as of 2018, and labor force participation rate of 61.7%<sup>2</sup>. Tioga County is the 48<sup>th</sup> largest County by population in New York out of 62 counties<sup>3</sup>. Historically, agriculture-related industries have been an essential part of the County's economy. Although this sector is still essential, the majority of the local labor force is employed in industries such as manufacturing, educational services, retail trade, health care, and social assistance.

**Figure 1: Location of Tioga County in New York State, 2020**



Source: U.S. Census Bureau. **Red border** indicates the location of Tioga County in New York State.

The majority of Tioga's business environment is made up of small businesses and sole operators. The County is also home to large operations, including Lockheed Martin, the area's largest private employer as well as CNYOG, a natural gas storage facility<sup>4</sup>. The presence of Lockheed Martin has contributed to job creation, specifically those requiring technical skills in drone development and laser systems. The County is also witnessing new investments that positively contribute to the economy, such as the recent 15.5-million-dollar investment by Voigt & Schweitzer New York Galvanizing, LLC<sup>5</sup>.

Tioga County benefits from its location in the middle of the Southern Tier Region, encompassing the City of Binghamton and Elmira-Corning metropolitan areas. The Region is served by The Southern Tier Expressway, including Interstate 86 and New York State Route 17, and three regional airports. In addition to providing jobs for at least 59% of Tioga County residents, the Region also facilitates access to major

<sup>2</sup> U.S. Census Bureau, Population Division.

<sup>3</sup> Ibid.

<sup>4</sup> <http://townofowego.com/>

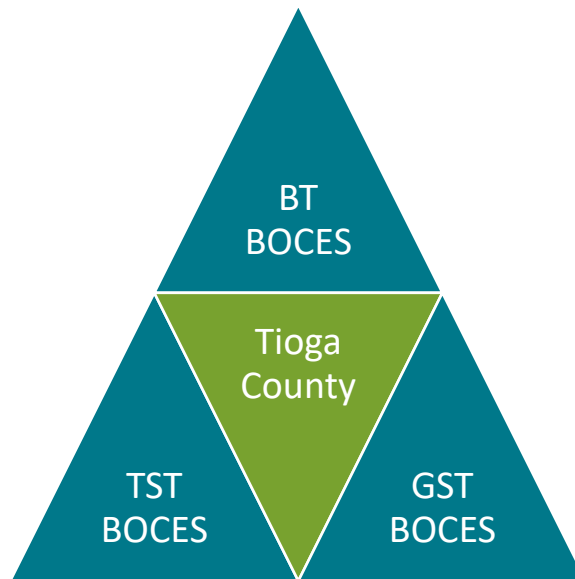
<sup>5</sup> EDP Final 2019 Annual Report.



amenities, including post-secondary education institutions such as Cornell and Binghamton Universities.

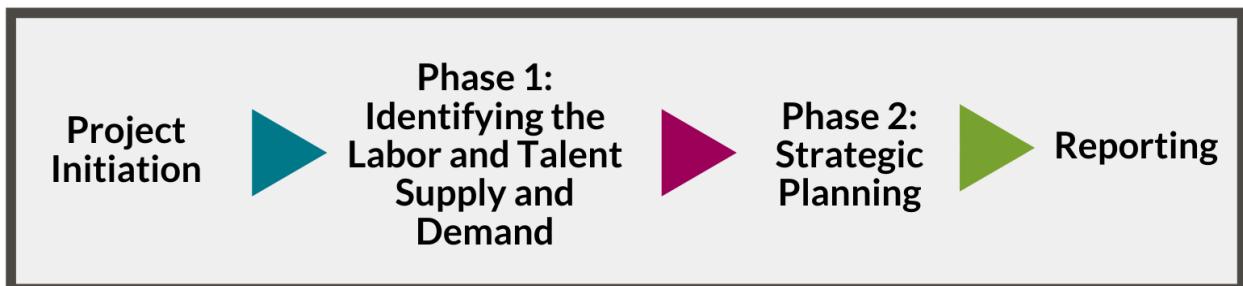
Tioga County also enjoys a robust education system, served by the Board of Cooperative Educational Services (BOCES). BOCES was created by the New York State legislature in 1948 to provide shared educational programs and services to school districts within the state. Tioga County is served by three (3) of the 37 BOCES that currently exist (Figure 2). These include the Broome-Tioga BOCES (BT BOCES), the Greater Southern Tier BOCES (GST BOCES) which include the counties of Schuyler, Steuben, Chemung, Tioga and Allegany and the Tompkins-Seneca-Tioga BOCES (TST BOCES).

**Figure 2: BOCES That Serve Tioga County**



### 1.3 Setting the Strategic Direction

The 2020-2025 Tioga County Workforce Development Strategy was completed in two phases, namely Phase I: Identifying the Labor & Talent Supply Key Findings and Phase II: Strategic Planning.



#### Phase 1: Identifying the Labor and Talent Supply and Demand

Phase one combined research and analysis of the current economic and workforce context in Tioga County, the Southern Tier Region, and the State of New York with a comprehensive statistical review and input from 33 local businesses. The research included a community profile, as well as a workforce pipeline





analysis, to assess the demand for workers in the next five years. This study also focused on five critical industries for the Tioga County economy.

Taking into account that Tioga County has a small presence of post-secondary education institutions, the initial phase of this project considered the broader Southern Tier Region as a catchment area for graduates in fields of study related to each industry sector. The results of this phase form ***Identifying the Labor & Talent Supply Key Findings Report***, serving as ***Appendix I*** to the Strategy.

## **Phase 2: Strategic Planning**

Building on the findings from Phase 1, stakeholder interviews were completed with sector associations, post-secondaries, workforce boards, foundations, not-for-profits, immigration service providers, and government representatives. These conversations provided in-depth insight around the successes and challenges with the labor and talent supply. A vision and action plan establish the framework for stakeholders throughout Tioga County to improve their ability to train, attract, and retain a quality workforce into the future. Where relevant, the recommendations have been informed by best practice research, provided as ***Appendix II: Best Practice Research***.

This document concludes the results of the research and consultation undertaken to provide Tioga County with the Draft 2020-2025 Tioga County Workforce Development Strategy. This draft Strategy was further tested and refined through a validation session in May 2020 to ensure that the actions in the Strategy reflect and ultimately fulfill the workforce needs of the County.



## 2. Situational Analysis

As Tioga County creates and implements a workforce strategy to ensure a well supported and skilled workforce with high growth potential, it should account for global and national trends that may impact workforce considerations in the short and long term.

In addition to providing the reader with high-level insights on current workforce trends, this situational analysis includes a review of Tioga's current planning environment, economic context, and labor force considerations.

### 2.1 Key Workforce Trends

Over the past decade, the talent landscape has been changing, shifting from low-skill, routine jobs to higher-skill, non-routine occupations<sup>6</sup>. This shift has primarily been driven by technology and impacted by globalization, demographics, social values, and the changing perceptions of the millennial workforce.

While it is understood that technological change has improved economic growth, productivity, and net job creation, these impacts have not been consistent across all economies. As evidenced in '*the future of work in America*' report<sup>7</sup>, the United States is a mosaic of local economies with significant gaps between those performing well and those lagging. The report, which analyzed 315 American cities, places them into five groups, namely, urban core (megacities, high growth hubs), urban periphery, niche cities (small powerhouses, college-centric towns), mixed middle and low-growth/rural areas. The city of Binghamton, along with 53 other cities and around 2,000 rural counties, totaling 78 million people fall under the low growth/rural areas. These trailing cities have an older and shrinking workforce, higher unemployment, and are, on average less educated compared to the rest of the cities.

A review of this report provides essential insights for Tioga County, as it fits within the low growth/rural areas group.

- Tioga County is expected to be impacted by automation technologies, with workforce displacement being the most significant outcome. As automation continues, the need for physical or routine roles will decline. Rural areas in the Americana and distressed Americana segments are at the higher end of the displacement spectrum. As per the report, more than 25% of workers across 512 counties (home to 20.3 million people) could be displaced.
- Automation is an ongoing process; changing the way work is organized with varying effects on different sectors. Accommodation and food services show the highest potential for automation at 73%, followed by manufacturing and transportation and warehousing at 60% and 57% of agriculture<sup>8</sup>. In terms of occupations, office support, and food service may decline while healthcare, STEM occupations, creatives and arts management, and business services are projected for growth.
- Compared to more diversified regions, Tioga County is likely to feel the shrink in employment owing to a less diversified economy with a higher number of low skilled roles in industries such as agriculture, transportation, and manufacturing. Considerations should be placed on promoting education that is focussed on tech-based skills across the County as workers with a high school

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<sup>6</sup> Deloitte. (2016, July). *The Future of the Workforce, Critical drivers and challenges*.

<sup>7</sup> McKinsey Global Institute. (2019, July). *The future of work in America: People and places, today and tomorrow*.

<sup>8</sup> Ibid.



diploma, or less are four times as likely as those with a bachelor's degree to be displaced by automation. It is also estimated that minority groups such as Hispanics and African Americans, with comparatively lower levels of educational attainment, could see upwards of 12 million jobs displaced. This is of critical importance, given that 3% of Tioga County are minority populations.

- Automation will accelerate the demand for technological skills<sup>9</sup>, which is expected to increase by 55% by 2030. This includes both basic digital skills, such as word processing and data entry, and advanced skill sets such as programming and data analysis. Tioga County must ensure that sufficient training and upskilling programs are in place to ensure the local workforce has the digital skills required to participate in the digital economy.
- Remote working has enabled workers to perform professional and tech-based operations virtually anywhere. This has resulted in an increased appetite for workers to move to a rural community to work<sup>10</sup>. Recent trends show that small counties (5,000-99,999 population) are succeeding in growing their workforce as a result of talent attraction. As per the fourth annual talent attraction scorecard, which ranked 2,226 small counties based on talent attraction, Tioga saw its ranking increasing from 2,049 in 2017 to 1,828 in 2019, indicating a positive trend.
- Within Organisation for Economic Co-operation and Development(OECD) countries, including the United States, research indicates that skills miss-match affects two out of every five employees.<sup>11</sup> High student debt levels and a tight labor market domestically compounds this problem, as recent graduates enter the first available role they can find instead of searching for a career that is the right 'fit.' Tioga County must work closely with educational providers, job seekers, and employers to ensure a strong talent pool exists with the right skills for the workplace.
- In addition to skills mismatch, the global workplace is influenced by a generational divide. With over five generations in the workforce, the majority of who are millennials, there is an increasing shift in leadership style from formal authority to leadership by influence.
- The rise of the technology-based workplace has also seen age-related discrimination, preventing mature workers from re-entering the workplace. This largely unconscious bias can be mitigated by focussing on a combination of state and federal policy responses in addition to providing local support that helps upskill older workers so they can return to the labor market.

This review of workforce trends highlights critical opportunities for Tioga County. A focus on building community assets, education, research, and development centers, along with advocating for capital investments, is imperative. Tioga County's proximity to college centric towns such as Ithaca and Binghamton offer opportunities to attract business investments, young professionals, and graduates seeking a higher quality of life.

### 2.1.1 The Impact of COVID-19 on Workforce

The COVID-19 pandemic has dramatically affected the global economy and the nature of work for communities and workers around the world. The United States has emerged as one of the worst-hit countries, with 1.37 million confirmed cases and over 80,000 deaths as of April 2020<sup>12</sup>. Furthermore, the

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<sup>9</sup> McKinsey and Company. (2019, May). *Skill Shift, Automation, and the Future of the Workforce*.

<sup>10</sup> As per a 2017 Gallup Poll, 27% of urban residents prefer rural areas and included population aged 30-49 years of age.

<sup>11</sup> Boston Consulting Group. (2020, January). *Fixing the Global Skills Mismatch*.

<sup>12</sup> Centers for Disease Control and Prevention, *Coronavirus Disease 2019 (COVID-19)*, <https://www.cdc.gov/coronavirus/2019-ncov/cases-updates/cases-in-us.html>.



country saw a job loss of 20.5 million and an unemployment rate of 14.7%. While the midterm and longer-term impacts of COVID-19 are still largely unknown, a few trends have emerged that provide key learnings for Tioga County.

As per the 2020 Hongkong and Shanghai Banking Corporation (HSBC) review of mid- to long-term implications, COVID-19 has significantly impacted sectors including commercial aerospace, recreation and culture, hospitality, and oil and gas. Technology-based sectors have seen less of an impact, with some pivoting quickly to impact the economy positively. As indicated in the Three Rivers Development Corporation's State of the Workforce Report 2020, the positive long-term outlook for the technology-based sectors provides significant opportunity to focus on upskilling and reskilling workers displaced due to layoff in sectors including sales, hospitality, and non-essential production.

Digital transformation is an essential component for the viability of the technology sector and workers as increased demand for remote working, digital skills, distance learning, online media content, telemedicine, and eCommerce have heightened. Digitalized e-learning platforms have changed the way people work and interact with others, even among key service industries where human interaction is important. For example, doctors in the UK are now assessing 100% of their patients through virtual appointments. In some sectors, these disruptions are considered positive. For example, recent survey results show that three out of four Chief Financial Officers aim to shift at least 5% of previously on-site employees to permanently remote positions post- COVID-19.<sup>13</sup>

In addition to changing workforce trends, consumption habits have also drastically changed due to COVID-19. E-commerce sales have increased since the pandemic, as exemplified in Europe, which saw a 13% increase in consumers browsing online e-commerce sites for the first time.

As the increased pressure for supplies and products amplified for select products, countries have identified a need for global restructuring of supply chains. Due to the increased pressures for access to products, governments and businesses have been able to respond to production and distribution opportunities and are shifting closer to the point of sales. Where possible, countries and regions look to expand their supply chain, resulting in less demand for some foreign-produced products. Personal protective equipment is perhaps the best example of this shift, with companies shifting manufacturing lines to produce masks, protective gear, and sanitizers.

While the devastation of COVID-19 is far-reaching, regions that respond quickly to support economic recovery will benefit. Through targeted approaches, Tioga County can capitalize on these trends. Support for local businesses looking to move to an online platform or digitize their products is an important consideration for Tioga. Additionally, as companies shift to remote working, there are opportunities for the County to assist these firms, notably smaller businesses. Emphasis can be placed on upgrading the digital infrastructure to support the remote working transition. This includes factors such as stable, high-speed Wi-Fi connections, good mobile coverage, and secure internet servers. As supply chains become less international, there are also opportunities for the County to position itself for being open to investment. However, it is imperative to recognize that as economies start back up, so too will the demand for talent, often with new or enhanced skill sets. The response of the workforce ecosystem must be strategic and requires collaborative and collective efforts across the workforce and economic systems.

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<sup>13</sup> Gartner Survey, 2020, <https://www.gartner.com/en/newsroom/press-releases/2020-04-03-gartner-cfo-surey-reveals-74-percent-of-organizations-to-shift-some-employees-to-remote-work-permanently2>



## 2.2 Planning Context

An inter-disciplinary approach to workforce development requires an understanding of existing local economic development and planning efforts. This places the Workforce Development Strategy within the current planning environment and helps identify synergies and coordination in planning efforts.

The 2020 Tioga County Strategic Plan serves as a framework that assists County departments to identify priorities that guide activities until 2020 and beyond. Strategic priorities of the Plan that relate to workforce development include the need to enhance services through technology and process improvements and respond to community and workforce trends. Key goals of the priorities include diversifying Tioga's economy to increase job opportunities and increased support for Workforce Development, including training for staff and improving customer experience.

Tioga County has also completed Long Term Community Recovery Strategies (LTRCS) for the towns of Tioga and Nichols and the Village of Owego. Key themes of these strategies include a focus on community revitalization and economic development projects. Actions in the Village of Owego LTRCS that relate to workforce development include recruiting and retaining the creative class/young people in their 20s and 30s, re-examining the small business incubator feasibility study, and focusing on tourism as a revenue tool. Similarly, the Nichols and Tioga LTRCS identifies opportunities to focus on tourism, light industry, commercial growth, and small businesses for economic growth.

The County has also witnessed key ongoing investments that serve to enhance its presence and economic performance in the region. This includes the \$15.5 million Voigt & Schweitzer New York Galvanizing, LLC investment expected to add 60 new jobs to the local community. The recent digital marketing campaigns developed as a result of the 2019 Tourism Strategic Plan are key strategies that can be leveraged for workforce development.

# TIOGA COUNTY, NY

Snapshot on demographics and Labor Force



## Population (2017)



**48,578**  
-4.5% from 2010

## Age Groups (2017)

Under 18 **22%**  
18 to 54 **45%**  
55 + **33%**

## Labor Force (Participation Rate 2017)

**65.5%**  
-4% from 2010

## Median Household Income (2017)



**\$57,153**

## Unemployment (2017)

**5.2%**

Household median income is similar to the national median household income and higher than those of surrounding counties.

Unemployment is higher among people 16 to 19 years of age, and people with less than high school education.

## Education and Field of Study (2017)

	% of the population
Less than 9th grade	2%
9th to 12th grade, no diploma	7%
High school graduate	35%
Post-secondary education	56%
— Some college, no degree	20%
— Associate's degree	11%
— Bachelor's degree	15%
— Graduate or professional degree	10%



**38%**

of people have a bachelor's degree in science and engineering



## 2.3 Tioga’s Workforce Considerations

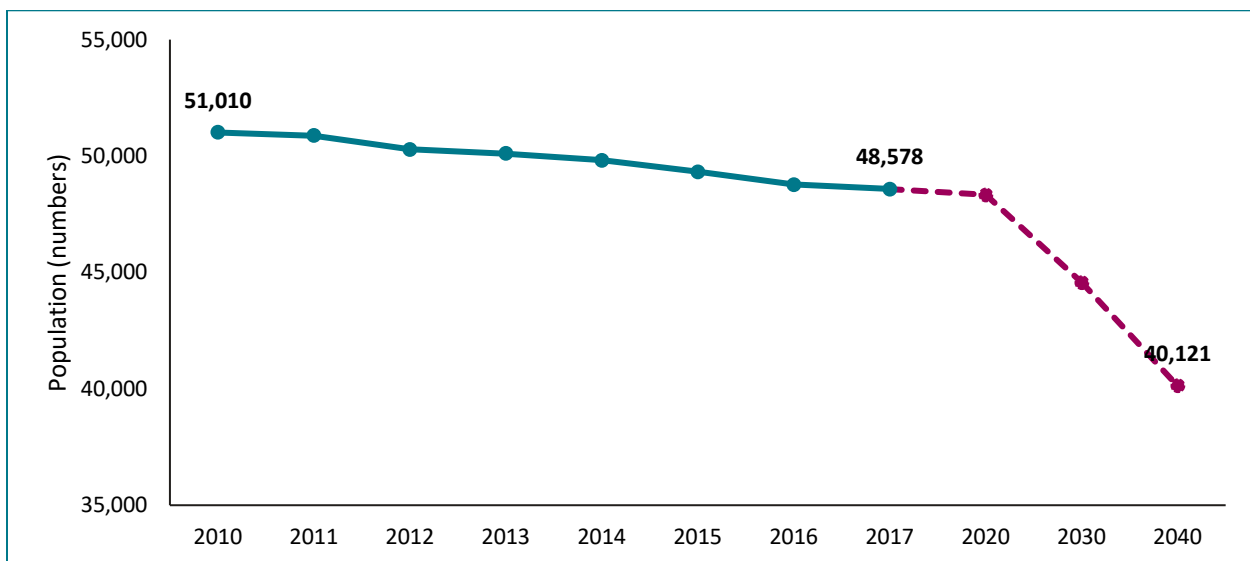
Tioga County’s current workforce considerations and sector profile is described below and includes key insights from the baseline provided in **Appendix II: Identifying the Labor & Talent Supply Key Findings**.

### 2.3.1 Workforce Characteristics

As of 2018, Tioga County was home to 49,045 people, accounting for 0.2% of New York’s total population of 19.8 million. The County has witnessed a population decline from 2010 to 2018 of 4%, representing a loss of 1,965 residents. Nonetheless, in the last year, the population saw a small growth of 1%.

Furthermore, as per Cornell University projections, Tioga County’s population is projected to decline, reaching a population decline of around 17% by 2040 further<sup>14</sup>. This trend poses challenges to the local workforce as the labor supply might not be able to meet the labor demand.

**Figure 3: Population Trends and Projections, 2010-2040, Tioga County, NY**



Source: U.S. Census Bureau, Population Division (Blue) & Cornell University. Program of Applied Demographics. 2017 (Magenta).

### Working-Age Population by Cohort

Tioga County has a relatively young population; 67% of the county’s residents are under the age of 54. Specifically, Tioga’s largest age group is represented by individuals below the age of 18 (22%). In contrast, people 65 years and older only represent 18% of Tioga’s population. Although this is a small percentage, Tioga County has a larger share of people age 65+ compared to the U.S. at 16%.

Taking into consideration that the population reaching retirement age in the next ten years (people currently aged 50 to 59) represent only 16% of Tioga’s total population and that the population under the age of 24 years is approximately 30%, the County can still meet future workforce demands. Talent retention and skills development is an important aspect of this.

<sup>14</sup> Cornell University. Program of Applied Demographics. 2017. Retrieved from <<https://pad.human.cornell.edu/profiles/Tioga.pdf>>

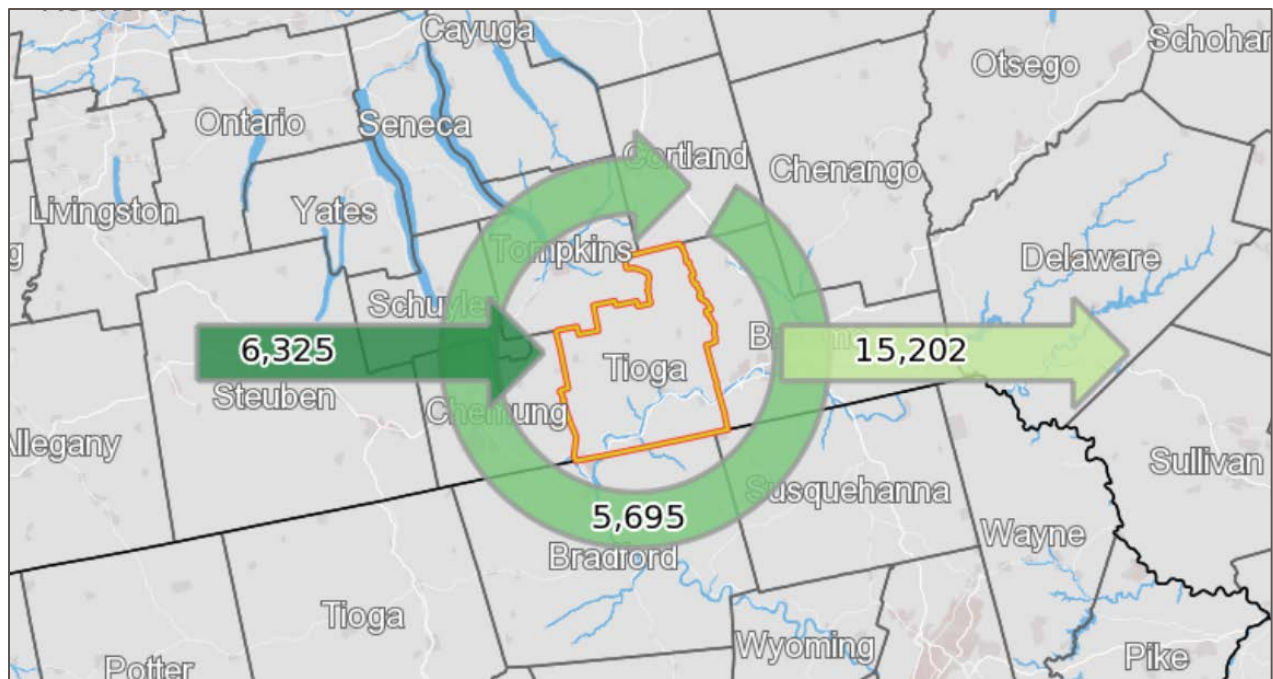


## Commuting Patterns

Community patterns show the inflow (number of people coming into the County to work) versus the outflow (number of residents leaving the County to work). If the outflow of workers is higher than the inflow of workers, it indicates that the number of resident workers is greater than the number of jobs available in the County. Considering Tioga's outflow (15,202 residents) to inflow (6,325 workers), it can be said that the County is a net exporter of workers. The data shows that approximately 59% of Tioga's residents worked outside the County, with only 22% of the local labor force living and working within the County. The top destinations for residents include Broome County (27%) and Tompkins County (12%).

While the lack of sufficient job opportunities is a challenge for the County, these patterns do confirm and support the notion that workers choose to live in Tioga regardless of where they may work.

**Figure 4: Inflow and outflow job counts (Primary jobs), 2015, Tioga County, NY**



Source: U.S. Census Bureau, Center for Economic Studies.

## Wage Gap

Anecdotal evidence and stakeholder consultations indicated that wage gaps that exist in Tioga are significant deterrents for talent attraction and retention.

A comparative analysis of mean hourly wage in Elmira (Chemung County) and Binghamton (Broome County), to the mean hourly wage in the New York City Metropolitan Division indicated that wages in the Southern Tier Region are lower for almost all sectors<sup>15</sup>. Healthcare support workers and protective services are the only occupations that showed higher wages in Elmira and Binghamton compared to New York City. Significant wage gaps are evident in management and business-related occupations. It is

<sup>15</sup> Due to data limitations, it is not possible to estimate the exact wage by occupations in Tioga County.





understood that the Metropolitan Division of New York serves as the headquarters of a significant number of companies and multinational corporations, and the competitive marketplace ensures competitive wages.

It is important to note that wages are not the ultimate factor individuals consider when deciding to relocate. As per the 2017 Gallup Poll, urban residents prefer to move to rural America, owing to the increasingly high costs of living in urban areas. Tioga can capitalize on these trends by supporting business growth and investing in community assets, amenities, and infrastructure improvements.

**Figure 5: Mean Hourly Wage by Occupations, May 2017, Elmira, Binghamton and NY-NJ Metro Division, NY**

Occupation	Elmira, NY	Binghamton, NY	New York-Jersey City-White Plains Metropolitan Division
<b>All occupations</b>	<b>\$21.86*</b>	<b>\$21.92</b>	<b>\$30.96*</b>
Management occupations	\$52.67*	\$50.03	\$79.75*
Business and financial operations occupations	\$34.53	\$31.89	\$48.43*
Computer and mathematical occupations	\$30.54*	\$40.22	\$50.15*
Architecture and engineering occupations	\$34.96*	\$34.89	\$43.98*
Life, physical, and social science occupations	\$34.28	\$27.00	\$38.90*
Community and social service occupations	\$24.24	\$21.22	\$26.40*
Legal occupations	\$46.27	\$39.93	\$70.64*
Education, training, and library occupations	\$27.38	\$25.13	\$33.30*
Arts, design, entertainment, sports, and media occupations	\$18.82*	\$21.02	\$39.19*
Healthcare practitioners and technical occupations	\$31.53*	\$35.74	\$46.48*
Healthcare support occupations	\$15.1	\$14.85	\$14.43*
Protective service occupations	\$29.80*	\$22.28	\$25.09*
Food preparation and serving related occupations	\$11.75	\$10.89	\$14.00*
Building and grounds cleaning and maintenance occupations	\$13.13*	\$12.78	\$17.45*
Personal care and service occupations	\$13.61	\$13.47	\$15.59*
Sales and related occupations	\$15.77*	\$16.67	\$27.28*
Office and administrative support occupations	\$17.74	\$16.33	\$21.36*
Farming, fishing, and forestry occupations	N/A	\$16.71	17.43*
Construction and extraction occupations	22.76*	\$22.69	33.44*
Installation, maintenance, and repair occupations	21.09*	\$22.08	26.31*
Production occupations	20.08*	\$16.54	18.87*
Transportation and material moving occupations	20.67	\$15.11	19.70*

Source: Occupational Employment Statistics Data. \* indicates that the percent share of employment or mean hourly wage for this area is significantly different from the national average of all areas at the 90-percent confidence level.

### Labor Force Characteristics

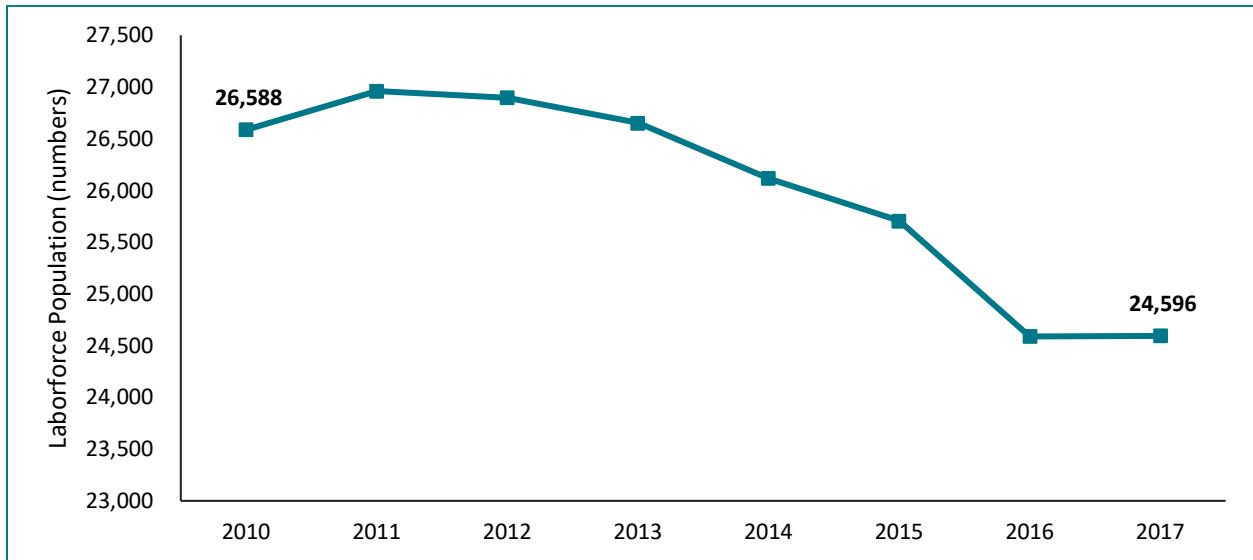
Since 2010 Tioga County witnessed a labor force decline of 7% from 26,588 people in 2010 to 24,596 people in 2017. In tandem with the labor force decline, the participation rates also declined by 4% from 65.5% in 2010 to 61.5% in 2017.

Individuals aged 35 to 44 years showed higher participation rates at 86% compared to the younger age bracket (16 to 19 years) at 44%. The lower participation rate in the latter group may be the result of individuals not looking for jobs due to school, college, and university. In terms of educational attainment, people with post-secondary education, including some college or associate degree, and university education evidenced a higher participation rate (over 82%), compared to those individuals



with less than a high school diploma<sup>16</sup>. Currently, there is not a significant presence of post-secondary education institutions in the County, forcing individuals to go to other communities to obtain a degree. Many of these individuals do not return to the County, thus reducing the available pool of qualified workers.

**Figure 6: Labor Force Trends, 2010-2017, Tioga County, NY**



Source: U.S. Census Bureau – ACS 5-Year Estimates

<sup>16</sup> American Community Survey. Product: 2017: ACS 5-Year Estimates Subject Tables | Table ID: S2301

# TIOGA COUNTY, NY

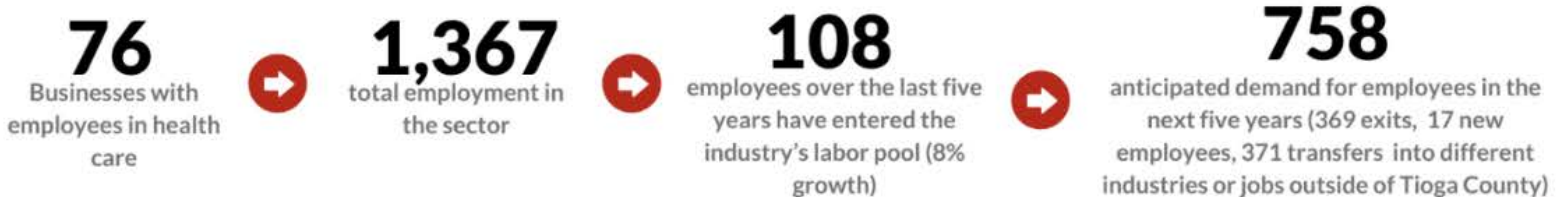
Snapshot on  
target sectors



## Advanced Manufacturing (2017)



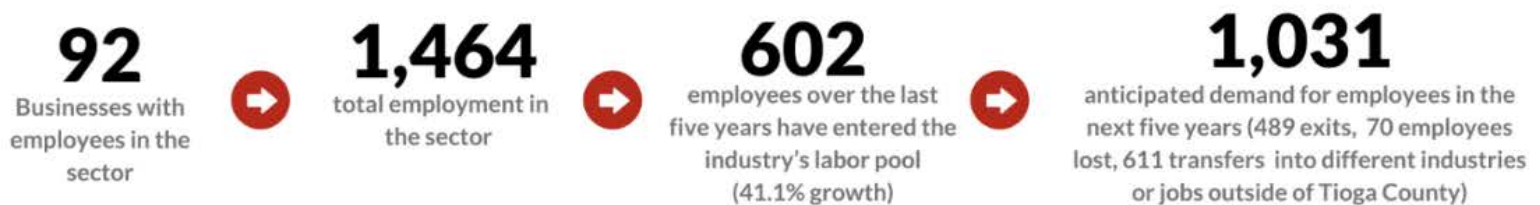
## Health Care Services (2017)



## Warehousing and Distribution (2017)



## Hospitality (2017)



## Professional Services (2017)





### 2.3.2 Target Sector Profile

Tioga County's workforce considerations also include a profile of target sectors and an assessment of the talent supply and demand for each sector. Target sectors for Tioga include advanced manufacturing, health care services, professional services, hospitality and warehousing and distribution. The agricultural sector has also been profiled for its significance and economic contribution to the community. Key insights are described below, and the complete assessment is provided in **Appendix I: Identifying the Labor & Talent Supply Key Findings**.

#### Advanced Manufacturing

Tioga County's advanced manufacturing sector comprises 21 businesses, which is 3% of total businesses in the County. The majority of businesses in this sector are fabricated metal product (FMP) manufacturers. These businesses specialize in transforming metal into intermediate or end products. FMP manufacturing, along with motor vehicle parts and food processing, is a core part of the United States' industrial base. FMP are usually small manufactures who serve specialized needs in sectors including construction, automotive, machinery and metal manufacturing, and oil and gas extraction.

Tioga's advanced manufacturing sector represents 5.4% of the Southern Tier Region advanced manufacturing businesses, and 0.2% of the State total. In terms of employees, Tioga County employed 12% of the Southern Tier Region advanced manufacturing workers.

A total of 3,238 employees work in advanced manufacturing; the majority (54%) perform operations in computer and electronic manufacturing industries. The majority employed in this sector are electrical and electronic equipment assemblers.

**Talent Demand:** The sector will need to replace nearly 1,065 workers in the next five years. Approximately 502 workers are anticipated to exit the workforce in the next five years, with another 902 transferring to another industry. Nonetheless, the overall employment demand in the advanced manufacturing sector is expected to fall by 10% in the next five years.

**Talent Supply:** From 2014 to 2017, a total of 12,819 people graduated with degrees related to advanced manufacturing, an average of 2,563 graduates per year. The majority of these individuals obtained degrees in computer science, electrical and electronic engineering, and mechanical engineering. It is estimated that computer and electronic manufacturing will be a sector of demand in the future.

With an estimated demand of 1,065 new workers in the next five years and considering a similar average of graduates in fields related to advanced manufacturing, Tioga County will need to attract/retain approximately 8% of these graduates every year to meet the projected demand.

#### Health Care Services

Tioga County's healthcare sector comprises 76 businesses, which is 10% of total businesses in the County. The majority of businesses in this sector are ambulatory health services. Tioga's healthcare sector represents 5% of the Southern Tier Region healthcare services, and 0.1% of the State total. In terms of employees, businesses in this sector employed approximately 1,367 people or 3% of the Southern Tier Region healthcare workers.

Of the 1,367 people working in healthcare, the majority (46%) work at nursing and residential care facilities as personal care aides and nursing assistants. The mentioned occupations are also expected to have the most significant growth within the health care services industry.



Tioga is in close proximity to the Guthrie health care system, serving the Northern Pennsylvania and Southern and Central New York areas. Similar to Tioga's occupational needs, the national healthcare system is projected to grow with high demand for occupations, including nurse practitioners, nursing assistants, personal aides, technicians, physicians, and surgical specialists. Employing a regional talent attraction lens will be important to meet future demand in this sector.

**Talent Demand:** The industry will need to replace 758 workers in the next five years. Approximately 396 workers are anticipated to exit the workforce in the next five years, with another 371 transferring to another industry. Furthermore, the industries in the health care sector are expected to grow by 0.2% in the next five years.

**Talent Supply:** From 2014 to 2017, a total of 13,460 people graduated with degrees related to healthcare; an average of 3,365 graduates per year. The field of study with the most significant number of graduates includes registered nurses, biology/biological sciences, and general psychology.

With an estimated demand of 785 new workers in the next five years and considering a similar average of graduates in fields related to healthcare, Tioga County will need to attract/retain approximately 4.6% of these graduates every year to meet the projected demand.

### Professional Services

Tioga County's professional services comprise 57 businesses, which is 7% of total businesses in the County. This industry sector specializes in performing professional, scientific, and technical activities. These services demand a high degree of knowledge, expertise, and training. Some of the services provided by this industry include legal services, accounting, architecture, engineering, computer services, consulting, research, translation, veterinary, and advertising, among others.

Tioga's professional services represent 6% of the Southern Tier Region professional services, and 0.1% of the State total. In terms of employees, businesses in this sector employed approximately 427 people or 4% of the Southern Tier Region professional workers. Software developers, applications, and accountants and auditors were significant occupations and also projected to experience the largest growth.

**Talent Demand:** The industry will need to replace 193 workers in the next five years. Approximately 69 workers are anticipated to exit the workforce in the next five years, with another 115 transferring to another industry. Furthermore, the overall industries in the professional service sector are expected to grow by 0.4% in the next five years.

**Talent Supply:** The majority of businesses in this sector require a college or university degree. Areas such as engineering, accounting, architecture, and law are part of this industry sector. In the Southern Tier Region, these degrees were the most common among graduates. From 2014 to 2017, an estimate of 26,433 people obtained degrees related to professional services: an average of 6,608 new graduates per year. From 2014 to 2017, the number of graduates in these areas increased by 17%, the majority in areas such as business administration, computer science, accounting, electrical and electronic engineering, and mechanical engineering.

With a projected local demand of 193 new workers in the next five years and a potential regional supply that exceeds that number, Tioga County will need to attract/retain 0.6% of these graduates to meet the projected demand.



## Hospitality

Tioga County's hospitality industry comprises 92 businesses, which is 11% of total businesses in the County. The majority of businesses in this sector are food services and drinking establishments. This sector includes all industries within the accommodation and food services sector. The development of this industry has been closely connected with technology in the last few years, and major technology trends are shaping and driving the hospitality industry worldwide. These trends include travel apps and the increase of the tourism industry; the emergence of a parallel industry that includes services like Airbnb and other shared spaces apps; and the demand for personalized services and the use of digital tools to cater to millennial travelers.

Tioga's hospitality sector represents 6% of the Southern Tier Region hospitality businesses, and 0.2% of the State total. In terms of employees, businesses in this sector employed approximately 1,464 people or 3% of the Southern Tier Regions hospitality workers. The majority of jobs in this sector included combined food preparation and serving, waiters and waitresses, and cooks. These occupations are also expected to experience the largest growth.

**Talent Demand:** The industry will need to replace 1,031 workers in the next five years. Approximately 489 workers are anticipated to exit the workforce in the next five years, with another 611 transferring to another industry. Nonetheless, the overall industries in the hospitality sector are expected to fall by 1% in the next five years.

**Talent Supply:** From 2014 to 2017, a total of 2,679 people graduated with degrees related to hospitality, an average of 669 graduates per year. The majority of these graduates obtained credentials in fields such as hotel, motel management, hospitality administration, cosmetology, and sport and fitness administration.

The hospitality sector's projected demand of 1,031 workers is mainly driven by the increase in occupations such as food preparation workers, servers, gaming dealers, and cleaners; all these occupations required a minimum of high school diploma or equivalent. This represents an opportunity for Tioga County to promote more active participation in the workforce among the population with less than high school education, whose current participation rate stands at 56%, the lowest among groups by educational attainment.

## Warehousing and Distribution

Due to unavailable data in Tioga County, it is not possible to provide accurate business count estimates for this industry sector. However, the data available suggests that there are at least 15 businesses in the sector; representing 4% of the Southern Tier Region's total. The majority of the businesses were in the truck transportation subsector. By 2017, Tioga County employed 681 people, accounting for 9% of the region employees in the sector and 0.2% of the State employees in the sector. The largest occupation in the sector includes heavy and tractor-trailer truck drivers, laborers and freight, stock, and material movers. These occupations are also expected to experience the largest growth.

**Talent Demand:** The industry will need to replace 362 workers in the next five years. Approximately 157 workers are anticipated to exit the workforce in the next five years, with another 211 transferring to another industry. Nonetheless, industries in the warehousing/distribution sector are expected to fall by 0.2% in the next five years.

**Talent Supply:** Graduates of fields related to warehousing and distribution in the Southern Tier Region



remain low in comparison to other fields. As of 2017, only ten people obtained degrees related to this industry, all of them in logistics, material, and supply chain management. Meanwhile, the greatest projected demand will be in freight movers, and tractor/truck drivers.

With an estimated demand of 362 new workers and a lagging regional supply, the regional skilled labor supply will not be able to feed the demand gap. It is also important to consider that occupations such as laborers and freight movers will require certification or on the job training.

## Agriculture

In addition to the target sectors, Tioga County has a strong agricultural heritage. The sector encompasses over one-third of the County's landmass, generating over \$36.7 million annually in local sales, resulting in closer to \$100 million community dollars and employment for over 500 people.

The County has taken proactive steps to build on its agricultural heritage. This includes the exploration of an innovative food hub model to lend support and expand markets for local farmers. Tioga County Agricultural Development focuses on agricultural economic growth and support for farmers, rural landowners, and public agencies. Partnerships with area municipalities and agencies, including Tioga Opportunities Inc., Southern Tier 8, and Cornell Cooperative Extension, ensures the continued viability of the sector. The Rural Initiative Re-Investment Fund aims to accelerate diversification, new product development, and the adoption of technology to realize efficiency improvements in the sector. The fund also enables local farmers to leverage capital investments and reduce financial risk.

### 2.3.3 Community Assets Inventory

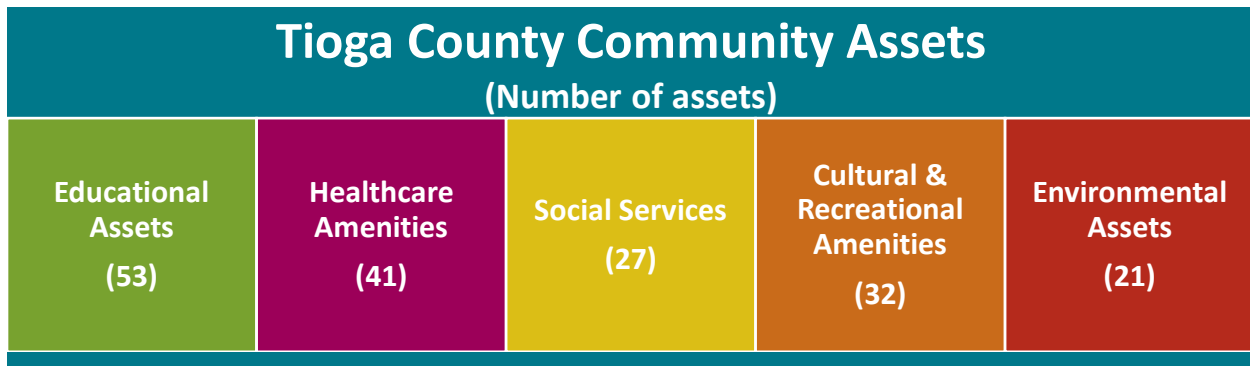
When considering the influencing factors that are top of mind for those seeking to relocate for career considerations, the opportunities to promote the County must be readily accessible for those undertaking recruitment. However, beyond the job opportunities being present, attention is often turned to understanding the influencing factors for quality of life. This includes affordable housing, transportation and walkability, tourism and cultural assets, post-secondary and life-long learning accessibility, health care, school, and social and sports programming for children.

As part of the strategy development, a community asset inventory was completed for Tioga County by adapting the "Lifestyle Resources Framework." It measures the quality of life in a community by examining its health, education, social, cultural, and environmental assets. A complete asset inventory is provided as an excel sheet to County staff and serves as **Appendix III: Asset Inventory**. The inventory should not be viewed for the absolute number of assets but rather to examine asset concentrations. Key insights are described below.

A total of 174 community assets were identified for Tioga County. The majority of these assets were educational institutions, followed by healthcare amenities, cultural & recreational amenities, social services, and environmental assets.



Figure 7: Lifestyle Asset Inventory – Tioga County Community Assets, 2019.



Source: D&B Hoovers. Adapted by MDB Insight.

Tioga County is home to twenty-one primary and secondary schools, in six different school districts, namely, Candor Central School District (two schools), the Newark Valley Central School District (three schools), the Owego Apalachin Central School District (four schools), the Spencer-Van Etten Central School District (three schools), the Tioga Central School District (three schools), and the Waverly Central School District (four schools), as well as ten child daycare services and after school programs. Tioga County has a considerable number of healthcare and social services assets (Tioga is home to 41 healthcare amenities and 27 social services facilities, including offices of physicians, dentists, nursing care facilities, retirement communities, and other basic healthcare services). Nonetheless, the County does not have a major hospital facility and depends on neighboring communities for the deliverable of more specialized medical services. The asset inventory also identified 22 cultural and recreational assets, the majority of which are fitness and recreational sports facilities, including seven golf courses. The County is also home to festivals such as the Tioga County Fair, the Strawberry Festival, and the Candor Daffodil Festival. Tioga County also has approximately 21 environmental assets, which include 13 community parks, and eight State protected areas.





## 3. Stakeholder Observations

The Strategy is built on stakeholder consultations and includes a business survey and stakeholder interviews with local employers, employers in contiguous counties, local school districts, higher learning institutions, and economic and workforce development organizations. Key insights are presented below. The results of the business survey form part of **Appendix I: Identifying the Labor & Talent Supply Key Findings**.

### 3.1 Business Survey Summary

The Labor Supply and Talent Business Survey identified that 91% of the total 33 business respondents had experienced difficulties recruiting, hiring, or retaining talent for specific occupations in the last year. While the largest proportion of these businesses (46%) noted that a high school diploma or equivalency was required for their hardest to fill positions, there was also representation by all levels of education in businesses' responses to this question. Further, 94% of businesses rated skilled workforce as very important or important to their operations. The large proportion of businesses indicating that they have difficulties recruiting and retaining these important positions for their organizations identifies a potentially substantial limiting factor for business productivity in the area. If businesses are constrained in their access to important workers, they will also be constrained in what they can produce and the growth capacity of their businesses. Therefore, it is reasonable to expect that policies and programs aimed at increasing the supply and retention of workers with the appropriate skills will have a substantial effect on the County's economic well-being.

The Labor Supply and Talent Business survey delved deeper by asking questions about businesses' difficulties and the skills required to explain some of the potential mechanisms for the skills shortages. The responses revealed that the majority of businesses did not feel dissatisfied with the staffing, employment, and recruitment services available or the educational, certification, and training opportunities for their existing workforce. The main concerns included the number of qualified workers in the County and the number of workers with the necessary 'employability' skills to fill their positions. The employability skills most often cited as lacking were: the willingness/ability to follow instructions, the general level of skills in verbal language, writing, math, and computer/technology. Respondents cited many barriers to recruiting and retaining employees, particularly lack of childcare and transportation in the area. These difficulties point decision-makers toward potential ways to alleviate the labor shortage. Further collaboration between businesses and local educational institutions could help lower the perception that workers have lower than optimal employability skills. The analysis also lends support to the enhancement of transportation and childcare services as a way to improve the availability of skilled workers in the area.

### 3.2 Interview with School Districts

MDB Insight engaged with the Owego-Apalachin School District and the Waverly Central School District in December 2019 via teleconference. The purpose of these consultations was to better understand the current skills training efforts, partnerships with other schools, and priorities for workforce development.

Both school districts have implemented programs that focus on skills development. For example, the Waverly Central School District has developed the 'The Wolverine Den'; a strong entrepreneurial space



that allows students to gain core business skills by running a coffee shop, credit union, clothing line and providing tech support. Similarly, the Owego-Apalachin School District has created a new STEAM Academy for grades 6 to 12, designed to give students earlier exposure to core concepts, and improve technical skills. The school also has developed a multi-stream building and construction system program in partnership with community colleges. The program has enabled students to gain a better perception of the trades stream as well as gain dual credits.

While both school districts are actively working on improving the skills development and talent pipeline, some key opportunities for improvement were identified and are highlighted below:

- Improve collaborations between school districts – The importance of not working in ‘silos’ and ensuring all skills development programs align with the broader district and regional vision was stressed. For example, the STEAM academy model could be replicated in the Waverly Central School District (the district has an empty school ground that they are looking to convert to an innovation center). Increased virtual meetings between the school districts were identified as being beneficial to promote opportunities and learn best practices.
- Improve collaborations with local employers – This was identified as a critical priority for the workforce strategy, to ensure that the programs taught in school align with industry demand. Stakeholders mentioned that improved collaboration with local employers would lead to:
  - A better-designed curriculum in schools and support for implementation
  - Increased opportunities for internships and work training programs
  - Business Bureau speaker series, so students are aware of professional pathways
- Increase awareness of successful programs/initiatives – Both school districts identified that programs such as the Wolverine Den, the STEAM academy and the Building and Construction system program should be promoted as it would improve the talent pipeline across the County.
- Strong partnerships with post-secondary institutions – This was another critical opportunity area identified by stakeholders. Furthermore, it was mentioned that the lack of a community college within Tioga County is limiting the ability of students to engage with higher education institutions. Investigating the option of establishing a community/online college was deemed a priority.
- Improve infrastructure gaps – Increasing transportation options to connect students with local businesses was deemed necessary by stakeholders due to the rural nature of the County.
- Strong partnerships with TEAM Tioga – Stakeholders mentioned that in order to successfully implement any of these initiatives support must be provided by the County, as resources are limited. Hiring a workforce development coordinator was raised as being a priority to manage collaboration efforts.

### 3.3 Stakeholder Interview Insights

#### Need for Greater/Improved Collaboration and Communication

When asked to identify priorities that would help strengthen the success of talent attraction, retention, and readiness in Tioga County, the majority of stakeholders identified the need for improved collaboration between educators, employers, and childcare professionals.

Stakeholders identified that there is a good level of collaboration within school districts and a strong



BOCES program. However, new opportunities for collaboration among training/educational institutions exist, including linking college programs to high schools and offering college credit for high school students who obtain secondary education and training. Stakeholders also indicated the need to offer programs that provide students with the soft skills needed to work, including communication skills, work ethic, and financial literacy. Collaboration among the educational and training institutions was seen as important to encourage a cohesive system preparing eventual graduates for the local workforce.

Collaboration between educational institutions and industry members was mentioned by many interviewees, mainly to ensure that educational programming is relevant to the available employment in the County and also to increase the availability of experiential learning opportunities. Opportunities identified include college and high school internship programs, job shadow programs, and distance learning programs.

Opportunities were also identified to collaborate effectively with Tioga County Tourism and Tioga Arts Council, among others, to promote Tioga County's quality of life, tourism, arts, culture, and recreation opportunities. Finally, it was suggested that individuals involved in childcare, transportation, and housing should be involved frequently in discussions regarding the local workforce due to the interconnection between these services and the availability of local labor. A related priority revolved around improved communication to help strengthen the success of talent attraction, retention, and readiness. While school districts communicate internally, there is a gap in external communications. Also, education and training institutions are often working in silos and often replicating or duplicating efforts. There needs to be a concerted effort to centralize the work of educational agencies and school districts to ensure everyone is on the same page and maximizing resources and outcomes.

## **Focus on Aligning Worker Skills with Local Employer Needs**

Stakeholders indicated a need to align worker skills with local employer needs. There is a general perception among employers that younger workers tend to have less developed soft skills than prior generations. Employers are finding a lack of soft skills, transferrable skills, and insufficient workplace engagement among many young workers.

A natural place to improve upon these skills, as noted by the interviewees would be during formal schooling. Respondents also mentioned that vocational training institutions and on-the-job training could help improve these skills in workers, as well. Aside from soft skills, the respondents noted the importance of ensuring that individuals in the area have the appropriate certifications for local employment opportunities. A significant opportunity to guide students towards in-demand fields is in K-12 schools, while they are exploring their interests and mapping potential career paths. The interviewees noted that experiential learning opportunities such as work shadowing, placements, and pre-apprenticeships are effective ways to help students understand the types of jobs they would like to pursue. Co-ops, apprenticeships, and internships are also helpful in higher education. Some respondents suggested that K-12 programming could better guide students to select career paths based both on their demonstrated skills and on the in-demand occupation and growth industries in the area.

Stakeholders further mentioned a disconnect between employers' offerings and the younger generations' needs and preferences. For example, entry-level graduates have higher salary expectations than is seen as reasonable for their experience level. In addition, many of the interviewees mentioned that students and young professionals are increasingly demanding greater flexibility in their work both in terms of hours and location (remote work). The current generation has some of the highest student loan



debt, which can influence career decisions based on starting wages. On the other hand, employers are seeking more work-ready graduates. Employers feel that university education and trade apprenticeships are not effectively preparing students and youth with the skills needed to participate in the workforce. A related issue is that employers in Tioga County do not have the resources to be a first employer, and instead, they target employees with more work experience.

The lack of a post-secondary presence was also identified as a barrier to skills alignment and talent supply. Many stakeholders identified the need to investigate the possibility of providing a satellite campus in Tioga County. However, Tioga County is home to the SUNY Broome Owego Satellite Campus. The lack of awareness among stakeholders as it relates to the existence of this Campus indicates the Campus and its programming may not be effectively communicated within the community.

It is recognized that improved collaboration between educational institutions and industry members will inform common barriers to employment and improve employee recruitment and retention efforts and talent alignment.

### **Provide Support for Local Workforce**

There were several mentions of various supports needed for local workers in the area. Interviewees frequently mentioned that low availability of childcare, transportation, and affordable housing all prove to be barriers to workers in the area. Measures to overcome any of these factors could help to improve the supply of available talent.

Tioga County should focus on improving housing infrastructure and supply. Tioga County is dominated by single-detached dwellings, which are not affordable for recent graduates, young workers, and young families. A diverse range of housing, including apartments, is needed. Tioga County is taking targeted steps to address the County's housing needs. As identified in the 2018 Tioga County Housing Study, actions include the adoption of an overall housing strategy to meet the housing needs of priority target market groups and creating an organizational structure to implement the recommendations.

Many of the interviewees worked with special employment groups such as disadvantaged youth, veterans, elderly workers, and those with drug/alcohol problems or criminal convictions. The consensus was that all these groups could be productive workers in the local economy as long as there are appropriate supports to address the unique needs of these individuals and support local employers that hire them. These supports must go beyond the hiring phase to on-the-job supports.

A stakeholder also mentioned the need to resume programming in the Owego Outreach Center (currently not operational). When the Center was operational, there was low participation. It was identified that the programming offered was not in line with community needs, and hence participation was often low. In addition, budget restrictions affected the continued operation of the Center. Tioga County can work with community partners to understand the needs of the Center and leverage it to develop new programming that is reflective of community needs. This could include basic support skills to help students and low-income groups, i.e., obtaining a driver's license and support for the SAT exams.

In addition to focusing on the identified targeted groups, there needs to be a broader conversation to align the skills of the mature workforce with local employers' needs. A few mentions were made regarding the senior workforce (55+ years) as being overlooked in employee-employer conversations. Tioga County has a high proportion of the senior workforce with the soft skills needed to participate in



the workforce. However, they are being overlooked as they may not have the necessary digital skills. Opportunities exist to establish programs that provide digital literacy training for this cohort.

### **Raising Awareness of Employment Opportunities in the County**

Respondents indicated that recent graduates and young workers are not aware of the employment opportunities in and around Tioga County. Lockheed Martin is well known in Tioga County, but graduates are unaware of other opportunities that exist. Tioga County is still perceived as a predominately manufacturing and farming community, and the opportunities in these industry sectors are not marketed effectively. For example, within the manufacturing sector, companies are hiring engineers, accountants, administrative staff, and business professionals. Also, the negative perception that accompanies the trades sectors impedes employee attraction and retention and the overall economic activity in the County and surrounding area.

Graduates and young workers are often not aware of the quality of life that Tioga County provides. For example, although there are approximately 300 nurse graduates from Binghamton University each year, the majority do not want to work in Tioga County because they perceive the community as lacking in the quality of life.

Stakeholders noted that there are already important efforts in place to attract businesses to Tioga County and marketing the County as a place to do business. Those interviewed believed these efforts should be continued and expanded as much as possible.

The respondents noted that efforts to distribute information about the types of employment available in the County should be continued, with a focus on both internal and external promotion. Some respondents felt that increasing the knowledge of Tioga County within the nearby educational and training institutions would be beneficial in raising awareness of all the County has to offer. Several respondents felt that a central hub for employment resources and job postings in the County would be a useful tool to attract talent both internally and externally. There were also important recommendations to market some of the careers within the local industries that are not commonly considered.

### **Marketing the County as A Place to Live**

Respondents listed many positive attributes of Tioga County beyond employment opportunities. In comparison to busy urban centers, Tioga County is rural, less expensive, and possesses more natural beauty. The interviewees noted that it is a safe place to raise a family compared to the bigger metropolitan areas. These attributes of the County will inevitably attract individuals and families seeking this quality of life. However, this may not be the selected lifestyle for all those potential job seekers looking to relocate to an area. This requires a recognition that Tioga County is not the choice for all. Thus, messaging must be targeted to attract those that are seeking what the County offers. Respondents mentioned that when businesses recruit a worker to the area, they often bring a family with them, so ensuring the family feels safe and welcome is an important consideration as well. Stakeholders mentioned that Tioga County has a diverse and vibrant arts and culture scene. Opportunities exist to leverage these considerations in promoting the overall quality of life in Tioga County.

## **3.4 Validation Session Insights**

Industry, workforce, and education representatives were invited to participate in a strategy validation



session on May 20<sup>th</sup> 2020. Participants engaged in a fulsome discussion, offering feedback on the emerging vision, recommendations, and actions identified in the Strategy. Input obtained from the stakeholders was used to refine the Strategy to ensure that community priorities are accurately positioned to improve the labor and talent supply needs in the County. The validation session promoted buy-in with the community and identified new opportunities for improved collaboration and coordination in workforce efforts. The insights presented below reflect those captured during the validation session for each of the Strategy recommendations.

### **Create → Augment the Training & Skills Development Ecosystem**

Stakeholders acknowledged that actions identified within this recommendation resonate well with community priorities. A few changes were recommended, and the insights provided are described below.

There was consensus among stakeholders indicating that schools are more focused on graduation rates and less focused on providing opportunities for students to gain practical work experience. Stakeholders indicated a need to align graduation requirements with job preparation requirements.

Furthermore, it is identified that local schools are often engaged in developing their own training programs. This requires significant time and resources, which ultimately affects the efficiency of the skills and training ecosystem. Stakeholders identified that there is merit in schools collaborating to understand the training programs that each offer, determine best practices and learn and share from each other. A school coalition may be critical to ensure that resources are shared efficiently.

Respondents indicated that guidance counselors offer academic assistance and help students navigate and meet their educational goals. However, there is less focus on career assistance, specifically as it relates to improving interview and resume writing skills. Students need help in addressing this gap if they are to more successfully transition from school to work. Currently, Tioga County Cornell Cooperative Extension and the Tioga County Career Center provide similar resources. However, there appears to be a limited awareness of their availability. Opportunities exist for local school districts to collaborate with these organizations to improve job readiness programs. The utilization of micro-credentials and badging was raised as an alternative to longer-term training and education options. This digital form of certification validates the skills and knowledge gained through informal and formal learning. Students can add these badges to their digital resume to demonstrate skills, knowledge, and abilities.

### **Connect → Enhance Partnerships and Collaboration between and among Stakeholders**

Stakeholders indicated that there is a great need to enhance partnerships and collaboration between and among workforce stakeholders. As identified in the actions, there are opportunities to develop a centralized, collaborative model that includes all the school districts and BOCES. This will allow the creation of a unified workforce development system. Relatedly, there needs to be a unified voice that markets and promotes the efforts of all school districts. Stakeholders also mentioned that although the agriculture sector is an integral part of Tioga County's economy, the sector is not explicitly mentioned in development efforts. There are opportunities to appoint an agriculture teacher and a working farm in the schools to promote the advantages of the sector among students and related job opportunities. The Tioga County 4-H Tractor and Machinery Operations Training / Certification program is a vital resource



to ensure the continued viability of the sector, given that many farmers in the County are reaching retirement. From 2010 to 2017, the labor force in the agriculture sector declined by 59% (a net decline of 266 people).

Stakeholders also identified a disconnect between industry needs and the skills of students. For example, students graduate with certification as welders while the industry is looking for specialized industrial welders. Stronger partnerships between educational and industry partners are critical in this regard.

Local employers who participated in the session shared that students are working basic jobs and not learning transferable skills, and they often lack a good work ethic. Students need to understand how work skills and soft skills are transferrable across occupations and across industries. Increased opportunity for internships would expose students to day to day work life and support increased understanding of how skills can be applied in varied work experiences. Opportunities exist to capitalize on a cradle to career program. As mentioned above, the Tioga County Career Center provides this support; however, it is not effectively leveraged.

### **Clarify → Reflect Tioga County's Sectors & Employers**

There was consensus among stakeholders that there is a negative perception of trades and specific roles in manufacturing and agriculture. Students feel that they need to gain a college degree and are not aware of other options available to them. There is a need to include on-the-job training while in school to ensure that they are prepared to participate in the workforce.

Stakeholders identified that actions such as engaging sector representatives to act as 'local champions' are important and need to be leveraged. The County can facilitate open houses or on-site visits as well as virtual opportunities so that students are exposed to business activities and operations. Promoting STEM-based initiatives is also important, as it will allow for companies to engage with students on an ongoing basis and vice versa.

Stakeholders also indicated that there is a need to leverage business incubators and develop a business resource guide to support small local businesses and start-ups. The Tioga Career Center's employer survey is an important diagnostic tool that should be leveraged.

Given the ongoing impacts of COVID-19, the County needs to support the industry as they refocus their supply chains and product development. Opportunities exist to leverage local manufacturers to develop personal protective equipment. Additionally, the County, as an information resource, provide training for businesses and workers to help them navigate the new normal.

### **Celebrate → Facilitate a common marketing effort for Tioga County**

Stakeholders identified that this is an important recommendation for the County. Similar to other recommendations, actions identified here resonated well with stakeholders. Stakeholders identified that there is a need for strong collaboration between the Economic Development and Planning (EDP) Office and Tioga County Tourism to realize success.

Stakeholders indicated a need for a common unified message that promotes actions and workforce priorities so that all workforce partners work together and do not duplicate efforts or tactics. It was indicated that TEAM Tioga takes a leadership role in bringing together the various workforce stakeholders.



Stakeholders also identified that the action that calls for coordination with academia to reach alumni is critical to workforce success, as it will strengthen buy-in, market the County to a wider audience, and promote engagement.

Gaps in transportation infrastructure were identified as a key issue as young graduates and seniors without access to a car are unable to reach their place of employment. Opportunities exist to promote cost-share programs between employers, employees, and community partners to mitigate this issue. There is also a need to support volunteers and recognize their efforts in promoting community workforce priorities.





## 4. Grounding the Foundation

As with many similar communities across the United States, Tioga County's economy has undergone significant changes over the last decade. While there is considerable optimism for the community, achieving workforce targets, require that the County address the necessary foundational elements that will foster greater confidence in the long-term growth potential for the community. As evidenced through research and consultations conducted as part of the development of the strategy, collaboration, coordination, and shared efforts is a critical foundation for Strategy success.

### 4.1 Collaboration in Workforce Development

An important step in promoting opportunities for collaboration, coordination, and shared efforts is an understanding of existing and potential partners for workforce development. The following paragraphs provide a brief overview of Tioga County's workforce development system and existing stakeholders. Figure 8 highlights those stakeholders that are critical for the implementation, monitoring and success of workforce development initiatives in Tioga County.

The presence of TEAM Tioga; the regional partnership between Tioga County Economic Development and Planning Office (EDP), Tioga County Industrial Development Agency (IDA), and the Tioga County Local Development Corporation (LDC), is central to Tioga County's current workforce development efforts. TEAM Tioga has taken a comprehensive and holistic approach to its economic development strategy, with workforce development being interconnected. The partnership has combined forces with municipalities, privately-owned companies, entrepreneurs, and local government to stimulate growth and development in the area.

In addition to TEAM Tioga, key workforce stakeholders include the six local school districts and three BOCES, post-secondary institutions, other career & educational services, workforce, and economic development partners. Initiatives such as the Owego Apalachin Central School District STEAM Academy, the BT BOCES Professional Learning & Innovation Center, the SUNY Broome satellite campus in Owego, and Cornell Cooperative Extension, position the County as a skilled and viable talent source.

One of the key examples of effective collaboration by TEAM Tioga was the Accelerated Apprenticeship Program (AAP), a workforce development and training program initiative developed in partnership with the Tioga County Career Center and the New York State Department of Labor. The program also brought together key educational partners as the training was provided at the OACSD STEAM facility, while SUNY Broome provided both the curriculum and instructor for the program. The successful completion of the program allowed participants to continue in a four-year NYS Apprenticeship program with built-in pay increases based on performance.

### 4.2 Key Considerations

This research identified that Tioga County's workforce development structure is robust and provides effective workforce services and activities. However, opportunities do exist to promote collaboration among the various workforce stakeholders with a focus on promoting shared goals or opportunities. The EDP Office activities include industrial retention and attraction, small business support, development approval and planning assistance, grant and small business loan assistance, commercial revitalization and facade improvements, and farm and agricultural development assistance. Given these varied focus



areas, budget considerations, and limited staff complement, it is important that the EDP office and TEAM Tioga act as an intermediary or “convener” for collaboration across organizations in workforce development in Tioga County.

A collaborative governance model is one whereby all stakeholders make and implement decisions about how to address a problem together. The advantages of collaborative governance include the ability to implement policies and solve problems that would not be possible by one agency, as well as to increase community support. Examples of collaborative governance include funder partnerships, public-private partnerships, multi-stakeholder initiatives, social sector networks, and Collective Impact initiatives. Key examples of collaborative governance include the Strive Partnership of Cincinnati and the Chicago Regional Growth Corporation. The Strive collaborative was made up of 300 educational leaders, foundations, government officials, parents, and non-profit and advocacy groups, which focused on a “single set of goals, measured in the same way. In promoting opportunities for collaboration, the following five elements are critical for Tioga County:

- A shared set of goals
- A standard plan for measuring outcomes
- Mutually reinforcing activities
- Ongoing communication
- A coordinating or “backbone” organization

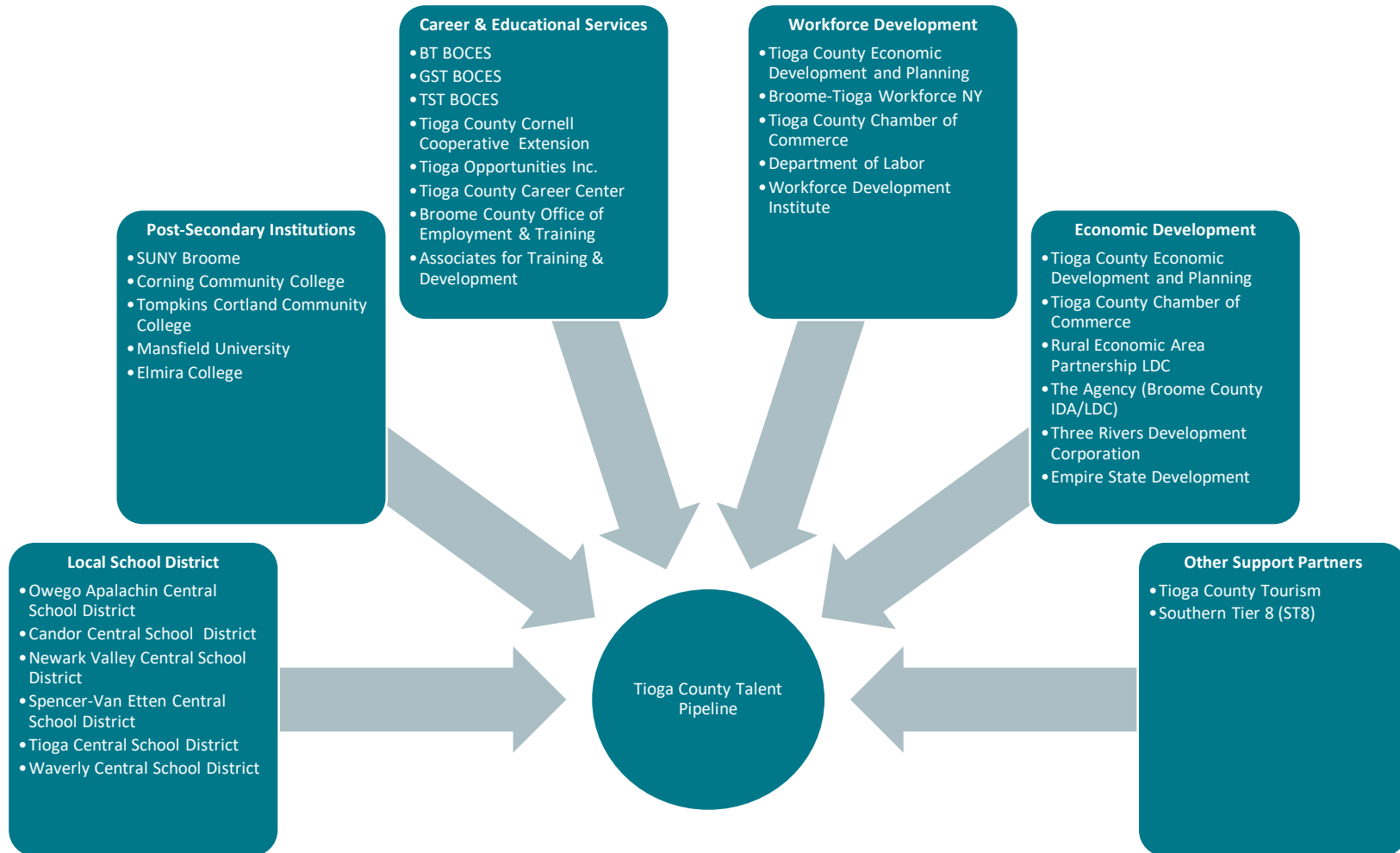
Overarching considerations for Tioga County’s EDP office include:

- Continue to expand its role as a ‘convener’ for workforce development collaboration in Tioga County.
- Investigate the feasibility of a part-time or full-time workforce coordinator to focus on workforce priorities.
- Investigate the feasibility of a workforce development advisory board, perhaps in partnership with the Broome-Tioga Workforce NY and Tioga County Chamber of Commerce, to facilitate more effective collaboration on workforce development issues in Tioga County.

These findings are further elaborated in the next section as part of the action plan for this Strategy.



Figure 8: Tioga County Workforce Stakeholders





## 5. Moving from Planning to Action

The Tioga County Workforce Development Strategy is intended as a living document for the community as it shapes the current and future local workforce to meet local economic needs now and into the future.

The successful implementation of the strategic action plan that follows will need the support and cooperation of all levels of government, educational institutions, organizations, companies, and individuals. It will require a commitment for collaboration and collective efforts, working in tandem with TEAM Tioga staff, to achieve the desired outcomes emerging through strategy implementation. It is this approach and commitment to the broader vision that will ensure a vibrant and robust community over the long term.

### 5.1 Vision

Tioga County exemplifies creativity and innovation, driving success and competitive positioning for our labor force and economy.

### 5.2 Recommendations

Based on the research and consultations to date, four distinct themes have emerged for the 2020-2025 Tioga County Workforce Development Strategy. They are collectively termed the '4-C's for Workforce Development' and are illustrated below.



Actions identified either support or build on existing initiatives that are underway across the County. There are significant opportunities for collaboration and cooperation among lead organizations, working collectively to support talent supply and demand alignment.



## **Recommendation #1: Create → Augment the Training & Skills Development Ecosystem**

### **Why is this important?**

The theme Create is focused on ensuring the creation, viability, and resilience of Tioga’s economy, supported through its talent. It calls for the County to examine and enhance the training and skills development ecosystem. This includes a focus on aligning worker skills with local employer needs, promoting ongoing training services and initiatives, emphasizing business recovery, and workforce reskilling post-COVID-19. The stated recommendations consider the goals of the 2020 Tioga County Strategic Plan, which identified the need for appropriate training of employees, given the County is facing an aging and declining workforce.

Consultation and research findings show a disconnect between employer needs and the skills of the local workforce and graduates. There is a significant opportunity to develop training programs in response to the rapidly changing business environment. Local school districts should be engaged in this effort to develop programming that is focused on technology skills and continuous learning that enables students to explore career pathways of interest, desired skills, and the growth industries in the area. It is also important to develop effective and enhanced training programs to reduce staff turnover and provide opportunities for aging workers to remain in the workforce. Building on current efforts<sup>17</sup>, providing mature aged workers with the ability to develop the technical skills required to compete in a job offers a unique opportunity to engage this population.

There are also significant opportunities for the County to target training & skills development in targets sectors (e.g., health care, advanced manufacturing, etc.). By tailoring the message to sectors of comparative strength locally, the County can best develop its talent attraction strategies.

### **Outcome**

An aligned talent pipeline and growing workforce enhances Tioga County’s economic presence in the regional and national marketplace, over the long term.

## **Recommendation #2: Connect → Enhance Partnerships and Collaboration between and among Stakeholders**

### **Why is this important?**

The theme of Connect emerged strongly as there is an identified need to ensure that workforce development efforts are well aligned, and efforts are maximized for the greatest return on investment. Enhanced partnerships between and among stakeholders for Tioga includes among school districts and academia, with the business community and other intermediary groups that support workforce development and labor market planning. This approach aligns with the Tioga County Economic Development & Planning 2019 Annual Report, which stipulates the need to connect local school districts and higher learning institutions, with employers, to create a highly qualified and skilled workforce pipeline.

Stakeholders identified that while school districts are exploring and providing programs that are

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<sup>17</sup> The Tioga Career Center customer-driven employment services and the Tioga Adult Learning lab.



reflective of business needs, there are opportunities to improve collaboration. A regional approach is essential here as it will ensure that best practices are shared, and workforce development efforts are better aligned. Consultations with Broome-Tioga BOCES lends a second lens to this theme. For example, while the Professional Learning & Innovation Center provides resources to advance curriculum, a gap exists with regards to professional partnerships. In this case, stronger partnerships between academia and industry are needed to bolster capacity and inform new programming streams. Deeper partnerships with business and academia will improve the consistency and availability of certifications and training opportunities that employers are demanding with those available locally and regionally.

There are also opportunities to increase awareness of existing programs offered by Tioga County and community partners. For example, the Owego Apalachin Central School District STEAM Academy, Building and Construction Trade Program, Professional Learning & Innovation Center, and Project STEAM 21. Project STEAM 21 is administered by the 21st Century Community Alliance and incorporates STEAM programs into the school district and the community. The program is currently pending renewal for 2021. This may require alternative strategies to continue to grow the local current and future workforce.

The Three Rivers Development Corporation's State of the Workforce Report 2020 identifies that increasing workforce participation rates to match national levels would solve existing workforce needs. Workforce participation can be increased by activating underutilized labor, (i.e.) individuals who are willing and able to work, but may lack the appropriate skills, experience, or accommodations to access employment. This includes seniors, veterans, individuals with disabilities, underemployed dual-career couples, and displaced service and retail workers.

### **Outcome**

A cohesive environment where academia, businesses, and community work together in a shared workforce development ecosystem.

## **Recommendation #3: Clarify → Reflect Tioga County's Sectors & Employers**

### **Why is this important?**

It is very common for select sectors to be perceived in a dated image. This particularly is true of sectors such as manufacturing, and to a lesser degree, tourism. As key sectors of Tioga County, there is a need to reflect positively through rebranding efforts of Tioga County's Sectors & Employers. This includes improved perceptions of skilled trades and manufacturing jobs, a supportive target sector environment, a focus on business recovery post-COVID-19, and access to relevant and reliable labor market information that portrays opportunity.

Based on the insights shared from local stakeholders, there is a perception that jobs in trades and primary industries, including manufacturing and agriculture, are 'blue-collar' and are low-paying and offer limited career advancement. These negative perceptions impact the job seeker's level of interest and impede the employer's ability to fill vacancies. This is concerning as there are jobs in demand and opportunities that require advanced technologies and skills. There is a recognized need to rebrand these employment opportunities and industries, focusing on the sophistication of the technologies they use and the quality of the jobs they offer.

Suggestions to support this rebrand include highlighting success stories of current employees, demonstrating the strength of career paths in these traditional industries, and working with educational



institutions across all levels to promote career pathways that span from entry-level to high skilled occupations. Related to this, reliable, accurate, and relevant labor market information is needed to support the decision-making process. As educators, workforce organizations, and economic development agencies explore solutions to address the supply and demand disconnect, there is a recognition that the availability and access to local Labor Market Information (LMI) will reflect the current and future demand for lower to high skilled occupations that are and will continue to be in demand. Another aspect of rebranding involves the current business environment. As the current COVID-19 pandemic continues to evolve, small businesses across Tioga County have been and will continue to be challenged by liquidity issues, job losses, and project stagnation. It is, therefore, critical that the County, in partnership with industry and community stakeholders, maximize dialogue with local businesses to identify issues, concerns, and potential opportunities to support their continued operations and future growth and expansion. Proactive initiatives, such as the COVID-19 Emergency Relief Loan Program,<sup>18</sup> should be promoted.

There are significant opportunities to place this workforce development strategy within the economic development and planning lens. Tioga County's Economic Development Strategy does not reflect current community priorities, particularly related to the impact of the recent pandemic. Capitalizing on the USDA Rural Economic Development Initiative (REDI) will support an updated economic development strategy that can give thought and consideration to synergies between workforce and economic development.

### Outcome

An accurate reflection of key economic sectors that offer good jobs and longer-term career development opportunities as part of the long-term viability of Tioga County's competitiveness.

## **Recommendation #4: Celebrate → Facilitate a common marketing effort for Tioga County**

### Why is this important?

Tioga County offers a unique quality of life through its many communities, an important asset in the promotion of the area as a place to call home, raise a family, and connect to nature. The focus on Celebrate encourages the County to reposition marketing efforts to attract workers and employers to settle in the County. Targeted Marketing includes promoting Tioga County's quality of life and community assets, mobilizing local businesses and community partners to retain talent, and advocating for Tioga's workforce priorities. To be successful in workforce development requires a strong brand presence as an attractive place to live, work, and do business.

Tioga County Tourism has made considerable progress in showcasing the abundance of natural assets such as the Finger Lakes region, the strong dining, and recreation activities, and event calendar. The County is fortunate because it offers a low cost of doing business, a strong sense of community identity and a beautiful rural living experience yet is still relatively close in geographic proximity to major urban and educational hubs. Messaging that highlights these competitive strengths combined with specific targeting of key worker industry groups should be prioritized. Those most receptive to this messaging will have a rural background, or a desire to experience rural living. These individuals would include

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<sup>18</sup> COVID-19 Emergency Relief Loan Program run through the Tioga County Industrial Development Agency (TCIDA). \$475,000 has so far been allocated to this program to provide financial aid to small businesses of 50 employees or less.



middle-aged millennials (late 20s early 30s) living in cities where they cannot afford to live and raise a family, such as New York City. By focusing on these target groups, Tioga County is selecting those individuals who are most likely to provide high value as residents, employees, and entrepreneurs.

Talent attraction efforts should also consider strategies for the placement of dual career partners. Research indicates that prospective employees in technical and professional fields often have a partner with a similar educational and professional background. Thus, employment and relocation decisions are often based on career options for not just one but both partners.

Additionally, COVID-19 presents a unique opportunity for the County to promote a shop and buy local message. As tourism in the short term will be primarily focused on regional travel, the more effective and responsive Tioga County is in promoting that it is open and ready to do business, the faster it may benefit from economic activity, and return to work for those impacted.

In addition to effective marketing, there is a need to advocate for the local workforce. Tioga County should continue to advocate for and seek solutions to needs and gaps that cannot be addressed solely at a regional level. This may include childcare, transportation, housing needs that impede workforce participation. The State of the Workforce Report 2020 identifies that lack of childcare was both a barrier to entry into employment, as well as a limiting factor to long-term employee retention in New York's Chemung, Schuyler, and Steuben Counties, and is applicable to Tioga County as well.

### Outcome

A shared Tioga brand presenting a unique value proposition is effectively marketed to local, regional, and international markets.

## 5.3 Action Plan

### 5.3.1 Interpreting the Action Plan

The level of priority should consider:

- The level of immediacy based on regional objectives
- The potential to contribute to an increase in the attraction and retention of talent in Tioga County
- The resources required (i.e., the capacity to implement given the current state)

The timeline assigned to each action may be operationalized as:

- Short-term – within a year
- Medium-term – 1-3 years
- Longer-term – 3-5 years

For each action presented, it is important to identify a lead organization, along with potential partner organizations that can contribute to implementation and monitoring.

### 5.3.2 Acronyms

The following table lists the acronyms used in the Tioga County Workforce Development Strategy and their respective descriptions.





Acronyms	Description
A4TD	Associates for Training & Development
B-T BOCES	Broome-Tioga BOCES
CCE Tioga	Cornell Cooperative Extension Tioga County
STEAM	Science, Technology, Engineering, Agriculture/Arts and Math
TC Chamber	Tioga County Chamber of Commerce
TCPDC	Tioga County Property Development Corporation
TCT	Tioga County Tourism
TEAM Tioga	Tioga County Economic Development and Planning
TCCC	Tioga County Career Center
TOI	Tioga Opportunities Inc.
NYS - A	New York State Department of Labor Registered Apprenticeship programs



## Recommendation #1: Create → Augment the Training & Skills Development Ecosystem

Create		Potential Lead	Potential Partners	Timing
<b>Action 1: Align Worker Skills with Local Employer Needs</b>				
1	Examine opportunities to encourage continuous experiential learning (job shadowing, placements, dual credit, and pre-apprenticeship) whereby students receive on-the-job experience and earn micro-credentials to demonstrate skills, knowledge, and abilities.	TEAM Tioga	School districts	Short
2	Pilot an annual youth employment fair to increase access of youth to employment, training, and career resources and services. This may be a virtual event that would suggest a County-wide initiative.	School Districts	Tioga County Business Services TEAM	Short to Medium
3	In collaboration with school districts and post-secondary, develop a targeted digital skills training/reskilling to increase skills alignment with employer needs.	TEAM Tioga, School Districts, Post-secondary	TC Chamber, TCCC, A4TD, Local employers	Medium
4	To promote employee retention, support the establishment of career laddering within local businesses to enable upskilling and workplace advancement for employees.	TEAM Tioga	TC Chamber, TCCC, Local employers	Medium
5	To improve job retention and career growth, increase local access to soft skills training programs to promote broader access and participation. (Skillsoft may be one option to explore).	TEAM Tioga	TC Chamber, TCCC, Local employers	Medium
<b>Action 2: Improve Awareness of Ongoing Training Services and Initiatives</b>				
1	Investigate the feasibility of a part-time or full-time workforce coordinator to support strategy implementation and ongoing collaboration to address workforce priorities.	School districts	TEAM Tioga	Short
2	Promote programs such as the Accelerated Apprenticeship Program (AAP) to ensure skills training in the manufacturing sector.	TEAM Tioga	NYS-A	Short
3	Create a regional database that highlights the range of workforce training programs and services provided by Tioga	TEAM Tioga	TC Chamber	Short to Medium



	County and partners. Provide the database as a digital version with links to training providers. This increases access to information resources.			
<b>Action 3: Reskill Workforce Post COVID-19</b>				
1	Carry out a business survey to inform on and respond to the specific impacts of COVID-19 on businesses and their workforce.	TEAM Tioga	TC Chamber, TCCC	Short
2	Develop and promote workplace supports to best position employers and employees to successfully interact with customers and clients for quality customer service experience.	TEAM Tioga	TC Chamber, TCCC, Public Health	Short to Medium
3	Launch digital skills and awareness programs focussed on data visualization and machine learning to enable workers to operate in a digital environment.	TEAM Tioga, School Districts, Post-secondary	TC Chamber, TCCC, A4TD, Local employers	Medium to Long



## Recommendation #2: Connect → Enhance Partnerships and Collaboration between and among Stakeholders

Connect		Potential Lead	Potential Partners	Timing
<b>Action 1: Improve Collaboration across Academia by Employing a Regional Lens</b>				
1	Maintain regular interaction and discussions with school districts to understand their challenges fully, and promote opportunities for collaboration for program development, design, and delivery.	TEAM Tioga	School districts	Short
2	Continue to promote the OACSD STEAM Academy to maximize interest and strengthen a regional competitive advantage.	TEAM Tioga	CCE, BOCES	Short
3	Building on the existing collaboration among school districts (Owego & Waverly), facilitate opportunities to create a centralized collaborative model that engages other school districts and BOCES to share best practices, programs, and services. The model may be piloted in select districts for evaluation and fit for the County.	TEAM Tioga	School districts, BOCES	Short
<b>Action 2: Improve Collaboration between Businesses and Academia</b>				
1	Continue to advocate for greater awareness of the importance of employability skills and the development of an employer-driven, competency-based career pathways system.	TEAM Tioga		Short
2	Building on the AAP, explore opportunities to promote the four-year NYS Apprenticeship program programs in the County.	TEAM Tioga	NYS-A	Short
3	Undertake an annual labor force survey to understand current skill sets and career aspirations of job seekers, students, recent graduates, underemployed, and unemployed.	TCCC	TEAM Tioga	Short
4	Establish a Talent Supply Table that brings together business, industry, educators, and employment support organizations to ensure open dialogue, knowledge exchange, and information sharing. The table may meet 2-3 times a year.	TEAM Tioga		Short
5	Establish a “speakers bureau” that links local employers with students in a school setting to share success stories, describe workplace experiences, and promote career exploration.	TEAM Tioga	TC Chamber, Local employers	Medium



Action 3: Enhance Business Community Supports				
1	Create a framework to ensure that key insights related to employer needs for skills and training gathered through local economic development and business member associations, is aggregated, and examined for appropriate action. A red flag system will support the identification of pressing issues.	TEAM Tioga		Medium
2	Explore the feasibility of a public-private recruitment coalition (i.e., Colorado Technology Recruiting Coalition) to formalize and share talent recruitment and retention strategies, align messaging, and strengthen local talent alignment.	TEAM Tioga		Medium
3	To mobilize the underutilized workforce, create a business case that demonstrates the Return on Investment of retaining or rehiring workers who have retired or are semi-retired.	TEAM Tioga	A4TD	Medium



### Recommendation #3: Clarify → Reflect Tioga County’s Sectors & Employers

Clarify		Potential Lead	Potential Partners	Timing
<b>Action 1: Improve Perceptions of Select Sectors</b>				
1	Engage sector representatives to act as ‘local champions’ and promote current day workplaces and occupations, reflecting manufacturing advancements, showcasing skilled trades, promoting agricultural careers, and demonstrating career advancement opportunities in such sectors as tourism, manufacturing, and areas of skilled trades.	TEAM Tioga	TC Chamber, Local employers	Short
2	Sponsor a classroom competition in middle school to empower students to create a campaign to promote sectors and occupations that have negative perceptions. This can be used to engage students and parents in career discussions.	School districts, BOCES	TEAM Tioga	Short
3	Continue to promote initiatives that showcase STEAM in Tioga and regional school districts, for example, Lockheed Martin’s Engineers Day.	TEAM Tioga	TC Chamber, Local employers	Short
4	Work with schools to create practical shop classes that include job camps, job shadowing, guest speakers and pre-apprenticeship programs, and programs such as the OACSD Building and Construction Trade Program.	TEAM Tioga	School districts, BOCES	Short to Medium
5	Increase student exposure to select occupations through shop classes in the school curriculum, with a focus on promoting the complete supply chain opportunities spanning all skill levels, for example, managerial positions and industrial welders in the manufacturing sector.	TEAM Tioga	School districts, BOCES	Short to Medium
<b>Action 2: Create a Supportive Environment for Target Sectors</b>				
1	Develop a business resource guide that assists businesses with human resources management, recruitment and retention, talent attraction, and access to information on grants, support programs.	TEAM Tioga	TC Chamber, Broome-Tioga Workforce NY	Short
2	Develop a business workshop series in satellite locations across Tioga County to increase awareness of services and programming available to small and medium businesses.	TEAM Tioga	TC Chamber	Medium



3	Explore the opportunity to establish an incubator and/or co-working space to support business growth and expansion. Growing these businesses will support job creation.	TEAM Tioga	Post-secondary, STEAM academy	Medium to Long
<b>Action 3: Focus on Business Recovery Post COVID-19</b>				
1	In conjunction with workforce partners, develop a diagnostic tool that will help businesses to identify skills gaps in their business continuity plan and emergency preparedness.	TEAM Tioga	Broome-Tioga Workforce NY, TC Chamber	Short
2	Promote existing initiatives such as the COVID-19 Emergency Relief Loan Program and those available through the Workforce Investment Board to support workforce transition back to work.	TEAM Tioga		Short
<b>Action 4: Ensure current and ongoing access to labor market information</b>				
1	Conduct an annual Employer Survey to inform a current and reflective profile of employer job demand, occupation vacancies, and labor market challenges.	TCCC	TEAM Tioga	Short
2	Seek and procure funding to implement this workforce development strategy, including projects that connect secondary and college students and graduates with local businesses.	TEAM Tioga		Short
3	Leverage available labor market tools to craft target messaging that supports the decision-making process for employers, job seekers, students, and educational institutions.	TEAM Tioga		Medium
4	Maintain an aggregated assessment of enrollment and graduation data across all educational institutions to inform on talent pipeline development and alignment between talent development and economic growth sectors.	TEAM Tioga	CCE Tioga	Medium



## Recommendation #4: Celebrate → Facilitate a common marketing effort for Tioga County

Celebrate		Potential Lead	Potential Partners	Timing
<b>Action 1: Promote Tioga County's Quality of life and Community Assets</b>				
1	Develop a workforce marketing profile that highlights Tioga County's lifestyle, affordability, cultural experiences, and recreational opportunities. Provide the profile to local employers and community partners to market the County and aid in recruitment efforts.	TEAM Tioga		Short
2	Raise the profile of local businesses and Tioga County through pop-up locations in post-secondary institutions.	TEAM Tioga	TC Chamber	Short to Medium
3	As part of an attraction effort, coordinate with academia to promote Tioga County's employment opportunities to alumni who have left the County.	TEAM Tioga	Post-secondary	Medium
4	Coordinate with community partners to provide authentic and transformative tourism experiences that attract tourists and potential residents <sup>19</sup> .	TCT		Medium
5	Develop a centralized recruitment tool/site where employers post jobs, and where job seekers can find local opportunities. Promote this site within and outside of the County to expand talent attraction efforts.	TEAM Tioga	Broome-Tioga Workforce NY, TC Chamber	Medium to Long
<b>Action 2: Mobilize Local Businesses and Community Partners to Retain Talent</b>				
1	Using common messaging across all Partners, develop a social media campaign using platforms that are popular among students, youth, and young professionals.	Tioga County	TEAM Tioga	Short to Medium
2	Engage local industry associations/business associations as key stakeholders to advance employer outreach initiatives such as business surveys, resources, and information dissemination.	TEAM Tioga		Short to Medium

<sup>19</sup> Regional tourism is an attractive talent attraction tool, especially given current pandemic environment which has limited international and national travel.





Action 3: Advocate for Tioga’s Workforce Priorities				
1	Advocate for the REAP Zone initiatives to stimulate economic and community development in the County	REAP LDC	TEAM Tioga	Short
2	Support the development of a diversity of affordable housing options to encourage talent attraction and retention.	TOI	TEAM Tioga; TCPDC	Medium
3	Continue to seek out opportunities to engage with community partners, including childcare, transportation, and housing organizations, to influence local decisions pertaining to the needs of the workforce.	TEAM Tioga	TOI; TCPDC; School Districts	Medium
4	Investigate and advance broadband capacity across the County.	Tioga County	TEAM Tioga	Long



## 6. Implementing for Desired State

In preparing this Workforce Development Strategy, Tioga County has taken proactive steps to mobilize workforce priorities and facilitate the creation of robust workforce pipelines. While the Strategy lays down clear recommendations to achieve desired outcomes, the Strategy will be successful only if the actions are undertaken, and if there is the measurability of performance. Figure 9 identifies key performance indicators for workforce actions to result in the desired outcome.

As reflected throughout this Strategy, the focus must be on laying the foundation for the Strategy, which calls for strengthening collaboration among existing partners and fostering relationships with new stakeholders. Implementation will be a collective effort, particularly given the structure of TEAM Tioga. The Economic Development and Planning (EDP) office carries out both economic and workforce development functions, with clear overlaps in business support, job creation, skills development, and talent alignment. There is a strong need for economic and workforce development functions to work together to ensure success for a skilled, resilient, and aligned labor market.



Figure 9: Key Performance Indicators for Workforce Actions

