

**TOWN OF ROXBURY**

**UPDATED COMPREHENSIVE PLAN**

**COMMUNITY PROFILE AND ENVIRONMENTAL INVENTORY**

Version 1

July 5, 2011

## Table of Contents

<b>Table of Contents</b> .....	<b>2</b>
<b>List of Tables</b> .....	<b>4</b>
<b>List of Figures</b> .....	<b>5</b>
<b>Introduction and Summary</b> .....	<b>6</b>
<b>Location</b> .....	<b>7</b>
<b>Historical Overview</b> .....	<b>7</b>
<b>Population Analysis</b> .....	<b>9</b>
<b>Population Change</b> .....	<b>9</b>
<b>Age Structure</b> .....	<b>10</b>
<b>Households</b> .....	<b>13</b>
<b>Regional Comparison</b> .....	<b>13</b>
<b>Housing Characteristics</b> .....	<b>16</b>
<b>Housing Affordability</b> .....	<b>20</b>
Proportion of Income Spend on Housing Costs .....	<b>21</b>
Ratio of House Value to Income .....	<b>22</b>
Purchase Price Multiplier .....	<b>22</b>
Summary.....	<b>22</b>
<b>Physical and Environmental Features</b> .....	<b>23</b>
<b>Water Features and Wetlands</b> .....	<b>23</b>
<b>Floodplains</b> .....	<b>23</b>
<b>Topography</b> .....	<b>24</b>
<b>Soils</b> .....	<b>24</b>
<b>Ecological Data</b> .....	<b>24</b>
<b>Town Budgets</b> .....	<b>25</b>
<b>Schools, Community Organizations, Historic Resources, and Recreation</b> .....	<b>28</b>
<b>Schools</b> .....	<b>28</b>
<b>Community Organizations</b> .....	<b>30</b>
<b>Historic Resources</b> .....	<b>31</b>
<b>Recreational Resources</b> .....	<b>33</b>
<b>Community Facilities and Infrastructure</b> .....	<b>34</b>
<b>Transportation and Highways</b> .....	<b>34</b>
State Roads .....	<b>35</b>
County Roads .....	<b>36</b>
Town Roads .....	<b>37</b>
Public Transportation .....	<b>37</b>
Journey-to-Work Data.....	<b>38</b>

Town of Roxbury – Community Profile and Environmental Inventory v1

<b>Emergency Services</b> .....	<b>40</b>
Fire .....	40
Ambulance .....	40
Law Enforcement .....	40
<b>Public Services and Utilities</b> .....	<b>41</b>
Utilities .....	41
Water .....	41
Wastewater .....	42
Solid Waste .....	43
<b>Land Use</b> .....	<b>43</b>
<b>Building Permits</b> .....	<b>43</b>
<b>Parcel Data</b> .....	<b>45</b>
<b>Subdivision Data</b> .....	<b>45</b>
<b>Land Use Regulations</b> .....	<b>46</b>
Site Plan Review .....	47
Subdivision .....	47
Historic Preservation Law .....	47
Wind Generating Towers Law .....	48
Critical Environmental Areas .....	48
NYCDEP Watershed Regulations .....	48
<b>Economic Resources</b> .....	<b>51</b>
<b>Industries and Businesses in Roxbury</b> .....	<b>51</b>
<b>Agriculture</b> .....	<b>54</b>
<b>Personal Income</b> .....	<b>55</b>
<b>Regional Planning Efforts</b> .....	<b>57</b>
<b>Village</b> .....	<b>57</b>
<b>Town</b> .....	<b>57</b>
<b>County</b> .....	<b>57</b>
<b>Corridor</b> .....	<b>57</b>
<b>Economic Development</b> .....	<b>57</b>

## List of Tables

Table 1. Comparison of population change, 1980-2010. ....	10
Table 2. Population composition, age distribution, 1980-2010, Town of Roxbury. ....	11
Table 3. Change in household characteristics, Town of Roxbury. ....	13
Table 4. Comparison of regional demographics, 2010. ....	14
Table 5. Comparison of demographics, Town of Roxbury and adjacent towns, 2010. ....	15
Table 6. Median household income in the past 12 months (in 2009 inflation-adjusted dollars) by age of householder. ....	15
Table 7. Distribution of housing unit types, Town of Roxbury, 1980-2000. ....	17
Table 8. Change in occupancy status for dwelling units, 1990-2010, Town of Roxbury. ....	18
Table 9. Selected housing costs and gross rent of specified housing units as a percentage of household income, households, Town of Roxbury, 2000. ....	21
Table 10. Median gross rent and selected monthly owner costs as a percentage of income, Town of Roxbury, 2006-2009. ....	22
Table 11. NYSDEC Natural Heritage Program Data, Town of Roxbury. ....	24
Table 12. Summary of Roxbury Town Budget, 2011. ....	25
Table 13. Roxbury Central School District selected data by school year. ....	29
Table 14. National- and state-listed historic resources in the Town of Roxbury. ....	31
Table 15. New York City-Owned Recreation Areas and Use Designations. ....	33
Table 16. Other recreational resources, Town of Roxbury. ....	34
Table 17. Mileage and condition of roads, Town of Roxbury. ....	35
Table 18. Traffic volume, state highways, Town of Roxbury, NY. ....	36
Table 19. Average Annual Daily Traffic (AADT) counts for Delaware County roads, June 2011, Town of Roxbury. ....	37
Table 20. Building permit summary, all building permit types, Town of Roxbury. ....	44
Table 21. Number of parcels and acreage of land uses, 2011, Town of Roxbury. ....	45
Table 22. Local laws with potential land use implications, Town of Roxbury. ....	47
Table 23. Business information, Roxbury and Denver zip codes, 2008 and 1998. ....	52
Table 24. Employment by industry, persons 16 years and older, Town of Roxbury, 2000. ....	53
Table 25. Comparison of occupations, Town of Roxbury, 2000. ....	53
Table 26. Employment status change for the population 16 years and older, Town of Roxbury. ....	54
Table 27. Number and types of agricultural tax parcels, Town of Roxbury, 2011. ....	54
Table 28. Agricultural Census data, Denver (12421) and Roxbury (12474) zip codes. ....	55
Table 29. Comparison of personal income characteristics, Town of Roxbury, 2000. ....	56
Table 30. Change in personal, household income characteristics, Town of Roxbury. ....	56
Table 31. Change in educational attainment, persons 25 years and older, Town of Roxbury. ....	57

## List of Figures

Figure 1. Age composition, Town of Roxbury, 2010.....	12
Figure 2. Age composition, Delaware County, 2010.....	12
Figure 3. Age composition, New York State, 2010.....	13
Figure 4. Year of construction for dwelling units, Town of Roxbury, 2000. ....	17
Figure 5. Occupancy status of all housing units, Town of Roxbury, 2010.....	18
Figure 6. Residency status, Town of Roxbury.....	19
Figure 7. Change in median house value and gross rent, Town of Roxbury. ....	20
Figure 8. 2009 house values distribution.....	20
Figure 9. Change in budget composition, Town of Roxbury, 2006-2011.....	26
Figure 10. Change in total appropriations and amount to be raised by taxes, Town of Roxbury. ....	27
Figure 11. Comparison of equalized full value tax rates, 2010. ....	28
Figure 12. Total and projected enrollment by School Year, Roxbury Central School District .....	29
Figure 13. Local revenue effort rate, Roxbury Central School District.....	30
Figure 14. Average annual daily traffic volume on State roads, Town of Roxbury.....	35
Figure 15. Travel time to work, workers aged 16 and older, Town of Roxbury, 2000. ....	39
Figure 16. Mode of transportation, workers aged 16 and older, Town of Roxbury, 2000. ....	39
Figure 17. All building permits (excluding administrative categories) and building permits for new residences, Town of Roxbury.....	44
Figure 18. Number of lots created by subdivision, number of subdivisions, and average size of subdivision, Town of Roxbury, 1990-2011.....	46

## Introduction and Summary

This Community Profile and Environmental Inventory is intended to provide a factual, data-driven foundation for the Comprehensive Plan. The most salient trends and patterns, which are discussed in detail below, can be summarized as follows:

- After increasing for 50 years, 2010 Census data show that the population may have stabilized. When compared to both Delaware County and New York State, Roxbury has a higher median age and fewer young people.
- Roxbury has higher vacancy rates than many other Delaware County towns, indicating a sizable percentage of part-time and seasonal housing units in the Town. Fully 43% of housing units are classified as for vacant, recreational, and occasional use. Owner-occupied housing units make up a slightly smaller percentage (40%) of all units.
- There are indications that housing may have become less affordable for residents in the Town. Although recent Census data estimate that both renters and owners generally spend less than 30% of their income on housing costs, house prices have increased. When income data are factored in, residents, particularly those with mortgages and those who rent, may experience difficulty paying for housing in Roxbury.
- The mountainous terrain of the Eastern Catskills defines settlement patterns within the Town. The headwaters of the East Branch of the Delaware River are found in Roxbury, and the Schoharie Reservoir is partially located in the northeastern portion of the Town. This puts Roxbury entirely within the New York City Watershed, specifically within its West-of-Hudson drinking water supply system.
- Residential uses comprise over 40% of land use in Roxbury. The combination of vacant land and wild, forested, public, and conservation lands represents 48% of land uses. Agricultural uses account for about 4,000 acres in Roxbury.
- Town Budgets have remained stable over the past six years. Between 2006 and 2011, highway expenditures accounted for 47%, on average, of all appropriations. The tax rate currently compares with the New York State average.
- The primary school district in the Town is the Roxbury Central School District. Since the mid-1990's, enrollments, which in 2009 stood at 336 students, K-12, have trended downward—a trend that is projected to continue through 2015.

- The Hamlets of Roxbury and Grand Gorge as well as Roxbury Run Village have public utilities for water supply and wastewater collection and treatment. Recent improvements to the water and wastewater systems in Roxbury and Grand Gorge and their surrounding areas have been made.
- Roxbury hosts a number of community organizations, from a radio station to an arts group. The Town also has many historic structures and properties. Indeed, much of the Hamlet of Roxbury is within a nationally-listed historic district, and the gravesite of famous naturalist and author John Burroughs can be found on the hills in Town he frequented as a youth.

## Location

The Town of Roxbury is located in the northeastern corner of Delaware County, in New York State, where Delaware, Greene, and Schoharie Counties meet. Geographically, it is defined by the hills and mountains of the Western Catskills Mountain region of the Allegheny Plateau located in the Town. In Roxbury, the these mountains form the valley through which the East Branch of the Delaware River flows from its headwaters located in the Town. According to the United States Census Bureau, the town has a total area of 87.6 square miles, of which 87.2 square miles is land area and 0.5 square miles (0.52%) is water. Two hamlets are located in the town, Grand Gorge and Roxbury, as well as the historical settlement area commonly known as the Denver and Vega Valley.

## Historical Overview<sup>1</sup>

The Town of Roxbury was formed on March 23, 1799, when it was separated from the Town of Stamford. Taking place two years after Delaware County was delineated in 1797, its incorporation coincided with the rapid settlement of the entire region in the post-Revolutionary era. It was comprised of the hamlets of Grand Gorge (then Moresville), Roxbury (then Beaver Dam), and Vega and Denver in the Batavia Kill valley, and the Thomson district of New Kingston. Early on, area development concentrated in the river valley, and along the several transportation routes, which were also located along the East Branch.

Like many towns in the area, Roxbury's main settlement group came from New England, and the town itself was named for Roxbury, Connecticut, where a number of these early settlers originated. The Town is a part of the Queen Anne Patent

---

<sup>1</sup> Adapted from the 2002 Town of Roxbury Comprehensive Plan, The Ulster and Delaware Railroad Historical Society, the Delaware county Genealogy and History Site, the National Register of Historic Places, and Wikipedia.

granted to Johannes Hardenberg in 1708. Among the earliest settlers in the area was John T. More and his family, which acquired the claim to what is now Grand Gorge around 1786. In Roxbury, the first settler was Israel Inman in 1788, and John and Joseph Keator were first in the Batavia Kill area, in 1794. By 1790, the area that was to become Roxbury was well settled.

In the 19<sup>th</sup> century, Roxbury provided a range of services to area residents. Early industries included grain mills, saw mills, a fulfilling mill, and farm implements manufacturing. The Ulster and Delaware Railroad arrived in 1872, and it eventually passed through Moresville (Grand Gorge) and Stamford. The historic Roxbury Depot was built at this time to serve the increasing amount of traffic. The arrival of rail transportation in Roxbury resulted in the expansion of local agriculture, and it sparked a local tourist trade. The first creamery was financed in part by the railroad interests, and dairy production, always important in the Town, expanded considerably after 1900. In that year, the Ulster and Delaware Railroad reached Oneonta for the first time, placing the Town within the New York City and Boston milksheds, allowing shipment of liquid milk to a much larger market.

The buildings of the historic Ulster and Delaware Railroad Depot and Mill Complex, then located in the Village of Roxbury, were built largely in the 1870s. These structures represent the types of industries important to the area at the time: a flour and feed mill, a creamery, an icehouse, and a passenger/freight depot. Up to World War II, the Town expanded, and many of its buildings and streets were constructed in this period.

Several notable people have called Roxbury home. Famous essayist, naturalist, and conservationist John Burroughs was born in the Town in 1837. After becoming a successful writer, Burroughs returned to Roxbury in 1908 and began spending summers at Woodchuck Lodge. Built by his brother, Curtis, the property features prominently in many of his writings and is now listed on the National Register of Historic Places. Influential railroad financier Jay Gould was born in Roxbury in 1836. He and, later, members of his family were instrumental in shaping the Town's built environment. Jay produced one of the first known maps of the then-Village of Roxbury in 1853. Helen, his daughter, shepherded such projects as the Roxbury Library, the construction of a home for the YMCA (a building that now houses the Roxbury Arts Group), and Kirkside Park. Helen Gould also helped finance the first lighting system in the town. The central school building, built with federal money in 1939, was the last major building project carried out in the hamlet of Roxbury in this period.

Once home to the rural communities of Denver and Vega, the valley was more populous a century or so ago, when farming was a way of life. The valley settlement was known as Batavia, and it was settled late in the 1700s by New Englanders. It hosted some of the best farmland in the Town, and it today it remains the least densely populated portion of the Town.

In the post-World War II era, Roxbury's built environment changed little. The Ulster & Delaware Railroad ceased running in 1932, but it continued to ship dairy products until after World War II. Its final closure coincided with the decline of dairying in the region, which brought shifts in the local economy, particularly in the agricultural sector. The advent of automobile transportation, in particular, facilitated a change in settlement patterns, bringing townhouse developments like Roxbury Run and enabling the construction of homes in some of the less populated portions of the Town; it also contributed to a rise in the tourist economy. New construction in the post-war era has taken place throughout the Town and on a variety of lots, ranging from tiny to relatively generous—several acres or more. Many second and seasonal homes have also been constructed.

## Population Analysis<sup>2</sup>

### Population Change

Generally, the population of the Town of Roxbury increased about 12% between 1950 and 2010. In this period, the greatest increases were seen between 1980 and 2000, although this trend began earlier, in 1970. The most recent census data (2010) show that the population decreased slightly from 2,509 to 2,502 (Figure 1). This may indicate that population size is becoming more stable.

---

<sup>2</sup> Population and related information for 1980, 1990, 2000, and 2010 was derived from the United States Census Bureau. Due to a change in the way the Census Bureau collects and releases socio-economic information (i.e. the American Community Survey, or ACS, has replaced the decennial Census Long Form questionnaire), data reported for places with populations smaller than 20,000 have varying levels of reliability and so were only partially utilized in this database. Census data were, where noted, supplemented with information from other sources.

Town of Roxbury – Community Profile and Environmental Inventory v1

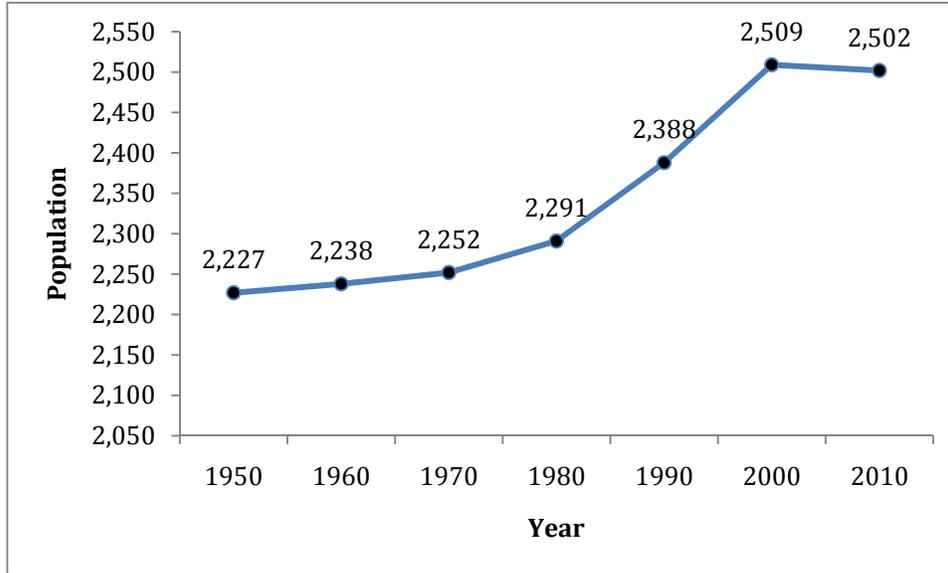


Figure 1. Population change, Town of Roxbury.

Since 1980, population in the Town has increased 9.2%. Compared to the state, and nation, the Town has seen only modest growth. Although Roxbury has grown more than Delaware County, it has generally grown about as fast as New York State in the same period. Population change for the United States, however, is much greater overall (Table 1).

Table 1. Comparison of population change, 1980-2010.

	1980	1990	2000	2010	1980-2010 % Change
United States	226,546,000	248,710,000	281,421,906	308,745,538	36.3%
New York State	17,558,165	17,990,455	18,976,457	19,378,102	10.4%
Delaware County	46,824	47,225	46,555	47,980	2.6%
Town of Roxbury	2,291	2,388	2,509	2,502	9.2%

### Age Structure

The median age in the Town has risen from 35 to 49 over the forty years depicted in Table 2, which mirrors increases in median age in New York State since at least 1970. This trend is reflected in the substantial growth (over 52%) of the 65 and older age group over the same period. There also was a 14% increase in the number of people aged 20 to 64 years in the Town between 1980 and 2010. The greatest decline (25%) is seen in the school-age population, 5 to 19 years old, and those under 5 years has decreased moderately (6%) as well. The number of females has grown twice as fast as males, although the female-male gender distribution in the

Town of Roxbury – Community Profile and Environmental Inventory v1

Town (49.7%-50.3%) is more even than the figure for New York State (51.6%-48.4%); this could reflect the increase in median age in the Town.

Table 2. Population composition, age distribution, 1980-2010, Town of Roxbury.

	1980	1990	2000	2010	1980-2010 Change
Total	2,291	2,388	2,509	2,502	9.2%
Under 5 years	132	170	144	124	-6.1%
5 to 19 years	543	508	457	405	-25.4%
20 to 64 years	1,240	1,295	1,416	1,414	14.0%
65 years and older	366	415	492	559	52.7%
Median Age	35	38	45	49	40.5%
Male	1,168	1,169	1,238	1,243	6.4%
Female	1,123	1,219	1,271	1,259	12.1%

Source: US Census Bureau and Minnesota Population Center, National Historical Geographic Information System.

Figures 2, 3, and 4 show the 2010 age compositions of the Town, Delaware County, and New York State, respectively. The concentration of people at the higher end of the age groups offer additional evidence of an aging of the Town's population, although the second "bulge" in the chart does show higher percentages of people aged 10 to 19. Roxbury is comparable to Delaware County, which also shows greater percentages of people over age 45. This contrasts with the pattern exhibited by the New York State population, which mirrors what would be expected for the US population as a whole. The State generally has comparatively higher percentages of people under the age of 44.

-DRAFT-  
Town of Roxbury – Community Profile and Environmental Inventory v1

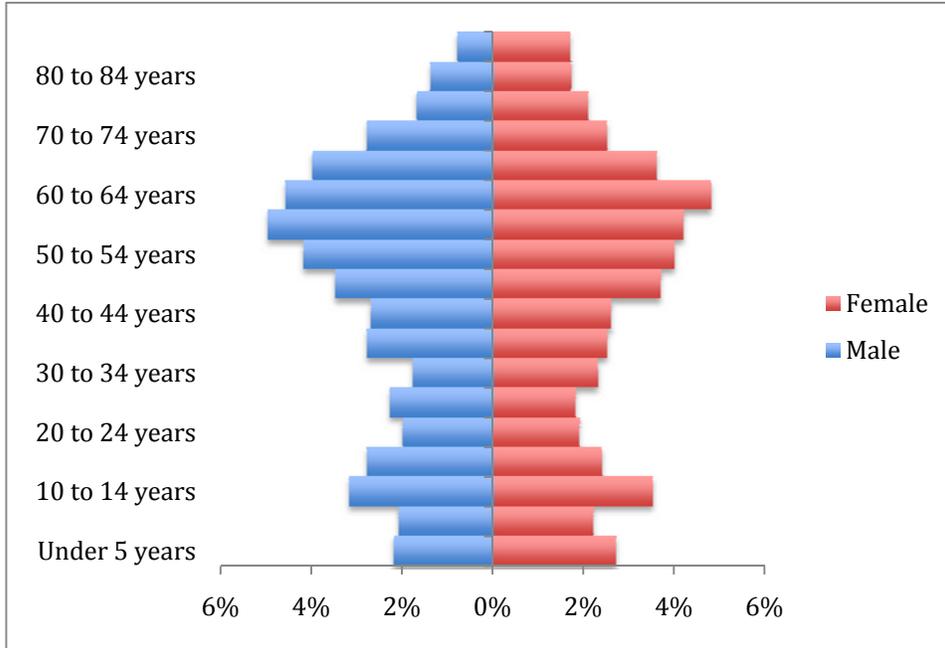


Figure 1. Age composition, Town of Roxbury, 2010.

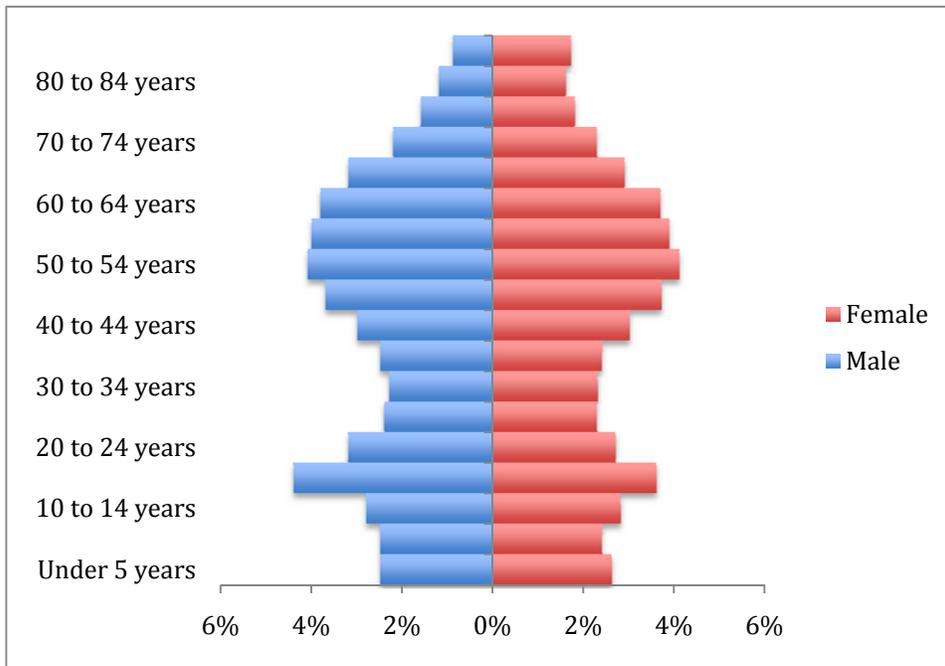


Figure 2. Age composition, Delaware County, 2010.

Town of Roxbury – Community Profile and Environmental Inventory v1

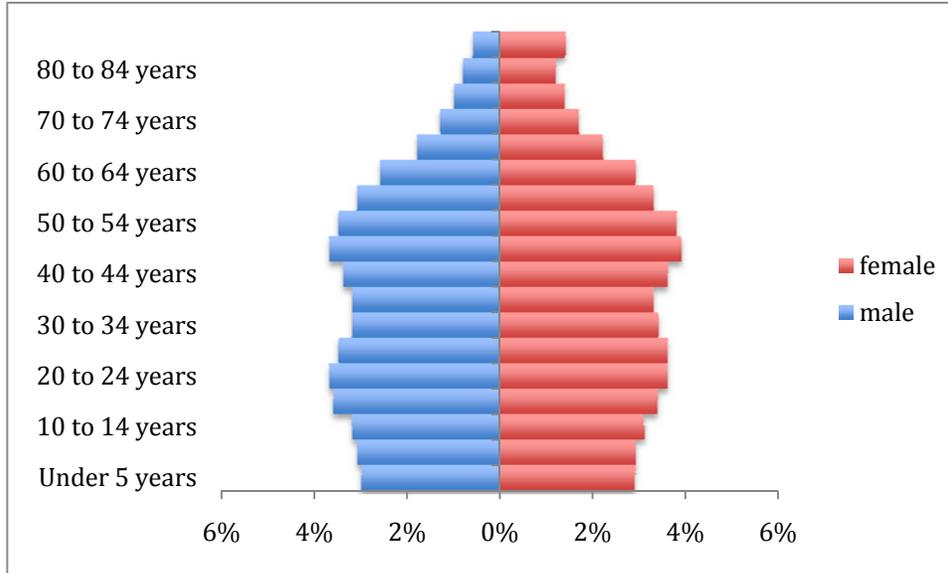


Figure 3. Age composition, New York State, 2010.

### Households

While population has increased 9.2% since 1980, the number of households<sup>3</sup> in the Town has risen at a different rate, 37.0% (Table 3). This is another common demographic shift seen in many rural communities where population rises little or moderately, but the increase in households is greater. The category showing the most change, however, is female-headed households, which has increased 80% since 1980—faster than the change in all households over the same period. About 8% of households (92 total households in 2010) in Roxbury are female-headed.

Table 3. Change in household characteristics, Town of Roxbury.

	1980	1990	2000	2010	1980-2010 Change
Total Population	2,291	2,388	2,509	2,502	9.2%
No. of Households	835	928	1,078	1,144	37.0%
Total No. of families	608	653	719	694	14.1%
No. of Married Couple households	536	551	603	546	1.9%
No. of Female Head of Households	51	66	74	92	80.4%

### Regional Comparison

Table 4 and Table 5 offer additional demographic data, comparing Roxbury at the regional, state, and national levels. When compared at the county, state, and national levels, the Town has lower rates of persons in poverty. More Town residents own their homes when compared at all levels; high rates of home

<sup>3</sup> Households are defined by the US Census as the people who occupy a housing unit as their usual place of residences. A family includes all people living in the same household who are related by birth, marriage, or adoption.

Town of Roxbury – Community Profile and Environmental Inventory v1

ownership are not uncommon in Delaware County. The vacancy rate<sup>4</sup> is notably higher than Delaware County as well as the state and nation, which is due to the preponderance of seasonal housing units in the Town (See Table 8, below). The density of settlement is also comparatively low. When compared to other Delaware County towns (Table 5), house values and median incomes are higher in Roxbury, and its rate of poverty is generally lower.

Table 4. Comparison of regional demographics, 2010 (except where noted).

	<b>Town of Roxbury</b>	<b>Delaware County</b>	<b>New York State</b>	<b>United States</b>
Population	2,502	47,980	19,378,102	308,745,538
Land Area (sq. mi)	87.62	1,468.00	48,624.00	3,648,399.00
No. residents per sq. mi.	28.56	32.68	398.53	84.62
Percent owner-occupied units	77.5	74.2	53.3	65.1
Vacancy rate (2010)	47.8	36.3	9.7	11.4
Unemployment rate in 2011*	NA	8.3	7.7	8.7
Median Household Income	\$54,970.00	\$41,656.00	\$55,233.00	\$51,425.00
M.O.E. <sup>5</sup>	\$8,869.00	\$2,000.00	\$179.00	\$83.00
Median value of housing unit (\$)	157,700	126,300	300,600	185,400
M.O.E.	26,826	6,194	1,116	201
Percent of individuals below poverty level	5.3%	15.1%	13.9%	13.5%
M.O.E.	2.5%	1.6%	0.1%	0.1%

\*Date are current to April 2011 and are not seasonally adjusted. *Source: U.S. Census Bureau 2005-2009 American Community Survey and 2010 Census; New York State Department of Labor; and United States Bureau of Labor Statistics*

<sup>4</sup> According to the Census Bureau, a housing unit in which no one is living on Census Day, unless its occupants are only temporarily absent. Units temporarily occupied at the time of enumeration by individuals who have a usual home elsewhere, such as second homes, are classified as vacant. (Transient quarters, such as hotels, are housing units only if occupied. Thus, there are no vacant housing units at hotels and the like.) Vacant units, including new construction, are excluded from the housing unit inventory if they are open to the elements, have a posted "condemned" sign, or are used entirely for nonresidential purposes (except storage of household furniture).

<sup>5</sup> Margin of Error (M.O.E.) represents the precision of an estimate. The ACS reports M.O.E.s at the 90% confidence level. This means that the true value of a parameter will, 9 times out of 10, fall in the range determined by adding and subtracting the margin of error from the value of a given estimate.

Town of Roxbury – Community Profile and Environmental Inventory v1

Table 5. Comparison of demographics, Town of Roxbury and adjacent towns, 2010 (except where noted).

	<b>Town of Roxbury</b>	<b>Town of Bovina</b>	<b>Town of Middletown</b>	<b>Town of Stamford</b>
Population	2,502	633	3,750	2,267
Land Area (sq. mi)	87.62	44.50	97.30	48.50
No. residents per sq. mi.	28.56	14.22	38.54	46.74
Vacancy rate (2010)	47.8	49.6	47.2	30.1
Median Household Income	\$54,970.00	\$36,500.00	\$36,748.00	\$38,583.00
M.O.E.	\$8,869.00	\$15,740.00	\$4,778.00	\$7,406.00
Median value of housing unit (\$)	157,700	213,500	195,400	114,100
M.O.E.	26,826	72,494	29,521	17,037
Percent of individuals below poverty level	5.3%	10.1%	18.9%	12.3%
M.O.E.	2.5%	10.1%	6.7%	5.1%

Source: U.S. Census Bureau 2005-2009 American Community Survey and 2010 Census; New York State Department of Labor; and United States Bureau of Labor Statistics

As indicated, Roxbury has a comparatively lower percentage of individuals living below the poverty level. Table 6 presents the most current household income data sorted on the age of the householder. There is generally a high degree of variability; some of this is an artifact of ACS sampling procedures,<sup>6</sup> although it may also tentatively indicate higher income levels than is typical for the County. Median income for households headed by those aged 25 to 44 in Roxbury is higher than in Delaware County, and is the only category significantly different<sup>7</sup> from the County.

Table 6. Median household income in the past 12 months (in 2009 inflation-adjusted dollars) by age of householder.

<sup>6</sup> Variability in estimates for Roxbury result from at least two aspects of the ACS: the definition of residence (i.e. a respondent’s “current” residence for more than 2 months) will likely capture more “seasonal” residents in the Town, and due to its small population size, values much larger or smaller than the mean will tend to reduce an estimate’s precision.

<sup>7</sup> Due to errors resulting from sampling procedures used by the ACS, difference in estimates should be evaluated using tests for statistical significance.

Town of Roxbury – Community Profile and Environmental Inventory v1

	New York		Delaware County		Town of Roxbury	
	Estimate	M.O.E. (+/-)	Estimate	M.O.E. (+/-)	Estimate	M.O.E. (+/-)
Median household income	55,233	179	41,656	2,000	54,970	8,869
<i>By Age of Householder</i>						
Under 25 years	26,864	468	28,633	16,021	NA	NA
25 to 44 years	62,098	333	44,280	6,388	64,063	8,489
45 to 64 years	66,779	348	55,376	2,998	61,524	10,110
65 years and over	32,688	206	29,197	2,968	32,283	13,410

Source: U.S. Census Bureau, 2005-2009 American Community Survey.

### Housing Characteristics

Housing data reflect both the Town’s historic character and the increases in construction between 1970 and 1980. As Figure 4 shows, almost 30% of housing units were built before 1939, and about 50% of all units were built before 1980. Although the number of housing units added between 1980 and 2000 increased at a 50% rate, much of that increase occurred between 1980 and 1990. More recently, the pace of growth in the housing stock has slowed: Between 1990 and 2000, the rate of increase was only 5%; between 2000 and 2010, 165 new units were constructed—an 8% increase which also represents 8% of the total number of units in 2010.

As Table 7 shows, most housing in the town is detached single-family homes. The category showing the most increase between 1980 and 2000 is 1-unit attached, which includes such structures as townhomes and condominium complexes and is likely attributable to the Roxbury Run Village development. Mobile homes have also increased markedly since 1980, although the number of units decreased by 33 (12%) between 1990 and 2000. The Town has lost the most units in structures containing 5 or more housing units, which has decreased by 58% in this period. Collectively, housing in structures containing 2 or more units accounts for only 7.6% of the total units in the Town; in comparison, 12.1% of housing units in Delaware County are in such structures.

Town of Roxbury – Community Profile and Environmental Inventory v1

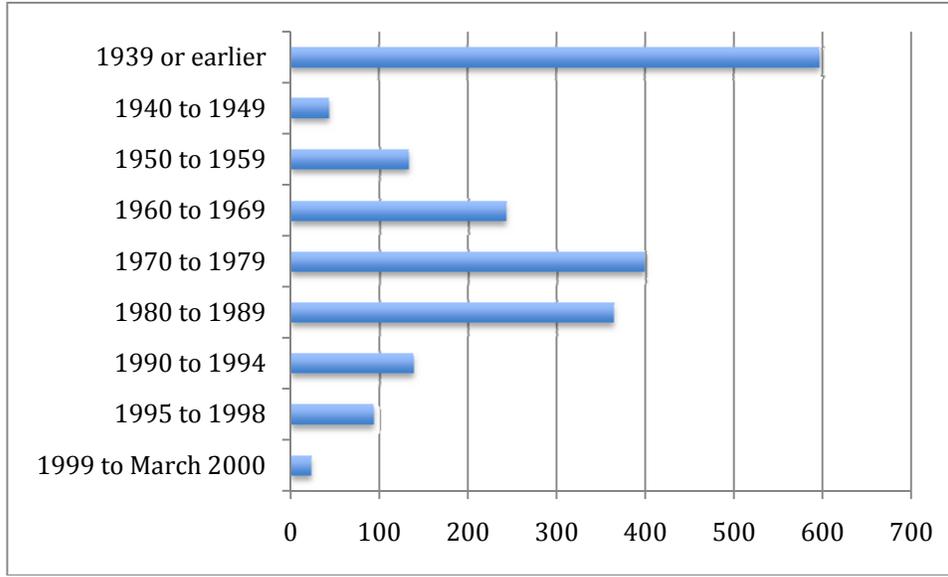


Figure 4. Year of construction for dwelling units, Town of Roxbury, 2000.

Table 7. Distribution of housing unit types, Town of Roxbury, 1980-2000.

Type of Unit	1980		1990		2000		1980-2000 Change
	Number	Percent	Number	Percent	Number	Percent	
1-unit, detached	1,002	74.2%	1,359	66.8%	1,458	70.1%	45.5%
1-unit, attached	7	0.5%	137	6.7%	128	6.2%	1728.6%
2 units	43	3.2%	81	4.0%	59	2.8%	37.2%
3-4 units	25	1.9%	35	1.7%	42	2.0%	68.0%
5 or more	128	9.5%	56	2.8%	53	2.5%	-58.6%
5-9 units	n/a	-	17	0.8%	12	0.6%	-
10-19 units	n/a	-	16	0.8%	12	0.6%	-
20+ units	n/a	-	23	1.1%	29	1.4%	-
Mobile homes/trailers	145	10.7%	282	13.9%	249	12.0%	71.7%
Other	n/a	-	28	1.4%	37	1.8%	-
Total	1,350	100.0%	1,978	100.0%	2,079	100.0%	50.1%

Source: Census and Minnesota Population Center, National Historical Geographic Information System

Most occupied units in the Town (82.3%, from Table 8) are owner-occupied (as opposed to renter-occupied). When vacant for-rent units are included, however, the percentage of rental units increases slightly from 11.7% to 13.9%.

In 2010, the vacancy rate in Roxbury was 48%, which represents a slight increase from 47% in 2000. Vacancy rates have generally declined since 1990, when the rate stood at 53%. The number of vacant units has exceeded the number of owner-occupied units since 1990. In 2010, the number of seasonal, recreational, and

Town of Roxbury – Community Profile and Environmental Inventory v1

occasional use units, which represents 89% of all vacant units and 43% of total units, exceeded the number of owner-occupied units (Figure 5).

According to a recent survey of second home owners in Roxbury, 44% occupy these residences for between 1 and 3 months each year. This survey also indicated that half of these residences have been owned for greater than 20 years.<sup>8</sup>

Table 8. Change in occupancy status for dwelling units, 1990-2010, Town of Roxbury.

	1990	2000	2010
Owner-occupied	718	865	887
Renter-occupied	210	213	257
Vacant	1,050	948	1,047
For rent	n/a	27	47
For sale only	n/a	43	28
Rented or sold, not occupied	n/a	21	6
For seasonal, recreational, or occasional use	n/a	828	933
Other vacant	n/a	29	33
Total	1,978	2,026	2,191

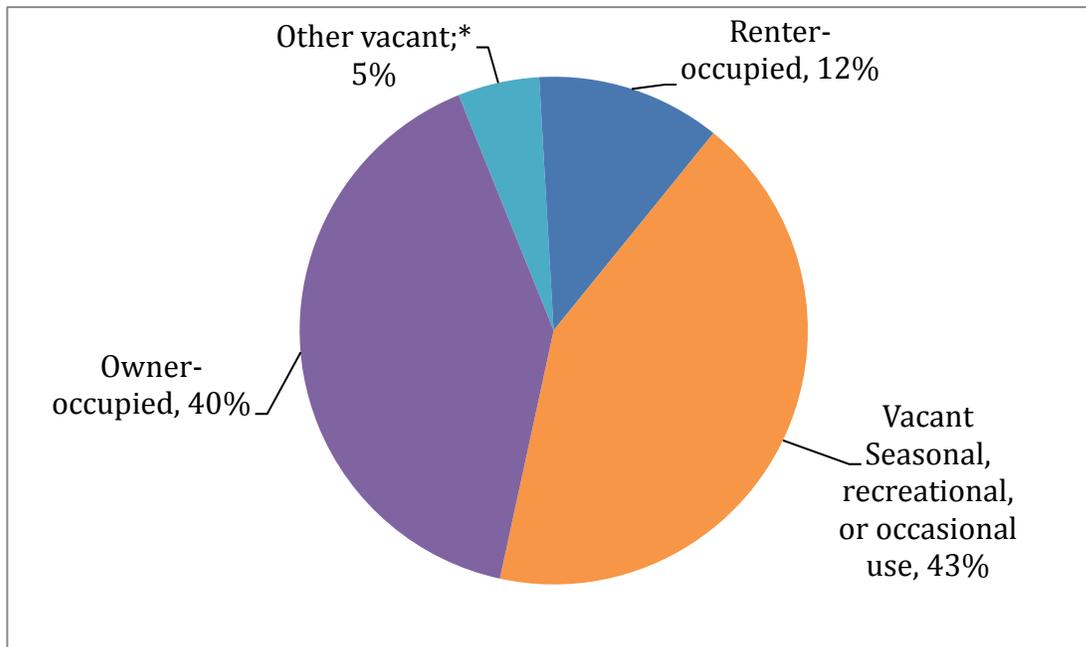


Figure 5. Occupancy status of all housing units, Town of Roxbury, 2010. \*Other vacant includes for rent, for sale, rented or sold, and otherwise uncategorized vacant units.

<sup>8</sup> [REFERENCE SECOND HOMEOWNER SURVEY]

Town of Roxbury – Community Profile and Environmental Inventory v1

As indicated by Figure 6, the Town’s population is relatively stable, with 68% of residents reporting in 2000 that they had lived in the same house in the past five years. This represents an increase of 18% since 1990. As Figure 7 illustrates, house values have fluctuated considerably while gross rents have steadily climbed. The distribution of house values in 2009 (Figure 8) shows a peak between \$100,000 and \$150,000, with most homes in the Town priced below \$300,000.

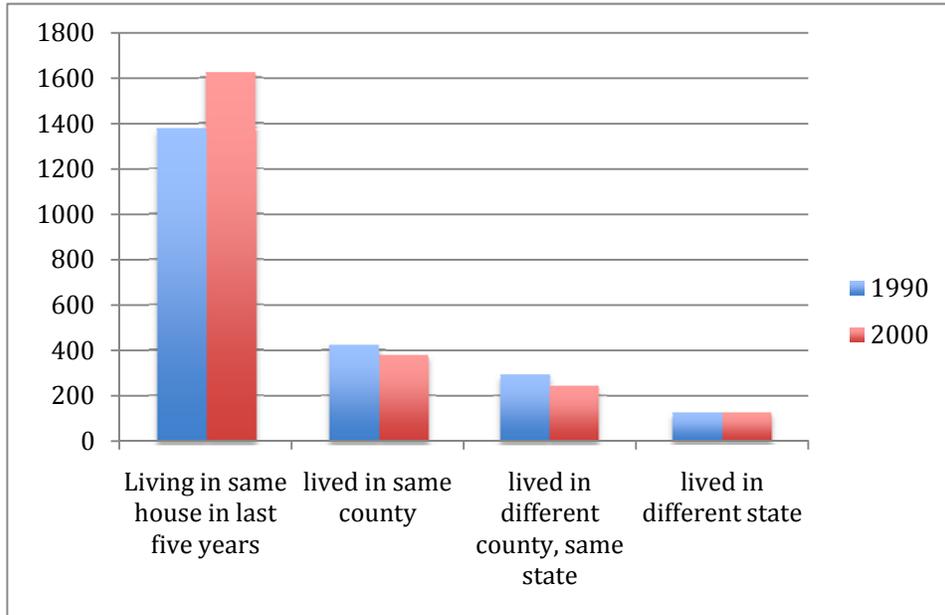


Figure 6. Residency status, Town of Roxbury.

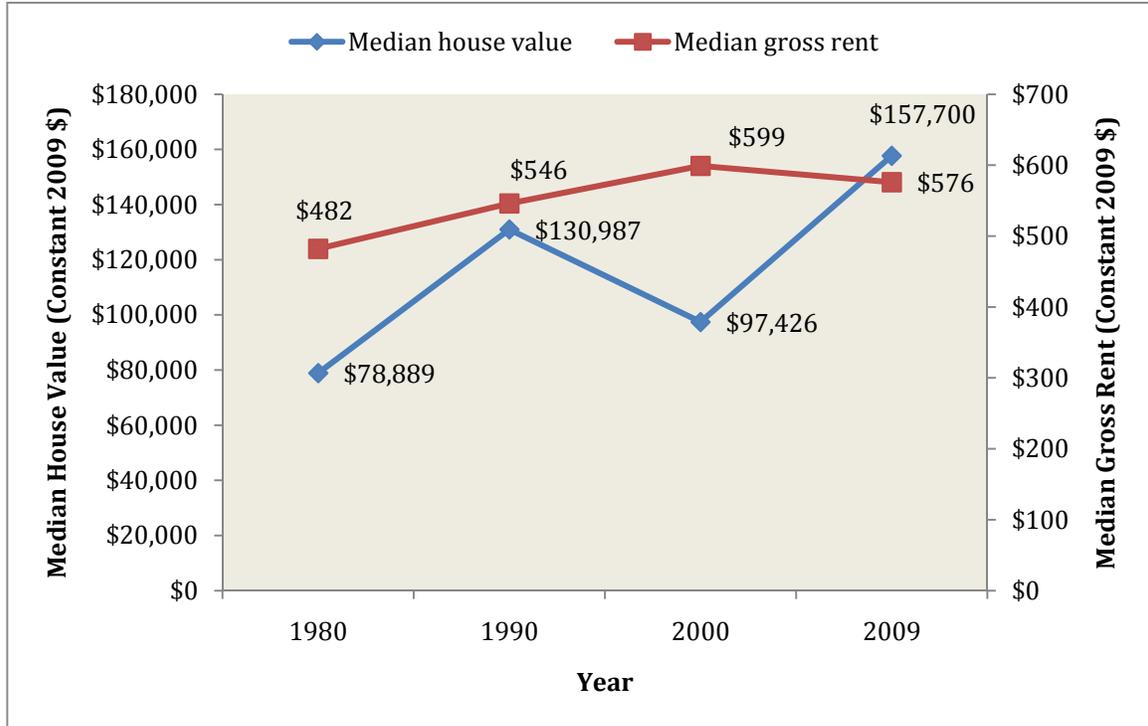


Figure 7. Change in median house value and gross rent, Town of Roxbury. *Source: US Census Bureau, American Community Survey, and Minnesota Population Center, National Historical Geographic Information System.*

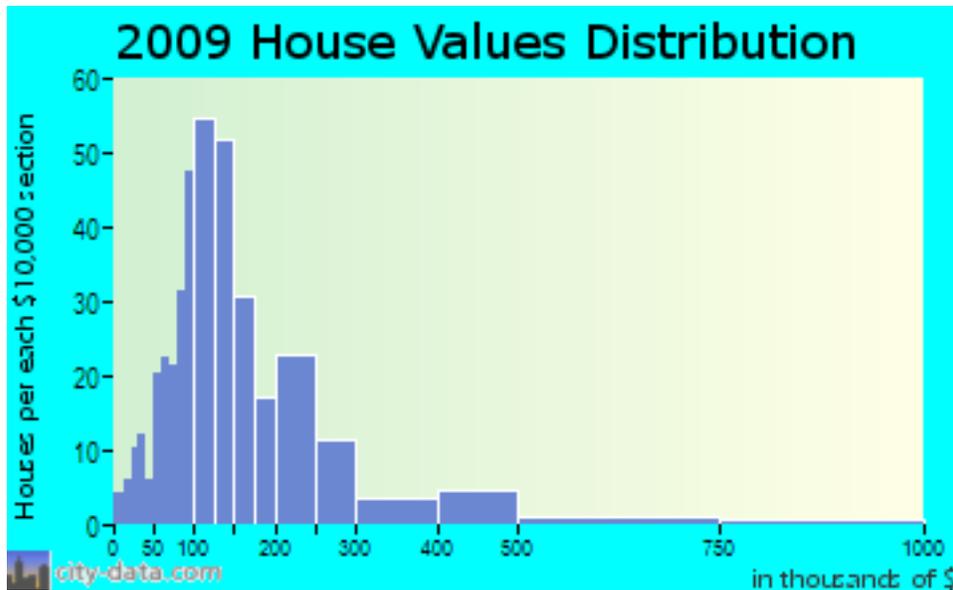


Figure 8. 2009 house values distribution. *Source: city-data.com*

### Housing Affordability

There are several ways to determine if housing is generally affordable in a community.

### Proportion of Income Spent on Housing Costs

One method is to examine the proportion of income spent on housing costs. An accepted definition of affordable housing is housing for which a household pays no more than 30 percent of their annual income. According to the 2000 Census (

Table 9), which collected information on housing costs as a percentage of income, a lack of affordable housing appears to affect proportionally more renters than owners of homes: almost 50 percent of renters pay greater than 30 percent of their income for housing, whereas only about 24 percent of owners do. Median gross rent (\$481, in 2000) as a percentage of household income for renters was 27.2%. For homeowners, median selected monthly housing cost as a percentage of income was 16.7%. However, for those with a mortgage, this figure was higher (24.8%) than for those without a mortgage (12.2%).

Table 9. Selected housing costs and gross rent of specified housing units<sup>9</sup> as a percentage of household income, households, Town of Roxbury, 2000.

Percentage of Income Spent On Housing	Renter-Occupied		Owner-Occupied	
	Number	Percent	Number	Percent
Less than 20.0	51	27.1	300	57.4
20.0 to 24.9	17	9.0	27	5.2
25.0% to 29.9	27	14.4	69	13.2
30.0 to 34.9	15	8.0	47	9.0
35.0 or more	50	26.6	80	15.3
Not computed	28	14.9	0	0.0
Total	188	100.0	523	100.0

The ACS, taken by the Census Bureau, provides updated estimates for these estimates, providing a rough estimate of change in housing affordability in the Town. According to ACS estimates (Table 10), renters pay a higher percentage of their income on housing than owners, and among homeowners, those with a mortgage pay a higher percentage. These estimates show that some renters may experience difficulty paying for housing.

---

<sup>9</sup> For owner-occupied units, these data exclude mobile homes, houses with a business or medical office, houses on 10 or more acres, and housing units in multi-unit buildings, and they exclude one-family houses on 10 or more acres for renter-occupied units. "Selected housing costs" for owner-occupied units includes include payments for mortgages, taxes, insurance, utilities, and other components of monthly housing expenses.

Table 10. Median gross rent and selected monthly owner costs as a percentage of income, Town of Roxbury, 2006-2009.

	Estimate	Margin of Error (+/-)
Renter-occupied units paying cash rent	27.4	3.2
Owner-occupied units	16.2	2.8
With a mortgage	21.1	3.7
Without a mortgage	12.3	2.7

Source: U.S. Census Bureau, 2005-2009 American Community Survey

### Ratio of House Value to Income

A second method to determine affordability is to look at the ratio between the median value of a single-family house and median household income. Nationally, a ratio of 2 or less is considered affordable. At the 2000 Census, the median value of single-family owner-occupied homes stood at \$78,200, and the median household income was \$40,721. This calculates to a ratio of 1.92, indicating a high level of affordability.

For the period between 2005 and 2009, the ACS estimates for median owner-occupied homes and median household income were \$157,700 and \$54,970, respectively. The resulting ratio, 2.86, indicates that single-family housing in Roxbury may have become less affordable. This trend is mirrored at the county level: With the same time period and data sources, the ratio for Delaware County has increased from 2.29 to 3.03.

### Purchase Price Multiplier

A third method, the purchase price multiplier, also gives an indication of affordability. This statistic represents the maximum mortgage approval amount likely to be given to potential homebuyers—usually about 2.25 times annual income. Based on the above-cited median income ACS estimate (\$54,970), this approach indicates the median income household could afford a house costing \$136,050, assuming a 10% down payment. This is lower than the ACS-estimated median home price in the same period, \$157,700.

### Summary

Taken together, the data indicate that housing has likely become less affordable for individuals with incomes close to the Town median. Both the ratio of house values to income and the purchase price multiplier methods support this observation. Given median income levels, the purchase of a new home in Roxbury may not be affordable, and owners with a mortgage typically pay more per month for housing. And this is especially the case for renters, many of whom spend more than 30% of their income on housing costs. Updated ACS estimates (See Table 10) show that this trend has continued since 2000. Housing in the Town is most affordable for homeowners without a mortgage.

## Physical and Environmental Features

Roxbury is rural in character, with development and land use patterns defined by the sharp relief afforded by the hills and valleys found in this part of the Catskills. Active farmland is found throughout the Town, although much potential agricultural land shows evidence of disuse. The Town is entirely situated within the New York City Watershed, and although there are some significant State landholdings, about [INSERT PERCENTAGE] of the Town is owned in fee by New York City, or are under some form of related easement.

### Water Features and Wetlands

As depicted on the Water Features map, water covers a small portion of total land area, about [INSERT NUMBER] acres. Most of Roxbury is situated within the Delaware River Basin, specifically the East Branch subbasin, the headwaters of which are found along NYS Route 30 in the Town. The northern portion of the Town drains to Schoharie Creek, which flows to the Mohawk River. The Schoharie Reservoir, located partially in Roxbury, is the largest water body in Town. The Bear Kill, Vly Creek, Little Red Kill, Fall Brook, and Pleasant Valley Brook [INSERT OTHERS FROM ENVIRO MAPPER, DON] are the other major streams.

There are [INSERT NUMBER] total acres of jurisdictional wetlands in Roxbury: about [INSERT NUMBER] acres are State and [INSERT NUMBER] acres are Federal.<sup>10</sup> Many of these are associated with the East Branch of the Delaware River and the Schoharie Creek. Wetland systems are natural assets for many reasons, including their capacity for flood control, groundwater recharge, as temporary filters of pollution carried by streams and runoff from the land, landscape and habitat diversity, education, research, and providing food and shelter for both rare species and economically important fish, birds, and animals.

### Floodplains

Floodplains in Roxbury are shown in magenta hatching on the Water Features map. Official floodplains<sup>11</sup> are mapped by the Federal Emergency Management Agency

---

<sup>10</sup> The State-administered wetland regulations flow from the 1975 Freshwater Wetlands Act and are administered by DEC. Specifically, the FWA protects those wetlands larger than 12.4 acres in size and certain smaller wetlands of unusual local importance by regulating certain disruptive activities, like dredging and filling. The State also regulates a 100 foot buffer area around wetlands under its jurisdiction. Federal regulation is performed by EPA and the Army Corps of Engineers, which regulate impacts to wetlands of all sizes, including those 1 acre and smaller. Permits from these agencies are needed if proposed activities will impact federal jurisdictional wetlands, which are defined by relationships to navigable bodies of water and usage by species of migratory birds.

<sup>11</sup> Floodplains are low-lying areas adjacent to water bodies that are periodically inundated during periods of excess water flow. According to Executive Order 11988, which outlines the Federal policy for development proposed in a floodplain, a floodplain is “the lowland and relatively flat areas adjoining inland and coastal waters including floodprone areas of

along the East Branch of the Delaware River, Schoharie Creek, the Bear Kill, and a small portion of Vly Creek along the southern Town line. [COMPLETE DESCRIPTION OF STREAMS]

### Topography

Topographical features in Roxbury are shown on the Slope and Elevation maps. Elevations in the Town range from about 1,200 feet at Schoharie Creek to about 3,400 feet atop Bearpen Mountain. The ridge along which Plattekill Mountain and Relay State Forest are found forms the western Town line, and another ridge, dominated by Bearpen Mountain and forming Vega Valley, is found along the eastern Town boundary. Elevation exceeds 3,000 feet along much of these ridgelines, and the steepest slopes (45% and greater) can be found in the northern portion of the Town. The valleys formed by this topography generally have slopes of less than 15%.

### Soils

[INSERT MAP REFERENCES; INSERT SOILS MAP; COMPLETE DISCUSSION] Soils conducive to farming are principally found to the west of the East Branch and in the northern portion of the Town, although agricultural districts and farmland are found throughout the Town.

### Ecological Data

Data from the Natural Heritage Program, which tracks information on rare or state-listed animals and plants, significant natural communities, and other significant habitats, are presented in Table 11. Roxbury is home to three listed species, and may still be home to one rare plant. In addition, there are numerous jurisdictional wetlands found throughout the town (See Water Features and Wetlands, above).

Table 11. NYSDEC Natural Heritage Program Data, Town of Roxbury.

Common Name	NYS Listing	Notes
Bald Eagle (bird)	Threatened	Breeding along the East Branch of the Delaware River
Northern Harrier (bird)	Threatened	Described for block 5268D of the 2000-2005 Breeding Bird Atlas
Whorled Mountain-mint (plant)	Threatened	On open portions of Schultice Mountain
Jacob's Ladder (plant)	Rare	Historical Record (last report: 1975); Last located south of Stratton Falls, along an old railroad bed

---

offshore islands, including at a minimum, that area subject to a one percent or greater chance of flooding in any given year." This is known as the "base floodplain."

## Town Budgets

The 2011 Town budget is presented below (Table 12). It is composed of general, highway, and special district appropriations, which includes light, water, sewer, and fire districts. Figure 9 demonstrates the composition of the Town budget over time. In 2011, highway expenditures accounted for 48.8% of total appropriations; special districts, 24.6%; and general funds, 26.7%. Expenditures on the Town highway system accounts for nearly half of all spending: On average, between 2006 and 2011, the highway appropriation accounted for 47.4% of the Town budget.

Table 12. Summary of Roxbury Town Budget, 2011.

	<b>Appropriation and Provisions for Other Use (\$)</b>	<b>Less Estimated Revenues (\$)</b>	<b>Less Unexpected Balance (\$)</b>	<b>Amount to Be Raised By Tax (\$)</b>
General	1,056,050	130,400	30,000	895,650
Highway - Townwide	1,930,392	203,600	185,000	1,541,792
<i>Special Districts</i>				
Roxbury Light District	15,220	30	0	15,190
Grand Gorge Light District	13,395	20	0	13,375
Roxbury Run Light District	3,200	5	0	3,195
Roxbury Water District	62,435	19,050	0	43,385
Grand Gorge Water District	826,575	16,050	5,000	805,525
Denver Water District	36,487	17,050	0	19,437
Roxbury Fire District	178,109	0	9,234	168,875
Grand Gorge Fire District	180,875	30,000	0	150,875
Middletown/Hardenburgh Fire District	5,270	0	0	5,270
Denver Sewer District Unit Charge	179,975	102,685	0	77,290
Debt Charge	15,347	0	0	15,347
Roxbury Sewer District Unit Charge	200,117	162,544	0	37,573
<b>Total</b>	<b>4,703,447</b>	<b>681,433</b>	<b>229,234</b>	<b>3,048,879</b>

Town of Roxbury – Community Profile and Environmental Inventory v1

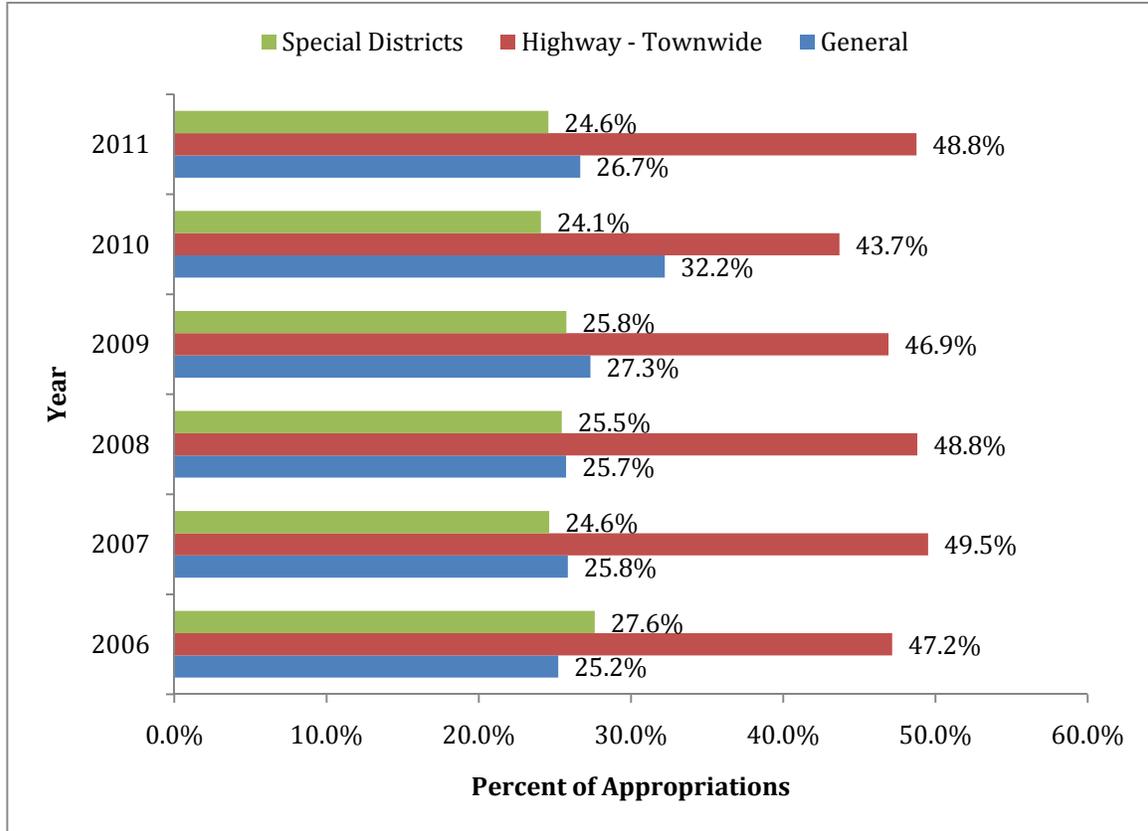


Figure 9. Change in budget composition, Town of Roxbury, 2006-2011.

The Town budget has remained stable over time, with slow growth in both total appropriations and corresponding amounts to be raised through taxation (Figure 10).

Town of Roxbury – Community Profile and Environmental Inventory v1

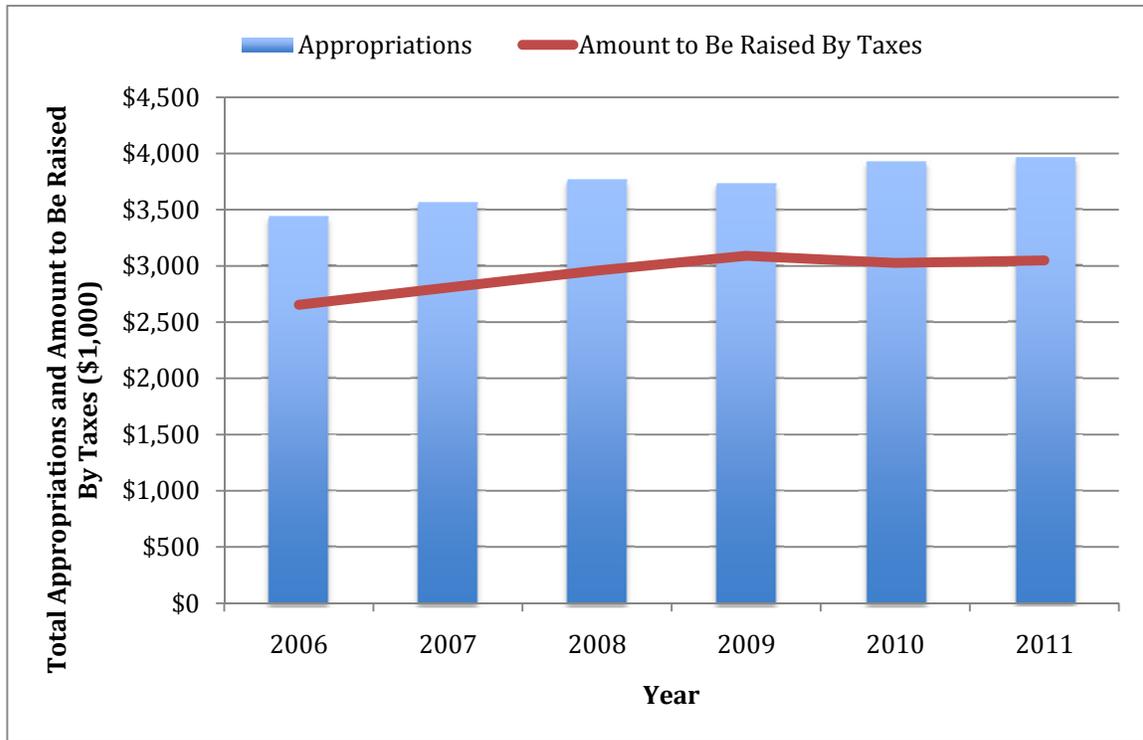


Figure 10. Change in total appropriations and amount to be raised by taxes, Town of Roxbury.

When adjusted for variations in assessment practices and to include the several different tax levies on property in the Town, the overall tax burden in Roxbury is higher than neighboring towns as well as the average for Delaware County (Figure 11). It is less than the State average, however.

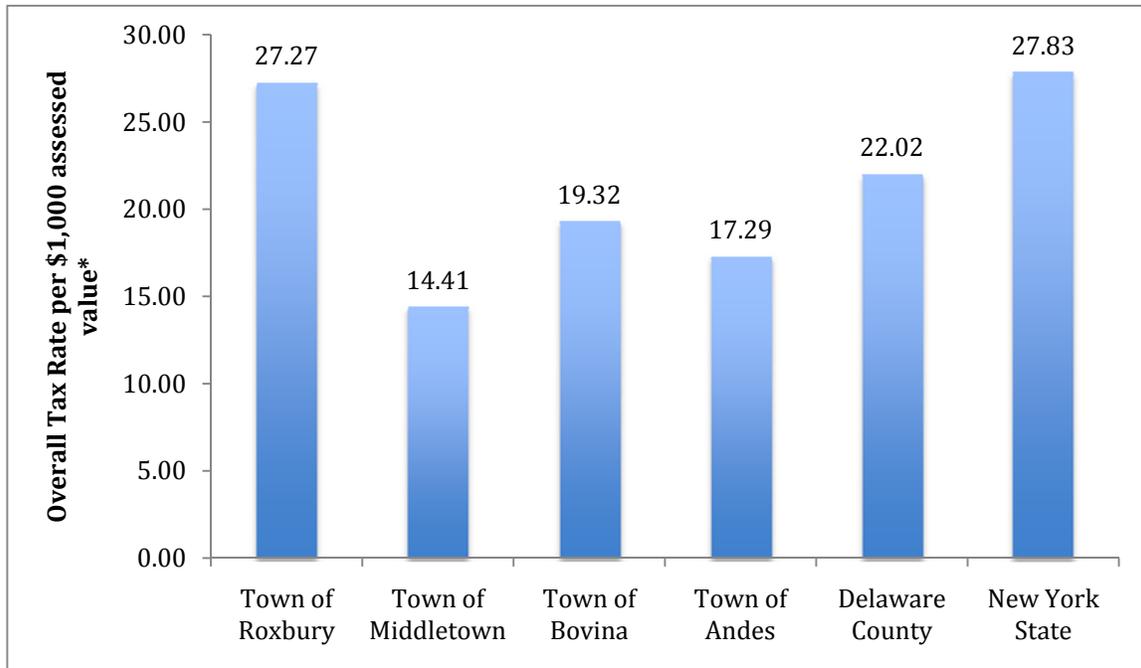


Figure 11. Comparison of equalized full value tax rates, 2010. \*Overall tax rate includes county, school district, town, school, and special district tax levies. *Source: Office of the State Comptroller*

## Schools, Community Organizations, Historic Resources, and Recreation

### Schools

Roxbury Central School District (RCSD) is the primary district serving the Town, covering some 92% of the Town’s land area. The Stamford, Gilboa-Conesville, and Margaretville School Districts serve the remaining 8%. The Grand Gorge Central School, located in Grand Gorge, operated for 50 years until its closure in 1980.

Grades Pre-K through 12 in the RCSD are located in a single two-story historic building on Main Street in the Town. Built in 1939, this building was last expanded in 1997, and additional facilities located at the site include several playing fields. The district proposed a small increase of less than 1% for its 2011-2012 school year annual budget, which voters approved. It has implemented a technology plan, which covers the period 2010 to 2013. This plan has set a variety of goals, including changes in the student management system, professional development, and technology replacement and infrastructure development.

Since 2001, enrollments have fluctuated between about 360 and 325 pupils, and by 2010, total enrollment showed a decline of almost 12% from 1998 levels (Table 13). By one projection, enrollments will drop below 300 in 2015 (Figure 12). The percentage of students eligible for free lunch, derived from a formula based on

Town of Roxbury – Community Profile and Environmental Inventory v1

household size and income, has generally risen in the period for which data are available; it has increased from a low of 12.8% in 1999-2000 to 32.0% in 2009-2010. For comparison, free lunch eligibility rates were 44.9% for Stamford, 26.9% in Gilboa-Conesville, and 46.0% in Margaretville. Recently, the number of teachers has dropped to 39—lower than the range of 42 to 45 seen between 1998 and 2009. Expenditure per pupil for the 2008 to 2009 school year was comparable to the state average of \$19,381.

Table 13. Roxbury Central School District selected data by school year.

	2005 to 2006	2006 to 2007	2007 to 2008	2008 to 2009	2009 to 2010
K-12 Enrollment	358	334	344	324	336
Elementary (K - Grade 6)	187	194	186	173	181
Secondary (Grade 7 - 12)	171	140	158	151	155
Attendance Rate	95.0%	95.0%	95.0%	95.0%	n/a
Suspension Rate	6.0%	13.0%	2.0%	3.0%	n/a
Students Eligible for Free Lunch	17.0%	29.0%	32.0%	24.0%	32.0%
Expenditure Per Pupil	\$19,200	\$18,755	\$30,261	\$20,648	NA
Number of Teachers	44	43	44	44	39
Student-teacher Ratio	8.1	7.8	7.4	7.4	8.6

Source: New York State Department of Education, Cornell University Program on Applied Demographics

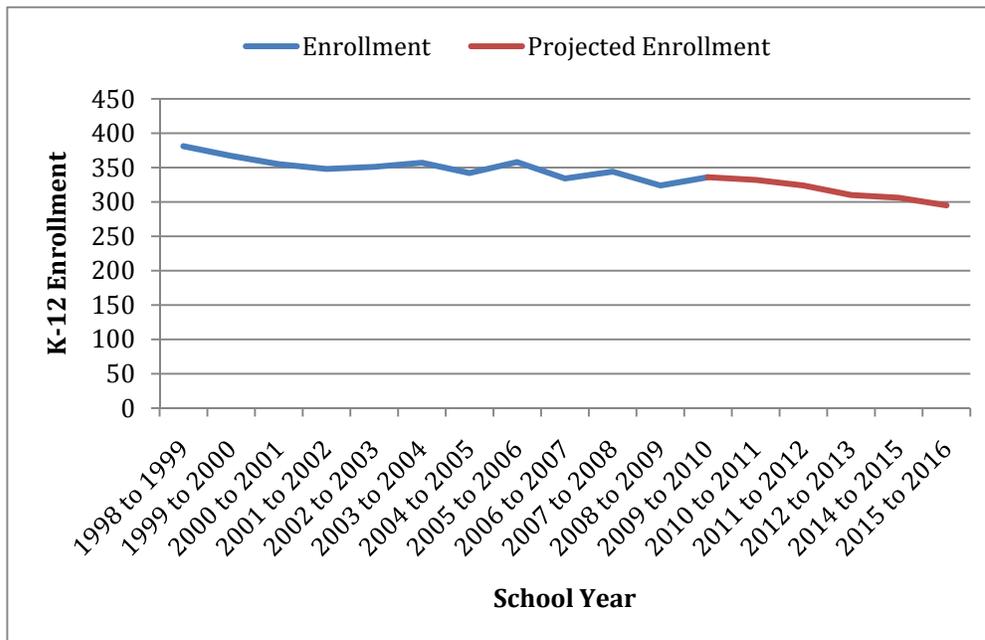


Figure 12. Total and projected enrollment by School Year, Roxbury Central School District. Source: New York State Department of Education, Cornell Program on Applied Demographics

A useful school district financial indicator is the local revenue effort rate, which is the ratio of local revenues to aggregate property value in the school district. Figure 13 shows the local revenue effort rate for RCSD, which has recently declined to 11.0, which is less than the state rate in 2008 of 13.1. This indicates that property values may enable the school to raise more revenue.

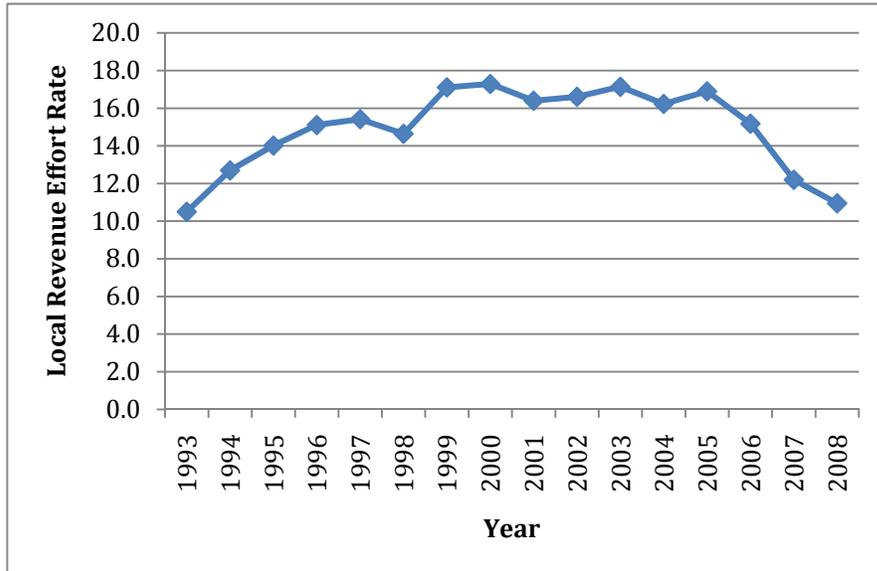


Figure 13. Local revenue effort rate, Roxbury Central School District. *Source: New York State Department of Education, Cornell Program on Applied Demographics*

The Otsego Northern Catskills Board of Cooperative Educational Services (ONCBOCES) also operates the Northern Catskills Occupational Center located in Grand Gorge. The ONCBOCES offers 15 different Career and Technical Education programs, Alternative Education, GED, and adult students. Two New Visions Health Care Professions programs are also available for high ability seniors. ONCBOCES also provides non-instructional assistance to its 19 component school districts, of which includes the RCS.

### Community Organizations

There are numerous Community Organizations providing services to or are located in the Town. The following list was obtained from the Town Clerk and the Town website:

- Catskill Community Garden Club
- Catskill Mah Jongg Club
- Girl and Cub Scouts
- Grand Gorge Community Action Group
- Grand Gorge Rescue Squad
- Grand Gorge Senior Dining Center
- Grand Gorge Senior Social Club

Greater Roxbury Learning Initiative Corporation  
Rotary Club  
The Roxbury Library Association  
Roxbury Quilters  
The Roxbury Volunteer Fire Department  
Grand Gorge Volunteer Fire Department  
Writers in the Mountains  
Roxbury Arts Group  
Woodchuck Lodge Association  
Delaware County Youth Program (hosted at RCSD on Main Street)  
WIOX radio station  
Roxbury Senior Citizens Club

### Historic Resources

A review of New York State Historic Preservation Office (SHPO) records indicate the presence of a number of historic resources, listed at both the national and state levels. A summary is provided in Table 14.

Table 14. National- and state-listed historic resources in the Town of Roxbury.

Listed Resource
Woodchuck Lodge/John Burroughs Home
First Old School Baptist Church of Roxbury and Vega Cemetery
Isaac Hardenbergh House
Roxbury Historic District
Second Old School Baptist Church of Roxbury
Ulster and Delaware Railroad Depot and Mill Complex
Walter Stratton House
Hardenbergh Manor House
Thomson Family Farm

A large portion of the Hamlet of Roxbury is contained within the Roxbury Historic District. Nationally listed in 2003, the district is bounded by NY Route 30, Delaware County Route 41, Bridge Street, Vega Mountain Road, Lake Street, and Shepard Hill Road (See Historic Sites map). It is an expanded version of the Main Street Historic District originally listed on the national register in 1988. It contains 244 contributing (the earlier district contained 86) and 67 noncontributing historic resources; in total, 239 contributing buildings, 4 sites, and 1 structure are contained within the district.<sup>12</sup>

<sup>12</sup> Properties within a historic district fall into one of two types of property: contributing and non-contributing. A contributing property, such as a 19<sup>th</sup> Century mansion, helps make

According to the National Register Nomination Form, “The historic district encompasses the entire area developed as the hamlet of Roxbury from the early nineteenth century to the mid-twentieth century, including commercial and residential areas, railroad related features and right-of-way, Kirkside Park, and the adjacent Shepard Hills Gold Course, which is laid out on the side of the steep mountain that frames the hamlet on the west side of the river. The Roxbury Historic District is significant as a distinctive intact example of a rural Catskill Mountain hamlet.”

Woodchuck Lodge, first listed as a National Historic Landmark in 1962 and, later, on the National Register in 1987, is located outside of the Hamlet of Roxbury, on Burroughs Memorial Road. It was the home of John Burroughs from 1910 until his death in 1921. The listed property totals about 25 acres and contains both the Lodge itself as well as the surrounding fields, which figured prominently in Burroughs’ childhood, and which he wrote about in several of his books and collections of essays.

The house is privately owned and open to the public on summer weekends, while Burroughs Memorial Field, which is a 3.5 acre parcel containing his gravesite below “boyhood rock,” is owned by the State and is also open to the public. According to the Nomination Form, “The land surrounding Woodchuck Lodge is as important as the building. It is John Burroughs’ writings about the land and its natural features that has national significance, and the house without its context has a severely diminished meaning.”

SHPO records also reveal several historic cemeteries:

- Person Cemetery
- Vega Cemetery
- Parker Cemetery
- Main Street Cemetery
- Fairview Cemetery

Finally, there are a number of Archaeologically Sensitive Areas found throughout the Town. These areas are defined by SHPO as areas that either a) contain known archaeological sites or b) where the discovery of archaeological sites is predicted. Many of these sites are associated with the listed historic resources found in Table 14, and two principle clusters of sensitive areas are apparent from SHPO mapping data: an area generally extending along Route 30 south of the Roxbury Historic District, and in the northeast corner of the Town.

---

a historic district historic, a non contributing property, such as a modern medical clinic, does not. The contributing properties are key to a historic district's historic associations, historic architectural qualities, or archaeological qualities. A property can change from contributing to non contributing and vice versa if significant alterations take place.

**Recreational Resources**

Numerous recreational opportunities exist in and around Roxbury. These include a variety of State and New York City-owned lands. The Catskill Forest Preserve is in close proximity to the east of Roxbury, and over 3,000 acres of New York City lands offer a variety of opportunities within the Town. Table 15 outlines recreational access to New York City-owned lands within the Town.

Table 15. New York City-Owned Recreation Areas and Use Designations.

Area	Location	Public Access Area	Hike	Fish	Hunt	Trap	Acres
Buffalo Hollow	George Lawrence Rd.	✓	✓		✓	✓	90
Delaware Headwaters	Route 30	✓	✓		✓		559
Duggan Hill	Duggan Hill Rd.		✓		✓		192
Hardscrabble Road	Hardscrabble Road		✓				47
Hinkley	Carroll Hinkley Rd.	✓	✓		✓	✓	87
McGregor Mountain	NY Route 23		✓		✓		256
New Kingston Mountain	New Kingston Mountain Rd.	✓	✓		✓	✓	282
Plattekill Mountain	Lower Meeker Hollow Rd.	✓	✓	✓	✓	✓	716
Pleasant Valley	Baumback Rd.		✓		✓		79
Sally's Alley	Route 36, Sally's Alley	✓	✓	✓	✓	✓	257
Vega Mountain	Vega Mountain Rd.	✓	✓		✓	✓	45
West Halcott	Red Kill Rd.		✓	✓	✓		110
West Schoharie	William Lutz Rd.		✓		✓		321
West Settlement	Roses Brook, Burroughs Memorial	✓	✓		✓	✓	34

*Adapted from New York City Department of Environmental Protection, [www.nyc.gov/html/dep/html/recreation/index.shtml](http://www.nyc.gov/html/dep/html/recreation/index.shtml).*

New York City Department of Environmental Protection (NYCDEP) recently opened up all NYCDEP-controlled lands that are adjacent to state-owned lands for hunting and fishing. The Schoharie Reservoir, a portion of which is located in the Town, is open to fishing, and portions of Schoharie Creek are stocked with trout by NYSDEC. Regulation of hunting and similar activities on DEP lands follows NYSDEC management unit rules and regulations.

State-owned lands managed by the New York State Department of Environmental Conservation (NYSDEC) in the Town include portions of several state forests (See the Public Lands map). Relay State Forest straddles portions of the Towns of Stamford and Roxbury. It was created in 2000 and hosts hiking as well as horse riding trails, and it is also managed for logging. Significant portions of Plattekill State Forest, which surrounds the Plattekill ski area, are also located in Roxbury. Bearpen Mountain State Forest also straddles the Greene and Delaware County line.

Recreational businesses in Roxbury include skiing, golf, horseback riding, ATV riding, snowmobiling, hiking, and indoor and outdoor baseball, softball, and soccer fields. A more detailed list of private and nonprofit or public recreation opportunities is provided in Table 16.

Table 16. Other recreational resources, Town of Roxbury.

<b>Location</b>	<b>Types of Activities Available</b>
<i>Outdoor</i>	
Plattekill Mountain	Skiing (winter); Mountain Biking, Camping, Chairlift Rides, Hiking (summer)
Stone Tavern Farm	Horseback Riding, Star Watching, ATV rentals, Hiking, XCountry Skiing, Paintball
Shepard Hills Golf	Golf, Hiking, Snowmobiling, Cross Country Skiing
Kirkside Park	Picnicking, Walking, Cross Country Skiing, Snowshoeing, baseball, Soccer, Softball
Catskill Scenic Trail	Hiking, Xcountry Skiing, Horseback Riding, Cycling
Grand Gorge Civic Center	Baseball, Softball
Delaware and Ulster Rail Ride	Scenic Train Rides, Train Museum
<i>Indoor</i>	
Grand Gorge Civic Center	Basketball

## Community Facilities and Infrastructure

### Transportation and Highways

There are a variety of road types in the Town totaling approximately 143 miles. Town-owned roads constitute the majority of roadway mileage (Table 17) and are mostly paved. County and State roads together comprise 31 total miles.

Town of Roxbury – Community Profile and Environmental Inventory v1

Table 17. Mileage and condition of roads, Town of Roxbury.

	Town	County	State
Miles	112	10	21
<i>Condition</i>			
Paved	82%	100%	100%
Dirt or crusher-run stone	18%	-	-
Total	100%	100%	100%

Source: Partially adapted from the 2002 Comprehensive Plan.

**State Roads**

State Routes 23 and 30 pass through the Town. Traffic counts (average annual daily traffic volume) generally increased through 1990, remained mostly stable between 1990 and 2005, and have declined on several sections of State roads since then. Historically, Route 23 appears to have carried more traffic and shows higher total traffic counts consistently since the 1970s. Over time, traffic on Route 30 has generally been lower, although it has increased steadily since 1977 (See Figure 14).

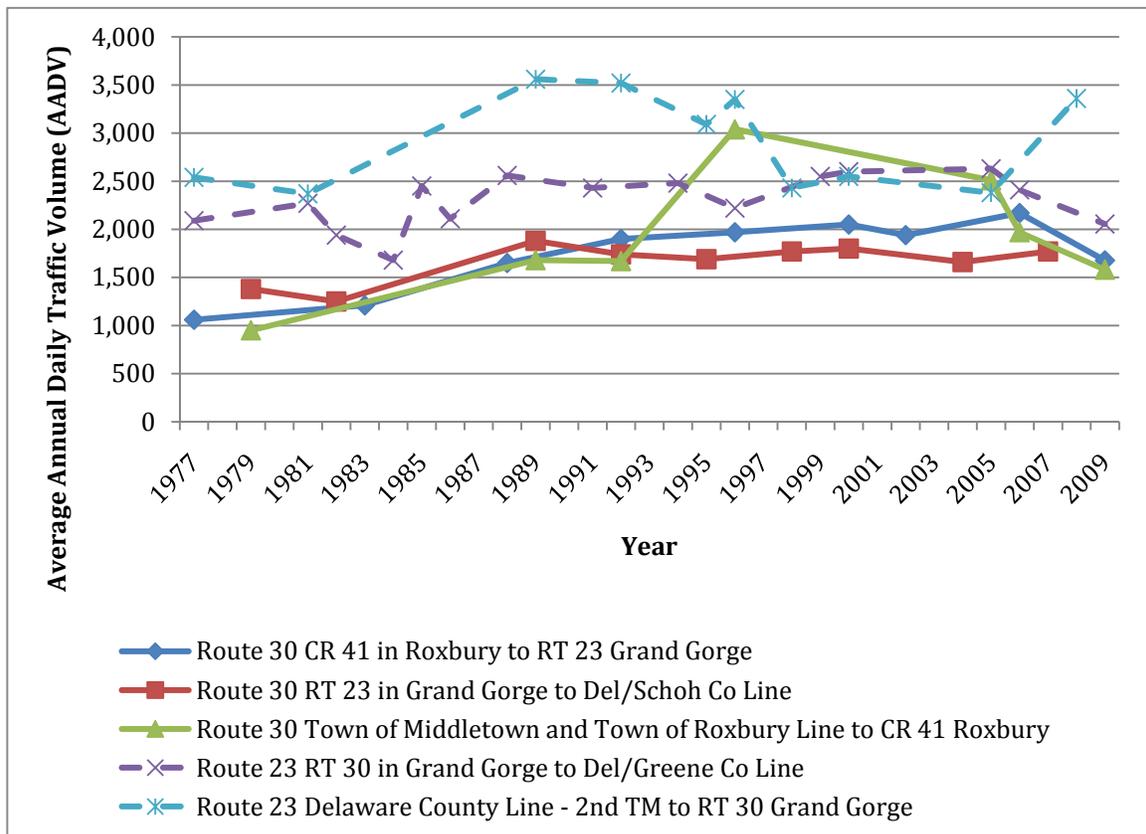


Figure 14. Average annual daily traffic volume on State roads, Town of Roxbury.

According to recent State traffic volume estimates (Table 18), the portion of Route 23 west of Route 30 in Grand Gorge experiences the highest traffic volumes; it also showed the greatest 3-year increase among all segments studied (41.2%). The

Town of Roxbury – Community Profile and Environmental Inventory v1

portion of Route 30 between Grand Gorge and the Delaware County line also recently experienced a slight increase. Route 23 also has higher volumes in absolute terms. Therefore, routes into and through Grand Gorge constitute the busiest State roads in the Town.

Table 18. Traffic volume, state highways, Town of Roxbury, NY.

Route	Location of Count	Average Annual Daily Traffic Volume (AADT)	Year	Change in AADT
23	Rte 30 (Grand Gorge) to the Delaware-Greene Co. Line	2,055	2009	-14.7%
		2,410	2006	
	Delaware County Line to Rte 30 (Grand Gorge)	3,360	2008	41.2%
		2,380	2005	
30	CR-41 (Roxbury) to Rte 23 (Grand Gorge)	1,677	2009	-22.7%
		2,170	2006	
	CR-38 (Town line) to CR-41 (Roxbury)	1,581	2009	-19.7%
		1,970	2006	
	Rte 23 (Grand Gorge) to Delaware County Line	1,770	2007	6.6%
		1,660	2004	

Source: NYSDOT

**County Roads**

According to the Town of Roxbury Comprehensive Plan (2002, “The Lamont Plan”), Delaware County roads within the town include:

- Route 36 running north-south along the Vega Valley;
- Route 8 serving Roxbury Run and connecting the Vega Valley with NYS Route 30 (a seasonal road taken over by the County after construction of Roxbury Run);
- Route 41 along the western bank of the East Branch of the Delaware River towards the Plattekill Ski Center; and
- Route 53 at the northeastern-most corner along the Schoharie Reservoir.

County roads are paved and capable of handling heavier and higher capacity traffic, especially important for the Plattekill Ski Center and the more developed southeastern portion of the town. County roads total 9.98 miles in length, slightly less than 10% of the town road system.

County roads generally carry less traffic than the State roads (Table 19). Route 41 carries the most traffic, and traffic is highest between Bridge Street and NY 30, in the Hamlet of Roxbury. Route 36 between Denver and Route 8 is the third busiest segment, connecting Denver, the Vega Valley, and the area surrounding Roxbury Run Village.

Table 19. Average Annual Daily Traffic (AADT) counts for Delaware County roads, June 2011, Town of Roxbury.

Road	Location		AADT
	From	To	
CR 41	W Settlement Road	Green Road	529
CR 41	Bridge Street	NY 30	668
CR 8	John Shultis Road	CR 36	282
CR 36	Dimmick Mt Road	CR 8	443
CR 36	CR 8	Vega	279
CR 8	NY 30	Hawk Hollow Road	271

Source: Delaware County Department of Public Works

The Town has varying levels of responsibility for maintenance of County-owned roads: Through a shared service agreement, the Town assists with stoning/oiling as well as paving of County roads; however, Roxbury is wholly responsible for plowing County roads in winter.

#### Town Roads

The Town maintains an extensive system of roads. The Roxbury Highway Department maintains over 75% of the Town road network. In addition to the superintendent, the Department has 10 full-time staff and an assortment of in-house equipment. In addition to Town-owned roads, the Department has shared services agreements with the Town of Stamford, the Town of Harpersfield, the Town of Middletown, and Delaware County. These agreements relate to stoning/oiling and paving operations and, with the County, plowing.

In 2011, the Department was not scheduled to undertake any paving in the Town—only sealing and stoning. Although long-term capital planning is informal, the Department identified several projects requiring attention. In the short-term, the Shepard Lane Bridge will soon require replacement, and the Vega-Dave Stewart Road Bridge will similarly require repair. In the long term, the salt and sand building may require expansion to meet Town needs.

[INSERT TOWN TRAFFIC COUNT DATA]

#### Public Transportation

There is a limited patchwork of public transit options available. An intercity bus operated by Adirondack Trailways travels along Route 23 between Oneonta and Kingston daily, stopping at Grand Gorge four times daily. According to NYSDOT

data,<sup>13</sup> in 2009, the Grand Gorge stop accounted for about 33% of all passengers on and off for the corridor. Delaware County Arc operates a daily fixed transportation route originating in Margaretville and passing through the Hamlet of Roxbury.

The Delaware County Office for the Aging (OFA) operates a limited, deviated fixed route bus system (it will deviate up to one-mile from the designated stops to pick up and drop off passengers). It is intended to transport elders to larger communities within and outside the County to access shopping, medical, and personal business services. Its routes begin and end in Delhi, and it runs each Thursday, stopping in Roxbury and Grand Gorge. Depending upon the time of the month, it provides service to Oneonta, Albany, and Kingston.

The OFA system is reaching more people but people are using it less often. Data for the entire system show that the number of one-way trips has declined by 33% between 1999 and 2008 but that it is serving 10% more individuals. Between 2007 and 2008, the system provided 12% fewer trips but serviced nearly twice as many people (170 compared to 272 unduplicated passengers).

#### **Journey-to-Work Data**

Most people in Roxbury use personal transportation to travel to and from work. Census data show that of all workers (aged 16 and older), about 94% did not work at home and commuted to their job. As the distribution of travel times for commuters in Figure 15 shows, a higher proportion of residents (54%) commute less than 20 minutes to work. The second peak in the distribution corresponds to the 19% of Town residents spending 45 min or longer travelling to work.

---

<sup>13</sup> Data are presented in *Final Report, Delaware County Coordinated Public Transportation Implementation Study, Locally Developed Public Transit Human Services Coordinated Plan, February 2011.*

Town of Roxbury – Community Profile and Environmental Inventory v1

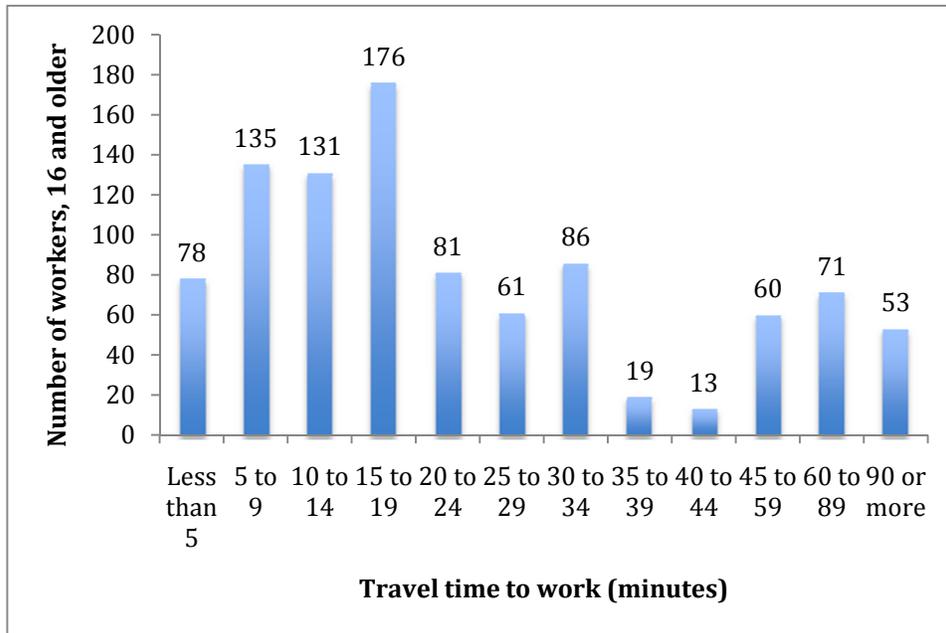


Figure 15. Travel time to work, workers aged 16 and older, Town of Roxbury, 2000.

Census data further indicate that the overwhelming majority of these trips are made with personal vehicles (Figure 7Figure 16). Within this category, approximately 86% drove alone while 14% carpooled. The fraction of trips to work made by bus indicate that the bus service described above is likely more important for non-work trips. Finally, of those neither using some form of personal transportation nor working at home, the greatest percentage (3.1%, or 32 people) walked to work.

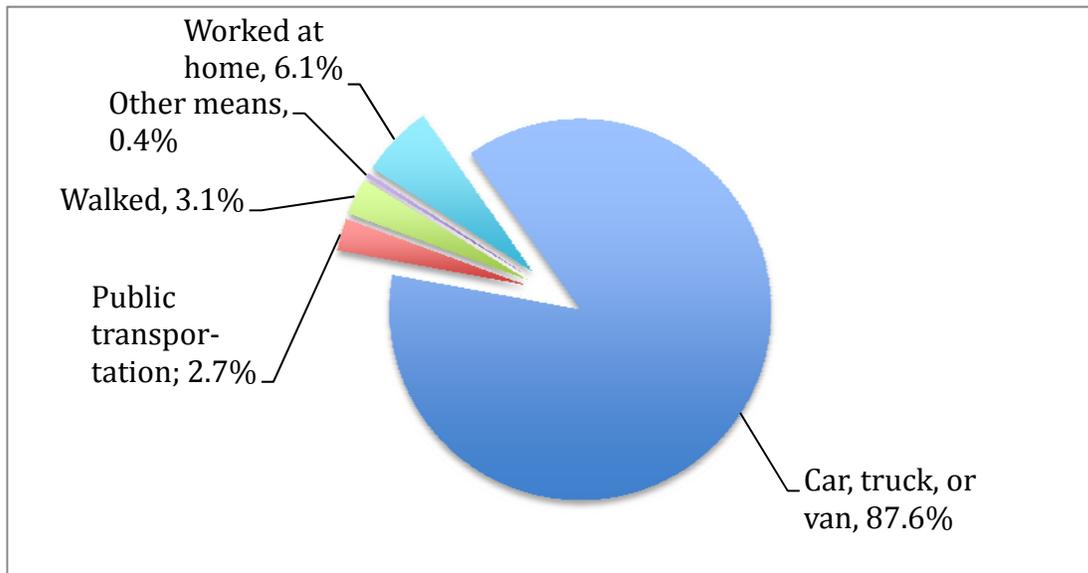


Figure 16. Mode of transportation, workers aged 16 and older, Town of Roxbury, 2000.

These data do not, however, capture non-work-related trips. However, they highlight the continuing importance of the Town's road network to its residents, who daily rely heavily on automobile transportation to commute to work.

### Emergency Services<sup>14</sup>

Delaware County coordinates the E-911 service.

#### Fire

Firefighting and rescue services are provided entirely by volunteers. According to Town budget data, there are 3 fire districts that serve varying portions of the Town:

- Middletown-Hardenburg Fire Department
- Roxbury Fire Department
- Grand Gorge Fire Department

Of these, the Roxbury Fire District and the Grand Gorge Fire District cover about 75% or more of the Town. The Grand Gorge Fire District is supported by mutual aid agreements with the Roxbury, Prattsville, Stamford, and Conesville Fire Departments. The Roxbury Fire District is supported by mutual aid agreements with their counterparts in Grand Gorge, Halcottsville, and the Middletown/Hardenburgh Fire District.

The Roxbury Fire Department maintains an inventory of 2 class A pumpers, 1 2,000 gallon tanker, 1 4X4 brush truck, and 1 ambulance. Currently, there are 6 EMT's (Emergency Medical Technicians), 1 paramedic, and approximately 62 people on the volunteer roster; although, not all of them are currently active. According to the Lamont Plan, the Roxbury Fire Department felt a slight need for more volunteers at the time the plan was written [UPDATE]. Lastly, the building in which the Fire Department is housed was constructed in 1962.

#### Ambulance

Both the Roxbury Fire Department and the Grand Gorge Fire Department provide ambulance and rescue services in addition to firefighting services. Emergency ambulance service is also provided directly by Margaretville Memorial Hospital. Backup medical transport is provided by CMT Cooperstown. Hospital services are provided at Margaretville Memorial Hospital, Fox Hospital in Oneonta, and Bassett Community Hospital in Cobleskill.

#### Law Enforcement

Local police services are provided throughout the Town of Roxbury by Town Constable Steve Williamson, who conducts regular road patrols in all areas. The Town also depends on the Delaware County Sheriff's Department and the NY State Police.

---

<sup>14</sup> Portions of the following are adapted from the Lamont Plan.

## Public Services and Utilities<sup>15</sup>

### Utilities

Electric service is provided by New York State Electric and Gas. Margaretville Telephone Company (MTC) provides cable TV and broadband service. Telephone service is provided by MTC, Verizon, and AT&T. Cell phone service is provided by [DON MAP?].

### Water

There are two water districts within the Town of Roxbury, one serving the hamlet of Grand Gorge, and one serving the hamlet of Roxbury. Both are served by the same source, a pair of wells located in the Hamlet of Roxbury. In addition, a privately owned water system serves the Roxbury Run development atop Scudder Hill Road. Areas outside the two water districts and the Roxbury Run system are served by private wells.

#### *Grand Gorge Water District*

The Grand Gorge Water District serves that hamlet, with its boundaries approximately coterminous with the MOA-designated hamlet area [INSERT MAP REFERENCE].<sup>16</sup> According to the recent Preliminary Engineer's Report (Lamont Engineers, November, 2000), there are 158 services on the system, as well as an additional 22 commercial customers. The estimated total Equivalent Dwelling Units (EDU – single residential unit or equivalent in water use) is 247 EDU for residential and commercial users combined. Recently, the water source in Grand Gorge was abandoned, and the hamlet is now served by the Roxbury wells. As part of these capital improvements, treatment and source control facilities were also upgraded.

#### *Roxbury Water District*

In addition to Grand Gorge, the Roxbury Water District provides public water in a service area that is approximately coterminous with the MOA-designated hamlet [INSERT MAP REFERENCE]. Sources presently consist of two wells, one of which was upgraded when the transmission main to Grand Gorge was installed.

[INSERT DISCUSSION OF WATER SYSTEM CAPACITY AND DEMAND]

---

<sup>15</sup> Portions of the following section are adapted from the Lamont Plan.

<sup>16</sup> The Town is a signatory to the 1997 New York City Watershed Memorandum of Agreement (MOA) and is a member of the Coalition of Watershed Towns, an inter-municipal body composed of the municipalities located wholly or partially within the West of Hudson (WOH) New York City Watershed. This agreement, signed in view of the importance of the drinking water the WOH watershed provides and the ongoing filtration avoidance declaration, largely revolves around the City's land acquisition program (LAP), and it sets up a framework for cooperation among signatories on matters relating to water quality. The City is prevented from acquiring land in MOA-designated hamlet areas, which are periodically reviewed.

### *Roxbury Run Water System*

A privately owned well system provides water to the 158 residential units in the Roxbury Run development.

### *Wastewater*

There are three sewer districts and one supplemental sewer service area within the Town of Roxbury: one serving the hamlet of Grand Gorge, one serving the hamlet of Roxbury, and a third (Denver Sewer District) serving Roxbury Run. There are two wastewater treatment plants: one in Grand Gorge, operated by NYCDEP, and one serving Roxbury Run, which is privately operated. On-site septic systems are utilized in the remaining parts of the Town.

### *Hamlet of Grand Gorge*

Grand Gorge is served by a sewage collection and treatment system that is wholly owned and operated by NYCDEP. A new treatment plant (Grand Gorge Wastewater Treatment Plant) was completed in 1998 entirely at City expense, and all operating and maintenance costs are absorbed by the City. This arrangement was established when the Schoharie Reservoir was built (1919 -1927) and is the subject of a 1929 agreement that spells out the responsibilities of the City.

As part of its New Sewage Treatment Infrastructure Program (NIP), construction of the Grand Gorge Sewer Extension Project was completed in October 2010. This extension, which is situated along NYS Rte. 23 west of the Hamlet of Grand Gorge, from Settlement Road to Bruce Porn Road, totaled approximately 5,100 linear feet. Approximately 20 homes, representing about 5,220 Gallons Per Day (GPD) were connected to the Grand Gorge WWTP.

[INSERT DISCUSSION OF CAPACITY AT GRAND GORGE, SEWER MAP]

### *Hamlet of Roxbury*

Roxbury hamlet wastewater is pumped to the City-owned Grand Gorge WWTP for treatment and discharge. This sewer extension project was completed in 2005, has a permitted flow of 91,000 GPD, and has displaced 315 septic systems; it is the product of an agreement reached in the spring of 2001 between the Town of Roxbury and the City of New York. This agreement also established a Roxbury Hamlet Sewer District and corresponding sewer service area boundary (See Map [INSERT MAP DESCRIPTION]).

Under the New Sewage Treatment Infrastructure Program, the City has also funded an additional collection system in the area of the Hamlet of Hubbell Corners to convey wastewater to the pump station in the Hamlet of Roxbury for treatment in Grand Gorge. Construction of the conveyance system was completed in 2010, and property owners are currently in the process of connecting to the system. According to the City, this project displaced 29 septic systems and has a permitted flow of 9,000 GPD. It also establishes the Hubbell Corners Supplemental Sewer Service Area (See Map [INSERT MAP DESCRIPTION]).

This represents a total permitted flow of 100,000 to the Grand Gorge WWTP. According to operations personnel, average daily flows are currently between 35,000 and 40,000 GPD; this will likely climb to between 40,000 and 45,000 when all connections to the Hubbell system have been made.

In terms of system expansion, the Town of Roxbury may seek New York City approval, but even if approved, New York City does not have an obligation to pay for the attendant sewer extension, whereas inside the sewer service area, New York City is obligated to pay for sewer extensions where “the existing on-site subsurface treatment system (SSTS) has failed or is at imminent risk of failing and cannot reasonably be repaired, or where, for new construction, sewer construction, sewer extensions are necessary because an SSTS is not practical due to site conditions (e.g. lot size, soils, water table) and / or legal constraints.”<sup>17</sup>

#### **Denver Sewer District**

The sewage collection and treatment system at the Roxbury Run Village development was originally built and then operated as a transportation corporation by the project developers. When faced with a costly and required upgrade of the treatment facility, the owners turned the system over to the Town. Under New York State law, the Town had no choice but to accept it; the result was the creation of the Denver Sewer District, and the completion of the required upgrade, with the cost of the upgrade and continuing operation managed as a public sewer district under the auspices of the Town of Roxbury but paid for through assessments on the properties in the Roxbury Run development. According to NYCDEP, it has a permitted flow of 0.0350 Million Gallons Per Day.

#### **Solid Waste**

All solid waste collection is handled by private haulers. Private contract haulers must deliver their collected refuse to the Delaware County Landfill, which is located near the Town of Walton. The Town of Roxbury has a transfer station located just off NYS Route 30 approximately 3 miles north of the hamlet of Roxbury. Town residents can drop household refuse on specified days free of charge, and as Delaware County residents, they may also use services provided by the County Solid Waste Management Center and Compost Facility.

## **Land Use**

#### **Building Permits**

Over the past 5 years, total building permits issued ranged from 158 in 2006 to 37 in May of 2011 (Table 20). The largest category is consistently additions, alterations, and major repairs. In this period, 58 new residences were permitted. Figure 17 shows all building permits and numbers of new housing permits from

---

<sup>17</sup> Quoted in the 2002 Lamont Plan [LIKELY FROM THE 2001 TOWN-CITY AGRMNT]

Town of Roxbury – Community Profile and Environmental Inventory v1

2001 to May 2011. Permits of all types have largely declined since 2004, and the number of new residence permits dropped 80% between 2005 and 2010. The pace of all types of construction in the Town appears to have slowed over the past five years.

Table 20. Building permit summary, all building permit types, Town of Roxbury.

Permit Type	2006	2007	2008	2009	2010	2011	Total
Addition, alteration, or major repair	63	44	40	26	24	12	209
Barn	8	5	0	2	4	1	20
Deck or porch	29	45	31	16	33	10	164
Garage	16	12	9	6	4	0	47
Houses	12	4	2	1	3	1	23
Mobile home, trailer, replacement trailer, or double-wide	6	4	8	3	2	0	23
Modular housing	3	3	2	3	0	1	12
Other	5	3	5	6	10	4	33
Shed or storage building	3	4	7	6	4	3	27
Stove or fireplace	13	14	21	17	5	5	75
Total	158	138	125	86	89	37	633

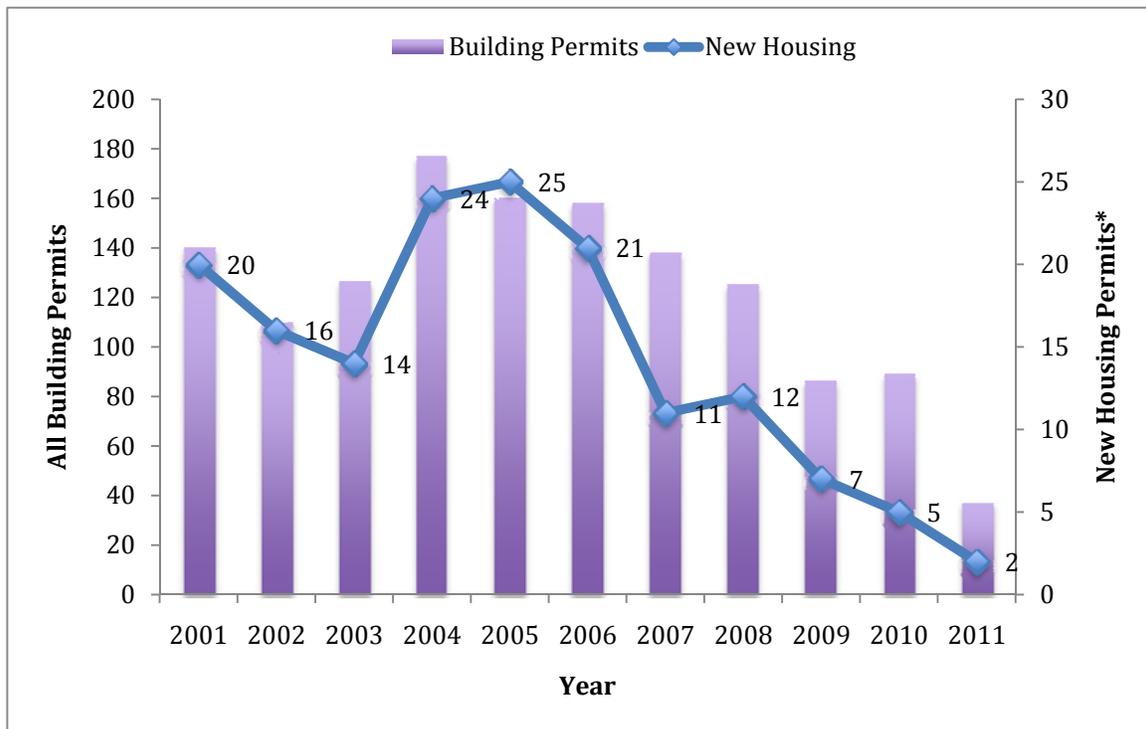


Figure 17. All building permits (excluding administrative categories) and building permits for new residences, Town of Roxbury. \*Includes houses, modular homes, and various mobile home types.

### Parcel Data

Property class data are shown in Table 21. Residential uses make up both the largest number of parcels and the greatest percent of total land area in Roxbury. Within this category, single family uses are found on the greatest number of parcels (1,269), but the highest percentage of land area is rural estates (15,585 acres or 28.3% of Town land area). The combination of vacant land<sup>18</sup> and wild, forested, conservation lands, and public parks is 47.9% of the Town land area. There are 6 industrial uses on 106 acres and 86 commercial uses on 171 acres. Agricultural uses are found on only 83 parcels but constitute a significant percent by land area of all uses, with over 4,000 acres or 7.4% of land area.

Table 21. Number of parcels and acreage of land uses, 2011, Town of Roxbury.

Property Class	Number of Parcels	Acres	Percent of Land Area
Agricultural	83	4,100.69	7.4%
Residential	1,930	22,322.03	40.5%
Commercial	86	171.49	0.3%
Industrial	6	105.84	0.2%
Recreation and Entertainment	6	734.97	1.3%
Community Services	61	376.60	0.7%
Public Services	36	923.95	1.7%
Vacant Land	1,077	12,317.50	22.3%
Wild, Forested, Conservation Lands and Public Parks	169	14,114.56	25.6%
Grand Total	3,454	55,167.63	100.0%

[INSERT] Table X. New York City lands and easements located in the Town of Roxbury.

### Subdivision Data

Subdivisions result in the creation of approved building lots. As such, data on subdivision activity is an indicator of construction activity in a given time period. In addition, because the lots created by subdividing existing parcels are not necessarily built upon in the same year they are created and added to a town's existing parcel stock, these data also indicate the magnitude of potential construction in the future.

Since 1990, a total of 305 lots have been created by 111 different subdivisions in the Town. In that period, the average size of all subdivisions was 2.7. Figure 18 depicts these trends graphically. Over this time period, about 70% of lots were created

<sup>18</sup> Vacant land is defined as property that is not in use, is in temporary use, or lacks permanent improvements.

from 1990 to 2000; this represents 61% of all subdivisions. Since 2000, the pace of parcel creation has slowed, especially since 2006. In general, subdivisions in this 22-year period have been small and would likely be classified as “minor subdivisions” under Town regulations (depending upon the availability of public infrastructure).

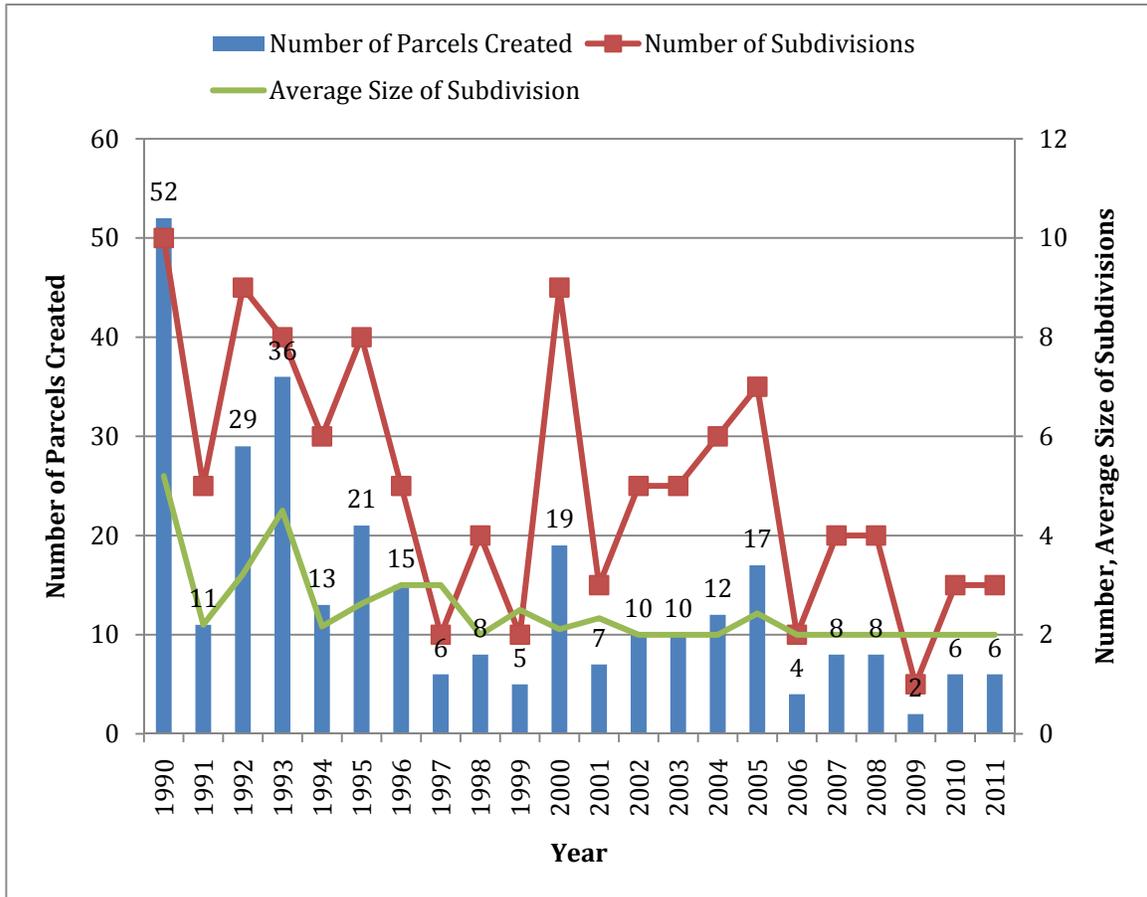


Figure 18. Number of lots created by subdivision, number of subdivisions, and average size of subdivision, Town of Roxbury, 1990-2011.

### Land Use Regulations

Table 22 presents a selection of local laws in Roxbury that may have land use implications. Laws relating to site plan review, subdivision, historic preservation, and wind towers are briefly discussed in this section, below.

Table 22. Local laws with potential land use implications, Town of Roxbury.

<b>Year</b>	<b>Name</b>
1975	Building Permit Ordinance
1984	Administering and enforcing NYS Uniform Building and Fire Prevention Codes
1985	Subdivision regulations
1987	Prohibiting the operations of dumps and dumping
1997	Regulating parking of motor vehicles on certain streets in the Town
2001	Communication tower and facilities law
2002	Wind energy deriving tower moratorium law
2002	Sewer Use Law
2007	Outdoor wood-burning devices
2007	Moratorium on solid waste facilities
2009	Relating to the establishment of landmarks or historic districts
2010	Local water supply law (Roxbury and Grand Gorge)
2010	Site plan review

#### Site Plan Review

The Town's Site Plan Review Law was enacted in 2010. It applies to new commercial construction, and to expansion of existing commercial structure or use that will increase the gross floor area of existing structures by more than 20%. It sets out submission requirements for site plan applications and contains procedures for review by the Town Planning Board. It also establishes standards and considerations relating to traffic and circulation; layout of developments, site appearance, and relationship to existing development; utilities improvements; maintenance; and environmental quality, among others.

#### Subdivision

The Town subdivision law, known as the Town of Roxbury Land Subdivision Regulations, was first enacted in 1985 and has since been amended four times, most recently in 2002. It creates minor and major subdivision review procedures and submission requirements. Minor subdivisions under these Regulations are defined as resulting in 3 or fewer lots fronting on an existing road; major subdivisions are defined as creating 4 or more lots and requiring the extension of Town facilities or the creation of public improvements. Finally, it sets forth design standards relating to roads, drainage, utilities, sidewalks, and lot improvements as well as environmental considerations.

#### Historic Preservation Law

The Historic Preservation Law was enacted in 2009, and it was amended in 2011. The Law creates the Roxbury Historic Preservation Commission, consisting of 5 members serving 3-year terms. The Commission, among other powers, can designate historic districts and landmarks, and it issues Certificates of Compatibility

for a) demolition or b) new construction activities that affect landmarks or historic districts in the Town.

#### **Wind Generating Towers Law**

The Town of Roxbury Wind Energy-Deriving Towers Law was enacted in 2002. Its stated intent is “to regulate the development of large scale (50KW or greater) wind energy-deriving towers (wind turbines) in the Town.” To this end, the law includes procedural and performance standards for wind tower siting applications.

#### **Critical Environmental Areas**

A portion of the Town was designated in 1990 as a Critical Environmental Area (CEA) under State regulation in order to protect groundwater aquifers from which the Town drinking water supply is derived.<sup>19</sup> A CEA is a specific geographic area designated by a state or local agency having exception or unique environmental characteristics<sup>20</sup> with respect to, in the Roxbury CEA, a benefit or threat to human health. Under State law, this area may be subject to heightened standards of environmental review to ensure that actions will not affect the reason for its designation (i.e. the protection of groundwater aquifers). **[INSERT MAP REFERENCE-DON?]**

#### **NYCDEP Watershed Regulations**

Some key elements of the Watershed Regulations (from the Catskill Watershed Corporation Website at <http://www.cwconline.org/pubs/moa.html>) are outlined below.

Construction of new wastewater treatment plants are prohibited in certain basins, and all existing wastewater treatment plants must install sophisticated wastewater treatment technology within 5 years, for which the City will pay. In addition, plants are not allowed to discharge effluent into wetlands and may only discharge into intermittent streams subject to NYSDEC standards.

All septic systems installed, repaired or replaced in the Watershed require prior approval by the City, and no septics are allowed within 100 feet of a watercourse or wetland or within 300 feet of a reservoir. It should be noted that these standards are state-wide standards, and not exclusive to the Watershed.

No new impervious surfaces are permitted within 300 feet of a reservoir, or 100 feet of a watercourse or wetland. Some exemptions to this rule exist for villages, hamlets, commercially zoned areas, and single family home construction. Construction of new roads are prohibited within 50 feet of intermittent streams or wetlands, 100 feet of perennial streams or 300 feet of a reservoir. Access roads to

---

<sup>19</sup> A map of the Roxbury CEA may be found at [http://www.dec.ny.gov/docs/permits\\_ej\\_operations\\_pdf/roxbury.pdf](http://www.dec.ny.gov/docs/permits_ej_operations_pdf/roxbury.pdf)

<sup>20</sup> 6 N.Y.C.R.R. 617.2(i) (1996).

subdivisions are allowed within the 100 foot buffer subject to approval by the City of a stormwater pollution prevention plan.

The location of new petroleum storage tanks are restricted. For example, no new gas stations or underground home heating oil tanks are permitted within 100 feet of a watercourse or 500 feet of a reservoir.

No new registered hazardous substance storage tanks are permitted within 100 feet of a watercourse or 500 feet of a reservoir.

Many types of new commercial and industrial projects within the Watershed now require the preparation of a "Stormwater Pollution Prevention Plan" (SPPP), which must be reviewed and approved by the City before final project approval may be granted. Examples of projects that require a SPPP are:

- Plans for development or sale of land that will result in the disturbance of five (5) or more acres of total land area as described in the definition of larger common plan of development or sale in Appendix A of the General Permit No. GP-0-10-001
- Construction of a subdivision (defined as any tract of land divided into five or more parcels of five acres or less along an existing or proposed street);
- Construction of a new industrial, institutional, municipal, commercial, or multi-family residential project that will result in creation of an impervious surface totaling over 40,000 square feet in size;
- A land clearing or land grading project, involving two or more acres, located at least in part within the limiting distance of 100 feet of a watercourse or wetland, or within the limiting distance of 300 feet of a reservoir, reservoir stem or controlled lake or on a slope exceeding 15 percent;
- Construction of a new solid waste management facility or alteration or modification of an existing solid waste management facility within 300 feet of a watercourse or wetland or 500 feet of a reservoir, reservoir stem or controlled lake;
- Construction of a gasoline station;
- Construction of an impervious surface for a new road;
- Construction of an impervious surface in the West of Hudson watershed within a village, hamlet, village extension or area zoned for commercial or industrial uses; or
- Up to a 25 percent expansion of an existing impervious surface at an existing commercial, institutional, municipal, or industrial facility which is within the limiting distance of 100 feet of a watercourse or wetland.

These requirements are in addition to those set forth under New York's State Pollutant Discharge Elimination System (SPDES) program, which is administered by NYSDEC. The State also sets standards for the preparation of SWPPPs reviewed by NYSDEC and NYCDEP, although the latter sets standards for redevelopment and

retrofits separately. Generally, projects disturbing 1 or more acres of land are classified according to whether post-construction stormwater controls, or best management practices, are required in addition to the SWPPP. One area where the NYCDEP requirements are more stringent is in the construction of individual residences. NYCDEP requires that these projects utilize post-construction stormwater management best practices.

Provisions in the Watershed Regulations that will affect homeowners most are those that deal with the placement and operation of septic systems, the location of underground fuel oil storage tanks, and the construction of new impervious surfaces (i.e. driveways) on residential property. However, even though a homeowner may live in the Watershed, the revised regulations will have the greatest impact on those homeowners who live near water—like reservoirs, wetlands and streams.

All existing septic systems that are operating according to federal, state and local approvals, but don't meet the additional requirements of the watershed regulations, are allowed to continue. However, if a septic system should fail and need major replacement, its repair should be made according to the new standards. If, because of site limitations or other conditions, that is impossible, the owner must work with NYCDEP to determine the most appropriate design and location. In addition, NYCDEP must review and approve any modification, expansion or remediation of an existing septic system. Routine repairs and maintenance are not affected by the regulations.

With regard to new septic systems, the NYCDEP will continue to monitor and approve design, treatment methods, construction, maintenance and operation. New conventional septic systems will not be allowed within 100 feet of a watercourse or 300 feet of a reservoir. When site conditions are unsuitable for a conventional system, raised systems are allowed, with certain restrictions on location.

In addition, DEP regulations:

- prohibit mound systems, intermittent sand filters and evapotranspiration/absorption systems;
- require an additional area of at least 100% of the primary absorption field's area to be set aside as a reserve field;
- prohibit the building of primary or reserve fields under pavement or other impervious surfaces;
- call for at least one percolation test and one deep hole test to be performed;
- prohibit the siting of new septic systems where soil percolation rates are inadequate; require a pump system to have a backup storage tank capable of holding one day's flow.

The watershed regulations govern the siting of new impervious (i.e. paved) surfaces such as roads, roofs and parking lots. The regulations prohibit the construction of

impervious surfaces within 100 feet of a watercourse or 300 feet of a reservoir, except in the following circumstances: the construction of improvements or additions to an individual residence (as long as they are non-commercial); agricultural activities; the construction of a new road needed to provide access to 2 or more parcels of land or to a subdivision; the paving of an existing dirt or gravel road; the construction of a driveway, where the driveway is needed to provide access to an existing residence.

With regard to limits on new residential construction, impervious surfaces are prohibited within 300 feet of a reservoir. In addition, the construction of new homes within 100 feet of a perennial stream or wetland, in most cases, will be permitted, but will require an "Individual Residential Stormwater Permit" from the NYCDEP.

## **Economic Resources**

### **Industries and Businesses in Roxbury**

The following information about commercial use for Roxbury is from the US Census County Business Patterns by zip code (Table 23). This information excludes data on self employed individuals, employees of private households, railroad employees, agricultural production employees, and most government employees. Business activity in the Town includes about 48 establishments in both the Roxbury and Denver zip codes. In general, the Roxbury zip code has a higher level of economic activity.

Between 1998 and 2008, the number of establishments decreased; first-quarter payroll also decreased. Annual payroll increased by 8.7%. Roxbury has higher levels of employment. In 2008, number of employees data were suppressed, making comparison difficult, but the last year for which data are available, 2006, shows 6 employees in the Denver zip code and 269 in the Roxbury zip code.

Town of Roxbury – Community Profile and Environmental Inventory v1

Table 23. Business information, Roxbury and Denver zip codes, 2008 and 1998.

Zip Code	Number of Establishments	Number of Employees	First-quarter payroll in \$1,000	Annual payroll in \$1,000
<i>2008</i>				
12474 (Roxbury)	41	100-249	852	3,966
12421 (Denver)	7	0-19	63	290
Total	48	n/a	915	4,256
<i>1998</i>				
12474 (Roxbury)	49	246	907	3,677
12421 (Denver)	5	11	47	239
Total	54	257	954	3,916
1998-2008 Change	-11.1%	n/a	-4.1%	8.7%

In 1998, the industries represented in Table 23 for the Roxbury zip code included a variety of establishments across 15 different industry classes. Together, there were 17 construction and retail establishments accounting for 35% of the total. Most establishments had between 5-9 employees or fewer; one business in the accommodation and food services sector had between 50-99 employees. The Denver zip code had 5 establishments spread evenly across 5 industries. Most establishments employed between 1 and 4 people in 1998.

In 2008, the Roxbury zip code had lost employment in manufacturing, wholesaling, the unclassified category, and transportation and warehousing, decreasing the number of industries in the Town from 15 to 11, and construction and retail accounted for 18 of all establishments, or 44%. The largest employers employed between 20-49 people and were now concentrated in the Arts, Entertainment, and Recreation sector. Other establishments had mostly (90%) 1-9 employees. In the Denver zip code, establishments now represented 6 industries; construction, with 2 businesses, was the dominant category. In Denver, all establishments had between 1 and 4 employees.

According to the 2000 census, most people reported working in Education, Health and Social Services, followed by construction and manufacturing (Table 24). Table 25 shows that in many ways, Roxbury is more comparable to the State of New York than to Delaware County in terms of broad employment classification of its population.

Town of Roxbury – Community Profile and Environmental Inventory v1

Table 24. Employment by industry, persons 16 years and older, Town of Roxbury, 2000.

Industry	No. Employed
Agriculture, forestry, fishing and hunting, and mining:	26
Construction	141
Manufacturing	121
Wholesale trade	19
Retail trade	97
Transportation and warehousing, and utilities:	47
Information	38
Finance, insurance, real estate and rental and leasing:	57
Professional, scientific, management, administrative, and waste management services:	47
Educational, health and social services:	230
Arts, entertainment, recreation, accommodation and food services:	92
Other services (except public administration)	47
Public administration	92
Total	1054

Table 25. Comparison of occupations, Town of Roxbury, 2000.

	New York	Delaware County	Town of Roxbury
Management, professional, and related occupations:	36.7%	31.6%	34.3%
Service occupations:	16.6%	16.9%	12.8%
Sales and office occupations:	27.1%	20.4%	25.8%
Farming, fishing, and forestry occupations	0.3%	2.4%	0.9%
Construction, extraction, and maintenance occupations:	7.6%	10.9%	13.9%
Production, transportation, and material moving occupations:	11.7%	17.9%	12.4%
Total	100.0%	100.0%	100.0%

Between 1990 and 2000, the percentage of persons in the labor force decreased from 54.5% to 57.4% (Table 26). Overall, the proportion of women in the labor force increased at a faster rate than growth in the population 16 years and older; the number of persons not in the labor force also grew substantially, and in 2000 stood at 45.5% of those aged 16 and older.

Table 26. Employment status change for the population 16 years and older, Town of Roxbury.

Employment Status	2000		1990		Change
	Number	Percent	Number	Percent	
In Labor Force	1122	54.5%	1056	57.4%	6.3%
Employed	1054	51.2%	980	53.3%	7.6%
Unemployed	68	3.3%	76	4.1%	-10.5%
Females	542	26.3%	444	24.1%	22.1%
Not in Labor Force	935	45.5%	783	42.6%	19.4%
	2057	100.0%	1839	100.0%	11.9%

### Agriculture

As stated in the Delaware County Agricultural Growth and Sustainability Plan, 2010-2015, “Agriculture has long been recognized as an important business in Delaware County. The NYC Watershed Economic Impact Assessment report completed in 2009 identified agriculture as a mature, ‘mainstay’ industry in Delaware County.” As indicated above, agriculture in Roxbury accounts for land use on about 83 parcels representing 7.4% of total land area in Roxbury. Of this, livestock-related uses are found on a majority of agricultural parcels, both by land area and by number of parcels. Together with cropland and horse farms, livestock operations constitute 90% of agricultural parcels and 88% of total agricultural land area (Table 27).

Table 27. Number and types of agricultural tax parcels, Town of Roxbury, 2011.

Agricultural Property Class	Number of Parcels	Acres	Percent of Land Area
Crops	18.0	1,111.8	2.0%
Game Preserve	3.0	217.2	0.4%
Horse Farm	18.0	584.1	1.1%
Livestock	36.0	1,930.9	3.5%
Other	1.0	1.2	0.002%
Vacant Land	7.0	255.5	0.5%
Agricultural Total	83.0	4,100.7	7.4%

Another way to capture the nature and extent of farming in the Town is using data from the US Agricultural Census. Conducted every five years, data are available at both the county and zip code levels. Although the 12474 (Roxbury) and 12421 (Denver) zip codes overlap other towns and do not entirely cover the Town itself,

Town of Roxbury – Community Profile and Environmental Inventory v1

these data give another snapshot of the type and level of farming going on in and around Roxbury.

Table 28 presents three census counts of farm operations roughly located in the Town. The Roxbury zip code has consistently hosted more farming operations, and roughly, more of these farms are run as the operator’s principal occupation. More operations also harvest crops in this zip code. Throughout the Town, more farms are 50 acres and larger. The total number of farming operations decreased since 2002.

In 2007, both zip codes included a mix of full and part-owners, and most operations had less than \$50,000 in commodity sales. All principal operators lived on their farms. Operations with animal sales included poultry and eggs, sheep, goats, cattle, and specialty animals. All farms in the Denver zip code and over 70% of those in the Roxbury zip code had animal sales of some kind. In Roxbury, 7 operations reported harvesting cropland compared to only 2 in Denver, and overall, the number of operations with cropland declined from 20 to 9 between 2002 and 2007, with farms of between 50 and 499 acres in Roxbury showing the greatest decline. Cropland in 2007 was mostly field crops, forage, hay, and haylage.

Table 28. Agricultural Census data, Denver (12421) and Roxbury (12474) zip codes.

	2007		2002		1997	
	12421	12474	12421	12474	12421	12474
	1	4	1	4	1	4
Number of Farm Operations	8	11	8	15	NA	13
1.0 to 49.9 acres	1	2	NA*	NA*	NA	2
50 to 999 acres	7	9	7	13	NA	11
<i>Operators</i>						
1 operator	1	5	NA*	9	NA	NA
2 operators or more	7	6	5	6	NA	NA
200 Days or more worked off operation	8	3	7	NA*	NA	6
Farming as Primary Occupation	NA	9	NA*	6	NA	8
Cropland Harvested	2	7	7	13	NA	10
1.0 to 49.9 acres	0	4	NA*	5	NA	4
50 to 499 acres	2	3	5	8	NA	6

\*Category contains 1 to 4 farms; data withheld.

**[INSERT TOWN ASSESSOR DATA]**

**Personal Income**

As Table 29 shows, income levels in Roxbury are generally lower than New York State levels but are comparable to Delaware County, although per capita income is substantially higher. Per capita income in the Town is also the highest of adjacent

Town of Roxbury – Community Profile and Environmental Inventory v1

towns. When compared to adjacent towns, household and family incomes are within the range of these other places.

Table 29. Comparison of personal income characteristics, Town of Roxbury, 2000.

	Median Household Income	Median Family Income	Per Capita Income	Aggregate Income for Individuals
New York State	\$43,393	\$51,691	\$23,389	\$443,844,082,200
Delaware County	\$32,461	\$39,695	\$17,357	\$834,070,500
Middletown	\$31,346	\$36,818	\$17,635	\$71,439,800
Bovina	\$43,359	\$46,094	\$19,653	\$13,010,600
Stamford	\$34,148	\$42,941	\$17,546	\$34,126,500
Roxbury	\$32,214	\$40,721	\$20,177	\$50,624,500

Table 30 depicts changes over time in income-related data for the Town. When converted to constant 1999 dollars, family, household, and per capita income values have all increased, although median household income has increased only slightly. Per capita income has grown by a third. The number of individuals in poverty has decreased. The substantial decrease in public assistance income is usually accounted for by changes in federal programs as well as different definitions of eligibility. Finally, the number of households with retirement income has increased substantially, and Social Security income households also increased faster than the growth in households generally.

Table 30. Change in personal, household income characteristics, Town of Roxbury.

	1990	2000	Change
Median Income for Families*	\$35,569	\$40,721	14.5%
Median Household Income*	\$32,070	\$32,214	0.4%
Per capita income*	\$15,084	\$20,177	33.8%
Individuals below poverty level	427	334	-21.8%
Percent of people living below poverty level	17.9%	13.4%	-25.1%
Households	925	1,063	14.9%
<i>Number of households with</i>			
Wage and salary income	639	708	10.8%
Social Security income	340	409	20.3%
Public assistance income	56	31	-44.6%
Retirement income	188	253	34.6%
Self employment	180	179	-0.6%
Farm self employment	24	n/a	-

\*Current dollar data was converted to constant 1999 dollar data by using the U.S. Bureau of Labor Statistics Consumer Price Index for 1989 and 1999. 1989 dollars x 1.297861 = 1999 dollars.

In general, more persons 25 and older in the Town are high school graduates than New York State—83% compared to 79% for the State in 2000 (Table 31). Yet the percent holding advanced degrees is lower than that of the State: 28.8% for the Town versus 34.6% for the State. More of the Town’s population have also completed some college but no degree, and this is the fastest growing category in the Town between 1990 and 2000—both in absolute and relative terms. Also increasing faster than the population (here, persons 25 years and older) are persons with some advanced degree.

Table 31. Change in educational attainment, persons 25 years and older, Town of Roxbury.

Educational Attainment	1990		2000		Change, 1990 to 2000
	Number	Percent	Number	Percent	
Less than high school diploma	384	24.0	306	16.7	-20.3%
High school diploma	647	40.4	673	36.7	4.0%
College, no degree	193	12.0	327	17.8	69.4%
Associates, Bachelors degree, or higher	379	23.6	528	28.8	39.3%
Total	1603	100.0	1834	100.0	14.4%

## Regional Planning Efforts

[UPDATE AND COMPLETE]

### Village

### Town

The Lamont Plan, which was adopted in 2002 [CHECK], has served as the Town Comprehensive Plan.

### County

The Delaware County Department of Economic Development recently completed the Delaware County Agricultural Growth and Sustainability Plan, 2010-2015, and the county is currently working on a county Comprehensive Plan.

### Corridor

The Delaware Soil and Water Conservation District has prepared an extensive Stream Corridor Management Plan for the East Branch of the Delaware River.

### Economic Development

The Town of Roxbury, along with the Town of Middletown, the Town of Andes, and the Village of Margaretville are participating in an upcoming State-funded planning

-DRAFT-

Town of Roxbury – Community Profile and Environmental Inventory v1

effort to comprehensively analyze and plan for economic development and revitalization. There are numerous other studies and plans that have been completed over the past decade addressing economic development in the Central Catskill region.