

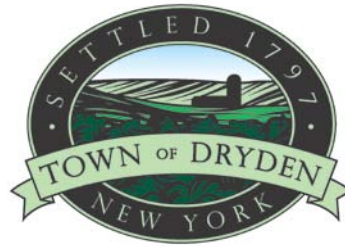
# A Community Snapshot:

## The Dryden Sustainability Inventory



TOWN OF DRYDEN, NEW YORK

SPRING 2011



## Acknowledgements

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# EXECUTIVE SUMMARY

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This report intends to define and describe sustainability indicators in the Town of Dryden. It contains a snapshot of the community today through an account of the characteristics, trends, and qualities related to the strength of the local economy, the vibrancy of the local community, and the health of the natural environment. This report serves as a foundation for understanding current conditions in the Town in order to develop effective goals and strategies to guide long-term sustainability planning and projects.

The sustainability inventory represents the first step in sustainability planning in the Town of Dryden. The purpose of sustainability planning is to create a plan and a planning process that integrates sustainability principles into Town policy and decision-making activities as a way to guide the Town of Dryden towards the measurement and achievement of a sustainable future. To this end, the Town has established the following goals:

## **1. Define and describe sustainability at the town level through a sustainability indicators assessment**

- Define sustainability
- Gather data on economic, social, and environmental systems
- Analyze data
- Establish a system for ongoing measurement, benchmarking and reporting of sustainability in the Town of Dryden
- Compile report and share with the public and town boards

## **2. Set goals for progress toward a more sustainable future derived from the baseline**

- Public, board, and interdepartmental participation to identify vision for Dryden and propose goals
- Build consensus, create timelines
- Passage of a resolution by the Town Board to accept goals and support the recommended measures to achieve them

## **3. Create an action plan to implement practices, activities, and policies that will support the achievement of sustainability goals**

- Develop strategic objectives and recommendations to achieve goals
- Create sustainability action plan and recommend measures

The effort was launched on November 16, 2010 with a town-wide meeting attended by Dryden citizens, Town staff, Town Board members, Planning Board members, the Village of Dryden mayor, and Conservation Board members. Participants gathered to learn more about the goals of the effort, help identify the parameters of the study, provide personal definitions of sustainability, and discuss community needs, challenges, and shared goals.

In the initial phases of the planning process, the Town of Dryden had been considering how to define sustainability in the context of this effort. The definitions that emerged are as follows:

*"The ability of present generations to meet their needs without compromising the ability of future generations to meet their own needs."*

*(Source: United Nations World Commission on Environment and Development, 1987)*

*"The interconnected health and well-being of three systems in a community: economic, social, and environmental."*

Meeting participants expanded upon these definitions to help articulate what is truly important for Dryden as it moves towards a more sustainable future:

*"Dryden is a place where people will be thriving and enjoying life and each other's company in peace, health, and plenty."*

*"Local, green, natural, affordable, equitable, community pride."*

*"Living or operating within the means provided with the ability to save for future use."*

*"It is not spending more money and buying more things to create less energy. It is learning and knowing how to simply use less energy."*

*"Self-reliant without being a burden on your neighbor."*

*"Practice-based on current technology that benefit us now and future generations in a positive manner."*

*"A sustainable future demands hard choices and requires accepting limits on what we do including limiting human population."*

It is worth noting that the concept of sustainability is inherent in the definition of conservation, a movement whose principles are closely linked with the emerging sustainability movement. The following definition of conservation closely parallels the UN definition of sustainability:

*"Conservation: The management of human use of the biosphere so that it may yield the greatest sustainable benefit to present generations, while maintaining its potential to meet the needs and aspirations of future generations. Thus conservation is positive, embracing preservation, maintenance, sustainable utilization, restoration, and enhancement of the natural environment."*

*(Source: McNeely, J.A., K.R. Miller, W.V. Reid, R.A. Mittermeier, and T.B. Werner. 1990. Conserving the World's Biodiversity. International Union for the Conservation of Nature, Gland, Switzerland; World Resources Institute, Conservation International, World Wildlife Fund--U.S., and the World Bank, Washington, DC. 193 pp.)*

This report offers a broad overview of the economic, social, and environmental conditions of the Dryden community in the present. While many elements of sustainability exist, there remains an opportunity to expand upon existing measures and to develop new practices and solutions. Building on this foundation, we intend to develop a synthesis of these facts in an effort to provide direction for future sustainability initiatives in the Town of Dryden. In the long-term, the Town can benefit from developing a mechanism for collecting town specific data to inform the sustainability planning process.

## BACKGROUND

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Local governments have a tremendous opportunity to create sustainable communities. The Town of Dryden has a fundamental commitment to the community at large to make decisions that protect and enhance economic, community, and environmental resources and assets. The Town is preparing to more actively promote healthy land use practices that encourage economic development and strengthen community character, while at the same time protect and enhance the natural environment. Not coincidentally, these three factors – economy, community, and environment - are the fundamental underpinnings of sustainability. Consistent with Dryden's promotion of healthy land use practices, the Town now intends to expand upon these activities in order to integrate sustainability into the planning and decision-making process to ensure a vibrant economy, strong community, and healthy environment for generations to come. Similarly, by defining a baseline, setting goals, and creating an action plan, the Town can directly engage community members in creating a vision for the future.

Through a private grant, the Town hired a Sustainability Planner in September 2010 to carry out the sustainability planning process. The Town took another critical step in October 2010, setting the stage for long-term action and decision-making by joining a network of more than 600 local governments nationwide who are committed to sustainability and climate protection. Founded in 1990, ICLEI – Local Governments for Sustainability, is an association of local governments dedicated to improving global environmental conditions through cumulative local action. ICLEI's mission is to build, serve, and drive a movement of local governments to advance deep reductions in greenhouse gas emissions and achieve tangible improvements in local sustainability.

ICLEI (pronounced iklee) encourages action by focusing on improvements to the quality of life for the entire community and supports local governments through access to training, tools and publications, software, technical, policy, and communications expertise and assistance, state, regional, national, and international peer networking, representation at international meetings, and more. As a member of ICLEI, the Town of Dryden is following the "5 Milestones for Sustainability," a simple, standardized means of assessing sustainability challenges, establishing goals, developing and implementing a plan, and monitoring, measuring and reporting performance.



## METHODOLOGY

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The data collected for the purpose of this study was gathered from available sources, existing data sets, and observational trends. In addition to establishing a sustainability baseline, the process also highlighted the extent of data available at the Town-level, and where the Town could benefit from collecting their own data. In some cases, proxies were used when direct figures and statistics were not available. Similarly, trends were extrapolated from higher-level data sets, such as county and state level data. Hard data was especially difficult to access at the town-level, making it necessary to use proxies and extrapolate from county and state-level data sets. While this prevented us from putting a fine point on each criterion

studied, we were still able to describe general trends and draw broad conclusions from this data. As we strive to present accurate, complete, and meaningful indicators of sustainability, the true value of this work is in using the indicators to identify goals and leverage action. This analysis is the first step into a new realm of planning in the Town of Dryden. Never before have these three elements – economy, community, and environment – been studied and connected in the context of promoting and achieving greater sustainability. This process will ultimately aid the Town in providing services, developing programs, and making decisions that take all aspects of sustainability into account.



# A COMMUNITY SNAPSHOT: INVENTORY RESULTS

## General Trends and Demographics

This section provides a snapshot of the Town of Dryden’s existing demographic characteristics, with a specific focus on population, age distribution, racial characteristics, education, housing, income levels, and employment. The primary source of demographic data is the United States Census. The 2010 Census count was just beginning at the time this document was written, so the results were not available for use or analysis. Therefore, most of the demographics data is derived from the 2000 Census.

The Town of Dryden is the second largest town in Tompkins County behind the Town of Ithaca, an area of central New York recognized for its natural beauty, cultural amenities and economic vibrancy. For the purposes of this report, Dryden is defined as the Town of Dryden, the Village of Dryden, and the Village of Freeville.

Dryden’s 15,869 residents treasure their agricultural heritage, rural character, and accessibility to quality education and employment. The median age of residents is 36.1 years, with 74% of residents over the age of 18. Men and women comprise 49.7% and 50.3% of the population, respectively. The following chart details the comparative population growth throughout Tompkins County over the past 30 years:

**Comparative Population Growth  
Town of Dryden and Tompkins County**

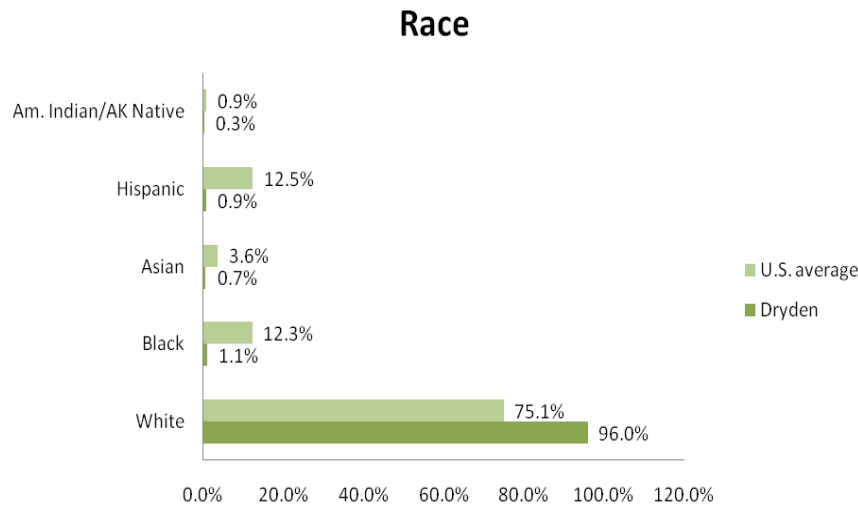
Town	Population 1970	Population 1980	Change '70 - '80	% Change '70 - '80	Population 1990	Change '80 - '90	% Change '80 - '90	Population 2000	Change '90 - '00	% Change '90 - '00
Dryden	9,770	12,156	2,386	24%	13,251	1,095	9%	13,532	281	2%
Dryden Village	1,490	1,761	271	18%	1,908	147	8%	1,832	-76	4%
Freeville	664	449	-215	-32%	437	12	-3%	505	68	13%
Tompkins County	77,064	87,085	10,021	13%	94,097	7,012	8%	96,501	2,404	2%
Caroline	2,536	2,754	218	9%	3,044	290	11%	2,910	-134	-5%
Danby	2,141	2,449	308	14%	2,858	409	17%	3,007	149	5%
Enfield	2,028	2,375	347	17%	3,054	679	29%	3,369	315	9%
Groton (Town)	4,881	5,213	332	7%	5,483	270	5%	5,794	311	5%
Ithaca (Town)	15,620	16,022	402	3%	17,797	1,775	11%	18,198	401	2%
Lansing (Town)	5,972	8,317	2,345	39%	9,296	979	12%	10,521	1,225	12%
Newfield	3,390	4,401	1,011	30%	4,867	466	11%	5,108	241	5%
Ulysses	4,500	4,666	166	4%	4,906	240	5%	4,775	-131	-3%

Source: U.S. Census Bureau, 1970, 1980, 1990 & 2000 Decennial Census.

Dryden grew 5% over the last ten years between 2000 and 2010, moving from 15,869 to 16,845 residents. The county as a whole grew 5%, from 96,501 to 101,564 residents (Source: US Census Bureau, 2000, 2010).

## Race

Dryden is a relatively homogenous community in terms of race when compared with the national average:

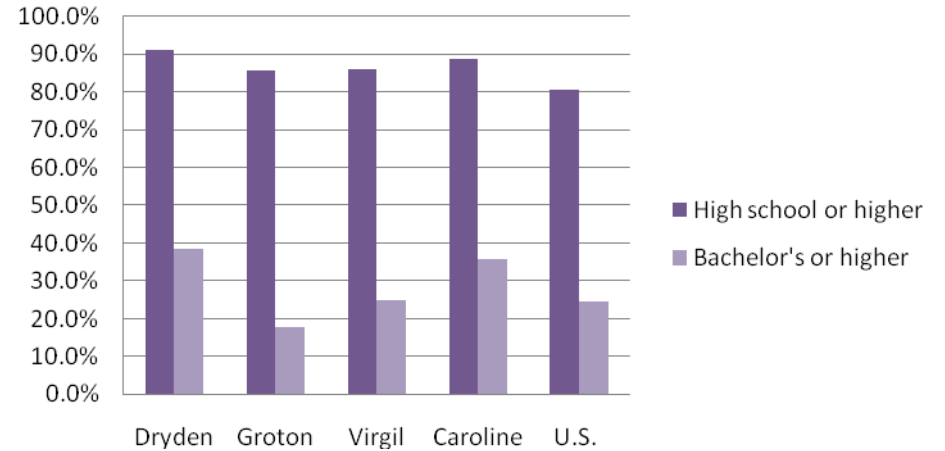


## Education

Most Dryden residents, 91%, have a high school degree or higher, and 38% of residents hold a bachelor's degree or higher. Trends in neighboring towns are as follows:

	High School or Higher (Percent)	Bachelor's Degree or Higher (Percent)
Dryden	90.9%	38.4%
Groton	85.5%	17.8%
Virgil	85.9%	24.9%
Caroline	88.6%	35.6%
U.S. Average	80.4%	24.4%

## Education

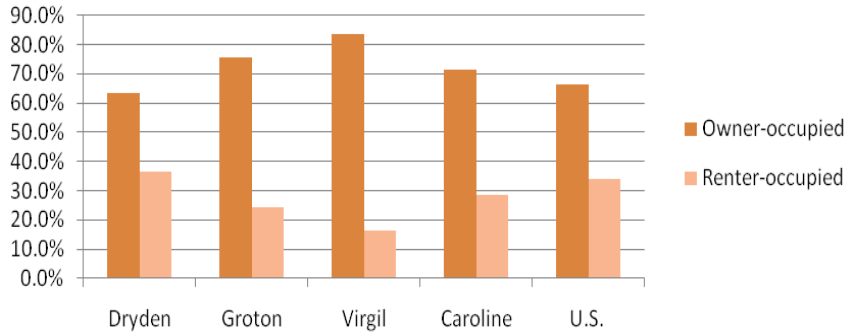


## Housing

Residential housing accounts for about 5.2% of the total land area in the town, with 6,598 occupied units. 70% are owner-occupied, while the remaining 30% are renter-occupied.

	Owner-Occupied Housing (Percent)	Renter-Occupied Housing (Percent)
Dryden	63.5%	36.5%
Groton	75.6%	24.4%
Virgil	83.6%	16.4%
Caroline	71.3%	28.7%
U.S. Average	66.2%	33.8%

## Housing

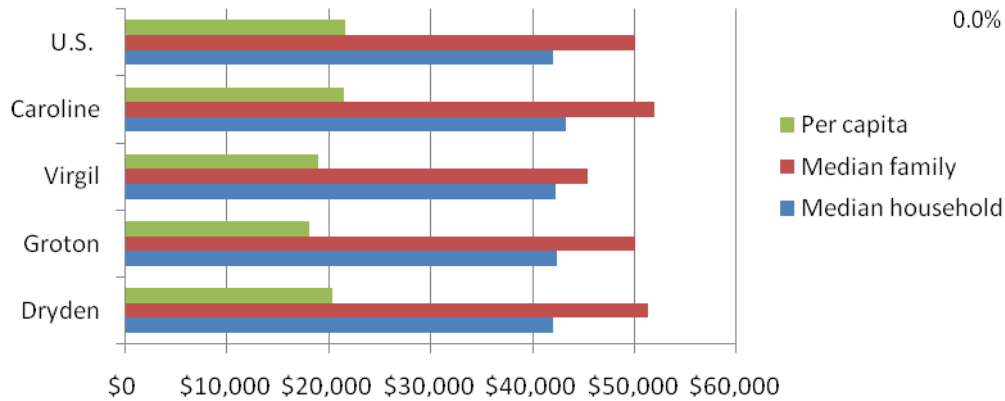


	Median Household Income	Median Family Income	Income Per Capita	Families Below Poverty Level	Individuals Below Poverty Level
<b>Dryden</b>	\$42,060	\$51,354	\$20,313	6.6%	10.4%
<b>Groton</b>	\$56,582	\$66,658	\$22,328	9.4%	10.8%
<b>Virgil</b>	\$58,111	\$58,782	\$27,196	1.0%	3.1%
<b>Caroline</b>	\$51,528	\$65,804	\$23,528	1.9%	5.6%
<b>U.S. Average</b>	\$51,425	\$62,363	\$27,041	9.9%	13.5%

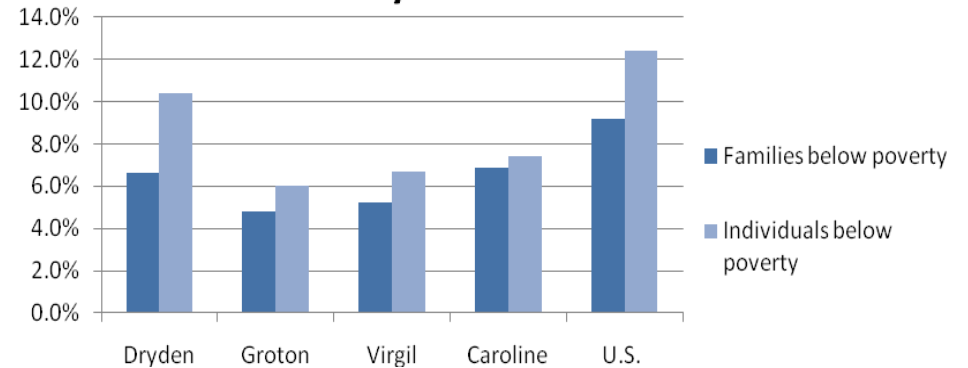
## Income and Poverty

The median household income was \$57,554 while the median family income was \$68,174. The per capita income was \$26,413. 3.7% of families fall below the poverty line in terms of income, while 8.9% of individuals fall below the poverty line. Trends in neighboring towns are as follow:

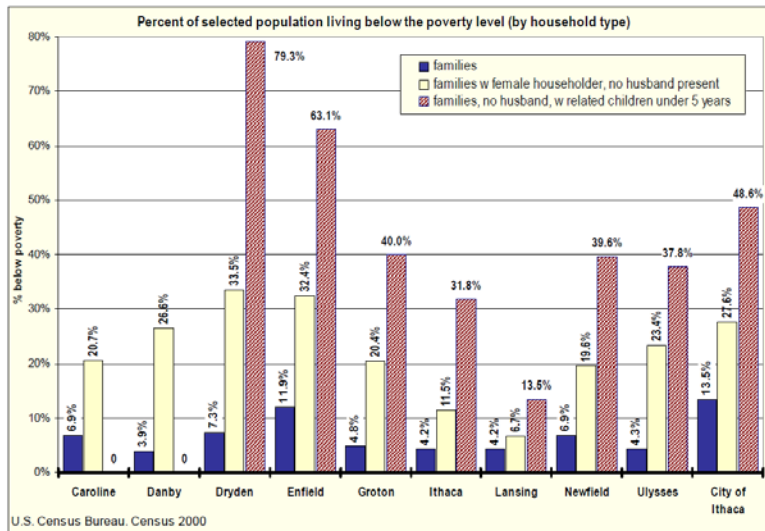
## Income



## Poverty Levels



Among selected household types, single mothers with young children have the highest rate of living below poverty. Poverty strikes these families especially hard in the Town of Dryden where nearly 80 percent of families with children under age 5 years and where no husband is present live below the poverty level:



(Source: [http://www.tompkins-co.org/health/cha05/pdf/CHA05-Tomp\\_00d-GenPop.pdf](http://www.tompkins-co.org/health/cha05/pdf/CHA05-Tomp_00d-GenPop.pdf))

## Economic Indicators

This report seeks to identify basic economic trends and conditions in Dryden in order to paint a clearer picture of the health and vibrancy of the local economy. Much of what is known about economic conditions in Dryden is derived from what is known in Tompkins County. Most of the information that follows is County-level data, and while not Town specific, helps us begin to understand major trends, influencing factors, challenges and opportunities related to the local economy.

### Workforce Composition and Employment

The workforce in the Town of Dryden represents 71% of the population and is comprised of 8,870 individuals aged sixteen and older. The Community Land Use Questionnaire distributed by the Town of Dryden in 2000 indicated that 58% of residents work in Tompkins County, with 14% working in the Town of Dryden.

In addition to being a great place to live, Tompkins County is arguably a great place to work. The workforce is highly skilled with 50% of employed residents classified as “management, professional, and related,” and 1 in 6 classified as “education, training, and library.” Of the major employers in the County, Cornell University has the biggest workforce with 8,600 employees. The primary employers include institutions of higher education, manufacturing companies, school districts, banks, health care institutions, grocery stores, and local governments. (Source: [http://www.tompkins-co.org/health/cha05/pdf/CHA05-Tomp\\_00d-GenPop.pdf](http://www.tompkins-co.org/health/cha05/pdf/CHA05-Tomp_00d-GenPop.pdf))

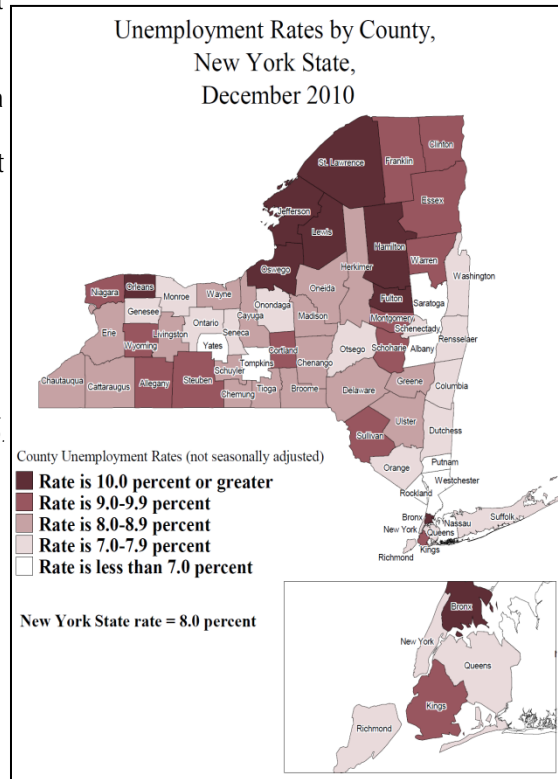
Table 2 — Top employers in Tompkins County (155+ employees)

Source: TCAD 2002		Pct employees of this list of top 27 employers	
1	Cornell University	8,600	Ed 42.7%
2	Borg Warner Automotive	1,460	Mfr 7.3%
3	Ithaca College	1,300	Ed 6.5%
4	Ithaca School District	1,050	Ed-PS 5.2%
5	County of Tompkins	760	Gov 3.8%
6	Cayuga Medical Center at Ithaca	700	Health 3.5%
7	Wegmans	640	Retail 3.2%
8	New York State Electric & Gas	575	Utility 2.9%
9	Emerson Power	550	Mfr 2.7%
10	Axiohm, Inc.	480	Mfr 2.4%
11	City of Ithaca	475	Gov 2.4%
12	TST BOCES	325	Ed-PS 1.6%
13	Lakeside Nursing Center	295	Health 1.5%
14	Wilcox Press	260	Mfr 1.3%
15	George Junior Republic	250	Ed 1.2%
16	Cargill, Inc.	243	Mfr 1.2%
17	Tompkins County Trust Co.	224	Fin 1.1%
18	Tops Supermarket	220	Retail 1.1%
19	Therm, Inc.	219	Mfr 1.1%
20	Tompkins Cortland Comm. Col.	210	Ed-PS 1.0%
21	Trumansburg Schools	210	Ed-PS 1.0%
22	CBORD Group	207	Mfr 1.0%
23	Challenge Industries	205	Mfr 1.0%
24	Dryden Schools	191	Ed-PS 0.9%
25	P&C Market	170	Retail 0.8%
26	H&E Machinery	160	Mfr 0.8%
27	Groton Schools	155	Ed-PS 0.8%
Total for this list of the top 27 employers		20,134	100.0%

## Unemployment

The unemployment rate for Tompkins County in December 2010 was less than 7%, the lowest in the state (Source: <http://www.labor.ny.gov/stats/laus.asp>). The average unemployment rate in the Ithaca metropolitan area for the year 2010 was 5.7%. According to the U.S. Census, unemployment rates in Dryden are much lower than the County or the State, with rates of less than 1%. However, unemployment is not the only challenge faced by the workforce. The mismatch of skills supplied and demanded results in a larger percentage of underemployed residents. Nearly half of the jobs in Tompkins County need workers with basic skills, but the workforce with that skill level is not high enough to meet demand. This also results in a high degree of underemployment (e.g. PhDs working at Gimme! Coffee)

(Source: <http://www.tcad.org/files/businessInfo/LaborExecSum08.pdf> and [http://www.labor.state.ny.us/stats/PDFs/ur\\_map.pdf](http://www.labor.state.ny.us/stats/PDFs/ur_map.pdf)).



## Employment Trends and Workforce Development

As noted previously, the region has a highly skilled labor force, which is an important foundation for any community seeking long-term economic stability. The Tompkins County Labor Market Region Study estimates that over the next 10 years, approximately 16,000 workers will be needed in Tompkins County to fill new jobs and replace workers that are retiring or moving on. Employment in the region is projected to expand .82% annually over the next ten years (Source: <http://www.tcad.org/files/businessInfo/LaborExecSum08.pdf>).

In the context of this growth, there are robust workforce development programs to support the training and education necessary to develop and maintain the skills needed to remain competitive in the job market. The primary providers of these services include:

- Tompkins County Workforce Investment Board
- Tompkins County Office of Employment and Training
- The Department of Labor
- The Women's Opportunity Center
- Tompkins-Seneca-Tioga BOCES
- Tompkins Cortland Community College (TC3)

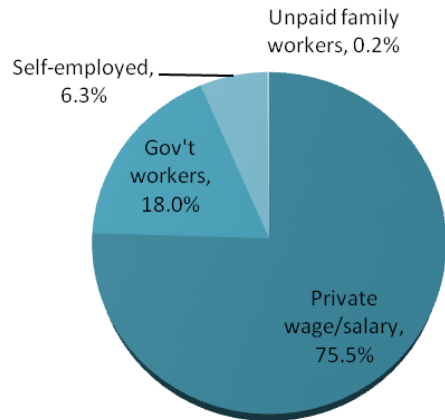
Specific training opportunities include but are not limited to:

- TC3 Biz/Green Energy Technology program – workshops, training, online classes with a focus on energy efficiency and green building: <http://www.tc3.biz/>
- TC Chamber of Commerce Business Training: <http://chambersmallbusinesscouncil.blogspot.com/>

Alternatives Federal Credit Union Business CENTS Training: <http://www.alternatives.org/cents.html>

According to the 2000 U.S. Census, the composition of the Dryden workforce is as follows:

### Workforce Composition



### Local Economy

With a thriving central village and numerous major employers throughout the town, the businesses themselves make Dryden a unique local economy, representing essential economic assets. More than fifty small businesses exist and succeed in Dryden, contributing to a strong local economy:

- [Avinet](#)
- [Bailey Insurance Agency](#)
- [Bell's Auto Care](#)
- [Bo's Bones](#)
- [Bountiful Blessings Bed & Breakfast](#)
- [Brookside Berry Farm](#)
- [Candlelight Inn](#)
- [Cotterill Insurance Agency](#)
- [Crown Construction](#)
- [DeGiorgio Design](#)
- [Dryden Family Medicine](#)
- [The Dryden Hotel](#)
- [Dryden Lawn & Recreation](#)
- [Dryden Mutual Insurance](#)
- [Embassy Inn](#)
- [Fat Boy Bakery](#)
- [Farmer's Choice](#)
- [Finger Lakes Physical Therapy](#)
- [Foxglove Bed & Breakfast](#)
- [The Herald-Examiner](#)
- [Holy Smoke Stove Fireplace Chimney](#)
- [Ithaca Artisan Apartments](#)
- [Lilley's Tack and Feed](#)
- [Locke Woods Interiors](#)
- [Midway Caravan](#)
- [Maple Ridge Dryden](#)
- [Maryhill Clayworks](#)
- [ModuHeat](#)
- [Perkins Funeral Home](#)
- [Quinn's Irish Hill Farm](#)
- [RPM Ecosystems](#)
- [Saunterings Gallery](#)
- [Schickel Construction](#)
- [Stafford Chevrolet](#)
- [Stevens Heritage Furniture](#)
- [Strebel Planning Group](#)
- [Sturges Electronics](#)
- [TidBITS Electronic Publishing](#)
- [Tile-Tec International](#)
- [Treeforms Furniture](#)
- [Vanguard Printing](#)
- [Whitmore Fence](#)
- [Wildflowers](#)
- [William S. Daisy Company](#)

See Related Online Resources for the full Dryden Business Directory

## Gaps: What we don't know

While the Town has a clear picture of education, housing, income, poverty, and employment rates and trends, the Town does not have data related to the specific trends across demographics. It could be valuable to better understand any correlations between these indicators and various groups, such as women, men, the elderly, communities of color, youth, etc.

Another consideration for the town may be that, because dual income households are now the norm, one income is derived from within the county, and the other from outside of the county. In the future, it would be beneficial to understand who is choosing to live in Tompkins County, and particularly in Dryden, and which quality of life factors influence their decision.

The town may also want to consider how land value factors in. A future research question might be: "Is the fact that the Town's tax assessment exceeded \$1 billion in 2009 significant and if so, how?"

Generally speaking, the biggest consideration for updates to this baseline inventory will be to collect and utilize more town specific data, but still in relation to regional and statewide data sets.

## Social Indicators

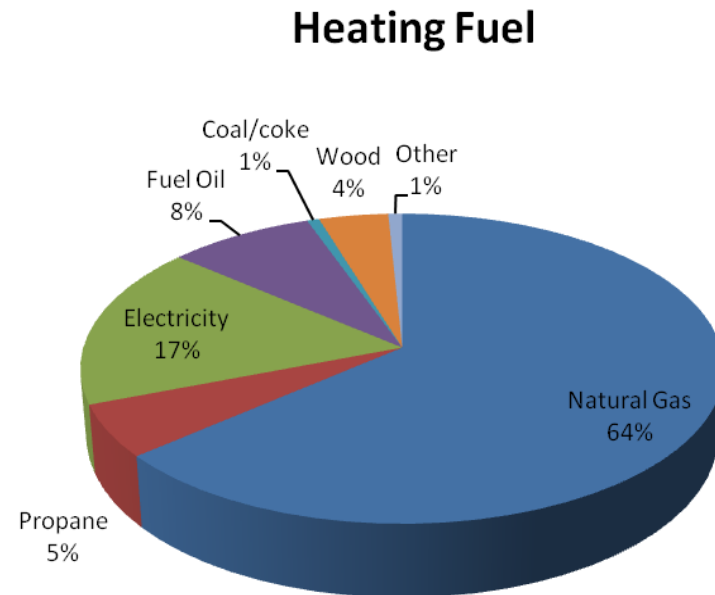
The community of Dryden is largely defined by the people who live, work, volunteer, and play here. When we ask the question: “What makes Dryden a great place to live?” there is no single answer. The characteristics that enable people to thrive in their community can be thought of as social indicators. In an attempt to understand the social sustainability of the Town of Dryden, the following indicators have been assessed:

- Affordable and quality housing
- Commuting patterns and walkability
- Cultural and recreational amenities
- Opportunities for civic engagement
- Educational opportunities
- Public safety
- Availability of health and medical resources
- Access to healthy, affordable food
- Formal and informal support services and networks
- Youth programming

### Dryden as Home: Where and How People Live

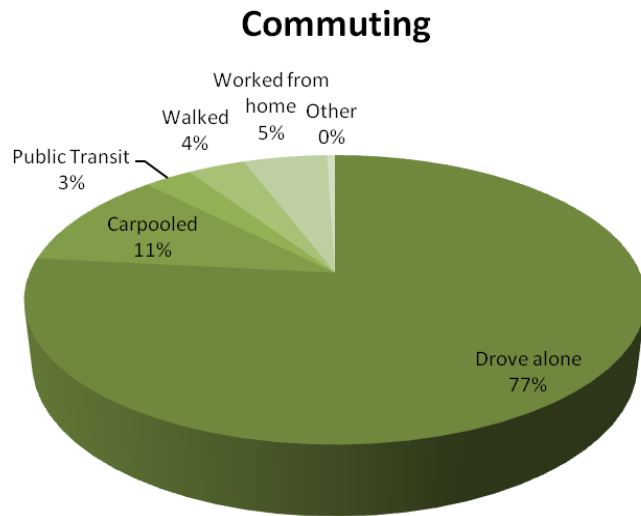
One of the most basic indicators of well-being is the integrity of the places we call home and the spaces we spend our time in. There are 6,437 occupied housing units in Dryden, 63.5% of which are owner-occupied. The remaining 2,510 units are rented. 45% of owner-occupied residential housing units in Dryden are single-family. In a climate as seasonal as upstate New York’s, the way homes are powered and heated is an important quality of life indicator. 64% of home owners and renters rely primarily on natural gas through the regional utility – New York State Electric and Gas (NYSEG) – to heat their homes. Other heating fuels used include propane (5%), electricity (17%), and fuel oil (8%),

(8%). The remaining 6% of residents use coal, wood, or an unspecified fuel source to heat their homes:



The majority of new home development in Dryden since the 1960's has occurred outside of traditional population centers, such as the village and hamlets. Also noteworthy is the significant proportion of manufactured homes in the Town of Dryden, 20% of all housing in the Town.

Dryden is often referred to as a "bedroom community," given the large proportion of residents who leave home to commute to nearby towns and cities for work each day. The commuting patterns of Dryden residents are indicative of such a trend. There are more than 8,414 people commuting to work each day, with a mean travel time of 19 minutes. These commuters get from home to work using several different modes of transportation, but most people drive to work alone.



In addition to work travel, Dryden residents use a variety of transportation modes to get around town, visit neighbors and friends, pick-up and drop-off their children, go shopping, and more. One indicator of community health is the extent to

which residents can walk to amenities like school, work, shopping, and recreational activities, a concept sometimes referred to as walkability. According to "Walk Score," Dryden is "Somewhat Walkable," scoring 66 out of 100. This means that there are some amenities within walking distance. To learn more, visit: [How Walk Score Works](http://www.walkscore.com) (Source: [www.walkscore.com](http://www.walkscore.com))

### Enjoying Dryden: Culture and Recreation

Cultural and recreational amenities undoubtedly improve the quality of life in any community. People of all ages, backgrounds, and interests can benefit from having access to places to play, exercise, experience art and music, and enjoy the outdoors. The proximity of these amenities to population centers is an important determination of sustainability. Understanding these dynamics helps identify areas for improvement. Altogether, Town residents have access to 15 acres of public park and recreation areas. They are served by three small park facilities as well as the Dryden Lake Trail, a 2.6 mile pedestrian/bicycle pathway. In addition to the trail, an 8 acre park at the outlet of Dryden Lake provides access to fishing, boating, playground, and picnic and leisure areas. The Village of Dryden owns Montgomery Park, a downtown space with a lawn, playground, basketball court, and bandstand, the site of weekly concerts in the summer, as well as a farmer's market. The Ellis Hollow Community Center also holds weekly evening concerts in the summer.



The Village of Freeville owns a 6 acre park which includes a field, picnic area, and playground. The four community associations -Etna, Varna, Ellis Hollow, and Bethel Grove - maintain 37 acres of private lands.

Despite being a relatively active community with an expressed interest in having more recreation space and public parks, Dryden falls below the National Recreation and Park Association's recommendations, which call for 6.25-10 acres of public parks and open space per 1000 residents. By this calculation, Dryden should have 166 acres of public parks, but instead has only 52 acres, much lower than the national standard. This issue is made even more evident by the heavy reliance on school fields and facilities, with school functions taking priority over resident's needs. The 2005 Comprehensive Plan articulated the need to address recreation and open space, and committed the Town of Dryden to developing a system of park and recreation facilities to serve the needs of residents in a cost effective manner.

Anyone looking for a structured recreation experience in a fitness facility or gym will find few options in the Town of Dryden. The neighboring communities of Ithaca, Groton, and Cortland offer more fitness options. The Town of Dryden Recreation Department does, however, offer several adult programs, including men's basketball, adult softball, and adult yoga.

### Being a Citizen in Dryden: Opportunities for Civic Engagement and Community-building

Civic engagement means working to make a difference in the civic life of our communities and developing the combination of knowledge, skills, values and motivation to make that difference. It means promoting the quality of life in a community, through both political and non-political processes (excerpted from Civic Responsibility and Higher Education, edited by Thomas Ehrlich, 2000). In Dryden, citizens have a

multitude of opportunities to engage, interact, discuss, share, and collaborate. With three distinct municipalities and four community associations, community members can engage in local government and community problem solving activities at many levels. The Town of Dryden is comprised of the supervisor, the Town Board, the Planning Board, the Conservation Board, and the Recreation Commission, providing leadership to the community by community members. The Village of Dryden is overseen by a Mayor and a Board of Trustees, while the Village of Freeville is run by a Mayor and a Community Council. Dryden residents can engage at the local government level, or through their community associations, which include:

- Ellis Hollow Community Association
- Bethel Grove Community Association
- Varna Community Association
- Etna Community Association

Dryden is also home to several robust political organizations, including Dryden Democrats and the Dryden Republican Party, both of which are dedicated to making Dryden a great community through the promotion of their respective party's policies and candidates.

In addition to engagement in the local governing process, residents have ample opportunity to participate and build relationships through the faith community. Churches located within the Town of Dryden include:

- Covenant Love Community
- Dryden United Methodist
- Reach Out for Christ
- Dryden Assembly of God
- Dryden Baptist Church
- Finger Lakes Church of Christ



Etna Community Church  
 Temple of Truth  
 Dryden Presbyterian Church  
 Holy Cross Church  
 Freeville United Methodist

Long before the Town of Dryden made a formal commitment to sustainability, community organizations have been organizing and advocating for a secure energy future, a protected natural environment, and a healthy community for all of its residents. With a strong focus on energy, community-building, local foods, and the prevention of hydrofracking of natural gas in the region, the following organizations have made great strides towards a more sustainable future for the Town of Dryden:

Dryden Renewable Energy Workgroup (DREW)  
 Dryden Resource Awareness Coalition (DRAC)  
 Dryden Solutions  
 Dryden Community Gardens  
 Dryden Preservation Corps  
 Dryden Listening Circles  
 Dryden Community Café

### Learning in Dryden: Educational Opportunities and Offerings

Learners of all ages are fortunate to have access to quality schools and educational programs ranging from public to private to community college and beyond. Most children under the age of 18 are enrolled in the Dryden Central School District, comprised of Cassavant Elementary School, Dryden Elementary School, Freeville Elementary School, Dryden Middle School, and Dryden High School. The following figures are indicative of the high quality of education that is provided by these schools:

(Source: [http://www.publicschoolreview.com/school\\_ov/school\\_id/55024](http://www.publicschoolreview.com/school_ov/school_id/55024)  
<http://www.publicschoolreview.com/aboutus.php>)

<b>School Enrollment</b>	4,151 over 3 years old in preschool-grad school
<b>Educational Attainment</b>	93% of population has high school degree or higher; 41% of population has bachelor's degree or higher
<b>Student-Teacher Ratio</b>	11:1 (NYS is 13:1)
<b>Drop-out Rate</b>	3% in 2008 (national average was 4.4%)
<b>Graduation Rate</b>	96%

An impressive trend among all schools in the district is their strong commitment to sustainability and environmental stewardship. Each school has a green team devoted to recycling and composting efforts. Both the middle school and the high school have "Go Green Ambassadors," and the Dryden High School has an active Sustainability Club. Dryden Sustainability Club members work to reduce waste in the school and raise awareness about sustainability issues in the world. These efforts and programs reach nearly 2,000 students and hundreds of faculty and staff.

Dryden is also a gateway to many first-rate higher education institutions. In the heart of the Town is Tompkins Cortland Community College, or "TC3," serving more than 6,000 students and offering 54 academic programs as well as many non-credit training and workshop learning opportunities. Worth noting is TC3's strong tradition of sustainability, made evident not only by their course offerings and programs of study, but also through their commitment to climate neutrality and their climate action planning process to reduce greenhouse gas emissions.



Just outside of Dryden, learners have access to:

SUNY Cortland  
Syracuse University  
SUNY College of Environmental Science and Forestry  
Onandaga Community College  
Cayuga Community College  
Cornell University  
Ithaca College  
Binghamton University  
Elmira College

### Services in Dryden: Formal and Informal Support Services and Networks

Social services available to members of the Dryden community are provided directly by Tompkins County. All residents in the County have access to the following services:

Adult Protective Services  
Child Abuse Emergency Number  
Childcare Payment Assistance  
Childcare Protective Services  
Dental Care Assistance  
Financial and Emergency Assistance  
Food Assistance (Food Stamps)  
Foster Care Homefinding, Adoption & Post Adoption Services  
Home Energy Assistance Program (HEAP)  
Long Term Care Services  
Medicaid  
Special Services  
Youth and Family Services

Dryden has three retirement facilities:

Dryden Senior Housing Corporation  
Walden Place Retirement Community  
Groton Community Health Care Center Inc.

Working parents have a multitude of options to choose from when it comes to childcare. There are at least six home providers in addition to the following programs:

FSA Child Care Center of Tompkins Cortland (preschool for 2-5)  
Dryden Head Start Program  
Tompkins Community Action Head Start Program  
Primary School Family Support  
Happy Way Childcare Center  
Integrative Montessori Nursery

Housing services are provided by a number of agencies in Tompkins County and are readily accessible to Dryden residents. Ithaca Neighborhood Housing Services provides financing assistance to low and moderate income residents for home purchases, home improvements, and home repairs. Tompkins Community Action, in addition to their energy services division, partners to provide safe, affordable housing for residents of Tompkins County. Better Housing for Tompkins County is dedicated to increasing sustainable, secure, and affordable housing options for residents.

## Feeling Safe in Dryden: Public Safety

Aside from basic survival, safety and security are the most fundamental of human needs. When these needs - whether perceived or real - are not met, the strength and cohesion of the community is strained and compromised. The Town of Dryden has systems and services established to provide public safety and emergency resources including police, fire, and emergency medical services. Residents are served by five volunteer fire departments within or near the town, each of which has up-to-date equipment, is housed in modern facilities, and is dispatched through a centralized 911 system. In addition to fire protection, the Neptune Hose Company provides EMS services to residents through Dryden Ambulance, Inc., which happens to be the only non-volunteer service. Over the past few years, there have been a decreasing number of volunteers available to respond to emergencies, a trend in need of examination.

Three law enforcement agencies -the New York State police, Village of Dryden police force, and the Tompkins County Sheriff Department - provide police services to Town residents. Additionally, the TC3 Office of Public Safety is a public law enforcement agency, whose highly trained officers are responsible for providing the highest quality services to the community and making the TC3 experience safe.

The NYS Division of Criminal Justice Services (NYS DCJS) maintains records of all crime reported in the state by county and jurisdiction. As of Spring 2011, the Tompkins County Sheriff's Department reports crime occurring in the County by jurisdiction to the NYS DCJS. They hope to be able to extrapolate town-level data in the future, but as of this writing, are unable to do so.

The breakdown of crime reported to the Dryden Village Police Department (DVDP) from 2005 to 2009 is as follows:

Violent Crime	2005	2006	2007	2008	2009
<b>Murder</b>	0	0	0	0	0
<b>Forcible Rape</b>	0	1	1	1	0
<b>Robbery</b>	0	1	1	0	0
<b>Aggravated Assault</b>	2	2	2	6	7
<b>Violent Total</b>	2	4	4	7	7

Property Crime	2005	2006	2007	2008	2009
<b>Burglary</b>	0	0	0	0	0
<b>Larceny</b>	0	1	1	1	0
<b>Motor Vehicle Theft</b>	0	1	1	0	0
<b>Property Total</b>	2	4	4	7	7

(Source: <http://criminaljustice.state.ny.us/crimnet/ojsa/indexcrimes/Tompkins.pdf>)

Domestic violence offenses reported to the DVDP in 2009 is as follows, with comparisons to jurisdictions of similar size:

	Dryden Village	Groton Village	Trumansburg Village	Tompkins County Sheriff
<b>Aggravated Assault</b>	0	2	0	4
<b>Simple Assault</b>	3	9	2	91
<b>Sex Offense</b>	2	0	0	2
<b>Violation of Protective Order</b>	2	1	0	21
<b>Total</b>	7	12	2	118

(Source: <http://criminaljustice.state.ny.us/crimnet/ojsa/domesticviolence/tompkins.pdf>)

## Being Healthy in Dryden: Health and Medical Access and Resources

Indicators of personal health and well-being are difficult to assess at the local level, given that most data has been collected, tracked, and analyzed at the County and State level. In the future, Dryden could benefit from gathering data related to health trends and resources in order to encourage and support healthy living and long-term personal wellness.

Dryden residents have access to major hospitals in the town of Ithaca (Cayuga Medical Center) and in the city of Cortland (Cortland Regional Medical Center and Cortland Convenient Care Center). A new Veteran's Affairs Outpatient facility located on Route 13 in Dryden opened in early 2011 to serve area veterans. Dryden residents also have access to Guthrie Medical, a not-for-profit healthcare organization, located on Hanshaw Rd. There are a handful of medical practices in Dryden, including Family Practice Associates of Dryden, Dryden Family Medicine, Medical Pain Associates, and a few others. Most specialists are located in Ithaca and Cortland.

An interview with Carol Klepack of Dryden Family Medicine provided an anecdotal account of some of the health and medical dynamics at work locally. Klepack emphasized that the major issue in Dryden is not one of availability or access to primary care physicians, with several providers in Dryden and even more specialists in nearby Ithaca and Cortland. Rather, the biggest challenge faced by individuals is in affordability of health care and quality of coverage. In fact, according to County Health Rankings, 28% of adults in Tompkins County do not have coverage compared with 18% statewide. Additionally, according to Klepack, people often purchase cheap policies with high deductibles and low premiums, leaving them unable to pay their bills unless they have a catastrophic incident. The primary health issues treated at Dryden Family Medicine are lifestyle-related diseases such as

heart disease, hypertension, Type 2 diabetes, and obesity. Klepack noted an observed rise in the incidence of childhood and teen obesity in recent years.

County Health Rankings, a recent report of health indicators in all 50 states by county, reveals the following statistics for Tompkins County:

- Fewer premature deaths when compared with the state: 4,488 vs. 5,933
- Adult smoking: 14% County vs. 19% NYS
- Adult obesity: 24% County vs. 25% NYS
- Diabetes: 6% vs. 8%
- Physical inactivity (adults reporting no leisure time/physical activity, aged 20+): 20% vs. 25%

(Source: <http://www.countyhealthrankings.org/new-york/tompkins>)

The Tompkins County Health Department's 2005 "Community Health Assessment" describes the health of the community by presenting information on the health status, community health needs, resources, and health services infrastructure. To learn more visit: <http://www.tompkins-co.org/health/community/index.htm>

## Eating in Dryden: Access to Healthy, Affordable Food

Personal health and well-being are inextricably linked to the food we put in our bodies. Similarly, having access to safe, affordable food is essential to any family's ability to prosper and thrive. In recent years, access to healthy, safe, and affordable food has become linked to the local food movement, which often provides the most reliable source of such food.

Dryden residents have a multitude of options when it comes to food choices, though there is room for improvement, particularly when it comes to accessing healthy, affordable food year-round.

Without leaving Dryden, food shopping can be done at Clark's Food Market which provides a full array of groceries including fresh produce. However it is likely that many residents travel to Ithaca or Cortland to grocery shop at big box stores where prices are cheaper, regional stores with more variety, or food cooperatives where organic and specialty items are more readily available. Kinney Drug Store, Rite Aid, Back to Basics (bulk natural foods store), and Ludgate Farm & Market (farm market and natural food store, fresh organic and local produce, local dairy and cheese, organic and natural groceries and bulk foods to gourmet and specialty treats) also provide options to town residents.

In addition to the Ithaca markets, for two seasons Dryden had a fledgling farmer's market at Montgomery Park on Elm Street, held every Wednesday evening from 6:30-8:30pm throughout July and August. A combination of factors, including inadequate facilities and parking, lack of farmer interest, and close proximity to larger markets in Ithaca, led to the conclusion of the market in 2010 until better options emerge. Farmer's markets often provide the freshest, healthiest options around. Similarly, Dryden is home to a number of flourishing local farms and stands, some of which include:



- Brian Magee Farm (lambs)
- Dedrick's Fruit Stand (produce and plants)
- Millbrook Farm – Freeville (sweet corn and cut flowers)

- Brookside Berry Farm – Freeville (strawberries)
  - Farmer's Choice Blueberries (blueberries)
  - Ithaca Organics – Community Supported Agriculture (vegetables and fruit)
- (Source: <http://ccetompkins.org/agriculture/buy-local/guide-local-foods>)

## The Next Generation in Dryden: Youth Programming and Activities

Creating a truly sustainable community is rooted in nurturing the next generation, as today's youth will soon be tomorrow's leaders. The opportunities available to young people and the extent of their engagement in community programs and projects is an important indicator of social sustainability.

The Dryden Youth Commission (DYC) is an umbrella organization that exists to support and increase access of Dryden youth to programs that build skills, confidence, leadership, and supportive relationships with peers and adults. The DYC is empowered to assess the needs and priorities of Dryden youth and to develop programs to meet their needs. The DYC funds many local programs, including:

- Dryden Youth Services through Cornell Cooperative Extension
- Animal Helpers/Animal Rescue/Animal Lovers
- Outdoor Cooking
- Teen Challenge Groups
- Primitive Pursuits
- Design on a Dime
- Junior Fire Academy
- Youth Employment
- O.U.R.S. Program
- Monday Mentoring
- Thursday Teen Leadership Council
- Friday Fun for All
- Brooktondale Summer Camp

## Youth Horticulture Apprentice Program Village of Dryden Youth Jobs Program

The Dryden Youth Opportunity Fund (DYOF) is dedicated to providing resources for the benefit of youth in the Dryden community by funding innovative programs and activities that go beyond the basic requirements of public education. The DYOF has provided resources for a number of programs and activities, ranging from the Dryden High School Sustainability Club to Family/Community Reading Nights.

The Town of Dryden Recreation Department offers a number of youth programs, including:

- Football
- Cheerleading
- Basketball
- Wrestling
- Track and Field
- Lacrosse
- Softball

For a more in depth analysis, please reference the Town of Dryden Recreation Master Plan, 2011, available upon request.

## Being Connected in Dryden: Information Access

Service providers in Dryden include Time Warner Cable, Frontier DSL, Cellular, and Clarity Connect WiMax. In 2011, the Dryden Town Board approved a plan to allow Clarity Connect to build three wireless towers in the town of Dryden, working toward the goal of connecting over ninety percent of the town to broadband internet. This increase in accessibility will provide nearly 2,000 residents with greatly improved internet connection along with fixed monthly prices for yearly prices. The improved coverage leaves only 152 residences uncovered

by higher speed internet service. Additionally, the enhanced coverage brings four internet hot spots in town.

In addition to regional papers such as the Ithaca Journal, the Tompkins Weekly, and the Ithaca Times, the Dryden Courier focuses on Dryden news and events, and is accessible in print and online. There is also the Southworth Library in the Village of Dryden, providing residents with access to computers as well as books, publications, newspapers, and other media.

## Gaps: What We Don't Know

In future updates to the baseline inventory, it would be useful to explore the following questions and trends:

- What, if any, conservation, energy efficiency and/or sustainability building/living measures are residents implementing in their homes and why? This information could be gathered through the building permit application process and/or code enforcement
- Where do Dryden residents work?
- Why are people choosing to live in Dryden and what specific amenities and characteristics influence the decision to live in Dryden?
- Why do so few commuters utilize public transit or other alternative modes of transportation? What would it take to increase ridership, carpooling, biking, walking, etc?
- Where do residents go outside of Dryden to access cultural and recreational amenities? What amenities would they support in Dryden?
- How many people participate in civic organizations or local government?
- What organizations need greater participation to thrive and fulfill their goals?
- Health concerns such as infant mortality, obesity, diabetes, heart disease, and more

## Environmental Indicators

The health of the natural environment can be understood by examining the abundance, quality, and well-being of environmental resources and indicators in Dryden. The health of natural systems is not only a reflection of whether we are good stewards of the land, but speaks to the importance of investing in those ecosystem services that provide a multitude of benefits to people. Whether it is as straightforward as clean water to drink, or as subjective and complicated as beautiful scenery that inspires us, ecosystems that are healthy and functional provide an invaluable service to human society. As valuable as these systems are, our ability to measure their health is imperfect except at a very small area. The town is fortunate to have highly qualified individuals on its various boards who specialize in the measurement of the health of ecosystems, as well as town staff that have a variety of experience in measuring and actively protecting natural resources.

### Water Quality

Dryden is within the Fall Creek and Six Mile Creek watersheds, which is embedded in the Cayuga Lake watershed, covering more than 800 square miles. With some of the richest, most fertile soils in the nation, Dryden is situated in a region that offers invaluable economic and natural resources, such as agriculture, tourism, real estate, industry, commerce, wildlife, fisheries, wetlands, and forest. The water quality of Cayuga Lake is characterized as very good, serving as a public water supply and recreation hub. Biologically speaking, fish communities are diverse and productive, and overall, the tributary streams have moderate to high water quality and habitat conditions that support a balanced biological community. However, there is habitat degradation found in some areas, and there are several pollution sources that

migrate to the surface and groundwater resources of the basin. The most threatening, long-term issues include sediment, phosphorus, fertilizers, pesticides, organic compounds, trace elements, pathogens, and exotic species.

(Sources: <http://water.epa.gov/type/location/states/ny.cfm> and <http://www.cayugawatershed.org/Cayuga%20Lake/RPP/index.html>)



For more information on the issues, view:  
<http://www.cayugalake.org/images/resources/issues.pdf>

The Community Science Institute's database contains data generated by water quality monitoring partnerships between their lab and volunteers:

<http://www.communityscience.org/database/>

Residents of Dryden have excellent access to waterways for recreational purposes. A 10 minute drive from the center of Dryden brings you to Cayuga Lake, providing access to boating, swimming, fishing, sailing, etc. Also within the county and within a short drive are several state parks, each of which feature impressive waterfalls, swimming, hiking trails, some watercraft access, fishing, picnicking, and camping. Within the Town of Dryden, there are more than seven streams, more than 260 ponds, 3,350 acres of mapped wetlands, as well as Dryden Lake, which has a large portion of public access.

A limited municipal water infrastructure means that most people rely on wells that draw water from aquifers and other groundwater sources found in major valleys throughout the town. Water service areas provide municipal water to 250 properties in addition to the 12 privately owned and operated public water supply systems in the town.

Hydraulic Fracturing, commonly referred to as "hydrofracking," has recently become an issue of concern for residents throughout New York State and in Dryden specifically. In April 2011, the Dryden Resource Awareness Coalition (DRAC) presented a petition with nearly 1,600 signatures, asking the Dryden Town Board to ban hydrofracking in the Town of Dryden. The Town Board passed a resolution calling for work toward a local law that would support that goal through zoning. Although groups like DRAC are organized and active, drilling companies still await the green light from the state to proceed with gas drilling. The draft SGEIS (Supplemental Generic Environmental Impact Statement) is scheduled for release in June 2011 and will have at least a 30-day public comment period, although many groups are requesting a 90-

day comment period. In early June 2011, the NYS Assembly passed legislation that would extend the current moratorium until June 1, 2012. The NYS Senate had not yet voted on the issue at the time of this writing.

Despite regulatory and legal uncertainties, communities throughout Tompkins County, including Dryden, are taking action to prepare for and prevent the possibility of fracking locally. The Tompkins County Planning Department is currently working to help small, rural municipalities, who will prepare for and avoid the negative impacts of hydrofracturing through planning and zoning best practices and tools.

Although facing powerful forces, Towns can have influence over certain aspects of drilling to minimize impacts through local ordinances and policies related to:

- Roads
- Noise
- Light
- Traffic/traffic patterns
- Large Trucks
- Bringing in money to the local economy
- Avoiding burdens on local taxpayers

Towns can also ensure that state regulations are in place and enforced, while also ensuring that wells and stream water quality testing continues and improves. Water quality testing should be through a third party, should establish a baseline pre-drilling, and should be funded by gas companies.

"Shaleshock," an alliance that works toward protecting local communities and the environment from exploitative gas drilling in the Marcellus Shale region, has compiled research from university, state agency, non-profit, and industry studies. Some of the highlights from this research are noted below:

- Large quantities of freshwater required, can deplete local resources as well as contaminate them
- Fracking fluids contain 200+ different chemicals – mix of chemicals is proprietary and undisclosed
- Toxicity of fluid disposal, which contains chemicals as well as arsenic and radioactivity from the shale. Usually disposed of underground in dry gas wells.
- Noise – initial drilling and permanent compressor stations that run day and night
- Traffic – average well drilling and fracking can mean nearly 1,000 tanker truck trips
- Air – pollution from diesel generators, drill rigs, trucks, condensate tanks and flaring are significant sources of VOCs and nitrogen oxide, which leads to high ozone levels. (Source: <http://shaleshock.org/drilling-101/>)

## Air Quality

Air quality is an exceedingly important indicator of environmental and human health. While Dryden’s rural, natural setting lends itself to relatively low levels of pollution, it is by no means pristine, largely due to the high volume of diesel truck traffic through the central arteries of town everyday. The EPA’s Air Quality Index (AQI) reports daily air quality, providing indicators of how clean or polluted the outdoor air is, and any health effects that may be experienced. The AQI provides data on the five major air pollutants regulated by the Clean Air Act: ground-level ozone, particle pollution, carbon monoxide, sulfur dioxide, and nitrogen dioxide. The closest monitoring station to Dryden (Syracuse, NY) typically reports air quality in the “Good,” range, which is the highest possible, with indices between 14 and 40 in January of 2011 (Source: [http://aimow.gov/index.cfm?action=aimow.local\\_city&cityid=144](http://aimow.gov/index.cfm?action=aimow.local_city&cityid=144) <http://www.epa.gov/ebtpages/air.html>). Ozone air quality in Central NY has not exceeded the national standard since 2004, staying below or just at the average. (Source: <http://www.epa.gov/region02/air/>) Major national trends that are likely felt in Dryden point to an increase in overall air quality. Criteria air pollutants and toxics

are declining and dropping, acid rain and haze are declining, and air quality monitoring is increasing.

Despite these improvements, the asthma rates in the state indicate that air quality must continually be improved upon. New York State asthma rates are higher than the national average, with one in 11 children and adults suffering from this chronic disease. While town-level data on asthma rates does not exist, Tompkins County rates lower than the state average in terms of asthma-related emergency department visits, hospital discharges, mortality rates.

(Source: [http://www.health.state.ny.us/statistics/ny\\_asthma/pdf/2009\\_asthma\\_surveillance\\_summary\\_report.pdf](http://www.health.state.ny.us/statistics/ny_asthma/pdf/2009_asthma_surveillance_summary_report.pdf))

New York State has strong systems in place to regulate air quality and protect consumers. The New York State Department of Environmental Conservation (NYS DEC) has the authority and influence to control air pollution through regulations, permit requirements, programs, and incentives. The DEC also monitors air quality and provides resources and technical assistance. To learn more, visit:

<http://www.dec.ny.gov/chemical/281.html>

## Energy and Greenhouse Gas Emissions

The majority of residents and businesses in Dryden purchase electricity and natural gas through the New York State Electric and Gas utility (NYSEG). The residential, commercial, and industrial sectors consumed the following quantities of energy in 2009:

Total Electric Consumption in 2009: 89,528,974 kWh

Total Natural Gas Consumption in 2009: 3,883,855 therms

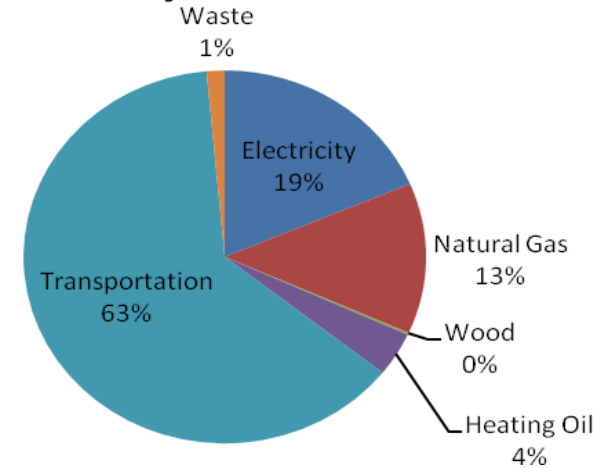
Total greenhouse gas emissions in the residential, commercial, industrial, transportation, and waste sectors were calculated using utility data and county assessment data, county

transportation counts, and county waste diversion data. See Appendix A for methodology. The greenhouse gas emissions were calculated from these sources using the "Clean Air & Climate Protection Software," from ICLEI, Local Governments for Sustainability (<http://www.icleiusa.org/action-center/tools/cacp-software>):

Source	Consumption	CO <sub>2</sub> e (tons)	Equivalent to
Electricity	89,528,974 kWh	29,520	Electricity use of 3,250 for one year
Natural Gas	3,883,855 therms	20,661	Energy use of 1,595 homes for one year
Heating Oil	590,051 gallons	6,635	13,998 barrels of oil
Transportation	171,732,000 vehicle miles traveled	99,724	Annual emissions of 17,298 passenger vehicles
Waste	10,610 tons	2,295	Recycling 700 tons of waste instead of sending it to the landfill
<b>Total Community Emissions</b>		<b>152,200</b>	<b>15,000,000 gallons of gasoline consumed</b>

(Source: <http://www.epa.gov/cleanenergy/energy-resources/calculator.html#results>)

## Community GHG Emissions



## Climate Change

Changes to the Earth's climate and ecosystems often seem to be happening in far away places, leaving communities like Dryden, NY untouched. It is worth noting, however, that impacts are already being felt in New York State, and that our choices and actions today will determine the world that we will inhabit tomorrow. A recent report entitled, "Responding to Climate Change in New York State," also known as "ClimAID," details some of the changes already observed and anticipated closer to home:

- Annual temperatures have been rising throughout the state since the start of the 20th century. State-average temperatures have increased by approximately 0.6°F per decade since 1970, with winter warming exceeding 1.1°F per decade.

- Sea level along New York’s coastline has risen by approximately 1 foot since 1900.
- Mean temperatures across our region could increase by 2.0 to 3.0°F in the 2020s, 3.5 to 5.5° F in the 2050s, and 4.5 to 8.5°F in the 2080s
- Precipitation could increase from an average 38 inches/year by 0 to 5% in the 2020s, 0-10% in the 2050s, and 5-10% in the 2080s
- Extreme heat events are very likely to increase, and extreme cold events are very likely to decrease throughout New York State.

(Source: <http://www.nysed.org/programs/environment/emep/clim-aid-synthesis-draft.pdf>)

As noted in the report, with these changes come threats to local communities. In particular, small towns in rural areas are more vulnerable to, and have fewer resources to deal with severe events such as floods, droughts, ice storms, and climate-related stressors. Furthermore, regions that depend on agriculture, such as Tompkins County and Dryden especially, may be at a higher risk and will be especially in need of adaptation assistance.

Climate change is a global issue that requires immediate and considerable action. In a political climate where attempts to pass comprehensive national climate legislation have been ineffectual, local governments have an opportunity to protect their communities by mitigating the negative impacts of climate change and adapting to the changes already occurring.

### Ecosystems and Biodiversity

Of the 10,760 acres designated as open space, 1,870 acres are considered ecologically or geologically significant. This land is in 16 private preserves that are owned and maintained by Cornell Plantations, Cayuga Nature Center, Finger Lakes Land Trust, and The Nature Conservancy, and is composed of

stream corridors, wetlands, and highland hardwood forests. Yellow Barn and Hammond Hill State Forests are two prominent natural and recreation areas in Dryden, and total more than 8,700 acres of forest. Dryden is home to many prominent and valued natural areas that serve as important habitat to native species and support biodiversity:

- Jim Schug Trail (Dryden Lake Trail)
- O.D. Von Engeln Nature Preserve
- Genung Nature Preserve
- Etna Nature Preserve
- Sapsucker Woods Sanctuary
- Monkey Run Nature Preserve
- Ellis Hollow Nature Preserve
- Roy H. Park Nature Preserve – Baldwin Tract
- Dryden Lake



The town has 57 Unique Natural Areas (UNA), which are defined as areas that harbor rare or endangered flora and fauna, unique geological features, or contain excellent examples of ecosystems or biotic communities and therefore, deserve special attention for preservation in their natural state. The UNA Inventory currently does not contain much specific data regarding animal species on UNA sites. Within the county, Dryden has the most acres designated as UNAs of any town. However, their preservation is for the most part voluntary on private lands. With no tangible protections, education and advocacy are the best tools available to protect these areas. The Town of Dryden Critical Environmental Areas (CEA) report was released in December 2010, and contains an inventory of the rare and scarce wildlife and plant populations found in CEAs.

## Land Use

The Town of Dryden stretches over 61,440 square acres, with 10,760 acres designated as permanently protected open space. Despite considerable population growth over the last 40 years, 90% of the land area remains active or inactive agricultural land, undeveloped meadow, brush, woodlands, or wetlands.

Residential development accounts for 5.2% of the land area in the Town of Dryden, 90% of which is single-family dwellings. The bulk of this development has occurred outside of the traditional population centers of the Villages of Dryden and Freeville. Commercial development makes up another 5% of total land area, while industrial development is a mere 275 acres. Scattered development, small-scale retail and industrial enterprises have created some land use conflicts as residents are affected by noise, hours of operation, light pollution, traffic, and other issues that impact quality of life.

## Agriculture

For generations, farming has been an essential component of Dryden's culture and character. The Town of Dryden recognizes its role in highlighting the significance of agricultural lands and its responsibility to preserve these lands over the long-term. Crucial to preserving agricultural lands is in understanding current conditions, identifying farmland worth protecting, and determining how to do so. The most recent Agriculture Profile was compiled by Cornell Cooperative Extension of Tompkins County in 2004. Highlights from that review are noted below:

- 1/3 of the total acreage in Dryden was identified as actively farmed
- 52 farmers in the town reported working 10,039 owned and 4,172 rented acres of land

- Cornell University owns over 6,500 additional acres used for agricultural field crops, experimental plots, and field laboratories
- 11 farms identified as multigenerational; 4 of these have been in one family for over 100 years
- Trends indicate a continuing interest in farming; more than two-thirds of the town's farmers say they have been farming for 30 years or less
- 47 operations fall into the USDA definition of small farms—farms with gross sales under \$200,000. Of these, 18 are part time operations (gross sales of less than \$10,000).
- The most vulnerable agricultural land is that owned by non-farmers and rented to farmers
- 1,682 acres of farmland is rented to farmers who expect to leave farming within the next 16 years
- Dryden's strong agricultural base can continue into the future by addressing some of the challenges that include preservation of and accessibility to agricultural lands, protection from development, and minimizing fragmentation of land due to rural sprawl. Continued thoughtful planning that involves the town's farmers is a good approach to reaching the town's agricultural preservation goals.

The *100 Year Dairy Farming Study* for the Town of Dryden reveals dairy farming trends over the last ten decades. Highlights from the report illustrate the significant changes that have occurred over the past 100 years:

- Five times as much milk was sold from the Town in 2007 as was sold in 1917 with considerably fewer resources required to produce it
- The number of farms decreased from 206 in 1907 to 8 in 2007 while productivity and efficiency increased substantially

- The labor force engaged in farming has decreased each decade while labor productivity (milk sold per worker) has increased by 35 times during the century, indicating great gains in technology, breeding, nutrition and management skills
- Only the most productive and well-adapted acres of farm land(5%) are now being used by dairy farmers to provide the forage base for milk production
- Production rates have steadily increased over the decades for both the cows and the crops grown to feed them, e.g. milk per cow increased from 4,400 pounds in 1917 to 22,800 in 2007

There are a number of local, state, and national programs and organizations that provide support to farmers in Tompkins County, including Dryden:

Tompkins County Soil and Water Conservation District  
 Tompkins County Cornell Cooperative Extension  
 Natural Resources Conservation Service  
 USDA Farm Service Agency  
 Ag and Farmland Protection Board

The Soil and Water Conservation District of Tompkins County plays an important role in protecting agricultural lands by assisting citizens and governments in making sound decisions regarding the management of soil, water and related natural resources. Some of the programs and services administered through the SWCD include Agricultural Environmental Management, Erosion Control and Stream Bank Stabilization, Agricultural Best Management Practices, and Agricultural Assessments. Cornell Cooperative Extension of Tompkins County offers a continuum of education and resources that support farmers, with programs ranging from farm marketing and business development to hands on farm-based skills training.

The Town of Dryden itself has taken a leadership position to protect and enhance agricultural resources. As stated explicitly in the Town’s Comprehensive Plan, future land use policies must recognize agriculture as a legitimate, long term land use on par with residential, commercial, industrial, and other traditional land uses. The plan recommended a new zoning district for the designated agricultural areas in the Town that, in combination with Conservation and Open Space zoned categories, will protect and enhance farmland. The Town is actively pursuing the protection of agricultural lands through Agricultural Land Conservation Easement, whereby the Town of Dryden could preserve agricultural resources for future generations by purchasing development rights to the land.

From these recommendations in the Comprehensive Plan the town has adopted zoning language that creates a Rural Agricultural District that places agriculture as the highest and best use, as well as a Conservation District protecting open space resources and in some cases acting as a buffer to the agricultural lands. In the future, the town will work with the agricultural community to refine the zoning district to ensure that agricultural resources will be protected even if properties are developed.

The town has also received four grants to protect three farms with Agricultural Conservation Easements, and closed on the first of these farms in December of 2010:

Low Lin Farms – 432.3 acres  
 Jerry Dell Farms – 420.25  
 Wideawake Dairy – 103 acres

The town is actively preparing an open space plan that includes a system to inventory smaller farmers and create a means of protecting or supporting those operations, as well as identify viable programs that support agriculture.

## Transportation

Accessibility, choice, and affordability are important factors for residents when it comes to transportation options. Of the 6,878 residents in the workforce, 5,224 drive to work alone, 94 take public transit, and 199 walk. It is clear that improvements to the current transportation system could be made if the Town works to lessen traffic impacts, help people save money, and spend less time on the road. Dryden is comprised of a network of 204 miles of state, county, and town-maintained roads, 117 miles of which are owned and maintained by the town. The Town roads serve primarily as local roads which have relatively low traffic volumes. However, with state highway Route 13 and 38 transecting the heart of the Village, carrying an average daily volume between 10,500 and 15,200 vehicles per day, residents are exposed to safety, congestion, and noise impacts. Similarly, a high percentage of this volume is "through traffic." Although the population has increased by 4,000 since the 1960's, only three miles of road have been added because most development has occurred on lots along existing roads, further exposing residents to traffic impacts. According to the 2000 Census, there are 14,323 in-commuters coming to work in Tompkins County from outside the county. This greatly contributes to the amount of cars on the road and the traffic impacts experienced by Dryden residents. This trend highlights the need for better housing options locally.

The Tompkins County rural public transit system is one of the most extensive in the state, but needs to increase ridership for service to

continue and to evolve to meet people's needs. Tompkins County Area Transit (TCAT) has five bus routes that serve Dryden residents, with several trips to surrounding cities and towns each day. While the area has minimal trail systems to enable residents to travel by non-automotives means, the Town has plans in place to provide connectivity for bike and pedestrian commuters. The 2.6 miles of the Dryden Lake Trail provide little utility beyond recreation, but the Town of Dryden has funding to develop a second segment of the trail into the Village of Freeville. Furthermore, the town plans to develop a trail segment that will follow the former Lehigh Valley Railroad from the East Ithaca Recreation Way through Varna to Freeville.

Major concerns expressed by residents and focus areas for Town officials include:

- Increased traffic through hamlets and villages and residential areas
- Congestion on Route 13
- Speeding, especially in villages, hamlets, and residential areas
- Providing alternatives to the car as a transportation mode



## Gaps: What We Don't Know

Although monitoring and data collection activities at the state and national level inform our understanding of environmental quality, there remains a need to understand these conditions at the local level. Specific areas to explore further include the loss of farmland, habitat loss, and the potential for renewable energy generation in Dryden. Given the lack of comprehensive data collection and analysis at the town level, it is challenging to gauge environmental health and thus, difficult to set goals and take action to enhance environmental health and quality. This section does point out the influential and well-established entities that exist to support environmental and ecosystem protection, each of which are indispensable to the health and vitality of Dryden's natural resources.

## NEXT STEPS

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### Community Visioning

Dryden's Sustainability Planning effort depends heavily on public participation to create a cohesive community vision devised by the people who know Dryden best – its citizens. The vision elicited from community members will serve as the foundation for the sustainability action plan, identifying goals and establishing priorities. We will engage a diverse array of participants and groups, inviting them to engage in a range of formats. The purpose of this project is to create a plan and a planning process that will integrate sustainability principles into Town policy and decision-making activities to guide the Town of Dryden towards the measurement and achievement of a sustainable future. This process must begin with voices from the community articulating their vision for the future of Dryden. Following this visioning stage, the Sustainability Advisory Group, comprised of representatives from the community, Town Board, Planning Board, Conservation Board, and Town Staff will work together with the Sustainability Planner to compile and develop the Sustainability Action Plan.

### Comprehensive Planning

In 1968 the town adopted a General Plan and went on to develop a Zoning Ordinance and other land use controls in line with that plan. In 2005 the town adopted a Comprehensive Plan that had a strong focus on land use in general, but especially the protection of open space. A revised zoning law is currently being developed that follows the recommendations found in that plan. The 2005 plan indicated that an update to that plan should be done every

five to ten years. When initially presented with the sustainability planning project, the Planning Board accurately pointed out that it seemed very similar to comprehensive planning. The intention of this plan is in part to inform the update of the Comprehensive Plan. The 2005 Comprehensive Plan's land use recommendations will be, for the most part, fulfilled through a combination of the new zoning law as well as the farmland protection program and the purchase of three easements. The next Comprehensive Plan will go beyond simply reiterating what has already been accomplished by the 2005 plan, but will provide a focus on those things that have been identified as needing more attention in the town, like housing, transportation, and open space protection.

The Sustainability Plan will identify those focus areas for the next Comprehensive Plan, thereby establishing a means of developing the next comprehensive plan with a relationship to the sustainability plan. This provides both an implementation path for the sustainability action plan, as well as an evaluation tool for comprehensive planning in the town. In an effort to integrate sustainability into the Town's long-range plans, the Sustainability Planner will recommend the adoption of the Sustainability Plan into the Comprehensive Plan. In doing so, it is our aim that the sustainability goals and recommendations are taken into account during future planning, development, and community outreach activities. Alternatively, it may be preferable to focus the next update to the Comprehensive Plan on sustainability, using the principles of sustainability as a means of organizing, developing, and evaluating policies resulting from the comprehensive planning process.

## RELATED ONLINE RESOURCES

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Town of Dryden: Sustainability Planning

<http://dryden.ny.us/departments/planning-department/sustainability-in-dryden>

## APPENDIX A: GREENHOUSE GAS EMISSIONS CALCULATION METHODOLOGY

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### MODEL

Emissions resulting from the residential, commercial, industrial, transportation, and waste sectors were calculated using ICLEI's Clean Air and Climate Protection Software (CACP 2009). CACP 2009 is a one-stop emissions management tool that calculates and tracks emissions and reductions of greenhouse gases associated with electricity, fuel use, and waste disposal.

CACP 2009 is a tool that calculates and tracks emissions and reductions of criteria air pollutants (particulate matter) and the following greenhouse gases:

- Carbon Dioxide (CO<sub>2</sub>)
- Methane (CH<sub>4</sub>)
- Nitrous Oxide (N<sub>2</sub>O)
- Hydrofluorocarbons (HFCs)
- Sulfur Hexafluoride (SF<sub>6</sub>)
- Perfluorocarbons (PFCs)

The Town of Dryden can benefit from the development of government and community greenhouse gas emissions inventories in the following ways:

**Risk Management** - Voluntarily reporting GHG emissions could help the Town of Dryden manage climate risk by documenting early actions to reduce GHG emissions.

**Addressing Inefficiencies** - Accounting for emissions can help the Town of Dryden gain better insight into the relationship between improving efficiency (reducing energy and waste) and reducing emissions, while at the same time saving money and resources.

**Readiness for a Carbon Constrained Future** - Identifying emissions sources to develop a GHG profile and management strategies will prepare the Town of Dryden to respond to the potential impact of new regulations.

**Recognition as an Environmental Leader** - Voluntarily reporting of GHG emissions provides the Town of Dryden with a pathway to recognize, publicize, and promote our environmental stewardship.

**Stakeholder Education** - Assembling an annual GHG emissions inventory can help inform management, constituents, employees, and the public about the Town of Dryden's GHG emissions profile.

### METHODOLOGY:

Natural gas and electricity utility data amongst residents and businesses in Dryden was obtained through the New York State Energy and Gas (NYSEG) utility. Kilowatt hours and therms used over a one year period, 2010, were entered into the CACP tool which calculated the CO<sub>2</sub> emissions resulting from activities that use electricity and natural gas. GHG emissions associated with transportation were calculated using vehicle miles traveled (VMT), which were obtained from the Ithaca-Tompkins County Transportation Council (ITCTC). VMT in the Town of Dryden, which are broken down by vehicle and fuel type, were entered into the CACP tool which calculated the emissions resulting from the combustion of gasoline and diesel. The amount of waste disposed of in the Town of Dryden was

extrapolated from County data, taking 14% of the overall disposal reported by the County. Given the 58% diversion rate, 42% of this total was used to calculate the GHG emissions resulting from the decomposition of waste in the landfill. The Department of Environment Conservation publishes a Solid Waste Management Plan, which contains a breakdown of the waste types (food waste, plant debris, paper waste, wood and textiles, etc.). This was factored in to the calculation to increase the accuracy of the model.