

A requirement of the Community Services Block Grant Organizational Standards

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Board of Director Approval 02.25.2019

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Chapter 1: Introduction

HISTORY OF COMMUNITY ACTION

Community Action Agencies (CAAs) are federally designated as the frontline resource for people living in poverty, providing direct services and support for education, employment, and family support services for families with low income. In addition to the direct services they provide, CAAs are leaders in promoting community economic development through community partnerships and inter-agency collaborations. Incorporated in 1965, Tioga Opportunities, Inc. (TOI) was designated as a CAA under the provision of the Economic Opportunity Act of 1964 signed by President Lyndon B. Johnson in his declaration of the “War on Poverty.” For over 50 years, TOI has been serving residents in and around Tioga County, New York, as a proven local grassroots and federally designated anti-poverty agency. The Agency is governed by a tripartite Board of Directors equally represented by the public, private, and consumer sectors to provide community members with programs including, but not limited to, safe and affordable housing, financial education and stability, community awareness, and health and wellness programs. The governing board’s composition of one-third publicly elected officials, one-third representatives of low-income people, and one-third representatives of the private sector allow for various viewpoints and expertise on both the issues and solutions affecting those in poverty.

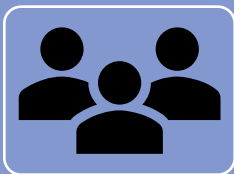
THE THREE NATIONAL COMMUNITY ACTION GOALS

TOI makes an important and unique contribution to the human services network in Tioga County as **we have the responsibility to ensure that people receive all the available benefits**. The following goals express what Community Action hopes to achieve over the long-term for individuals, families, and communities of low-income. These goals have been adopted so that all CAAs could talk about their



GOAL 1

- Individuals and families with low income are stable and achieve economic security



GOAL 2

- Communities where people with low incomes live are healthy and offer economic opportunity



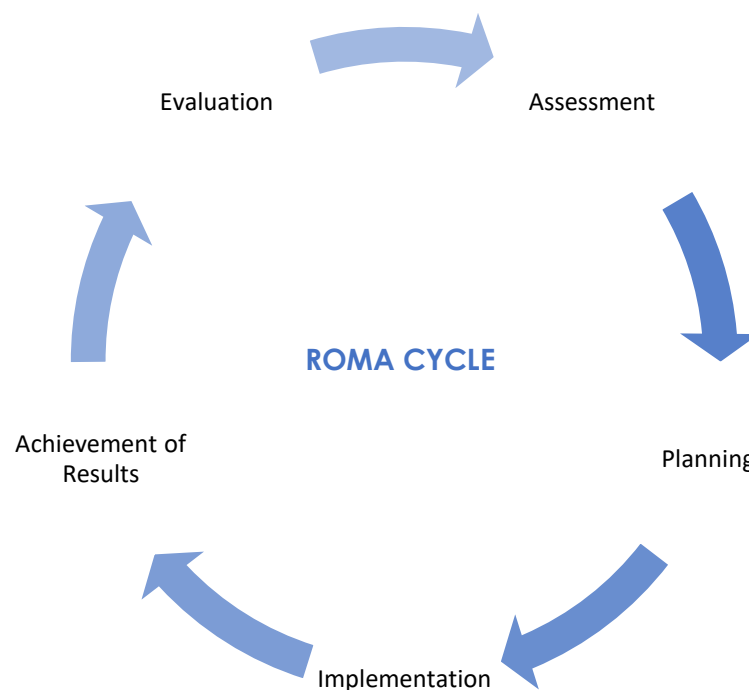
GOAL3

- People with low incomes are engaged and active in building opportunities in communities

results using one or more of these goals. TOI is a part of a network of 1,000 CAAs throughout the United States.¹

THE ROMA FRAMEWORK

In 1998, the CSBG Act mandated the implementation of a comprehensive performance-based management system called Result Oriented Management and Accountability, commonly referred to as “ROMA,” across the entire Community Action network. Simply put, ROMA is a framework including a set of principles and practices associated with the operation of services and which is implemented through developed systems. The ROMA cycle typically begins with an assessment, followed by planning, implementation, and achievement of results. The cycle is always continuous, and evaluation can take place at any stage of the cycle. More often than not, final evaluation is had after results are achieved (as shown below).



As a result of the Three National Goals and ROMA, performance standards and a uniform system of national reporting indicators have been adopted by all CAAs to better assess agencies’ effectiveness and focus on impacts and benefits, or outcomes, of agency services. Prior to these developments, CAAs would focus primarily on describing and reporting the services delivered. Consequently, programs were single-service focused and the root or underlying causes of poverty were not addressed. However, by adopting the Three National Goals, ROMA, and an outcome-driven approach, TOI has been one of the many CAAs across the nation to better understand what happens to the families served, the communities in which we work, and how our agencies have evolved by linking the identified results to the needs and to the strategies employed by agencies to meet those needs.

¹ Illinois Association of Community Action Agencies, The History of Community Action, <http://www.iacaanet.org/history.php>

AGENCY PLANNING PROCESS

Information-based strategic plans have been a foundation of the Community Action approach since the program's earliest days; they are increasingly important in these tight economic times to support accountable and sound management practices. As a Community Action Agency, TOI has been tasked by the CSBG authorizing statute to identify community needs (as they relate to the elimination of poverty) and resources, and then create strategies that use existing resources (and develop new ones) to address needs. This is completed through the Community Needs Assessment which is also the first phase of the ROMA Cycle.



The subject of the assessment is not only the community's needs, but also its resources or assets. Further, it affirms that the Assessment is to be used to develop TOI's long range strategy as well as its shorter-term activities. As defined by Community Action Partnership, a Community Needs Assessment is "A process conducted by all Community Action Agencies every three years to determine the underlying causes and conditions of poverty within the community they serve and identify the available resources to address the unmet needs of the community's most vulnerable residents. The Community Needs Assessment is the first phase of the Results Oriented Management and Accountability (ROMA) Cycle, grounding and guiding the work to develop and implement programs and services that lift families and communities out of poverty. The execution of a regular Community Needs Assessment is a requirement

for all CSBG Eligible Entities, and one of the nine category's (Category 3) of the Organizational Standards."²

EXPECTATIONS FOR THE COMMUNITY ASSESSMENT

This assessment measures more than just individual, family, and social service needs. Specifically, this assessment will allow TOI leaders to:

- Understand the full scope of emerging and constant needs and service gaps of economically insecure residents of the Tioga County service area
- Educate the community and its leaders about the needs and service gaps
- Choose the role that TOI will play in meeting some of those needs and in lowering current and future barriers to community residents' economic security
- Identify partnerships with others in the community that can help fulfill the CAA mission and address identified gaps
- Identify public policy issues to which TOI should provide input
- Demonstrate to the community that TOI has strategically chosen the most important issues to address, alone or with partners, and is using its resources most effectively

BREAKING THE CYCLE OF POVERTY

In order to break the cycle of poverty, CAAs must also include an approach based on changing behavioral patterns that support asset development and address the underlying issues keeping households vulnerable. Although asset development is often thought of in terms of economic resources, like buying a home or putting money aside in a savings account, it can also be considered in terms of human capital, such as skills or education.⁴ It is shown that attaining assets can increase your chance to stay where you live; helps you think positively about your future; enables you to stick to a career choice; helps you get better terms from the bank; provides a foundation for risk taking; increases your ability to make choices; improves the well-being of children; increases community connections; and increases political participation.⁵

"Asset building is an anti-poverty strategy that helps low-income people move toward greater self-sufficiency by accumulating savings and purchasing long-term assets. Helping people purchase assets, as opposed to simply increasing their income, provides stability that may allow them to escape the cycle of poverty."³

In most cases, the underlying issues affecting a wide range of health and well-being risks and outcomes are derived from the conditions in which people live, learn, work, and play. These conditions are also referred to as social determinants of health (SDOH).⁶ The following graphic displays the 12 key domains

² Community Action Partnership, Community Needs Assessment Resource Guide, September 15, 2018.

<https://communityactionpartnership.com/publication/toolkit/community-needs-assessment-resource-guide/>

³ Indiana Asset Development and Financial Literacy Initiative, *Asset Development* (2010),

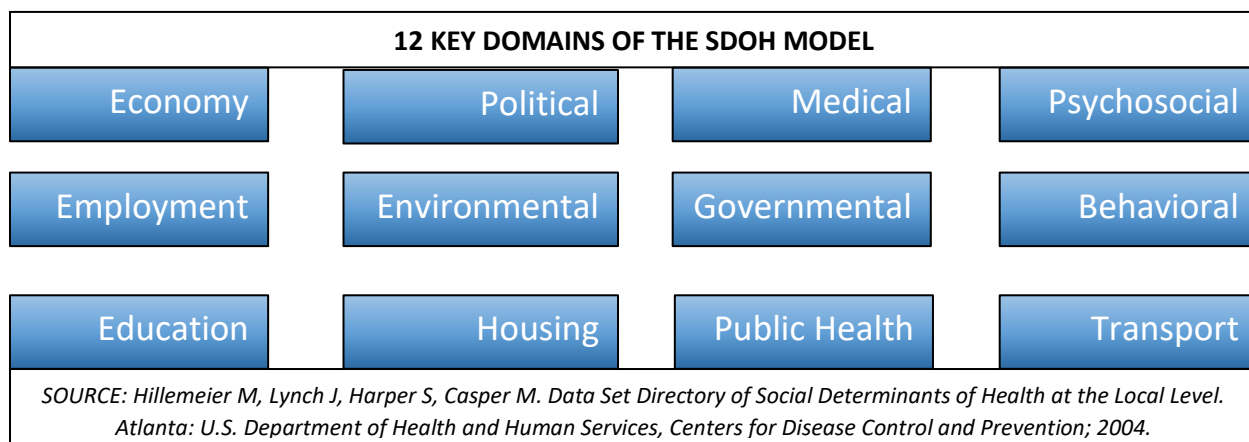
https://www.iidc.indiana.edu/styles/iidc/defiles/CCLC/migAsstDev/AssetDev/Intro_to_Asset_Development_audio.ppt

⁴ Ibid

⁵ Ibid

⁶ Centers for Disease Control and Prevention, *Social Determinants of Health: Know What Affects Health*, <https://www.cdc.gov/socialdeterminants/index.htm>

of the SDOH model, each of which contain their own key indicators that contribute to the underlying conditions. These domains are frequently used to conceptualize and link socioenvironmental factors impacting the health of populations.⁷ Resources that enhance quality of life can have a significant influence on population health outcomes. Examples of these resources include safe and affordable housing, access to education, public safety, availability of healthy foods, local emergency and health services, and environments free of life-threatening toxins.⁸ Understanding the relationship between how population groups experience these conditions and the impact of their attributes on health is fundamental to the social determinants of health. It is critical that decisions regarding how to improve health and eliminate disparities are integrated into the larger picture of community characteristics that promote or endanger health and well-being. An effort to do this can be seen throughout the *Statistical*



Profile of Tioga County section of this assessment, where connections to these social determinants are highlighted.

STATE OF THE GRANTEE

With the understanding that Community Action Agencies are more than just service providers, Tioga Opportunities, Inc. staff embraces a new approach which includes the following key components:



⁷ Hillemeier M, Lynch J, Harper S, Casper M. *Data Set Directory of Social Determinants of Health at the Local Level*, Atlanta: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention; 2004

<https://www.cdc.gov/socialdeterminants/index.htm>

⁸ Healthy People 2020, *Social Determinants of Health*, <https://www.healthypeople.gov/2020/topics-objectives/topic/social-determinants-of-health>

Vision

An innovative, evolving organization that promotes strong, inclusive communities and successful, thriving people.

Mission

TOI creates partnerships that strengthen communities while empowering individuals and families to achieve independence and enrich their quality of life.

Services at Tioga Opportunities, Inc.

At Tioga Opportunities, Inc., over 85 staff members collaborate to provide the following services to Tioga County residents.

SERVICES	PROGRAM	AGENCY DEPARTMENT
Safe and Affordable Housing	Home Repair	Housing Services
	Rental Apartments for Older Adults and People with Disabilities	
	Rental Assistance	
	Energy Efficiencies and Weatherization	Energy Services
	Radon Testing and Mitigation	
	Residential Safety and Health Improvement	Housing Services and Energy Services
Financial Education and Stability	Budget Counseling	Agency-Wide
	Credit Building	
	Financial Literacy	
	Home Appliance Loans	Community Development
Community Education, Awareness and Outreach	Caregiver Tools	Family Services
	Social/Recreational Activities for Older Adults	
	Newsletters and Social Media Outreach	Agency-Wide
	Health Education	
	Educational Presentations	
	21 st Century	Community Development
	Community Learning Center	
	Landlord Education	Housing Services
Health and Wellness	Exercise for Older Adults	Family Services
	Family Planning	
	In-Home Care Services	
	Respite Services	
	Information and Assistance	
	Medicare Insurance Counseling	
	Nutrition Services – Congregate Dining	
	Home Delivered Meals for Older Adults	
	Nutritional Counseling	
	Women, Infants, and Children (WIC)	
	Transportation Services	Community Development

	Air Service Quality	Energy Services
Collaborations	AARP Income Tax Preparation	Agency-Wide
	County Emergency Site	
	Driver Safety Courses	

Chapter 2: Methodology

This Community Needs Assessment includes an update of the information that Tioga Opportunities, Inc. gathered since the last agency assessment. The subject of this assessment is the needs of Tioga County. While Tioga Opportunities, Inc. has wide discretion in choosing the priorities for their Community Action Plan, TOI is directed to base that plan on a complete analysis of the community-wide conditions in order to address verified and urgent local needs. This document is unique within Tioga County and New York State in that it offers a focus on local conditions, analyzing the economic opportunities and barriers for all residents who are at risk of remaining or becoming economically insecure. It also identifies existing and potential resources to expand opportunities and prepares the TOI leadership team to plan a multi-year strategy.

The *Statistical Profile of Tioga County* section contains a profile of Tioga County, including the target population and its characteristics and similar indicators of need. This profile contains comprehensive statistical data on demographic and socioeconomic conditions and is significant because it shows the situation of those who don't currently qualify for agency services but who may in the near future, such as those whose income is higher than the Federal Poverty Guideline (FPG). This would include those eligible for affordable housing programs and LIHEAP. Low-wage workers and retirees who are economically vulnerable and at high risk of experiencing periods of crisis and poverty may also be affected by economic development strategies. This section reflects the secondary data gathering phase including updated "observed" data from sources such as the U.S. Census Bureau, Bureau of Labor Statistics, New York State Department of Health, as well as local reports including the Tioga County Housing Study, Tioga Tells: Quality of Life Assessment, the Community Foundation for South Central New York Community Assessment, and more.

The following section, called the *Perceived Profile of Tioga County*, includes a primary data collection of community interviews. Interviews were conducted to complement the observed data and provide brief understandings of the perceived needs in Tioga County. Specifically, both stakeholders and TOI customers were asked to offer insight regarding the health of the community, the performance of its institutions, and the conditions most affecting its residents. Additionally, the study probed to produce insights about community assets and protective factors that can be brought to bear on community challenges. Since only a small number of interviews were conducted, Tioga Opportunities, Inc. considers the analysis a reinforcement of the observed data reported in the previous section. Data is also included from the 2018-2019 Tioga Tells: Quality of Life Assessment, which explored perceptions of quality of life in Tioga County through a county-wide survey and over 12 focus group discussions. From these sets of data, TOI draws conclusions of the perceived profile of Tioga County.

From this primary and secondary data, an analysis of perceived and observed conditions was developed. The report presents findings and recommendations in the section of the assessment titled *Discussions of Trends in Tioga County*.

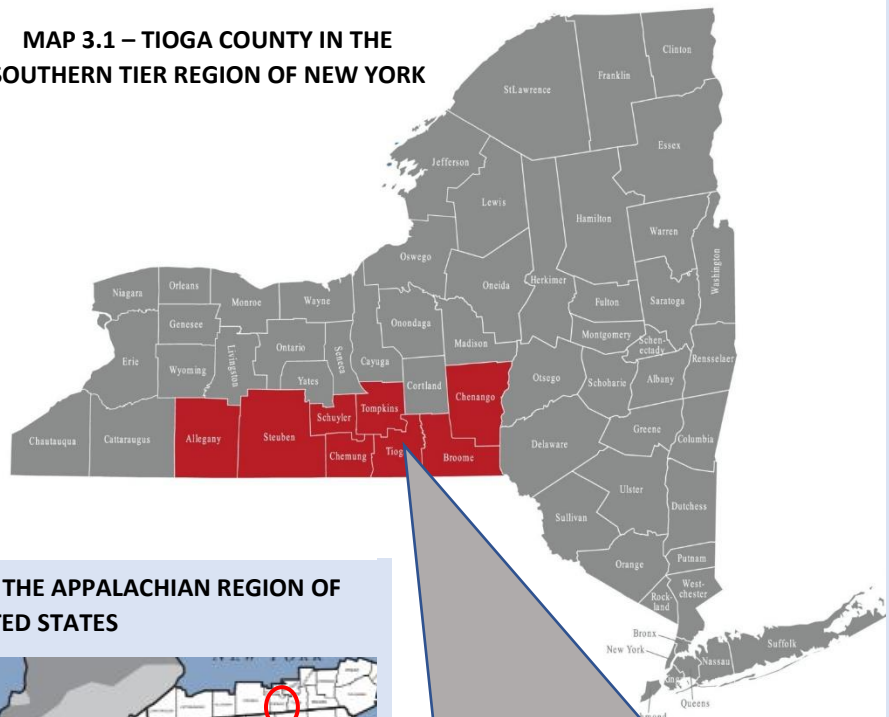
Chapter 3: Statistical Profile of Tioga County

REPORT AREA

Geographic Location

The report area is a predominantly rural area located in South Central New York (highlighted in red below) called Tioga County. Tioga County is uniquely positioned in that it shares a border with both New York and Pennsylvania counties (MAP 3.1). In New York, Tioga is bordered by Chemung, Tompkins, Cortland and Broome Counties and in Pennsylvania, Tioga borders Susquehanna and Bradford Counties. Tioga County is also considered part of the Appalachian Region of the United States, “which is a 205,000-square-mile region that follows the spine of the Appalachian Mountains from southern New York to northern Mississippi.”⁹

MAP 3.1 – TIOGA COUNTY IN THE SOUTHERN TIER REGION OF NEW YORK



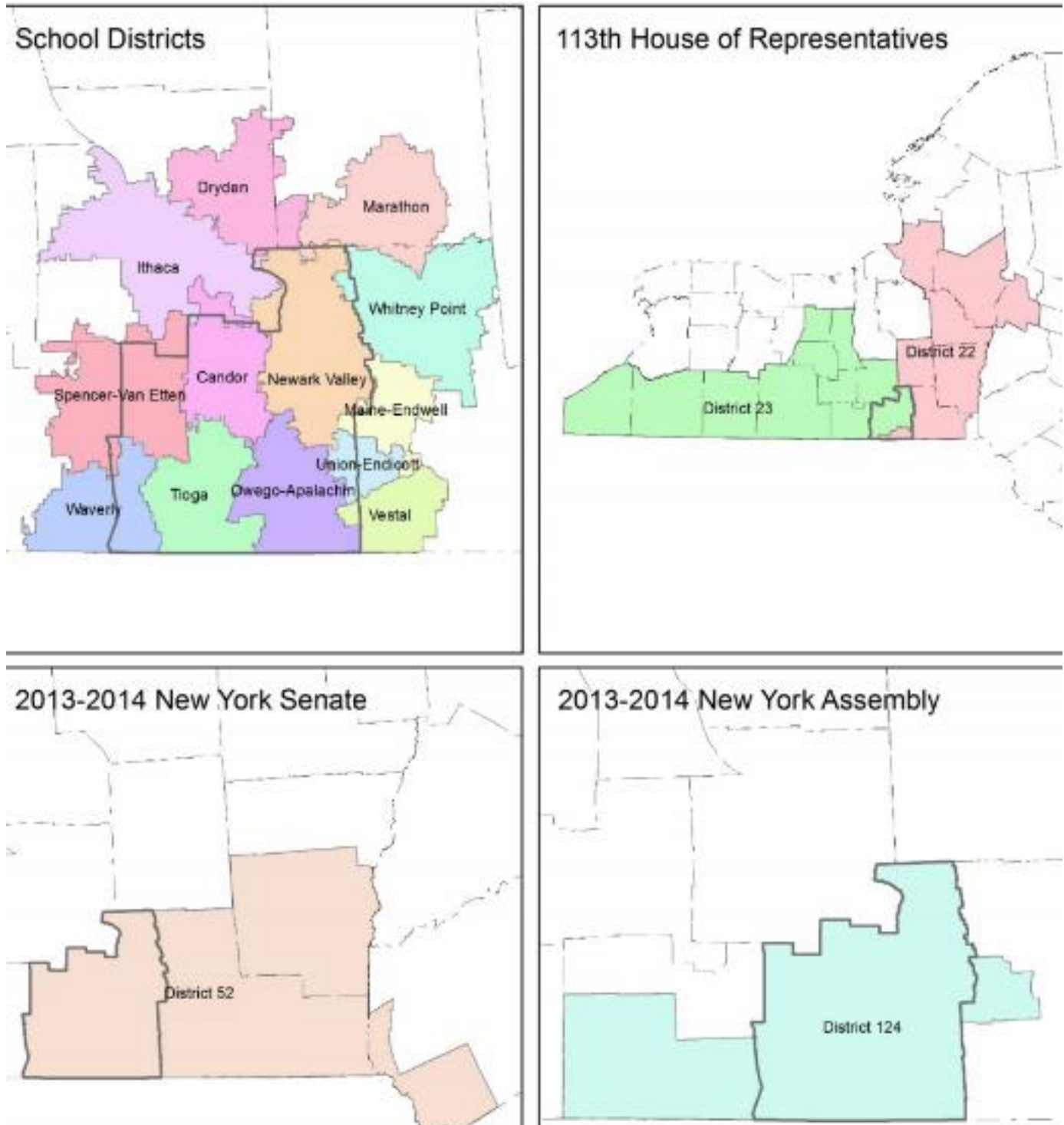
MAP 3.2 – TIOGA COUNTY IN THE APPALACHIAN REGION OF THE UNITED STATES



MAP 3.3 – TIOGA COUNTY AND ITS NEARBY COUNTIES

⁹ Appalachian Regional Commission, *The Appalachian Region*, https://www.arc.gov/appalachian_region/TheAppalachianRegion.asp

MAP 3.4 – TIOGA COUNTY OVERLAP WITH SCHOOL AND POLITICAL DISTRICTS



Source: 2017 Tioga County Profile, Cornell Program on Applied Demographics

Land Use

Tioga Opportunities, Inc. serves all of Tioga County, which consists of 331,940 total acres of land area¹⁰ and 33 miles of the Susquehanna River.¹¹ The Tioga County Official Highway Map reports Tioga County as 519 square miles, while the U.S. Census reports it as 523 square miles.¹² The quaint villages and rolling hills within Tioga County provide a variety of land use options to residents, including agricultural production and public parks. TABLE 3.1 to the right displays the land use of Tioga County as of 2013.

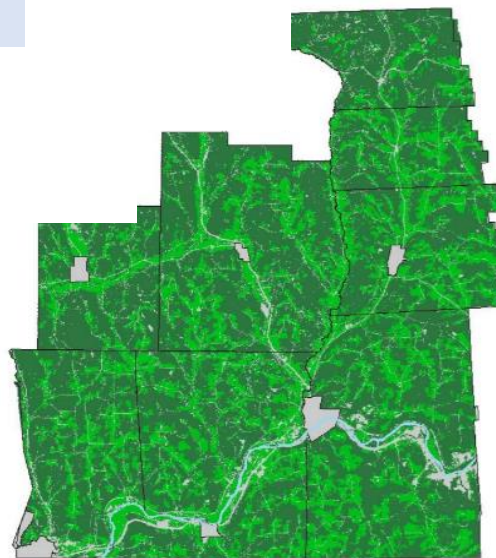
TABLE 3.1 - TIOGA COUNTY LAND USE, 2013	
Description	Parcel Count
Agricultural Properties	806
Commercial Properties	1,002
Community Service Properties	355
Industrial Properties	97
Public Parks, Wild, Forested and Conservation Properties	278
Public Service Properties	492
Recreation and Entertainment Properties	88
Residential Properties	17,201
Vacant Land	5,549
Total Parcels in All Broad Use Categories	25,868
<i>Source: 2015 Tioga County Farmland Protection Plan Update</i>	

Tioga County is considered the 42nd largest county in New York State by area,¹³ and approximately 32.5% of its land is in farms.¹⁴ Although some large (500-999 acre) and very large (1,000 acre or more) farming operations do exist within the county, most operations are between 50 to 179 acres.¹⁵ Also varying in size are Tioga County's various parks, including state parks, conservation centers, public parks, and nature reserves. Each community within Tioga County has parks which are known to host events and activities such as camping, picnics, wedding and graduation celebrations, hiking, tubing and skiing, fishing, and athletics.

MAP 3.5 – Agricultural Activity in Tioga County



Source: Tioga County GIS



¹⁰ Tioga County Farmland Protection Update, 2015, <https://www.tiogacountyny.com/media/5557/tioga-county-ag-farmland-protection-plan.pdf>

¹¹ Tioga County Public Health Community Health Assessment, 2019-2024, <https://www.tiogacountyny.com/media/7278/tioga-county-community-health-assessment-20192024.pdf>

¹² Team Tioga, August 16, 2018, *The Mystery Miles of Tioga County* [Instagram Photograph]. Retrieved from <https://www.instagram.com/p/BmjWtnjiLCX/>

¹³ New York State, Village of Owego Comprehensive Review Report, June 2016. Financial Restructuring Board for Local Governments. <https://frb.ny.gov/recsDeterms/reports/VillageofOwego-ComprehensiveReview.pdf>

¹⁴ Tioga County Farmland Protection Update, 2015

¹⁵ Ibid

POPULATION DEMOGRAPHICS

Composition and Density

Within its nine towns and six villages reside 49,045 people, 49.5% of whom are male and 50.5% of whom are female.¹⁶ According to the 2010 U.S. Census, 65.66% of the Tioga County population is considered rural and the population per square mile is 98.6.¹⁷ MAP 3.6 below illustrates the population density of Tioga County by municipality. Within the service area, population centers can be found in the Villages of Owego and Waverly.

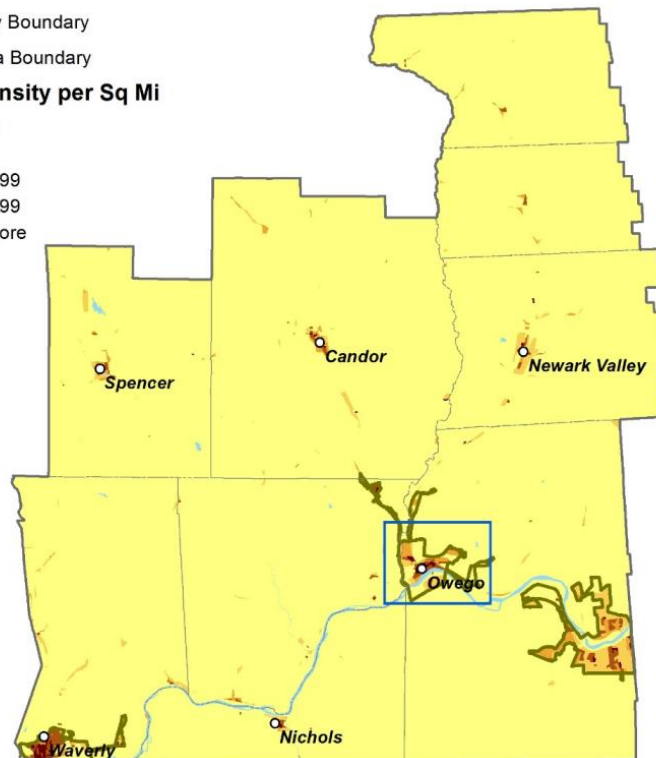
MAP 3.6 – TIOGA COUNTY 2010 POPULATION PER SQUARE MILE AT BLOCK LEVEL

Legend

- ⊙ City
- Village
- SubCounty Boundary
- Urban Area Boundary

Population Density per Sq Mi

- Under 500
- 500 - 999
- 1,000 - 1,999
- 2,000 - 4,999
- 5,000 or more
- Water



Source: 2017 Tioga County Profile, Cornell Program on Applied Demographics

¹⁶ 2018 American Community Survey, 5-Year Estimates

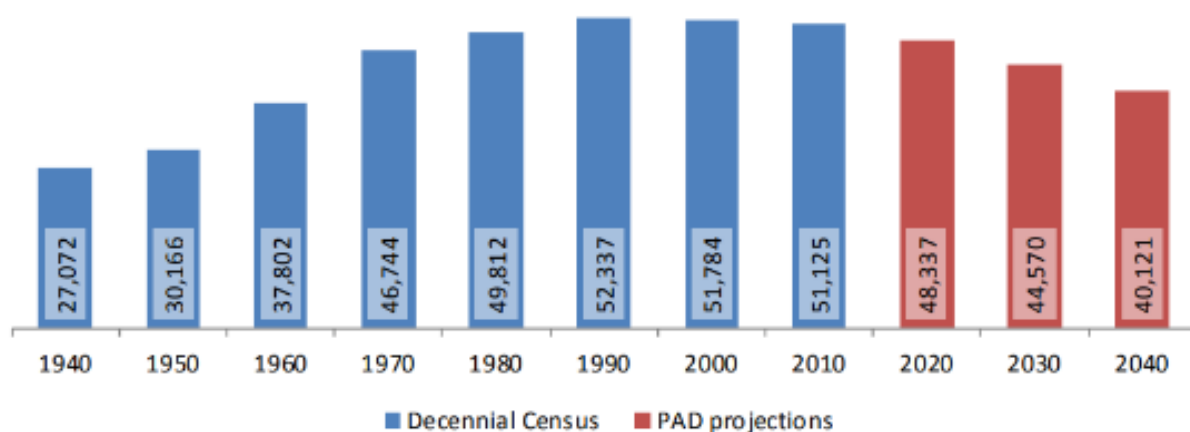
¹⁷ U.S. Census Bureau, Quick Facts, Tioga County, NY. July 1, 2019. <https://www.census.gov/quickfacts/tiogacountynewyork>

As TABLE 3.2 below reveals, Tioga County has seen a decline in its population within each municipality since 2010. CHART 3.1 offers a future snapshot of the total population trend of Tioga County. That is, between 2010 and 2040, Tioga County can expect to lose 11,004 residents.

TABLE 3.2 - SUB COUNTY POPULATION CHANGE 2010 - 2015				
Area	Total Population		Difference	
	2010 Base	2015	Count	%
New York State	19,378,087	19,795,791	417,704	2.2%
Tioga County	51,123	49,453	-1,670	-3.3%
Towns				
Barton	8,858	8,597	-261	-2.9%
Berkshire	1,412	1,368	-44	-3.1%
Candor	5,307	5,116	-191	-3.6%
Newark Valley	3,944	3,798	-146	-3.7%
Nichols	2,519	2,479	-40	-1.6%
Owego	19,891	19,182	-709	-3.6%
Richford	1,172	1,133	-39	-3.3%
Spencer	3,151	3,021	-130	-4.1%
Tioga	4,869	4,759	-110	-2.3%

Source: U.S. Census Bureau Population Estimates 2010 -2015

CHART 3.1 – TIOGA COUNTY TOTAL POPULATION ESTIMATES 1940-2040



Source: 1940-2010 Decennial Census and projections by Cornell Program on Applied Demographics

Nativity and Geographic Mobility

In 2014-2018, an estimated 98.2% of people living in Tioga County were U.S. natives. Of those who were foreign-born (1.8%), the majority came from Europe (39.5%) and Asia (30.7%), followed by Latin America (22.6%) and North America (6.4%).¹⁸ Meanwhile, 65.8% of the Tioga County native-born population were living in the state in which they were born and 89% of people at least one year old living in Tioga County were living in the same residence one year earlier.¹⁹ TABLE 3.3 on the right further illustrates the geographic mobility of Tioga County residents from 2014 to 2018.

TABLE 3.3 - GEOGRAPHIC MOBILITY BY COUNTY					
	Tioga	Chemung	Tompkins	Cortland	Broome
Same Residence	89.0%	88.4%	75.0%	85.5%	84.7%
Different Residence, Same County	5.6%	7.5%	11.2%	9.5%	9.6%
Different County, Same State	3.5%	2.7%	5.1%	4.0%	3.7%
Different State	1.8%	1.1%	6.4%	0.8%	1.4%
Abroad	0.1%	0.3%	2.2%	0.1%	0.6%
<i>Source: 2018 ACS 5-Year Estimates</i>					

Age

The median age in Tioga County is 44.0 years old, which is higher than the New York State average of 38.7 years and the national average of 37.9 years.²⁰ An estimated 21.4% of the population was under 18 years, 29.7% was 18 to 44 years, 29.8% was 45 to 64 years, and 19.2% was 65 years and older. When comparing these age cohorts to the New York State and national percentages, Tioga County appears to have less 18- to 44-year-olds yet more people who are 45 to 64 and 65 years and older. Between 2010 and 2040, the population loss is projected at more than 10,000 among residents aged 15 to 64; while the 65+ population is expected to grow by 22.1% or 1,800 persons, and the 85+ population is projected to grow by 31.3% or 305 persons. This rapid aging will level off and decline, beginning in 2030.²¹

TABLE 3.4 – AGE COHORT PERCENTAGES BY AREA				
AREA	Under 18	18 to 44	45 to 64	65 and older
Tioga County	21%	30%	30%	19%
NYS	21%	37%	27%	16%
National	23%	36%	26%	15%
<i>Source: 2014-2018 ACS 5-Year Estimates</i>				

TABLE 3.5 - AGE COHORT BY GENDER IN TIOGA COUNTY		
Age Cohort	Percent Male	Percent Female
Under 5	5.4%	5.1%
5 to 9	6.3%	5.1%
10 to 14	6.2%	6.6%
15 to 19	6.3%	5.8%
20 to 24	6.1%	5.4%
25 to 29	5.1%	5.0%
30 to 34	5.6%	5.3%
35 to 39	6.4%	5.2%
40 to 44	5.1%	5.8%
45 to 49	6.2%	6.4%
50 to 54	7.7%	7.0%
55 to 59	9.1%	9.1%
60 to 64	6.6%	6.6%
65 and older	5.8%	20.6%
<i>Source: 2014-2018 ACS 5-Year Estimates</i>		

¹⁸ 2018 American Community Survey, 5-Year Estimates

¹⁹ Ibid

²⁰ Ibid

²¹ Tioga County Housing Study, 2017, <https://www.tiogacountyny.com/media/5819/tioga-county-housing-study-122817.pdf>

CHART 3.2 – TIOGA COUNTY POPULATION ESTIMATES OF 5-14-YEAR-OLDS, 1940-2040

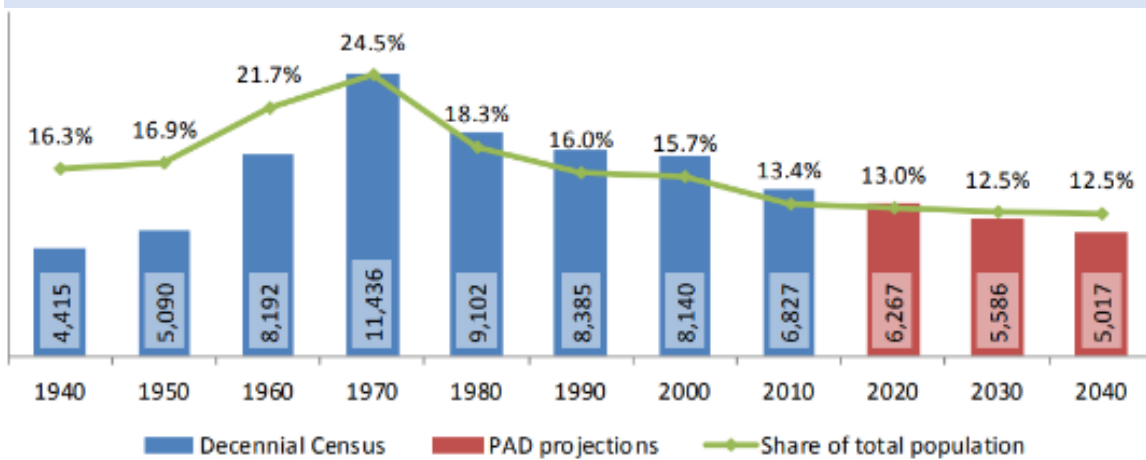


CHART 3.3 – TIOGA COUNTY POPULATION ESTIMATES OF 25-64-YEAR-OLDS, 1940-2040

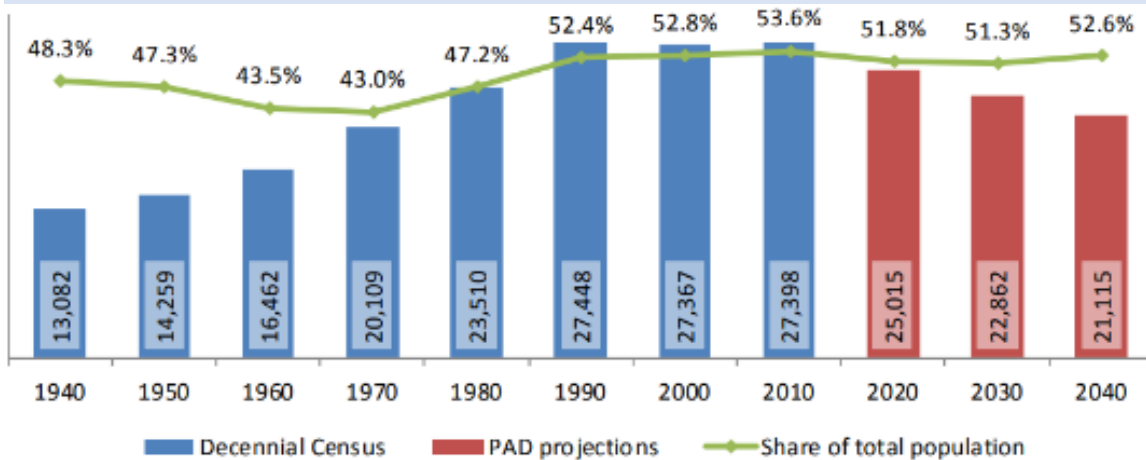
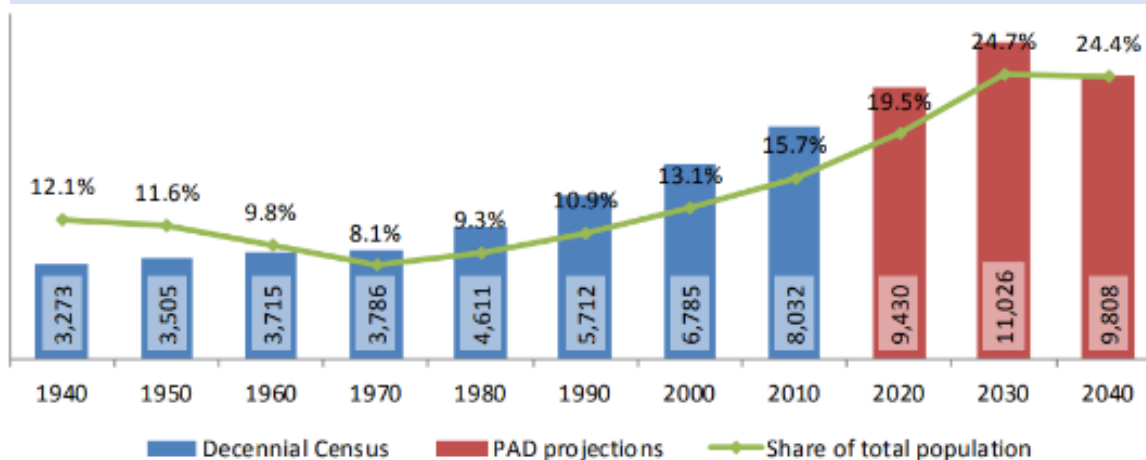


CHART 3.4 – TIOGA COUNTY POPULATION ESTIMATES OF 65-YEAR-OLDS & OVER, 1940-2040



Source: 1940-2010 Decennial Census and Projections by Cornell Program on Applied Demographics

Overall, the population aging rates in Tioga County have increased dramatically within the last few years, like much of New York's Southern Tier. According to the 2017 Tioga County Housing Study, this is fueled by decreases estimated within the younger working family cohort and net outmigration.²² The 2010-2015 American Community Survey estimates and the Cornell University Program on Applied Demographics trended data reveals increasing numbers and proportions of residents ages 65+ and 85+,²³ as well as an increasing ratio of these persons to the working age population.²⁴ The 2017 Tioga County Housing Study shows that for every 100 working age residents (ages 18-64) in Tioga County, there are –

- a) 65.7 dependents, both elderly (65+) and young (<18), which is higher than the statewide estimate of 56.1 and national estimate of 50.91;
- b) 28.8 elderly dependents (65+), which is higher than the NYS estimate of 22.40 and the national estimate of 22.31; and
- c) 36.9 young dependents (<18), which is higher than the NYS estimate of 33.7 and national estimate of 28.6.²⁵

Race/Ethnicity and Languages

Between 2014-2018, the majority of Tioga County residents were Caucasian or White (96.6%); 0.7% were Black or African American; 0.2% were American Indian and Alaska Native; and 0.7% were Asian.²⁶ Among people at least five years old living in Tioga County, 2.4% spoke a language other than English at home. Spanish was spoken by 0.9% of people at least five years old; and 0.6% reported that they did not speak English very well.²⁷ Compared with area counties (TABLE 3.6), on average, Tioga County's population is older, less diverse, speaks less variety of languages at home, and is more fluent in English.²⁸

TABLE 3.6 – COMPARISON OF DEMOGRAPHICS BY AREA						
County	Median Age	White	Black	Asian	Language Spoken other than English at Home	Don't Speak English Well
Tioga, NY	44.0 years	96.60%	0.70%	0.20%	2.40%	0.60%
Chemung, NY	41.3 years	88.00%	6.10%	0.30%	4.20%	1.10%
Tompkins, NY	30.9 years	80.50%	4.10%	0.20%	14.40%	3.50%
Cortland, NY	36.4 years	94.80%	1.50%	0.80%	3.30%	0.90%
Broome, NY	39.8 years	85.90%	5.70%	4.20%	9.60%	3.20%
Susquehanna, PA	48.2 years	97.50%	0.70%	0.30%	2.60%	0.80%
Bradford, PA	44.5 years	96.90%	0.40%	0.70%	2.50%	0.70%
Source: 2014-2018 ACS 5-Year Estimates						

²² Tioga County Housing Study, 2017, <https://www.tiogacountyny.com/media/5819/tioga-county-housing-study-122817.pdf>

²³ 2015 American Community Survey, 5-Year Estimates

²⁴ Cornell University Program on Applied Demographics, Tioga County Profile, 2017, <https://pad.human.cornell.edu/profiles/Tioga.pdf>

²⁵ Tioga County Housing Study, 2017

²⁶ 2018 American Community Survey, 5-Year Estimates

²⁷ Ibid

²⁸ Ibid

Disability Status

In Tioga County, 14.6% reported having a disability between 2014-2018.²⁹ This is higher than the New York State rate of 11.5% and the national rate of 12.6%, but similar to the rates of surrounding counties (TABLE 3.7).³⁰ The likelihood of having a disability varied by age – from 5.5% of people under 18 years old, to 11.4% of people 18 to 64 years old, and to 35.1% of those 65 and over.³¹ TABLE 3.7 on the right reports this data in comparison with other area rates, including the surrounding counties, New York State, and the nation.

TABLE 3.7 - COMPARISON OF DISABILITY DATA BY AREA, 2018				
County	% with Disability	People Under 18	18 to 64 years	65+ years
Chemung	15.40%	6.90%	12.90%	34.90%
Broome	15.60%	6.50%	12.90%	35.00%
Susquehanna	16.90%	5.80%	14.00%	34.40%
Cortland	13.10%	5.70%	10.20%	35.00%
Tioga	14.60%	5.50%	11.40%	35.10%
Bradford	15.30%	5.10%	12.80%	34.10%
Tompkins	9.10%	3.30%	7.30%	25.90%
NYS	12.60%	4.20%	10.30%	35.00%
NATIONAL	11.50%	3.90%	8.80%	33.00%
Source: 2018 American Community Survey				

Area Veterans

Tioga County has a 2.7% higher rate of veterans than the rate of New York State (10.4% and 7.7%, respectively). New York State has the fifth largest veteran population in the United States with 778,522 total members.³² Most Tioga County veterans served in the two Gulf Wars, Korea, and Vietnam.³³ The largest proportion, nearly 40%, served in Vietnam and the smallest, due to the advancing age of this cohort, in World War II.³⁴ The most recent veterans (those who served in the second Gulf War) represent the smallest percentage of the total population who have served; no data was available for service in Afghanistan, the Middle East, or elsewhere.³⁵

As shown in TABLE 3.8 on the following page, Tioga County and its neighboring counties have seen a steady decrease in the number of its veterans. All the while, the number of male veterans in Tioga County from 2015 to 2018 has been 13 to 14 times more than the number of female veterans (TABLE 3.9 on the following page). When examining the age of veterans in Tioga County (TABLE 3.10 on the following page), we see that the number of veterans aged 85 years and older has increased 10% since 2015, suggesting that the decline is due to casualty rather than the outmigration of veterans from Tioga County.

²⁹ 2018 American Community Survey, 5-Year Estimates

³⁰ Ibid

³¹ Ibid

³² United States Department of Veteran Affairs, National Center for Veteran Analysis and Statistics, https://www.va.gov/vetdata/veteran_population.asp

³³ Ibid

³⁴ Ibid

³⁵ 2018 American Community Survey, 5-Year Estimates

TABLE 3.8 – PERCENT CHANGE IN AREA VETERANS, 2015-2018					
County	2015	2016	2017	2018	% Change
Broome	13,950	13,495	13,044	12,598	-10%
Chemung	7,510	7,307	7,107	6,912	-8%
Cortland	3,123	3,043	2,964	2,885	-8%
Tioga	4,365	4,274	4,182	4,088	-6%
Tompkins	4,356	4,222	4,091	3,963	-9%
Bradford	5,665	5,541	5,417	5,292	-7%
Susquehanna	3,650	3,558	3,466	3,373	-8%
Source: National Center for Veterans Analysis and Statistics					

TABLE 3.9 - TOTAL NUMBER OF TIOGA COUNTY VETERANS BY GENDER				
Sex	2015	2016	2017	2018
Male	4067	3980	3892	3801
Female	298	294	290	287
TOTAL	4365	4274	4182	4088
Source: National Center for Veterans Analysis and Statistics				

TABLE 3.10 - PERCENTAGE OF TIOGA COUNTY VETERANS BY AGE				
Age	2015	2016	2017	2018
17 to 44	16.2%	16.2%	16.2%	16.4%
45 to 64	34.2%	34.2%	33.8%	32.8%
65 to 84	42.9%	42.7%	42.7%	42.9%
85+ years	6.7%	6.9%	7.3%	7.9%
Source: National Center for Veterans Analysis and Statistics				

Households and Families

In 2014-2018, there were 20,045 households in Tioga County and its average size was 2.42 people.³⁶ Families comprised more than half of the households, at 68.2%, which includes both married-couple families (53.4%) and other families (14.8%).³⁷ The percentage of female headed households in Tioga County is 28.7%, and 41% of all households include one or more person aged 60 or older.³⁸

Over time, much has changed in the institution of marriage: from the 1950s when marriage was about “bringing together the traditional roles of men and women to form a union based on practicality and compromise, to today, when it is largely seen as an equal partnership rooted in love and mutual respect.”³⁹ As shown by TABLE 3.11 on the following page, the percentage of “never married” residents in Tioga County is less than both the New York State and national average for both males and females whereas the percentage of “now married” residents in Tioga County is higher. The percentage of both male and female New York State residents whose marital status is “separated” is higher than the rate of the national and Tioga County, with the exception of Tioga County females who have a 0.2% higher rate than that of the State. Tioga County also has a higher rate of widows than both the New York State and the nation rates, and Tioga County females have a significantly higher rate than their male counterparts. Divorce rates in Tioga County are also higher than New York State rates, but lower than national rates and Tioga County females have a 2.3% higher rate than Tioga County males.⁴⁰

³⁶ 2018 American Community Survey, 5-Year Estimates

³⁷ Ibid

³⁸ Tioga County Housing Study, 2017, <https://www.tiogacountyny.com/media/5819/tioga-county-housing-study-122817.pdf>

³⁹ World Finance, *For Richer for Poorer: The Economics of Marriage*, Matsangou, M. 2017.

⁴⁰ 2018 American Community Survey, 5-Year Estimates

TABLE 3.11 - COMPARISON OF MARITAL STATUS BY AREA AMONG MALES AND FEMALES						
Marital Status	Tioga		NYS		National	
	Males	Females	Males	Females	Males	Females
Never Married	29.30%	21.80%	40.60%	35.60%	36.40%	30.20%
Now Married	57.30%	53.70%	47.60%	42.50%	49.80%	46.50%
Separated	1.40%	2.60%	2.00%	2.80%	1.70%	2.30%
Widowed	2.90%	10.40%	2.60%	9.00%	2.60%	8.80%
Divorced	9.20%	11.50%	7.20%	10.10%	9.50%	12.10%
Source: 2018 ACS 5-Year Estimates						

Many studies have shown the link between financial instability and relationship dissolution and divorce; “researchers argue economic hardship may place stress on couples, thereby increasing conflict and leading eventually to divorce,” and others state fights over limited resources and additional stressors (e.g. bill collectors) as factors which diminish relationship quality by increasing conflict and reducing intimacy.⁴¹ Of all divorces filed in 2010 (728), the majority were declared on the grounds of cruelty (37.6%), abandonment (31.5%), and separation by agreement (21.3%).⁴² 47.8% of divorces in 2010 were among couples with one to two children under the age of 18 years old, and 27.5% of divorces were filed after 5 to 9 years of marriage.⁴³

TABLE 3.14 - DIVORCES BY AREA AND NUMBER OF CHILDREN UNDER 18				
# CHILDREN	Tioga		NYS	
	#	%	#	%
None	73	41.0	32,664	57.9
One	37	20.8	10,285	18.2
Two	48	27.0	7,946	14.1
Three	7	3.9	2,252	4.0
Four	3	1.7	457	0.8
Five +	3	1.7	111	0.2
Not Stated	7	3.9	2,667	4.7
TOTAL	178	100%	56,382	100%
Source: Vital Statistics of New York, 2010				

TABLE 3.12 - DIVORCES BY AREA AND DECREE/LEGAL GROUNDS				
Decree/Grounds	Tioga		NYS	
	#	%	#	%
Cruelty	67	37.6%	10228	18.1%
Abandonment	56	31.5%	38,756	68.7%
Imprisonment	0	0.0%	90	0.2%
Adultery	3	1.7%	216	0.4%
After Legal Separation	0	0.0%	72	0.1%
After Separation by Agreement	38	21.3%	3,829	6.8%
Not Stated	14	7.9%	3,191	5.7%
TOTAL	178	100%	56,382	100%
Source: Vital Statistics of New York, 2010				

TABLE 3.13 - DIVORCES BY AREA AND DURATION OF MARRIAGES				
Duration	Tioga		NYS	
	#	%	#	%
Under 5 years	35	19.7%	12,758	22.6%
5 to 9 years	49	27.5%	16,560	29.4%
10 to 14 years	35	19.7%	9,530	16.9%
15 to 19 years	31	17.4%	6,356	11.3%
20 to 29 years	22	12.4%	7,490	13.3%
30+ years	6	3.4%	2,917	5.2%
Not Stated	0	0.0%	771	1.4%
TOTAL	178	100%	56,382	100%
Source: Vital Statistics of New York, 2010				

⁴¹ U.S. National Library of Medicine, National Institutes of Health. *Economic Factors and Relationship Quality Among Young Couples: Comparing Cohabitation and Marriage*. Hardie, Jessica H and Lucas, Amy. 2010.

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3116270/>

⁴² Vital Statistics of New York State, 2010, https://www.health.ny.gov/statistics/vital_statistics/2010/

⁴³ Ibid

HOUSING

Many studies have shown housing as a social determinant of health. Namely, healthy, safe housing is linked to healthier, longer lives.⁴⁴ The 2017 Tioga County Housing Study identified the following socioeconomic factors as affecting the County's housing market:

- (1) Physical and Environmental Conditions
- (2) Housing Stock
- (3) Economic Trends
- (4) Housing Trends
- (5) Demographic Trends
- (6) Land Use Regulations
- (7) Capacity to Rent

Physical and Environmental Conditions ⁴⁵

Between 1954 and 2018, Tioga County was included in 15 FEMA declarations for severe storm-related disasters.⁴⁶ The long history of flooding has had a dramatic impact on the county and has created a mounting series of issues for both the municipalities and homeowners. This has been an issue primarily in the villages of Waverly, Nichols, and Owego, and Towns of Barton and Owego. Flooding was most impactful in the Village of Owego, where 85% of the village was under water following Tropical Storm Lee in 2011. Not only did the floods impact the physical housing stock and overall built infrastructure in these communities, but it also had an impact on the affordability for existing and prospective homeowners. The quality of houses was damaged, property values declined, property taxes rose to meet increasing municipal expenses, and mandatory flood insurance was imposed on houses carrying a mortgage.



The Flood of 2011 in the Village of Owego

⁴⁴ The Nation's Health: Vol. 46, Issue 7, September 2016. Wahowiak, L.
<http://thenationshealth.aphapublications.org/content/46/7/1.3>

⁴⁵ Tioga County Housing Study, 2017, <https://www.tiogacountyny.com/media/5819/tioga-county-housing-study-122817.pdf>

⁴⁶ Tioga County Public Health, Community Health Assessment, 2019-2024, <https://www.tiogacountyny.com/media/7278/tioga-county-community-health-assessment-20192024.pdf>

Housing Stock ⁴⁷

Within the Southern Tier Region, Tioga County has the smallest amount of housing stock (22,200 units) except for Schuyler County (6,270 units). Nearly 90% of the housing units (15,585) in Tioga County are occupied and 10% (2,311) are vacant, which is a factor that contributes to blight. At the municipal level, the highest occupancy rates occur in Apalachin (93.8%), the towns of Barton (90.7%) and Owego (91.4%), and the village of Nichols (90.1%), where the rates of occupancy exceed 90%. These municipalities are notably located in proximity to the area's main employers and within the area's quality school districts (described more in the section, *Education*). The municipalities with the lowest occupancy and highest vacancy rates are those located in the county's most rural reaches, including the villages of Candor (82.8% OCC, 17.2% VAC) and Newark Valley (82.0% OCC, 18.0% VAC) and the town of Spencer (82.8% OCC, 17.2% VAC). These municipalities are also located within the region's lowest ranked school districts (refer to the section, *Education*). Of the units that are occupied throughout the county, an estimated 80% are owner-occupied and 20% are renter-occupied.



The majority of Tioga County's housing structures include one unit, and 10.6% include two to four units. Significant percentages of housing units in several municipalities are renter occupied, which is of particular concern in the Village of Owego with 43% and the Village of Waverly with 45% (TABLE 3.15 on the following page). In these municipalities, much of the rental property is in the form of single-family houses. Close behind is the village of Spencer with 41%. Tioga County also contains a high concentration of mobile homes; an estimated 15% of the housing structures are mobile homes, which is significantly higher than the New York State rate of 2.4% and the national rate of 6.4%. The highest concentration of mobile homes are located in the town of Spencer.

Furthermore, an expanding number of rental properties have been purchased by out-of-town buyers, often perceived as "slumlords." This group is paying as little as \$30,000-\$40,000 in cash for foreclosure properties with no required flood insurance. These properties are impinging on the more desirable neighborhoods, and many are perceived as "drug houses." This is a growing concern in Waverly, Owego, Candor, Spencer, and Newark Valley.

The housing stock throughout Tioga County and the remainder of the Southern Tier is also dated, "leading to an assumption that a portion of the stock is suffering from deferred maintenance and outdated construction materials such as inadequate wiring, use of lead-based paint, asbestos, roofing materials, poor insulation and weatherization. Much of the housing stock also is lacking in upgrades that

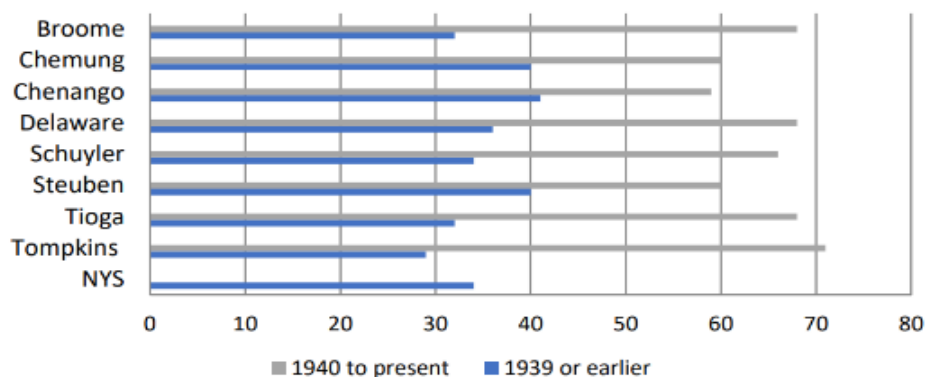
⁴⁷ Tioga County Housing Study, 2017, <https://www.tiogacountyny.com/media/5819/tioga-county-housing-study-122817.pdf>

meet the expectations of today's consumers, as well as amenities important to changing lifestyles, such as handicapped accessibility." Nearly 200 units lack complete kitchen and plumbing facilities, and some 350 do not have access to telephone service. The village of Nichols has the oldest housing stock in the county with 79.8% of all units and 91.0% of owner-occupied housing units built before 1939. The median age of housing is 50 years, as compared to 37 years nationally. More than 1/3 of the units were constructed before 1949, and about 9,782 homes were built prior to 1960. The average year that homes were built is 1965, and only 7 housing units were constructed in 2014 or later. The issue of older and outdated housing was exacerbated by the flooding of 2011, which severely affected the housing stock in the County. CHART 3.5 below highlights the age of homes in the Southern Tier.

TABLE 3.15 – RENTER-OCCUPIED HOUSES IN TIOGA COUNTY BY MUNICIPALITY			
Municipality	Total Housing Units	Renter-Occupied	
		Estimate	% Total
Berkshire Town	498	54	10.8%
Richford Town	445	63	14.1%
Candor Town	1,915	322	16.8%
Tioga Town	2,100	377	18.0%
Owego Town	7,556	1,435	19.0%
Newark Valley Town	1,552	295	19.0%
Nichols Town	1,032	210	20.3%
Candor Village	258	58	22.5%
Newark Valley Village	445	124	27.9%
Nichols Village	218	62	28.4%
Spencer Town	1,212	346	28.5%
Barton Town	3,561	1,185	33.3%
Apalachin	515	191	37.1%
Spencer Village	378	155	41.0%
Owego Village	1,673	723	43.2%
Waverly Village	1,902	855	45.0%

Source: Tioga County Housing Study, 2017

CHART 3.5 – YEAR RESIDENTIAL STRUCTURES WERE BUILT



Source: Regional Economic Development Council of the Southern Tier. 2017 Progress Report

Income and Affordability ⁴⁸

Further compounding the challenges of the housing market in Tioga County include the limited household income to buy or rent, as well as the lack of affordable housing to purchase or rent. The median household income in Tioga County is \$57,514 and the highest median income levels are among married couples with families at \$78,325 and working age cohorts, 25-64 years of age at \$66,259 - \$67,665. This positions the buying power for single-family housing in the \$90,000 - \$175,000 price range for the 25-64-year-old age cohort. However, 75% of new hires in the next five years will be in skilled labor and service worker jobs with a household income in the \$50,000 - \$70,000 range, which will continue to increase the demand for housing at the \$90,000 - \$150,000 price point. The lowest annual median incomes are in the town (\$44,550) and village (\$44,773) of Spencer, village of Waverly (\$41,146) and town of Richford (\$39,821) that brings attention to the growing financial burden on both owners and renters. Housing burden, that is greater than 30% of a household's annual income, is greatest among renters at 41% as compared to homeowners at 21%, which makes it difficult for the struggling family to save the money necessary to achieve homeownership. For example, nearly 26% of all households with an annual income of less than \$20,000 are spending more than 30% on rent, while only 2% of those households with an income of \$35,000 - \$50,000 exceed the 30% threshold.

Not only are families struggling to achieve homeownership, but many cannot cover the costs of necessary home rehabilitation or upgrades. Specifically, the majority of people aged 51 to 62 are low to moderate-income and live in single-family homes, but many lack the financial resources to provide routine home maintenance, including roof repair, installation of energy efficient windows, and necessary kitchen and bathroom upgrades. Consequently, this housing stock is not being freed up for the first-time home buyer. Rather, it becomes a financial burden on the senior household, which continues to deteriorate and potentially contributes to blight in the neighborhoods. Additionally, the combined cost of flood insurance and property taxes are usually higher than a monthly mortgage payment, which are significant barriers to the first-time homebuyer as income is redirected away from rehabilitation and necessary home upgrades to cover these expenses. Furthermore, there is increasing demand for safe and affordable housing for the moderate-income families, much of which is currently being fulfilled by single-family and subdivided houses owned by independent landlords. Specifically, the demand is among households with an annual income between 51% and 80% of the median family income. With a median household income of \$57,514 for the entire county, more than 6,000 households have an annual income of less than 80% or \$46,011. This represents one-third of all households in Tioga County. However, it is important to consider the 41% of households (8,100) that live under asset-limited, income-constrained, employed (ALICE) conditions, where households earn more than the U.S. poverty level, but less than the basic cost of living for Tioga County.



ASSET LIMITED

ALICE has no safety net for emergencies



INCOME CONSTRAINED

ALICE's income falls short of basic necessities



EMPLOYED

ALICE is working, but can't afford the cost of living

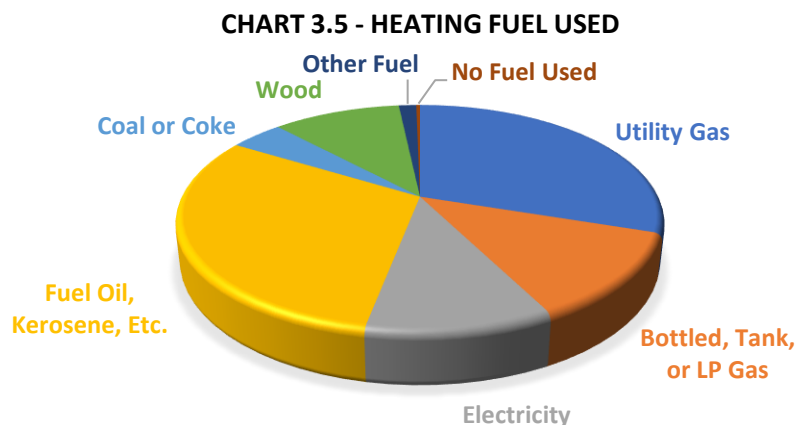
⁴⁸ Tioga County Housing Study, 2017, <https://www.tiogacountyny.com/media/5819/tioga-county-housing-study-122817.pdf>

This translates to \$19,380 for a single person and \$56,965 for a family of 2 adults and 2 young children; slightly less than the median household income of \$57,514 for the entire county. The greatest number of these families live in the Village of Owego (48%), Town of Richford (49%), and Town (51%) and Village (54%) of Spencer. “When ALICE households do not have enough income, they have to make difficult choices to reduce their expenses. They may be forced to skimp on childcare, healthy food, or car insurance. These ‘savings’ threaten their health, safety, and future.”⁴⁹

The Tioga County Housing Study also shows that the demand for moderate income housing in Tioga County will grow as wages remain flat. The Impact of Annual Wages on Buying Power and Renting Power of Persons in the Workforce demonstrates that typical job categories pay an annual wage of less than \$58,000. Many of the new jobs being created have an annual wage of \$35,000 - \$40,000; which translates into a projected household income of \$46,000 - \$68,000. Approximately 30% of all rental units, or 1,286, are occupied by persons whose annual income is \$25,000 – \$50,000 and who are considered moderate-income households. Only 38 units of affordable housing are in existing “projects.” The balance is in the form of single-family houses or sub-divided houses that are owned by independent landlords. The majority of these houses are located in the villages of Owego and Waverly.

Types of Fuels Used⁵⁰

The majority of homes in Tioga County utilize fuel oil, kerosene, etc. (30.7%) or utility gas (30.1%) as their primary source of heating fuel, while 12.4% use bottled, tank or LP gas; 10.6% use electricity; and 10.3% use wood. Meanwhile, 0.3% of households report using no fuel, while 1.4% use “other.” No households reported using solar energy to heat their homes.



Source: 2011-2015 American Community Survey 5-Year Estimates

⁴⁹ United Way of New York State Study of Financial Hardship 2018, <https://www.unitedforalice.org/home>

⁵⁰ 2015 American Community Survey, 5-Year Estimates

EMPLOYMENT AND ECONOMY

Not only is housing a key indicator of the overall quality of life, but an essential element for attraction and retention of a viable workforce and growth of the business sector. Simultaneously, there are several factors that impact the quality and affordability of housing including the viability of the businesses, availability and stability of jobs, and the wages. The economic stability of the county also determines how attractive it is to investors seeking opportunities for construction of new housing.⁵¹

Employers and Employment Status⁵²

Major employers in Tioga County represent a wide range of industry sectors from the sophisticated engineering and cutting-edge Research and Development at Lockheed (2,100 workers) to education with more than 1,330 employees among the six area school districts. The warehousing and distribution sector employs nearly 800 workers at CVS Warehouse (480), Best Buy (234) and FedEx (73). Although the closing of Sanmina in 2018 and the loss of 274 jobs has impacted the county, the remaining manufacturing sector is strong with several companies such as Upstate Shredding (360), Ensco (225), Stateline Auto (220), FS Lopke (200), Leprino Foods (225) and Crown Cork & Seal (165). Tioga Downs is a regional leader in entertainment and tourism with an estimated total of 700 employees in 2018. The healthcare sector also is important to the economic landscape with nearly 450 employees at Elderwood and Riverview Manor. Government and social service agencies employ more than 500 people.

As shown by the table on the right, at the start of January 2018, Tioga County's unemployment rate was 4.4%, which was 0.4% higher than the state average and 0.3% higher than the national average.



TABLE 3.16 - UNEMPLOYMENT RATES BY AREA, 2014-2018

	2014	2015	2016	2017	2018
Tioga County	6.1%	5.5%	5.1%	5.1%	4.4%
NYS	7.0%	5.7%	4.9%	4.7%	4.0%
Nation	6.6%	5.7%	4.9%	4.7%	4.1%

Source: New York State Department of Labor

⁵¹ Tioga County Housing Study, 2017, <https://www.tiogacountyny.com/media/5819/tioga-county-housing-study-122817.pdf>

⁵² Ibid

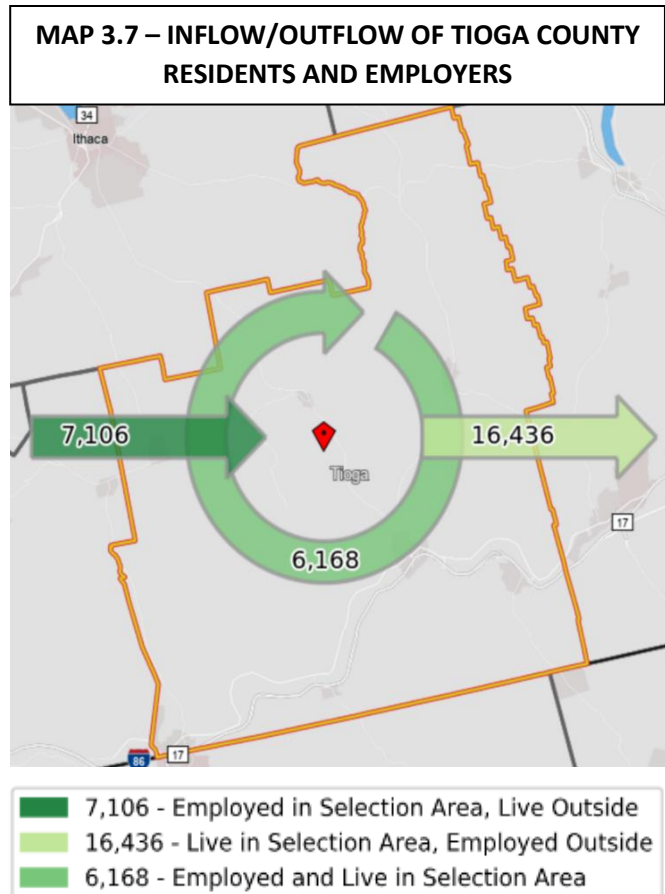
According to the NYS Department of Labor, Tioga County's workforce was 23,960 in 2015, but dropped to 23,200 in 2016. The workforce has continued to decline and stood at 23,100 as of October 2017. Of this number, an estimated 22,100 are currently employed and an estimated 1,000 are out of work, significantly down from 2,000 unemployed in 2012. This translates to a workforce participation rate of 95.7%.⁵³

Employment Dynamics

Of the employed population living in Tioga County in 2017, 6,168 people also worked in the county. By contrast, 16,436 residents traveled outside the county for work. Also during this time, 7,106 people traveled into Tioga County for work. These trends have remained consistent since 2013.⁵⁴

Barriers to Economic Development

A 2019 assessment published through the Community Foundation for South Central New York reveals the following six barriers to the region's economic development (TABLE 3.17 on the following page), which includes Broome, Chenango, Delaware, Otsego, and Tioga Counties.⁵⁵ The study also highlights that area employers agree on the negative impact that poor infrastructure has on employment: "Area employers such as Lockheed, Crown Cork & Seal, and Guthrie Health report issues with recruiting talent due to lack of adequate housing options. Many new employees in senior management, engineering, and the medical professions are relocating from major metropolitan areas and have an expectation of traditional neighborhoods, quality housing, options at various price points, and lower property taxes."⁵⁶ Despite these challenges, Tioga County led New York State with a GDP growth rate of 10.8% in 2015. This growth has been sustained in recent years through successful economic development projects including the expansion of Tioga Downs Casino and Resort and the establishment of Crown Cork & Seal and FedEx facilities in the county.⁵⁷



⁵³ Tioga County Housing Study, 2017, <https://www.tiogacountyny.com/media/5819/tioga-county-housing-study-122817.pdf>

⁵⁴ U.S. Census Bureau, Center for Economic Studies, *On the Map: Inflow/Outflow Analysis, 2013-2017*, <https://onthemap.ces.census.gov/>

⁵⁵ Community Foundation of South Central New York, *Fostering Leadership in the CFSCNY Region: An Assessment of Opportunities and Challenges*, Horn Research, 2019, <https://donorswhocare.org/wp-content/uploads/2020/01/Fostering-Leadership-in-CFSCNY-Region-Final-Report-with-Appendices.pdf>

⁵⁶ Tioga County Housing Study, 2017, <https://www.tiogacountyny.com/media/5819/tioga-county-housing-study-122817.pdf>

⁵⁷ Tioga County Economic Development and Planning, 2019 Press Release

TABLE 3.17 – REPORTED BARRIERS TO ECONOMIC DEVELOPMENT IN THE SOUTHERN TIER REGION	
Barrier	Definition
Leadership Gap	Respondents most frequently said that their county lacked leadership and vision around economic development which is exacerbated by a lack of coordinated efforts between localities and a lack of investment
Workforce	A key barrier to economic development is the lack of sufficient workforce
Infrastructure	A lack of sufficient and appropriate housing is a barrier to economic development in the region as is transportation and utilities.
Community Environment	A lack of cultural and recreational amenities as well as walkable spaces that are visually appealing limit economic development
Taxes and State Model	High taxes and over-regulation are significant barriers to economic development in the region and the state's economic development model discourages collaboration which is a significant hurdle to county efforts
Community Self-Perception	Respondents nearly universally felt that a community's self-perception has a significant impact on whether and how a community moves forward, noting that a negative self-perception is particularly damaging. The bulk of respondents said their community's self-perception was negative, but a large portion also noted that it was improving.
<i>Source: CFSCNY 2019 Assessment</i>	

TABLE 3.18 – WORKFORCE REPLACEMENT DEMAND IN TIOGA COUNTY			
Category	Total EEs* 25-44	Total EEs* 45-64	Supply/Gap
Wholesale Trade	254	143	111
Wholesale and Retail Trade **	61	47	14
Public Administration	138	225	-87
Manufacturing	653	966	-314
Healthcare and Social Assistance	579	719	-140
Educational Services	668	817	-149
Arts, Entertainment and Recreation	239	178	61
Grand Total	2592	3095	-503
<i>Source: 2017 Tioga County Housing Study</i>			
*EEs = Employees			
**Wholesale trade is a business in which goods are sold for retail, capital or durable nonconsumer goods, and raw and intermediate materials and supplies used in production to other businesses; whereas the retailing process is the final step in the distribution of merchandise, organized to sell goods in small quantities to the general public through store and nonstore retailers. ⁵⁸			

⁵⁸ NAICS Sector 42 – Wholesale Trade Scope and Implementation Guidelines for U.S. Statistical Agencies, *Clarification Memorandum No. 1*, https://www.census.gov/eos/www/naics/history/docs/cm_1.pdf

Workforce Gap

In 2015, the workforce was 23,960 residents, and dropped to 23,100 in 2017.⁵⁹ Many employers will be faced with replacing nearly 30% of their workforce in the next 5-7 years; however, the number of younger workers age 25-45 is not adequate and the workforce participation rate among those aged 20-25 is less than 70%.⁶⁰ That is, a substantial number of the workforce in Tioga County is reaching retirement age and the younger workforce is not large enough to replace their predecessors. There is expected to be a gap of no less than 500 workers in the next 5-7 years, with the largest in manufacturing and healthcare (TABLE 3.18 on the previous page).⁶¹ Some researchers posit that the reasons for the surge in older workers is due to the size of the baby boom generation, meaning that the number of Americans attaining age 60 each year is climbing steeply; and also that the labor force participation rates among adults between 60 and 74 have increased.⁶² This data is complemented by data analysis reported in the CFSCNY 2019 Assessment, which states that “Data from the New York State Department of Labor and the Census Bureau show an increasing gap between in the region’s working age population and the projected number of jobs. When asked what kinds of workforce gaps exist in their county, a common refrain among respondents was that there are many jobs available, but not enough workers.”⁶³

Further analysis by the CFSCNY documents the following primary issues potentially preventing workers from becoming employed in the area:

- (1) Infrastructure – “Transportation is a significant barrier to employment, particularly for lower-income workers. Access to transportation is considered an issue for all the counties in the CFSCNY region. The lack of affordable childcare is an additional barrier to employment for all income levels and a lack of housing options is a challenge in attracting workers to the region.”
- (2) Wages – “Low wages are a barrier to employment for lower-skilled workers who may not be able to afford to pay for transportation and childcare. For higher skill positions, low wages may prevent professionals from relocating to the area from larger metropolitan areas.”
- (3) Drug Testing – “Drug testing is a significant barrier for some people who might otherwise wish to join the workforce. Testing criteria which include recreational marijuana use are of particular concern.”
- (4) Communication – “Employers aren’t effectively informing potential workers of open positions and opportunities for on-the-job training. Local organizations are not recruiting at the universities early or often enough to recruit professional level employees.”

⁵⁹ Tioga County Housing Study, 2017, <https://www.tiogacountyny.com/media/5819/tioga-county-housing-study-122817.pdf>

⁶⁰ Ibid

⁶¹ Ibid

⁶² Brookings, Burtless, G. 2013. *The Impact of Population Aging and Delayed Retirement on Workforce Productivity*, <https://www.brookings.edu/research/the-impact-of-population-aging-and-delayed-retirement-on-workforce-productivity/>

⁶³ Community Foundation of South Central New York, *Fostering Leadership in the CFSCNY Region: An Assessment of Opportunities and Challenges*, Horn Research, 2019, <https://donorswhocare.org/wp-content/uploads/2020/01/Fostering-Leadership-in-CFSCNY-Region-Final-Report-with-Appendices.pdf>

Leadership Gap

Within and around Tioga County is also a growing concern of a current and future leadership gap. As reported by the CFSCNY, “Data support the concern about a current and future leadership gap. A search of the BroomelsGood.com job posting aggregator found 473 positions with ‘manager’ in the title and eight executive leadership positions were currently available. In addition, information from The Agency’s Workforce Analysis in November of 2016 suggested there will be a regional need for 120 new top executives between 2012 and 2022. And Census data show that approximately 25-30% of the current workforce in the CFSCNY region is close to a traditional retirement age.”⁶⁴ The table below depicts this data.

TABLE 3.19 – PERCENT OF WORKERS BY AGE GROUP AND COUNTY			
County	Percent of Workers		
	Aged 55 to 59	Aged 60 and Over	Total Aged 55 & Over
Broome	11.6%	13.2%	24.8%
Chenango	13.0%	13.6%	26.6%
Delaware	11.6%	17.9%	29.5%
Ostego	11.4%	15.4%	26.8%
Tioga	13.3%	12.7%	26.0%
Source: CFSCNY 2019 Assessment			

Additional analysis from the latest CFSCNY Assessment reveals the following five challenges that respondents feel have contributed to the leadership gap:

- (1) Generational Differences – “variations between generations in terms of work-life balance and values, as well as differing expectation as how and when leadership positions are attained result in a lack of trust between generations”
- (2) Community Environment – including cultural and recreational environments, generational divides, and a change-resistant and conservative-oriented culture deterring young professionals from staying in the area
- (3) Inadequate Leadership – including “a lack of planning and knowledge by current leaders” which “has affected the creation of a pipeline. Some ‘old guard leaders’ have been hesitant to provide opportunities for training or mentoring.”
- (4) Detached Networks – “the lack of overlapping networks within their communities result in missed opportunities for linking potential leaders to available leadership positions.”
- (5) Lack of Learning Opportunities – “the combination of a lack of opportunities available for potential young leaders, a lack of mentorship from older professionals, and a lack of a clear ladder to greater leadership responsibility are significant barriers to creating a pipeline for new leaders.”⁶⁵

⁶⁴ Community Foundation of South Central New York, *Fostering Leadership in the CFSCNY Region: An Assessment of Opportunities and Challenges*, Horn Research, 2019, <https://donorswhocare.org/wp-content/uploads/2020/01/Fostering-Leadership-in-CFSCNY-Region-Final-Report-with-Appendices.pdf>

⁶⁵ Ibid

The “lack of coordinated efforts between localities and a lack of investment” was noted in 2019 during survey and focus group discussions with Tioga County residents, where 55% of residents cited a lack of mutual trust and respect exist between residents and decision-makers.⁶⁶

Industries and Occupations

Despite struggles in recent years, agriculture remains a strong part of the Tioga County economy. In 2017, the total market value of agricultural products sold in the county was \$40.9 million. While the total number of farms fell slightly from 536 farms in 2012 to 535 in 2017, the number of acres of farmland rose 4.9% to 113,182 over this period. The number of dairy farms in the county fell nearly 50% between 2007 and 2017, with 59 dairy farms remaining in 2017.⁶⁷ According to the Tioga Tells: Quality of Life Assessment, “recent economic shifts have left farmers feeling less respected in the community and left behind economically.” Specifically, Tioga Tells participants felt “farming is being left behind and underappreciated in favor of development.” However, the recent influx of Amish population settling in the more remote municipalities of Tioga County (Berkshire, Candor, and the southside of Owego) brings optimism to concerned agricultural enthusiasts, who state that they “use land that would otherwise go to waste” and are “industrious; they bring a work ethic that is refreshing.”⁶⁸

From 2016 to 2017, employment in Tioga County grew at a rate of 0.301% from 22,900 employees to 23,000 employees.⁶⁹ TABLE 3.20 on the following page depicts the primary jobs held by county residents, where the most common types of jobs are Office and Administration Support Occupations (2,884 people), Sales and Related Occupations (2,216 people) and Management Occupations (2,182 people).

Compared to other counties, Tioga County has a significantly higher number of residents working as Architecture and Engineering Occupations, Building and Grounds Cleaning and Maintenance Occupations, and Production Occupations.⁷⁰ Considering the major employers in Tioga County (Lockheed Martin, School Districts, and manufacturing and distribution centers like Best Buy and Upstate Shredding), though, this difference is accounted for. The highest paying jobs held by residents are Architecture and Engineering Occupations (\$83,333), Computer, Engineering, and Science Occupations (\$82,188), and Computer and Mathematical Occupations (\$82,167).⁷¹ According to the New York State Department of Labor, occupations with the most expected hiring in the Southern Tier region include Home Health Aides, Nursing Assistants, and Personal Care Aides.⁷²

TABLE 3.21 on the following page depicts Tioga County employment by industry, which reveals that the most common employment sectors for residents are Manufacturing (3,139 people), Educational Services (3,310 people), and Retail Trade (3,116 people). The highest paying industries in Tioga County are

⁶⁶ Tioga Tells Quality of Life Assessment, 2018-2019, https://rhnsnyc.org/wp-content/uploads/2019/07/Final-Report_Quality-of-Life-Assessment_TiogaTells2018.2019.pdf

⁶⁷ United States Department of Agriculture, 2017 Census of Agriculture.

⁶⁸ Tioga Tells Quality of Life Assessment, 2018-2019, https://rhnsnyc.org/wp-content/uploads/2019/07/Final-Report_Quality-of-Life-Assessment_TiogaTells2018.2019.pdf

⁶⁹ Data USA, Tioga County Profile, 2017, <https://datausa.io/profile/geo/tioga-county-ny>

⁷⁰ Ibid

⁷¹ Ibid

⁷² New York State Department of Labor, *Jobs in Demand Today*, <https://labor.ny.gov/stats/reos.asp>

Mining, Quarrying and Oil and Gas Extraction (\$73,527), Utilities (\$58,750), and Professional, Scientific, and Technical Services (\$54,531).⁷³

In 2013 – 2017, an estimated 83.6% of Tioga County workers drove to work alone while 9.7% carpooled. Among those who commuted to work, it took them 23 minutes, on average, to get to their place of work.⁷⁴

TABLE 3.20 – TIOGA COUNTY EMPLOYMENT BY OCCUPATION	
Occupation	%
Office and Administrative Support	12.5
Sales and Related Occupations	9.6
Management	9.5
Production	7.4
Food Preparation and Serving	7.3
Construction and Extraction	6.0
Education and Library Instruction	5.9
Building and Grounds Cleaning and Maintenance	5.2
Business and Financial Operations	3.9
Health Diagnosing, Treating, Practitioners and Other Technical	3.7
Transportation	3.7
Personal Care and Service	3.6
Installation, Maintenance, and Repair	3.4
Computer and Mathematical	3.1
Architecture and Engineering	3.1
Material Moving	2.1
Healthcare Support	2.0
Health Technologies and Technicians	1.9
Community and Social Service	1.6
Law Enforcement	1.2
Art, Design, Entertainment, Sports and Media	1.0
Fire Fighting, Prevention, and Other Protective Service Work	0.9
Legal Occupations	0.7
Life, Physical, and Social Science	0.7
<i>Source: Data USA, Tioga County Profile</i>	

TABLE 3.21 – TIOGA COUNTY EMPLOYMENT BY INDUSTRY	
Industry	%
Manufacturing	14.4
Educational Services	14.4
Retail Trade	14.3
Healthcare and Social Assistance	13.8
Accommodation and Food Services	8.0
Construction	7.3
Professional, Scientific and Technical Services	5.5
Public Administration	4.6
Administrative Support and Waste Management Services	3.6
Wholesale Trade	2.9
Transportation and Warehousing	2.8
Finance and Insurance	2.2
Information	1.6
Arts, Entertainment and Recreation	1.4
Mining, Quarrying, and Oil/Gas Extraction	1.2
Utilities	1.1
Agriculture, Forestry, Fishing and Hunting	0.9
<i>Source: Data USA, Tioga County Profile</i>	

⁷³ Data USA, Tioga County Profile, 2017, <https://datausa.io/profile/geo/tioga-county-ny>

⁷⁴ 2017 American Community Survey, 5-Year Estimates

Job Stability, Wages and Income

In a survey conducted in fall 2017, the majority of employers did not indicate plans to expand or increase employment within the next 3-5 years with the exception of Tioga Downs. Only Tioga Downs planned to hire, citing an addition of 100 new positions to staff the new hotel, events center, and restaurant in 2017, then even more employees during spring 2018 and annually thereafter. These positions are expected to be concentrated in food and beverage, hotel, racing, and the pool. It is noted that on December 6, 2017, Sanmina Corporation filed a WARN notice with the New York State Department Labor, announcing the firm's planned plant closing. According to the filing, 161 employees were separated from the company effective March 7, 2018, and the remainder of the total workers affected – 274 according to the filing – to separate by the yet unannounced closing date. According to survey data submitted by the company, this displaced some 141 full-time employees who reside in Tioga County. Area employers such as Lockheed, Crown Cork & Seal, and Guthrie Health report issues with recruiting talent due to lack of adequate housing options. Many new employees in senior management, engineering, and the medical professions are relocating from major metropolitan areas and have an expectation of traditional neighborhoods, quality housing, options at various price points, and lower property taxes.⁷⁵

It is important to consider the stability of employers in the surrounding counties because census data shows that over 55 percent of Tioga County residents commute to work out of the county, suggesting that people may prefer to live in Tioga County. For example, an estimated 750 area residents work at Cornell University; among these, 500 reside in Candor, Spencer, and Berkshire and another 200 live in Owego, Newark Valley, Richford, and Willseyville. Ithaca College employs 150 Tioga County residents. Guthrie Health System employs 4,087 people among its campuses in Pennsylvania and New York. Of this number, 546 are residents of Tioga County; with 350 living in Waverly.⁷⁶ Tioga Tells: Quality of Life Assessment survey respondents complement this in that they overwhelmingly believe Tioga County to be a safe, active, and kid-friendly community with good schools, suggesting it is a good place to raise a family.⁷⁷ However, 59% of the Tioga Tells respondents believe that the County lacks sufficient job opportunities.⁷⁸ The CFSCNY investigated this claim in their study on workforce perceptions, which revealed that there are many jobs available, but not enough workers. Additionally, the low wages “are a barrier to employment for lower-skilled workers who may not be able to afford to pay for transportation and childcare. For higher skill positions, low wages may prevent professionals from relocating to the area from larger metropolitan areas.”⁷⁹

The median household income of Tioga County (\$57,153) is less than the living wage needed to meet basic needs (\$57,706). This difference (\$553) is less than all surrounding counties and New York State as a whole (TABLE 3.22 on the following page).⁸⁰ According to the U.S. Census, an estimated 4.1% of

⁷⁵ Tioga County Housing Study, 2017, <https://www.tiogacountyny.com/media/5819/tioga-county-housing-study-122817.pdf>

⁷⁶ Ibid

⁷⁷ Tioga Tells: Quality of Life Assessment, 2018-2019, https://rhnscny.org/wp-content/uploads/2019/07/Final-Report_Quality-of-Life-Assessment_TiogaTells2018.2019.pdf

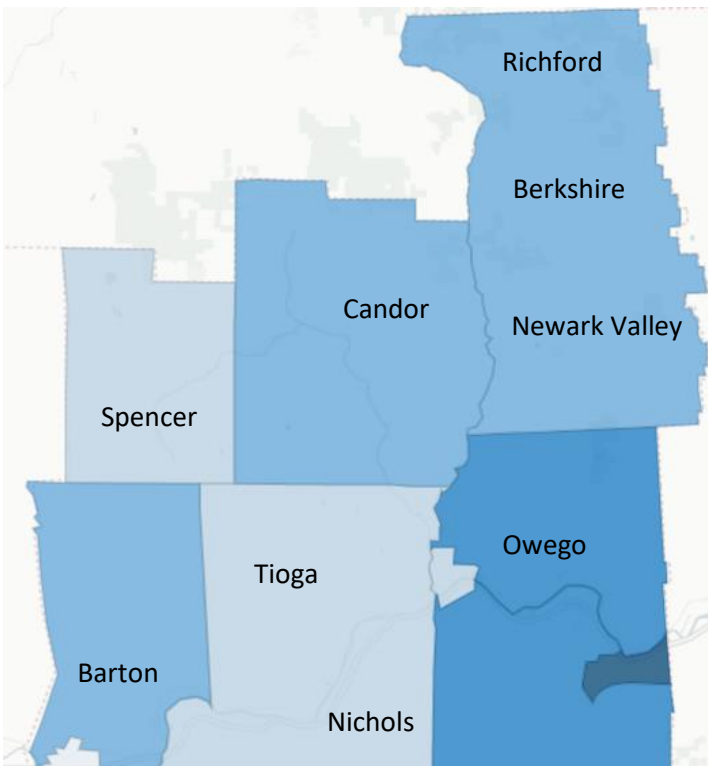
⁷⁸ Ibid

⁷⁹ Community Foundation of South Central New York, *Fostering Leadership in the CFSCNY Region: An Assessment of Opportunities and Challenges*, Horn Research, 2019, <https://donorswhocare.org/wp-content/uploads/2020/01/Fostering-Leadership-in-CFSCNY-Region-Final-Report-with-Appendices.pdf>

⁸⁰ Ibid

TABLE 3.22 – LIVING WAGE ESTIMATE AND MEDIAN HOUSEHOLD INCOME BY COUNTY			
County	Living Wage Needed to Meet Basic Needs (2 adults both working, 1 child)	Median Household Income	Difference between Income and Cost of Basic Needs
Broome	\$57,706	\$49,064	-\$8,642
Chenango	\$56,831	\$48,567	-\$8,264
Delaware	\$57,241	\$47,921	-\$9,320
Otsego	\$58,404	\$51,254	-\$7,150
Tioga	\$57,706	\$57,153	-\$553
NYS	\$67,419	\$64,894	-\$2,525
Source: Community Foundation for South Central New York 2019 Assessment			

MAP 3.8 – MEDIAN HOUSEHOLD INCOME IN TIOGA COUNTY BY LOCATION



Source: Tioga County Profile, Data USA

TABLE 3.23 – HOUSEHOLD INCOME IN TIOGA COUNTY IN 2014-2018	
Income	%
Less than \$10,000	4.1%
\$10,000 - \$14,999	6.0%
\$15,000 - \$24,999	9.6%
\$25,000 - \$34,999	10.4%
\$35,000 - \$49,999	11.1%
\$50,000 - \$74,999	18.9%
\$75,000 - \$99,999	13.9%
\$100,000 - \$149,999	16.7%
\$150,000 - \$199,999	5.4%
\$200,000 or more	3.9%
Source: 2018 American Community Survey, 5-Year Estimates	

TABLE 3.24 – PERCENTAGE OF ALICE + POVERTY HOUSEHOLDS IN TIOGA COUNTY, 2016		
Town	Total HH	% ALICE + Poverty
Apalachin (P)	492	46%
Barton (SD)	3,510	49%
Berkshire (SD)	492	41%
Candor (P)	268	36%
Candor (SD)	1,951	41%
Newark Valley (P)	434	52%
Newark Valley (SD)	1,485	35%
Nichols (P)	200	38%
Nichols (SD)	997	45%
Owego (P)	1,623	47%
Owego (SD)	7,579	31%
Richford (SD)	450	54%
Spencer (P)	336	53%
Spencer (SD)	1,201	46%
Tioga (SD)	2,040	45%
Waverly (P)	1,859	53%
Source: United Way ALICE Report, County Pages		

households had income below \$10,000 a year and 3.9% had income over \$200,000 or more (TABLE 3.23). Of all the households receiving earnings in 2014-2018 (73.3%), 37.0% received Social Security and about 25.9% received retirement income other than Social Security. 6.2% of households received Supplemental Security Income and 3.2% received cash public assistance income. The average income from Social Security was \$19,592.⁸¹ MAP 3.8 on the previous page shows the median household income in Tioga County by location.

Poverty and ALICE Rates

Poverty limits opportunities for quality housing, safe neighborhoods, healthy food, living wage jobs, and quality education. As poverty and related stress increase, health worsens.⁸² According to the American Community Survey, the poverty status in Tioga County is 10.5% among individuals as compared with the New York State at 14.6%.⁸³ The poverty rate in Tioga County is lowest when compared to surrounding counties (TABLE 3.25). The largest demographic living in poverty are females 18 to 24, followed by females 45 to 54 and females 25 to 34.⁸⁴ In the region, Tioga County has one of the highest poverty rates for people 65 years and older, yet its poverty rates fare better than most surrounding counties for children under 18 years and people 18 to 64 years (TABLE 3.25 below).⁸⁵

Although Tioga County's poverty rate is not high compared to other areas based on federal guidelines, it is important to consider those families that are struggling financially based on asset-limited, income-constrained, employed (ALICE) conditions. Combined, the number of ALICE and poverty-level households equals the total population struggling to afford basic needs.⁸⁶ At the county level in 2016, 40% of households suffer the strain of financial vulnerability according to ALICE. Specifically, 29% of households are above poverty line, but not making adequate wages to meet basic needs; that is \$20,304 for a single person and \$62,700 for 2 adults and 2 young children.⁸⁷ The following charts illustrate the number and types of ALICE households over time, while TABLE 3.24 on the previous page shows the percentage of ALICE + poverty households in Tioga County by municipality.

TABLE 3.25 – POVERTY RATES BY AREA						
Poverty Rates	Tioga	Broome	Tompkins	Chemung	Cortland	NYS
People in poverty	10.50%	17.00%	19.60%	14.80%	15.50%	14.6%
Children under 18 years below poverty	13.60%	23.00%	14.40%	20.80%	17.10%	20.6%
People 65 years and over below poverty	8.10%	7.60%	4.90%	8.80%	9.20%	11.5%
People 18 to 64 years below poverty	10.10%	17.90%	24.00%	14.40%	16.50%	13.4%
<i>Source: 2014 - 2018 American Community Survey 5-Year Estimates</i>						

⁸¹ 2014-2018 American Community Survey, 5-Year Estimates

⁸² County Health Rankings and Roadmaps, 2019 County Health Rankings Report, https://www.countyhealthrankings.org/sites/default/files/state/downloads/CHR2019_NY.pdf

⁸³ 2013-2017 American Community Survey, 5-Year Estimates.

⁸⁴ Data USA, Tioga County Profile, 2017, <https://datausa.io/profile/geo/tioga-county-ny>

⁸⁵ 2014-2018 American Community Survey, 5-Year Estimates

⁸⁶ ALICE Report, New York County Pages, 2018, https://www.dropbox.com/s/p3y8pgnz9z0ahul/18UW_ALICE_Report_CountyPages_NY_8.30.18.pdf?dl=0

⁸⁷ Ibid

CHART 3.6 – TIOGA COUNTY HOUSEHOLDS BY INCOME, 2000-2016

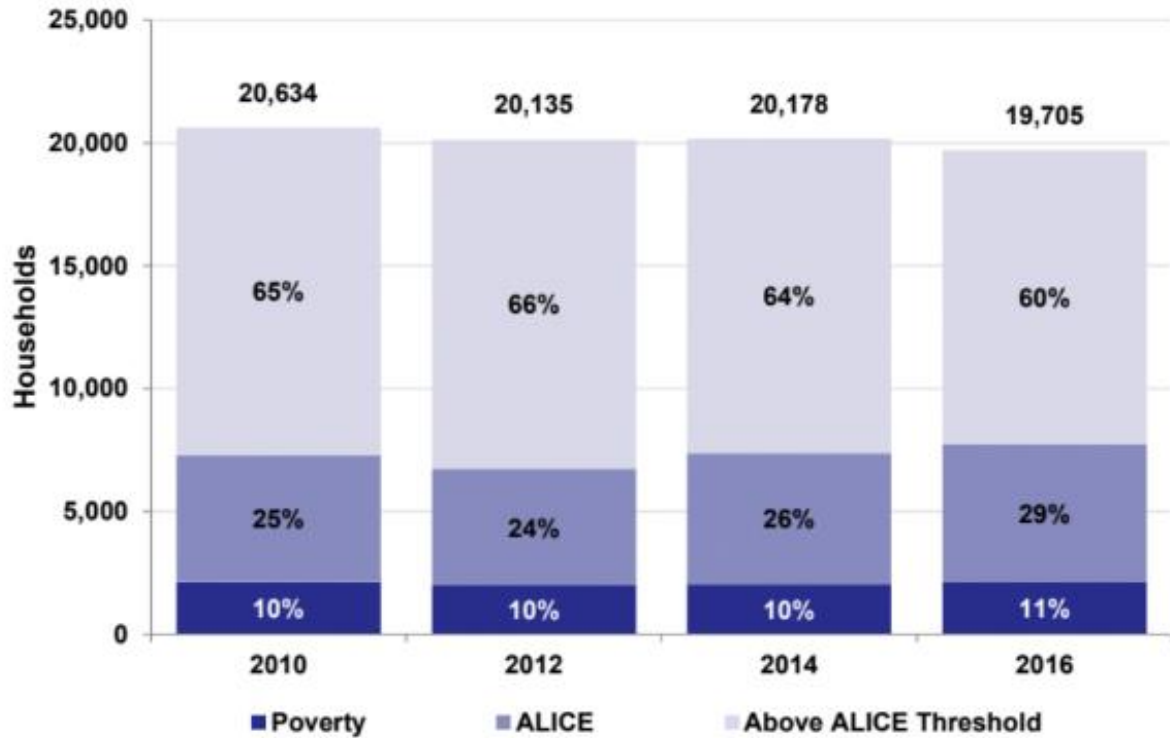
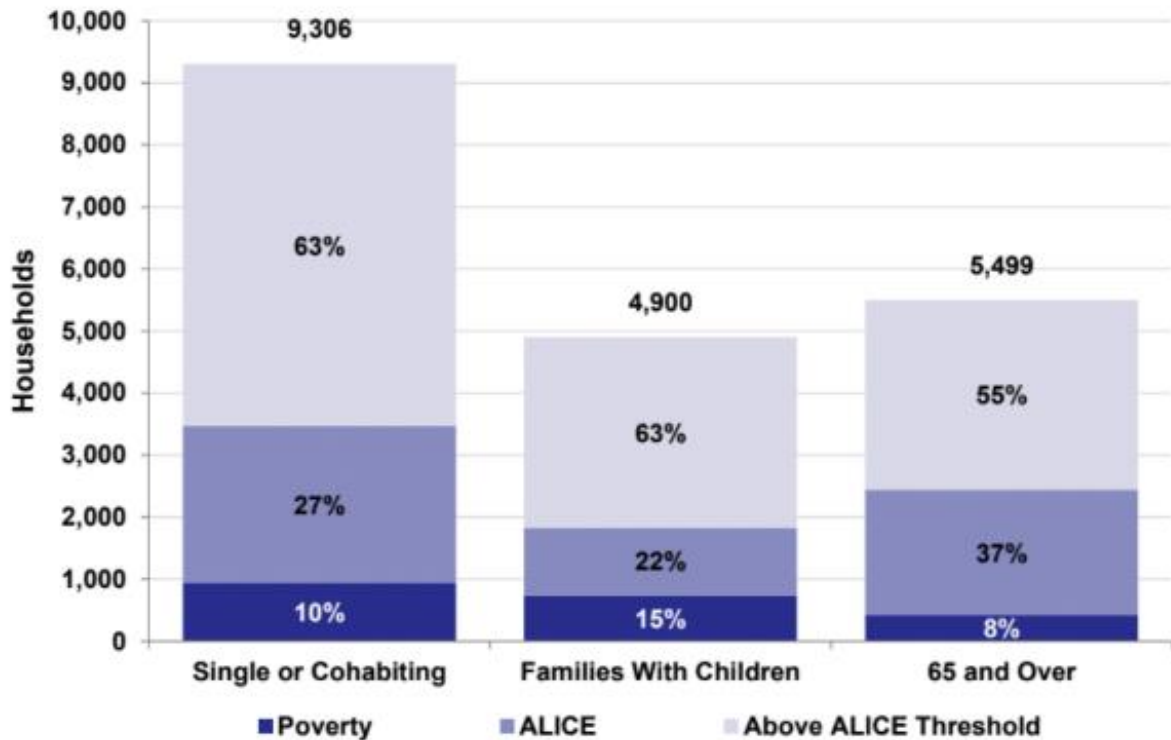


CHART 3.7 – TIOGA COUNTY HOUSEHOLD TYPES BY INCOME, 2016



Source: ALICE Report, New York County Pages

HEAP, SNAP, and Medicaid Participation

The Home Energy Assistance Program (HEAP) is a vital program that helps people with low income pay the cost of heating their homes. During the 2017-2018 HEAP season, 5,336 applications were processed yielding an average of \$497 per benefit, or \$2,903,978 in total.⁸⁸ Additional energy assistance services included furnace repairs and replacements, a furnace clean and tune program, and air conditioning components.

Within Tioga County, the SNAP and Medicaid Unit (FSMA) manages the applications and undercare for those requiring assistance with food stamps and Medicaid coverage. SNAP issues monthly electronic benefits to individuals and families that can be used like cash to purchase food at authorized retail food stores and farmers' markets. Eligibility and benefit levels are based on household size, income and other factors. Medicaid is an income- and resource-based program available for individuals who need coverage for their medical expenses.⁸⁹ In 2018, FSMA processed 23,467 applications, re-certification, and undercare maintenance tasks, which is up from 23,098 in 2017. The average monthly number of individuals receiving SNAP benefits in 2018 was 4,970, and approximately 35% were children.⁹⁰

The monthly average of Tioga County residents on Medicaid in 2018 was 3,554, 624 of whom were children. 1,190 residents received Social Security Income every month on average, while there were 220 Chronic Care Medicaid cases.⁹¹

⁸⁸ Tioga County Department of Social Services, 2018 Annual Report, <https://www.tiogacountyny.com/media/5863/social-services-annual-report-2018.pdf>

⁸⁹ Ibid

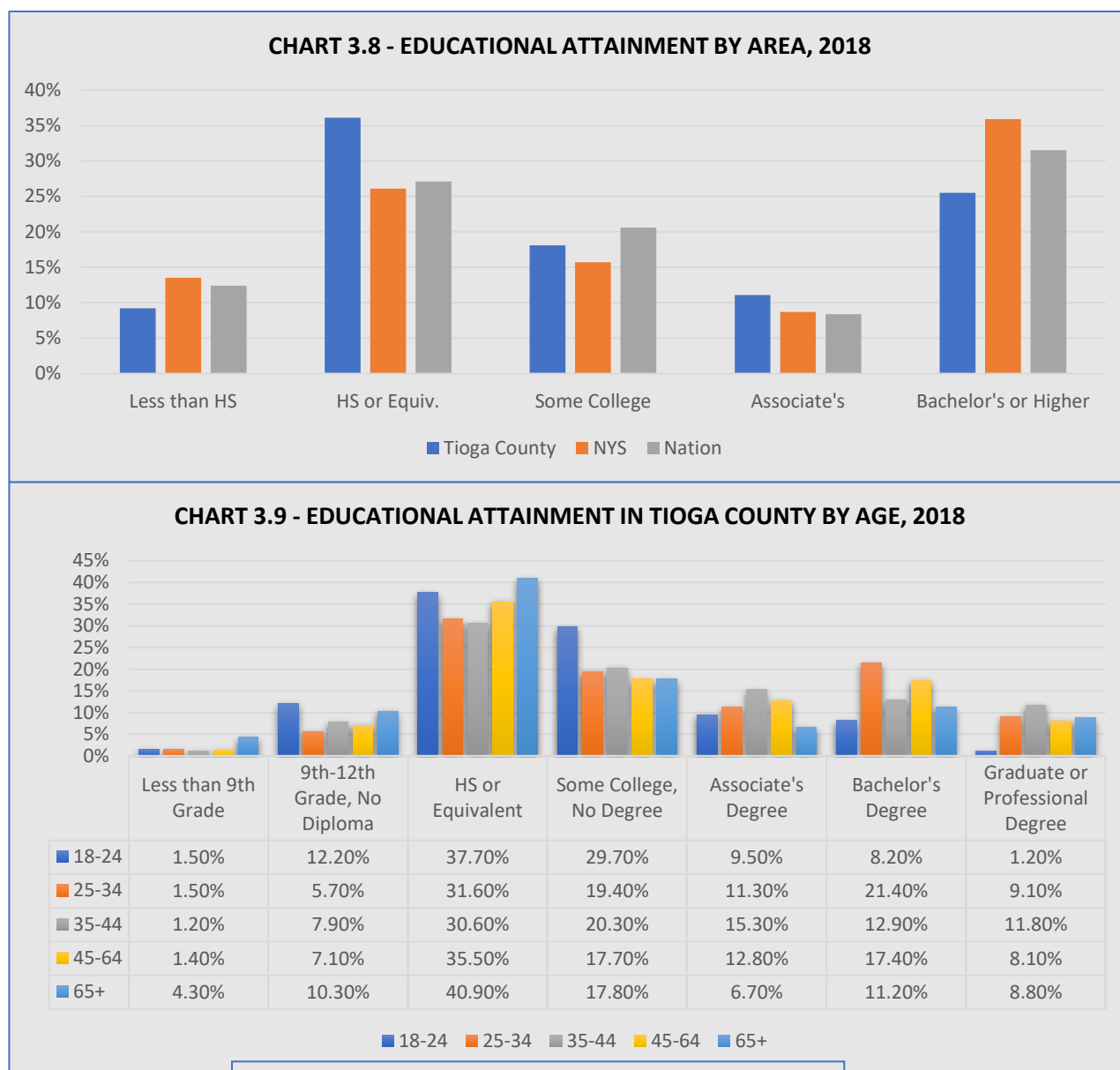
⁹⁰ Ibid

⁹¹ Ibid

EDUCATION

Educational Attainment

In Tioga County, the majority of people 25 years and over (90.8%) had at least graduated from high school, whereas nearly 10% of residents did not complete high school (9.2%).⁹² As of March 2017, more than one-third of the adult population in the United States has a bachelor's degree or higher.⁹³ As shown below, the rate of adults with a bachelor's degree or higher in Tioga County is much less than the general population.⁹⁴



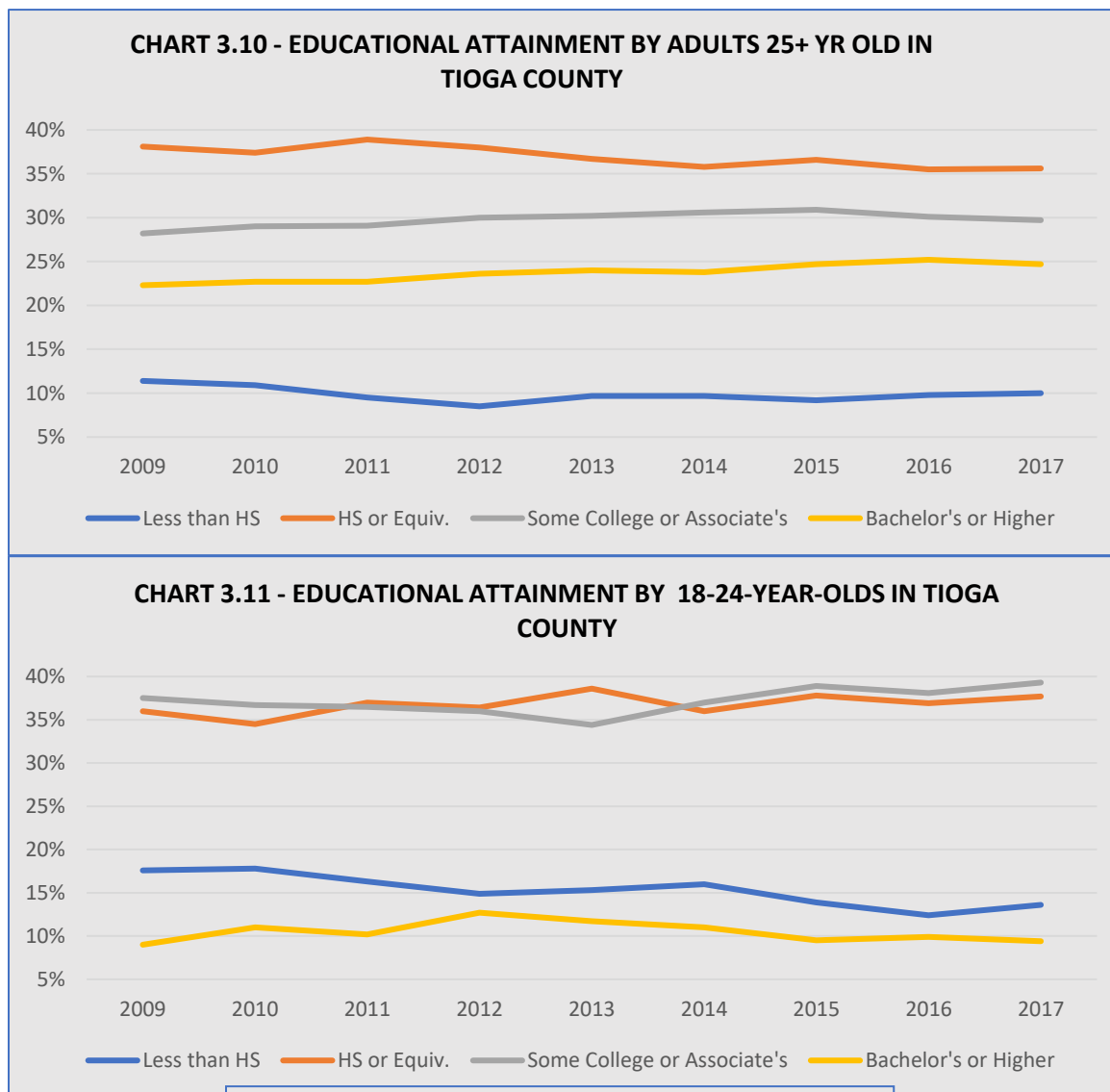
Source: 2018 American Community Survey, 5-Year Estimates

⁹² 2014-2018 American Community Survey, 5-Year Estimates

⁹³ U.S. Census, *Highest Educational Levels Reached by Adults in the U.S. Since 1940*, 2017, <https://www.census.gov/newsroom/press-releases/2017/cb17-51.html>

⁹⁴ 2014-2018 American Community Survey, 5-Year Estimates

In 2017, the rate of people aged 18 to 24 with less than a high school diploma was 13.6% compared to 2009 at 17.6%. Since 2009, the rate of those aged 18 to 24 with a bachelor's degree or higher increased from 9% in 2009 to a high of 12.7% in 2012 but has since decreased. In 2017, the rate of those earning a bachelor's degree or higher was 9.4%. The following table depicts these trends.



Source: 2018 American Community Survey, 5-Year Estimates

Student Enrollment

There is one private school in Tioga County, the North Spencer Christian Academy, which serves students in grades K-12; compared to the six public schools in Tioga County: Candor, Newark Valley, Owego-Apalachin, Spencer-Van Etten, Tioga, and Waverly Central School District. The total enrollment of K-12 public students in 2018-2019 was 7,055, which was lower than the previous two academic years (2015-2016 of 7,305 and 2016-2017 of 7,174).⁹⁵ The following table illustrates student enrollment by public school and homeschool instruction in Tioga County.

TABLE 3.26 – STUDENT ENROLLMENT BY PUBLIC SCHOOL AND HOME INSTUCTION, 2019			
School District	Public School Students	Home School Students	Total Students
Candor	722	29	751
Newark Valley	1,122	64	1,186
Owego-Apalachin	1,954	107	2,061
Spencer-Van Etten	882	70	968
Tioga	924	44	968
Waverly	1,451	39	1,490
TOTAL	7,055	353	7,424

Sources: New York State Education Department and Tioga County Public Schools, 2019

School Quality and Student Performance

Many studies have found that schools are considered good if they contain updated facilities and equipment, stimulating atmospheres, high-quality educational programs, as well as if they were safe, had dedicated teachers, small class sizes, healthy environments, and graduates who went on to excel academically and occupationally.⁹⁶ However, researchers have found that the determining factor in their decisions of where to attend school was whether the school was located in a good neighborhood.⁹⁷

This relationship between quality school districts and housing buying behavior has long been documented. According to the National Association of Realtors 2015 Profile of Home Buyers and Sellers, “25% of home buyers listed school quality and 20% listed proximity to schools as deciding factors in their home purchase.”⁹⁸ This is complemented by figures from the U.S. Department of Education which states that at least one out of four families nationwide chose their neighborhood specifically for the schools there.⁹⁹ Local research proves Tioga County falls in line with these trends as clear linkages exist between areas with the lowest occupancy and highest vacancy rates and the region’s lowest ranked school districts (Candor, Newark Valley, and Spencer).¹⁰⁰ The following table displays the ratings of Tioga County public school districts by GreatSchools, which includes important information in addition to test scores – factors that make a big difference in how children experience school, such as how much a school

⁹⁵ New York State Education Department, *Tioga County Profile*, <https://data.nysed.gov/profile.php?county=060>

⁹⁶ *The American Dream and the Power of Wealth: Choosing Schools and Inheriting Inequality in the Land of Opportunity*, (pp.4-51), Johnson, Heather B. 2006. New York: Routledge.

⁹⁷ Ibid

⁹⁸ National Association of Realtors, *Profile of Home Buyers and Sellers*, 2015, <http://www.nar.realtor/schools-the-hombuying-decision#!#section-166155>

⁹⁹ United States Education Department, 2004.

¹⁰⁰ Tioga County Housing Study, 2017, <https://www.tiogacountyny.com/media/5819/tioga-county-housing-study-122817.pdf>

TABLE 3.27 - AVERAGE RATINGS OF PUBLIC SCHOOLS IN TIOGA COUNTY, 2019						
Public School District	Overall Ranking	Academics		Equity		Student to Teacher Ratio
		Test Scores*	Student Progress*	Equity Overview*	Low-Income Students*	
Candor	4	4	8	2	2	8:01
Newark Valley	4	4	5	2	3	12:01
Owego-Apalachin	7	7	8	4	5	13:01
Spencer	5	6	4	4	4	12:01
Tioga	5	6	6	4	4	13:01
Waverly	4	5	5	2	3	14:01
<p>Source: GreatSchools Rankings</p> <p>Ratings at the lower end of the scale (1-4) signal that the school is “below average,” 5-6 indicates “average,” and 7-10 are “above average.”</p> <p>*Test Score measures schools on proficiency, using performance on state assessments across grades and subjects compared to other schools in the state</p> <p>*Student Progress measures the level of progress students have made on reading and math assessments during the past year or more</p> <p>*Equity Overview measures how well a school serves the academic development of all students by examining the performance level of disadvantaged students on state tests and in-school performance gaps between disadvantaged students and other students</p> <p>*Low Income Rating measures state test scores for students who qualify for free or reduced-price lunch compared to all students in the state</p>						

helps students improve academically and how well a school supports students from different socioeconomic groups.¹⁰¹

Overall, this data suggests that residents choose their communities for reasons such as housing quality, proximity to employers, employment opportunities, and higher wages, and school quality plays a secondary role to these factors. While the rankings above reveal that half of the schools are below average, two are average and only one is above average, survey and focus group participants overwhelmingly believed Tioga County has good schools and that this was a strong asset to living in the county.¹⁰² Specifically, during discussions with Tioga County residents, parents remarked how the dedication and longevity of school staff, additional social support, small class sizes, and safety were factors contributing to the county’s public school quality.¹⁰³

¹⁰¹ GreatSchools, <https://www.greatschools.org/gk/ratings/>. Accessed 2-2020.

¹⁰² Tioga County Housing Study, 2017, <https://www.tiogacountyny.com/media/5819/tioga-county-housing-study-122817.pdf>

¹⁰³ Ibid

Absenteeism

Within Tioga County schools and throughout the nation, chronic absent students (those who miss at least 15 days of school in a year) usually face tremendous adversity – including poverty, health challenges, community violence, and difficult family circumstances – that make it difficult for them to take advantage of the opportunity to learn at school.¹⁰⁴ Within Tioga County, nearly 20% (or 1,389 out of 7,305) of the student population was chronically absent in the 2015-2016 school year compared to 16% nationwide. The largest rate of chronic absenteeism occurred at Waverly Central School District at 25%, whereas the lowest rate took place at Candor at 15.8%. See TABLE 3.28.

TABLE 3.28 – PERCENT OF CHRONICALLY ABSENT STUDENTS IN TIOGA COUNTY, 2015-2016

School District	%	#
Candor	15.80%	115
Newark Valley	18.40%	219
Owego-Apalachin	18.20%	357
Spencer-Van Etten	17.70%	157
Tioga	17%	164
Waverly	25%	377
TOTAL		1389
<i>Source: U.S. Department of Education</i>		

Suspension and Expulsion

The following table displays disciplinary data of Tioga County public schools in 2015. As shown below, Waverly Central School District is consistently one of the highest ranked schools in terms of percentage of students with in-school and out-of-school suspensions, expulsions, referrals to law enforcement, and students with school-related arrests.¹⁰⁵ Tioga Central School is the only other district in which expulsions occurred. The highest rates of in-school suspensions occurred at Spencer Van Etten (8.9%), while Owego-Apalachin had the fewest (3.8%).

TABLE 3.29 – DISCIPLINARY DATA IN TIOGA COUNTY PUBLIC SCHOOLS, 2015

School	Enrollment	In-School Suspensions		Out-of-School Suspensions		Expulsions		Students Referred to Law Enforcement		Students with School-Related Arrests	
		#	%	#	%	#	%	#	%	#	%
Candor	730	37	5.10%	18	2.50%	0	0%	0	0%	0	0%
Newark Valley	1226	76	6.20%	65	5.30%	0	0%	2	0.20%	0	0%
Owego-Apalachin	2,040	77	3.80%	53	2.60%	0	0%	0	0%	0	0%
Spencer-Van Etten	926	82	8.90%	53	5.70%	0	0%	4	0.40%	0	0%
Tioga	1,011	54	5.30%	24	2.40%	8	0.80%	5	0.50%	5	0.50%
Waverly	1,560	115	7.40%	105	6.70%	9	0.60%	6	0.40%	4	0.30%
TOTAL	7493	441	5.90%	318	4.20%	17	0.20%	17	0.20%	9	0.10%
<i>Source: Civil Rights Data Collection Sol and District Search</i>											

¹⁰⁴ United States Department of Education, *Chronic Absenteeism in the Nation's Schools*, <https://www2.ed.gov/datastory/chronicabsenteeism.html>

¹⁰⁵ Civil Rights Data Collection School and District Search, <https://ocrdata.ed.gov/DistrictSchoolSearch#districtSearch>

Free and Reduced Lunch

The percentage of students receiving free and reduced lunch is often used as a proxy measure for the percentage of students living in poverty. In Tioga County, the highest rates of free and reduced lunch within elementary schools was at Tioga Central (62.9%), followed by Waverly (59.6%) and Newark Valley (57.7%). Within county high schools, the highest rates were at Tioga (55.2%) and Spencer-Van Etten (52.7%). The table below further illustrates these rates.

TABLE 3.30 – FREE AND REDUCED LUNCH RATES IN TIOGA COUNTY SCHOOLS, 2018-2019			
School	Elementary	Middle	High
Candor	53.30%	47.80%	
Newark Valley	57.70%	54.00%	47.40%
Owego-Apalachin	48.40%	50.90%	38.60%
Spencer-Van Etten	55.60%	58.50%	52.70%
Tioga	62.90%	69.30%	55.20%
Waverly	59.60%	59.70%	45.90%
<i>Source: SchoolDigger</i>			

Graduation Trends

When considering the 2019 overall graduation rate data in Tioga County, graduation, advanced regents, and dropout rates were higher than the New York State average.¹⁰⁶ By contrast, regents and GED rates were lower than the state average.¹⁰⁷ Further analysis reveals educational disparities between and within Tioga County's school districts, as shown by TABLE 3.31 below.

TABLE 3.31 – GRADUATION RATE								
	New York State	County-Wide	Candor	Newark Valley	Owego-Apalachin	Spencer	Tioga	Waverly
All Students	83%	86%	79%	89%	92%	81%	89%	80%
Female	87%	89%	89%	92%	95%	85%	84%	84%
Male	80%	83%	70%	86%	88%	78%	93%	76%
General Education Students	88%	92%	88%	92%	96%	91%	95%	88%
Students with Disabilities	61%	55%	56%	63%	70%	33%	43%	48%
Non-Economically Disadvantaged	89%	92%	83%	94%	95%	89%	97%	90%
Economically Disadvantaged	77%	79%	74%	87%	87%	73%	82%	64%
<i>Source: New York State Education Department</i>								

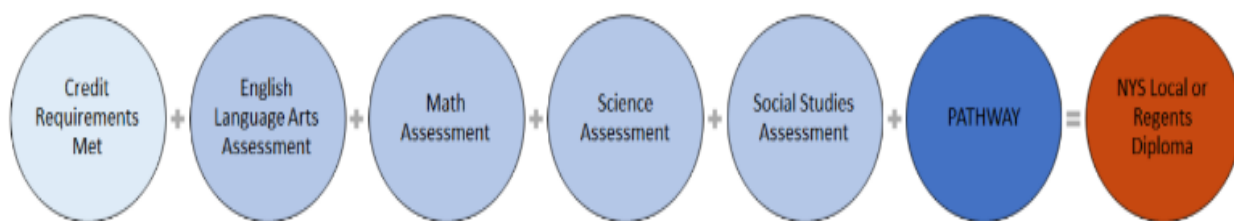
¹⁰⁶ New York State Education Department, *Tioga County Profile*, 2018, <https://data.nysed.gov/profile.php?county=060>

¹⁰⁷ Ibid

Candor, Waverly, and Spencer Van Etten Central School Districts have the poorest graduation rates of all students in Tioga County, while Owego-Apalachin has the highest rate, followed by Newark Valley and Tioga Central. The greatest variation in student graduation rates between schools is seen with Candor and Owego-Apalachin at 13%. TABLE 3.32 displays this data, where green cells highlight performance that is better than the state average, and red cells are considered worse.

Graduation rate data also reveal educational disparities among separate demographic groups within schools. For example, more females than males graduate in each school except Tioga Central. This is also seen at the state level, as females are 7% more likely to graduate than males. The greatest variation in graduation rate by sex within school districts is seen at Candor, where females graduate at a 19% higher rate than males. Additionally, county-wide students with disabilities graduate at a 37% lower rate than their general education student counterparts. This rate is 10% less than the New York State rate of 27%. Owego-Apalachin and Newark Valley are the only school districts in Tioga County where students with disabilities graduate at a higher rate than that of New York State, whereas less than 50% of students with disabilities graduate at Spencer, Tioga, and Waverly Central Schools. Unsurprisingly, the graduation rate gap between non-economically disadvantaged and economically disadvantaged students in Tioga County school districts follows a greater trend in New York State. While the gap in New York State between these two groups is 12%, Candor, Newark Valley, and Owego-Apalachin students fare better. Notably, Waverly has a 26% graduation rate difference between students who are economically disadvantaged and those who are not.

Additionally, under the “4+1” pathway assessment option, graduating students’ interest in the Arts, Biliteracy (LOTE), Career and Technical Education (CTE), Career Development and Occupational Studies (CDOS), Humanities (HUM), and Science, Technology, Engineering and Math (STEM) are demonstrated through the successful performance of four required Regents Exams or Department-approved alternative assessments, as well as completion of a comparably rigorous pathway to meet the fifth requirement for graduation.¹⁰⁸ In Tioga County public schools, pathways offered include the HUM, CTE, STEM, and CDOS. The following graphic illustrates the process graduating students must undertake to follow an approved pathway.



As shown by TABLE 3.32 on the following page, most graduating students (77.39%) in 2019 satisfied curriculum necessary for the Humanities pathway, and 13.44% of graduating students satisfied curriculum for Science. More students pursued CDOS curriculum than Math (5.50% versus 3.26%), and only 0.41% of students pursued CTE. Areas in which economically disadvantaged students outperformed not economically disadvantaged students were in CTE, Math, and CDOS; whereas more not economically disadvantaged students pursued HUM, and Science than economically disadvantaged students. Students with disabilities were much more likely to pursue CTE and CDOS than general

¹⁰⁸ New York State Education Department, *Multiple Pathways to Graduation Curriculum Instruction Handout*, <http://www.nysed.gov/common/nysed/files/programs/curriculum-instruction/multiplepathwayshandout.pdf>

education students, whereas general education students were much more likely to pursue Math and Science curriculum than students with disabilities. Humanities, Math and Science are more specialized fields, suggesting that students graduating under these pathways are likely to pursue higher education whereas those in CTE and CDOS fields are more likely to enter the workforce upon graduation.

TABLE 3.32 – TIOGA COUNTY GRADUATION PATHWAYS DATA, 2018-2019						
GROUP	HUM	CTE	MATH	SCIENCE	CDOS	TOTAL
All Students	77.39%	0.41%	3.26%	13.44%	5.50%	491
Female	74.12%	0.39%	4.31%	15.69%	5.49%	255
Male	80.93%	0.42%	2.12%	11.02%	5.51%	236
Students with Disabilities	84.91%	3.77%	0.00%	3.77%	7.55%	53
General Education Students	76.48%	0.00%	3.65%	14.61%	5.25%	438
Not Economically Disadvantaged	79.23%	0.00%	2.46%	15.85%	2.46%	284
Economically Disadvantaged	74.88%	0.97%	4.35%	10.14%	9.66%	207
Source: New York State Education Department						

Dropout Rates

The following table displays the dropout rate data for Tioga County schools across different demographic groups and in contrast with New York State rates. Overall, Tioga County schools reflect similar dropout rate trends in most every demographic group, yet students with disabilities in Tioga County are 6% more likely to dropout than the New York State population as a whole. However, Candor Central School District has a 0% dropout rate among students with disabilities. Additionally, dropout rates are significantly worse for students with disabilities and economically disadvantaged students at Waverly Central School District than students of the same groups at other schools.

TABLE 3.33 – DROPOUT RATES								
	New York State	County-Wide	Candor	Newark Valley	Owego-Apalachin	Spencer	Tioga	Waverly
All Students	6%	7%	7%	6%	4%	7%	6%	11%
Female	5%	6%	4%	6%	2%	3%	8%	13%
Male	7%	7%	10%	6%	5%	11%	5%	9%
General Education Students	5%	5%	10%	4%	1%	3%	5%	8%
Students with Disabilities	11%	17%	0%	25%	13%	25%	14%	26%
Non-Economically Disadvantaged	3%	3%	7%	3%	2%	5%	0%	2%
Economically Disadvantaged	9%	11%	7%	8%	6%	9%	12%	26%
Source: New York State Education Department								

TRANSPORTATION

Access to reliable transportation plays a big part in where people can live, the schools they can attend, job opportunities, or how often they see family and friends. The Binghamton Metropolitan Transportation Study states, “It keeps them connected to employment, shopping, health care, recreation, family and friends, and many other aspects of their lives. For the aging population, low-income individuals, or people with disabilities, transportation and maintaining basic levels of mobility can be a challenge.”¹⁰⁹ “

As a social determinant of health, access to high-quality, affordable transportation is fundamental to mental, physical, and emotional well-being.”¹¹⁰ Transportation has long been cited as a concern for rural residents across the nation, as well as in Tioga County.¹¹¹ In both rural and urban settings, transportation clearly impacts the usage of health care services because those without reliable transportation are more likely to delay and forgo necessary appointments, preventative care, and health maintenance activities.¹¹² “Transportation is also vitally important to the provision of in-home care, including the mobility of the health care workforce throughout rural areas, and to the ability of informal caregivers to reach their loved ones and provide necessary resources and support... Beyond health care access, transportation impacts the well-being of rural residents from issues as varied as accessing food, social support, education, employment, recreation, and community services.”¹¹³

Commuting to Work

As mentioned earlier, Tioga County residents who commute to work spend an average time of 22.4 minutes traveling, which is less time than the average U.S. worker (25.1 minutes). Additionally, 1.35% of the workforce in Tioga County have “super commutes” in excess of 90 minutes. In 2017, the most common method of travel for workers in Tioga County was “drove alone” (83.6%), followed by those who carpooled (9.75%). 2.62% of residents worked at home. Trends of commuter transportation methods by residents reveal that the percentage of residents bicycling to work increased between 2013 and 2015 but has since remained steady, while the percentages of residents carpooling, working from home, and driving alone have not seen any significant changes. Additionally, the percentage of residents using taxis to travel to work has declined over time, most significantly between 2016 and 2017; and the rate at which residents walk to work seems to be stabilizing from a decrease between 2013 and 2015.¹¹⁴

¹⁰⁹ Binghamton Metropolitan Transportation Study, Coordinated Public Transit – Human Services Transportation Plan, 2018, <http://www.bmtsonline.com/sites/default/files/FINAL%20Coordinated%20Transportation%20Plan%202018.pdf>

¹¹⁰ University of Minnesota Rural Health Research Center, Policy Brief: *Rural Transportation: Challenges and Opportunities*. November 2017. http://rhrc.umn.edu/wp-content/files_mf/1518734252UMRHRCTransportationChallenges.pdf

¹¹¹ Tioga Tells: Quality of Life Assessment, 2018-2019, https://rhnsnyc.org/wp-content/uploads/2019/07/Final-Report_Quality-of-Life-Assessment_TiogaTells2018.2019.pdf

¹¹² University of Minnesota Rural Health Research Center, Policy Brief: *Rural Transportation: Challenges and Opportunities*. November 2017.

¹¹³ Ibid

¹¹⁴ Data USA, Tioga County Profile, 2017, <https://datausa.io/profile/geo/tioga-county-ny>

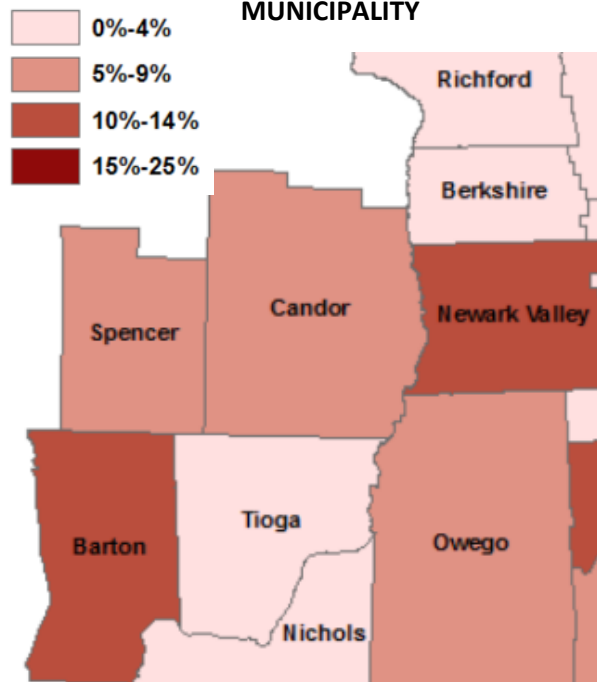
Vehicle Ownership

The need for public transit and human services depends on a variety of factors including vehicle ownership. According to the latest U.S. Census, the average household in Tioga County has two cars.¹¹⁵ However, the U.S. Census identified 89 households with no vehicle available in 2010, or 5.5% of households within the county. 2015 also saw an increase in the number of households with no vehicle, bringing the percentage to 7%. The Town of Barton has the lowest rate of vehicle ownership as 12% of households are without vehicles.¹¹⁶ The map to the right illustrates the percentage of households without a vehicle in Tioga County municipalities.

Transportation-Vulnerable Populations

A variety of transportation services are needed to meet the increasing mobility needs of older adults, people with disabilities, and people with lower incomes in the region. As the number of older adults increases, there is an increased need for more specialized services beyond those typically provided through general public transit or shared ride human service agency-provided transportation.¹¹⁷ Other researchers state: “With the percentage of the elderly rural population growing and the younger rural population diminishing, the elderly are left to depend more on themselves, people of the same age, their community, and government services for their well-being.”¹¹⁸ Not only is the lack of transportation one of the most important issues facing the elderly, but the rural socially disadvantaged people (referred to as transportation disadvantaged).¹¹⁹ Transportation disadvantage results from difficulties accessing transportation and/or opportunities, and is directly linked to both social and economic disadvantage.¹²⁰ “Individuals with disabilities face unique mobility challenges, which may be exacerbated by living in rural areas because transportation services are typically more informal and less specialized; travel distances are larger, services may cost more, and quality of services may vary between rural and urban areas.”¹²¹

MAP 3.9 – PERCENTAGE OF TIOGA COUNTY HOUSEHOLDS WITHOUT A VEHICLE BY MUNICIPALITY



Source: BMTS Coordinated Plan

¹¹⁵ U.S. Census, 2010.

¹¹⁶ Binghamton Metropolitan Transportation Study, Coordinated Public Transit – Human Services Transportation Plan, 2018, <http://www.bmtsonline.com/sites/default/files/FINAL%20Coordinated%20Transportation%20Plan%202018.pdf>

¹¹⁷ Ibid

¹¹⁸ *Economics of Transportation Research Needs for Rural Elderly and Transportation Disadvantaged Populations*, 2017. Mjelde, J.W., Dudensing, J. Brooks, Battista, G., Carrillo, B., Counsil, A. Giri, Pyrialakou, V.D., and Ullerich, S. Texas A&M University – COALS, AgriLife Extension, and Texas Transportation Institute College Station, TX. <https://static.tti.tamu.edu/tti.tamu.edu/documents/TTI-2017-1.pdf>

¹¹⁹ Ibid

¹²⁰ Ibid

¹²¹ Ibid

Modes of Transportation

While data on residents' preferences of transportation modes in Tioga County is limited, analysis from the National Household Travel Survey reports automobile, walking, public transit, and bicycling as the most common forms of travel in the nation. Specifically, 85% of all trips reported by individuals 19 years and older were made by automobile, while walking encompassed 10%, public transit 2.3%, and bicycling 0.7%¹²² "The automobile will remain the most popular form of transportation during retirement because the car is the most efficient manner to fulfill everyday mobility needs."¹²³

Within Tioga County, many find that older adults may limit their driving behavior from night driving, rush hours, city centers, highways, long trips, bad weather, and unfamiliar routes.¹²⁴ Other research states that "many elderly eventually stop driving because of family or societal pressures, age-related health, or cognitive problems... even if disabilities are not an issue, the elderly may have to give up their automobile because they may not be able to afford the ownership costs."¹²⁵ These sentiments were also captured in Tioga Tells focus group discussions with older residents and in recent community interviews with older adults.

Alternative transportation options for elderly often consist of family and friends, nonmotorized travel (e.g. walking and biking), and private and public transportation alternatives.¹²⁶ Stakeholder interviews suggest that, in Tioga County, many older adults and residents with low income rely heavily on those within their social networks to fulfil their mobility needs.¹²⁷ Additional research documents how "the elderly may be hesitant to ask for rides because they do not want to burden family or friends,"¹²⁸ which was confirmed true by Tioga County residents during the Tioga Tells 2018-2019 senior and low-income focus group discussions.¹²⁹ A 2005 study highlights that for elderly trips, walking and biking (unsurprisingly) rank far behind the automobile as popular travel modes for the elderly. Interviews with older adults in Tioga County highlight the lack of sidewalks, poor upkeep, obstruction problems, and safety concerns as complaints associated with nonmotorized travel.¹³⁰

Additionally, taxi and public bus services are common transportation alternatives available. However, the cost of taxi services in Tioga County often become an unrealistic option for residents.¹³¹ "Private taxi services are often nonexistent in rural areas, and when available, the private transportation options are often too expensive for many [elderly] to use, especially when considering distances that must be traveled."¹³² It is also important to note that there has been a loss of public transit in Tioga County since 2014. *Ride Tioga*, which provided fixed route public transit and dial-a-ride paratransit services, ceased

¹²² *Economics of Transportation Research Needs for Rural Elderly and Transportation Disadvantaged Populations*, 2017. Mjelde, J.W., Dudensing, J. Brooks, Battista, G., Carrillo, B., Counsil, A. Giri, Pyrialakou, V.D., and Ullerich, S. Texas A&M University – COALS, AgriLife Extension, and Texas Transportation Institute College Station, TX.

<https://static.tti.tamu.edu/tti.tamu.edu/documents/TTI-2017-1.pdf>

¹²³ Ibid

¹²⁴ Stakeholder Interviews. November 2019.

¹²⁵ *Economics of Transportation Research Needs for Rural Elderly and Transportation Disadvantaged Populations*, 2017.

¹²⁶ Ibid

¹²⁷ Stakeholder Interviews. November 2019.

¹²⁸ *Economics of Transportation Research Needs for Rural Elderly and Transportation Disadvantaged Populations*, 2017.

¹²⁹ Tioga Tells: Quality of Life Assessment, 2018-2019, https://rhnsnyc.org/wp-content/uploads/2019/07/Final-Report_Quality-of-Life-Assessment_TiogaTells2018.2019.pdf

¹³⁰ Community Member Interviews. November 2019.

¹³¹ Ibid

¹³² *Economics of Transportation Research Needs for Rural Elderly and Transportation Disadvantaged Populations*, 2017.

operations on November 30, 2014. Ride Tioga operated about 20 years in Tioga County and added a few connections into Broome County. It was funded with Federal Transit Administration and New York State Department of Transportation transit funds, as well as Medicaid transportation reimbursements, so the service was at almost no cost to Tioga County. During 2013, New York State contracted with Medical Answering Services (MAS) to schedule all Medicaid transportation statewide. MAS assigned most patients to taxi service instead of the bus. Ride Tioga ridership, which had been rising annually, went from about 1,000 per month to zero in early 2014. Other rural transit providers in New York suffered the same results. The cease in operations of Ride Tioga happened suddenly and left a significant gap in Tioga County transportation services, not only to Medicaid patients, but to those non-Medicaid riders who used the fixed route and paratransit services to get to work, medical appointments, food shopping, and more.¹³³ Medicaid is another important source of transportation for those who qualify, providing emergency and non-emergency medical transportation. However, “since the Centers for Medicare & Medicaid services only permit reimbursement for ‘loaded’ miles in which the beneficiary is in the vehicle,”¹³⁴ rural transportation providers in Tioga County are placed at a disadvantage as they need to bear the burden of driving more reimbursed miles to pick up passengers.

Transportation Programs and Services

Tioga County is home to some key transportation programs which provide a needed alternative to the lack of public transit. Most programs are available through nonprofit groups while others are volunteer-led. However, the majority of these services are for medical transport, suggesting a gap in services to places like the pharmacy and recreational activities. The available programs typically provide door-to-door services (where an individual is picked up from their location and delivered to the destination’s door) or door-through-door transportation (where an individual is picked up, the transport stays during the appointment). Some programs also offer a mileage reimbursement for volunteer drivers while others allow older adults to trade their own cars to pay for rides. The following is a list of the available transportation programs in Tioga County.

TABLE 3.34 - TRANSPORTATION SERVICES AVAILABLE IN TIOGA COUNTY, NY					
Public Transit	Public Transportation	Paratransit Services	Volunteer Service	Pharmacy Delivery Service	Other Service
C-Tran	Owego Taxi	Achieve	TOI	CVS Pharmacy	A New Hope Center
	R&L Taxi		Northern Tioga Neighbors Network	Waverly Pharmacy	Seniors Helping Seniors
	Valley Taxi			Apalachin Pharmacy	Senior Information and Referral Service
	A1 Chucks Taxi			Owego Pharmacy	Tioga County Rural Ministry
	A&D Transport				Move Together NY
	Totem Taxi				Encore Plus Breast and Cervical Health Program
					Getthere Mobility Transportation

¹³³ Binghamton Metropolitan Transportation Study, Coordinated Public Transit – Human Services Transportation Plan, 2018, <http://www.bmtsonline.com/sites/default/files/FINAL%20Coordinated%20Transportation%20Plan%202018.pdf>

¹³⁴ University of Minnesota Rural Health Research Center, Policy Brief: *Rural Transportation: Challenges and Opportunities*. November 2017. http://rhrc.umn.edu/wp-content/files_mf/1518734252UMRHRCTransportationChallenges.pdf

HEALTH

Clinical Care

85.9% of adults in Tioga County report having a regular health care provider, which is 3% higher than the New York State rate.¹³⁵ However, Tioga County is considered a health professional shortage area in primary and dental care. Health Professional Shortage Areas (HPSAs) are designated by the Health Resources and Services Administration's Office of Shortage Designation, based on requests from the state Primary Care Offices (PCOs).¹³⁶ As of 2019, the ratio of population to providers placed Tioga County as the 9th worst for primary care physicians, the worst in number of dentists, and the bottom quarter (47th of 62) in mental health providers in New York State (TABLE 3.35).¹³⁷ There are also no pediatricians located in Tioga County. In 2016, 7.3% of Tioga County adults report not receiving medical care because of cost.¹³⁸

TABLE 3.35 – RATIO OF POPULATION TO NUMBER OF PROVIDERS, 2019		
Provider Type	Tioga County	New York State
Primary Care Physicians	3,050:1	1,200:1
Dentists	5,400:1	1,230:1
Mental Health Providers	700:1	370:1
Source: County Health Rankings		

When asked to list the top health concern in 2019, Tioga County residents reported access to mental health providers as the second top health concern.¹³⁹ Six organizations in Tioga County provide mental health services through a total of 22 programs, the most frequently available of which are care coordination and general support programs.¹⁴⁰ In 2016, the Tioga County Mental Health Department indicated that the loss of supportive case management had left a large gap in the system and noted a need for an Open Access Program to accommodate consumers with limited access to transportation. Providers also reported that access to services can be limited due to wait times and funding changes and restrictions constrain programs' ability to serve clients.¹⁴¹ Additionally, Tioga County provides treatment services for chemical addiction and dependency through two outpatient clinic locations. According to the CFSCNY, "the county mental health department reported a need for a recovery center due to limited availability at the Addiction Crisis Center, which is generally at full capacity."¹⁴²

There are no hospitals located within the borders of Tioga County. Rather, healthcare systems rest just outside the county and include Lourdes-Ascension Health, United Health Services, Cayuga Medical

¹³⁵ New York State Community Health Indicator Reports, https://webbi1.health.ny.gov/SASStoredProcess/guest?_program=%2FEBI%2FPHIG%2Fapps%2Fchir_dashboard%2Fchir_dashboard&p=ch&cos=49&ctop=10

¹³⁶ Health Resources and Services Administration, <https://data.hrsa.gov/>

¹³⁷ County Health Rankings, 2019, <https://www.countyhealthrankings.org/app/#!/new-york/2019/rankings/tioga/county/outcomes/overall/snapshot>

¹³⁸ New York State Community Health Indicator Reports

¹³⁹ Tioga County Public Health, Community Health Assessment, 2019-2024, <https://www.tiogacountyny.com/media/7278/tioga-county-community-health-assessment-20192024.pdf>

¹⁴⁰ Community Foundation for South Central New York Needs Assessment Regional Summary, 2015, <https://donorswhocare.org/wp-content/uploads/2018/10/CFSCNY-Needs-Assessment-Regional-Summary.pdf>

¹⁴¹ Ibid

¹⁴² Ibid

Center, Guthrie, Arnot Ogden, and St. Joseph's Hospital.¹⁴³ "Distance to a trauma center for a majority of residents ranges from 35 to 55 minutes. This is a concern for the towns of Richford and Berkshire, as they are over 20 miles from the nearest hospital."¹⁴⁴

Preventive Care

As a type of health care whose purpose is to shift the focus from treating sickness to maintaining wellness and good health, preventive care includes a healthy lifestyle, exercise, diet, and other similar efforts. In a medical setting, preventive care includes physical examinations, screenings, laboratory tests, counseling, and immunizations.¹⁴⁵ Recommended prevention, detection, and lifestyle activities vary by age and gender, but can include blood pressure, diabetes and cholesterol tests, cancer screenings, nutrition, depression, and drug and alcohol counseling, routine well-child visits, and vaccinations.¹⁴⁶ The following list are preventive statistics from Tioga County.

- In Tioga County, 84.5% of adults report having their blood cholesterol checked, compared with the Southern Tier rate of 79.9% and the state rate of 83.4%.¹⁴⁷
- Of the Tioga County adults 65 years and older, 67% received a flu immunization within the past year.¹⁴⁸ Additionally, the percentage of fee-for-service Medicare enrollees that had an annual flu vaccination in Tioga County was 46%, which is the same rate as New York State.¹⁴⁹
- In 2018, Tioga County Public Health Educators performed 119 child passenger safety checks to educate parents and caregivers about proper car seat installation and fit for children, as well as assist in the replacement of expired or dangerous car seats. Of these seats checked, 82% were installed incorrectly. Additional efforts were taken to educate 40 area bus drivers and bus monitors, as well as provide 89 new car seats to those in need.¹⁵⁰
- 88.5% of women aged 21-65 received a cervical cancer screening, which is higher than the NYS rate of 82.2% and the Southern Tier rate of 81.4%; whereas 71.9% of women aged 50-74 years received breast cancer screenings, which is lower than the NYS rate of 79.7% and the Southern Tier rate of 72.1%.¹⁵¹ When compared to the rest of the counties in New York, Tioga County ranks in the top percentile of mammography screenings, that is the percentage of female Medicare enrollees ages 65 to 74 that received an annual mammography screening.¹⁵² However,

¹⁴³ Tioga County Public Health, Community Health Assessment, 2019-2024,

<https://www.tiogacountyny.com/media/7278/tioga-county-community-health-assessment-20192024.pdf>

¹⁴⁴ Ibid

¹⁴⁵ Barrow Group, *The Importance of Preventive Care*, <https://www.barrowgroup.com/blog/importance-preventative-care/>

¹⁴⁶ U.S. Department of Health and Human Services, Preventive Care, <https://www.hhs.gov/healthcare/about-the-aca/preventive-care/index.html>

¹⁴⁷ New York State Community Health Indicator Reports,

https://webbi1.health.ny.gov/SASStoredProcess/guest?_program=%2FEBI%2FPHIG%2Fapps%2Fchir_dashboard%2Fchir_dashboard&p=ch&cos=49&ctop=1&ctop=2&ctop=3&ctop=4&ctop=5&ctop=6&ctop=7&ctop=8&ctop=9&ctop=10&ctop=11&ctop=12&ctop=13&ctop=14&ctop=15

¹⁴⁸ Ibid

¹⁴⁹ County Health Rankings, 2019, <https://www.countyhealthrankings.org/app/#!/new-york/2019/rankings/tioga-county/outcomes/overall/snapshot>

¹⁵⁰ Tioga County Public Health, 2018 Annual Report, <https://www.tiogacountyny.com/media/5875/tioga-county-public-health-2018-annual-report.pdf>

¹⁵¹ New York State Community Health Indicator Reports,

https://webbi1.health.ny.gov/SASStoredProcess/guest?_program=%2FEBI%2FPHIG%2Fapps%2Fchir_dashboard%2Fchir_dashboard&p=ch&cos=49&ctop=1&ctop=2&ctop=3&ctop=4&ctop=5&ctop=6&ctop=7&ctop=8&ctop=9&ctop=10&ctop=11&ctop=12&ctop=13&ctop=14&ctop=15

¹⁵² Ibid

57.7% of women aged 50-74 had a mammogram between October 2014 and December 2016, which is lower than both the Southern Tier rate (58.7%) and the NYS rate (71.2%).¹⁵³

- 60.1% of adults in Tioga County report visiting the dentist in the past year, which is lower than the Southern Tier rate of 66.9% and the state rate of 68.4%, and 26.1% of Medicaid enrollees report visiting the dentist at least once for preventive care during the last year.¹⁵⁴ Tioga County Public Health reports 2,119 dental screenings in 2018, compared to 1,884 in 2017.¹⁵⁵
- The percentage of Tioga County children aged 0-15 months in government sponsored insurance programs with the recommended number of well-child visits was 77.1%, compared to the Southern Tier rate of 79.8% and the state rate of 80.1%. Of the Tioga County children aged 3-6 years in government sponsored insurance programs, 69.8% attended the recommended number of well-child visits which is lower than both the Southern Tier rate (72.1%) and the state rate (84.3%). 53.0% of Tioga County youth aged 12-21 in government sponsored insurance programs met the recommended number of well-child visits, which is also lower than the Southern Tier rate (53.8%) and the state rate (68.1%).¹⁵⁶
- During the Spring of 2018, Tioga County Public Health partnered with the Carantouan Greenway and Southern Tier Lyme support to bring an educational awareness campaign on tick and Lyme disease to Tioga and Waverly Central School Districts, where over 1,330 students were taught about tick prevention and importance, as well as Lyme disease symptoms.¹⁵⁷ Since 2008, Tioga County has seen a dramatic increase in the number of confirmed Lyme disease cases, with the exception of 2015 to 2018. Only one case was confirmed in 2008, compared to an all-time high of 82 cases in 2015. The confirmed number of cases fell from 65 in 2016 to 30 in 2017.¹⁵⁸

Health Care Coverage

94.3% of the population in Tioga County has health coverage, with 52% on employee plans, 16.7% on Medicaid, 13.3% on Medicare, 10.8% on non-group plans, and 1.64% on military or VA plans.¹⁵⁹ This is higher than the New York State rate of 91.4%.¹⁶⁰ The percentage of children with health insurance is 97.7%, which is similar to the New York State rate of 97.4%.¹⁶¹ Of those with health insurance in Tioga County, 60% report utilizing a provider within the county and 86% of residents report regular access to a health care provider.¹⁶² Between 2016 and 2017, the percent of uninsured population in Tioga County

¹⁵³ Ibid

¹⁵⁴ Ibid

¹⁵⁵ Tioga County Public Health, 2018 Annual Report, <https://www.tiogacountyny.com/media/5875/tioga-county-public-health-2018-annual-report.pdf>

¹⁵⁶ Ibid

¹⁵⁷ Ibid

¹⁵⁸ Ibid

¹⁵⁹ Data USA, Tioga County Profile, <https://datausa.io/profile/geo/tioga-county-ny>

¹⁶⁰ New York State Community Health Indicator Reports, https://webbi1.health.ny.gov/SASStoredProcess/guest?_program=%2FEBI%2FPHIG%2Fapps%2Fchir_dashboard%2Fchir_dashboard&p=ch&cos=49&ctop=10

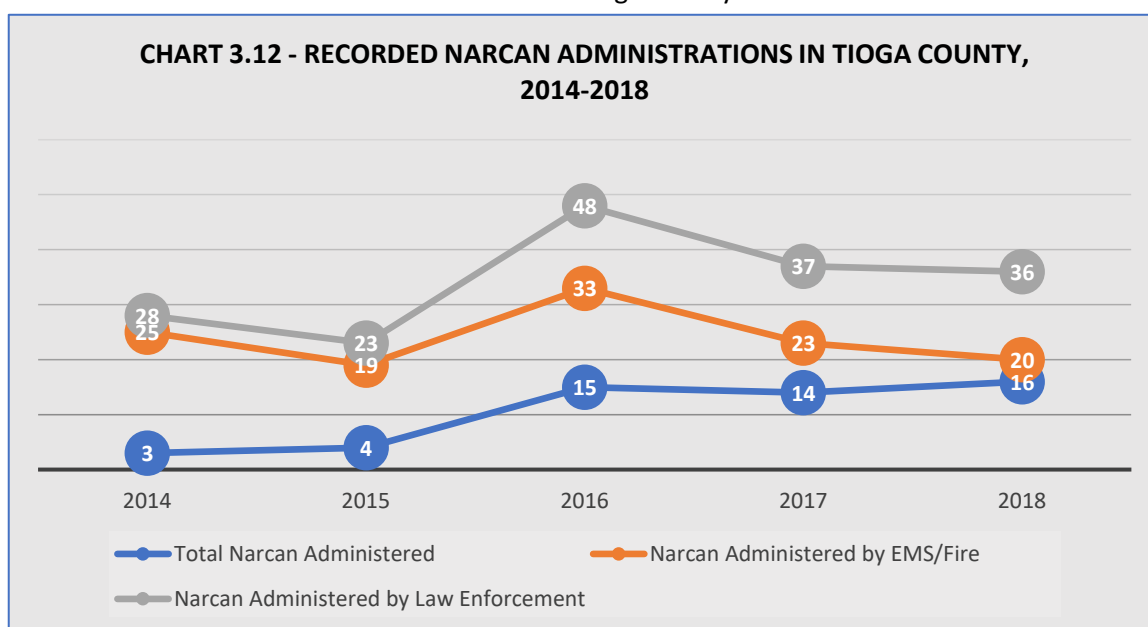
¹⁶¹ Ibid

¹⁶² Tioga County Public Health, Community Health Assessment, 2019-2024, <https://www.tiogacountyny.com/media/7278/tioga-county-community-health-assessment-20192024.pdf>

declined from 6.2% to 5.68%.¹⁶³ As of 2019, 5% of people in Tioga County are uninsured compared to 7% in New York State.¹⁶⁴

Behavioral Health

According to the NYS Community Health Indicators Report, Tioga County had higher rates of alcohol-related motor vehicle injuries and deaths in 2014-2016 (55.4%) than the Southern Tier Region (39.6%) and New York State (29.9%).¹⁶⁵ The rate of cigarette smoking among adults (20.8%) and the incidence of lung and bronchus cancer in Tioga County (64.4) is also higher than that of New York State (14.2% and 59.2% respectively).¹⁶⁶ Eight opioid-related deaths occurred in Tioga County in 2018, as well as in 2016 and 2014, compared to 14 in 2015 and 11 in 2017.¹⁶⁷ In 2018, 13 Narcan trainings were completed, 186 individuals were trained in identifying an opioid overdose and administering Narcan, and 205 Narcan kits were distributed among law enforcement and community members.¹⁶⁸ CHART 3.12 below reveals the number of recorded Narcan administrations in Tioga County since 2014.



Additionally, Tioga County has a significantly higher rate of adult obesity (40.1%) than New York State (25.5%), yet children and adolescent obesity rates between the two are similar (17.4% and 17.3%, respectively).¹⁶⁹ While the Tioga County Public Health CHA survey found that 50% of Tioga County residents consider physical activity important, inactivity rates are “above 20% and trending upwards.”¹⁷⁰

¹⁶³ Data USA, Tioga County Profile, <https://datausa.io/profile/geo/tioga-county-ny>

¹⁶⁴ County Health Rankings, 2019, <https://www.countyhealthrankings.org/app/#!/new-york/2019/rankings/tioga-county/outcomes/overall/snapshot>

¹⁶⁵ New York State Community Health Indicator Reports, https://webbi1.health.ny.gov/SASStoredProcess/guest?_program=%2FEBI%2FPHIG%2Fapps%2Fchir_dashboard%2Fchir_dashboard&p=ch&cos=49&ctop=10

¹⁶⁶ Ibid

¹⁶⁷ Ibid

¹⁶⁸ Tioga County Public Health, 2018 Annual Report, <https://www.tiogacountyny.com/media/5875/tioga-county-public-health-2018-annual-report.pdf>

¹⁶⁹ Ibid

¹⁷⁰ Tioga County Public Health, Community Health Assessment, 2019-2024, <https://www.tiogacountyny.com/media/7278/tioga-county-community-health-assessment-20192024.pdf>

That is, the percentage of adults age 20 and over reporting no leisure-time physical activity was 26%.¹⁷¹ However, 40% of residents who responded to the survey indicated that access to physical activities were a health problem/concern.¹⁷² This is consistent with the County Health Rankings, which states 65% of Tioga County residents have adequate access to locations for physical activities while 35% do not.¹⁷³ As of 2019, this percentage placed Tioga County in the bottom quarter (14 of 62) of all New York counties with regard to access to physical activity locations.¹⁷⁴

When compared with other New York counties, Tioga County has seen the fewest number of chlamydia cases (100 newly diagnosed cases per 100,000 population)¹⁷⁵ and has the 3rd fewest HIV prevalence rates (77 per 100,000 aged 13 years and older).¹⁷⁶ Case rates of syphilis and gonorrhea are also less than the New York rate, as zero syphilis cases were reported in 2018 and only 232.8 cases of gonorrhea were reported per 100,000 people compared with New York's 658.7.¹⁷⁷ Of those with gonorrhea, 42.8% were female whereas 57.2% were male.¹⁷⁸

Food Environment and Nutrition

Within Tioga County, 16.2% had low access to healthy food in 2015¹⁷⁹ and 14.4% of households received Food Stamp/SNAP benefits.¹⁸⁰ According to the Food and Health Network of South Central New York, an estimated 4,770 Tioga County residents, or 9.3%, were food insecure in 2012.¹⁸¹ Although the rate of food insecurity decreased between 2009 to 2012, the rate of food insecure children in Tioga County in 2012 was nearly double the rate of all residents at 2,170, or 18.3%.¹⁸² In 2017, 4,780 individuals in Tioga County, or 9.7% of the population, were food insecure compared to 9.5% in 2016 and 9.9% in 2015.¹⁸³ CHART 3.13 (next page) depicts the recent status of food insecurity among children in Tioga County.

While the food insecurity rate in Tioga County appears poor, its food environment index is considered the 8th best in the state, or 8 out of 62, at 8.8/10.¹⁸⁴ The Tioga County food environment index is

¹⁷¹ County Health Rankings, 2019, <https://www.countyhealthrankings.org/app/#!/new-york/2019/rankings/tioga/county/outcomes/overall/snapshot>

¹⁷² Tioga County Public Health, Community Health Assessment, 2019-2024, <https://www.tiogacountyny.com/media/7278/tioga-county-community-health-assessment-20192024.pdf>

¹⁷³ County Health Rankings, 2019, <https://www.countyhealthrankings.org/app/#!/new-york/2019/rankings/tioga/county/outcomes/overall/snapshot>

¹⁷⁴ Ibid

¹⁷⁵ New York State Community Health Indicator Reports, https://webbi1.health.ny.gov/SASStoredProcess/guest?_program=%2FEBI%2FPHIG%2Fapps%2Fchir_dashboard%2Fchir_dashboard&p=ch&cos=49&ctop=10

¹⁷⁶ Rural Health Information Hub, Rural Data Explorer, 2017, <https://www.ruralhealthinfo.org/data-explorer>

¹⁷⁷ New York State Community Health Indicator Reports, https://webbi1.health.ny.gov/SASStoredProcess/guest?_program=%2FEBI%2FPHIG%2Fapps%2Fchir_dashboard%2Fchir_dashboard&p=ch&cos=49&ctop=10

¹⁷⁸ Ibid

¹⁷⁹ Rural Health Information Hub, Rural Data Explorer, 2017, <https://www.ruralhealthinfo.org/data-explorer>

¹⁸⁰ New York State Community Health Indicator Reports, https://webbi1.health.ny.gov/SASStoredProcess/guest?_program=%2FEBI%2FPHIG%2Fapps%2Fchir_dashboard%2Fchir_dashboard&p=ch&cos=49&ctop=10

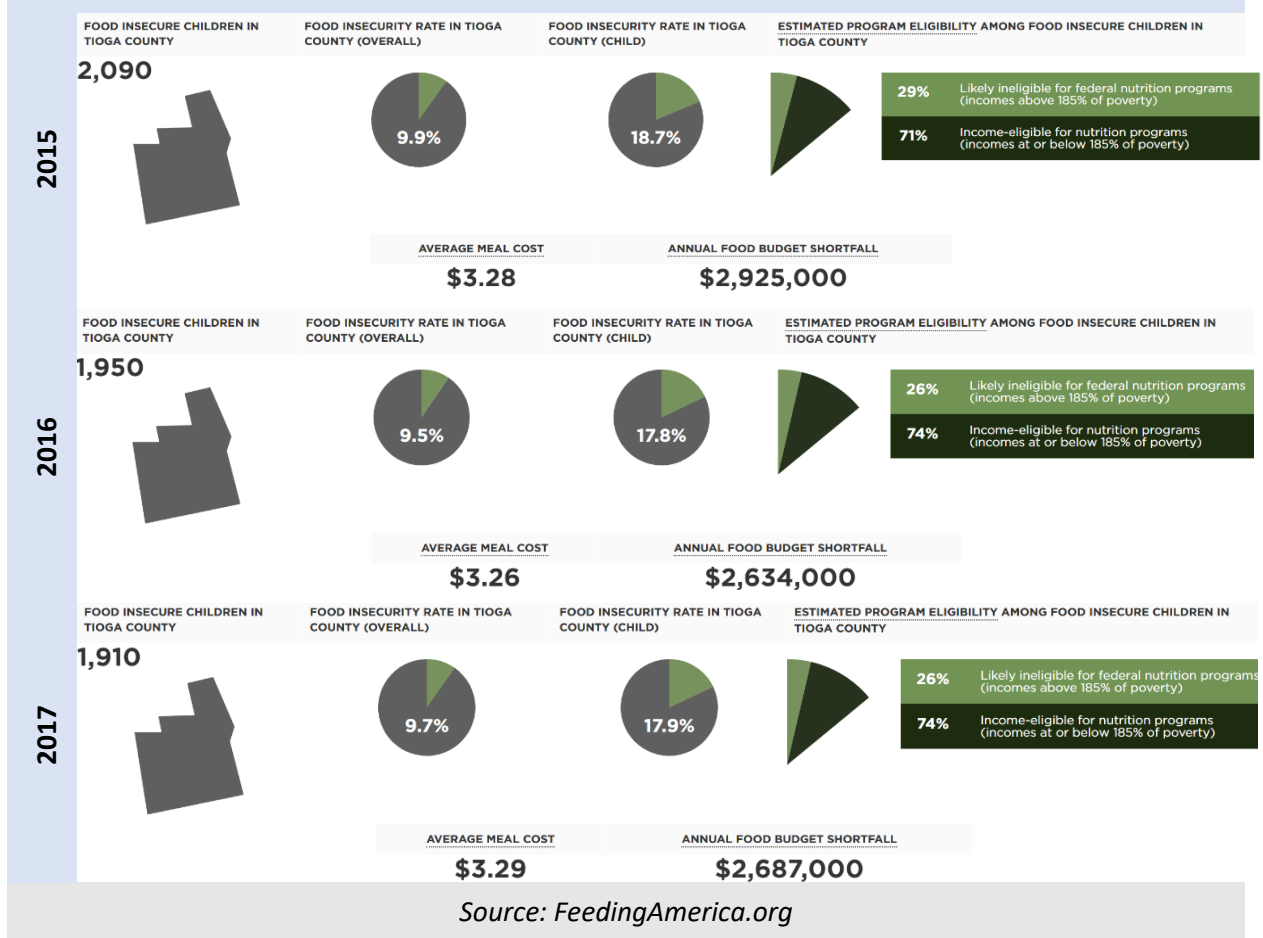
¹⁸¹ Food and Health Network, *Helping to Create Hunger-Free Communities*, 2018, <https://foodandhealthnetwork.org/wp-content/uploads/2018/07/helping-to-create-hunger-free-communities.pdf>

¹⁸² Ibid

¹⁸³ Feeding America, *Food Insecurity in Tioga County*, 2015-2017, <https://map.feedingamerica.org/county/2015/overall/new-york/county/tioga>

¹⁸⁴ County Health Rankings, 2019, <https://www.countyhealthrankings.org/app/#!/new-york/2019/rankings/tioga/county/outcomes/overall/snapshot>

CHART 3.13 - FOOD INSECURITY RATES AMONG CHILDREN IN TIOGA COUNTY, 2015-2017



developed by the USDA, which assembles statistics on factors including the food choices, health and well-being, and community characteristics of residents and thus identifies food insecurity rates.¹⁸⁵ This index rating suggests that the factors contributing to a healthy food environment in Tioga County are good, especially when compared with Kings County, who has the lowest index in New York State of 7.4.¹⁸⁶

In 2010, food banks provided 127,443 pounds of fresh produce to area hunger-relief agencies in Tioga County, and 117,660 pounds in 2011.¹⁸⁷ As of 2014, active programs available to assist residents experiencing food insecurity include *Calling all Hunters*, a venison donation program; Tioga County's five community and educational gardens; School Year Free or Reduced Lunch Programs; SFSP Summer Lunches Program; and the New York Farmers' Market EBT/Food Stamp/SNAP Program, which can help increase the use of EBT benefits at farmers' markets.¹⁸⁸ Other community assets actively combating food insecurity include local ministries, churches, schools, and food pantries. However, in recent years, the number of markets participating in the New York Farmers' Market EBT/Food Stamp/SNAP Program

¹⁸⁵ Ibid

¹⁸⁶ Ibid

¹⁸⁷ Food and Health Network, *Helping to Create Hunger-Free Communities*, 2018, <https://foodandhealthnetwork.org/wp-content/uploads/2018/07/helping-to-create-hunger-free-communities.pdf>

¹⁸⁸ Ibid

within Tioga County has significantly declined, and an updated list of emergency food services and programs has not yet been identified.

Furthermore, without municipal-level data, it is difficult to fully understand the relationship between food choices, health and well-being, and community characteristics in each Tioga County community. As the Food and Health Network states: “Food insecurity may reflect a household’s need to make tradeoffs between basic needs, such as housing and medical bills, and purchasing nutritionally adequate food.”¹⁸⁹ USDA adds: “Food environment factors – such as store/restaurant proximity, food prices, food and nutrition assistance programs, and community characteristics – interact to influence food choices and diet quality. These interactions are complex, and more research is needed to identify causal relationships and effective policy interventions.”¹⁹⁰ Local reports suggest a concern of food deserts particularly in the remote areas of Newark Valley and Berkshire.¹⁹¹ The Tioga County Public Health CHA states that “the main challenge nutrition educators have observed is the rural setting of the county. Accessibility of healthy food is limited. Many residents communicate their desires to make the healthier food choices, but when it comes down to the ease and accessibility, it seems that convenience is what makes the decision.”¹⁹² Other sources cite that the percentage of population with low-income and low access to a supermarket or large grocery store in Tioga County is 2.85%, which is higher than the New York State rate of 2.25%.¹⁹³ However, without comprehensive data supporting the locations or movements of food deserts, supplies and environments in Tioga County, the nutritional routines of residents, especially low-income residents, and their ability to access healthy foods using reliable transportation and adequate financial assistance are not well understood. “While emergency food assistance programs are essential, they are not the whole answer. Ending hunger requires ongoing, integrated, and sustainable solutions for economic security. Families need positive opportunities to break the cycle of poverty, to experience the benefits of eating nutritious food, and to be empowered by public policies and practices that build on community and neighborhood assets.”¹⁹⁴

¹⁸⁹ Ibid

¹⁹⁰ United States Department of Agriculture, Economic Research Service, <https://www.ers.usda.gov/data-products/food-environment-atlas/>

¹⁹¹ Tioga Tells Quality of Life Assessment, 2018-2019, https://rhnscny.org/wp-content/uploads/2019/07/Final-Report_Quality-of-Life-Assessment_TiogaTells2018.2019.pdf

¹⁹² Tioga County Public Health, Community Health Assessment, 2019-2024, <https://www.tiogacountyny.com/media/7278/tioga-county-community-health-assessment-20192024.pdf>

¹⁹³ New York State Community Health Indicator Reports, https://webbi1.health.ny.gov/SASStoredProcess/guest?_program=%2FEBI%2FPHIG%2Fapps%2Fchir_dashboard%2Fchir_dashboard&p=ch&cos=49&ctop=10

¹⁹⁴ Food and Health Network, *Helping to Create Hunger-Free Communities*, 2018, <https://foodandhealthnetwork.org/wp-content/uploads/2018/07/helping-to-create-hunger-free-communities.pdf>

Births and Prenatal Care

The birth rate in Tioga County is 9.8 per 1,000 population, which is higher than the Southern Tier Region rate of 9.5 and lower than the New York State rate of 11.9.¹⁹⁵ In Tioga County, 28.6% of live births were unintended pregnancies; 7% of live births had low birthweights; and 26% of live births occurred within 24 months of a previous pregnancy.¹⁹⁶ Additionally, the rate of children born with congenital disability (e.g. cleft lip, spina bifida, down syndrome, and cystic fibrosis¹⁹⁷) in Tioga County has increased from nearly 180 per 10,000 births in 2000 to an all-time high of 350 per 10,000 births in 2010, but sharply declined from 2010 to 2012 by about 75 births.¹⁹⁸

Tioga County experiences one of the highest teen birth rates in New York counties (24 per 1,000 female population ages 15-19), although the perinatal data profile from 2014 to 2016 shows the trend is decreasing (TABLE 3.36 below).¹⁹⁹ The municipalities of Richford, Berkshire, Willseyville and Candor have high levels of teen pregnancy and birth rates.²⁰⁰ The Spencer municipality has the most alarming percentage of premature births at 17.2%, whereas Nichols has the least at 2.2%.

TABLE 3.36 - PERINATAL DATA PROFILE OF TIOGA COUNTY, 2014-2016

Town	Total Births	Teen Birth Rate (per 1,000)	Teen Pregnancy Rate (per 1,000)	% Pre-mature Births	% Low Weight Births	% with Late or No Prenatal Care	Infant Deaths	Infant Death Rate (per 1,000 live births)
Richford	70	40.4	70.7	6.2	8.6	4.3	0	0
Berkshire	66	39.2	54.9	12.5	15.2	6.1	3	45.5
Willseyville	43	31.3	52.1	2.4	0	2.3	0	0
Candor	119	29.6	34.6	13.9	5.9	4.2	0	0
Newark Valley	107	21.2	29.7	10.8	4.7	4.7	0	0
Barton	47	18.5	27.8	5.1	4.3	2.1	2	42.6
Spencer	105	17	26.8	17.2	8.6	3.8	0	0
Lockwood	28	25.6	25.6	19	10.7	3.8	0	0
Owego	295	18	24	11.4	7.8	4.1	2	6.8
Apalachin	182	16.9	20.8	5.6	3.3	2.7	1	5.5
Nichols	55	9.1	18.3	2.2	7.3	3.6	0	0
Waverly	167	7.2	12.9	9.2	9.6	1.8	0	0
TOTAL	1,284	19.1	26.7	9.9	7.1	3.6	8	6.2
<i>Source: Tioga County Public Health</i>								

¹⁹⁵ New York State Community Health Indicator Reports, https://webbi1.health.ny.gov/SASStoredProcess/guest?_program=%2FEBI%2FPHIG%2Fapps%2Fchir_dashboard%2Fchir_dashboard&p=ch&cos=49&ctop=10

¹⁹⁶ Ibid

¹⁹⁷ U.S. Department of Health and Human Services, National Institute of Health, <https://www.nichd.nih.gov/health/topics/birthdefects/conditioninfo/types>

¹⁹⁸ Tioga County Public Health, Community Health Assessment, 2019-2024, <https://www.tiogacountyny.com/media/7278/tioga-county-community-health-assessment-20192024.pdf>

¹⁹⁹ New York State Community Health Indicator Reports

²⁰⁰ Tioga County Public Health, Community Health Assessment, 2019-2024

Mortality and Morbidity

The mortality rate in Tioga County is 925.2 per 100,000 population, which is less than the Southern Tier region of 973.0 but significantly higher than the New York State rate of 769.8.²⁰¹ Within Tioga County, the years of potential life lost per 100,000 is 6,400, which is greater than that of New York State (5,400).²⁰² According to the National Center for Health Statistics, cancer, unintentional injury, heart disease, suicide, perinatal deaths, and homicide deaths were the national leading causes of years of potential life lost before age 75.²⁰³ Studies show that populations at higher risk for premature death include those with obesity, those who smoke, those with a higher risk of unintentional injuries, those with heart disease risk factors, and those with increased exposure to environmental hazards.²⁰⁴ In Tioga County, heart disease and cancer consistently top the causes of death and stroke and Alzheimer's disease are on the rise (See TABLE 3.37 on the following page).²⁰⁵ The Tioga County Public Health Community Health Assessment (CHA) reports that men die from unintentional injury three times more than women, and women die from Alzheimer's disease twice as much as men.²⁰⁶ Unintentional injury may include poisoning, motor vehicle traffic deaths, and falls. Nationally, unintentional injuries were the leading cause of death for all groups under age 45.²⁰⁷

As shown by CHART 3.14 on the following page, death by unintentional injury has generally increased between 2008 and 2018, with the most significant increase occurring between 2013 and 2014. The most common unintentional injuries result from motor vehicle crashes, falls, fires and burns, drowning, poisonings, and aspirations.²⁰⁸

Compared to New York State and the national average, Tioga County has a significantly higher rate of motor vehicle accidents that involve pedestrians.²⁰⁹ Additionally, the rate of age-adjusted suicide death among the Tioga County population is 11.5 per 100,000 population, which is higher than the New York State rate of 8.0.²¹⁰

²⁰¹ New York State Community Health Indicator Reports, https://webbi1.health.ny.gov/SASStoredProcess/guest?_program=%2FEBI%2FPHIG%2Fapps%2Fchir_dashboard%2Fchir_dashboard&p=ch&cos=49&ctop=10

²⁰² County Health Rankings, 2019, <https://www.countyhealthrankings.org/app/#!/new-york/2019/rankings/tioga/county/outcomes/overall/snapshot>

²⁰³ Centers for Disease Control and Prevention, National Center for Health Statistics, <https://www.cdc.gov/nchs/fastats/deaths.htm>

²⁰⁴ United Health Foundation, America's Health Rankings, 2017, <https://www.americashealthrankings.org/explore/annual/measure/YPLL/state/ALL>

²⁰⁵ Tioga County Public Health, Community Health Assessment, 2019-2024, <https://www.tiogacountyny.com/media/7278/tioga-county-community-health-assessment-20192024.pdf>

²⁰⁶ Ibid

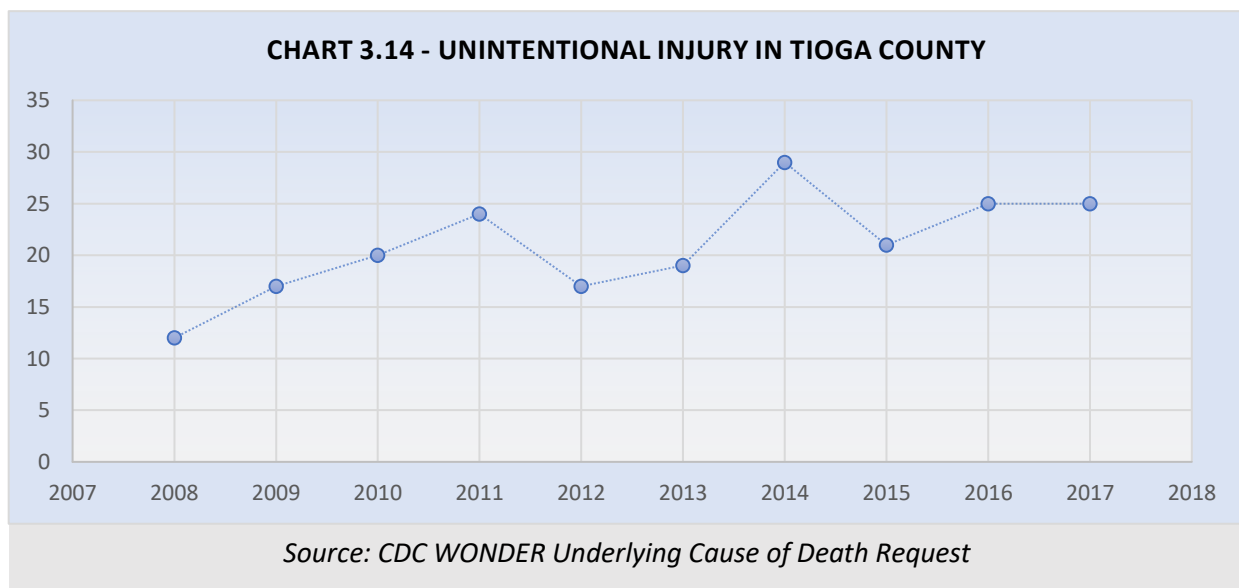
²⁰⁷ County Health Rankings, 2019, <https://www.countyhealthrankings.org/app/#!/new-york/2019/rankings/tioga/county/outcomes/overall/snapshot>

²⁰⁸ Maine Center for Disease Control and Prevention

²⁰⁹ Tioga County Public Health, Community Health Assessment, 2019-2024, <https://www.tiogacountyny.com/media/7278/tioga-county-community-health-assessment-20192024.pdf>

²¹⁰ New York State Community Health Indicator Reports, https://webbi1.health.ny.gov/SASStoredProcess/guest?_program=%2FEBI%2FPHIG%2Fapps%2Fchir_dashboard%2Fchir_dashboard&p=ch&cos=49&ctop=10

TABLE 3.37 – TOP LEADING CAUSES OF PREMATURE DEATH IN TIOGA COUNTY								
Year	Total Deaths, Premature Death Rate	#1 Cause (Deaths)	#2 Cause	#3 Cause	#4 Cause	#5 Cause	#6 Cause	#7 Cause
2008	400, 704.6 per 100,000	Cancer (123)	Heart Disease (105)	CRLD (29)	Alzheimer's Disease (14)	Stroke (14)	Unintentional Injury (11)	Kidney Disease and Urinary Tract Diseases (10)
2012	461, 712.5 per 100,000	Heart Disease (116)	Cancer (98)	CRLD (31)	Alzheimer's Disease (24)	Stroke (23)	Unintentional Injury (17)	Diabetes (15)
2015	443, 671.7 per 100,000	Heart Disease (116)	Cancer (94)	Alzheimer's Disease (26)	Stroke (24)	CRLD (24)	Unintentional Injury (16)	Diabetes (10)
Source: Tioga County CHA *CRLD is an abbreviation for Chronic Restrictive Lung Disease								



PUBLIC SAFETY

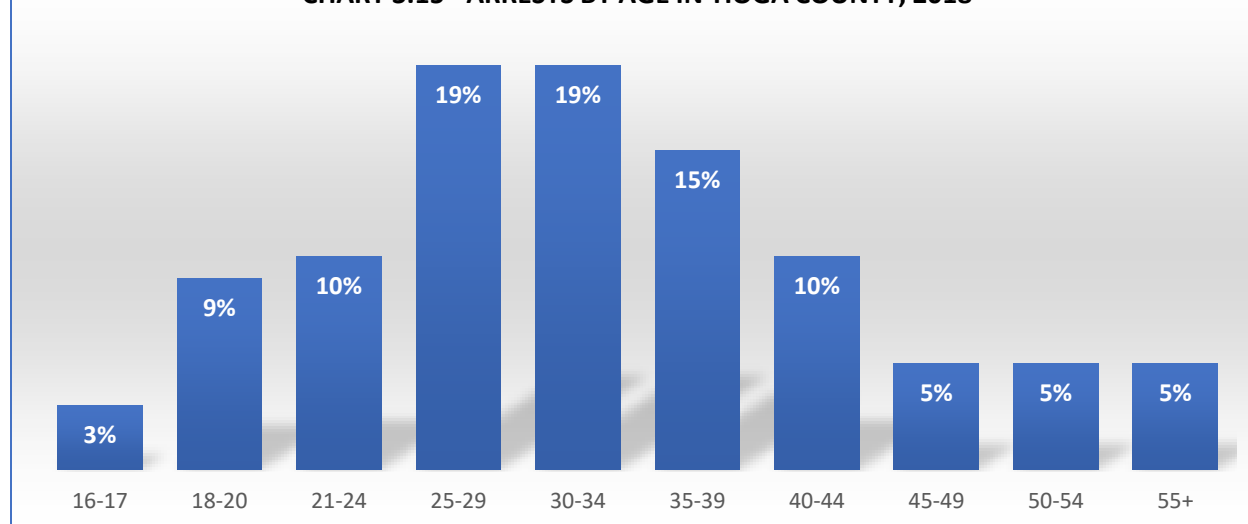
Arrests

In 2018, 707 total arrests were made in Tioga County, 74% of whom were male and 26% female.²¹¹ Of the total arrests made, 30% were felony arrests and 70% were misdemeanor arrests.²¹² Additionally, 40% of all arrests were drug- and alcohol-related; 5% were violent; 13% were property; and 42% were “other.”²¹³ The majority of arrests were made among those aged 25 to 39 years (52.7%), followed by those aged 21 to 24 years (10.3%), 40 to 44 years (9.8%), and 18 to 20 years (9.3%). The following charts and tables depict these trends, while also revealing that more females than males were arrested on drug felony and misdemeanor charges, as well as property misdemeanor charges. By contrast, more males than females were arrested on violent felony charges. Over time, drug misdemeanor arrests have increased, while DWI, property and other arrests have steadily declined.

TABLE 3.38 – TIOGA COUNTY ADULT ARRESTS BY SEX, 2018

	# Total Arrests	% Male Arrests	% Female Arrests
Total	707	74%	26%
Felony Total	214	32%	25%
Drug	47	21%	26%
Violent	34	18%	9%
DWI	25	11%	15%
Other	108	51%	50%
Misdemeanor Total	493	68%	75%
Drug	111	20%	29%
DWI	96	22%	13%
Property	95	17%	23%
Other	191	40%	35%
<i>Source: DCJS, Computerized Criminal History System</i>			

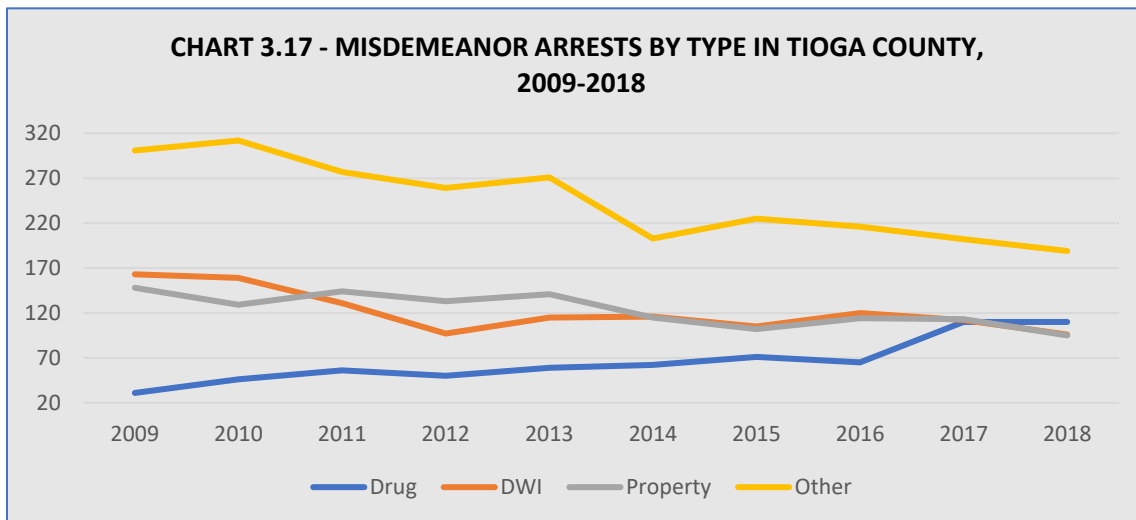
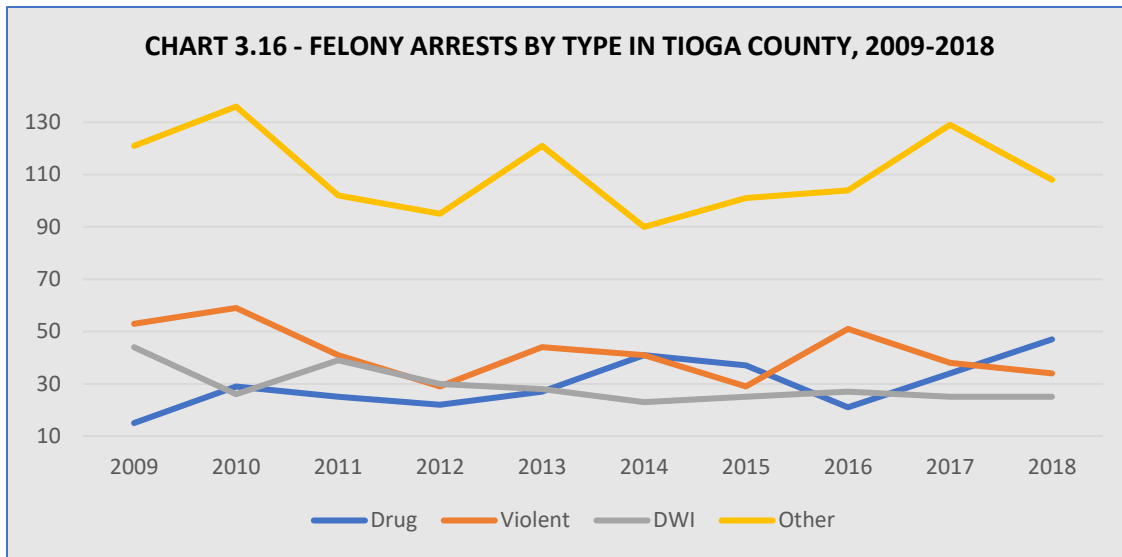
CHART 3.15 - ARRESTS BY AGE IN TIOGA COUNTY, 2018



²¹¹ New York State Division of Criminal Justice Systems, Computerized Criminal History System, <https://www.criminaljustice.ny.gov/crimnet/ojsa/stats.htm>

²¹² Ibid

²¹³ Ibid



Crime

Over the last five years in Tioga County, there have been two hate crimes: one in 2015, and the other in 2017.²¹⁴ From 2014 to 2018, the incidence of property crime (e.g. burglary, larceny, motor vehicle theft) in the county far exceeded that of violent crime (e.g. murder, rape, robbery, aggravated assault), and the total property crime decreased over time (441 property crimes in 2014 compared to 352 in 2018) (CHARTS 3.18-3.19 on the following page). That is, there were 2,004 property crimes from 2014 to 2018 compared to 235 violent crimes.²¹⁵ In 2014, there were 441 property crimes reported, which is significantly more than the number reported in 2018 of 352.²¹⁶ However, violent crime rates have increased from 27 in 2014 to 63 in 2016; then decreased in violent crime from 63 in 2016 to 43 in

²¹⁴ New York State Division of Criminal Justice Systems, Computerized Criminal History System, <https://www.criminaljustice.ny.gov/crimnet/ojsa/stats.htm>

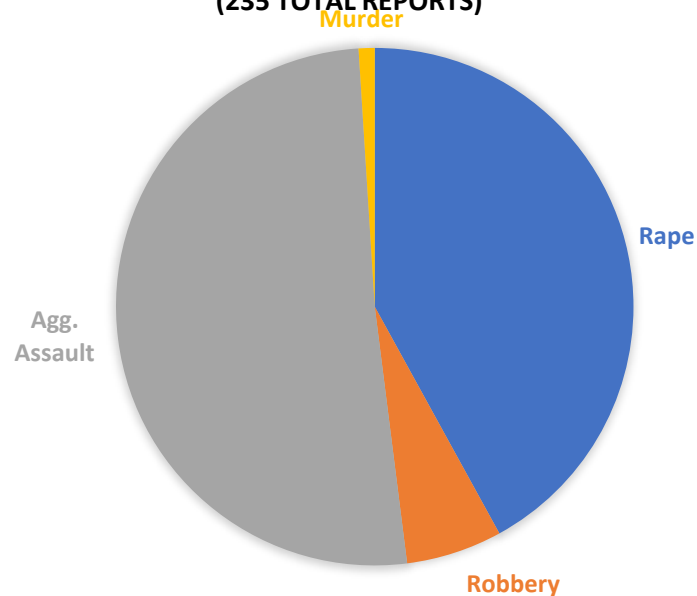
²¹⁵ Ibid

²¹⁶ Ibid

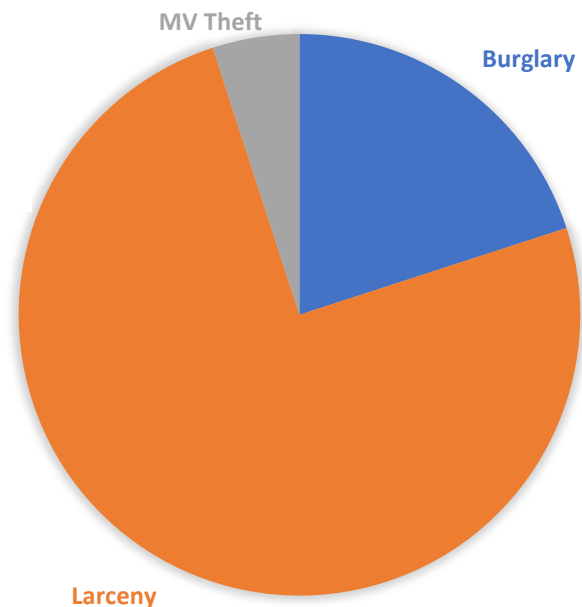
2018.²¹⁷ The majority of violent crimes that have been reported between 2014 to 2018 were rape (42%) and aggravated assault (51%), whereas the majority of property crimes during this time were larceny (75%).²¹⁸

Overall, the index crime rate in Tioga County is 834.5, which is significantly lower than that of New York State (1,784.2) and Non-New York City (1,583.6).²¹⁹ Taken together with local data, this suggests that, overall, Tioga County is a safe place to live.²²⁰

**CHART 3.18 - VIOLENT CRIME BY TYPE,
2014-2018
(235 TOTAL REPORTS)**



**HART 3.19 - PROPERTY CRIME BY TYPE, 2014-
2018
(2,004 TOTAL REPORTS)**



²¹⁷ Ibid

²¹⁸ Ibid

²¹⁹ Ibid

²²⁰ Tioga Tells: Quality of Life Assessment, 2018-2019, https://rhnscny.org/wp-content/uploads/2019/07/Final-Report_Quality-of-Life-Assessment_TiogaTells2018.2019.pdf

Domestic Abuse

There is currently one domestic violence and abuse shelter and program in Tioga County, called *A New Hope Center*, which is located in the Village of Owego. This agency provides services to individuals affected by domestic violence, sexual assault, and crime including counseling and advocacy, residential services, supervised visitation programs, domestic violence classes for men, and a survivors' support group.²²¹ TABLE 3.39 depicts domestic violence data in Tioga County from 2018, where "intimate partner" includes spouse, ex-spouse, and those in an intimate relationship; and "other family" includes sibling, child, grandparent, grandchild, in-law, step-parent, step-sibling, and other blood and in-law relationships.²²²

TABLE 3.39 - DOMESTIC VIOLENCE VICTIMS REPORTED IN TIOGA COUNTY, 2018				
	Intimate Partner		Other Family Victim	TOTAL
	Female Victim	Male Victim		
Agg. Assault	4	1	4	9
Simple Assault	53	10	24	87
Sex Offense	1	0	5	6
Violate Protection Order	5	0	0	5
TOTAL	63	11	33	107

Protective and Preventative Services

In 2018, Tioga County Child Protective Services (CPS) received 1,111 reports,²²³ which is a decrease from 1,154 reports in 2017.²²⁴ Of the CPS reports, 804 were tracked to the investigative units and 307 were tracked to the Family Assessment Response (FAR) Unit. Of the 804 cases tracked as investigations, 151 were consolidated, 166 were secondary reports, and 59 were duplicate reports. Tioga County was responsible for determining the remaining 328 reports. 21% of the Central Registry reports received contained allegations involving drug use, which is an increase from 18% in 2017 and 14% in 2016. Additionally, Adult Protective/Adolescent Services reported 439 adult services referrals in 2018, which is a 15% decrease from 2017, and 153 adult protective referrals compared to 151 in 2017. The department reports adult protective investigations decreased from 72 in 2017 to 65 in 2018.

The Tioga County Department of Social Services In-House Preventive Services were provided to 61 families with 131 children. Of the 31 families discharged from Preventive Services, 81% had no new indicated reports for the year. An additional preventive service program in the county is the Tioga County Youth Bureau, which addresses the priorities of preventing child abuse and neglect and provides programs for youth during non-school hours. In 2018, the Tioga County Youth Bureau and its Board provided funding to ten programs that served a total of 1,645 youth.²²⁵

²²¹ A New Hope Center, <https://www.anewhopecenter.org/additional-services>

²²² New York State Division of Criminal Justice Systems, Computerized Criminal History System, <https://www.criminaljustice.ny.gov/crimnet/ojsa/stats.htm>

²²³ Tioga County Department of Social Services, 2018 Annual Report, <https://www.tiogacountyny.com/media/5863/social-services-annual-report-2018.pdf>

²²⁴ Tioga County Department of Social Services, 2017 Annual Report, <https://www.tiogacountyny.com/media/4702/2017-annual-report.pdf>

²²⁵ Tioga County Department of Social Services, 2018 Annual Report, <https://www.tiogacountyny.com/media/5863/social-services-annual-report-2018.pdf>

Foster Care and Adoption

Tioga County ranks above the State and national average with regard to safety and stability foster care indicators. The federal guidelines define stability as having two or fewer placements for children that have been in foster care less than one year.²²⁶ In 2018, no children were moved from placements more than twice within their first year of placement nor did any children re-enter care within one year of discharge.²²⁷ Of the 11 children discharged from foster care, three were reunited with a parent, two were discharged to a relative, and four were adopted; and two of the 11 children were discharged within one year of their placement date.

Six new foster homes were opened in 2018, three of which were emergency certified to care for relative children, “eliminating the need for children to be placed with strangers allowing for continued stability through their family connections. These new, local foster homes are critical in response to growing needs as a result of the ongoing opioid epidemic.”²²⁸

²²⁶ Tioga County Department of Social Services, 2016 Annual Report, <https://www.tiogacountyny.com/media/3518/2016-annual-report-final.pdf>

²²⁷ Tioga County Department of Social Services, 2018 Annual Report, <https://www.tiogacountyny.com/media/5863/social-services-annual-report-2018.pdf>

²²⁸ Ibid

EMERGENCY PREPAREDNESS

Emergency Services

The Tioga County Office of Emergency Services coordinates the County's efforts to prepare for and respond to emergency situations. "In an emergency situation, the Office of Emergency Services works with County departments and external agencies to respond to the needs of citizens by helping to protect lives and property, assist those injured or whose normal lives have been disrupted by events, and to provide for the rapid restoration of normal services."²²⁹ Additionally, the Office of Emergency Services provides support and assistance to the volunteer fire departments and emergency squad/first responder units in Tioga County.

Tioga County is served by 15 fire departments, six full-time emergency squads, four first responder units, two not-for-profit ambulance services, one not-for-profit ambulance service from outside the county, and one for-profit ambulance service from outside the county, as well as Lockheed Martin's Industrial Fire Brigade.

The Emergency 9-1-1 Communications Center is the sole Public Safety Answering Point for the county from which every emergency response is communicated. Twelve public safety dispatchers maintain its operations, which run continuously throughout the year and include performing emergency communications for all law enforcement operating within the county.²³⁰ This includes communication between dispatchers and Sheriff patrols, State Police, Environmental Conservation Police, Owego Police, Waverly Police, the emergency squads, first responders, and fire departments, the County Fire Investigation Team, County Hazmat Team, County Search and Rescue, and the Medi-Vac Helicopter.²³¹ The Center also collaborates with the Tioga County Public Health Department, Mental Health Department, Social Services, Municipal Highway Departments, and Animal Control by providing "after-hour" referrals.²³² The Tioga County Emergency 9-1-1 Communications Center has previously been recognized by the Susquehanna Regional Medical Services Council as the Outstanding Emergency Services Dispatch Center for the Susquehanna District of New York.²³³

Natural, Technological and Man-Made Hazards

In 2012, "The Tioga County Hazard Mitigation Planning Committee evaluated and ranked natural hazards of concern for Tioga County using methodologies promoted by FEMA's hazard mitigation planning guidance and generated by FEMA's HAZUS-MH risk assessment tool. This risk assessment identified approximately 23 natural hazards that can potentially affect Tioga County and determined that 10 natural hazards are considered significant risk to Tioga County, 5 of which are defined as *Hazards of Concern*, or those most likely to seriously impact the county."²³⁴

²²⁹ Tioga County Emergency Services, <https://www.tiogacountyny.com/departments/emergency-services/>

²³⁰ Tioga County Sheriff Department, <http://www.tiogacountysheriff.com/e911>

²³¹ Ibid

²³² Ibid

²³³ Ibid

²³⁴ Tioga County Comprehensive Emergency Management Plan, 2013, <https://www.tiogacountyny.com/media/1574/tiogacempmarch112013rev452013.pdf>

“Tioga County also evaluated potential hazards and impacts associated with technical and man-made threats. This evaluation was performed using the *Threat and Hazard Identification and Risk (THIRA) Program* developed by the U.S. Department of Homeland Security” (TABLE 3.40).²³⁵

TABLE 3.40 – CONCERNING NATURAL HAZARDS IN TIOGA COUNTY		
Rank	Top Natural Hazards of Concern	Other Natural Hazards of Significant Risk
1	(Riverine, Flash and Dam) Flooding	Ice Storm
2	Severe (Windstorm, Thunderstorm, Hailstorm, and Lightning) Storm	Ice Jam
3	Severe Winter (Heavy Snow, Blizzard, Freezing Rain, Sleet, and Nor’easter) Storm	Windstorm
4	Earthquake	Tornado
5	Drought	Hurricane and Tropical Storm
HAZARDS POSING GREATEST THREAT TO LIFE		HAZARDS OCCURRING WITH LITTLE/NO WARNING
Transportation Accident		Severe Storm
Security, Improvised Explosive or Active Shooter Event		Landslide
Terrorist Act		Dam Failure
Epidemic/Pandemic		Utility Failure
Hazardous Materials (Fixed Site)		Flood
		Tornado
HAZARDS OCCURRING MOST OFTEN IN TIOGA COUNTY		Fire
		Earthquake
Severe Storm		Security, Improvised Explosive or Active Shooter Event
Severe Winter Storm		Terrorist Act
Flood		Critical Infrastructure or Key Resource Failure
Transportation Accident		Transportation Accident
Windstorm		Wildfire
Fire		Hazardous Materials (in Transit and Fixed Site)
Hazardous Materials (in Transit)		Water Supply Contamination
Oil Spill		Transportation Accident
Extreme Temperatures		Oil Spill
		Structural Collapse
<i>Source: 2013 Tioga County Comprehensive Emergency Management Plan</i>		

²³⁵ Ibid

The 2013 Tioga County Comprehensive Emergency Management Plan addressed the following as strategies to mitigate hazards in Tioga County: emergency services, public education and awareness, structural design and development standards, property protection, retrofitting and removal, structural protection and natural resource protection.²³⁶ Additionally, the following special populations were identified as *vulnerable populations*, those who may have heightened risk or response needs associated with identified hazards: people 65 years and older; people under the age of 20, people with disabilities, people who are institutionalized; people who are below the poverty level; and people who speak a language other than English at home.²³⁷

Emergency Preparedness

While the update to the latest County Emergency Management Plan has not been released, officials recognize the group of mobilizers in TABLE 3.41 on the right as some of the key agents who help assess disasters in Tioga County.

According to the latest emergency assessment, disaster services in Tioga County are coordinated by a multi-agency committee consisting of county, regional, and area human service providers that regularly serve the community. This integrated multi-agency approach to providing disaster human services creates a comprehensive structure for responding to the physical, mental,

TABLE 3.41 - DISASTER HUMAN SERVICE TASK GROUPS IN TIOGA COUNTY	
Task Group	Lead Agencies
General Population	Red Cross
Shelters Functional Needs	Public Health
Support Services	Public Health
Disaster Food and Meals	Red Cross
	Salvation Army
	Tioga Opportunities, Inc.
	Public Health
	Soup Kitchens and Pantries
Counseling, Mental Health and Spiritual Needs	Community Services
	Fire Departments and Auxiliaries
	Schools
	Department of Mental Hygiene
	Red Cross
Long-Term Housing	Faith Based Community
	Salvation Army
Support Disaster Assistance Centers	Spiritual Leaders
	Department of Social Services
	Tioga Opportunities, Inc.
	Department of Social Services
	Public Health
Pet and Animal Sheltering	Mental Hygiene
	Red Cross
	Salvation Army
	Department of Aging
	Public Health, Tioga County Animal Rescue Team
Management of Donated Goods	United Way
	Tioga County C.O.A.D.
	Red Cross
	Salvation Army
	The Bridge
	Love Knows No Bounds
Volunteer Management	Faith Based Community
	Tioga County C.O.A.D.
	Red Cross
	Salvation Army
Source: 2013 Tioga County Comprehensive Emergency Management Plan	

²³⁶ Tioga County Comprehensive Emergency Management Plan, 2013, <https://www.tiogacountyny.com/media/1574/tiogacempmarch112013rev452013.pdf>

²³⁷ Tioga County Comprehensive Emergency Management Plan, 2013, <https://www.tiogacountyny.com/media/1574/tiogacempmarch112013rev452013.pdf>

emotional, and family needs of disaster victims. Unified management of disaster human services in the county is accomplished by coordinating the efforts of multiple county and regional human service agencies under the provisions of the Tioga County Comprehensive Emergency Management Plan and by mobilizing representatives of these services at the Tioga County Emergency Operations Center and the Tioga County Health and Human Services Building. Additional support is available from state, federal, and voluntary agencies which supplement local disaster response and recovery activities through the county Disaster Human Services Committee. The committee is responsible for preparedness and planning related to disaster services, coordinating and managing services during disasters, and providing leadership, staffing, resources, and support needed to deliver disaster aid.²³⁸ In 2018, Tioga County Emergency Services organized a committee referred to as the Local Emergency Planning Committee (LEPC) to meet bimonthly and bring in presenters to discuss potential hazards in Tioga County, as well as mitigation strategies and response to hazards. This group is comprised of Emergency Services, law enforcement, NYS Division of Homeland Security Office of Emergency Management, Tioga County Department of Social Services, Tioga County Public Health, Tioga County COAD (Community Organizations Active in Disaster), local businesses, utilities, faith-based community, service organizations, and more.²³⁹

Disaster, Assessment, and Recovery

Latest emergency plans cite that in the event of an emergency, authorized officials and media utilize the Emergency Alert System, which is a national public warning system requiring TV and radio broadcasts, cable television systems, wireless cable systems, satellite digital audio radio service providers, direct broadcast satellite service providers, and wireline video service providers to allow state and local authorities to use their communication systems to deliver important emergency warnings, alerts, notices, and emergency weather information to targeted citizens in the community. When the announcement involves greater complexity and is less urgent, news releases, public announcements, photos and videos can be alternative effective means of distributing emergency information. Officials are also familiar with utilizing alternative communication methods including Hyper Reach Emergency Notification Program, New York Alert, route alerting by law enforcement, site- and hazard-specific warning and alerting, and situation reporting as needed to communicate information.²⁴⁰

In July 2019, the New York VOAD (Voluntary Organizations Active in Disaster), the official chapter of the National VOAD Movement, released the image on the following page citing the placement of organizations active throughout New York State “who mobilize across the disaster life cycle under the guidance and direction of their local COAD.”²⁴¹ Local COADs have been organized in 60% of New York’s 62 counties. Within Tioga County, Tioga Opportunities, Inc. serves as the local COAD, an organization that can “most efficiently help during a disaster” by “coordinating efforts, reducing duplication of services, and working with the NYVOAD to deploy State Members.”²⁴²

²³⁸ Tioga County Comprehensive Emergency Management Plan, 2013, <https://www.tiogacountyny.com/media/1574/tiogacempmarch112013rev452013.pdf>

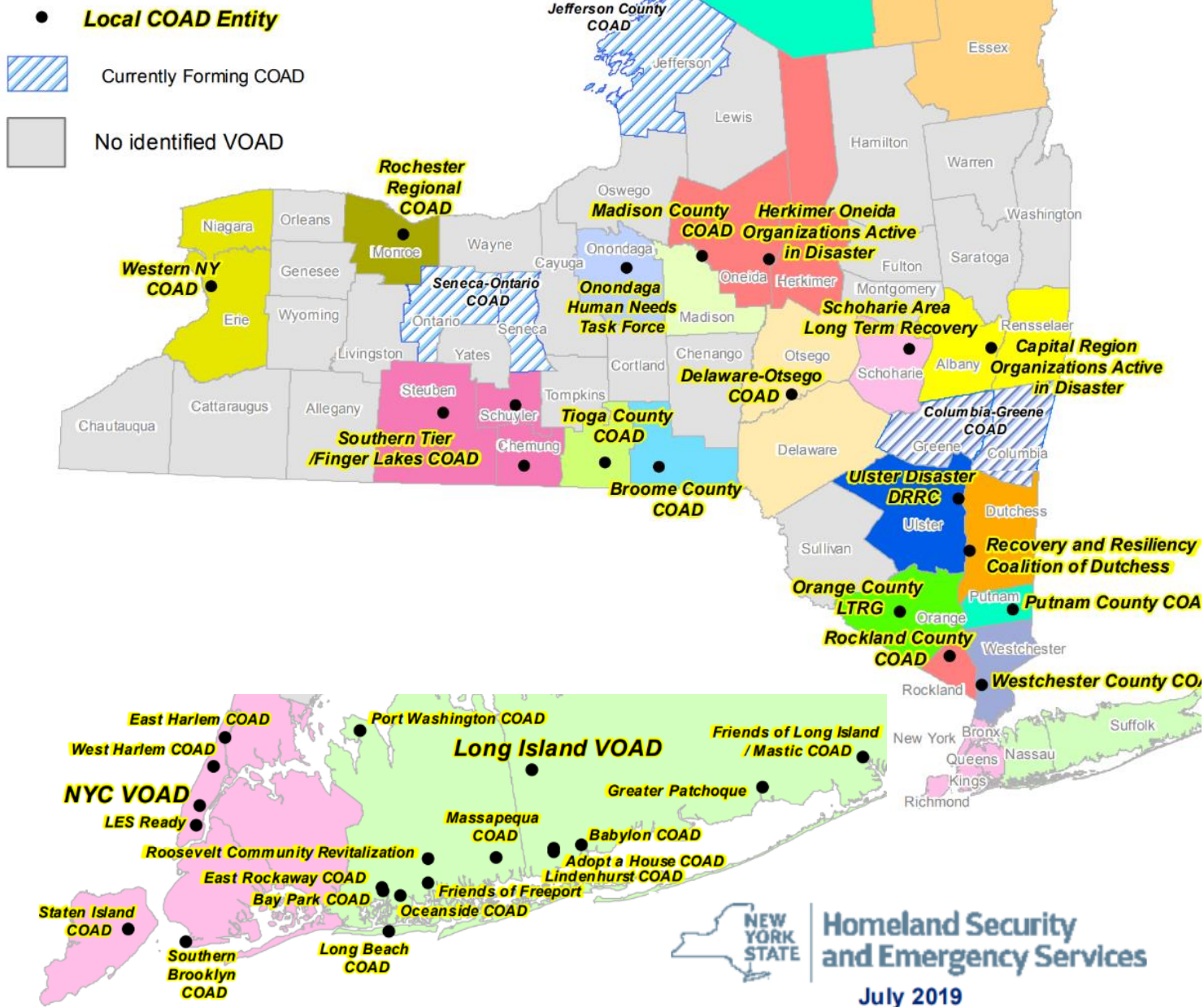
²³⁹ Interview with R. Williams, Deputy Director of Emergency Services. February 2020.

²⁴⁰ Ibid

²⁴¹ New York Voluntary Organizations Active in Disaster, <https://nyvoad.communityos.org/cms/home>

²⁴² Ibid

Active New York State COAD Entities



CHILD CARE

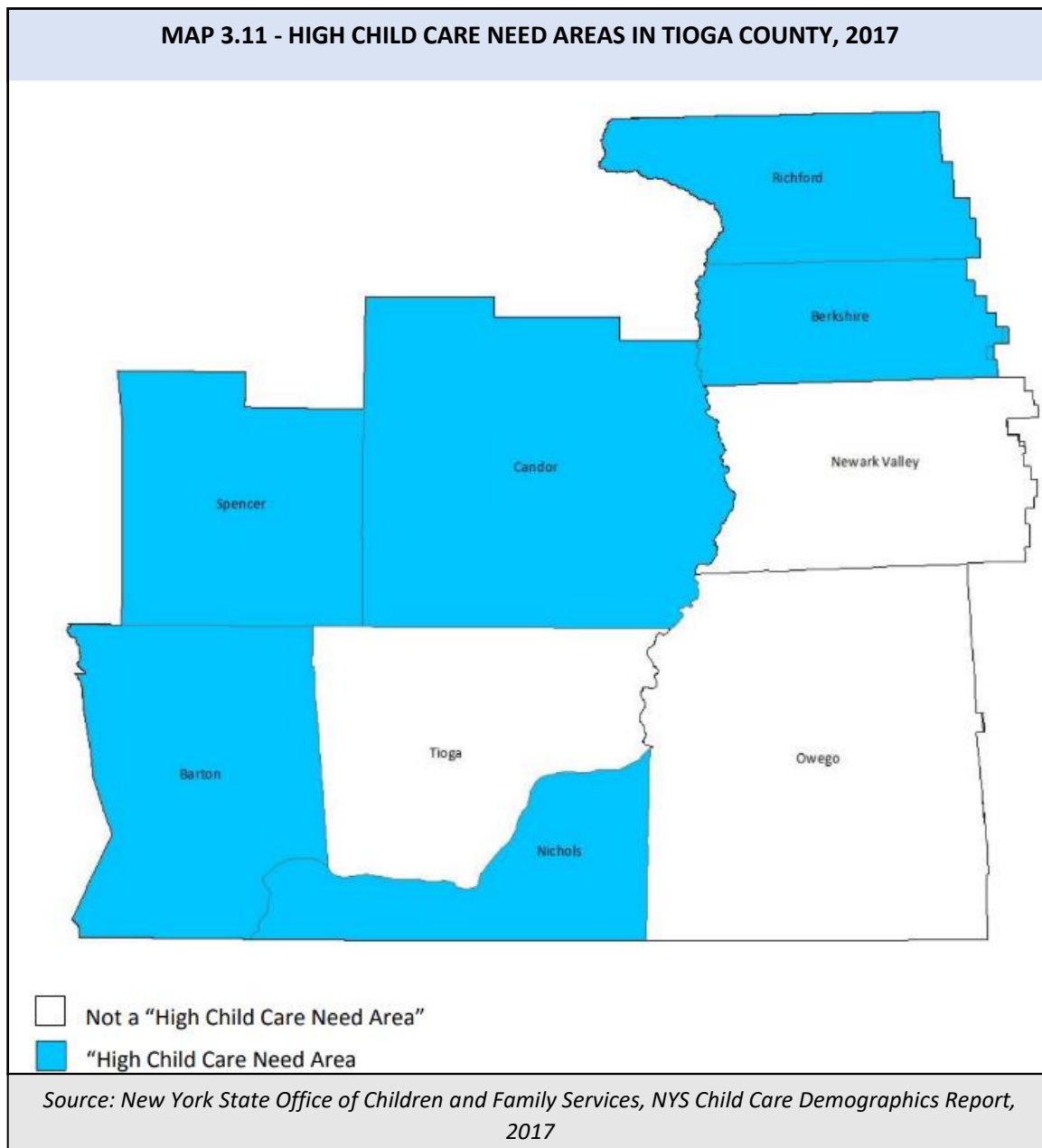
Studies have shown that quality childcare practices in the formative years result in greater cognitive development, improved teacher-student relationships, better classroom behavior, longer attention spans, and desirable social skills.²⁴³

TABLE 3.42 reports the number and types of regulated childcare programs by school districts in Tioga County. Of the total number of day care centers in Tioga County (25), eight are located in the Owego-Apalachin school district, five in Candor, Newark Valley, and Waverly School Districts, and two are in Spencer-Van Etten School District. No childcare programs are located in the Tioga Central School District. The most common type of childcare program in Tioga County is family day care, of which there are nine total; followed by day care centers (seven). The majority of family day care programs are located in Candor, whereas Owego-Apalachin houses four of the County's seven day care center programs.

TABLE 3.42 - REGULATED CHILD CARE PROGRAMS BY SCHOOL DISTRICT IN TIOGA COUNTY, 2020						
School District	Day Care Center	Family Day Care	Group Family Day Care	School Age Day Care	Small Day Care Center	TOTAL
Candor	0	5	0	0	0	5
Newark Valley	1	1	2	1	0	5
Owego-Apalachin	4	1	1	2	0	8
Spencer-Van Etten	0	1	0	1	0	2
Tioga	0	0	0	0	0	0
Waverly	2	1	2	0	0	5
ALL	7	9	5	4	0	25
<p>Source: New York State Division of Child Care Services, Day Care Facility Search. Accessed Feb. 2020.</p> <p>Day Care Centers – provide care for more than six children at a time, not in a personal residence</p> <p>Small Day Care Centers – provide Care for up to six children, not in a personal residence.</p> <p>Family Day Care Homes – provide care for three to six children at a time in a residence; may add one or two school-age children. The maximum number of children will depend on whether there are and how many infants are in care.</p> <p>Group Family Day Care Homes – provide care for seven to twelve children at a time in a residence; may add one or two school-age children. The maximum number of children depend on whether there are and how many infants are in care. A provider must use an assistant when more than six children are present.</p> <p>School-Age Child Care Programs – provide care for more than six children from kindergarten through age 12. Care for children during non-school hours; also may provide care during school vacation periods and holidays.</p>						

²⁴³ Family Enrichment Network Community Assessment, 2018-2019, https://familyenrichment.org/resource_files/2018%20Final.pdf

MAP 3.11 below highlights the high childcare need areas in Tioga County. These high need areas are defined as being both high poverty and low relative availability of licensed or registered childcare. Municipalities are considered high childcare need areas if 25% or more of families have incomes below 200% of the Federal Poverty Level and there is a ratio of 3 children or more under 5 years of age per regulated childcare slot.²⁴⁴ In this case, income areas were identified by using the 2015 American Community Survey 5-Year Estimates.



²⁴⁴ New York State Child Care Demographics Report, 2017, <https://ocfs.ny.gov/main/reports/2017-NY-Child-Care-Demographics-Report.pdf>

Unmet Need

The Family Enrichment Network collects and provides extensive information on their childcare referral program, which shows that, in the counties they serve (Broome, Chenango, and Tioga), there is an unmet need for childcare for 8,661 children between 0-12 years of age. Within Tioga County, there is an unmet need for childcare for 568 children under five years old; and an unmet need for 1,263 children between the ages of five and 12 years old.²⁴⁵

The four biggest areas in which demand is greater than the supply are infant/toddler care, children with challenging behaviors or special needs, school age children, and care in outlying areas.²⁴⁶ According to Family Enrichment Network reports, 35% of the care needed in Tioga County was for infants and toddlers. Referral specialists state that infant and toddler spaces fill quickly when they are available in programs.²⁴⁷ During 2017, five families in Tioga County requested childcare for children with behavior issues, emotional concerns, autism, educational disabilities, or developmental delays.²⁴⁸ Additionally, 46% of children who were served using the Family Enrichment Network's referral service needing care were school aged.²⁴⁹

Child Care Costs

According to the Carsey Institute, the top challenges facing rural childcare are affordability, accessibility and availability, quality, lack of regulated care, lack of family resources, and lack of transportation.²⁵⁰

Low income families traditionally have less access to higher quality, affordable childcare, and many of the jobs kept by low income parents involve non-traditional hours.²⁵¹

TABLE 3.43 - NEW YORK CHILD CARE BLOCK GRANT SUBSIDY PROGRAM ALLOCATIONS, 2018-2019		
	Tioga County	New York State
Apr. 2018 - Sept. 2018	\$529,067	\$403,041,012
Oct. 2018 - Mar. 2019	\$594,620	\$403,040,989
Final SFY 2019 -2019 Allocation	\$1,189,239	\$806,082,001
<i>New York State Office of Children and Family Services, Local Commissioners Memorandum, March 2019</i>		

Within Tioga County, 210 families are receiving childcare assistance through the New York State Child Care Block Grant.²⁵² In all of the Southern Tier counties, including Tioga County, the cost of childcare is increasing \$554 per year.²⁵³ Now, the average family spends about \$8,736 per year for an infant, \$8,060 for a toddler, and \$7,072 for a school-age child.²⁵⁴ TABLE 3.43 above reveals the NYS Child Care Subsidy program allocations for Tioga County in 2018-2019, while TABLE 3.44 on the following page documents the childcare market rates for Tioga County.

²⁴⁵ Family Enrichment Network Community Assessment, 2018-2019,
https://familyenrichment.org/resource_files/2018%20Final.pdf

²⁴⁶ Ibid

²⁴⁷ Ibid

²⁴⁸ Ibid

²⁴⁹ Ibid

²⁵⁰ Ibid

²⁵¹ Ibid

²⁵² Ibid

²⁵³ Press Release, Kirsten Gillibrand U.S. Senator for New York, *Child Care Costs Rising \$730 Each Year in New York*,
<https://www.gillibrand.senate.gov/imo/media/doc/ChildCare.pdf>

²⁵⁴ Ibid

TABLE 3.44 - TIOGA COUNTY CHILD CARE MARKET RATES, 2019				
DAY CARE CENTER				
	Under 1.5 YR	1.5-2 YR	3-5 YR	6-12 YR
Weekly	\$220	\$206	\$195	\$180
Daily	\$48	\$45	\$44	\$39
Part-Day	\$32	\$30	\$29	\$26
Hourly	\$8	\$8	\$8	\$7
FAMILY DAY CARE HOME AND GROUP FAMILY DAY CARE HOME				
	Under 2 YR	2 YR	3-5 YR	6-12 YR
Weekly	\$160	\$150	\$150	\$150
Daily	\$35	\$35	\$33	\$30
Part-Day	\$23	\$23	\$22	\$20
Hourly	\$5	\$5	\$5	\$5
SCHOOL-AGE CHILD CARE				
	Under 1.5 YR	1.5-2 YR	3-5 YR	6-12 YR
Weekly	\$0	\$0	\$195	\$180
Daily	\$0	\$0	\$44	\$39
Part-Day	\$0	\$0	\$29	\$26
Hourly	\$0	\$0	\$8	\$7
LEGALLY-EXEMPT GROUP CHILD CARE STANDARD RATE				
	Under 1.5 YR	1.5-2 YR	3-5 YR	6-12 YR
Weekly	\$0	\$0	\$146	\$135
Daily	\$0	\$0	\$33	\$29
Part-Day	\$0	\$0	\$22	\$20
Hourly	\$0	\$0	\$6	\$5.25
INFORMAL CHILD CARE STANDARD RATE				
	Under 2 YR	2 YR	3-5 YR	6-12 YR
Weekly	\$104	\$98	\$98	\$98
Daily	\$23	\$23	\$21	\$20
Part-Day	\$15	\$15	\$14	\$13
Hourly	\$3.25	\$3.25	\$3.25	\$3.25
INFORMAL CHILD CARE STANDARD RATE				
	Under 2 YR	2 YR	3-5 YR	6-12 YR
Weekly	\$112	\$105	\$105	\$105
Daily	\$25	\$25	\$23	\$21
Part-Day	\$16	\$16	\$15	\$14
Hourly	\$3.50	\$3.50	\$3.50	\$3.50
New York State Office of Children and Family Services, Local Commissioners Memorandum, April 2019				

RECREATION AND TOURISM

Top recreational and tourist activities in Tioga County include agriculture, arts, dining, craft beverages, golf, history, lodging, outdoor recreation, shopping, and wedding events. Tioga County is home to the nation's first certified organic dairy farm, as well as pumpkin and blueberry farms, homegrown maple syrup, honey, and lavender products, and vibrant greenhouses and farmers markets.²⁵⁵ Tioga County is also "the bridge to many beer and wine trails in the Finger Lakes region," and yields a brewery, vineyard, distillery, and winery of its own. There are 19 well-known parks within Tioga County, which feature state park hiking trails, waterfalls, river walks, birdwatching sites, a nature preserve, and a wetland preserve. Historic sites within the county include farmstead museums, historical societies and exhibits, Civil War cannons, notable grave sites and monuments, historical architecture and houses, and the first official freight train of the Southern Central Railroad. Additional recreational sites include ten golf courses, numerous quaint village and town shops, and the Tioga Downs Casino and Resort which hosts gaming, harness racing, spa, concert, and banquet events and activities.²⁵⁶



Data compiled by the National Travel and Tourism Office show that New York was the most visited state in the nation by overseas travelers in 2016.²⁵⁷ Although the Southern Tier Region, including Steuben, Tioga, Chemung, Broome, and Tompkins Counties, had the third lowest average wage (\$22,300), it had the third most rapid percentage growth of any region in total travel and tourism wages (+29.8%) (TABLE 3.45 on the following page).²⁵⁸

Tioga County Tourism recently completed a strategic plan to guide its operations over the next three years, major actions of which include creating and implementing a digital marketing campaign; improving product development and promotions; optimizing partnerships; and exploring and utilizing

²⁵⁵ Tioga County Tourism, *Experience Tioga*, website. Accessed January 2020. <https://experiencetioga.com/agriculture/>

²⁵⁶ Ibid

²⁵⁷ New York State Division of Research and Statistics, *New York State's Travel and Tourism Sector: A Statewide and Regional Analysis*, June 2017. <https://labor.ny.gov/stats/PDFs/New-York-State-Travel-and-Tourism-Sector.pdf>

²⁵⁸ Ibid

TABLE 3.45 - STATE TRAVEL AND TOURISM SECTOR EMPLOYMENT AND WAGES BY LABOR MARKET REGION, 2015			
Region	Employment	Total Wages (\$ Million)	Annual Average Wage
Finger Lakes	18,200	\$382.90	\$21,100
Central New York	13,300	\$292.50	\$21,900
Southern Tier	9,200	\$206.40	\$22,300
North Country	8,300	\$187.50	\$22,500
Western New York	28,800	\$739.80	\$25,700
Capital	22,700	\$592.10	\$26,100
Mohawk Valley	11,000	\$288.60	\$26,300
Hudson Valley	36,400	\$1,137.80	\$31,200
Long Island	41,700	\$1,441.90	\$34,600
New York State	414,100	\$18,180.70	\$43,900
New York City	221,000	\$12,529.80	\$56,700
<i>New York State Travel and Tourism Sector Statewide and Regional Analysis, 2017</i>			

TABLE 3.46 – STATE TRENDS IN TRAVEL AND TOURISM SECTOR EMPLOYMENT AND WAGES, BY LABOR MARKET REGION, 2015		
Region	% Change in Employment	% Change in Total Wages
New York State	16.20%	38.20%
New York City	25.30%	46.80%
Western New York	12.20%	33.50%
Southern Tier	4.20%	29.80%
North Country	8.60%	26.70%
Mohawk Valley	0.70%	24.00%
Hudson Valley	9.70%	22.80%
Central New York	5.10%	20.20%
Capital	3.50%	18.00%
Finger Lakes	2.50%	14.40%
Long Island	9.20%	8.50%
<i>New York State Travel and Tourism Sector Statewide and Regional Analysis, 2017</i>		

creative people resources.²⁵⁹ To maintain and strengthen Tioga County's position as a tourism destination, Tioga County Tourism intends to:

- (1) Increase visitors' length of stay and spending by assisting with projects that develop and enhance new and existing tourism assets such as historic properties, lodging, greenspaces, and walkable downtown spaces, as well as increasing recreational, cultural, and entertainment opportunities, including recreational opportunities on the Susquehanna River
- (2) Increase continual contact between the Tioga County Legislature and state representatives to allocate funds in State Parks budget to develop Two Rivers State Park in Waverly;
- (3) Capitalize on the increased visitor traffic at Tioga Downs Casino through on-site promotion
- (4) Support new tourism product development such as an outlet mall adjacent to Tioga Downs and an outdoor/indoor recreational facility;
- (5) Market to traffic on I-86 through the use of the NYS DOT LOGO and TOD highway signs and the creation of a visitor's center; and
- (6) Promote and support Agricultural Tourism Initiatives that highlight farm tours, locally grown and farm products.

²⁵⁹ Tioga County Economic Development and Planning, 2015 Annual Report, <https://www.tiogacountyny.com/media/5854/edp-final-2018-annual-report.pdf>

Chapter 4: Perceived Profile of Tioga County

PRIMARY DATA COLLECTION



To deepen our understanding of the perception of community need in Tioga County, data from the 2018-2019 Tioga Tells: Quality of Life Assessment is included. Tioga Tells explored perceptions of quality of life in Tioga County through a county-wide survey and over 12 focus group discussions. The survey yielded 315 responses, while the focus group discussions brought 149 participants to the table. Of the survey participants, 87% were Tioga County residents while 10% were residents of Broome County and 3% were from surrounding areas. Focus group discussions included conversations with service providers employed in Tioga County, people with disabilities, farmers and farm workers, veterans, people with low income, independent living and assisted living seniors, and individuals from any background. 85% of all survey and focus group participants were Tioga County residents. It is important to note that, while not all focus group participants reported living in Tioga County, every participant did claim to live and/or work within the county.

Tioga Opportunities, Inc. hosted community interviews with 13 stakeholders and residents, 54% were customers and 46% were stakeholders. Trends emerged as participants described the needs of or concerns affecting people with low to moderate income in Tioga County. As a result, each trend was assigned a name, and a frequency was calculated for each. In this case, frequency is considered the number of participants who mentioned this need/concern at least once. This process was completed for both customer and stakeholder groups

From this data, TOI draws conclusions of the perceived profile of Tioga County.

PRIMARY DATA COLLECTION RESULTS

Needs/Concerns

Overall, 14 different needs/concerns were recorded from TOI community interviews. TABLE 1 reveals the analyzed results of each need/concern by group while also highlighting the most frequently perceived need/concern for each group by color.

KEY	TABLE 4.1: PERCEPTION AND FREQUENCY OF NEEDS/CONCERNS BY GROUP			
1st Most Frequently Mentioned	Need/Concern Mentioned	Customer Frequency	Stakeholders Frequency	Total Frequency
2nd Most Frequently Mentioned	Expenses	6	2	8
3rd Most Frequently Mentioned	Clothing	1	1	2
	Education	3	5	8
	Food	2	3	5
	Housing	1	4	5
	Income-Constrained	3	4	7
	Lack of Activities	4	0	4
	Lack of Coordination	2	2	4
	Lack of Information Circulation	4	3	6
	Lack of Social Support	1	1	2
	Lack of Transportation	4	5	9
	Lyme Disease Prevalence	1	0	1
	Workforce Development Challenges	1	1	2
	Child Care	0	1	1
	TOTAL	33	32	64

This analysis shows that although customers and stakeholders perceived similar needs/concerns, some concerns by customers were not discussed among stakeholders and vice versa. For example, four customers identified "lack of activities" and one customer identified "Lyme Disease prevalence" as top needs/concerns of people with low to moderate income in Tioga County, which were the only two needs/concerns not reported by stakeholders. Similarly, childcare was mentioned by a stakeholder but not by any customers as a need among low to moderate income residents. This could be due to the lack of young parents among customer participants. Of the six customer participants, only one was a young mother and one was a middle-aged adult, whereas the remaining four were older adults.

TABLE 4.2 shows the most common needs/concerns among participants by group; the top three needs/concerns among customers were: (1) expenses, (2) lack of activities, information circulation, and transportation (tied), and (3) income constraints/limitations and education. Conversely, stakeholders reported the need of transportation and education most frequently, followed by (2) income constraints/limitations and housing, and (3) food and the lack of information circulation.

TABLE 4.2: TOP 3 PERCEIVED NEEDS/CONCERNS BY GROUP WITH FREQUENCY			
Rank	Group	Top Need/Concern	Frequency
#1	Stakeholder	Education	5
		Lack of Transportation	
	Customer	Expenses	6
#2	Stakeholder	Housing	4
		Income Constrained	
	Customer	Lack of Activities	4
		Lack of Information Circulation	
		Lack of Transportation	
#3	Stakeholder	Food	3
		Lack of Information Circulation	
	Customer	Education	3
		Income Constrained	

When discussing expenses, participants described the concern of the costs associated with using, maintaining, and repairing a vehicle; and similar expenses including housing costs (i.e. rent and utilities); daycare and assisted living care and/or facilities; and prescription medication. Customers also described a "lack of activities" in Tioga County for people with low to moderate income. This was particularly concerning to customers who were older adults, as all older adult participants emphasized the importance of affordable and age-friendly activities as a method of preventing boredom and enhancing quality of life. In the Tioga Tells study, participants from the focus group discussion of people with low income frequently mentioned the extent to which "the working poor are not in control of their standard of living," highlighting the reactions to conditions faced by the ALICE population.²⁶⁰ One participant highlighted the relationship between her finances and mental health: "Happiness is influenced or diminished by forces beyond my control," describing situations like these as vulnerable where they are "living paycheck to paycheck," "without help," like "being in a hamster wheel." To some, living without the ability to pay for things can lead to isolation, as many of the well-promoted activities require payment.

By contrast, while there are activities free of cost to residents, many say they lack the awareness or information of where to find these activities. The lack of information circulation across Tioga County was also a pervasive theme for both customers and stakeholder interviewees. In this case, participants recalled the difficulty following the discourse by which information about community resources, services, and/or activities circulate. Unsurprisingly, stakeholders were generally more aware of community resources, services, and activities available to residents in Tioga County, whereas customers typically discussed only those in which they've participated. The means by which residents hear of these resources, services, and activities were also discussed. Some participants felt that internet (i.e. email blasts, newsletters, social media advertisements) and printed materials (i.e. billboards, newspapers, mass mailings, public flyers) were appropriate means, whereas others felt word of mouth or a combination was best. These sentiments were also reflected in the Tioga Tells study, where participants

²⁶⁰ Tioga Tells: Quality of Life Assessment, 2018-2019, https://rhnsnycny.org/wp-content/uploads/2019/07/Final-Report_Quality-of-Life-Assessment_TiogaTells2018.2019.pdf

contributed the absence of information as a contributing factor to the disconnect and division they felt among different groups.²⁶¹

Those who expressed a concern about education mentioned the need to: address educational disparities within county school districts; enhance healthcare counseling regarding available options, services, and resources to all residents; equip of people with low income with reading, budgeting, and cooking skills; provide more scam detection and prevention education for older adults, as well as strategies to remind older adults about attending appointments and administering medication; increase awareness of income eligibility guidelines for food pantries and other local assistance services; and equip people and families with low- to moderate-income about money management. Interviewees also expressed concern over those facing income constraints, citing it as problematic for older adults, middle-class residents and families, people with low-income, and older adults with assisted living care needs. Participants highlighted income constraints as likely to affect those in an emergency situation without savings, as well as their access to food (EBT-reliant), and essential housing and safety needs.

Strengths/Assets

Overall, 13 different strengths/assets were recorded. TABLE 4.3 reveals the analyzed results of each strength/asset by group while also highlighting the most frequently perceived strength/asset for each group by color.

KEY
1st Most Frequently Mentioned
2nd Most Frequently Mentioned
3rd Most Frequently Mentioned

TABLE 4.3: PERCEPTION AND FREQUENCY OF STRENGTHS/ASSETS BY GROUP			
Strength/Asset Mentioned	Customer Frequency	Stakeholders Frequency	Total Frequency
Active	0	1	1
Agencies	0	2	2
Businesses	0	1	1
Friendly	2	3	5
Geography	1	2	3
Local Amenities	1	1	2
Low Crime	0	1	1
Lower Costs	0	1	1
Organizations	3	3	6
Outdoors	0	1	1
Programs and Initiatives	1	3	4
Resources and Services	1	3	4
Rural Culture	3	1	4
Sense of Community	0	1	1
Service Providers	1	4	5
Volunteerism	0	1	1
TOTAL	13	29	42

²⁶¹ Ibid

The strengths identified by TOI interviewees are also reflected as strengths in the Tioga Tells: Quality of Life Assessment. As interviewees perceived service providers and organizations as being an asset to Tioga County, many focus group participants mentioned community organizations as a strength to living in Tioga County, where “participants often referenced community organizations as playing a positive role in their quality of life... (by) offering support and stability.”²⁶² To participants, these organizations consist of human service agencies, as well as volunteer transportation groups and churches. In Tioga County, there are around 46 local churches.²⁶³

The “rural culture” interviewees described positively here reflect similar perceptions as the Tioga Tells focus group and survey participants. Namely, “the varying geography and population density throughout the county was perceived positively” in the Tioga Tells study, in that residents described having the “freedom to choose whether and how to spend their leisure time.” The geography of the county also contain hills, rivers, and parks that residents said “cultivated a sense of mindfulness that promotes mental and spiritual well-being.” “Other participants echo this sentiment by describing how ‘nature reinforces basic living’ and provides residents with ‘peace of mind’ and quietude.” “Through comments such as these, participants explain the connection between natural features and spirituality as a quality of life indicator.”

While TOI interviewees frequently mentioned Tioga County as friendly, Tioga Tells findings suggest positive community traits “such as friendliness, safety, history, and ‘small town charm’ as important beliefs of living in Tioga County.”

TABLE 4.4: TOP 3 PERCEIVED STRENGTHS/ASSETS BY GROUP WITH FREQUENCY			
Rank	Group	Top Strength/Asset	Frequency
#1	Stakeholder	Service Providers	4
	Customer	Organizations	3
		Rural Culture	
#2	Stakeholder	Friendly, Resources and Services	3
		Organizations	
		Resources and Services	
	Customer	Friendly	2
#3	Stakeholder	Agencies	2
		Geography	
	Customer	Geography	1
		Local Amenities	
		Programs and Initiatives	
		Resources and Services	
		Service Providers	

²⁶² Tioga Tells: Quality of Life Assessment, 2018-2019, https://rhnsnycny.org/wp-content/uploads/2019/07/Final-Report_Quality-of-Life-Assessment_TiogaTells2018.2019.pdf

²⁶³ Yellow Pages local search. February 2020.

Chapter 5: Key Findings

Given the data presented in this assessment, the following are considered key findings.

DEMOGRAPHICS



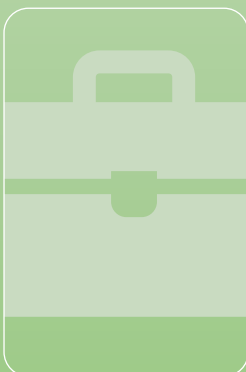
- Expected population loss of over 10,000 residents between 2010 and 2040, while 65+ age cohort is expected to grow by over 20%.
- Dramatic growth in the number and proportion of older persons in the population, which most notably affects the housing market and the workforce.
- 65.7% of the population is considered to be dependent - 28.8% are older adults and 36.9% are children.
- Higher rate of people with disabilities when compared to NYS, but similar to surrounding counties.
- NYS has the 5th largest veteran population out of the nation, and Tioga County has a higher percentage of veterans than NYS.

HOUSING



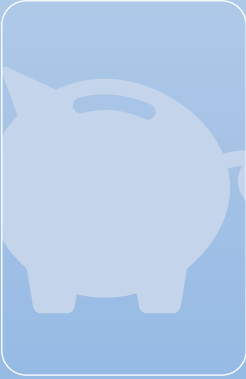
- Flooding poses continual threat to housing stock - quality and costs.
- Areas with high vacancy and low occupancy rates are located in the same areas as lowest ranked school districts and vice versa.
- High percentage of units in Tioga County are renter-occupied and there is a growing concern of absentee landlords.
- High concentration of manufactured/mobile homes (15%) compared to NYS of 2.4%.
- Dated housing stock, like much of the Southern Tier, leads to deferred maintenance and outdated facilities, as well as lack of quality for first-time homebuyers (\$90K-\$150K price range)
- Growing financial burden on homeowners and renters - flood insurance, maintenance, and repairs.

EMPLOYMENT/ECONOMY



- Wide range of industry sectors exist, including manufacturing, entertainment and tourism, and healthcare sectors.
- Unemployment rate decreased from 6.1% in 2014 to 4.4% in 2018, although it's been consistently higher than the NYS rate (4.0% in 2018).
- Over 16K of the employed population living in Tioga travel outside the county for work; the average commute is about 23 minutes.
- Tioga County led NYS with a GDP growth rate of 10.8% in 2015
- Many employers will be faced with replacing nearly 30% of their workforce in the next 5-7 years; yet there is a lack of qualified job candidates aged 25-45 and the workforce participation rate among those 20-25 is less than 70%.
- While the type of farming in Tioga County is perceived to have changed, agriculture remains a strong part of the economy.

INCOME



- Largest demographic living in poverty is females aged 18-24 years
- Tioga County has one of the highest poverty rates for people aged 65+, yet rates fare better than surrounding counties for those under 18 and 18-64 years.
- Considering the ALICE population, 40% of Tioga County households are considered financially vulnerable; highest rates of ALICE are located in the Village of Owego, Town of Richford, and Town and Village of Spencer.

EDUCATION

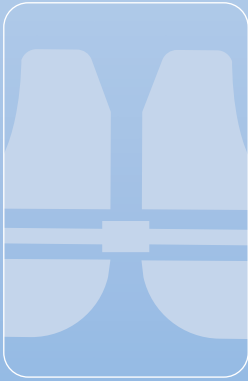


- The majority of Tioga County residents have at least graduated high school, but rates of those with a bachelors degree are much less than the national average.
- Nearly 20% of the students enrolled in Tioga County are students of home instruction.
- The public school staff's longevity and dedication, social support, small class sizes, and safety were regarded as positive attributes of Tioga County schools.
- Large disparities in graduation and drop-out rates exist between economically disadvantaged and non-economically disadvantaged students.

HEALTH



- There are high child and adult obesity rates when compared with NYS rates.
- Tioga County is a designated Health Professional Shortage area
- There are high cancer and heart disease rates.
- The teen pregnancy rates in Tioga County are higher than the NYS rates.
- There are low incidences of sexually transmitted diseases.
- Tioga County has strong preventive care initiatives, including Lyme disease, child passenger, and Narcan trainings.



PUBLIC SAFETY AND EMERGENCY PREPAREDNESS

- The index crime rate is significantly lower than the NYS rate, and residents overwhelmingly believe Tioga County is a safe place to live.
- Tioga County ranks above the state and national average with regard to safety and stability foster care indicators.
- Tioga County has strong emergency preparedness initiatives.
- There is an unmet child care need for over 8,500 children between the age of 0-12 years in Tioga County; and the biggest needs are care for infants, children with special needs, school-age children, and care in outlying areas.



RECREATION AND TOURISM

- Tioga County has a wide variety of recreational activities, yet not all families may be able to access them due to costs. Residents believe there are barriers to participating in activities, as well as a lack of mutual trust and respect between residents and decision-makers.
- There are strong recreation and tourism initiatives set to take place.
- Residents strongly believe that there is a sense of community pride and an opportunity to make a difference in their communities.



OTHER

- While Tioga County lacks public transportation, it is recognized for its strong nonprofit and volunteer transportation services and programs.
- Tioga County is perceived as a safe, active, kid-friendly place to live, suggesting it is a good place to age and raise families.
- The natural beauty and resources of Tioga County are attractive to its residents and provide plenty of outdoor recreational activities.

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