



Oswego County Comprehensive Plan

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46 East Bridge Street, Oswego, NY 13126

Phone: 315-349-8322 E-Mail: shannon@co.oswego.ny.us

www.co.oswego.ny.us

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Oswego County Planning and Community Development, .pdf document

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1. INTRODUCTION

A. PURPOSE

The primary purpose of the Oswego County Comprehensive Plan is to serve as a guide to county decisionmakers as they work to accommodate the physical growth and development of Oswego County. The plan will also provide a statement of community goals, objectives and strategies along with comprehensive information regarding plan elements. It is intended that the plan will be helpful to local towns, villages and cities as they plan for their communities' futures, to State agencies as they plan facilities within the county, and to other public entities, private businesses, not-for-profit agencies, and citizens as they plan for their futures.

In these days of limited public resources, it is important that there be adequate information available regarding the plans of public and private sector providers of infrastructure and facilities to allow for effective, efficient expenditures of public funds and sound private sector decision-making.

B. HISTORY OF SETTLEMENT

The Iroquois, French and British, several wars, the New York State Barge Canal, shipping days, creative builders, and local civic leaders have all left their marks on the history of Oswego County. The earliest inhabitants of the area were pre-Iroquoian native peoples, Algonquins, who hunted and fished. Later, the Onondagas and Oneidas hunted the land and fished in its waters, but with few exceptions, did not settle the area. Permanent village sites are known only in the southern part of the county. The first white explorers were French missionaries and Dutch fur traders. The English were introduced to the Great Lakes region and Oswego when they took over Dutch possessions. The British built two forts, Fort Oswego and Fort Ontario to protect their trading interests. Control of Oswego was transferred in 1796 to the American government well after the American Revolution.

People who followed these earlier inhabitants came in three waves. After the Revolutionary War, Yankees or New Englanders settled the region during the pre-industrial period from 1790 to 1825. These mostly Protestant people were farmers, artisans or housekeepers. In the late 1820s, immigrants were primarily from western Europe: England, Germany, and French-Canada. They worked in factories, commercial ventures, and service occupations. At the close of that century, the third wave of immigration brought people from southern and eastern Europe: Italy, Poland, and Russia.

As soon as the British left Fort Ontario in 1796, settlers made Oswego their home because of the possibility of business with Canada and trade on Lake Ontario and the Oswego River. Realizing that the area at the mouth of the river would be an important place, the State of New York made plans to lay out a community, Franklin Square, on the

west side of the river. Following the War of 1812, the east side of Oswego was laid out in a grid street pattern and broad lots similar to the west side of the river. The completion of the Oswego Canal in 1828 gave Oswego its commercial start and spurred enormous growth, the population doubled between 1820 and 1830. The canal allowed cheaper and faster transportation for passengers and freight and established a larger market for all products. Using water power, factories along the Oswego River produced flour, starch, textiles, and manufactured goods. Beginning in the 1870s, Oswego declined as a bustling port. Salt shipments from Syracuse were no longer needed with the discovery of salt fields in the Midwest and the Erie Canal became a more cost-effective transportation route when it quit charging tolls. Before World War II, Oswego's economy began to focus on what was to become its major local industry, energy.

The City of Fulton, formerly Oswego Falls, flourished as a result of the construction of the canal with grain mills, textile factories, and metal working plants. As shipping business declined at the end of the nineteenth century, Fulton continued as an industrial center.

The land west of the Oswego River encompassing the Towns of Oswego, Hannibal, Granby, and Minetto was called the Military Tract because land parcels were given free to Revolutionary veterans. Through a series of treaties, the State of New York had purchased land from the Iroquois Indians. Although each soldier was given 600 acres, few soldiers settled in the area; they sold their parcels to others.

In 1792, George Scriba and several other investors assumed the contract of 525,000 acres of land between the Oswego and Salmon Rivers from John and Nicholas Roosevelt. The Towns of Constantia, West Monroe, Amboy, Parish, Hastings, Schroepfel, Palermo and Volney comprised Scriba's purchase. The southern area along the Oneida Lake shore was settled earlier than the northern portions because of the natural waterway from the Mohawk Valley to Lake Ontario. Land and water transportation routes prescribed the location of villages in the Scriba Patent. Cleveland, Bernhards Bay, Constantia, Phoenix and Hinmanville ring the region along the Oneida Lake and Oneida and Oswego Rivers, the traditional water route. In 1846, Oswegonians built the first plank road in the United States initially from Syracuse to Central Square and later completed it to Watertown (now U.S. Route 11). The Village of Central Square sits astride this early road which connected North Country farmers with salt sources near Syracuse.

Settlement patterns were further influenced by the distribution of natural resources. From 1830 through the 1850s, bog iron ore along Scriba's Creek in Constantia supplied iron foundries. This in turn spurred settlement on the north shore of Oneida Lake. In Cleveland and Bernhards Bay, sand from Oneida Lake led to early glass manufacturing. Palermo, northern Hastings, and areas of Schroepfel were sources of gravel and sand.

The Scriba Patent North includes Scriba, New Haven and Mexico. In the nineteenth century, these towns were similar in many ways. Each lay along the stage

route from Rome and Utica to Oswego, and each had creeks or rivers to power early mills. Villages formed at the intersection of main roads or where a major route crossed a creek at a mill site. The most activity and growth was in the Village of Mexico because of its location at the intersection of two creeks, Black Creek and the Little Salmon River. Their water powered grist and saw mills, machine shops, wagon and pump manufacturers, and copper shops, together making Mexico a thriving manufacturing community. Before the Civil War, Mexico was an area of antislavery activity. Several residents were a part of the Underground Railroad to help escaped slaves reach Canada.

The North Country includes the Towns of Richland, Albion, Boylston, Williamstown, Redfield, Orwell and Sandy Creek. Originally, Williamstown and the southern parts of Richland and Albion belonged to George Scriba's Patent. The four remaining towns belonged to a vast multi-million-acre tract occupying much of the northern portion of the State. The State sold this tract in 1791. It changed hands of several land speculators until individual settlers purchased farms of manageable size. Lumbering made the area ideal for dairy farming. Today, many of these marginal farms have returned to woodlands.

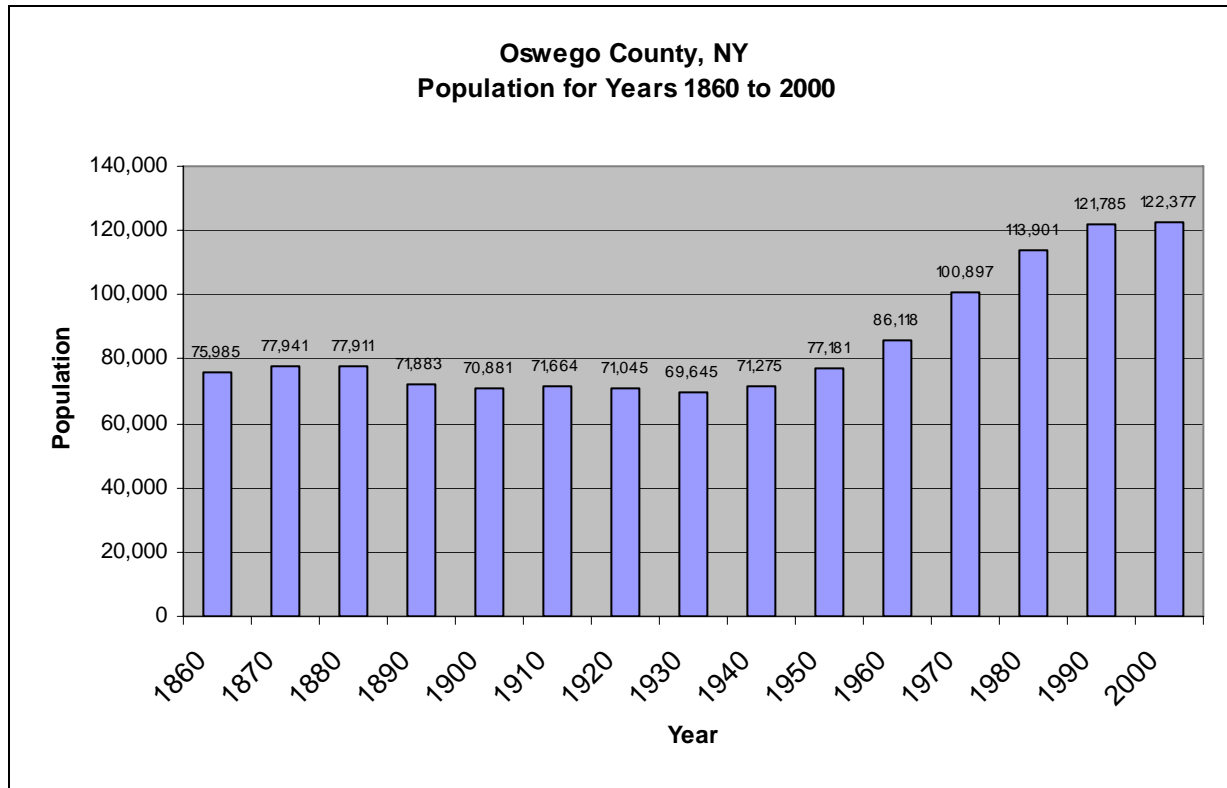
Besides farming activity, communities developed around industries powered by water, the railroad, and recreational activities. The railroad was to this area what the canal was to the City of Oswego. The railroad strengthened ties to Syracuse and contributed to the growth of inland villages. Richland Station is a reminder of the former importance of the railroad. Historically, the Village of Altmar, and hamlets of Williamstown, Redfield, and Orwell centered on early mills, tanneries, and wood product industries. Additionally, villages served small farms as shopping and social centers. The Village of Pulaski on the Salmon River and the Villages of Sandy Creek and Lacona on Little Sandy Creek developed around industries powered by nearby streams. Serving as the seat of government for eastern Oswego County added to Pulaski's growth. As early as 1900, summer tourist and residential areas developed along the lakeshore. Former lumbering camp sites developed into recreational camp areas, other sites were specifically developed as seasonal home areas.

Following World War II, traditional activities declined. Recent growth relates to the expansion of a few key industries and suburbanization. People choose to live in Oswego County because of employment opportunities and the quality of life in small towns, its natural and historic landscape, and its close commuting distance to Syracuse via Routes 81 and 481.

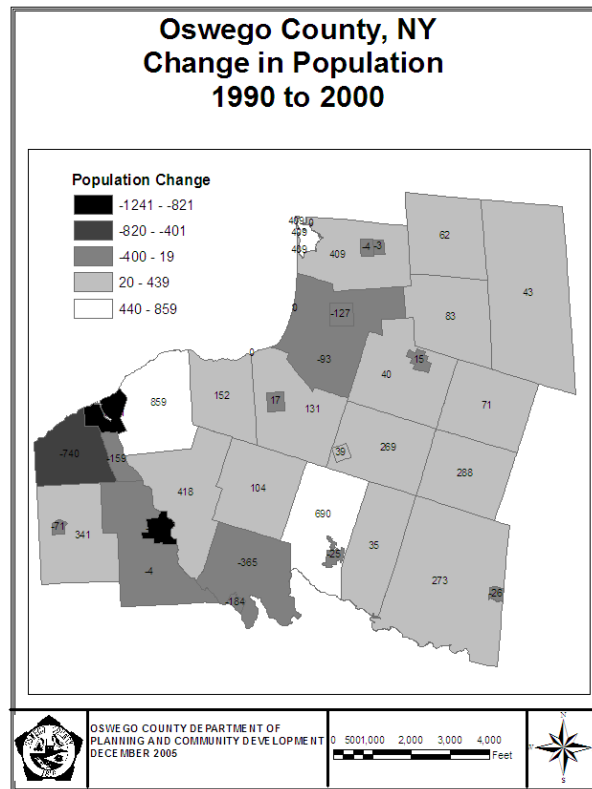
C. DEMOGRAPHIC PROFILE

Population

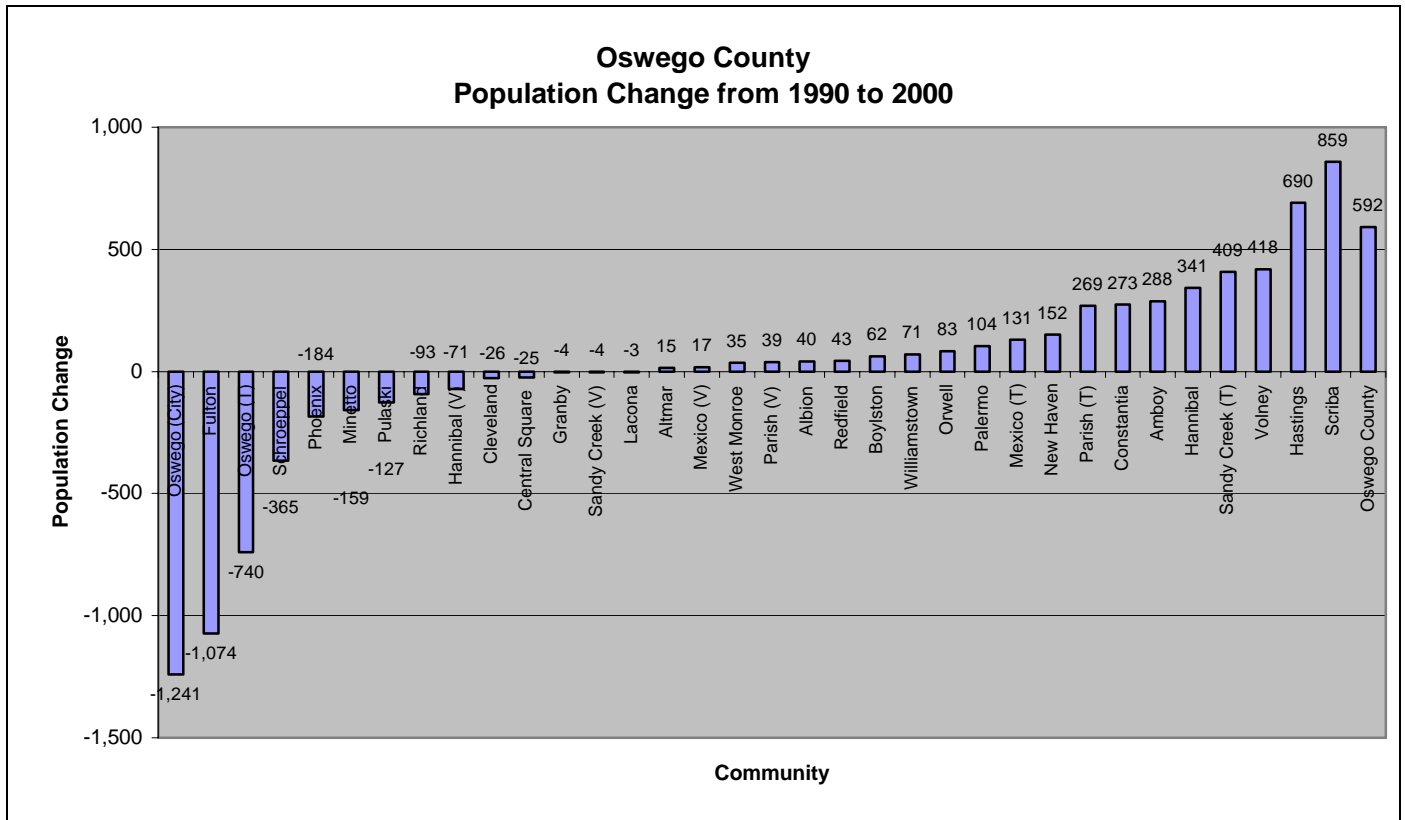
According to the 2000 US Census, 281.4 million people were counted in the United States, a 13.2% (32.2 million) increase from 1990 and the largest increase in US history.¹ The states with the greatest growth were Nevada (66.3%), Arizona (40.0%), Colorado (30.6%) followed by Utah (29.6), Idaho (28.5) and Georgia (26.4).² The slowest growing states were North Dakota (.03%), West Virginia (.8%), Pennsylvania (3.4%), Connecticut (3.6%) and Maine (3.8%).³ New York's population growth from 1990 to 2000, was 5.5% or 986,000.^{4,5} The state's growth is consistent with the 5.5% growth in the Northeastern region (CT, NH, MA, NJ, NY, RI, ME, VT, PA) of the United States.⁶ The New York State Census 2000 Total Population map prepared by the NYS Department of Economic Development, State Data Center is included in the Appendix. A map is included in the appendix showing these trends.



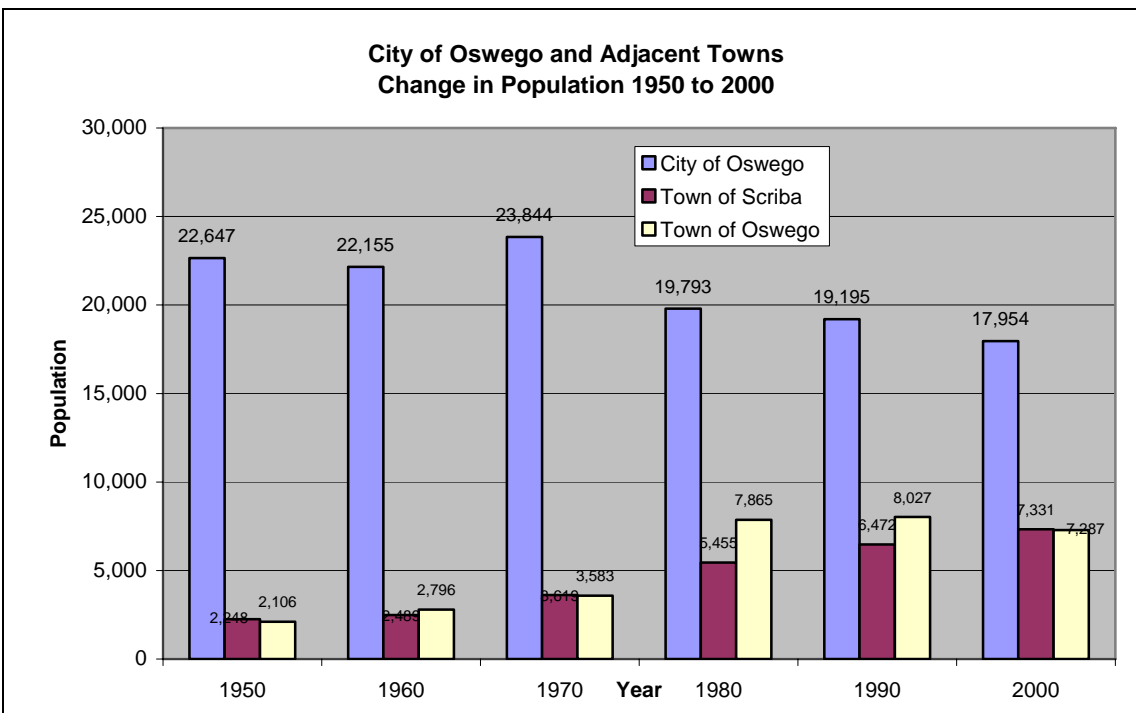
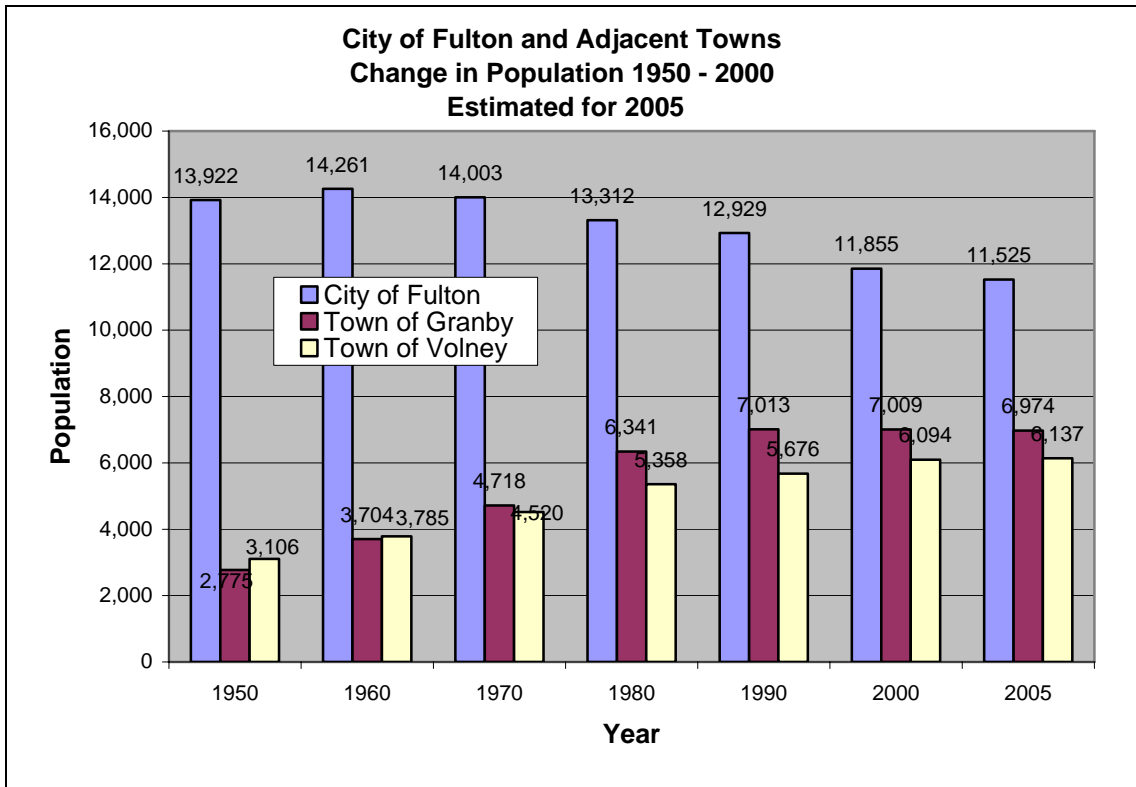
The Oswego County population from 1860 to 2000 is shown in the above table.⁷⁻¹¹ According to the 2000 US Census, the population of Oswego County was 122,377.¹² Between 1990 and 2000, Oswego County gained 592 people.¹³ Oswego County has shown slow population growth; which is similar to other communities in Upstate New York- scarcely growing.¹⁴ The U.S. Census Bureau estimates that the 2006 population would increase .6% from April 1, 2000 to July 1, 2006 to a total of 123,077.¹⁵ Following population trends is important in preparing for infrastructure, services and employment needs.



The thematic map shown above shows the change in population from 1990 to 2000 for each municipality.¹⁶ The darker shades reflect a loss of population and these are classified into five (5) classes of equal interval, with the communities gaining the most population shown as white.¹⁷ Those communities that lost the greatest number of people were the City of Oswego (-1,241) and City of Fulton (-1,074) followed by the Town of Oswego (-740) and Town of Schroepfel (-365). The Towns that gained the largest number of people were the Town of Scriba (859) and Hastings (690), and Volney (410). The change in population is shown in the bar graph below.

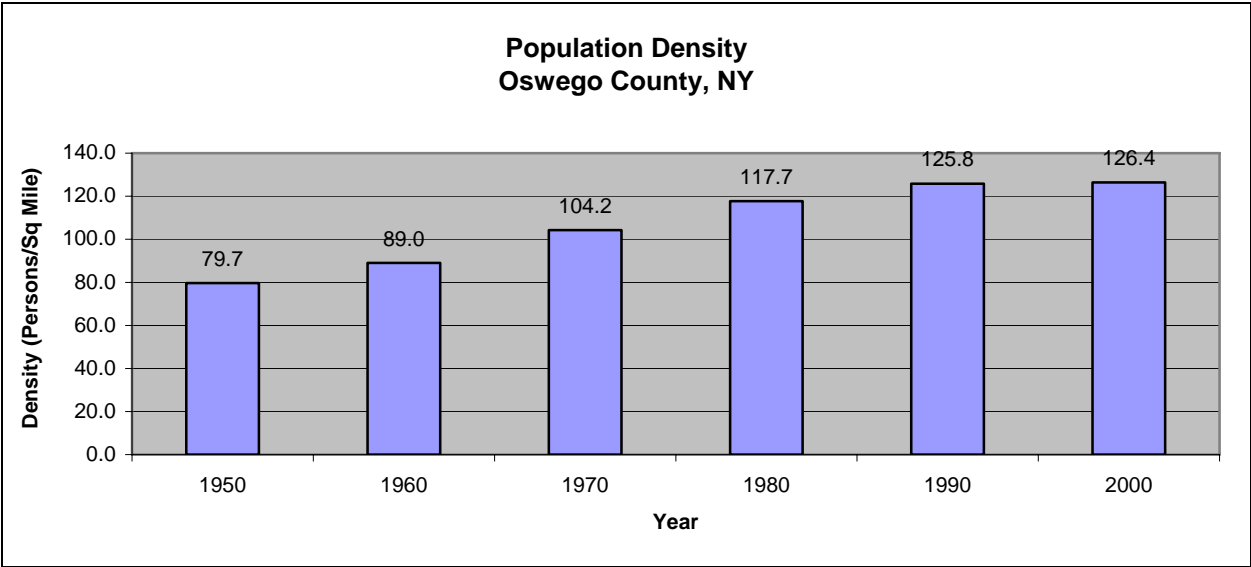


A report by the Brookings Institution, Center on Urban and Metropolitan Policy, *Sprawl Without Growth: The Upstate Paradox* by Rolf Pendall describes the slow growth, urban sprawl and declining density in Upstate New York, trends which may also be occurring in Oswego County.¹⁸ One of the findings of the report is that, “People, jobs, and businesses are leaving cities and villages and moving to towns. Upstate cities lost over 40,000 households; businesses have also disappeared from cities while growing in towns.”¹⁹ The graphs below show the loss of population in the cities of Fulton and Oswego and general increase in population in the towns adjacent to each city.

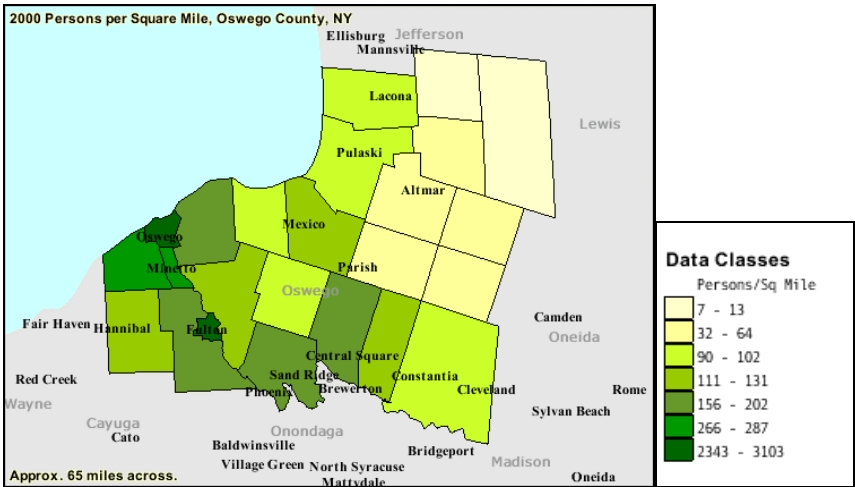


The appendix includes a bar graph showing the population of each community for Census years 1950 to 2000. ²⁰

Population Density



Population density in Oswego County has increased since 1950 as shown in the bar graph above. Shown below is a thematic map of the population density (persons per square mile) for communities in Oswego County.²¹ Population density had been classified using the Natural Breaks method into seven (7) classes with the least dense communities shown as light yellow and most dense communities shown as dark green. The communities of Redfield (8.2 persons per square mile), and Boylston (12.8 persons/square mile), in the Tug Hill region have the lowest densities while as expected, the densities in the Cities and in Oswego/Oneida River corridor communities are higher.



The population, and population density (1950 to 2000) for each community are provided in the Appendix. From 1990 to 2000, population densities decreased in 70% all the villages in the county, these are shown in the table below. The Village of Altmar, Mexico, and Parish had an increase in population density from 1990 to 2000. Both cities had a decrease in population

density. In addition, the Towns of Minetto, Oswego and Schroepfel have decreased in population density.

Decrease in Population Density 1990 to 2000	Percent Change
Village of Hannibal	-11.6
Town of Oswego	-9.2
Town of Minetto	-8.7
City of Fulton	-8.3
Village of Phoenix	-7.6
City of Oswego	-6.4
Village of Pulaski	-5
Town of Schroepfel	-4.1
Village of Cleveland	-3.3
Village of Central Square	-1.5
Village of Sandy Creek	-0.5

The appendix also includes a bar graph showing the population density from 1950 to 2000 for each community.

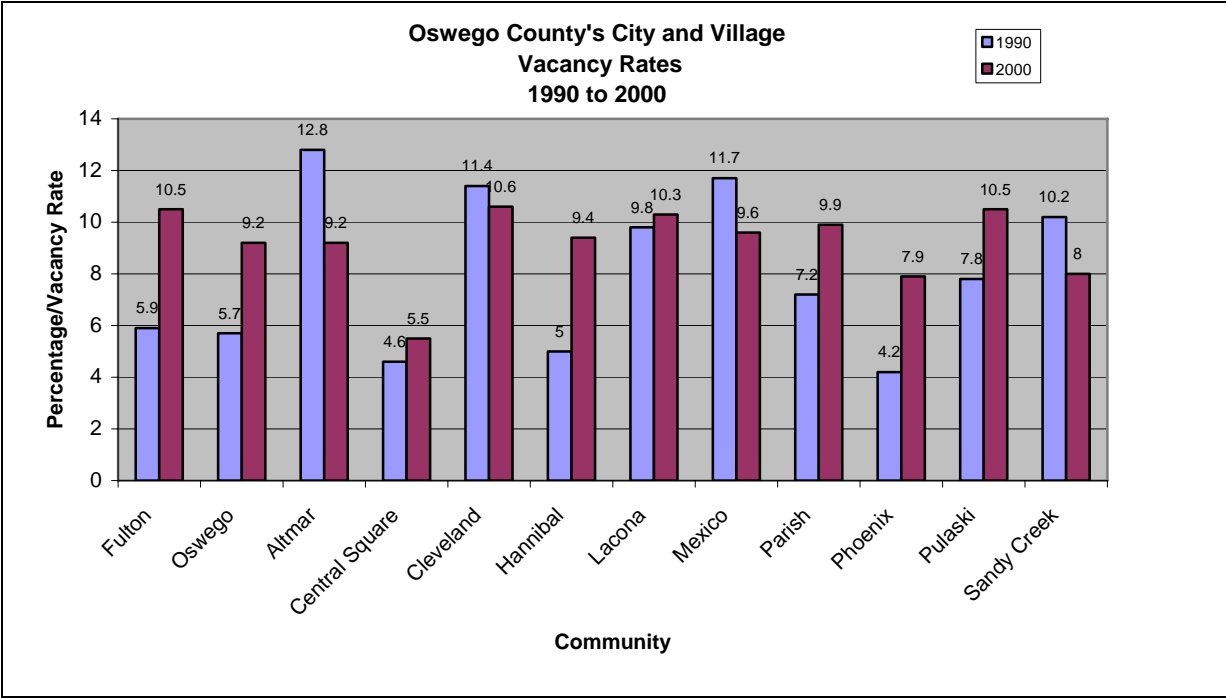
Vacancy Rates

A housing unit is a house, an apartment, a mobile home or trailer, a group of rooms or a single room occupied as separate living quarters or, if vacant, intended as separate living quarters. Separate living quarters are those in which the occupants live and eat separately from any other persons in the building and have direct access from outside the building or through a common hall.²² Both occupied and vacant housing units are included in the US Census' housing unit inventory, except that recreational vehicles, boats, vans, tents, railroad cars, and the like are included only if they are occupied as someone's usual place of residence. Vacant mobile homes are included if they are intended for occupancy on the site where they stand. Vacant mobile homes on dealers' sales lots, at the factory, or in storage yards are excluded.²³

A housing unit is occupied if it is the usual place of residence of the person or group of persons living in it, or if the occupants are temporarily absent.²⁴ If all the persons staying in the unit at the time of the census have their usual place of residence elsewhere, the unit is classified as vacant.²⁵ A household includes all the persons who occupy a housing unit as their usual place of residence.²⁶ A housing unit is vacant if no one is living in it at the time of enumeration, unless its occupants are only temporarily absent.²⁷ Units temporarily occupied at the time of enumeration entirely by persons who have a usual residence elsewhere are classified as vacant.²⁸

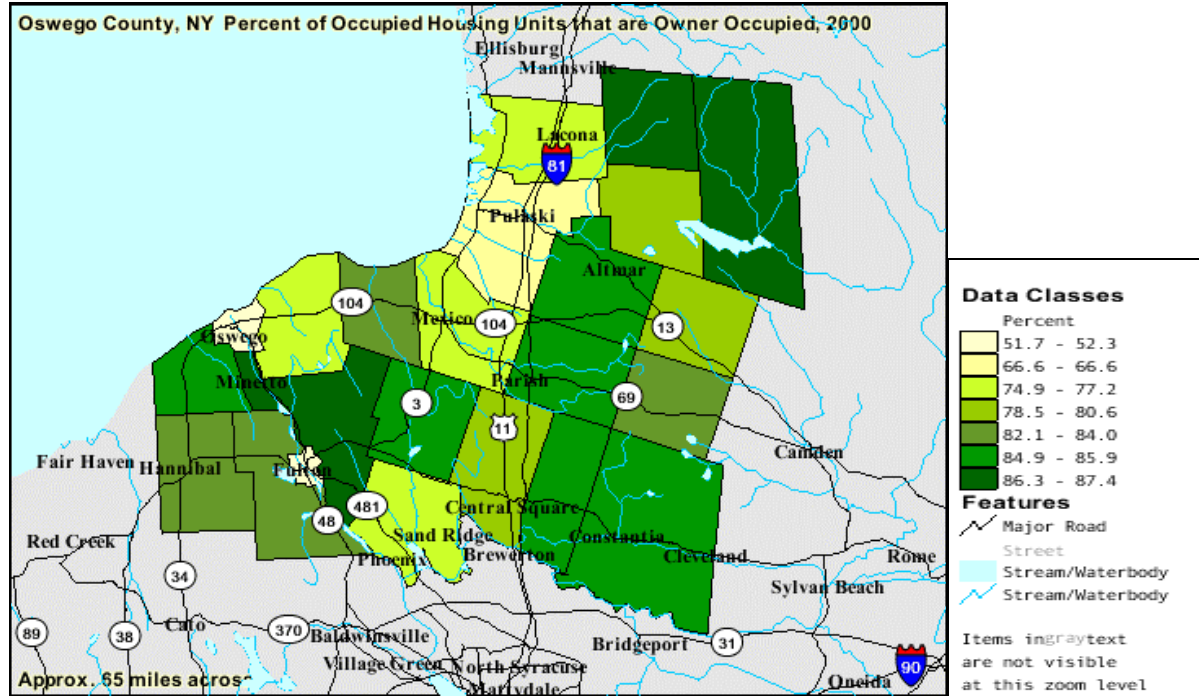
In 1990, Oswego County had a vacancy rate of 12.6%, increasing to 13.8% in 2000 an increase of 1.2%.²⁹ Vacancy rates can indicate distress. Vacancy rates increased in six (6) of the ten (10), 60% of the villages and in both cities. According to Pendall, "vacancy rates in Upstate NY grew from 45 of Upstate's 53 cities, and only in the Hudson Valley region did more than

one city not experience rising vacancy rates. Vacancy rates also rose in 292 of 412 villages that existed in both 1990 and 2000, but except in villages with fewer than 1,000 residents, vacancy rates are generally lower than those in cities; villages with populations exceeding 5,000 have comparatively healthy cumulative vacancy rates of 6.0 percent.” ³⁰

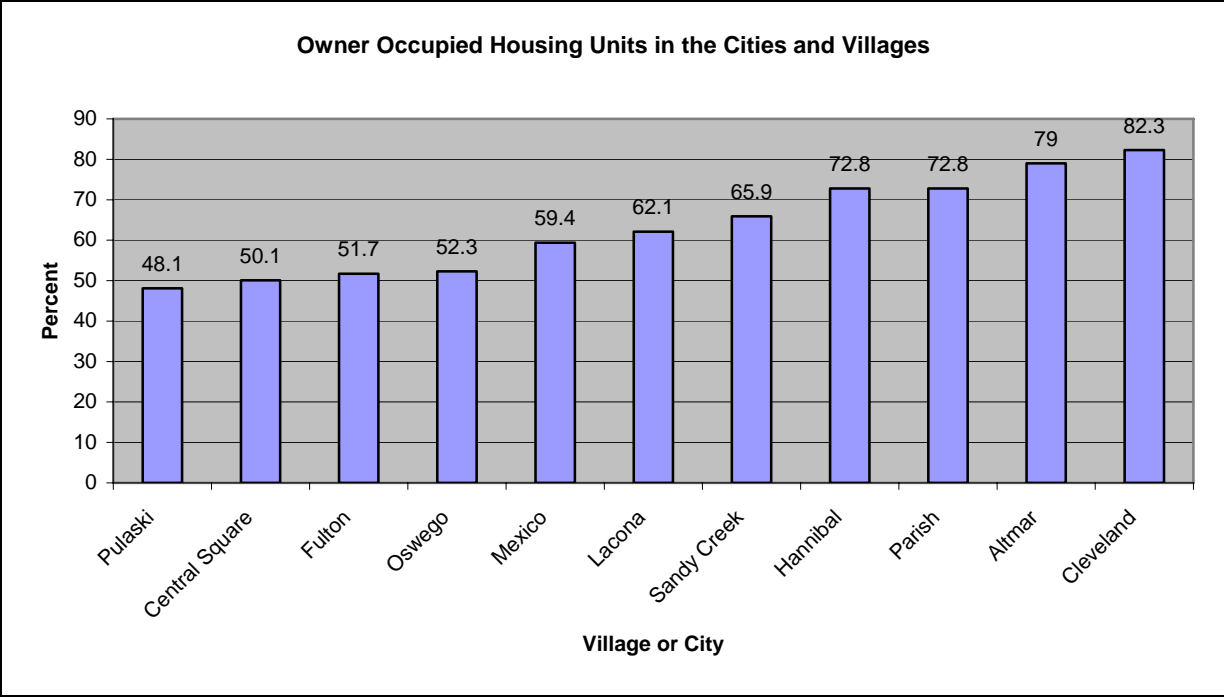


Source: US Census Bureau, 1990, 2000

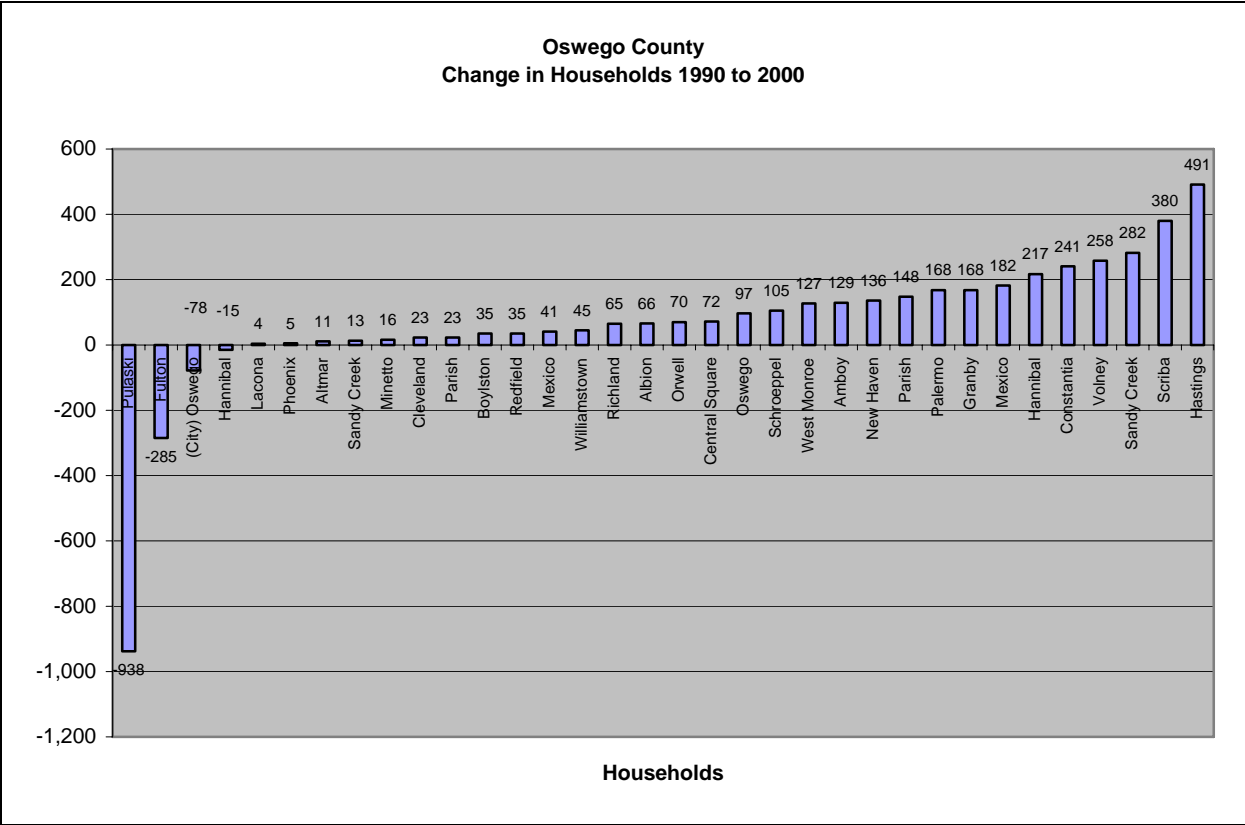
Owner Occupied Housing Units



Cities have much lower homeownership rates than do towns or villages, and these rates have been falling despite national trends toward higher home ownership.³¹ This trend is also present in Oswego County. As shown in the thematic map above the City of Fulton (51.7%) and City of Oswego (52.3%) as well as the Town of Richland (66%), Pulaski (51.9%) all have a lower percentage of homeownership than other communities in Oswego County.³² According to Pendell, "For all of Upstate New York, the home ownership rate grew from 67.0 to 67.7 percent in the 1990's. In Upstate cities, however, homeownership fell from 46.8 percent to 45.9 percent. And as a consequence of weak housing demand, cities' housing stock is also old. Over half of the housing units in Upstate cities in 2000 had been built before 1940, compared to only 20 percent of that in towns outside villages. Village housing is also aging, with 46 percent built before 1940. Many older housing units have deteriorated and no longer suit modern tastes, nor are they large enough to accommodate the household possessions of today's wealthier households."³³



Households



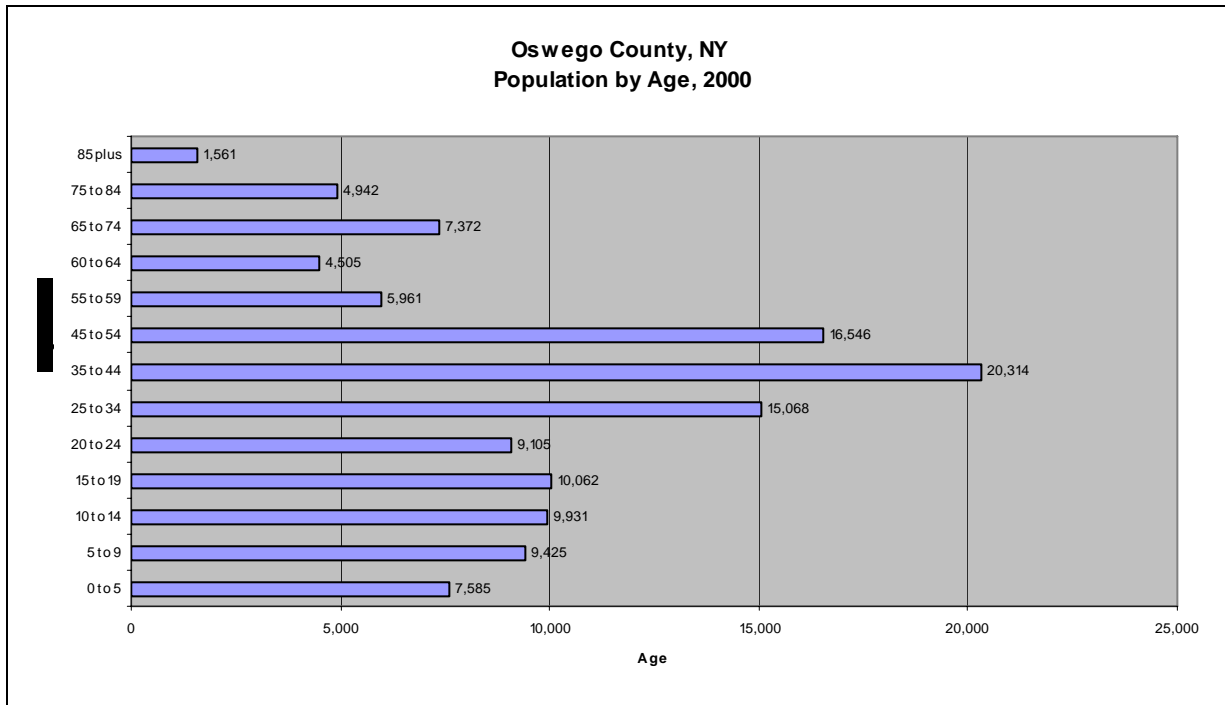
According to the U.S. Census Bureau, the number of households increased in all communities, except for the City of Fulton, City of Oswego, Village of Pulaski and Village of Hannibal.³⁴ Following the population trends, the largest increases occurred in the: Town of Hastings, Town of Scriba and Town of Sandy Creek. The increase in the Town of Sandy Creek may be influenced by the development and expansion at Fort Drum. Increases in the Town of Hastings are influenced by its proximity to the City of Syracuse and Interstate 81. While the increase in the number of households in the Town of Scriba is likely a result of outward migration from the City of Oswego and its lower real property taxes. The total change in number of households from 1970 to 2000 for each community in Oswego County and as a whole, is depicted in two bar graphs in the appendix.

Sex and Age

According to the 2000 US Census, 49.4% (60,402) of the population of Oswego County were males and 50.6% (61,975) were females.³⁵ The 2000 Census reported that the US male population grew slightly faster (13.9%) than the female population (12.5%) since 1990.³⁶ Since 1980, the male-female ratio has increased in 1990 was 95.1 which increased to 96.3 in 2000.³⁷ Oswego County's male-female ratio was 97.5, 49.4 percent were males while 50.6 percent were females.³⁸ According to the US Census, there were more boys than girls born every year and the boys continue to outnumber girls through early childhood the male-female ratio declined with age after age 24.³⁹ The US male-female ratio decreased in the 15-24 year cohort to 105.1 to 92.2 for ages 55 to 64. In NYS the male-female ratio is 93.1.⁴⁰

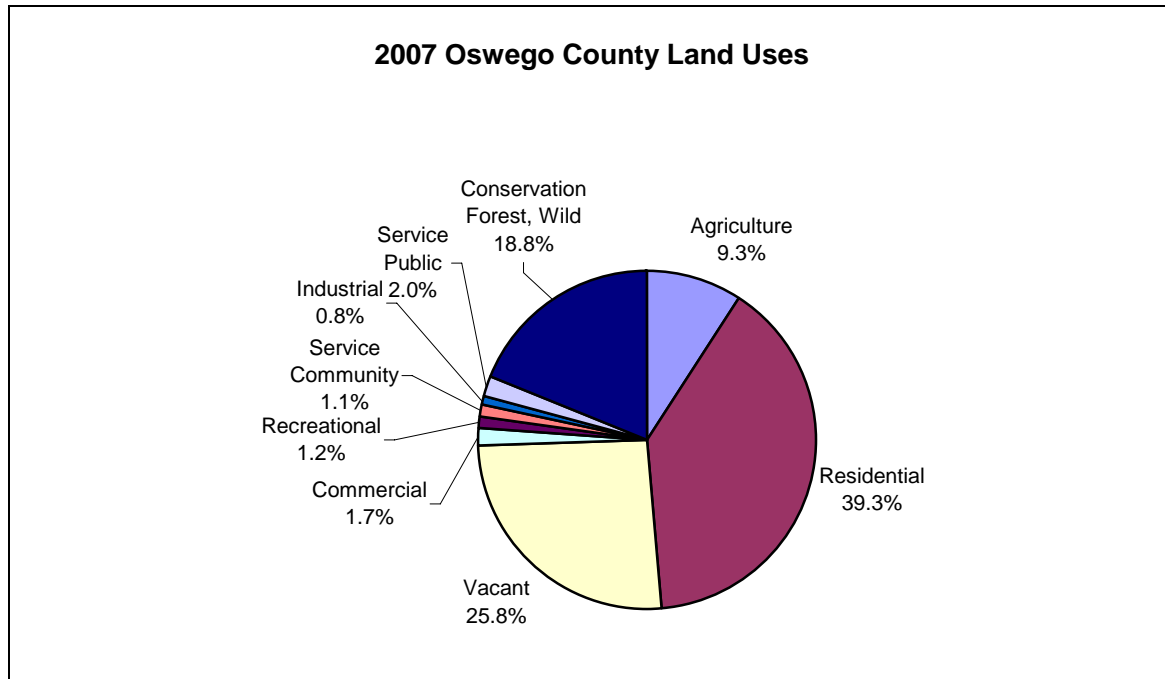
Median Age

The median age of the US was 35.3.⁴¹ The median age is highest in the Northeastern US at 36.8 in 2000.⁴² NYS's median age is 35.9. In addition the Northeastern US has the highest proportion of people age 65 and over, while it had the smallest proportion under age 18.⁴³ NY's population in 2000 had 24% of its population under 18 years of age and 13% of the population 65 years of age and older.⁴⁴ In Oswego County, 11.3% of the population is 65 year or older while 26.8% is younger than 18. The median age in Oswego County is 36.2 (+/- .4).⁴⁵



In comparing the age distribution of Oswego County and New York State, Oswego County has a higher percentage of younger persons age 5 to 24 and those 35 to 44 years of age.⁴⁶ In contrast, the proportion of persons in the age groups 25 to 34 years is lower in Oswego County than in NYS.⁴⁷ The percent population of persons over 60 years of age is greater at the state level. The age structure is related to potential labor force.⁴⁸ Nearly all jobs are held by people ages 21 to 64; there is only a small proportion held by workers over 65 years old or under 21 years old.⁴⁹ The number of persons in these latter groups determines other community needs such as medical care facilities and public schools for the younger population.

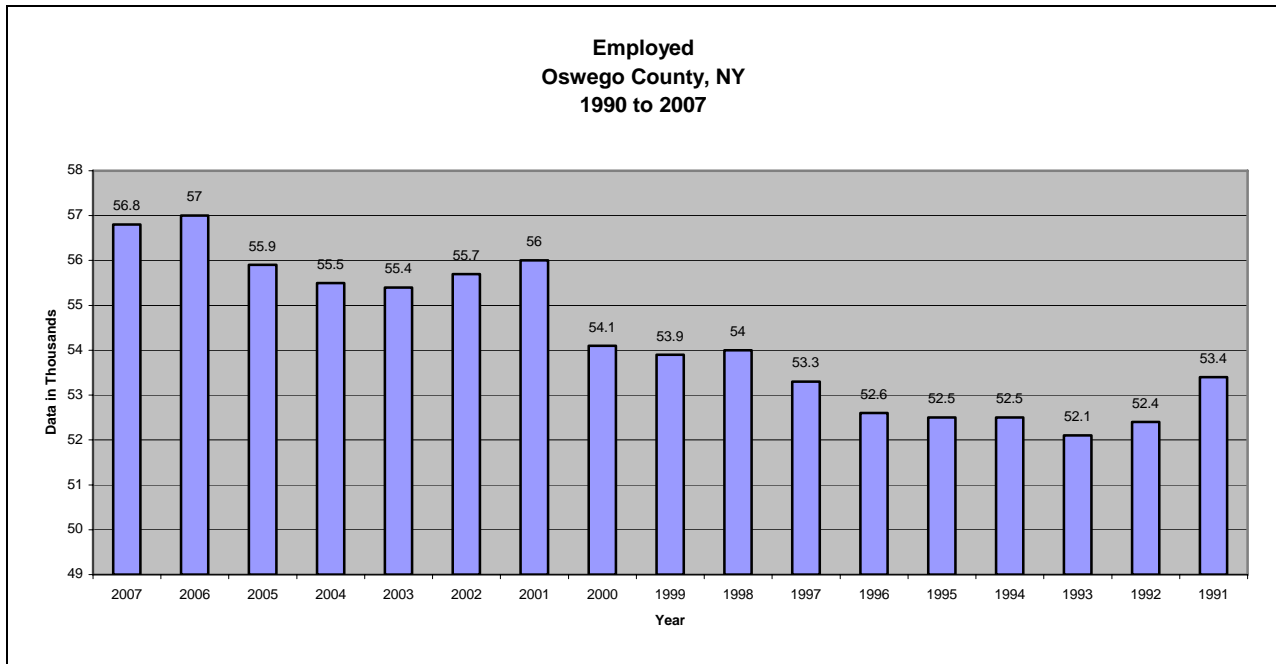
Land Use



Year	Agriculture	Residential	Vacant	Commercial	Recreational	Community		Public		Forest, Wild
						Service	Industrial	Service	Conservation	
1988	19.9%	33.9%	18.4%	1.5%	0.8%	1.1%	0.9%	3.5%		20.0%
1999	13.6%	36.7%	22.6%	1.9%	1.1%	1.1%	1.1%	2.7%		19.3%
2007	9.6%	40.5%	26.6%	1.8%	1.3%	1.1%	0.9%	2.0%		19.4%
99 to 07	-10.3%	6.6%	8.2%	0.3%	0.5%	0.0%	0.0%	-1.5%		-0.6%

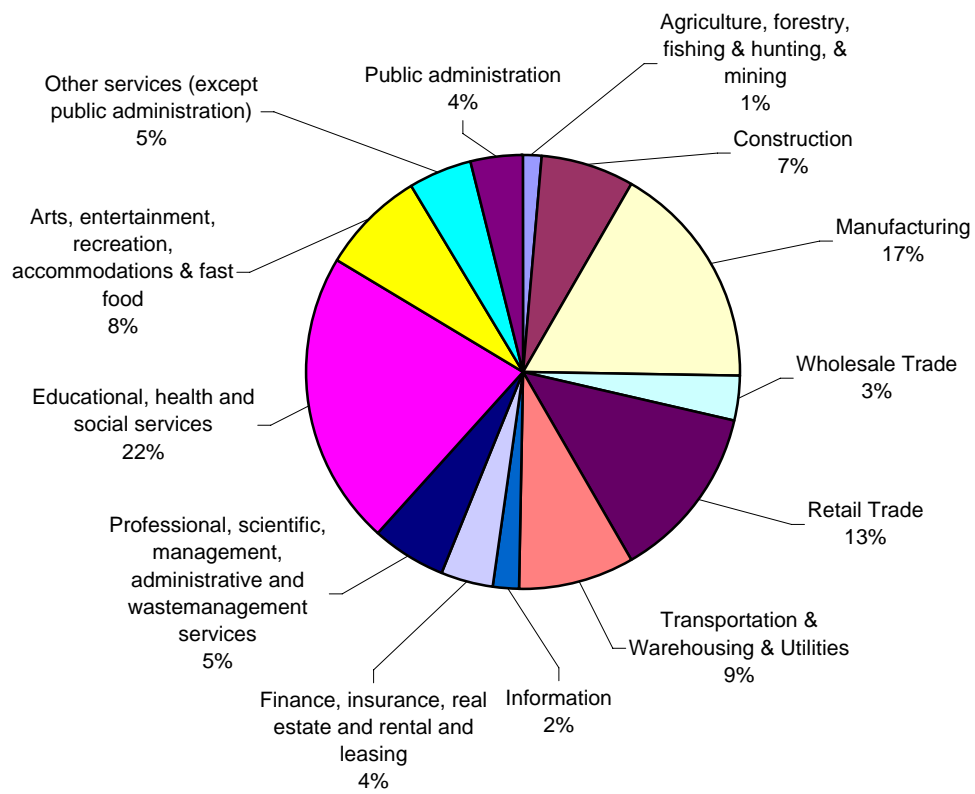
The table shown above shows general trends in land use patterns in Oswego County. This information is based on acreages and real property tax classification codes of the Oswego County Real Property Tax Records. Property classified as agriculture has decreased since 1988 while vacant and residential and recreational land uses have increased.⁵⁰

Employment

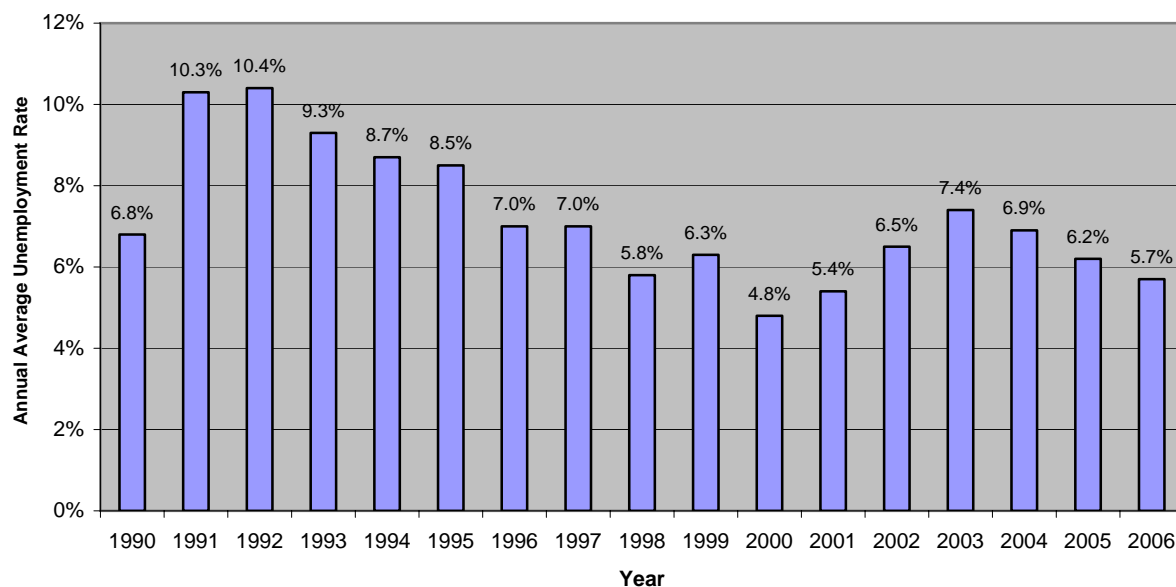


According to the NYS Department of Labor statistics, from 1990 to 1999, the annual average employed increased from 53,400 to 54,100 or 700.⁵¹ From 2000 to 2006 the annual average employed increased from 56,000 to 56,800.⁵² The educational, health and social services employees the highest percentage of employees over 16, followed by manufacturing at (17%).⁵³ The profile of selected economic characteristics shows the percentage of civilians over age sixteen (16) employed in the following industries.⁵⁴ The industries with the highest percentage of civilian workers are in the industries of: Educational, health and social services (22%) , manufacturing (17%) and retail trade (13%).⁵⁵

16 Years and Over Employed Civilian Population, 2000

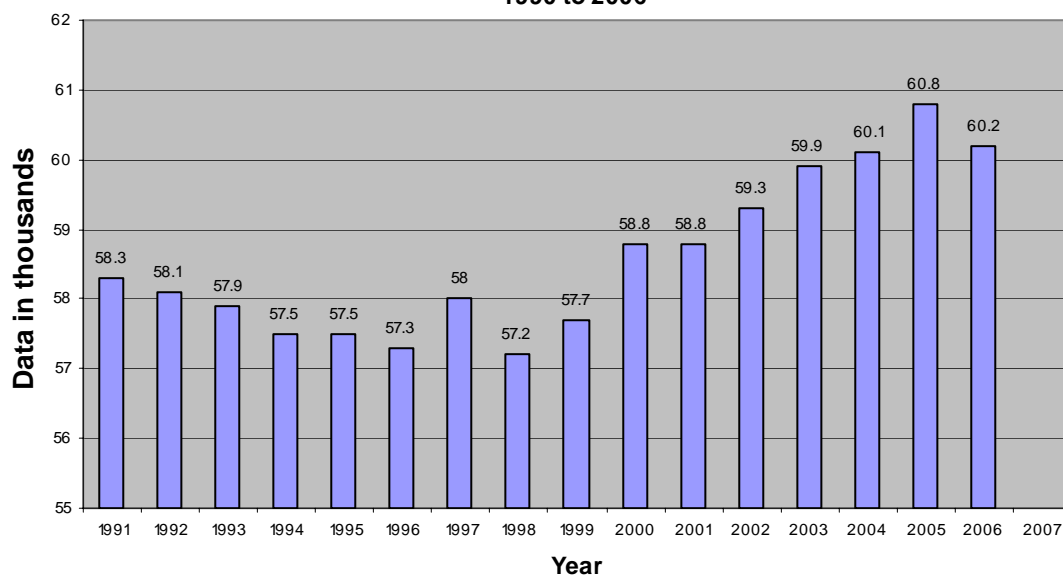


Oswego County Annual Average Unemployment Rate

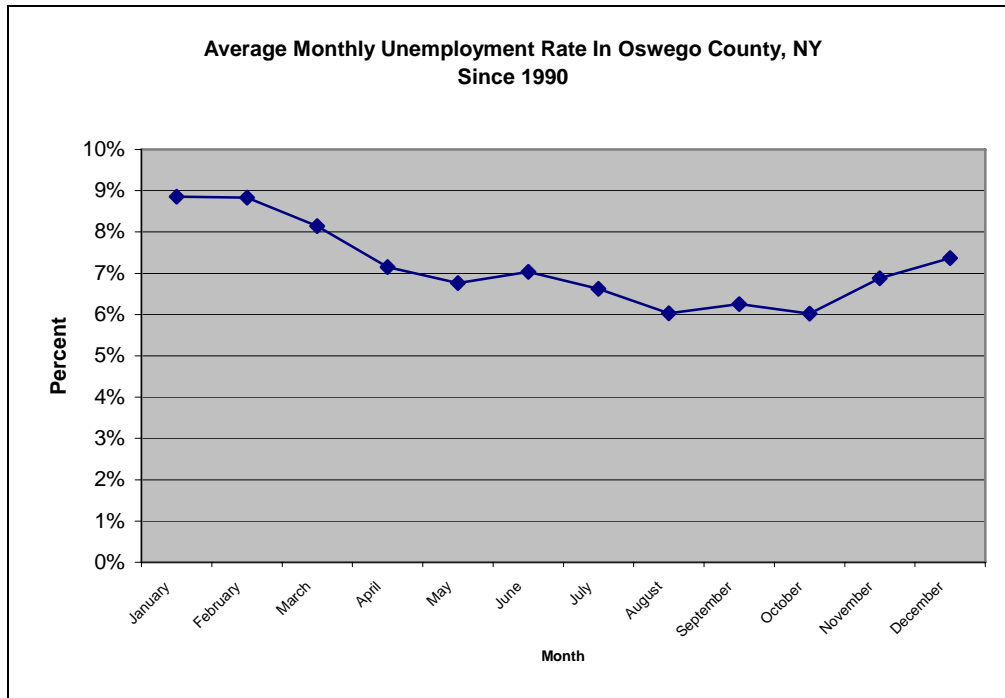


The Annual Average Unemployment Rates are shown in the table above and in 2006 the average unemployment rate was 5.7%, and since 1990 it has only been lower in 2000 and 2001. The Annual Average Labor Force is shown in the table below.⁵⁶

Annual Average Labor Force Oswego County, NY 1990 to 2006



The Average Monthly Unemployment Rate in Oswego County since 1990 is shown in the table below. Unemployment is generally higher during the months of January and February and lowest in August and October.⁵⁷



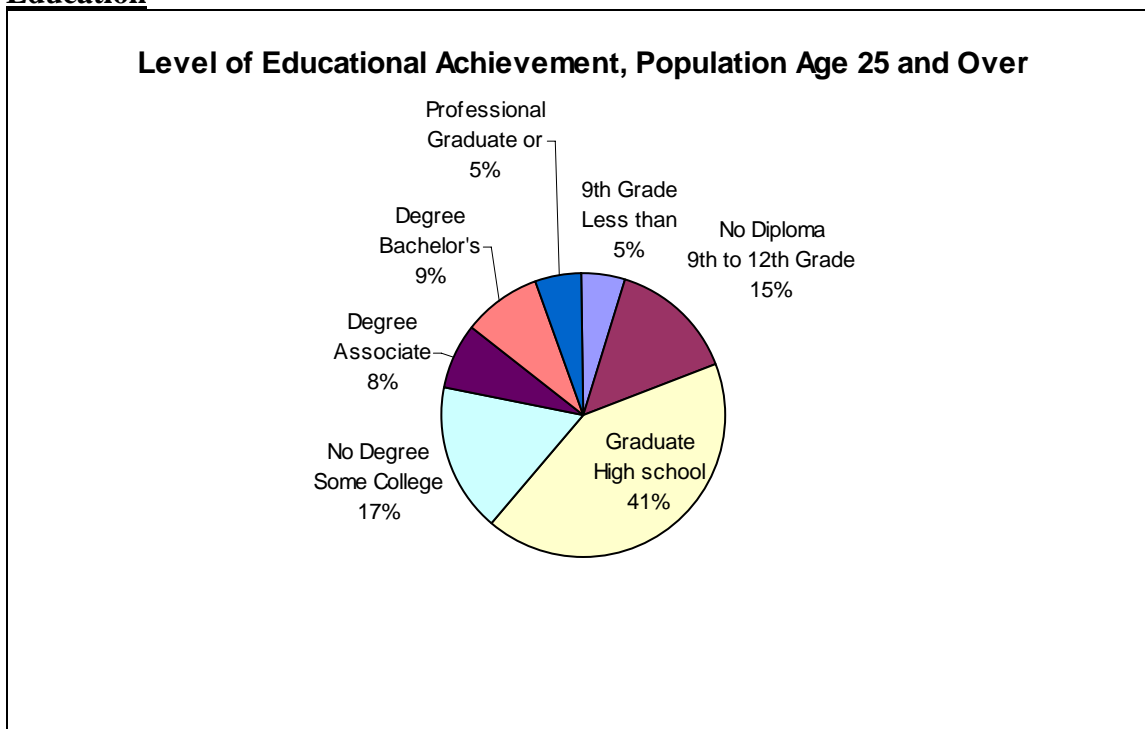
Transportation

According to the US Census, 2000, the percent that worked outside the County is reflected in a bar graph in the appendix. The lowest percentage of those commuting out of the county for work lived in the Town of Scriba, Town of Oswego and Minetto.⁵⁸ The highest percentage of those commuting outside the county were reflected in West Monroe, Schroepel, Village of Cleveland and Town of Hastings.⁵⁹

According to the US Census, 2000, the mean travel time to work in Oswego County is 24.4 minutes.⁶⁰ Those in the City of Oswego have the lowest travel time at 16.6 minutes and those in Boyston have the highest travel time at 40.7 minutes.⁶¹ A bar graph is included in the appendix showing the mean travel time to work for each community in Oswego County.

The majority of workers 16 years and over drove alone to work with the highest percentage occurring in the Town of Scriba (89%), and the lowest percentage in the Village of Cleveland (68.1%).⁶² According the 2000 Census, 11.6% of workers 16 years and over car pooled, with the highest percentage occurring in the Village of Altmar (29.6%) and the lowest percent in the Town of Oswego (6.2%).⁶³ The community with the highest percentage of those working at home was Town of Boyston (13.6%) and the lowest was the Town of Orwell (.9).⁶⁴ The Town of Oswego reflected the highest number of worker walking to work (18.9%) and noone reported walking to work in Boyston or Palermo.⁶⁵ .8% of those workers 16 and over reported that they used public transportation to get to work.⁶⁶ These modes of transportation and percentage of workers 16 years and over are reflected in the graphs in the appendix.

Education



Above is a pie chart showing the level of educational achievement in the year 2000 and the population over 25 years of age. 41% of those over 25 years old have a high school diploma; while 24% don't have a high school diploma.⁶⁷ The appendix includes pie charts showing each municipality and the level of educational achievement. Also included is a bar graph showing each level of education for all the communities in Oswego County, allowing comparison between communities.

Housing Characteristics

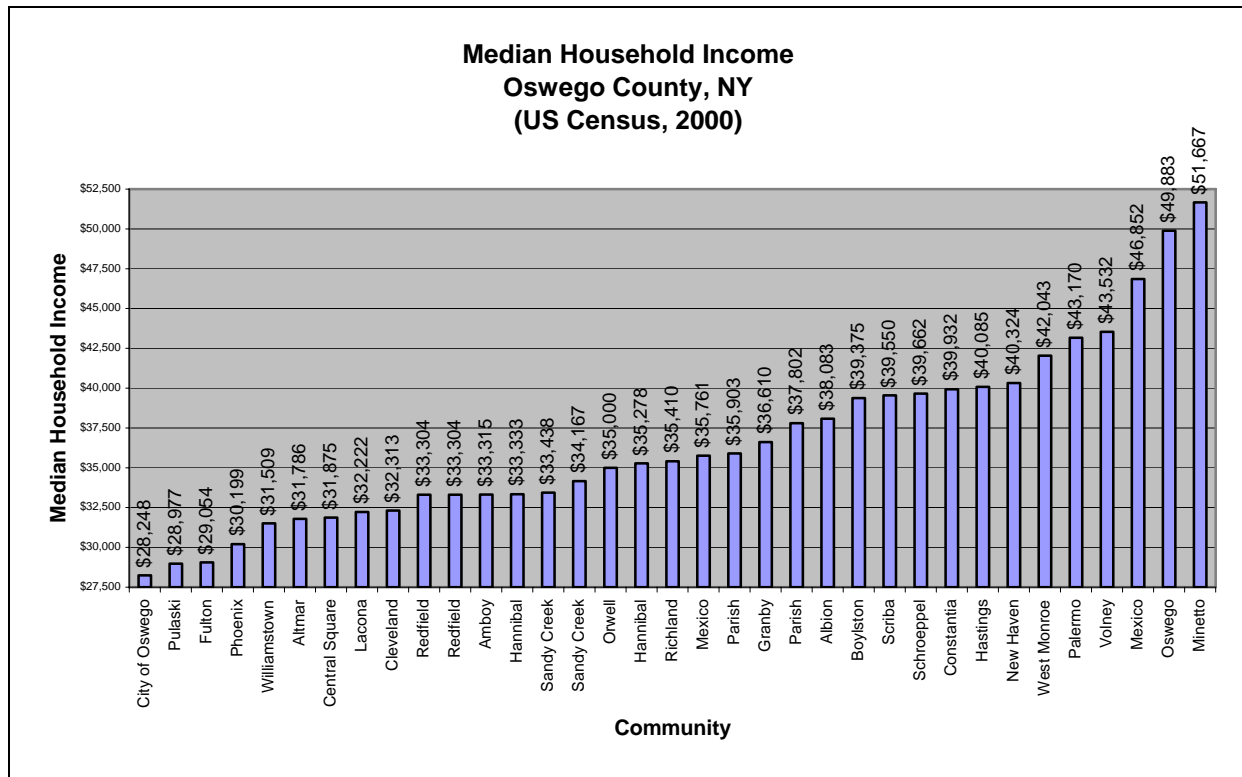
Nationally the housing inventory increased 13.4% or 13.6 million units with the highest growth rates occurring in the Southern region of the United States (17.5%). The number of housing units also increased in the West (16.7%), Midwest (10.1%) and Northeast (6.6%). New York State experienced a 6.3% increase in housing units over ten years (1990 to 2000). From 1990 to 2000, the number of housing units in Oswego County increased to 4,283 or by 9%. Counties adjacent to Oswego County experienced the following growth: Oneida (2%), Onondaga (3%), Cayuga and Jefferson both increased by 7%, Madison and Cayuga by 8%, Lewis (15%).⁶⁸

Income

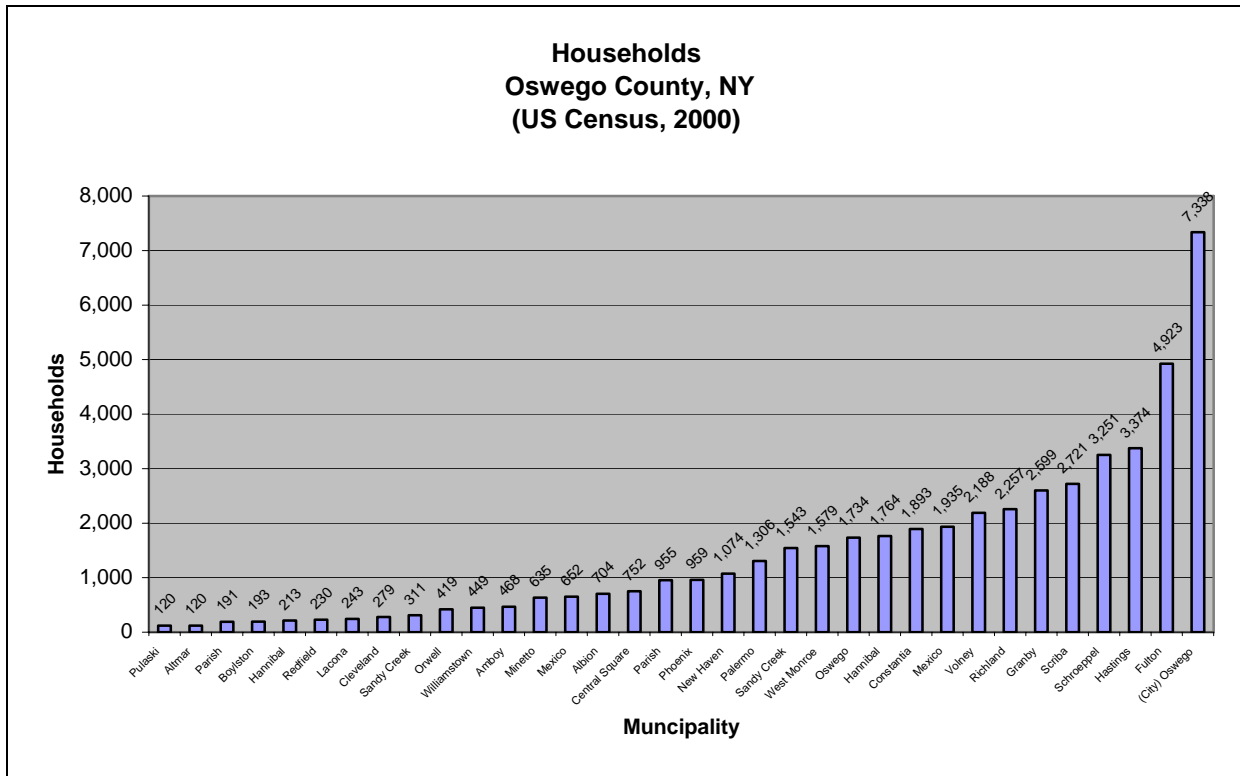
Household Income

Household income is the sum of money (income) received in the previous calendar year by all household members 15 years old and over, including household members not related to the householder, people living alone, and others in non-family households.⁶⁹ According to the US Census, 2000, Profile of Selected Economic Characteristics the median household income for NYS is \$43,393 and in Oswego County it is \$36,598.⁷⁰ According to American Factfinder, NY's estimated median household income in 2006 (inflation-adjusted dollars) was \$51,384 (+/-

\$255).⁷¹ The US estimate is \$48,451 (+/- \$82).⁷² The median household income reported here was produced through statistical modeling. The median household income for each municipality in Oswego County is shown in the table below.



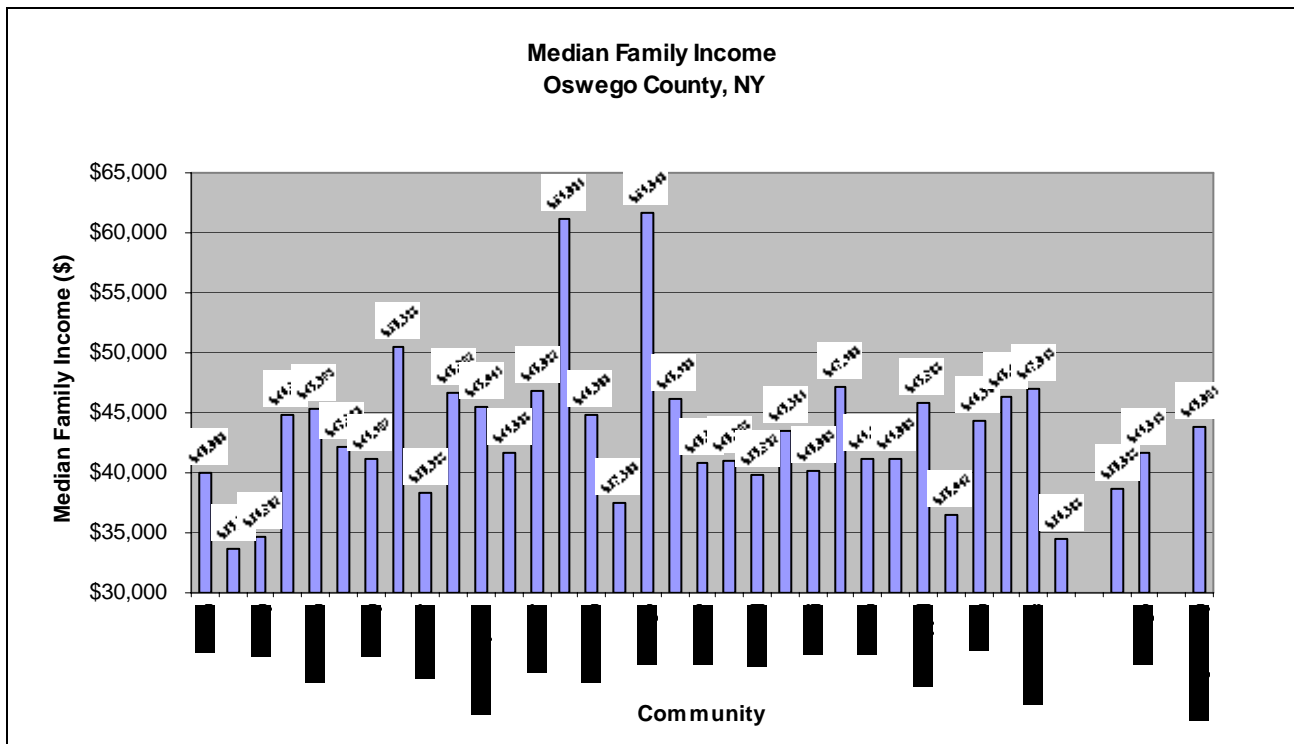
The towns with the highest median household income are located in the Towns of Minetto, Oswego and Mexico. The communities with the lowest median household income are located in the City of Oswego, Village of Pulaski and City of Fulton.



According the US Census, a household includes all the persons who occupy a housing unit. A housing unit is a house, an apartment, a mobile home, a group of rooms, or a single room that is occupied (or if vacant, is intended for occupancy) as separate living quarters. Separate living quarters are those in which the occupants live and eat separately from any other persons in the building and which have direct access from the outside of the building or through a common hall. The occupants may be a single family, one person living alone, two or more families living together, or any other group of related or unrelated persons who share living arrangements. (People not living in households are classified as living in group quarters.)⁷³ The bar graph above shows the ranking and number of households in each community.

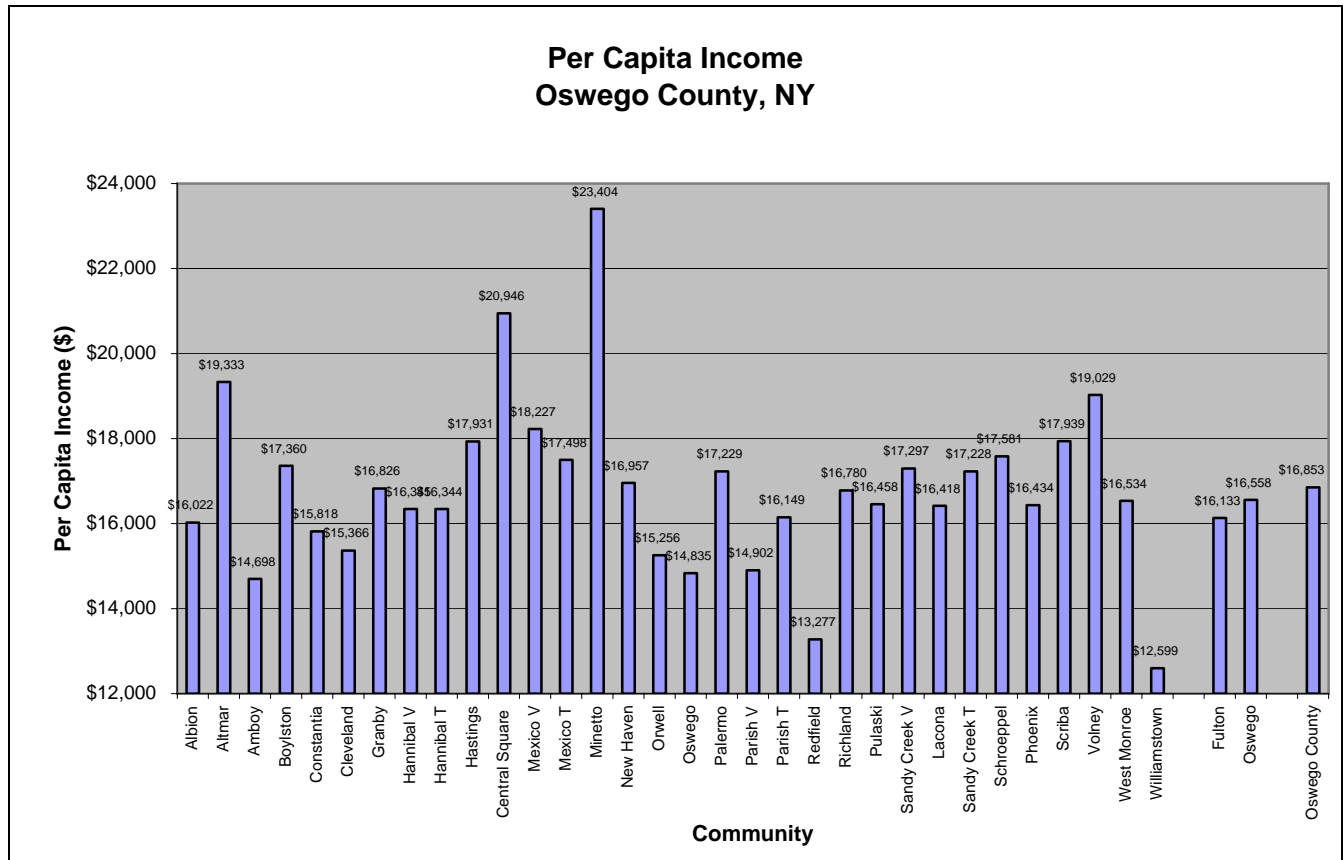
Median Family Income

The 1999 median family income in NYS is \$51,691 and in Oswego County it is \$43,821.⁷⁴ Median family income for Oswego County communities is shown below. The highest median family incomes are reported in the Town of Oswego, and Minetto, with the lowest median family incomes reported in the Village of Altmar, Town of Williamstown and Amboy.



Per Capita Income

The 1999 per capita income in New York was \$23,389 and in Oswego County the per capita income was \$16,853.⁷⁵ Per capita income is the mean money income received in 1999 computed for every man, woman, and child in a geographic area. It is derived by dividing the total income of all people 15 years old and over in a geographic area by the total population in that area. Note - income is not collected for people under 15 years old even though those people are included in the denominator of per capita income. This measure is rounded to the nearest whole dollar. Money income includes amounts reported separately for wage or salary income; net self-employment income; interest, dividends, or net rental or royalty income or income from estates and trusts; Social Security or Railroad Retirement income; Supplemental Security Income (SSI); public assistance or welfare payments; retirement, survivor, or disability pensions; and all other income. Per capita income is often used as a measure of wealth of the population.⁷⁶

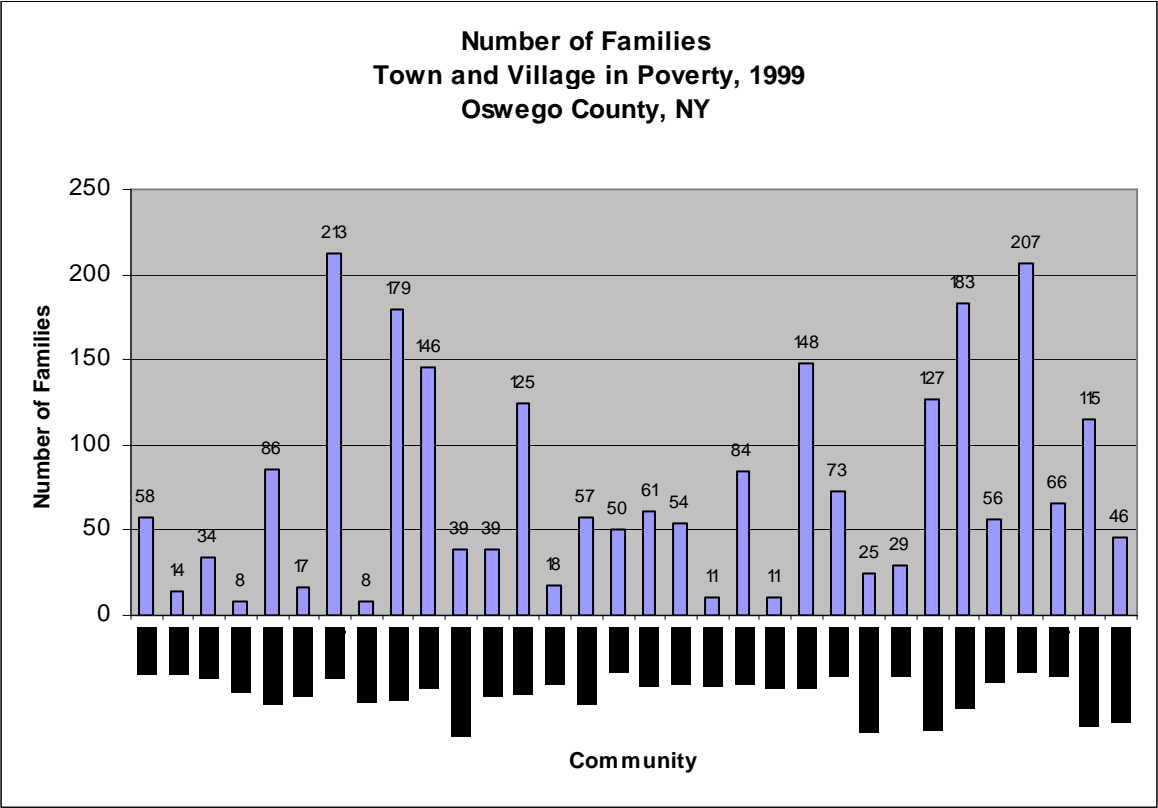


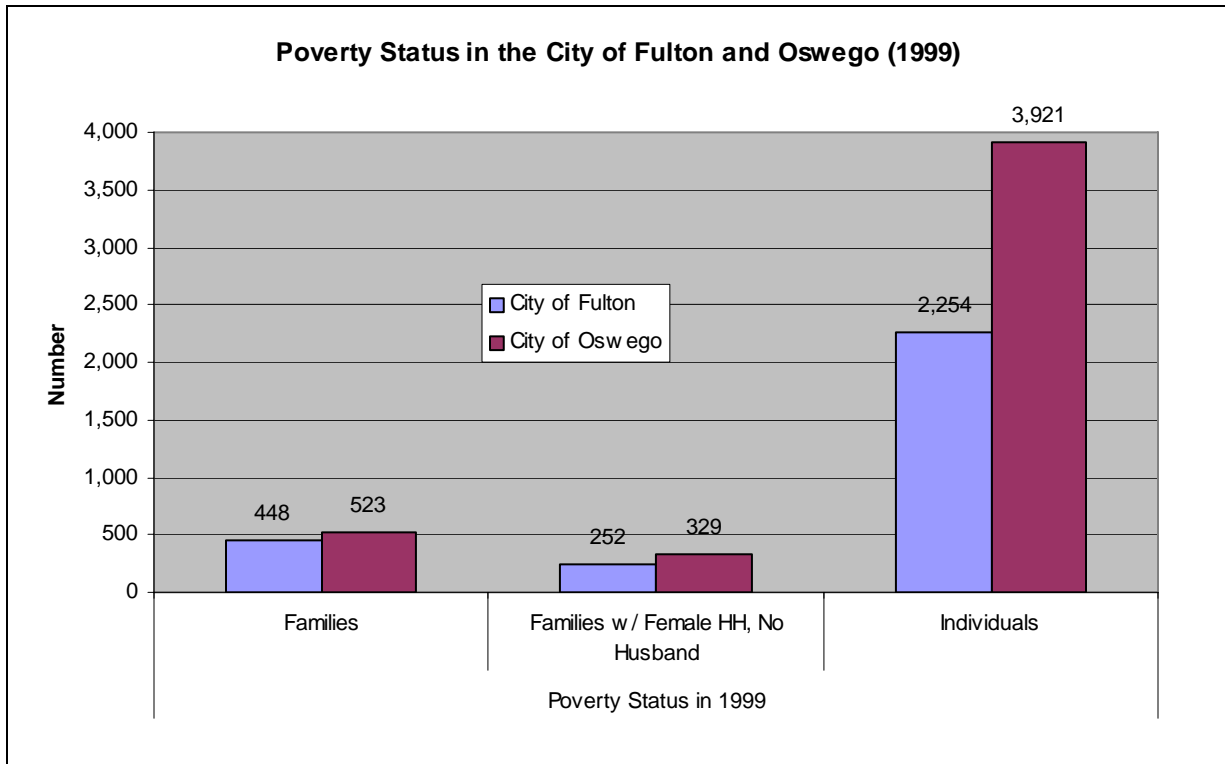
Poverty

Poverty is defined by the US Census Bureau, Economics and Statistics Administration in the publication, "Poverty: 1999: Census 2000 Brief" which is included in the appendix. According to the US Census Bureau, New York State had 11.5% of all families below the poverty level in 1999 and it is estimated that there are 14.2% (+/- .2%) of the population below the poverty level in the last twelve months (1/10/08).⁷⁸ The estimated poverty level for the United States during that same time frame was 13.3% (+/- .1).⁷⁹ During this same time frame, 9.7% of all

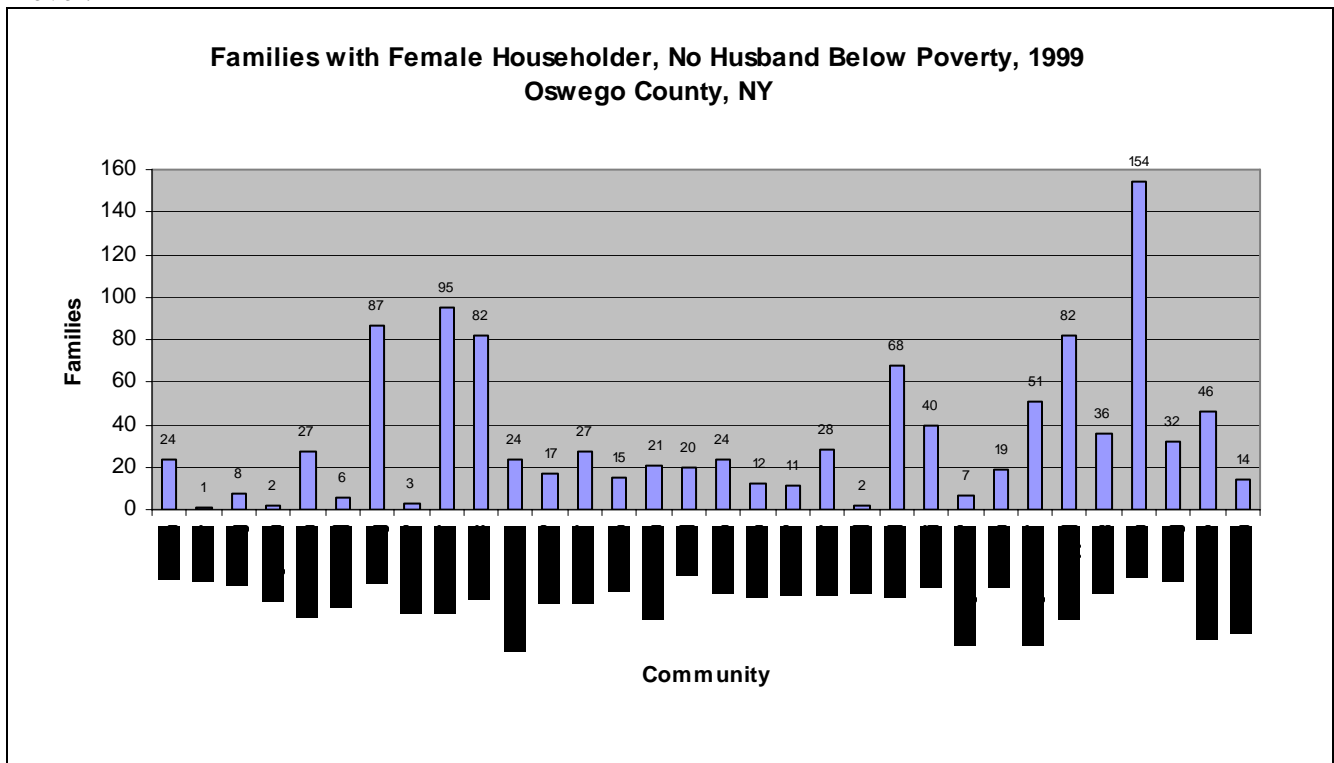
families in Oswego County were below the poverty level, 31.6% of all families with female householders, no husband present were below the poverty level and 14% of all individuals were below the poverty level in 1999.⁸⁰

The two graphs shown below indicates the number of families in the towns and villages and cities in poverty in 1999. The communities with the highest number of familes in poverty were the City of Oswego (523) and City of Fulton (448) and the Town of Granby (213) and Town of Scriba (207).

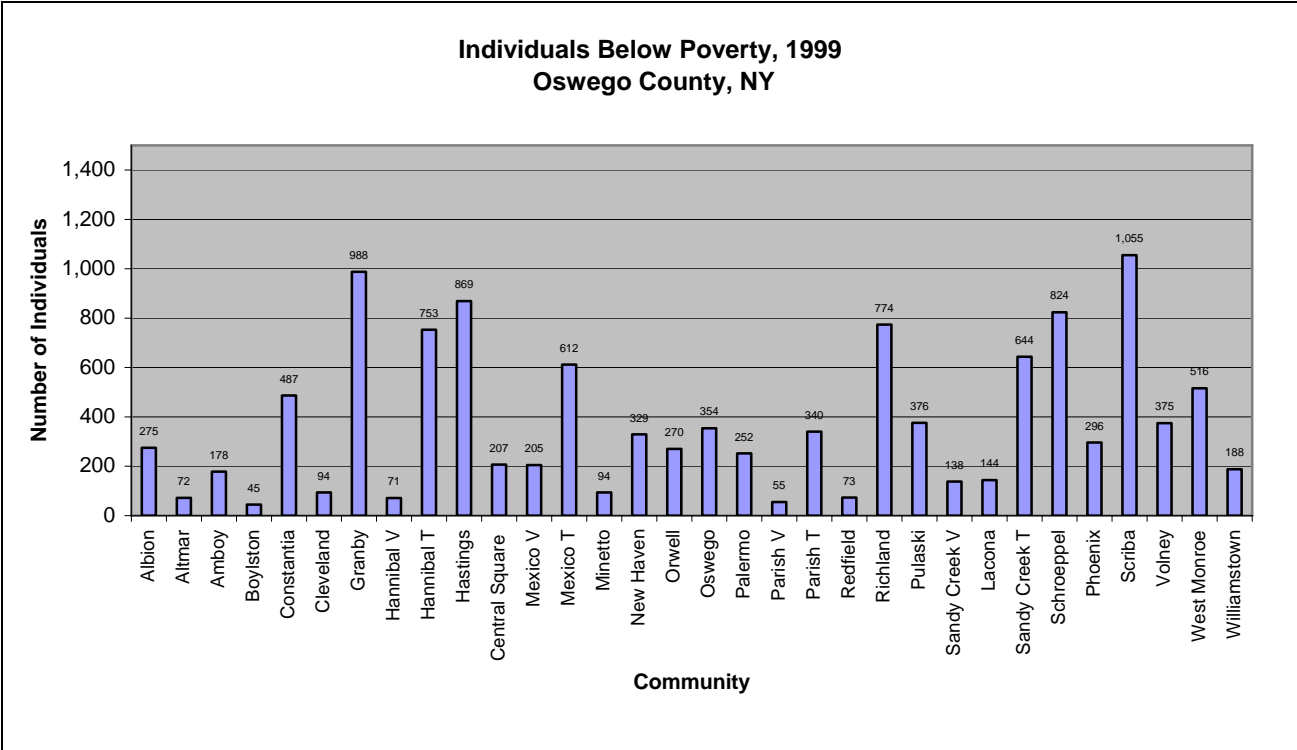




In addition, the Cities of Oswego (329) and Fulton (252), and Town of Scriba (152) have the highest number of families where the female householder (no husband) are below the poverty level.



The greatest number of individuals below poverty in 1999 lived in the City of Oswego, Fulton and Towns of Scriba, and Granby.



END NOTES

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- ⁴ US Bureau of Census, 1990 Census of Population and Housing, Summary Tape File 1 (100% Data) Matrices, P1, P3, P15, P16.
- ⁵ United States Bureau of Census, 2000 Census of Population and Housing, Summary Tape File 1 (100% Data).
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- ⁷ United States Department of Commerce, United States Census Bureau, Census 2000, Table DP-1. Profile of General Demographic Characteristics: 2000.
- ⁸ Oswego County Department of Planning and Community Development, Oswego County Data Book, 1994, p. II-2.
- ⁹ Ibid, 1989, p. 7.
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³² U.S. Census Bureau, Census 2000 Thematic Map, Summary File 1, “TM-H001. Total Housing Units: 2000” No date, 1/4/08, <http://factfinder.census.gov>.

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D. OVERVIEW OF THE COMPREHENSIVE PLAN

The Oswego County Comprehensive Plan addresses nine subject areas based on NYS legislation defining a comprehensive plan. Sections of the plan address: Natural Resources and Environment; Historic Resources; Transportation; Infrastructure; Housing; Community Facilities; Parks, Recreation and Open Space; Economic Development; and Land Use and Community Design. Each section includes an inventory or profile of existing conditions, a discussion of relevant trends, an analysis of opportunities and constraints, and the goals, objectives, and strategies of the plan relating to that plan element. A separate implementation section describes how progress in achieving goals and objectives will be measured and monitored and the resources that are potentially available to support the plan's strategies. It is recognized that the goals are broad statements that represent long range community hopes and desires. Objectives are more specific steps toward achieving a goal but which will take some time to implement and will require periodic review every five to ten years. Strategies are more specific actions which should at least be initiated within a five year time horizon and which should be monitored annually and reviewed at least every five years.

. Plan Contents

The Natural Resource and Environment section describes the resources in major ecological zones within the county and within important corridors along rivers and lakeshores. It recommends measures to enhance and conserve the multiple values of our natural resources through cooperative management and public and private stewardship.

The discussion of Historic Resources explains the legal framework for historic preservation efforts and how historic preservation tools can be an integral part of an overall community revitalization process. This section reveals how historically significant structures and elements in our landscape can enhance our understanding of the communities in which we live.

Under Transportation, the roads and other elements of our transportation systems are described and ways we can effectively manage these resources in tight financial times are explained. The importance of maintaining an integrated transportation system and Federal government initiatives to support "intermodalism" are explained.

The Infrastructure section discusses those elements of our communities which we often take for granted until a storm or break in a pipeline interrupts service. The existing water, sewer, power and telecommunication systems in the county are described and challenges and opportunities of changes occurring in the way these services are provided are discussed. Ways we can efficiently meet current and future needs are explained.

Housing is one of our basic human needs. The current makeup of our housing stock is described along with demographic and policy trends that will impact how we meet our community's housing needs in the future. Some creative alternatives to current types of housing development are suggested.

Community Facilities encompasses those facilities needed to provide a broad range of public and quasi-public services from education to medical care and public safety to child care. Financial challenges facing providers of these services and how they are affecting decision-making about current and future facility development are discussed.

Economic development means jobs, and Oswego County's employment trends and labor force are documented. Opportunities which may exist in a changing economy and strategies to capitalize on those opportunities are evaluated. All sectors of the economy are recognized as important to our future economic well being.

The Parks, Recreation and Open Space section starts with an inventory of the many recreational resources in the county and documents the increasing demand for water and trail related recreation. Parks and recreation opportunities are recognized both as a means to meet the needs of county residents and as an integral part of our tourism economy. Greenway and trail development opportunities are emphasized.

In Land Use and Community Design we consider the types of communities we will live in in the future. Strategies which can allow us to capitalize on all of our economic opportunities while retaining the natural beauty and rural and small town character we enjoy are identified.

Finally, the implementation section outlines how the plan's recommendations will be put into practice and how progress in achieving the plan's goals will be monitored and evaluated.

2. The Planning Process

This plan has been developed over a period of over two years utilizing a process which attempted to maximize the opportunity for public discussion and input regarding the issues facing the county as it moves into the 21st Century. The process began with a series of ten public meetings in 1995 soliciting public concerns regarding the plan's subject areas. Meetings were held at locations throughout the county to provide residents from all areas with the chance to learn about and provide ideas for the plan. During this process we received input from over 290 participants, many of them representing associations with combined county memberships in the thousands. (Appendix I-B)

As the plan developed, specific outreach efforts were extended to many organizations to confirm that our assessment of the sentiment expressed at this first round of public meetings was on target. Among the many groups we made presentations to and received additional feedback from were the Goals 2000 Task Force, the Oswego County Sportsmen's Federation, the County Snowmobile Club Association, the Greater Oswego Chamber of Commerce, the Association of Town Supervisors, Operation Oswego County, Inc., the Oswego Housing Development Council, the Heritage Foundation of Oswego, and the Fulton Neighborhood Action Committee. The reaction from these groups has been positive and supportive.

A draft plan based on this input was presented at a series of four public meetings in the spring of 1996 held in Pulaski, Central Square, Fulton and Oswego. A detailed survey on plan strategies was distributed to attendees at these meetings and the results are compiled in Appendix I-C. All public input was considered and evaluated. (Appendix I-D - summary of the public comments) Public comments were reviewed at two workshops with County Planning Board members prior to finalization of this plan.

Finally, a workshop was held with Planning Board members and the County Legislature and a public hearing before the County Legislature was held on March 13, 1997, prior to approval and adoption by the Legislature.

We are encouraged by the strong interest and support expressed for this plan by many community leaders and ordinary citizens. Their ongoing support and interest will be essential to successful implementation of the plan's strategies.

II. NATURAL RESOURCES AND ENVIRONMENT

A. INVENTORY

1. Introduction

a. Ecological Zones and Greenway Corridors

The natural resource and environment component of the Oswego County Comprehensive Plan is organized around ecological zones and greenway corridors. The ecological zones are based upon the 1982 Ecological Zones of Northern New York developed by the NYS DEC Division of Fish and Wildlife. These zones were distinguished on the basis of differences in both natural and social factors. Natural factors were defined as features of the environment other than those resulting from man=s activities and include: bedrock geology, land form and topography, soil productivity, climate, and forest type. Social factors are affects of man=s activities and include land ownership, land use, road access and human population density. Both social and natural factors have a fundamental influence on the occurrence, distribution and abundance of wildlife. The ecological zones include the Ontario Drumlins, Tug Hill, Erie-Ontario Plain, Eastern Ontario Plain and Oswego Lowlands. (Map 7)

Another category used for planning purposes are the Lake Ontario Coastal Zone, Oswego/Oneida River and Salmon River Corridors. These areas have been identified for greenway protection (Map 6) and are important for wildlife habitat, scenic views and recreational experiences enjoyed by tourists and residents.

b. Glacial Geology

The current landscape of Oswego County was shaped mainly by deposition of glacial drift and lake sediments plus the subsequent weathering and erosion of surface and bedrock materials. The County falls within the two physiographic regions of the Erie-Ontario Lowlands and Tug Hill Plateau with two thirds of the County in the Erie-Ontario Lowlands. During the retreat of the glaciers about 10,000 years ago, water from Lake Ontario drained eastward through the Mohawk Valley to the Hudson River due to the damming of the St. Lawrence by the remaining ice sheet. During this period, most of the County was beneath glacial Lake Iroquois. Lake Iroquois is the early predecessor of Lake Ontario and extended to an outlet at the east end of what is now Oneida Lake. As the glacier receded, the St. Lawrence Valley was opened and the waters reversed flow and drained from Lake Ontario to the northeast by way of the St. Lawrence River.

As a result of this glacial period the three most common landforms in the county are drumlins, glacial moraines, and till plains. Other post glacial landforms are eskers, ancient beach formations, barrier bars, deltas, alluvial fans, stream terraces, kame terraces, kame moraines, kettle holes and lake and outwash plains.

c. Climate

The climate of Oswego County is of the continental type, influenced by the gently rolling topography, the prevailing westerly winds, and proximity of Lake Ontario. Temperatures are typical of those in the northeastern United States and western Europe, but are tempered by the influence of Lake Ontario. Monthly precipitation is well distributed throughout the year, but ranges from an annual average of 34 inches in the southwest to about 55 inches in the remote northeastern Tug Hill areas.

Oswego County lies in the Eastern Lake Ontario snowbelt, an area from which annual winter snowfall decreases in all directions. Cold, dry polar air masses absorb heat and moisture as they pass eastward over Lake Ontario. Rising elevations cool the air, causing snow to precipitate. Seasonal snowfall averages from something less than 90 inches in the southwest to more than 200 in the Tug Hill areas.

The Tug Hill region receives a generous supply of precipitation at approximately 55 inches per year. It has a short growing season and is the wettest and snowiest region in New York State. Annual snow accumulation provides most of the region's usable water to replenish surface stream flows and groundwater aquifers.

Frost may be expected from early October until late May, with average annual front dates occurring near the end of October and the end of April.

The prevailing winds shift towards the north-westerly in winter and the south-westerly in the summer. At times, the southerly winds of summer persist throughout the fall and even into December and January.

d. Wetlands

The complex glacial geology of Oswego County has resulted in a number of significant hydrological features including surface waterbodies, aquifers and wetlands. State regulated wetlands of 12.4 acres or more account for 80,505 acres or 13 percent of the land area. Three classes of State wetlands are found in the county with Class I being the most significant in terms of wildlife and hydrological value. A breakdown of State wetland acreage by class is provided in the following table.

Table II-1: New York State Regulated Wetlands in Oswego County

	<u>Acres</u>	<u>% of Wetlands</u>	<u>% of Land Area</u>
Class I	53,414	66%	8.6%
Class II	20,243	25%	3.3%
Class III	<u>6,848</u>	<u>9%</u>	<u>1.1%</u>
TOTAL	80,505	100%	13%

Source: Oswego County Department of Planning and Community Development

2. Ecological Zones

a. Tug Hill

Topography/Geology/Soils - The Tug Hill Region is normally identified by the boundary of the 500 foot elevation contour which coincides with the approximate beach line of ancient Lake Iroquois. The region is an ancient peneplain which consists of an erosion resistant sandstone lying above shale and limestone. Much of the region is covered with numerous glacial features such as beach deposits, kame moraines and kettle lakes.

Biologists have separated the Tug Hill region into three ecological zones to better facilitate wildlife management. Two of these zones are located in Oswego County, the Central Tug Hill and Transitional Tug Hill ecozones. The Central Tug Hill lies roughly at the Tug Hill region=s center and includes the Towns of Redfield and Orwell. The Transitional Tug Hill includes parts of the Towns of Parish, Albion, Williamstown, Boylston and Amboy. Within the Transitional Tug Hill region is an area called the Ontario Ridge and Swamplands which contains poorly drained soils and ridged ground moraines and swampy places that characterize its relief. The Tug Hill region offers remoteness, and excellent winter recreation, wildlife observation, hunting and trapping opportunities. The region has a gently rolling relief and the topography rises from west to east reaching the maximum elevation in the county at 1,725 feet in northeast Redfield. The region is relatively undeveloped.

The soils in the Tug Hill region are predominantly stony medium to coarse-textured, poor and imperfectly drained, highly acidic and derived from sandstone origin. (Map 10) They have low agricultural productivity. Soils in the region are rated as being fair for their potential to grow trees and are generally mixed, stony, sandy, wet, and shallow. Many biologists feel that the poor soils of the Tug Hill are more of a limiting factor to vegetative growth than harsh winters. Glacial till, medium textured soils which are well to moderately well drained can be found in an area north of the Hamlet of Orwell.

Hydrology - The Tug Hill has relatively few areas of open water which are critical for the feeding of waterfowl and migratory bird species. The Upper Salmon River Reservoir (Redfield Reservoir) is the largest man made water body in the region. The reservoir's surface area is approximately 5.28 square miles. The largest natural pond is North Pond, located in the Town of Amboy, which covers .34 square miles. Kasoag Lake is also located in the region and is an example of a kettle lake.

Water use in the region is low when compared to the total amount available annually. Groundwater resources include the Tug Hill Aquifer a 47 mile long, crescent shaped deposit of sand and gravel that flanks the western and southwestern edges of the Tug Hill Plateau. (Map 12) The aquifer extends discontinuously from Watertown Center in Jefferson County to Camden in Oneida County. The aquifer has a northwest/southeast orientation. The section of the Tug Hill Aquifer in Oswego County is sometimes referred to as the Lacona-Williamstown Aquifer. The Lacona-Williamstown Aquifer is composed of six types of deposits based upon texture and manner in which they were transported to their current site. These are sand, sand and gravel, silt and sand, till, alluvium, and organic materials. The potential groundwater yield is dependent upon geologic deposit, permeability and porosity.

The Redfield Aquifer is also located in the Tug Hill region. It is believed that the groundwater resource here is substantial. The aquifer is comprised of glacial outwash in river valleys of the North Branch of the Salmon and Mad Rivers. The outwash is thickest at the confluence of the two valleys. The potential well yields are estimated at 8 to 14 million gallons per day. The Happy Valley, Pulaski and Constantia Aquifers are also located in the Tug Hill region and relatively little is known about these resources.

Wetlands/Vegetation/Wildlife - The Central Tug Hill has a large number of wetlands and wetland complexes. (Map 9) This pattern is created by terraced ponds, kames and eskers. Peat and muck deposits are common in these wetlands. The majority of the wetlands associated with the Upper Salmon River Reservoir are emergent. Wetlands in the Central and Transitional Tug Hill are generally shrub swamps dominated by alder.

The Central Tug Hill region is dominated by uninterrupted deciduous, northern hardwoods with intermittent successional forests. (Map 13) Common trees are the American beech, maples, yellow birch and hemlock, white pine, spruce and fir. Trees of the Central Tug Hill provide an assemblage of seeds, cones, and leaves for food of a variety of birds and mammals. Cherry is an economically important common hardwood.

The Transitional Tug Hill area is made up of successional forests which include hardwood species overtaking the abandoned agricultural fields and cut over areas as well as coniferous plantations. (Map 13) The Oneida Lake Forest extends into parts of Albion, Parish, Amboy, Williamstown, West Monroe, Constantia, and Hastings. This forest has a high concentration of black cherry, eastern hemlock, and white pine. Depressions between drumlins are dominated by red maple which favors wet soils. Conifer forests are not abundant in the region and are mainly the result of plantation and reforestation. (Map 13)

Wildlife habitats in the Tug Hill include primarily forests, some agricultural fields, and wetlands. White tailed deer, snow shoe hare, grey squirrel, and grouse are found in the upland forest areas. White tailed deer use the deciduous forest during the warmer months and find refuge in coniferous forests in the winter. Deer wintering yards are located on the north side of the Salmon River Reservoir and along the North Branch of the Salmon River. Ruffed grouse and wood cock are best suited to the Central Tug Hill fringe and Transitional Tug Hill regions. Pheasant and cottontail rabbit are not as abundant in the area due to heavy seasonal snowfall and harsh weather conditions. Important mammals include red fox, grey fox, and eastern coyote which were rare but are beginning to make a comeback. The forest is well shaded, creating a moist forest floor suitable for amphibians such as salamanders, reptiles and small rodents which in turn feed predators.

Shrub swamps provide habitat for the snowshoe hare, ruffed grouse, deer, beaver, woodcock, moles and shrews and other mammals, birds and amphibians. Shrubland attracts aerial predators such as hawks, owls and woodcock. Beaver, mink, muskrat and fisher live in the wetlands and travel the water ways.

Geese are frequently found on the small ponds and reservoirs and wood ducks frequent many of the forest wetlands. The south side of the Redfield Reservoir provides a haven for a population of bald eagles. The large expanse of forest canopy and wetlands provide a substantial food source for forest nesting hawks and numerous song bird species. Surface water streams provide excellent brook trout habitat.

Farm fields and pasture are the first areas to be free of snow in the spring and the first areas in which seeds germinate. Cultivated corn crops in these areas provide food for deer, squirrels, Canadian geese, crows, rodents and others.

b. Erie-Ontario Plain

The Erie-Ontario Plain encompasses most of central and western Oswego County including both the Drumlins and Oswego Lowlands sub-units. Most of the Towns of Hannibal and Granby are not included in one of the two sub-units which are discussed separately in more detail below.

Topography/Geology/Soils - The topography of these towns is rolling. The elevation is lowest in the northwest corner of Hannibal (~300 feet), rises to a maximum height of 500 feet at the top of the drumlins located at the Hannibal/Granby town line and then gradually slopes toward the Oswego River.

The bedrock geology of the region consists primarily of the Clinton group with shale, green and gray marine sandstone, hematite limestone, conglomerate and dolostone. A small portion of the region is part of the Medina Group - Queenstone Formation and is located parallel to the north/south Cayuga County line and south of the Village of Hannibal. Bedrock in this area is composed of red sandstones, shales and siltstone. Natural gas in the region exists in poor quality or quantity. Building stone in the Medina Group-Queenstone Formation is of fair potential for local use.

In the Town of Hannibal lodgement till is the dominant surficial deposit with only a few small areas of ablation till. Lacustrine sediments in the Town of Hannibal are small to moderate size deposits of lake silt and sand scattered throughout the town, with only a few deposits of lake silt and clay. Glaciofluvial deposits are found throughout the Town of Hannibal. In Granby lake silt and fine sand deposits cover the largest area and are the most contiguous. Lake silt and clay deposits are found around the Ox Creek area and extend to an area south of Lake Neatahwanta. Wave delta sand and gravel deposits are scattered in northern Granby. Also located in northern Granby are (glaciofluvial) beach sand and gravel deposits which are well sorted and highly permeable. Ablation till is located primarily in southwest Granby.

The best soils for development with sanitary leach fields, and buildings with basements are Alton gravelly fine sandy loam, 0-8% slopes; Hinckley gravelly loamy sand, 3-8% slopes; Oakville loamy fine sand, 0-6% slopes; and Windsor loamy fine sand. These soils are scattered throughout the Town of Hannibal and in the Town of Granby along Rathburn Road north of Granby Center, Route 176 west of Bowen's Corners and between South Granby and Pinnacle Hill Roads.

There are 31 soil types in the Town of Granby that are prime, unique or of statewide importance for farmland and comprise a large portion of the Town of Granby. The importance of these agricultural soils varies with the degree to which they are contiguous. In the Town of Hannibal prime farmland is interspersed throughout the town with no distinct pattern or area of concentration. Unique farmlands can be found in the northeast corner of the Town of Hannibal, north of Cunningham Road. Another large area is located north of Harris Hill Road and east of County Route 7 with several smaller areas nearby. Other area can be found south of Pellet Road between Summerville Road and Brackett Road. The western portion of Hannibal from north of Woodruff Road south to Pellet Road is farmland of statewide importance. Typical farming activities on upland soils include dairy farming and fruit orchards. Small deposits of organic soils are found throughout Hannibal with larger deposits in the eastern portion of the town. Granby also has organic soils which have been used for muck farming.

Hydrology - The surface water resources of the region flow into Lake Ontario or the Oswego River. There are no surface waters in the region that meet the AA, A, B or NYS DEC classification. Nine Mile Creek south of the Village of Hannibal is suitable for trout fishing and propagation.

Flood hazard areas in the region occur primarily adjacent to streams and wetlands. (Map 8) The Towns of Granby and Hannibal participate in the National Flood Insurance Program.

Aquifers in the region include the Hannibal Aquifer and Fulton Aquifer. The Hannibal aquifer has a northwest/southeast orientation and is located in proximity to the Village of Hannibal. The portion of the Fulton Aquifer located in the region is located primarily in the Town of Granby and roughly follows the Lake Neatahwanta watershed. (Map 12)

Wetlands/Vegetation/Wildlife - In the region many of the wetlands follow streams or are located between drumlins. The majority of the wetlands in the Town of Hannibal are located in the eastern half of the town with smaller areas scattered throughout the rest of the community. Two large wetlands are located in the northeast corner of Cunningham Road and in the south east between Peat Bed Road and Harris Hill Road. Wetlands in the Town of Granby are largely deciduous swamps with red maple, willows, and red ash. Many of the Town of Granby wetlands were drained at one time for muck farming, but wetland vegetation has reclaimed many of the old farms.

The majority of the land in the region is successional pasture or early successional forest characterized by aspen, red maple, white ash and white pine and forest particularly in the north east section of Hannibal from Cunningham Road south to NYS Route 3 and southwest from Durbin Road to Pellet Road.

The wetlands and successional forests and fields support a number of wildlife species including white tailed deer, raccoons, coyote, beaver, opossum, hare and many other species.

c. Drumlins

Topography/Geology/Soils - Drumlins are a subunit of the Erie-Ontario Plain and are common in the Towns of Scriba, Oswego, Hannibal and all of Minetto. (Map 6) Drumlins are glacial deposits of gravel that generally have a north/south orientation and parallel the direction in which the glacier moved. They have an elongated form and are generally steepest along the northern slope and more gently sloping along the southern slope. Drumlin terrain is hilly and is atypical of glacial lake plains. In the Town of Hannibal the drumlins are flat topped due to wave action on ancient Lake Iroquois.

Hydrology - Streams in the drumlin region flow into Lake Ontario. Lakes in the region are few and include McMullen Pond and Regan=s Silver Lake/ Mud Lake. Part of the Hannibal aquifer is located in the drumlin region north of the Village of Hannibal. No other aquifers have been identified in the region.

Wetlands/Vegetation/Wildlife - Due to the nature of drumlins this area has a variety of smaller ecological community types in which maple beech and associated plants are predominant at higher elevations. Between the drumlins can be found numerous small interconnected wetlands and small stream corridors which typically can harbor red maple and beech-birch forests, and alder swamps. An extremely biologically diverse wetland complex is located adjacent to Regan=s Silver Lake which is noted as a biologically important bog mat and home to an endangered moth species.

d. Oswego Lowlands

Topography/Geology/Soils - The Oswego Lowlands are also a subunit of the Erie-Ontario Plain bordered on the west by the Oswego River Corridor, south by the Oneida Lake Outlet/River, west by the Transitional Tug Hill and north by the Eastern Ontario Plains and the Salmon River. (Map 6) The region includes all of the Town of Palermo and parts of the Towns of Volney, Schroepfel, Hastings, Mexico, New Haven, Scriba, Parish, Richland and Albion. All of the Villages of Parish and Central Square are within the region along with parts of the Villages of Phoenix, Mexico, and Pulaski. Part of the City of Fulton is also located in this region.

The Oswego Lowlands are underlain by the Clinton Group, Median Group and Lorraine Group bedrocks. The Medina Group consists of red sandstones and shales of Upper Ordovician and Lower Silurian age. (Map 11)

The Oswego Lowlands have scattered, low rounded hills surrounded by wetlands. The underlying unconsolidated sediments are sands, gravel, and clays deposited at the edges of glacial Lake Iroquois. In many places, the glacial till is overlain by lacustrine sediments.

Hydrology - Surface water drains into the Oneida River, Oswego River, Lake Ontario and Oneida Lake (Ontario & Oneida Drainage Basins) all of which eventually flow into Lake Ontario.

The Sand Ridge Aquifer is one of three groundwater resources found in Oswego County. The aquifer is a narrow ridge comprised of glaciofluvial and glaciolacustrine sediments. The aquifer is approximately 13 miles long and is located almost entirely in the Towns of Palermo and Schroepfel. (Map 12)

Recharge of the Sand Ridge Aquifer is dependent upon precipitation. Wetlands are the principal discharge areas for the aquifer. Other discharges include the Oneida River, springs, evaporation, two municipal wells in the Town of Schroepfel which supply the Village of Phoenix, and many private, domestic wells and community water systems.

The Great Bear Springs (Fulton Aquifer) are a source of groundwater for the City of Fulton. There are a total of five wells in the Great Bear Springs complex, two of which are located in Schroepfel and the others in Volney. Surficial deposits in this area include till, lake silts and sands and gravel.

Wetlands/Vegetation/Wildlife - The Town of Palermo has 27% of its total land area consisting of wetlands. The dominant vegetation is red maple and red ash. Six bog mats are located in the Town one is part of the Lot Ten Swamp, South of Paradise Road; another is a kettlehole between Factory Road and County Route 45; and the others are located between Blumer and Hare Roads; South of Blumer Road and east of Griswood Road, north of County Route 35A and west of Route 3, and east of Island Road, adjacent to a muckland.

Ecological communities in the region include agricultural upland fields, shrub swamps, forest lands and wetland agricultural fields. Wetlands in the region provide habitat for species such as muskrat, beaver, mink, raccoon and opossum. Upland areas provide habitat for deer, fox, coyote, squirrel, rabbit and mice. Some of these animals are sought by hunters and trappers.

e. Eastern Ontario Plain

Topography/Geology/Soils - The Eastern Ontario Plain is located between Lake Ontario and the Oswego Lowlands and Transitional Tug Hill physiographic zones. The region transects the Towns of Scriba, New Haven, Mexico, Richland and Sandy Creek and includes part or all of the Villages of Mexico, Pulaski, Sandy Creek and Lacona.

The bedrock geology of the region is part of the Lorraine Group and is primarily gray sandstone from Scriba to roughly the Salmon River and gray shale and sandstone from the Salmon River north to the county line.

The topography of the region is level and rolling plains with only minor relief. The underlying sediments are mostly glacially deposited silts, clays, sand and gravel. Lodgement tills are located in the southern two thirds of the Town of New Haven. Ablation till is located in the town's northern half and a small outwash deposit of sand and gravel is located in the hamlet of New Haven. Lake silt and sand (lacustrine deposits), as well as peat, marl, muck and clay are scattered throughout the town. Sand and gravel deposits are located in small pockets in the southern half of the town.

The beaches/shorelines of ancient Lake Iroquois can be observed in the Town of Sandy Creek and generally coincide with the 350= and 450= contour elevation causing the features of the topography to be slightly modified as the result of wave and stream action. Two to three miles east of Lake Ontario is a shoreline marked by benches, beach sand and dunes at approximately 280= to 300= contour elevations. Mining of sand and gravel deposits in the Town of Sandy Creek are economically viable and active.

The northern portion of the region, including approximately half of the Town of Mexico, Sandy Creek and Richland, is characterized by slopes that trend toward Lake Ontario, and which drop approximately 700' from West Boylston to the lakeshore. These slopes have resulted in narrow, riparian wetlands.

New Haven soils are acidic with neutral to slightly acidic fragipans. The soils are deep, medium textured soils which are moderately well drained and are undulating and sloping on glacial till. Large tracts of muck are located in New Haven east of County Route 51 and between County Route 6 and 35.

Hydrology - Surface water in the region includes numerous streams which flow into Lake Ontario. Red, Otter, Butterfly Creek, and Catfish Creek are located in the region. Surface waters in the Town of Sandy Creek flow into North or South Sandy Pond or the Salmon River and eventually into Lake Ontario. One potential source of pollution in Sandy Creek noted in the Town's Natural Resource Inventory was nonpoint pollution from agricultural areas causing accelerated algae and weed growth.

The Pulaski Aquifer in northern Richland is located in this region, but relatively little research has been done on this aquifer. In the Town of New Haven water tables are commonly high or perched causing the need for specially designed basements or foundations. The potential for aquifers is higher in bedrock groups and formations such as the Clinton Group sandstone and upper shale and in the Lorraine Group (Containing the Pulaski & Whetstone Gulf formation). Most of the region is on private wells with the exception of those users in the Villages of Sandy Creek, Lacona, Pulaski, and Mexico which have municipal groundwater supplies. Some residents in the Town of Scriba access Lake Ontario water through connections to the City of Oswego water system. It should also be noted that the 1989 Position Paper, Oswego County's Position Regarding the State's Identification of the Towns of Scriba and New Haven as a Candidate Area for a State Low Level Radioactive Waste Disposal Facility, identifies the Towns of New Haven and Scriba as having a hydrologic unit comprised principally of sand and gravel with the potential of yielding significant quantities of potable water. Approximately 11% of the land area includes these deposits. The Position Paper also explains that the two towns are underlain by a 250 foot thick formation of Oswego Sandstone which is considered to be an unconfined, unconsolidated aquifer strata with potentially high well yields.

In the Town of New Haven the average well yield in shale and siltstone ranges between 3 gallons per minute (gpm) to 28 gpm. Wells in sandstone in central New Haven average 11 gpm and have a maximum reported yield of 40 gpm. (Kantrowitz) In general Oswego Sandstone wells produce an average of 10 gpm with a maximum reported yield of 125 gpm. (Weston Consultants, 1982)

Wetlands/Vegetation/Wildlife - In addition to riparian wetlands mentioned above, a second distinct wetland area in the region includes the northern half of the towns of Mexico, Scriba, and New Haven. These wetlands are characterized by a relatively flat topography situated well above the level of Lake Ontario. Poorly drained ablation tills have promoted the formation of evenly distributed small wetlands many of which are connected by streams.

The Eastern Ontario Plain supports primary, and secondary successional growth. Abandoned pastures and orchards are the first stages in succession after active agriculture ceases and are characterized by low, grassy and herbaceous vegetation, scattered shrubs and small trees, orchard grass, goldenrod, raspberry and Queen Anne's lace. Northern hardwoods include four dominant species - sugar maple, yellow birch, American beech, and hemlock. Other common species are red maple, white ash, basswood and black cherry.

Common wildlife species found in the region include woodcock, cottontail, ruffed grouse and grey squirrel. Deer and ring necked pheasant populations are small. Fur bearers include raccoon, mink, red fox, grey fox and skunk.

3. Greenway Corridors

a. Oswego River

Topography/Geology/Soils - The Oswego River corridor is approximately 24 miles long, and drains the second largest basin in NYS (5,122 square miles) including parts of Central New York and the Finger Lakes region.

The river contributes 4.2 billion gallons of water to Lake Ontario daily, second only to the Niagara River. For the purposes of this plan the Oswego River Corridor includes the major tributaries of Ox Creek and Lake Neatahwanta via Tannery Creek. (Map 7)

The Oswego River travels over shales and sandstone at the southern reach and through red sandstone and shale in the middle and outlet portions. The surficial geology is a function of lacustrine sediments left by Lake Iroquois. (Map 11)

There are some flood plain areas along the river corridor; however, due to the relatively wide character of the river coupled with fairly steep banks, the overall flood plain is relatively narrow. All eight municipalities within the Oswego River corridor participate in the National Flood Insurance Program. Flood hazard areas are shown on Map 8.

Erosion and siltation are perhaps the most notable geological concerns and are influenced by soil types. Problems are predominant during high water flows in the spring. Clearing of river banks for the purpose of development and access to the waterfront leave vulnerable soils prone to erosion and siltation which then impact water quality (Map 10). Soils in the corridor include lacustrine silt and clays and some glacial soils in the Ox Creek area. Soil types range from moderately steep to flat slopes and include: Amboy- Williamstown (sloping), Ira Sodus (rolling to stony and moderately steep), Amboy- Williamstown (rolling), and Raynham-Canandaigua (nearly level). All of these soils are problematic to conventional septic system design, have poor drainage, poor permeability and are subject to a seasonal high water table. (See, Soil Survey of Oswego County, New York, USDA)

Hydrology - The Fulton Aquifer encompasses five municipalities and lies in proximity to the Oswego River. The state designated this as a primary aquifer, and it is rather arbitrarily defined because of the relatively flat Ontario Lake Plain with no bedrock boundaries. (Map 12) Surface drainage divides along with surficial geology were used to delineate the area having a direct hydrologic influence on the Fulton Aquifer. The aquifer is unconsolidated and comprised of sand and gravel with kame, lake sand and silt, and clay deposits. The Fulton Aquifer is generally 10 to 75 feet thick. The Great Bear Springs are located in the Oswego River Corridor within the Fulton Aquifer. The Great Bear aquifer is 125 feet thick.

Lake Neatahwanta is an important natural resource located in southwest Fulton and the Town of Granby and is utilized for swimming, boating, nature appreciation and education, fishing, and aesthetics. The lake is eutrophic with impairment of use resulting from non-point source pollution (nutrients) from agricultural runoff, soil erosion and possibly, urban stormwater runoff. The lake is the only water body in Oswego County with a ?precluded= severity of use. Lake Neatahwanta has been identified by the Oswego County Water Quality Coordinating Committee as the number one priority water body for remediation.

The lake has wetlands and flood hazard areas located along all shores except for the east side which has some development. Wetlands have areas have been subject to limited development and access from those areas is limited. The majority of the north and eastern shore is publicly owned. The Lake Neatahwanta Reclamation Committee is considering development alternatives for this area of the shore. The Town of Granby and City of Fulton do not have greenway buffer regulations to protect the aesthetics or views of the lake.

Ox Creek is a wide, slow moving stream which offers excellent bass habitat. It has been plagued in recent years by explosive growth of invasive water chestnut.

Wetlands/Vegetation/Wildlife - Many wildlife habitats are found in the Oswego River corridor. Most of the forested areas of the corridor provide food and shelter for small mammals such as the red squirrel, grey squirrel and raccoon. Forested areas are important to migrating song birds and canopy dwelling birds such as vireos, warblers and thrushes. The major species of the forest plant communities are red oak, white pine, black cherry and various species of maple and willow. Wetland and open waters throughout the corridor provide habitat for muskrat, beaver and the great blue heron. Wetlands within the corridor are illustrated on Map 9. Waterfowl migrate through the corridor in the spring and fall and many winter in the corridor including common golden eyes, buffleheads, loons, mallards, mergansers, and black ducks. Waterfowl such as wood duck, mallards

and blue wing teal use the river corridor for nesting. Common vegetation in these wetlands includes sedges, rushes, red osier dogwood, willows, cattails and marsh grass.

Cultural Influences - From a historical perspective the Oswego River has contributed to the economic development of the County and is one of the most important natural resources in the county. The NYS Barge Canal and river have served as a water highway with connections to the Atlantic seaboard, midwest, Canada and the rest of the world. The entire length of the river is navigable by recreational and commercial marine traffic.

Land use development patterns have been influenced by the river's ability to provide transportation, water power, recreational opportunities and scenic views. Some land uses have led to the degradation of the river. Past industrial activities, municipal sewage treatment plants and urban sewer overflows (point sources) have contaminated the river and its sediments. For this reason the International Joint Commission (IJC) has identified the Oswego River from the Varick Dam to the Oswego Harbor breakwall as an area of concern (AOC) and focal point for remediation plans. The pollutants of concern in the Oswego River AOC are PCBs, dioxin, phosphorus, mercury, mirex and octachlorostyrene. Additional information on the Oswego River AOC can be found in the Oswego River Remedial Action Plan (RAP), (NYS DEC 1990) and The Oswego Harbor Survey, 1994.

Non-point sources of pollution include leaching of hazardous waste sites, contaminated sediment and groundwater, agricultural runoff, and atmospheric deposition. In the towns of Volney and Granby and City of Fulton there are five inactive hazardous waste sites thought to have been sources of contamination to the Oswego River. Remediation plans have been completed or are underway at these sites. Other upstream pollution sources are Onondaga Lake and the Seneca River. Therefore, parts of the Oswego River south of Varick Dam may have pollution problems similar to those in the AOC. (Fisheries Enhancement Plan for Oswego River, NY, A Tributary to Lake Ontario, March 1994) Water sampling conducted at the Minetto Bridge showed that the water column parameters of concern are iron, coliform, dissolved solids, phenols and PCBs. Limited fishing advisories are in effect for the Oswego River between the Oswego Harbor and the upper dam in Fulton, with consumption limited to one meal per month. In the area between Three Rivers to Oswego Falls Dam in Fulton conditions are such that fishing and fish survival may become limited due to flow modification. From the dam in Phoenix to Oswego the fishing use is impaired due to metals in the sediment.

The Oswego River corridor offers many recreational opportunities including boating, fishing, historic study and sight seeing. The NYS Barge Canal and Oswego River are designated in the NYS Open Space Plan as a greenway and recreationway. The Oswego County Planning Board conducted the Oswego River Scenic Assessment in 1992 which discusses means for preserving and improving the scenic quality of the Oswego River corridor through compatible land use practices. There are a number of open space and recreational areas which play an important part in preserving the wildlife, beauty and environmental quality of the corridor. Currently, there are no local laws which specifically protect this river/greenway corridor from poor development practices.

b. Oneida Lake Outlet and River

The Oneida Lake Outlet and River includes the 18 mile long Oneida River, Peter Scott Swamp, Big Bay Swamp and Toad Harbor Swamp. (Map 6) The Oneida River drains all or parts of the Town of Hastings, Palermo, Schroepel, and Volney, and towns around Oneida Lake in Oswego County as well as in Onondaga, Oneida and Madison County.

Hydrology - Water levels in Oneida Lake and the Oneida River east of Caughdenoy are regulated by the tainter-gait dam. Flow volumes are also regulated by the dam. Flood hazard areas along the Oneida River are shown on Map 8. The Oneida River is prone to frequent seasonal flooding. The largest flood hazard areas in this region are along the Oneida River, Peter Scott Swamp, a wetland and significant wildlife habitat, and Toad Harbor Swamp. The majority of the Oneida River is lined with residential and seasonal home development much of which is within the flood hazard area. The large wetland complexes are important storage areas for floodwaters which prevent even worse flooding than now occurs.

The Sand Ridge Aquifer is an unconfined principal aquifer which is approximately 15 miles long and is located in the Towns of Schroepfel and Palermo. (Map 12) Recharge to the aquifer is derived solely from infiltration of precipitation that falls directly on the aquifer and averages from 7.9 to 15.9 million gallons per day. The aquifer is capable of yielding water at a rate of several hundred gallons per minute. Peter Scott Swamp, the Oneida River and other streams are discharge areas for the aquifer. Groundwater flow is from north to south. The aquifer supplies water to the Village of Phoenix and to individual wells over the aquifer. The quality of water from the aquifer meets NYS DOH water quality standards.

Wetlands/Vegetation/Wildlife - There are large wetland complexes in this character area. (Map 9) The western portion of the north shore of Oneida Lake includes Toad Harbor Swamp a 3.85 square mile wetland complex which is highly productive and one of the largest in the county. Another smaller wetland found in this area is Big Bay Swamp, which is a 2.59 square mile wetland. Frenchman and Dunham islands in Oneida Lake are also highly rated as wildlife habitat for waterfowl and migratory birds.

Vegetation in these wetlands are typical of swamps, marshes, bogs and wet meadows found throughout the north shore. Trees include red maple, black ash, American elm, red ash, hemlock and tamarack. Common shrubs include various willows, speckled alder, spice bush, buttonbush, dogwoods, holly, highbush cranberry and golden rod. Marshes include various species of Typha and fresh water Spartina. Other common plants include rushes, grasses, sedges and other species well adapted to seasonal flooding and emergent conditions.

Peter Scott Swamp is a generalized state identified significant wildlife habitat and is the largest wetland complex associated with the Oneida River. The Peter Scott Swamp provides excellent habitat for the fur bearing animals which provide a fair income to trappers in the county.

Wetland complexes contain shrubby vegetation which is an attractive food source for deer populations. Peter Scott Swamp, Toad Harbor Swamp and Three Mile Bay all serve as deer wintering yards. Other mammals found in these wetland areas are hare, squirrel, beaver, muskrat, mink, raccoon and fox.

The most common forms of wildlife found along this corridor are geese, ducks and mergansers. Fairly large populations breed and nest in the wetland areas and others use Oneida Lake. A great blue heron rookery is located in the Peter Scott Swamp. Raptors are also found along the corridor. There are many migratory song birds and waterfowl that utilize the habitat in the Oneida Lake Outlet and River.

Cultural Influences - As part of the Rotating Intensive Basin Studies (RIBS), the Oneida River was sampled at US Route 11 in Brewerton, a popular fishing and boating area. The water column had no parameters of concern, only iron was borderline. Copper, lead, and zinc were found in bottom sediment at greater levels than threshold values based on numerical water quality standards or guidance values adopted by NYS DEC.

There are two sewage treatment plants which discharge into the Oneida River, Oak Orchard and Brewerton. The Metropolitan Petroleum company in Brewerton and Sears Realty in Clay are major industrial contributors. Water quality of the Oneida River is also affected by the release of algae from Oneida Lake.

c. Oneida Lake North Shore

Topography/Geology - The Oneida Lake North Shore is located east of Toad Harbor Swamp along Oneida Lake. (Map 6) It is part of a lowland area which extends in an easterly direction from the Great Lakes Basin. Included in the region are the hamlet of Constantia, Village of Cleveland and part of the Town of Constantia. The region is relatively flat and wet with numerous narrow, slow flowing creeks.

The Oneida Lake North Shore has water bearing sandstone and shale with a thickness of about 250 feet. Soils in this region are predominantly wet, poorly drained and rocky. The soils along the north shore pose significant limitations for building, development and septic systems.

Hydrology - The majority of Oneida Lake is in Oswego County with its southern boundary abutting Onondaga County and with Oneida County to the east. The lake is 79.8 square miles with 30,600 acres in Oswego County. Its drainage basin extends into Onondaga, Oneida, Madison, Lewis and Oswego Counties. The lake is deepest toward the east and shallower to the west. The lake is 20.9 miles long and between 3.8 and 5.5 miles wide, and is part of the Barge Canal system.

Oneida Lake is a shallow and naturally eutrophic lake with a maximum depth of 35 feet. The lake receives soft, cold water from the Tug Hill Plateau and hard, warm water from the south. The fertile drainage basin of the lake was once the bottom of an inland freshwater sea, and drainage from this area brings into the lake an abundance of soluble minerals and dissolved organic materials which alone appear to contribute to annual algae blooms. Concern has been expressed in recent years over extensive algae blooms and aquatic vegetation.

Oneida Lake is used almost exclusively for recreational purposes and has a highly productive fishery including bass, perch and walleye. The lake level is regulated by the tainter-gate dam in Caughdenoy as the lake drains to the west into the Oneida River.

No aquifers have been identified in this region.

Wetlands/Vegetation/Wildlife - The Oneida Lake North Shore has varied vegetation cover. (Map 13) The landscape is forested with conifer, deciduous and mixed forest and scattered among the landscape are many wetlands. Plants along the lake shore are adapted to flooding and wet soils and include black gum and yellow poplar. In better drained soils elm, black ash, beech and red maple are predominant. Conifers stands are sporadic.

Oneida Lake and its shoreline serve as resting and feeding areas for loons, grebes, herons, gulls, sandpipers, and plovers. As in all areas of the county there are numerous species of songbirds. Several gull and tern populations are also located on small islands in the lake. These are highly productive ecozones which also provide spawning and hatching shelter for fish populations. They provide a substantial food source for feeding birds, waterfowl and other forms of wildlife.

Cultural Influences - At one time farming was the predominant land use in the region however, there has been a significant decline leading to successional fields. (Map 13) Successional fields comprise the largest land area in the Town of Constantia. The town is no longer an active farm community and the remaining farms can be found along NYS Route 49. The second largest land area is comprised of forests and will eventually be the largest land area if natural succession from abandoned farm fields continues. The ponds, streams and woodlands provide an attractive setting for new homes but are extremely sensitive to development.

Water resources predominate in this region, contributing to the natural beauty of the area and providing important recreational opportunities. Managing Change, The Pilot Study in Rural Design and Planning by the Tug Hill Commission identifies that 90% of the Town of Constantia contains critical and sensitive resources vulnerable to development. A Tug Hill survey conducted as part of this study found that 90% of the survey respondents identified rural atmosphere as important or very important, and 87% identified natural resources and features as important or very important.

The Village of Cleveland sewage treatment plant is a point source discharge to the lake. High density seasonal and permanent homes and small pockets of commercial development along the lake shore may be a source of non point contaminants caused by septic systems.

d. Salmon River Corridor

Topography/Geology - The Salmon River Corridor follows the Salmon River. (Map 7) The Salmon River flows through rolling topography until it meets the flat coastal plain of the Eastern Ontario Lake Plain where the river's velocity slows and it begins to meander over outwash and alluvium. At the Lake Ontario Coastal Zone the river's characteristics change to a delta. In the past the Salmon River supplied sand to the Eastern Ontario Barrier system. A breakwall creating a safe harbor may have retained some of the outwash from entering into the lake.

The bedrock of the Lower Salmon River corridor consists of dark shales imbedded with limestone and gray fine grained sandstone imbedded with dark gray shale. Bedrock is overlain by glacial till with poor soils and drainage.

The most unique geological feature in the upper Salmon River Corridor is the Salmon River Falls and Gorge. This property is now owned by NYS DEC and it is a scenic high point of the Salmon River Corridor. The falls tumble 110 feet.

Hydrology - The headwaters of the Salmon River begin in the Town of Osceola in Lewis County. There are two reservoirs, the Salmon River Reservoir located in the towns of Redfield and Orwell and the Lower Reservoir which is located in the Town of Orwell. Niagara Mohawk generates hydroelectric power from and controls the water levels in both reservoirs and the Salmon River.

Water quality in the upper Salmon River is excellent due to the pristine quality of its headwaters and periodic flushing of the hydroelectric generation at the reservoirs. However, non-point source pollution within the watershed including sedimentation and septic systems, could influence future surface water quality in the watershed.

Vegetation/Wildlife - According to the US Forest Service (1987), no endangered flora exists in the Salmon River Corridor but an extensive inventory of the corridor has not been done. The New York Natural Heritage Program lists Birds Eye Primrose, Mountain Saxifrage, Sedge, Rams Head Lady Slipper, Osprey, and Black Tern among the species of Statewide importance.

The Salmon River is known for its vast fishing opportunities including steelhead, rock bass, bullhead, Atlantic salmon, brown trout, coho and chinook salmon, rainbow trout, northern pike and large mouth bass.

Cultural Influences - Quality of life in the Salmon River Corridor is directly tied to the natural resources of the area. The environment provides ample opportunities for outdoor recreation. The Salmon River Corridor has been the focus of the Salmon River Greenway Committee which has sought to provide direction for and coordinate efforts aimed at the enhancement and development of the greenway along the Salmon River Corridor. The Salmon River Corridor Greenway Protection and Development Concept Plan establishes the goals and objectives for the greenway creation and recreational development to protect the open space of the corridor. The committee was established in response to Niagara Mohawk divestment of lands within the corridor much of which has been sold in fee or as easement to NYS DEC. The newly acquired area south of the Salmon River Reservoir is now part of the Stillwater State Reforestation Area. As a result of Niagara Mohawk divestitures, conservation easements provide protection and access along the river. The conservation easements serve as a linear greenway, open space buffer and provide public access to the river and reservoirs. The southern shore of the Salmon River Reservoir has large wetland complexes and important wild life habitat and is a potential nesting area for bald eagles.

e. Lake Ontario Coastal Zone

Topography/Geology/Hydrology - The Lake Ontario Coastal Zone consists of a highly productive coastal environment that is directly related to the transitional nature of the coast. (Map 6) Included in this zone is North and South Sandy Pond. There are three types of shorelines within the zone: sandy beach, cobblestone, and bluff.

The sandy shore is continually being modified by wind, wave action and littoral drift. The sandy shore beach is generally found north of Selkirk Shores State Park and extends into Jefferson County. The narrow band of sandy shore is part of the Great Lakes dunes, a unique environment created by wind deposited sands at a time when Lake Ontario water levels were much lower than they are today. The beach area is also influenced by deltas from streams and rivers.

Cobblestone beaches are comprised of rounded, and smooth textured stony deposits of sand, gravel and other unconsolidated materials. Cobblestone shores may be stable or unstable. An example of a cobblestone beach can be found near Mexico Point Park.

Bluffs in Oswego County are truncated drumlins in which the lake shore slope of the drumlin erodes away. Bluffs normally have a slip face of sand or cobbles with larger stones deposited at the bottom of the slope. The upper part of the bluff is normally comprised of shallow soils with various cliff dwelling plants. An example of a bluff can be found at Sunset Beach or near the SUNY Oswego campus.

Water levels of Lake Ontario are regulated at the St. Lawrence Seaway and no known aquifers are noted in this character region.

Wetlands/Vegetation/Wildlife - The littoral zone (beach) is an extremely harsh environment for plant life. Mosses and lichen and American Beach grass are the most predominant species found in the beach zone. American Beach grass helps protect the beach from erosion.

Inland from the beach lie the primary and secondary dunes which are susceptible to erosion. American Beach grass and low shrubs help prevent erosion and aid in the buildup of the dune system. Scrub shrub and tree communities of sand willow and sand cherry establish themselves behind the protective dunes. The dunes provide protection for wetlands located inland, behind the dune. These areas include but are not limited to North and South Sandy Ponds, and Deer Creek Marsh.

Another land feature found in the Lake Ontario Coastal Zone is high quality wetlands. Wetlands in the coastal zone are abundant and are characterized by large offshore marshes and swamps which are separated from the lake shore by coastal barriers or bluffs. Their water levels are directly related to lake levels. Marshes in the zone are fed by streams. Snake Swamp, Butterfly Swamp, Teal Marsh, Deer Creek and Grindstone Creek outlets are examples of this type of wetland.

Several bogs are found in the Deer Creek Marsh. These bogs are normally identified by a mat of vegetation (mosses, cranberry, Tamarack, Blue Spruce, leather leaf, and pitcher plant) floating over a shallow water body or pond. These wetlands are highly productive and are among the most ecologically diverse types of wetlands.

Marshes are normally classified on the basis of their dominant vegetation. Typha, bulrush and other hydrophytes are grass like plants that dominate marshes. This type of wetland normally contains little woody vegetation except in high spots or hummocks. Marshes contain large numbers of plants like sedges. Marshes are found in Snake, Butterfly and Deer Creek Swamp.

Fens are fresh water swamps that contain a variety of woody plants. These plants may exist in combination with vascular plants or may be dominated by tree species adapted to hydric soil conditions. These woody species include Alder, Black Ash, Black Gum, White Cedar, Tamarack, Red Maple and various willow species. Associated shrubs may include Red Osier Dogwood, Winterberry, Cranberry Bush Viburnum, Potentilla, Poison Sumac and other deciduous plant species. Examples of this wetland community are found within Deer Creek Marsh and south of South Sandy Pond.

The Lake Ontario Coastal Zone is extremely important for the migration of birds particularly neotropical migrants and raptors. In the spring the shoreline of Lake Ontario is a stop-over area for migrating song birds which rest and forage during the day and fly across Lake Ontario at night. The most common songbird species are Catbird, Yellow Warbler, and Common Yellow throat. The Birds of Oswego County: An Annotated Checklist provides valuable information on bird species and occurrences.

The Lake Ontario Coastal Zone is a very rich habitat area with an abundance of wildlife and has been identified by the NY Natural Heritage Program as an area of particular rarity. There are 21 rare species, and 11 rare or exemplary habitats. The area also harbors a number of rare and endangered species and many significant species. The dunes and wetlands are of unparalleled importance for rare plants, animals and natural communities. (The Nature Conservancy, April 1995)

B. TRENDS

1. Oswego River Fishery Enhancements

In 1994 the US Fish and Wildlife Service completed the Fisheries Enhancement Plan for the Oswego River, New York, A Tributary to Lake Ontario which has served as a useful guide to understanding trends in the Oswego River fishery. The Oswego River Basin once provided plentiful habitat for feeding, spawning, growth and migration route for a myriad of Lake Ontario fishes. The Lake Ontario ecosystem showed, by the late 1980s and early 1990s, that the fishery resources have had a dramatic recovery from the 1950s and 60s. Since the 1800=s navigational dredging and hydropower facilities have changed the river, its species composition, channel substrate, water quality, flow regime and riparian vegetation which all affect fish habitat in the River and Lake Ontario. Hydropower facilities, shoreline development, impaired water quality, flood control measures and exotic species all limit the attainment of a healthy fishery. Hydropower facilities have limited fish migration, increased water temperature, decreased dissolved oxygen concentrations and created drastic changes in flow volumes. Since the 1920=s, eighteen species have not been observed in the Oswego River which could be a result of habitat degradation from land use practices, pollution, competition among species and/or overharvesting. As part of the relicensing of hydroelectric plants on the Oswego River, remediation of some of these impacts is being considered. Habitat improvements, increased minimum flows and protection of fish from mortality associated with passing through hydropower stations are all being reviewed.

2. Exotic Species

The proliferation of accidentally introduced exotic species, such as purple loosestrife, water milfoil, phragmites, water chestnut, and the ever dreaded zebra mussel, have disrupted the natural food chain and competed with naturally occurring species. Zebra mussels are the latest nuisance organism and have increased water clarity, leading to the increase in aquatic vegetation growth, change in the food chain and decreased oxygen levels in some areas of reported infestation. Zebra mussels also clog water intake pipes of municipalities and industry.

3. Clean Water Legislation

The Clean Water Act (CWA) focuses mainly on surface water and established the National Pollutant Discharge Elimination System (NPDES) leading to the State Pollution Discharge Elimination System (SPDES). The Environmental Protection Agency (EPA) administers NPDES and the NYS Department of Environmental Conservation (DEC) and NYS Department of Health administer the SPDES program. The State Legislature recognized the need to maintain groundwater and surface water resources and enacted Article 17, Water Pollution Control of the Environmental Conservation Law (ECL). With this came the creation of the SPDES program which maintains NYS waters with reasonable standards of purity. The SPDES program is designed to eliminate the pollution of surface and groundwater and to maintain the highest quality of water possible consistent with public health, enjoyment of the resource, protection and propagation of fish and wildlife, and industrial development in the state. Federal reauthorization of the Clean Water Act is pending and may affect how these resources are managed in the future.

4. Regional Approach to Water Quality

Current trends in planning include a focus on regional resources rather than governmental jurisdictions. The rationale for this is that a resource like a stream may cross many jurisdictional boundaries making the resource difficult for any single entity to manage. It is more effective to identify watersheds and to manage natural resources on this basis. Water quality in the Seneca, Oneida, Oswego River basin has improved since the 1960s due to municipal, industrial and other point source discharges being brought under control. Remaining problems in the basin are mainly related to non-point source pollution. For example a portion of the reduced water quality in the Oswego River is caused by point and non-point source pollution from Onondaga County and beyond. Runoff from agricultural, urban and suburban lands transports pollutants such as pesticides, fertilizers, oil, metals, road salts and nutrients into waters of the basin. Excessive nutrients can enter waterbodies from failing septic systems. The

Oswego County Water Quality Coordinating Committee, the Water Resources Board of the Finger Lakes Association, and the CNY Regional Planning and Development Board are groups that assist in watershed-wide water quality protection efforts.

5. Focus on Groundwater

Groundwater is a critically important source of drinking water for citizens of the county. In 1988 approximately 42% of the County residents depended on groundwater and the demand will increase by 37.6% by the year 2000. (Barton & Loguidice, 1992) It is also a vulnerable natural resource which is nearly impossible and almost always extremely expensive to clean up once polluted. DEC regulates activities that might pollute groundwater, such as solid waste disposal and transportation, mining, oil and gas development and pesticides use. DOH regulates public water supplies to ensure that the water is safe. DOH drinking water standards are also used by DEC. Recent efforts have focused on local efforts to address land use impacts which could affect groundwater quality.

6. Northern Forest Lands

The northeastern third of the county is in the Tug Hill region which has been identified as part of the nationally significant Northern Forest Lands. The Northern Forest Lands support forest based industries that have an impact on the local economy. The forests contribute to the local economy directly through forest product related industries and services, and recreational opportunities and tourism. In earlier times, forest lands would have been sold chiefly between timber companies for the value of the timber. The extent of these lands ultimately were not different than in the past. In the 1980s there were examples of large tracts of the northern forest lands being sold for their development value. With the sale of large tracts for development, the risk of change to the character of the land and the impact of change on important public values, on a scale never seen before, was an issue demanding attention. As a result, the U.S. Congress directed the Forest Service to conduct a study of the resource and the threats to its future.

The Finding Common Ground: Conserving the Northern Forest Lands report identified the following issues:

- * an increased polarization among forest user groups
- * increase in property taxes causing loss of land from natural resource uses
- * development pressure near shorelines and scenic places
- * loss of jobs due to competition from other regions and countries
- * incomplete knowledge of land management techniques to maintain and enhance biodiversity
- * lack of funding and clear priority-setting for public land and easement acquisition
- * insufficient attention to and funding for public land management
- * fear of losing public recreational opportunities and access to private lands
- * failure to consider forest land as a whole, as an integrated landscape
- * loss of respect for traditions of private ownership and uses of private lands

Without dealing with these issues, we could see the breakup of the northern forests lands, steadily weakening the economy and continuing pressure on finite natural resources.

7. Wetlands Regulation

During the 1970s the federal Freshwater Wetlands Act resulted in a federal program to regulate wetlands throughout the nation. Wetlands began to be recognized by government officials as having important values for habitat and flood storage. The recognition that wetlands are decreasing at an alarming rate prompted a policy of no net loss of wetland acreage throughout the country. The idea was to create and restore wetlands to compensate for the loss of wetlands in other areas and to prevent avoidable impacts to existing wetlands. The US Army Corps of

Engineers was granted the authority to enforce federal policy to regulate wetlands under the amended Rivers and Harbors Act and Section 404 of the Clean Water Act.

The current trend in wetland protection at the federal level is uncertainty and change. During the Bush administration, the Corps of Engineers was developing a technique to assess wetlands based on a number of values including heritage value, flood storage, habitat values, nutrient uptake and others. This system would identify wetlands that had high potential based upon their biological diversity and location in the watershed and provide a rating system for high priority wetlands. However, implementation of the assessment technique was halted due to a dispute over the length of time that a wetland has to be wet to be defined as a wetland and the technique was never implemented.

Today change is about the only consistent factor in wetlands issues. As new assessment techniques are developed political officials are questioning the value of wetlands, and the current trend toward deregulation at the federal level may reverse the advances made toward protecting this resource in the past. Although many individuals have identified the need to protect wetlands citing, for example, the disastrous flooding that has resulted in engineered watersheds such as the Mississippi River Valley, the scientific community is coming into conflict with political pressures to deregulate wetlands.

8. Coastal Erosion

Currently there is a push in coastal areas of the U.S. to reduce the extent of "hard technology" applied in the process of stabilizing dune ecosystems and coastal areas. Scientists like Orrin Pilkey have identified that areas with seawalls and jetties are more prone to flood damage because, although they hold back flood waters to a certain point, when water levels exceed the capacity of this type of shore protection the results can be catastrophic. Shorelines which are left in a natural state serve a number of functions. The vegetation not only provides stabilization to soils but it disperses wave energy, provides habitat for wildlife, provides the opportunity for nutrient uptake where they are excessive and enhances the scenic quality of the shore.

A natural shoreline profile offers protection to land development in coastal areas and river corridors. In many areas of the U.S. it is recognized that a gradually sloping shoreline disperses wave and flood energy in a far more efficient manner than do seawalls.

Dunes like the Great Lakes dune system along the eastern Lake Ontario shoreline have been recognized as important natural features that protect the shoreline. Approaches to protecting these dune systems include regulation and enforcement of development activities in barrier areas, protection of the primary dunes from unwise and damaging pedestrian crossings and vehicular use, revegetation and protection of vegetation in coastal dunes ecosystems, and utilizing natural methods of dune stabilization rather than the costly construction of seawalls and jetties which can accelerate erosion rates and interrupt critical sand supply and movement in the littoral zone. A new method of dune protection includes the use of wave trips or artificial reefs that are placed in critical areas to trip and disperse waves before they reach the shoreline. These methods follow the rationale that it is better to find natural ways to protect shorelines from flooding and erosion because it is less expensive, and allows the shoreline to interact with the waterbody as a functioning ecosystem in much the same way that it has evolved over time.

9. Sustainable Development

Sustainable development has become a theme for the more progressive types of development currently taking place throughout the country. This type of development takes into account the carrying capacity of the landscape with respect to human development. Based upon an extensive site inventory and analysis new communities are developed in the appropriate location and density in order to integrate the current natural resources of the site into development and develop to a point that produces minimal impact to the natural features and functions. For example buildings may be clustered in order to retain the maximum amount of open space and protect the resources which provide a regional identity of an area. Construction and development is carefully planned to avoid impacts to soils, vegetation and water quality. Natural methods of stormwater management are developed by directing runoff from streets and driveways to impoundment areas which not only enhance scenic

quality of a development but provide water for waterfowl and wildlife, allow vegetation to remove pollutants from the water before it runs into streams, and allow recharge of groundwater.

10. Greenways and Corridors

Greenways and waterfront revitalization programs have been encouraged by the Federal government in order to revitalize areas that have or will continue to experience growth in urban, suburban and exurban areas. These greenways establish a linear system of parks and open spaces that connect major population areas along waterways in order to protect and enhance natural, cultural and historical resources. Greenways may also be important in providing natural corridors to allow wildlife populations to move between large protected open space areas.

The Wild and Scenic Rivers Program is one that identifies undeveloped river corridors that have value due to the fact that they have not yet experienced development pressure. Many of these rivers are recognized as a scarce resource in that very few relatively undisturbed water bodies exist in the nation. These corridors are critical for protecting unique habitat and high quality surface waters. These very features may attract development in the future as development pressure begins to move into the few remaining remote areas of the country.

C. ANALYSIS

As Oswego County continues to grow it is important to remember that careful planning is needed to retain some of the county's rural character and create a shared vision for its future. By addressing our opportunities and constraints associated with our natural resources we can determine the necessary steps to be taken. It has been observed, "it is not the resources we lack, nor even the knowledge, but the vision to use them constructively." (Fairbrother, New Lives, New Landscape) The natural resources background of this plan indicates several opportunities and constraints regarding soil conditions, non-point source pollution control and watershed management, underutilized resources, wetlands and habitat protection, that will help guide the County's vision.

1. Non Point Source Pollution Control/Watershed Management

Obstacles to watershed management plans and policy making include lack of understanding by the public, jurisdictional conflicts and disagreements, and the lack of time, money and expertise. Opportunities exist to work with lake management committees and associations to overcome those obstacles and to create and/or implement watershed management plans. Other opportunities exist for public education to increase awareness of watershed issues.

a. Lake Neatahwanta

The efforts of the Lake Neatahwanta Reclamation Committee and the Oswego County Water Quality Coordinating Committee have sought to improve water quality in Lake Neatahwanta through several non-point source pollution control projects. Over the past several years the efforts focused in the watershed have been on data collection and physical improvements. Data collection included a stream bank inventory, lake management study, GIS mapping of watershed characteristics, and stream monitoring to assist in understanding the conditions in the watershed and lake. Several implementation projects have been completed including streambank remediation, farm nutrient management and shoreline stabilization. Further opportunities exist for streambank remediation in the feeder streams and potential stormwater diversion project(s). Funding has been made available through public grants, and private donations from individuals and industries. The Lake Neatahwanta Reclamation Committee is dedicated to improving the water quality of the lake and enhancing its use. In the future, work by the committee will most likely include improved community support and seeking additional funding to further the water quality objectives.

b. Sandy Ponds

The Oswego County Water Quality Coordinating Committee has identified North and South Sandy Ponds as its second priority water body. Funding has been requested through the Water Resources Board of the Finger Lakes Association to begin an initial inventory of the watershed and ponds. The first step is to complete the inventory and management plan. Available funding is a constraint and with the existing fiscal status at all levels of government, progress on this waterbody may be slowed. It is suggested that shoreline septic systems are the primary contributor to water quality problems.

2. Soil Conditions and Development

Restrictive soils in Oswego County are cause for concern as development in the county continues. Because restrictive soils are so prevalent throughout the County, virtually all new development faces the potential problems associated with these soils.

Of particular concern are the soils classified as "most severe" which indicate no type of traditional on-site septic system is well suited. These soils are common in the Town of Schroepel, northeast of Phoenix and in the southeast portion bordering Onondaga County; and in the southern portion of the Town of Hastings including Central Square. These areas both offer proximity to Onondaga County and to the Oneida River making them prime areas for future development. The minimum size of a parcel of land needed to accommodate sustainable development without infrastructure is impacted by soil type.

3. Underutilized Lands

a. Forests

The County's natural resources are the basis for our economic well being. In the Tug Hill region public and private forest lands can and do serve a variety of uses including recreation, wildlife habitat, forest products and surface and groundwater protection. Forestry management plans can contribute to the improved use of our forest areas.

A recent article in the Syracuse Post Standard identified Oswego County as having 50-74% of its land area covered by forests. Approximately 62% of the state is forested and federal analysts say the State's timber is growing about three times as fast as it's being cut. With a large percentage of the county's land area consisting of forests, opportunities exist for expanding the economic benefit of these lands through timber management plans. NYS DEC foresters can help interested residents develop timber management plans and groups such as Tug Hill Tomorrow and Tug Hill Resources Investment for Tomorrow (THRIFT) can provide additional information and assistance to landowners.

b. Eco-Tourism

Most of the ecological zones in the county offer opportunities for nature education and interpretation. The Lake Ontario Coastal Zone has a rare freshwater dune system which with a management plan and local commitment, will provide excellent opportunities for wildlife observation, habitat preservation and other educational opportunities. A constraint to opening natural areas to more users is the potential for the disruption of habitat and destruction of the environment through over use. The balance should be carefully managed.

4. Large Open Spaces, Islands and Corridor Habitat

Recent research on wildlife populations has indicated that many species require large expanses of unbroken habitat for survival. Oswego County is fortunate to have a solid base of state forests and wildlife management areas. Small acquisitions of inholdings and key adjacent properties from willing sellers could allow for long term conservation of multiple wildlife species in a way that has little impact on private property owners. Also, maintenance of wildlife movement corridors between large public open spaces would assist with maintaining the viability of wildlife populations. Such corridors could be maintained through a combination of land use planning, landowner agreements and conservation easements.

Frenchman and Dunham Islands in Oneida Lake and the shoreline of Lake Ontario serve as prime bird migration and/or nesting areas which are critical elements in the protection and preservation of bird species. By maintaining and/or restoring native vegetation bird populations can be helped to stabilize. There should be educational opportunities for those that own property in the migrating corridors to learn about the migration routes and ways to protect the habitat for migrating birds. A constraint to restoring the habitat is that many areas of the shoreline are very developed and easement creation or habitat restoration would need to be done on a strictly voluntary basis. By retaining the migration routes and providing managed access, there are potential opportunities for tourism associated with the rapidly growing number of bird watchers in the U.S.

5. Wetlands

Wetlands pose several opportunities and constraints. Wetland areas provide wildlife habitat and can be utilized as a natural classroom. Wetlands also serve as natural water retention and purification areas and can serve as flood detention areas. Due to the nature of wetlands, they can be used to naturally create stormwater detention areas and waste water discharge purification areas. In certain cases wetlands prohibit development. Wetlands are protected from development through state and federal regulations which prohibits building or filling within the wetland or within 100= of the State regulated wetland boundary without a permit. However, wetland mitigation poses several opportunities for protecting wetland habitat and expanding public ownership and/or protection of large wetland complexes.

Approximately 95% of Peter Scott Swamp is held in private ownership, including approximately 11% owned by Sithe Energies, Inc. and 12% owned by the Phoenix Gun Club. New York State owns 5% of the swamp. Through wetland mitigation, parts of Peter Scott Swamp could be purchased to preserve the integrity of this flood plain and wetland habitat area. Other opportunities exist in Big Bay Swamp and along the Lake Ontario Shoreline.

6. Greenway Corridors

Opportunities and constraints in the Salmon River Greenway are highlighted in the Salmon River Corridor Greenway Protection and Development Concept Plan. A few of the opportunities are:

- * Provide open space and natural resource stewardship for the unique and relatively undeveloped corridor area while it is still relatively undeveloped.
- * Good water quality and a large amount of lake effect snow allow for year round recreational activities.
- * Interest by Niagara Mohawk in investing in the greenway corridor through development and by operating the hydropower facility in a more ecological manner.
- * Improved and expanded public and private facilities to accommodate recreational demand.
- * Salmon River Greenway Committee serves as a forum for planning and educational opportunities.
- * A nature study facility with visual and physical access to the Salmon River and trail system.

Constraints in the corridor are limited public funding, lack of local infrastructure (water and sewer) to support the added demand of tourists, and potential for over use of trails and other natural areas leading to degradation.

Opportunities also exist along the Lake Ontario and Oswego/Oneida corridors. Private, not-for-profit conservation organizations such as the Central and Western New York Chapter of the Nature Conservancy, the Onondaga Audubon Society and Save Oswego County all own nature preserves and are active in varying degrees with conservation efforts in the coastal zone. Partnerships between private industry, not-for-profits and county and

local governments offer opportunities to advance the greenway concept along Lake Ontario. Alcan and Sither Energy have both undertaken conservation initiatives along the shoreline.

The State Canal Plan supports the greenway concept along the canal system which includes Oneida Lake, the Oneida River and the Oswego River. State properties and cooperative efforts with local and county governments and private landowners in these corridors hold the promise of establishing a true greenway system.

D. GOALS, OBJECTIVES AND STRATEGIES

GOAL: CONSERVE THE NATURAL RESOURCES OF OSWEGO COUNTY IN ORDER TO MAXIMIZE THE LONG RANGE ECONOMIC, SOCIAL AND ENVIRONMENTAL BENEFITS TO CURRENT AND FUTURE GENERATIONS.

OBJECTIVE 1: Maintain steady progress towards reducing discharge of toxic substances, nutrients and sediments to the waters of the County.

- STRATEGIES:**
- a. Advocate that water quality in the Oswego River and Lake Ontario be a primary consideration of any cleanup plan for Onondaga Lake.
 - b. Maintain a comprehensive computerized inventory of SPDES permits, hazardous waste sites and other potential sources of water pollution in the county.
 - c. Develop a comprehensive computerized map of watershed/drainage basins and aquifers.
 - d. Assist well drillers in developing a voluntary certification program and creation of a central library for well construction data/logs.
 - e. Promote implementation of guidelines for erosion and sedimentation control.
 - f. Continue operation of a comprehensive solid waste management program and household hazardous waste collection program.
 - g. Support a watershed approach to improving water quality in priority water bodies including Lake Neatahwanta and Sandy Pond.
 - h. Utilize wetland restoration or creation as a means to reduce nonpoint source contaminants in surface waters.
 - i. Oppose disposal and long-term storage of out-of-county hazardous and non-recyclable wastes in Oswego County.

OBJECTIVE 2: Support long-term planning and control mechanisms and effective response efforts to insure residents, resources and properties are safeguarded from the effects of flooding and water level fluctuations.

- STRATEGIES:**
- a. Limit development in the 100 year flood plain to low intensity land uses and ensure that floodways are unobstructed in order to minimize flood damage potential to life and property.
 - b. Promote implementation of guidelines for stormwater management so as to prevent an increase in flood flows and in the hazards and costs associated with flooding.

- c. Encourage that stream geometry be maintained so as to sustain the hydrologic functions of streams.
- d. Encourage municipal participation in the National Flood Insurance Program.
- e. Encourage greenway planning in flood hazard areas.
- f. Support enforcement of Federal and State wetland regulations as they relate to flood control.
- g. Monitor the effects of Lake Ontario lake levels on shoreline erosion and support maintenance of levels within the recent historical range.

OBJECTIVE 3: Support the protection, stabilization, restoration and optimum public use of the Lake Ontario coastal zone's important environmental resources.

- STRATEGIES:
- a. Improve educational signage identifying erosion control issues.
 - b. Seek funding to study how sand movement in Lake Ontario affects freshwater dune and beach development and stabilization.
 - c. Improve managed public access to shoreline areas through development of dune walkovers, wildlife observation areas, and trails in appropriate areas, and divert higher intensity uses away from fragile ecosystems.
 - d. Promote low impact shoreline stabilization techniques and encourage ecological site planning in all shoreline areas.
 - e. Protect migratory bird habitat along shorelines, especially in the form of conservation easements and landowner management agreements.
 - f. Limit displacement of shore and harbor dependent uses and other water dependent uses which support economic development.

OBJECTIVE 4: Develop an ecological approach to planning for county growth to protect habitat for the diversity of plant and animal species, assure the protection of unique and irreplaceable biological resources, and sustain the traditional pastimes of hunting, fishing, trapping and viewing wildlife.

- STRATEGIES:
- a. Guide development to sites with existing infrastructure and low impact on natural resources.
 - b. Identify potential wildlife movement corridors between major open space areas and encourage their incorporation into greenway, trail and local comprehensive planning efforts.
 - c. Prevent decreases in groundwater recharge and stream base flow so as to maintain aquatic life, assimilative capacity, and potential water supply.
 - d. Work with the NYS Natural Heritage Program to inventory habitats of threatened, rare and endangered species throughout Oswego County and identify areas with unique or important ecosystems which warrant protection.

- e. Encourage landowner agreements or donation of conservation easements by waterfront industries for the purposes of habitat protection, especially along Lake Ontario and major waterways.
- f. Advocate implementation of guidelines for buffers along streams, rivers, wetlands and shorelines.
- g. Seek grant funding that will support land acquisitions and programs that protect biodiversity and wildlife habitat in the county.
- h. Improve public access to large parcels of forested public lands and waterways, especially from greenway corridors.

OBJECTIVE 5: Support the preservation and management of public and private forest lands for a variety of uses including sustainable harvest of forest products, recreation, wildlife habitat, surface and groundwater protection, and air quality enhancement.

- STRATEGIES:
- a. Work with private landowners to provide stewardship and to promote sustainable yields of forest products on private forest lands.
 - b. Advocate methods to continue traditional patterns of land ownership and use of the "northern forest lands" in the Tug Hill region.
 - c. Inventory all lands in public ownership and easement and identify and protect those that have significant value for recreation, nature study and environmental education.
 - d. Identify parcels that should be targeted for acquisition, recreational development or conservation of open space to complement existing large public open spaces, including those identified in the New York State Open Space Plan.
 - e. Identify lands that may be traded with public and private sector organizations and land holders in order to consolidate public holding sin the county and eliminate out parcels.
 - f. Develop sustainable management plans for all county owned park, recreation and reforestation properties including evaluation of the most cost effective approaches to stewardship and consideration of the sensitivity of natural areas to public use.

OBJECTIVE 6: Encourage implementation of best available technology and best management practices to maintain and improve air quality and protect the health of County residents.

- STRATEGIES:
- a. Upgrade air pollution controls at the Energy Recovery Facility.
 - b. Develop a model ordinance for local control of burning of refuse.

OBJECTIVE 7: Encourage practices for efficient, environmentally sustainable agricultural production and maintain or enhance agricultural lands as a viable and competitive natural resource.

- STRATEGIES :
- a. Support whole farm planning for local farmers and agricultural operations.
 - b. Encourage local communities to consider clustering and other creative planning techniques that can help to preserve agricultural lands.

III. HISTORIC RESOURCES

A. INVENTORY

1. National Register

The National Register of Historic Places is an important component of the nationwide preservation process. It is a resource which contributes to the understanding of the historical and cultural foundations of the United States. Administered by the National Park Service, under the Secretary of the Interior, the National Register is a working list of properties determined to be of national, state, or local significance and worthy of preservation and consideration in planning or development decisions. Properties on the listing are distinguished because they are documented and evaluated according to uniform standards, *The Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation*. These standards were developed to recognize the accomplishments of all peoples who have made a contribution to our country's history and heritage. The criteria are designed to guide state and local governments, federal agencies, and others in evaluating potential entries to the National Register (Appendix III-A). The National Register includes the following: all historic areas in the National Park System; National Historic Landmarks which have been designated by the Secretary of the Interior for their significance to all Americans; and properties significant to the Nation, State, or community which have been nominated by the states, federal agencies, and others and have been approved by the National Park Service (U.S. Department of the Interior, The National Register of Historic Places). The number of historic resources in New York State are shown below.

Table III-1: Historic Resources in New York State

<u>Resources</u>	<u>Number</u>
National Register of Historic Places	3000 listings
Historic Sites Inventory	180,000 sites
State Administered Historic Sites	35 sites

Source: Conserving Open Space in New York State, 1995, p. 39

Typically, the necessary documentation and forms to nominate properties to the National Register are prepared by organizations, sponsors, or by the staff of the State Historic Preservation Officer. The completed nomination is presented to the State Board for Historic Preservation for approval. If approved, the Commissioner of the Office of Parks, Recreation and Historic Preservation (OPRHP) lists the property on the State Register and forwards the nomination to the National Park Service for final approval and listing on the National Register. Communities having a Certified Local Government make recommendations on properties eligible for nomination in their community directly to OPRHP. The nomination process is designed to insure complete and accurate documentation of each eligible property. In Oswego County, 250 properties are listed on the National Register (Appendix III-B). These include buildings within the county's four historic districts located in the Village of Mexico, the Village of Pulaski, the Village of Sandy Creek, and the City of Oswego. Individual nominations outside these districts include fourteen in the Town of Mexico, twelve in the Town of Sandy Creek, and fourteen in the City of Oswego. In addition, there are twelve other properties in the county listed on the National Register. Fort Ontario in the City of Oswego is not only listed on the National Register, but it is also a State administered historic site demonstrating mid-nineteenth century army life at the star-shaped fortress (New York State Parks, Historic Sites, & Programs Guide, G-21). Numerous other properties are listed on the Village of Phoenix/Town of Schroepel Local Register (Appendix III-C). Designated by the local Historic Preservation Commission, these properties meet the criteria for local significance, but have not been designated by the State of New York or the Federal government. The rest of the county has no provision for designating properties to a local register.

2. Historic Districts

Historic properties are concentrated in the county's four historic districts. Ninety-three properties in the Franklin Square Historic District in the City of Oswego are listed on the National Register of Historic Places. As the center of early Oswego, Franklin Square was laid out on the west side of the Oswego River in 1797. It was designed to be the city's civic as well as residential center with a courthouse, academy, and prison and houses from all major periods (Federal, Greek Revival, Gothic, Italianate, and Queen Anne) surrounding them. In the nineteenth century, these typical New England blocks became the focal point for the prestigious residences of merchants, ship builders and ship captains, bankers, millers, and lumbermen. The northern blocks on the square were sold in 1817 to raise money to build the Oswego County courthouse on the east side of the river (Franklin Square Historic District, 2).

The Mexico Village Historic District includes 56 properties on the National Register. These properties, mostly of Italianate or Greek Revival architecture, are located on a two block Main Street and several adjacent residential blocks (Mexico Multiple Resource Nomination, 53). The historic district includes a portion of those residences which survived with few or no alterations as well as the village's commercial core. During the nineteenth century, the Village of Mexico had two primary functions: (1) services and housing for people travelling west from Rome to Oswego on the overland route; and (2) commercial and industrial services for the large surrounding agricultural community. The two creeks, Black Creek and Little Salmon Creek, provided water power for grist and saw mills and machine shops, wagon and pump manufactories, and cooper shops. Many homes in the historic district were built by mill owners and reflect the early success of the mills.

The Pulaski Historic District consists of 38 sites in the intact historic residential and commercial core of the village. The 14 acre district is rectangular in shape, three blocks long and two blocks wide. The boundaries of the historic district correspond closely to the original local militia drill field. In the early nineteenth century, the center portion of the field developed as the business district leaving open areas at each end which later became parks. The parks, residences, churches, civic buildings, and commercial structures were constructed between 1819 and 1940 and include a high concentration of Italianate architecture. Although an 1880 fire destroyed nearly all the central district, merchants rebuilt within one year in varying designs, predominantly Italianate. The people of Pulaski have a high degree of pride and an awareness of the architectural heritage which survives in their historic district (Pulaski Village Historic District, 1).

The Sandy Creek Historic District includes eleven commercial, residential, and civic properties constructed between the 1835 and 1928. The district encompasses 3.7 acres of the historic and present commercial center of Sandy Creek located at the intersection of U.S. Route 11, the historic Syracuse-Watertown plank road, and Harwood Drive, the historic main street of commercial, religious, and civic properties. The eleven properties represent development based on the prosperity of local farmers, the opening of transportation routes, and the advent of tourism (Sandy Creek Multiple Resource Area, 2).

3. Archaeological Resources

The New York State Office of Parks, Recreation, and Historic Preservation has mapped all known archaeological resources for the state on the New York State Archeological Sensitivity map. Because of the sensitive nature of this information, the map is not reproduced and is filed at the offices of the OPRHP in Albany. From reading the map it can be seen that archaeological areas in Oswego County are concentrated along the Oswego River, Oneida Lake, the Salmon River, and Lake Ontario at the mouth of the Salmon River at Selkirk Shores. Additionally, the Town of New Haven, the villages of Parish, Central Square, and Pulaski, and the cities of Fulton and Oswego are exceptionally sensitive areas. Shipwrecks in southeastern Lake Ontario have been inventoried by the Oswego Maritime Foundation (Appendix III-D).

B. TRENDS

1. Federal Legislation

Preserving historic properties as a reflection of our American heritage became national policy through the passage of the Antiquities Act of 1906, the Historic Sites Act of 1935, and the National Historic Preservation Act of 1966, as amended (National Register Bulletin 15, i). The Historic Sites Act authorized the Secretary of the Interior to identify and recognize properties of national significance. The National Historic Preservation Act of 1966, as amended, was designed to accelerate and expand historic preservation programs and activities on the Federal, State and local levels. It authorizes the Department of Interior to establish, maintain and expand a National Register of Historic Places to recognize not only properties of national significance but also those of local and State significance worthy of preservation. As the nation's central historic preservation law, the National Historic Preservation Act also established the following: State Historic Preservation Officer responsibilities, Grants-in-Aid program, Certified Local Government Program, Advisory Council on Historic Preservation, and Federal Agency responsibilities. Under this legislation, the National Park Service sets program direction and assures consistency for preservation activities nationwide.

As defined by the Department of the Interior, the goal of the national preservation program is "to establish national standards for historic preservation, to identify and document significant historic resources in the United States, to assist in preservation efforts by providing assistance to public and private preservation agencies and organizations and to educate the general public concerning the value of historic preservation." (U.S. Department of the Interior, The National Register of Historic Places) Preservation keeps intact places that are important parts of a community's identity and provides historical information about how an area was settled, developed, or declined. It helps a community to identify and understand the economic, geographic, environmental, social, and cultural forces that shaped its development (Stokes and Watson, 38).

The federal government recently entered the historic preservation picture in a major new way. The Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA) permits money allocated for "transportation enhancement activities" to be used for the acquisition of historic sites, for historic preservation, and for the rehabilitation and operation of historic transportation buildings, structures, or facilities (Baer, 84).

During the last decade, many incentive programs have suffered because of changes in political and public support. Changes with the federal Tax Reform Act of 1986 curtailed the attractiveness of the tax credit by imposing restrictive passive-loss rules on the use of the credit and by denying its availability to wealthier taxpayers (Schwartz, 12). The tax credit was reduced from 25% to 20% and the amount of the credit a taxpayer could use each year was trimmed to \$7000. Previously, taxpayers could use all the credit available to them in the year the project was finished. Many state and local governments have tried to compensate for these changes. It is unlikely, in a tight fiscal climate, that the original tax credits will be restored (Hoyt, 87).

2. Neighborhood Preservation

Early preservation efforts concentrated on museum-like buildings. During the 1960s, urban renewal and highway building provoked concern over the demolition of historic buildings. Thus, began organized efforts to also protect buildings for their architectural or scenic qualities. The use of preservation ordinances, one of the oldest preservation tools, exploded in the mid-1960s. Previously, the concept had only spread slowly throughout the nation after Charleston, South Carolina, enacted the first historic preservation ordinance in 1931 (Roddewig, 1). These ordinances have evolved as a vehicle to protect individual landmarks as well as entire neighborhoods.

Lately, attention has shifted from individual buildings to larger areas, city neighborhoods, county villages, and rural countryside (Wellman, x). Historic preservation trends focus on restoring the character and vitality of downtowns and neighborhoods, converting structures for new economic activities, and restoring outdated transportation routes for interpretation and recreation. Removing fake facades from store fronts is one step in restoring the historic character of downtowns. Another is supporting the multiple use of these buildings. For example, use the street level space for commercial activities, second level for office activities, and the third level for

residential. Gaps in historic neighborhoods are being filled with buildings of similar style to reflect the original character of the area. With the decline in manufacturing, empty factories, warehouses, and mills are being converted for commercial space and housing. Churches and schoolhouses have been converted primarily because of consolidation. Within archaeology, shipwrecks and underwater heritage sites are one of the fastest growing branches. By continuing to be used, historic resources can often best be of service to present and future generations while at the same time retaining tangible reminders of the story of the area=s development (Historic Resources Survey Manual, 15).

3. Comprehensive Planning

Preservation concerns and values have found their way into comprehensive plans and the overall planning process over the last decade (Morris, 37). Frequently, preservationists and planners have clashed, not understanding one another=s purpose or motivations. Communities are now recognizing the aesthetic design and economic values of preservation. Increasingly, municipalities include a historic preservation element in their comprehensive plans or at least use preservation techniques in other elements of the plan such as housing, economic development, or community design. Planners are looking at historic preservation as part of the planning solution rather than as a problem.

C. ANALYSIS

1. National Register Listing

The results of listing on the National Register help to preserve historic properties. First, the property is recognized as significant to the Nation, the State, or the community. Second, the property is considered in the planning of Federal or federally assisted projects and in the decision to issue a surface coal mining permit. Finally, a property on the National Register is eligible to take advantage of federal tax provisions and qualifies for federal assistance for historic preservation when funds are available. Being listed on the State Register also has benefits. Historic properties are considered in the planning for projects involving state agencies and qualify for state grants.

Listing on the National Register is an honor and an important step in the preservation process, but it does not protect the historic property as much as might be expected. In general, there are no restrictions on private owners of registered properties. Owners may sell, alter, or dispose of their properties as they wish, consistent with local ordinances. Being on the National Register does, however, provide protection from demolition when federal or state funds are to be used.

2. Local Regulation

Communities dedicated to historic preservation have taken different routes to protect their historic resources through zoning, NYS General Municipal Law, section 96-a and the NYS Municipal Home Rule Law. Preservation controls are an exercise of police power that have been found constitutionally to be a legitimate public purpose.

Zoning variances or special use applications granted in or adjacent to historic areas can have a significant impact on historic character. For example, in a historic residential district where one essential quality of the streetscape is a uniform setback from the street, an application for a variance might mar the character of the neighborhood (White and Roddewig, 12). On the flip side, variances or special permits which do not disrupt an area=s character can encourage rehabilitation. Zoning is a police power regulation of cities, towns, and villages which divides a municipality into districts or zones. Permissible uses of land are prescribed in each zone. The simplest way to coordinate historic preservation with zoning is to make historic districts official zoning districts (12). By providing particular districts with carefully drafted standards for land use and for the design and siting of improvements, zoning can provide the type of regulations typically judged appropriate for historic preservation. This is often accomplished by using a historic district overlay which provides a set of regulations aimed at

preservation in addition to the basic use and other controls already applicable to the land pursuant to the underlying zoning districts.

Unlike zoning, General Municipal Law applies to counties as well as to cities, towns, and villages. General Municipal law, section 96-a, contains specific authority for historic and aesthetic preservation controls including, regulations, special conditions and restrictions. (State of New York Department of State, 2) This statute is in addition to zoning powers, therefore, there need not be any zoning controls in effect to use this statute. The permissible purposes of these restrictions, special conditions and regulations and what may be accomplished by them is broadly stated in the statute. Regulations can be adopted to preserve buildings and areas which may not be of historic importance but are of architectural or other significance to the neighborhood. Finally, a unique provision authorizes controls to apply not only to a specific property being preserved but also over the use and/or appearance of neighboring private property within public view. This recognizes that a place of historic or aesthetic value can be greatly affected by the use and appearance of a nearby property. Nevertheless, controls over neighboring land would have to be reasonable (3). The Village of Phoenix/Town of Schroepfel Certified Local Government was developed under New York State General Municipal Law.

The third source of police power to enact preservation regulation is the broad local law powers granted to municipalities by the Municipal Home Rule Law. Counties, cities, towns and villages are authorized to adopt local laws relating to the protection and enhancement of their physical and visual environment (Municipal Home Rule Law, section 10 (1)(a)(11)). This is not limited to controls for historic preservation purposes, but could prove to be useful particularly if controls are desired outside the framework of zoning ordinances.

The Village of Phoenix/Town of Schroepfel has established itself as a Certified Local Government (CLG). By being a CLG, a community strengthens its ability to make important decisions about local preservation, development, and planning issues. In New York State, the Historic Preservation Services Bureau of the Office of Parks, Recreation and Historic Preservation (OPRHP) coordinates the Certified Local Government Program and provides assistance to member communities. In this state and federal preservation partnership, a CLG enjoys expanded participation in preservation activities, coordination with other programs such as Urban Cultural Parks, and priority legal, technical, and design assistance from the OPRHP. More specifically, the benefits offered to CLGs include training from OPRHP, participation in nominations to the National Register of Historic Places, participation in the national historic preservation assistance network, access to publications on historic preservation, and professional assistance.

Being a CLG has financial benefits as well. Certified Local Governments are eligible to apply for earmarked grants from their State Historic Preservation Office. At least 10% of annual federal preservation grant monies must be distributed among Certified Local Governments. While most CLG grants are used for planning and public education projects, the repair and restoration of properties listed on the National Register is an eligible activity.

To become a Certified Local Government, the local government must establish and enforce local legislation for the designation and protection of historic properties. This requires the following: a local Historic Preservation Commission, a process to landmark historic properties, and a method for reviewing changes to these landmarks. (New York State Office of Parks, Recreation, and Historic Preservation, Help for Community Preservation) Besides these three requirements, the CLG has a broad latitude to draft laws appropriate to their community. When requested, the New York State Office of Parks, Recreation, and Historic Preservation provides model preservation laws and legal advice.

The Village of Phoenix/Town of Schroepfel has used its benefits as a CLG for many purposes. The Historic Preservation Commission has conducted workshops to educate the public and other local governments on the importance of historic preservation. In 1988, they received funding from the New York State Council on the Arts to conduct a Historic Landscape Preservation Study. A second survey, the River Bridge and Canal Historic District Architectural Study, was published in 1990 with funding from the State Historic Preservation Office. The commission affected community planning by enforcing a historic preservation ordinance through a local law. Ultimately, however, the Village of Phoenix/Town of Schroepfel CLG separated when the village changed its law

in June 1995. Now, the village board rather than the preservation commission approves building changes; the village's commission is only advisory. With the change in the village's law, the Town of Schroepfel reorganized and in early 1996 formed a Schroepfel Landmarks Commission. The town remains a CLG and expanded the new commission's activities to include landscape and archaeology (Dix). The CLG status of the village is questionable.

Under authority conferred on counties to adopt local laws relating to the protection and enhancement of the physical and visual environment (Municipal Home Rule Law, section 10(1)(ii)(a)(11)) and to provide, by regulation as well as otherwise, for protection of historic and architectural resources (General Municipal Law, section 96-a and Article 5-K), Madison County has proposed a county Certified Local Government to preserve its unique heritage. Although other counties in the nation are certified CLGs, Madison County is the first county in New York to propose it. As a county CLG, its cities, towns, and villages would have the following options: having no preservation controls at all, electing to be included in the county local law by a local law/ordinance/resolution, or adopting its own preservation law or ordinance (Madison County Board of Supervisors). The county CLG puts legislation in place to be utilized as determined by each locality.

There are also several benefits of the county local law. In rural counties like Madison and Oswego, enacting a historic preservation law and developing, initiating, and forming a commission to carry out that law can be time-consuming and duplicative. Additionally, if a county had legislation and a commission to serve it, the expertise, experience, and training could be shared by the entire county. Finally, rather than being in competition against each other, local governments could, under a county historic preservation umbrella, develop skills to acquire funds in a cooperative and planned way. As a county unit, projects may be more competitive for grant sources. Nonetheless, Certified Local Governments are more common at the local level.

For over 60 years, local preservation ordinances have been the primary tools for historic preservation. While these techniques will continue to be a key to historic preservation, they are limited in preventing exurban sprawl and addressing financial pressures on owners of historic properties which are both important in protecting the broader context of historic areas (Morris, 1).

3. Financial Incentives

Financial incentives to rehabilitate and maintain historic buildings encourage private participation and investment in preservation. Because of the financial attraction, owners of historic properties who may not be active in preservation are encouraged to save buildings and become advocates. The purpose of incentive programs is to provide a contract of sorts between the property owner and the public, to counter government forces or land use policies that inadvertently threaten historic resources, to generate systematic rehabilitation of historic buildings, to provide for rehabilitation projects to compete with new construction or abandonment, and to compensate owners who may be significantly burdened by historic preservation laws. Federal rehabilitation tax incentives first authorized by the Tax Reform Act of 1976 and strengthened by the Economic Recovery Tax Act of 1981 were the biggest government-sponsored boom to preservation. The decade from 1978 to 1987 was the golden age of historic preservation in the United States during which a preservation industry came into being. While the Tax Reform Act of 1986 reduced the benefits of tax incentives, they are still available. The table below shows healthy investment, with or without credits, in the rebuilding of older structures.

Table III-2: The Projected Growth in Rehabilitation

1993: \$23.1 billion
1994: \$24.9 billion
1995: \$26.9 billion
1996: \$28.3 billion
1997: \$30.1 billion
1998: \$31.1 billion

Source: F.W. Dodge in Hoyt, p. 87

Dodge's figures, however, may underestimate rehabilitation's real value by some 25 percent. Not included in these figures are countless projects costing less than \$1 million such as commercial fix-ups and major single-family renovations (Hoyt, 86).

The preservation tax incentive is available to eligible owners of historic commercial, office, industrial, or residential properties listed on the National Register. It rewards owners of depreciable historic structures with an investment tax credit for rehabilitation costs. Generally, an owner has to preserve 75 percent of the original exterior wall to qualify for federal-tax preservation incentives.

Most public agency and private foundation funding programs are for municipal or NFP owners. Properties owned by municipalities and not-for-profit organizations are eligible to apply for state historic preservation matching grants. New York State established the Environmental Protection Act/Environmental Protection Fund (EPF) in 1993 to provide a funding mechanism "to protect the environment" through a variety of grant programs including park, recreation and historic preservation. The New York State Office of Parks, Recreation and Historic Preservation administers this program. Municipalities, NFP corporations, and more recently school districts and BOCES, are eligible to receive 50% matching grants for the acquisition, restoration, preservation, rehabilitation, protection, or improvement of historic buildings, structures, sites and objects listed on the National Register of Historic Places. The EPF grant program is similar to the grant program funded under the Environmental Quality Bond Act of 1986 except under EPF municipalities may apply for the acquisition of historic resources.

There are few opportunities for assistance to private property owners and particularly owner occupants. Residential and commercial property owners may, however, qualify for federal, state, or municipal funds distributed through county and/or city agencies or private lending institutions in the form of low interest loans or grants. As discussed above, owners of income producing properties may qualify for federal income tax benefits. Beyond the consideration of age and condition of historic properties, these programs emphasize providing affordable housing, creating employment opportunities, and investing in local communities. They may also offer assistance to target areas such as older urban neighborhoods or rural agricultural districts. Interestingly, most grant programs require that the historic property be listed or eligible for the State or National Register or be designated as a landmark under a local preservation ordinance at the time of the application. A list of organizations offering funding for historic preservation projects are listed in Appendix XI-B.

4. Downtown Revitalization

A key element in keeping a historic neighborhood or commercial area viable is that it must be used. In Oswego County, the population of the cities and villages has declined or grown very modestly. Most growth has been outside these corporate limits. By containing development and preventing urban sprawl, the continued use of historic buildings is encouraged. The "sense of place" of a village is frequently defined by the flavor of its central business district (CBD). Traditionally, the CBD symbolized the vitality and strength of a community. The singular advantage of this area was its centrality as reflected in the saying, "All roads lead downtown." The CBD is often the only part of the city or village a visitor sees and thus provides the sole basis for an assessment of the place. This highly visible area is characterized by pedestrian traffic, high density development, and mixed uses.

Downtown merchants have been hurt by competition from shopping malls and commercial strips and the consolidation of key social institutions such as post offices. Additionally, pressure for redevelopment, together with tearing down buildings to save on tax assessments, threatens the oldest and most historic CBD buildings. Because the oldest blocks of a village typically form the CBD, historic resources are concentrated there. Consequently, preservation and revitalization efforts are focused in the CBD. The initial task then is to define the boundary of the central business districts and the transitional areas around them.

Defining the boundaries of the CBD is a difficult task. Factors determining the boundary include intensities of land use, land value, building height, street level uses, and upper story uses. The shape of the CBD tends to be either square or elongated (1 or 2 streets). The transitional area adjacent to the CBD is of mixed land uses and is a buffer as well as a reservoir of potentially renewable land for CBD or residential uses (Hartshorn, 309). Once the boundaries are mapped, this area can be targeted for revitalization.

Offering incentives and implementing programs within boundaries of historic CBDs can encourage revitalization and redevelopment by steering development into the central business district. Main Street programs assist small community merchants in making their business district a more attractive place in which to shop (Stokes and Watson, 14-15). The components include historic store fronts, new uses for vacant or underused buildings, improved parking, assuring a range of stores and services, and a resident population downtown. Landscaping is a crucial factor in the appearance of a city or village. Planters, street lights, benches, trash receptacles, fences, walls, and pavement patterns contribute to a lively and richly detailed streetscape. To function as a neighborhood service center, pedestrian and traffic safety need to be enhanced. Sidewalks are an essential element of a pedestrian-friendly village which many villages lack. Together, the appearance of place, marketing practices such as coordinated opening hours, special events, and shared advertising can fill a CBD with activity from both natives and visitors (Sutro 17).

5. Adaptive Reuse

Adaptive reuse retains and reinforces the historic cultural landscape while accommodating contemporary uses, needs, and conditions. Abandoned schools, factories, and warehouses have been converted to much-needed housing, offices, and commercial space. In today's competition for public funding of historic preservation and economic development projects, it is essential to link the two in a comprehensive strategy. Many developers combine the historic preservation tax credit with economic development and commercial revitalization grants to tackle rehabilitation projects previously considered unfeasible. As much as 16 percent can be saved in construction costs for gut rehabilitation while 18 percent can be saved in construction time over demolishing a building for a new building of similar size. Also, developers and owners are discovering that a recycled building is more likely than a new building to be approved by neighborhood groups and conservationists (Hoyt, 86). For example, when Kingston, New York converted its 1910 Stuyvesant Hotel into apartments, the construction costs were much less than a new building at the same location. Rehabilitation cost \$78 per square foot compared to some \$100 for a new, multi-story, semi-fireproof building. The goal of this project was not only to provide housing for a mix of elderly, handicapped and mentally disabled tenants, but it was also to increase the city's charm and attract small businesses to the depressed business district. Now, the Stuyvesant is the most conspicuous building in the neighborhood. Its face lift has sparked upgrading of nearby structures. The challenge for planners and preservationists is to encourage new infill and adaptive reuse and rehabilitation of older buildings that complement historic development patterns while maintaining a regulatory environment that is receptive to economic development.

6. Development Incentives

Besides investment tax incentives, zoning and building code incentives can have significant impacts on the rehabilitation of historic properties. Local land use management tools including zoning and parking requirements must be analyzed for their effect on historic properties. Relaxation of land use classifications and variance and special use procedures for historic structures may encourage rehabilitation and reuse. Relaxing parking codes can prevent the demolition of properties or the clearing of areas near historic properties that may be necessary to comply with parking requirements. Planning boards approve these requests. The education of planning board members is required if those options are to be used.

7. Landscape Features

Culturally distinct rural areas usually have had unique ways of building, laying out farms, and creating furnishings and food. A key visual impression of the rural landscape is the repeating pattern of farm building clusters and associated open fields. Among these open spaces, significant historical features reflect the culture of people, patterns of development, or changes in technology. These features could include cemeteries, parks, farms, bridges, canal locks, or dams. Examples in our landscape are the Case Wall in the Town of Williamstown and the Salladin graves in the Town of Mexico, as well as remnants of the original Oswego Canal. The impact of new

construction on historic landscapes has not been considered in most preservation programs perhaps because most are based on urban models.

Unlike buildings, historic features in the landscape are not as easily recognized or understood (Reppert, 81). Nonetheless, identifying them is the start to valuing these features for their cultural, educational, economic and quality of life purposes. Once identified, stewardship or easements, either donated or purchased, would encourage their protection.

8. Archaeological Resources

As with buildings and landscape features, an important step in protecting archaeological resources is identification. Because many of these sites have been built over by streets or buildings, identifying them requires two steps, background research and field work. Background research identifies the most likely places to look while field work inspects the ground surface, sometimes including excavation.

The preferred method of physical protection of archaeological resources is to simply leave the site undisturbed. Another suggestion is to incorporate the site into development projects. The site can be left intact within landscaped areas, buried under fill, or exposed to some extent and interpreted for the public. Many sites may be appropriate for incorporation in greenway planning. If a site cannot be physically preserved, data recovery is appropriate. This means excavating the site to study the information and then translating that information into written form (books, maps, notes) to be consulted by future scholars. When a project site may be in an archeological sensitive area, a Cultural Resource Investigation determines if an archaeological resource is eligible for the National Register of Historic Places. The steps of the investigation are as follows: (1) determining the presence of resources in the project area, (2) if identified, proposing modifications to the project to minimize or avoid impact, (3) if modifications are not possible, evaluating the resource in detail, and finally (4) researching to provide adequate data for eligibility to the National Register. The report should include evidence of the resource=s integrity and significance and an evaluation of the impact of the proposed project on the site. The purpose of the process for listing on the National Register is not to impede or halt development, but it is to assure the value of the historic property is given direct consideration in planning decisions (Parker).

Among our archaeological resources are submerged vessels. The Great Lakes region is widely recognized as one of the best shipwreck diving locations because its cold fresh water has preserved a multitude of vessels. Shipwrecks offer information on ship design, engineering, commerce, and shipboard life. These vessels are clues to how water transportation shaped the country and are a significant part of our cultural heritage. Moreover, goods and material remains at sites indicate choices of our ancestors and their lifestyles (FGG Executive Services Inc., 4) Exposure to air accelerates the decomposition process, consequently, shipwrecks are often better left submerged.

Underwater parks and preserves encourage the preservation of underwater historic resources. Because local businesses and stakeholders depend on attractive shipwrecks for their livelihood, they promote preservation and anti-pillaging among their customers. Unfortunately, in Oswego County and much of New York State diving areas are currently open frontiers. The preservation of historic resources and the viability of a diving industry, thus, relies on divers respecting underwater resources. Divers can either be the most destructive force to preservation or its greatest asset. To encourage the later, the Great Lakers Dive Association in Fulton prefers methods of self-regulation over legislation. These would encompass volunteer ?patrols= by local diving clubs, ?take nothing= rules enforced by dive charter leaders, educational programs, and preservation ethics taught by diving instructors.

Well planned and coordinated promotion and preservation programs encourage education, recreation diving, and tourism. In Oswego County, the Oswego Maritime Foundation, a non-profit corporation, leads a Marine Archaeology Program with technical and service support from the Great Lakers Dive Association and New York Sea Grant. The program=s purposes are as follows:

1. Locate, identify, and map shipwrecks and submerged cultural resources before they are obscured by zebra mussels or destroyed by misuse.

2. Through public education programs, increase public awareness of, and appreciation for, the region=s maritime heritage.
3. Through public education programs, reduce the frequency of shipwreck pillage, and promote the responsible use of shipwrecks for recreation, education, and scientific study.
4. Promote sport diving as a tourism industry. (Oswego Maritime Foundation)

Before a historic dive location is given public access, it should be identified, documented, and inventoried to gather all information about our cultural heritage (Great Lakers, 6) This information contributes to our overall knowledge of maritime history benefiting museums, schools, historians, and the general public. Additionally, the Canadian organization, Save Ontario Shipwrecks, has noticed that pillage decreases when the contents of a shipwreck are widely publicized and frequently visited by dive charter boats (6).

The U.S. Abandoned Shipwreck Act of 1987 (ASA) influenced the use and management of cultural resources in the Great Lakes. This act culminated from conflicts and confusion over ownership and management of abandoned shipwrecks. The act does not apply to other underwater cultural resources such as prehistoric remains or historic docks and wharfs. The ASA has two general purposes. They are to:

- ⊗ eliminate the application of admiralty law of finds and law of salvage to abandoned shipwrecks 1) embedded in submerged lands of a state, 2) embedded in coralline formations protected by a state on submerged lands of a state, or 3) on submerged lands of a state and included in or determined eligible for inclusion in the National Register of Historic Places.
- ⊗ affirm state ownership and management authority for abandoned shipwrecks that meet one or more of the three criteria listed above. (Vrana and Mahoney, A6)

The ASA clarifies use and management by:

- ⊗ characterizing abandoned shipwrecks as multiple resources.
- ⊗ emphasizing rights of reasonable access by the public.
- ⊗ encouraging the development of underwater parks, or other types of areas that provide additional protection.
- ⊗ requiring public participation in the preparation of guidelines to foster partnerships in management. (A6)

New York State models its shipwreck program after the Abandoned Shipwreck Act. Because abandoned shipwrecks are primarily yielded to the State, the county is encouraged to establish a partnership with state agencies.

9. Economic Development

Historic preservation need not be a limitation on development, rather, it can be the basis for it (Herr, 33). More than ever, cultural and natural assets form the basis for economic development in small communities. Historic preservation programs tend to be a stimulus for tourism and economic investment. Each dollar awarded in grants and loans by the National Trust for Historic Preservation leveraged an average of ten dollars. The greatest attractions for economic growth in many towns are their quality of life, natural environment, historic legacy, and cultural context. Small communities also rely on monies received from tourism and its related service industries for major portions of their economic activity. Increasingly, visitors flock to sites of historical and cultural significance (Munsell, 30). Studies prove that visiting historic sites and small-town shopping are two of the top preferred activities of travelers. Even those not considering themselves preservationists seek the quality, safety, and unique experiences offered by small-town America (Cole, 6) In a survey reported by the New York State Office of Parks, Recreation and Historic Preservation, 70% of respondents expressed interest in touring historic properties (Historic Preservation Field Services Bureau). This underscores the value of National Register designation and the financial benefits which historic preservation can provide.

10. Education

Educational efforts are a key to a community's preservation success. There is the misconception that preservation is unrelated to the real needs of the county -- jobs, housing, human services. Consequently, preservation is not supported. Education is not only necessary for the public but also for those who develop and administer programs (Herr, 35). Before hoping to have an effect on an individual's perception of historic preservation or a change in attitude or behavior relating to it, it is first necessary to make individuals aware of the historic resources surrounding them (Veverka, 27). Many tools are now available whether they are high-tech (video, community cable television, computer simulations) or more traditional (workshops, newsletters). Particularly used in heritage tourism, the interpretive communication process is designed to reveal meanings and relationship of our cultural heritage through first-hand involvement with objects, artifacts, landscapes, and sites.

Recently, the Heritage Foundation suggested a brochure of basic architectural styles for realtors. This brochure will give realtors a reference for describing houses/buildings and assisting clients seeking historic structures. Private property owners frequently are unaware of the maintenance "how-tos" of historic buildings. A pamphlet describing repairs (windows, doors, roofing) may encourage property owners to make those repairs consistent with the building's historic style rather than altering it. Appreciating our heritage and wanting to preserve reminders of that heritage can be taught at an early age. This could encompass learning our history of development, identifying architectural styles, and hearing traditional folk stories. This would build on the work of local historians.

There are many participants in the county that can influence the direction of historic preservation in Oswego County. These include among others, local historians, not-for-profit organizations, planning board members, developers, realtors, private property owners, and school children. Frequently, preservationists fear that planning and zoning boards are too pro-development and unable to say "no" when development threatens a key historic resource. On the other hand, preservationists are sometimes viewed as unwilling to look for workable compromises. However, the benefits of linking preservation and wise land-use planning is beginning to override these fears (White and Roddewig, 41). With the decisions of the planning board and the cooperation of developers, new development should respect the community's identity and share qualities of scale, form, and materials with existing development. It is important to strive for better coordination between the work of historic preservation organizations and local planning boards and municipal legislatures. The lack of interaction weakens preservation efforts (Morris, 1).

11. Local Historians/Historical Societies

Each town and/or village has a historian or historical society as does the county as a whole (Appendix III-E). Local historians collect and interpret history whether it be written, oral stories, or information from town files. This information is shared with the public through newspaper columns, local history days, and presentations in schools. The Pulaski Historical Society has developed a self-guided tour for the Village of Pulaski including its historic district of nineteenth century commercial architecture and the restored H. Douglas Barclay Courthouse. Additionally, the Mexico Historical Society published a tour for the Village of Mexico particularly its residential Historic District and the fourteen properties listed on the National Register (Oswego County Department of Promotion and Tourism).

Several organizations in the county participate in preserving and expanding our historic and cultural resources. The Heritage Foundation of Oswego, Inc. purpose is "... to promote, protect, and enhance the historical and environmental resources found within the County of Oswego, New York." (The Heritage Foundation of Oswego, Inc. Annual Report) In fulfilling this purpose, this not-for-profit organization advises on building restoration, consults as to community services, and advocates for historic preservation. The Heritage Foundation sponsors two self-guided walking tours in the City of Oswego. The tours provide a view of uncommon and intact nineteenth century architecture and an opportunity to learn about the settlement and development of this region.

The Heritage Foundation is finishing a county-wide survey of historic and archeological sites, including text and maps for each town, village, and city. Understanding that there is a system for recognizing historic resources is an educational tool. A historic inventory helps a community to identify and understand the forces that shaped its development. (Wellman, 111) Additionally, this information can be used to prepare nominations for the State and National Registers and to consider land use and the planning of new projects.

A basic step to prevent harm to historic and cultural resources is a notification program. Frequently owners are willing to protect important resources once they learn about them. Logically, notification follows the resource inventory. Owners are notified about why their property is significant and why it deserves protection. Owners appreciate information compiled by organizations about their property. It prevents hard feelings and increases the owner=s awareness of historic resources (Stokes and Watson, 174-175). This process can be the first step in establishing a good relationship with a property owner and that relationship may eventually lead to a permanent commitment to protecting significant resources.

For the past fifteen years, the Heritage Foundation has sponsored a county-wide Plaque Program. Locally designated properties receive historic recognition and each property displays a plaque which denotes the historic significance of the property. This program helps to educate the public about the historic significance of the buildings and landscapes in the

area. Recognition programs work because they give owners pride and praise in protecting a community resource (Stokes and Watson, 174).

12. Celebrations and Festivals

Celebrations around community and history can be educational. During the summer months, for example, communities bordering the Oswego River celebrate the history of the canal. Canal Days in the Village of Phoenix highlights the nineteenth century history of the village as a stopping point along the Oswego Canal. Begun as a fourth grade history project, the festival incorporates canal history into its street festival of traditional storytelling, crafts, and entertainment. Celebrating its historic waterfront, the City of Oswego hosts one of Central New York=s greatest summer festivals, Harborfest. This festival is highlighted by reenactments of the battles of the War of 1812 and other special events at Fort Ontario. The four day event is packed with historic storytelling at the H. Lee White Marine Museum, top name entertainment, rides, games, arts and crafts, and a spectacular fireworks display over the Oswego Harbor. During the summer, the Oswego County Fair celebrates the agricultural heritage of the county with arts and crafts, exhibits by the various historical societies, and music performances. Other communities celebrate their unique cultural and historical significance throughout the year with similar activities. Nationally, Preservation Week is held annually during May.

A comprehensive plan brings historic preservation concerns to the forefront of local public policy and reviews its integration into other elements of the county=s development. Although not every historic and cultural resource will survive indefinitely, it is important that there is an agreement on a vision for preservation in Oswego County and that tools are in place to guide change. Dialogue with organizations and communities shaped the vision, the goals and objectives, of historic and cultural preservation in our county.

D. GOAL, OBJECTIVES AND STRATEGIES

GOAL: MAINTAIN THE HISTORIC CHARACTER OF THE COUNTY'S CITIES, VILLAGES AND RURAL TOWNS AS THEY ACCOMMODATE CHANGE.

OBJECTIVE 1: Encourage the preservation, maintenance, rehabilitation and appropriate adaptive reuse of older and historic structures in the County.

- STRATEGIES:
- a. Serve as a clearinghouse for information on historic properties, processes and organizations.
 - b. Provide technical assistance to the Heritage Foundation of Oswego, Inc. with respect to the publication of their county-wide historic survey.

- c. Provide local and County planning board members, historic property owners, developers, realtors and the general public with educational opportunities on historic preservation.
- d. Support nominations to the State Register and the National Register of Historic Places.
- e. Develop alternative standards for historic structures which would permit the relaxation of land use classifications and parking codes to encourage the adaptive use of historic structures and/or to prevent their demolition.
- f. Investigate the benefits and drawbacks of becoming a county-wide Certified Local Government (CLG).
- g. Identify historically significant areas (e.g. neighborhoods, central business districts) whose character could be preserved through the implementation of historic overlay zoning districts.
- h. Include historic resource issues in the County Planning Board review of local planning and zoning actions.

OBJECTIVE 2: Revitalize and maintain the older commercial cores of communities.

- STRATEGIES:
- a. Investigate potential incentives to attract businesses to Central Business District locations.
 - b. Promote the implementations of Main Street programs and commercial core area redevelopment plans.

OBJECTIVE 3: Protect historically significant features in our landscapes.

- STRATEGIES:
- a. Inventory historically significant landscape features.
 - b. Encourage the donation and purchase of historic preservation easements to protect historically significant landscape features.

OBJECTIVE 4: Preserve historic resources as a means of attracting economic development to the County.

- STRATEGIES:
- a. Promote tourism associated with historic resources.
 - b. Encourage private investment for restoration work.

OBJECTIVE 5: Protect archaeological resources.

- STRATEGIES:
- a. Incorporate archaeological resources into greenway planning.
 - b. Locate, identify and document underwater archaeological resources.
 - c. Include archaeological resource issues in the County Planning Board review of local planning and zoning actions.

IV. TRANSPORTATION (Amended 4/2008)

1. Highways, Roads, and Streets

The following New York State Department of Transportation highway mileage inventory shows nearly 2000 miles of Federal, State, County, and local highways, roads, and streets in Oswego County.

Table 1
Highway Mileage Oswego County, 2004

JURISDICTION	MILES	PERCENT OF TOTAL
Federal	30.9	1.5
State	290.6	14.6
County	503.4	25.4
Local	1155.3	58.3

Source: New York State Department of Transportation, 2004

Total: 1980.2 miles

These figures are similar to the mileage listed in the 1997 comprehensive plan report, which shows a total of 1931 miles. The largest discrepancy is with the State figures, which show 252.84 miles versus the current figure of 290.6 miles. The explanation for this difference is unclear, although it may be the result of more accurate assessment of actual inventories as opposed to actual increases in State highway miles. The data for local roads shows an approximately ten mile increase over 1995. The cause for this increase is also unclear, although it could be reasonably ascribed to new roads constructed as a result of subdivision activity.

Table 2 shows a breakdown of bridge responsibilities and sufficiency ratings as of 2007 and Table 3 shows the same data for 1996. There are a total of 235 bridges in Oswego County that are maintained by New York State, Oswego County, or local governments. Oswego County is responsible for all non-state bridges over twenty five feet in length, while local communities maintain bridges twenty to twenty five feet in length. All bridges are rated on a scale of one to seven, with seven being the best. Bridges with a rating of less than three are closed to traffic. A comparison of the tables shows that the percentage (less than one) of substandard bridges has not changed since 1996. At the high end of the scale, the tables show that both New York State and Oswego County have a greater percentage of their bridges rated five or greater than they did in 1996. The item of potential concern is that it appears that local governments have a greater percentage of bridges with a rating of 4.00-4.99 than they did in 1996.

TABLE 2
Bridge Conditions Oswego County 2007

Owner	Number of Bridges Owned	% of Total Owned	Less than 3.0 Percent	3.0 – 3.999 Percent	4.0 – 4.999 Percent	5.0 or Greater Percent
NYS DOT	104	44.26	0.96	2.88	24.04	72.12
Oswego County	109	46.38	0.92	15.60	41.28	42.20
Municipalities	22	9.38	0.00	9.09	54.55	36.36
Total	235	100	0.85	9.36	34.89	54.89

Source: New York State Department of transportation, September 2007

TABLE 3
Bridge Conditions Oswego County 1996

OWNER	NUMBER OF BRIDGES	PERCENT OF TOAL	CONDITION RATING			
			< 3.00	3.00-3.99	4.00-4.99	5.0 OR GREATER
			PERCENT	PERCENT	PERCENT	PERCENT
NYS	104	43.5	<1	12.5	24.0	62.5
O.C	113	47.2	<1	17.6	46.9	34.5
LOCAL	22	9.2	--	4.5	36.3	59.2

Source: New York State Department of transportation, March 1996

2. Functional Classification

Perhaps a more useful way to study a road and highway system is to examine its actual use. One means is through what is known as the functional classification system. This is explained in detail in the 1997 Plan. As a quick review however, there are six basic categories: interstate, principal arterials, minor arterials, major collectors, minor collectors, and local roads or streets. This system mainly applies to rural areas, as urban area roads do not distinguish between major and minor collectors. In general, the higher the classification, the more important it is to maintain the ability of the highway to provide for the uninterrupted flow of traffic from one point to another. This means that that to the extent possible service to adjoining land use activities should be discouraged. Conversely, the primary function of local roads is to provide access for residents to the higher order highways in a manner that is socially and environmentally acceptable.

A comparison of the functional classification map shown in the 1997 plan (Map1) and the 2006 revisions as shown in Maps 2 and 3, indicates that most of the changes in

functional classification designations occurred in the Cities of Fulton and Oswego, as well as the Villages of Phoenix, Central Square, and Pulaski. Concurrent with these changes is the extension of an Urban Area corridor between Fulton and Oswego and to north of Central Square. Other changes include classifying all of New York State Route 48 as a Minor Arterial, classifying County Route 57 from Fulton to Minetto via the Minetto Bridge as a Major Collector, upgrading various minor collectors in Fulton and Oswego to major collectors, and the inclusion of Churchill Road and County Route 63 as major collectors.

An important point when considering how highways are classified in the County is to examine the main transportation corridors. The map shows that Route 104 from Cayuga County to Interstate 81 and all of Route 481 are Principal Arterials, while all of State Routes 3, 48, 49, and 13 as well as US Route 11 from Route 13 to County Route 2 in Pulaski and County Route 57 from Onondaga County to Phoenix and County Route 2 from US 11 to Interstate 81 and County Route 4 from County Route 53 to Oswego are Minor Arterials. Traffic counts for these routes (Appendix) show a wide range of vehicular traffic. However, the numbers for Fulton, Oswego, Central Square, and Pulaski do show what appear to be especially elevated figures. For example, State Route 3 from Cayuga County to NY 104 shows a 2006 Average Annual Daily Traffic (AADT) count of 2340 vehicles. This number steadily increases from over 10,000 to over 20,000 vehicles in Fulton and does not go below 5000 vehicles until well east of the City. Similar patterns can be seen for portions of Routes 481, 48, 104, 11, and 13.

3. Commuting Patterns

Another means of examining highway use is commuting patterns. Table 4 shows numbers and percent of workers living in Oswego County and commuting to work in adjoining counties, while Table 5 shows means of transportation to work. The single conclusion from both tables is that while the total number of workers has declined since 1980, more people are commuting to work outside the County and are traveling farther and are doing so by themselves, as opposed to working in Oswego county or using mass transit or sharing rides.

TABLE 4
COMMUTING DESTINATION

County of work	1980	2000	Percent change
Oswego	33998	31157	-8.4
Onondaga	14621	18231	24.7
Jefferson	444	438	-1.4
Cayuga	151	348	130.5
Madison	80	311	288.8
Oneida	484	556	14.9
Cortland	3	103	3333.3

Source: New York State DOT 2003

TABLE 5
MEANS OF COMMUTING

Year	Total Commuters	Drive alone	Carpool	Mass transit	Walk
1990	50706	38698	6916	599	2780
2000	52833	42644	6155	435	1944
Pct Change	4.2	10.7	-11.00	-27.4	-30.1

Source: New York State DOT 2003

Public Transportation

This is included as a separate report both for its inventory, analysis, and goals and objectives and strategies.

Oswego County Airport

The Oswego County Airport is located in the Town of Volney along County Route 176 near the City of Fulton. The airport is owned and operated by Oswego County. The 1997 report indicates that as of 1990 the airport had a total of 15,750 operations. The number of operations had increased to 25,000 by 1995 and has been generally stable at this level. The airport has two runways, one of which is 4,200 feet long and the other of which is 5,200 feet in length. The facilities are used by a variety of industries, which include but are not limited to, Anheuser-Busch, Black Clawson, Constellation Energy, Entergy Nuclear Northeast, Huhtamaki Consumer Packaging, Northeast Biofuels LLC, Sithe Energy, and The Fulton Companies. A private firm, The Flight School, is based at the County airport. The firm provides flight instruction, charter services for business and private use, and maintenance on single and twin engine airplanes. Finally, Canfield Machines and the New York State Power Authority maintain facilities at the Airport and there are 170 acres of land available for new industrial expansion.

New York State Canal

The 1997 report states that 18,353 pleasure craft used the Oswego portion of the canal in 1993. The most recent available data is for 2005 and it shows approximately 15,900 craft using the canal for noncommercial purposes. This data would suggest that while absolute numbers have fluctuated since 1997, the canal is primarily used for recreational purposes.

Rail.

In 1997 CSX Corporation acquired the rail lines previously owned by Conrail. Data provided by the NYSDOT shows that in 2003 the Baldwinsville Secondary and the Fulton Secondary lines carried less than one million gross tons per mile of freight while the Montreal Secondary carried between five and ten gross tons per mile. These numbers

would suggest a decline in freight hauling along the Fulton Secondary line since 1991 when over two million tons of freight were hauled between Fulton and Oswego.

Port of Oswego

The Port of Oswego is located at the mouth of the Oswego River on the east and west banks and along the shoreline of Lake Ontario. The Port has a depth of 27 feet and a width of 750 feet. The Port has a turning basin of over 100 acres. Storage facilities include over 100,000 square feet of shed space, 400,000 square feet of open storage, plus a 32,000 ton storage structure all of which are served by adjacent rail tracks.

In 2002 over 450,000 tons of shipping went through the Port, much of which was inbound. Materials include aluminum, cement, corn, petroleum products, potash, and salt, as well as windmill components. Port customers include Novelis, Great Lakes Grain, American Rock Salt, North American Rock Salt, Cargill, Perdue, CPS, Essroc, Lafarge, and Sprague Energy.

Bike Trails

The 1997 plan identifies the Seaway Trail as the only formally state designated bicycle route in Oswego County. Currently, there are four additional informal trails in the County. There is an extension of the Seaway Trail known as the Salmon Hatchery Bicycle Loop. There are also trails sponsored by local business and bicycling groups. These trails include the Tour de Tug Hill, the Northern Tier Route and the Salmon River Falls Loop. (Map 4)

Pedestrian

In addition to the East and West Linear Parks and the O&W path in Oswego, the City of Fulton is in the process of developing a walkway that will eventually extend from the Indian Point Boat Launch site south to the Oneida Street Bridge. Other communities that have plans for trails include the Village of Pulaski for paths along the Salmon River and the Village of Phoenix whose 2007 Strategic Plan calls for trail development on the north side of Lock Island as well as along Oneida, Culvert, and Bridge Streets. In addition, the Town of Hastings is working to develop a trail that extends from the Hamlet of Brewerton (west of US 11) east to Interstate 81 along the West Monroe border.

ANALYSIS

Most of the road mileage in Oswego County is under local or county control (83.7%) with the balance controlled by the State of New York (14.6%). The data would suggest that maintenance costs for the County highway system are becoming more and more problematic. They were approximately 3.8 million dollars in 2003 and the adopted 2007 budget is just under 6.5 million dollars. Comparable figures for local communities are not available, but it may be reasonably assumed that their costs are also rising in a similar manner. The issue becomes one of finding ways to extend the life of a road or highway and minimizing if not eliminating the need to construct new roads. The 1997

plan addresses coordination between local, county, and state governments when conducting highway maintenance, construction, or reconstruction activities. This point is equally, if not more important today. This also applies to coordinating all public sector maintenance or extension of subsurface infrastructure. One means of accomplishing this is through computerized (GIS) inventories of both County and local highways and bridges as well as conditions. This is especially important for bridges as reconstruction or replacement is extremely expensive. (Deck replacement costs are approximately \$155 per square foot of deck. The proposed replacement of the Route 104 Bridge in Oswego will be approximately nine million dollars during 2008-2009.)

This database would be comparable to what is currently available for the State highway system and could include such information as functional classification road geometry, traffic volume, accident data, level of service for major intersections or segments of highway, adjoining land use activities including subsurface infrastructure, and maintenance and service history. Through this data both Oswego County and local governments could monitor specific roads segments and bridges and maintenance and construction costs, as well as more easily coordinate construction and maintenance activities.

Changes in the functional classification of some of the State and County highways since 1997 reflect population increases and an intensification of land use activities, particularly between Phoenix and Oswego and Central Square. Changes in land use activities such as the construction of large traffic generators like shopping centers or manufacturing facilities can quickly result in a local road acquiring collector or even arterial characteristics. This process could result in turning what was once a low volume local road to what is effectively a high volume collector road. Trends in traffic volumes can be monitored through a continuous traffic counting program similar to what existed in Oswego County prior to 2000.

A proactive approach would be for the County and local governments to monitor and control development along the roads and highways. As much as possible the construction of major traffic generators should be confined to existing population centers and current high capacity roads. The density of adjoining land use activities should be consistent with the current functional classification system. The County should work closely with local communities to develop and administer appropriate land use controls, as this function is strictly the prerogative of local governments. Some communities are addressing this issue when they update their regulations and they require minimum lot frontages to be a function of the road classification. Thus the requirements are stricter for arterial or collector highways than they are for local roads. This also applies to state highways, particularly the more urban corridors of the County, where State, local and county officials should work together to develop appropriate corridor management plans and integrate them with local planning and land use controls. This especially applies to Routes 3, 11, 13, 48, 104, and 481.

Public Transit

An important component of a transportation system is public or mass transit. This is especially true as one means of maximizing the useful life of state, county and local roads. A further more detailed analysis maybe found in the transit system report and plan.

Rail Service

The 1997 plan suggests the use of rail lines for tourism and recreation. We would suggest this is still a concept that should be explored. While there currently is a limited use of the CSX rail lines for commercial purposes, these activities should be encouraged and developed to the extent possible. This is especially true for rail connections with the Port of Oswego, which is undergoing increased activity as a transshipment point for windmill electric generation components.

Port of Oswego

In August of 2007 discussion with Port officials indicated that they anticipated increased shipping volume as a result of the Volney biofuels plant going into production. This would result in additional corn coming into the harbor and being shipped by rail to the plant. In addition, the blades used in wind turbine facilities through out New York State arrive at the Port prior to being delivered by truck to various wind farms. Thus, maintaining efficient rail and highway connections with the Port is essential. This is especially true in the City of Oswego where portions of East First and East Second Streets have a limited turning radius, which can result in transit bottlenecks for the shipment of some oversized cargo.

Additionally, storage space at the East Terminal is limited and the Port must use its 15-acre Fitzgibbons property to the east to accommodate extremely large cargo, such as windmill blades. Access to this site could be improved by utilizing an existing CSX rail bed.

Long term development possibilities at the Port include a truck ferry between Oswego and Hamilton, Ontario and creating marshalling and laydown areas for containerized cargo.

Oswego County Airport

In 2005 Oswego County updated the Airport Master Plan, which proposes a series of improvements to the airport terminal and facilities. We would encourage the County government to make every effort to implement all proposals. The use of the airport as an industrial development site should be encouraged and to the extent possible the County should work with New York State and local governments to work toward ensuring the maximum functional capacity of State, County, and local roads leading to and from the airport.

State Canal

The data indicates recreational use of the canal has continued since 1997. While this is not a transportation issue per se, access to the canal requires use of the highway system and should be coordinated among all units of government.

Bike Trails

The 1997 Plan recommends the creation of a bike trail system at the county level and identifies a number of state and county roads where there may be a potential to accomplish this task. These roads include all or portions of NYS 3, 13, 48, 69, and 264 as well as County Routes 2, 13, 15, 17, 22, 50, and 52. Some of those roads, such as NYS

Route 3 and County Route 2 are currently used as de-facto county bike routes. State standards for bike routes along existing shoulders on public roads call for eight feet along arterial roads and six feet along collectors. We would recommend the County inventory all County Routes and work with New York State to obtain comparable data for state routes that have the potential to become established bike trails. A computerized inventory of state and county roads that identifies shoulder width and traffic volumes would help facilitate such a project.

Pedestrian Movement

The 1997 plan calls for identifying areas of the County highway system where there are pedestrian safety issues and engaging in appropriate remedial action. This is still a valid recommendation especially given the increasing costs of transportation and highway maintenance.

Funding Sources

Along with public support, the key to any implementation process is funding. The current Federal funding program is known as SAFETY-LU and provides monies for a variety of maintenance and construction project. The State of New York also has a funding mechanism that can assist local efforts. While the numbers have changed since 1997, the basic formula has remained. Federal and or state funds may pay for the bulk of certain types of projects, but there will generally be a requirement for some local matching funds.

GOALS, OBJECTIVES, STRATEGIES

GOAL: MAINTAIN AN EFFICIENT COUNTY TRANSPORTATION SYSTEM IN THE MOST FISCALLY SOUND, ENVIRONMENTALLY RESPONSIBLE AND ENERGY EFFICIENT MANNER POSSIBLE.

OBJECTIVE 1: Maintain the County highway system in a state of good repair, assist the appropriate maintenance of local roads, and coordinate maintenance activities with New York State to ensure the proper function of the highway system.

STRATEGIES:

- a. Develop and maintain a comprehensive computerized inventory of conditions on the County highway system including bridges and encourage and assist local government to develop a comparable inventory.
- b. Implement traffic counting program on County highway system and assist local governments in developing comparable programs.

c. Upgrade or maintain transportation linkages between the Port of Oswego, the Oswego County Airport, CSX rail lines, and the New York State Canal System.

d. Identify in written and map format proposed five year improvement plans to the State and County highway systems.

e. Identify and seek to correct impediments to the efficient and safe flow of traffic along State, County, and local highways, including means to reduce the volume of traffic along these roads.

f. Assist county and local governments in the exploration of possible efficiencies through the consolidation of highway maintenance services.

g. Support implementation of the Oswego County Coordinated Public Transportation Plan, 2007.

OBJECTIVE 2: Coordinate transportation system planning, development, and maintenance programs with the New York State Department of Transportation, local governments, and transit system operators.

STRATEGIES: a. Encourage local communities to develop uniform and consistent frontage, access and site design standards that support the functional classification system.

b. Work with local governments and NYS DOT to develop detailed corridor management programs for identified commercial corridors.

OBJECTIVE 3: Support the continuation of rail freight service and the development of passenger rail service, especially for tourism purposes.

STRATEGIES: a. Advocate for continued freight service on existing rail lines.

b. Support efforts to develop tourist-based rail service in Oswego County.

OBJECTIVE 4: Develop a system of bike and pedestrian routes including on-road components and paths that are separate from highways.

STRATEGIES:

- a. Assess the suitability of county roads for bicycle use based on traffic volume and road conditions and designate appropriate highways as County bike routes.
- b. Develop a bicycle trail program as part of a multi-use trail plan.
- c. Identify pedestrian safety issues along State and County highways and incorporate needed improvements into appropriate work plans.







OBJECTIVE 5:

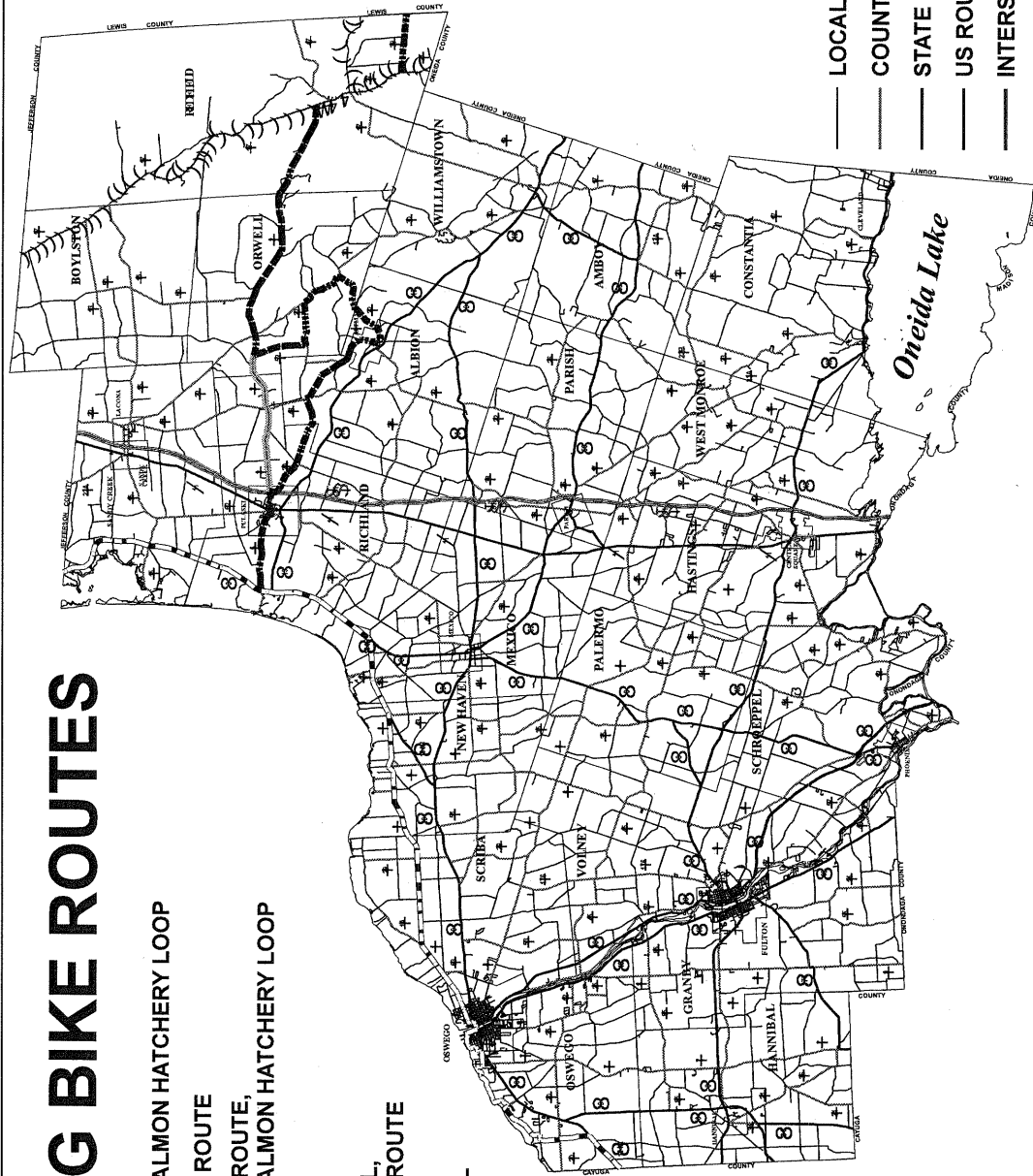
Support the development of appropriate facilities and equipment at the Oswego County Airport.






STRATEGY:

Coordinate with state, county, and local governments to ensure that highway connections to the County Airport meet the needs of all users.

EXISTING BIKE ROUTES

-  SEAWAY TRAIL SALMON HATCHERY LOOP
-  NORTHERN TIER ROUTE
-  NORTHERN TIER ROUTE, SEAWAY TRAIL SALMON HATCHERY LOOP OVERLAP
-  SEAWAY TRAIL
-  TOUR DE TUGHILL, NORTHERN TIER ROUTE OVERLAP
-  TOUR DE TUGHILL



-  LOCAL ROADS AND STREETS
-  COUNTY HIGHWAYS
-  STATE HIGHWAYS
-  US ROUTE
-  INTERSTATE

MAP 4



OSWEGO COUNTY DEPARTMENT OF
COMMUNITY DEVELOPMENT, TOURISM, AND
PLANNING NOVEMBER 2006

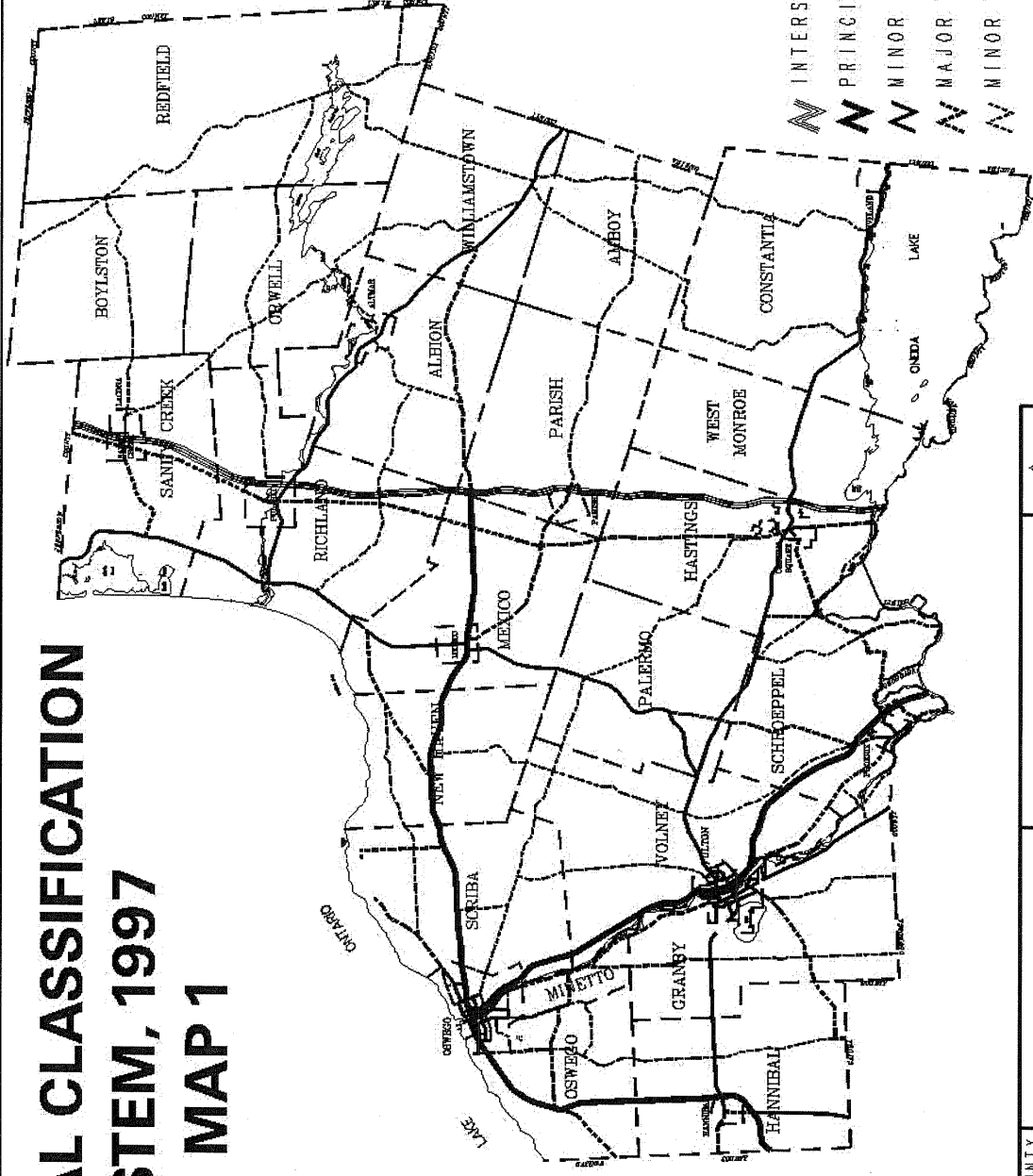


OSWEGO COUNTY
COMPREHENSIVE PLAN UPDATES


SOURCE: OSWEGO COUNTY DEPARTMENT
OF COMMUNITY DEVELOPMENT, TOURISM,
AND PLANNING

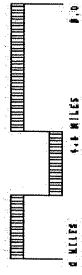


FUNCTIONAL CLASSIFICATION SYSTEM, 1997 MAP 1




- INTERSTATE
- PRINCIPAL ARTERIAL
- MINOR ARTERIAL
- MAJOR COLLECTOR
- MINOR COLLECTOR


 NORTH


 0 MILE 0.5 MILE 1.0 MILE

**OSWEGO COUNTY
COMPREHENSIVE PLAN**

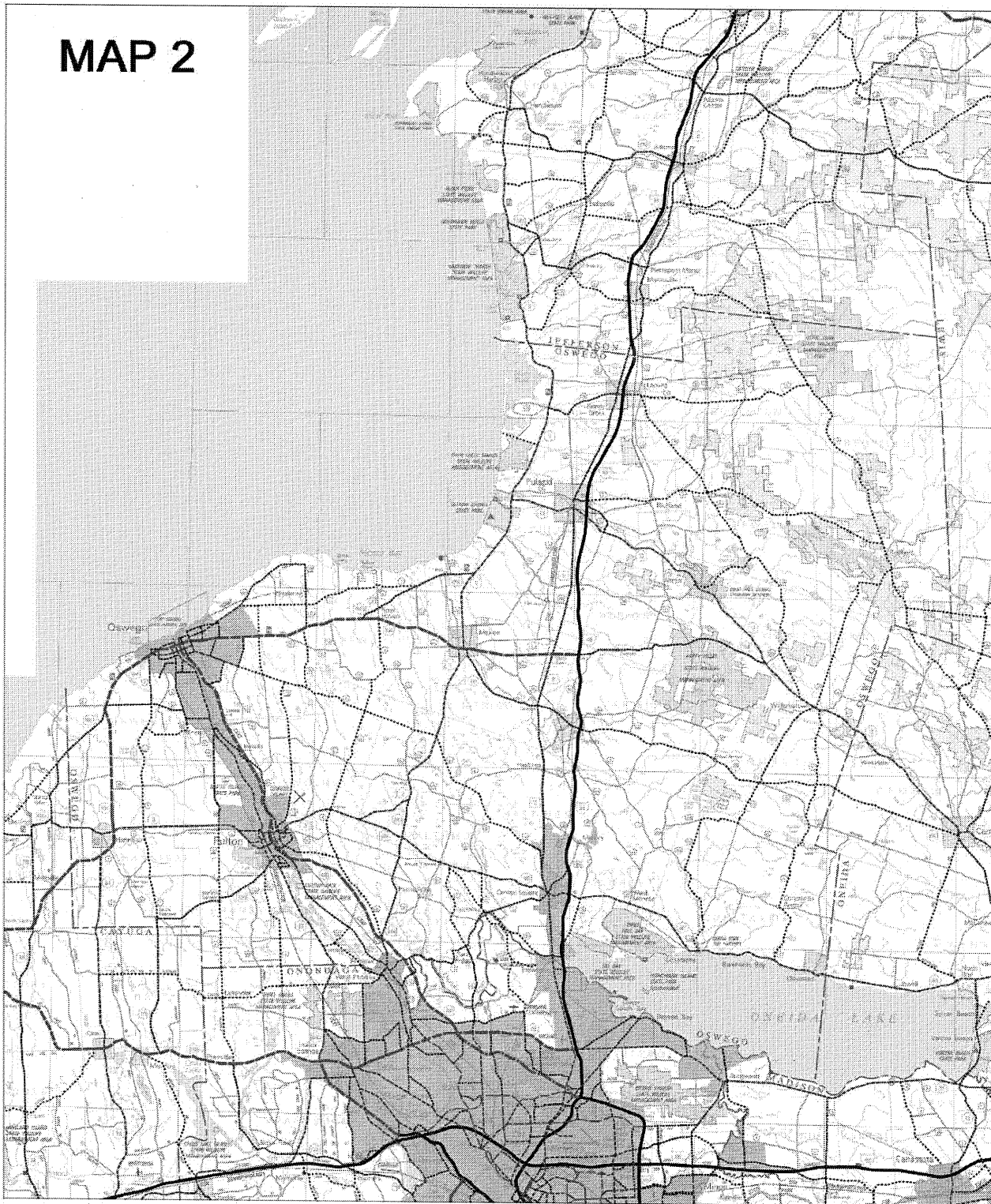
PREPARED BY: OSWEGO COUNTY
DEPARTMENT OF PLANNING AND
COMMUNITY DEVELOPMENT
DATE: MARCH 1996



2000 Rural Functional Classification Oswego County Region 3

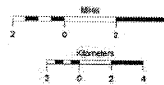
New York State
Department of Transportation

MAP 2



BOUNDARIES	
State	-----
County	-----
City or Village	-----
Town	-----
Other	-----
ROADS	
Principal Thruway	-----
Interstate	-----
U.S.	-----
State	-----
County	-----
State Hwy (SH)	-----
County Road	-----
Interchange	-----
Divided	-----
Wide med	-----
Narrow med or barrier	-----
Undivided	-----
4 or more lanes	-----
2 or more lanes	-----
1 lane then 2 lanes	-----
Vehicle track, left	-----

Functional Classification System			
Urban	Functional Class/Route	National Highway System	Rural
Interstate	-----	-----	-----
Principal Arterial (Expressway)	-----	-----	-----
Principal Arterial (Other Arterial)	-----	-----	-----
Minor Arterial	-----	-----	-----
Collector	-----	-----	-----
Local	-----	-----	-----
Urban Area			



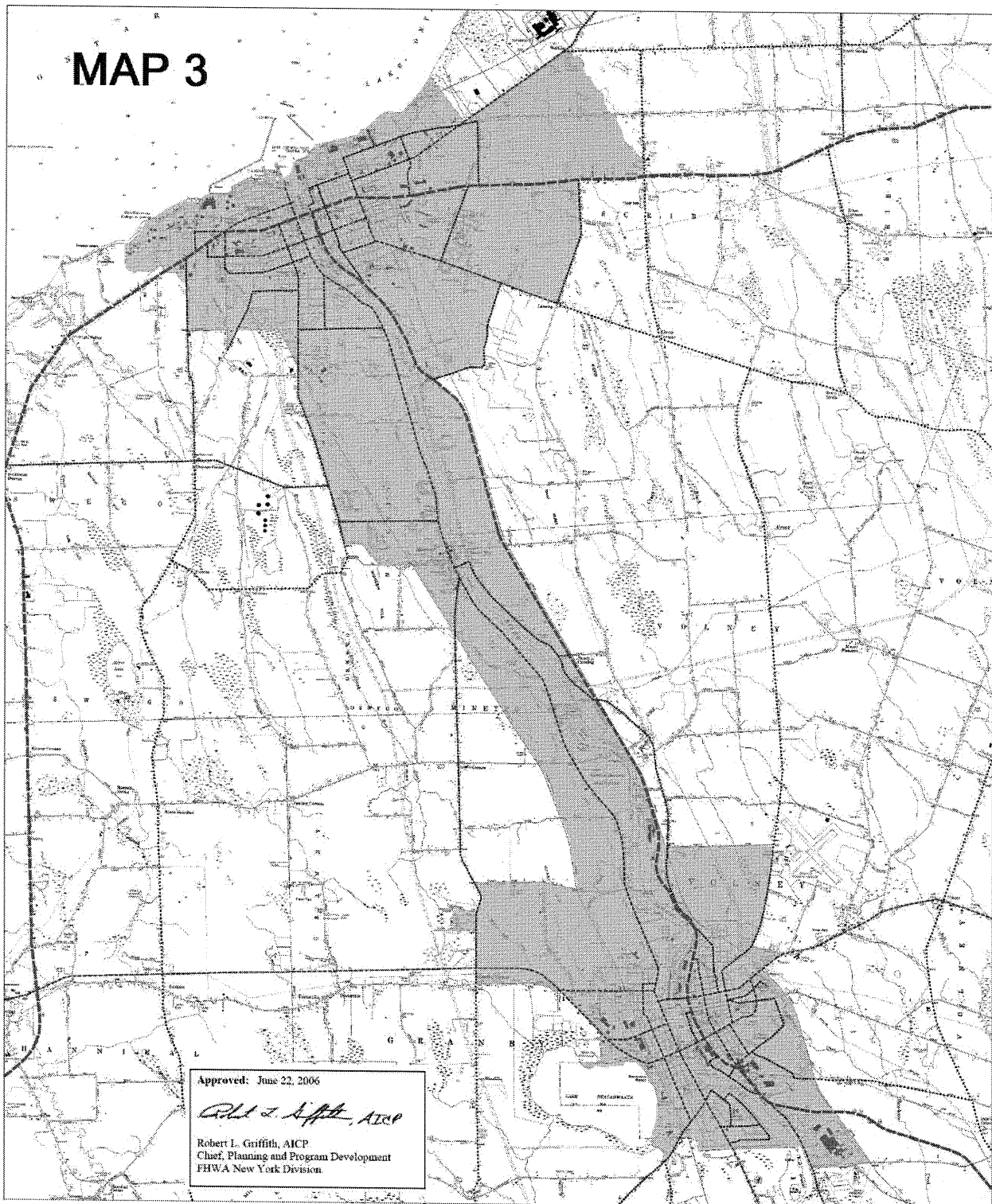
Approved: June 22, 2006

Robert L. Griffith, AICP

Robert L. Griffith, AICP
Chief, Planning and Program Development
FHWA New York Division

2000 Urban Functional Classification Oswego Urban Area Region 3

MAP 3



Approved: June 22, 2006

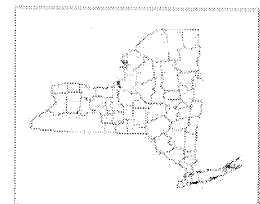
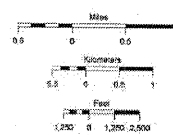
Robert L. Griffith, AICP

Robert L. Griffith, AICP
Chief, Planning and Program Development
FHWA New York Division

BOUNDARIES:	
State	-----
County	-----
City or Village	-----
Town	-----
Other	-----

ROADS:	
Preferred Touring Route	-----
Interstate	-----
US	-----
State	-----
County	-----
State Hwy (SH)	-----
Neighborhood	-----
County Road	-----
Interchange	-----
Divided	-----
Widened	-----
Narrow	-----
Undivided	-----
4 or more lanes	-----
Local Street	-----
Vehicle Break	-----

Functional Classification System			
Urban	Functional Classification	National Highway System	Rural
Interstate	-----	-----	Interstate
Principal Arterial (Expressway)	-----	-----	Principal Arterial
Principal Arterial (Local)	-----	-----	Major Arterial
Minor Arterial	-----	-----	Minor Arterial
Collector	-----	-----	Minor Collector
Local	-----	-----	Local
Urban Area	-----	-----	



Oswego Urban Area

V. INFRASTRUCTURE AND UTILITIES (Amended 4/2008)

The 1997 Comprehensive Plan examined public water and sewer districts, power generation and transmission, and telephone, cable, and cellular tower service in Oswego County. The following report is more limited in scope. It primarily examines the issue of water and sewer districts, especially the expansion of public water districts during the past ten years. It should be noted however, that many of the concerns raised in the 1997 plan are still valid and have been incorporated into this report.

Water

Map 1 shows the approximate extent of public water districts as they existed in 1997. There were a total of 29 and they covered part of the Town of Orwell plus all of the Town of Oswego, the Cities of Fulton and Oswego, and the Villages of Central Square, Cleveland, Mexico, Phoenix, Pulaski, Sandy Creek and Lacona, as well as portions of the surrounding towns. The districts served a total population of over 57,000 people, which was more than 40% of the County population at that time. The land area covered by these districts was approximately 66.38 square miles or 6.9% of the County.

Map 2 shows the current extent of existing or approved water districts. From the map it is apparent that the number and extent of water districts has expanded considerably since 1997. It is difficult to identify the number of current districts, as some have been consolidated since 1997. However, the Planning Department estimates there are now approximately forty districts, eleven of which have been formed or consolidated since 1997. Communities that saw the creation of new districts or the expansion or consolidation of previous districts include Scriba, Volney, Granby, New Haven, Mexico, Richland, Hastings, West Monroe, and Constantia. The current population of the various water districts is at best an estimate based on data from the Final Intended Use Plans filed with the State of New York for each district. A compilation of data from these documents gives an estimate of over 70,000 people, which is over 56% of the current population of 123,077.

It should be stated at this point that subsurface infrastructure does not necessarily exist in all of the area indicated, but rather the map should be seen as an indication of the potential extent of public water service facilities. The area shown by Map 2 is approximately 231.43 square miles or 24.1% of the County land area. This represents a 247% increase in the area of the County covered by water districts since 1997.

As a means of providing a planning related perspective on public water systems, Map 3 shows current water districts in relation to Oswego County Agricultural District 11. The district covers approximately 75 square miles, roughly 18 square miles, or more than 20% of which now fall within the boundaries of public water districts.

Sewer

Public sewer systems often follow the creation of public water systems. Unfortunately, data on the extent of current sewerage systems is unavailable at this writing. However, Map 4 shows the estimated area of public sewer systems as of 1997,

along with known extensions. There were 17 sewer districts, which served total of approximately 43,000 people or 35% of the County population. It may be assumed the extent of sewer coverage has increased in the past ten years, but it has not kept pace with the creation of new water districts.

Analysis

The purpose of this report is to raise long term planning issues associated with the creation of new public water or sewer districts, as well as the maintenance and expansion of existing districts. New York State Health Department standards effectively mandate housing densities of two units per acre when on-site well and sanitary systems are employed. Those requirements become unnecessary when public water systems are in use. However, much of Oswego County is underlain by soils that present varying degrees of difficulty for traditional septic systems. As land becomes more valuable for residential and commercial uses, than for agricultural and forest activities, the stress placed on subsurface disposal systems increase, ultimately requiring the development of public sewer services. We would caution that it is to the advantage of the County and local governments to carefully consider the long-term impacts of public water systems, especially given the costs of capital construction (For example, the estimated cost of Granby Water District 3 is over nine million dollars.) New water systems are financed through the Drinking Water State Revolving Fund, which is a loan at one-third the prevailing market rate. Public sewer system construction loan rates are at one-half the prevailing rate.

We would suggest that proactive policies at the County and local level should be developed to address ways of making the most efficient use of existing systems, determining the most appropriate areas for the expansion of existing districts or the creation of new districts, and how to best manage the inevitable changes in local land use patterns. There are a variety of computer mapping technologies such as CAD or GIS that can help in this process. They can be used to inventory existing facilities as well as help develop general maintenance and repair programs. The County could either provide this technology to local districts or help them acquire the necessary hardware and software themselves.

The expansion of existing districts or the creation of new districts is a more complicated topic, as it involves a host of environmental, economic, and political issues which in turn affect the development of land use patterns within a community. Most communities favor expanding their residential, commercial, and industrial base, but still want to preserve their rural character. There is a trade-off between economic growth and a rural environment. This means that the County and local communities need to carefully consider the type and density of growth they want to encourage. This can be accomplished through sound planning practices such as encouraging growth at densities that do not exceed the natural carrying capacity of the land and by encouraging growth in areas that may be easily served by existing or expanded water or sewer districts. (Natural carrying capacity may be considered the availability of sufficient quantities of potable water to meet residential or commercial needs and that point where natural processes are able to absorb septic effluents.) Other techniques may include encouraging water

conservation and protecting existing sources of water, as well as ensuring properly functioning on-site sanitary disposal systems.

The Department would suggest that a community's need for new sources of water may be minimized if existing sources remain uncontaminated. Oswego County is underlain by a number of highly productive sand and gravel aquifers. The County can and should develop its own policies for protecting these resources and should assist local governments to do the same. Much of this can be facilitated through existing computerized mapping technologies that can assist local governments in implementing their own programs.

For those parts of the County where the natural carrying capacity has already been exceeded or is in danger of reaching that threshold, or where there are acute environmental issues, then the creation of new service districts may indeed be necessary. For example, at the present time leachate from the County's Bristol Hill Landfill is sent by truck to the City of Fulton sewer treatment facilities. In 2006 the County shipped over 5.5 million gallons at a cost of over \$139,000. The County also shipped over 160,000 gallons from its Silk Road facilities at an additional cost of over \$4200. The Department suggests it may be more economical and environmentally benign, in terms of lessened truck traffic and wear on Route 3 and Silk Road to extend existing sewer lines to the Bristol Hill Landfill, as well as develop a new collection process for the Silk Road leachate. Such an extension should facilitate more environmentally sound development patterns along portions of New York Route 3 in the Town of Volney. At present, sewer service stops approximately one mile to the west of the Bristol Hill facilities at a school along New York State 3.

In 1994, the voters of Oswego County defeated a proposed countywide water district. We would suggest that instead of piecemeal extensions of existing sewer or water districts the County re-evaluate the feasibility of establishing an appropriate County or part county sewer or water districts.

GOALS, OBJECTIVES, STRATEGIES

GOAL: PROTECT THE QUANTITY AND QUALITY OF WATER SUPPLIES SO THAT EVERY RESIDENT, BUSINESS, AND INDUSTRY HAS ACCESS TO SAFE, POTABLE WATER AND THE QUALITY OF ALL COUNTY WATERS IS SUFFICIENT FOR DESIRED USES.

OBJECTIVE 1: Assist existing water and sewer districts in managing their systems.

STRATEGIES: a. Develop and maintain a computerized inventory of public water and sewer systems and disseminate this data to the appropriate districts and communities.

- b. Explore with local communities and districts options for developing computerized management systems.
- c. Develop a coordination process that ensures that digital files showing the location of new or expanded water or sewer districts or lines be shared with Oswego County and local communities.

OBJECTIVE 2: Assist local governments in implementing groundwater protection programs and policies.

- STRATEGIES:**
- a. Develop a comprehensive GIS based inventory of all data on municipal well fields, recharge areas, aquifer and potential aquifer in the County and seek funding to more accurately identify these areas.
 - b. Assist local communities in developing groundwater protection programs and policies.

OBJECTIVE 3: Identify areas of the county where existing development exceeds natural carrying capacity.

- STRATEGIES:**
- a. Analyze available environmental data to model the natural carrying capacity of areas of the County experiencing significant growth.
 - b. Evaluate the potential for extending sewer lines to the Silk Road and Bristol Hill Landfills.
 - c. Reevaluate the viability for a county water or sewer district.

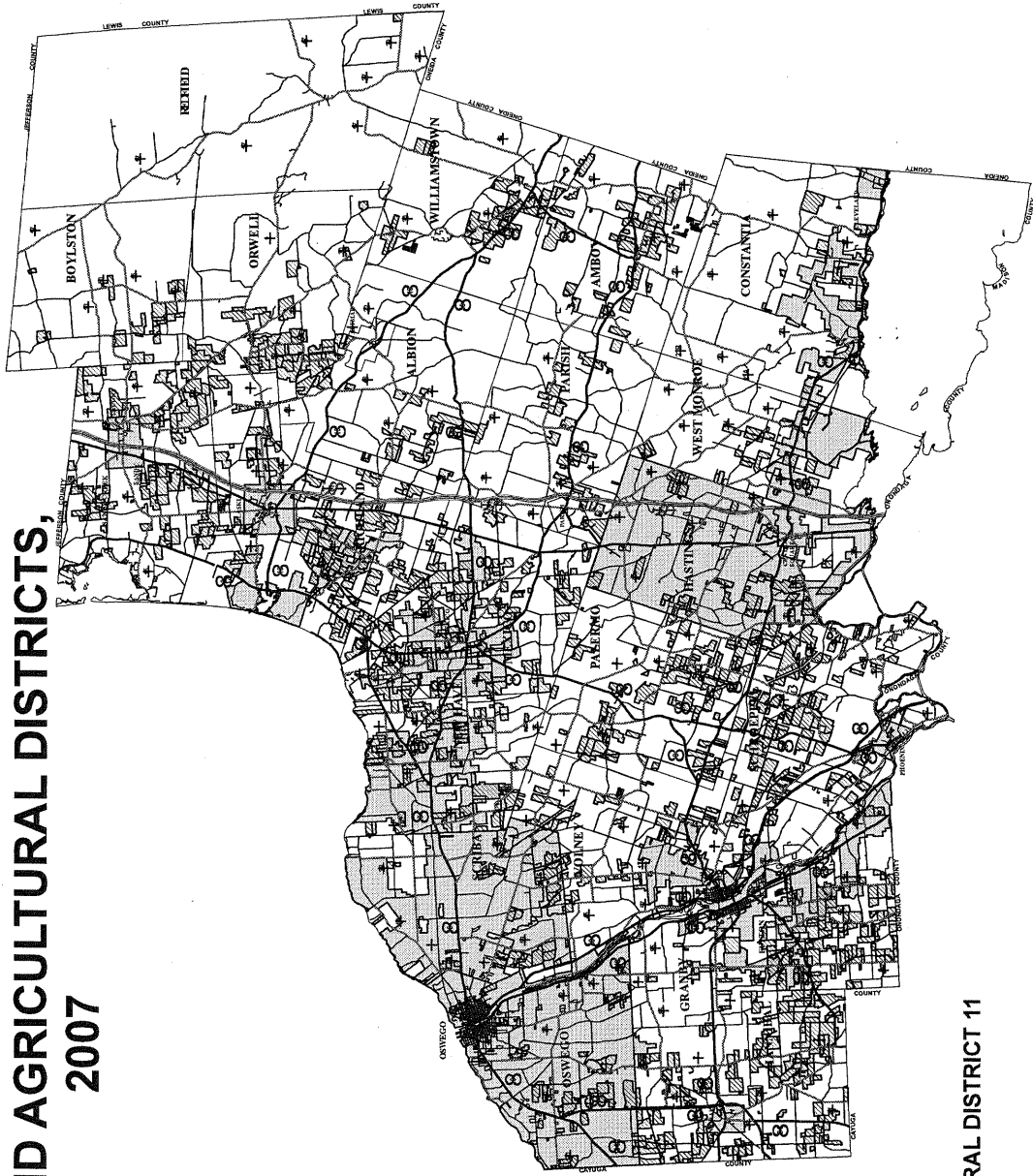
GOAL: IMPROVE EFFECIENCY AND REDUCE COSTS OF INFRASTRUCTURE DEVELOPMENT WITHIN OSWEGO COUNTY.

OBJECTIVE: Coordinate infrastructure development with land use planning activities of local government and economic development efforts in the public sector.


- STRATEGIES:**
- a. Assist local governments in developing comprehensive planning programs, including appropriate regulations, public acquisition, and infrastructure development.

- b. Maintain an updated inventory of existing infrastructure.
- c. Develop a countywide computerized geographic information system as a tool to facilitate coordination of infrastructure development.

PUBLIC WATER AND AGRICULTURAL DISTRICTS, 2007



- OSWEGO COUNTY AGRICULTURAL DISTRICT 11
- PUBLIC WATER DISTRICTS 2007



OSWEGO COUNTY DEPARTMENT OF
COMMUNITY DEVELOPMENT, TOURISM, AND
PLANNING OCTOBER 2007



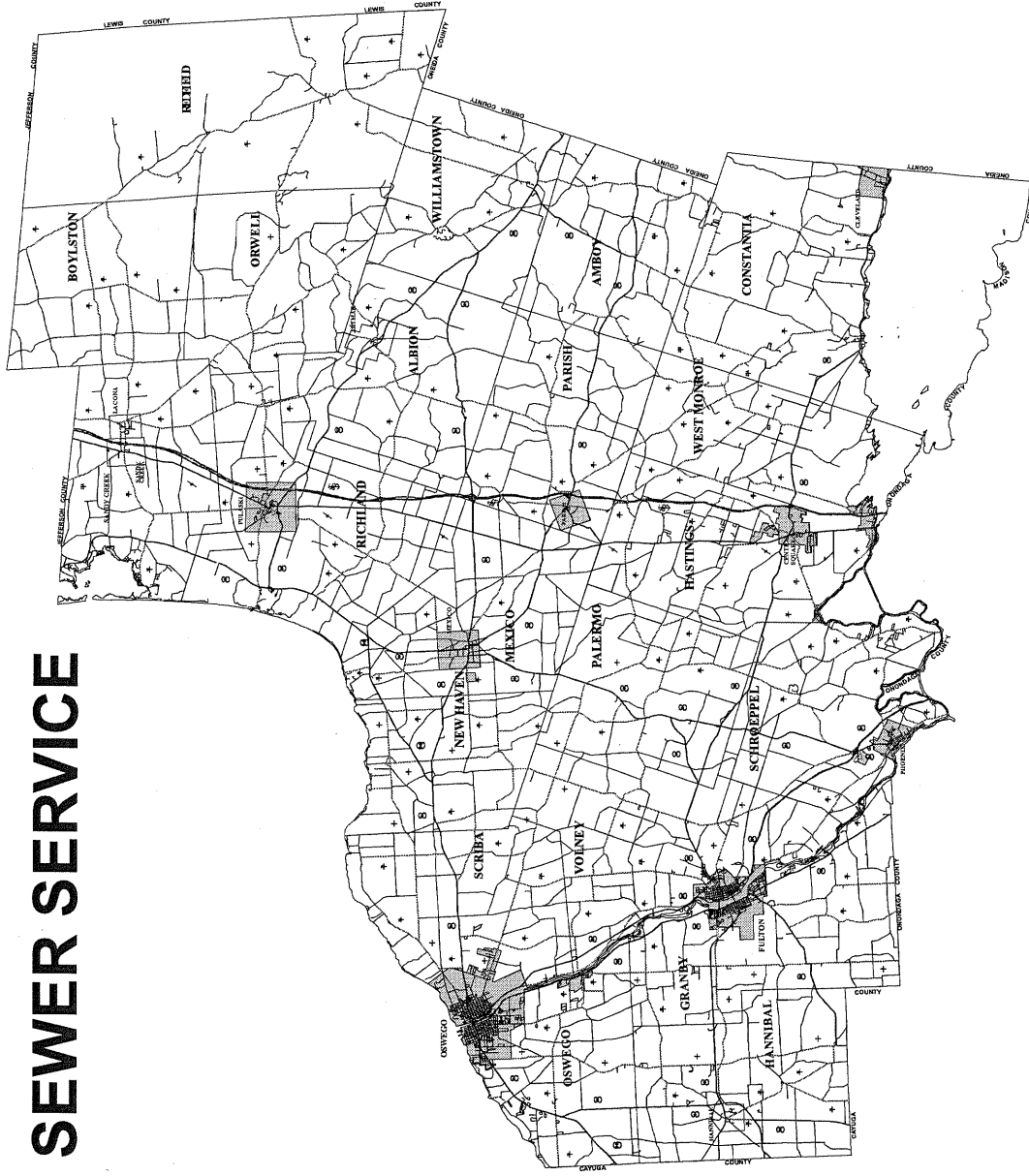
OSWEGO COUNTY
COMPREHENSIVE PLAN UPDATES
INFRASTRUCTURE

SOURCE: OSWEGO COUNTY DEPARTMENT
OF COMMUNITY DEVELOPMENT, TOURISM,
AND PLANNING; 1997

MAP 3



PUBLIC SEWER SERVICE



PUBLIC SEWER SERVICE

OSWEGO COUNTY DEPARTMENT OF
COMMUNITY DEVELOPMENT, TOURISM, AND
PLANNING OCTOBER 2007



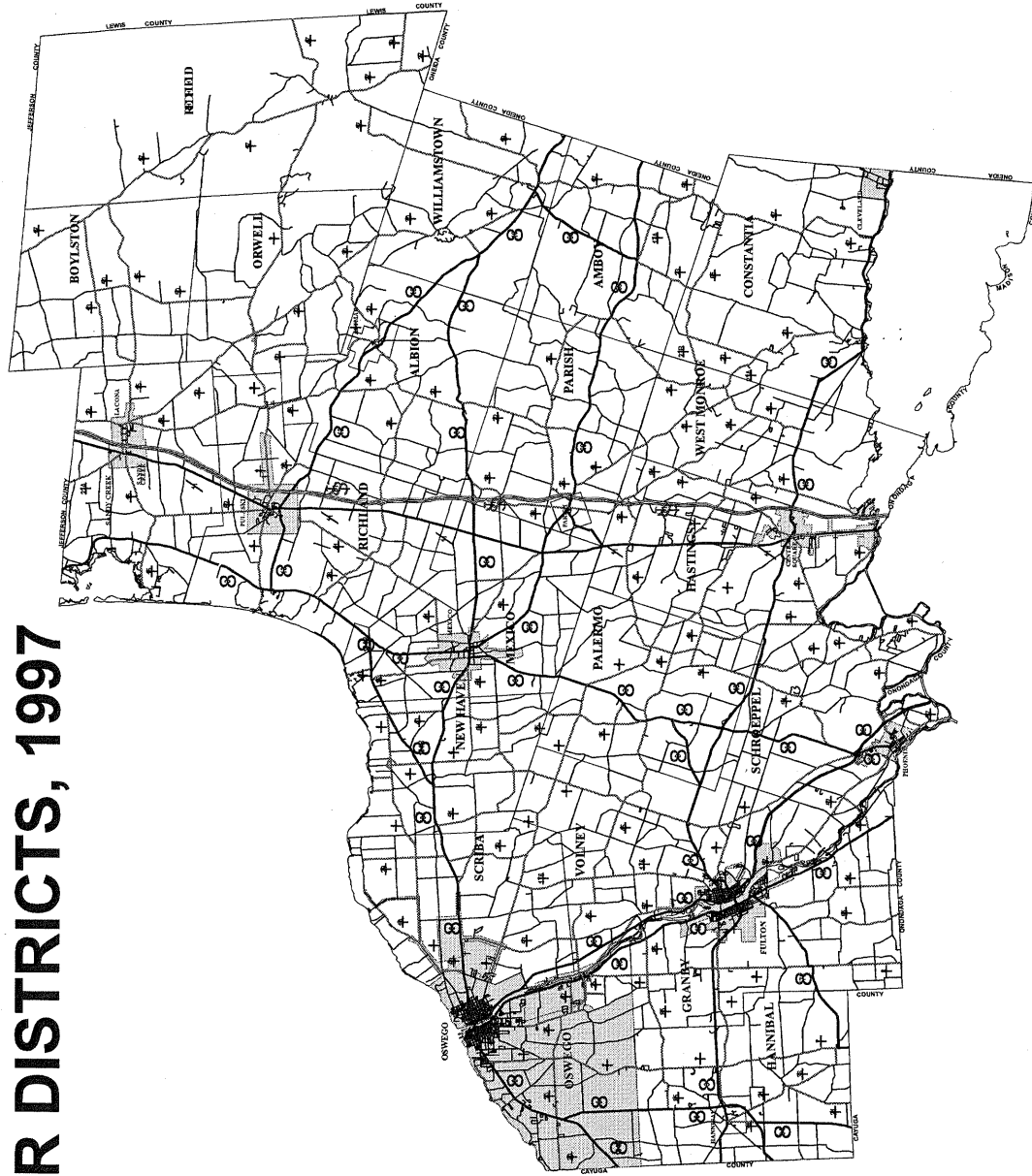
OSWEGO COUNTY
COMPREHENSIVE PLAN UPDATES
INFRASTRUCTURE

SOURCE: OSWEGO COUNTY DEPARTMENT
OF COMMUNITY DEVELOPMENT, TOURISM
AND PLANNING, 1997, 2007

MAP 4

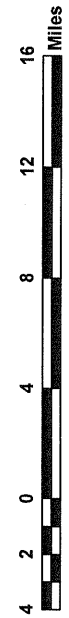


PUBLIC WATER DISTRICTS, 1997



PUBLIC WATER DISTRICTS 1997

OSWEGO COUNTY DEPARTMENT OF
COMMUNITY DEVELOPMENT, TOURISM, AND
PLANNING OCTOBER 2007



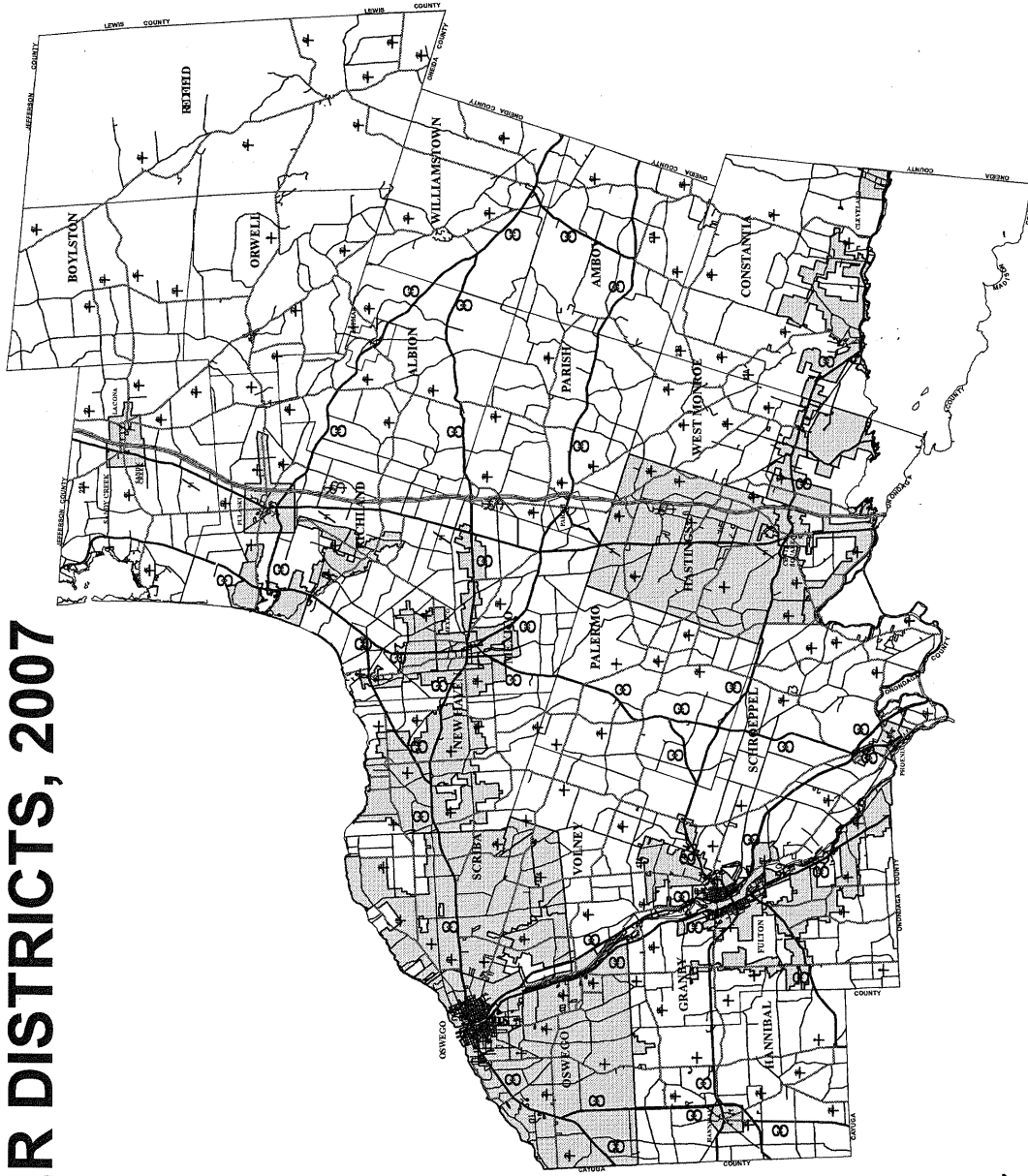
OSWEGO COUNTY
COMPREHENSIVE PLAN UPDATES

SOURCE: OSWEGO COUNTY DEPARTMENT
OF COMMUNITY DEVELOPMENT, TOURISM,
AND PLANNING

MAP 1



PUBLIC WATER DISTRICTS, 2007



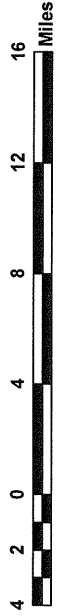
PUBLIC WATER DISTRICTS 2007

OSWEGO COUNTY DEPARTMENT OF
COMMUNITY DEVELOPMENT, TOURISM, AND
PLANNING OCTOBER 2007



OSWEGO COUNTY
COMPREHENSIVE PLAN UPDATES
INFRASTRUCTURE

SOURCE: OSWEGO COUNTY DEPARTMENT
OF COMMUNITY DEVELOPMENT, TOURISM,
AND PLANNING; 1997



MAP 2



VI. HOUSING

A. INVENTORY

1. Age of the County's Housing Stock

Oswego County's housing stock is generally older in nature. The largest percentage of the county's housing stock (36%), was built prior to 1940, compared to the national percentage which is 18% for this time period. Between 1970 and 1979 Oswego County experienced a surge in housing development and another 9,877 units were developed. Development during this decade accounts for approximately 20% of the existing housing stock in the county. Table VI-1 on the following page demonstrates the housing activity from prior to 1940 to the present. During the 1970-1979 boom in housing, much of the development was located in the Towns of Scriba and Oswego. At this time, the FitzPatrick Nuclear Power Plant was under construction and Niagara Mohawk then developed Nine Mile Point #2 which took many years to complete. During this time, employment in the construction industry peaked at approximately 5,000-6,000 persons averaging approximately 3,200 persons at any given time. In addition to construction jobs, another 1,000-2,000 persons were employed by Niagara Mohawk to operate the facility.

Looking at the year housing was built by municipality reflects not only population increases, but paints a picture of the type of housing that can be found in an area. Map 24 titled Greatest Percentage of Housing Built indicates that in most of the county the greatest percentage of the housing stock was built in 1939 or earlier. But in the southern portion of the county (Schroeppel, West Monroe, Hastings and Palermo), the greatest percentage of housing stock was built between the years of 1980-1990. Although villages located within these towns have older housing stocks, the remainder of the towns are primarily made up of newer units. The increase in housing in the area is a result of commuter patterns with the southern portion of the county serving as a bedroom community for Onondaga County.

2. Housing Type

Approximately 61% of the total housing stock is made up of single family detached housing units. Another 20% of the county's housing stock is mobile homes, followed by 2-4 unit dwellings making up 11%. Five percent of units are in structures with 10 or more units and 3% are in structures with 5-9 units. Of the 8,828 mobile home units, approximately 2,507 or 28% are located within 78 mobile home parks throughout the county.

The Town of Granby is host to the greatest number of mobile homes, 903, comprising 35% of the locality's overall housing stock. The Town of West Monroe has 40% of the local housing stock comprised of mobile homes which is the highest percentage in the county.

Table VI-1: Number of Housing Structures by Decade Built
Oswego County

Town/City	Pre-1940	1940-49	1950-59	1960-69	1970-79	1980-88	1989-90	Median Age	Total Structures
Albion	256	3	17	87	171	190	10	1970	734
Amboy	113	12	43	96	160	66	15	1969	505
Boylston	86	6	16	40	77	20	19	1966	264
Constantia	653	71	288	281	401	281	86	1961	2061
Granby	651	152	224	351	598	570	51	1968	2597
Hannibal	567	47	64	175	410	346	35	1968	1644
Hastings	669	129	324	329	648	842	197	1972	3138
Mexico	766	66	101	232	471	392	77	1965	2105
Minetto	197	23	72	156	146	50	3	1962	647

New Haven	383	18	32	163	288	248	75	1970	1207
Orwell	275	51	30	64	138	89	3	1950	650
Oswego	392	106	142	310	432	362	20	1968	1764
Palerrno	235	28	58	178	328	304	51	1973	1182
Parish	277	6	44	73	236	193	26	1971	855
Redfield	169	25	51	89	87	59	22	1961	502
Richland	1076	105	139	229	620	355	112	1960	2636
Sandy Creek	990	20	146	343	541	382	19	1962	2441
Schroeppel	849	169	299	388	787	820	67	1970	3379
Scriba	308	17	138	408	906	755	70	1975	2602
Volney	615	136	216	297	298	443	60	1962	2065
West Monroe	305	46	108	258	370	470	50	1972	1607
Williamstown	209	7	32	83	130	102	5	1964	568
Fulton	2553	691	625	472	798	353	44	1943	5536
Oswego	5027	446	583	535	836	383	55	1939	7865
County	17621	2380	3792	5637	9877	8075	1172	1961	48554

In recent years there has been a dramatic increase in the number of mobile homes in Oswego County and throughout the nation. In 1980 13% of the total county year-round housing inventory was comprised of mobile homes. The number of mobile homes increased from 4,988 in 1980 to 8,828 in 1990. This represents a 77% increase in mobile home units throughout Oswego County in one decade.

Mobile homes are either located on individual lots or in mobile home parks. Mobile homes located on individual lots are usually treated the same as stick built homes. A building permit is required for placement of the unit and it is necessary for the unit to meet all the building and health codes concerning well and septic system separation. In mobile home parks, the park owner is responsible for providing water and sewer facilities (according to New York State Health Law), trash pick-up, road maintenance and other amenities. Mobile home parks often create rural neighborhoods.

Various communities regulate mobile homes in many different ways. Sixteen of Oswego County's 34 municipalities have at least one mobile home park. In the Town of Granby the majority of the mobile homes are located on individual lots. The Town of Schroepfel is host to 685 mobile homes, approximately 78% of which are located in mobile home parks.

Mobile homes continue to make up a large portion of the Oswego County housing market. Building permit data suggests that in 1993 for every 1.4 single family stick built homes developed, a mobile home was placed on a lot. The following table illustrates residential development according to building permit data for the years 1988, 1991, 1992 and 1993. A ratio for single family homes compared to mobile homes has been provided in the last row. (Table VI-2)

3. Home Ownership

According to the 1990 Census owner occupied housing is housing occupied by the owner or co-owner. The census definition does include housing that is not fully paid for and which is being purchased with a mortgage or some other debt arrangement. Census data lists all housing units as either owner occupied, renter occupied or vacant.

Table VI-2: Residential Building Permits Issued

	1988	1991	1992	1993*
Single Family Residence (SF)	444	194	244	360
Multi-Family Residence	22	16	7	3
Mobile Home (MH)	290	95	233	260
Camp	9	1	6	1
Apartment	24	1	8	0
Total Permits	789	307	498	624
SF/MH Ratio	1.4/1.0	2.0/1.0	1.1/1.0	1.3/1.0

* 1993 data was not available from the following townships: Albion, Orwell, Palermo, Redfield, Sandy Creek, Scriba, and Williamstown.

Source: Oswego County Planning Board Survey of Local Jurisdictions

According to the Census, there are 30,978 owner occupied housing units in Oswego County representing 64% of the total housing stock. The percentage of owner occupied housing units varies from one municipality to another. The Town of Redfield's year round owner occupied housing stock accounts for 33% of the town's total housing units. Occasional use (seasonal) units would generally be classified as vacant. In Palermo 85% of the total housing stock is owner occupied.

Residential housing unit sales in Oswego County during the 1990=s averaged about 500 closings annually. During the mid-1980=s, Oswego County experienced a boom in sales (823 in 1987). A decrease in sales began in 1988 and hit its lowest point in 1993.

One reason for this decline in housing sales during the late 1980=s may be attributed to an increase in the prime lending rate. The decline in housing sales continued into the early 1990=s. Although the prime lending rate began to decrease in 1991 and continued to decline through 1992, housing sales did not increase as one might expect. A couple of reasons for this may be a sluggish national and local economy and a lack of consumer confidence. Local realtors indicated that Oswego County residents were hesitant about making financial purchases which required a long term commitment because of the lack of confidence in their job security and long term employment opportunities.

The multiple listing information for Oswego County includes eight areas. The areas are as follows:

Area 01	Sandy Creek, Lacona, Pulaski, Boylston, Redfield, Orwell, Richland, Altmar, Albion and Williamstown
Area 02	Parish, Mexico, New Haven and Palermo
Area 03	City of Oswego, Oswego, Scriba and Minetto
Area 04	Volney, Granby, Hannibal and City of Fulton
Area 05	Cayuga County (Fair Haven and Sterling)
Area 06	Lysander, Baldwinsville, Phoenix and Schroepfel

Area 07 West Monroe, Constantia, Hastings, Central Square and Amboy

Area 16 Multiple listings - Jefferson, Madison and Onondaga Counties

For purposes of comparison it is necessary to use data which includes total units sold for all areas. The following is a historical perspective of the annual number of residential housing units sold by year:

<u>1980</u>	<u>1987</u>	<u>1988</u>	<u>1989</u>	<u>1990</u>	<u>1991</u>	<u>1992</u>	<u>1993</u>	<u>1994</u>
294	823	734	660	495	436	428	515	552

Source: Multiple Listing Statistics

Table VI-3 is a summary of more detailed information concerning the residential real estate market for the years 1992-1994.

Table VI-3: Number of Residential Closings by Area

	1992	1992	1992 % of	1993	1993	1993 % of	1994	1994
1994 % of Area listed Sold	Listed	Closed	Listed Sold	listed	Closed	Listed Sold	Listed	Closed
01	244	48	20	229	73	32	222	64
29								
02	21	203	56	28	202	65		32
03	317	161	51	305	153	51	408	163
04	315	110	35	356	123	35	380	157
05	62	29	47	40	25	63	53	15
06	69	12	17	81	25	31	79	28
07	238	23	0	202	57	21	235	53
16	23	3	13	21	3	14	31	7
Total	1503	428	28	1437	515	30	1610	552

Residential

Source: U.S. Bureau of the Census, 1990

The purchase of a mobile home is not always considered as a residential closing. Therefore, all mobile home sale transactions are not listed in the real estate summary data. According to the New York State Division of Housing and Community Renewal, Mobile Home Division, a mobile home is only considered a housing unit with a mortgage when real property is involved. If a mobile home is purchased and placed in a mobile home park or on a piece of land that is owned by another individual, then it is probable that the transaction was not handled by a realtor, but as a financial loan under section 223 of the Real Property Law.

4. Housing Values

The 1990 Census provides information concerning estimated value of specified owner occupied housing units. This statistic indicates the homeowner's estimate of what the property, house and lot would sell for if it were for sale. Value data for vacant units were obtained only for units that were for sale, in which case the asking price was recorded. The County-wide data suggested that 45% of homeowners estimate their home and property are in the \$60,000 - \$99,999 range. This was the estimated value for a plurality of homeowners in every municipality except the Town of Redfield where 27% of homeowners surveyed valued their housing unit and property to be in the

\$25,000 to \$39,000 and another 27% in the \$40,000 to \$59,999 range. Twenty six percent estimated the value of their housing unit and property to fall within the \$60,000 to \$99,999 range.

The municipalities which have the greatest percentage of housing estimated to be valued less than \$25,000 are the Town of Redfield with 20%, Boylston with 16% and Village of Altmar with 15%. The municipalities with the greatest percentage of homes valued at \$200,000 or more are Constantia, New Haven and West Monroe which all indicate 2% of the local housing stock in this category. Many of these units are likely to be lakefront units which usually command a premium.

The Central New York Regional Planning Board completed an analysis of median home values in Oswego County after adjusting for inflation. The study showed sharp increases in median home values in Oswego County between 1980 and 1990. According to the study "the following communities experienced increased values of over 30%; the Town of Sandy Creek (31.7%), the Town of Richland (32.8%), the Village of Pulaski (33.3%), the Town of Albion (36.6%) and the Village of Altmar (40%). The following municipalities had median home values below \$50,000 according to homeowner; the Village of Altmar (\$49,200), the Town of Amboy (\$48,500), the Town of Orwell (\$47,100), the Town of Williamstown (\$45,900), and the Town of Redfield (\$41,000)." Appendix VI-A contains a copy of the Housing Value Comparison 1980-1990 chart which was developed by the Central New York Regional Planning and Development Board.

5. Rental Market

Approximately 24% of the County's housing stock is classified as renter occupied. In more densely populated areas such as villages and cities the type of rental housing is made up mostly of apartments. Infrastructure in these areas generally allows for greater density.

The cities and most of the villages have water and sewer facilities and can accommodate two-family and multi-family development which tends to be utilized as rental units.

The rental stock in the more rural areas consists largely of mobile homes. The one exception to the rule is the four or more bedroom unit size; these units are usually individual stick built homes.

The Central New York Regional Planning Board did a comparison of the Oswego County rental market, taking into account inflation from 1980-1990. According to their study:

Median contract rent values within Oswego County from the 1990 Census were shown to be \$311.00. The median rent in the City of Fulton was \$302.00 and the median rent in the City of Oswego was \$322.00. These were increases of 13.7% and 11.9% respectively, after adjusting for inflation. The community with the highest median rent was the Town of West Monroe at \$351.00. The other municipalities with high median contract rents include: the Town of Minetto (\$339.00), the Village of Phoenix (\$338.00), the Town of Schroepfel (\$337.00) and the Town of Scriba (\$329.00).

Dramatic jumps in median contract rent values are evident during the past decade in the following communities: the Town of Boylston (44.1%), the Town of Sandy Creek (35.7%), the Town of West Monroe (35.4%) and the Town of Orwell (35.1%). Finally the least expensive community within Oswego County with regards to rental properties was the Town of Redfield with a median rental rate of \$175.00.

(Appendix VI-A)

6. Vacancy Rates

a. Homeowner Vacancy

The way the Census Bureau collected vacancy information changed between 1980 and 1990. In 1980 census information did not account for housing units that were vacant and for sale. Therefore, a valid comparison of homeowner vacancy rates by decade cannot be completed. The homeowner vacancy rate is important because it is one indicator used to assess the existing housing need. The homeowner vacancy rate is the percentage relationship between the number of vacant units for sale and the total homeowner inventory.

However, according to the 1990 Vacant for Sale information, the homeowner vacancy rate for Oswego County was 1.2%. The highest homeowner vacancy rate was 3.6% in the Town of Redfield, the lowest rate was .5% in the Town of New Haven. The Towns of Oswego, Palermo, Williamstown and the cities of Oswego and Fulton had less than 1% of their owner designated housing vacant and for sale. Typically a 2% vacancy rate for homeowner housing is considered normal. It should be noted that the vacancy rate does not reflect the number of housing units on the market but the percentage of homeowner units unoccupied and for sale. So even though it may seem as though there are many housing units for sale, the actual homeowner vacancy rate can be much lower.

b. Rental Unit Vacancy

The county-wide percentage of housing units classified as vacant for rent is 6%. The Town of Orwell had the greatest percentage of rental units classified as vacant, 25%, followed by the Town of Mexico which had a 14% vacancy rate and the Town of Sandy Creek with a 12% vacancy rate. The following towns also had double digit rental vacancy rates: Minetto at 11% and Redfield, Amboy and Hastings all with 10%. The Town of Albion has a 2% vacancy rate which is the lowest rental vacancy rate in the county. The towns of Boylston and Scriba and the City of Oswego had a 4% vacancy rate, slightly below the optimal rental vacancy rate which is 5%.

c. Occasional Use

The high overall vacancy rates in some towns are because the census definition of vacancy includes units held for occasional use. Therefore, it is necessary to break down the vacancy rate by classification. Table VI-4 analyzes vacancy by classification.

It is interesting to note that the highest incidence of occasional use housing is in the Town of Redfield where 55% of the housing stock is utilized for occasional use. The towns of Sandy Creek and Orwell also have a high incidence of occasional use housing with 44% and 41%, respectively. The 1980 Census information did not include seasonal or occasional housing in any of its analysis, therefore a comparison between decades cannot be made.

7. Substandard Housing

The Census does not identify housing units for structural deficiencies or for substandard conditions. However the Census does collect information about housing units lacking complete plumbing facilities. This represents housing units which lack hot and cold piped water, a flush toilet, or a bath tub or shower. All three facilities must be located inside the same house, apartment or mobile home, but not necessarily in the same room. Housing units are classified as lacking complete plumbing facilities when any one of the three facilities are not present.

In Oswego County, 1% of the total housing stock is classified as lacking complete plumbing facilities. However locally the percentage of units lacking complete plumbing facilities ranges from 0% in the towns of Schroepel and New Haven to 10% in Boylston.

The census also collects information about the total number of persons per unit. According to the United States Department of Housing and Urban Development, the average number of persons in a living unit should not exceed one per room. This standard is usually included when describing a substandard housing unit.

Table VI-4: Number of Vacant Housing Units By Classification

Town/City	For Rent	For Sale Only	Not Occupied	Occassional Use	Farm Workers	Other Vacant	Total Vacant	Total Housing Units
Albion	2	9	17	63	0	17	108	746
Amboy	6	4	12	109	0	10	141	480
Boylston	11	2	4	85	0	13	105	263
Constantia	19	19	6	323	0	64	431	2083
Granby	40	34	20	44	0	28	166	2597
Hannibal	27	19	12	18	1	20	97	1644
Hastings	71	36	40	33	0	31	211	3094
Mexico	61	20	23	213	0	35	350	2105
Minetto	9	9	5	4	0	10	37	656
New Haven	6	4	5	208	0	46	276	1207
Orwell	16	4	2	266	0	13	301	650
Oswego	18	10	17	38	4	31	118	1755
Palermo	9	7	10	2	0	16	44	1182
Parish	6	7	12	27	0	9	61	868
Redfield	4	6	0	265	0	9	284	479
Richland	56	18	58	288	0	24	444	2636
Sandy Creek	39	23	26	1096	0	20	1204	2465
Schroepfel	33	31	35	84	2	42	227	3373
Scriba	22	18	15	139	3	64	261	2602
Volney	26	20	18	7	1	63	135	2065
West Monroe	13	33	45	64	0	22	177	1629
Williamstown	7	2	2	144	2	7	164	568
Fulton	151	26	47	23	0	81	331	5536
Oswego	133	25	67	70	0	154	449	7865
County	775	386	498	3613	13	829	6114	48548

Source: U.S. Bureau of the Census, 1990

According to the 1990 Census, a total of 2% of the housing units in the county were occupied by households which had more than one person per room. The greatest percentage of these housing units were located in the towns of Amboy (6%) and Williamstown (5%).

8. Specialized Housing

One indicator of specialized housing enumerated in the Census is the number of persons living in group quarters. In Oswego County the percentage of persons living in group quarters is 11%. The group quarter population can be broken down further. The following is the distribution for the group quarters population:

<u>Correctional Institution</u>	<u>Nursing Home</u>	<u>Psychiatric Hospital</u>	<u>Dormitory</u>	<u>Emergency Shelter</u>	<u>Visible in the Streets</u>
2%	15%	1%	78%	<1%	<1%

In Oswego County specialized housing is developed primarily by two not-for-profit agencies, Oswego County Opportunities and Catholic Charities. Funding for these programs is provided by Federal, State and local funding sources.

Oswego County Opportunities, Inc. (OCO) provides transitional living in community residences for mentally ill adults who do not require hospitalization, but are in need of supervision, support and assistance to live in the community. OCO is certified by the New York State Office of Mental Health. A transitional living supervised community residence provides a single-site homelike living environment with 24 hour-a-day on-site supervision.

The transitional living community residence apartment program provides single and double occupancy apartments in Fulton and Oswego. The intensive supportive community residence program provides an independent living situation and daily staff visits. The supportive community residence also provides an independent living situation but with only one to three weekly staff visits. Both of these programs have 24 hour on call staffing for emergency situations.

OCO operates several community residences, supportive apartments and one respite bed throughout the county for developmentally disabled adults. The Residential program is specifically designed and operated to assist persons with developmental disabilities to live as independently as possible. Staff supervision is provided in the residence at all times. The apartment program consists of daily oversight and guidance with a 24 hour on call system. The respite program consists of one bed that families may utilize for their developmentally disabled family member on a temporary basis. The respite stay is determined by the availability of the bed and the needs of the individual.

Arbor House Halfway House and Arbor House Supportive Living apartment program are certified by the New York State Office of Alcoholism and Substance Abuse services. The halfway house provides twenty-four hour on-site staffing and supervision. The supportive living apartment program provides services for adults residing in scattered site apartments. The average stay of residents at the halfway house is from six to nine months. Average involvement for those who participate in the supportive living and apartment program is between one and two years.

An Agency Operated Boarding Home (AOBH) is run by OCO and provides housing for 6 adolescent females 13-18 years of age in a group home setting. The girls come from the Central New York area and the group home is funded through payments from the Department of Social Services that is responsible for the adolescent. In addition to the basic needs of food, clothing, shelter and general health care, other services offered are counseling, psychological services, recreational and cultural activities, and independent living skills. The girls group home has supervision by qualified staff on a 24 hour basis.

The supervised independent living program is an extension of the AOBH girls group home and is an apartment program which allows for transition from residential foster care to independent living.

Catholic Charities operates the community Family Care program for the county. Family care is a residential service that provides a home for people who are recovering from mental illness. Family care matches persons willing to share their home and community with individuals in need of the guidance, support and the companionship of a family environment. Currently there are 22 family care slots available. At this time 18 are being used.

An issue which has received attention throughout the nation is the homeless. According to the 1990 Census there are only 12 homeless persons in Oswego County. Eleven of these people were sighted in the City of Oswego and one person was seen in the City of Fulton. This data was collected on Shelter and Street night, which was conducted in two separate operations at pre-identified shelters and at street locations where individuals were known to congregate.

Shelter enumeration was conducted nationwide two weeks prior to the Census from 6:00 p.m. to midnight on March 20, 1990. Street enumeration occurred from 2:00 a.m. to 4:00 a.m. on March 21, 1990. All visible persons at pre-identified locations were counted, excluding persons in uniform or persons engaged in obvious money-making activities. The locations included parks, bridges or streets where persons were known to congregate. From 4:00 a.m. to 8:00 a.m. enumerators were stationed at abandoned and boarded up buildings.

Persons or entire families who were doubled up, staying with friends or relatives, in shelters for abused women and men, or living in tents, institutions or jail were not counted as homeless for the 1990 Census because it could not be classified with certainty that these people did not have a home. Due to winter weather conditions, homeless persons would probably not be visible in the streets in March in Oswego County. Since homeless families and individuals are often provided short-term housing in rooming houses, motels or hotels, it is reasonable to assume that the homeless figures for Oswego County have been underestimated by the Census.

The Census indicates that there were 132 persons at an emergency shelter in Orwell. This is Unity Acres which is a privately owned, operated and funded shelter for homeless men. Oswego County has a Youth Emergency Services Program (YES) which is administered by Oswego County Opportunities. The YES program can provide temporary emergency shelter through their host home program. The YES program can accommodate approximately four youths on any given night. This number can only be approximated because all host home sites are not available on any given night. It should be noted that two of the host homes can accommodate a youth and an infant.

The program to assist teenage homeless (The PATH) is a transitional living program for homeless young people. The PATH is available to a young person who is 16 to 21 years old, lacking a safe place to live and willing to participate in a program that provides food, housing and activities to empower youth to live responsibly and independently. Currently there are four apartments which can accommodate a maximum of eight program participants.

Oswego County Opportunities also operates Services to Aid Families (SAF) which provides emergency shelter for abused women and children. SAF also has a network of safe homes available for emergency shelter purposes. The combined total number of slots available to the SAF house on any given night is 18.

9. Assisted Housing

The subject of housing encompasses much more than the physical structures. The affordability is linked directly to the existing housing market and in some cases the availability of subsidized units. In Oswego County the following housing assistance programs are in existence:

- * The City of Fulton Community Development Agency administers 427 Section 8 Housing certificates and vouchers. The program service area is the City of Fulton. Approximately 16% of the total rental market is subsidized.
- * The City of Oswego Community Development Office administers 458 Section certificates and vouchers. The program service area is the City of Oswego. Approximately 13% of the total local rental market is subsidized.
- * The Phoenix Public Housing Agency administers 123 Section 8 Housing certificates and vouchers. The program service area is the Village of Phoenix and the Town of Schroepfel. Approximately 13 % of the local rental market is subsidized.
- * The Oswego County Rental Assistance Program administers 310 Section 8 Housing certificates and vouchers. The program service area is the entire county. However, the county program will only assist residents in the cities Fulton or Oswego, the Village of Phoenix and the Town of Schroepfel under special circumstances. The Oswego County Housing Program also administers 18 units of project based assistance under the Section 8 Moderate Rehabilitation Program. These units are located in Williamstown, Redfield and Mexico. This represents a subsidy of 6% of the total county rental market, excluding the cities of Oswego and Fulton and the Town of Schroepfel.

There are also project based units located throughout the county. These projects differ from the rental assistance programs in that the assistance does not go with the tenant but stays with the housing unit. Some of the project based housing assistance programs are owned and operated by a governmental entity, such as a housing authority; other projects are privately owned and operated but are under contractual agreement to maintain affordable housing costs.

Table VI-5 is a list of project based assisted housing units located in the County. All of the following developments are operated privately but do or have received government funding for development or operating costs.

Table VI-5: Project Based Assisted Housing

<u>Name</u>	<u>Location</u>	<u>Number of Units</u>
*Conifer Meadow Apartments	Central Square	130
Green Acres	Central Square	20
*Fulton Mills Apartments	Fulton	108
*Towpath Towers	Fulton	120
John Warren Wight	Mexico	32
*St. Luke Apartments	Oswego	100
*Pontiac Terrace	Oswego	70
*Simeon-Dewitt Apartments	Oswego	130
Wine Creek Apartments	Oswego	60 reserved for income eligible total of 256
*Paddocks Landing	Phoenix	32
Bradley Court	Phoenix	24
*Patrick Court	Phoenix	24
Christopher Court	Phoenix	40
Village Center	Phoenix	15
*Springbrook Apartments	Pulaski	(40% receive assistance) 119
*Deerfield Apartments	Pulaski	N/A
*Creekside Apartments	Sandy Creek	20

*Indicates the units are for elderly, 62 and older, disabled or handicapped.

Source: Community Resource Directory and personal contacts with project managers.

In addition there are two project-based, assisted apartment complexes owned and operated by public entities. Pathfinder Courts has 246 units located in the City of Fulton, and is operated by the Fulton Housing Authority. Funds are received through the New York State Division of Housing and Community Renewal (DHCR). Hamilton Homes is operated by the Oswego Housing Authority and has 186 units located in the City of Oswego. Funds also are received through the New York State Division of Housing and Community Renewal. These two housing complexes are also under contract with DHCR to maintain affordable housing units for a designated period of time.

10. Homeowner and Owner Invested Property Rehabilitation

The City of Fulton has been able to provide assistance in the rehabilitation of owner inventory properties under the Division of Housing and Community Renewal Housing Rental Rehabilitation Program. One hundred twenty eight (128) rental units have been repaired and are being utilized as safe, sanitary and affordable housing for city residents. An additional 11 units of rental housing located in the targeted area of the Community Development Block Grant Small Cities program in the city have also been rehabilitated.

HUD HOME funds have provided monies for both owner-occupied and owner investor properties within two targeted areas of the City and have been approved for a city-wide program. In the first two years of the HOME Program, there were 31 units of rental housing rehabilitated. HOME funds also provided assistance for rehabilitation of 13 owner-occupied properties. It was projected that an additional 30 properties will be rehabilitated during 1995-96.

For the past 18 years, the City of Oswego has operated a highly successful Housing Rehabilitation Program for owners of one and two family homes. Under the owner-occupied rehabilitation program, the Community Development Office has rehabilitated 600 homes, containing approximately 625 units since 1977.

The Rental Rehabilitation Program in the City of Oswego has been in existence since 1984. Since its inception, the program has rehabilitated 83 units in 44 buildings. Both programs have been funded through Community Development Block Grants.

In 1994, Oswego County was awarded \$200,000 of HUD HOME funds from the NYS Division of Housing and Community Renewal to implement a county-wide homeowner housing rehabilitation program. This was the first homeowner rehabilitation program available to the rural areas of Oswego County. The focus of this program was to leverage existing private and public housing repair, weatherization and energy conservation monies. A total of fifteen homes were rehabilitated.

In 1991 the Village of Hannibal received a HUD Small Cities Community Development Block Grant for \$400,000 to implement a village-wide moderate housing rehabilitation program. At the completion of the program in 1993, twenty-five homes had been rehabilitated.

In 1983, the Oswego Housing Development Council in conjunction with the Oswego County Section 8 Housing Program rehabilitated five owner investor properties with a total of 18 housing units. The Housing units are located in the towns of Redfield, Williamstown and Mexico.

11. Homeowner Programs

In Oswego County there are a variety of first-time home buyer programs available to income eligible families. The cities of Oswego and Fulton received funding from HUD under the Community Development Block Grant program to implement a first-time home buyer program. The City of Fulton has had a first-time home buyer program since 1992. Approximately 25 families have purchased their own home through this program and the City anticipates serving an additional 25-30 families. The City of Oswego's program was initiated in 1995 and is based on a three year plan. The City plans to assist approximately 30 families.

The Village of Phoenix received a Small Cities Community Development Block grant for first time homeownership in 1992. The village is implementing their program in two phases. The first phase, which is completed, involved the write down of existing homes for purchase. The second phase of the project includes the building of new single family housing units for purchase by a buyer from the Small Cities funded first-time home buyer program.

The Village of Parish is also in the process of revising their proposed first-time home buyer program. The original plan was to write down the mortgage of the proposed new homes which were to be built through the New York State Affordable Homeownership program. However, due to program complications, these new homes will not be constructed. The village is planning to use their Small Cities grant to further homeownership opportunities throughout the village.

The Oswego Housing Development Council, a not-for-profit agency which operates as the Rural Preservation Council for the county, has a new construction first-time home buyer program. The council has completed development of six homes in Williamstown, and has constructed eight homes in Pulaski with a capacity for a total of 12 units there.

12. Fair Housing

The Federal government passed the Fair Housing Amendments Act of 1988, which expanded Title VIII of the Civil Rights Act of 1968, to prohibit discriminatory housing practices based on handicap and familial status. The law also establishes an administrative and judicial enforcement mechanism for cases where discriminatory housing practices cannot be resolved informally and provides for monetary penalties in cases where housing discrimination is found. The Fair Housing Amendments Act also establishes design and construction requirements for certain new multifamily dwellings to ensure against discrimination against families.

New York State's fair housing requirements are included in equal opportunity legislation and are more inclusive than those provisions in the federal law because age and marital status are included as part of the protected populations.

In 1990 Oswego County passed county legislation which embraces the Federal Fair Housing legislation. This local law also established an Oswego County Fair Housing Officer and Fair Housing Council. In an effort to encourage Fair Housing practices, Oswego County has developed and implemented the New Horizons Fair Housing Strategy. The focus of the strategy is on education. One aspect of the New Horizons plan is encouraging local municipalities to participate in the New Horizons program. The Villages of Altmar, Mexico, Parish, Phoenix and Pulaski and the Town of Williamstown have passed resolutions which support the County's Fair Housing Law and Fair Housing Council and have each appointed a local Fair Housing Representative to distribute information about Fair Housing.

B. TRENDS

The U.S. population as a whole is getting older as the elderly are becoming a larger percentage of the total population. Although the majority of elderly households prefer to remain in their single family owned homes, national policy for elderly people has focused almost entirely on multi-family housing, including publicly assisted housing, retirement communities, congregate care and life care facilities.

As people age, their house becomes more of a challenge to live in. The layout of most houses is so inflexible that infirmities associated with age make it necessary for an elderly person to move or adapt their housing. Also, as people age in place they become over housed, meaning that one or two people now reside in a home that was once occupied by a family of four or more.

Another trend which has resulted in an increase in housing units throughout the country is the fact that families or households are smaller. As the size of the household has become smaller, there has been an increase in the number of households relative to the population. Thus even in areas with little or no population growth there has often been a significant increase in housing units.

The size of the average house has also increased. In 1965, the average home had approximately 1,525 square feet. In 1990, the average home had 1,966 square feet. In New York State, the average home was even larger, 2,149 square feet. Consequently, the percentage of income spent on housing has increased. Owners of mortgaged homes spent 19% of their income on housing costs in 1960. In 1990, owners of mortgaged homes spent 21% of their income on housing.

In Oswego County, as well as throughout the country, there is often a negative attitude toward the renting population. Members of the general public have voiced concerns about the perceived lack of investment renters have in their community. This statement has not been substantiated. It is also argued that rental properties are often not adequately maintained and are detrimental to neighborhoods. In such instances, there is frequent disagreement among landlords and tenants as to whether it is the renter who is an undesirable tenant or the landlord who is an irresponsible absentee property owner.

In rural areas of the country mobile and manufactured housing have become more prevalent. During the last ten years Oswego County has seen an increase in mobile/ manufactured housing units from 13% of the total housing stock to 20%. Mobile homes and manufactured housing are viewed as affordable housing alternatives. This trend is likely to continue.

In New York State as well as other parts of the country, special populations such as the developmentally disabled and the mentally impaired are being removed from institutionalized settings. Thus there has been an increase in specialized housing and group homes. It is believed that a group home setting is more economical and provides a better environment for residents. It appears this trend of neighborhood integration will continue.

C. ANALYSIS

1. Number of Housing Units Required

In order to understand the future housing needs for Oswego County, it is necessary to use existing data and future population and household population projections to estimate the anticipated number of housing units that will be needed.

By looking at the existing number of dwelling units and subtracting those units designated as occasional use, we can estimate how many existing permanent dwelling units are available. When comparing the total number of units to the existing households population, the excess existing housing units reflect the vacancy rate. The ideal housing market vacancy rate to create a wider range of housing options for owner occupied housing is no more than 2% and for rental housing 5%. It should be noted that there are vacant housing units not for rent, sale or in use that are not accounted for in this calculation.

To determine total housing units needed, we will use a blended vacancy rate of 3.5%. It is anticipated that in the year 2000 a total of 49,583 housing units will be needed. For a break down of future anticipated housing needs by community, refer to Table VI-6.

Based on 1990 Census information, owner-occupied housing units make up 69% of the total housing units in the county. Assuming that the percentage of residents owning their own home remains relatively constant, approximately 4,761 of the additional units required will be owner occupied.

The prevalence of mobile and manufactured homes in Oswego County has and will continue to have an impact on housing development in the county. In some areas the ratio of mobile and manufactured housing units being placed on lots are one for every one stick built home. According to local realtors, mobile and manufactured housing is one form of affordable housing. The market suggests that there is a lack of suitable housing available in the \$50,000-\$60,000 price range. Mobile and manufactured housing can fill this need. Although the cities of Oswego and Fulton and the villages of Parish, Pulaski and Phoenix have implemented first-time homeowner programs which may help qualified applicants to purchase a site built housing unit, these programs are not large enough to turn the tide away from mobile and manufactured housing as an easily accessible and affordable means to homeownership.

2. Cost of Housing

Table VI-7 is from the publication entitled "Preparing for Homeownership." This table demonstrates how much home you can afford based on your income and the interest rate at which the home is being purchased. By analyzing income, debt service, and mortgage interest rate, we can estimate the cost range for new housing units that can be supported in an area.

For example, the median county household income is \$29,083 and the allowable debt payment for the \$25,000 income category is \$167.00 a month. (Table VI-8) Therefore, for median household monthly allowable debt would be approximately \$190.00. This means that a household could not have more than \$190.00 of monthly bills or payments that are their responsibility and still qualify for the mortgage indicated by Table VI-6. If a typical household had this monthly debt service or less, this household could afford a home costing a maximum of approximately \$82,260 at a fixed rate of 8% for 30 years. If a household's actual monthly debt exceeds those listed in Table VI-8, a good rule of thumb is that for every \$50.00 of "excess debt" you can expect a \$5,000 reduction in the amount of mortgage that can be qualified for.

Therefore, a household with the median county income of \$29,083, but with monthly debt cost of \$450, would be able to afford a home priced at \$55,920 based on an 8%, thirty-year monthly mortgage payment.

Public input and the average sale price of houses being sold in the county suggest that people have more debt than the standard allowable rate and people are choosing to purchase below what they could otherwise afford based on their gross income. Thus, according to information concerning the potential and actual average selling prices provided by the Oswego County Board of Realtors, an affordable single family home in Oswego County should sell for between \$56,000-\$82,000 based on 1990 dollars. Of course when projecting the future cost of housing for Oswego County, projected cost should include inflation.

Concern has also been voiced about the lack of higher end housing available in the county. It is more difficult for a developer to develop higher end tract development in a rural area, because he or she can not receive an adequate return on his or her investment. Typically, higher end housing is custom built on a site by site basis. However, Oswego County has an opportunity to attract higher end housing because of the close proximity to Syracuse, as well as the natural assets the county has to offer.

TABLE VI-6: ANTICIPATED NUMBER OF HOUSING UNITS NEEDED BY 2000

Town/City	Total 1990 Year-Round Occupied Housing Units	Total Anticipated Number of Year-Round Housing Units Needed in 2000	Additional Year-Round Housing Units Needed in 2000*
Albion	638	753	115
Amboy	338	386	48
Boylston	158	184	26
Constantia	1652	2015	363
Granby	2431	2797	366
Hannibal	1547	1793	246
Hastings	2883	3420	537
Mexico	1753	1954	201
Minetto	619	682	62
New Haven	938	1082	144
Orwell	349	456	107
Oswego	1637	3159	1522
Palermo	1138	1267	129
Parish	807	936	124
Redfield	195	228	33
Richland	2192	2393	201
Sandy Creek	1261	1385	124
Schroepfel	3146	3797	657
Scriba	2341	2735	394
Volney	1930	2227	297
West Monroe	1452	1703	251
Williamstown	404	471	67
Fulton	5208	5490	282
Oswego	7416	8270	854
County	42433	49583	7150

*Based on 1990
Census Population
Projection

Table VI-7: Maximum Mortgage by Annual Income and Interest Rate*

Interest Rate	Annual Income					
	\$20,000	\$30,000	\$40,000	\$50,000	\$60,000	\$70,000
6.5%	65,900	98,800	131,800	164,800	197,700	230,700
7.0%	62,600	93,900	125,300	156,600	187,900	219,200
7.5%	59,600	89,400	119,200	149,000	178,800	208,600
8.0%	56,700	85,100	113,500	141,900	170,300	198,700
8.5%	54,100	81,200	108,300	135,400	162,500	189,600
9.0%	51,700	77,700	103,500	129,400	155,300	181,200
9.5%	49,500	74,300	99,100	123,800	148,600	173,400
10.0%	47,400	71,200	94,900	118,600	142,400	166,100
10.5%	45,500	68,300	91,100	113,800	136,600	159,400
11.0%	43,700	65,600	87,500	109,300	131,200	153,100
11.5%	42,000	63,100	84,100	105,100	126,200	147,200

*This table is based on allowable debt rates.
Source: Preparing for homeownership, p. 12.

4. Rental Market

The current rental vacancy rate in Oswego County is 6.8%. The optimal rental vacancy rate is 5%. Rental housing accounts for approximately 24% of the total housing stock as previously estimated based on anticipated household increases of 7,150 additional housing units needed in the year 2000, approximately 1,573 of these units will be rental units. This is approximately 22% of the total new units required.

It is important to understand the rental market to predict what type of new units may need to be added to the housing rental inventory. At the present time, the rental vacancy rate is higher than desired. For instance, some rental units may be vacant because they are unsafe, too expensive or are located in an area that does not have a viable rental market, because of lack of proximity to employment, transportation or community services. By understanding the conditions of the rental market a more educated estimate for the anticipated number of rental units can be obtained. Currently, a detailed analysis of this market does not exist.

5. Substandard Housing

In order to understand the existing both the rental and owner-occupied housing markets and more effectively use public and private dollars, a definition of substandard housing should be developed. Areas of the county with high vacancy rates and a high percentage of older units should be surveyed. Each housing unit should be evaluated in relation to the definition of substandard or a local housing code. This information would be very helpful in understanding the housing needs of Oswego County.

Table VI-8: Allowable Monthly Debt by Income

Gross Annual Income	Allowable Debt Payments/Mo.
\$20,000	\$133
25,000	167
30,000	200
35,000	233
40,000	267
45,000	300
50,000	333
55,000	367
60,000	400
65,000	432
70,000	467

Source: Preparing for homeownership, p. 13

6. Occasional Use Housing

According to existing statistical information, many parts of Oswego County are viewed as vacation areas and therefore there are large concentrations of occasional use units located in some communities. The demand for occasional use housing is challenging to estimate. Some of the factors that influence a demand for occasional housing are economic trends, disposable income, the attractiveness of an area, as well as potential resale value. Presently, the occasional use housing unit category accounts for 7% of the existing market. It is assumed that this percentage will remain constant, thus accounting for an increase in occasional use units of 501, totalling 4,114 by the year 2000. Not every community will experience an increase in occasional use units. Occasional use units are usually tied to tourism or recreational activities. Therefore, those areas that have seasonal and recreational attractions and activities are more likely to have an increase in this type of housing.

Estimating the projected growth in the area of special population housing is extremely difficult. The ability to operate many of these programs is tied directly to government funding at the State and Federal level both of which are undergoing changes.

D. GOALS, OBJECTIVES AND STRATEGIES

GOAL: PROVIDE A WIDE RANGE OF SAFE, SANITARY AND AFFORDABLE HOUSING OPPORTUNITIES FOR THE EXISTING AND FUTURE RESIDENTS OF OSWEGO COUNTY.

OBJECTIVE 1: Support the maintenance of the county's housing stock.

- STRATEGIES:
- a. Develop a model housing code that could be adopted by local municipalities.
 - b. Apply for grants for maintenance and rehabilitation of owner-occupied housing.
 - c. Recommend that local zoning ordinances be reviewed to consider the appropriateness of allowing accessory apartments if the homeowner resides in the primary residence, in order to facilitate maintenance of larger, older homes.
 - d. Apply for funding to develop a mobile home replacement program for homeowner units which are unsafe.
 - e. Develop a model inspection form based on HUD housing quality standards which could be adopted by municipalities or utilized as a guide for landlords and tenants to ensure that all rental housing units are safe, sanitary and decent for their inhabitants.
- OBJECTIVE 2:
- Address the housing needs of Oswego County's aging and other special needs populations.
- STRATEGIES:
- a. Encourage local municipalities to amend local laws to provide for accessory apartments, elder cottages and shared residences.
 - b. Research the possibility of creating a mobile housing unit program which could be used in rural areas to allow for family care of elderly family members.
 - c. Apply for or support applications for grants to develop a diversity of private senior housing opportunities in areas of greatest need which are located near services.
 - d. Support efforts to develop targeted plans to address housing needs of the disabled, runaway youth, victims of abuse and the homeless.
- OBJECTIVE 3:
- Increase the opportunities for homeownership in Oswego County.
- STRATEGIES:
- a. Apply for grants to assist first-time homebuyers.
 - b. Support and encourage lending institution efforts to target a percentage of mortgages to low income, first-time homebuyers.
- OBJECTIVE 4:
- Encourage the use of creative and innovative design techniques when developing new housing.
- STRATEGIES:
- a. Develop model site plan standards for planned housing developments including options for higher density, more affordable housing.
 - b. Develop a model subdivision ordinance which incorporates creative design techniques.
- OBJECTIVE 5:
- Promote non-discrimination in the sale and lease of housing.
- STRATEGIES:
- a. Continue to update and implement the Oswego County Fair Housing Strategy.
 - b. Provide staff support for the Oswego County Fair Housing Council.
- OBJECTIVE 6:
- Locate affordable housing throughout Oswego County in proximity to job opportunities and community services.

- STRATEGIES:
- a. Recommend that new affordable housing be located near job opportunities and community services.
 - b. Work with local municipalities to update their zoning regulations to ensure that affordable housing can be located in proximity to job opportunities and community services.

VII. COMMUNITY FACILITIES (Amended 4/2008)

B. INVENTORY

1. Education

In Oswego County there are nine school districts: Altmar-Parish-Williamstown Central (APW), Central Square Central, Fulton Schools, Hannibal Central, Mexico Academy and Central, Oswego City Schools, Phoenix Central, Pulaski Central and Sandy Creek Central. In 2007 a total of 24,736 students were served by the nine school districts. There are a total of 46 school buildings being utilized as teaching facilities. Thirty-two of these are designated as elementary schools, five as Jr. High or middle schools, and nine as high schools.

Oswego County also has five parochial/denominational elementary schools and one secondary denominational school. In 1992 Bishop Cunningham Catholic Jr-Sr. High School was closed due to lack of enrollment. Presently there is not a secondary parochial school within Oswego County. In 1982 this school served 221 students. Children that were attending Bishop Cunningham Catholic Jr-Sr. High school now attend the public high school in their district.

District	1993 Public School Enrollment	2007 Pre- Kindergarten to 12th Grade	Change in enrollment 1993 to 2007
APW Central	1,810	1,690	-120
Central Square Central	4,851	4,885	34
Fulton Schools	4,249	3,856	-393
Hannibal Central	1,756	1,761	5
Mexico Academy and Central	2,804	2,688	-116
Oswego City Schools	5,221	4,974	-247
Phoenix Central	2,710	2,488	-222
Pulaski Central	1,239	1,260	21
Sandy Creek Central	1,137	1,134	-3
All Districts	25,777	24,736	-1,041

According to the 2007 enrollment figures, the Oswego City School district has the largest student enrollment, with a total of 4,974 students, followed by Central Square district which had a total of 4,885 students. The Sandy Creek school district had the smallest enrollment with 1,134 students.

a. Vocational and Technical Training

The Oswego County Board of Cooperative Educational Services (BOCES) was established in 1948 when legislation enabling school districts to combine their resources and share needed services was passed. There are 40 BOCES throughout New York State. In 1969 Oswego County BOCES moved to their present facility on County Route 64 in Mexico. At that time, five hundred students comprised the school enrollment, while today over 10,000 are served by numerous student programs.

Oswego County BOCES serves all nine public school districts in the County, BOCES is operated by a board of nine individuals, each one representing a component district. BOCES operations provide specialized instructional services at the request of the component school districts. Additionally, BOCES offers several adult education programs and tutorial services. The following is a list of adult career programs currently being offered.

- Auto technician
- HVAC
- Computer Training
- Nail Technician
- Precision Machining
- Welding
- Heavy Equipment and CDL Program
- Practical Nursing
- Medical Assistant
- Medical Transcription
- Nurse Assistant
- Home Health Aides
- Dental Assistant
- Adult basic education courses

Additionally Oswego County BOCES offers companies the custom design programs to meet specific employer training needs. Oswego County BOCES specializes in on site training with secure labs and centrally located classroom space and industrial trainers for various trade approved curriculums for all skill levels.

Oswego County BOCES continues to upgrade its technological capacities. In 2007 Oswego County BOCES initiated the "Staying Connected with the Classroom" the program is a collaborative effort involving SUNY Upstate Medical University Hospital, Time Warner Cable and the participating school district.

This service provides portable distance learning units, which are capable of real-time audio and video interaction, to students who are ill, hospitalized or homebound so that they can participate in their school courses and maintain connections with their teachers and classmates.

b. Community Colleges

Cayuga Community College is one of 64 institutions that make up the State University of New York (SUNY). The College is sponsored by Cayuga County and governed by a 10 member board of trustees. Founded under the sponsorship of the Auburn City School District in 1953 as Auburn Community College, the College officially changed its name to Cayuga County Community College in 1975 when Cayuga County assumed sponsorship. Cayuga Community College has an Oswego County extension site located in the City of Fulton. Cayuga Community College offers two year associate degrees in the areas of liberal arts, business, computers, criminal justice, electrical technology, mechanical technology, nursing and telecommunications

Fulton operations grew rapidly from two downtown classrooms in 1994 to the current facility on West Broadway (Route 3). Opened in 2001, the Fulton campus now serves over 1,000 students each academic year. The Fulton campus expanded in 2004 with additional classrooms and office space. In 2006, New York State granted the facility branch campus status and the "Fulton Campus" designation became official.

Similar to Cayuga County's sponsorship of the college, each year the Oswego County Legislature designates financial support based on a possible student participation formula.

c. Universities and Colleges

The State University of New York (SUNY) College at Oswego is located in Oswego County along the shore of Lake Ontario west of the City of Oswego. SUNY Oswego was founded in 1861 as the Oswego Normal School by Edward Austin Sheldon, who was an innovative and progressive educator. He embraced some of the most innovative teaching methods of his day. In 1913, the campus moved from the City of Oswego to the current lakeside location following the construction of Sheldon Hall. At this time, the institution became known as Oswego State Teachers College and in 1948, one of the State University of New York charter members. In 1962, the college broadened its academic perspective and became a full-fledged arts and science institution in the SUNY system.

The institution has three academic divisions: The College of Arts and Sciences, School of Business and the School of Education. Additionally the college offers continuing education, graduate studies and research. SUNY Oswego offers more than 110 undergraduate majors, minors, cooperatives and graduate programs.

SUNY Oswego is accredited by the commission on Higher Education of the Middle States Association of College and Schools. The following schools have received their accreditation:

- The School of Education is accredited by the National Council for Accreditation of Teacher Education
- The School of Business is accredited by the Association to Advance Collegiate Schools of Business.

Additionally, the following departments have been accredited;

- Art Department – National Association of Schools of Art and Design
- Chemistry Department - American Chemical Society
- Music Department – National Association of Schools of Music Curriculum
- Theatre Department – National Association of Schools of Theatre

As previously indicated, SUNY Oswego offers a variety of continuing educational opportunities. Training and education is available to local corporations and businesses to upgrade the workforce. The college also offers American Management Association certification courses. The SUNY Oswego Continuing Education Center at the Oswego

County Industrial Park in Phoenix offers junior level courses and non-credit learning opportunities for local residents.

SUNY owns 50 buildings on the lakeside campus of 696 acres. More than 650 additional acres owned by college related organizations are available to the college. There are facilities for fine and performing arts, intercollegiate and intramural athletics. Recently approximately \$250 million has been invested in a campus wide renovation, highlighted by the October 2006 opening of the Campus Center.

Approximately 8,300 students are enrolled annually, two-thirds of these students are full-time undergraduates. The number of full time faculty and staff for 2006 is 1,195 and the number of part-time faculty and staff is 631. SUNY Oswego is an asset to Oswego County, the college has an annual total economic impact of \$137.3 million for Oswego County. This includes employment, goods, services and reinvested resources.

2. Child Care Facilities

Child care facilities are an important part of the community's resources. In New York State, individuals caring for more than two unrelated children must register or license with the New York State Office of Children and Family Services. The license/registration process ensures that child care providers meet the minimum standards established by New York State. There are several types of registered and licensed child care in Oswego County. Registered Family Day Care is one adult caring for as many as six children age two and up, plus two additional school age children. Family Day Care providers who choose to care for infants under the age of two are limited to a capacity of five children plus two school age children and no more than two infants may be in care at a time. Licensed Group Family Day Care involves a provider and an assistant together caring for a maximum of twelve children plus two additional school age children. The capacity is reduced from 12 to 10 if the providers choose to care for infants. No more than four infants may be in care at any time. Licensed Day Care Centers and registered School-Age Child Care programs are located at a site other than a residential home and serve more than twelve children. Capacity levels vary depending upon the space available in the center or school-age program.

Currently, Oswego County has 75 registered Family Day Care homes, with a maximum capacity of 450 pre-school age plus 150 school-age children. There are 30 licensed Group Family Day Care homes with a maximum capacity of 360 pre-school age plus 60 school-age children. There are 18 School Age Child Care programs with a total capacity of 953 children. The following seven licensed Day Care Centers have varying capacities:

The Children's Center Mitchell Street, Oswego	The Children's Center Sheldon Hall, SUNY Oswego	Discovery Day Care Oswego County Industrial Park, Phoenix
Pulaski Day Care Center Castle Drive, Pulaski	Little Gulls & Buoys Day Care & Learning Center, LLC Route 104, Mexico	The Phoenix Children's Center Jefferson Street, Phoenix
Little Luke's Child Care Burkle Street, Oswego		

Oswego County Opportunities, Inc. offers Head Start to 264 children at seven locations throughout Oswego County and all nine school districts within the county offer Universal

Pre-K. There are also several nursery school programs as well as private providers in Oswego County which are not required to register with New York State.

Oswego County is fortunate to have the Child Care Council, which promotes and supports the development of quality, accessible and affordable child care services. The council serves as a community resource for education and training on topics related to accessing and providing child care services. The Child Care Council also enrolls child care providers that are legally exempt from registration who serve families receiving a child care subsidy from the Oswego County Department of Social Services. Enrollment ensures that these providers meet minimum standards established by New York State.

3. Health

a. Hospitals

Oswego County has two hospitals of general service located in the cities of Oswego and Fulton. Oswego Hospital was incorporated in January 1881. The hospital was founded by a group of women known as the Board of Lady Managers, with some assistance from an all male finance committee. At that time, the hospital provided six beds. In 1893, Thomas Mott donated a lot on the west side of Fourth Street between Schuyler and Seneca Streets. The hospital was built on this site, but the West Fourth Street hospital soon became overcrowded and obsolete and the decision was made to search for a new site.

In 1908, the Oswego Hospital relocated to its current site on West Sixth and Bridge Street, known as the DeWolfe House. The DeWolfe House experienced three expansions in 1910, 1928 and 1949. Another expansion was completed in 1969. During this renovation the original DeWolfe House was demolished.

In 1994, the Oswego Hospital acquired and developed additional land at the West Sixth Street site for out-patient and other medical services. In early 2002 Oswego Hospital Board of Trustees and Management worked together to develop and implement the Oswego Hospital Renewal Project. This project was driven by patient comments and suggestions along with the needs of the physicians in an effort to create an expansion plan that would offer the clients of Oswego Hospital the best care possible.

The expansion plan included an Outpatient Surgery Center and a New Surgical Suite both opened in 2005. The Out-patient Surgery Center has a separate entrance and registration area, patient and family consultation rooms and a private outpatient waiting area. The New Surgical Suite has four operating rooms, six recovery areas and three endoscopic operating rooms.

In 2006 a new maternity department and a new intensive care/critical care unit were added to Oswego Hospital as part of the hospital renewal project. The New Maternity department hosts five home – like labor/delivery/recovery (LDR) rooms, twelve private/semiprivate rooms, newborn nursery, and isolation nursery and lactation center.

The new Intensive Care /Critical Care unit has eight private rooms with bathroom facilities, post operative recovery space, negative pressure accommodations for patients requiring isolation and a family conference and waiting area.

Oswego Hospital is a 202 bed facility with a medical staff trained in acute medical, surgical, maternity, pediatric and skilled nursing care. Oswego Hospital also has home health aides for Oswego County residents, a mental health division for inpatient and outpatient psychiatric services. Oswego Hospital also is a mother agency to the Seneca Hill Health Services Center in Volney, which includes radiation oncology, outpatient laboratory services and a Veteran's Administration satellite facility. Oswego Hospital's services also include satellite health services centers in Mexico, Parish, Oswego and Volney.

A.L. Lee Memorial Hospital is a private, not for profit facility. It began in the early 1900s as a private dwelling on the west side of the Oswego River. In April of 1908, Mrs. Victoriana Lee of New York City donated a site to the hospital as a memorial to her late husband, Brigadier General Albert Lindley Lee. The hospital was completed on Jan 1, 1919. Lee Memorial's first expansion took place in 1923-24, a second major expansion occurred in 1941, when completed the facility had 35 beds.

In the early 1960's Lee Memorial underwent extensive modernization, with construction of an addition on the southwest side of the existing building. The hospital grew to 55 medical and surgical beds, four pediatric beds and eight obstetric beds. In the 1970's the obstetric beds were converted to medical-surgical use.

In 1971 Oswego County tore down the old hospital building to make way for construction of Andrew Michaud Nursing Home, an 80 bed county owned facility.

In March of 1974 Lee Memorial hospital became a voluntary not-for-profit corporation. Highlights of the 1970's include a new Intensive and Coronary care unit and renovation to the Emergency department.

In 1988 the hospital opened a primary care center in Phoenix. In 1989 the Lee Memorial Office building opened adjacent to the existing hospital on the southwest side. This facility provides physician offices, diagnostic testing and patient clinic serves through the Fulton Health Center. Additionally an ambulatory surgery unit opened at this site in 1989. In 2001 the hospital opened the first Sleep Lab in Oswego County. The facility also included rehabilitative services with the addition of Speech Therapy and Occupational Therapy, Cardiopulmonary Department services began offering enhanced Holter monitoring. In 2002 the hospital upgraded its administrative services by installing meditech health information system and later going wireless to their satellite offices. In 2004 there were also renovations to the outpatient services and main floor expansion. In early 2006 the hospital continued to invest in state of the art technology. In 2007 renovations to the hospital included an x-ray suite , installation of digital fluoroscopy and improvements to the surgical services.

A.L. Lee Memorial Hospital is a 67 bed facility that is fully accredited by the Joint Commission on Accreditation of Healthcare Organization (JCAHO).

Early in 2005, Oswego County sold the Andrew Michaud Nursing home facility to St. Luke's Health Services.

b. Community Medical Services

Oswego Hospital operates health centers in Oswego, Mexico and Parish, as well as a Veteran's clinic. The Oswego Occupation Health center is located on West Sixth Street in the Health Services Center.

The Oswego VA Clinic is located at the Seneca Hill Facility, County Route 45A, and suite 400. The Oswego VA Clinic offers a full range of primary care outpatient services to veterans of Oswego County.

The Parish Health Services Center is located at 10 Carlton Dr., Parish NY and provides primary care for the health and wellness of local families. Services include comprehensive care for newborns through geriatric, women's wellness, immunizations, allergy injections and laboratory draws.

The Oswego Hospital operates the Mexico Family Health Center which provides primary care for residents in the Mexico area. Oswego Hospital also operates the mental health facility located on Bunner Street in the City of Oswego.

A.L. Lee Memorial Hospital operates the Public Screening clinic at the hospital located in Fulton. Additionally A.L. Lee Memorial Hospital operates the Phoenix Primary Care Center which is located on State Street in the Village of Phoenix, the center provides primary care for the residents of southern Oswego County. A.L. Lee Memorial Hospital also operates a primary care community medical center in the Village of Hannibal.

Oswego County Opportunities (OCO) is a private non-profit corporation dedicated to serving the human service needs of Oswego County residents and operates two primary care centers in the county.

These centers provide primary family medical care, minor emergency care, family planning and complete physicals. The Fulton Health Center is a cooperative effort between OCO and A.L. Lee Memorial Hospital located on South Fourth Street in the City of Fulton, adjacent to A.L. Lee Memorial Hospital.

OCO operates the Oswego Health Center in the City of Oswego, this facility opened in 1996. OCO also offers family planning services in the Villages of Pulaski and Mexico.

The Central Square Health Center is operated by Prepaid Health Plan which is a nonprofit insurance group which operates several community clinics throughout Central New York. The center is located on Route 49 in Central Square and provides family services, laboratory, x-rays and gynecology.

The Pulaski Health Center is located in the Village of Pulaski. The center is operated by Northern Oswego County Health Services Inc. and provides family medical care to local residents. Services include medical and dental health care, laboratory and x-ray services, immunizations and referrals.

Open Hands Clinic for the uninsured is operated by Rural and Migrant Ministry of Oswego County Inc. The Clinic is open from 5-7 p.m. on Wednesdays and is located at 15 Stewart Street, Richland, NY.

The Samaritan Family Health Center is located in the Village of Lacona and is associated with the Good Samaritan Hospital in Watertown, NY. The current services offered are family practice, serving all ages, immunizations, allergy shots, blood work, EKG's and spirometry.

Hospitals Home Health Care Inc. was established in 1989 by A.L. Lee Memorial and Oswego Hospitals. The main goal of this organization is to ensure that patients' healthcare needs are met after they leave the hospital. Although financially sponsored by Lee Memorial and Oswego Hospitals, HHHC operates as a separate and independent organization.

c. Nursing Homes

Oswego County has seven nursing homes located within the county, all of which are privately owned. The following table lists the nursing home facilities located in Oswego County, the number of approved skilled nursing beds and the number of approved health related facilities, according to New York State Department of Health.

Name	Ownership	Licensed Number Beds
Andrew Michaud Nursing Home, Fulton	Private	89
Sunrise Nursing Home Oswego	Private	120
Loretto Heights Oswego	Private	120
Meadow Brook Manor Hannibal	Private	20
Pontiac Nursing Home Oswego	Private	80
St. Luke's Nursing Home Oswego	Private	200 40 adult day care
Seneca Hill Manor Nursing Home, Volney	Private	128
TOTAL		797

Source: Nursing Home Administrators

4. Public Safety

The issue of public safety presents itself in many forms within a community. It is necessary to have services in place to address a variety of safety issues. The issue of public safety presents itself in many forms within the community.

The E-911 Center is designated as the primary PSAP (Public Safety Answering Point) for all of Oswego County. All wire-line emergency calls are received at the Center, as well as all wireless calls originating in the County. This agency in turn dispatches for thirty-one Fire agencies, nine EMS providers (ambulance), the County Sheriffs, New York State Police, both incorporated City Police forces, and three Village Police forces.

In 2007 the Public Service Commission approved the sale of the former Niagara Mohawk Fire School to the county. The school is comprised of nine buildings on a 20acre site on East Seneca Street in Oswego. It is the intention that this school be utilized by emergency workers for specialized training in live fire fighting, in smoke drill, confined space training, fire protection systems and Homeland Security weapons of mass destruction training. The training facility can also be used for industrial fire training. It is anticipated that the facility will be reopening in the summer of 2008.

a. Fire Safety

Oswego County is served by one industrial fire department located at the Novelis Aluminum Corporation plant, two professional fire departments in the cities of Oswego and Fulton and 27 volunteer companies serving the towns and villages within the county.

b. Emergency Medical Services

Similarly, ambulance services are operated within the cities of Oswego and Fulton and are paid professionals. The remainder of the county is serviced by volunteer professional emergency ambulance services and/or private contracted services.

c. Law Enforcement

At the Federal level, Oswego County is served by the Federal Bureau of Investigation office in Syracuse. The United States Border Patrol has an office in the City of Oswego and the United States Coast Guard has a station located on Lake Ontario in the City of Oswego. The Coast Guard patrols Lake Ontario and a portion of the Oswego River.

The New York State Police Department has three trooper barracks in Oswego County. These barracks are located in the City of Fulton, Town of Hastings and Village of Pulaski.

The Oswego County Sheriff's Department service area is anywhere within Oswego County, excluding the cities of Oswego and Fulton. Although the county's service area does not include local municipalities, which have their own police forces, the county will assist or respond to calls within these areas when necessary. The Sheriffs Department also has a marine division, which is responsible for activities along the shore of Lake Ontario and Oneida Lake, as well as all other water bodies within Oswego County and a snow mobile patrol unit.

The cities of Oswego and Fulton have police forces as do the Villages of Central Square, Pulaski and Phoenix.

5. GENERAL GOVERNMENT

a. Administrative

Public buildings and facilities are structures owned by the public and utilized for housing government services. These buildings include municipal offices, county office building and other facilities, court buildings, libraries, transfer stations, landfills and energy recovery facilities. There are twenty-four municipal offices and six county office buildings in the County. There are two courthouse facilities.

Oswego County owns and operates six county office buildings, which are located throughout the county. The following is a list of the offices and their locations:

Legislative Office Building
46 East Bridge Street
Oswego, NY 13126

Public Safety Center
39 Churchill Road
Oswego, NY 13126

Health Services Office Complex
70 Bunner Street
Oswego, NY 13126

Oswego County Branch Office
200 North Second Street
Fulton, NY 13069

Oswego County Spring Street Building
Spring Street
Mexico, NY 13114

Pulaski Health Clinic
Barclay Court House
Pulaski, NY 13142

The county has three highway garages located in Scriba, Pulaski and Parish. The County also owns a building maintenance facility, a records storage facility and former jail building, that is currently unoccupied.

b. Courts.

In Oswego County, Federal court matters are handled in Syracuse at the Federal Court Building located at Clinton Square.

State Supreme Court matters in Oswego County are tried in the recently renovated Court House located in Oswego on East Oneida Street. Presently, Oswego has two State Supreme Court Justices. Although the State Supreme Court presides over civil and criminal cases, the majority of cases heard in Oswego County are civil in nature.

Oswego County Court is held in two locations within the county; the new Public Safety Center which is located off of State Route 481 on Churchill Road in Scriba and the Barclay Court House in Pulaski. Family Court is also held at the Churchill Road site.

Each town has a justice; many towns only hold court on an as needed basis. The villages of Pulaski, Central Square, Phoenix and Cleveland also have justices and participate in the local court system. Oswego City Court is held in the City Court facility located in the Conway Building directly across from City Hall on West Oneida Street. Fulton City Court is held in the Chambers located in the Fulton Municipal Building on South First Street in the City of Fulton.

c. Solid Waste.

Most solid waste generated in Oswego County is disposed of through county operated facilities. Garbage and recyclables may be brought to transfer stations by either municipal, contracted, or private haulers and individual residents. Garbage is unloaded, compacted, and transferred to county trailers. Recyclables are transferred via county trucks to the Materials Recovery Facility (MRF) located at the Bristol Hill site. Scrap metals are recycled at a local scrap yard, and burnable waste is taken to the County's Energy Recovery Facility (ERF) which generates steam and electricity for industrial use. Non-burnable waste and ash from the ERF are disposed of at the Bristol Hill Landfill, a double-composite lined, sanitary landfill located in the Town of Volney. Oswego County charges a tipping fee for the disposal of non-recyclable waste. Yard wastes are composted at county facilities at all transfer station locations except Oswego.

Transfer stations are located at:

Bristol Hill – State Route 3, east of the City of Fulton in the Town of Volney.

Hannibal – County Route 7, Johnson Road

Hastings – State Route 11, north of Central Square

Oswego – East Seneca Street

Pulaski – County Route 2A, south of Centerville Road

6. Post Offices

Oswego County also has 26 post offices. The following is a list of the communities that have post offices and their zip codes:

Altmar	13302	Bernhards Bay	13028
Central Square	13036	Cleveland	13042
Constantia	13044	Fulton	13069
Hannibal	13074	Hastings	13076
Lacona	13083	Lycoming	13093
Mallory	13103	Maple View	13107
Mexico	13114	Minetto	13115
New Haven	13121	Orwell	13426
Oswego	13126	Parish	13131
Pennellville	13132	Phoenix	13135
Pulaski	13142	Redfield	13437
Richland	13144	Sandy Creek	13145
West Monroe	13167	Williamstown	13493

7. Cultural Resources

Oswego County has many cultural resources located throughout the county. Cultural resources are sites, structures, districts, objects, biotic elements associated with or representative of earlier human activities. Historical sites, museums and crafts, musicals, literary and theatrical organizations bring alive history and traditions.

The diversity of the county's settlers means that we have a tremendous wealth of traditions, folk tales, arts and crafts. Culturally distinct rural areas usually have had unique ways of building, laying out farms, and creating furnishings and food. As rural life styles, and the old and no longer cost-effective ways of doing things, fade our traditional cultural heritage is in danger of being lost. Just as with individuals, healthy communities need memories of the past. Retaining clear evidence of the community's cultural heritage provides context for where it is going in the future.

In 1991 Oswego County, with funding from the New York State Council on the Arts conducted a county-wide cultural needs assessment. The needs assessment sought to address the impact of the absence of an arts council in the county. Out of this study, the organization Arts & Culture for Oswego County was established.

Among the county's more prominent cultural sites are Fort Ontario, Selkirk Lighthouse, the Richardson-Bates House Museum, the H. Lee White Marine Museum, the Central Square Railroad Museum and the Fort Brewerton Block House Museum. Complimenting these places are art and cultural organizations such as Arts and Culture for Oswego County, Artswego, the Oswego Players, Inc., the Oswego Opera Theater and the Ontario Center for the Performing Arts.

The cultural facilities within Oswego County are both public and private in nature.

There are thirteen public libraries in Oswego County. The following is a list of the libraries and their locations.

<u>Library</u>	<u>Location</u>
Annie Porter Ainsworth Memorial Library	Sandy Creek
Central Square Library	Central Square
Cogswell Free Library	Orwell
David E. Vayner – Branch	Fulton
Fulton Public Library	Fulton
Hannibal Free Library	Hannibal
Mexico Public Library	Mexico
Oswego City Library	Oswego
Parish Public Library	Parish
Penfield Library	SUNY Oswego
Phoenix Public Library	Phoenix
Pulaski Public Library	Pulaski
Williamstown Public Library	Williamstown

Other public cultural facilities located in Oswego County are:

- ❖ The Oswego County Nature Park at Camp Zerbe in Williamstown. The park features a nature trail, interpretive center, educational exhibits and a meeting center.
- ❖ Rice Creek Field Station at SUNY Oswego. The Rice Creek Field Station is an instructional and research laboratory. There are two lab/classrooms, a lecture room and exhibit areas with an indoor viewing gallery surrounded by 400 acres of land with trails.
- ❖ The Cornell Cooperative Extension 4-H Nature Center located in Amboy. The Amboy Nature Center has buildings for meetings and offers overnight accommodations for organized groups.
- ❖ State University of New York Performing Arts Center. The SUNY Oswego Performing Arts Center has two theaters: The Waterman Theater which seats 550 people and is available for public use, and the Lakeside Dinner Theater which seats 165-200 people. The theaters are located on the SUNY campus and the Lakeside Theater is open for six weeks during the summer.
- ❖ State University of New York Fine Arts. The Tyler Art Gallery is located at the SUNY Oswego Campus. The gallery serves the community by bringing in exhibitors, interpreters, collectors and presenters of original work.
- ❖ Salmon River Fine Arts Center: Located on Lake Street in Pulaski, features a wide range of professional art work from local artists. The gallery is open year round.
- ❖ The Art Association of Oswego: The Association hosts a gallery and offers art classes at its headquarters at Fort Ontario Park in Oswego.
- ❖ Oswego High School Theater for the Performing Arts: Locally, the Oswego High School has a theater, which has a seating capacity of 868. In addition to school activities, local groups utilize this theater for a variety of performances and activities.
- ❖ Francis Marion Brown Civic Center Theater: The City of Oswego owns this building located on Fort Ontario Park property. The city leases the building to the Oswego Players under a long term lease agreement. This theater has a seating capacity of 121.
- ❖ The Roy McCrobie Community Center Building: Located on Lake Street in the City of Oswego, is home to the Ontario Center for the Performing Arts. The maximum number of persons that can be accommodated at this location is 200. The building is also available for use by other community groups.

Oswego County is rich in history and has a variety of historical offerings. The following museums are open and operating throughout Oswego County.

The Bridge House Museum

The Bridge House Museum contains a collection of artifacts depicting the history of the Village of Phoenix and the NYS Barge Canal. The historic building is located along the canal at the corner of State and Lock Streets in Phoenix.

Casey's Cottage

Dr. William C. Casey, a Columbia University graduate, transformed an old carriage house into a manor house. Some of the impressive features are the life-size wall carvings and huge fireplace. The Cottage is located adjacent at the Mexico Point State Park, which also has a sandy beach along Lake Ontario in Mexico, NY.

Fort Brewerton Block House Museum

The Block House Museum located on Route 11 in Brewerton, touches on 10,000 years of history from Paleo-Indian to World War I. Adjacent to the museum is the original earthworks of a 1759 British fortification. The Stevens Block House is a replica of the original home built in 1794 by Oliver Stevens, the first permanent white settler in Oswego County.

Fort Ontario

Fort Ontario brings military life of 1868 alive for visitors. This New York State Historic Site overlooks beautiful eastern Lake Ontario in Oswego. Visitors have an opportunity to see the enlisted men's barracks, officers' quarters, the powder magazine, and much more.

H. Lee White Marine Museum

The H. Lee White Marine Museum features a fascinating variety of artifacts, paintings, models and intriguing stories of the area's maritime heritage. The museum is one of the most historic sites in the history of the United States. Ever since Pere Simon LeMoyne first entered the river in 1654 to the present day events, which have shaped our destiny as a nation, have continuously taken place here. It is for this reason that the Port of Oswego New York Authority undertook the task of developing a museum, which would reflect the historic importance of the Oswego Harbor and the exciting story of Lake Ontario as well.

La Guerre d' Independence

La Guerre d' Independence is an impressive wall mural scene that depicts America's War of Independence. The historic mural was made in France and is one of only two in existence. The other is on display in the White House in Washington, DC. The famous multicolored woodblock scenic of 32 strips is on permanent display in Mexico Academy and Central School on Main Street (Rte 104) in the Village of Mexico.

The Mexico Museum

The Mexico Museum on South Jefferson Street in the Village of Mexico features changing exhibits, albums, maps, and fascinating restored materials detailing Mexico's past. The museum itself was originally a mid-nineteenth century law office.

The Oswego Railroad Museum

The Oswego Railroad Museum is dedicated to the historic preservation of railroad history in the Oswego County area. This is depicted in an H&O layout along with various static displays. It is sponsored by the Oswego Valley Railroad Association Inc. and is maintained by the members of the club and various volunteers. The museum is located in the City of Oswego.

Pratt House Museum of Fulton

The Friends of History in Fulton, NY, Inc. highlights the significant history of Fulton, a former mill town and prominent industrial center. The museum is located at 177 South First Street in the historic Pratt House, which was built in 1863. It features permanent and changing exhibits on Fulton's history, industry, and people.

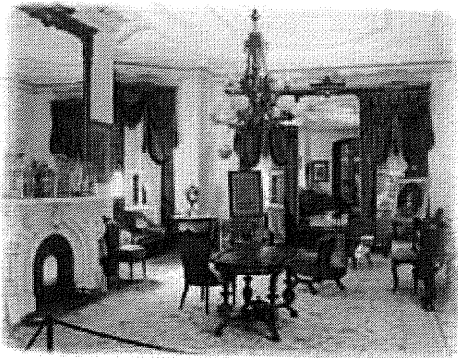
Rail City Historical Museum

Rail City Historical Museum is the site of the first steam-operating railroad museum in the United States. Housed in the former RWO & NYC depot from Deer River, NY, the Rail City Historical Museum contains an extensive collection of steam-era photographs, displays of railroad timetables, brochures, posters, artifacts, railroad memorabilia, and a unique railroad gift store. In addition, the museum features the history of Rail City Museum, a fascinating account of how an eccentric visionary, Oswego County resident Dr. Stanley A. Groman, single-handedly saved a score of railroad locomotives, cars, trolleys, track and structures from the scrap heap and in the process constructed the nation's first steam-operating railroad theme park.

The Oswego County Historical Society

The Oswego County Historical Society's collection of nearly 25,000 artifacts, documents, and photographs traces the significant history of the area, and is located in the Richardson-Bates House Museum, 135 East Third Street, Oswego. The house was built The Oswego County Historical Society

The Oswego County Historical Society's collection of nearly 25,000 artifacts, documents, and photographs traces the significant history of the area, and is located in the Richardson-Bates House Museum, 135 East Third Street, Oswego. The house was built between 1867 and 1880 and is a fine example of Tuscan Villa Victorian architecture.



The entire upstairs of the house is dedicated to the preservation of local history. The downstairs is preserved, as the Richardson family knew it, with 95 percent of the original furnishings of the period. Maxwell Richardson was an attorney, real estate broker, and two-term mayor of Oswego. His house reflects his wealth and position as a civic leader.

Safe Haven Holocaust Refugee Camp

982 refugees from 18 war-torn countries fled the Nazi terror in Europe during the Holocaust. They sailed to the safety of America as guests of the US government. Oswego, NY became their home for the next eighteen months. While there, the refugees experienced joys, sorrows, some uplifting moments, as well as tragedies. Babies were born, couples married, and people died. Children attended Oswego schools and became scouts. Adults attended English classes and learned trades. Although safe at last, there was still a dream that most refugees shared, the dream to become Americans.

Safe Haven, Inc. is a non-profit organization administered by a volunteer board of directors. It was formed to document the lives of the refugees who were offered sanctuary at the Fort Ontario Emergency Refugee Shelter in Oswego, New York during WWII.

The Safe Haven Museum and Education Center commemorates the stories of survival, the transition from fear to freedom, and the role the people of Oswego played in this humanitarian effort educational and business organizations, government agencies and supporting members of the community.

The Selkirk Lighthouse



Located in the town of Richland, near Pulaski, the Selkirk Lighthouse was erected at the mouth of the Salmon River in 1838, and is listed on the National Register of Historic Landmarks. Today the light serves as a Class III navigation aid.

Additionally the recently established Oswego 2020 Arts Group, is a representative group of community organizations and businesses interested in furthering the cultural life of the Oswego Community. The Mission of the Oswego 2020 Arts Group as follows: The 2020 Arts Group is dedicated to furthering the cultural, artistic and economic vitality of the Oswego Community through collaborative efforts involving local artists, arts, educational and business organizations, government agencies and supporting members of the community.

8. TRENDS

Education

Most school districts face increasingly tight budgets. These fiscal constraints drive the trend locally and regionally, to simply maintain the existing school programs and facilities. Many school districts now face decreasing enrollment, adding to the difficulty in maintaining a quality educational program. Therefore some of our school districts are researching the possibility of reconfiguring current school building usage to better reflect the decreasing school age population. New York State is also committed to incorporating Pre-K education into all the public school curriculums.

The National trend to mainstream special education students into the classroom continues. The federal "No child left behind" legislation promotes national acceptable education standards. Over the past 5 years, this act has led to additional testing at all levels of education.

The National trend to mainstream special education students into the classroom continues. As does the no child left behind program, which reflects a national acceptable education standard. In the past five years we have seen additional testing at all levels of education. New York State is currently working to eliminate local diplomas and ensure that all students receive a New York State Regents diploma.

In the area of higher education, the trend for SUNY schools has been one of renovation and revitalization. The State of New York is committed to a capital improvement plan for its colleges and universities. Additionally SUNY Oswego continues to get more of their areas of study accredited each year.

The cost of college tuition continues to increase. In the past year the cost of tuition increased by approximately \$1,000 - \$2,000. However the cost of higher public education is still considerably less than private colleges and universities.

Child Care

The trend towards registered family child care providers instead of large day care centers will probably continue. A family child care provider is someone that is registered with the State and is permitted to watch a certain number of children in his or her home. The increase in family providers may be because of the local economy with people wishing to go into business for themselves and the availability for start up funding.

If New York State incorporated pre-k into the public school system, there may not be a need for as many full day child care providers. The current child care system seems to be working well and is expected to meet the current need for the immediate future.

Health Care

The national trend in medical and health care continues to move from individual health care providers to a managed health care system. Overall patient hospital stays continue to decrease and there has been a significant increase in out-patient procedures. Extended stays for rehabilitation purposes are now addressed by nursing homes and other rehab facilities.

Since 1997, Oswego County has seen a dramatic increase in decentralized health care services. The number of medical clinics and specialized health services has increased throughout the county. This has actually been advantageous to Oswego County residents, as travel to a medical campus is not always necessary. Conversely, not all medical needs can be addressed at one location, so additional travel and scheduling is often required.

Oswego County's health care needs are directly influenced by national policy, therefore the future of health care needs in Oswego County is hard to access. However since people are living longer, and the "baby boomer population" has started to retire, it can be assumed that additional geriatric health services will most likely be required.

In an effort to make the current health care system more fiscally sound the governor requested that the New York State Commission on Health Care Facilities in the 21st Century (also known as the Berger Commission) submit a report which recommends and legislation that could be implemented to improve NYS health care system.

This report came out in January of 2007. One of the recommendations of the Berger report was to reconfigure A.L. Lee Memorial Hospital into an out patient facility only. This would dramatically change the medical options available to Oswego County residents. A.L. Lee Memorial Hospital went to court to stop the process until further research could be done to analyze the impacts and how the transition could be achieved.

As of January 2008, this matter has not been resolved. Currently A.L. Lee Memorial Hospital continues to serve the community, none of their services have changed since the onset of the Berger Commission process.

The need to address our aging population is a trend, which cannot be ignored. The challenge will be to provide quality services in a time of budget cutting. Inevitably, New York State will need to become more innovative in this area and, since so much of this field is regulated by the State, Oswego County will adhere to the new State initiatives.

Public Safety

The trend in public safety facilities such as a police, fire, emergency medical services and law enforcement has been to maintain the existing facilities and services. The trend is evident when reviewing the future facility plans for local fire and law enforcement providers. All of the local providers are interested in maintain their existing facilities and in a few instances adding a small addition on to the facility to meet the current need.

General Government

The trend for general government is downsizing and privatization. Therefore, there is no anticipated need for any additional general government facilities. The trend is to maintain or even consolidate the existing facilities.

Cultural

Public funding of cultural facilities at the national, state and local levels has continued to decrease. However recently, New York State has realized the importance of cultural activities for economic development and tourism. Although direct government assistance to municipalities for cultural activities has decreased there seems to be a surge in the development of not for profit cultural organizations and activities. Many of these agencies receive private funding and operate on very limited budgets, but they are growing and surviving because of the personal passion of the members of the organizations. The cooperative use of facilities by multiple public and private entities has been successful, as long as this can continue arts and culture will continue to thrive in Oswego County.

ANALYSIS

The direct role of Oswego County in the development of community facilities is limited. As previously illustrated, the county's primary role deals with the operation of the County's 911 and fire control, as well as county government buildings and facilities. The County is looking into upgrading the current Emergency 911 system. The need to upgrade is important for reliability and coverage issues. The county is responsible for policing those areas of the county that do not have a local police force.

The county is interested in continuing to work on the Oswego County Nature Park at Camp Zerbe Implementation Plan, as well as maintain Camp Hollis.

Overall population growth in Oswego County is limited to the southern townships. Therefore, these areas are more likely to face possible deficiencies and should analyze their existing community facilities in greater detail. Planning for community facilities is one element of creating a community, which is attractive to those businesses required to meet a community's economic needs. If community facilities are not planned, then the quality of life for the residents of these areas will suffer.

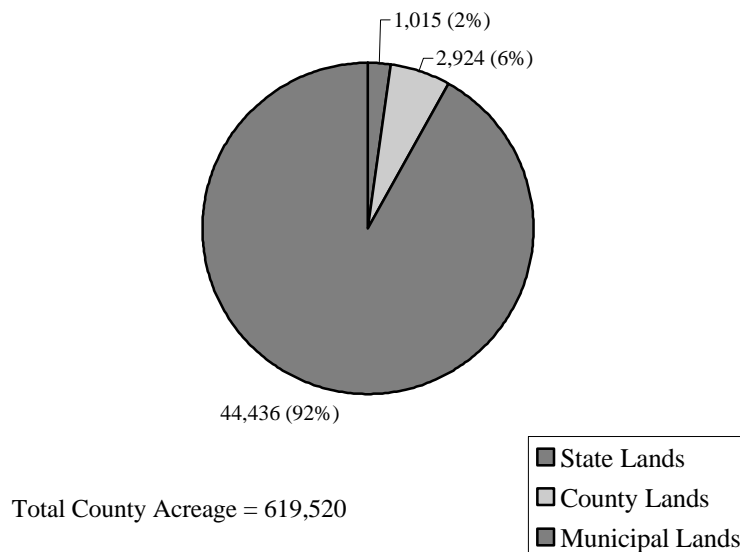
VIII. PARKS, RECREATION AND OPEN SPACE

A. INVENTORY

1. New York State Public Lands

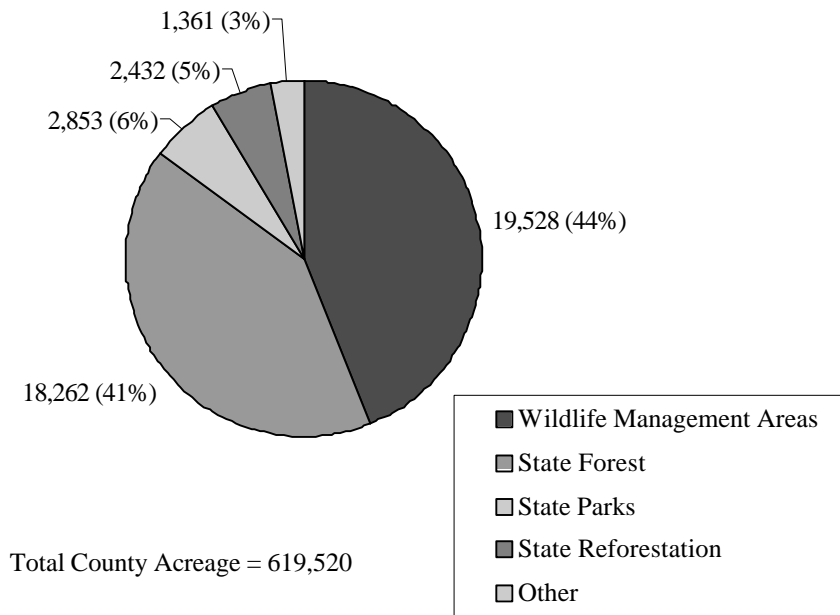
Oswego County is fortunate to have a number of State parks, recreation areas and open spaces. Selkirk Shores State Park for example provides lakefront park space while Battle Island State Park offers local residents and visitors a public golf experience. The State has large land holdings in the county such as Winona State Forest (renowned for its cross-country ski trails) and Happy Valley Wildlife Management Area which provides open space and wildlife habitat. On the other hand the Oneida Lake State Fish Hatchery stocks the most heavily fished inland lake in the New York State and the Salmon River hatchery in Altmar is responsible for re-establishing the salmonid sportfishery in Lake Ontario. These important State lands and facilities are key recreational resources and important tracts of public open space. (Figure VIII-1 and Figure VIII-2)

Figure VIII-1: Public Recreation Lands in Acres
Oswego County



The majority of publicly owned land, especially state forest and reforestation areas, is located in the eastern and northern portion of the county. The estimated combined total land area owned by the State comprises over 43,000 acres in Oswego County. Of this total land area, over 20,000 acres are wildlife habitat areas (Appendix VIII-A). Other State properties of significance in Oswego County are the State Barge Canal lands under the jurisdiction of the New York State Thruway Authority, and the Oswego County Trail which runs from Fulton to Cleveland and is leased from the New York State Department of Transportation. The State University of New York at Oswego also operates a large property, including recreational facilities associated with the college.

Figure VIII-2: State Recreation Lands in Acres
Oswego County



The following is a brief summary of State recreational land holdings in Oswego County (Appendix VIII-A for a more detailed list of public lands in Oswego County).

a. State Parks

- * Selkirk Shores State Park is a 980 acre waterfront park on the shore of Lake Ontario in the Town of Richland. The park provides camping, fishing, cabins and a swimming beach. See Appendix VIII-B for more information.
- * Battle Island State Park is a 235 acre riverfront park and golf course located on the Oswego River in the Town of Granby. The property provides cross-country skiing in the winter.
- * Mexico Point Park is a 120 acre park located on the west side of the Little Salmon River outlet to Lake Ontario. Located in the Town of Mexico, the park is leased by the town from the Office of Parks, Recreation and Historic Preservation for use as a town park and provides a public beach to local residents. The park also provides hiking and picnicking opportunities.
- * Fort Ontario Historic Site is a historic fortification located on the eastern shore of Lake Ontario's Oswego Harbor. The fort is in a 36 acre park. The site provides Civil War era military demonstrations and contains a research library and historic cemetery. The park provides an excellent view of Lake Ontario and provides picnicking and historical interpretive opportunities to the public.
- * Frenchman's Island State Park is a 26 acre island in Oneida Lake. This historic site is a state park accessible by boat only and is used mainly for wildlife management and conservation and is home to large populations of migratory birds and waterfowl.

b. State Wildlife Management Areas

There are a number of State wildlife management areas in the county which provide valuable open space for wildlife habitat and recreational pursuits. All of these areas are managed by the NYS Department of Environmental Conservation and all provide trails for public access. These areas include Little John, Happy Valley, Big Bay and Deer Creek Wildlife Management Areas and provide trails for fishing access, hiking, mountain biking and snowmobiling. See Appendix VIII-A for a list of State wildlife management areas.

c. State Forest and Reforestation Areas

There are approximately 18,262 acres of State forest in Oswego County, mainly in the northern and eastern portions of the county. Many of these state forests, especially Winona State Forest, provide trails which are open to cross-country skiing, hiking and biking. These state lands are also open to snowmobiling and hunting in designated areas. A list of state forests is provided in Appendix VIII-A for more detail.

d. State Fish Hatcheries

The Salmon River Hatchery is located on Route 22 in the Village of Altmar. The facility provides an information booth, aquarium, mounted fish specimens, fishing lure display and hatchery overlook balconies. The hatchery provides fish for stocking of salmon and trout to the Great Lakes and tributaries.

NYS Oneida Lake Fish Hatchery is located in the hamlet of Constantia on Route 23 along the north shore of Oneida Lake. The facility provides self-guided tours where visitors can observe hatchery operations including entering, tagging and egg taking.

e. Other State Lands

Other state lands include the New York State Canal lands and locks, Mexico Point Boat Launch, various fishing access points along the Salmon River and other Lake Ontario tributaries, the Salmon River falls overlook, and property owned by SUNY Oswego including the college campus and Fallbrook recreation center. These lands provide a number of opportunities to view wildlife and nature, and provide public access to open space and waterfront areas. Other properties owned by the state, including canal flood control and the Oswego County Recreation Trail, provide open space and recreational opportunities to county residents. See Appendix VIII-A for more information.

Figure VIII-2 shows a representation of the acreage of State Land in Oswego County. (Map 26)

2. Oswego County

Oswego County has a number of land holdings throughout the county. Although most of these lands do not contain extremely large blocks of open space many county reforestation areas are contiguous to or contained within State lands. These lands complement some of the large tracts of State land throughout the county.

A complete inventory of County lands is found in Appendix VIII-A. Key recreational properties are described below.

a. The Oswego County Nature Park at Camp Zerbe

Camp Zerbe was purchased from the Syracuse Boys Club in 1992 with a grant from the 1986 Environmental Quality Bond Act. The county is developing the property in accordance with a 1992 development plan as a nature park offering county residents a variety of recreational and educational opportunities. The park is in a rural natural area, covered with northern climax forest, successional woods and wetland vegetation. Camp Zerbe covers 364

acres of which a large portion is a Class I New York State regulated wetland. The property was combined with contiguous county reforestation lands to bring the total acreage of the park to 574 acres. A 24 acre kettlehole, Lake Loraine, and two other smaller kettleholes, Ike Allen Pond and Edick Pond are in the park. Currently, the park is utilized as a rustic summer day camp and nature center. The camp's structures consist of a main lodge, nature interpretive center, meeting center and other support buildings. Existing recreational facilities consist of court and field games, picnicking, hiking, canoeing and fishing access on Lake Loraine. The property is contiguous to the 8,645 acre Happy Valley State Wildlife Management Area. There is ample room to expand and improve Camp Zerbe's current facilities.

In 1993 and 1994 many of the objectives of the development plan were implemented including development of a nature trail loop and a trail which will eventually encircle Lake Loraine. Other recent improvements were made to the Nature Interpretive Facility (dedicated to late county legislator William Britton), the caretakers cabin, and Meeting Center (dedicated to late county legislator "Paco" Malone). Structural improvements were made to the Main Lodge and parking facilities, and electrical upgrades to all facilities are currently underway. Current implementation plans include an outdoor pavilion, restroom facilities, an improved picnic area, trail and parking improvements and additions to current trails.

b. Camp Hollis

Camp Hollis is a 37 acre residential youth camp on Lake Ontario in the Town of Oswego. The camp is on Camp Hollis Road with easy access just one mile from State Route 104 via West Lake Road. The camp is set in an open area and is surrounded by successional forest. A small pond is located on the far eastern end of the property. Facilities consist of an arts and crafts building, dining hall, cabins, a small amphitheater, picnic pavilion, swimming pool, court and field games, and a playground. Access to the lake is strictly monitored and limited because of the rocky shoreline and the roughness of the water.

c. Oswego County Lakeshore Nature Park

The 27 acre Oswego County Lakeshore Nature Park is adjacent to the Oswego County Industrial Park in Oswego on the lakeshore side of Conrail railroad tracks. The property is in an environmentally sensitive area and was dedicated for recreation and lake access. Approximately half of the site is part of Teal Marsh, a Class I State regulated wetland. The rest of the site is predominately successional growth forest. A beach and rock shoreline approximately 1,200 feet in length runs along the Lake Ontario shoreline. The only man-made feature is a deteriorating concrete retaining wall built some 50 years ago which runs parallel to the shoreline for 200 feet. A trail was developed in 1993 with funding from the Environmental Quality Bond Act of 1986.

d. Independence Park

Independence Park was dedicated in November 1995. It is located on Riker's Beach Road in the Town of Scriba and was acquired by the county from the Sithe Independence Partnership. The park includes approximately 700 feet of lakefront with a 3,500 foot nature trail winding through woodlands and wetlands. The trail terminates at a raised observation mound on the edge of Lake Ontario. The park provides opportunities for hiking, cross-country skiing and is perfectly suited to observe and photograph birds and wildlife on a major song bird migration route.

e. Oswego County Reforestation

According to Real Property tax records, Oswego County maintains approximately 2000 acres of reforestation land. These properties are undeveloped and are open to hunting and fishing. Some State funded snowmobile trails also cross some of these parcels. These properties are more concentrated in northern portions of the county and many of them are contiguous to large tracts of State owned land. Exchange of some properties within Happy Valley Wildlife Management Area for State parcels contiguous to the Oswego County Nature Park at Camp Zerbe has been discussed in order to complete a nature trail loop around Lake Loraine. (Map 26)

f. Oswego County Airport Park

Original plans for the Oswego County Airport included a proposal for a county park on property adjacent to the airport. Major components of the park plans were a four mile jogging trail, tennis and basketball courts, playing fields, a playground and a picnic area. The location proximate to the Fulton population center of the county suggests that such a facility could offer recreational benefits to local residents.

A few major components of the plan have not received serious consideration due to lack of funding. These projects must be reviewed in the context of current and planned airport operations and development. According to airport management, approximately 60 acres are reserved for recreational use. Future plans could include developing athletic fields at the old Durfy gravel pit encompassing about 280 acres off of Calkins Road. Also planned is a toddler playground pending demolition of the old EAA building on Route 176. It is hoped that by improving facilities to include professional regulation-sized athletic fields that little league and regional/national soccer tournaments would draw outside interest.

g. County Railroad Rights of Way

Oswego County has acquired abandoned railroad right of ways (ROW's). Acquisition of these properties represents foresight by the county, essential to providing intact corridors for future infrastructure improvements. The primary intent is for use of these right of ways to provide future water lines, sewer routes, communication corridors or other linear uses that may develop in the future. However, some areas may also offer recreational trail opportunities.

County owned ROW's are distributed throughout the county including sections in Williamstown, Albion, Richland, Sandy Creek, Mexico, New Haven, and the Hojack line which extends from Furniss Rd. in the Town of Oswego through Hannibal to the Cayuga County line. Smaller segments are located in the Town of Scriba. Many of these segments are interrupted by parcels which are privately owned and offer limited trail potential at this time, but larger segments are currently being informally used by local residents for walking, hiking, jogging and bicycling. The ROWs are in good condition with respect to potential trail development. County ROW's are generally 80 to 100 feet in width. Grading, stream and street crossings are required in some locations to prepare for recreational uses.

h. The Oswego County Recreation Trail

The 28 mile Oswego County Recreation Trail a formerly abandoned railroad right of way (ROW), traverses the county from Maple Avenue, just east of the City of Fulton to the Oneida County line in the Village of Cleveland. Currently the trail is leased by the County from the New York State Department of Transportation for use as a formal recreation trail, but the County plans to eventually acquire the ROW from the State pending DOT processing. An informal trailhead parking area is located on County Route 6. The trail extends east to the Village of Central Square where it ends at the Central Square Railroad museum. East of IB81 the trail continues to the hamlet of Constantia crossing a number of creeks and forested lands including the Toad Harbor Swamp complex and the Hastings Town Park. In Constantia the trail runs through the southern portion the State Fish Hatchery, about 1/8 mile from Oneida Lake. The trail continues east through fields, orchards and forest to the Village of Cleveland and a large village green directly next to the old glass works. From Cleveland the ROW continues into Oneida County toward Sylvan Beach. In Oneida County the ROW is not currently used for formal recreation but plans are being formulated to extend the trail into the Town of Vienna.

The County Recreation Trail is enjoyed primarily by local residents who live along the corridor but the trail facilitates a number of uses. During an inventory of the corridor in the summer of 1995, a number of bicyclists and joggers were observed and a plan for trail improvements is currently underway. The trail is part of the Oswego County Snowmobile trail system and is groomed by the Oswego County Department of Public Works during the winter. (Map 27)

3. Regional

a. State Snowmobile Trail System

Oswego County receives a great deal of lake effect snow as the result of its geographic location. The northern part of the County is in the Lake Ontario snowbelt. Due to heavy lake effect snows Oswego County is a prime area for snowmobilers who transport sleds from areas where snowfall is less consistent. Oswego County has 288 miles of existing State funded trails on private and public lands maintained by local snowmobile clubs and by the Oswego County Department of Public Works.

Although the Oswego County Department of Planning and Community Development, the Department of Public Works and the Oswego County Snowmobile Association have been participating in the New York State Trail Grant Program since 1986, increased club memberships have indicated that greater use of the trail system is inevitable. Our system has evolved into a quality network of safe and scenic trails and the county's three year snowmobile trail plan sets guidelines for addressing problem areas. The County is working with local clubs to make the trail system better, safer, and easier to navigate. (Map 27)

Lewis County is linked to Oswego County via a Snowmobile Trail corridor and a number of improved and seasonal roads. Snowmobile traffic in the north and east corner of the County is a major seasonal factor with links to Lewis and Jefferson Counties. The Oswego County Snowmobile Trail system provides access to the Tug Hill and Adirondack Greater snowmobiling region. Linkages are also provided that could connect the Adirondack region to points as far west as the Rochester area and the Finger Lakes region. Oswego County's 288 mile funded snowmobile trail system provides links to all of the surrounding counties.

b. New York State Canal System

New York State Canal lands in Oswego County extend from Oneida Lake and portions of the Oneida River, to the Oswego River Canal from the Three Rivers area to the City of Oswego. There are approximately 40 miles of canal in Oswego County including two thematic regions included in the NYS Canal Plan. These include "Oneida Lake Recreation" on Oneida Lake and "The Gateway to the Great Lakes" including the entire Oswego Canal. There are several locks on the Oswego Canal and one at the outlet of Oneida Lake in Brewerton. Remnants of the historic locks of the canal are found in Caughdenoy and along the Oswego Canal from Hinmanville to the City of Fulton along the former towpath. Remnants of the old canal towpath can be found along the east shore of the length of the Oswego River.

The Oswego Canal provides a waterway link from the Seaway Trail to the City of Syracuse, the Finger Lakes, Oneida Lake and ultimately to the Hudson and Niagara Rivers. This important historic resource ties the entire western and southern tiers of the County from the coastal zone of Lake Ontario into the interior of New York State. It is also an important link that ties the cities of Oswego and Fulton and points along the Oswego River and Oneida Lake and River with proposed improvements in the Inner Harbor project in the City of Syracuse.

c. Seaway Trail

Seaway Trail Inc. was established in 1978 to facilitate development of trail systems, bicycle paths, boating and canoe access, picnic and scenic overlooks and interpretive programs along the 454 mile ASeaway Trail[≡] (Map 18). The Seaway Trail follows the Lake Ontario and Erie coasts from Pennsylvania to the St. Lawrence Seaway. The Seaway Trail is a scenic route that incorporates two lane roads for cars, bicycles, recreational vehicles and motor coaches. The recreational/scenic route connects numerous public recreational facilities and public access to the Lake Ontario shoreline including 38 parks, 13 wildlife management areas and 21 public beaches.

d. Tug Hill Tourathon Route and Trail System

The Tug Hill Tourathon is a 31 mile trail system in Winona State Forest in northern Oswego and southern Jefferson County. The trails extend through scenic forests, fields and along unplowed seasonal roads providing a quality recreation experience for mountain biking which is allowed on a seasonal basis. The Trails are regularly

maintained and groomed for cross country skiing and dog sledding in the winter. The system contains some of the best cross country ski trails in the northeast.

The Tour de Tug bicycle route is a 110 mile loop in the northeastern portion of the County which also extends into southern Jefferson County. The loop encompasses most of the scenic Tug Hill Region and is the route for the annual Tour de Tug bicycling event. Although this event takes place yearly the route is enjoyed by bicycle enthusiasts throughout the bicycle season.

4. Not for Profit and Cooperative Operated Lands

a. Sandy Pond Beach

In 1994, the Central New York Chapter of The Nature Conservancy purchased two large parcels of undeveloped land on the south spit of Sandy Pond comprising 77 acres and containing rare freshwater dunes and plants. The Chapter has entered into a cooperative management agreement with the New York State Department of Environmental Conservation. The property is part of the rare eastern Lake Ontario freshwater dune system. This barrier provides unique, high quality habitat for shorebirds and coastal vegetation that attracts concentrations of migrating and breeding birds. Sandy Pond Beach is a biological and recreational treasure and a major natural asset to county residents.

Until the purchase this area was privately owned and access to the spit was not legal. The Nature Conservancy, DEC and the friends of Sandy Pond Beach have joined together to establish and manage the area to preserve and restore the freshwater dunes and to protect feeding, nesting and resting habitats for birds while providing compatible public access to the shore. This area, known as "boaters beach" is informally used as a popular beach site for boaters in the area. Oswego County owns a small portion of the spit at the northern tip. (Map 26)

b. Snake Swamp

Snake Swamp Preserve is a 41 acre herbaceous marshland west of the City of Oswego and north of Lakeshore Road in the Town of Oswego. This area is owned (in part) by Save Oswego County, Inc., a private, non-profit environmental organization. It is managed to preserve its wetland cover and to protect the night herons (closed April 1st - August 31st). Educational use is encouraged.

The wetland itself has a history of instability because of fluctuating water levels. In the last 40 years, it has changed from swampland to herbaceous marshland (due to high water levels) and is in the process of returning to swampland conditions after decades of lower water levels. The area has served as a late summer roosting and loafing area for black-crowned night herons. (Map 26 and 29)

c. Noyes Sanctuary

Noyes Sanctuary is a 90 acre Onondaga Audubon Society nature preserve and bird sanctuary on Nine Mile Point Road (Route 63) north of its intersection with County Route 1. Frequently, eagles and osprey are seen while cutting across the corner of the lake to reach the northeast coastline. Great horned owls have been sighted on a year-round basis. During the May migration about 30 species of warblers are commonly sighted. The fruits that grow in large quantities on the viburnum species near the parking lot attract flickers, waxwings, grosbeaks, catbirds, vireos, and thrushes during the fall. A large barn swallow colony located along the lakeshore is reportedly the only such colony in the state.

d. Derby Hill

The Derby Hill Bird Observatory is a 50 acre sanctuary owned and operated by the Onondaga Audubon Society located on Sage Creek Road off Route 104 B, one mile west of its intersection with Route 3. Its location on

the extreme southeastern corner of Lake Ontario makes it an excellent place to observe migrating raptors. Hawks, eagles and vultures use winds and thermals to conserve energy and improve flight distance during migration.

There are three lookouts that provide observation opportunity to view species such as bald eagle, golden eagle, peregrine or osprey. Derby Hill is also an excellent spot to witness the fall migration of waterfowl, gulls and jaegers.

The woods and marshland are being prepared to serve as a center for nature education. This includes interpretive material and a trail system planned for the near future.

e. Amboy Environmental Education Center

The Amboy 4-H Environmental Education Center is a 150 acre facility off of NYS Route 183 in the Town of Amboy. The center offers self-guided interpretive trails and guided nature walks year-round. Use of the facility is free but there is a fee for overnight use. The area also provides marked trails which are open to the public.

f. Marquise Nature Education Area

This area is a 265 acre nature education and applied research area. The land was acquired in 1995 by Cornell Cooperative Extension from a former SUNY professor who wished to keep the property undeveloped. The property is located in the Town of Williamstown and contains a rare category 1 quaking mat kettle bog, a NYS DEC designation. The property has some informal trails and is only open to the public through permission.

g. Youth Camps

There are a number of youth camps in Oswego County, some of which own large parcels of land encompassing ponds, woods, wetlands, and streams. Youth camps generally provide both overnight and day use camping and recreation for group members. The Central New York Girl Scouts and Boy Scouts maintain approximately 1900 acres of land for camping while other groups like the Ontario Bible Conference and the Fulton YMCA provide summer youth programs to group members. Other programs include Arts in the Parks at various park properties, programs at Camp Hollis through the City-County Youth Bureau, the Catholic Youth Organization and other programs. (See list of youth programs, Appendix VIII-C, for further details) These youth camps, run by private and public organizations, provide a wide variety of educational, nature interpretative programs, and recreational activities for young people. For more information, see the Community Services Directory published annually by the Oswego City-County Youth Bureau.

5. Local Municipalities

Local municipalities are important providers of park, recreation and open space opportunities. City, town and village parks may be traditional green space parks providing ball fields, picnic areas and/or passive recreation, or may incorporate downtown streets, sidewalks and business districts into an integrated public/private recreational opportunity. Art exhibits, outdoor cafes, revitalized main streets and waterfronts can enhance private-for-profit ventures while providing for leisure, entertainment, recreation and historical interpretation for residents and visitors. Local governments have primary responsibility for providing for the active recreation needs of the resident population.

See Appendix VIII-A for an inventory of local municipal parks.

6. School Properties

Many school properties provide recreational opportunity to the public in the form of athletic fields, playgrounds and gymnasiums. These facilities not only provide for field sports, they also provide public green space for local communities. An inventory of school properties is included in Appendix VIII-A.

7. Private and Commercial

There are many recreational opportunities and facilities in Oswego County that are either privately or semi privately owned. Commercial golf courses and campgrounds, for example, are available to the public for a fee. These small businesses provide an important service to local residents and visitors to the county. They are also important to the local economy and the tourism industry. Other areas that provide opportunities are schools, churches, and landholding by corporations. Nestle Park, the Alcan Nature Reserve and Niagara Mohawk Properties are prime examples of cooperative recreational opportunities provided by private corporations.

A list of commercial and semi-public park, recreation and open space facilities is included in Appendix VIII-A.

B. TRENDS

1. Eco-tourism and Environmental Education

Ecotourism is gaining popularity on a world wide basis. Locations experiencing ecotourism growth are developing ways to deal with the impacts of tourism development in sensitive natural environments. Many naturalist tourists are flocking to areas ranging from the Amazon, Belize, and the Galapagos Islands to local trips to view migratory songbirds in their native habitat on the shores of Lake Ontario or dive to Great Lakes shipwrecks. More and more people are becoming interested in the study of nature and our heritage through viewing wildlife in its natural habitat and naturalist recreation vacations.

Ecotourism normally consists of guided tours of nature at its best, in the wild and under primitive conditions. Tours range from guided tour boats or white water rafting excursions to hiking or climbing in order to develop an appreciation for the environment, wildlife and the study of ecology. Programs at the 4H Environmental Education Center, Rice Creek Field Station and the Marquise Nature Education and Demonstration Area have been very successful in educating people of all ages about our environment and current environmental issues. Another example is an interpretive sign systems being developed to protect the rare freshwater dune system along Lake Ontario. (Map 26)

2. Wildlife Conservation

Over the past 25 years an increasing awareness of our impact upon the environment has evolved. Efforts to save endangered species are common knowledge from the comeback story of the Bald Eagle to the controversy over the Spotted Owl in the Northwest. Locally people are recognizing that open space for wildlife habitat must be conserved in order to provide for the future of outdoor pursuits like hunting, fishing, trapping, and viewing wildlife. Groups like the Oswego County Sportsmens Federation, The Ontario Dune Coalition, and Tug Hill Tomorrow are helping encourage cooperation between public agencies and private landowners to deal with local issues and concerns. These groups open avenues of communication for concerns ranging from providing adequate open space for hunting and trapping to providing information to the public regarding conservation of the local fishery.

3. Waterfront Revitalization

During the first half of the century many communities turned away from waterways due to pollution. Today, the advent of the post industrial age is causing communities to rediscover connections with waterfront areas as a means to mend the historical abuses. Well publicized efforts in cities like Cleveland, Boston, Baltimore, San Antonio and New York have developed and are currently implementing plans for waterfront revitalization, but locally communities are also recognizing the economic benefits of waterfront revitalization. From Oswego to Redfield residents are now benefitting from trails, boat rides, dinner cruises, historic museums and small business development associated with our waterfronts.

Waterfront revitalization reestablishes the historical precedence for the existence of the community. For example the City of Fulton was developed with strong ties to the Oswego River and the Canal. Established as a commercial center for the surrounding region, the river fostered the canal as a trade route and the falls provided power to run mills, factories and finally to generate electricity. Over time, however, the city's connection to the river seems to have been lost. Strip development obscures historic patterns and urban renewal has changed the character of the central business district.

Fortunately, some communities recognize waterways as an important economic resource. As industrial change occurs, large tracts of waterfront property may become available for reclamation as waterfront parks, riverwalks and urban linear parks reestablishing the waterfront as an important aspect of the local economy.

Locally, the success of Harborfest and the linear park in Oswego provide the economic framework for riverfront business. Waterfront projects are being undertaken in a number of communities. Many take the form of parks, recreation and open space projects providing recreation to local residents, public access to waterways, economic development in central business districts and open space in shoreline areas. Waterfront projects are currently at various stages of development throughout the county including the Town of Constantia, the Village of Pulaski, the Towns of Redfield, Albion, Orwell and Richland, the Town of Sandy Creek, the Towns of Schroepfel and Volney and the cities of Fulton and Oswego and Village of Phoenix. Other towns, including Hastings and Minetto, also have a number of potential projects and would like to develop better waterfront facilities. (Maps 28 and 29)

4. Greenways and Trails

Greenways are an important trend nationally and locally. Greenway planning is taking place from the populous Hudson Valley area to remote river valleys like the Salmon River. As part of a wider movement to protect linear features in the landscape, greenways are created around canals, waterfronts, rivers and coastlines. Greenways protect the natural areas and open spaces along key resources including lake shores, rivers and coastal zones. The greenway concept is to keep the corridor green with natural vegetation and create a way or trail system that connects points of interest along the corridor. Greenways have direct or indirect human benefit and use providing for hiking, wildlife observation, environmental interpretation, historical interest, fishing access, and stream bank or shoreline protection. In summary, they create a quality lifestyle for local residents.

The greenway approach is a response to the recognition that these environments are complex and sensitive to development while demand for waterfront property is steadily increasing. As shorelines in more populated areas become congested, we can expect an increase in the number of people who will want to move to less populated coastal areas. Especially in the case of the rare freshwater dune and wetland complex along the eastern shore of Lake Ontario, the need for open space planning is important if we are to conserve this precious open space resource that plays a key role in attracting thousands of fishermen, nature lovers and beachgoers each year. (Maps 6, 18 and 27)

Perhaps the greatest greenway success story of the last 10 years has been the conversion of abandoned railroad corridors into recreational trails in towns, rural areas and cities. As of February 1995 there are over 644 sites and 7000 miles of former railroad corridor nationally which provide recreation to walkers, hikers, bicyclists, runners, wheel chair recreation, equestrians and cross country skiers. Many trails provide non-motorized year round recreation while others provide for seasonal snowmobile use. Presently, 650 sites in every state include railroad right of ways being converted for recreational use. Greenway advocates throughout the country envision these corridors as an integral component of interconnected trails and transportation corridors including old canals, scenic river corridors, coastal areas and other remnant lands.

Much of this interest in trails and recreation corridors was catapulted by the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA). In this federal legislation rail-trail conversion was listed among the 10 specific enhancement recommendations. Approximately 17% of ISTEA funds have been granted to rail trail

projects. Recreation trails take the form of linear parks that connect park, recreation and open spaces together providing an alternative to driving as a means to access recreational facilities.

Demand for trails in Oswego County is increasing steadily. In 1994, residents in the Town of Oswego and Hannibal voiced support for the development of a recreation trail along the old Hojack railroad corridor. In addition more support for trails has been facilitated through the Salmon River Corridor Plan and the Canal Plan and groups which have advocated opening county owned railroad ROWs in the Towns of Mexico, Richland and Albion to recreational use. The Oswego County Snowmobile Association also supports trail development for all types of use and wants to be included in multi-season, multi-use trail development. Trail improvements have taken place at the Oswego County Nature Park at Camp Zerbe, Winona State Forest, along the Oswego River in the Town of Volney, the Village of Phoenix, the City of Fulton and the City of Oswego. Along the Salmon River trail development has been taking place on the south side of the reservoir, along the gorge and in the Village of Pulaski. (Map 27)

5. Historic Tourism

Local history is an integral part of Oswego County's parks, recreation and open space potential. Sites like Fort Ontario, Breitbeck Park, Lock Island and Mexico Point readily come to mind as historical and recreational resources. Local historians see history and local heritage as a special component of the recreational potential of the county. Museums and underwater parks are growing in popularity both nationally and locally, providing an important framework for education, interpretation and investigation of local resources.

Agriculture also has a strong history in Oswego County and provides a tie to the open space component of the plan. Large farms provide the opportunity for understanding local agricultural history and provide a vehicle for learning and agriBtourism which is growing on farms, orchards and during seasonal festivals. (Map 14)

6. Nature Parks and Interpretive/Education Programs

There is a national and local trend toward natural/heritage interpretation and environmental educational programs. Many communities run comprehensive programs in environmental education. Locally education programs are run at the 4BH Environmental Education Center, and Rice Creek Field Station, and plans to create an outdoor "nature as a classroom" area along eastern Lake Ontario are underway. At the same time interpretation of our local natural and historical resources is occurring along the Oswego Canal, Seaway Trail and many other greenway areas in the county. The trail center in Albion, the Bridge House Museum in Phoenix and many other scenic/historic areas complement efforts to improve park, recreation and open space opportunities for residents and visitors. (Map 26)

C. OPPORTUNITIES AND CONSTRAINTS

In addition to the discussion below, Appendix VIII-B provides an inventory and description of State, Regional and Local plans providing parks, recreation and open space opportunities for Oswego County.

1. Protecting Resources/Economic Benefits

Travel, recreation and tourism generates approximately 100 million dollars of economic impact to the county each year. In light of this fact, it is important to recognize that our natural resources are limited in their capacity to sustain certain types of recreational activity. Fishing has always been the mainstay of visitation to the county. In 1993, 52,323 nonResident licenses were sold in Oswego County. Increasing demand is evident in specific areas of the county. Along the Salmon River angler days increased from 7000 in 1976 to an estimated 180,000 in 1989, more than 25 times the number in a 13 year period. Many fear that the fishing may have leveled off due to zebra mussel infestation and imbalances in prey-predator species populations, but anglers continue to visit the county in large numbers. This illustrates the potential economic impact of recreational activities and the need for them to be planned appropriately to minimize adverse impacts to the natural environment.

The Eastern Lake Ontario shoreline is an example of the negative impacts unplanned recreational use can have upon the environment. Freshwater dunes are very limited in their ability to sustain trampling and vehicular traffic, however, the popularity of the area makes it extremely difficult to control adverse recreational impacts like ATV use and motorized biking in sensitive areas. As a result, "blow outs" or erosion has occurred as stabilizing vegetation has been destroyed. Planning the appropriate placement of public access to recreation areas, and the proper type and level of activity as well as voluntary guidelines for property owners to plan for the use of their properties are all necessary.

Cost is obviously a constraint in developing recreational facilities but the benefit to the economy must be considered when making these investments. One hundred more visitors to the county per day creates approximately \$2 million in business receipts in a year. Unfortunately local communities which want to see further recreational development may be deterred by the current economic climate. The City of Fulton, for example, is very interested in revitalizing their waterfront area, but the recent closing of the Miller Brewery and other local economic trends in industry have interfered with their ability to fund projects like the riverwalk, marina upgrade and a street tree program.

The proximity of recreation to private residential development can also be prohibitive. In many areas of the county, private landowners view the development of recreational facilities, especially trails, near their homes as an invasion of privacy and worry about their own liability and increasing crime. These are legitimate concerns, and the rights of private property owners must be taken into consideration when developing recreational facilities in or near residential areas.

2. Opportunities

Regardless of the constraints to the development of parks and recreation areas there is much opportunity throughout Oswego County. Many population centers in the county are near waterways providing excellent opportunity to improve downtowns and increase quality of life while creating an economically viable tourism industry. A number of public and semiBpublic park areas provide access to a wide range of recreational activities in locations ranging from the forested wilderness of the Tug Hill Plateau to the beaches and bluffs of the Lake Ontario shoreline.

a. Water Resources

The opportunities for Oswego County lie mainly in its abundant water resources. Major water resources of the county include Oneida Lake, the Oneida/Oswego River, the Salmon River and, of course, Lake Ontario. There are also a number of smaller under-utilized recreation areas like Lake Neatahwanta. The county's abundant fishery has always been the focus of recreational activities but the diversity of parks, recreation and open spaces in the county provide an enormous potential for further development, especially with respect to environmental education and interpretation.

b. Greenways

Oswego County is recognizing the benefits of greenways as a means to revitalize communities and to connect large open space lands. By improving water quality, maintaining open space, and enhancing access to public lands, there is the opportunity to increase availability of multiBseason recreation pursuits. State and regional agencies are working to improve access to public lands for walking, hiking, hunting, and biking. Others are devoting efforts to improving parks and other open space projects on area waterways, trailways, historic areas and shorelines. Oswego County has enormous potential to link parks, recreation and open space areas through greenways, trailways and waterways. In fact, there are over 125 miles of corridor with greenway potential in the county with numerous connections to surrounding counties. Plans at the State and regional level have sparked a number of specific plans for all of the major water corridors. Greenway opportunities have provided the framework for these exciting projects, many of which have only begun to develop.

c. Corporate Conservation

Another opportunity in Oswego County is the willingness of local companies to allow conservation and recreation easements. According to "The Conservationist" corporations own a large percentage of land in North America comprising perhaps 1/4 of the land base in the United States (Vol. 48, #5 and 6). Companies normally keep spare land as buffers for security or safety reasons and as space for future expansion. Today companies realize that protecting the environment is a genuine concern of the majority of Americans. Many of the most successful companies recognize that conservation is a sound business strategy and it is beneficial to "green" their corporate image.

In Oswego County a number of local companies have given land grants or agreed to sell important land holdings to State or local municipalities. Sealright in Fulton has agreed to turn over riverfront property in order to develop recreation along the Oswego River. Niagara Mohawk has divested large tracts of land along the Salmon River Corridor for the purposes of greenway development and conservation. Site Energies and Alcan have developed buffers along Lake Ontario in order to conserve natural areas and allow public nature trails and access to the shoreline. These corporate investments in the county are extremely positive in improving the quality of life for county residents. These companies not only create employment but by recognizing the importance of parks and open space and providing areas for recreation they create quality opportunities for the community.

d. Scenic Byways

Transportation corridors provide recreational opportunities that complement greenways. Many of the parkways that Robert Moses developed earlier in the century remain quality scenic routes that link parks, beaches and population centers. In Oswego County the Seaway Trail provides links not only to parks like Selkirk Shores and Camp Hollis but to population centers like the City of Oswego. Opportunity for scenic byways and trailways exist along the Oswego River and the Salmon River Corridor. According to the President's Commission on American Outdoors, nearly 80% of Americans enjoy driving for pleasure and sightseeing. If these areas are developed properly they can provide a wide range of opportunity but without a formal recognition of their value and action to protect the attractiveness of the routes, scenic assets may be lost through the pressures of the development they have helped to attract.

e. Rail-Trails

Oswego County has acquired a number of abandoned railroad right-of-ways for the purpose of future infrastructure but public requests for their interim use as recreation corridors is growing. The ROW's have great recreation potential that can co-exist with gas lines or water lines. These corridors are quite scenic and in many cases have historically been utilized for informal recreation since their abandonment. Petitions have been submitted to the county to develop the Hojack Trail along the old railroad bed between Oswego and Hannibal and others would like to see the Oswego County Recreation Trail create a recreation corridor that will complement recreation plans for the north shore of Oneida Lake. In Oswego County, county-owned railroad ROWs have potential for recreational development because the nature of a railbed is that it is not sensitive to intensive recreation like snowmobiling or mountain biking. While many park trails are being closed to mountain biking, railbeds are already suited to the task.

f. Snowmobiling

Snowmobiling and cross-country skiing also bring potential for recreation to the area. Due to the heavy amounts of snowfall in the county, our location is ideal for winter recreational endeavors. Snowmobiling for example has increased dramatically over the past five years and snowmobilers bring much to the local economy. For many business owners the snowmobilers carry the recreational business in the winter that the fishing season brings to the area in other seasons. Hotel and restaurant owners in the Pulaski area, for example, have created a niche for themselves by capitalizing on snowmobilers. Oswego County has 288 miles of groomed snowmobile trails that are partially funded by the Bureau of Marine and Recreational Vehicles. The opportunity that this creates also aids development of other types of trails. Many snowmobilers favor the development of multi-use/multi-season

trails because many of them use trails for biking, hiking and fishing during the summer. The opportunity is encouraging due to the fact that snowmobilers provide volunteer labor and materials to develop trails for the benefit of all. (Map 27)

g. Nature Education

Besides the numerous opportunities for outdoor recreation, Oswego County has an enormous potential for nature education, interpretation and environmental study. In fact, the county has the potential to be a model for natural education, interpretation and environmental research. Facilities like the 4BH environmental center, the Oswego County Nature Park at Camp Zerbe, Rice Creek Field Station, the Salmon River Fish Hatchery, the Eastern Ontario Shoreline and Freshwater Dune System and the Seaway Trail provide residents and visitors with access to nature and nature education programs. Nature walks, nature trails and educational success stories are abundant in Oswego County and interest in developing interpretive programs for all of the major resource areas has been expressed by many county residents and organizations.

h. Sandy Island Beach

Currently, Oswego County is working with Seaway Trail Inc. and the Trust for Public Land to study the feasibility of acquisition of the property known as Sandy Island Beach to provide public access to Lake Ontario. The issue of the County or some other public entity acquiring this property for public access was raised at the Parks, Recreation and Open Space meeting of the comprehensive plan in March of 1995. As of 1996, the Trust for Public Land holds an option to purchase Sandy Island Beach and the County and Seaway Trail are currently developing an analysis of acquisition and operations to determine the feasibility of public management of the property by an agency or organization yet to be determined.

i. Lake Neatahwanta

Lake Neatahwanta is a 749 acre warm water lake located on the western edge of the City of Fulton. The lake is an important public recreation resource with public parks, swimming beaches, campground, boat launches and excellent fishery. Recreational use and the quality of recreational experience is affected by excessive aquatic vegetation growth and algae blooms.

The lake is easily accessible from State Route 3 connecting to I-481 one mile east of the lake and U.S. Route 104 eight miles to the west. Approximately five miles of the shore is predominantly wetlands. About 25% of the shore has been filled for recreational purposes including North Bay Campground, Bullhead Point and Recreation Park which are all owned by the City of Fulton. North Bay Campground is 60 acres with campsites, bathing beach, and boat launch and dock. Bullhead Point is about five acres and presently has an undeveloped dirt parking area along the shore. Recreation Park is 27 acres with a beach, pavilion and picnic grounds, and court and field games.

The Lake Neatahwanta Opportunities Plan developed in 1995 addresses mixed recreation/commercial use for municipal lands along the north and east shores of the lake. Five conceptual plans address the development of North Bay, Bullhead Point, the Recreation Park Esplanade, Public Gardens and lake trails as well as an approach to protecting open space and scenic views along the shoreline. The plan outlines a program that will foster the development of Lake Neatahwanta and complement the ongoing watershed management plan. The program includes picnic grounds, an outdoor amphitheater, a boat launch, a lodge for public use and other details for long term improvements to the lake resource. (Map 26 and 29)

j. SUNY Oswego Athletic Fields

The Southwest Athletic Fields, (Hidden Fields) are located on the SUNY College of Oswego Campus between Dormitory Road, NY Route 104 and Fred Haynes Boulevard. The fields are primarily used for intramural sports. SUNY's athletic fields are under-utilized especially during the summer.

k. O&W Railroad Promenade and Bikeway

East Park is a 4.5 acre urban park bordered by East Oneida, East Second, East Bridge and East Fourth Streets in the City of Oswego. Shade trees dominate the landscape and a playground is located in the southwest corner of the park. Three buildings are located within the perimeter of East Park: a synagogue on Oneida Street; the County Courthouse on East Oneida and East Second Street; and the County Legislative Office Building on the

corner of East Bridge Street and Second Street. Adjacent to the Legislative Office Building is an abandoned railroad tunnel. The park area is accessible on all sides by pedestrian walks. (Map 18)

In December of 1994 a joint City/County federal (ISTEA) grant application was awarded funding and is being administered through the State Department of Transportation (DOT). The first phase of the project will connect East Park with Fort Ontario and structural improvements and restoration of the old railroad tunnel which runs between the County Courthouse and the County Legislative Office Building. A future phase will complete a link between the East and West Side Linear Parks by upgrading the old railroad trestle bridge. The ultimate goal is to unite the west side of the City of Oswego with a bicycle/ pedestrian link to East Park and Fort Ontario.

l. Mexico Point

The State of New York Office of Parks, Recreation and Historic Preservation owns approximately 120 acres of land on the west side of the Little Salmon River outlet in the Town of Mexico. The park is currently leased by the Town of Mexico for use as a town park. The park is directly across the river from the Mexico Point State boat launching facility and adjacent to historic Spy Island, home of revolutionary war figure Silas Towne. The property contains an extensive Class I regulated wetland, a natural protective feature on the Lake Ontario shoreline and a small sandy beach.

This State-owned Mexico Point property provides multiple recreational activities. The Oswego County Department of Planning and Community Development has helped the Friends of Mexico Point Park to develop a plan which is currently in the implementation stage. The facility provides for the preservation of historic Spy Island and public access to Lake Ontario.

Park uses include picnicking, trails, swimming, shoreline fishing and historic interpretation. In the summer outdoor performances take place. Proposed future improvements include meeting rooms in existing buildings, cross-country skiing and nature trails, and historic displays. (Map 26)

m. Lock Island and Henley Park

Lock Island is an eight acre island between the Oswego River and Lock One of the Oswego Canal in the Village of Phoenix. The Island is directly across from the Village's Henley Park overlooking Lock 1. The property became more accessible when the State of New York constructed a new bridge over the Oswego River. In anticipation of this improved access, the Village of Phoenix worked with the Oswego County Planning Department, the NYS DEC, and Niagara Mohawk Power corporation (who granted the north half of the island to the village) and NYS Department of Transportation, to develop a conceptual recreation plan for the island and Henley Park. These plans were incorporated as part of a recently adopted Village Comprehensive Plan. This plan complements the Oswego River Scenic Assessment and the State Canal Plan. In 1994 the Village hired a consultant to develop construction drawings for the project. Facilities slated for the island include a cartop boat launch, parking for cars and trailers, fishing access, picnic areas, a children's play area, and transient boat docking. Funding for initial improvements was made possible by an Aid to Municipalities grant through the New York State Thruway Authority in 1994. The New York State Department of Environmental Conservation has committed to requesting funding for portions of the project to provide fishing access to the Oswego River. The New York State Thruway Authority will continue to contribute to the recreational development of Phoenix as a Canal Port.

The project offers both local and regional recreational opportunities of high priority in Oswego County and complements community revitalization and economic development objectives of the Village of Phoenix. (Map 28)

D. GOALS, OBJECTIVES AND STRATEGIES

GOAL:	DEVELOP A COMPREHENSIVE RECREATIONAL SYSTEM OF MAJOR PARKS, RECREATION SITES AND OPEN SPACE AREAS LINKED TO ONE ANOTHER AND TO COUNTY POPULATION CENTERS BY A GREENWAY AND TRAIL SYSTEM.
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- OBJECTIVE 1: Develop greenways and trail system corridors as the foundation around which local parks, recreation sites and open space can be planned.
- STRATEGIES:
- a. Establish and support greenway status for the NYS Canal System, the Lake Ontario Coastal Zone and the Salmon River corridor.
 - b. Support and seek funding to implement specific greenway projects outlined in the NYS Canal Plan, the Oswego River Scenic Assessment, the Salmon River Corridor Plan, and the NYS Open Space Plan.
 - c. Develop a county wide trail system including: 1) improvements to the Oswego County Recreation Trail; 2) evaluation of County-owned railroad ROWs for inclusion in the system; 3) trails in greenway corridors to improve access and public education opportunities; and 4) consideration of private/public partnerships for development and maintenance, safety, concerns of adjoining landowners and all potential trail uses.
- OBJECTIVE 2: Focus on appropriate waterfront sites for the purpose of providing a wide range of recreational opportunities.
- STRATEGIES:
- a. Complete the feasibility study for development of Sandy Island Beach as a public beach with adequate facilities for a designed carrying capacity and support development if feasible.
 - b. Provide technical support, assistance and grantsmanship to local projects which provide protection and access to lands along shorelines, including redevelopment of the Fitzgibbons site in Oswego.
 - c. Advocate implementation of specific projects on State and county lands to provide both boat and pedestrian access to public waterways which is compatible with existing management plans, including options for increased use of Camp Hollis.
- OBJECTIVE 3: Promote Oswego County through development and promotion of environmental education and nature interpretation facilities and activities.
- STRATEGIES:
- a. Complete implementation of the Oswego County Nature Park at Camp Zerbe development plan.
 - b. Identify resources that have scientific or educational importance and natural heritage value and encourage education, interpretation and research opportunities relating to these resources.
 - c. Study relationships between recreation and tourism and develop an economic analysis of tourism opportunities related to parks, beaches, trails, scenic landscapes, historic sites and recreational water use.
- OBJECTIVE 4: Relate major recreation sites to the transportation system in order to provide appropriate accessibility.
- STRATEGIES:
- a. Provide a well coordinated and uniform signage system to identify and direct traffic to public recreation facilities.
 - b. Develop and/or improve parking and access to park, recreation and open space areas on the county highway system.

OBJECTIVE 5: Support efforts to satisfy the active recreation needs of county residents and visitors.

- STRATEGIES:
- a. Assist municipalities in developing local parks and recreation plans.
 - b. Develop and manage public lands to complement park, recreation and open space facilities that are better provided and managed in the private for profit or not-for-profit sector.
 - c. Include consideration of all potential recreation uses in management plans for county properties.

IX. ECONOMIC DEVELOPMENT

A. PROFILE OF THE OSWEGO COUNTY ECONOMY

1. Employment

The most recent available annual figures show that an average of 51,700 Oswego County residents were employed in 1995 and 4,900 were unemployed yielding an annual average unemployment rate of 8.6 percent. Monthly unemployment rates have fluctuated between 5.1 and 12.8 percent during the 1990's, but have consistently remained above the rates for the Syracuse Metropolitan Statistical Area (Cayuga, Madison, Onondaga and Oswego Counties). Unemployment rates have remained stubbornly high for twenty years reaching annual rates above ten percent in 1975, 1976, 1986, 1991 and 1992, and dipping below seven percent only twice, in 1988 and 1990. (Figure IX-1) Among adjoining counties, Jefferson and Lewis have generally had higher unemployment and Madison, Onondaga, and Oneida lower unemployment. Cayuga County has generally, though not always, maintained lower unemployment rates. (Figure IX-2)

During the 1990s total employment among Oswego County residents has ranged from a low of 47,300 in February, 1992 to a high of 53,900 in July, 1994. In spite of persistent high unemployment rates total employment has continued to generally trend upward along with overall population. However, in-county employment has fluctuated with peaks in 1985 and 1992.

2. Labor Force

Approximately 73% of males and 52% of females over the age of 16 were in the labor force in 1990. The figure for males is virtually unchanged from 1980 but the participation rate for females is a significant increase from the 44% rate in 1980. The most common occupations in Oswego County as of 1990 were operator/fabricator/labor (10,203), production crafts (8,072), administrative/clerical (7,954), and services (7,450). 1994 average annual wages varied widely between sectors with Transportation, Communications and Public Utilities (\$51,970) and Manufacturing (\$40,547) at the high end, and Retail Trade (\$11,838) and Mining/Agricultural Services (\$15,703) at the low end. Total annual average wages in Oswego County was \$27,999, the highest of any county in Central New York.

The largest industry group in terms of employment for residents of Oswego County in 1990 was manufacturing with 10,951 employed, or 21.1 percent of employed persons in the county. The second most important sector was retail trade with 9,342 workers representing 18 percent of employed persons. These figures were for Oswego County residents regardless of whether they work in or outside the County. Figures are similar for data by place of employment which covers all employees who work in Oswego County regardless of where they live. In 1990, 21.8 percent of those working in the county worked in manufacturing and 18.5 percent in retail trade. By 1994, manufacturing job losses left 18.7 percent of wage and salary employment in manufacturing and 19.3 percent in retail trade. All government, including educational institutions, is the single largest employment sector accounting for 27.5 percent of wage and salary employment in 1994.

3. Income

Median family income in 1989 as measured by the 1990 Census was \$33,888. The range by municipality was from a low of \$23,571 in Orwell to a high of \$50,085 in Minetto. Average per capita income in 1989 was \$11,792, a 25.3 percent increase from 1985. From 1975 to 1993 per capital personal income increased from \$4,681 to \$17,012 and when adjusted to 1993 dollars, from \$12,573 to \$17,012, a 35 percent increase. During the same period, per capita personal income in the U.S. increased from \$16,236 in 1993 dollars to \$20,800, a 28.1 percent rise. In 1990, 77 percent of households had wage or salary income, 12 percent had self

employment income, 27 percent received social security and seven percent of households received public assistance.

4. Business Establishments

Between 1985 and 1992, the number of business establishments in Oswego County increased by 16.7 percent from 1,687 to 2,089. This compares with overall employment growth of just 3.3 percent during this same period. Thus, the average number of workers per firm has declined from 20 in 1985 to just under 17 in 1992. Firms with fewer than 100 employees accounted for about 60 percent of private sector employment.

The largest growth in number of business establishments was in contract construction (+145 firms), retail trade (+99 firms), and services (+92 firms). Retail trade and services together account for about 60 percent of all business establishments with payrolls and 74 percent of retail and services businesses consist of firms with fewer than 10 employees. Across all sectors over 79 percent of firms had fewer than ten employees in 1992, yet it is estimated that these smallest firms account for about twenty percent of all private sector employment. By contrast, the 26 largest employers account for about 40 percent of all employment in the county.

Only fourteen establishments employed more than 250 people in 1992. A 1996 survey of the largest private sector employers shows that these firms are in the manufacturing, transportation, communications and public utilities, and services sectors. The largest manufacturing sectors in 1991 were food and kindred products, primary metals, and paper and allied products which together accounted for about 54 percent of manufacturing employment.

Figure IX-1: Unemployment Rate, 1975-1994
Oswego County

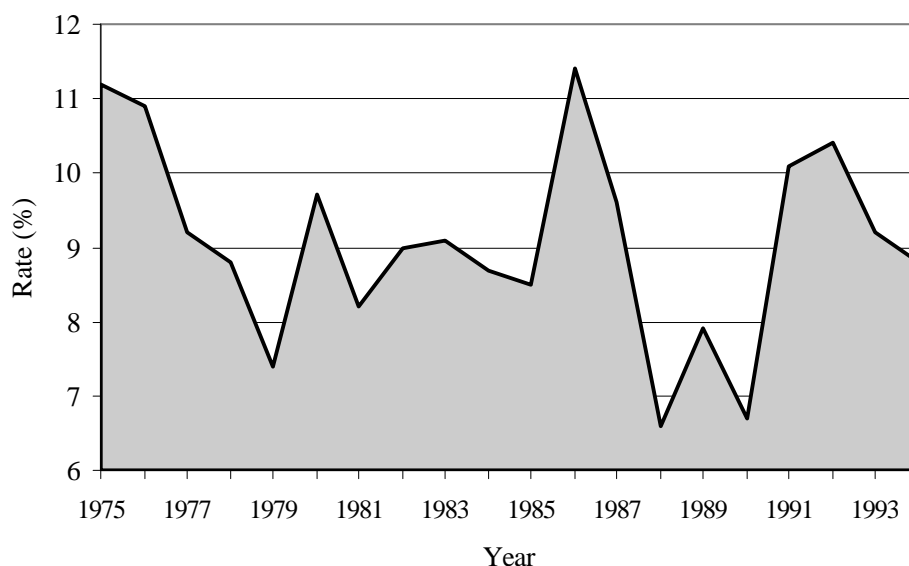


Figure IX-2: Regional and Adjacent County Unemployment Rates, 1994
Oswego County

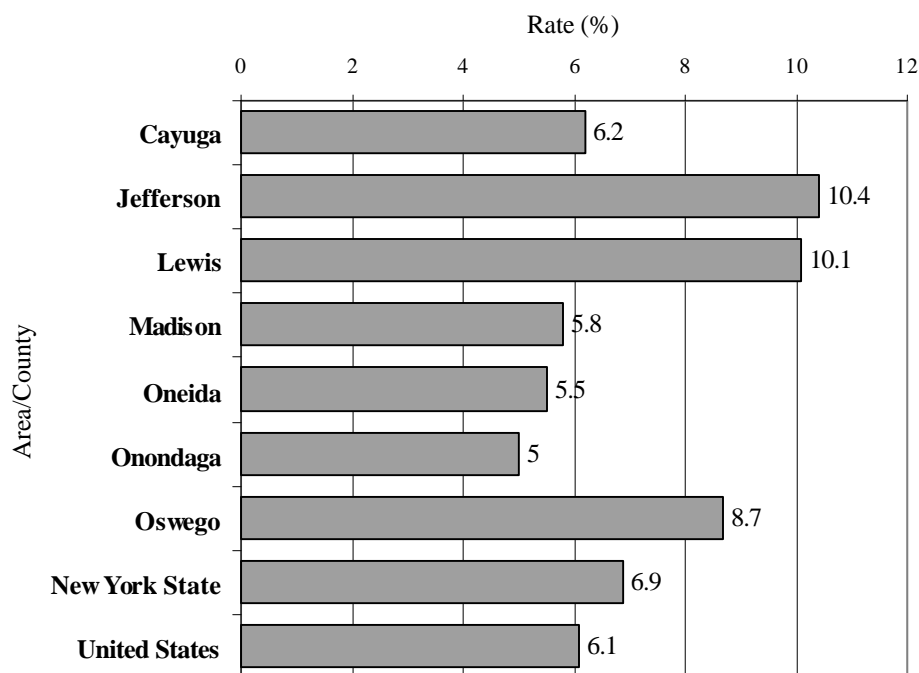


Table IX-1: Top 20 Private Sector Employers in Oswego County

<u>Rank</u>	<u>Employer</u>	<u>Employees</u>
1	Niagara Mohawk Power Corporation	1,500
2	Alcan Rolled Products	800
3	New York Power Authority	780
4	Nestle Chocolate & Confections	700
5	Oswego Hospital	676
6	Sealright Company	490
7	Oswego County Opportunities	421
8	Schoeller Technical Papers	352
9	Oswego Industries	350
10	A.L. Lee Memorial Hospital	320
11	Black Clawson Converting Machinery, Corp.	304
12	Birds-Eye - Dean Foods	282
13	Owens Brockway	280
14	Armstrong World Industries	260
15	St. Luke's Nursing Home	240
16	Price Chopper	227
17	P & C Food Markets	222
18	Tops Friendly Markets	220
19	The Fulton Companies	200
20	Wal-Mart	200

Note: Data includes full and part-time employees.

Source: Business Guide 1996, Oswego County Business

5. Retail Trade

The growth in retail firms and employment is reflected in retail sales figures which grew from \$263 million in 1977 to \$682 million in 1992 according to the Census of Retail Trade. (Figure IX-3) Due to the small number of firms in the General Merchandise category, sales were not reported in the Census of Retail Trade in 1992 so as not to provide information from which a single retailer's sales could be deduced. Among other sectors, Food Stores (\$177 million), Automotive Dealers (\$155 million), and Eating and Drinking Establishments (\$80 million) were sales leaders. (Figure IX-4)

In most categories the number of retail establishments has declined since 1977 indicating the replacement of smaller independent merchants, typical of city and village downtowns, with larger, national chain retailers most commonly found in shopping center and mall locations. However, recent growth in the number of Eating and Drinking establishments and Miscellaneous Retail Stores suggests a growth in tourism related and speciality retail businesses. (Figure IX-5)

6. Manufacturing

Despite recent declines in total employment, manufacturing is by far the largest private sector income producer in Oswego County. In 1994, manufacturing accounted for \$288 million in annual payroll or 27% of total payroll in the county. Until 1991, manufacturing was the largest sector overall accounting for nearly 30 percent of total payroll in that year.

In 1982 total value of manufactured products shipped was over \$2.4 billion with \$793 million of that value added by Oswego County industry. Capital expenditures on plant and employment topped \$63 million.

7. Government

Government overtook manufacturing as the largest payroll producing sector in the county in 1993 when just over 30 percent of total county payroll was in this sector. Government includes all Federal, State, County and local government as well as all public education including school districts and SUNY Oswego. In 1994 total government payroll was \$288 million. Table IX-2 shows the largest public sector employers.

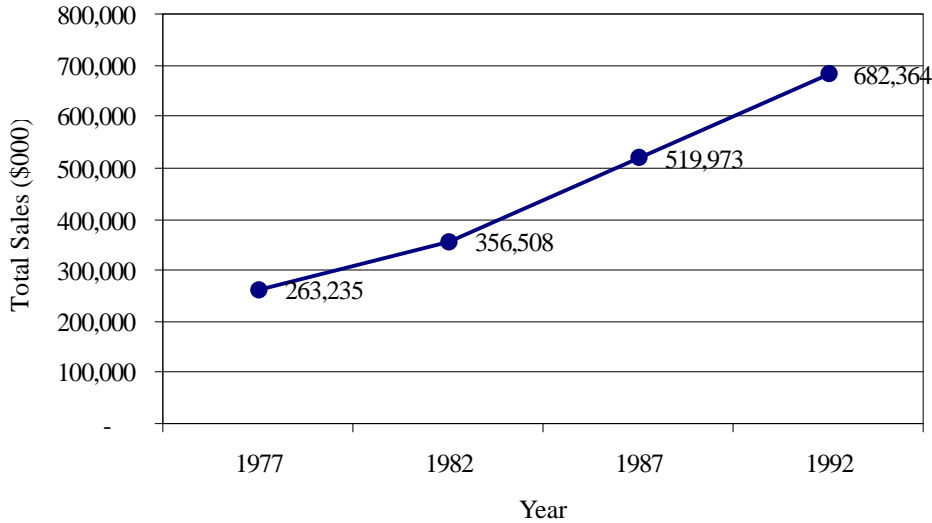
Table IX-2: Top 14 Public Sector Employers

<u>Rank</u>	<u>Employer</u>	<u>Employees</u>
1	Oswego County Government	1,541
2	SUNY-Oswego	1,255
3	Oswego School District	785
4	Central Square School District	678
5	Oswego County BOCES	615
6	Fulton School District	597
7	Mexico School District	425
8	City of Oswego	420
9	Phoenix School District	400
10	Altmar-Parish-Williamstown School District	278
11	Hannibal School District	250
12	City of Fulton	184
13	Pulaski School District	175
14	Sandy Creek School District	152

Note: Data includes full and part-time employees.

Source: Business Guide 1996, Oswego County Business

Figure IX-3: Total Retail Trade Sales
Oswego County, 1977-1992



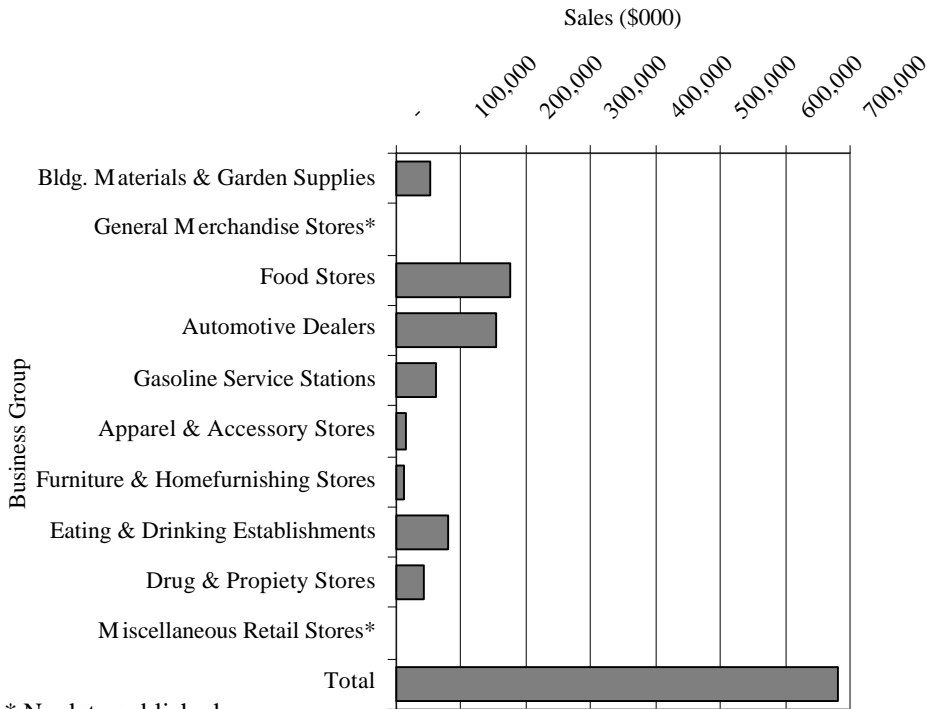
Source: 1977, 1982, 1987, and 1992 Census of Retail Trade

Within the Government sector, higher education is an important and often overlooked basic industry for Oswego County. The State University of New York at Oswego's 6,380 full-time traditional students and 1,225 faculty and staff spend over \$40 million a year in the local economy. Total direct and indirect spending generated by the college, its students and staff amounts to \$73 million annually in the county economy. This includes expenditures for food, housing, transportation and other needs.

8. Natural Resource Sectors

The natural resources sectors of agriculture, forestry, and mining make up a relatively small component of overall wage and salary employment and income but most farm operations are proprietorships. Agriculture in particular is critical to the economies of rural communities. In 1994, mining and agricultural services accounted for about 1.5 percent of overall private wage and salary employment and about .7 percent (\$7 million) of private sector wage and salary income. Net farm income by place of work in 1993 was \$7.6 million or just about .6 of one percent of total earnings by place of work. According to the 1992 Census of Agriculture, there were 659 farms encompassing 112,334 acres in Oswego County, down from 826 farms and 139,440 acres in 1982. Market value of all products sold amounted to over \$31 million, little changed from a decade earlier and down from the \$34 million in 1987. However, average farm sales increased from \$37,318 in 1982 to \$47,487 in 1992. Farms account for about 18 percent of the land area in the county. Each farmer has an investment in land, buildings, and machinery equal to about 4.7 times the annual market value of products sold. The land in farms consists of 35 percent harvested cropland, 21 percent unpastured woodland, 21 percent pastured land and 22 percent land in house lots, roads and other uses.

Figure IX-4: Retail Sales by Kind of Business
Oswego County, 1992



* No data published

Source: 1992 Census of Retail Trade

Major crops and commodities produced in 1992 included corn for grain or seed (407,807 bushels on 4,340 acres), corn for silage (70,995 bushels on 6,343 acres), oats for grain (43,350 bushels on 1,149 acres), and hay (49,639 dry tons on 24,578 acres). There were 3,090 acres in vegetable crops and 781 acres in orchards. All categories of production showed significant declines from 1982, but much of the agricultural decline can clearly be attributed to the difficulty faced by the dairy industry in New York State.

9. Tourism

Another major industry in Oswego County which is closely tied to the natural resource base is tourism. Employment in travel related sectors increased from 1,524 in 1976 to 3,423 in 1994 and the number of establishments increased from 307 to 374. Total payroll in 1994 was \$32,202,000. The biggest employment gain was between 1981 and 1990 during which time 1,635 jobs were added and total payroll increased by over \$19 million.

Other evidence of the increased impact of outdoor recreation on the Oswego County economy includes the fact that more non-resident fishing licenses are sold in Oswego County than in any other county in New York State, and increases in boat registration (up 22 percent from 1988 to 1992) and snowmobile registrations (up 15 percent from 1988 to 1992).

B. TRENDS

1. Competition in a World Economy

Several national trends have influenced and/or are likely to influence the economic development of Oswego County. Two of them are integrally related. The emerging world economy with reductions in trade barriers is one of the factors driving efforts at increased corporate efficiency in order to enhance competitiveness. Unfortunately for many workers corporate efficiency often translates to "down-sizing." This has been seen in Oswego County where consolidation of operations resulted in the closing of the Miller Brewery and where major investments in modernization and increasing production capacity by firms such as Nestle and Alcan have not necessarily resulted in increased employment. On the other hand, consolidation will result in an increase of 100 jobs at Sealright and, as production processes become technologically more sophisticated, the skills needed by employees change creating the potential for increased productivity and wages. Also, the increased capital investment in production facilities may make employment more secure for the employees whose jobs remain

The world economy is certainly important to Oswego County with foreign based corporations like Nestle, Alcan, Sithe and Schoeller accounting for a large share of employment and investment. The strategic location of the county and the presence of the Port of Oswego also offer potential for increased international trade, especially with Canada.

2. Retailing

Another trend which affects all areas, including Oswego County, is the ever changing nature of retailing. From the predominance of shopping malls in the 70s, to the explosive growth of discounters in the 80s, and the resurgence of strip centers in the 90s, Oswego County has increasingly seen the decline of downtowns. As shoppers seek goods at malls in Onondaga County and shopping centers in Oswego County, small independent retailers have had a tough time competing. Marketing strategies of major retailers have reshaped the retail marketplace with new construction of large grocery stores and discounters like Walmart and K-Mart entering the market.

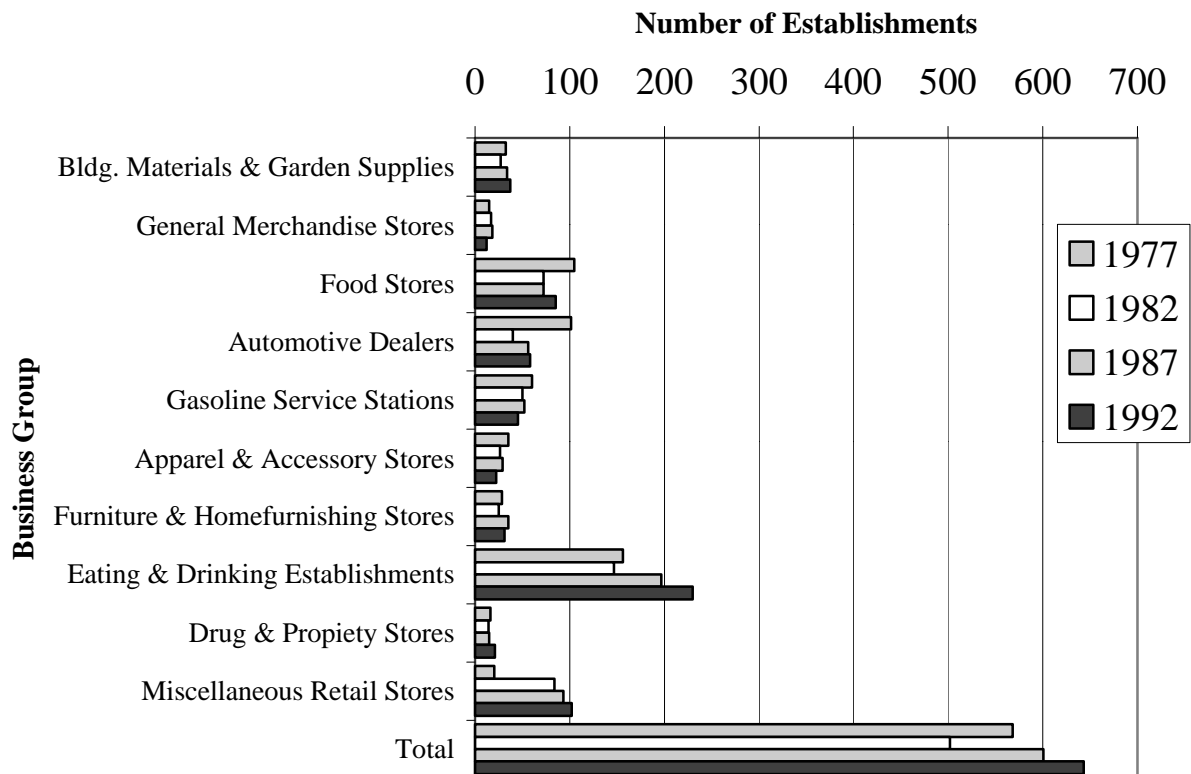
3. Government Taxation and Regulation

Another trend of late has been an increasing focus on the impacts of government taxation and regulatory policy on the economy. Although these issues are much too complex to fully explore in this document, three issues locally are clearly relevant to the comprehensive plan: property taxes, land use regulation, and the impacts of incentives to business investment in the county.

Property taxes were raised repeatedly as an issue in the public meeting to obtain input for this component of the plan. The ongoing concern over school, municipal and county property tax rates has been raised to a new level of concern by requests from Niagara Mohawk, the largest property taxpayer in the county, for a 50 percent reduction in its property tax assessment over five years.

New York State has a complex system of land use regulation which has increasingly been cited as a potential impediment to economic development in the State. At one Statewide public forum, a major mall and shopping center developer admitted that competition was reduced in his field because many developers were unwilling to enter a marketplace with so much uncertainty in the land use decision-making process. A survey of public and private interests across the State has shown a wide-spread discontent with the land use decision-making process. A survey of public and private interests across the State has shown a wide-spread discontent with the land use decision-making process. The problem results in part from the large number of towns, cities and villages in New York State each having completely independent responsibility for land use planning, regulation and zoning. This, when combined with a multiplicity of State and Federal rules, an often overly complex

Figure IX-5: Number of Retail Trade Business Establishments
Oswego County (1977,1982,1987,1992)



Source: 1977, 1982, 1987, 1992 Census of Retail Trade

environmental review process, very little up-front long range planning, and inadequate training of many local planning officials, has resulted in a cumbersome process which may, too often, serve to retard economic activity.

4. Business Incentives

The final issue which has received increasing attention locally and across the State is the impact of offering incentives to specific firms or to businesses locating in a specific area such as an Economic Development Zone. Some have argued that this may work against already established businesses by creating an unfair cost advantage for new entrants into the market. It is asserted that all businesses should receive the same advantages to create a level playing field and that what one community gains by providing locational incentives another community may lose. Finally, payment in lieu of tax (PILOT) agreements may tend to reduce the net positive fiscal impact generally attributed to industrial and commercial development. These arguments are often countered by explaining that: 1) especially given Oswego County's persistent high unemployment rates, job creation is and should be the primary objective of economic development; 2) Oswego County must use whatever tools it can to attract and retain jobs given what has at least been perceived to be an unfavorable competitive business climate in New York State; 3) new investment has many spinoff and multiplier benefits to the county and its residents; and 4) PILOT agreements do provide a significant positive net fiscal benefit to all levels of local government.

C. ANALYSIS

Many of the trends affecting economic development in Oswego County are the result of, or can be influenced only by, policy decisions made at the State and Federal level. Whether we agree or disagree with international trade policy or Federal and State tax policy, it is beyond the scope of a Comprehensive Plan to address these issues. We must, however, recognize the opportunities and constraints that State and Federal policies create for the local area, and respond to those as best we can to develop a strong, sustainable local economy.

1. Maintaining Manufacturing Competitiveness

Perhaps the overriding reality facing local economic development efforts is the internationalization of the economy and the resultant intense competitive pressure on manufacturing operations. Manufacturing remains the foundation of the Oswego County economy and although much of what determines profitability is beyond the authority of local or county government to influence, several factors which can be influenced locally affect the competitiveness of firms in Oswego County. Primary among these are infrastructure, transportation, natural resources, regulatory reform, and taxes. Also important are quality of life issues like education, recreation, housing, the environment, and other community facilities which directly affect the ability of businesses to attract and retain educated, skilled employees. These issues are all covered elsewhere in this Comprehensive Plan. The key from the economic development perspective is to integrate all of these issues into an overall community strategy to create jobs and enhance the local tax base.

Transportation networks, public sewer and water facilities, electric and natural gas service, and telecommunications are all critical elements to any successful business, but especially to manufacturing. It is not efficient to provide a full range of services to all areas of Oswego County, but the State Route 481 and Interstate 81 corridors are critical to our economic growth. In addition to being the major highway corridors, they are also the rail line corridors in the county. Key communities in these corridors should be targeted as employment growth centers where infrastructure will be provided to allow job creation which depends on these facilities. There has been public comment indicating we should focus on fully utilizing and extending existing infrastructure rather than using a broader based approach to infrastructure development. Within the Route 81 and 481 corridors the opportunity to provide all municipal service exists in five communities: Oswego, Fulton, Phoenix, Central Square and Pulaski. These are the areas with the greatest potential for major economic growth, especially if infrastructure can be upgraded to cure any current deficiencies. Oswego County is fortunate to have two economic development zones in Oswego and Fulton (Map 31) which can offer tax, utility and other incentives to businesses and enhance their competitiveness.

2. Small Business Growth

It should also be recognized that much job growth is occurring in small firms, some of which may not require either major arterial or rail access, or complete infrastructure. Therefore, many business opportunities will exist in other parts of the county. This may be particularly true for tourism or natural resource based firms. Every community can assess its own economic potentials but it is clear that many of the villages retain functions as small commercial trade and service centers to provide goods and services to the local population and to visitors. As residential development in rural areas continues to increase, there may be a demand for convenience goods in locations in hamlets and at country cross-roads. And, home or residence-based occupations are increasing in popularity as the computer age allows more business to be done from home. Finally, certain types of businesses may require or be compatible with a more rural location. Careful land use planning can allow all types of businesses to flourish at appropriate locations while protecting our natural environment and rural or small town character and way of life.

3. Natural Resource Based Development

Oswego County's rich natural resource base encompassing Lake Ontario and the Lake Plain, as well as the Tug Hill Plateau, offers many economic opportunities from tourism and recreation to farming and forestry. Our natural resource base is critical to our economic future and the opportunity for resource based economic activity must be encouraged and protected from incompatible development. Creative solutions will be required to allow agriculture and forestry to continue as economically viable enterprises. Our tourism industry is also dependent upon our natural resource base. Many opportunities remain to expand our tourism industry by offering new attractions,

improving access to our resources, and extending the seasons during which the resources are utilized. We are also blessed with significant water resources both in terms of Lake Ontario and several significant groundwater aquifers. These offer special opportunities as evidenced by companies like Schoeller Technical Paper, Alcan and Sithe Energies.

4. Human Resources

Our human resources also offer special opportunities. Notable among these are those provided by the presence of the SUNY Oswego campus in the county. SUNY Oswego is extending and expanding its role in the community with outreach efforts such as the satellite campus in Phoenix, continuing education efforts, and training programs with local industry. Further opportunities for linkages between this fine educational institution and our local economic growth need to be explored and may include physical linkages such as a research facility or park designed to turn ideas into products, processes and local jobs. The strong partnership between business and labor in Oswego County is another asset which should be capitalized on. Our demonstrated track record of providing a trained labor force and completing construction projects in a timely fashion are strong selling points when decisions are made to locate or expand business operations in Oswego County.

5. Conclusion

In conclusion, development of the local Oswego County economy is not a question of manufacturing vs. tourism or agriculture vs. downtown redevelopment, but rather a challenge of maximizing the economic potential of all of our resources, human, natural and man-made. By recognizing the opportunities presented by our people, land and water, and infrastructure, and focussing on addressing our infrastructure constraints in an efficient, cost-effective manner, we can create a business and development climate which is favorable to job and firm creation and growth.

D. GOALS, OBJECTIVES AND STRATEGIES

GOAL: DEVELOP A LOCAL ECONOMY WHICH PROVIDES GOOD JOB AND BUSINESS OPPORTUNITIES, NECESSARY GOODS AND SERVICES, AND THE STRONG, STABLE LOCAL TAX BASE NEEDED TO SUPPORT GOVERNMENT SERVICES AND PUBLIC EDUCATION.

OBJECTIVE 1: Develop and support the development of industrial and major commercial employment sites which have all necessary public services and which are compatible with existing land use patterns in the county.

STRATEGIES:

- a. Continue the development of infrastructure and facilities needed to make the Oswego County Industrial Park (Schroeppel) and Lake Ontario Industrial Park (Oswego) attractive business locations.
- b. Develop and/or support private sector development of full service business/industrial parks at appropriate compatible locations in the Central Square and Pulaski areas including upgrade of existing infrastructure if necessary.
- c. Develop and implement a plan for the Oswego County Airport Industrial Park (Volney) including provision of infrastructure and consideration of a focus on power industry and power industry-related firms.
- d. Develop and maintain an up-to-date inventory of industrial and commercial sites which:
1) are accessible to arterial or major collector roads; 2) have appropriate zoning; 3) have electrical utilities and/or natural gas service available at site boundary; and 4) have public water and public sewer available.

OBJECTIVE 2: Identify appropriate areas where all types of desirable and needed commercial activities and community services can occur so that location of developable sites will not be a hindrance to entrepreneurship or to providing needed services in Oswego County.

- STRATEGIES:
- a. Work with cities and villages to develop and maintain an inventory of infill sites in existing central business districts.
 - b. Review local zoning ordinances and make recommendations to encourage entrepreneurship by allowing residence-based businesses in appropriate areas.
 - c. Work with cities, villages and adjoining towns to project future commercial land use needs and locate appropriate planned commercial districts to meet those needs.
 - d. Identify and promote rural hamlets and traffic controlled intersections on minor arterial and collector roads at appropriate locations for consideration as planned "neighborhood commercial" nodes to serve the needs of rural residents and tourists.

OBJECTIVE 3: Develop and promote the development of facilities and attractions necessary to insure the continued growth of our tourism economy.

- STRATEGIES:
- a. Plan and develop a county-wide recreation trail system.
 - b. Support viable projects to increase both pedestrian and boater public access to surface waters as long as they are environmentally sound and conform to existing greenway plans and standards.
 - c. Encourage development of and develop nature interpretive facilities focussed on the major natural resource areas of the county.
 - d. Support and develop improved access to public lands such as improved parking areas, trail heads, and ancillary facilities.
 - e. Support development of projects identified in the NYS Canal Plan and the Seaway Trail Oswego-Eastern Shore Communities Tourism Development Plan.
 - f. Review local zoning ordinances and recommend changes needed to allow tourism support facilities and businesses in appropriate areas.
 - g. Promote appropriate access to underwater archaeological resources.

OBJECTIVE 4: Protect important and significant farmland resources to insure that agriculture continues to be a major contributor to our local economy and a wise use of our natural resources.

- STRATEGIES:
- a. Develop a farmland protection program which focuses on viable farm operations and committed farmers and which provides assistance with long term financial and land development strategies which will allow the continuation of agricultural operations.
 - b. Promote agritourism.
 - c. Promote farmers markets and community based agriculture which offer locally produced agricultural products.
 - d. Continue efforts to strike a balance between wetland and environmental protection and rural economic needs which will allow the continuation of a viable muck farming industry in the county.

- OBJECTIVE 5: Provide a regulatory climate that is predictable, fair and efficient while protecting the quality of life of county residents.
- STRATEGIES:
- a. Provide access to a comprehensive land use regulation training program for local legislative, planning and zoning officials in Oswego County.
 - b. Advocate proactive solutions and flexible regulatory approaches to environmental issues so that regulations do not become a hindrance to appropriate development.
 - c. Work to avoid unnecessary delays in permitting processes through the development of Generic Environmental Impact Statements (GEIS) and the application of Geographic Information systems (GIS).
 - d. Develop a county-wide map of existing zoning to assist with business location decisions.
 - e. Develop a wetland mitigation bank which may be used to provide effective and efficient wetlands impact mitigation for both private and public sector projects.
- OBJECTIVE 6: Utilize an economic impact model so that decision makers can understand how different types of development affect the local economy and tax base.
- STRATEGIES:
- a. Seek grant funds to hire a consultant to develop or adapt an existing economic impact model which can provide guidance to local decision-makers.
- OBJECTIVE 7: Promote a regulatory framework which provides for necessary access to mineral resources while protecting the interests and addressing the concerns of local communities.
- STRATEGIES:
- a. Advocate changes to the State Mined Land Reclamation Law to allow for meaningful local input into the DEC mining permit process.
 - b. Provide municipalities with information regarding the location and nature of their sand and gravel resources so that informed judgements can be made about local planning and zoning provisions regarding mining.
 - c. Work with the NYS DEC to develop model mine reclamation guidelines and encourage their use in mining permit applications for sites in Oswego County.
- OBJECTIVE 8: Target economic development opportunities based on linkages to current industries and resources.
- STRATEGIES:
- a. Develop a permanent forum in which to discuss and pursue power industry issues within the county.
 - b. Explore ways to translate research and development efforts at SUNY Oswego into businesses and jobs in the Oswego County economy.
 - c. Target industrial development opportunities which can utilize our plentiful water resources.
 - d. Target economic development opportunities associated with changes in the power industry.

- e. Target compatible recycling industries which can complement our comprehensive solid waste management system.
- f. Support work force development, financing alternatives and other programs to promote retention and expansion of existing industries and attraction of new industries which create or retain jobs in the local economy.
- g. Support construction of a wide range of housing types within the county to maximize the local economic benefits from meeting residents' housing needs.
- h. Support small business development programs, especially those targeted to tourism related businesses.
- i. Support development opportunities associated with the Port of Oswego.

X. LAND USE AND COMMUNITY DESIGN

A. INVENTORY

1. General Land Use

The Land Use and Community Design section of this plan pulls together themes from throughout the other sections of the plan and puts them into the context of how we use land and design communities in order to enhance our quality of life. The purpose of the inventory for this section is to show current land use patterns in order to identify and predict future impacts of land use on the county. Real property assessment records are the best existing source of this information. These categories are described below. Data variables include the property type, classification and ownership codes compiled and overseen by the Oswego County Department of Real Property Tax Services in accordance with the NYS Division of Equalization and Assessment Assessor's Manual.

<u>Category</u>	<u>Description</u>
Agricultural	Property used for production of crops or livestock.

Residential	Property used for human habitation. Living accommodations such as hotels, motels and apartments are included in commercial category.
Vacant Land	Property that is not in use, is in temporary use, or lacks permanent improvement.
Commercial	Property used for the sale of goods and/or services.
Recreation	Property used by groups for recreation, amusement and entertainment.
Community Service	Property used for the well being and assembly of the community.
Industrial	Property used for the production and fabrication of durable and nondurable manmade goods.
Public Services	Property used to provide services to the general public.
Wild Forested, Conservation Lands and Public Parks	Reforested lands, preserves and private hunting and fishing clubs.

Based upon Real Property Tax records for 1995, the greatest percentage of land in Oswego County is classified as being used for residential purposes (36.3%). 20.6% is classified as being vacant, 19.3% forest, 15.4% agriculture, and 3.3% for public service. This data depends upon the accuracy and consistency of land classification for assessment purposes. Categories may or may not be consistent with actual land use categories. For example, a residentially assessed parcel of 20 acres might only have an acre of actually developed land. This information is provided to illustrate general patterns based upon the use for which the parcel of property is assessed.

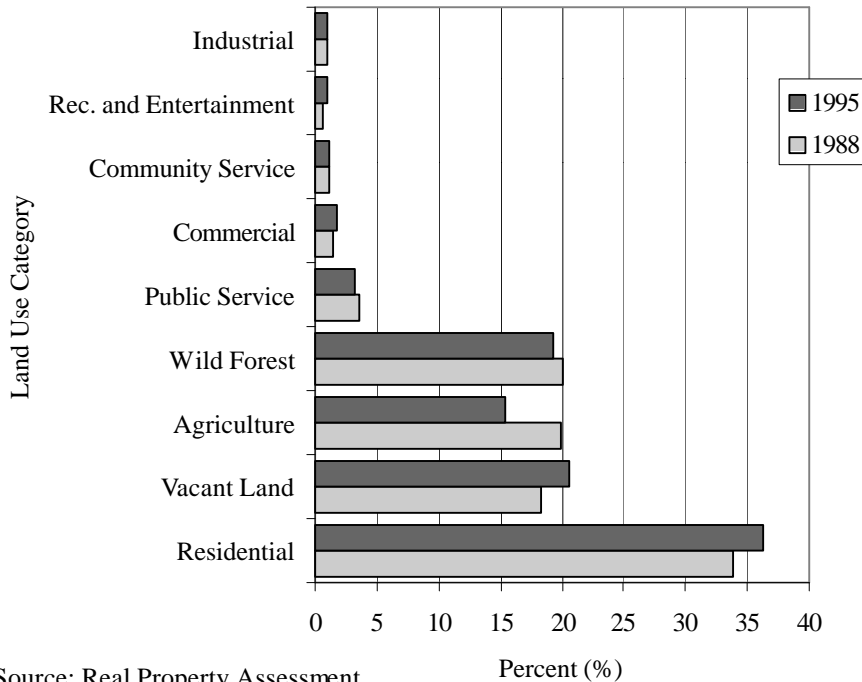
The earliest computerized tax records in the county are from the year 1988 and continue to the year 1995. The data has been summarized by the County Administration and is shown in Table X-1 and Figure X-1.

Table X-1: 1988 and 1995 Oswego County Land Use

<u>Land Use Category</u>	<u>1988 Percent</u>	<u>1995 Percent</u>	<u>Change 1988 to 1995</u>
Residential	33.9%	36.3%	+2.4%
Vacant Land	18.3%	20.6%	+2.3%
Agriculture	19.9%	15.4%	-4.5%
Wild Forest	20.0%	19.3%	- .7%
Public Service	3.5%	3.3%	- .2%
Commercial	1.5%	1.8%	+ .3%
Community Service	1.1%	1.2%	+ .1%
Recreation and Entertainment	.7%	1.0%	+ .3%
Industrial	.9%	1.0%	+ .1%

See Appendix X-A for land use assessment data by city and town.

Figure X-1: Oswego County Land Use
1988 and 1995



Source: Real Property Assessment

2. Community Types

Oswego County is made up of a diverse group of communities most of which retain a rural or small town character. For purposes of this plan, communities are considered under six types: employment and service centers; community service centers; rural recreational/natural resource based; rural/agricultural based; rural residential; and suburban residential. Within each type specific communities often play unique roles and many municipalities include more than one category.

a. Employment and Service Centers

Employment and service centers are communities which have a well developed retail and service economy and which host major employers in the county. These communities are characterized by access to major transportation networks and have complete public infrastructure. These communities also tend to have the highest residential densities in the county. Included in this community type are the cities of Oswego and Fulton, and the villages of Phoenix, Pulaski and Central Square, including their immediate surrounding areas in adjoining towns. The City of Oswego plays unique roles as the seat of county government and as an international port on Lake Ontario. In addition the city and adjacent Town of Oswego are home to the SUNY at Oswego campus. The city's harbor has become a waterfront recreational mecca for boaters and fishermen. The city is site of the Oswego Steam Station power plant and the Oswego Hospital.

The City of Fulton is the hub of industry in the county and a major port on the Oswego Canal. Major industries like Nestle and Sealright anchor the economic base of the community. The city is also a retail trade center for surrounding communities and the site of A. L. Lee Memorial Hospital.

The Village of Pulaski is a tourism destination especially for fishermen attracted to the Salmon River. The community is a traditional service center for the northern third of the county and retains a vibrant historic downtown. Two interchanges on Interstate 81 provide easy access for both visitors and commercial traffic.

The Village of Phoenix also is located on the Oswego Canal and the Oswego County Industrial Park is located just outside its borders. The village has excellent access to NYS Route 481 and has focussed community revitalization on its waterfront associated with recreational use of the Oswego Canal and River. It has also been the site of major investments in high quality multi-family housing developments in recent years.

The Village of Central Square primarily serves as a community service center to a rapidly suburbanizing population and to commuters and other travellers on I-81, State Route 49 and U.S. Route 11. The proximity to Onondaga County and I-81 have prompted much recent interest in commercial and industrial development opportunities.

b. Community Service Centers

Community service centers are primarily those smaller villages which have some but not all of the infrastructure or locational and transportation attributes necessary to support major concentrations of employment. Included in this group are the remaining villages in the county: Hannibal, Cleveland, Parish, Mexico, Altmar, Sandy Creek and Lacona. Many of these communities are also the home of major employers but their primary economic roles are as retail and service centers for the surrounding residential population or as service centers to seasonal residents and tourists. In growing areas of the county these communities are likely to experience continued commercial growth. Other futures will be tied to trends in tourism.

c. Rural Recreational/Natural Resource

These communities tend to be very rural in nature often including large public open spaces such as forests or wildlife management areas, or other natural resources which attract visitors. Included in this group would be the Tug Hill towns of Boylston, Redfield, Orwell, Williamstown and Albion, as well as parts of the lakeshore communities of Sandy Creek, Richland, Mexico, New Haven, West Monroe and Constantia. Some communities are host to lodging, marinas, sports shops and other tourist related businesses while others may have economies based on forest products and back country recreation.

d. Rural/Agricultural

In these communities agriculture remains the predominant land use but rural residential development has increased in recent decades. The towns of Palermo, Granby and Hannibal would fit this category along with large parts of Oswego, Scriba, Volney, New Haven, Mexico, Richland, Williamstown and Sandy Creek. Major agricultural activities include dairying, muck farming and fruit growing.

e. Rural/Residential

In areas of the county where traditional agricultural land uses have declined, low density, rural residential development is the primary activity. Parts of nearly all of the towns listed above along with Parish, Amboy and northern Schroepfel, Hastings, West Monroe and Constantia reflect this pattern.

f. Suburban Residential

In all or parts of many towns residential development has reached or is approaching suburban density. Although elements of the rural landscape may remain, the community character is clearly residential in nature. Many of these areas are portions of towns surrounding major employment centers. Parts of the towns of Oswego, Scriba, Minetto, Volney and Granby would fit this category. Other areas are primarily bedroom communities for Onondaga County including parts of Hastings, Schroepfel, West Monroe and Constantia. Commuting patterns indicate that more than half of the residents of these communities work outside Oswego County. (Map 4)

g. Commercial Strips

In addition to the above community types, commercial strip development has occurred along a number of major highways in the county. Most notable among these are NYS Route 104 East in Oswego, NYS Routes 481 and 3 in Fulton, NYS Route 49 in Central Square and West Monroe, U.S. Route 11 in Hastings and NYS Route 13 in Pulaski. Less intensive strip commercial development exists on NYS Route 104 West in Oswego, County Route 57 south of Phoenix, and NYS Route 3 in Port Ontario.

h. Industrial Parks/Concentrations

Major industrial hubs in the county exist on the northeast side of the City of Oswego extending along Lake Ontario into the Town of Scriba, and in the City of Fulton and Town of Volney. Industrial parks have been or are being developed in the towns of Schroepfel and Volney and the City of Oswego.

C. TRENDS

1. National

a. Industrial Land Use

During the past ten years the face of industry and the way industrial development occurs has changed. Throughout the county there has been a decrease in manufacturing jobs and labor intensive employment, thus forcing the downsizing of many industries. Many communities are faced with land use issues which involve the reuse of industrial facilities. Reclamation of urban industrial areas or "brownfields" are part of this trend. Old industrial sites and factories that occupied large tracts of land are usually located on major waterways and are close to population centers. These areas are being reclaimed as revitalized buildings, greenspace and parks and can become large public open space and infill projects that complement a community's physical and social connectivity.

b. Commercial Land Use

A national and statewide trend for the last twenty years has been the development of malls and commercial strips along major roadways. Most rural areas have not experienced the development of a large mall, however, strip retail developments line many of our State and local highways. This trend is tied directly to our society's dependence on the automobile. Strip and mall development cater to the mobile customer by providing parking and access designed for the automobile.

In the last five years this trend has started to change. The plaza and shopping center concept seems to be coming back. As of late, new retail commercial development is embracing the concepts of shared parking and access while maintaining individual store access.

Another commercial trend is the development of the "Big Box" retail/wholesale store. The number of these stores has increased dramatically in the last ten years throughout the country. The acceptance of these large discount retailers has varied from community to community. Some communities welcome these large retailers while others try to prohibit their development, citing concerns that these developments have an adverse effect on small downtowns and are not aesthetically desirable.

Downtown and main street revitalization is a trend which has been a focus on the national level for over a decade. Downtown revitalization involves restoring the economic and historic fabric of a community. The implementation of facade improvement programs, development of streetscapes, use of infill techniques and mixed use development are tools used to revive downtowns as well as smaller local main streets.

c. Residential Land Use

The national and statewide residential land use trend has been the development of single family subdivision tract housing. Affordable housing in urbanized areas has typically been provided by multi-family apartments or townhouse units. In more rural areas, the affordable housing need has increasingly been addressed by purchasing or renting mobile and manufactured housing.

The concept of clustering has become popular in high growth areas and areas which have sensitive natural features. Clustering is a method of grouping residential and/or commercial development on a smaller portion of the site and leaving the remainder of the site as open space.

d. Community Design

During the last decade there has been a return to the more traditional development style known as neo-traditionalism or the "new urbanism," which is the return of the traditional community design. This borrows and builds upon local and regional characteristics like local building material and styles and is contrary to the "Anywhere USA Syndrome," where single family housing tracts are the same in Central New York as they are in other parts of the country.

Another community design trend is to recognize the importance of human scale. Human scale focuses on the needs of people as opposed to the needs of the automobile. Thus, human scale design often encourages smaller pavement widths for streets and encourages the incorporation of sidewalks, bike paths and street trees. This concept also incorporates elements of the natural environment into development design by leaving mature trees instead of completely clearing a site and then planting trees that require 20 or more years to mature.

Aesthetic stormwater management is becoming popular in more progressive areas where stormwater is diverted into reflective pools, man-made ponds and wetlands thus removing pollutants before they enter our surface and groundwater. This method makes stormwater treatment a visually pleasing design element in the landscape while at the same time providing open space and habitat.

2. Local Trends

a. Industrial

Local industrial land use trends have mirrored the national trends. Oswego County has experienced downsizing and the challenge of reuse of large industrial complexes, such as the Miller Brewing plant. However, Oswego County continues to be a leader in the energy and recycling industries. It also retains strong food processing, paper/packaging, metals and machinery manufacturing sectors.

b. Residential

In 1988, approximately 203,052 acres of land in Oswego County was assessed for residential uses. The total acreage increased to 218,818 in 1995, an increase of 15,766 acres in 7 years. The total percent of land used for residential purposes in the county in 1988 was 33.9% and in 1995 the percentage increased to 36.3%, an increase of 2.4%.

Increasing suburbanization will obviously continue to be a major land use trend into the foreseeable future. Reliance on the automobile has created concerns with respect to parking and access, non-pedestrian oriented communities and higher costs associated with highway and infrastructure maintenance. Increasing suburban populations make it difficult for centralized neighborhoods and commercial land uses to maintain a viable business in downtowns. More and more people are building on the fringes of population areas moving further into the countryside. This has caused concern Statewide as suburban areas spring up placing increasing burdens on school systems, infrastructure and natural resources. The recent financial burdens on school districts such as Central Square are examples of this impact. At the same time taxpayers head to polls to vote down increasing school expenditures, local towns are reporting increasing numbers of building permits. A total of 54 new residential permits were issued in the towns of Constantia, Hastings, and West Monroe in 1995, 67 in 1994, and 66 in 1993.

This reflects a trend statewide that suburban sprawl is continuing even though overall population is growing slowly or not at all.

c. Commercial

The percentage of land in the county assessed for commercial purposes increased .3% from 1988 to 1995. Approximately 1.8% of the land in the county was devoted to commercial uses in 1995 and the commercial acreage increased to 11,033 acres.

During the last three years there has been an increase in home occupations and small businesses which operate from the same lot as the principal residence. The home business trend is relatively new. Over time this may tend to blur the distinction between residential and commercial land use.

Small business is an important part of many local communities in Oswego County. Appropriate location and adequate site design are necessary to insure business success. Development of compact business districts is more efficient in terms of providing necessary public services and more effective in attracting clients or customers.

c. Agriculture

Many communities throughout the State and locally are faced with a declining land area for field agriculture. According to the New York Agricultural Statistics for 1993-1994, 4,000 farms have gone out of production accounting for approximately 500,000 acres that no longer produce feed crops or dairy products, much of which will be targeted for future suburban development. Although property taxes have increased about 48% since 1987, farm production expenses increased by 15% between 1987 and 1992. An important issue with respect to this trend is that profitability to the farmer is more easily obtained through sale of his land than by farming. Many communities are realizing that agricultural open space planning is important in order to maintain their economic and environmental health.

From 1988 to 1995, the percentage of land being assessed as agricultural has decreased approximately 4.45% in Oswego County. In 1988, approximately 119,095 acres were recorded and in 1995 the acreage decreased to approximately 93,022 acres for a loss of approximately 26,073 acres assessed as agricultural. In 1988, 19.9% of the total land in Oswego County was used for agricultural uses and in 1995 the percentage of agricultural lands decreased to 15.4%. These numbers when compared to the 1992 Census of Agriculture show a declining trend in agricultural operations. According to the Bureau of the Census 826 farms were in operation in Oswego County in 1982 as compared to 659 in 1992.

C. OPPORTUNITIES AND CONSTRAINTS

1. Natural Constraints

Perhaps the largest constraint to developing land in Oswego County is the limiting capacity of the soils in the county. Soils are the determining factor for the suitability of private septic systems and their effects on local water quality. Increasing trends toward suburbanization will continue to be a concern in areas without public water and sewer systems well into the next century. Many areas of the county are unsuitable for development because hydric soils are prevalent. Hydric soils are closely associated with river and stream corridors, coastal areas and the abundant wetlands in the county. These environments normally contain diverse ecosystems associated with shoreline and wetland conditions. Although their scenic beauty and amenities may often make these the most desirable areas for development, they are also most important for wildlife habitat, open space and recreational endeavors. Where possible, undeveloped areas with the most severe restrictions for development should be considered for appropriate natural resource based uses, while areas with appropriate infrastructure will have more potential for future development.

2. Transportation and Infrastructure

Along with the constraints of soils one must factor in the transportation system and sewer and water infrastructure when planning for future land use policy. Continued development in areas where commercial centers with good highway access already exist will be less costly. Many of these areas have sufficient levels of water and sewer service. If we emphasize improvements to existing commercial centers and aid in reestablishing or improving them as places to live and to work, growth will occur in proximity to these commercial centers, fostering economic development, allowing investments in upgraded sewer and water infrastructure, and reducing the costly burden of developing expensive infrastructure after development occurs.

3. Suburbanization

With respect to residential development, it should be recognized that suburbs can decline for the same reasons as urban areas. Aging housing, lack of private investment, and poor local image are all problems that are associated with the decline of suburban neighborhoods. The communities that do best have encouraged public transportation, mixed land uses and well designed pedestrian thoroughfares. Most importantly the suburban areas that have become the most economically viable have identified and maintained their sense of place which throughout most of Oswego County is closely tied to the rural character of the county.

In many suburbanizing areas, for example, a local community will see a new 50 home residential development as an opportunity to increase their "tax base." These 50 hypothetical new homes will be placed on 1/2 to one acre lots and will be developed on an old farm with access by a rural road. After the project is developed traffic increases, and demand for improved roads, better schools, bussing, libraries, fire and ambulance services follows. That these hidden costs are associated with the development is often overlooked. Five years later the developer decides to add 50 more homes to the tract. The perception is that this will also increase the "tax base." By this time the local school is at maximum capacity, school referendums are rejecting calls for increased budgets, fire and ambulance service needs improvement, wells are exhausted and septic systems may be leaching higher levels of nitrates and contaminants into the local groundwater supply. At this point, increasing expenditures make local officials view the construction of the new 50 units as a short-term source of tax revenue, but the cycle continues and before long the local government is faced with the costly construction of better roads, new public sewers and water, a new school, better emergency response facilities and a host of other costly projects that lead to increasing taxes for local residents.

This scenario is typical of many rural communities and foresight can certainly help to alleviate some of the problems associated with unplanned development, not to mention the burden that the development may have on the rural character of the community.

4. Natural Resources

Perhaps the most striking opportunity for Oswego County is its rich heritage with respect to its natural resources, especially its water resources. The over 200 miles of shoreline areas in the county provide a great opportunity to capitalize on waterfront areas, ranging from the pristine landscapes of the upper Salmon River to the urban economic opportunities along the Oswego Canal. Water is the key component to the opportunities of the county much as it has always been. Water is important to industry as well as wildlife and provides the framework for developing the county's mix of developed and rural areas. A greenway approach offers the opportunity to strengthen the natural and historical heritage of the past and provide a bright economic future and quality of life to county residents.

Greenways are a means by which to link commercial and population centers with parks, trails, waterways and open space corridors in a comprehensive and integrated manner. This provides a "system" of interconnecting greenspaces. This greenway approach is an excellent opportunity for the county to work toward the achievement of many goals and objectives in this plan in a step by step manner.

5. Rural Character

The rural character of the county also provides a number of opportunities to people who want to live in a country setting. The abundance of open space in the county affords the ability to deal with increasing

suburbanization in a responsible manner by utilizing the latest techniques in open space planning, storm water management and development design, as well as planning for future infrastructure improvements in a well organized, comprehensive and cost effective manner.

One of the easiest ways that value can be added to future development is the incorporation of performance standards for subdivisions and local roads. The street can become a means of creating a sense of neighborhood. Rather than streets devoid of pedestrians or ones with a dangerous mix of pedestrian and autos, streets can be designed with pedestrian walkways and site amenities like lighting and landscaping that will enhance the safety and visual character of development. Street tree programs and streetscape improvement programs are key elements to enhancing neighborhood character.

6. Heritage Values

Much opportunity also exists in the many downtown buildings and historical structures throughout the county. The heritage value of old buildings, districts and corridors can serve as an attraction to visitors and shoppers, and thus, to small businesses. The overriding principle for achieving the objectives of the land use section of the plan is to relate new development to existing natural conditions and patterns of development in the county.

Conservation and proper use of agricultural lands is supported by this plan. The natural interests of the farmer or forester in conserving the land upon which their livelihood depends, can serve as a guide for long term, county-wide interest in rural land conservation.

7. Water Quality

Specific recommendations with respect to maintaining and improving water quality county-wide are found throughout this plan. Open space recommendations, for example, are directed toward retaining public access to shorelines and toward conservation easements and buffer zones for all waterways and lakeshores. Emphasis on low impact recreational use of the Salmon River Corridor, Lake Ontario Coastal Zone and Oneida Lake north shore should be balanced with higher impact recreation use of Lake Ontario and the Oswego River Corridor at specific locations, especially in the cities of Fulton and Oswego. Industries should be encouraged to locate in designated industrial parks or planned industrial districts with public infrastructure near major roads and transportation corridors. Urban and large scale suburban development should be directed to areas that have public water and sewer or have the potential for providing public infrastructure in a cost effective manner.

D. GOALS, OBJECTIVES AND STRATEGIES

GOAL: ENSURE SUSTAINABLE LAND USE DEVELOPMENT THAT WILL MEET EXISTING NEEDS AND THE NEEDS OF FUTURE GENERATIONS.

OBJECTIVE 1: Encourage development of a wide range of housing opportunities in locations which efficiently utilize infrastructure, provide access to services and job opportunities, and do not degrade natural resources.

STRATEGIES:

- a. Work with towns with no land use regulations to develop and implement basic local land use plans, policies, model ordinances, and enforcement mechanisms.
- b. Encourage local governments to provide for higher density or clustered development, especially in areas where sufficient infrastructure exists or can be provided at a relatively low cost.
- c. Target plans for cost effective infrastructure extensions to areas near existing infrastructure in communities experiencing the greatest suburban growth.

	d.	Develop a specific plan for a selected residential project to illustrate sustainable methods of development as a model for future development.
OBJECTIVE 2:		Develop an integrated open space system which incorporates working landscapes, significant resource areas, greenways, major public lands and trail corridors.
STRATEGIES:	a.	Review local land use regulations and recommend changes that will complement the greenway system.
	b.	Assist local communities with plans for specific projects which enhance identified greenways, recreational areas, and open space systems.
	c.	Review all delinquent tax parcels before they are sold to determine whether they offer potential to contribute to the open space system.
OBJECTIVE 3:		Diversify the local economy by coordinating infrastructure and telecommunication development in major employment centers, reinforcing cities and villages as commercial service centers, creating a positive environment for small business development, and enhancing the economic value of our natural resources.
STRATEGIES:	a.	Target areas for future commercial and industrial use based on existing land use, natural conditions, infrastructure and services.
	b.	Provide technical assistance to local communities in incorporating the appropriate location and design standards for commercial/industrial uses into local land use plans and ordinances.
	c.	Provide technical assistance to local governments to develop efficient regulatory procedures.
	d.	Identify resource-based, recreation and tourism, and other low intensity business uses which are appropriate in rural areas.
	e.	Create public/private partnerships to promote businesses that will enhance economic use of the county's natural resource base.
	f.	Develop new tourism attractions at locations that will provide economic benefits and opportunities to local residents.
OBJECTIVE 4:		Promote stewardship of our natural resources by managing public and private lands for a sustained yield of natural products, taking an ecological approach to local planning, encouraging the continuation of working landscapes, preserving the most significant natural areas, and promoting Oswego County's natural attributes.
STRATEGIES:	a.	Sponsor workshops to promote sustainable concepts of development and progressive development techniques.
	b.	Develop environmental education and research programs to enhance knowledge and awareness of the local environment.
	c.	Sponsor workshops for homeowners along greenways to illustrate the techniques and benefits of ecological site planning.

OBJECTIVE 5: Encourage management of land use activities to protect surface and groundwater quality and quantity and avoid increasing risks associated with flooding.

- STRATEGIES:**
- a. Promote implementation of guidelines for stormwater management and erosion and sedimentation control.
 - b. Target nitrate loading of groundwater as a determining factor for density of development for lots not served by public water and sewer.
 - c. Require adequate wastewater treatment for homes receiving municipal water service.

OBJECTIVE 6: Promote efficient and safe access to our transportation system through land use management and design approaches which include consideration of all transportation modes and maintain transportation system function.

- STRATEGIES:**
- a. Target major commercial/industrial land uses to sites with the greatest access to transportation corridors.
 - b. Promote land uses and frontage requirements that are consistent with the functional classification of roads.

OBJECTIVE 7: Promote regional solutions to land use and development issues which transcend county political boundaries.

- STRATEGIES:**
- a. Support development of regional data on housing and the economy to better define land use needs within Oswego County.
 - b. Seek linkages with adjoining counties for trail, greenway and open space systems.
 - c. Work with adjoining counties and regional organizations to develop and support watershed approaches to water quality and flood control management activities.
 - d. Coordinate transportation network development and maintenance with State and regional agencies and adjoining counties.
 - e. Support regional initiatives to maintain and improve air quality in order to avoid adverse impacts on Oswego County.

GOAL: MAINTAIN THE RURAL AND SMALL TOWN CHARACTER OF OSWEGO COUNTY.

OBJECTIVE 1: Encourage new development to incorporate traditional village characteristics and/or complement natural landscape features in order to revive a "sense of place" and sense of community by reinforcing traditional development patterns.

- STRATEGIES:**
- a. Develop model streetscape design concepts.
 - b. Promote incentives for use of historic buildings.
 - c. Encourage pedestrian scale multiple use development in central business districts.
 - d. Develop visual preference based design criteria for cities, villages and towns.
 - e. Recommend buffering standards between incompatible land uses and between development and sensitive natural areas.

- f. Recommend use of cluster development and building envelope planning techniques, especially in parts of the county which are experiencing increasing development pressure.
- OBJECTIVE 2: Encourage retail development to occur in Central Business Districts or in planned commercial districts adjacent to cities and villages.
- STRATEGIES:
 - a. Assist municipalities in mapping Central Business District boundaries and adjacent transitional areas to be incorporated into comprehensive plans, development review processes and zoning ordinances.
 - b. Develop and promote model site design standards for planned commercial districts.
 - c. Recommend maximum square footage limits for retail structures outside of planned commercial districts.
- OBJECTIVE 3: Utilize waterfront revitalization plans as a means to strengthen cities and villages as strategic commercial centers.
- STRATEGIES:
 - a. Implement waterfront design guidelines set forth in the State Canal Plan and local waterfront revitalization plans.
 - b. Support specific projects that strengthen linkages between waterfront areas and business districts.
 - c. Develop visual assessments and plans to improve visual access to waterways.

XI. IMPLEMENTATION

A. RESOURCES

Many of the strategies of this plan represent ongoing efforts of county agencies, not-for-profit agencies and other organizations. The hope is that the plan will help to better coordinate and focus these efforts. Other strategies represent new approaches that may involve redirecting current activities or a change in emphasis from current priorities. In all cases responsible agencies have been consulted regarding these changes and have agreed to the plan's strategies.

Where the plan recommends capital investments in facilities or projects, these are either consistent with current levels of investment in these areas or outside sources of funding have been identified which offer potential support for the projects. It is believed that the very existence of this comprehensive plan will enhance grant applications and make them more competitive.

B. IMPLEMENTATION TOOLS

The plan envisions using up-to-date technology and management techniques in order to allow more efficient use of existing resources. This will allow many of the plan's initiatives to be implemented without additional staff.

1. Capital Improvement Programs

Although most units of government have some sort of a capital improvement budgeting process, few have detailed five year capital improvement programs. Developing five year capital investment plans allows better financial planning and, if these plans are shared between school districts, cities, towns, villages and the county, may reveal ways that the burden on taxpayers can be reduced. The plan recommends that all projected capital improvements be included in written five year capital improvement programs.

2. Geographic Information Systems

Geographic Information Systems (GIS) are often described as "computer mapping" but in fact they are much more. They allow not only the storage and retrieval of large amounts of information that can be associated with a geographic location, but also permit complex analysis that otherwise would be impossible or cost prohibitive. The county has a geographic information system which will be expanded to allow it to serve as a tool for more efficient infrastructure and natural resource management, among many other uses. Many of the strategies in the plan are made possible only because this tool is available.

3. Communication and Coordination

The plan suggests several formal arrangements to enhance communication on issues of great importance to the county and its residents. This improved communication will allow better coordination between levels of government, and between the public and private sectors, on important issues like infrastructure and telecommunication development. It is believed that this coordination will lead to tangible savings to both government and private business and will, thus, lower overall costs which are passed on to residents in terms of taxes and fees for services.

C. ROLES AND RESPONSIBILITIES

This plan envisions many partnerships between different levels of government and between the public and private sectors. Appendix XI-A includes signed lead agency commitments for all of the plan's strategies. Many other entities, organizations and agencies have offered their support to implementation of this plan. By identifying a lead agency, duplication of effort will be avoided and accountability assured.

D. FISCAL IMPACT

Throughout the planning process many people have questioned the county's ability to implement the plan's strategies given current fiscal constraints at all levels of government. This plan addresses areas that have been identified as priority concerns of the Oswego County community. In many cases the issues are also of concern nationally. It does not appear that resources to address these important issues will dry up entirely, or in many cases, be reduced at all. In Appendix XI-B we have summarized grant programs and funding sources directly applicable to the strategies of this plan. While Oswego County and its cooperating organizations and communities may not be successful in accessing all of these funding sources, this plan will be extremely useful in helping us to compete for grants. Given past successes, we are confident that many grant applications will be funded. If we can get only our

"fair share" based on our population or relative share of affected resources we will be able to make great strides in advancing all of the strategies of this plan without an increased local tax burden. It will, however, be necessary to strategically use available county and local government resources to provide necessary local matches and staff support needed to successfully obtain grant funds.

Oswego County already makes necessary capital investments through its capital program. Over the five years from 1992 through 1996 an average of \$2.36 million was allocated annually for capital investments in bridge, building, highway, parks and environmental projects. A total of \$4.89 million was budgeted for principal and interest on long term capital debt in 1997. Ongoing capital expenditures of \$7.25 million (including debt service) would represent 5.5% of total county appropriations for 1997. This would seem to represent a modest level of investment in our future. Capital investments in line with this recent experience would appear to be sufficient to maintain the county's proactive role in achieving the goals and objectives of this plan, if programmed in a manner to focus on the plan's objectives and strategically expended to leverage outside funding sources whenever possible. A five year capital program will help to set aside necessary funding and prioritize county capital investments.

E. MONITORING AND EVALUATION

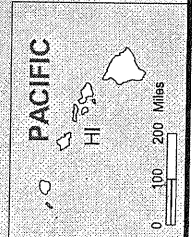
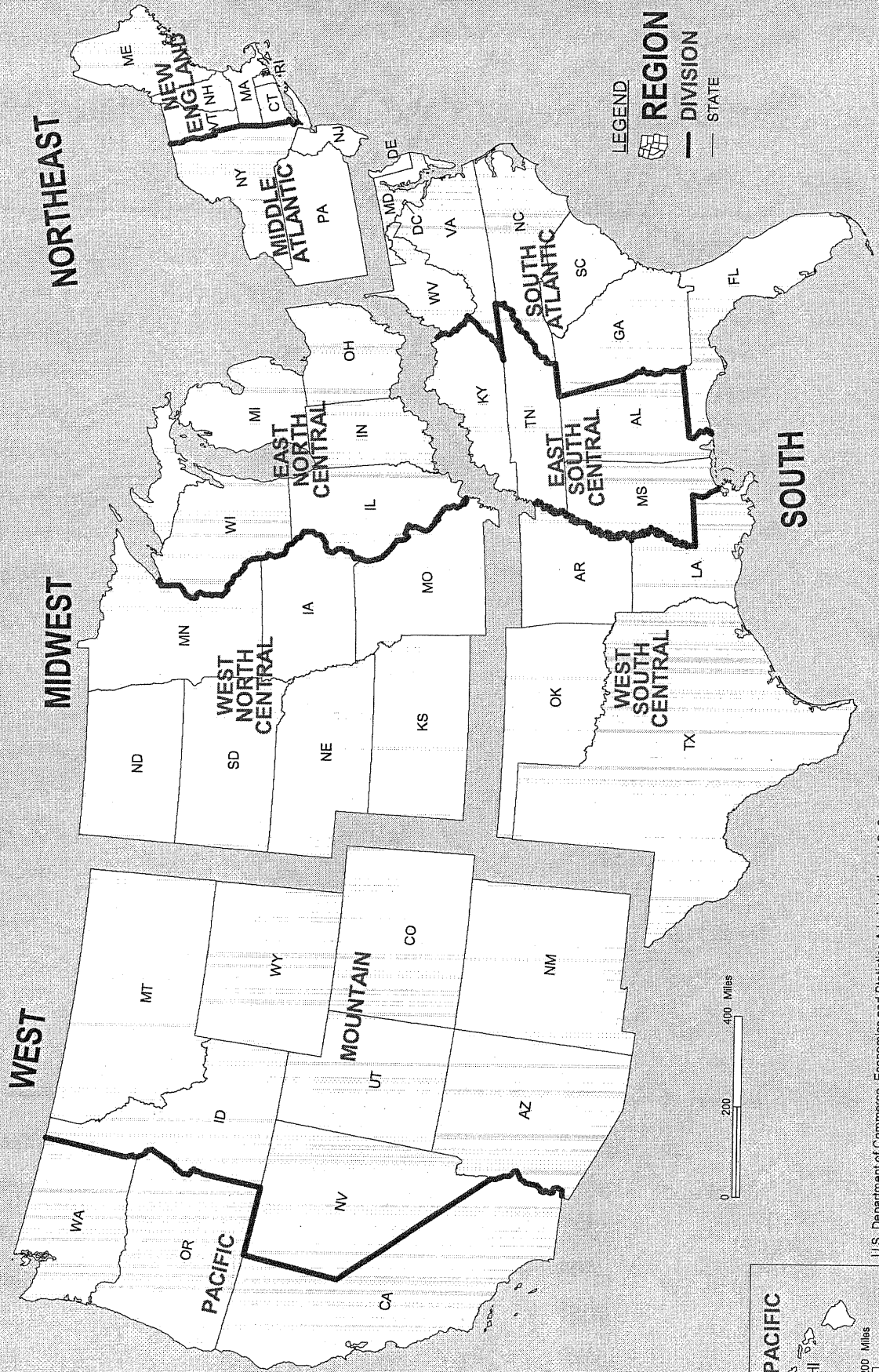
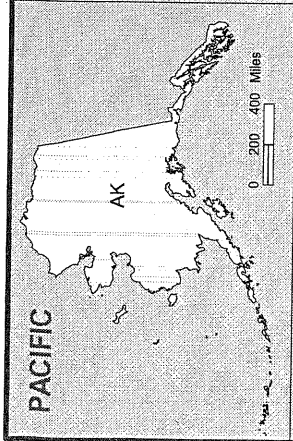
Each section of the plan will be reviewed at least every five years. This will be done on a rotating basis to limit the impact on other staff responsibilities. On average, one or two plan sections will be reviewed and updated each year. In addition, progress in implementing plan strategies will be monitored and reported annually. Effectiveness of the strategies in reaching plan goals and objectives will also be evaluated. In this way, the plan will become a living, evolving document which is always current and responds to changing conditions while maintaining the focus on long term goals.

It is recognized that some elements of this plan are further along in the process of developing effective strategies to reach long term goals and objectives. It is expected that the plan's goals and objectives will be refined and, in some cases, become more focused over time.

**VOLUME II:
APPENDICES**

I. APPENDICES INTRODUCTION (Amended 4/2008)

Census Regions and Divisions of the United States



Census Bureau Regions and Divisions with State FIPS Codes

Region I: Northeast

Division 1: New England

Connecticut (09)
Maine (23)
Massachusetts (25)
New Hampshire (33)
Rhode Island (44)
Vermont (50)

Division 2: Middle Atlantic

New Jersey (34)
New York (36)
Pennsylvania (42)

Region 2: Midwest*

Division 3: East North Central

Indiana (18)
Illinois (17)
Michigan (26)
Ohio (39)
Wisconsin (55)

Division 4: West North Central

Iowa (19)	Nebraska (31)
Kansas (20)	North Dakota (38)
Minnesota (27)	South Dakota (46)
Missouri (29)	

Region 3: South

Division 5: South Atlantic

Delaware (10)
District of Columbia (11)
Florida (12)
Georgia (13)
Maryland (24)
North Carolina (37)
South Carolina (45)
Virginia (51)
West Virginia (54)

Division 6: East South Central

Alabama (01)
Kentucky (21)
Mississippi (28)
Tennessee (47)

Division 7: West South Central

Arkansas (05)
Louisiana (22)
Oklahoma (40)
Texas (48)

Region 4: West

Division 8: Mountain

Arizona (04)	Montana (30)
Colorado (08)	Utah (49)
Idaho (16)	Nevada (32)
New Mexico (35)	Wyoming (56)

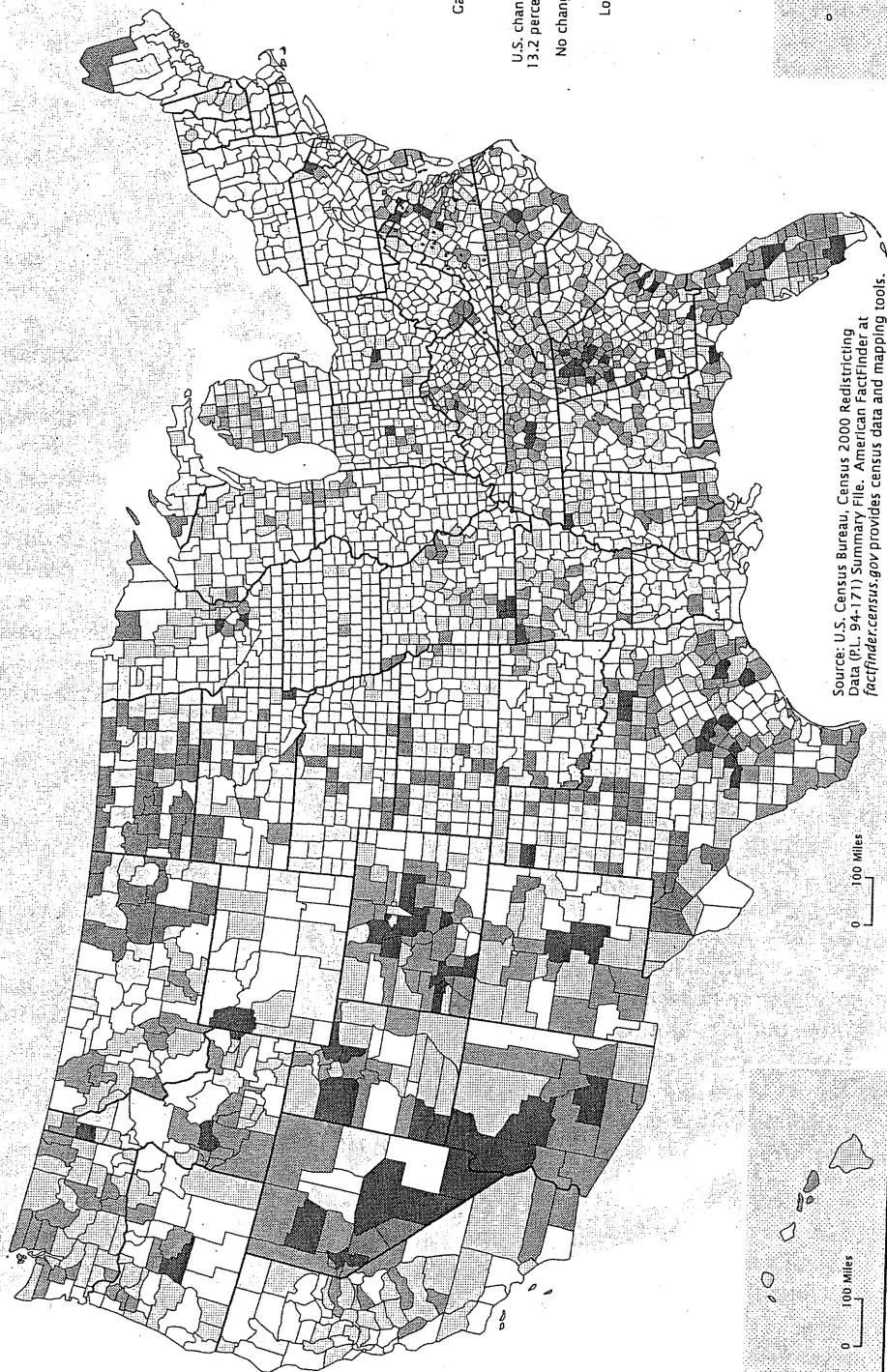
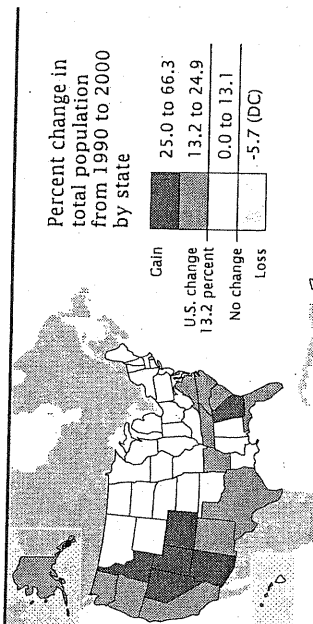
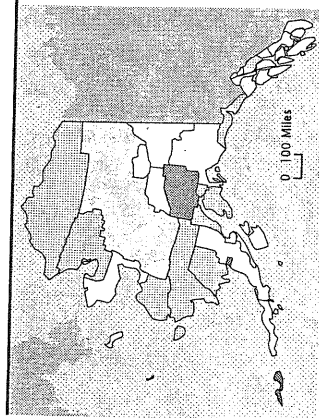
Division 9: Pacific

Alaska (02)
California (06)
Hawaii (15)
Oregon (41)
Washington (53)

**Prior to June 1984, the Midwest Region was designated as the North Central Region.*

Figure 2.
Percent Population Change:
1990 to 2000

(For information on confidentiality protection, nonsampling error, and definitions, see www.census.gov/prod/cen2000/doc/p94-171.pdf)



Percent change in
total population
from 1990 to 2000
by state

Gain	25.0 to 66.3
U.S. change	13.2 to 24.9
No change	0.0 to 13.1
Loss	-5.7 (DC)

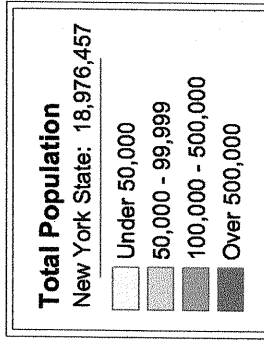
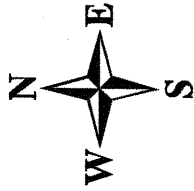
Percent change in
total population
from 1990 to
2000 by county

Gain	50.0 to 191.0
U.S. change	25.0 to 49.9
No change	13.2 to 24.9
Loss	0.0 to 13.1
	-9.9 to -0.1
	-42.3 to -10.0

Source: U.S. Census Bureau, Census 2000 Redistricting Data (PL 94-171) Summary File. American FactFinder at factfinder.census.gov provides census data and mapping tools.

New York State Census 2000

Total Population



Data Source: U.S. Census Bureau, Census 2000
Prepared by: N.Y.S. Department of Economic Development,
State Data Center

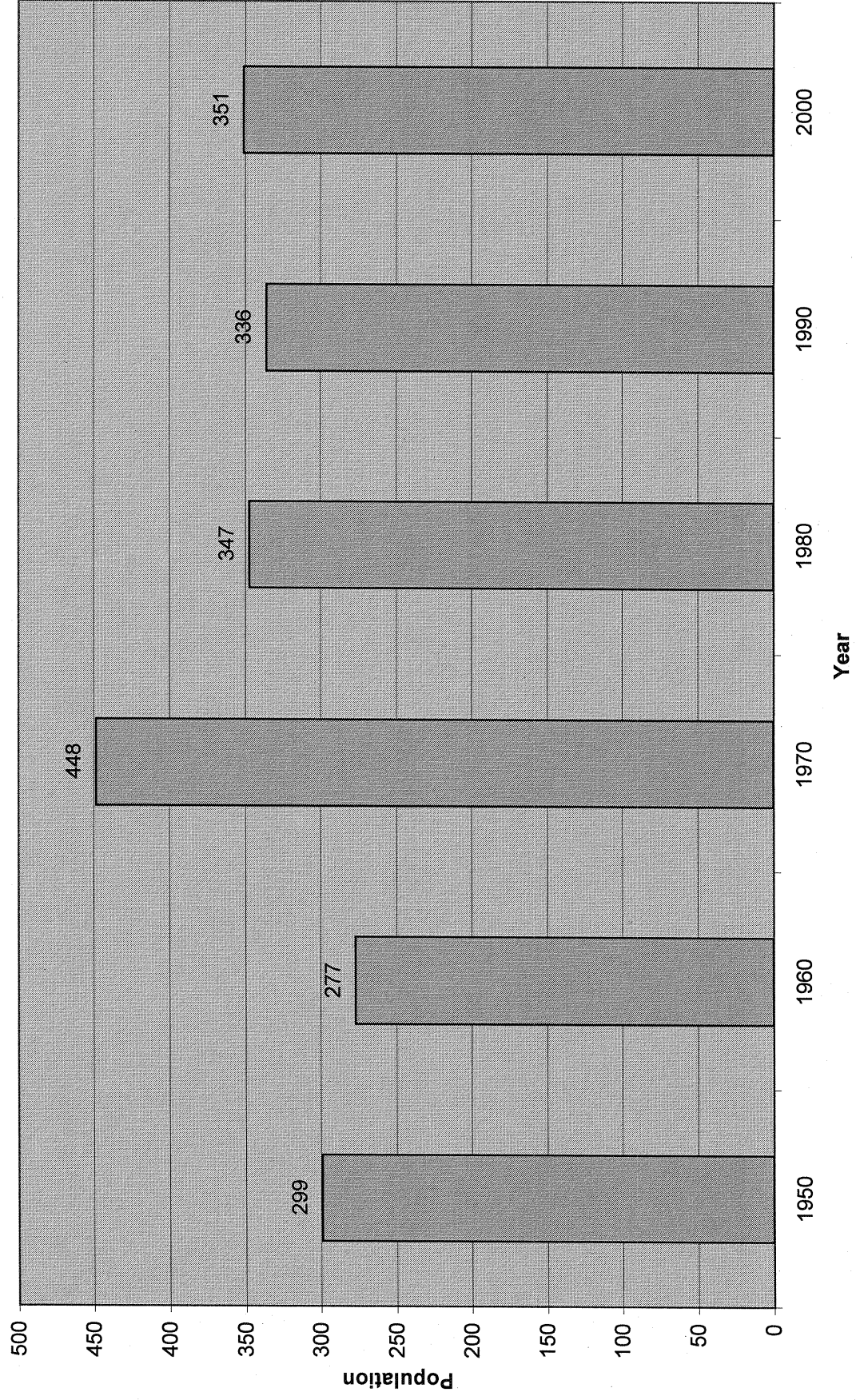
Oswego County, NY

Population Trends

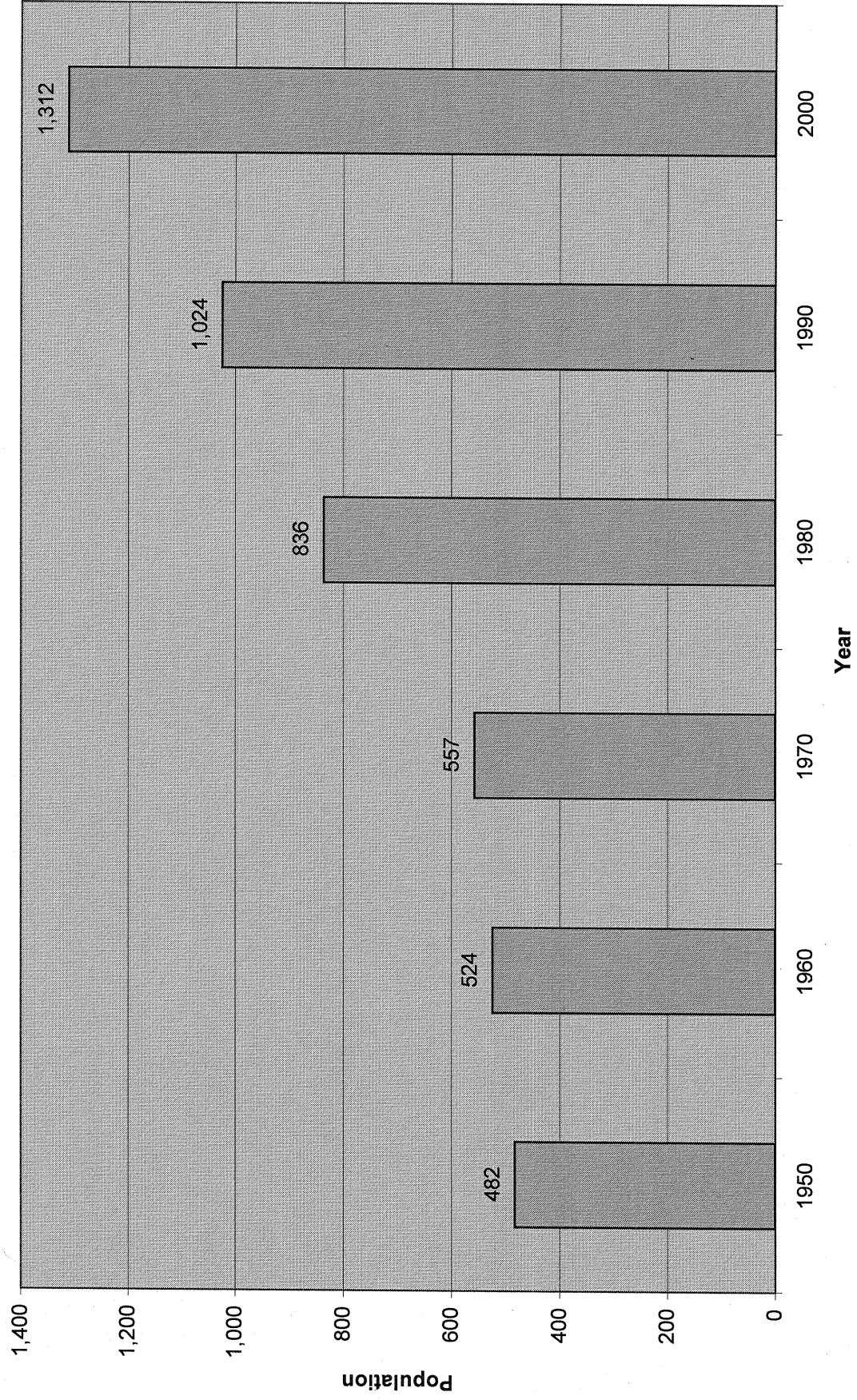
<u>Municipality</u>	<u>Town (T) Village(V)</u>	<u>1950</u>	<u>1960</u>	<u>1970</u>	<u>1980</u>	<u>1990</u>	<u>2000</u>
Albion	T	1,036	1,125	1,452	1,730	2,043	2,083
Altmar	V	299	277	448	347	336	351
Amboy	T	482	524	557	836	1,024	1,312
Boylston	T	302	293	276	390	443	505
Constantia	T	1,947	2,730	3,542	4,312	4,868	5,141
Cleveland	V	555	732	821	855	784	758
Granby	T	2,775	3,704	4,718	6,341	7,013	7,009
Hannibal	T	2,230	2,673	3,165	4,027	4,616	4,957
Hannibal	V	501	611	686	680	613	542
Hastings	T	3,063	4,457	6,042	7,095	8,113	8,803
Central Square	V	665	935	1,298	1,418	1,671	1,646
Mexico	T	3,035	3,435	4,174	4,790	5,050	5,181
Mexico	V	1,398	1,465	1,555	1,621	1,555	1,572
Minetto	T	1,025	1,290	1,688	1,905	1,822	1,663
New Haven	T	1,259	1,478	1,845	2,421	2,778	2,930
Orwell	T	752	663	836	1,031	1,171	1,254
Oswego	T	2,106	2,796	3,583	7,865	8,027	7,287
Palermo	T	1,397	1,663	2,321	3,253	3,582	3,686
Parish	T	1,264	1,439	1,782	2,172	2,425	2,694
Parish	V	574	567	634	535	473	512
Redfield	T	418	388	386	459	564	607
Richland	T	4,067	4,554	5,324	5,594	5,917	5,824
Pulaski	T	2,033	2,256	2,480	2,415	2,525	2,398
Sandy Creek	T	2,354	2,506	2,644	3,256	3,454	3,863
Lacona	V	540	556	556	582	593	590
Sandy Creek	V	708	697	731	765	793	789
Schroeppel	T	4,037	5,554	7,153	8,016	8,931	8,566
Phoenix	V	1,917	2,408	2,617	2,357	2,435	2,251
Scriba	T	2,248	2,489	3,619	5,455	6,472	7,331
Volney	T	3,106	3,785	4,520	5,358	5,676	6,094
West Monroe	T	1,002	1,417	2,535	3,482	4,393	4,428
Williamstown	T	707	739	883	1,008	1,279	1,350
Fulton		13,922	14,261	14,003	13,312	12,929	11,855
Oswego		22,647	22,155	23,844	19,793	19,195	17,954
Oswego County		77,181	86,118	100,897	113,901	121,785	122,377

Note: Town data includes villages, if any.
Source: U.S. Bureau of the Census

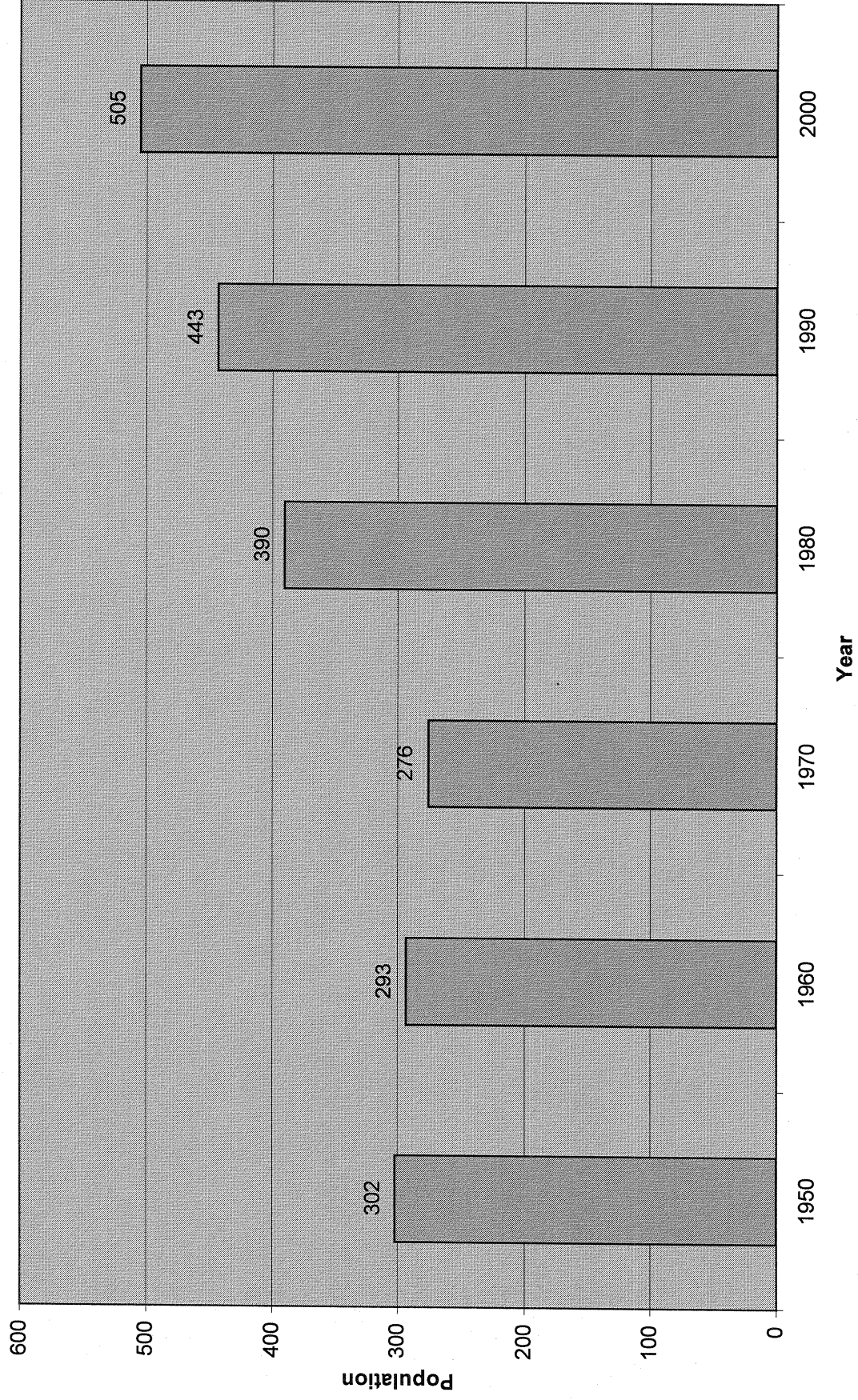
Village of Altmar Population 1950 to 2000



Town of Amboy Population 1950 to 2000

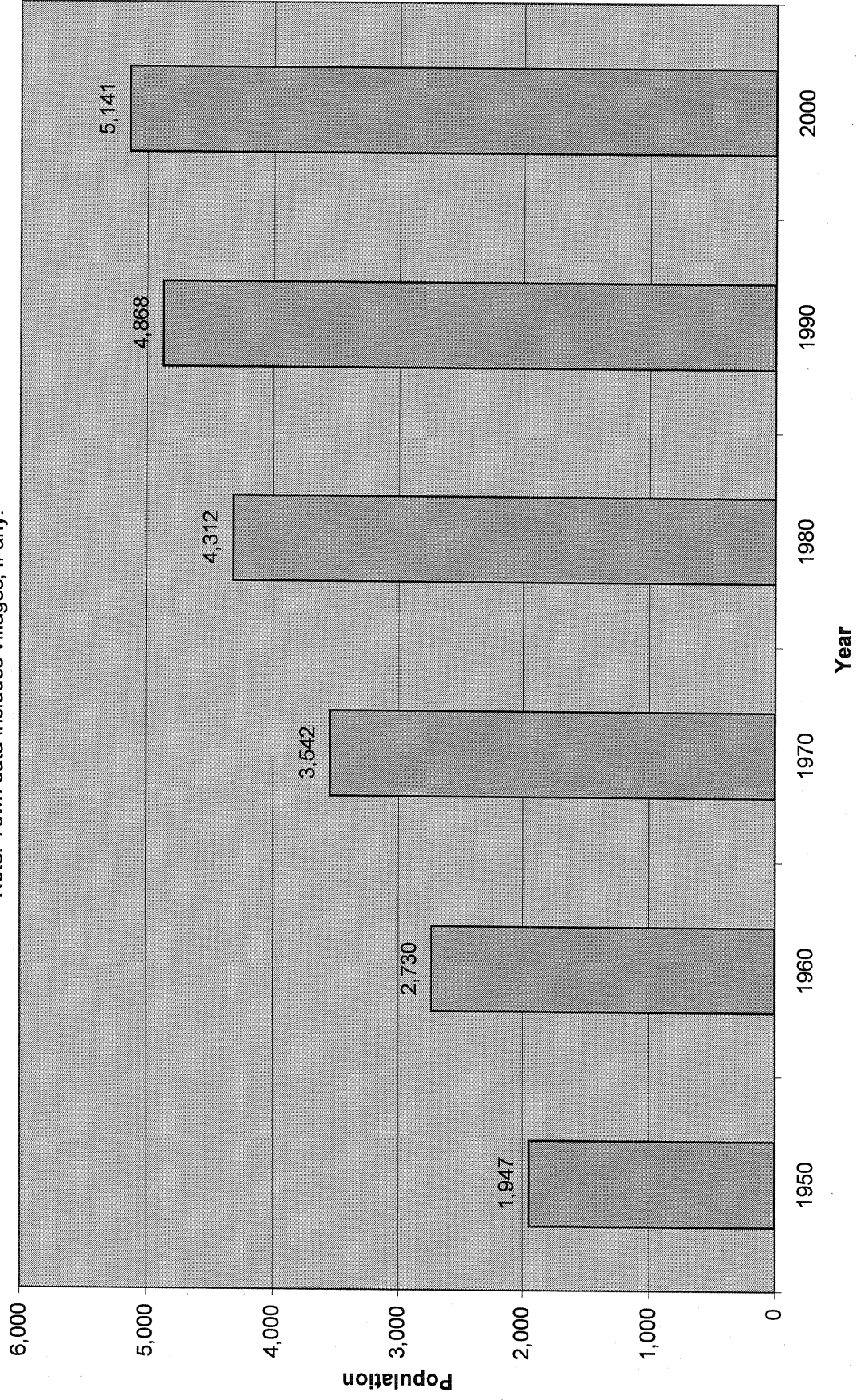


Town of Boylston Population 1950 to 2000

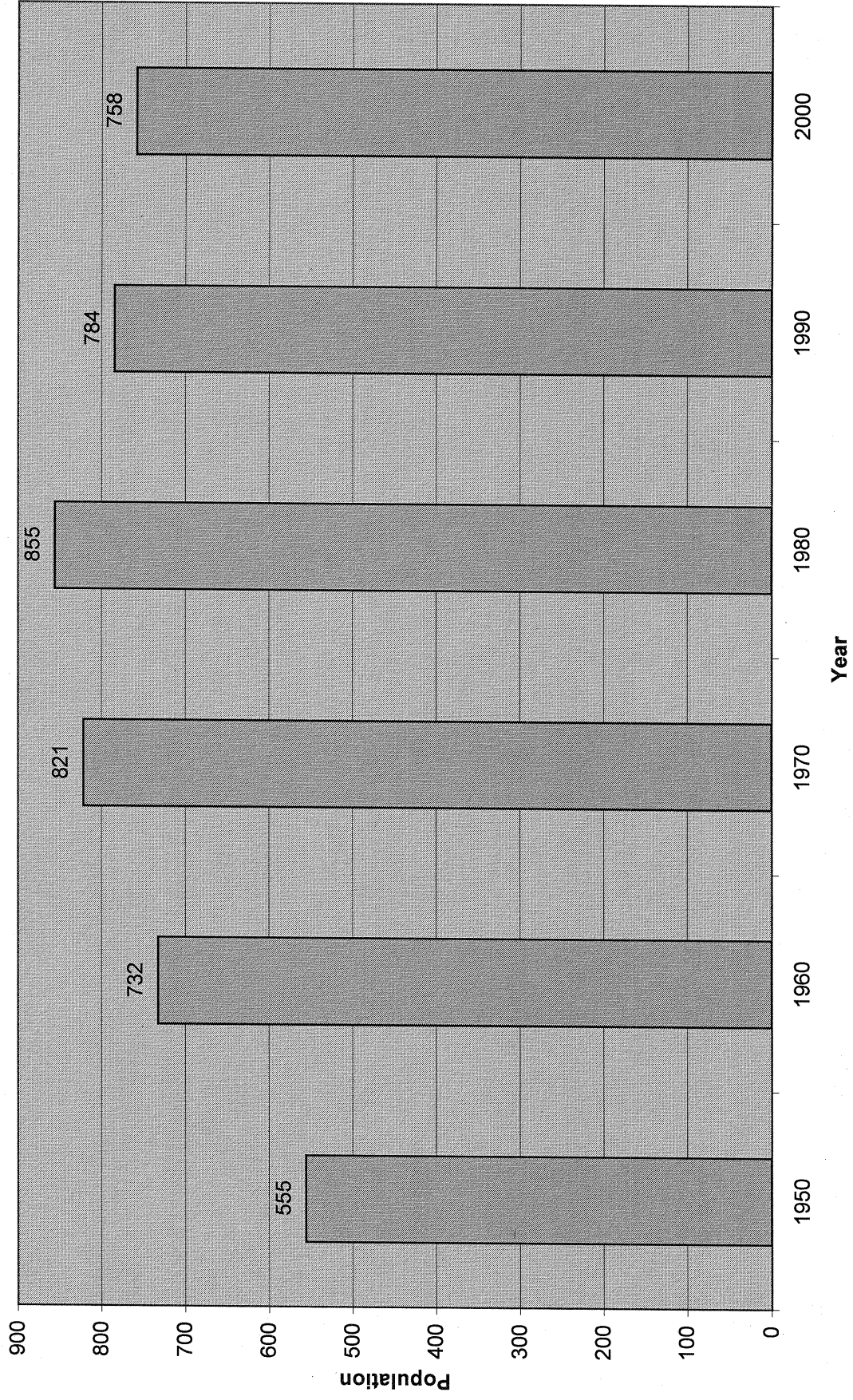


Town of Constantia Population 1950 to 2000

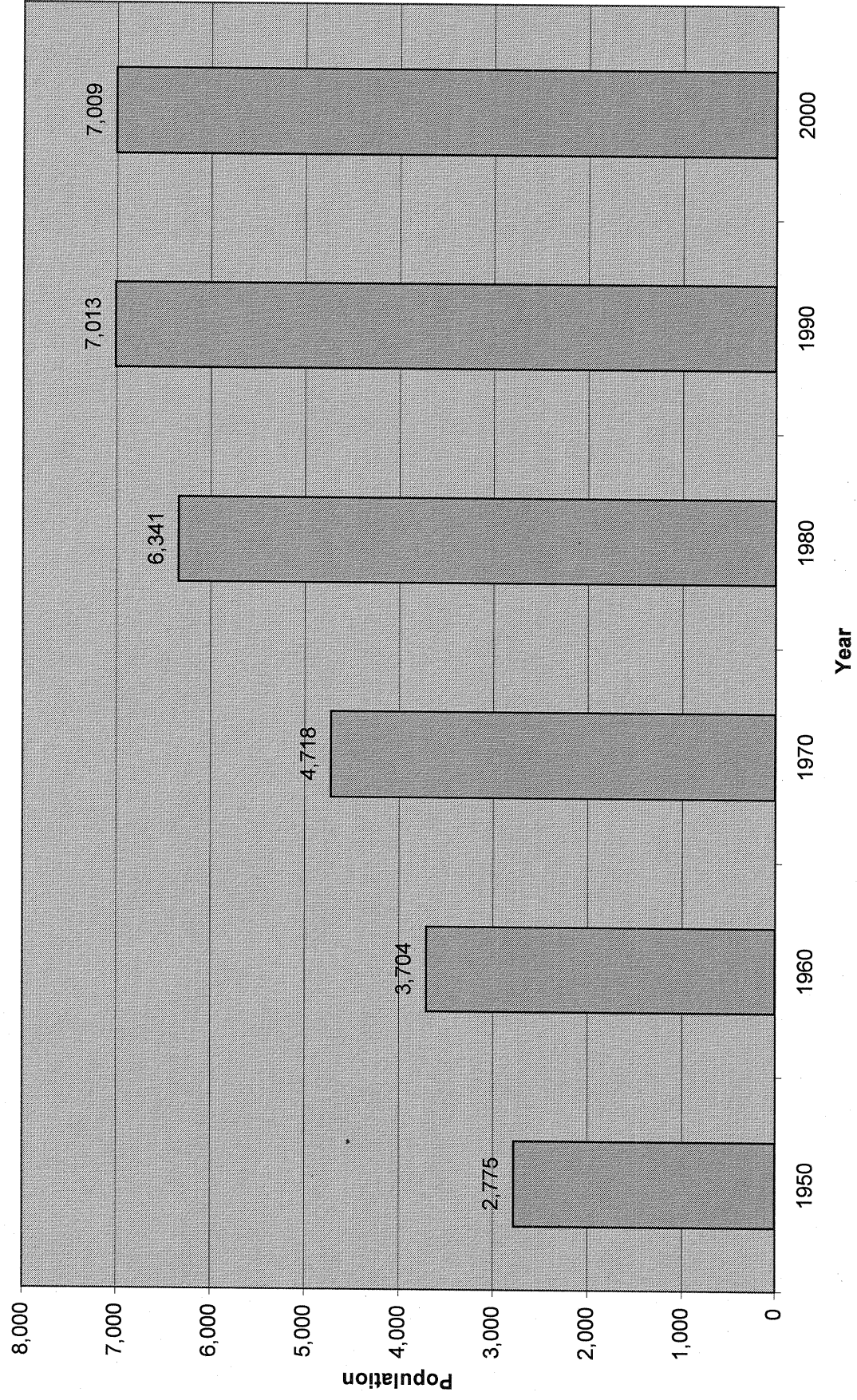
Note: Town data includes villages, if any.



Village of Cleveland Population 1950 to 2000

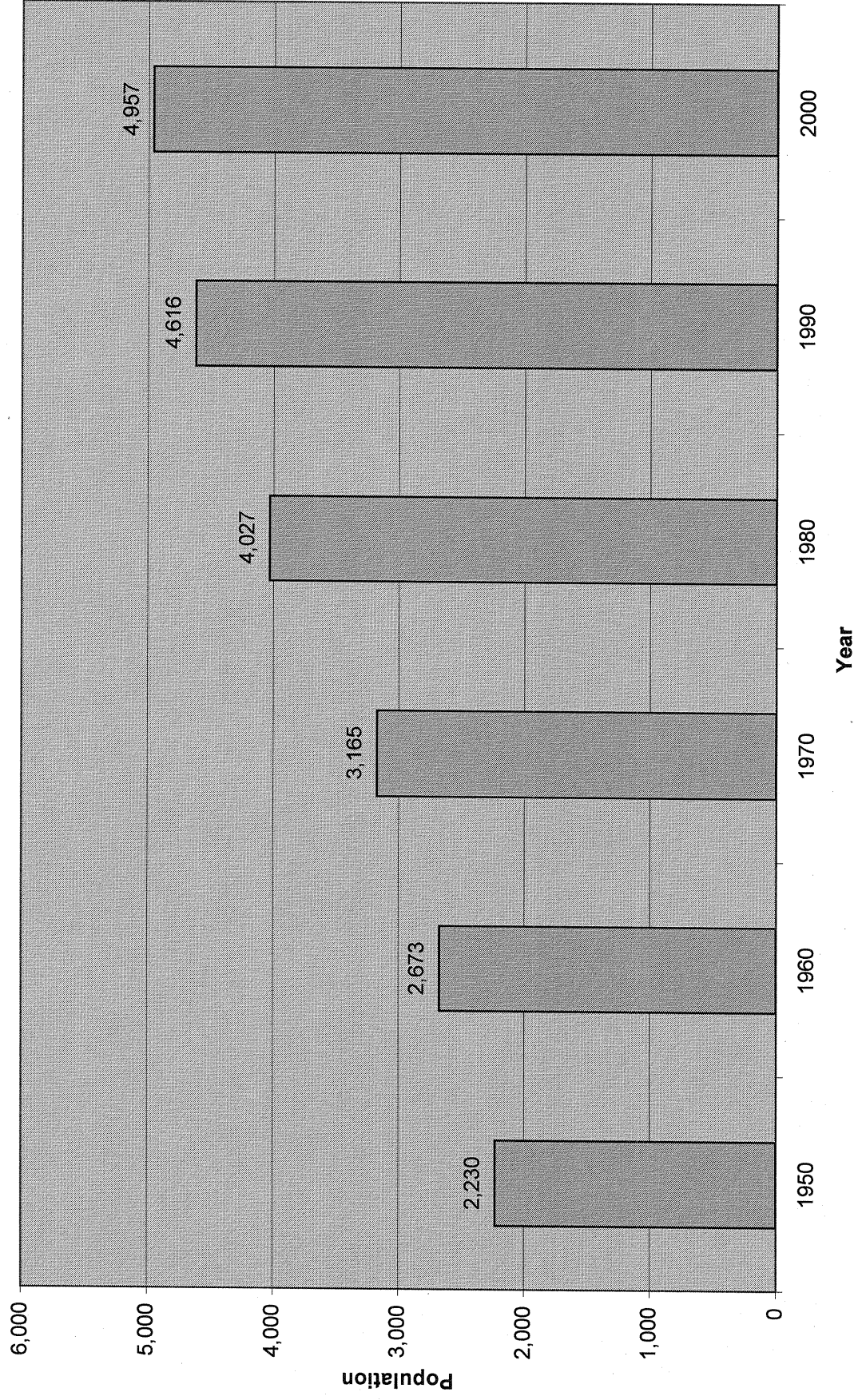


Town of Granby Population 1950 to 2000

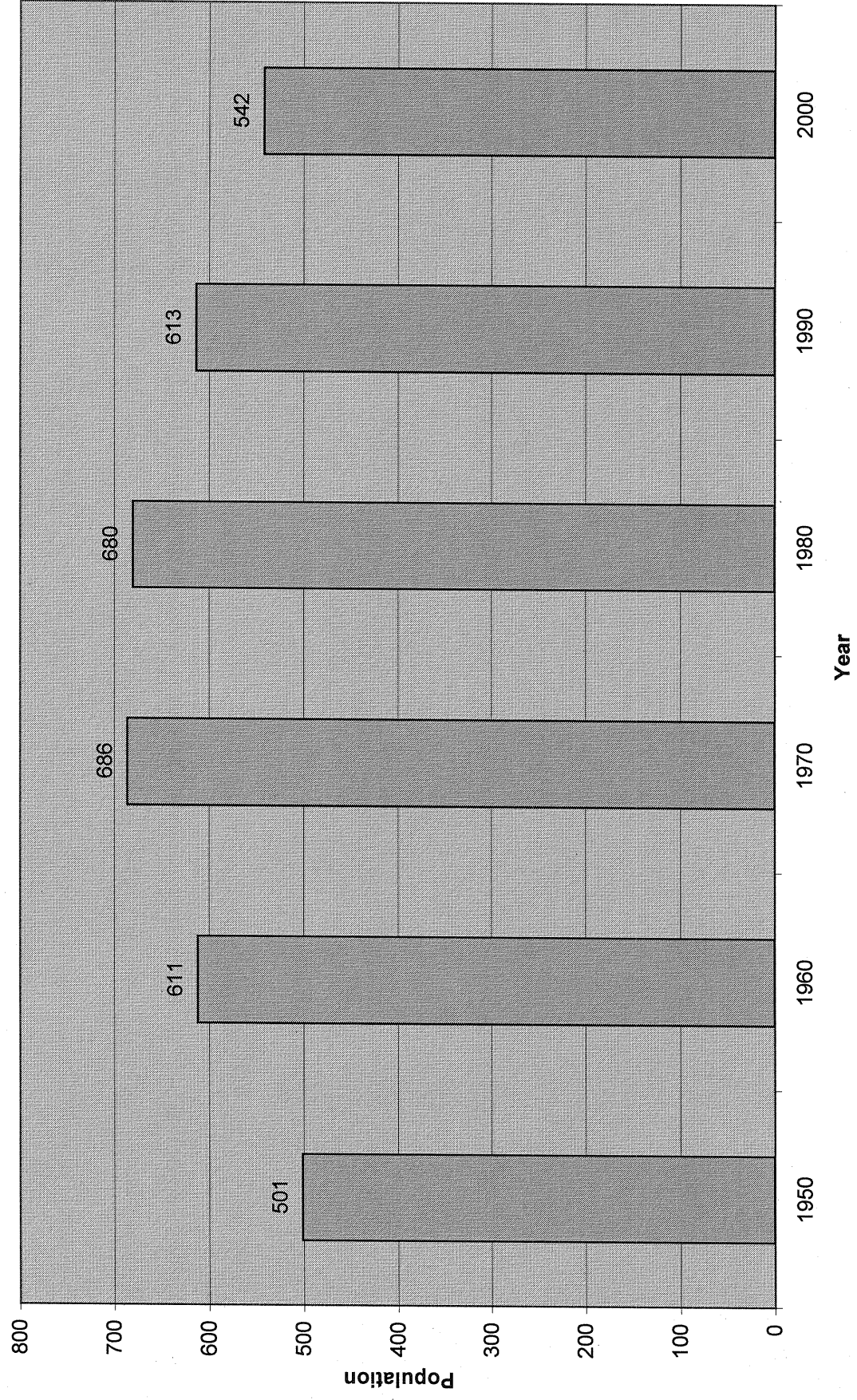


Town of Hannibal Population

Note: Town data includes villages, if any.

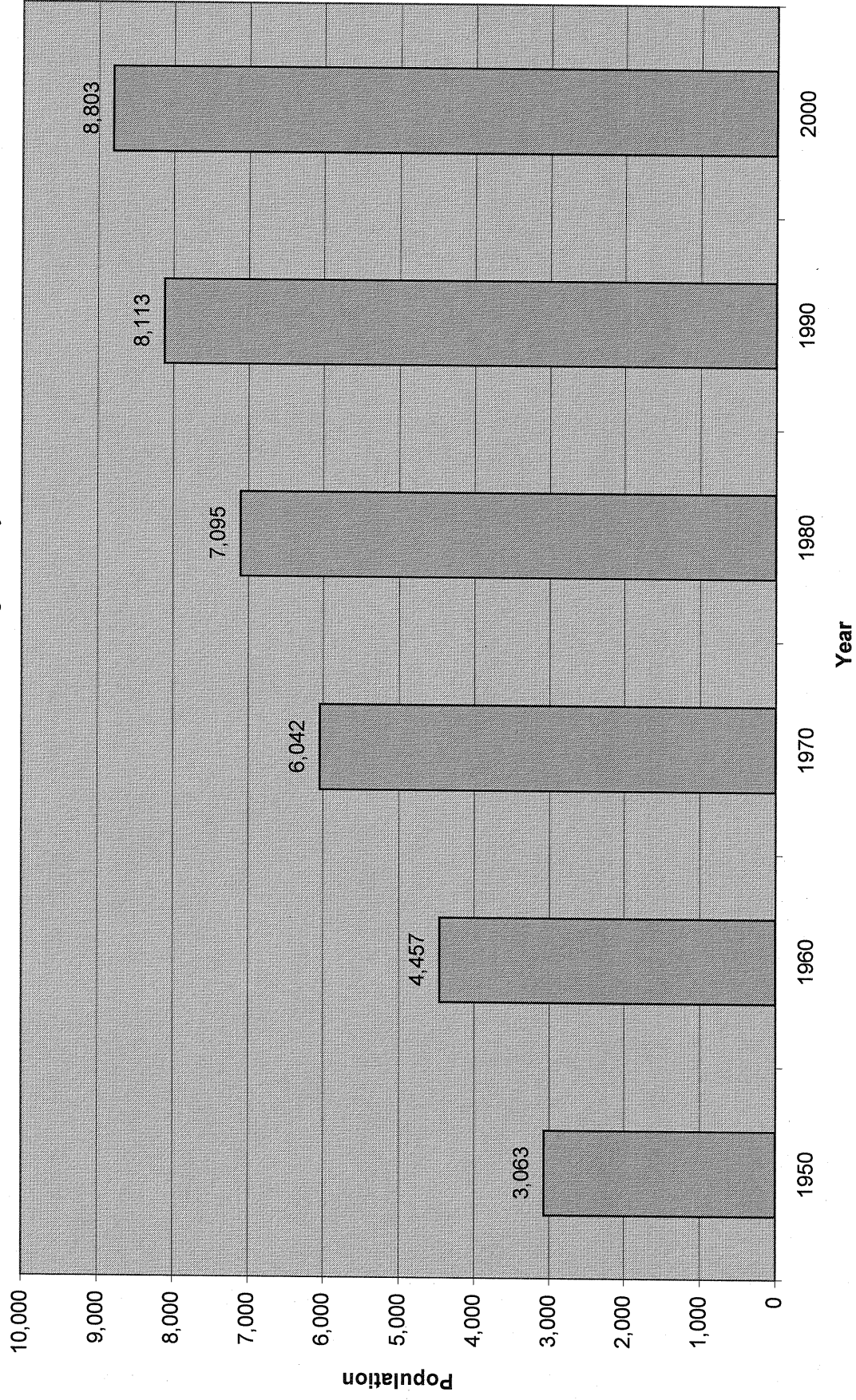


Village of Hannibal Population 1950 to 2000

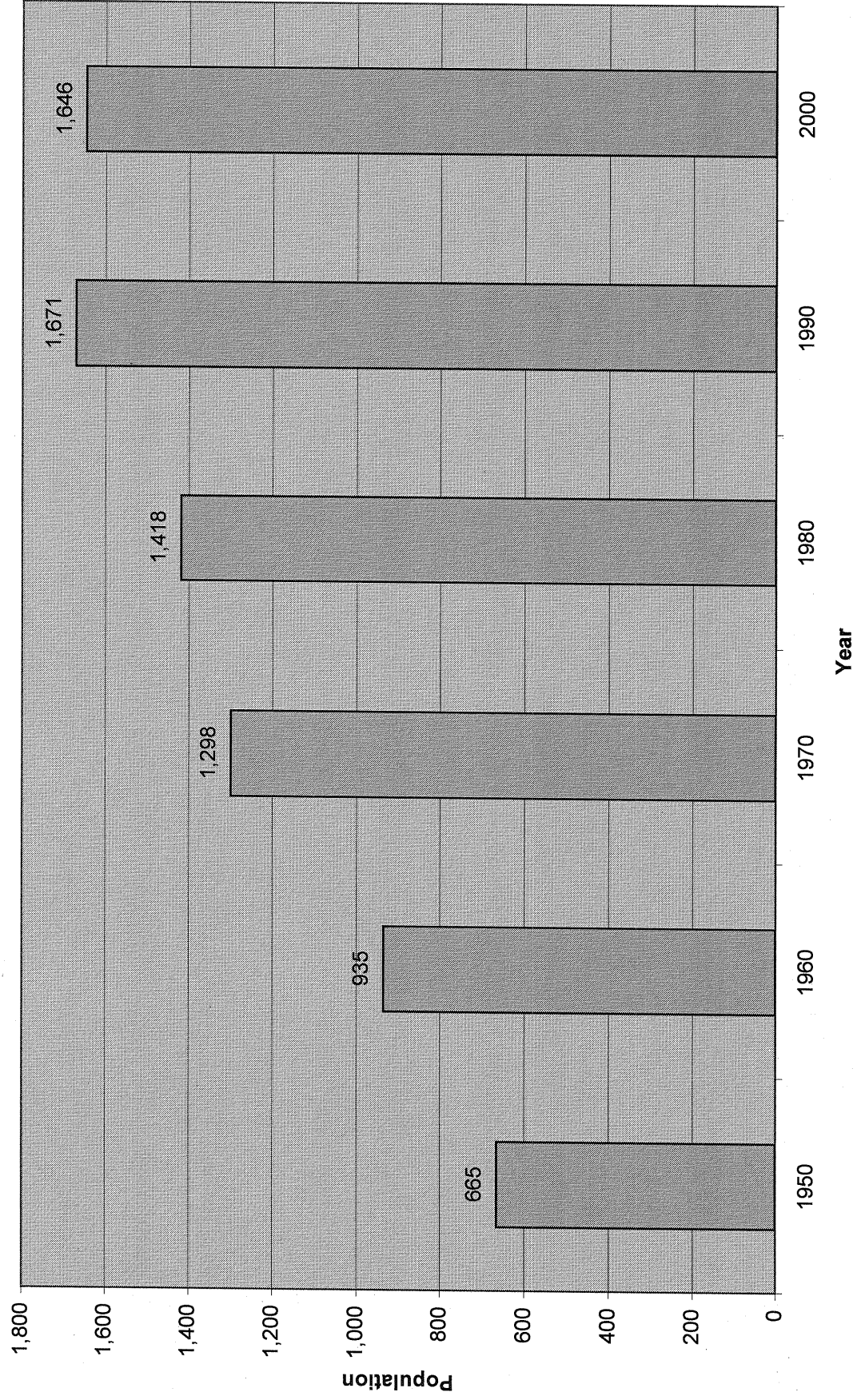


Town of Hastings Population 1950 to 2000

Note: Town data includes villages, if any.

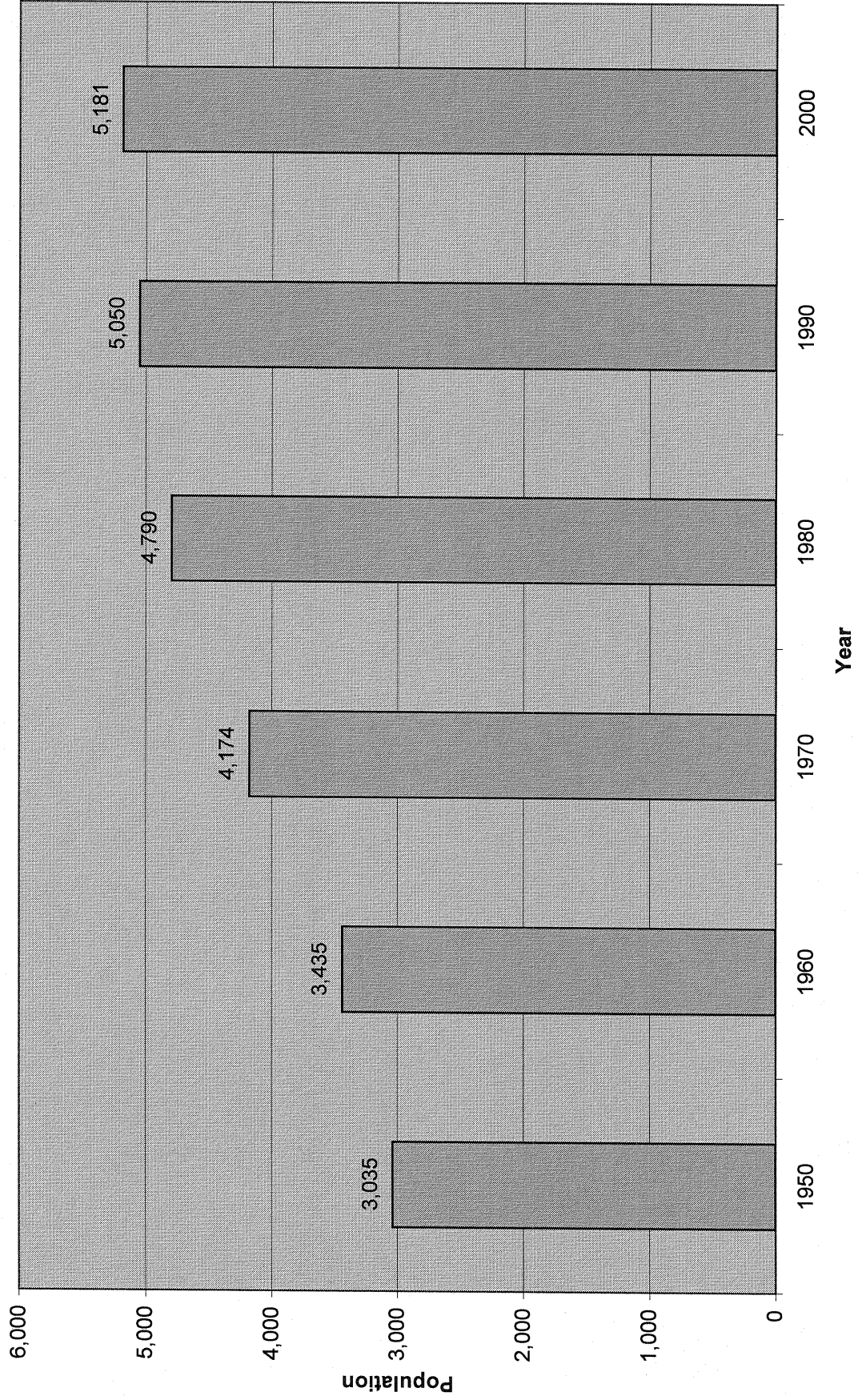


Village of Central Square Population 1950 to 2000

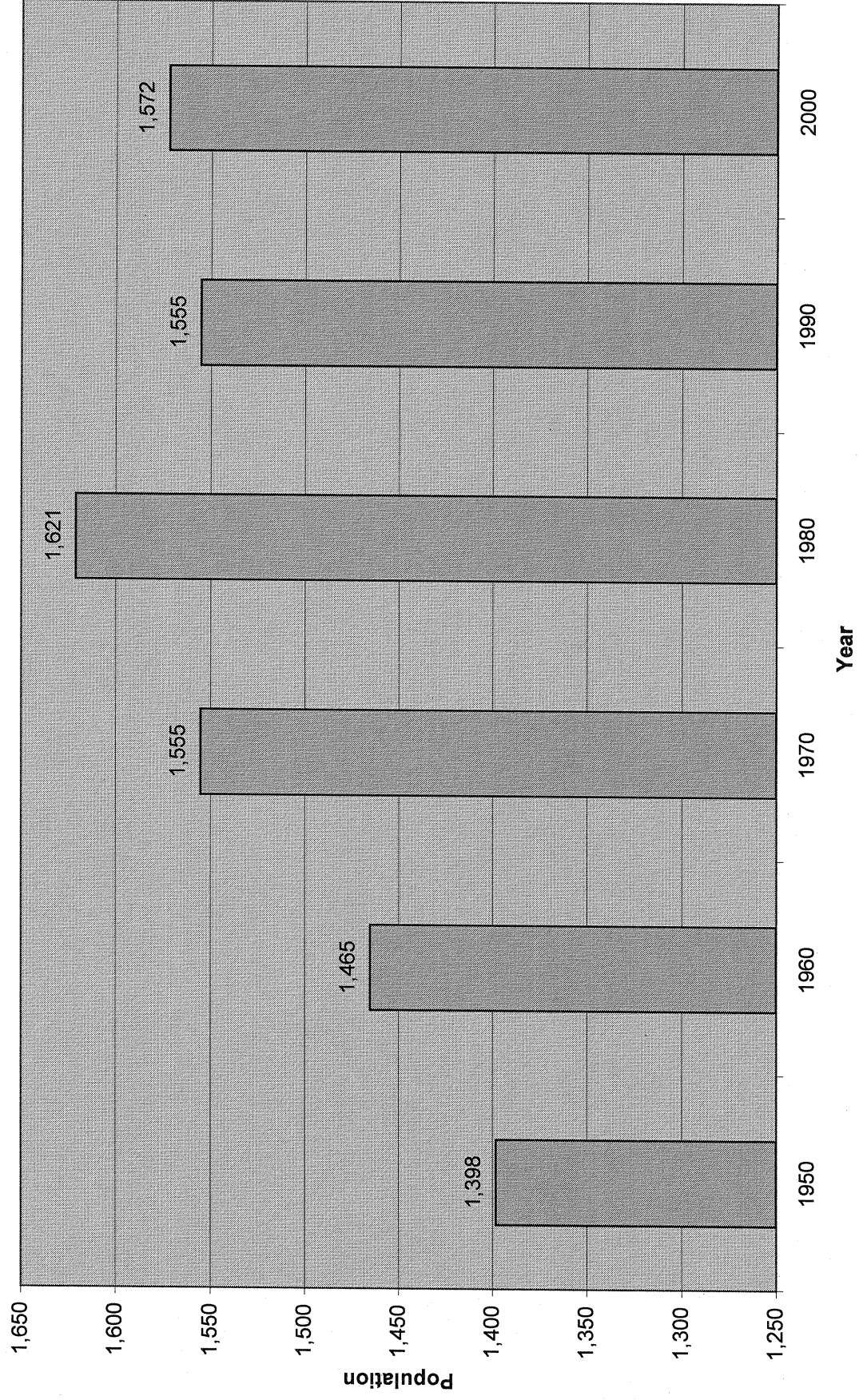


Town of Mexico Population 1950 to 2000

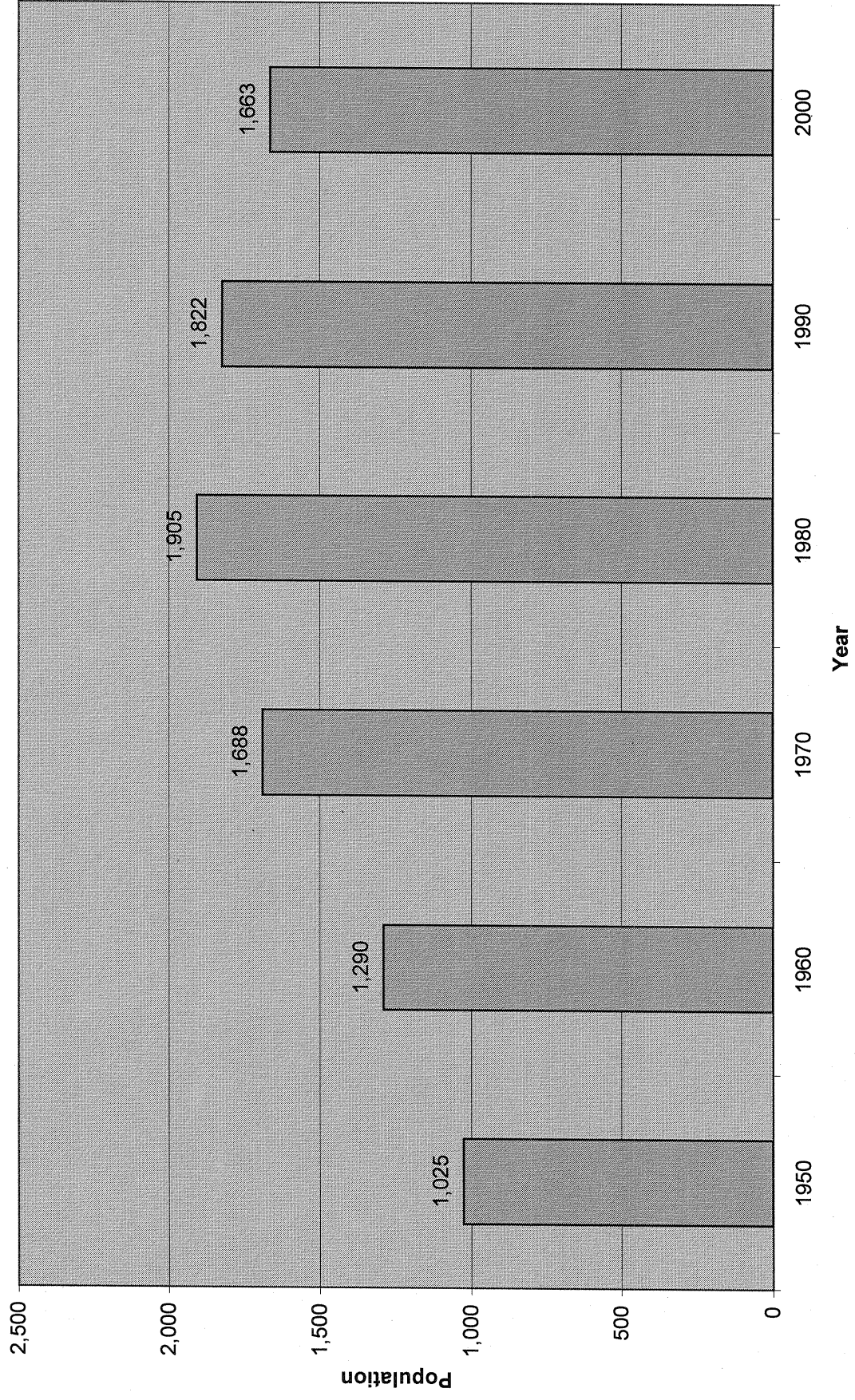
Note: Town data includes villages, if any.



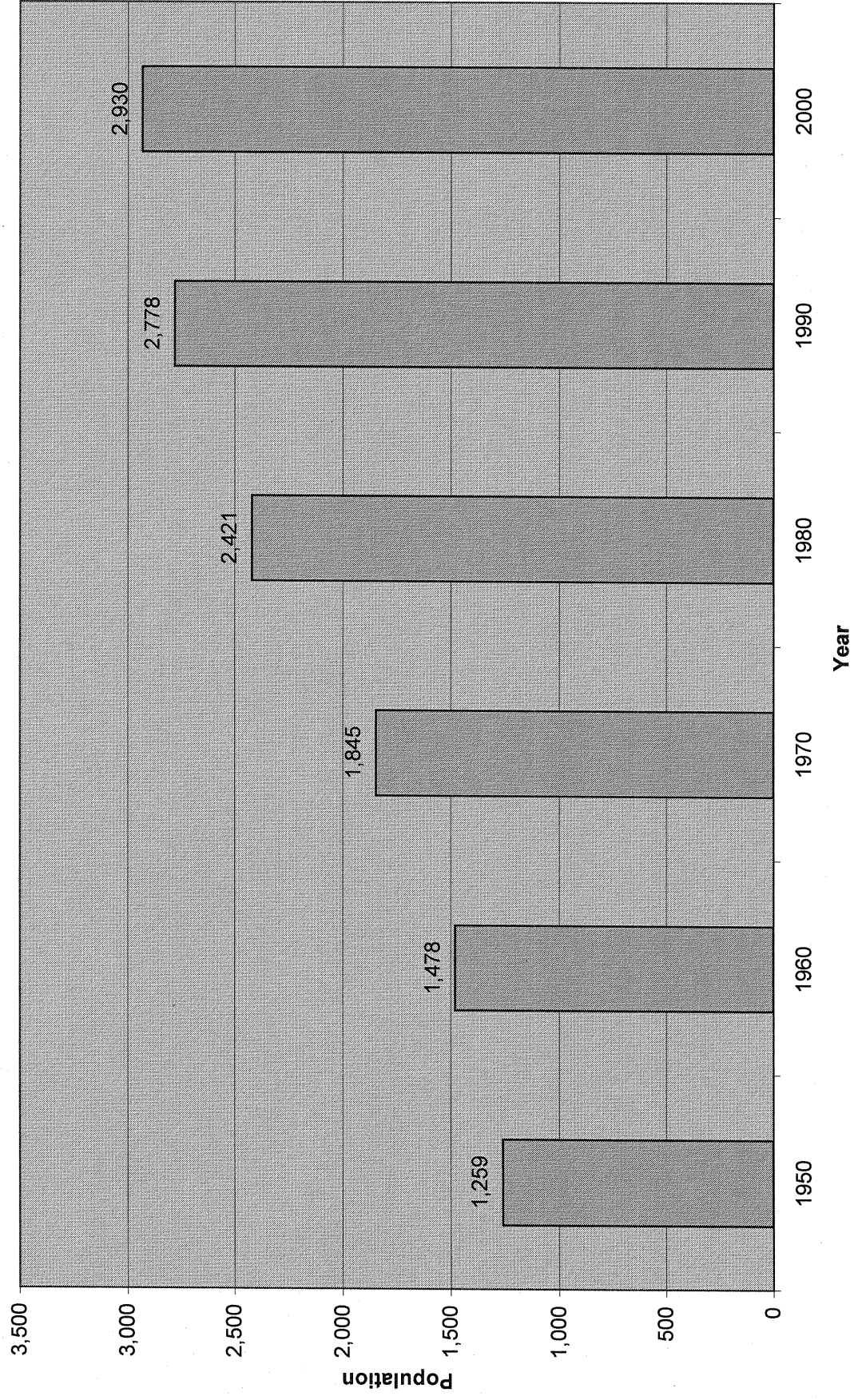
Village of Mexico Population 1950 to 2000



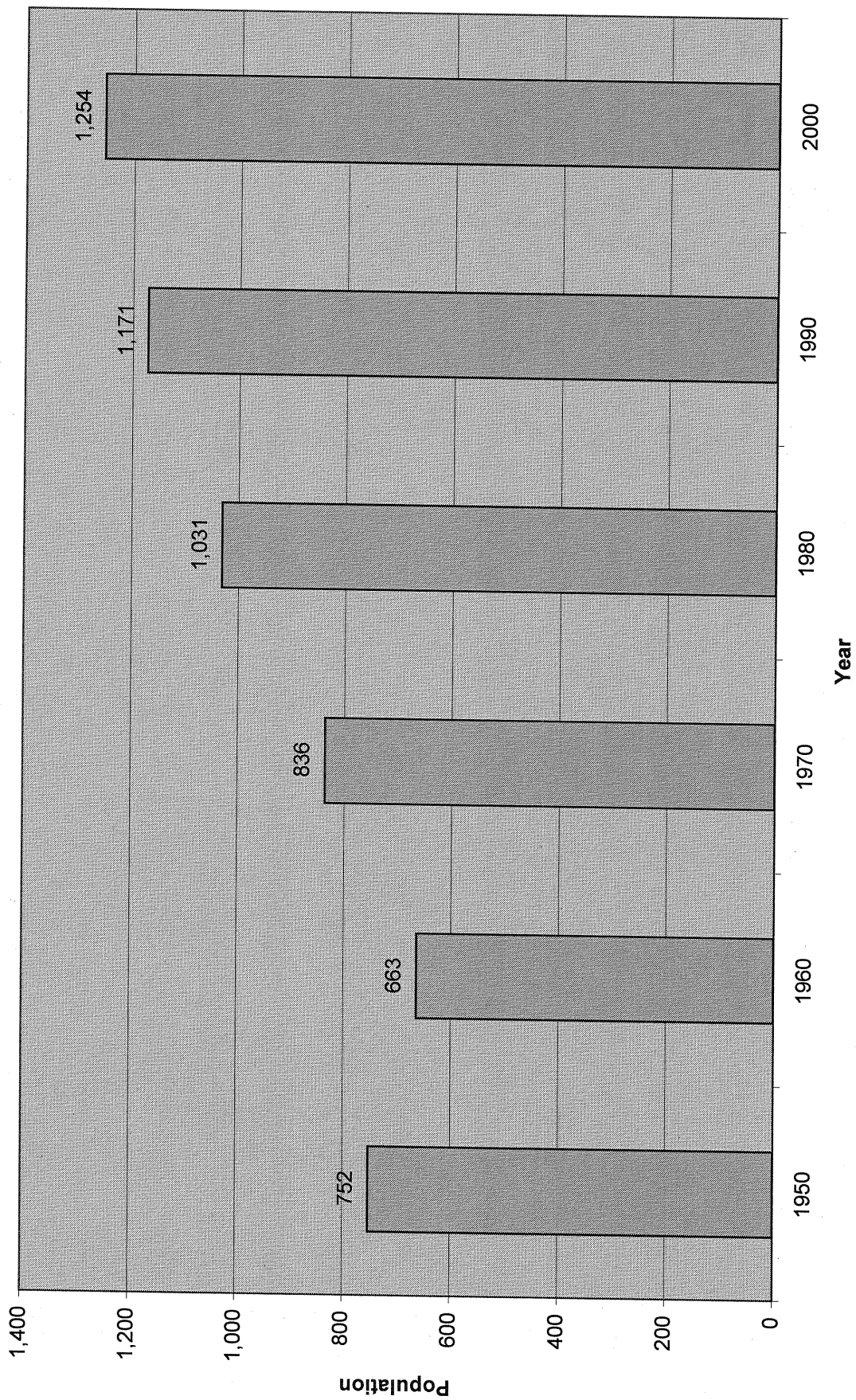
Town of Minetto Population 1950 to 2000



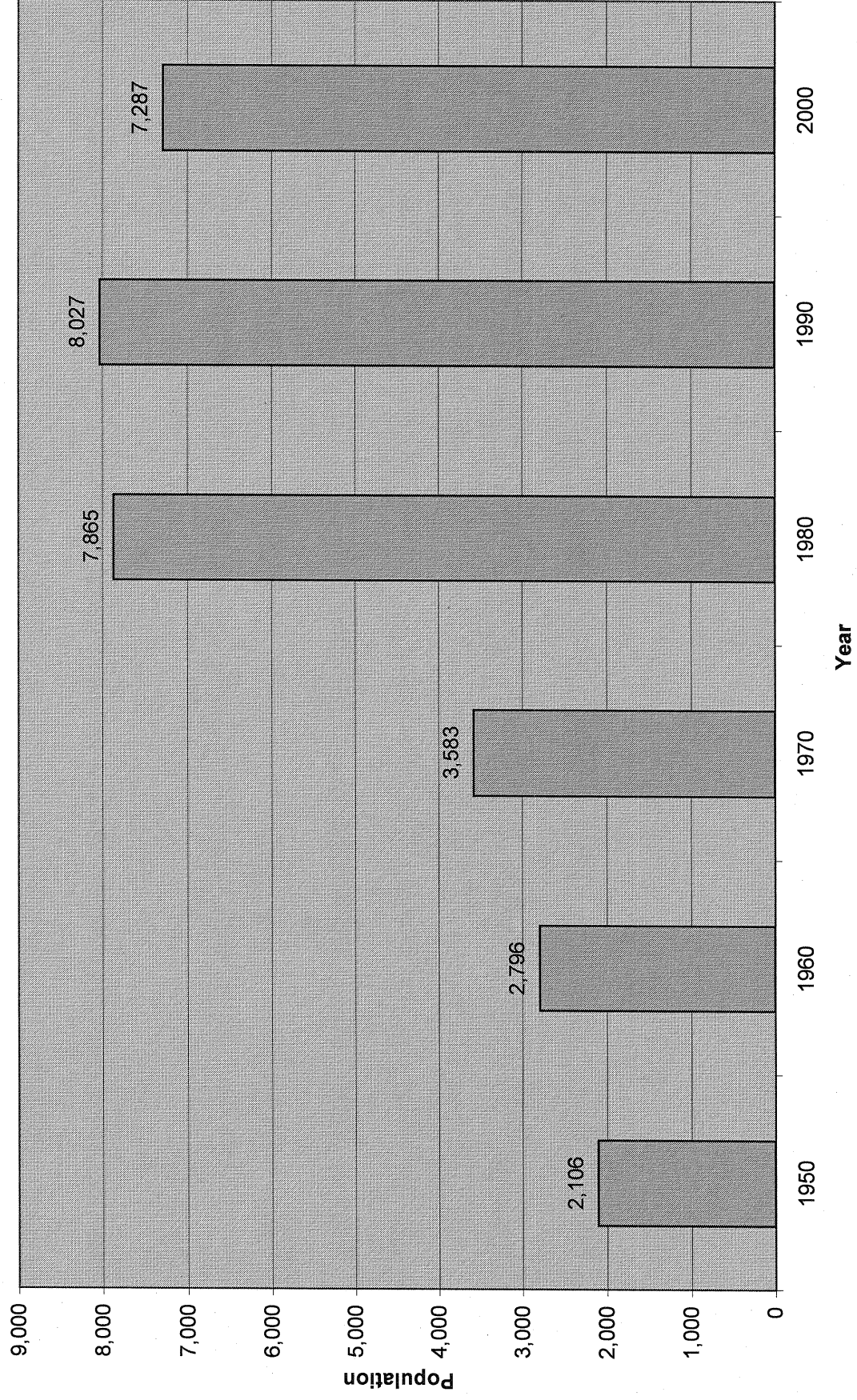
Town of New Haven Population 1950 to 2000



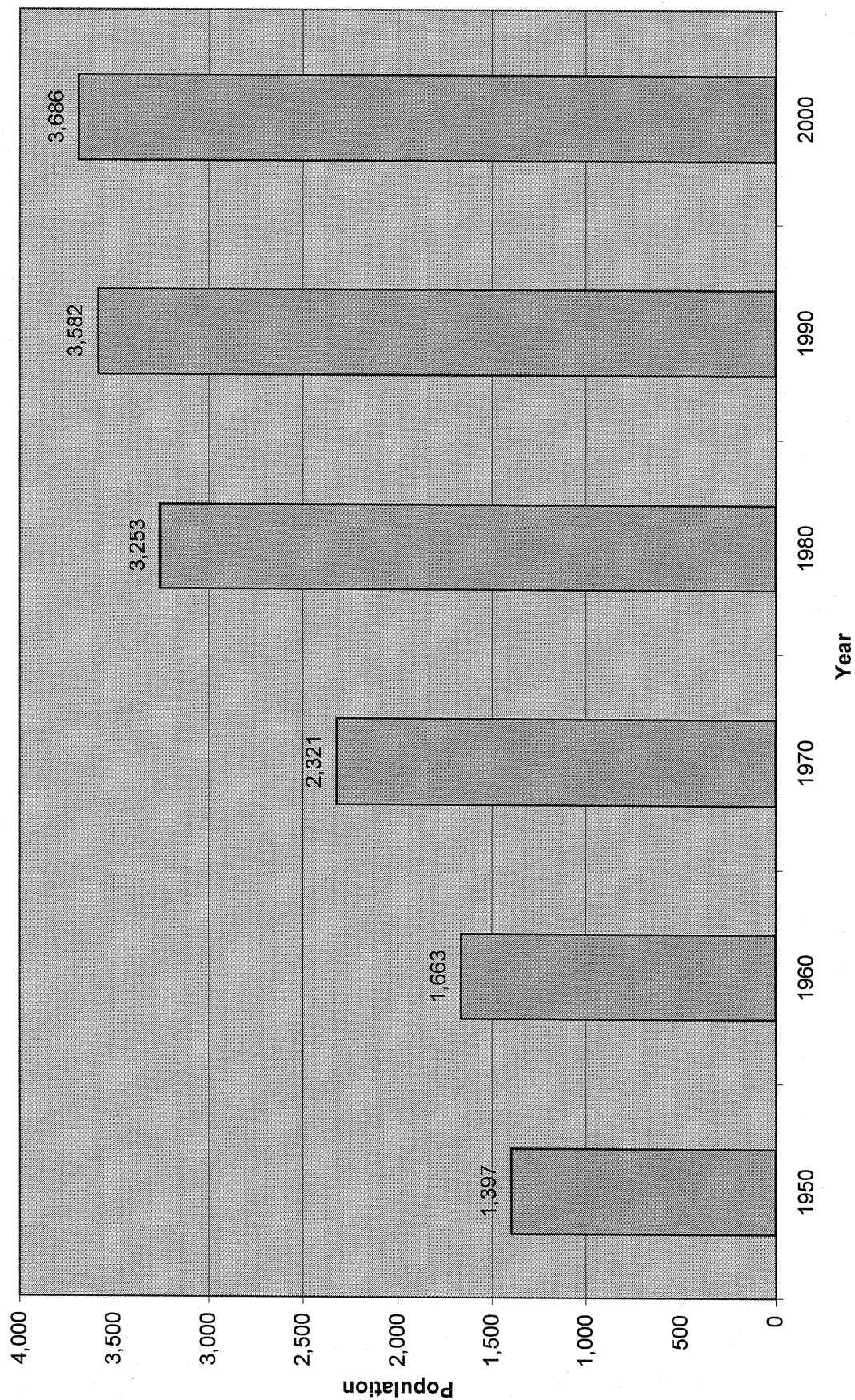
Town of Orwell Population 1950 to 2000



Town of Oswego Population 1950 to 2000

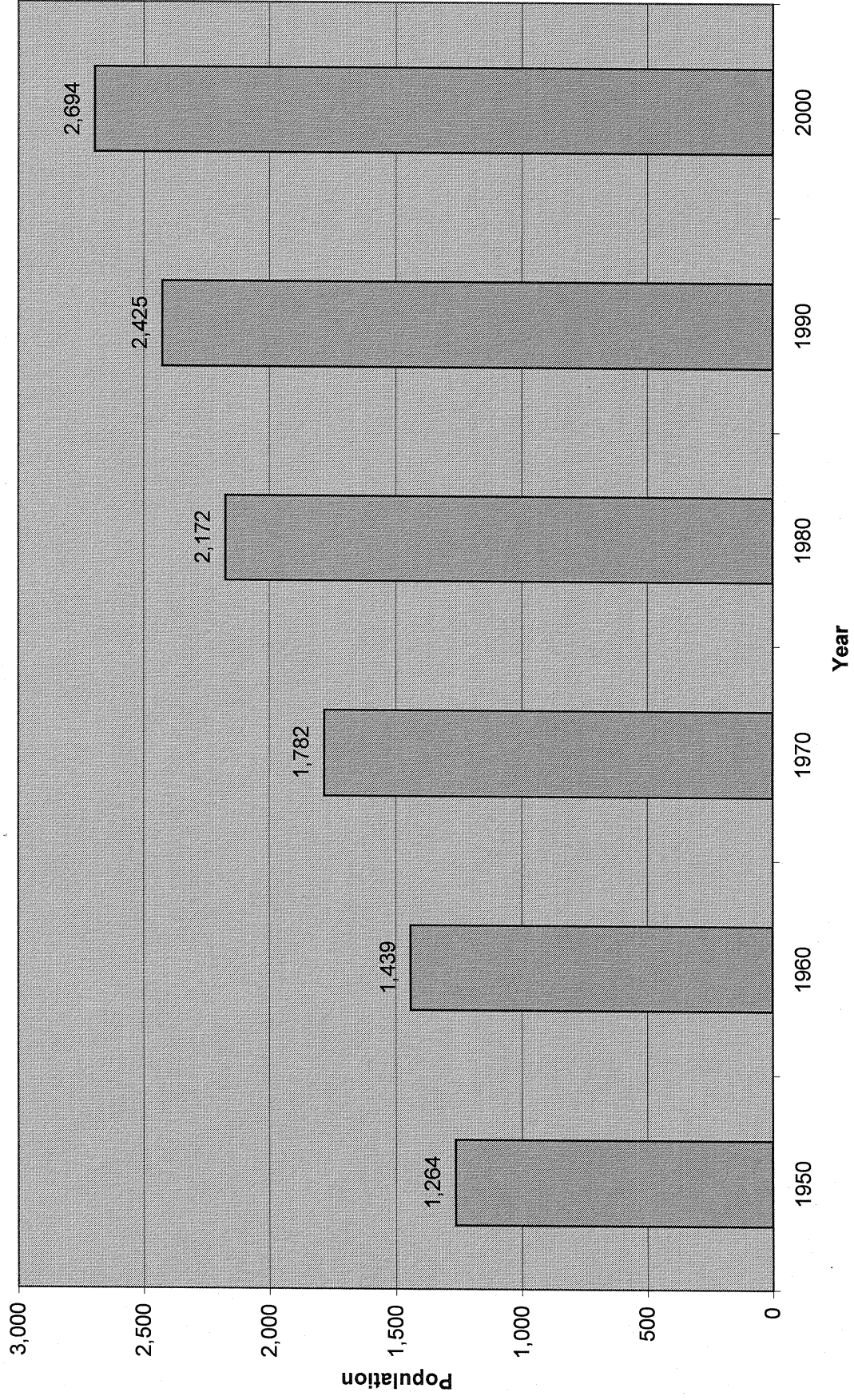


Town of Palermo Population 1950 to 2000

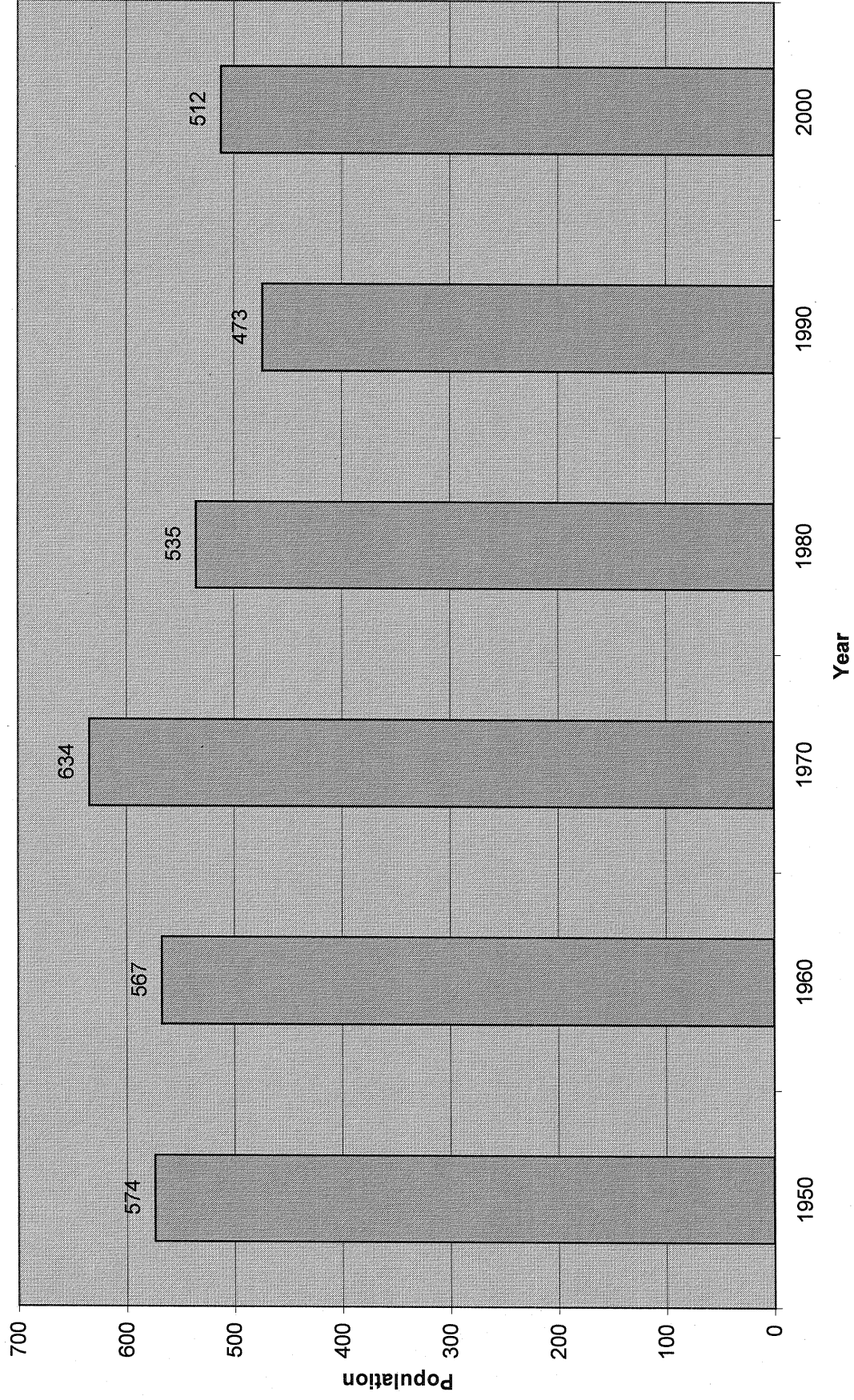


Town of Parish Population 1950 to 2000

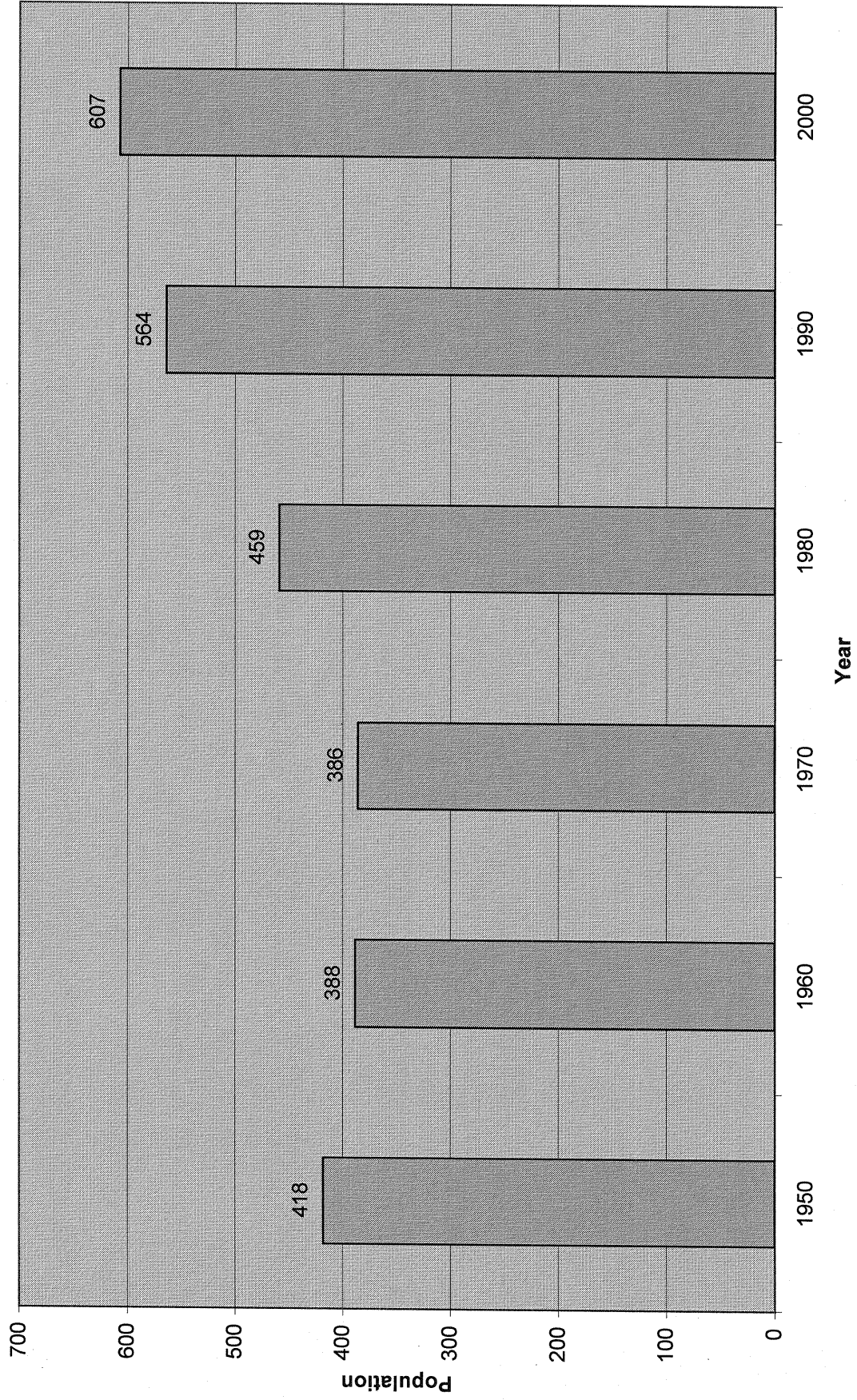
Note: Town data includes villages, if any.



Village of Parish Population 1950 to 2000

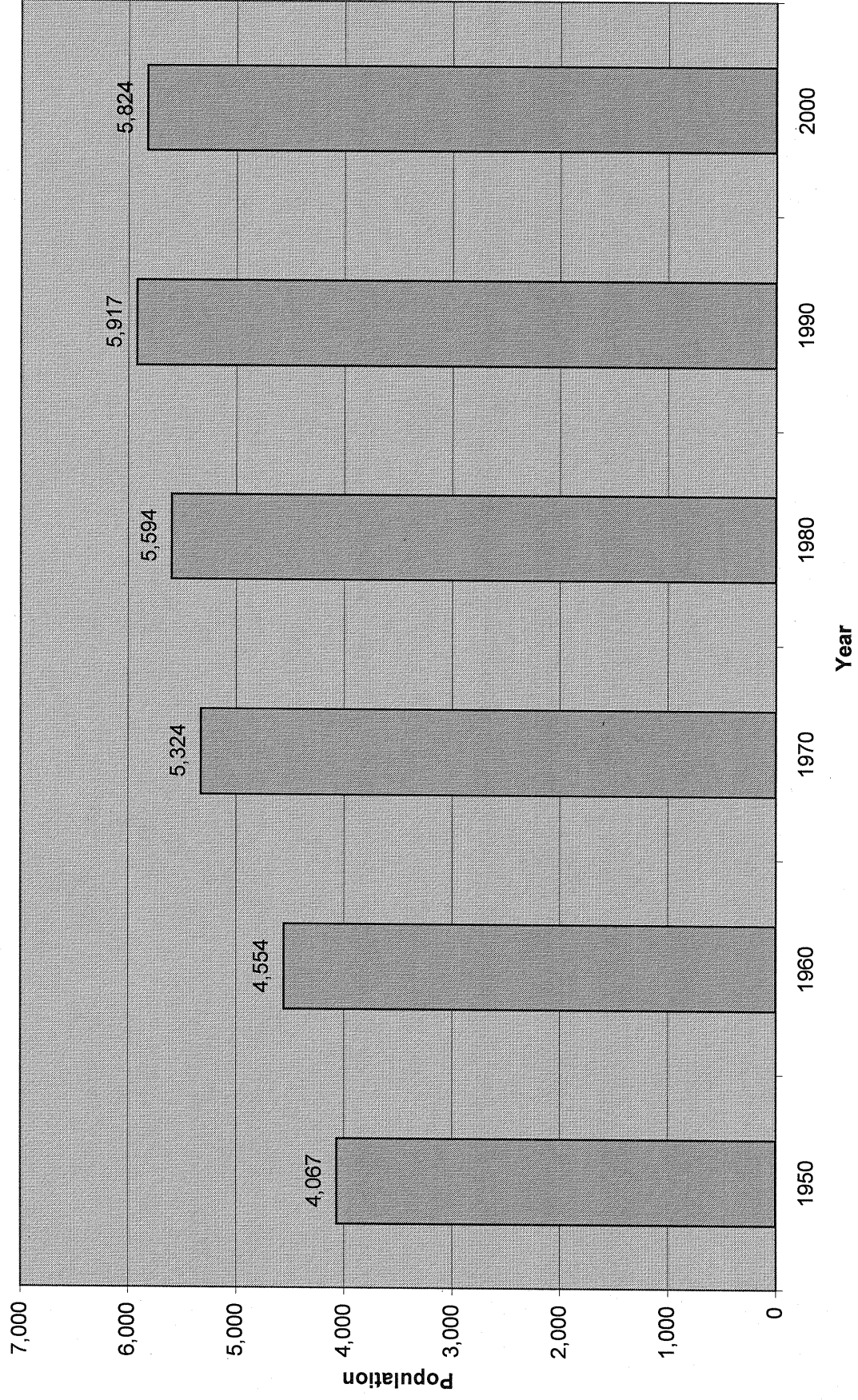


Town of Redfield Population 1950 to 2000

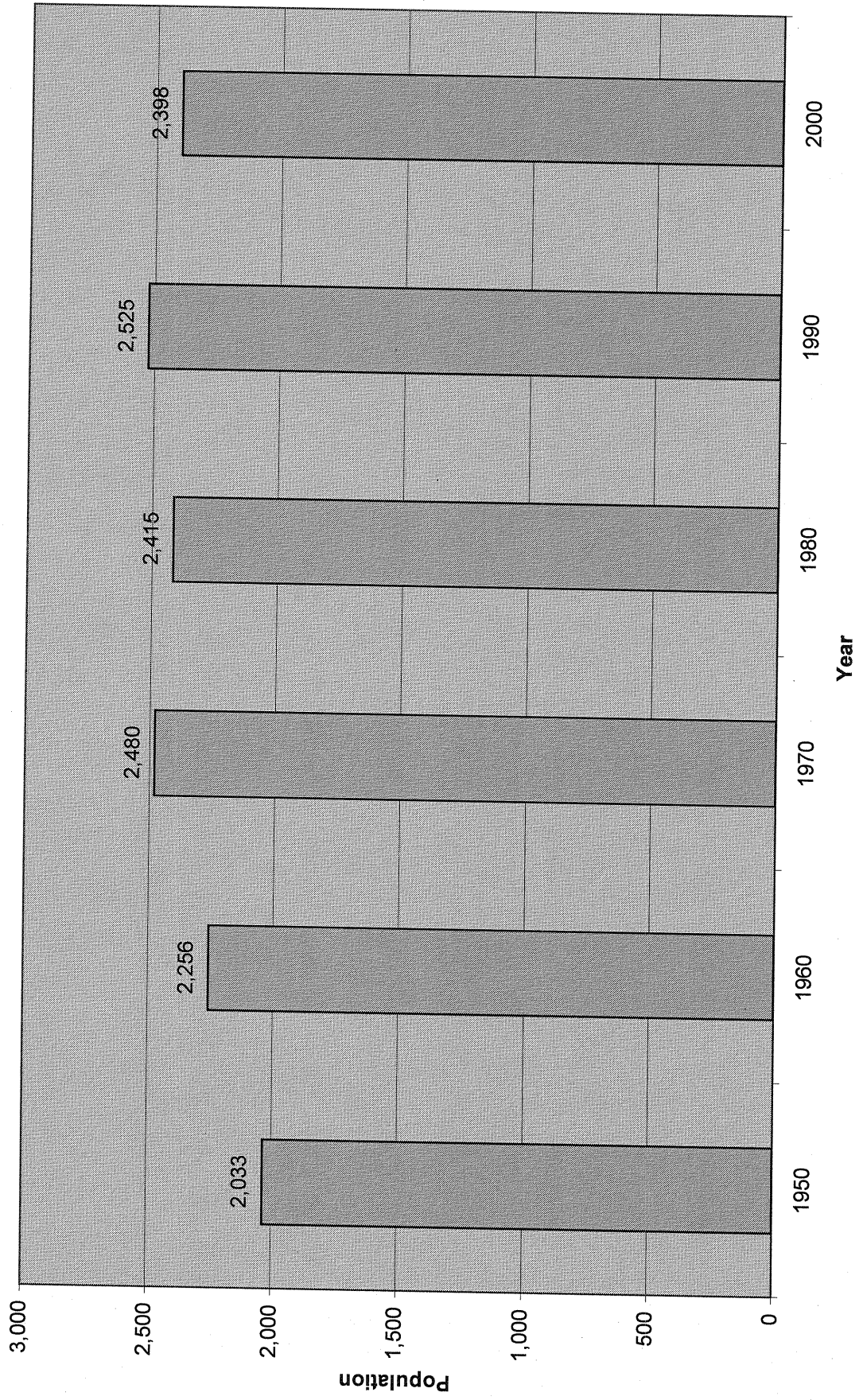


Town of Richland Population 1950 to 2000

Note: Town data includes villages, if any.

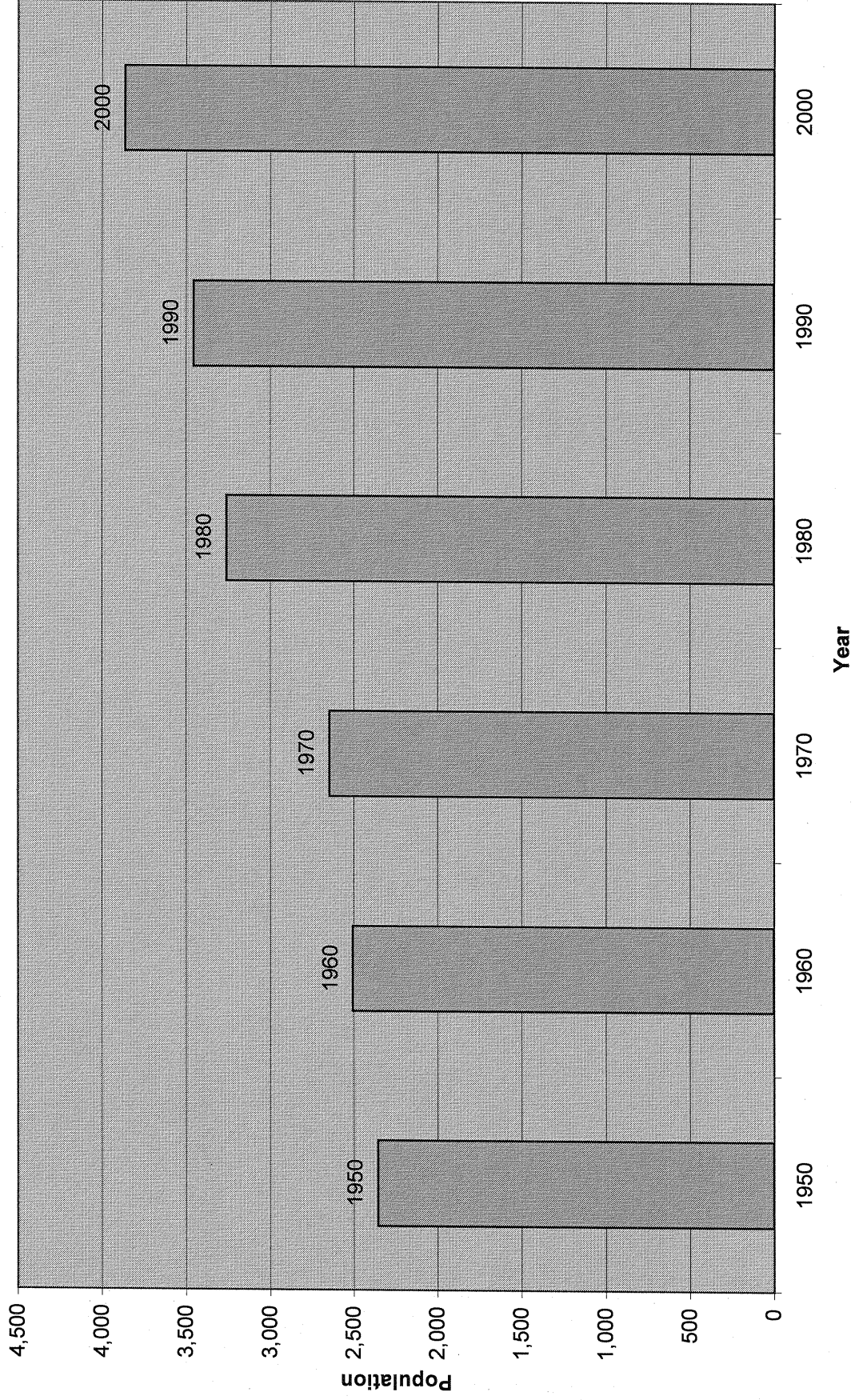


Village of Pulaski Population 1950 to 2000

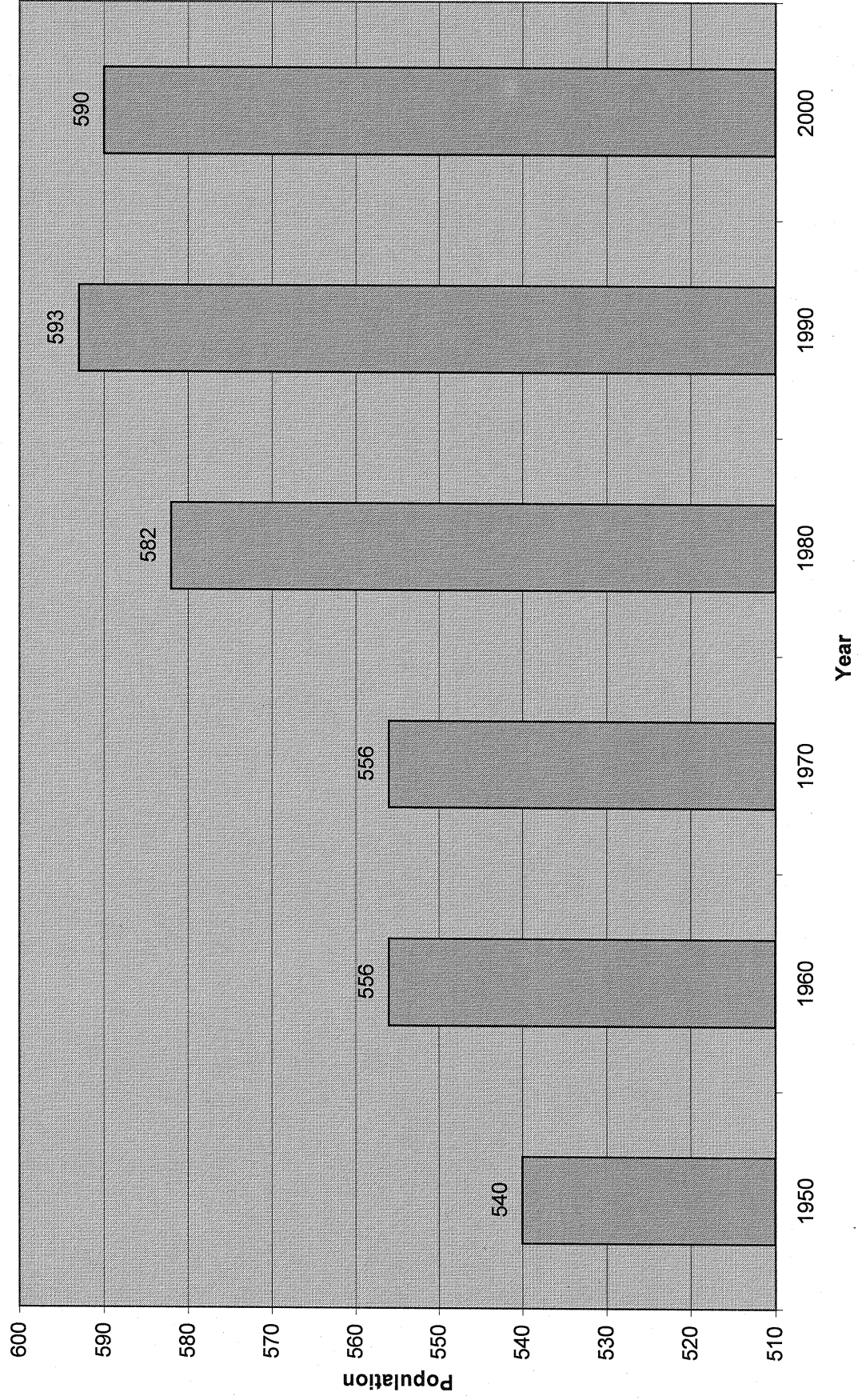


Town of Sandy Creek Population 1950 to 2000

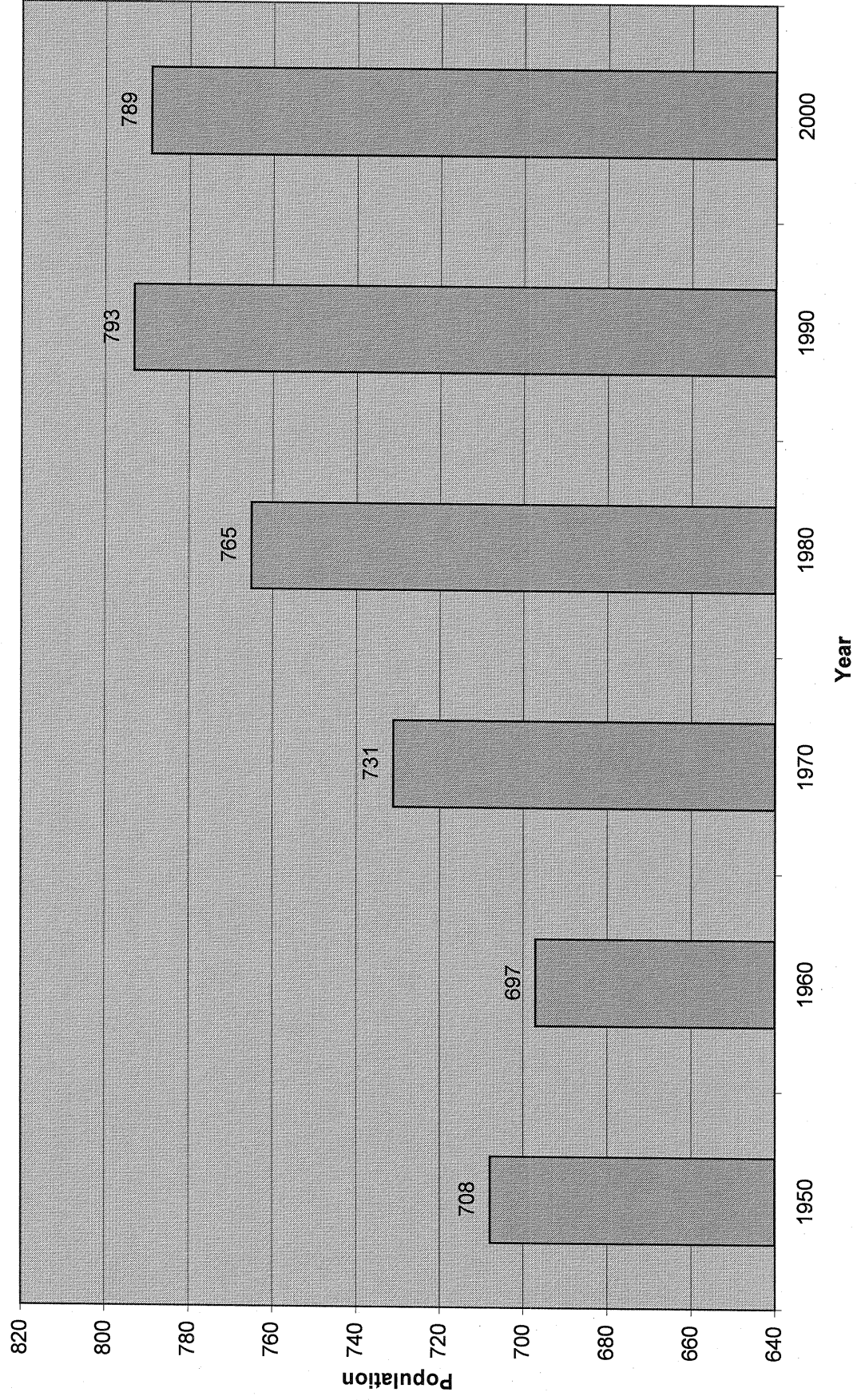
Note: Town data includes villages, if any.



Village of Lacona Population 1950 to 2000

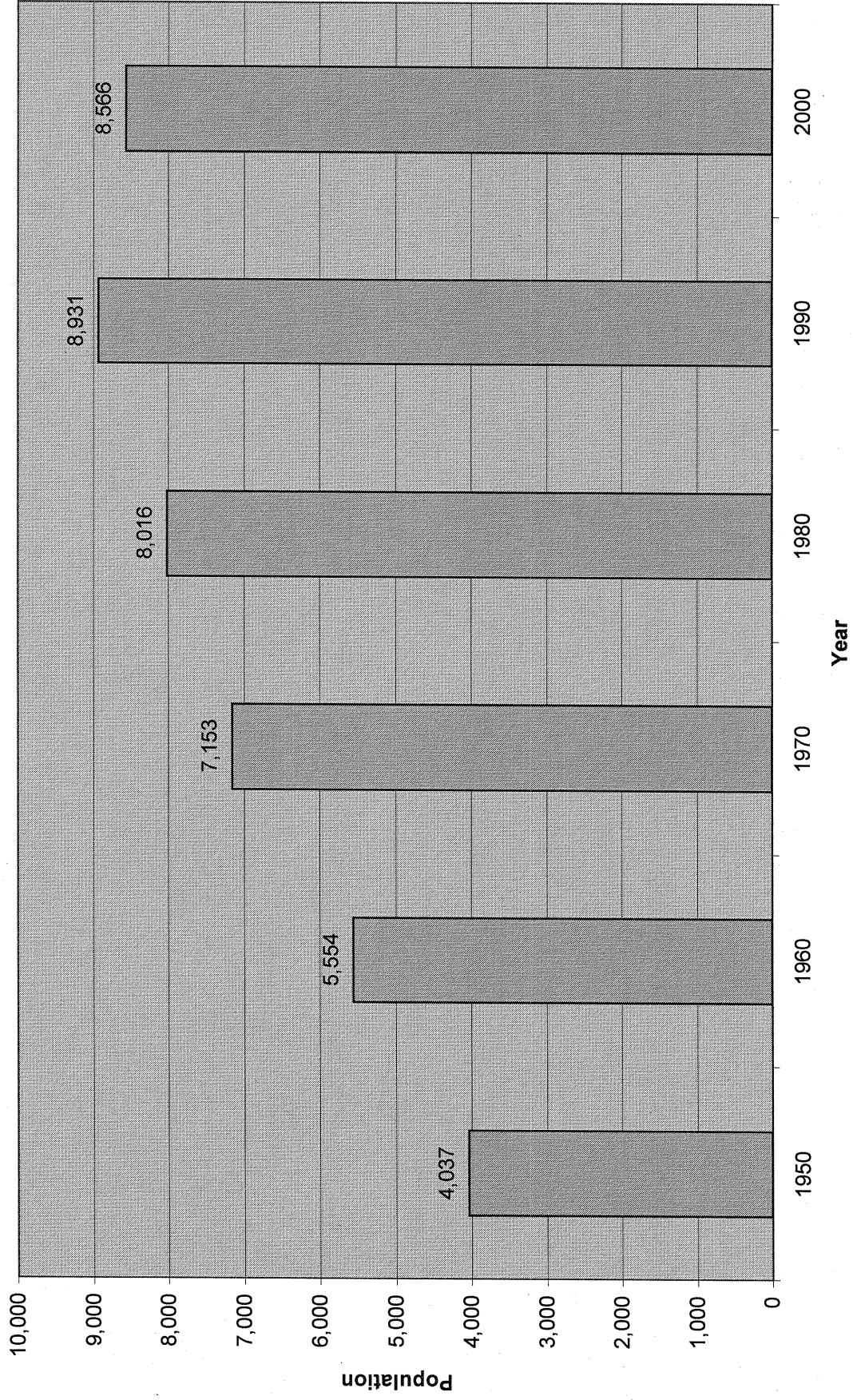


Village of Sandy Creek Population 1950 to 2000

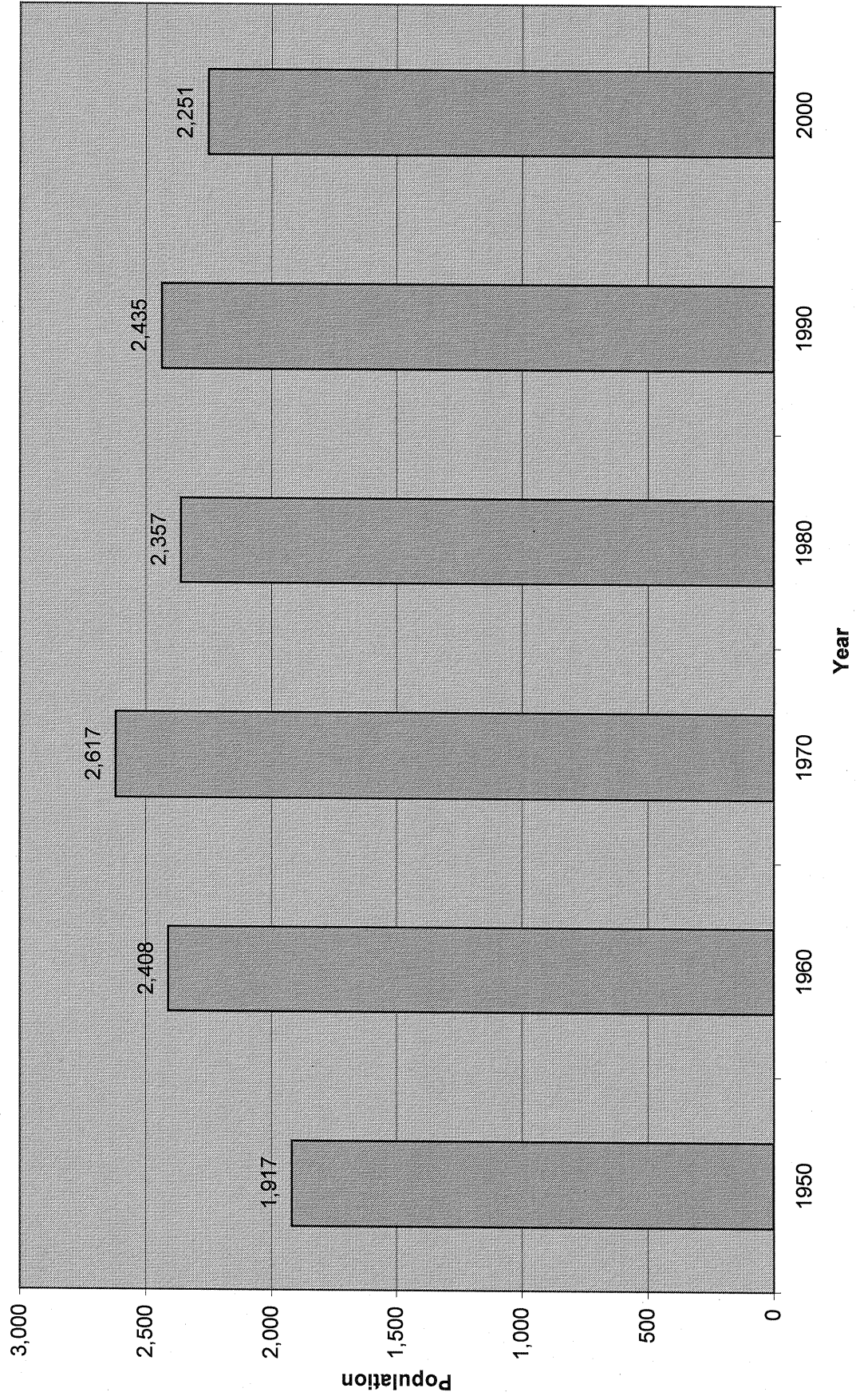


Town of Schroepel Population 1950 to 2000

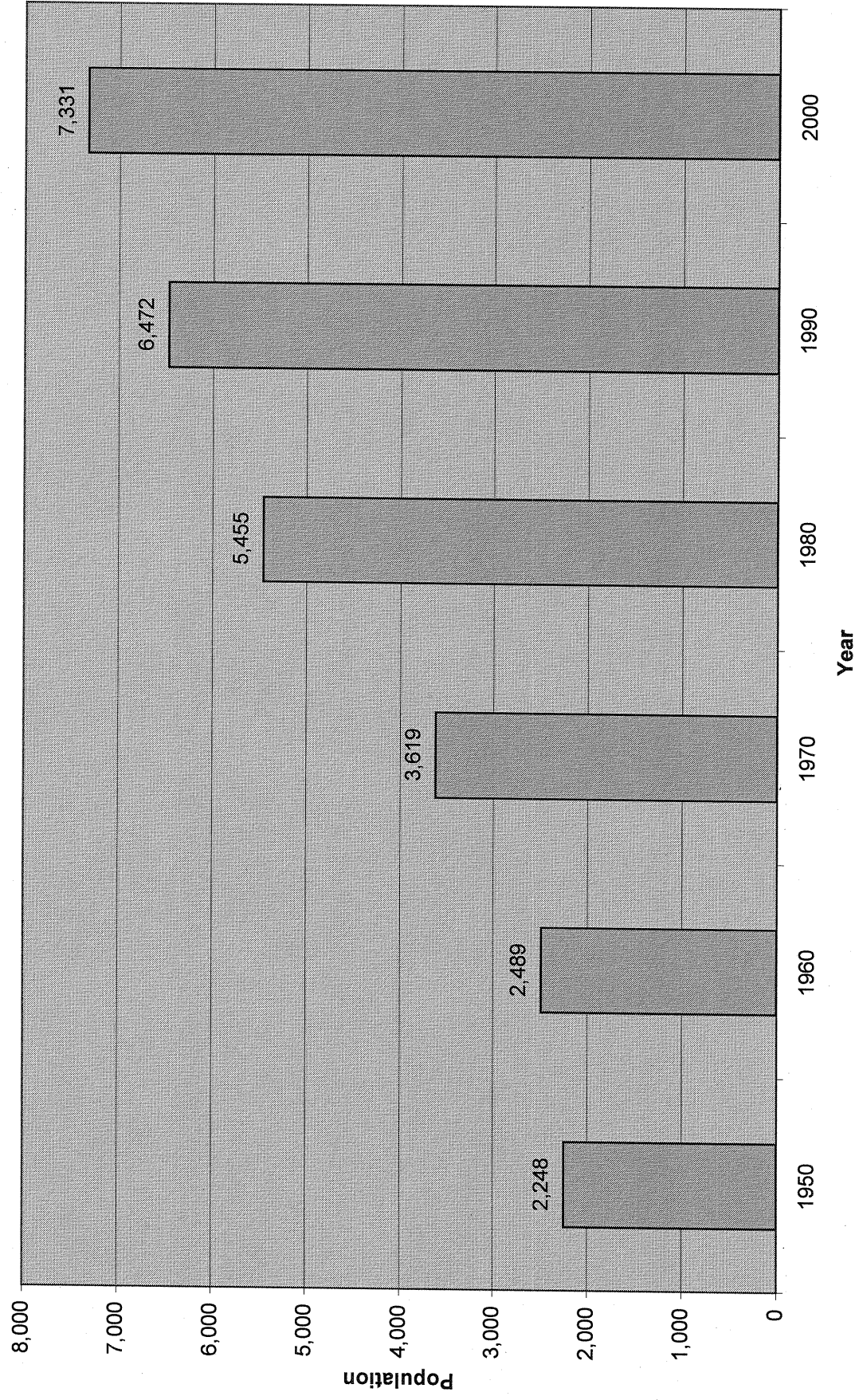
Note: Town data includes villages, if any.



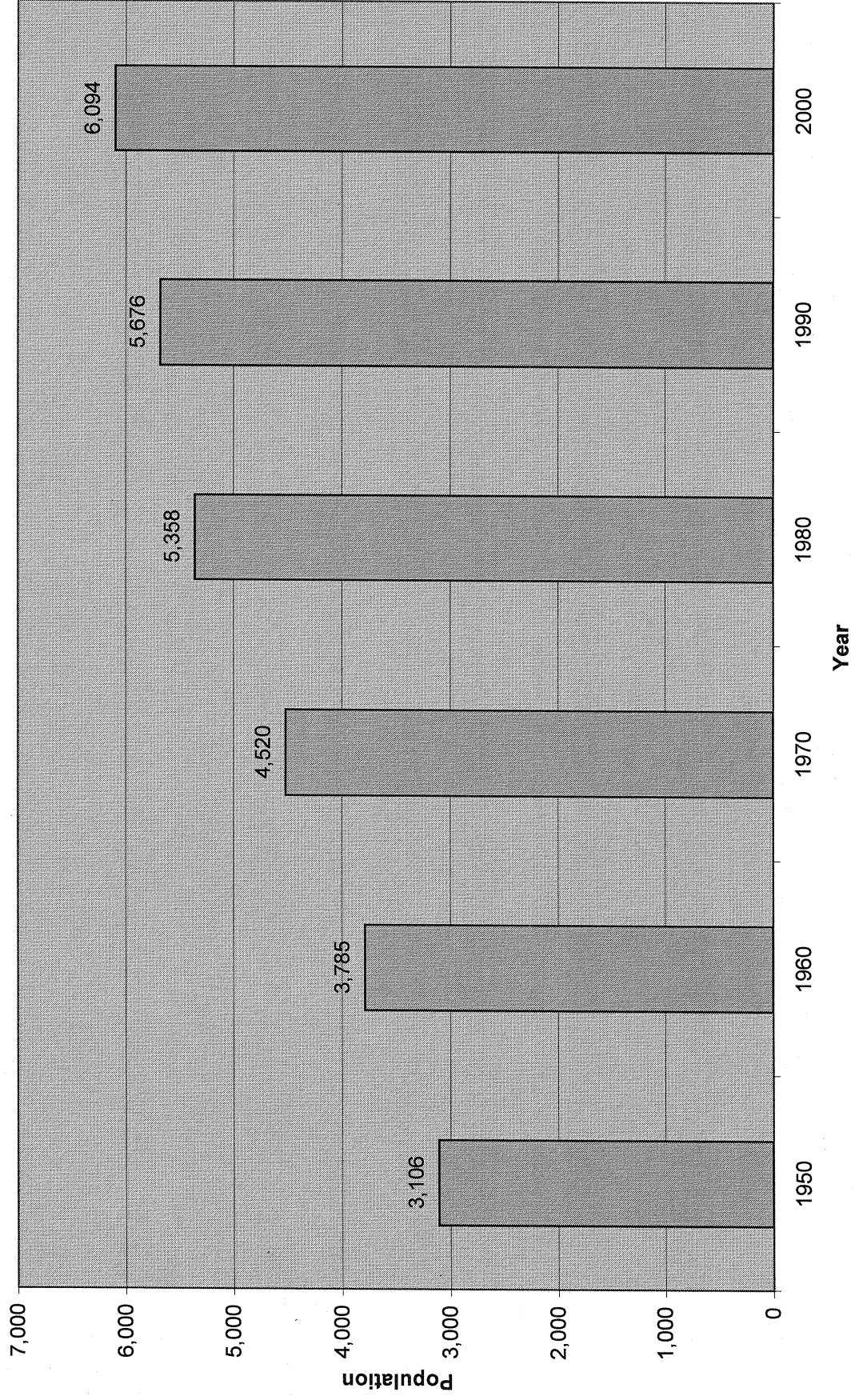
Village of Phoenix Population 1950 to 2000



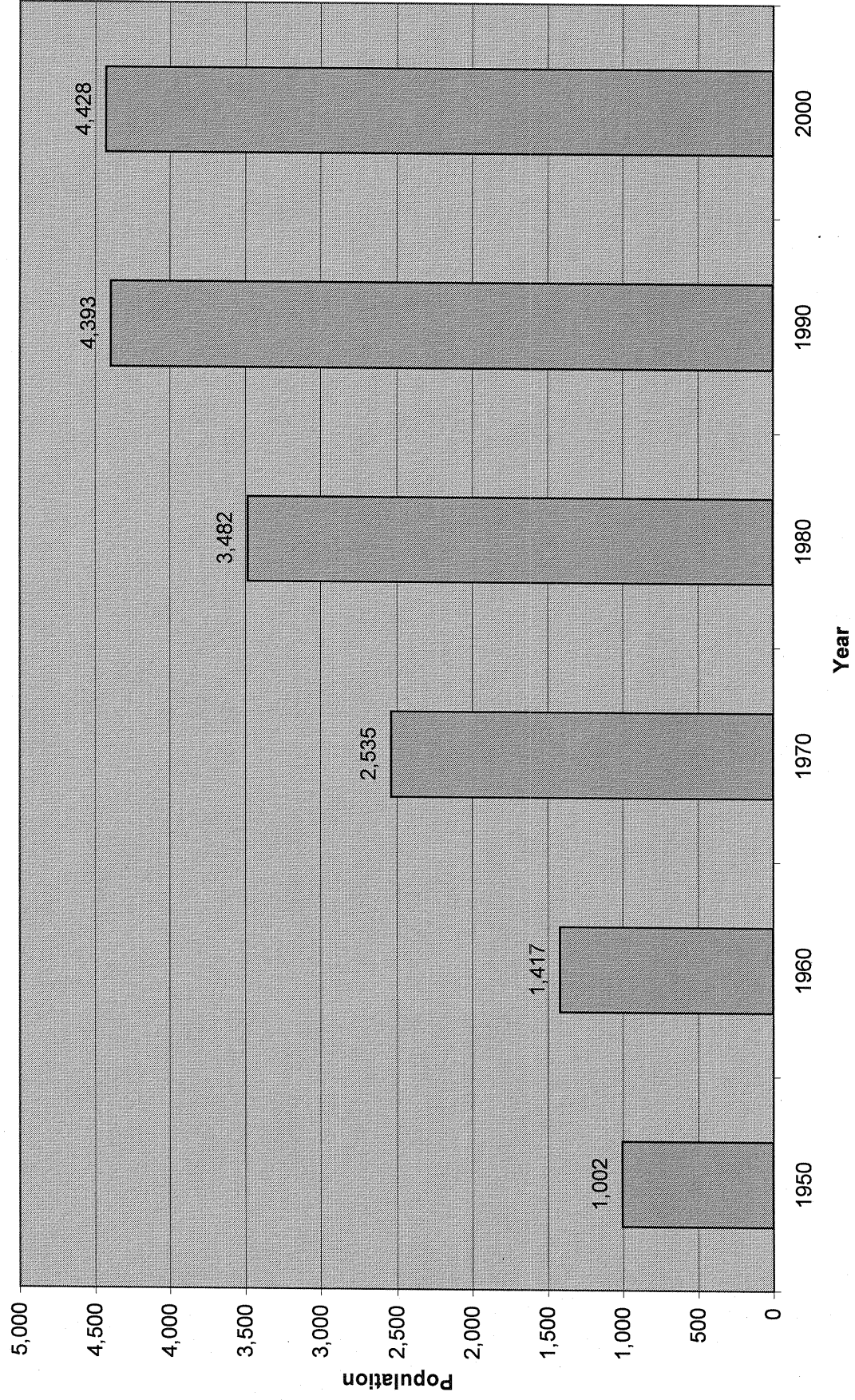
Town of Scriba Population 1950 to 2000



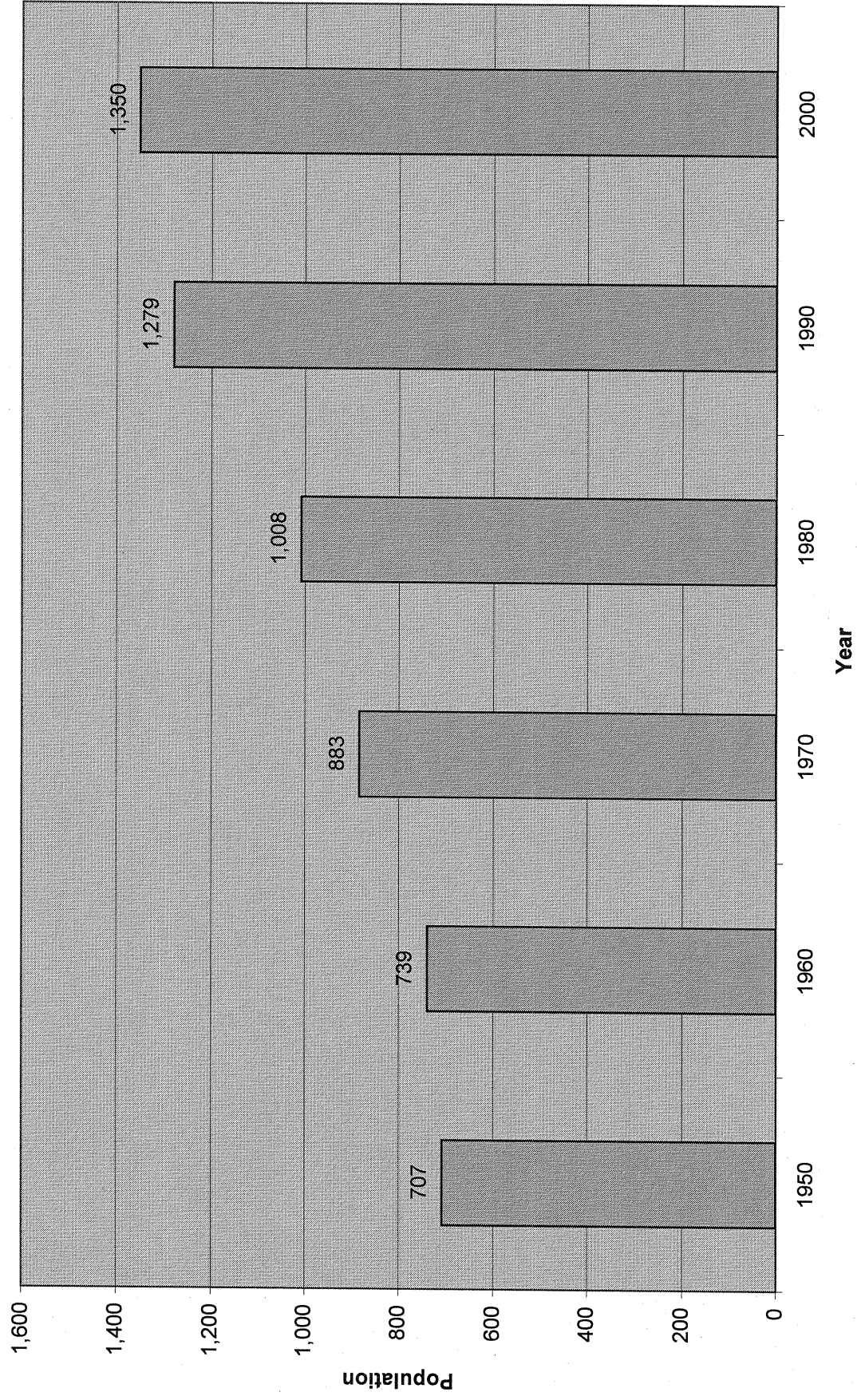
Town of Volney Population 1950 to 2000



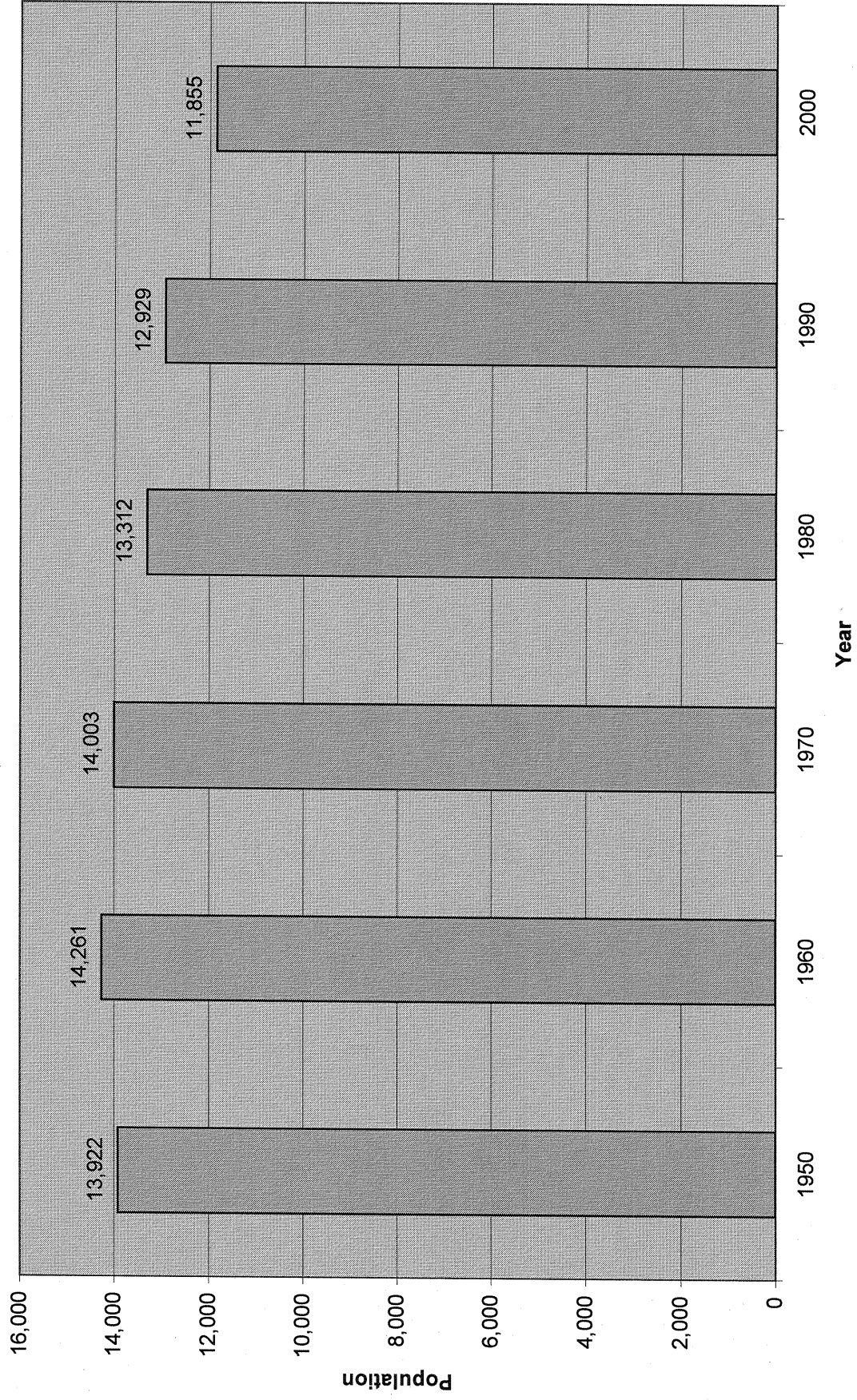
Town of West Monroe Population 1950 to 2000



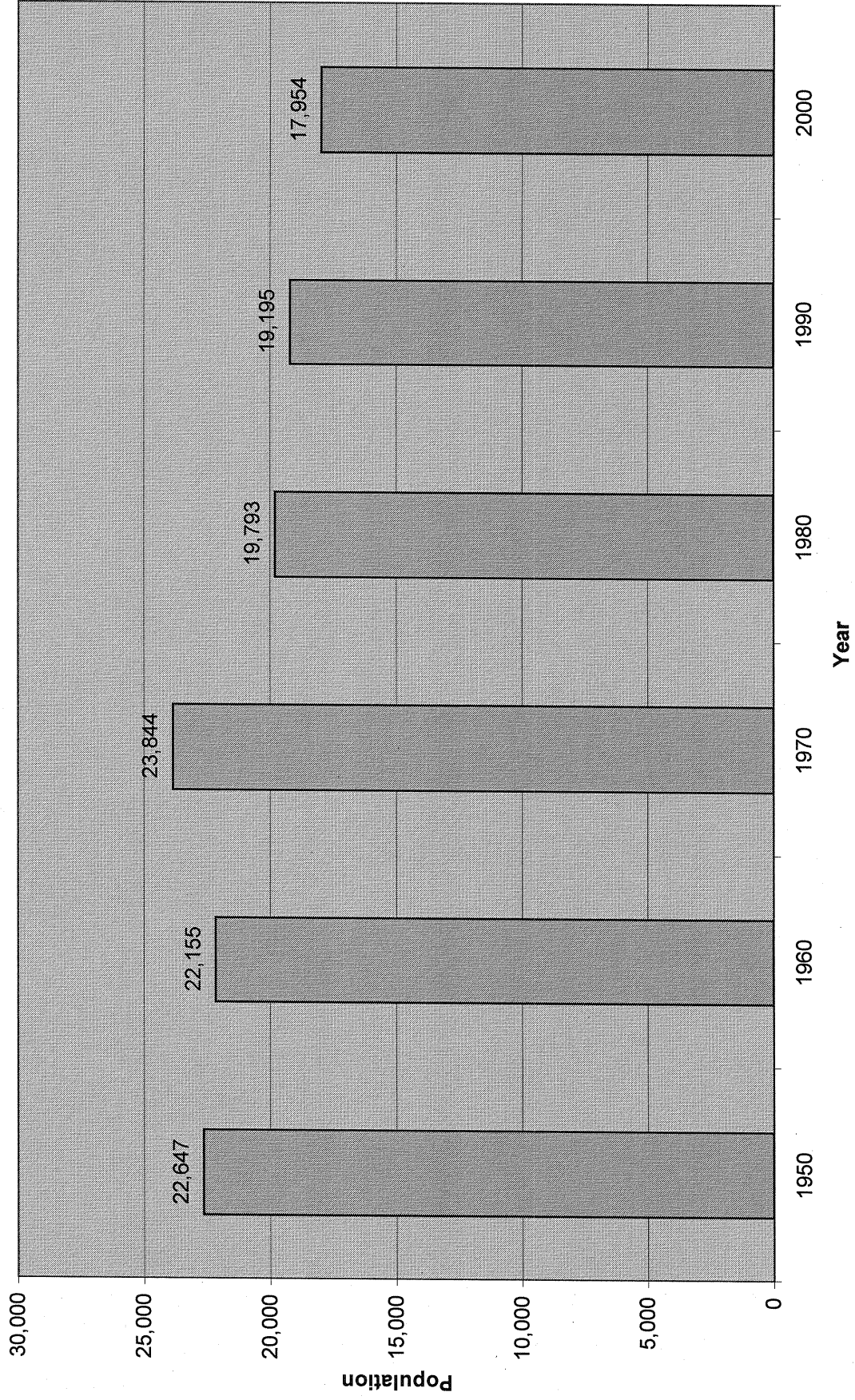
Town of Williamstown Population 1950 to 2000



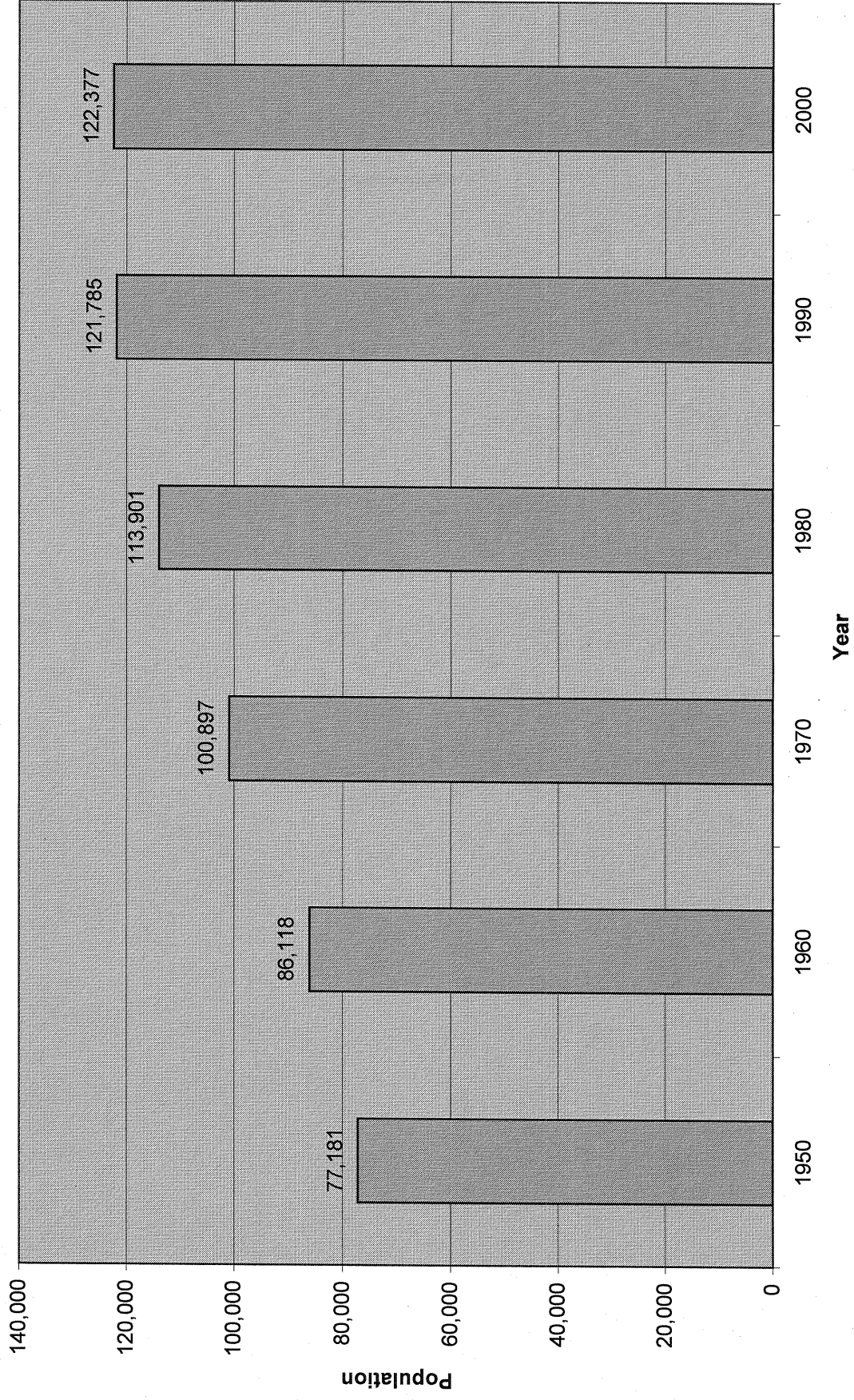
City of Fulton Population 1950 to 2000



City of Oswego Population 1950 to 2000



Oswego County Population 1950 to 2000

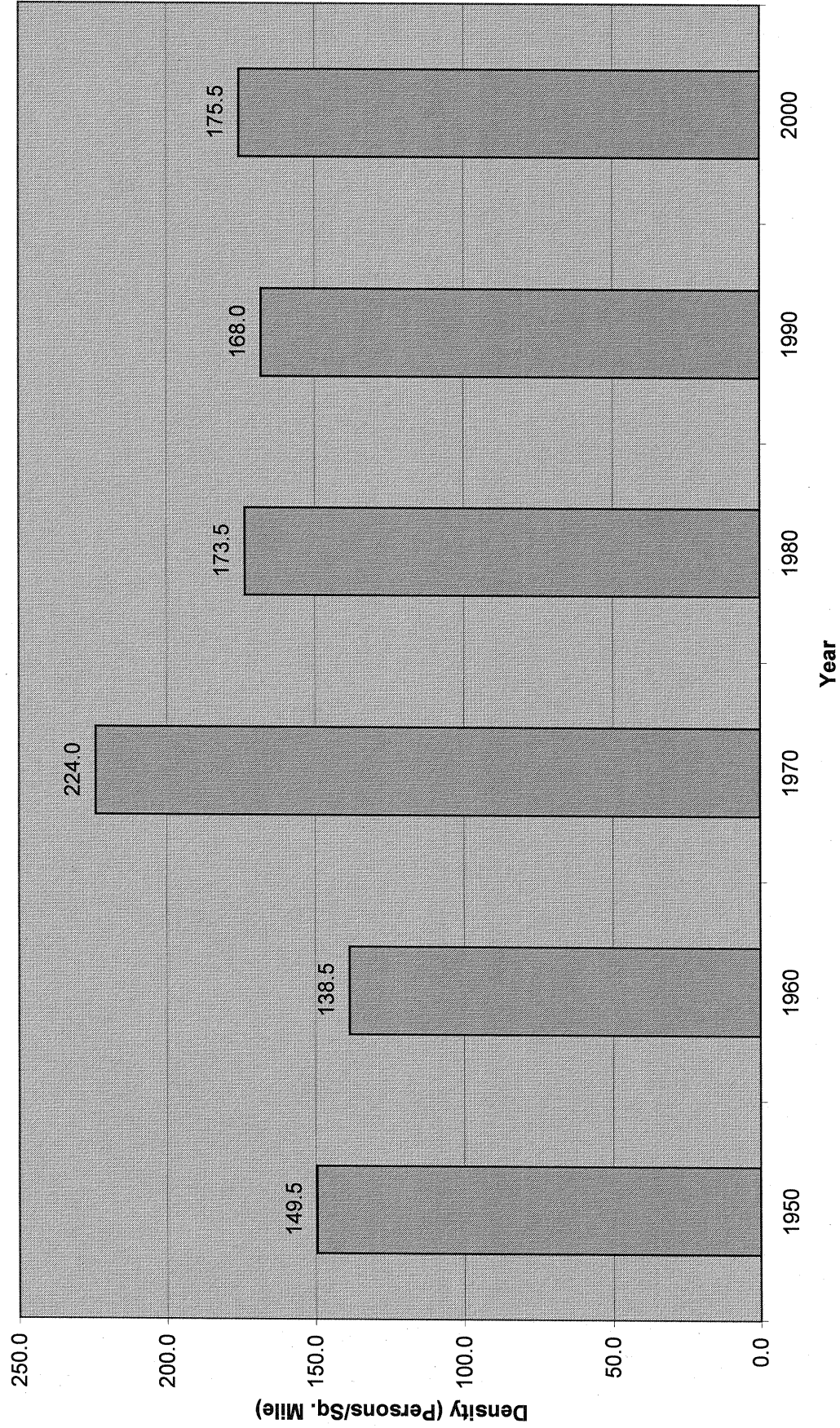


Oswego County, NY Land Area and Population Density														
Municipality	Town (T) Village(V)	Land Area Square Miles	Density		Population									
			1950	1960	1970	1980	1990	2000	1950	1960	1970	1980	1990	2000
Albion	T	48.3	21.4	23.3	30.1	35.8	42.3	43.1	1,036	1,125	1,452	1,730	2,043	2,083
Altmar	V	2	149.5	138.5	224.0	173.5	168.0	175.5	299	277	448	347	336	351
Amboy	T	37.7	12.8	13.9	14.8	22.2	27.2	34.8	482	524	557	836	1,024	1,312
Boylston	T	39.6	7.6	7.4	7.0	9.8	11.2	12.8	302	293	276	390	443	505
Constantia	T	57.9	33.6	47.2	61.2	74.5	84.1	88.8	1,947	2,730	3,542	4,312	4,868	5,141
Cleveland	V	1	555.0	732.0	821.0	855.0	784.0	758.0	555	732	821	855	784	758
Granby	T	45.1	61.5	82.1	104.6	140.6	155.5	155.4	2,775	3,704	4,718	6,341	7,013	7,009
Hannibal	T	45.4	49.1	58.9	69.7	88.7	101.7	109.2	2,230	2,673	3,165	4,027	4,616	4,957
Hannibal	V	1.3	385.4	470.0	527.7	523.1	471.5	416.9	501	611	686	680	613	542
Hastings	T	46	66.6	96.9	131.3	154.2	176.4	191.4	3,063	4,457	6,042	7,095	8,113	8,803
Central Square	V	0.9	738.9	1038.9	1442.2	1575.6	1856.7	1828.9	665	935	1,298	1,418	1,671	1,646
Mexico	T	46.9	64.7	73.2	89.0	102.1	107.7	110.5	3,035	3,435	4,174	4,790	5,050	5,181
Mexico	V	2.3	607.8	637.0	676.1	704.8	676.1	683.5	1,398	1,465	1,555	1,621	1,555	1,572
Minetto	T	6	170.8	215.0	281.3	317.5	303.7	277.2	1,025	1,290	1,688	1,905	1,822	1,663
New Haven	T	31.4	40.1	47.1	58.8	77.1	88.5	93.3	1,259	1,478	1,845	2,421	2,778	2,930
Orwell	T	42.4	17.7	15.6	19.7	24.3	27.6	29.6	752	663	836	1,031	1,171	1,254
Oswego	T	27.8	75.8	100.6	128.9	282.9	288.7	262.1	2,106	2,796	3,583	7,865	8,027	7,287
Palermo	T	40.8	34.2	40.8	56.9	79.7	87.8	90.3	1,397	1,663	2,321	3,253	3,582	3,686
Parish	T	42.5	29.7	33.9	41.9	51.1	57.1	63.4	1,264	1,439	1,782	2,172	2,425	2,694
Parish	V	1	574.0	567.0	634.0	535.0	473.0	512.0	574	567	634	535	473	512
Redfield	T	74.2	5.6	5.2	5.2	6.2	7.6	8.2	418	388	386	459	564	607
Richland	T	54.4	74.8	83.7	97.9	102.8	108.8	107.1	4,067	4,554	5,324	5,594	5,917	5,824
Pulaski	T	4	508.3	564.0	620.0	603.8	631.3	599.5	2,033	2,256	2,480	2,415	2,525	2,398
Sandy Creek	T	43	54.7	58.3	61.5	75.7	80.3	89.8	2,354	2,506	2,644	3,256	3,454	3,863
Lacona	V	1	540.0	556.0	556.0	582.0	593.0	590.0	540	556	556	582	593	590
Sandy Creek	V	1.2	590.0	580.8	609.2	637.5	660.8	657.5	708	697	731	765	793	789
Schroeppel	T	43.5	92.8	127.7	164.4	184.3	205.3	196.9	4,037	5,554	7,153	8,016	8,931	8,566
Phoenix	V	1.1	1742.7	2189.1	2379.1	2142.7	2213.6	2046.4	1,917	2,408	2,617	2,357	2,435	2,251
Scriba	T	41.2	54.6	60.4	87.8	132.4	157.1	177.9	2,248	2,489	3,619	5,455	6,472	7,331
Volney	T	49.3	63.0	76.8	91.7	108.7	115.1	123.6	3,106	3,785	4,520	5,358	5,676	6,094
West Monroe	T	43.2	23.2	32.8	58.7	80.6	101.7	102.5	1,002	1,417	2,535	3,482	4,393	4,428
Williamstown	T	39.6	17.9	18.7	22.3	25.5	32.3	34.1	707	739	883	1,008	1,279	1,350
Fulton		3.6	3867.2	3961.4	3889.7	3697.8	3591.4	3293.1	13,922	14,261	14,003	13,312	12,929	11,855
Oswego		8	2830.9	2769.4	2980.5	2474.1	2399.4	2244.3	22,647	22,155	23,844	19,793	19,195	17,954
Oswego County		968	79.7	89.0	104.2	117.7	125.8	126.4	77,181	86,118	100,897	113,901	121,785	122,377

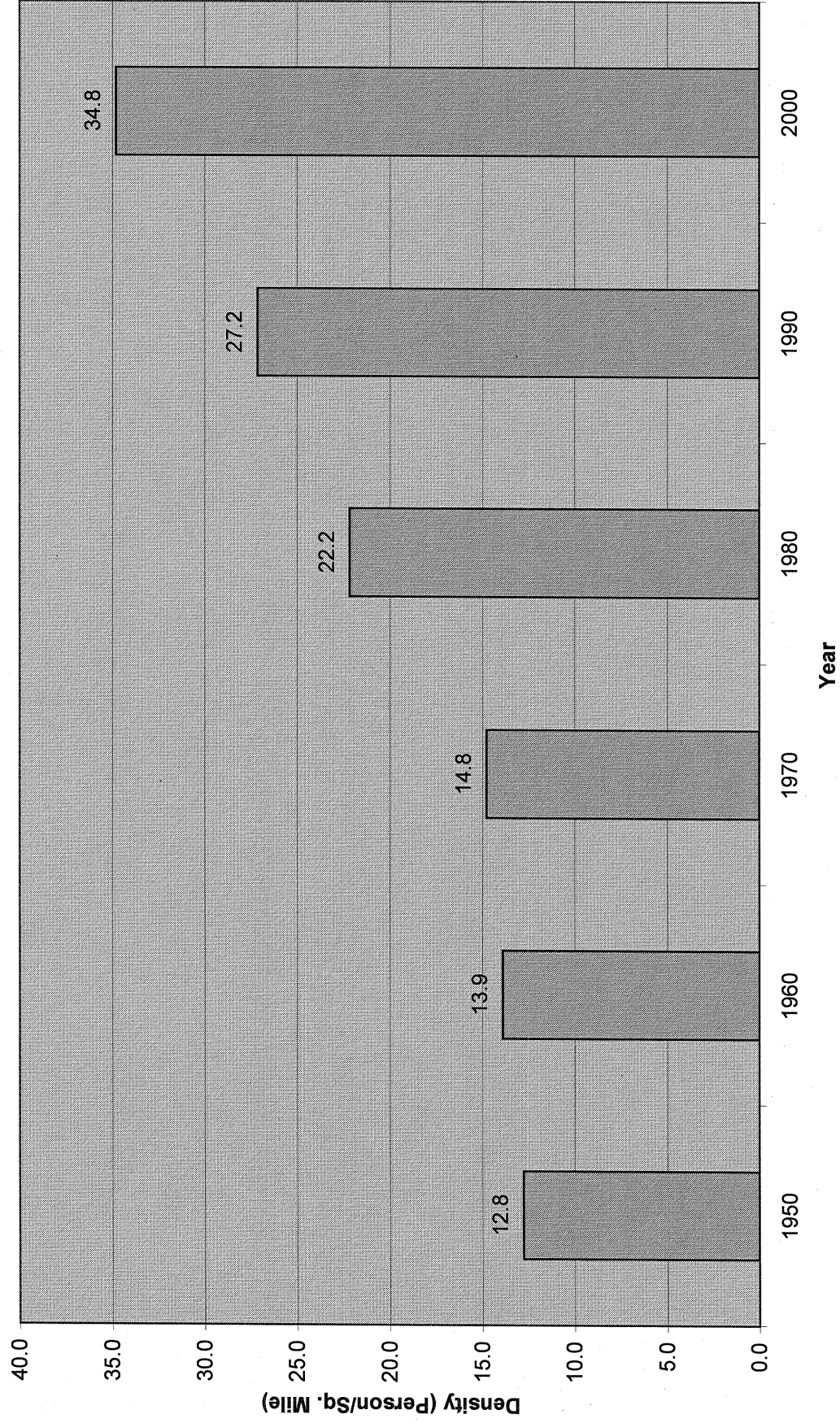
Note: Town data includes villages, if any.

Source: U.S. Bureau of the Census

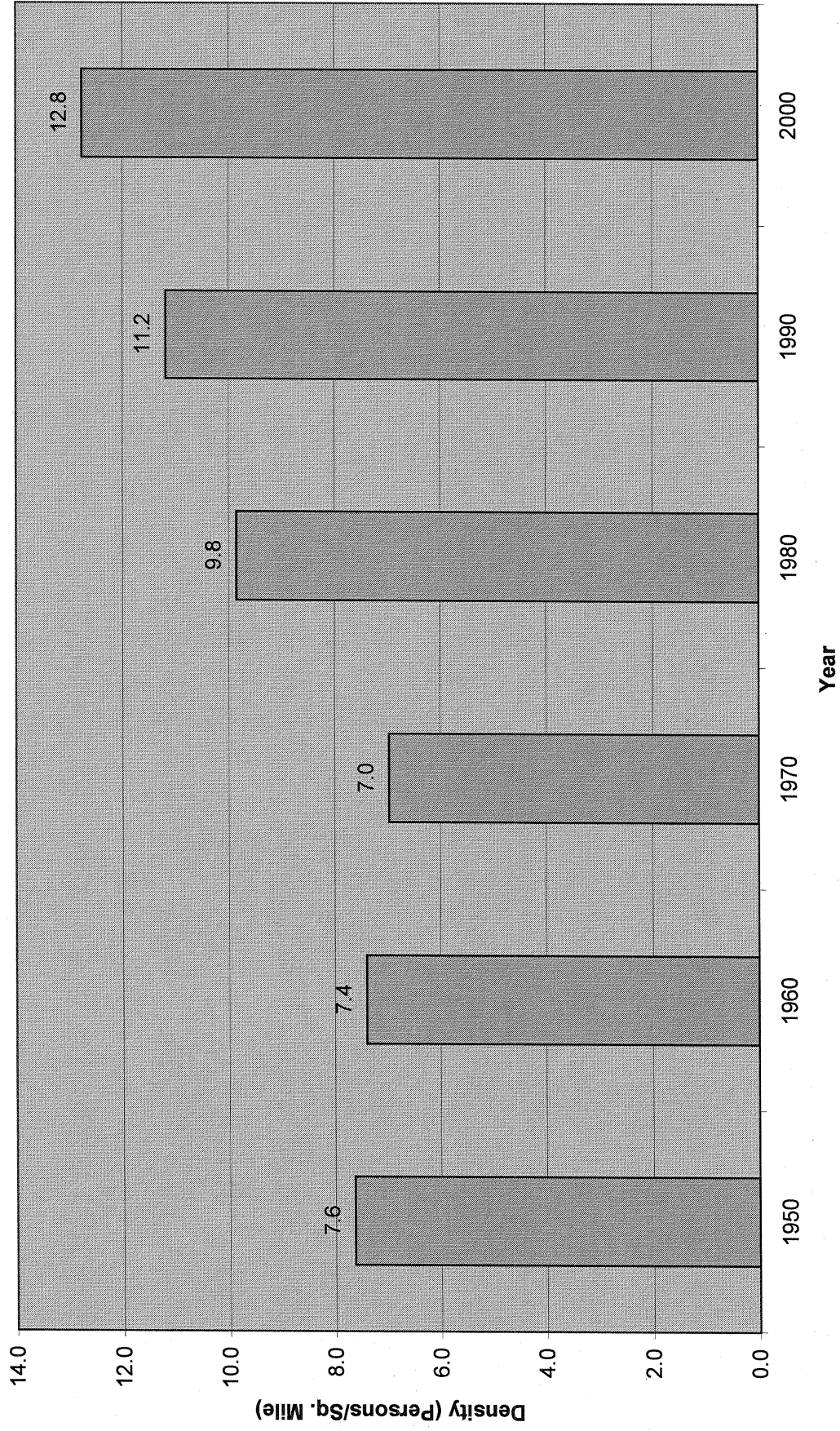
**Population Density
Village of Altmar, NY**



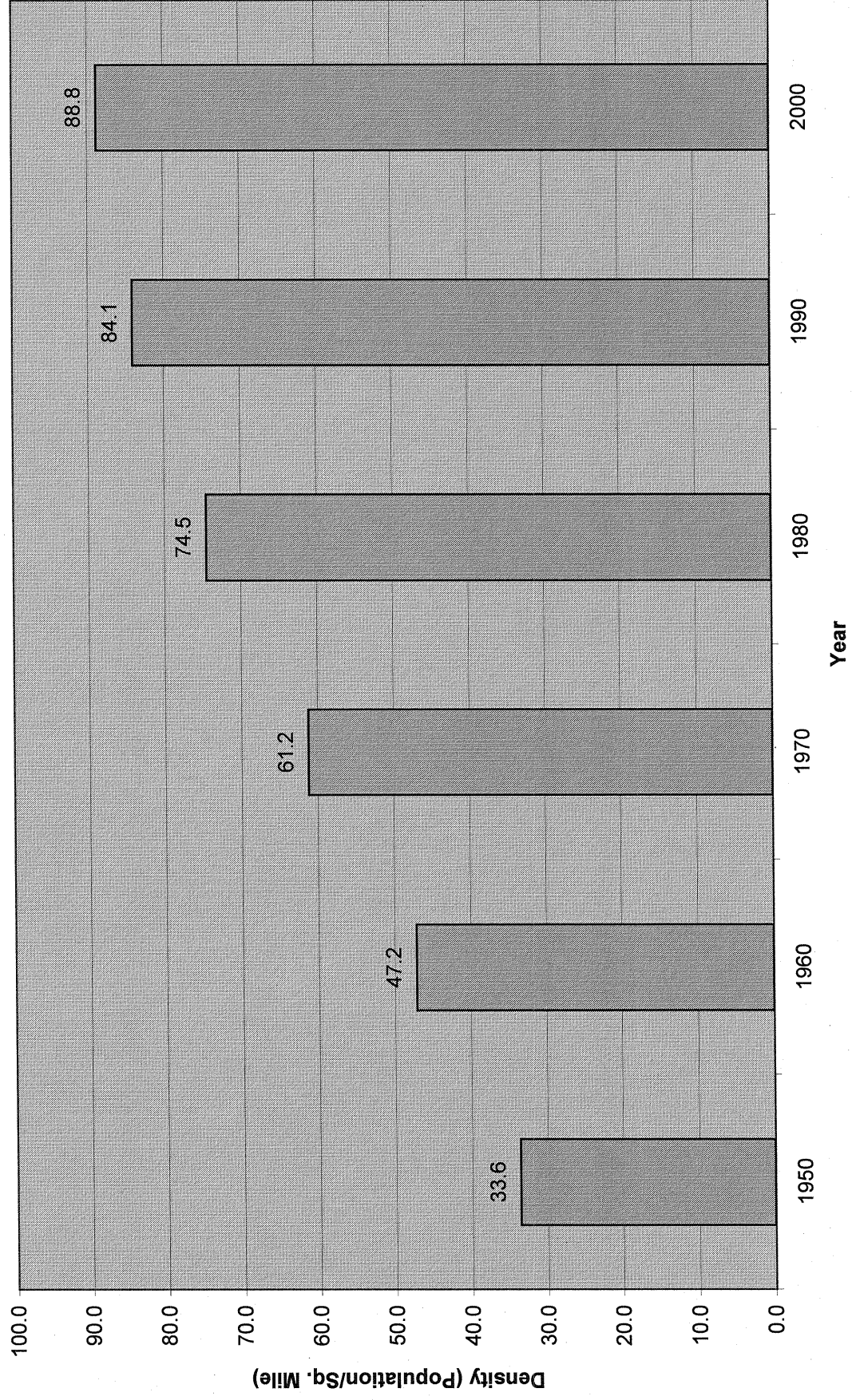
**Population Density
Town of Amboy, NY**



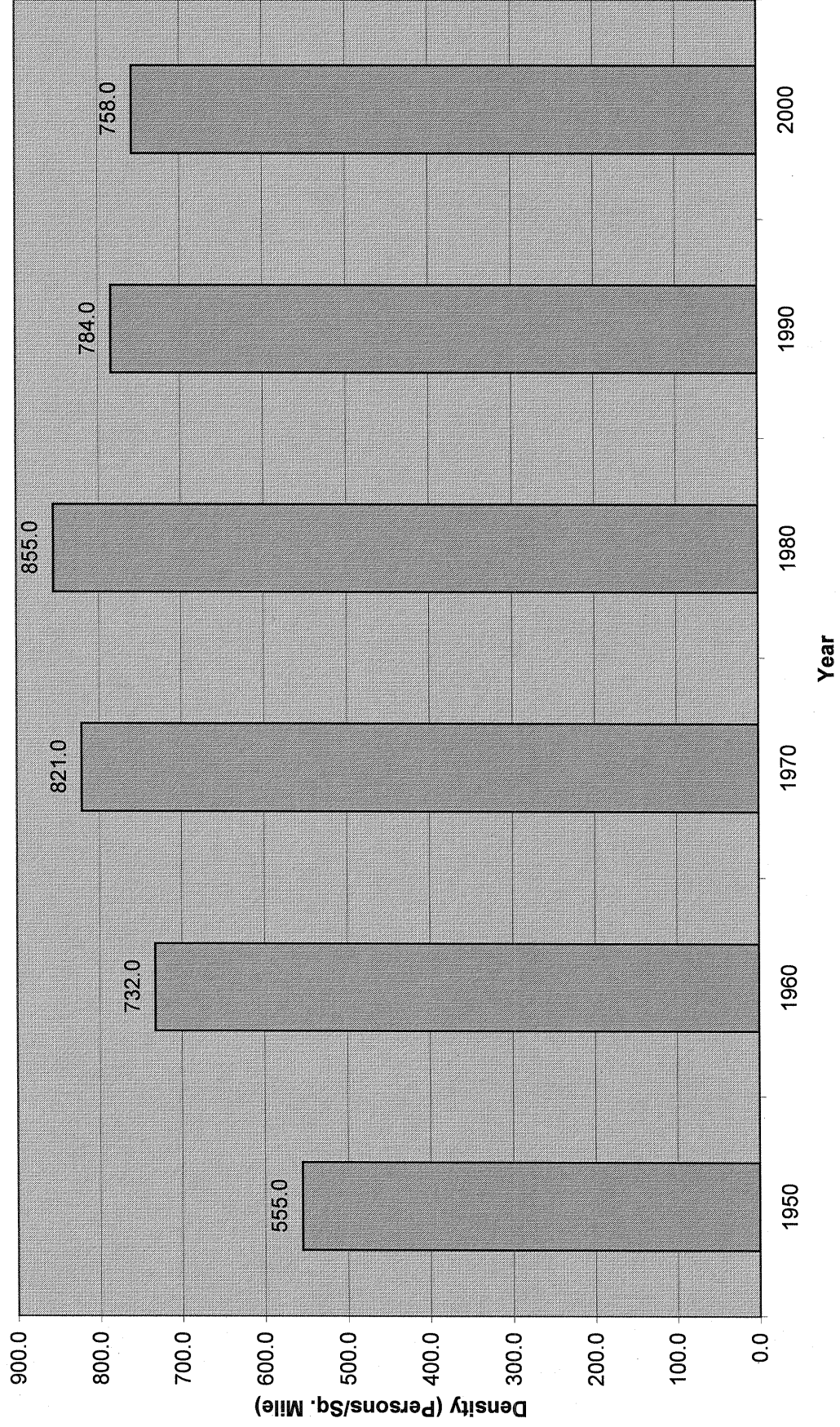
**Population Density
Town of Boylston, NY**



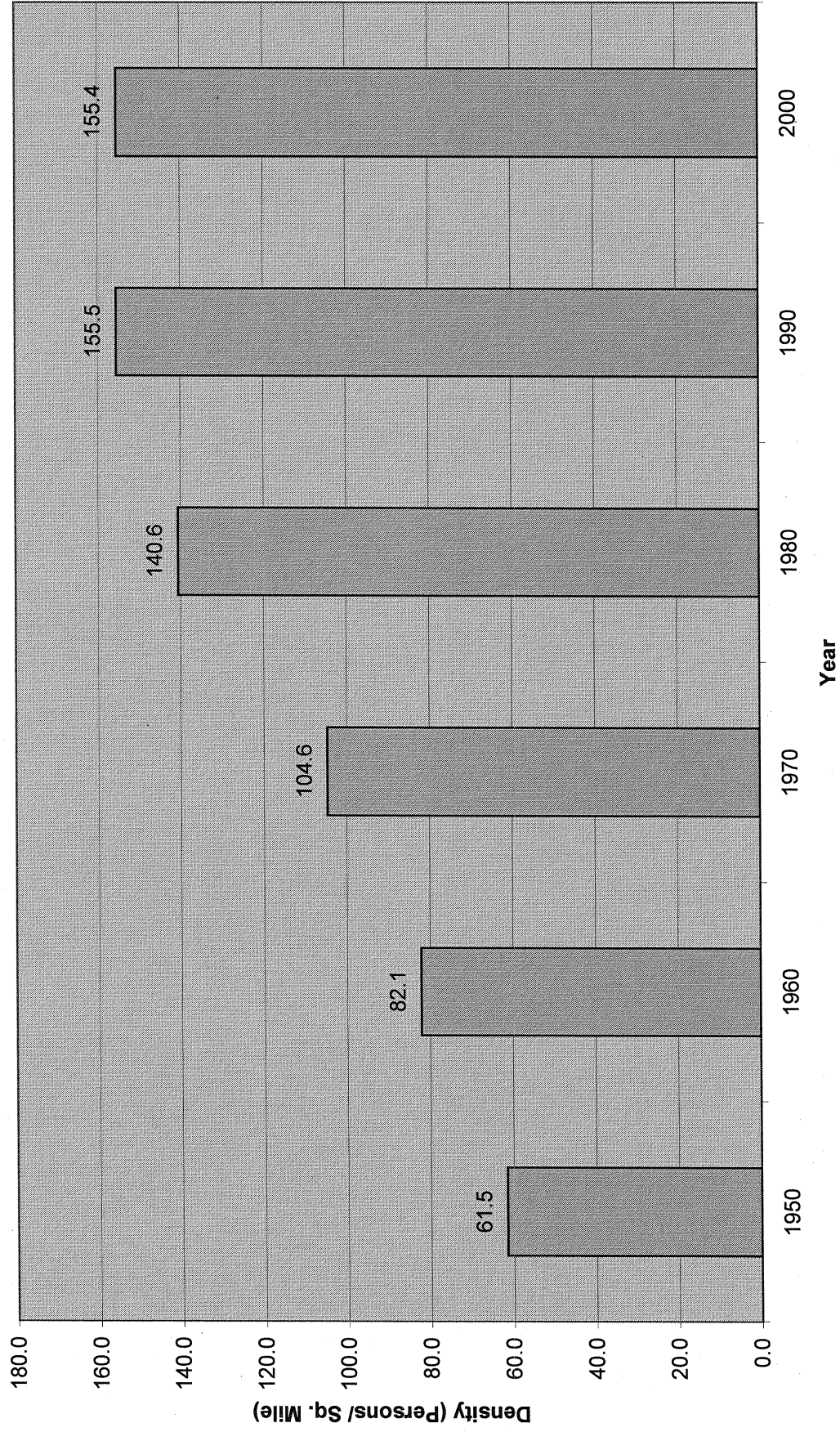
**Population Density
Town of Constantia, NY**



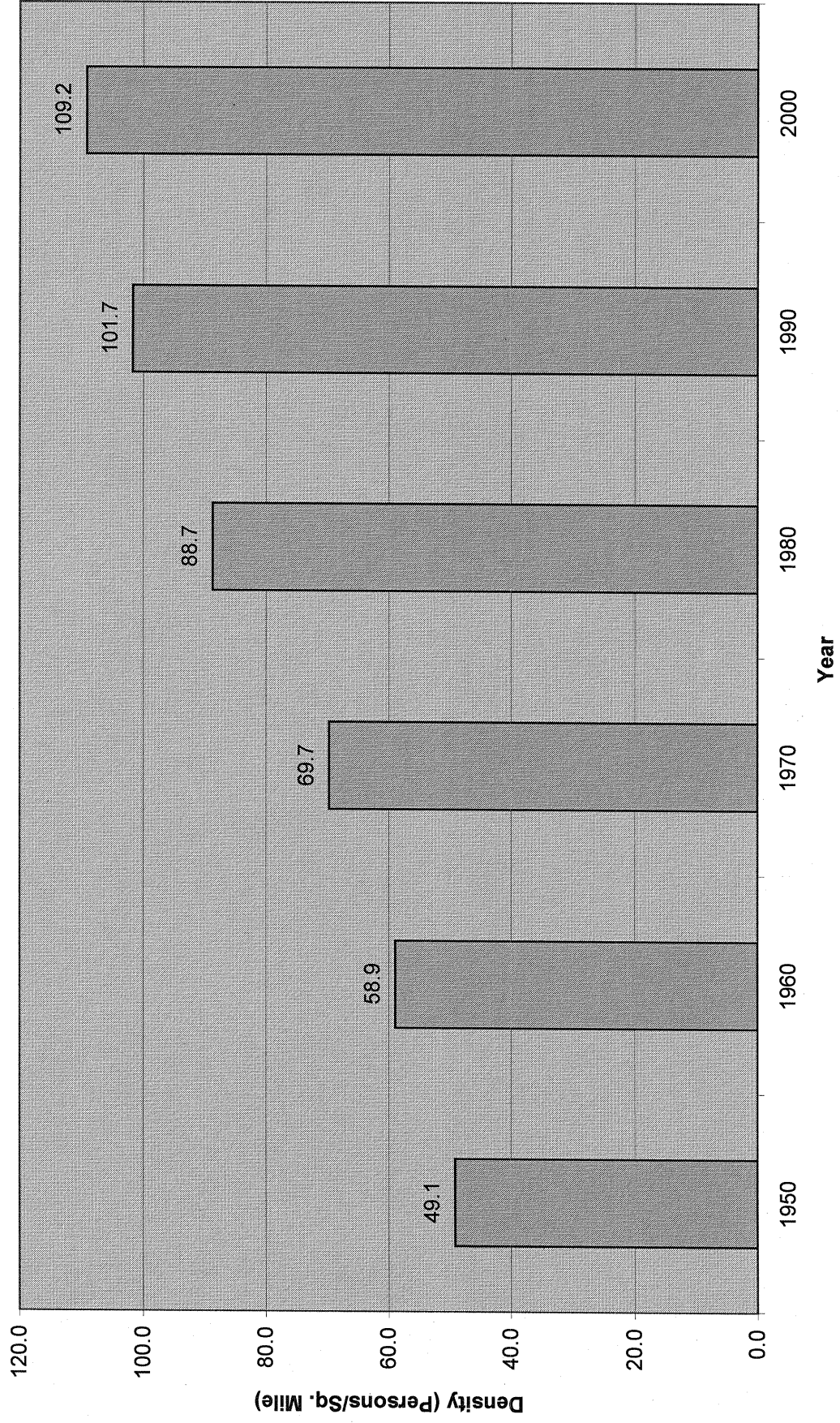
**Population Density
Village of Cleveland, NY**



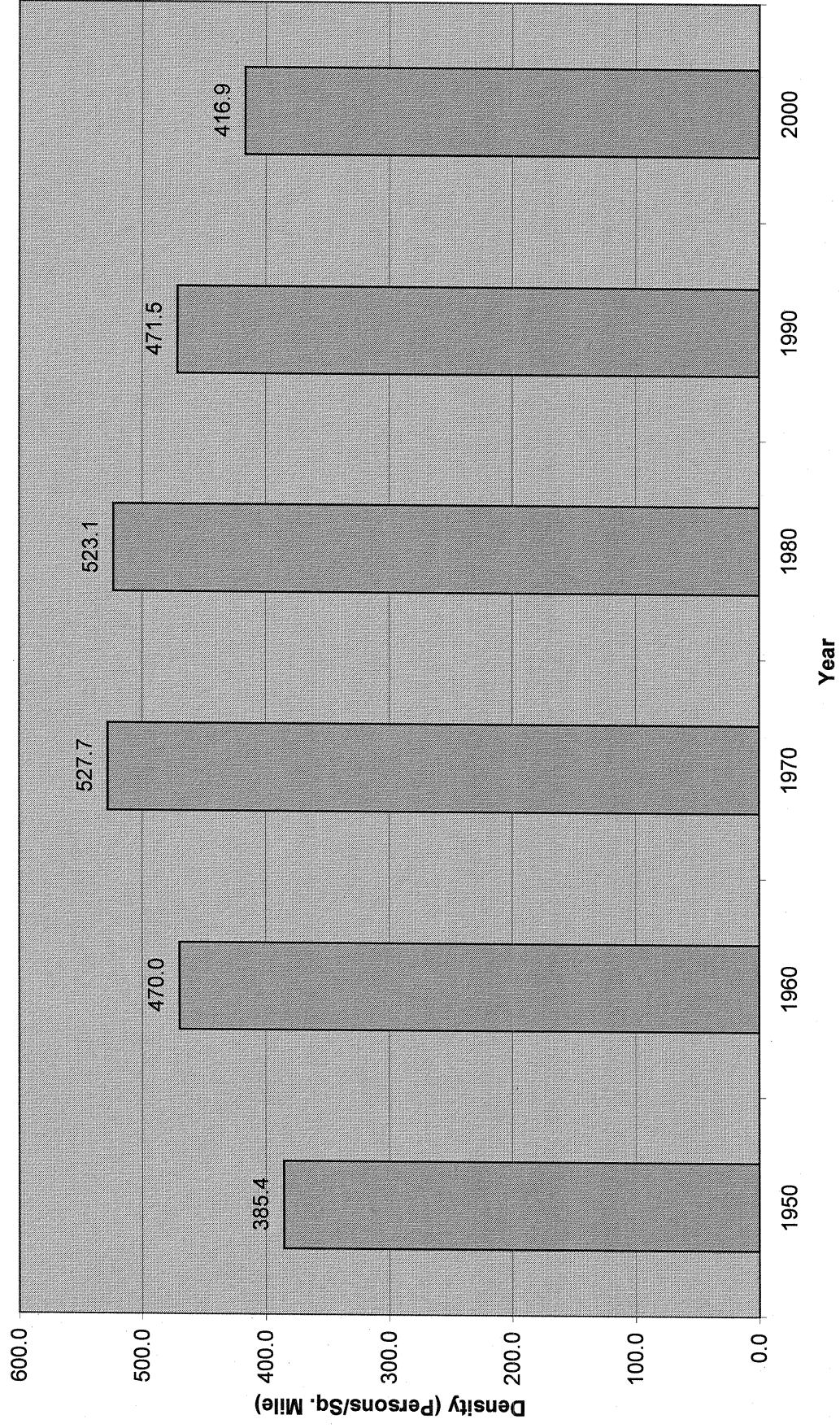
**Population Density
Town of Granby, NY**



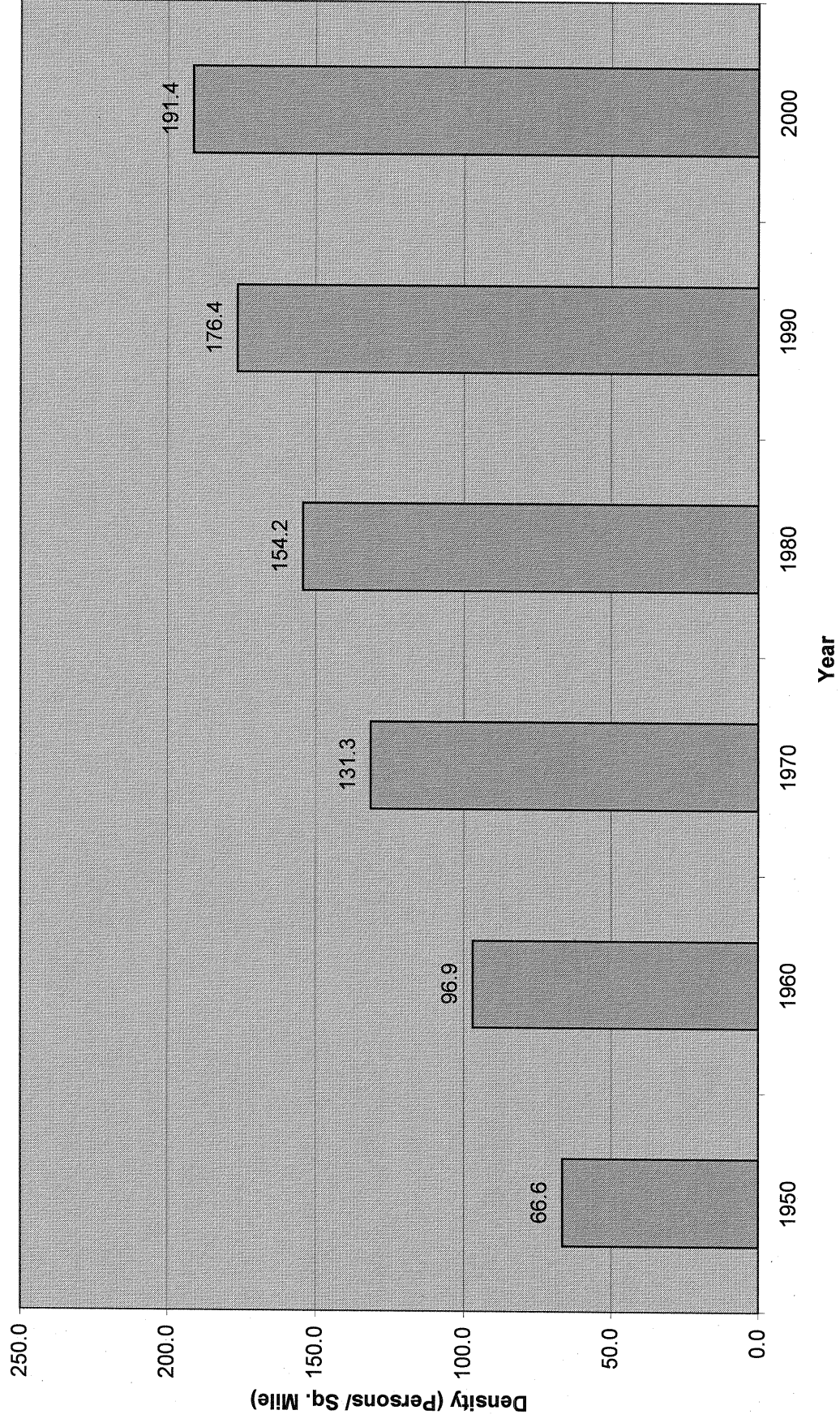
**Population Density
Town of Hannibal, NY**



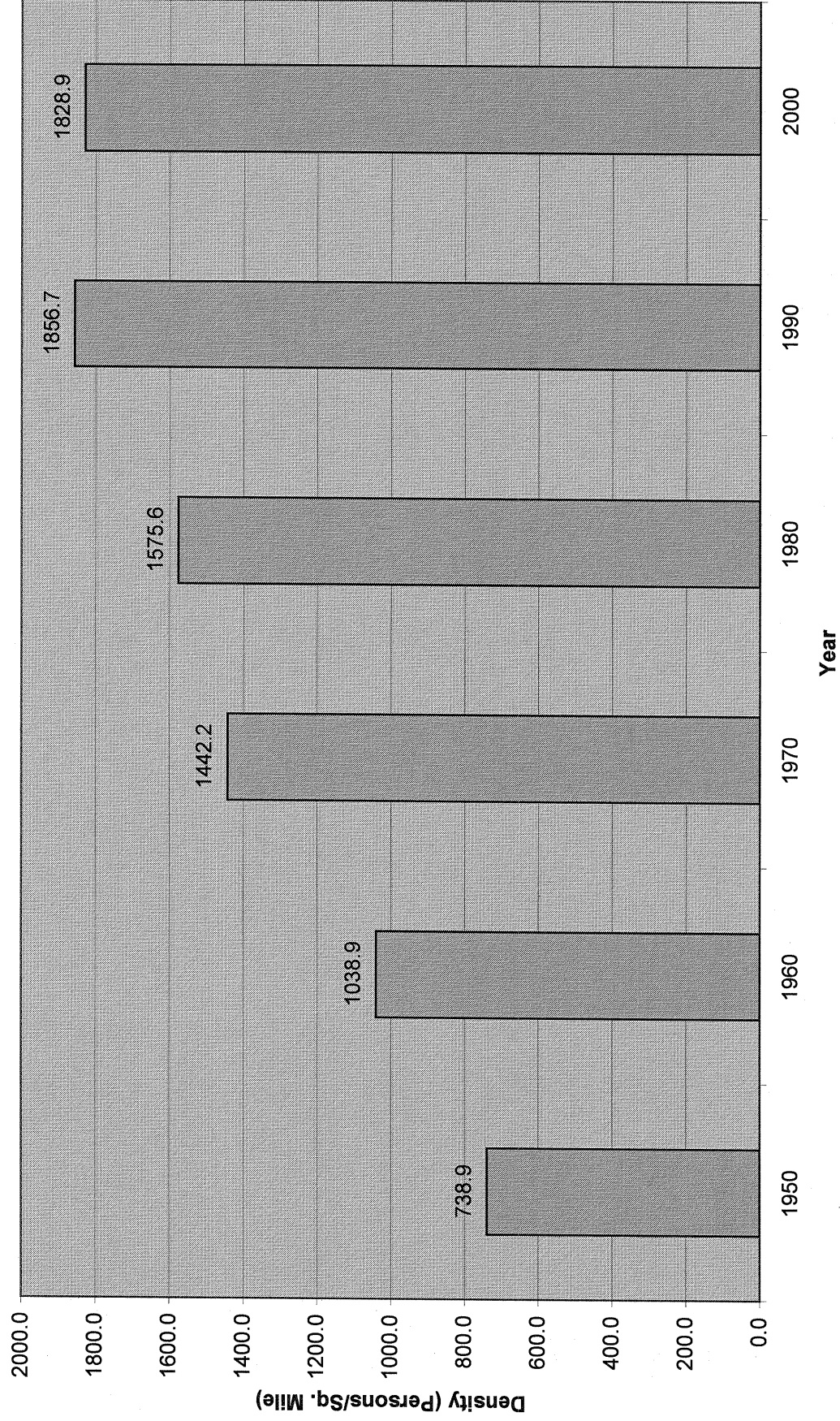
**Population Density
Village of Hannibal, NY**



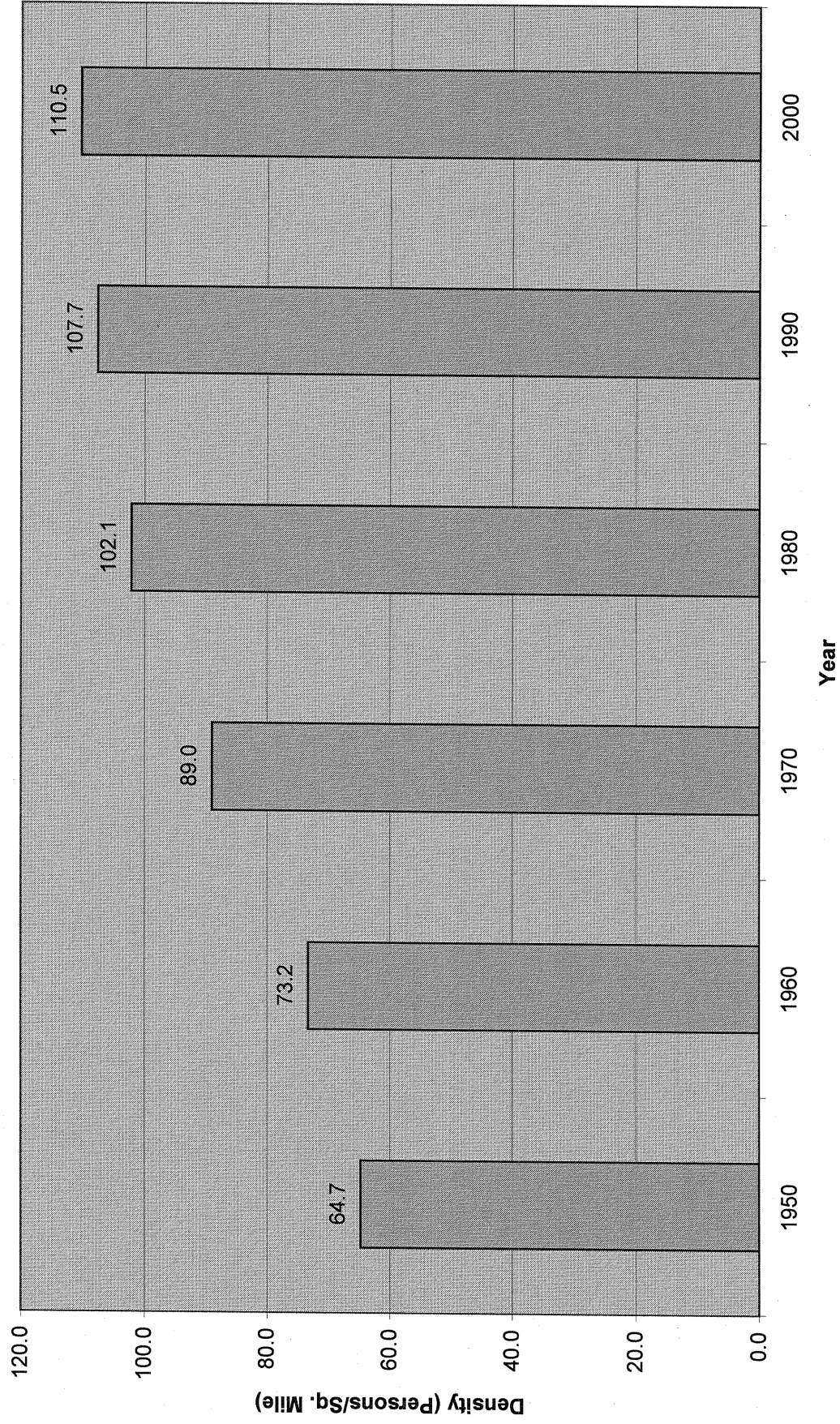
**Population Density
Town of Hastings, NY**



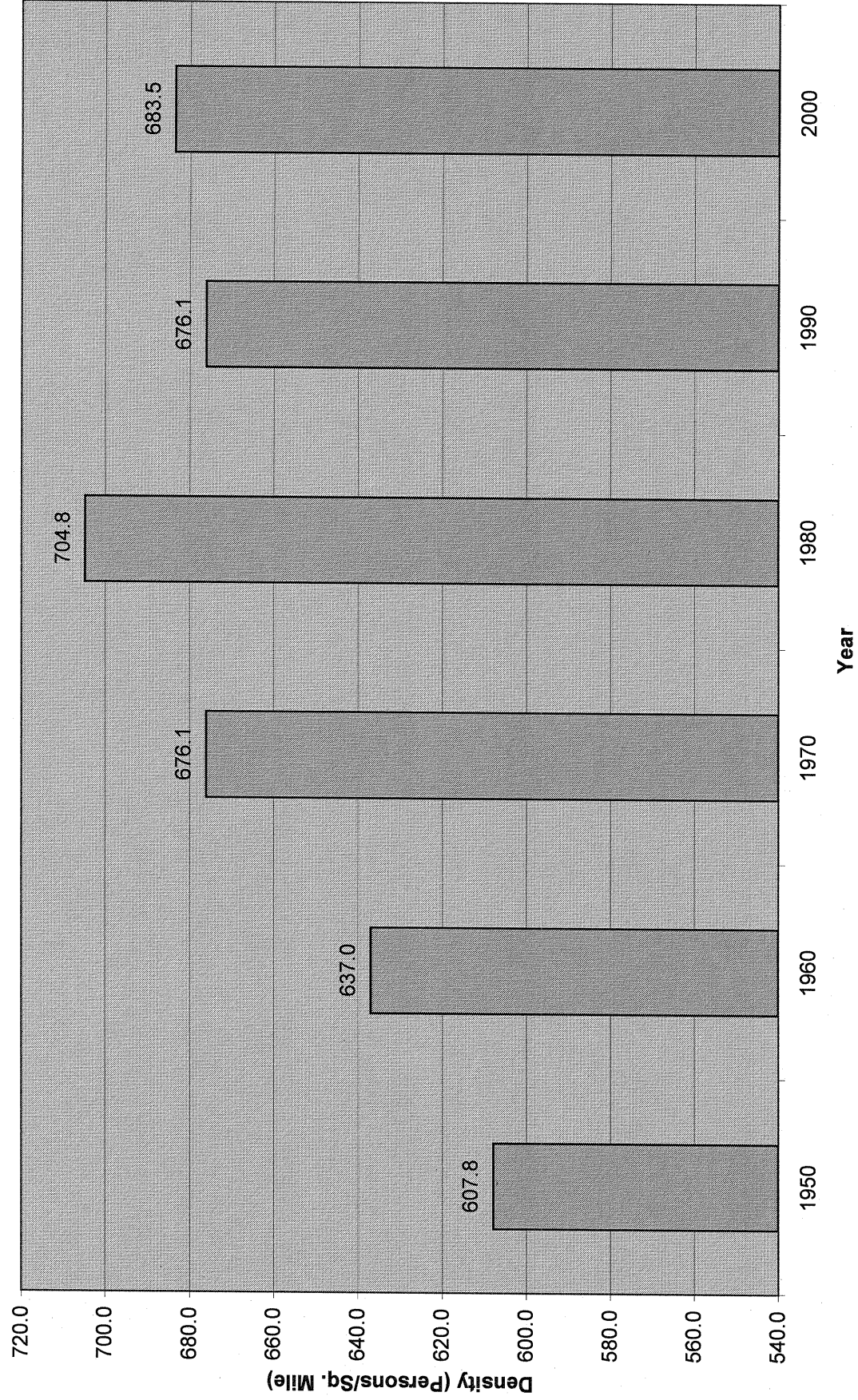
**Population Density
Village of Central Square, NY**



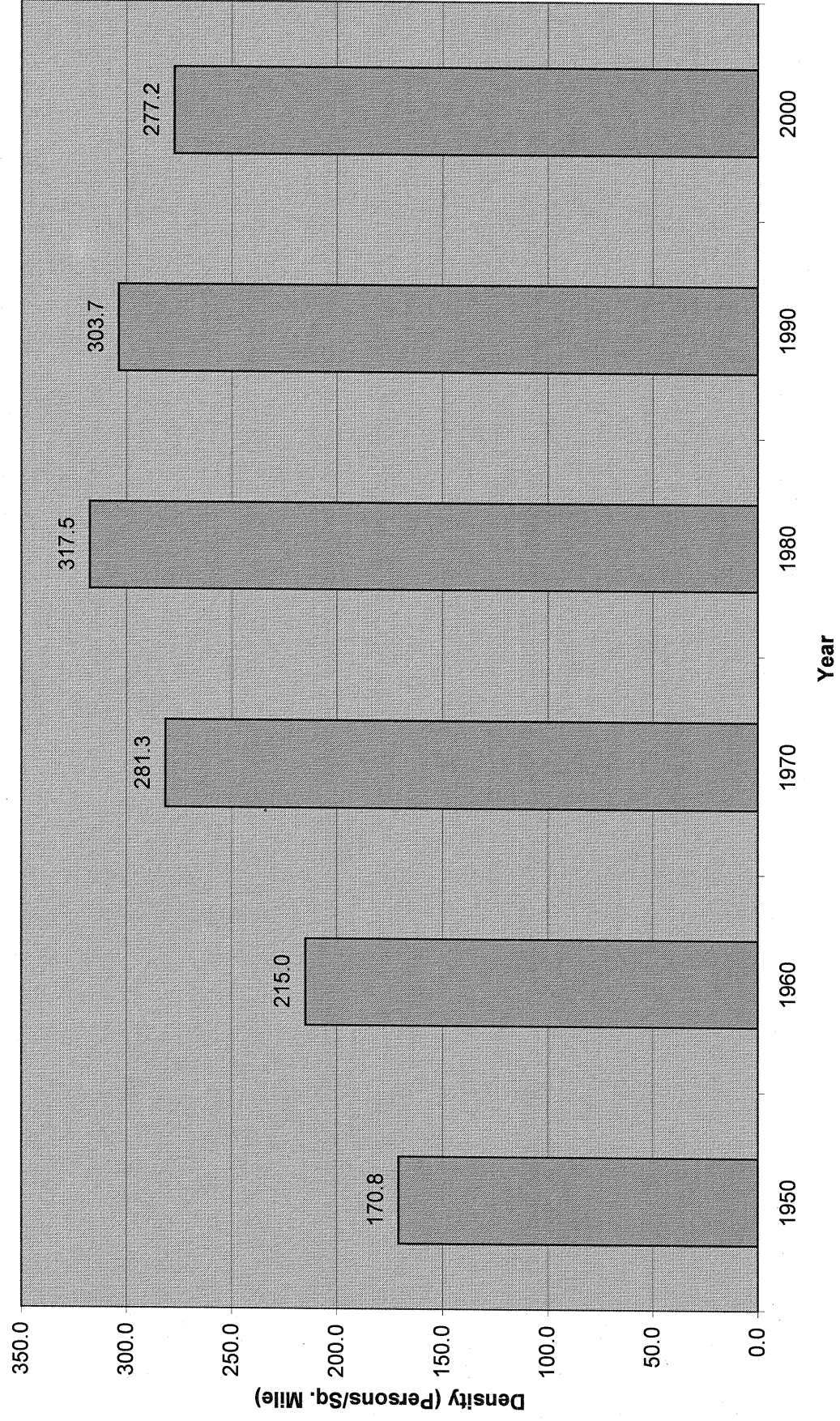
**Population Density
Town of Mexico, NY**



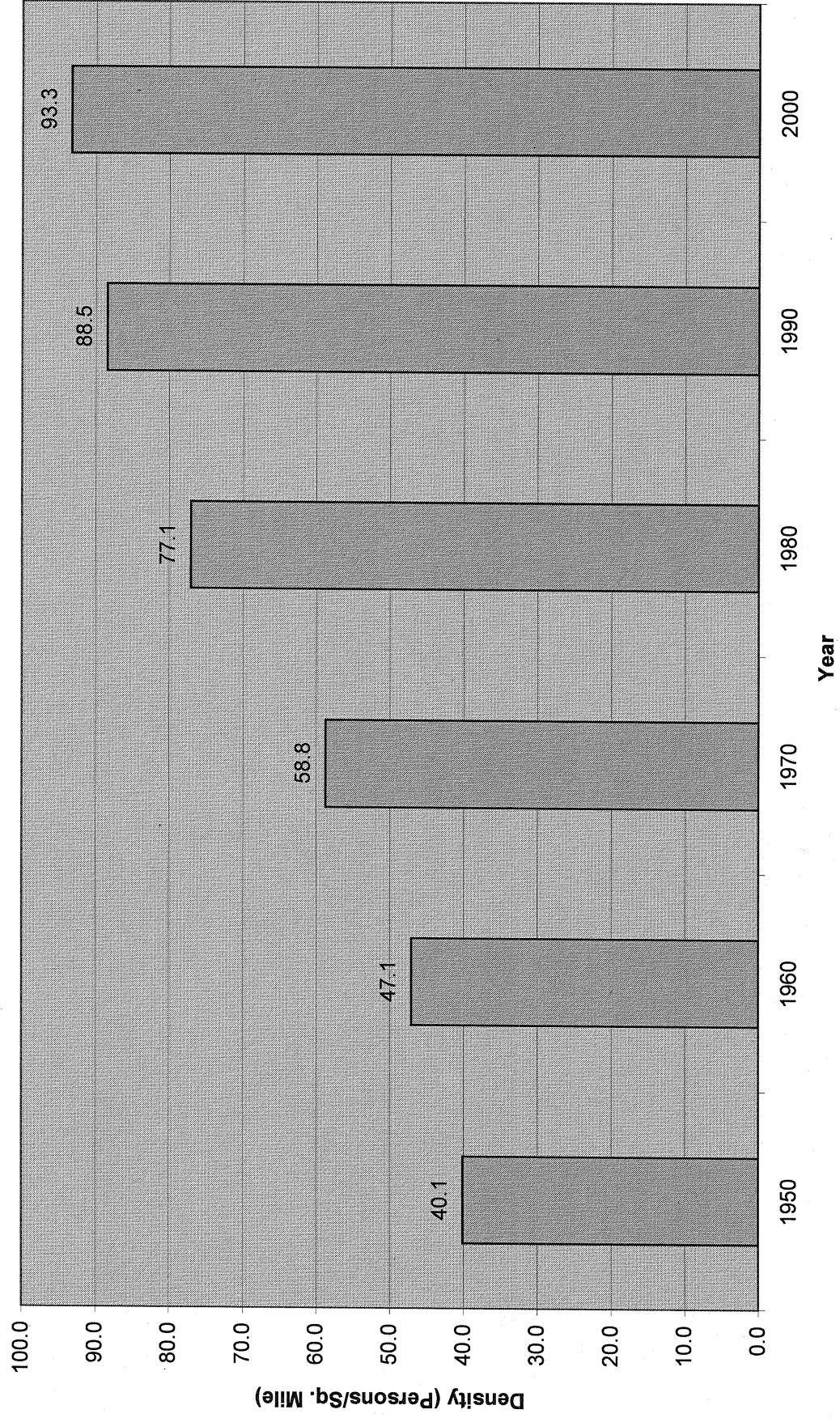
**Population Density
Village of Mexico, NY**



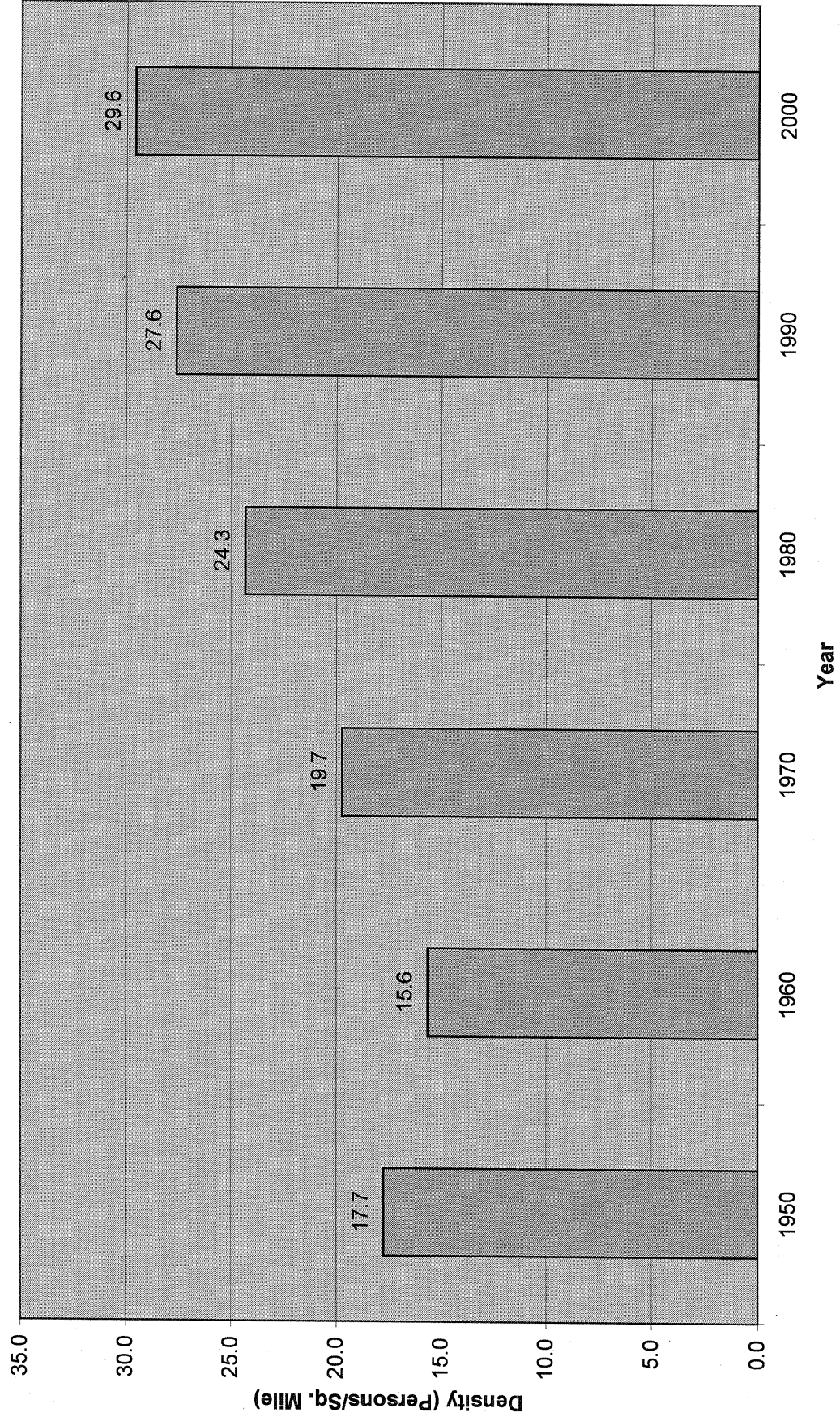
**Population Density
Town of Minetto, NY**



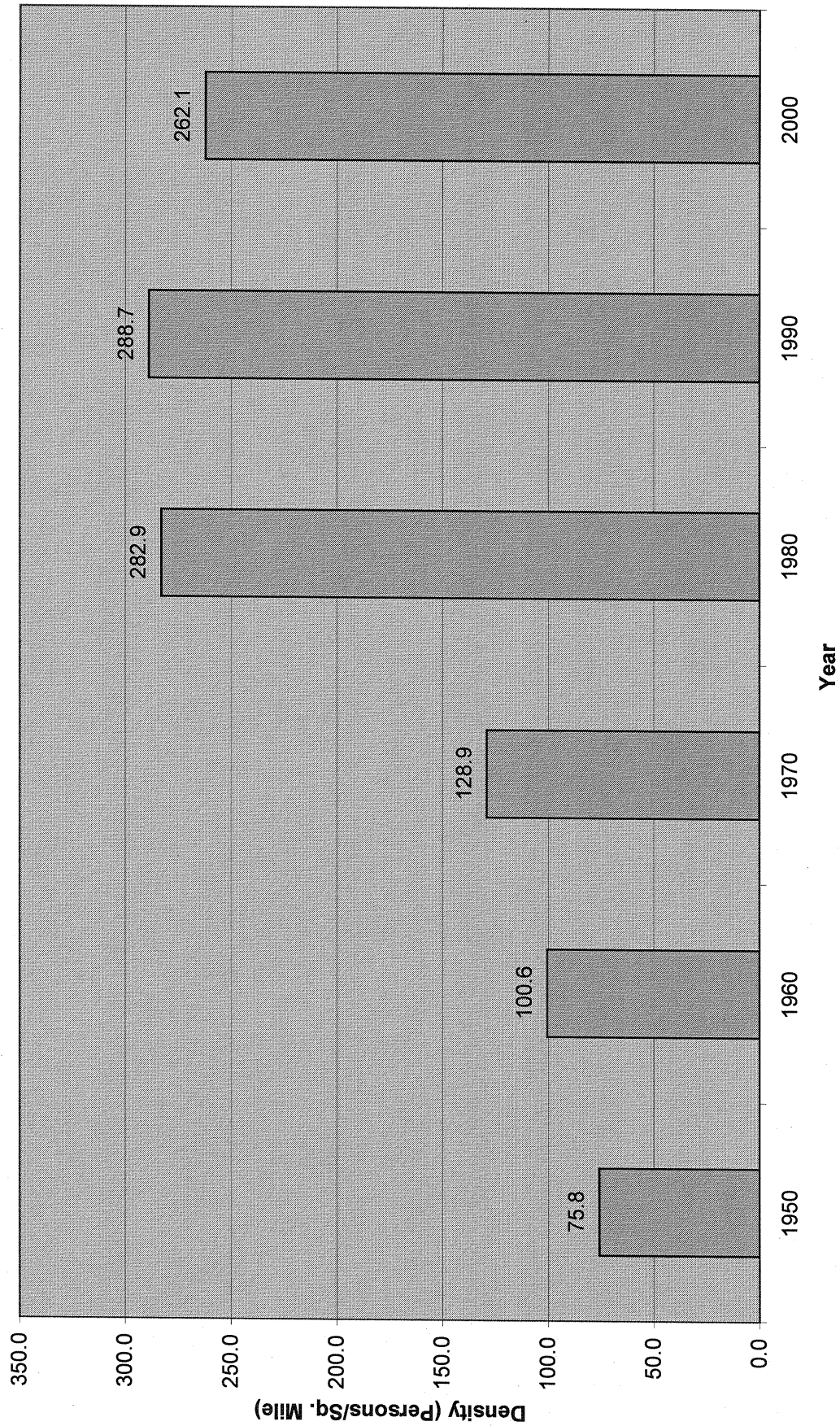
**Population Density
Town of New Haven, NY**



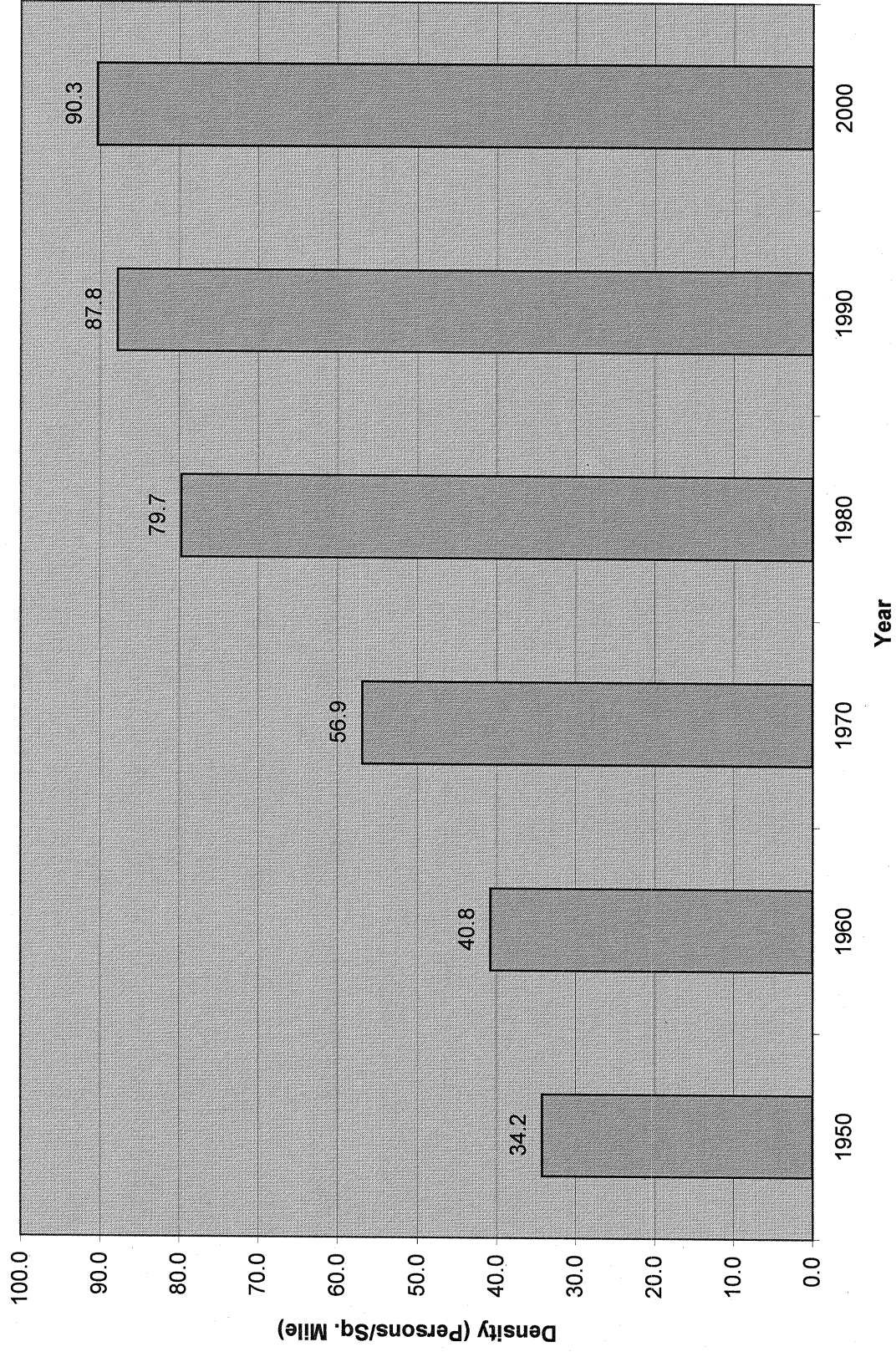
**Population Density
Town of Orwell, NY**



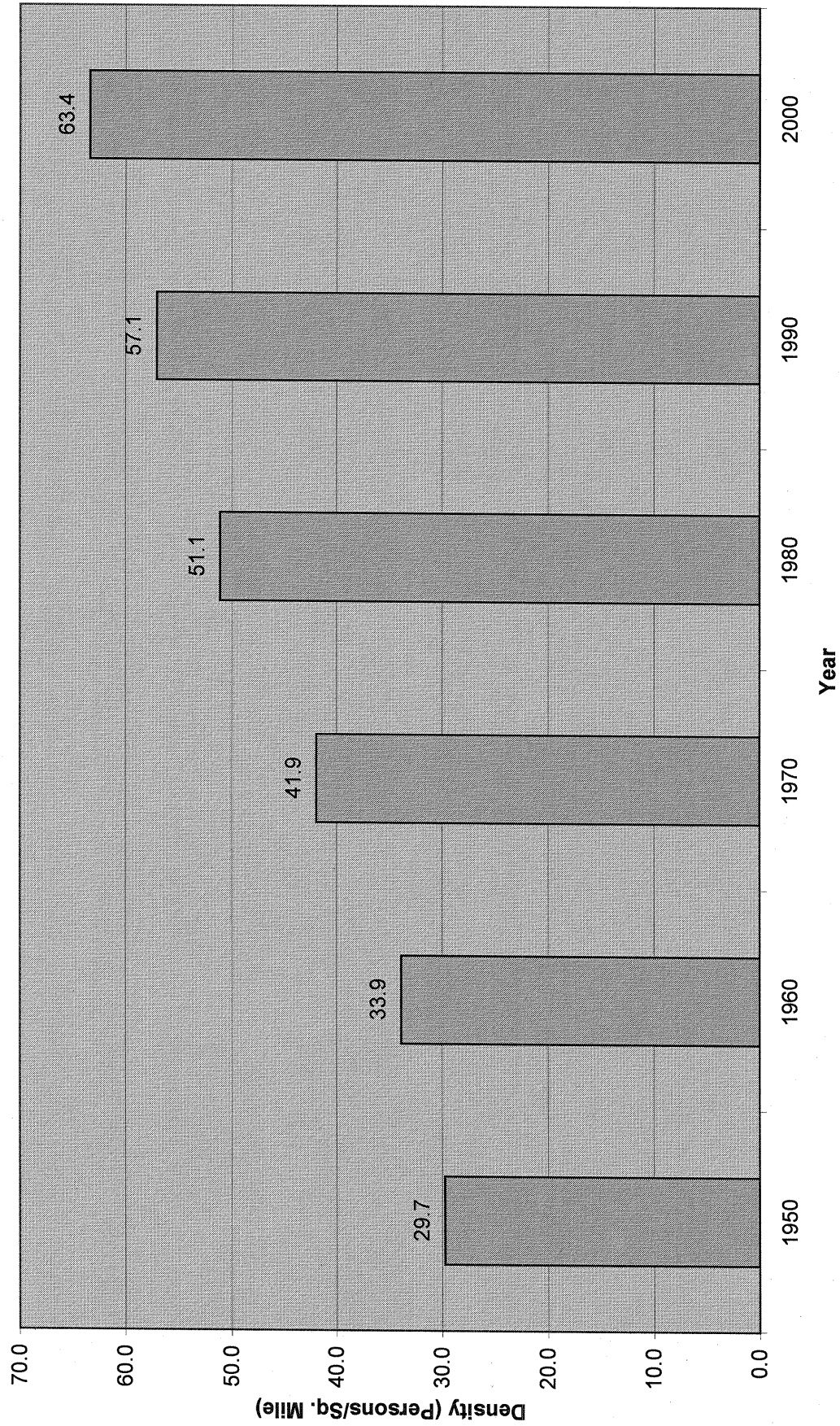
**Population Density
Town of Oswego, NY**



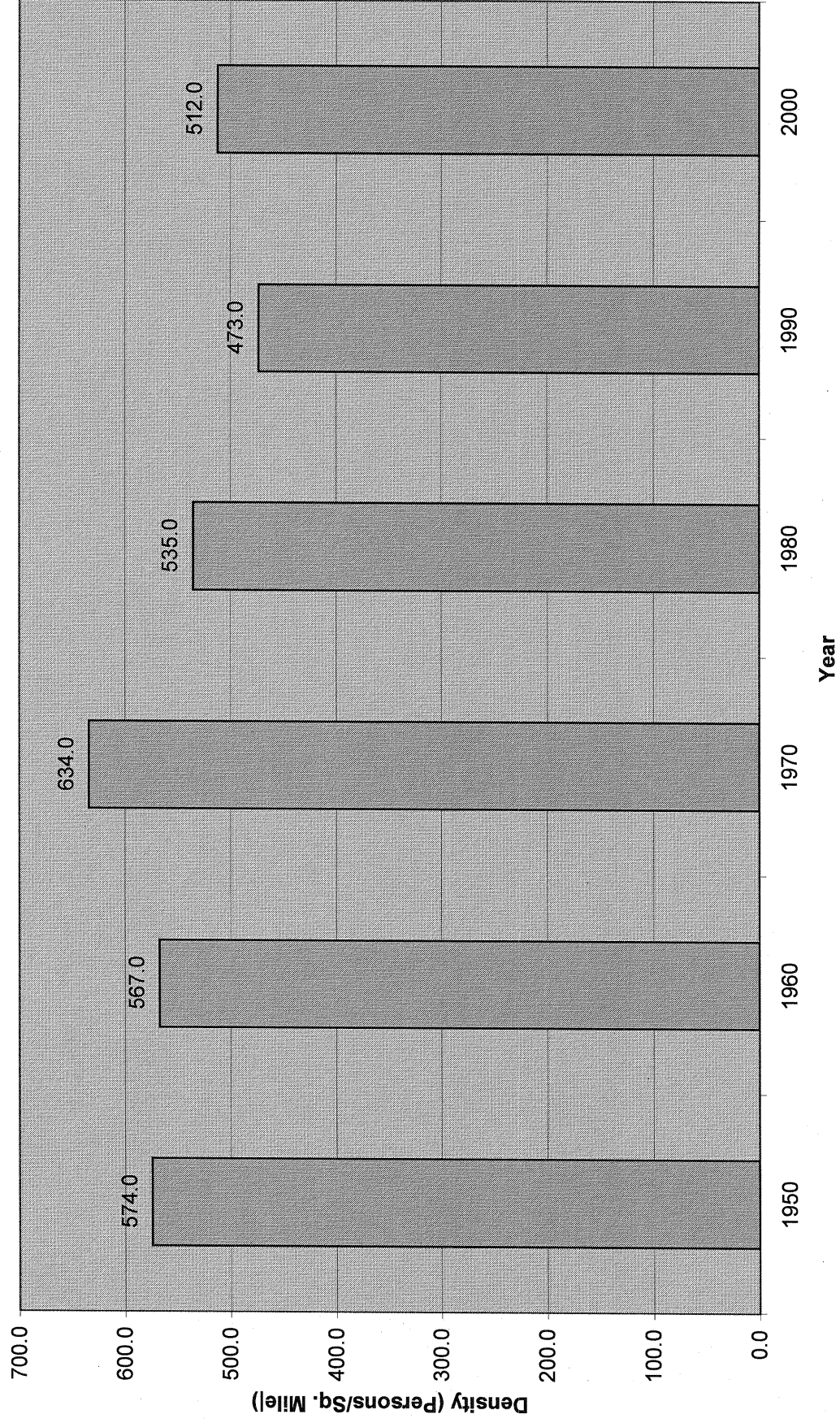
**Population Density
Town of Palermo, NY**



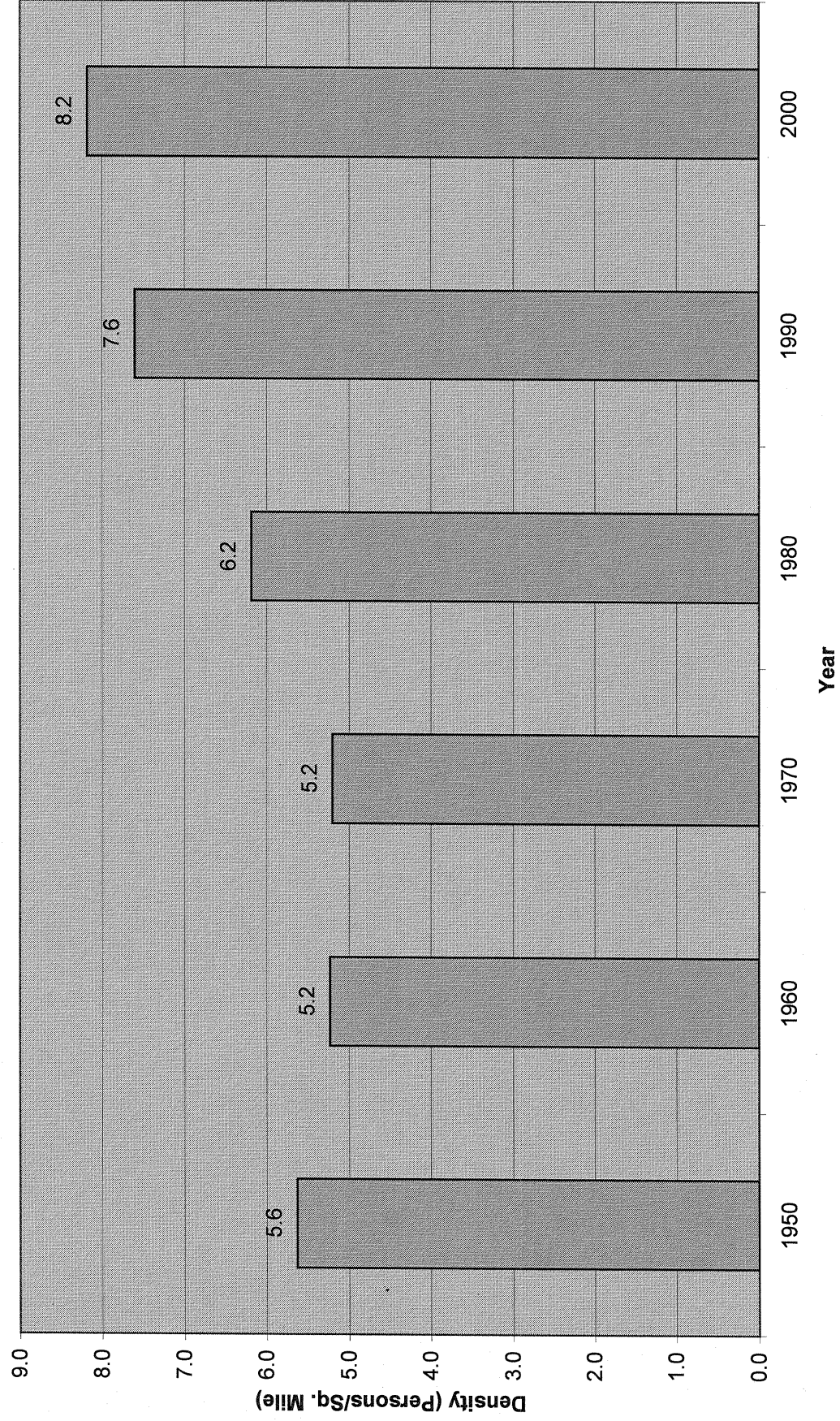
**Population Density
Town of Parish, NY**



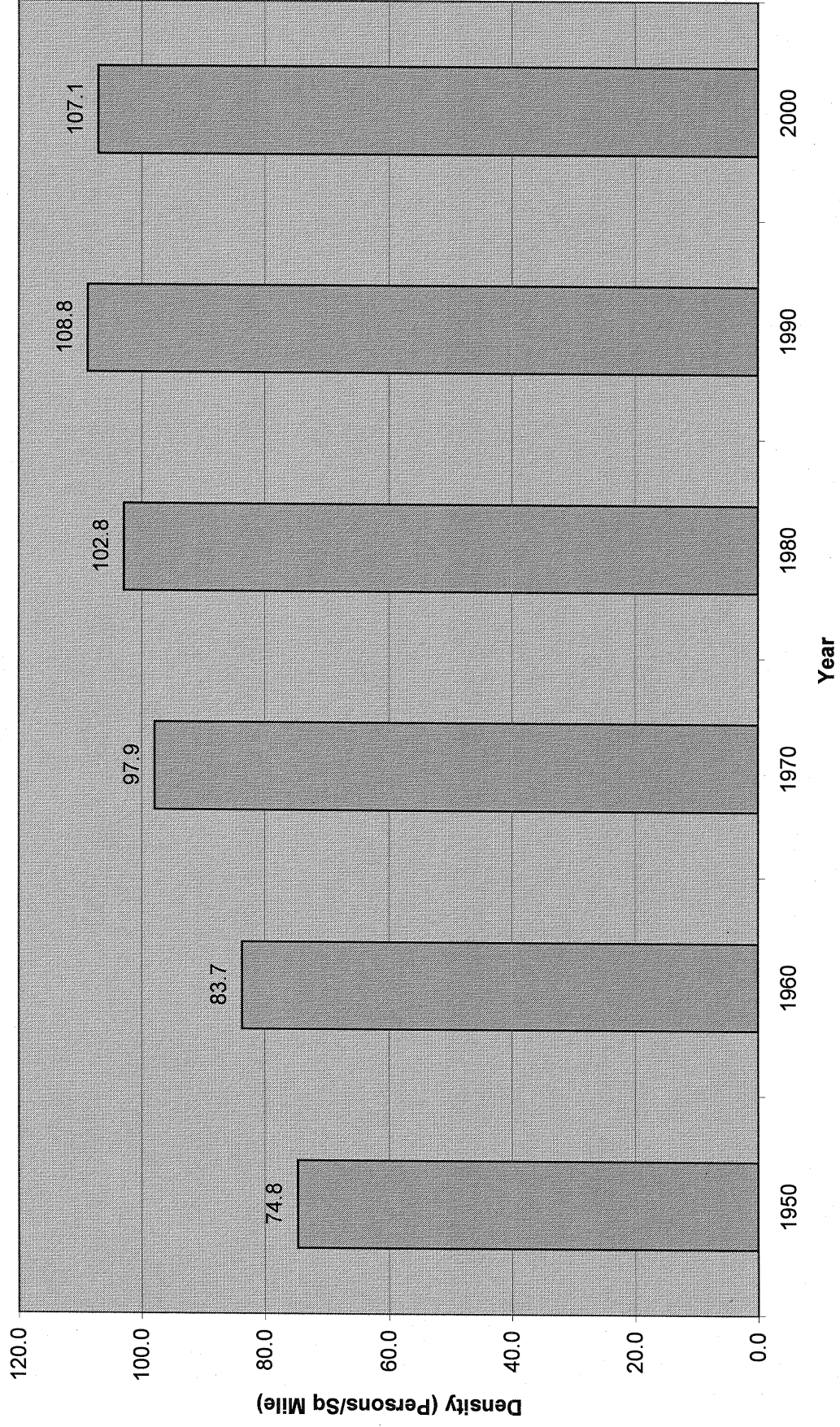
**Population Density
Village of Parish, NY**



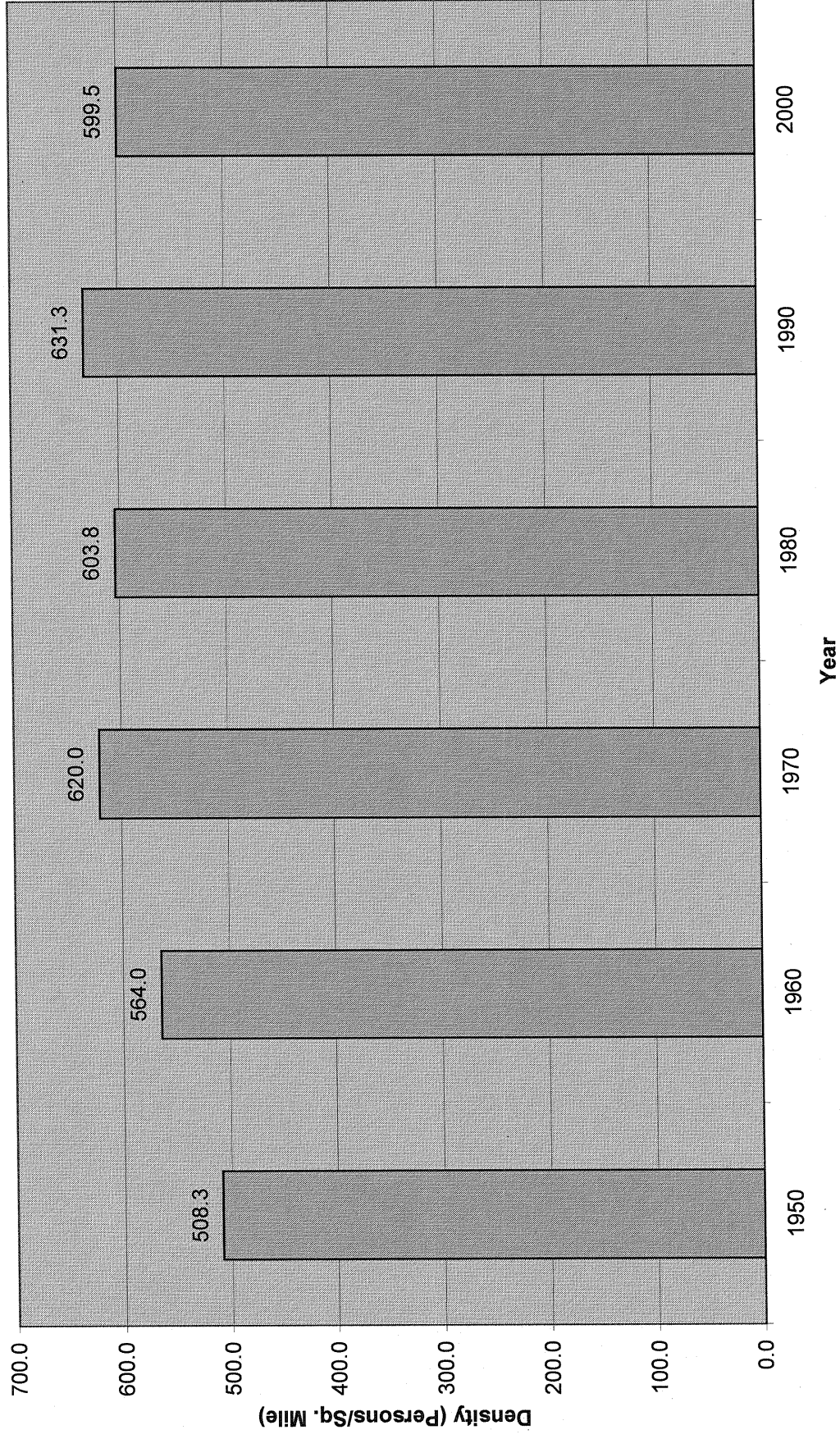
**Population Density
Town of Redfield, NY**



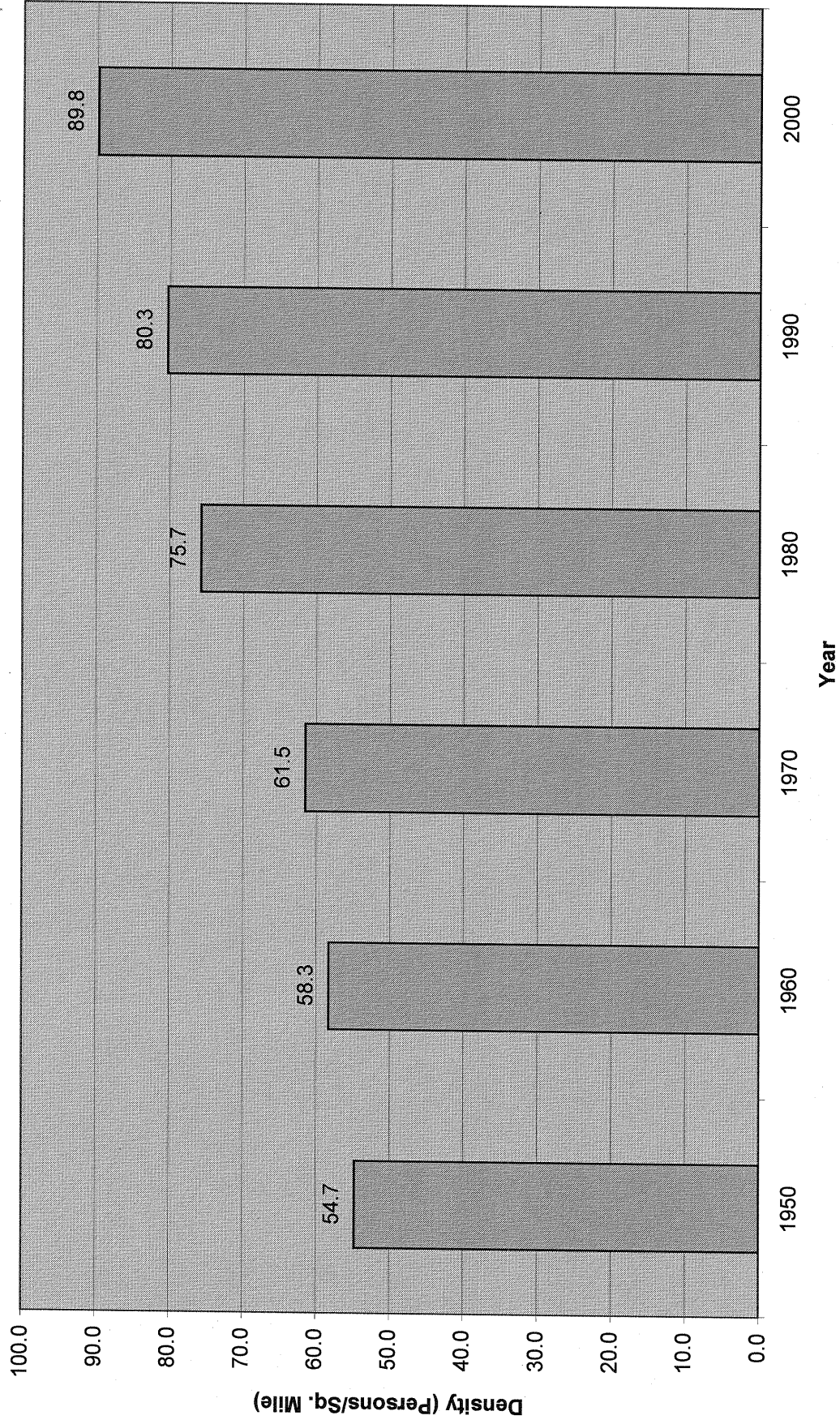
**Population Density
Town of Richland, NY**



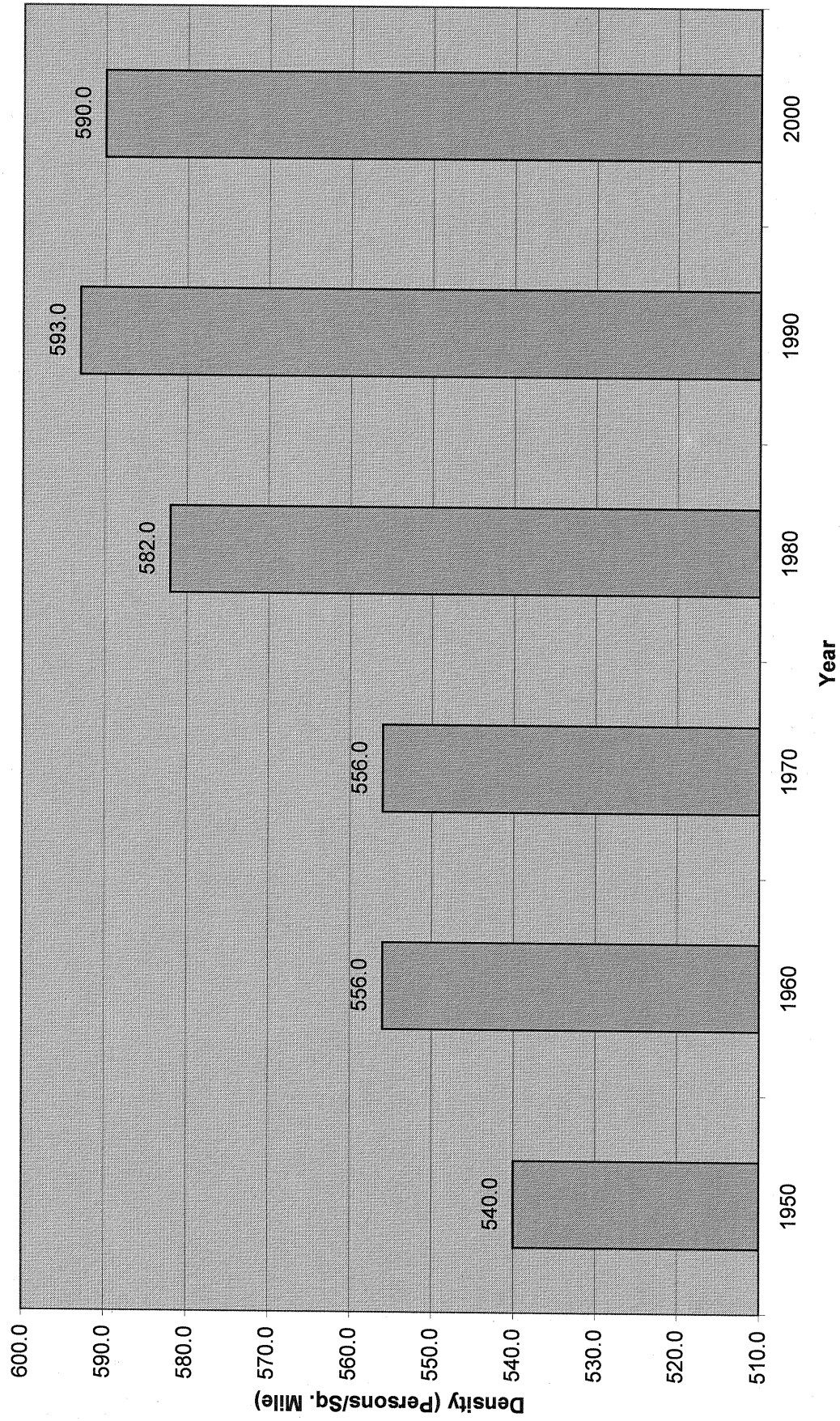
**Population Density
Village of Pulaski, NY**



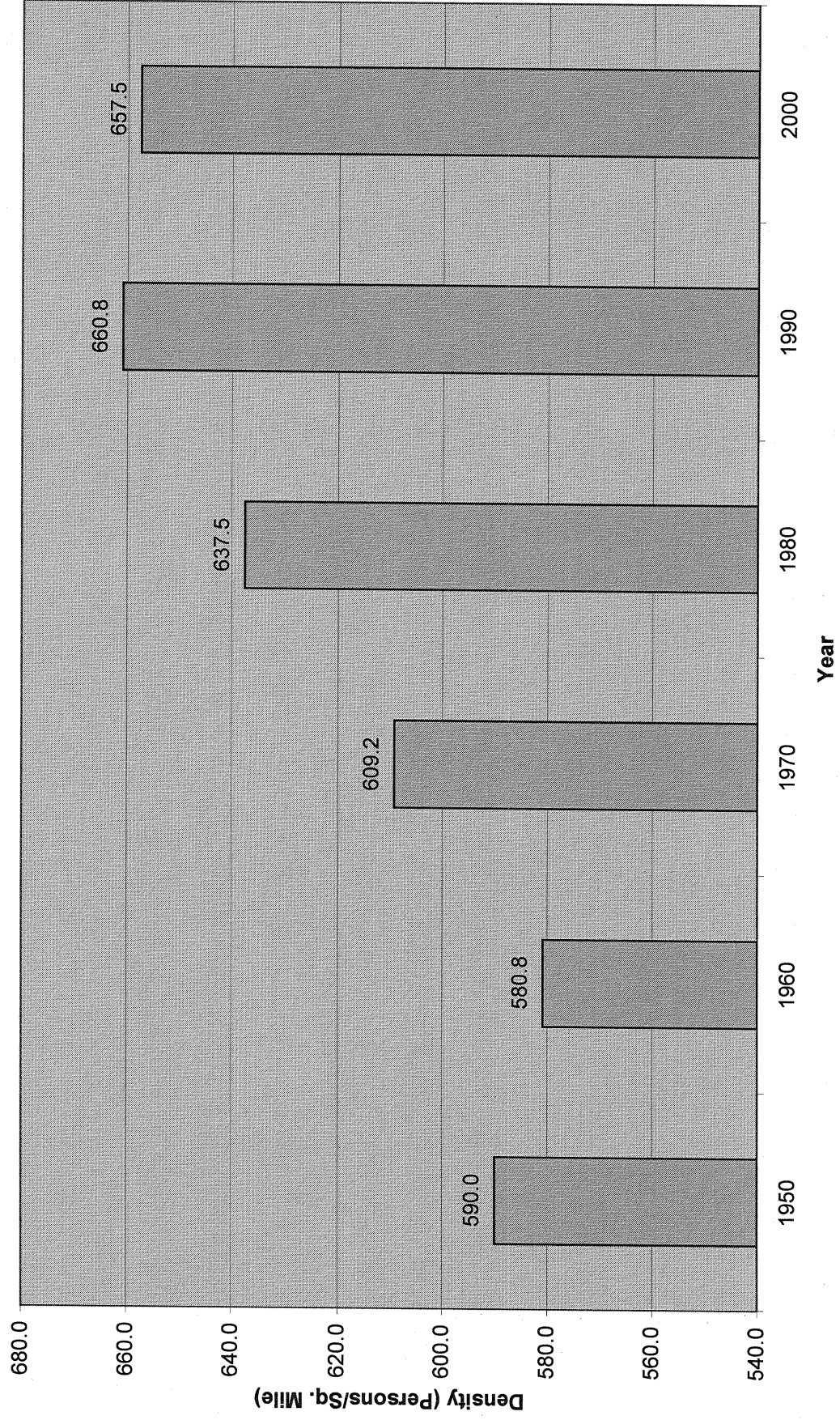
**Population Density
Town of Sandy Creek, NY**



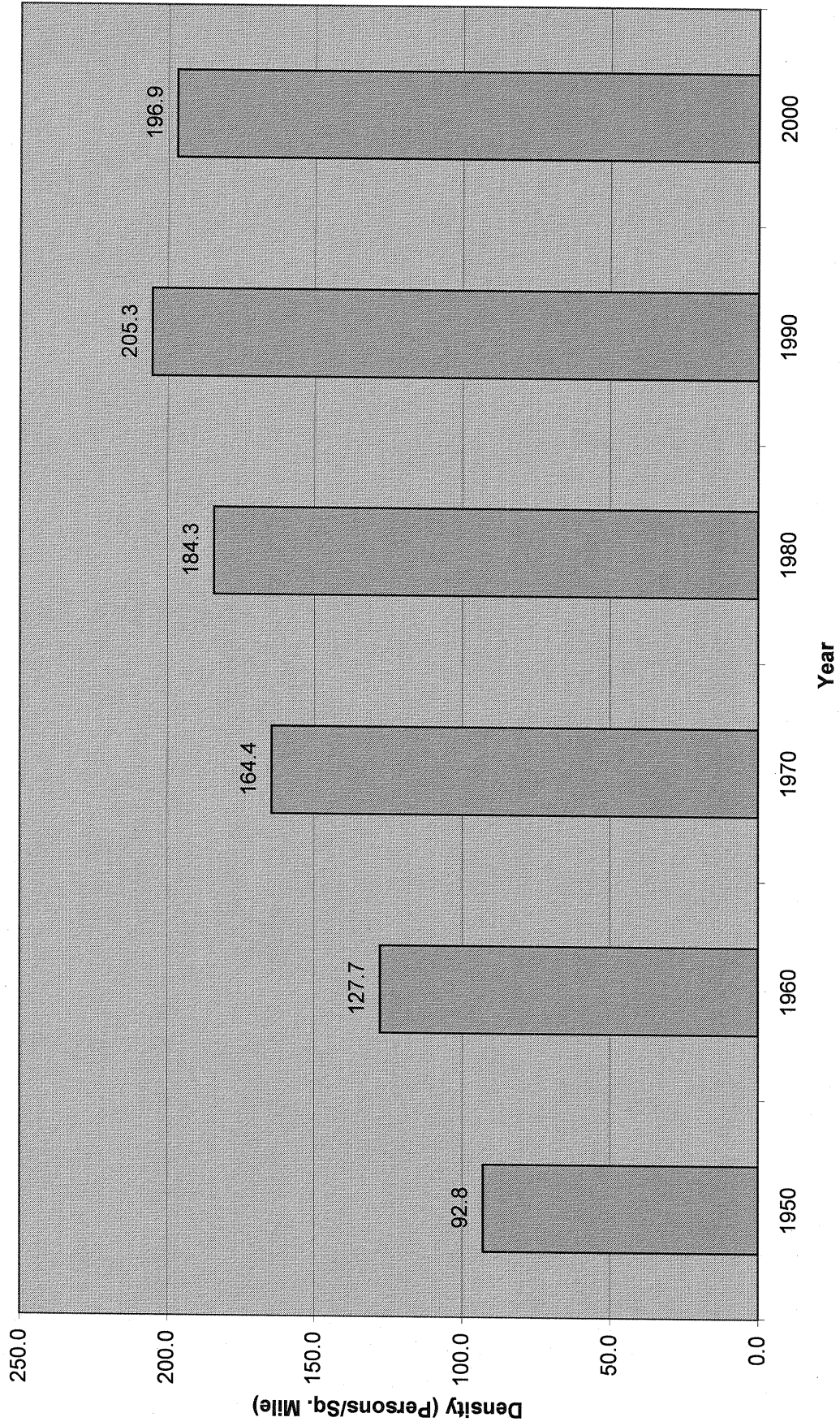
**Population Density
Village of Lacona, NY**



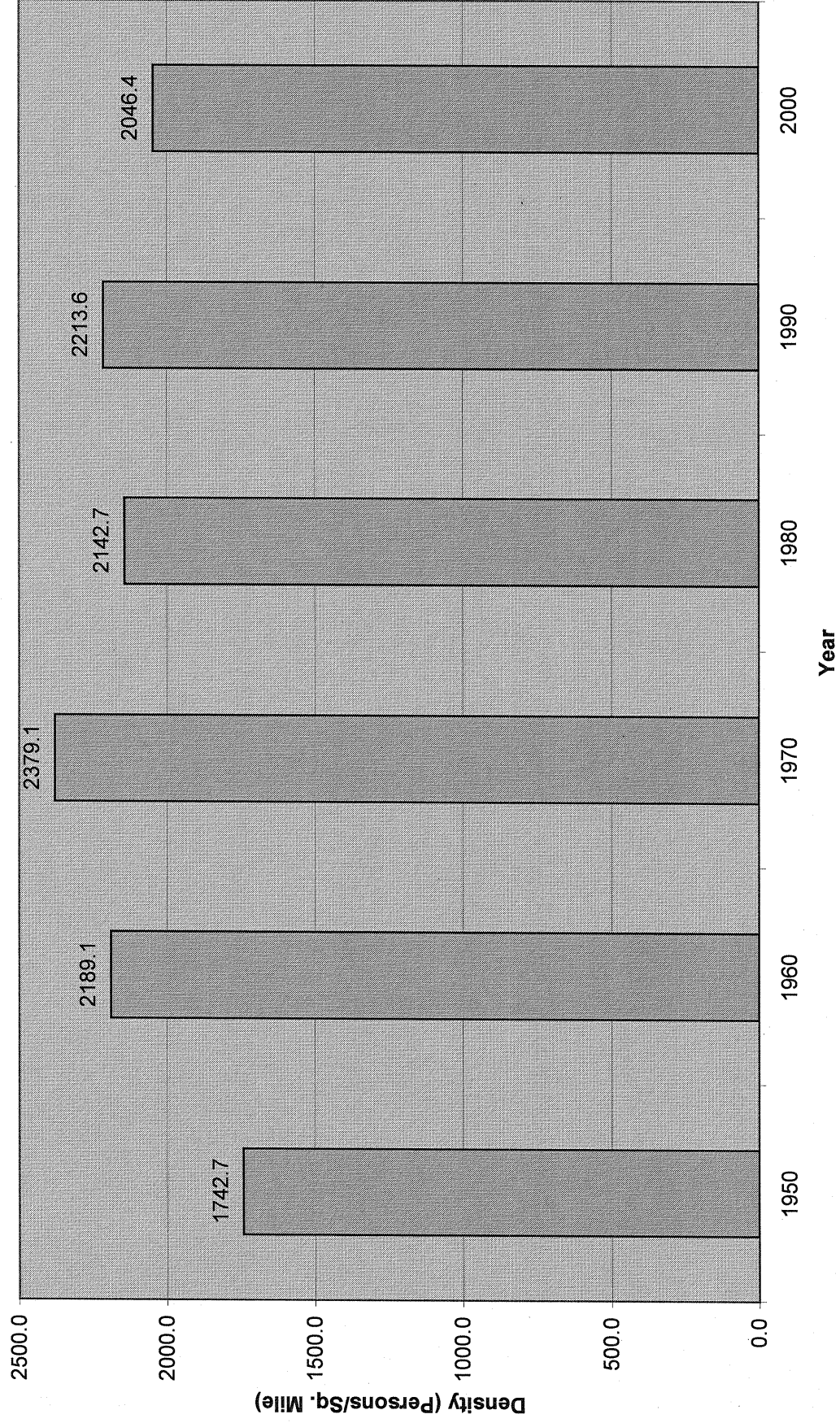
**Population Density
Village of Sandy Creek, NY**



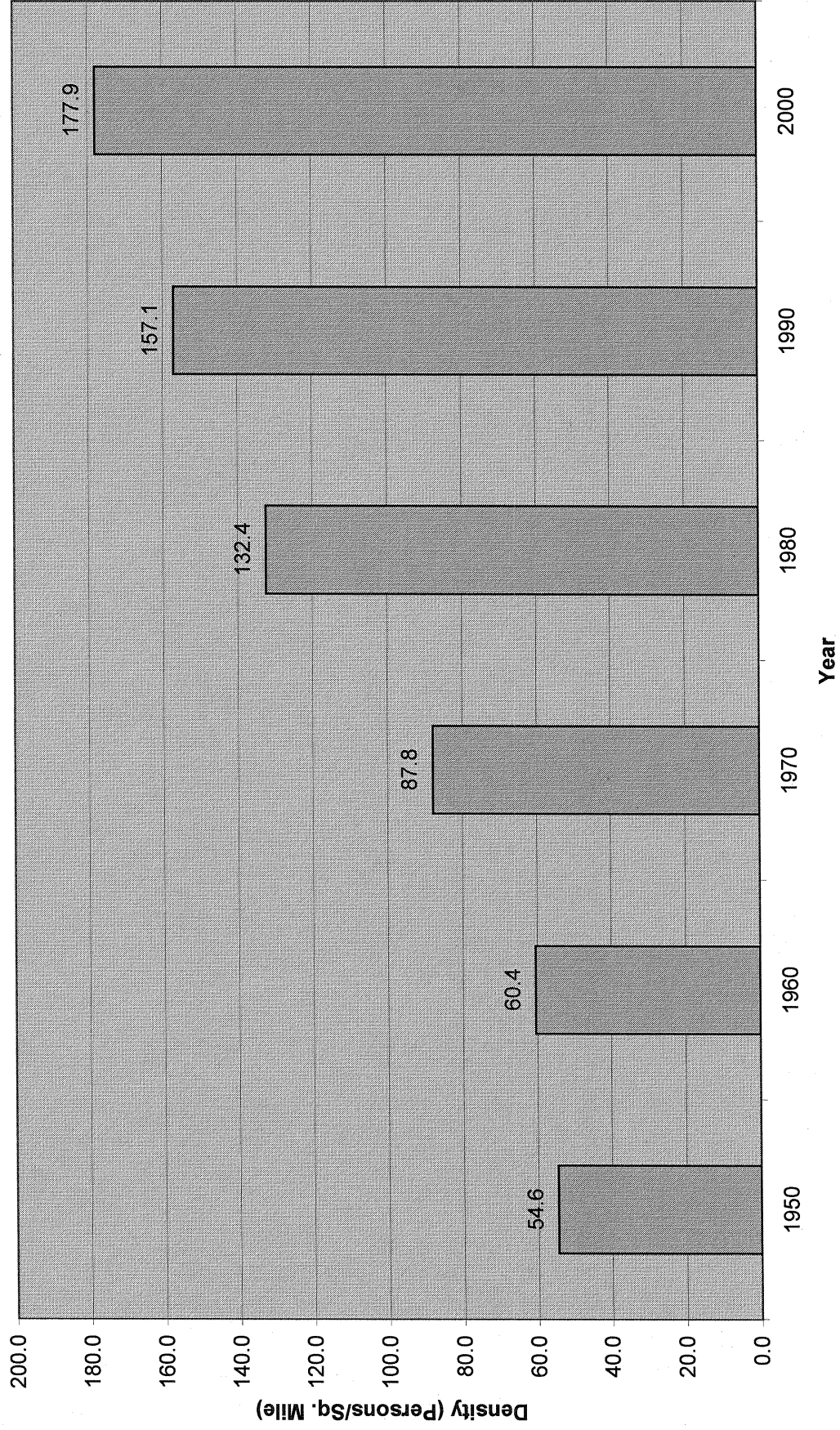
**Population Density
Town of Schroepfel, NY**

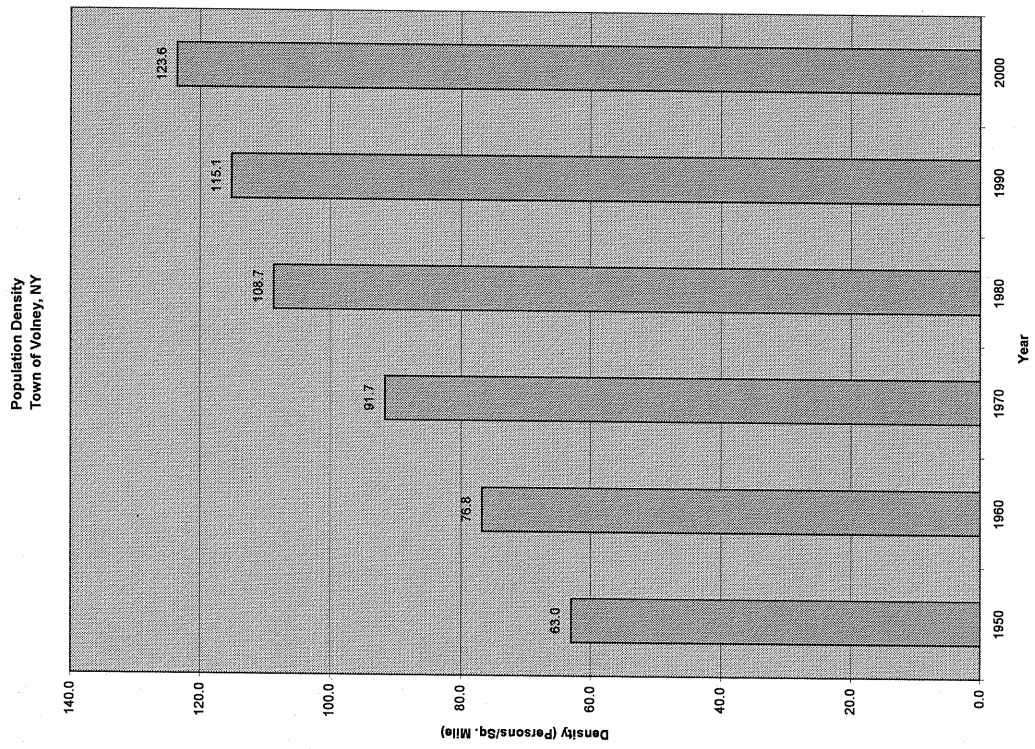


Population Density Village of Phoenix, NY

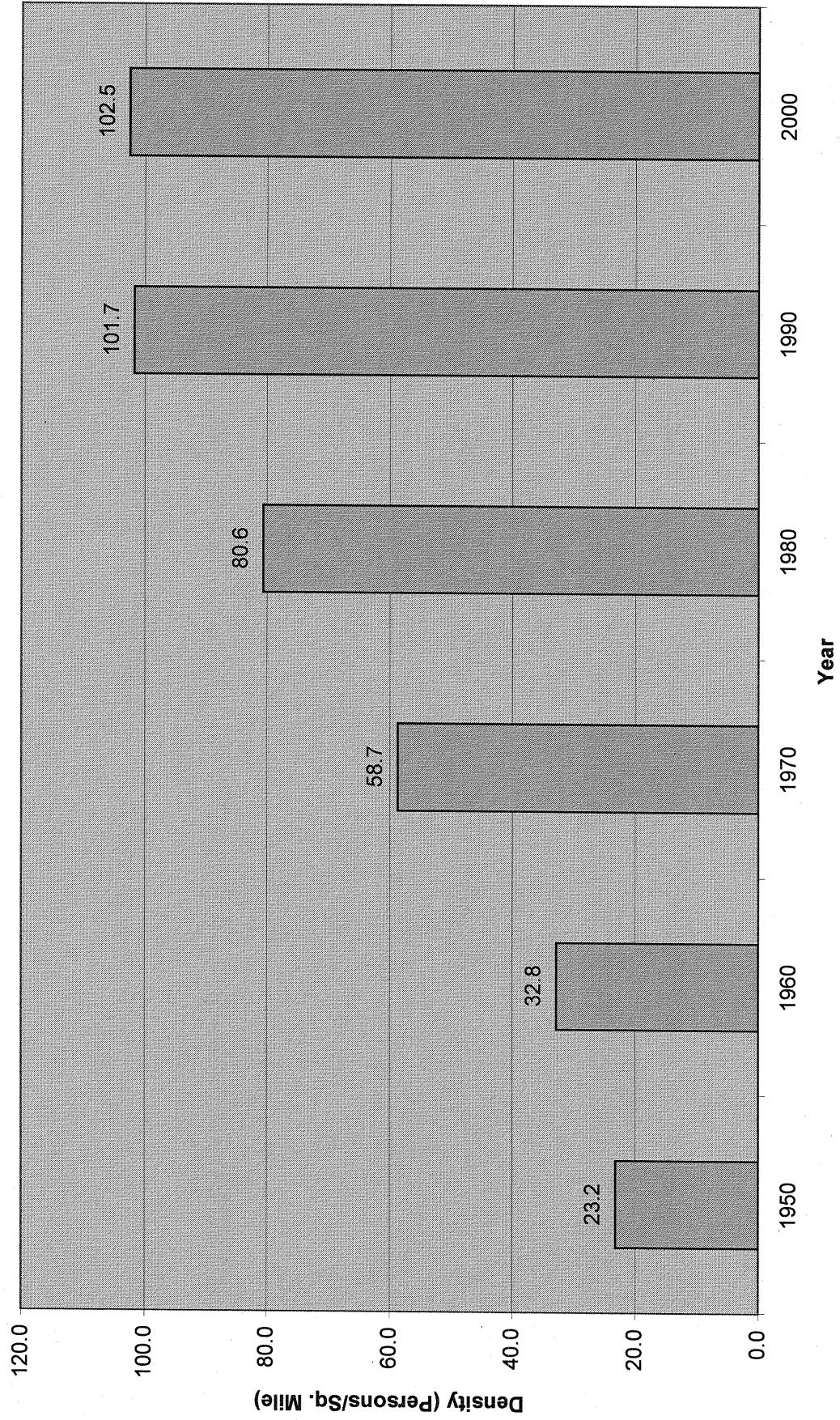


**Population Density
Town of Scriba, NY**

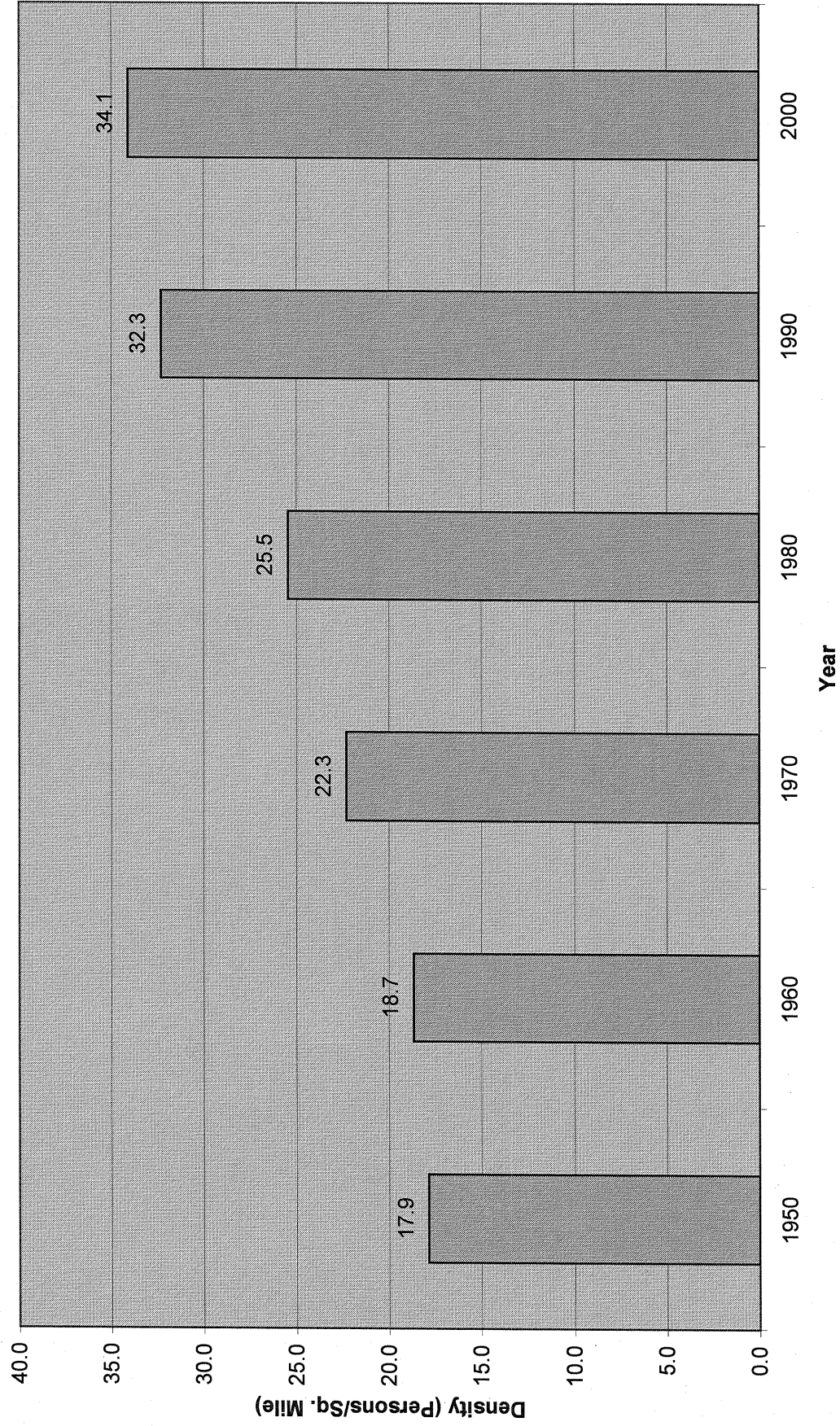




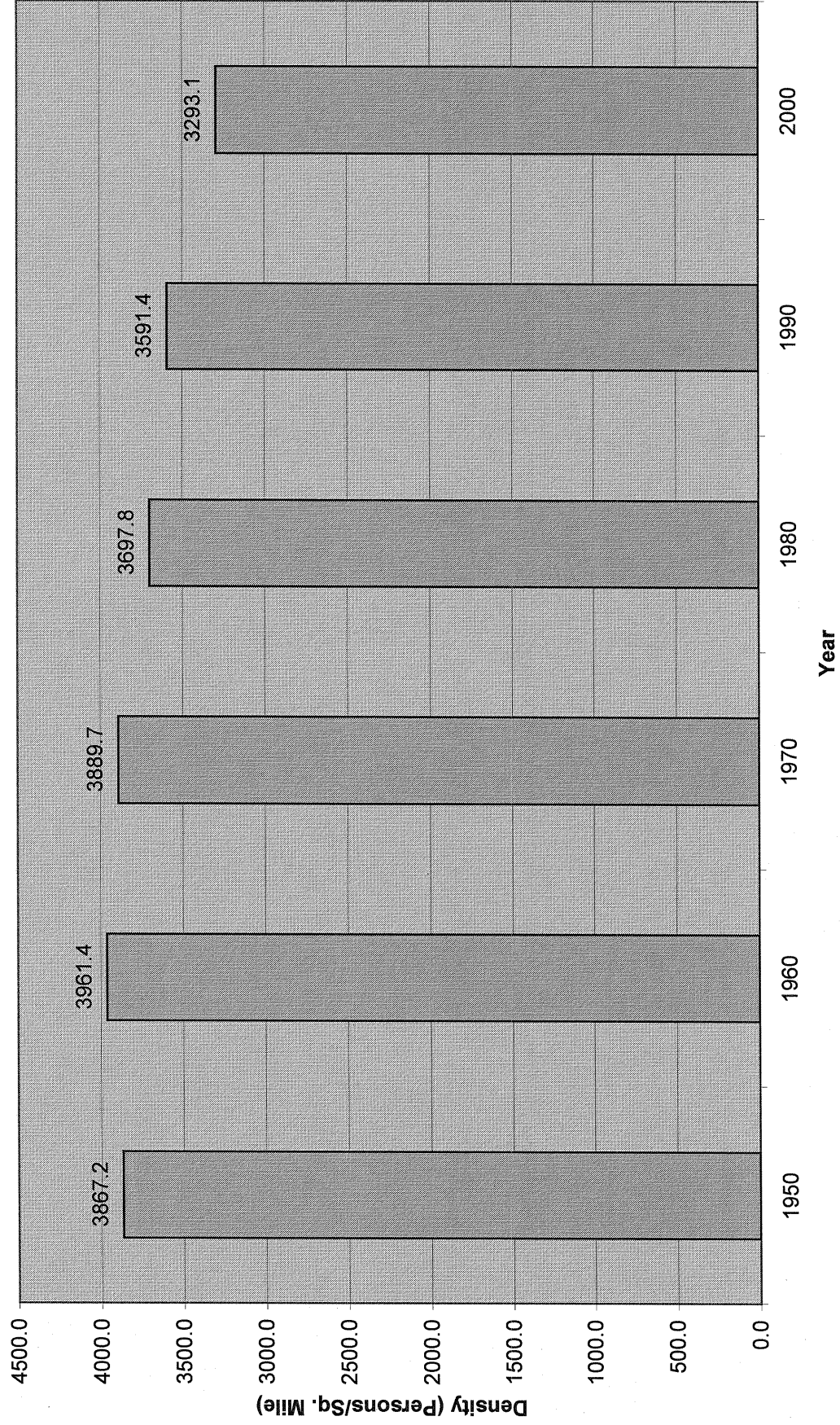
**Population Density
Town of West Monroe, NY**



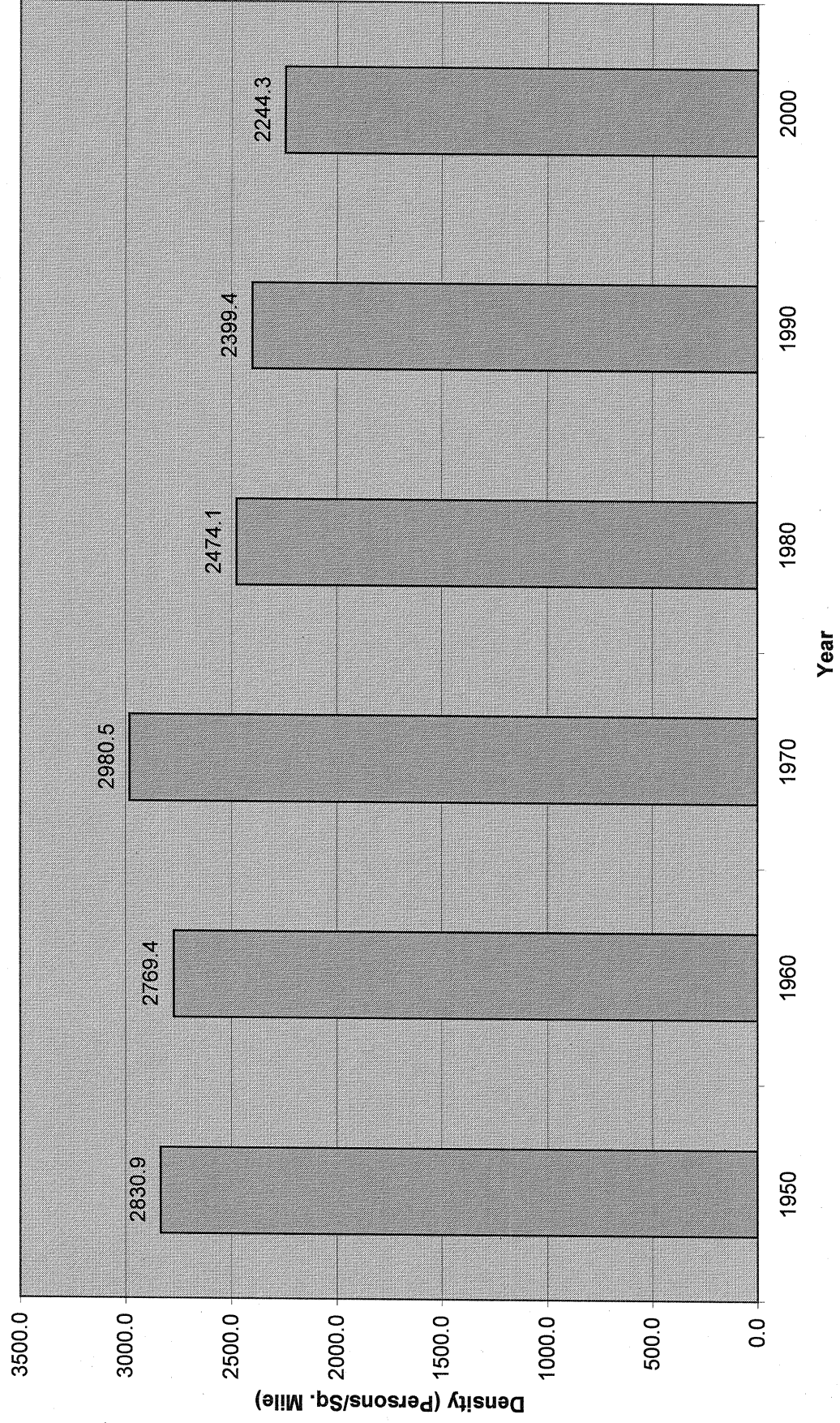
**Population Density
Town of Williamstown, NY**



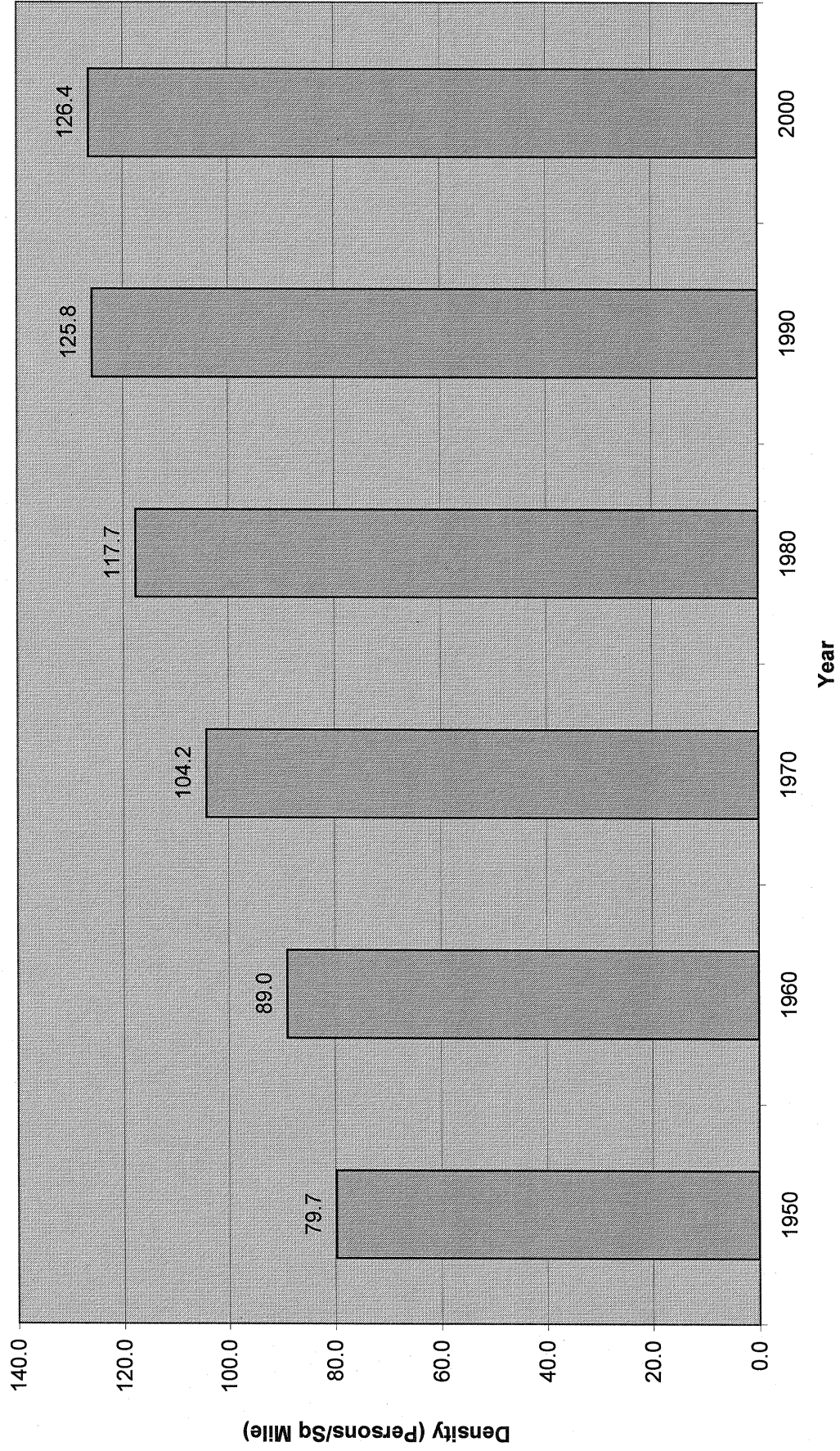
Population Density City of Fulton, NY



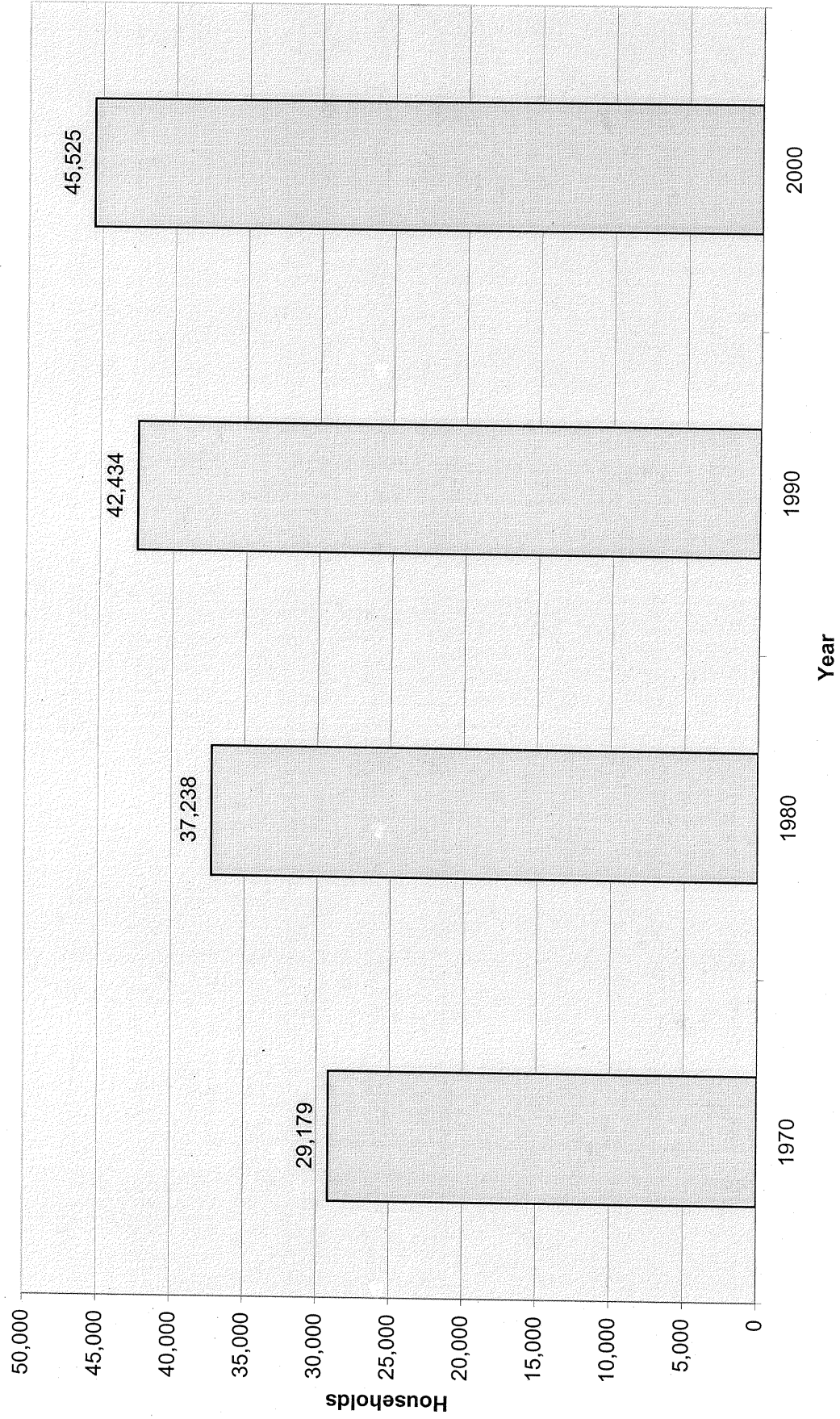
**Population Density
City of Oswego, NY**



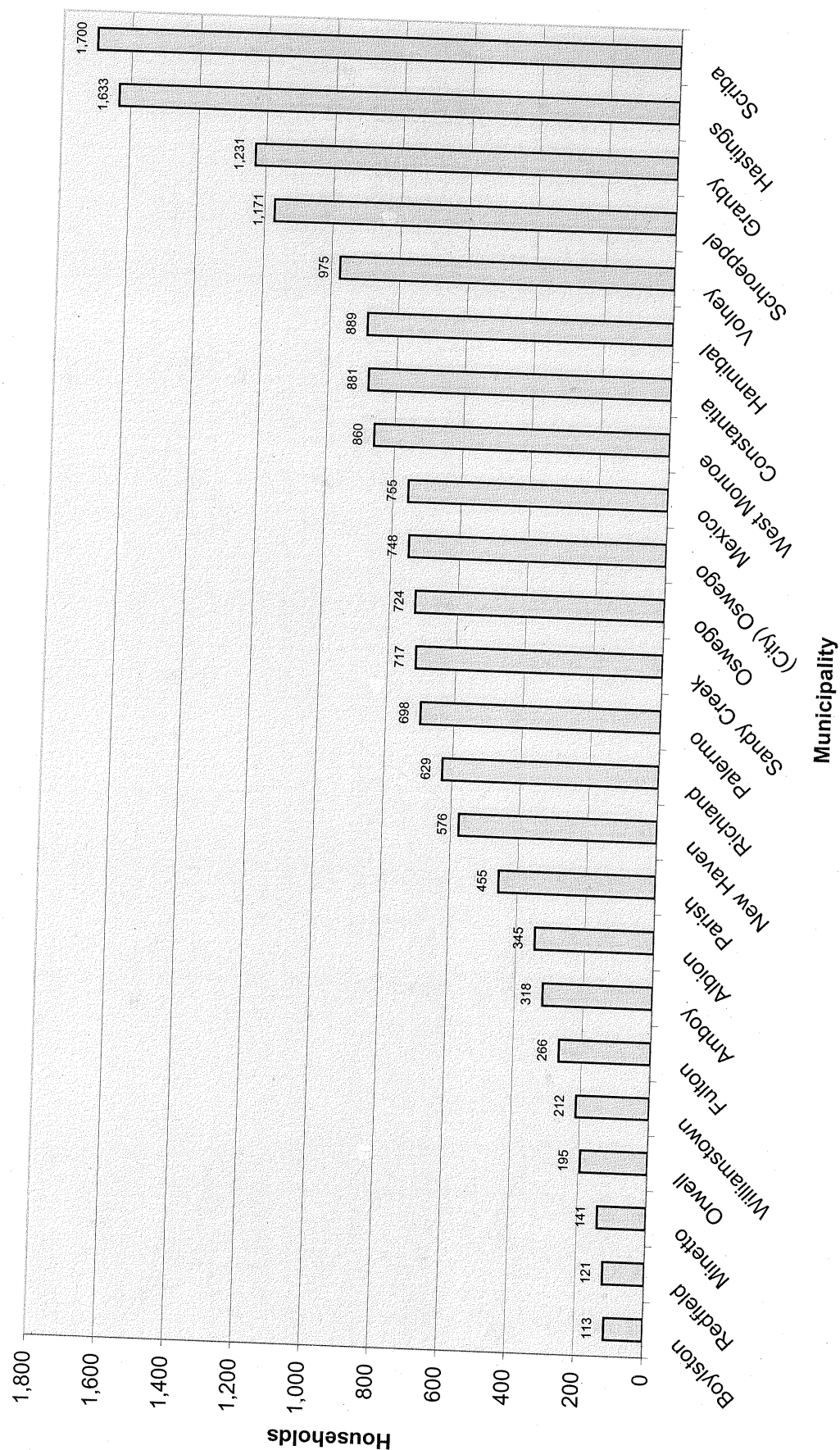
**Population Density
Oswego County, NY**



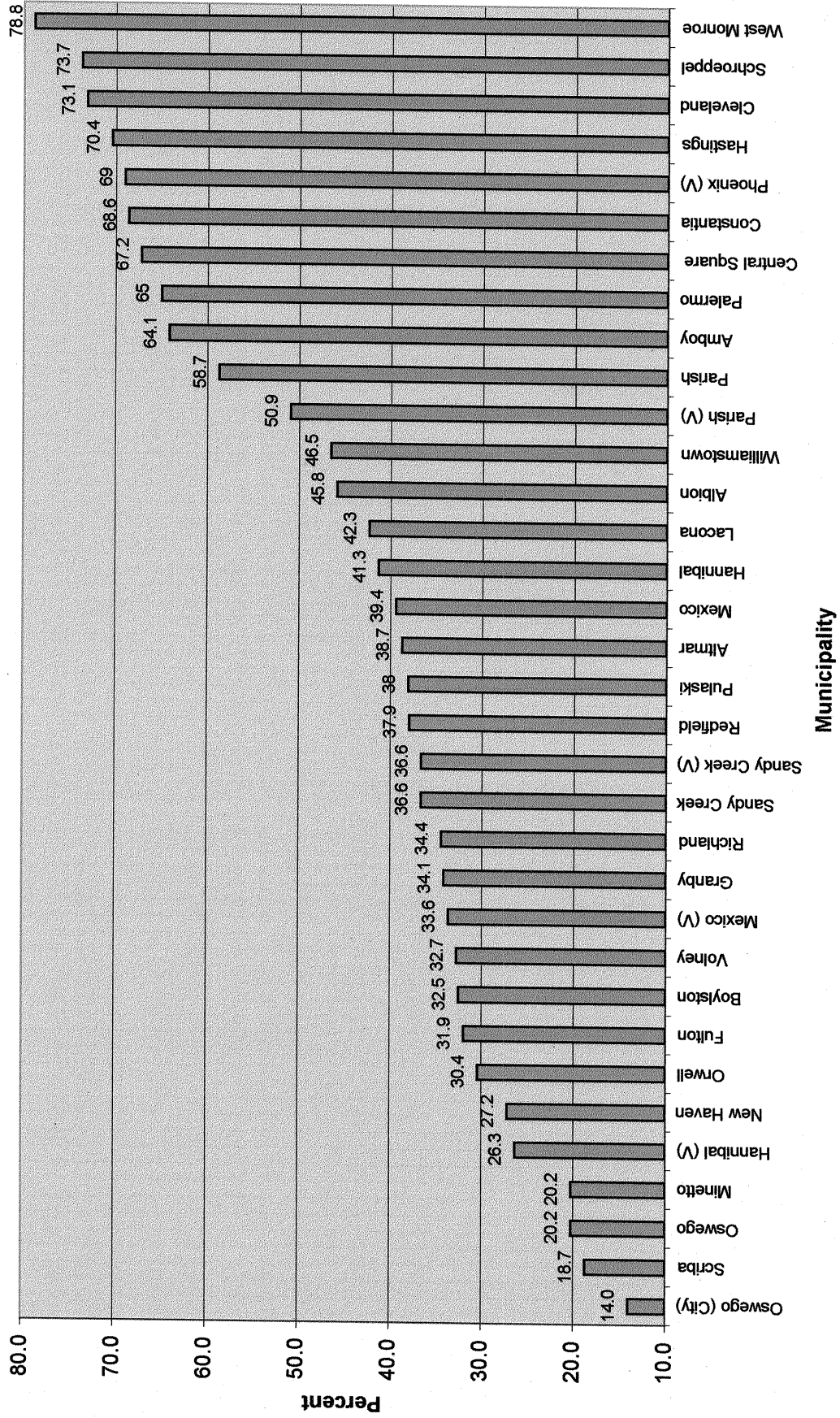
**Total Households
Oswego County, NY**



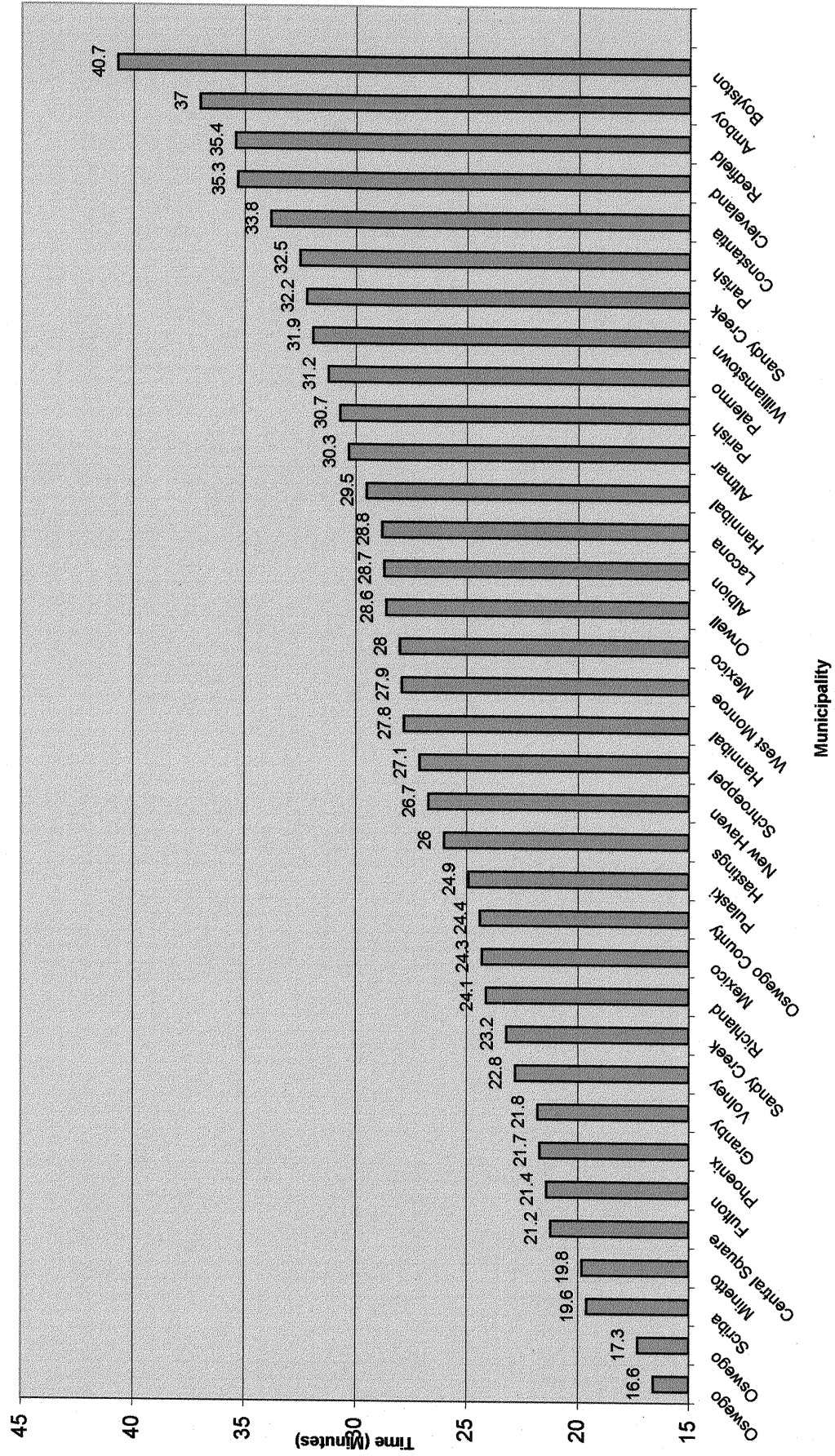
Change in Total Number of Households 1970 to 2000 Municipalities in Oswego County, NY



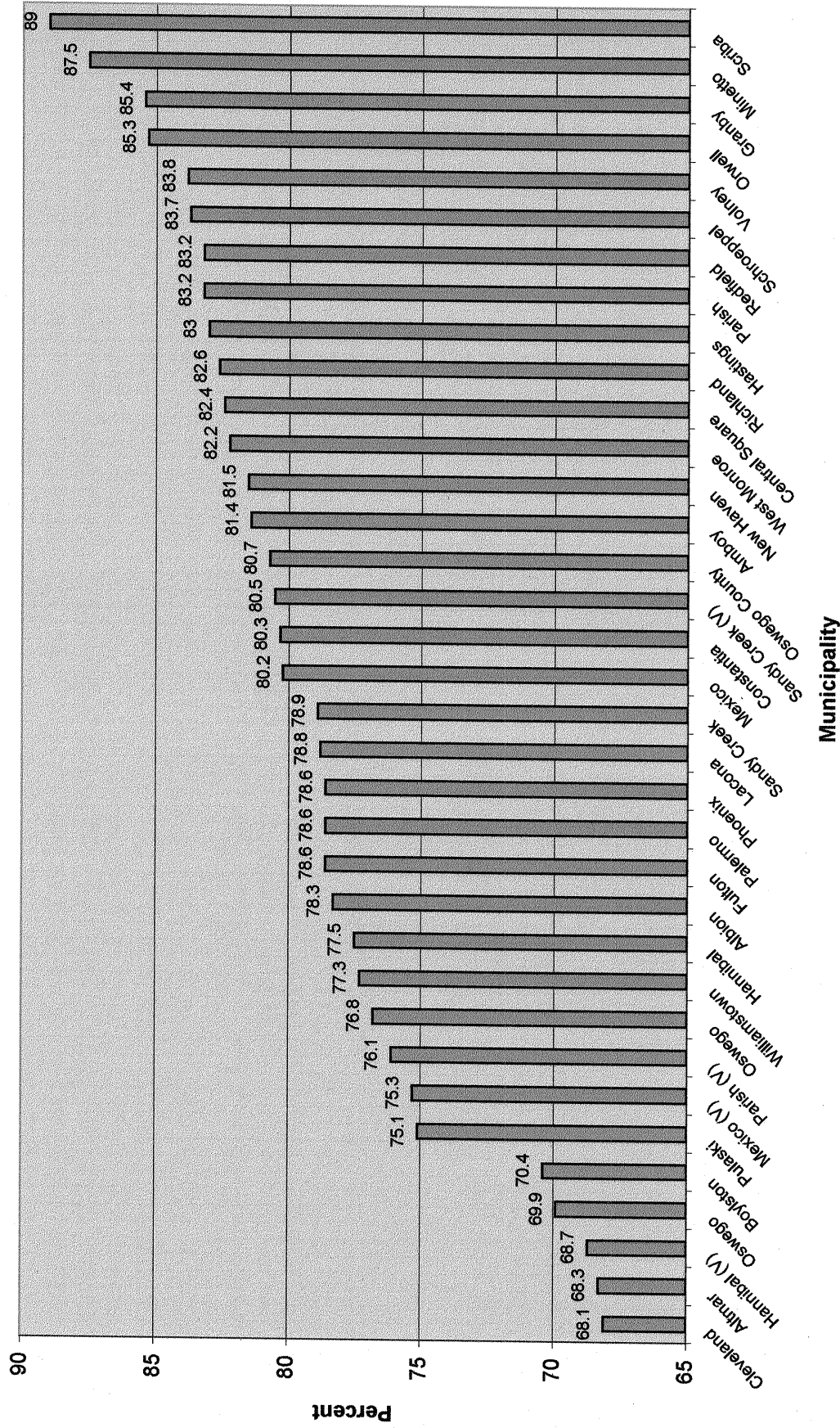
Percent Worked Outside County of Residence Oswego County, NY 2000



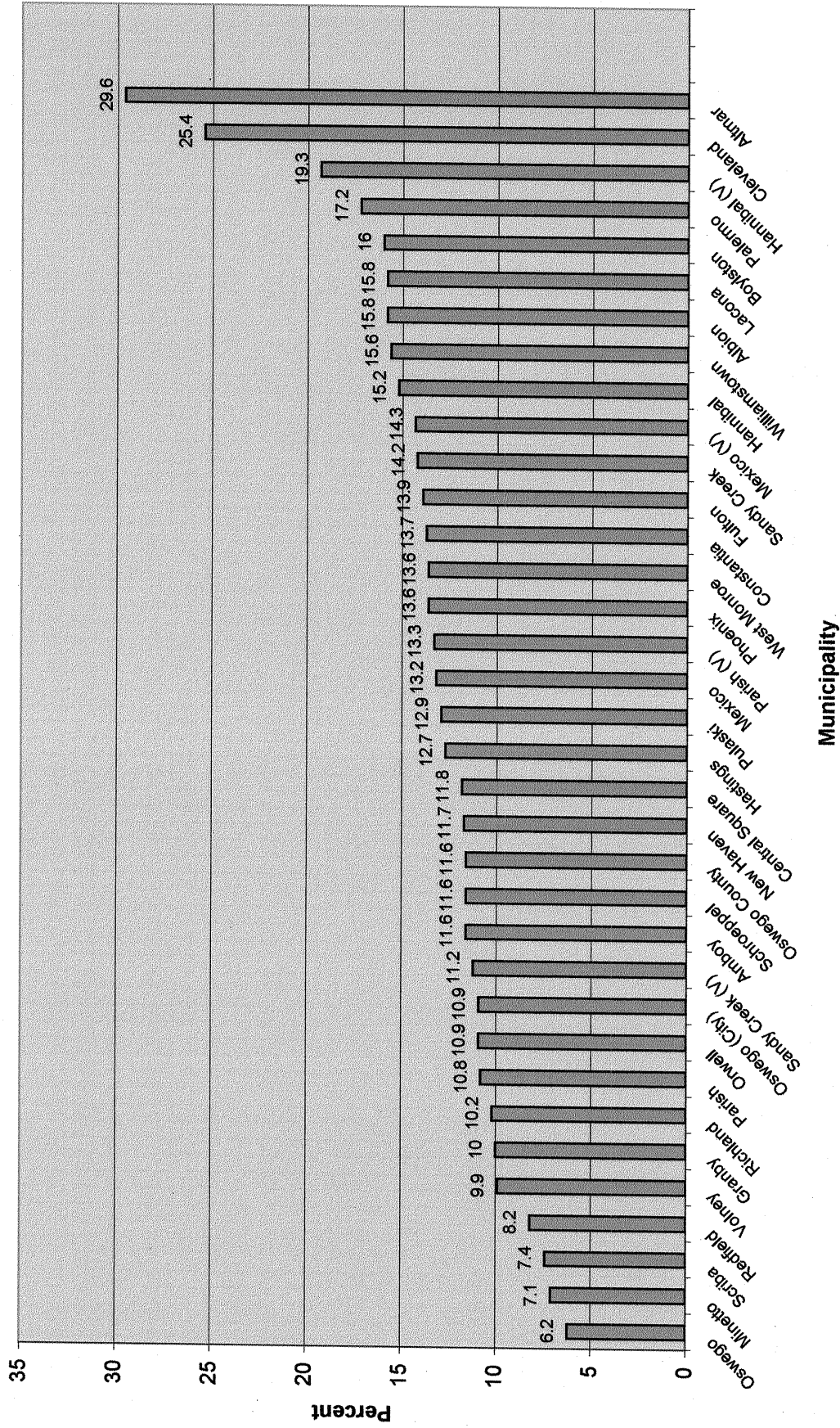
Mean Travel Time to Work Oswego County, NY 2000



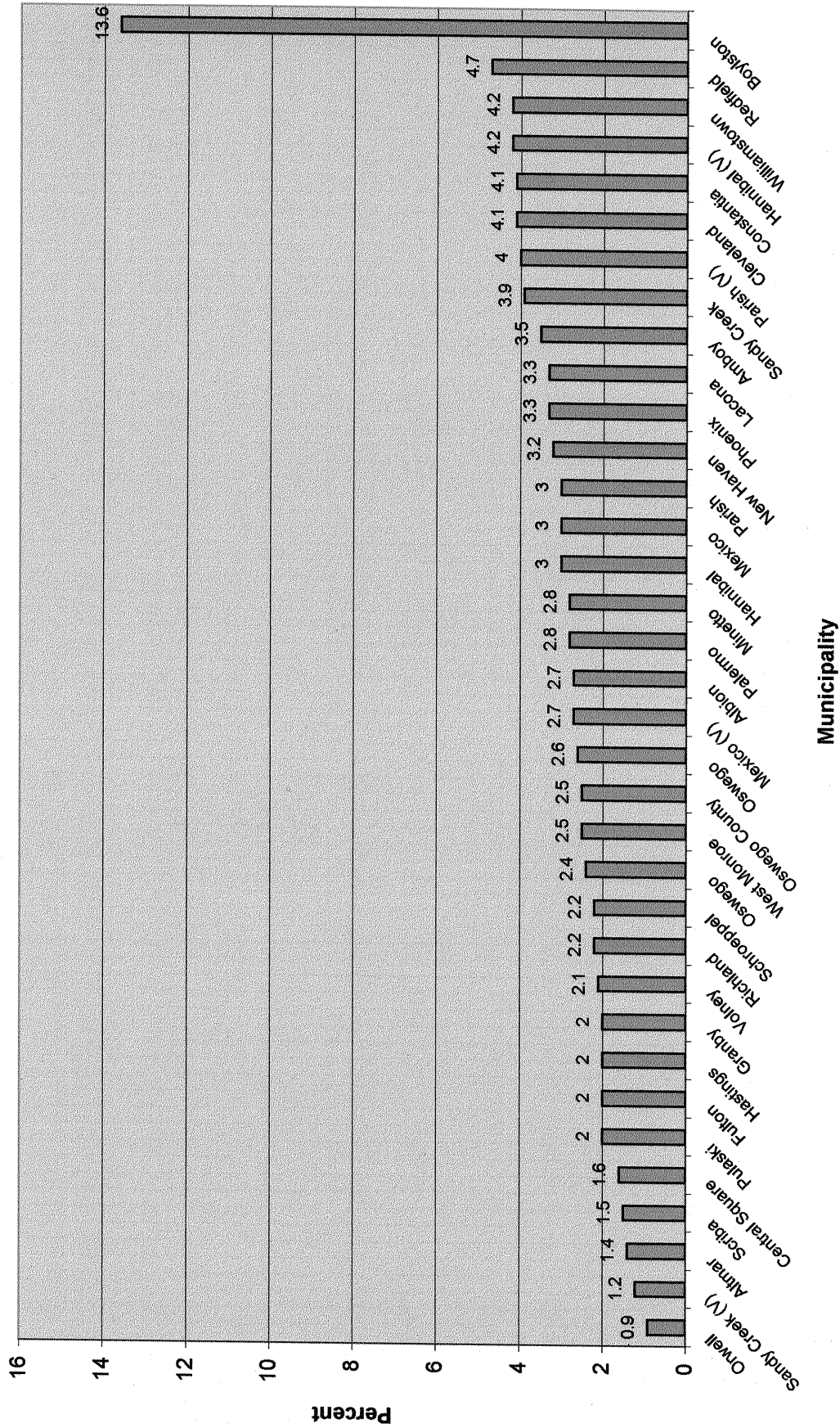
Workers 16 Years and Over Drove Alone, 2000 Oswego County, NY



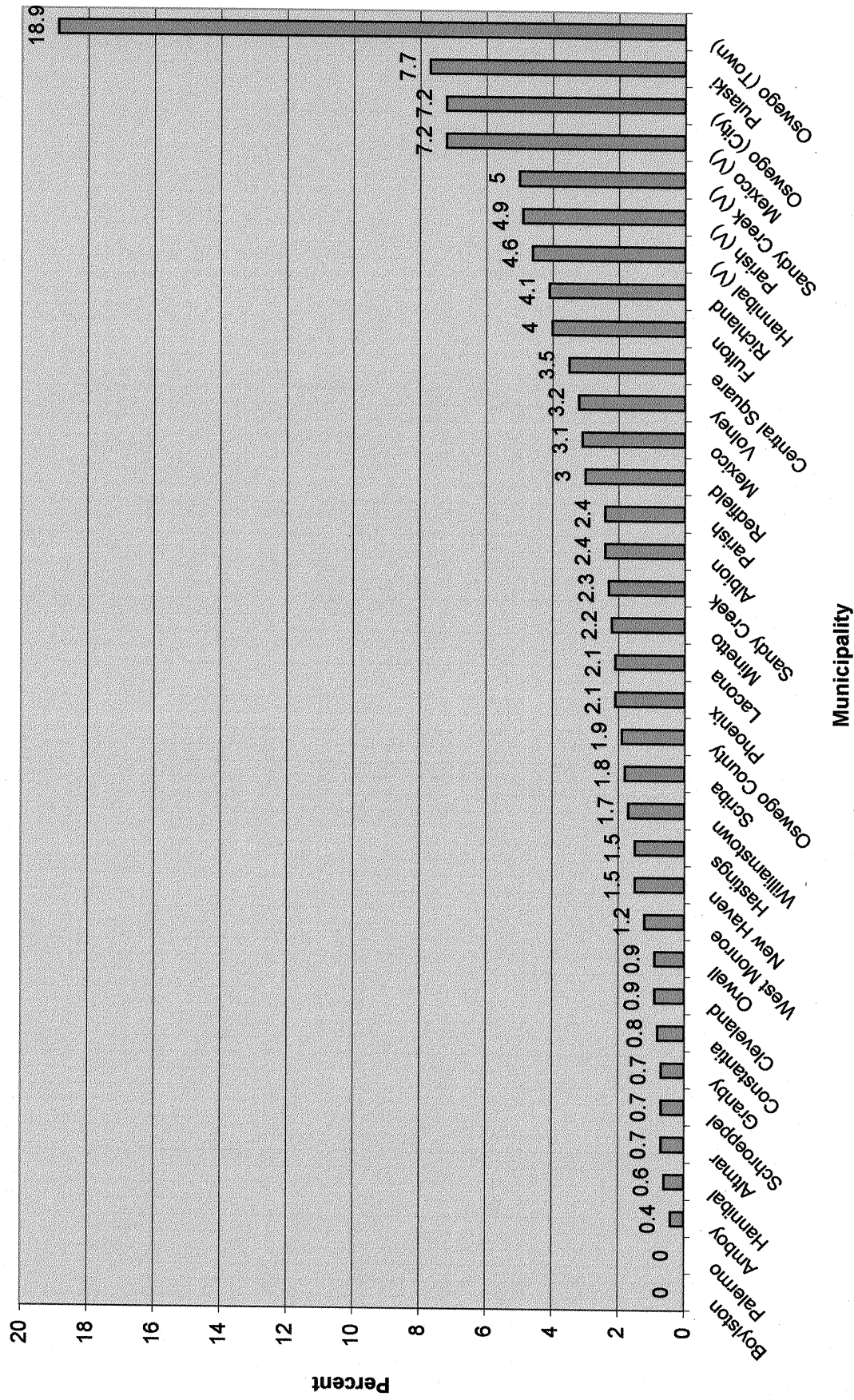
Workers 16 Years and Over Percent in Car Pools Oswego County, NY 2000



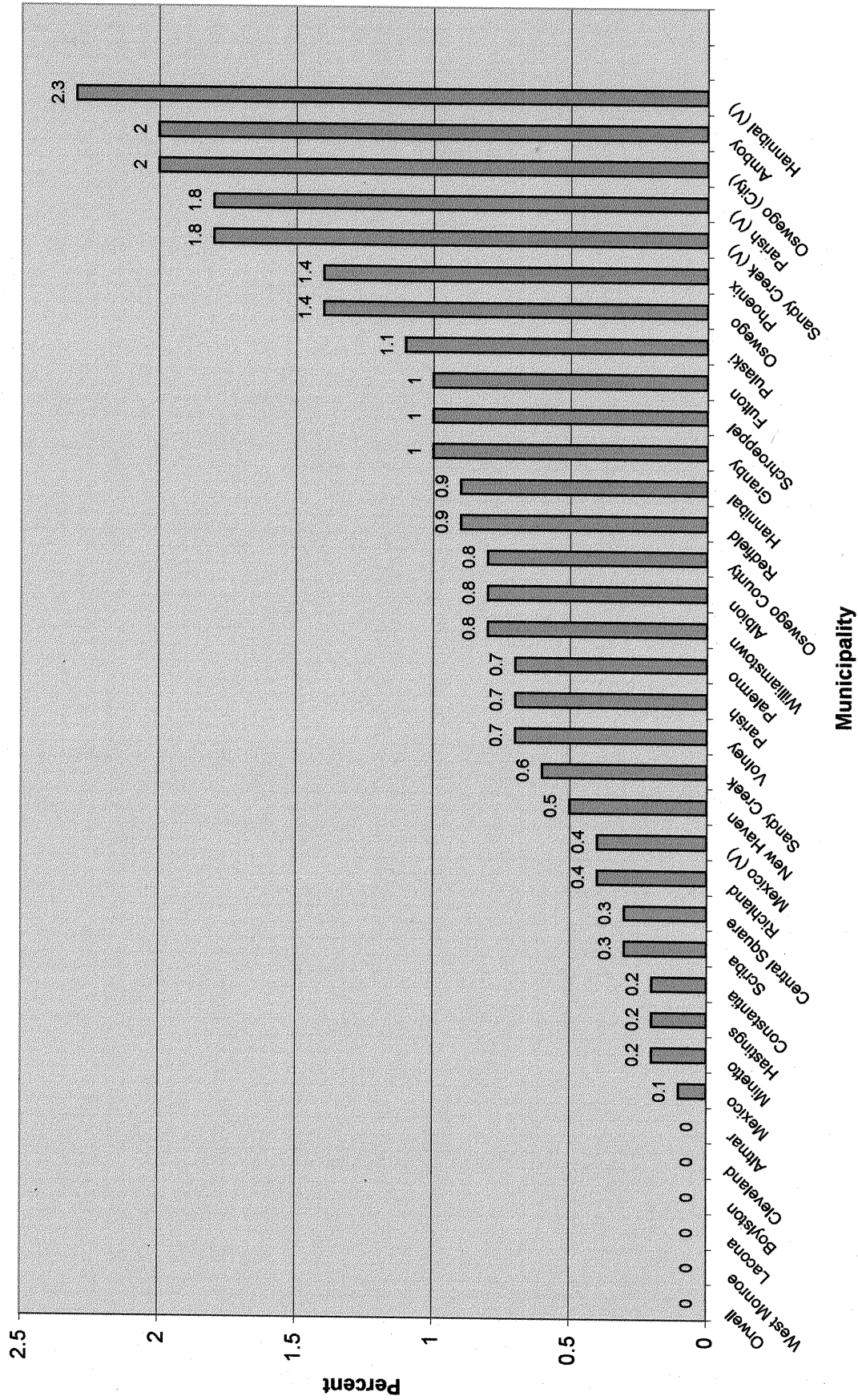
Workers 16 Years and Older Worked at Home, 2000 Oswego County, NY



Workers 16 Years and Older Walking to Work, 2000 Oswego County, NY



Workers 16 Years and Over Using Public Transportation Oswego County, NY 2000

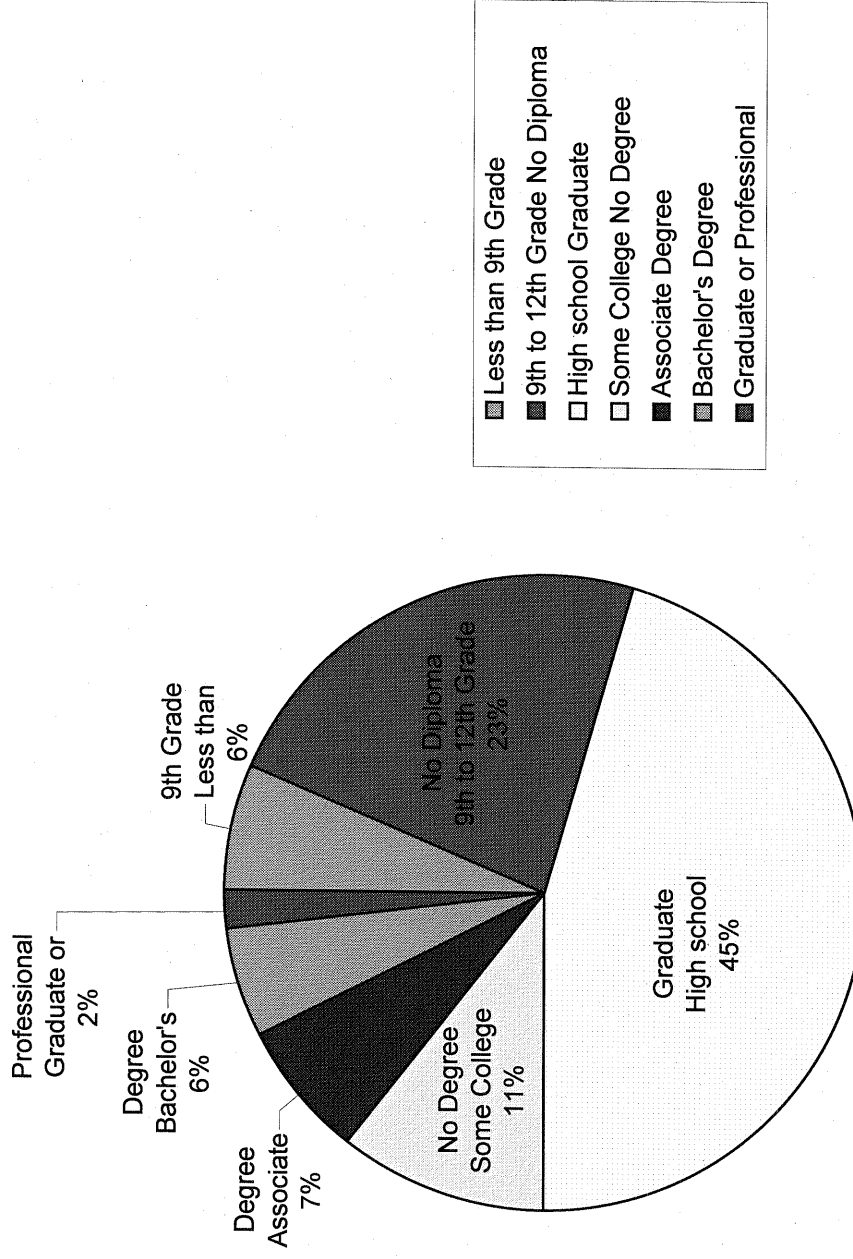


Municipality	Town (T) Village(V)	Total Pop Over 25	Less than 9th Grade	9th to 12th Grade No Diploma	High school Some College		Associate Bachelor's		Graduate or Professional
					Graduate	No Degree	Degree	Degree	
352089 Albion	T	1238	6.1%	14.6%	46.6%	16.9%	7.4%	4.7%	3.6%
352001 Altmar	V	198	11.1%	15.2%	53.5%	14.1%	2.5%	2.5%	1.0%
352200 Amboy	T	816	6.3%	23.2%	45.6%	10.7%	6.9%	5.5%	2.0%
352400 Boylston	T	349	3.4%	13.2%	38.1%	22.9%	4.6%	14.6%	3.2%
352689 Constantia	T	3378	3.8%	15.7%	43.3%	15.8%	10.8%	7.5%	3.1%
352601 Cleveland	V	473	3.4%	14.8%	39.5%	17.5%	14.2%	7.6%	3.0%
352800 Granby	T	4471	4.6%	17.1%	44.9%	15.5%	7.7%	6.0%	4.1%
353089 Hannibal	T	3034	4.9%	20.8%	46.6%	14.6%	5.7%	4.8%	2.6%
353001 Hannibal	V	367	63.8%	12.3%	43.6%	20.4%	5.2%	7.6%	4.4%
353289 Hastings	T	5783	3.9%	14.5%	41.9%	18.7%	9.6%	7.0%	4.3%
353201 Central Square	V	1180	4.5%	12.7%	35.0%	19.2%	10.6%	9.9%	8.1%
353489 Mexico	T	3311	3.7%	11.6%	40.6%	20.0%	9.4%	9.6%	5.1%
353401 Mexico	V	1012	1.8%	9.6%	35.1%	20.2%	10.7%	13.9%	8.8%
353600 Minetto	T	1136	1.4%	7.5%	32.6%	20.3%	8.6%	16.0%	13.6%
353800 New Haven	T	1832	2.8%	13.8%	48.3%	18.2%	5.3%	8.0%	3.5%
354000 Orwell	T	817	5.1%	18.0%	43.5%	15.9%	5.8%	4.9%	6.9%
354200 Oswego	T	3022	2.9%	10.2%	33.4%	16.5%	8.3%	15.4%	13.2%
354400 Palermo	T	2331	6.6%	14.2%	45.0%	18.0%	7.1%	5.6%	3.6%
352089 Parish	T	1706	5.4%	13.5%	48.4%	13.1%	9.1%	6.9%	3.6%
352001 Parish	V	325	3.1%	8.6%	47.1%	21.2%	7.4%	9.5%	3.1%
354800 Redfield	T	379	6.6%	13.2%	48.5%	19.3%	6.9%	1.6%	4.0%
355089 Richland	T	3800	4.7%	15.2%	38.9%	16.9%	8.7%	10.9%	4.7%
355001 Pulaski	V	1610	5.8%	15.7%	35.5%	17.6%	10.1%	10.2%	5.0%
355289 Sandy Creek	T	2598	6.5%	15.2%	41.0%	17.5%	7.4%	8.0%	4.4%
355201 Lacona	V	376	3.7%	11.7%	37.5%	19.4%	10.1%	11.4%	6.1%
355203 Sandy Creek	V	520	5.2%	12.5%	42.7%	17.3%	5.6%	10.2%	6.5%
355489 Schroepfel	T	5543	4.8%	13.4%	42.4%	14.3%	9.0%	10.8%	5.4%
535401 Phoenix	V	1449	7.0%	14.6%	46.1%	14.4%	5.5%	8.1%	4.3%
355600 Scriba	T	4598	4.7%	13.5%	46.2%	17.7%	5.9%	7.4%	4.6%
355800 Volney	T	3819	2.9%	12.2%	43.0%	17.3%	7.1%	13.9%	3.6%
356000 West Monroe	T	2822	3.5%	16.8%	40.0%	20.6%	6.6%	8.9%	3.6%
356200 Williamstown	T	768	4.3%	19.0%	46.5%	17.1%	5.9%	4.8%	2.5%
350400 Fulton	T	7614	6.1%	16.5%	40.5%	17.2%	8.1%	8.5%	3.2%
351200 Oswego		11000	7.8%	12.8%	34.2%	18.2%	5.9%	12.1%	9.1%
Oswego County		76165	5.0%	14.5%	41.2%	17.2%	7.6%	9.2%	5.3%

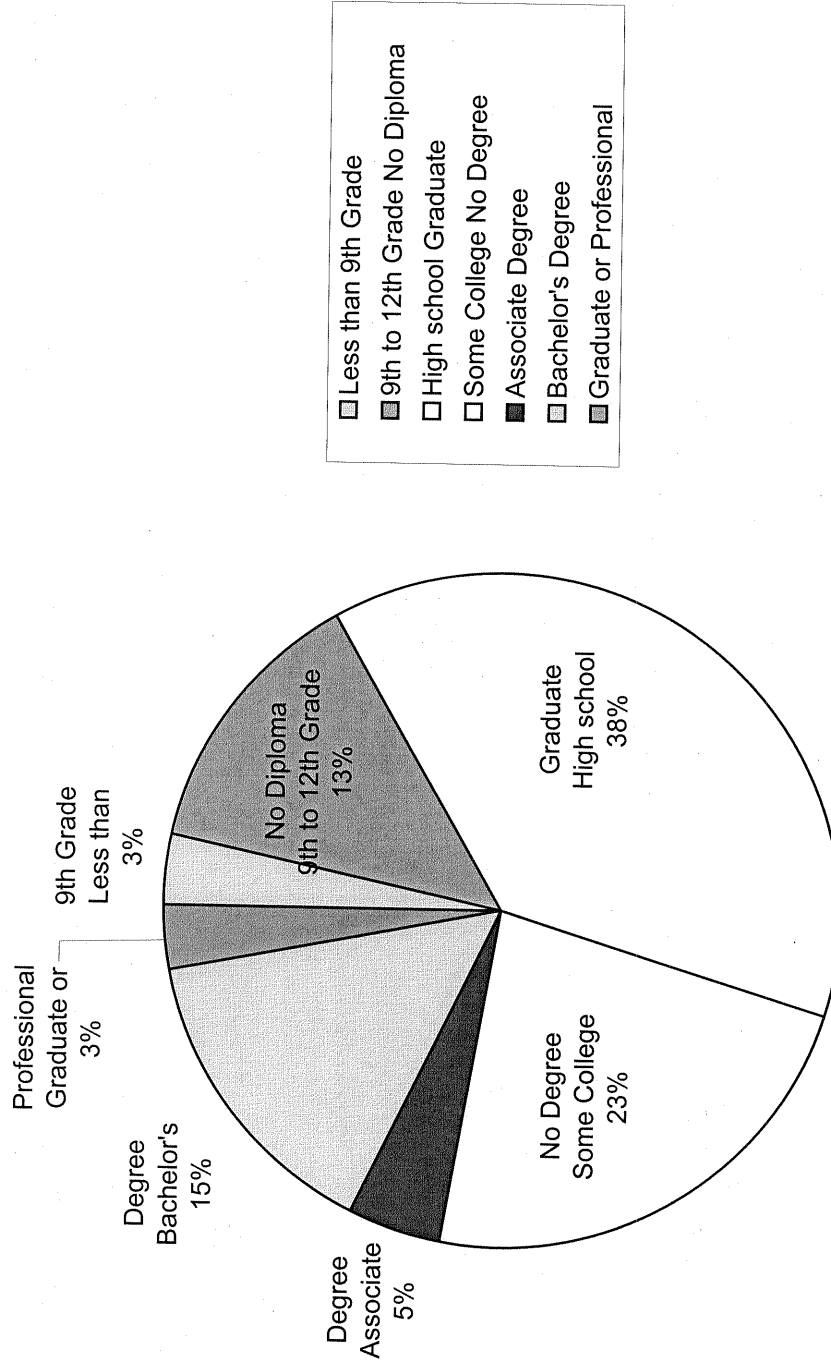
Note: Town data includes villages, if any.

Source: U.S. Bureau of the Census

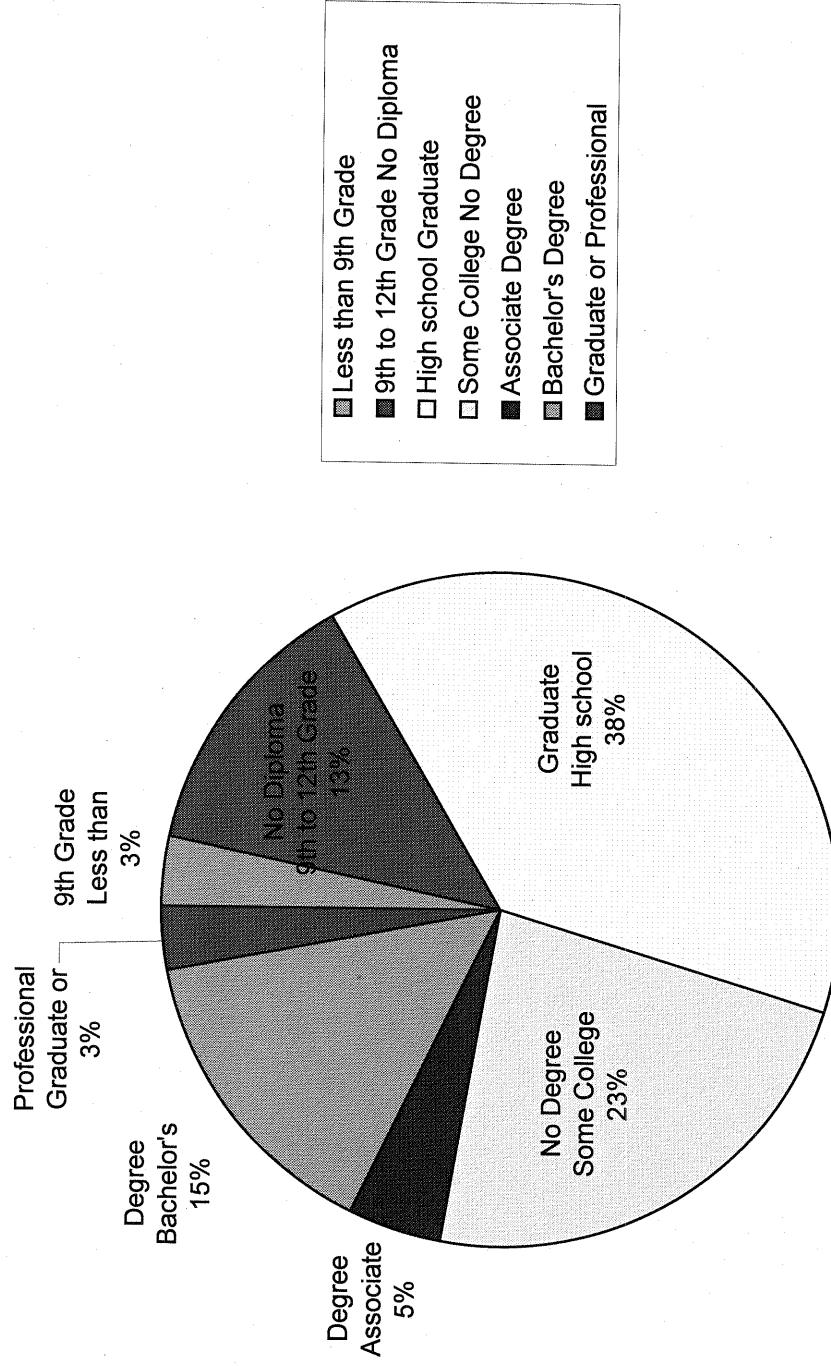
Level of Educational Achievement Population Age 25 and Over, 2000 Town of Amboy, NY



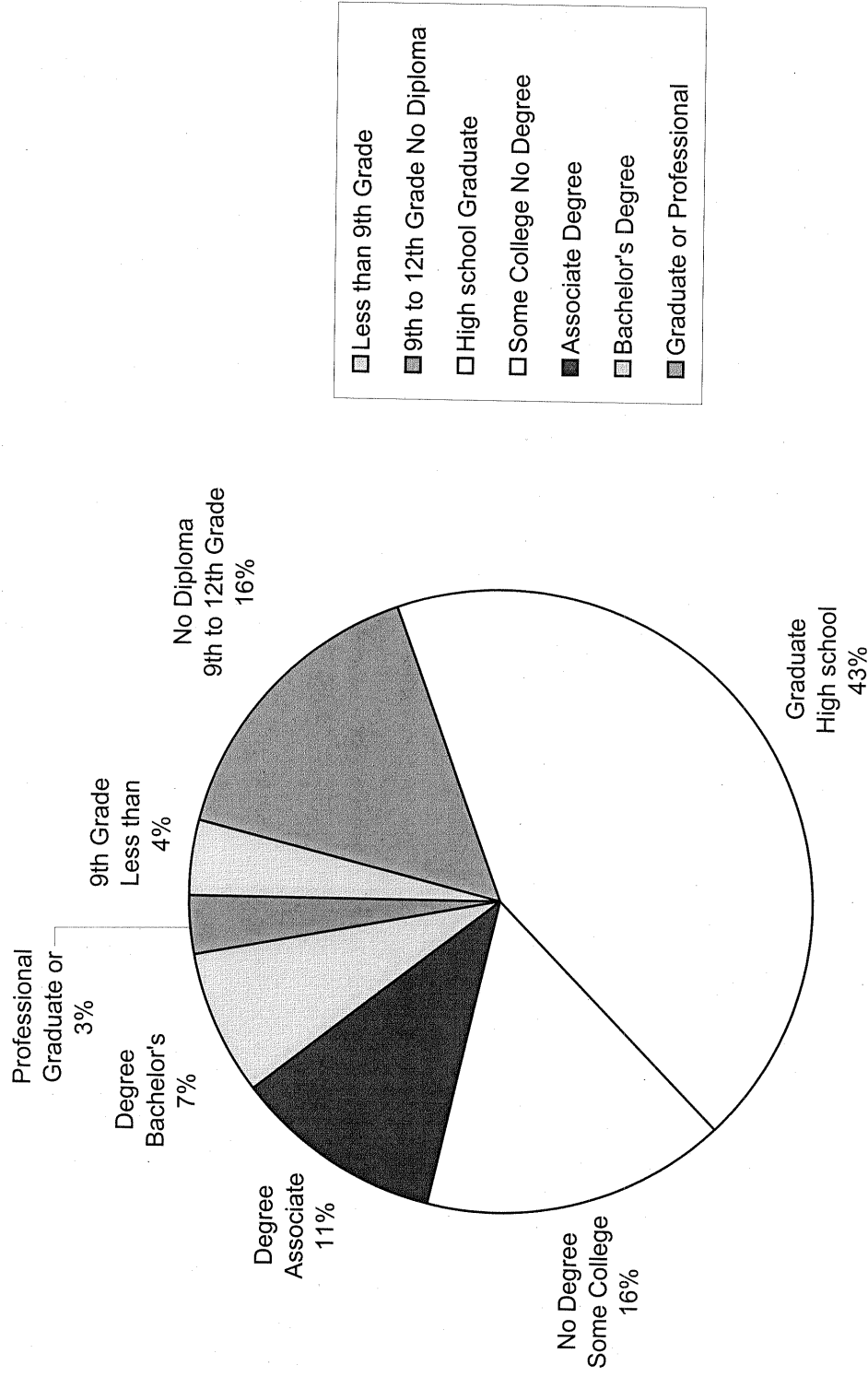
Level of Educational Achievement Population Age 25 and Over, 2000 Town of Boylston, NY



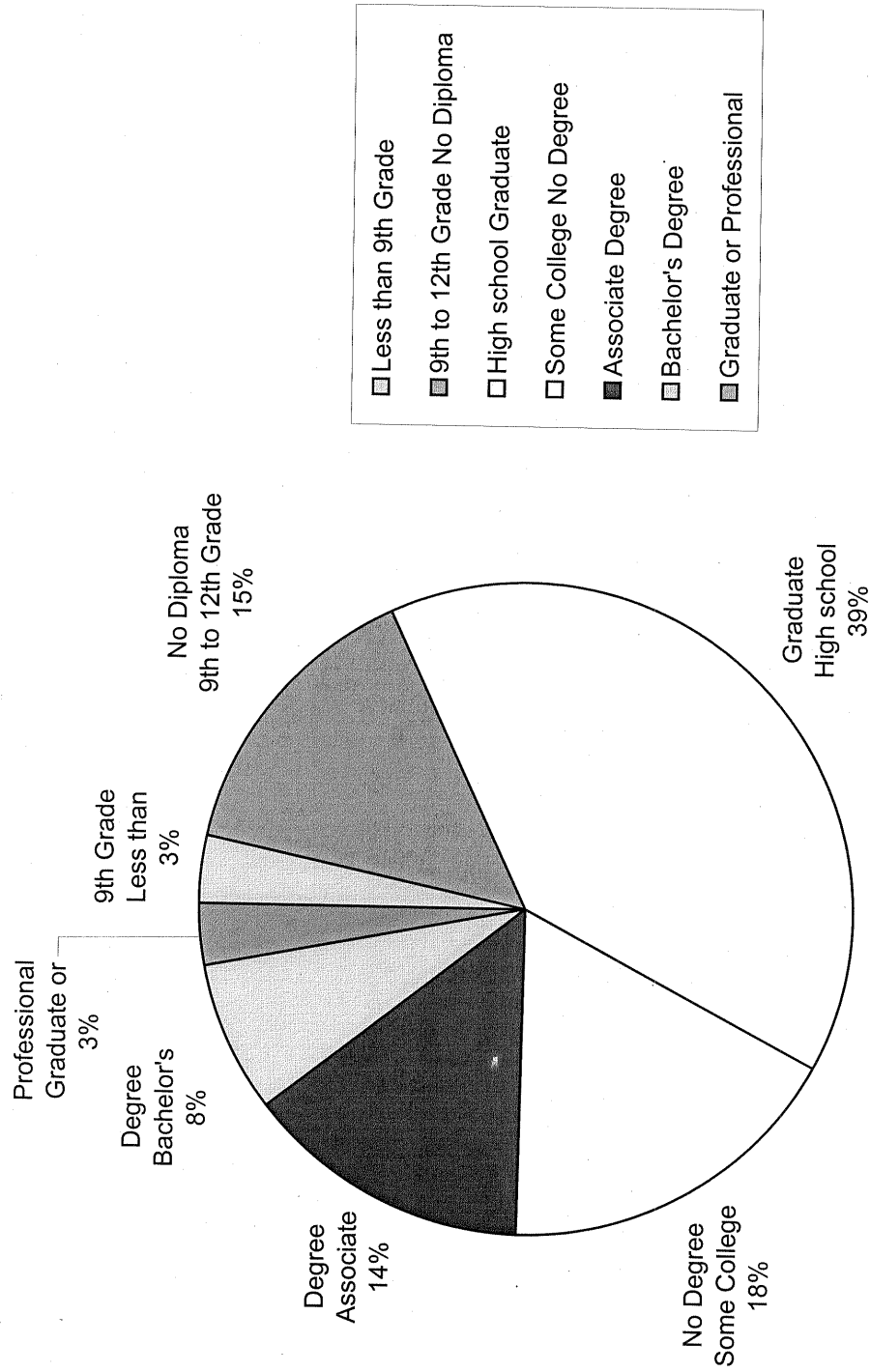
Level of Educational Achievement Population Age 25 and Over, 2000 Town of Boylston, NY



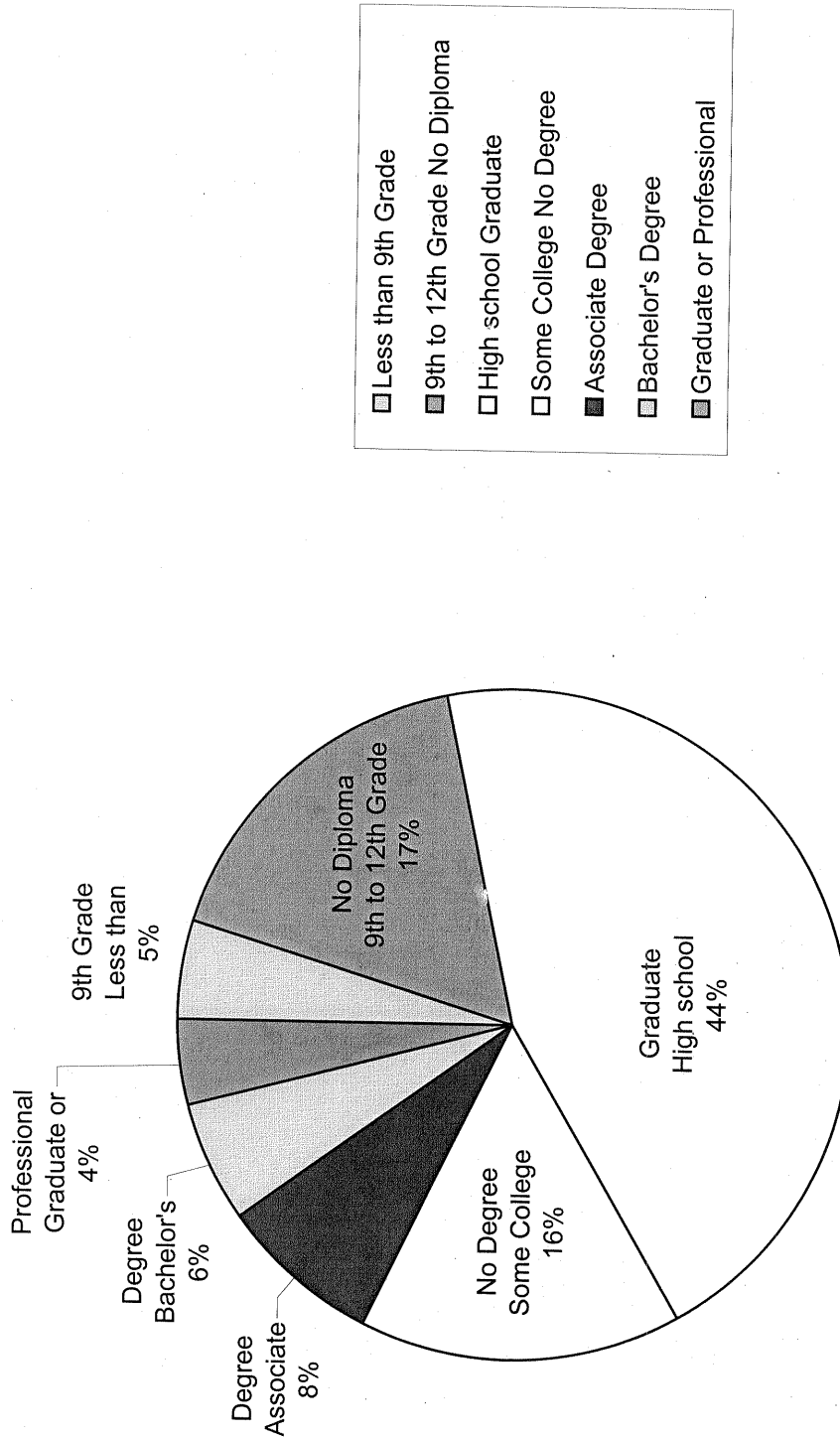
Level of Educational Achievement Population Age 25 and Over, 2000 Town of Constantia, NY



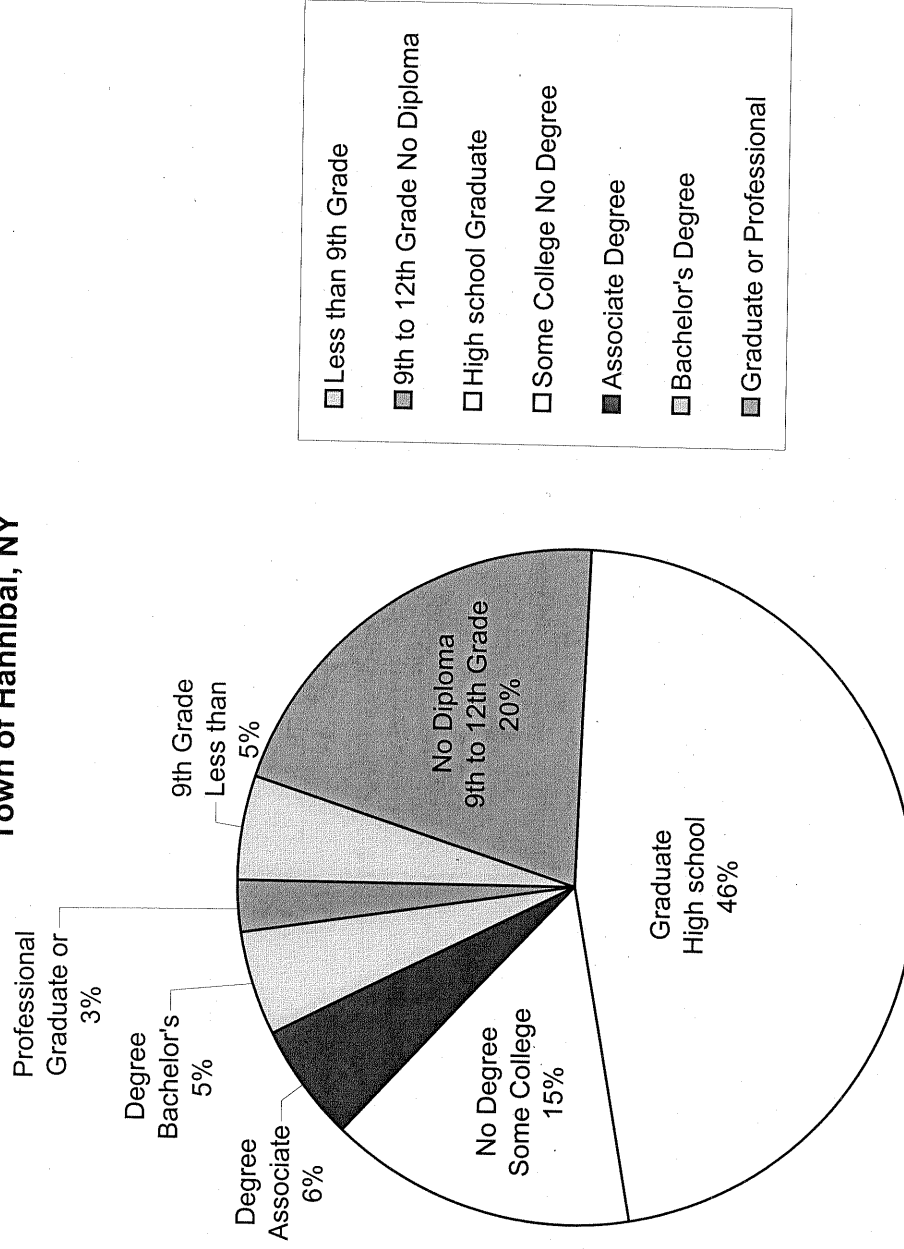
Level of Educational Achievement Population Age 25 and Over, 2000 Village of Cleveland, NY



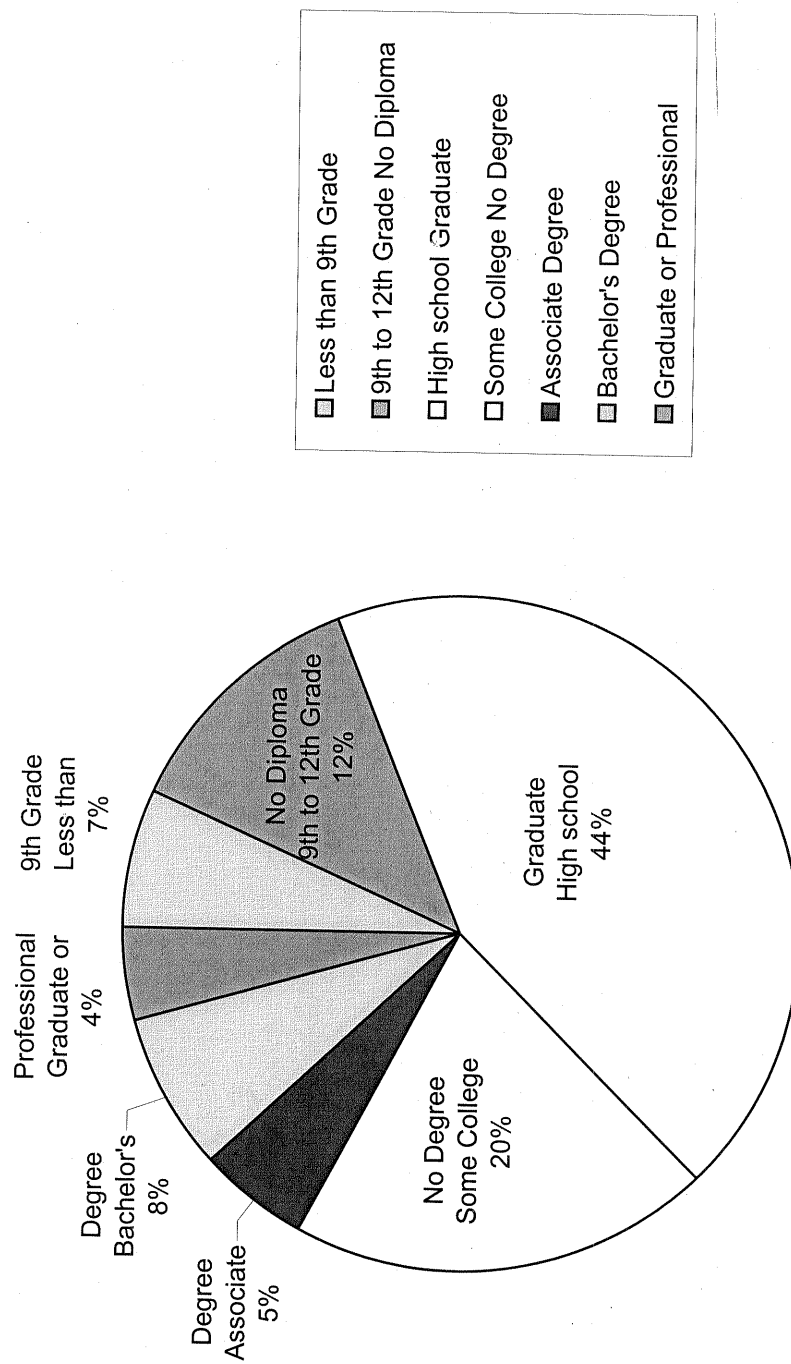
Level of Educational Achievement Population Age 25 and Over, 2000 Town of Granby, NY



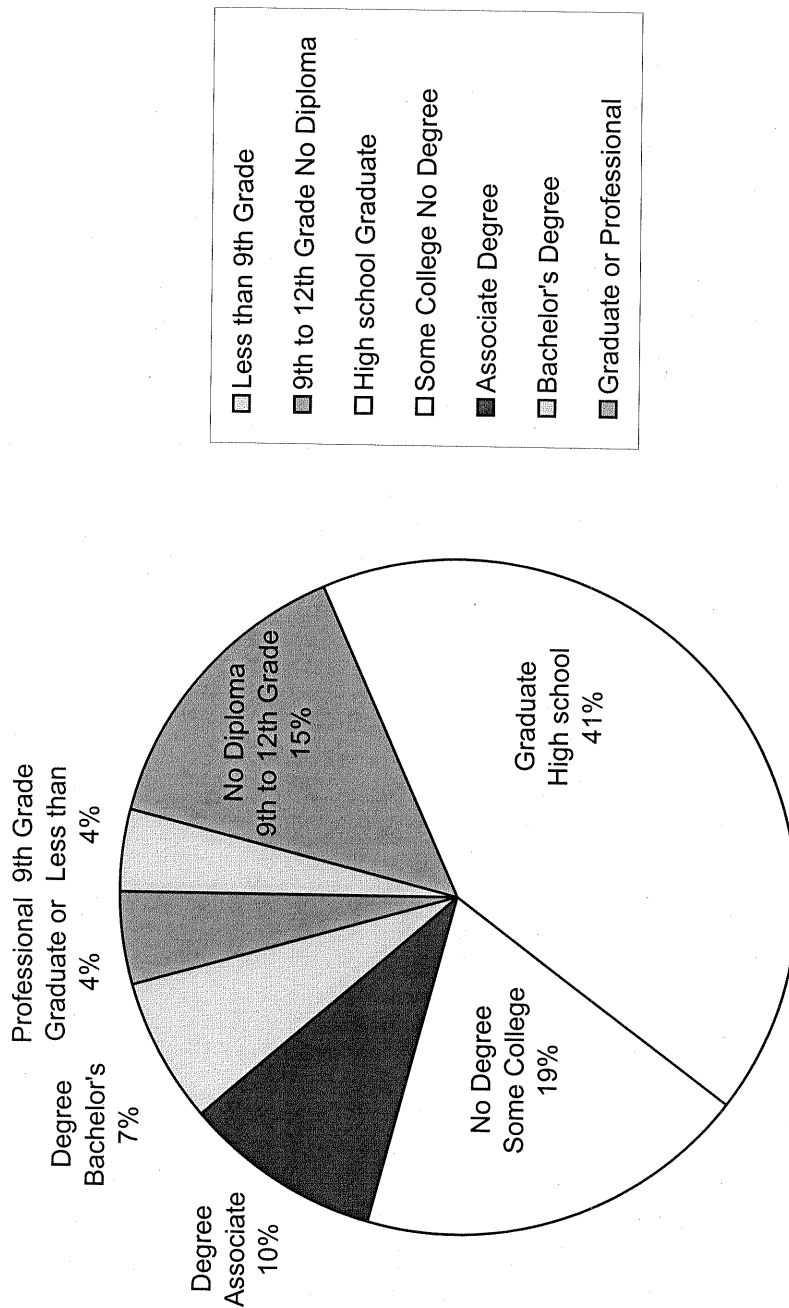
Level of Educational Achievement Population Age 25 and Over, 2000 Town of Hannibal, NY



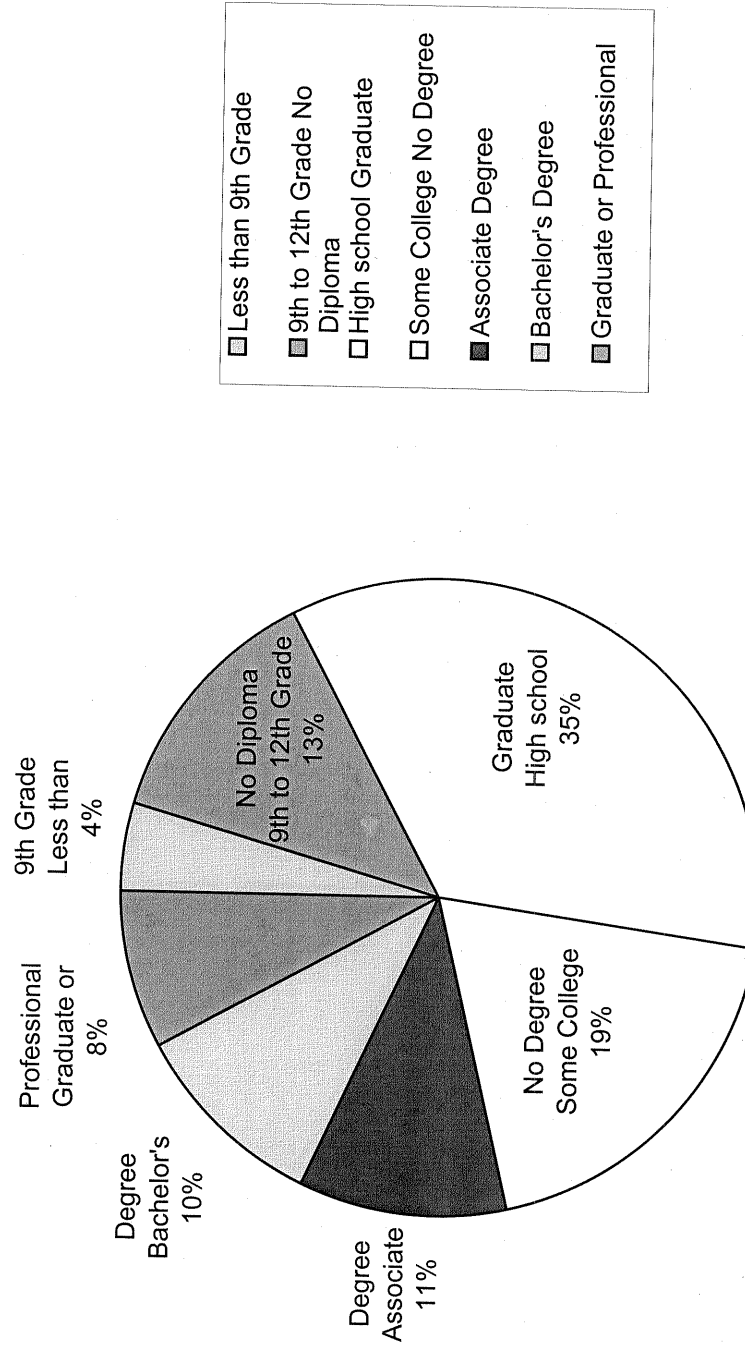
Level of Educational Achievement Population Age 25 and Over, 2000 Village of Hannibal, NY



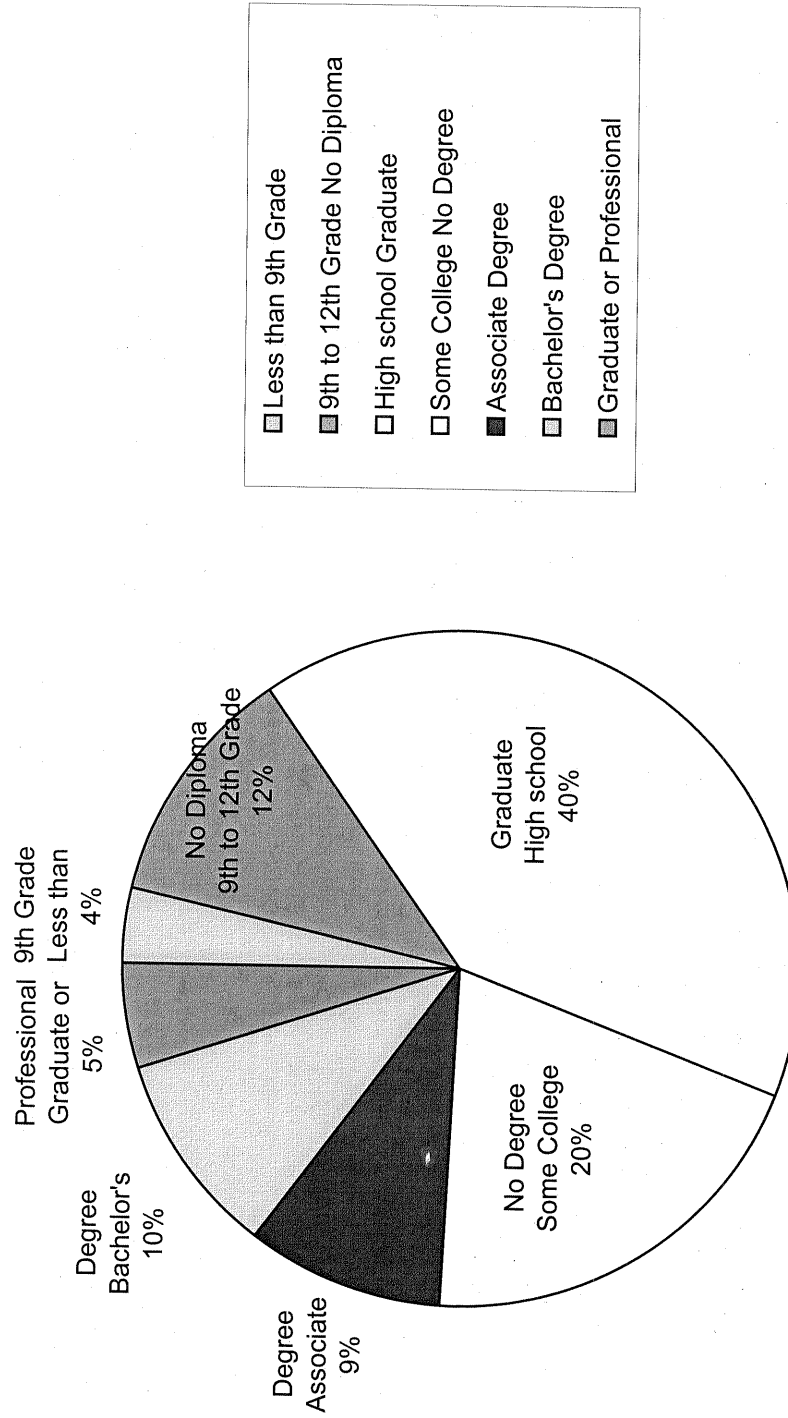
Level of Educational Achievement Population Age 25 and Over, 2000 Town of Hastings, NY



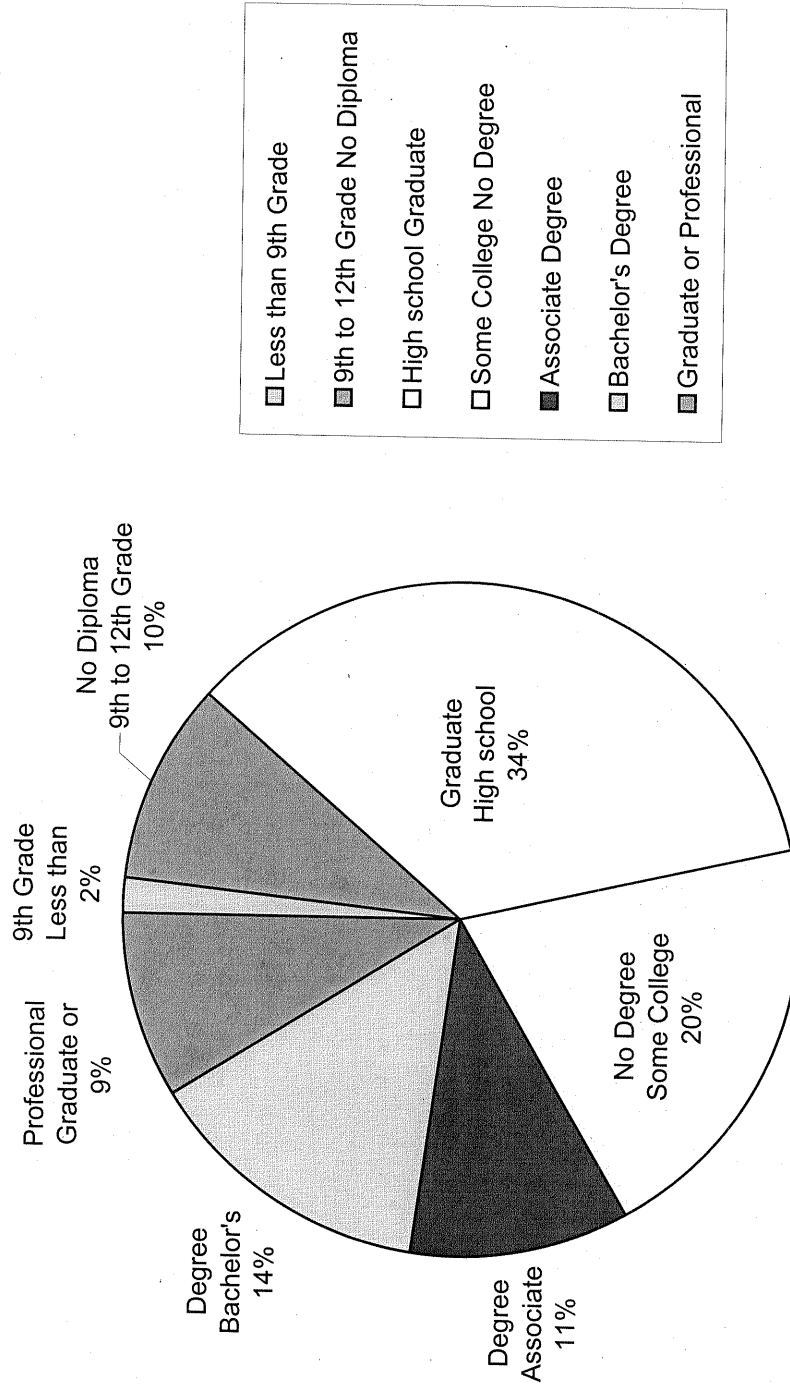
Level of Educational Achievement Population Age 25 and Over, 2000 Village of Central Square, NY



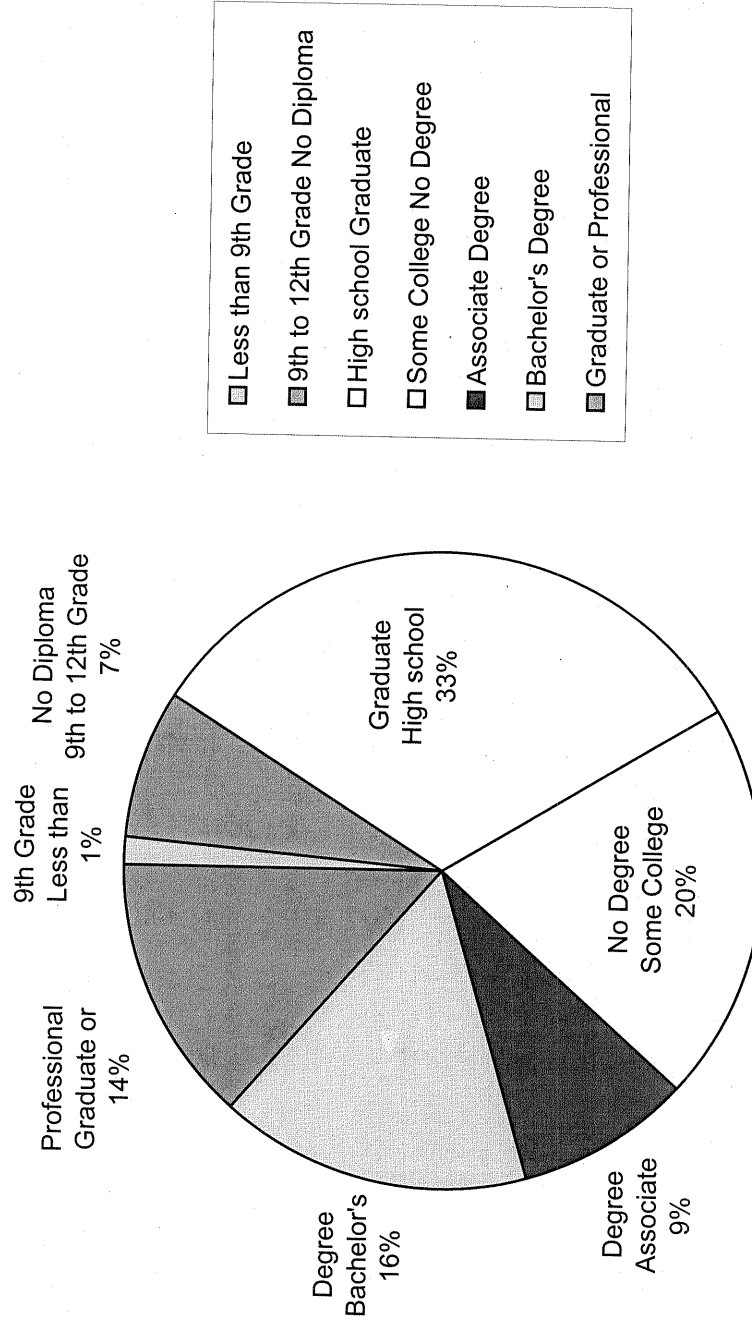
Level of Educational Achievement Population Age 25 and Over, 2000 Town of Mexico, NY



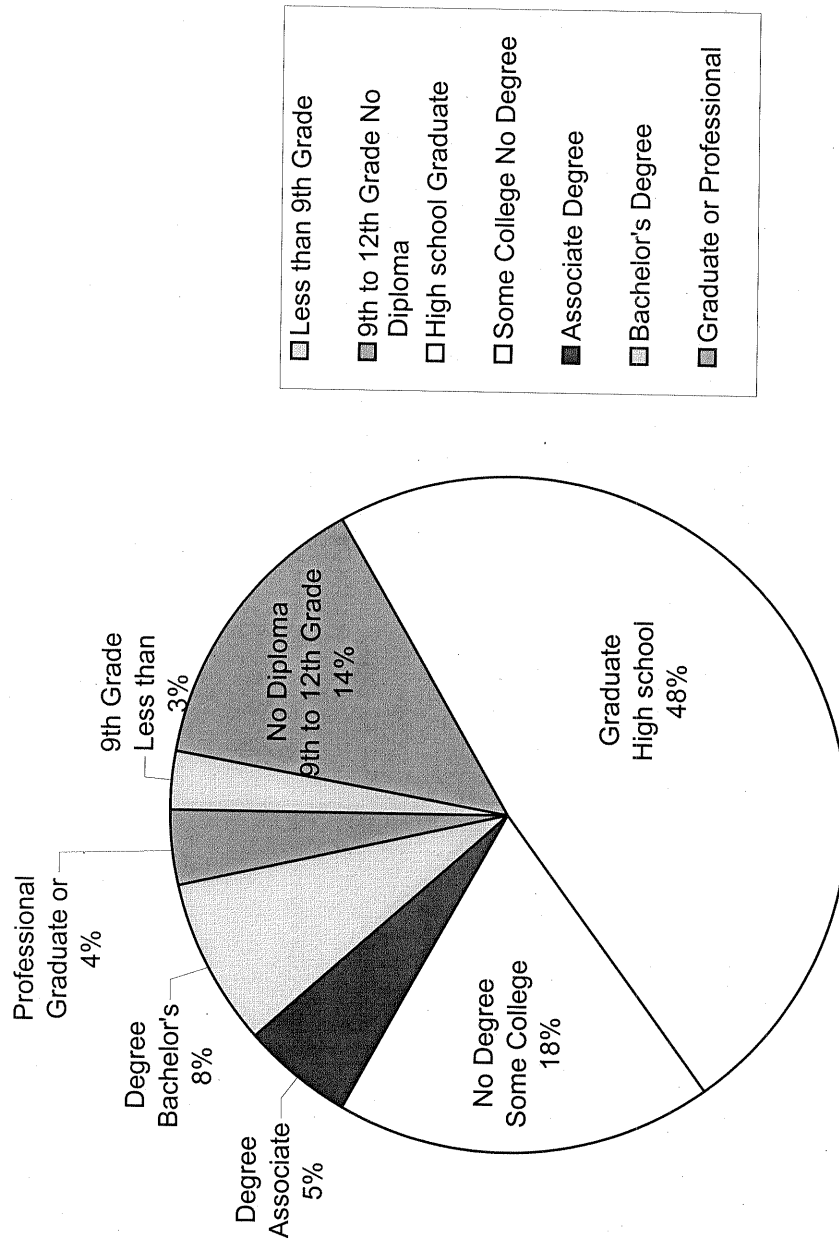
Level of Educational Achievement Population Age 25 and Over, 2000 Village of Mexico, NY



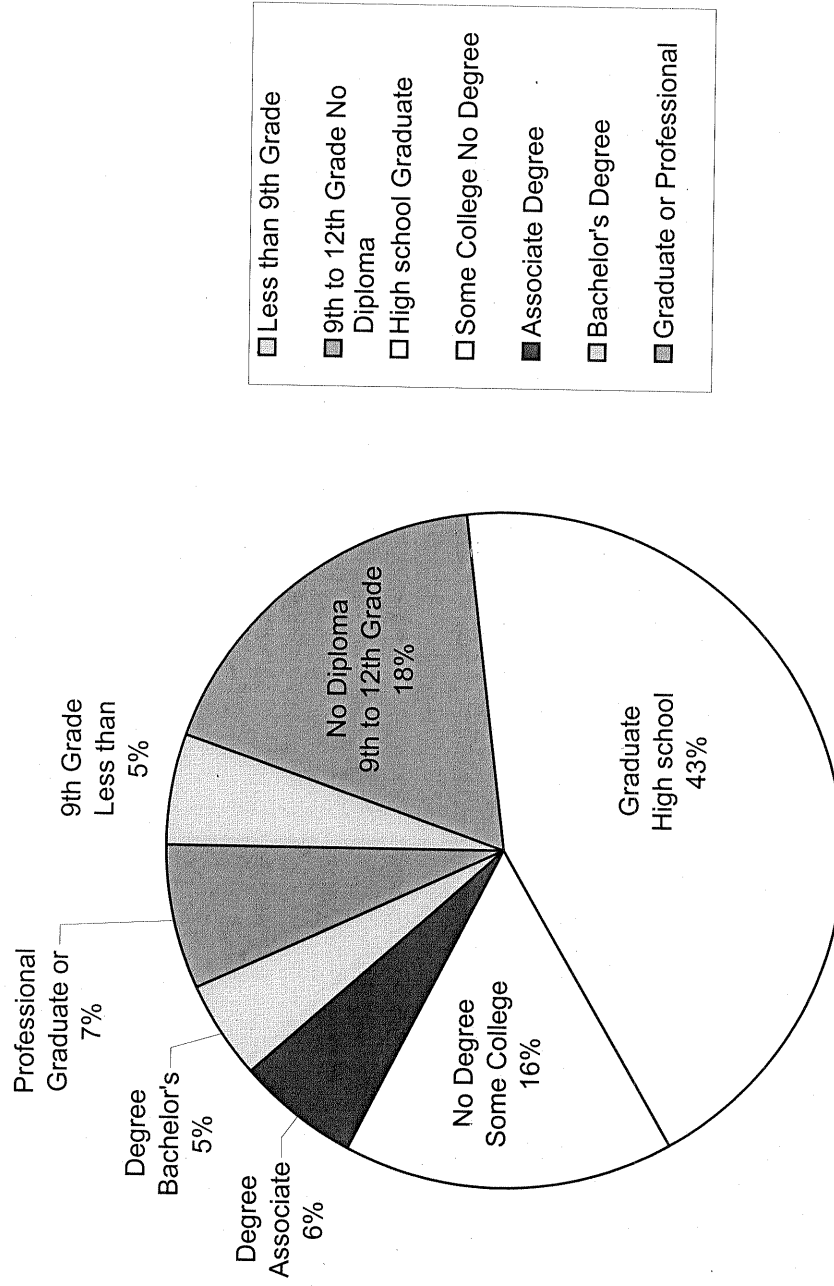
Level of Educational Achievement Population Age 25 and Over, 2000 Town of Minetto, NY



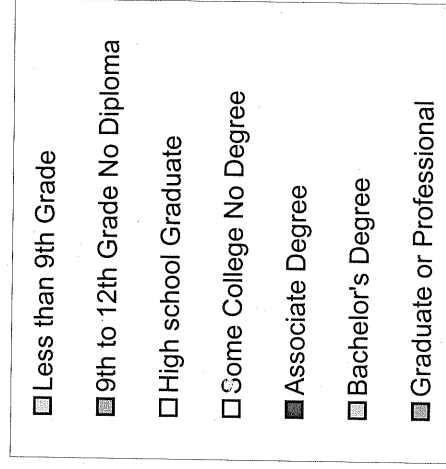
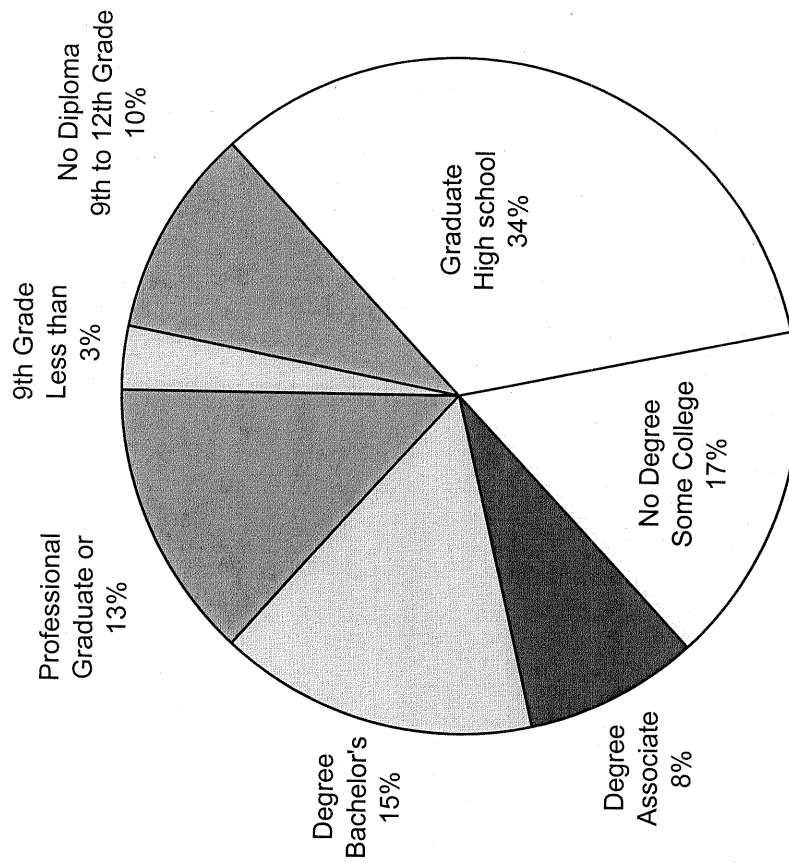
Level of Educational Achievement Population Age 25 and Over, 2000 Town of New Haven, NY



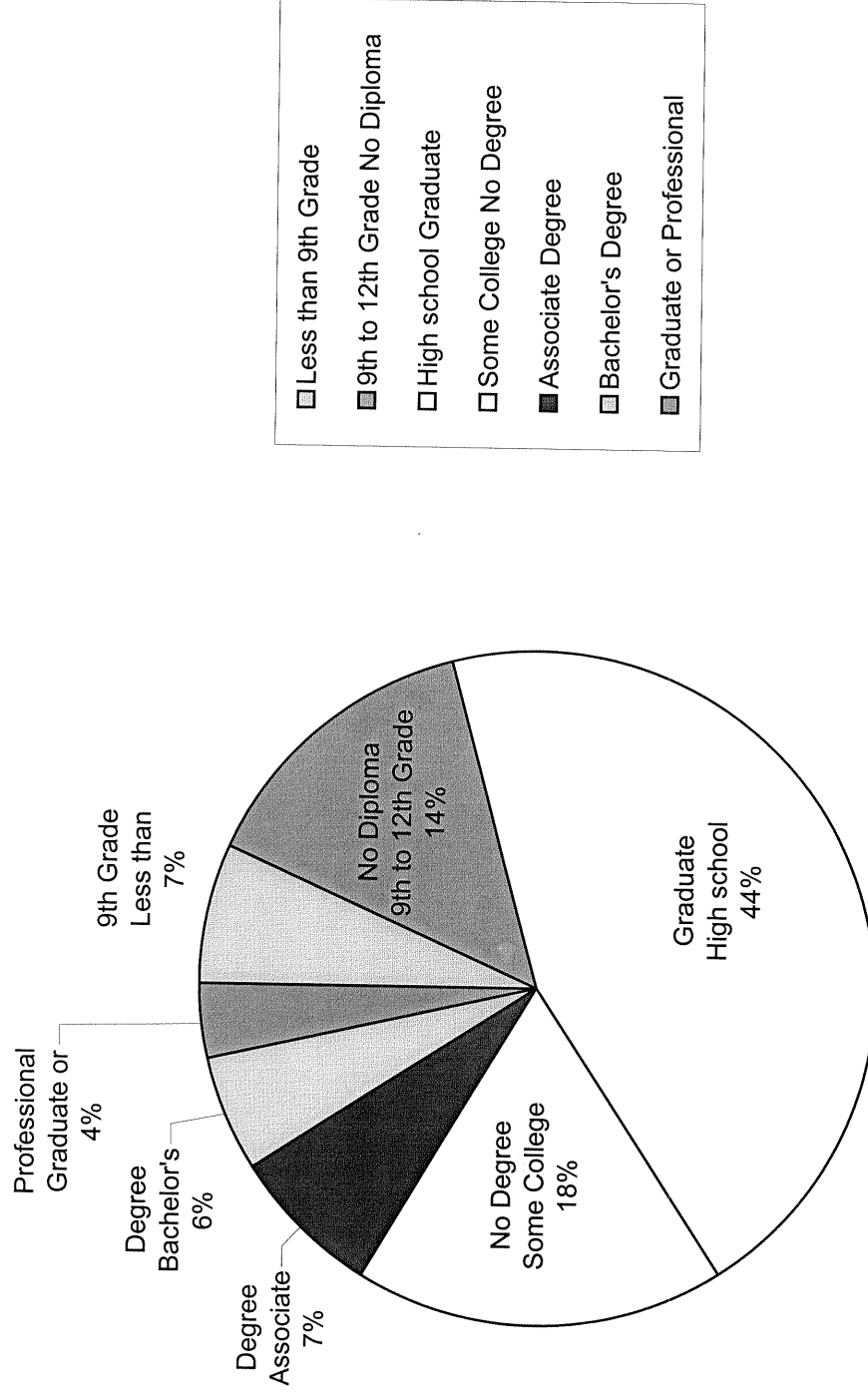
Level of Educational Achievement Population Age 25 and Over, 2000 Town of Orwell, NY



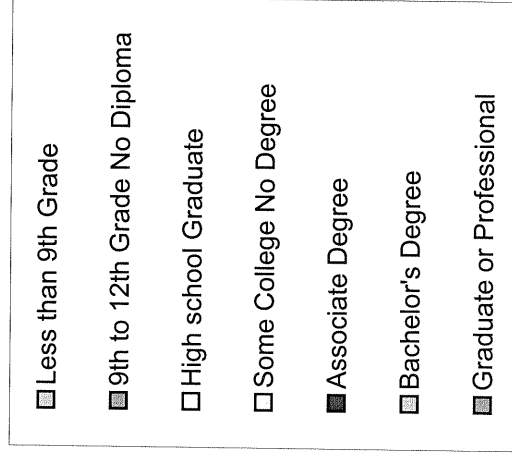
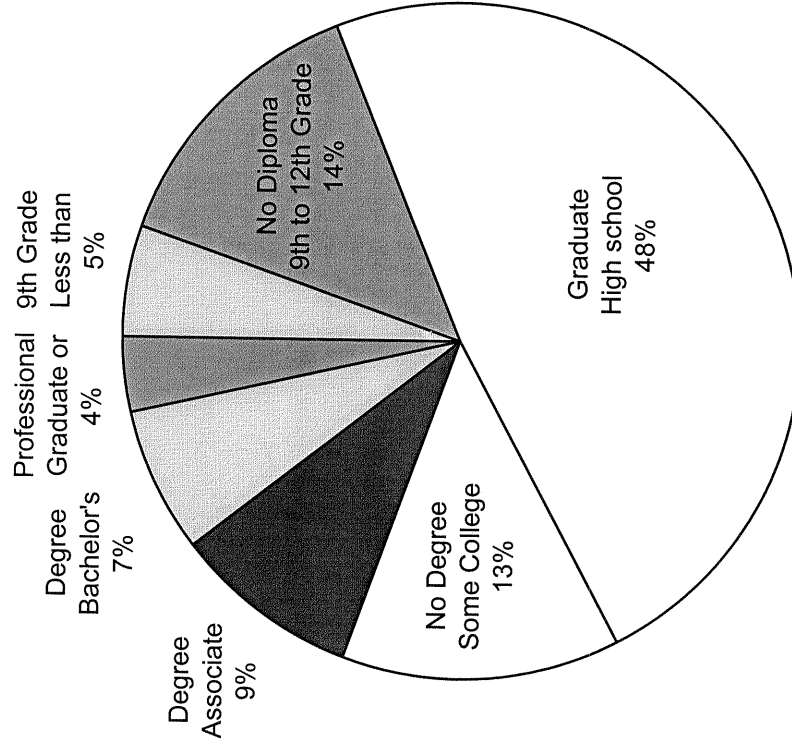
Level of Educational Achievement Population Age 25 and Over, 2000 Town of Oswego, NY



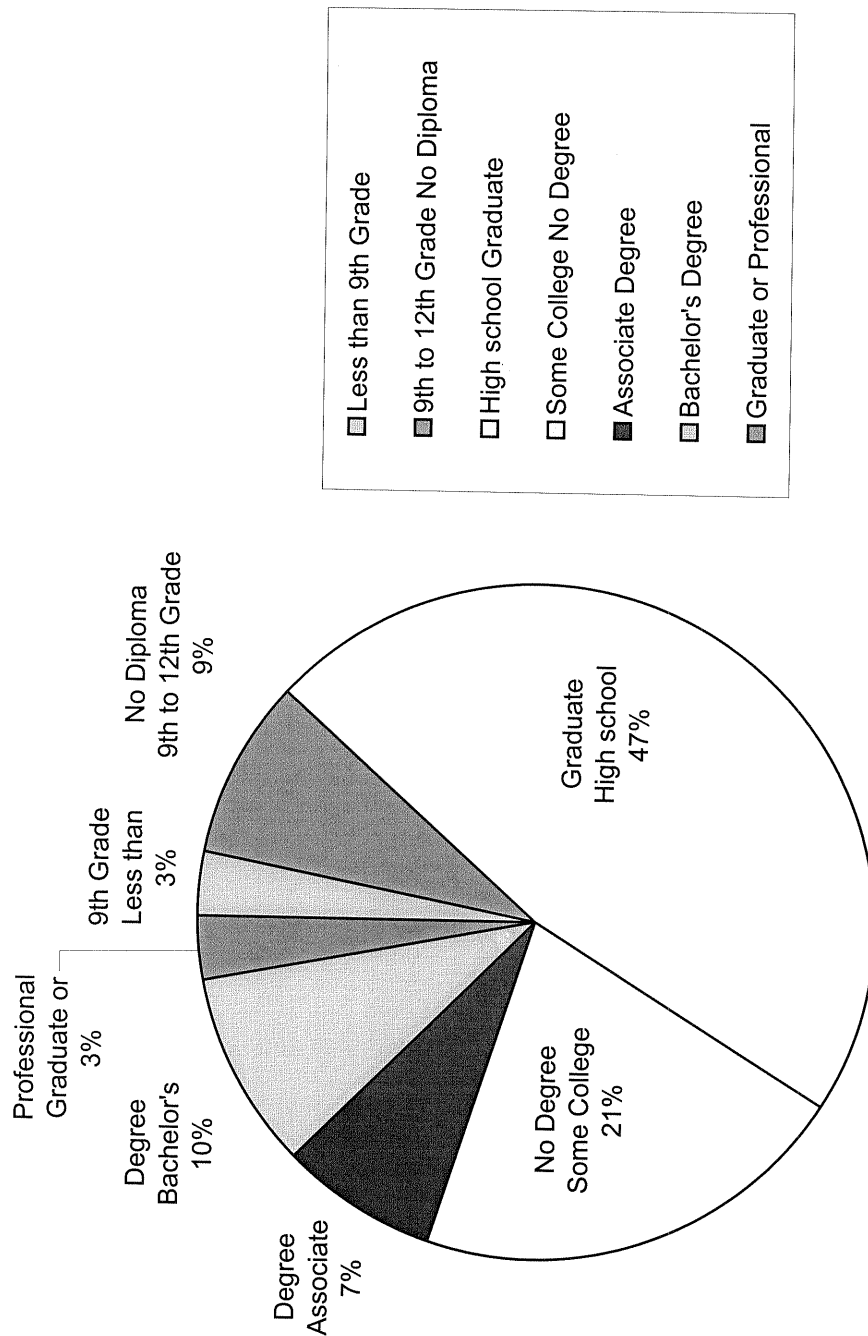
Level of Educational Achievement Population Age 25 and Over, 2000 Town of Palermo, NY



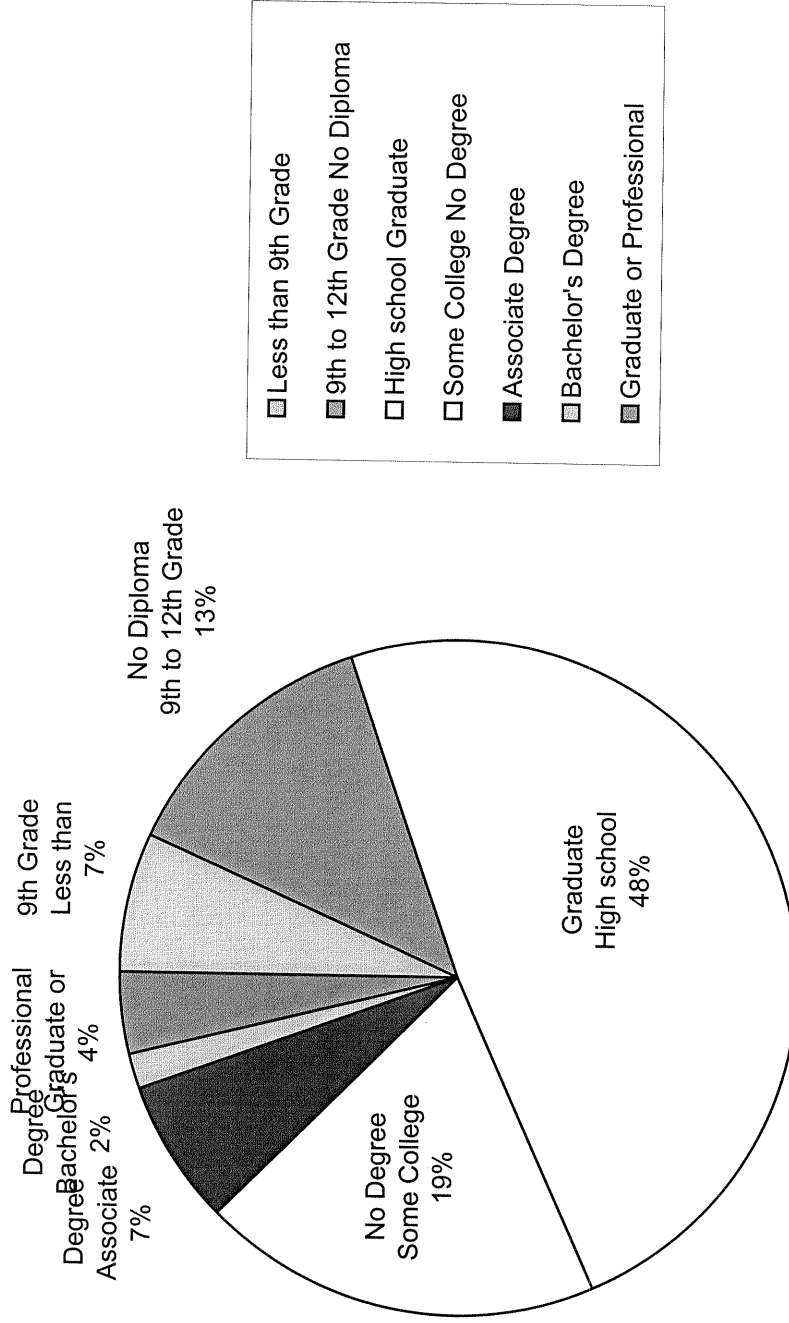
Level of Educational Achievement Population Age 25 and Over, 2000 Town of Parish, NY



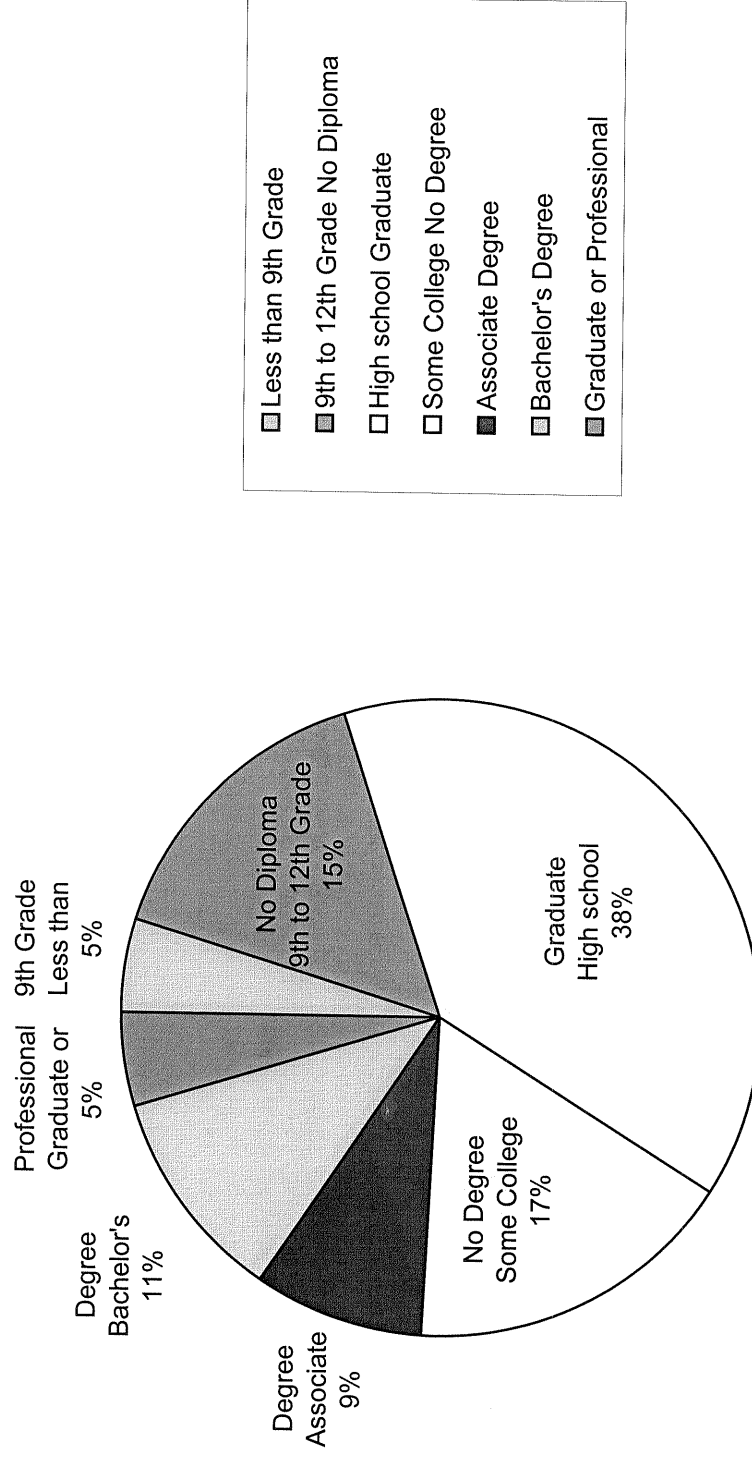
Level of Educational Achievement Population Age 25 and Over, 2000 Village of Parish, NY



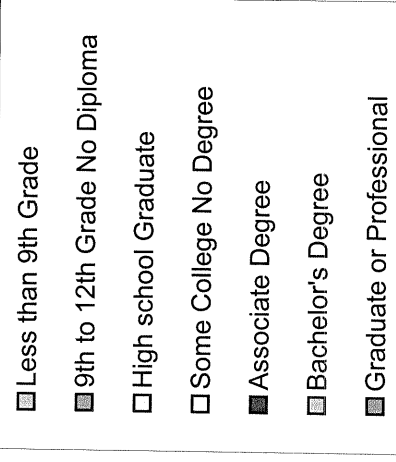
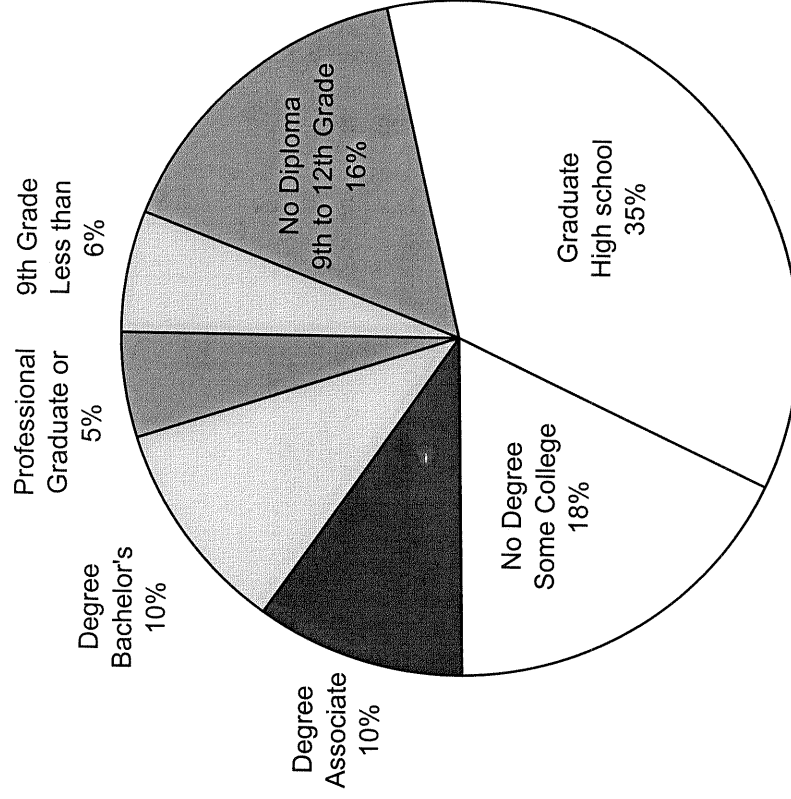
Level of Educational Achievement Population Age 25 and Over, 2000 Town of Redfield, NY



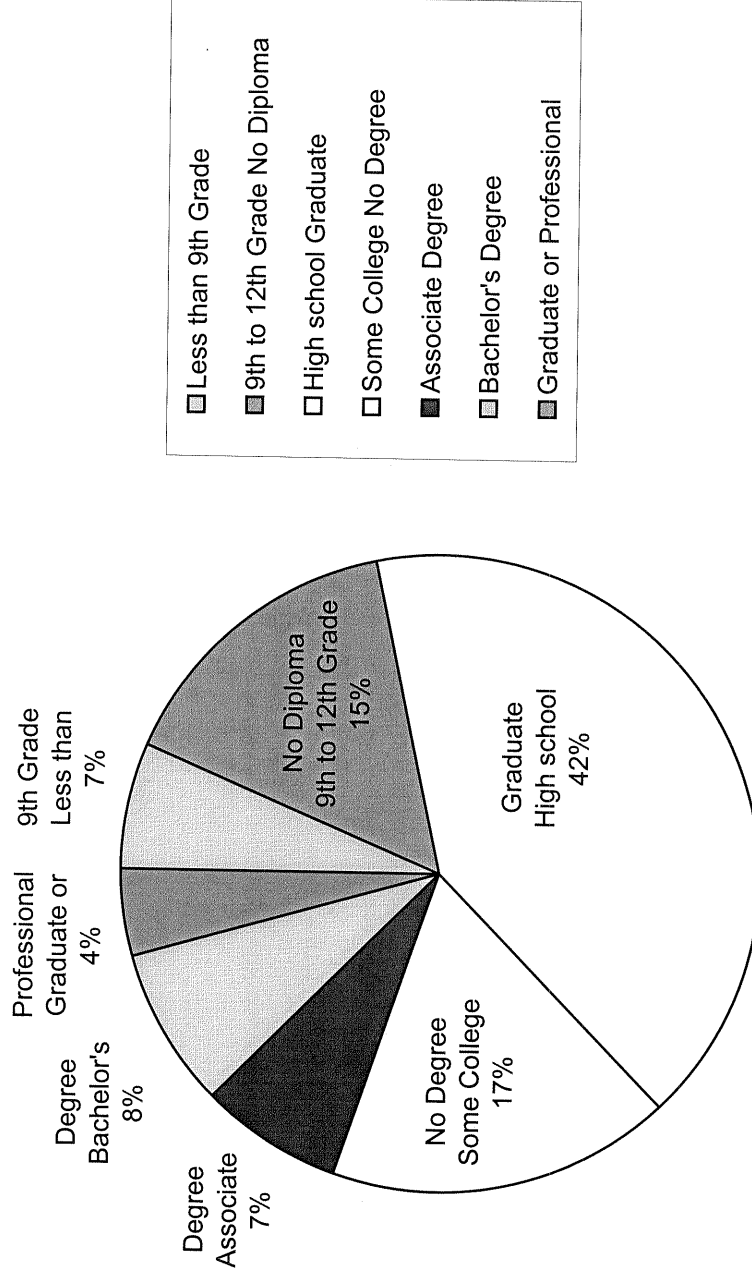
Level of Educational Achievement Population Age 25 and Over, 2000 Town of Richland, NY



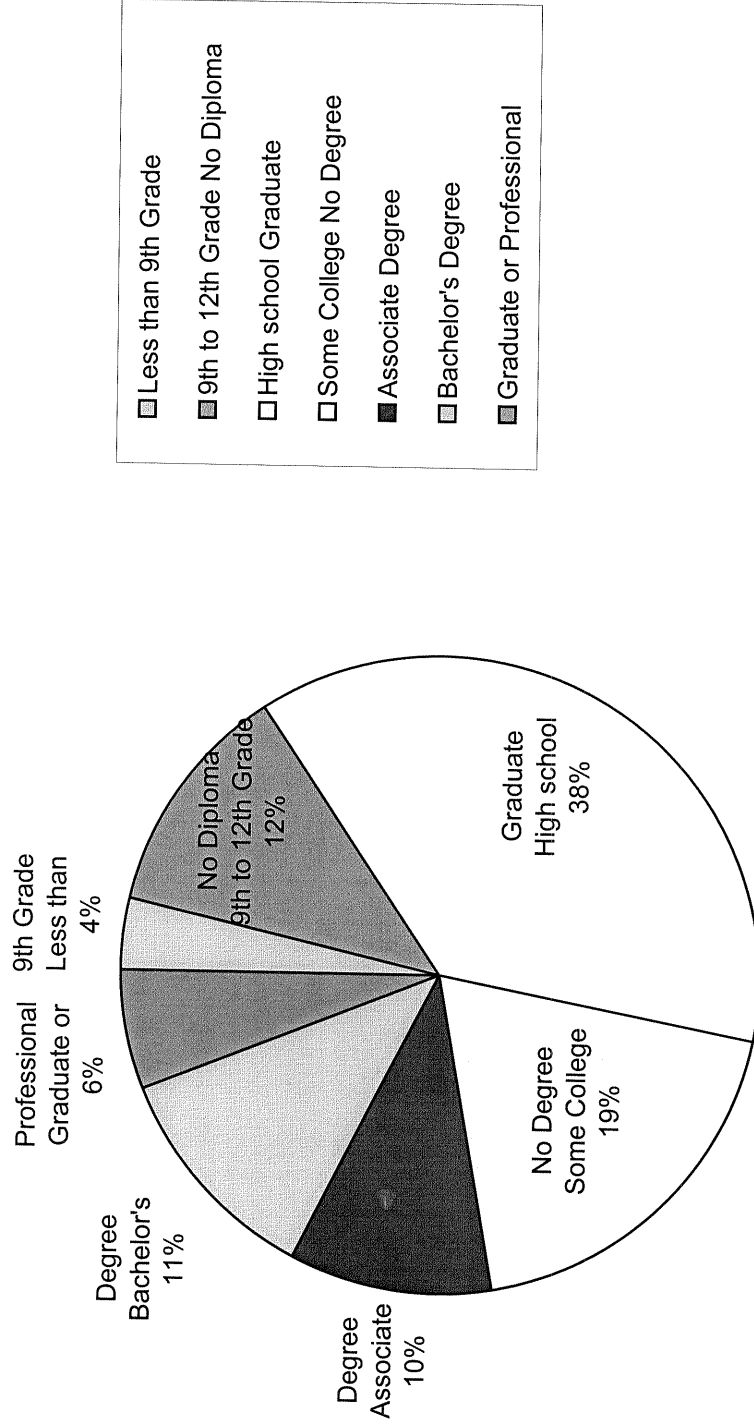
Level of Educational Achievement Population Age 25 and Over, 2000 Village of Pulaski, NY



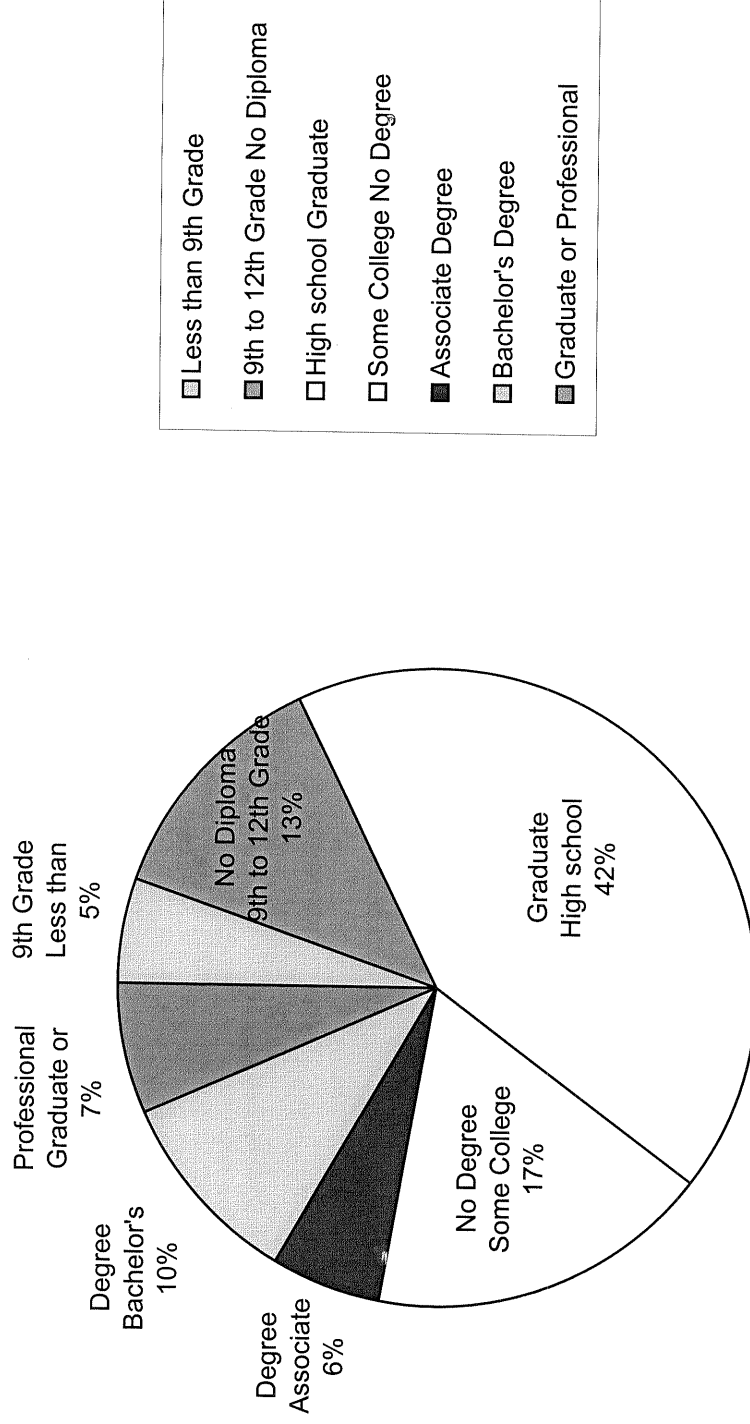
Level of Educational Achievement Population Age 25 and Over, 2000 Town of Sandy Creek, NY



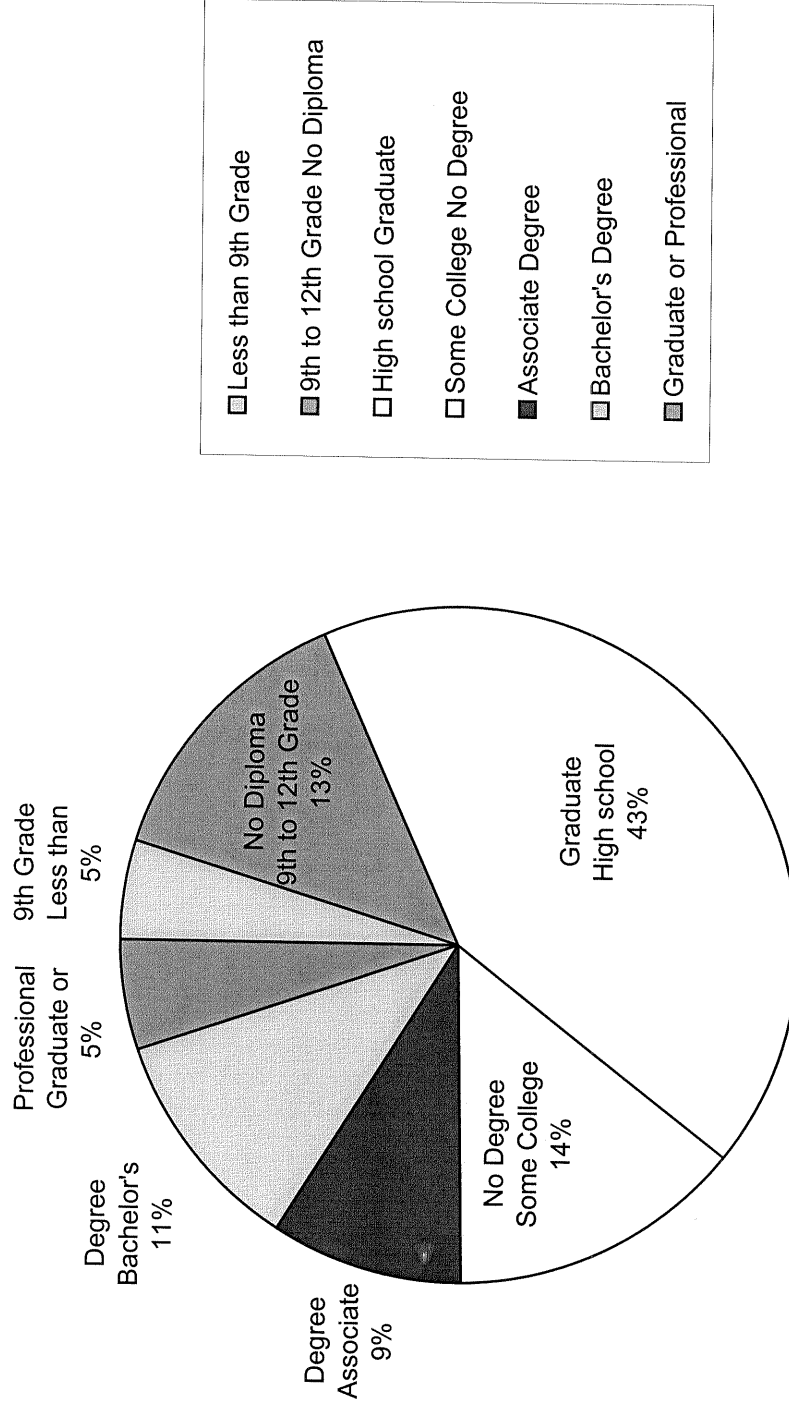
Level of Educational Achievement Population Age 25 and Over, 2000 Village of Lacona, NY



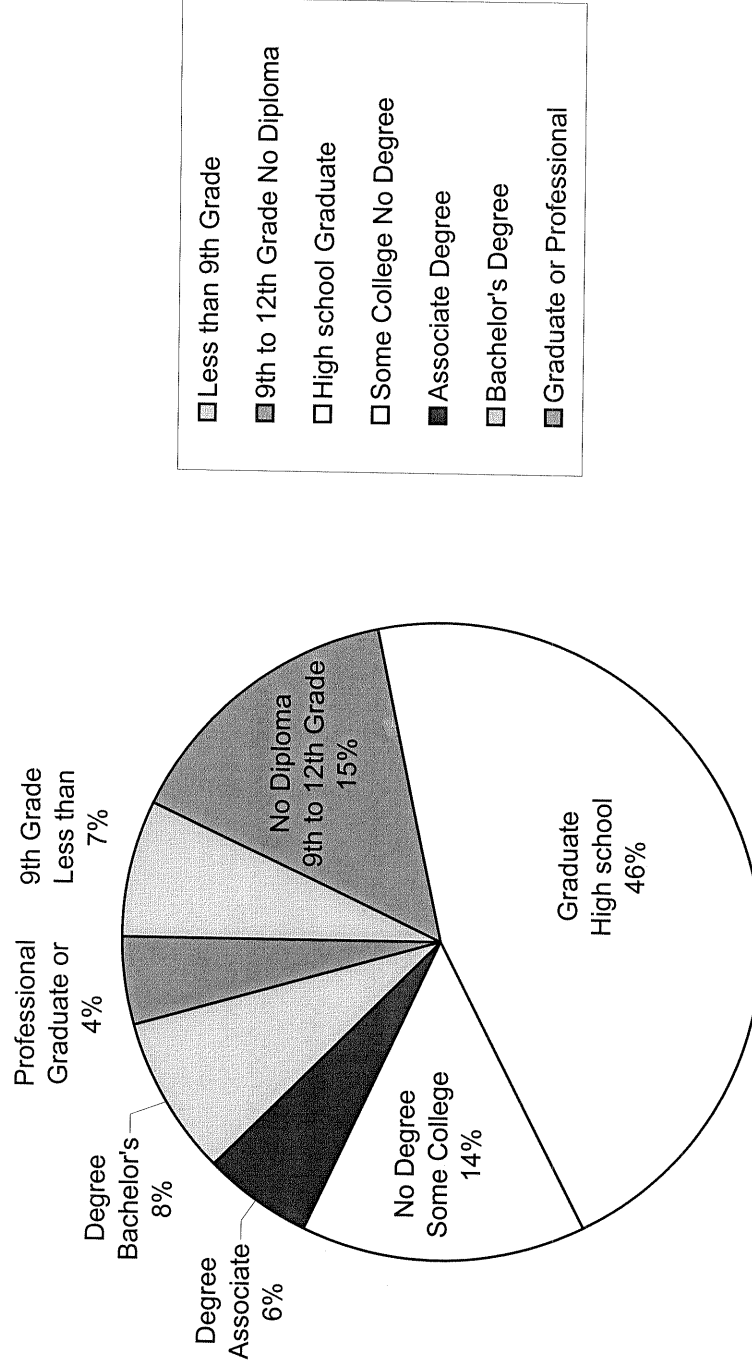
Level of Educational Achievement Population Age 25 and Over, 2000 Village of Sandy Creek, NY



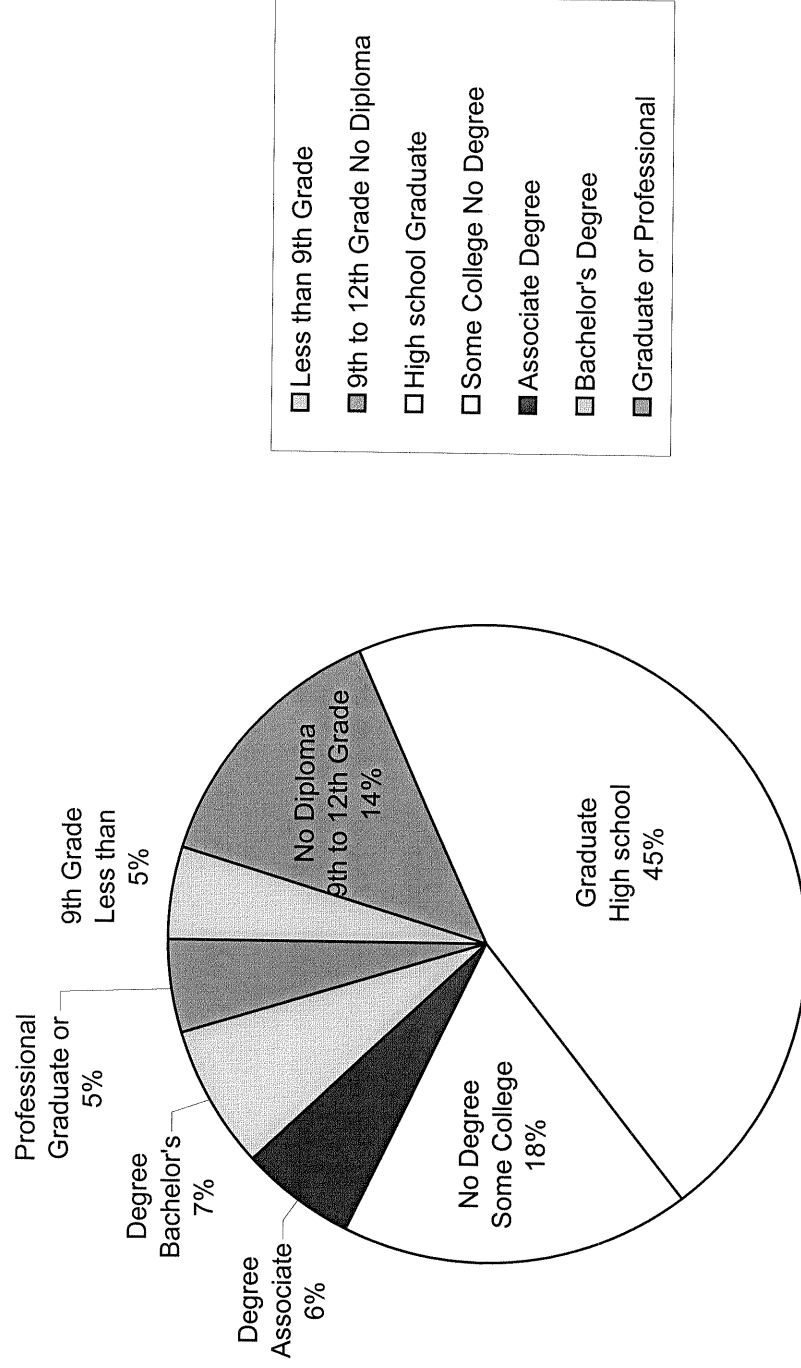
Level of Educational Achievement Population Age 25 and Over, 2000 Town of Schroeppe, NY



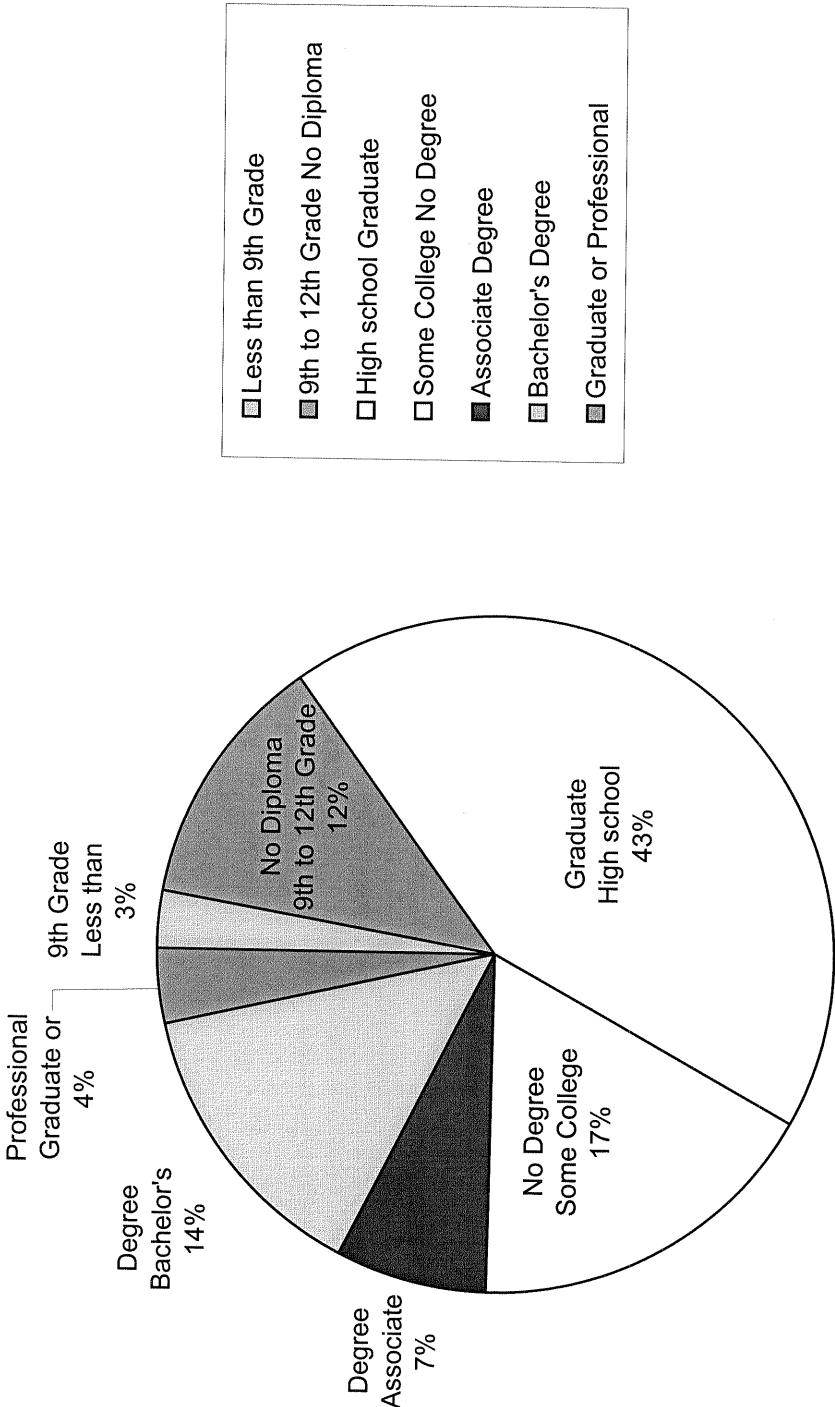
Level of Educational Achievement Population Age 25 and Over, 2000 Village of Phoenix, NY



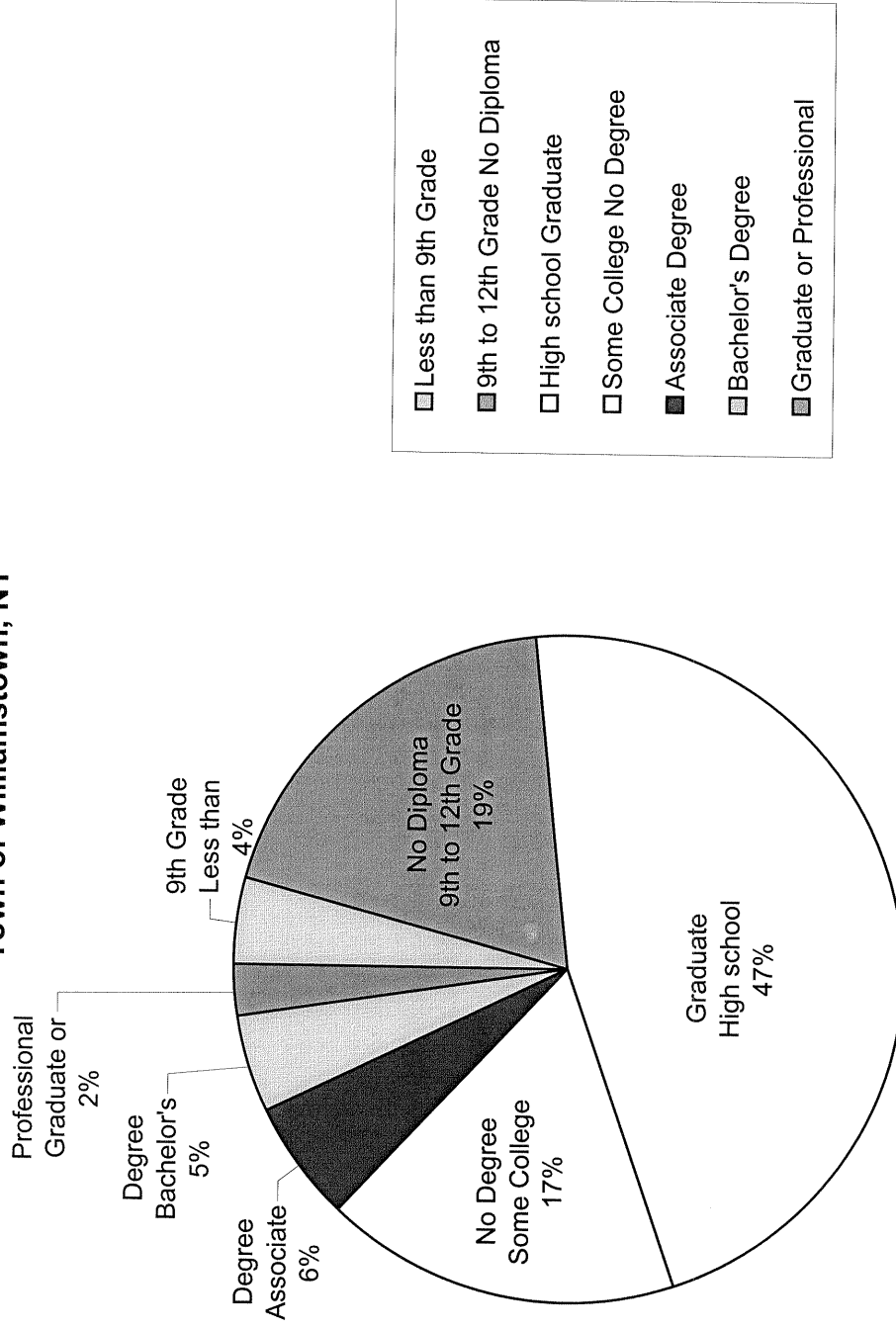
Level of Educational Achievement Population Age 25 and Over, 2000 Town of Scriba, NY



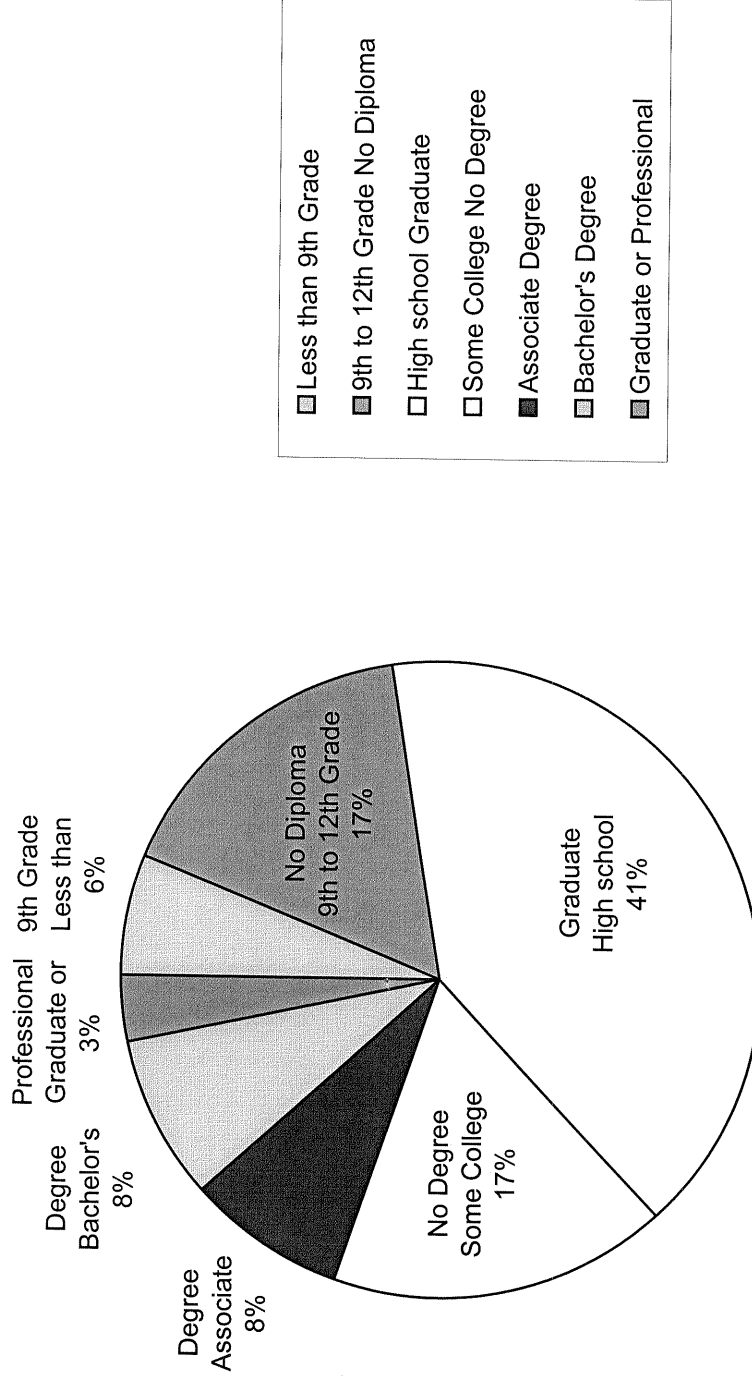
Level of Educational Achievement Population Age 25 and Over, 2000 Town of Volney, NY



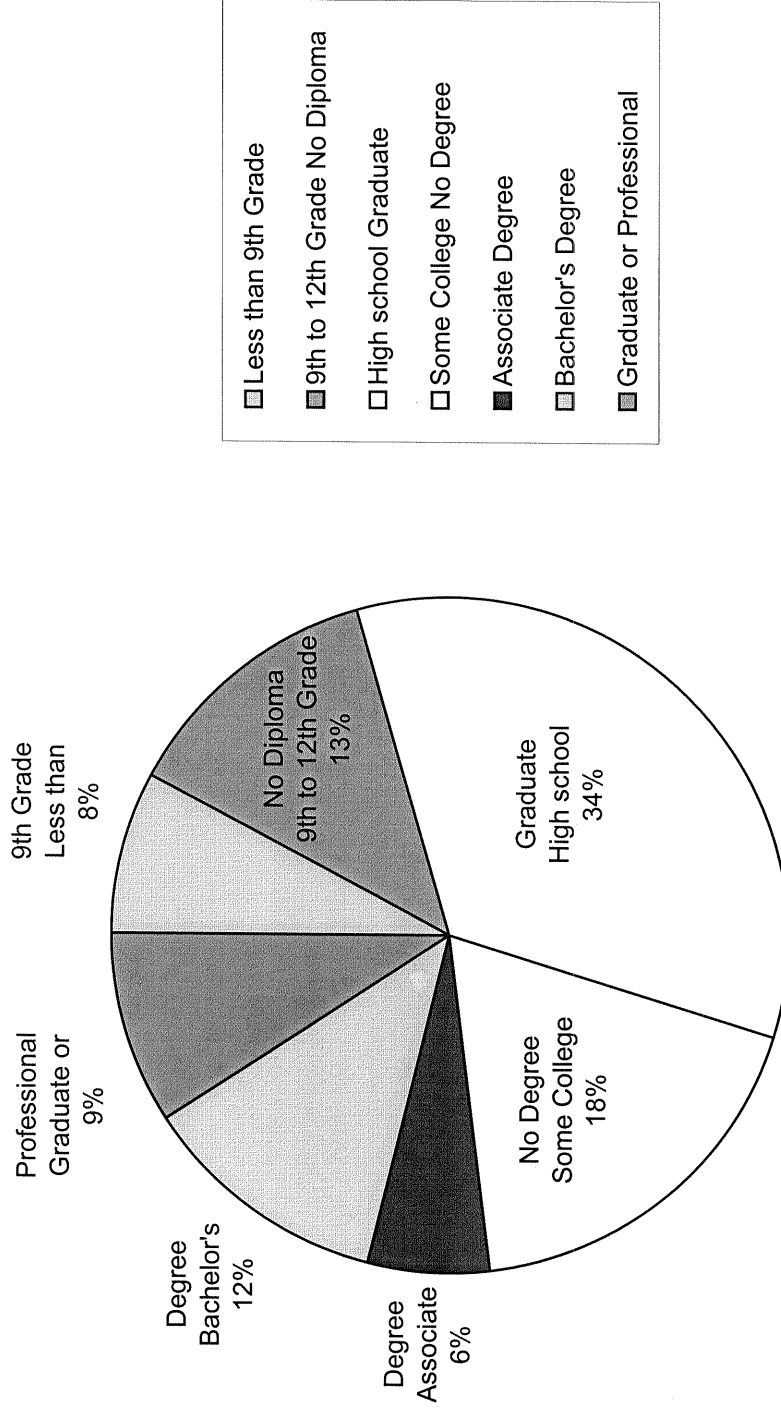
Level of Educational Achievement Population Age 25 and Over, 2000 Town of Williamstown, NY



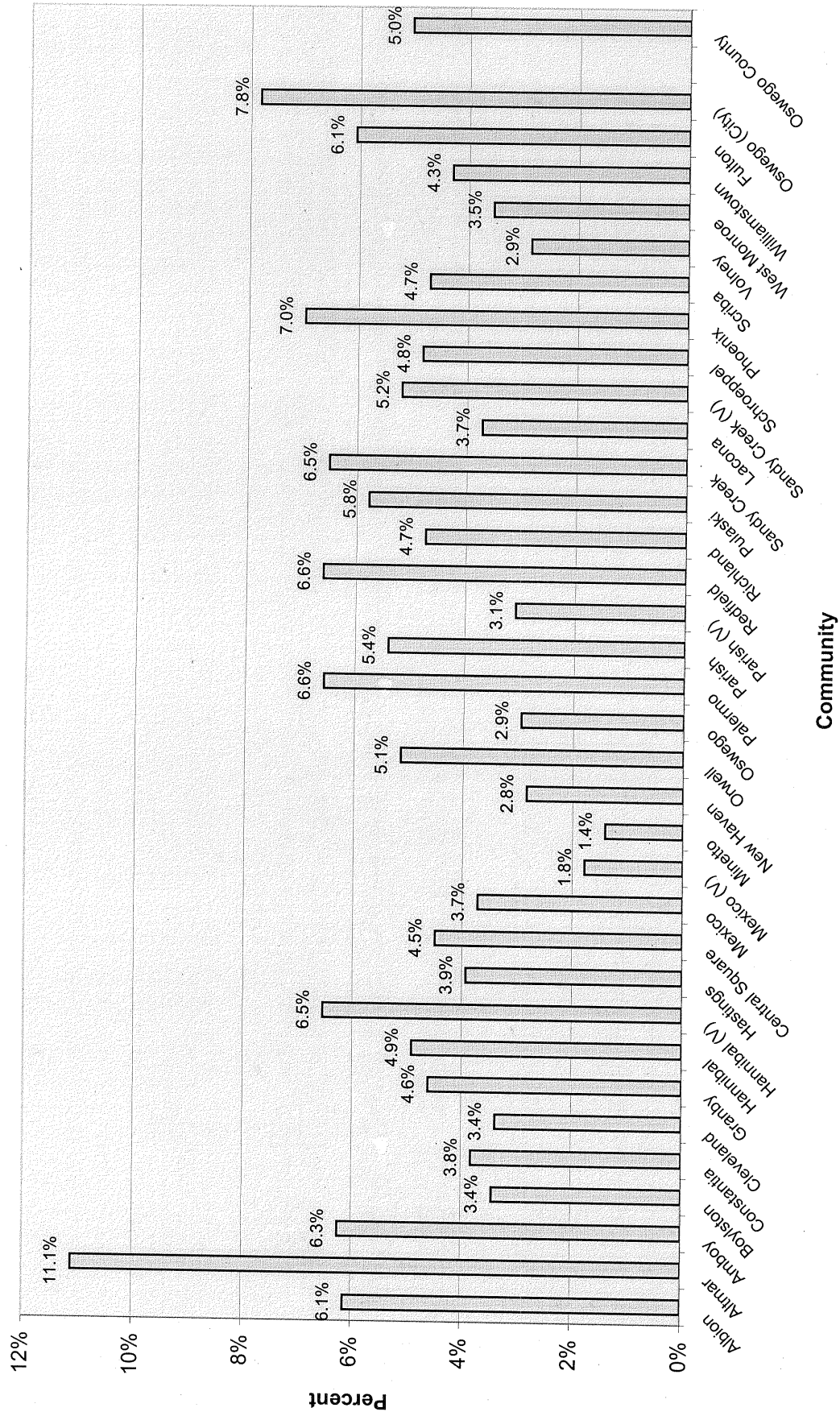
Level of Educational Achievement Population Age 25 and Over, 2000 City of Fulton, NY



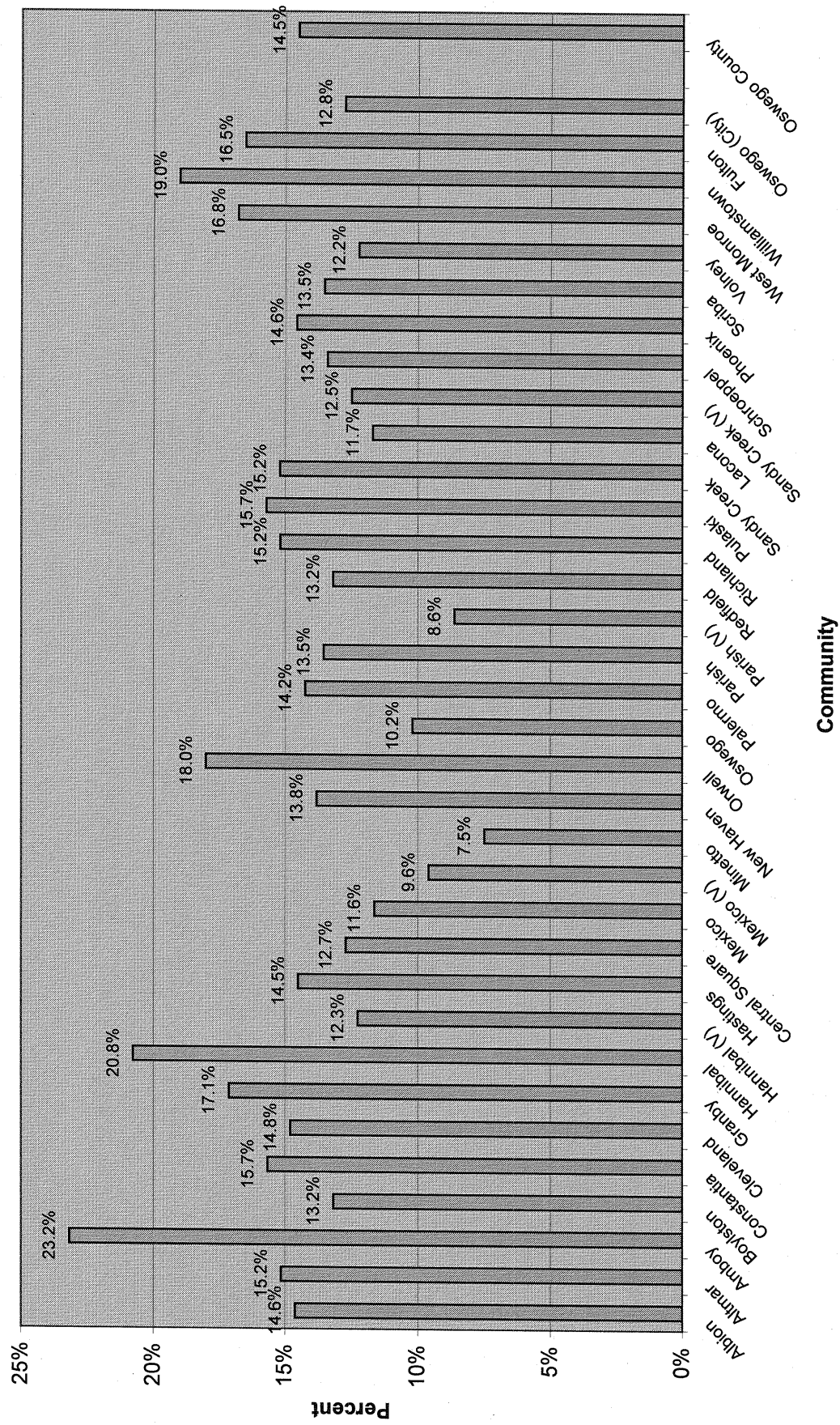
Level of Educational Achievement Population Age 25 and Over, 2000 City of Oswego, NY



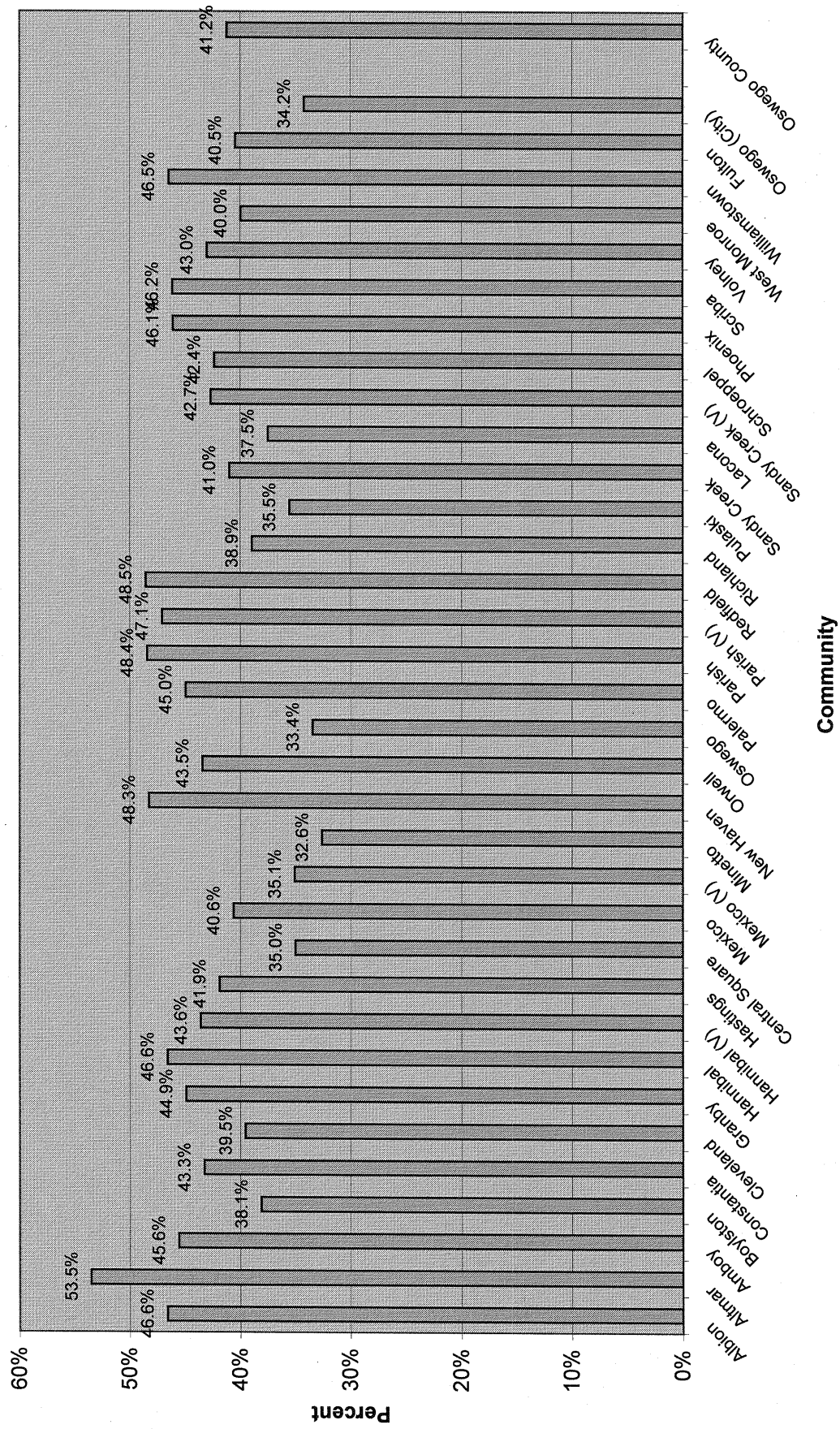
Population 25 and Over with Less than 9th Grade Education Oswego County, NY



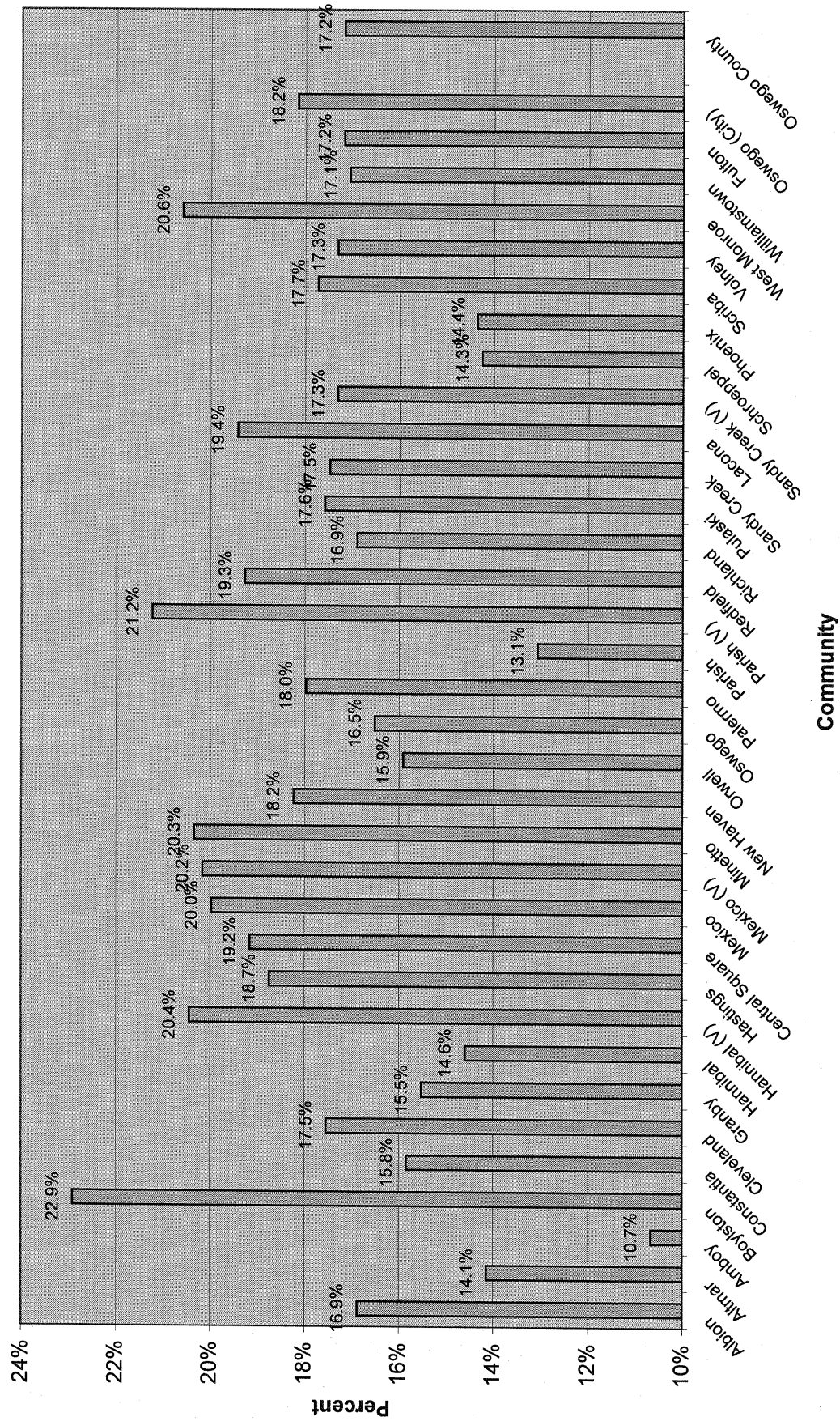
Population 25 and Over with 9th to 12th Grade, no Diploma Oswego County, NY



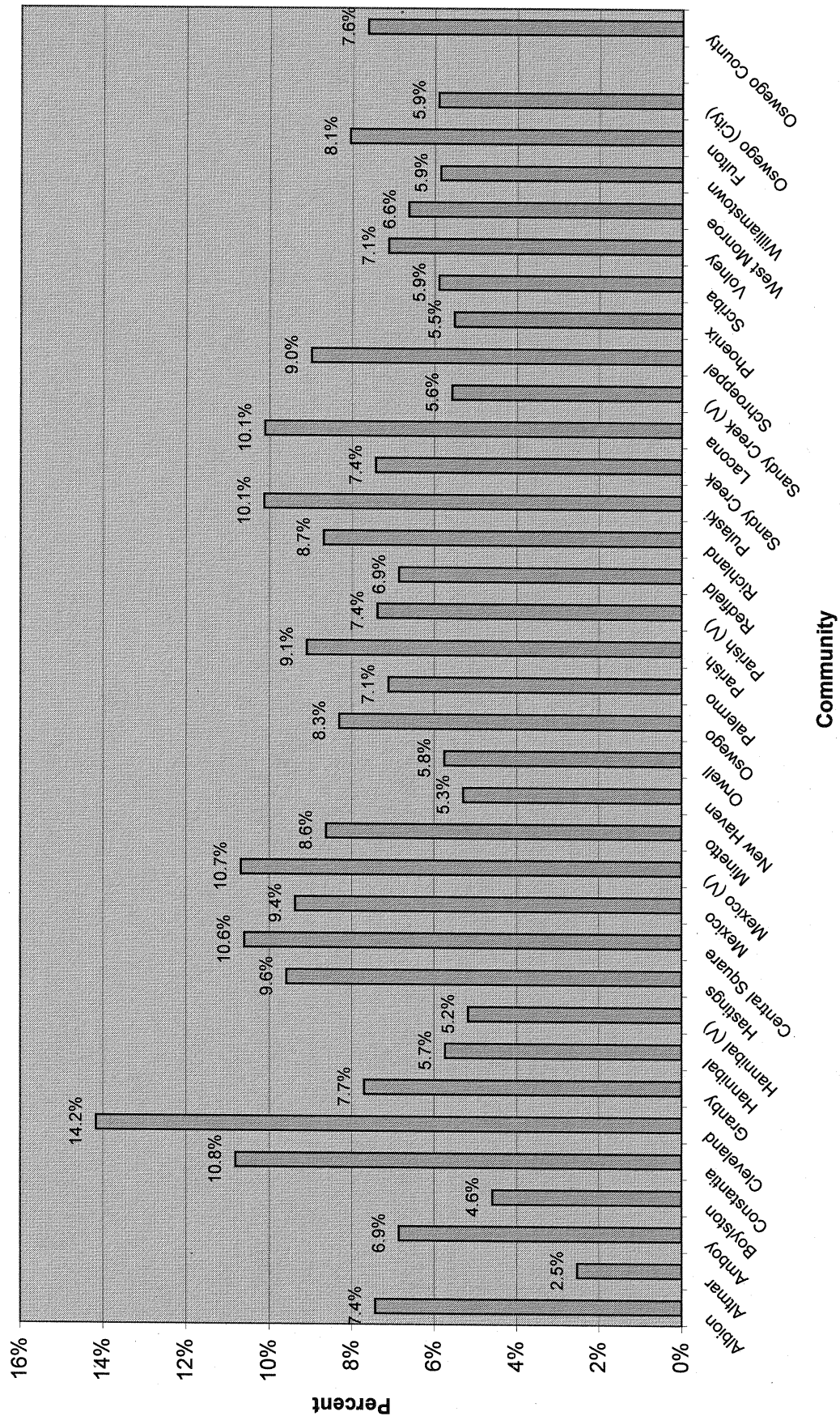
Population 25 and Over with High School Graduate (Including Equivalency) Oswego County, NY



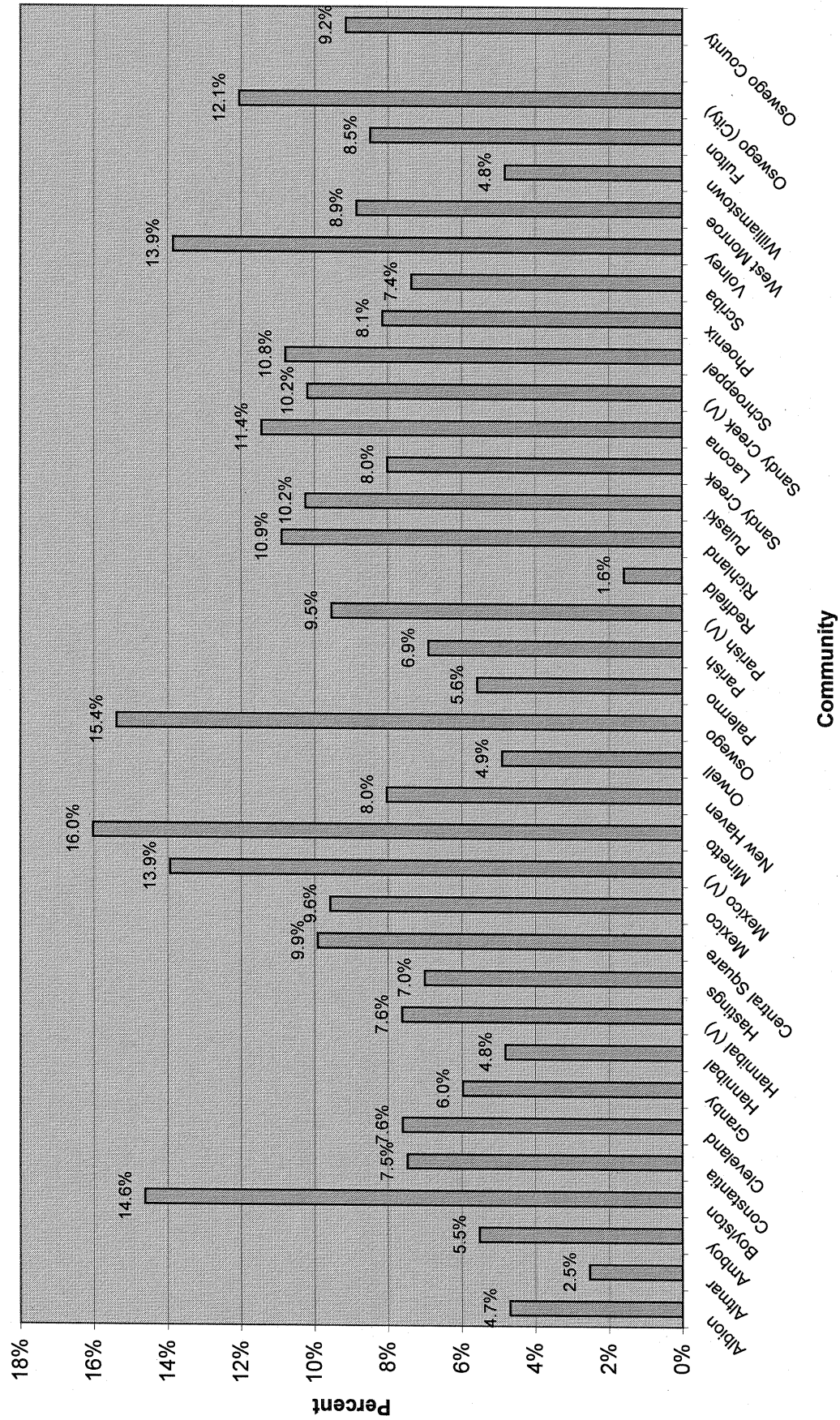
Population 25 and Over with Some College, No Degree Oswego County, NY



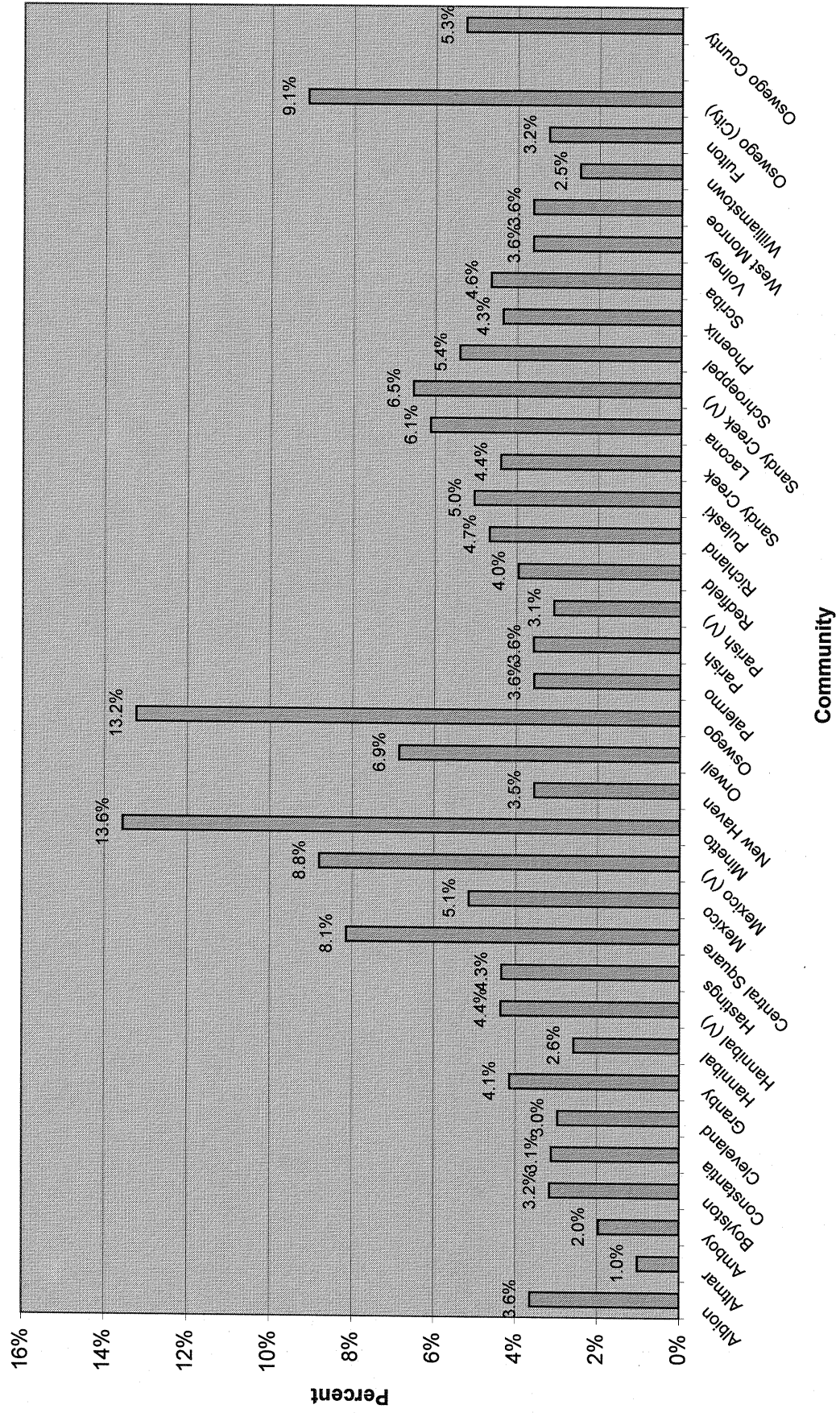
Population 25 and Over with Associates Degree Oswego County, NY



Population 25 and Over with Bachelor's Degree Oswego County, NY



Population 25 and Over with Graduate or Professional Degree Oswego County, NY



Poverty: 1999

Census 2000 Brief

Issued May 2003

C2KBR-19

By
Alemayehu Bishaw
and
John Iceland

At the close of the 20th century, 12.4 percent of the U.S. population, or 33.9 million people, reported 1999 family incomes that were below the poverty thresholds, down from 13.1 percent in 1989.¹ The incidence of poverty varied considerably across regions, states, counties, and cities, and some groups experienced higher rates of poverty than others.

This report, which exhibits data on the poverty population, is part of a series that presents population and housing data collected by Census 2000.² It describes population distributions for the United States, including characteristics of regions, states, counties, and places with populations of 100,000 or more. A description of how the Census Bureau measures poverty may be found on page 2 and the poverty thresholds used are in Table 1.

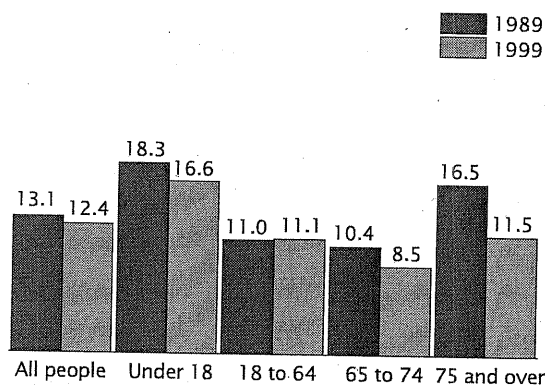
Declines in poverty between 1989 and 1999 were regis-

tered for most of the age groups shown in Figure 1 and Table 2. The poverty rate for children (those under 18) declined by 1.7 percentage points, from 18.3 percent in 1989 to 16.6 percent in 1999.

Despite declines, the child poverty rate in 1999 still surpassed rates for adult age groups. In 1999, for example, the poverty rate for people 18 to 64 was 11.1 percent, and the poverty rate for people 65 to 74 and those 75 and over were 8.5 percent and 11.5 percent, respectively. Notably, people 18 to 64 experienced an increase in poverty over the decade.

Figure 1.
Poverty Rates by Age: 1989 and 1999

(For information on confidentiality protection, sampling error, nonsampling error, and definitions, see www.census.gov/prod/cen2000/doc/sf3.pdf)



Source: U.S. Census Bureau, Census 2000 Summary File 3.

¹ The estimates in this report are based on responses from a sample of the population. As with all surveys, estimates may vary from the actual values because of sampling variation or other factors. All statements made in this report have undergone statistical testing and are significant at the 90-percent confidence level unless otherwise noted.

² The text of this report discusses data for the United States, including the 50 states and the District of Columbia. Data for the Commonwealth of Puerto Rico are shown in Table 3 and Figure 3.

U.S. CENSUS BUREAU

Helping You Make Informed Decisions

U.S. Department of Commerce
Economics and Statistics Administration
U.S. CENSUS BUREAU

United States
**Census
2000**

How poverty is measured.

Poverty statistics presented in census publications use thresholds prescribed for federal agencies by Statistical Policy Directive 14, issued by the Office of Management and Budget (OMB). The original poverty measure was developed in the Social Security Administration during 1963-1964. It was adopted by the Council of Economic Advisors, and the OMB subsequently revised it slightly in 1969 and 1981.

The data on poverty status were derived in part from Census 2000 long form questionnaire items 31 and 32, which provide information on the amount of income people receive from various sources. Poverty status was determined for everyone except those in institutions, military group quarters, or college dormitories, and unrelated individuals under 15 years old.

The current official poverty measure has two components—poverty thresholds (income levels) and the family income that is compared with these thresholds. The official definition uses 48 thresholds that take into account family size (from one person to nine or more) and the presence and number of family members under 18 years old (from no children present to eight or more children present).

Furthermore, unrelated individuals and two-person families are differentiated by the age of the reference person (under 65 or 65 and over). The poverty thresholds are not adjusted for regional, state, or local variation in the cost of living. The dollar amounts of the poverty thresholds used in this report are shown in Table 1.

Family income then determines who is poor. If a family's total income is less than the threshold for the family's size and composition, the family and everyone in it

are considered poor. If a person is not living with anyone related by birth, marriage, or adoption, the person's own income is compared with his or her poverty threshold as an "unrelated individual." For example, the 1999 poverty threshold for a 3-person family with one member under age 18 was \$13,410. If the total family income for 1999 was greater than this threshold, then the family and all members of the family were considered to be above the poverty level.

The total number of people below the poverty level is the sum of the number of people in poor families and the number of unrelated individuals with incomes below the poverty threshold. Census 2000 asked people about their income in the previous calendar year. Poverty estimates in this report compare family income in 1999 with the corresponding 1999 poverty thresholds.

Table 1.
Poverty Thresholds (Annual Dollar Amounts) by Size of Family and Number of Related Children Under 18 Years Old: 1999

Size of family unit	Weighted average threshold	Related children under 18 years								
		None	One	Two	Three	Four	Five	Six	Seven	Eight or more
One person (unrelated individual)	\$8,501									
Under 65 years	8,667	8,667								
65 years and over	7,990	7,990								
Two people	10,869									
Householder under 65 years ..	11,214	11,156	11,483							
Householder 65 years and over	10,075	10,070	11,440							
Three people	13,290	13,032	13,410	13,423						
Four people	17,029	17,184	17,465	16,895	16,954					
Five people	20,127	20,723	21,024	20,380	19,882	19,578				
Six people	22,727	23,835	23,930	23,436	22,964	22,261	21,845			
Seven people	25,912	27,425	27,596	27,006	26,595	25,828	24,934	23,953		
Eight people	28,967	30,673	30,944	30,387	29,899	29,206	28,327	27,412	27,180	
Nine people or more	34,417	36,897	37,076	36,583	36,169	35,489	34,554	33,708	33,499	32,208

Note: The weighted average thresholds represent a summary of the poverty thresholds for a given family size. They are not used to compute official poverty statistics.

Source: U.S. Census Bureau, Current Population Survey.

Table 2.
Poverty Rates by Age: 1989 and 1999

(For information on confidentiality protection, sampling error, nonsampling error, and definitions, see www.census.gov/prod/cen2000/doc/stf3.pdf)

Characteristic	1989			1999			Percentage point change, 1999 less 1989
	Total*	Below poverty level		Total*	Below poverty level		
		Number	Percent		Number	Percent	
All people	241,977,859	31,742,864	13.1	273,882,232	33,899,812	12.4	-0.7
Under 18 years	62,605,519	11,428,916	18.3	70,925,261	11,746,858	16.6	-1.7
Under 5 years	17,978,025	3,617,099	20.1	18,726,688	3,412,025	18.2	-1.9
5 years	3,626,098	714,726	19.7	3,909,962	689,664	17.6	-2.1
6 to 11 years	21,187,263	3,870,105	18.3	24,587,815	4,148,573	16.9	-1.4
12 to 17 years	19,814,133	3,226,986	16.3	23,700,796	3,496,596	14.8	-1.5
18 to 64 years	149,809,693	16,533,363	11.0	169,610,423	18,865,180	11.1	0.1
65 to 74 years	17,932,656	1,857,468	10.4	18,253,226	1,550,969	8.5	-1.9
75 years and over	11,629,991	1,923,117	16.5	15,093,322	1,736,805	11.5	-5.0

* Total refers to the number of people in the poverty universe (not the total population). For more details, see the text box on how poverty is measured.

Details may not sum to totals because of rounding.

Source: 1990 census and Census 2000 Summary File 3.

GEOGRAPHIC DISTRIBUTION OF POVERTY

Poverty rates varied across regions and states.

Poverty rates varied considerably across regions (see Table 3).³ The lowest poverty rate in 1999 was experienced in the Midwest region (10.2 percent), while the poverty rate was 11.4 percent in the Northeast and 13.0 percent in the West. Poverty rates in 1999 remained highest in the South (13.9 percent). Although 35.6 percent of the total population resided in the South, 40.0 percent of the

population living in poverty resided there, according to Census 2000 (see Figure 2).

The variation across the 50 states and the District of Columbia was even more pronounced (Table 3). Among the 50 states, poverty rates in 1999 ranged from a low of 6.5 percent in New Hampshire to a high of 19.9 percent in Mississippi. The estimated poverty rate for District of Columbia (20.2 percent) is not statistically different from Mississippi.

The three states with the highest poverty rates in 1989 (Mississippi, Louisiana, and New Mexico) all experienced significant declines in poverty over the 1990s, yet remained the three highest.

None of the three states with the lowest poverty rates in 1989 (New Hampshire, Connecticut, and New Jersey) experienced declines in poverty; two of them—Connecticut and New Jersey—experienced increases. Nevertheless, New Hampshire and Connecticut remained among the three states

with the lowest poverty rates in 1999, along with Minnesota.

Clusters of low and high poverty counties were evident in 1999.

Figure 3 shows how poverty rates varied among U.S. counties in 1999. The lighter-shaded counties, such as those that predominate in the Midwest, along the coast in the Northeast, and in some mountain states, had lower-than-average poverty rates. In contrast, the darker-shaded counties in the South and Southwest had higher-than-average poverty rates. High-poverty counties were clustered in Appalachia (such as in West Virginia and Eastern Kentucky), in the Mississippi delta area, along the border in Southwest Texas, and in some American Indian tribal areas in states close to the Canadian border and the Southwest.

Some places had lower poverty rates than others.

Tables 4 and 5 show the places with the lowest and highest poverty rates in 1999 among places with a

³ The Northeast region includes the states of Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, and Vermont. The Midwest region includes the states of Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, and Wisconsin. The South region includes the states of Alabama, Arkansas, Delaware, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, West Virginia, and the District of Columbia, a state equivalent. The West region includes the states of Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, and Wyoming.

Table 3.
State and Regional Poverty Rates: 1989 and 1999

(For information on confidentiality, protection, sampling error, nonsampling error, and definitions, refer to www.census.gov/prod/cen2000/doc/stf3.pdf)

State	1989			1999			Percentage point change 1999 less 1989
	Total*	Below poverty level		Total*	Below poverty level		
		Number	Percent		Number	Percent	
United States	241,977,859	31,742,864	13.1	273,882,232	33,899,812	12.4	-0.7
Regions							
Northeast	49,352,506	5,214,372	10.6	52,039,565	5,919,007	11.4	0.8
Midwest	58,035,788	6,971,020	12.0	62,613,918	6,360,113	10.2	-1.9
South	83,106,946	13,065,294	15.7	97,437,335	13,569,265	13.9	-1.8
West	51,482,619	6,492,178	12.6	61,791,414	8,051,427	13.0	0.4
State							
Alabama	3,945,798	723,614	18.3	4,334,919	698,097	16.1	-2.2
Alaska	532,474	47,906	9.0	612,961	57,602	9.4	0.4
Arizona	3,584,399	564,362	15.7	5,021,238	698,669	13.9	-1.8
Arkansas	2,292,037	437,089	19.1	2,600,117	411,777	15.8	-3.2
California	29,003,219	3,627,585	12.5	33,100,044	4,706,130	14.2	1.7
Colorado	3,212,550	375,214	11.7	4,202,140	388,952	9.3	-2.4
Connecticut	3,188,125	217,347	6.8	3,300,416	259,514	7.9	1.0
Delaware	645,399	56,223	8.7	759,117	69,901	9.2	0.5
District of Columbia	570,826	96,278	16.9	541,657	109,500	20.2	3.3
Florida	12,641,486	1,604,186	12.7	15,605,367	1,952,629	12.5	-0.2
Georgia	6,299,654	923,085	14.7	7,959,649	1,033,793	13.0	-1.7
Hawaii	1,071,352	88,408	8.3	1,178,795	126,154	10.7	2.4
Idaho	985,553	130,588	13.3	1,263,205	148,732	11.8	-1.5
Illinois	11,143,856	1,326,731	11.9	12,095,961	1,291,958	10.7	-1.2
Indiana	5,372,388	573,632	10.7	5,894,295	559,484	9.5	-1.2
Iowa	2,676,958	307,420	11.5	2,824,435	258,008	9.1	-2.3
Kansas	2,391,824	274,623	11.5	2,605,429	257,829	9.9	-1.6
Kentucky	3,582,459	681,827	19.0	3,927,047	621,096	15.8	-3.2
Louisiana	4,101,071	967,002	23.6	4,334,094	851,113	19.6	-3.9
Maine	1,189,534	128,466	10.8	1,240,893	135,501	10.9	NS
Maryland	4,660,591	385,296	8.3	5,164,376	438,676	8.5	0.2
Massachusetts	5,812,415	519,339	8.9	6,138,444	573,421	9.3	0.4
Michigan	9,077,016	1,190,698	13.1	9,700,622	1,021,605	10.5	-2.6
Minnesota	4,259,456	435,331	10.2	4,794,144	380,476	7.9	-2.3
Mississippi	2,502,902	631,029	25.2	2,750,677	548,079	19.9	-5.3
Missouri	4,970,573	663,075	13.3	5,433,293	637,891	11.7	-1.6
Montana	776,793	124,853	16.1	878,789	128,355	14.6	-1.5
Nebraska	1,530,947	170,616	11.1	1,660,527	161,269	9.7	-1.4
Nevada	1,178,396	119,660	10.2	1,962,948	205,685	10.5	0.3
New Hampshire	1,075,703	69,104	6.4	1,199,322	78,530	6.5	NS
New Jersey	7,563,170	573,152	7.6	8,232,588	699,668	8.5	0.9
New Mexico	1,484,339	305,934	20.6	1,783,907	328,933	18.4	-2.2
New York	17,481,762	2,277,296	13.0	18,449,899	2,692,202	14.6	1.6
North Carolina	6,397,185	829,858	13.0	7,805,328	958,667	12.3	-0.7
North Dakota	613,969	88,276	14.4	619,197	73,457	11.9	-2.5
Ohio	10,574,315	1,325,768	12.5	11,046,987	1,170,698	10.6	-1.9
Oklahoma	3,051,515	509,854	16.7	3,336,224	491,235	14.7	-2.0
Oregon	2,775,907	344,867	12.4	3,347,667	388,740	11.6	-0.8
Pennsylvania	11,536,049	1,283,629	11.1	11,879,950	1,304,117	11.0	-0.1
Rhode Island	964,376	92,670	9.6	1,010,000	120,548	11.9	2.3
South Carolina	3,368,125	517,793	15.4	3,883,329	547,869	14.1	-1.3
South Dakota	670,383	106,305	15.9	727,425	95,900	13.2	-2.7
Tennessee	4,743,685	744,941	15.7	5,539,896	746,789	13.5	-2.2
Texas	16,580,286	3,000,515	18.1	20,287,300	3,117,609	15.4	-2.7
Utah	1,694,357	192,415	11.4	2,195,034	206,328	9.4	-2.0
Vermont	541,372	53,369	9.9	588,053	55,506	9.4	-0.4
Virginia	5,968,596	611,611	10.2	6,844,372	656,641	9.6	-0.7
Washington	4,741,003	517,933	10.9	5,765,201	612,370	10.6	-0.3
West Virginia	1,755,331	345,093	19.7	1,763,866	315,794	17.9	-1.8
Wisconsin	4,754,103	508,545	10.7	5,211,603	451,538	8.7	-2.0
Wyoming	442,277	52,453	11.9	479,485	54,777	11.4	-0.4
Puerto Rico	3,494,544	2,057,377	58.9	3,769,782	1,818,687	48.2	-10.6

* Total refers to the number of people in the poverty universe (not the total populations). For more details, see the text box on how poverty is measured.

NS Not statistically different from zero at the 90-percent confidence level.

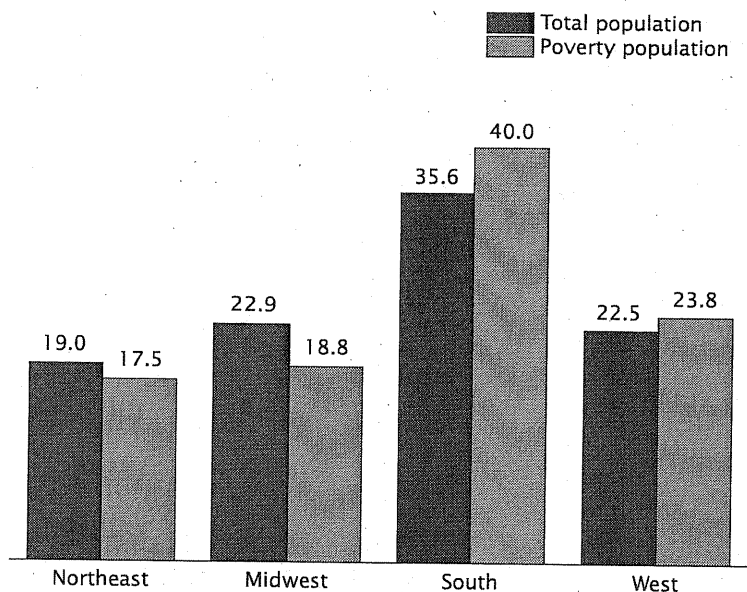
Note: Details may not sum to totals because of rounding.

Source: 1990 census and Census 2000 Summary File 3.

Figure 2.

Distribution of People and Poverty by Region in Census 2000

(Percent in each region. For information on confidentiality protection, sampling error, nonsampling error, and definitions, see www.census.gov/prod/cen2000/doc/sf3.pdf)



Source: U.S. Census Bureau, Census 2000 Summary File 3.

population of 100,000 or more.⁴ Naperville, Illinois, had the lowest poverty rate—2.2 percent—among these places (Table 4). Of the 10 places with the lowest poverty rates in Table 4, five were in the West (Gilbert, AZ; Westminster, CO; Thousand Oaks, CA; Arvada, CO; and Peoria, AZ), four were in the Midwest (Naperville, IL; Livonia, MI; Overland Park, KS; and Sterling Heights, MI), one was in the South (Plano, TX), and none were in the Northeast.

Brownsville, Texas, had the highest poverty rate at 36.0 percent. Five of the 10 places listed in Table 5 were

⁴ Census 2000 showed 245 places in the United States with 100,000 or more population. They included 238 incorporated places (including four city-county consolidations) and seven census designated places that were not legally incorporated. For a list of these places by state, see www.census.gov/population/www/cen2000/phc-t6.html.

in the South (Brownsville is accompanied by Laredo, TX; Miami, FL; Athens-Clarke, GA; and New Orleans, LA). Four were in the Northeast (Hartford, CT; Providence, RI; Newark, NJ; and Syracuse, NY), and only one in the West (San Bernardino, CA). None were in the Midwest.

ADDITIONAL FINDINGS ON THE POVERTY POPULATION

Poverty rates varied by race and Hispanic origin.

Census 2000 asked respondents to report one or more races. With the exception of the Two or more races group, all race groups discussed in this report refer to people who indicated only one racial identity among the six major categories: White, Black or African American, American Indian and Alaska Native,

Asian, Native Hawaiian or Other Pacific Islander, and Some other race.⁵ The use of the single-race population in this report does not imply that it is the preferred method of presenting or analyzing data. The Census Bureau uses a variety of approaches.⁶

Non-Hispanic Whites had the lowest poverty rate (8.1 percent) in 1999. The poverty rates for Asians (12.6 percent) and Native Hawaiians or Other Pacific Islanders (17.7 percent) were somewhat higher (see Table 6). Poverty rates were higher still among Blacks or African Americans (24.9 percent) and American Indians and Alaska Natives (25.7 percent). Poverty rates for those who were of Some other race (24.4 percent) or Two or more races (18.2 percent) were also higher than the national average (12.4 percent).⁷

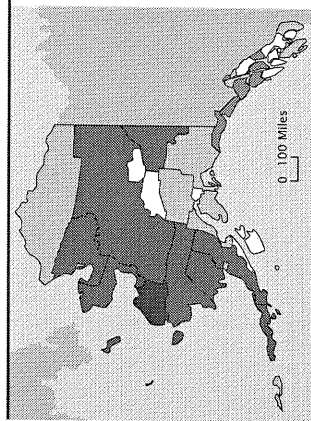
People who were Hispanic or Latino (who may be of any race) also had a high poverty rate (22.6 percent) compared with the national average.⁸

⁵ For further information on each of the six major race groups and the Two or more races population, see reports from the Census 2000 Brief series (C2KBR/01), available on the Census 2000 Web site at www.census.gov/population/www/cen2000/briefs.html.

⁶ This report draws heavily on Summary File 3, a Census 2000 product that can be accessed through *American FactFinder*, available from the Census Bureau's Web site, www.census.gov. Information on people who reported more than one race, such as "White and American Indian and Alaska Native" or "Asian and Black or African American," is forthcoming in Summary File 4, which will also be available through *American FactFinder* later in 2003.

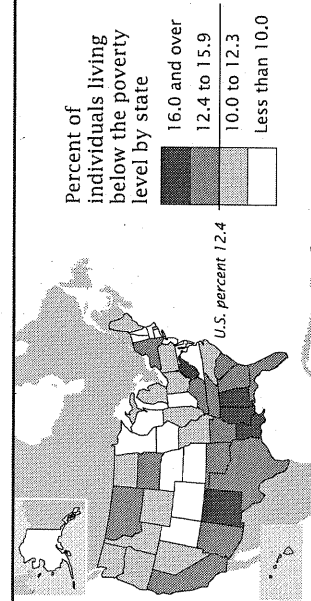
⁷ All the poverty rates for the race groups mentioned above differ statistically from each other except the poverty rates of Native Hawaiians and Other Pacific Islanders and people who reported Two or more races.

⁸ Because Hispanics may be of any race, data in this report for Hispanics overlap with data for racial groups. Based on Census 2000 sample data, the proportion of Hispanics was 8.0 percent for Whites, 1.9 percent for Blacks, 14.6 percent for American Indians and Alaska Natives, 1.0 percent for Asians, 9.5 percent for Pacific Islanders, 97.1 percent for those reporting Some other race, and 31.1 percent for those reporting Two or more races.



**Figure 3.
Poverty Rates: 1999**

(Data based on sample. For information on confidentiality protection, sampling error, nonsampling error, and definitions, see www.census.gov/prod/cen2000/doc/sf3.pdf)



Percent of individuals living below the poverty level by state

16.0 and over
12.4 to 15.9
10.0 to 12.3
Less than 10.0

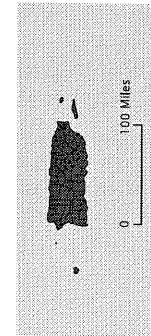
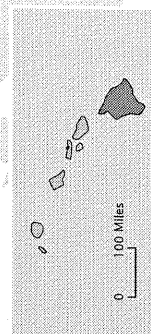
U.S. percent 12.4



Percent of individuals living below the poverty level by county

26.0 or more
17.0 to 25.9
12.4 to 16.9
8.5 to 12.3
Less than 8.5

U.S. percent 12.4



Source: U.S. Census Bureau, Census 2000 Summary File 3. American Factfinder at factfinder.census.gov provides census data and mapping tools.

Table 4.
Places of 100,000 or More With the Lowest Poverty Rates: 1999

(For information on confidentiality protection, sampling error, nonsampling error, and definitions, see www.census.gov/prod/cen2000/doc/sf3.pdf)

Places with 100,000 or more	Total*	Below poverty level		90-percent confidence interval	
		Number	Percent	Lower	Upper
Naperville city, IL.....	126,420	2,809	2.2	2.0	2.4
Livonia city, MI.....	99,202	3,136	3.2	3.0	3.4
Overland Park city, KS.....	147,185	4,730	3.2	2.9	3.5
Gilbert town, AZ.....	109,547	3,529	3.2	2.9	3.5
Plano city, TX.....	221,149	9,500	4.3	4.0	4.6
Westminster city, CO.....	100,436	4,726	4.7	4.3	5.1
Thousand Oaks city, CA.....	115,302	5,714	5.0	4.6	5.4
Arvada city, CO.....	101,860	5,307	5.2	4.8	5.6
Sterling Heights city, MI.....	123,568	6,480	5.2	4.9	5.5
Peoria city, AZ.....	107,094	5,627	5.3	4.9	5.7

*Total refers to the number of people in the poverty universe (not the total population). For more details, see the text box on how poverty is measured.

Note: Because of sampling error, the estimates in this table may not be significantly different from one another or from rates for other geographic areas not listed in this table.

Source: Census 2000 Summary File 3.

Table 5.
Places of 100,000 or More With the Highest Poverty Rates: 1999

(For information on confidentiality protection, sampling error, nonsampling error, and definitions, see www.census.gov/prod/cen2000/doc/sf3.pdf)

City and State	Total*	Below poverty level		90-percent confidence interval	
		Number	Percent	Lower	Upper
Brownsville city, TX.....	138,169	49,701	36.0	35.2	36.8
Hartford city, CT.....	116,756	35,741	30.6	29.9	31.3
Laredo city, TX.....	174,070	51,493	29.6	29.0	30.2
Providence city, RI.....	160,243	46,688	29.1	28.5	29.7
Miami city, FL.....	352,916	100,405	28.5	28.1	28.9
Newark city, NJ.....	261,451	74,263	28.4	27.9	28.9
Athens-Clarke County, GA.....	93,161	26,337	28.3	27.4	29.2
New Orleans city, LA.....	468,453	130,896	27.9	27.5	28.3
San Bernardino city, CA.....	180,100	49,691	27.6	27.0	28.2
Syracuse city, NY.....	137,234	37,485	27.3	26.6	28.0

*Total refers to the number of people in the poverty universe (not the total population). For more details, see the text box on how poverty is measured.

Note: Because of sampling error, the estimates in this table may not be significantly different from one another or from rates for other geographic areas not listed in this table.

Source: Census 2000 Summary File 3.

Poverty rates varied by family type and number of children.

Between 1989 and 1999, the poverty rate for all families fell from 10.0 percent to 9.2 percent, but poverty rates varied by family type and the presence of children (see Table 7).

The poverty rate for all married-couple families in 1999 (4.9 percent) was lower than the rate for male householder families with no spouse present (13.6 percent) and female householder families with no spouse present (26.5 percent). Among the latter group, the

poverty rate for families with related children under 18 was higher still, at 34.3 percent in 1999, although this figure represented a decline from 42.3 percent in 1989.

ABOUT CENSUS 2000

Uses of poverty statistics

The U.S. Census Bureau's statistics on poverty provide an important measure of the country's economic well-being and are sometimes used nonstatistically to assess the need or eligibility for various types of public assistance. Funds for food, health care, and legal services are distributed to local agencies based on data about elderly people with low incomes. Data about poor children are used to apportion Title I funds to counties and school districts. Under the Low-Income Home Energy Assistance Program, income and poverty data are used to allocate funds for home energy aid among areas. Other statutory applications include the Head Start Act, the Child Welfare and Services Program, the Vocational and Applied Technology Act, and the Public Housing/Section 8 Certificate and Housing Voucher Allocation Programs.

Accuracy of the Estimates

The data contained in this report are based on the sample of households who responded to the Census 2000 long form. Nationally, approximately 1 out of every 6 housing units was included in this sample. As a result, the sample estimates may differ somewhat from the 100-percent figures that would have been obtained if all housing units, people within those housing units, and people living in group quarters had been enumerated using the same questionnaires, instructions, enumerators, and so forth. The sample estimates also differ from the

values that would have been obtained from different samples of housing units, people within those housing units, and people living in group quarters. The deviation of a sample estimate from the average of all possible samples is called the sampling error.

In addition to the variability that arises from the sampling procedures, both sample data and 100-percent data are subject to nonsampling error. Nonsampling error may be introduced during any of the various complex operations used to collect and process data. Such errors may include: not enumerating every household or every person in the population, failing to obtain all required information from the respondents, obtaining incorrect or inconsistent information, and recording information incorrectly. In addition, errors can occur during the field review of the enumerators' work, during clerical handling of the census questionnaires or during the electronic processing of the questionnaires.

Nonsampling error may affect the data in two ways: (1) errors that are introduced randomly will increase the variability of the data and, therefore, should be reflected in the standard errors; and (2) errors that tend to be consistent in one direction will bias both sample and 100-percent data in that direction. For example, if respondents consistently tend to under report their incomes, then the resulting estimates of households or families by income category will tend to be understated for the higher income categories and overstated for the lower income categories. Such biases are not reflected in the standard errors.

While it is impossible to completely eliminate error from an operation as large and complex as the decen-

Table 6.
Poverty of Individuals by Race and Hispanic Origin: 1999

(For information on confidentiality protection, sampling error, nonsampling error, and definitions, see www.census.gov/prod/cen2000/doc/sf3.pdf)

Characteristic	Total*	Below poverty level		90-percent confidence interval	
		Number	Percent	Lower	Upper
All people	273,882,232	33,899,812	12.4	12.4	12.4
Race					
White alone	206,259,768	18,847,674	9.1	9.1	9.1
Black or African American alone..	32,714,224	8,146,146	24.9	24.9	24.9
American Indian and Alaska Native alone	2,367,505	607,734	25.7	25.6	25.8
Asian alone	9,979,963	1,257,237	12.6	12.5	12.7
Native Hawaiian and Other Pacific Islander alone	364,909	64,558	17.7	17.4	18.0
Some other race alone	15,100,625	3,687,589	24.4	24.3	24.5
Two or more races	7,095,238	1,288,874	18.2	18.1	18.3
Hispanic or Latino (of any race)....	34,450,868	7,797,874	22.6	22.6	22.6
White alone, not Hispanic or Latino.	189,785,997	15,414,119	8.1	8.1	8.1

*Total refers to the number of people in the poverty universe (not the total population). For more details, see the text box on how poverty is measured.

Source: Census 2000 Summary File 3.

nial census, the Census Bureau attempts to control the sources of such error during the data collection and processing operations. The primary sources of error and the programs instituted to control error in Census 2000 are described in detail in Summary File 3 Technical Documentation under Chapter 8, "Accuracy of the Data," located at www.census.gov/prod/cen2000/doc/sf3.pdf.

All statements in this Census 2000 Brief have undergone statistical testing, and all comparisons are significant at the 90-percent confidence level, unless otherwise noted. The estimates in tables maps, and other figures may vary from actual values due to sampling and nonsampling errors. As a result, estimates in one category may not be significantly different from estimates assigned to a different category. Further information on the accuracy of the data is located at www.census.gov/prod/cen2000/doc/sf3.pdf. For further information on the computation

and use of standard errors, contact the Decennial Statistical Studies Division at 301-763-4242.

For More Information

The Census 2000 Summary File 3 data are available from the *American Factfinder* on the Internet (factfinder.census.gov). They were released on a state-by-state basis during 2002. For information on confidentiality protection, nonsampling error, sampling error, and definitions, also see www.census.gov/prod/cen2000/doc/sf3.pdf, or contact the Customer Services Center at 301-763-INFO (4636).

Information on population and housing topics is presented in the Census 2000 Brief series, located on the Census Bureau's Web site at www.census.gov/population/www/cen2000/briefs.html. This series, which will be completed in 2003, presents information on race, Hispanic origin, age, sex, household type, housing tenure, and social, economic, and housing

Table 7.

Poverty Rates of Families by Family Type and Presence of Children: 1989 and 1999

(For information on confidentiality protection, sampling error, nonsampling error, and definitions, see www.census.gov/prod/cen2000/doc/sf3.pdf)

Characteristic	1989			1999			Percentage point change, 1999 less 1989
	Total*	Below poverty level		Total*	Below poverty level		
		Number	Percent		Number	Percent	
All families	65,049,428	6,487,515	10.0	72,261,780	6,620,945	9.2	-0.8
Married-couple family	51,718,214	2,849,984	5.5	55,458,451	2,719,059	4.9	-0.6
With related children under 18 years	25,258,549	1,834,332	7.3	26,898,972	1,767,368	6.6	-0.7
Under 5 years only	5,578,878	377,041	6.8	5,276,884	329,946	6.3	-0.5
Under 5 years and 5 to 17 years ..	5,555,442	634,771	11.4	5,819,401	618,283	10.6	-0.8
5 to 17 years only	14,124,229	822,520	5.8	15,802,687	819,139	5.2	-0.6
No related children under 18 years ..	26,459,665	1,015,652	3.8	28,559,479	951,691	3.3	-0.5
Other family	13,331,214	3,637,531	27.3	16,803,329	3,901,886	23.2	-4.1
Male householder, no spouse present	2,949,560	407,330	13.8	4,302,568	585,970	13.6	-0.2
With related children under 18 years	1,494,956	291,572	19.5	2,526,727	448,039	17.7	-1.8
Under 5 years only	364,548	81,314	22.3	584,265	113,215	19.4	-2.9
Under 5 years and 5 to 17 years	218,849	67,882	31.0	375,284	99,326	26.5	-4.6
5 to 17 years only	911,559	142,376	15.6	1,567,178	235,498	15.0	-0.6
No related children under 18 years	1,454,604	115,758	8.0	1,775,841	137,931	7.8	-0.2
Female householder, no spouse present	10,381,654	3,230,201	31.1	12,500,761	3,315,916	26.5	-4.6
With related children under 18 years	6,783,155	2,866,941	42.3	8,575,028	2,940,459	34.3	-8.0
Under 5 years only	1,177,366	592,836	50.4	1,437,173	589,201	41.0	-9.4
Under 5 years and 5 to 17 years	1,354,965	859,782	63.5	1,583,239	812,292	51.3	-12.1
5 to 17 years only	4,250,824	1,414,323	33.3	5,554,616	1,538,966	27.7	-5.6
No related children under 18 years	3,598,499	363,260	10.1	3,925,733	375,457	9.6	-0.5

* Total refers to the number of people in the poverty universe (not the total population). For more details, see the text box on how poverty is measured.

Note: Details may not sum to totals because of rounding.

Source: 1990 census and Census 2000 Summary File 3.

characteristics such as ancestry, income, and housing costs.

For additional information on poverty, including reports and survey

data, visit the Census Bureau's Internet site on at www.census.gov/hhes/www/poverty.html. To find information about the availability of data products, including reports,

CD-ROMs, and DVDs, call the Customer Services Center at 301-763-INFO (4636), or e-mail webmaster@census.gov.