

# Chapter III: Economic Profile

## Section 1. Introduction

Spanning portions of six counties, the Oneida Lake watershed is a demographically diverse ecosystem that offers a variety of recreational and economic opportunities. Extending from the Tug Hill region in the north to the DeRuyter Reservoir in the south, and from the City of Syracuse in the west to the City of Rome in the east, the geographic diversity of the watershed is reflected in everything from population trends to local economic influences. Because of the diverse conditions within the watershed, the region boasts of a well-developed and extensive infrastructure, abundant wildlife, strong aesthetic appeal, and a wide range of tourism and recreational opportunities. Collectively, these features form the basis of a healthy, regional economy.

The following socio-economic profile of the Oneida Lake watershed is based primarily on county, city, town, and village level statistics. In some cases, only a small portion of a designated municipality is located within the watershed boundary. However, the findings of this analysis are drawn from areas that, in most cases, extend beyond the watershed boundary. Therefore, it is important to note that this profile can serve only as a general overview of the social and economic characteristics of the Oneida Lake watershed based on municipal designations. To help reduce the skewing effect, municipalities contributing less than one percent of their total land area to the watershed are not included in this profile unless otherwise noted.

## Section 2. Demographics, Occupation, Employment and Income

Demographic and socio-economic characteristics of the Oneida Lake region influence the health of the watershed. Over time, demographic changes can stimulate or depress environmental impacts and economic development, which in turn, can have direct implications on infrastructure development and maintenance. The Oneida Lake watershed boasts a diverse population that contributes greatly to its unique character. Portions of six counties and 69 municipalities are located within the Oneida Lake watershed.

### 2.1 Population

According to the U.S. Census Bureau's 2000 statistics (block level data) approximately 262,164 people live in the Oneida Lake watershed (**Table 3.2.1**). The City of Rome in Oneida County and the City of Syracuse in Onondaga County are significant population centers. **Map 3.2.1** visually shows population distribution for the Oneida Lake watershed.

The 1980, 1990 and 2000 Census population totals for municipalities located entirely or partially within the Oneida Lake watershed are shown by county in **Table 3.2.2**. Between 1980 and 1990 the total municipal population of the

<i>County</i>	<i>Population</i>
Cortland	74
Lewis	996
Madison	50,607
Oneida	59,557
Onondaga	110,078
Oswego	40,852
<b>Watershed Total</b>	<b>262,164</b>
Population was computed by HOCCPP from 2000 block-level Census data.	

watershed increased 1.6 percent. This increase, however, was followed by a 3.7 percent decline between 1990 and 2000. As a result, the municipal population of the Oneida Lake watershed experienced a net loss of 2.2 percent between 1980 and 2000.

<b>Table 3.2.2 Population Change By Municipality</b>						
<b>Municipality*</b>	<b>1980</b>	<b>1990</b>	<b>2000</b>	<b>1980-1990</b>	<b>1990-2000</b>	<b>1980-2000</b>
	<b>Pop. (#)</b>	<b>Pop. (#)</b>	<b>Pop. (#)</b>	<b>Change (%)</b>	<b>Change (%)</b>	<b>Change (%)</b>
<b>Lewis County (Total for Watershed Towns)</b>	<b>5258</b>	<b>5128</b>	<b>4946</b>	<b>-2.5</b>	<b>-3.5</b>	<b>-5.9</b>
Town of Lewis	720	858	857	19.2	-0.1	19.0
Town of Martinsburg	1494	1358	1249	-9.1	-8.0	-16.4
Town of Montague	32	47	108	46.9	129.8	237.5
Town of Osceola	321	239	265	-25.5	10.9	-17.4
Town of Turin	824	873	793	5.9	-9.2	-3.8
Town of West Turin	1867	1753	1674	-6.1	-4.5	-10.3
<b>Madison County (Total for Watershed Towns)</b>	<b>52069</b>	<b>55703</b>	<b>56229</b>	<b>7.0</b>	<b>0.9</b>	<b>8.0</b>
City of Oneida	10810	10850	10987	0.4	1.3	1.6
Town of Cazenovia	5880	6514	6481	10.8	-0.5	10.2
Village of Cazenovia	2599	3007	2614	15.7	-13.1	0.6
Town of DeRuyter	542	1458	1532	169.0	5.1	182.7
Town of Eaton	5182	5362	4826	3.5	-10.0	-6.9
Town of Fenner	1580	1694	1680	7.2	-0.8	6.3
Town of Lenox	8539	8621	8665	1.0	0.5	1.5
Village of Canastota	4773	4673	4425	-2.1	-5.3	-7.3
Village of Wampsville	569	501	561	-12.0	12.0	-1.4
Town of Lincoln	1722	1669	1818	-3.1	8.9	5.6
Town of Nelson	1495	1892	1964	26.6	3.8	31.4
Town of Smithfield	1001	1053	1205	5.2	14.4	20.4
Town of Stockbridge	1947	1968	2080	1.1	5.7	6.8
Village of Munnsville	499	438	437	-12.2	-0.2	-12.4
Town of Sullivan	13371	14622	14991	9.4	2.5	12.1
Village of Chittenango	4290	4734	4855	10.3	2.6	13.2
<b>Oneida County (Total for Watershed Towns)</b>	<b>86984</b>	<b>89062</b>	<b>80519</b>	<b>2.4</b>	<b>-9.6</b>	<b>-7.4</b>
City of Rome	43826	44350	34950	1.2	-21.2	-20.3
City of Sherrill	2830	2864	3147	1.2	9.9	11.2
Town of Annsville	2389	2786	2956	16.6	6.1	23.7
Town of Augusta	2080	2070	1966	-0.5	-5.0	-5.5
Town of Ava	664	792	725	19.3	-8.5	9.2
Town of Camden	4925	5134	5028	4.2	-2.1	2.1
Village of Camden	2667	2552	2330	-4.3	-8.7	-12.6
Town of Florence	688	852	1086	23.8	27.5	57.8
Town of Lee	6892	7115	6875	3.2	-3.4	-0.2
Town of Vernon	5354	5338	5335	-0.3	-0.1	-0.4
Village of Oneida Castle	751	671	627	-10.7	-6.6	-16.5

**Table 3.2.2 Population Change By Municipality**

<b>Municipality*</b>	<b>1980 Pop. (#)</b>	<b>1990 Pop. (#)</b>	<b>2000 Pop. (#)</b>	<b>1980-1990 Change (%)</b>	<b>1990-2000 Change (%)</b>	<b>1980-2000 Change (%)</b>
Village of Vernon	1373	1274	1155	-7.2	-9.3	-15.9
Town of Verona	6681	6460	6425	-3.3	-0.5	-3.8
Town of Vienna	5197	5564	5819	7.1	4.6	12.0
Village of Sylvan Beach	1243	1119	1071	-10.0	-4.3	-13.8
Town of Westmoreland	5458	5737	6207	5.1	8.2	13.7
<b>Onondaga County (Total for Watershed Towns)</b>	<b>280175</b>	<b>278180</b>	<b>267969</b>	<b>-0.7</b>	<b>-3.7</b>	<b>-4.4</b>
City of Syracuse	170105	163860	146435	-3.7	-10.6	-13.9
Town of Cicero	23689	25560	27982	7.9	9.5	18.1
Down of DeWitt	26868	25148	24942	-6.4	-0.8	-7.2
Village of East Syracuse	3412	3343	3178	-2.0	-4.9	-6.9
Town of Fabius	1811	1760	1974	-2.8	12.2	9.0
Town of LaFayette	4488	5105	4833	13.7	-5.3	7.7
Town of Manlius	28489	30656	31872	7.6	4.0	11.9
Village of Fayetteville	4709	4248	4190	-9.8	-1.4	-11.0
Village of Manlius	5241	4764	4819	-9.1	1.2	-8.1
Village of Minoa	3640	3745	3348	2.9	-10.6	-8.0
Town of Onondaga	17824	18396	21063	3.2	14.5	18.2
Town of Pompey	4492	5317	6159	18.4	15.8	37.1
Town of Tully	2409	2378	2709	-1.3	13.9	12.5
<b>Oswego County (Total for Watershed Towns)</b>	<b>19366</b>	<b>22666</b>	<b>24335</b>	<b>17.0</b>	<b>7.4</b>	<b>25.7</b>
Town of Amboy	838	1024	1312	22.2	28.1	56.6
Town of Constantia	4312	4868	5141	12.9	5.6	19.2
Village of Cleveland	855	784	758	-8.3	-3.3	-11.3
Town of Hastings	7095	8113	8803	14.3	8.5	24.1
Village of Central Square	1418	1671	1646	17.8	-1.5	16.1
Town of Parish	2172	2425	2694	11.6	11.1	24.0
Town of Redfield	459	564	607	22.9	7.6	32.2
Town of West Monroe	3482	4393	4428	26.2	0.8	27.2
Town of Williamstown	1008	1279	1350	26.9	5.6	33.9

Source: U.S. Census Bureau

\*Note: Town totals include village totals for all villages within a town, whether or not the village is located within the watershed.

Of the five major watershed counties, Oswego County municipalities within the watershed experienced a net population increase of 25.7 percent between 1980 and 2000. Similarly, Madison County municipalities within the watershed experienced a net population increase of 8.0 percent between 1980 and 2000. Watershed municipalities in Lewis County, Oneida County and Onondaga County experienced net population losses of 5.9, 7.4 and 4.4 percent respectively.

The average population density for all municipalities in the Oneida Lake watershed is approximately 205 persons per square mile of land area (2000 Census of Population and Housing). Onondaga County, located in the southwestern portion of the watershed, is the most

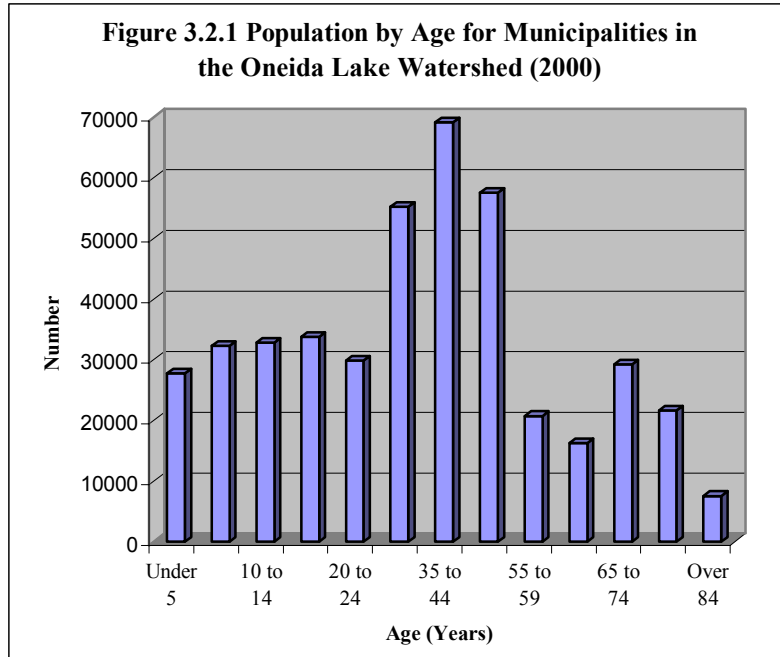
densely populated (698.2 persons per square mile). A significant contributor to Onondaga County's population density is the City of Syracuse. At 5,834 persons per square mile, Syracuse is the single most densely populated municipality in the watershed. In direct contrast, Lewis County, located in the northern portion of the watershed, is the least densely populated county (11.7 persons per square mile). The Lewis County Town of Montague, with a population density of less than 2 persons per square mile, is the least densely populated municipality in the watershed. Population densities for all watershed municipalities are provided in **Table 3.2.3**.

<b>Table 3.2.3 2000 Population Density</b>			
<i>Municipality</i>	<i>Population Density (persons per square mile)</i>	<i>Municipality</i>	<i>Population Density (persons per square mile)</i>
<b>Lewis County</b>			
Town of Lewis	13.2	Town of Osceola	3.0
Town of Martinsburg	16.5	Town of Turin	25.4
Town of Montague	1.7	Town of West Turin	16.4
<b>Madison County</b>			
City of Oneida	498.8	Village of Wampsville	554.3
Town of Cazenovia	129.9	Town of Lincoln	72.8
Village of Cazenovia	1662.2	Town of Nelson	45.6
Town of DeRuyter	50.2	Town of Smithfield	51.7
Town of Eaton	107.9	Town of Stockbridge	65.7
Town of Fenner	54.0	Village of Munnsville	506.8
Town of Lenox	238.0	Town of Sullivan	204.4
Village of Canastota	1333.0	Village of Chittenango	1999.8
<b>Oneida County</b>			
City of Rome	466.4	Town of Lee	152.2
City of Sherrill	1593.2	Town of Vernon	139.8
Town of Annsville	49.1	Village of Oneida Castle	1200.2
Town of Augusta	70.9	Village of Vernon	1321.8
Town of Ava	19.2	Town of Verona	92.7
Town of Camden	93.1	Town of Vienna	94.7
Village of Camden	1031.2	Village of Sylvan Beach	1475.4
Town of Florence	19.8	Town of Westmoreland	143.9
<b>Onondaga County</b>			
City of Syracuse	5833.2	Village of Fayetteville	2448.0
Town of Cicero	577.4	Village of Manlius	2822.6
Down of DeWitt	736.5	Village of Minoa	2721.7
Village of East Syracuse	2016.4	Town of Onondaga	364.9
Town of Fabius	42.4	Town of Pompey	92.7
Town of LaFayette	123.1	Town of Tully	104.7
Town of Manlius	642.3		
<b>Oswego County</b>			
Town of Amboy	35.3	Town of Parish	64.5
Town of Constantia	90.4	Town of Redfield	6.7
Village of Cleveland	673.0	Town of West Monroe	131.3
Town of Hastings	192.3	Town of Williamstown	34.9
Village of Central Square	852.6		

Source: 1990 Census of Population and Housing, STF 1A and 2000 Census DPI

## 2.2 Age and Educational Attainment

Based on municipal level data, the median age of the population within the watershed is 35.5 years (2000 Census of Population and Housing). Approximately 26 percent of this population is under 18 years of age while 14 percent of the population is over 65 years of age. Individuals between 35 and 44 years comprise the largest adult age demographic (16% of the total population). Historically, populations with high numbers of individuals in this age bracket exhibit a high degree of residential stability and employability. **Figure 3.2.1** shows population by age for municipalities in the Oneida Lake watershed.



Of the five primary counties in the Oneida Lake watershed, the Onondaga County population has achieved the highest level of education. According to the 2000 Census 85.7 percent of all Onondaga County residents 25 years and over were, at minimum, high school graduates. Moreover, 28.5 percent held a bachelor's degree or higher. The high concentration of post secondary schools including Syracuse University, LeMoyne College and the State University of New York College of Environmental Science and Forestry, all located in the City of Syracuse, may be

the primary reason for the county's high educational status. The breakdown of educational attainment by county can be found in **Table 3.2.4**.

**Table 3.2.4 Educational Attainment by County (2000)**

1990 Educational Attainment Persons 25 Years and Over	Lewis County	Madison County	Oneida County	Onondaga County	Oswego County
Less than 9th grade	983	1,780	10,959	11,430	3,838
Some high school	2,325	5,510	22,322	31,128	11,057
High school graduate	8,349	14,519	51,748	86,409	31,396
Some college, no degree	2,287	7,780	30,053	53,488	13,081
Associate degree	1,390	4,717	14,692	29,858	5,810
Bachelor's degree	1,127	5,647	17,238	49,125	6,978
Graduate or professional degree	906	3,808	11,834	35,467	4,005
Percent high school graduate or higher	81.0%	83.3%	79.0%	85.7%	80.4%
Percent bachelor's degree or higher	11.7%	21.6%	18.3%	28.5%	14.4%

Source: US Bureau of the Census 2000 Census of population and Housing (note: data is provided on a whole-county basis)

## 2.3 Income

According to 2000 Census of Population and Housing, the average per capita income (PCI) for the five primary counties in the Oneida Lake watershed was \$18,156 and ranged from \$14,971 in Lewis County to \$21,336 in Onondaga County. The 2000 PCI for New York State was \$23,389 and \$21,587 for the United States.

The 2000 median household income in Lewis, Madison, Oneida, Onondaga and Oswego Counties was lower than the State level (\$43,393) by 26.3, 7.9, 20.8, 6.2 and 18.6 percent respectively and lower than the national level (\$41,994) by 22.2, 4.5, 16.9, 2.8 and 14.7 percent respectively. In all five watershed counties, the percentage of individuals and families below the poverty level was lower than the percentage of individuals and families below the New York State poverty level (14.6 and 11.5 percent for individuals and families respectively). The percentage of individuals and families below the poverty level in Madison and Onondaga Counties was also below the national levels (12.4 and 9.2 percent). Income statistics for all watershed counties are detailed in **Table 3.2.5**.

<b>Table 3.2.5 Income Statistics for Oneida Lake Watershed Counties</b>							
<b>Category</b>	<b>Lewis County</b>	<b>Madison County</b>	<b>Oneida County</b>	<b>Onondaga County</b>	<b>Oswego County</b>	<b>NYS</b>	<b>USA</b>
Per Capita Income, 2000	\$14,971	\$19,105	\$18,516	\$21,336	\$16,853	\$23,389	\$21,587
Median household income, 2000	\$34,361	\$40,184	\$35,909	\$40,847	\$36,598	\$43,393	\$41,994
Individuals below poverty, 2000	13.2%	9.8%	13.0%	12.2%	14.0%	14.6%	12.4%
Families below poverty level, 2000	10.1%	6.3%	9.8%	8.6%	9.7%	11.5%	9.2%

*Source: U.S. Census Bureau, 2000 Census of Population and Housing (Note: The U.S. Census Bureau uses a set of money income thresholds that vary by family size and composition to determine who is poor. If a family's total income is less than that family's threshold, then that family, and every individual in it, is considered poor.)*

## 2.4 Employment, Business and Retail Sales

Reflecting the observed trend in overall population within the watershed between 1990 and 2000, the average civilian labor force from the five primary watershed counties was 4.5 percent lower in 2000 than it was in 1990. This trend was not reflected at the state level where the civilian labor force was approximately 1 percent higher in 2000 than it was in 1990, or at the national level where a 12 percent increase in the 2000 labor force over the 1990 labor force was observed.

In both 1990 and 2000 the average annual unemployment rate in three of the five primary watershed counties (Madison, Oneida and Onondaga) was lower than the state and national averages. All of the primary watershed counties, with the exception of Lewis County, witnessed a decline in 2000 unemployment rates over 1990 rates, as did the state and the nation. It should be noted, however, that the level of decline between the 1990 and 2000 unemployment rates for

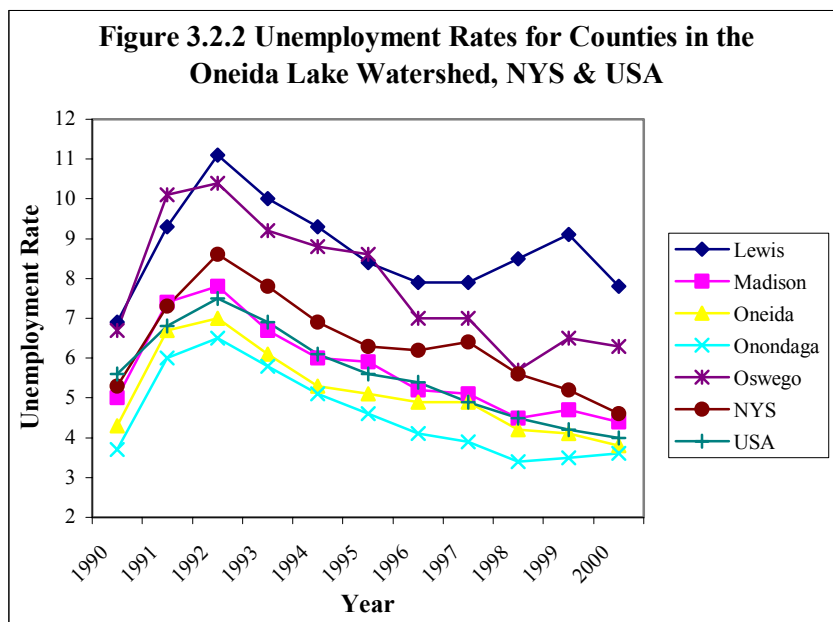
Madison (0.6), Oneida (0.5), Onondaga (0.1) and Oswego (0.4) Counties were less than the levels of decline observed at the state (0.7) and more significantly, the national (1.6) levels.

Although a fewer number of county residents were employed in the year 2000 than in the year 1990, the average annual rate of unemployment was lower in 2000 than in 1990 in all the watershed counties with the exception of Lewis County. This trend was not reflected at the state and national levels where unemployment rates were also lower in 2000 than in 1990, but the actual number of employed persons was correspondingly higher as well (**Table 3.2.6**).

Place	Labor Force		Employed		Rate of Unemployment	
	1990	2000	1990	2000	1990	2000
Lewis County	12,400	12,100	11,500	11,100	6.9	7.8
Madison County	35,500	35,100	33,700	33,500	5.0	4.4
Oneida County	115,200	111,300	110,200	107,100	4.3	3.8
Onondaga County	244,900	230,100	235,800	221,800	3.7	3.6
Oswego County	57,600	56,300	53,800	52,700	6.7	6.3
NYS	8,843,000	8,941,000	8,375,000	8,533,000	5.3	4.6
USA	125,840,000	1,400,863,000	118,793,000	135,208,000	5.6	4.0

*Source: NYS Dept. of Labor*

Collectively, these statistics suggest that employment opportunities in the primary watershed counties have not kept pace with other parts of the state, and that employment opportunities in New York State have not kept pace with other states in the nation. **Figure 3.2.2** shows unemployment trends for counties in the Oneida Lake watershed, NYS, and the USA. This conclusion is further supported by changes in the number of non-farm establishments operating in each of the primary watershed counties relative to the change in establishments operating at the state and federal levels. As shown in **Table 3.2.7**, non-farm establishments in the primary watershed counties *decreased* by an average of 2.2 percent between 1990 and 1999, while the percentage of non-farm establishments at the state level *increased* by 4.1 percent and increased by 13.5 percent at the national level.



Retail sales for 1997 were strongest in Onondaga County, totaling upwards of 4.3 billion dollars. This amount was greater than all four remaining counties combined. Although retail sales for the five watershed counties continue to be lowest in Lewis County, retail sales in Lewis County did increase 49.0 percent from 1992 to 1997. This was much greater than the increase for NYS (17.2 percent) and the United States (29.9 percent). Complete employment, business and retail sales statistics for the five-county region is presented in **Table 3.2.7**.

**Table 3.2.7 Employment, Business, and Retail Sales for Counties  
in the Oneida Lake Watershed, NYS and USA**

<i>Category</i>	<i>Lewis County</i>	<i>Madison County</i>	<i>Oneida County</i>	<i>Onondaga County</i>	<i>Oswego County</i>	<i>NYS</i>	<i>USA</i>
Employment in government, 1997	2,162	4,226	22,772	41,127	9,198	1,400,287	21,780,000
Average earnings per job, 1997	\$20,028	\$21,538	\$25,259	\$30,268	\$26,599	\$40,059	\$30,842
Private, non-farm establishments, 1990	528	1,374	5,453	12,430	1,967	466,762	6,175,563
Private, non-farm establishments, 1999	544	1,354	4,969	11,652	2,025	485,954	7,008,444
Change in private non-farm est, 1990-99	16	-20	-484	-778	58	19,192	832,881
Private, non-farm est, % change 1990-99	3.0%	-1.5%	-8.9%	-6.3%	2.9%	4.1%	13.5%
Retail sales, 1992 (\$1000)	89,925	371,821	1,686,021	3,814,020	682,364	118,885,698	1,894,880,209
Retail sales, 1997 (\$1000)	134,022	463,263	1,846,126	4,372,310	742,124	139,303,944	2,460,886,012
Change in retail sales 1992-1997 (percent)	49.0%	24.6%	9.5%	14.6%	8.8%	17.2%	29.9%

*Source: U.S. Bureau of the Census (Note: Data is provided on a whole-county basis).*

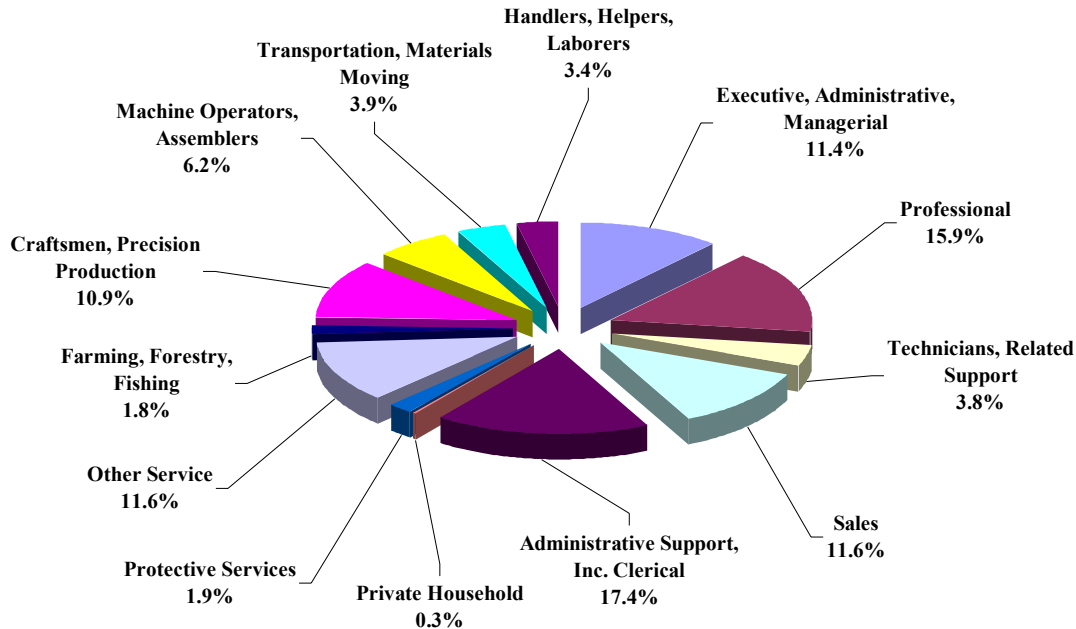
Agriculture is also an important economic factor in the Oneida Lake watershed. According to the 1997 Census of Agriculture, the total market value of agricultural products sold in the five primary watershed counties was over \$300 million in 1997. The average market value of agricultural products sold per farm in the five counties was slightly lower than the average per farm for New York State. Additional agricultural statistics for the Oneida Lake watershed are presented in Chapter IV Section 2 *Agricultural Land Use*.

## **2.5 Labor Force by Occupation**

Each of the five primary watershed counties contributes proportionally to the labor force; 17.4 percent of the workforce in the five primary counties in the watershed is employed in an Administrative Support position and 15.9 percent is employed in a Professional position (1990 Census of Population and Housing) (**Figure 3.2.3**). When comparing categories of employment by occupation, the largest disparity is observed in the number of county residents in the Farming, Forestry and Fishing occupational category. The Farming, Forestry and Fishing category contributes 11.8 percent of the total work force for Lewis County, while only 0.9 percent of Onondaga County's employed persons are in this category. This is likely due to the heavily forested nature and the strong timber industry presence in Lewis County. Craftsman and Precision Production is the single largest occupational category in Lewis (12.6%) and Oswego (15.6%) Counties, while the largest occupational group in Madison, Oneida, and Onondaga Counties is Administrative Support. A breakdown of the labor force by occupation is provided in **Table 3.2.8**.



**Figure 3.2.3 Oneida Lake Watershed Labor Force by Occupation:  
Five County Total (1990)**



**Table 3.2.8 Labor Force by Occupation in Oneida Lake Watershed Counties  
Occupation of Employed Persons 16 Years and Over by County, 1990**

Occupation	Lewis		Madison		Oneida		Onondaga		Oswego		5 County Total	
	#	%	#	%	#	%	#	%	#	%	#	%
Executive, Administrative, Managerial	812	7.4	3,369	10.3	10,934	10.3	29,341	12.9	4,424	8.5	48,880	11.4
Professional	1,176	10.7	4,694	14.4	16,304	15.4	39,982	17.5	6,128	11.8	68,284	15.9
Technicians, Related Support	339	3.1	936	2.9	3,885	3.7	9,292	4.1	1,886	3.6	16,338	3.8
Sales	729	6.6	3,522	10.8	11,670	11.0	29,097	12.8	4,887	9.4	49,905	11.6
Administrative Support, Inc. Clerical	1,322	12.0	4,778	14.6	18,829	17.7	41,788	18.3	7,954	15.3	74,671	17.4
Private Household	75	0.7	156	0.5	281	0.3	449	0.2	119	0.2	1,080	0.3
Protective Services	129	1.2	450	1.4	2,815	2.7	3,817	1.7	1,001	1.9	8,212	1.9
Other Service	1,349	12.2	3,635	11.1	13,839	13.0	24,766	10.9	6,330	12.2	49,919	11.6
Farming, Forestry, Fishing	1,303	11.8	1,627	5.0	1,974	1.9	2,153	0.9	877	1.7	7,934	1.8
Craftsmen, Precision Production	1,395	12.6	4,296	13.2	11,708	11.0	21,428	9.4	8,072	15.6	46,899	10.9
Machine Operators, Assemblers	1,099	10.0	2,500	7.7	7,120	6.7	11,463	5.0	4,303	8.3	26,485	6.2
Transportation, Materials Moving	673	6.1	1,481	4.5	3,575	3.4	7,638	3.3	3,399	6.6	16,766	3.9
Handlers, Helpers, Laborers	634	5.7	1,182	3.6	3,257	3.1	6,966	3.1	2,501	4.8	14,540	3.4
County Totals (All Occupations)	11,035	100	32,626	100	106,191	100	228,180	100	51,881	100	429,913	100

Source: U.S. Bureau of the Census 1990 (Note: Data is provided on a whole-county basis. The percent column shows the percent each occupation contributes to the total labor force for that county.)

## **2.6 Empire Zones Program**

The Empire Zones (EZ) Program, formerly known as the Economic Development Zones Program, is a New York State-supported program that provides tax credits and other incentives for businesses to locate or expand within a specific geographic area. The EZ Program promotes economic development by encouraging job creation and business expansion. There are several EZs located in the vicinity of the watershed including the Oneida and Herkimer County, Onondaga County, Madison County, Oswego, Fulton, Rome, and Syracuse zones.

Legislation has been proposed to expand the size of the 22 existing Empire Zones throughout Upstate New York to four square miles. Under this proposal, the Oneida-Herkimer, Onondaga County, and Syracuse zones would double in size.

## **2.7 Oneida Indian Nation**

The Oneida Indian Nation owns approximately 15,000 acres (23 square miles) of land in Madison and Oneida Counties that is primarily used for commercial and residential purposes as well as open space. According to the Madison and Oneida County Assessors office, the Oneida Nation's land holdings are assessed at approximately \$150 million (Coin 2001).

As part of an economic resurgence, the Oneida Indian Nation opened the Turning Stone Casino in 1993. As a tourism destination, the Turning Stone Casino and Resort, located in the Town of Verona, attracted over 16 million guests between 1993 and 1999 and has contributed to the growth of the region's economy. The resort includes New York State's only casino, a hotel, spa, restaurants, retail shops, three golf courses, RV Park, conference center, and showroom. In addition to the Turning Stone Casino and Resort, the Oneida Indian Nation also owns gas stations and convenience stores, a T-shirt printing shop, Standing Stone Gaming (an electronic gaming machine manufacturer), a farm, the Marion Manor Marina, and other properties in Madison and Oneida Counties. The land holdings and retail sales of the Oneida Nation are not subject to property and sales taxation.

In 1997, the Oneida Indian Nation became the largest employer in Madison and Oneida Counties. Between 1993 and 1999, the Oneida Nation created approximately 2,982 new jobs in Central New York. Additional information about the Oneida Indian Nation is presented in Chapter II Section 1.7.2 *Oneida Indian Nation*.

## **Section 3. Watershed Infrastructure**

The Oneida Lake watershed infrastructure supports economic growth and development throughout the area. Affordable and abundant housing and an advanced transportation network of highways, railways, air transportation facilities, and the New York State Canal System make this region easily accessible and economically attractive. A description of housing, transportation, and water and sewer infrastructure within the watershed follows.

### 3.1 Housing

According to the 2000 U.S. Census of Population and Housing, there are 189,662 housing units located in the municipalities of the Oneida Lake watershed. Slightly less than 62 percent of the total municipal housing units are located in Onondaga County while municipalities in Lewis County contain fewer than 2 percent of the total housing units. Over 88 percent of the total municipal housing units are occupied. Over half (56.4 percent) of all occupied housing units are owner occupied, and renters occupy 32 percent. Seventy-six percent of all renter occupied units are located in Onondaga County with 59 percent of those rented units existing in the City of Syracuse alone. The high percentage of renter occupied units in the City of Syracuse can be partly attributed to the presence of academic institutions including Syracuse University, SUNY Upstate Medical College, and SUNY College of Environmental Science and Forestry. Students of academic institutions are generally temporary residents.

Vacant housing units, as a percentage of total municipal housing units by county, was greatest in Lewis County (40.3 percent) and least in Onondaga County (9.4 percent). However, 73.5 percent of the vacant housing units in Lewis County are classified as seasonal, recreational or occasional use units while only 6.8 percent of Onondaga's vacant housing units are similarly classified. While the total percentage of seasonal, recreational or occasional use housing units accounts for only 2.6 percent of all housing units in watershed municipalities, approximately 70 percent of those units are located in municipalities that border Oneida Lake (Towns of Cicero, Sullivan, Lenox, Verona, Vienna, Constantia, West Monroe, and Hastings). Housing data for municipalities in the Oneida Lake watershed are found in **Table 3.3.1**.

<i>Municipality*</i>	<i>Total Housing Units (2000)</i>	<i>Owner Occupied Units</i>	<i>Renter Occupied Units</i>	<i>Vacant Units</i>	<i>Vacant Units Classified as Seasonal/Recreational/Occasional Units</i>	<i>% of Vacant Units Classified as Seasonal/Recreational/Occasional Units</i>
Town of Lewis	440	250	46	144	109	75.7
Town of Martinsburg	627	380	93	154	89	57.8
Town of Montague	267	40	5	222	215	96.8
Town of Osceola	402	98	14	290	265	91.4
Town of Turin	417	246	50	121	55	45.5
Town of West Turin	971	484	151	336	198	58.9
<b>Total for Lewis County Watershed Towns</b>	<b>3124</b>	<b>1498</b>	<b>359</b>	<b>1267</b>	<b>931</b>	<b>73.5</b>
City of Oneida	4672	2615	242	1815	4	0.2
Town of Cazenovia	2567	1828	525	214	118	55.1
Village of Cazenovia	1031	573	370	88	21	23.9
Town of DeRuyter	867	465	127	275	238	86.5
Town of Eaton	1798	977	381	440	345	78.4
Town of Fenner	651	510	97	44	10	22.7
Town of Lenox	3877	2454	1031	392	160	40.8
Village of Canastota	1994	1091	781	122	3	2.5
Village of Wampsville	211	171	40	0	0	0
Town of Lincoln	700	575	88	37	9	24.3
Town of Nelson	1020	640	91	289	240	83.0
Town of Smithfield	446	348	67	31	3	9.7
Town of Stockbridge	802	580	159	63	9	14.3

**Table 3.3.1 Housing Data for Municipalities in the Oneida Lake Watershed (2000)**

<i>Municipality*</i>	<i>Total Housing Units (2000)</i>	<i>Owner Occupied Units</i>	<i>Renter Occupied Units</i>	<i>Vacant Units</i>	<i>Vacant Units Classified as Seasonal/Recreational/Occasional Units</i>	<i>% of Vacant Units Classified as Seasonal/Recreational/Occasional Units</i>
Village of Munnsville	176	109	57	10	0	0.0
Town of Sullivan	6209	4687	1001	521	215	41.3
Village of Chittenango	1968	1324	520	124	2	1.6
<b>Total for Madison County Watershed Towns</b>	<b>23609</b>	<b>15679</b>	<b>3809</b>	<b>4121</b>	<b>1351</b>	<b>32.8</b>
City of Rome	16272	7792	5861	2619	40	1.5
City of Sherrill	1309	978	284	47	10	21.3
Town of Annsville	1144	879	182	83	23	27.7
Town of Augusta	812	569	175	68	3	4.4
Town of Ava	285	227	30	28	8	28.6
Town of Camden	2020	1389	492	139	13	9.4
Village of Camden	1000	536	384	80	2	2.5
Town of Florence	432	314	55	63	30	47.6
Town of Lee	2699	2198	365	136	8	5.9
Town of Vernon	2266	1595	517	154	35	22.7
Village of Oneida Castle	284	186	78	20	1	5.0
Village of Vernon	544	269	230	45	1	2.2
Town of Verona	2665	2038	361	266	105	39.5
Town of Vienna	3037	1806	386	845	607	71.8
Village of Sylvan Beach	847	352	120	375	288	76.8
Town of Westmoreland	2323	1994	240	89	7	7.9
<b>Total for Oneida County Watershed Towns</b>	<b>35264</b>	<b>21779</b>	<b>8948</b>	<b>4537</b>	<b>889</b>	<b>19.6</b>
City of Syracuse	68192	23991	35491	8710	180	2.1
Town of Cicero	11033	8457	2081	495	172	34.7
Down of DeWitt	10694	7205	2863	626	66	10.5
Village of East Syracuse	1503	648	745	110	5	4.5
Town of Fabius	779	558	128	93	57	61.3
Town of LaFayette	1925	1526	300	99	25	25.3
Town of Manlius	13071	9981	2572	518	139	26.8
Village of Fayetteville	1901	1359	471	71	22	31.0
Village of Manlius	2143	1180	876	87	13	14.9
Village of Minoa	1293	968	281	44	2	4.5
Town of Onondaga	7964	6056	1623	285	27	9.5
Town of Pompey	2272	1957	197	118	23	19.5
Town of Tully	1139	765	265	109	62	56.9
<b>Total for Onondaga County Watershed Towns</b>	<b>117069</b>	<b>60496</b>	<b>45520</b>	<b>11053</b>	<b>751</b>	<b>6.8</b>
Town of Amboy	640	393	75	172	137	79.7
Town of Constantia	2351	1623	270	458	282	61.6
Village of Cleveland	310	228	49	33	12	36.4
Town of Hastings	3635	2649	725	261	62	23.8
Village of Central Square	796	377	375	44	3	6.8
Town of Parish	1034	813	142	79	18	22.8
Town of Redfield	537	199	31	307	283	92.2
Town of West Monroe	1765	1357	222	186	53	28.5
Town of Williamstown	634	362	87	185	151	81.6
<b>Total for Oswego County Watershed Towns</b>	<b>10596</b>	<b>7396</b>	<b>1552</b>	<b>1648</b>	<b>986</b>	<b>59.8</b>
<b>Total for All Watershed Towns</b>	<b>189662</b>	<b>106848</b>	<b>60188</b>	<b>22626</b>	<b>4908</b>	<b>21.7</b>

*\*Note: Town totals include village totals for all villages within a town, whether or not the village is located within the watershed.*

*Source: 2000 U.S. Census of Population and Housing*

## 3.2 Water and Sewer Infrastructure

In 1990, the last year for which this type of Census data is available, 81.2 percent of the housing units in watershed municipalities obtained their water from a public system or private company, 13.3 percent of the municipal housing units relied on drilled wells as the primary water source, and 3.9 percent of the housing units relied on dug wells. The remaining 1.6 percent of the municipal housing units utilized some other, non-defined primary water source. Public systems and private companies were the primary water source in Madison, Oneida, and Onondaga municipalities. Drilled wells were the primary water source in Lewis and Oswego municipalities. Water source data for municipal housing units in the Oneida Lake watershed is presented in **Table 3.3.2**. More detailed information on water supply in the Oneida Lake watershed can be found in Chapter IV Section 4 *Water Supply Systems*.

The vast majority of housing units (72.2 percent) in the municipalities that comprise the Oneida Lake watershed use public sewers for wastewater disposal. Nearly all of the remaining housing units rely on septic tanks or cesspools for wastewater disposal. Less than one percent utilizes some other, non-defined source of wastewater disposal. Wastewater disposal data for municipal housing units in the Oneida Lake watershed is presented in **Table 3.3.2**. For a more detailed discussion of wastewater disposal see Chapter IV Section 3 *Wastewater Treatment*.

<i>Municipality</i>	<i>1990 Housing Units</i>	<i>Public System/Private Co. #</i>	<i>Public System/Private Co. %</i>	<i>Individual Wells #</i>	<i>Individual Wells %</i>	<i>Other Water Source #</i>	<i>Other Water Source %</i>	<i>Individual Septic #</i>	<i>Individual Septic %</i>	<i>Public Sewer #</i>	<i>Public Sewer %</i>	<i>Other Waste water Disp #</i>	<i>Other Waste water Disp %</i>
Town of Lewis	353	5	1.4	321	90.9	27	7.6	347	98.3	3	0.8	3	0.8
Town of Martinsburg	536	183	34.1	265	49.4	88	16.4	411	76.7	112	20.9	13	2.4
Town of Montague	150	0	0.0	103	68.7	47	31.3	134	89.3	0	0.0	16	10.7
Town of Osceola	371	16	4.3	275	74.1	80	21.6	324	87.3	0	0.0	47	12.7
Town of Turin	404	168	41.6	144	35.6	92	22.8	369	91.3	24	5.9	11	2.7
Town of West Turin	840	412	49.0	357	42.5	71	8.5	565	67.3	206	24.5	69	8.2
<b>Total for Lewis County Watershed Towns</b>	<b>2654</b>	<b>784</b>	<b>29.5</b>	<b>1465</b>	<b>55.2</b>	<b>405</b>	<b>15.3</b>	<b>2150</b>	<b>81.0</b>	<b>345</b>	<b>13.0</b>	<b>159</b>	<b>6.0</b>
City of Oneida	4463	4172	93.5	284	6.4	7	0.2	654	14.7	3778	84.7	31	0.7
Town of Cazenovia	2372	1235	52.1	1060	44.7	77	3.2	1351	57.0	1013	42.7	8	0.3
V. of Cazenovia	995	970	97.5	20	2.0	5	0.5	42	4.2	953	95.8	0	0.0
Town of DeRuyter	802	247	30.8	386	48.1	169	21.1	762	95.0	16	2.0	24	3.0
Town of Eaton	1674	500	29.9	958	57.2	216	12.9	1447	86.4	180	10.8	47	2.8
Town of Fenner	609	19	3.1	523	85.9	67	11.0	575	94.4	15	2.5	19	3.1
Town of Lenox	3635	2516	69.2	1109	30.5	10	0.3	1329	36.6	2284	62.8	22	0.6
Village of Canastota	1916	1902	99.3	14	0.7	0	0.0	65	3.4	1851	96.6	0	0.0
V. of Wampsville	200	197	98.5	3	1.5	0	0.0	185	92.5	15	7.5	0	0.0
Town of Lincoln	587	7	1.2	529	90.1	51	8.7	569	96.9	4	0.7	14	2.4
Town of Nelson	997	50	5.0	806	80.8	141	14.1	946	94.9	23	2.3	28	2.8
Town of Smithfield	380	14	3.7	305	80.3	61	16.1	364	95.8	11	2.9	5	1.3
Town of Stockbridge	723	357	49.4	228	31.5	138	19.1	678	93.8	34	4.7	11	1.5
Village of Munnsville	173	157	90.8	4	2.3	12	6.9	152	87.9	21	12.1	0	0.0
Town of Sullivan	5573	4181	75.0	1352	24.3	37	0.7	3161	56.7	2344	42.1	68	1.2
V. of Chittenango	1715	1673	97.6	42	2.4	0	0.0	91	5.3	1624	94.7	0	0.0

<b>Total for Madison County Watershed</b>													
<b>Towns</b>	<b>21815</b>	<b>13298</b>	<b>61.0</b>	<b>7540</b>	<b>34.6</b>	<b>974</b>	<b>4.5</b>	<b>11836</b>	<b>54.3</b>	<b>9702</b>	<b>44.5</b>	<b>277</b>	<b>1.3</b>
City of Rome	16661	15560	93.4	1061	6.4	40	0.2	2475	14.9	14160	85.0	26	0.2
City of Sherrill	1126	1114	98.9	12	1.1	0	0.0	25	2.2	1101	97.8	0	0.0
Town of Annsville	972	358	36.8	508	52.3	106	10.9	934	96.1	22	2.3	16	1.6
Town of Augusta	760	335	44.1	390	51.3	35	4.6	480	63.2	171	22.5	109	14.3
Town of Ava	255	0	0.0	226	88.6	29	11.4	250	98.0	0	0.0	5	2.0
Town of Camden	1957	1181	60.3	742	37.9	34	1.7	890	45.5	1058	54.1	9	0.5
Village of Camden	1033	1033	100.0	0	0.0	0	0.0	47	4.5	986	95.5	0	0.0
Town of Florence	364	6	1.6	306	84.1	52	14.3	320	87.9	2	0.5	32	8.8
Town of Lee	2545	1293	50.8	1181	46.4	71	2.8	2388	93.8	127	5.0	30	1.2
Town of Vernon	2104	1193	56.7	873	41.5	38	1.8	1464	69.6	636	30.2	4	0.2
V. of Oneida Castle	291	291	100.0	2	0.0	0	0.0	248	85.2	39	13.4	4	1.4
Village of Vernon	528	507	96.0	21	4.0	0	0.0	27	5.1	501	94.9	0	0.0
Town of Verona	2515	978	38.9	1472	58.5	65	2.6	2261	89.9	212	8.4	42	1.7
Town of Vienna	2690	1268	47.1	1413	50.7	59	2.2	1703	63.3	978	36.4	9	0.3
V. of Sylvan Beach	750	739	98.5	6	0.8	5	0.7	11	1.5	739	98.5	0	0.0
Town of Westmoreland	2017	351	17.4	1618	80.2	48	2.4	1923	95.3	73	3.6	21	1.0
<b>Total for Oneida County Watershed</b>													
<b>Towns</b>	<b>33966</b>	<b>23637</b>	<b>69.9</b>	<b>9752</b>	<b>28.7</b>	<b>577</b>	<b>1.7</b>	<b>15113</b>	<b>44.5</b>	<b>18540</b>	<b>54.6</b>	<b>303</b>	<b>0.9</b>
City of Syracuse	71502	71467	100.0	8	0.0	27	0.0	389	0.5	70989	99.3	124	0.2
Town of Cicero	9448	9361	99.1	79	0.8	8	0.1	948	10.0	8486	89.8	25	0.3
Down of DeWitt	10252	10165	99.2	61	0.6	26	0.3	1526	14.9	8701	84.9	14	0.1
V. of East Syracuse	1489	1489	100.0	0	0.0	0	0.0	11	0.7	1478	99.3	0	0.0
Town of Fabius	681	5	0.7	626	91.9	50	7.3	664	97.5	5	0.7	12	1.8
Town of LaFayette	1825	408	22.4	1273	69.8	144	7.9	1659	90.9	145	7.9	21	1.2
Town of Manlius	12138	11349	93.5	774	6.4	15	0.1	2699	22.2	9428	77.7	11	0.1
Village of Fayetteville	1840	1840	100.0	0	0.0	0	0.0	34	1.8	1806	98.2	0	0.0
Village of Manlius	2027	2022	99.8	5	0.2	0	0.0	14	0.7	2013	99.3	0	0.0
Village of Minoa	1320	1320	100.0	0	0.0	0	0.0	11	0.8	1309	99.2	0	0.0
Town of Onondaga	6808	5861	86.1	771	11.3	76	1.1	2756	40.5	4029	59.2	23	0.3
Town of Pompey	1936	152	7.9	1730	89.4	54	2.8	1782	92.0	122	6.3	32	1.7
Town of Tully	1011	425	42.0	531	52.5	55	5.4	585	57.9	400	39.6	26	2.6
<b>Total for Onondaga County Watershed</b>													
<b>Towns</b>	<b>115601</b>	<b>109193</b>	<b>94.5</b>	<b>5853</b>	<b>5.1</b>	<b>455</b>	<b>0.4</b>	<b>13008</b>	<b>11.3</b>	<b>102305</b>	<b>88.5</b>	<b>288</b>	<b>0.2</b>
Town of Amboy	505	0	0.0	413	81.8	92	18.2	457	90.5	0	0.0	48	9.5
Town of Constantia	2061	392	19.0	1579	76.6	90	4.4	1993	96.7	27	1.3	41	2.0
Village of Cleveland	341	319	93.5	9	2.6	13	3.8	335	98.2	4	1.2	2	0.6
Town of Hastings	3138	1156	36.8	1926	61.4	56	1.8	1955	62.3	1125	35.9	58	1.8
V. of Central Square	713	676	94.8	37	5.2	0	0.0	41	5.8	672	94.2	0	0.0
Town of Parish	855	19	2.2	792	92.6	19	2.2	616	72.0	219	25.6	20	2.3
Town of Redfield	502	13	2.6	431	85.9	13	2.6	446	88.8	9	1.8	47	9.4
Town of West Monroe	1607	239	14.9	1329	82.7	239	14.9	1511	94.0	88	5.5	8	0.5
Town of Williamstown	568	20	3.5	510	89.8	20	3.5	543	95.6	20	3.5	5	0.9
<b>Total for Oswego County Watershed</b>													
<b>Towns</b>	<b>9236</b>	<b>1839</b>	<b>19.9</b>	<b>6980</b>	<b>75.6</b>	<b>529</b>	<b>5.7</b>	<b>7521</b>	<b>81.4</b>	<b>1488</b>	<b>16.1</b>	<b>227</b>	<b>2.5</b>
<b>Total for All Watershed Towns</b>													
<b>Towns</b>	<b>183272</b>	<b>148751</b>	<b>81.2</b>	<b>31590</b>	<b>17.2</b>	<b>2940</b>	<b>1.6</b>	<b>49628</b>	<b>27.1</b>	<b>132380</b>	<b>72.2</b>	<b>1254</b>	<b>0.7</b>

*\*Note: Town totals include village totals for all villages within a town, whether or not the village is located within the watershed.*

*Source: 1990 Census of Population and Housing, STF 3A*

### **3.3 Transportation**

Major highways and interstates in the vicinity of Oneida Lake have provided opportunities for convenient access to the region. At the heart of the highway system is the New York State Thruway (I-90) that passes through the City of Syracuse just south of Oneida Lake. The Thruway connects major urban centers from New York City to Buffalo, and intersects Interstate 81, which runs north to the Canadian border and south to Knoxville, Tennessee. The New York State Department of Transportation cites a total of 10,622 miles of roads in the five primary counties that comprise the watershed. Lewis County has the fewest miles of state roads (1331.5) and Onondaga County the most (3049.7).

In addition to roadways, ample railroads, bus lines, port facilities, and airports service the watershed. Syracuse Hancock International Airport, the principal commercial airport servicing the watershed, handles passenger airlines and air cargo service. A total of 27,457 tons of air cargo (including freight, mail, and express shipments) were handled to and from Hancock in 1994 (Central New York Regional Planning and Development Board and Metropolitan Development Association 1996). The Oswego County Airport also provides standard facilities for aircraft. Other county airports and smaller commercial airports service areas within the watershed, but are located outside the watershed. Conrail, the major freight railroad in the watershed, connects the region with its 11,700 route-mile system in 12 states, the District of Columbia, the Province of Quebec, and other railroads throughout North America. Railroad passenger service is provided by Amtrack, a tenant of the Regional Transportation Center located in Syracuse. The Regional Transportation Center is also serviced by Centro, Greyhound, and Trailways bus lines. These trains and buses service many other stops and stations throughout the watershed. The deep-water Port of Oswego, located on the southern shore of Lake Ontario, offers direct service to all ports in the world and also provides access to the NYS Canal System for recreational craft and the Inland Waterway system flowing south from the Great Lakes to Florida. Oswego's port can handle all types of cargo movement, and has extensive on-site storage facilities. Transportation routes have played a major role in the development of the area, making it easily accessible and convenient, thereby promoting economic development and growth throughout the region.

### **3.4 The New York State Canal System**

The Erie Canal, which opened in 1825, passes through the cities of Rome, Oneida and Syracuse as it stretches across New York from Buffalo on the eastern shore of Lake Erie, to Albany on the upper Hudson River. In 1918, the Erie Canal was enlarged and modified to facilitate the transport of larger barges. The new Barge Canal extended through Oneida Lake, connecting it to the Great Lakes and Atlantic Ocean. The canal provided a tremendous economic boom to the upstate economy. The early 1900s saw a shift in primary transportation methods at which time the Barge Canal was replaced by railroads. The rail system stretched across the Lake Ontario Plain connecting the Oneida Lake watershed to metropolitan centers in Buffalo, Rochester, Syracuse, and Albany. Today the canal network, known as the New York State Canal System, is a widely used recreational and historic resource. The Canal System enhances the economic development potential of waterfront activity centers in the Oneida Lake watershed through increased use of water transportation.

The NYS Canal Corporation has been implementing a statewide revitalization program in accordance with seven regional canal plans and the *New York State Canal Recreationway Plan*. Revitalization efforts were enhanced in December 2000 through federal designation of the Canal System as the Erie Canalway National Heritage Corridor and a Commission of 27 members representing federal, state and local interests. The Commission has recently begun its activities and is expected to receive federal funds of \$1 million annually for ten years to preserve the historical significance of the canal, promote tourism to spur economic development and expand recreational use.

## **Section 4. Tourism and Recreational Opportunities**

A variety of tourism and recreational opportunities are available in the Oneida Lake watershed. Regional attractions, annual events, extensive park and recreational facilities, excellent boating and fishing access, and other tourism opportunities greatly enhance the watershed's value.

### **4.1 Regional Attractions and Annual Events**

The Oneida Lake region provides excellent recreational events year-round. Festivals, fishing, dining, historic tours, and beautiful scenery create an enjoyable experience for people of all ages. There are numerous cultural and educational opportunities in the region including the Oneida Indian Nation in Verona, Canastota's International Boxing Hall of Fame, Oneida Community Mansion House, Chittenango Landing Canal Boat Museum, the Syracuse Symphony Orchestra, Shako:wi Cultural Center in Oneida, and the Museum of Science and Technology in Syracuse. The Town of Osceola is home to the Fiddler's Hall of Fame; one of N.Y. State's 18 halls of fame. Annual events include the OZ Fest, the Jazz Fest, the New York State Fair, the Central Square and Lafayette Apple Festivals, and numerous antique, car, air, and arts and craft shows. The Sylvan Beach Amusement Park attracts tourists to the eastern edge of the lake throughout the summer. For sports enthusiasts, there are the Syracuse Crunch hockey and Syracuse Chiefs baseball teams, as well as a variety of collegiate athletic activities. Racing and gaming enthusiasts can enjoy Brewerton Speedway, Vernon Downs, and the Turning Stone Casino. The region is also the focus of a planned multi-billion dollar tourist resort destination in Syracuse called DestiNY, USA. Scheduled to open in 2004, DestiNY will promote all of Upstate NY as internationally recognized tourism destination.

### **4.2 Parks and Recreational Facilities**

The Oneida Lake watershed offers a variety of parks and recreational facilities for the outdoor enthusiast. Two state parks, one county park, two town parks, and two state wildlife management areas are located on the lakeshore. There are also two public piers on the lake, located in Sylvan Beach and Brewerton. County parks within the Oneida Lake watershed include Jamesville Beach, Oneida Shores, Pratt's Falls, and Highland Forest in Onondaga County and Oxbow Falls and Nichols Pond in Madison County. These and many other NYS, county, town and village parks located throughout the watershed offer a wide range of activities such as swimming, hiking, bird watching, fall foliage viewing, golfing, cross-country skiing, snowshoeing, snowmobiling, hunting, fishing, trapping, and camping.



Round Lake, within Green Lakes State Park, is a Registered Natural Landmark of the U.S. Natural Parks Service. Round and Green Lakes, located in the Town of Manlius, are rare meromictic lakes (the lake water never completely mixes – no fall or spring turnover). Round Lake (180 ft. deep) and Green Lake (195 ft. deep) are glacial lakes surrounded by upland forest. A four-mile hiking trail loops around both lakes and the park is widely used during all seasons of the year. Another unique recreational site is the Rome Sand Plains, encompassing approximately 5,000 acres in the southwestern part of the City of Rome. It is one of the few existing inland pine barrens in the nation and its rare setting results from the combination of sand dunes and peat bogs. User trails of the Rome Sand Plains Resource Management Area pass through mixed northern hardwood forests, pitch pine heath barrens, sand dunes, barren openings of moss and lichens, meadows, pitch pine-blueberry peat swamps, black spruce-tamarack bogs, pine barrens vernal bogs, and the shrubby floodplain of Wood Creek – all within a few acres of one another. Additional information about the Rome Sand Plain is located in Chapter II Section 4.1 *Subwatershed Descriptions*.

In the Tug Hill region, land was recently purchased in the East Branch of Fish Creek subwatershed. Some of these areas will be kept as preserve, some will be used for forestry, while other areas will be available for recreational activities such as hunting and snowmobiling. Additional information about the changed ownership of lands in Tug Hill’s East Branch of Fish Creek subwatershed can be found in Chapter II Section 4.1 *Subwatershed Descriptions*.

The New York State Department of Environmental Conservation (NYS DEC) operates the Oneida Lake Fish Cultural Station in Constantia. The NYS DEC stocks the lake and tributaries with a variety of fish species raised at the station, the first such facility in North America to intensively rear large numbers of fingerling walleyes. The station is the largest state-of-the-art walleye hatchery in the country. Not surprisingly, walleye are the major species stocked by the NYS DEC. The Oneida hatchery holds educational tours and maintains seasonal visiting hours. Additional information on fish stocking in the Oneida Lake watershed can be found in Chapter II Section 4.2.2 *Fish Stocking*.

A list of New York State Parks and Recreational Facilities in the Oneida Lake watershed presented in **Table 3.4.1**. State recreational land is also visually represented in **Map 3.4.1** – State Recreational Land. In addition to park facilities, the Tug Hill region of Lewis, Oneida and Oswego Counties has a variety of multi-use and snowmobile trails in the Oneida Lake watershed.

<b>Table 3.4.1 NY State Parks &amp; Recreational Facilities in the Oneida Lake Watershed</b>
<ul style="list-style-type: none"> <li>• Big Bay State Wildlife Management Area</li> <li>• Chittenango Falls State Park</li> <li>• Cicero Swamp State Wildlife Management Area</li> <li>• Clark Reservoir State Park</li> <li>• Old Erie Canal State Park</li> <li>• Frenchman's Island State Park (Undeveloped)</li> <li>• Green Lakes State Park</li> <li>• Nelson Swamp State Unique Area</li> <li>• NYS DEC Oneida Lake Fish Cultural Station</li> <li>• Rome Sand Plains State Unique Area</li> <li>• Rome State Wildlife Management Area</li> <li>• Three Mile Bay State Wildlife Management Area</li> <li>• Tioughnioga State Wildlife Management Area</li> <li>• Tug Hill State Wildlife Management Area</li> <li>• Verona Beach State Park</li> </ul>

In the southern part of the watershed, the Link Trail is an ongoing hiking trail project in Madison, Oneida and Onondaga Counties that will connect the Old Erie Canal Park to the Finger Lakes Trail and then on to the Appalachian Trail (Maine to Georgia).

### **4.3 Water-Based Recreation**

Oneida Lake and its watershed provide numerous opportunities for a variety of water sports including fishing, boating, swimming, and other activities during the year. These activities are enjoyed by people of all ages living within and outside of the watershed through public and private access points.

#### **4.3.1 Fishing**

Throughout history fishing has played a major role in the social and economic development of the region, and today, is one of the main recreational uses of Oneida Lake. The lake's fishery is a major contributor to the region's tourism industry. Often recognized as "The Walleye Lake of New York State," Oneida Lake provides anglers with more fish per acre than any other lake in the northeastern United States. Over 75 fish species were identified in the lake in the 20<sup>th</sup> century. Oneida Lake has been identified as the most important inland fishery and the fourth most important sport fishery in New York State (VanDeValk et al 1998). The lake's tributaries and other smaller lakes in the watershed also provide excellent fishing opportunities. Fisheries supplement the local economy year-round. For this reason, the integrity of the lake and watershed has a direct impact on the economic livelihood of local municipalities.

The Oneida Lake fishery has been extensively studied by scientists at the Cornell University Biological Field Station (CBFS) located on the shores of Oneida Lake. The CBFS is a tremendous resource within the watershed. The NYS DEC has also studied the Oneida Lake fishery. To determine the fisheries impacts on the local economy, the NYS DEC conducted a statewide survey of 1996 angler effort and expenditures. The report documented 573,060 angler days for Oneida Lake, ranking it first in the number of angler days out of all inland waters in New York State. Walleye, yellow perch, and bass were documented as the most popular among anglers. Approximately 87 percent of the total number of anglers on Oneida Lake in 1996 were residents of NY State. In 1996, anglers spent over \$2.6 million en route and over \$7.6 million on site during fishing trips to Oneida Lake. Over \$600,000 in "at-site" expenditures was generated during the winter ice fishing season despite the fact that ice conditions were considered to be poor that year. The 1996 net economic value of Oneida Lake's freshwater fishery was estimated to be over \$9.4 million, again ranking it first among New York State's inland waters (Connelly et al 1997). People from all over New York State and beyond annually spend millions of dollars throughout the watershed as they recreate on Oneida Lake.

Bass and walleye fishing derbies are held seasonally on the lake, offering excellent fishing opportunities, challenging competition, as well as cash and merchandise prizes. Fishing charters also operate on Oneida Lake and are another means of using the lake's resources.

There are a number of other economically valuable waterbodies located throughout the Oneida Lake watershed. Cazenovia Lake, Fish Creek, and the many other lakes and streams in the

watershed are popular recreation spots that attract visitors from both inside and outside of the region. For example, in 1996 an estimated 21,020 anglers spent over \$1.7 million fishing at-site in Madison County alone (NYS DEC 1998). A larger number of anglers (24,870 in Oneida, 36,040 in Onondaga, and 114,130 in Oswego County) spent even more money fishing at-site in Oneida (over \$4.3 million), Onondaga, (almost \$3 million), and Oswego (over \$45.6 million) Counties. The full impact of fishing and recreational uses extend far beyond Oneida Lake, with economic benefits felt throughout all the waterbodies in the watershed.

A historical perspective of the ecology and economics of Oneida Lake fish can be found in Volume 1, Number 3 and 4 of the Roosevelt Wild Life Annals of November 1928. A current characterization of lake and watershed fishery resources is also provided in this report in Chapter II Section 2.4.5 *The Oneida Lake Fish Community* and Chapter II Section 4.2 *Tributary Fisheries*.

### 4.3.2 Boating and Fishing Access

Besides fishing, Oneida Lake is also heavily used for recreational boating, including jet skiing and sailing. During the 1997 boating season (April – November), an average of 48 percent of the boats using the lake were non-fishing boats (VanDeValk et al 1998). These users provided significant contributions to the local economy through the purchase of gas, food, cottage rentals, and other expenditures.

There are over 40 marinas and boat launch sites in the Oneida Lake vicinity (**Table 3.4.2**). In addition to the fee-based boat launching ramps located at many marinas and parks on the lake, the NYS DEC maintains no-fee boat-launch sites at Godfrey Point, the South Shore, and Three-Mile Bay.

In addition to public fishing access at government run parks and the public pier in Sylvan Beach, there are a number of fishing access sites on Oneida Lake and its tributaries. The New York State Department of Transportation maintains a total of 12 fishing access sites throughout the Oneida Lake watershed (**Table 3.4.3**). Like the public boat launching sites, these fishing access sites are also available to the public free of charge.

<b>Table 3.4.2 Marinas and Launch Sites in the Oneida Lake Vicinity</b>	
• Aero Marina	• Lakeshore Yacht & Country Club
• Anchorage Marina	• Lone Pine Marina
• Apps Landing	• Mac's Marina
• Big Bay Marina	• Maple Bay Marina
• Boathouse Marina	• Marion Manor Marina
• Boats-A-Float	• Mazzoli's Boat Rental
• Bradbury's Boatel	• NYS South Shore Boat Launch*
• Brewerton Boat Yard	• Oneida Bay Marina
• Callahan's Marina	• Oneida Lake Boat & Cottage
• Caughdenoy Marina	• Oneida Lake Marina
• Charley's Boat Livery	• Oneida Shores Park
• Doug's Rent-A-Boat	• Skinner's Harbour
• Ess-Kay Yards	• South Bay Marina
• Fisher Bay Marina	• Spruce Grove Marina
• Fremac Marine	• Stone's Bridgeport Marina
• Godfrey Pt. State Launch*	• Theisen Marine
• Gunterh's Marine	• Thrall's Lakeport Marina
• Hughes Harbor	• Three Mile Bay State Launch*
• Johnnie's Pier 31	• Trade-A-Yacht East Marina
• Johnson Bay Marina	• Tri-Bridge Marina
• K & M Big Bay, Inc.	*Free of charge
<i>Source: Oneida Lake Association and Cornell Cooperative Extension</i>	

**Table 3.4.3 NYSDOT Fishing Access Sites in the Oneida Lake Watershed**

<i>County</i>	<i>Town</i>	<i>Highway/Stream/Lake Location</i>
Madison	Cazenovia	Route 13/Chittenango Creek
Madison	Cazenovia	Route 20/Cazenovia Lake
Oneida	Augusta	Route 26/Sconondoa Creek
Oneida	City of Rome	Route 26/Mohawk River/Barge Canal
Oneida	City of Rome	Route 46/Mohawk River
Oneida	Camden	Route 13/West Branch Fish Creek
Oneida	Camden	Route 69/Fish Creek
Oneida	Vienna	Route 13/Canal & Oneida Lake
Onondaga	Dewitt	Route 481/Butternut Creek
Onondaga	Manlius	Route 290/Erie Canal
Onondaga	Cicero	I-81/Oneida Lake
Oswego	Hastings	I-81/Oneida Lake
Oswego	West Monroe	Toad Harbor/Oneida Lake

*Source: NYS Department of Transportation*

Public waterway access sites usage is an indicator of the relative level of economic benefits local communities and businesses gain from expenditures made by boaters and anglers. From April to October 1990, the NYS DEC and NYS Office of Parks, Recreation, and Historic Preservation (OPRHP) jointly conducted a statewide survey of boating use at public waterway access sites in New York State. Of the 107 sites surveyed, the Oneida Lake South Shore Boat Launch had the highest use and the third greatest number of total boating trips over the 184-day boating season. The South Shore parking lot was filled to capacity during 86 percent of the summer weekends that fell within the survey period (NYS DEC and OPRHP 1992). More importantly, the survey stated that during peak periods

(summer weekends and holidays), public sites provide access for only 28 percent of all boats in use on the lake. The actual total usage of the lake is much higher.

## **Section 5. Economic Impacts from Tourism**

Tourism opportunities are plentiful throughout the Oneida Lake watershed. Fishing and hunting in the Tug Hill region are enjoyed by many local homeowners and out of town visitors, and many industrial landowners sell fishing and hunting leases to clubs to provide sportsmen access to forest land. The money raised by these leases helps to offset tax assessments against the property, making it easier for businesses to maintain ownership of large tracts in the northern part of the watershed. During the winter, approximately 10-15 thousand snowmobiles each weekend use the trails on Tug Hill (Personal Communication, Gary Hamburg, Lewis County Chamber of Commerce, January 2, 2002). A 1990 study found that snowmobiling generates \$8 million each season in the Tug Hill region. In the southeastern portion of the Oneida Lake watershed, more than 3.5 million people visited the Oneida Indian Nation’s Turning Stone Casino and Resort in the year 2000 (Zogby International 2001). Tourism benefits extend to surrounding businesses in the watershed as visitors take advantage of the region’s lodging, restaurants, shops, and other facilities.

The number of registered boats and the volume of boat traffic in the region directly correlate to the economic impacts of tourism related activities in the watershed. In 2000, there were 53,503 boats registered with the New York State Department of Motor Vehicles in the five primary Oneida Lake watershed counties. This represents a 41% increase from 1987. Moreover, the activity of Erie Canal East (which includes Oneida Lake) increased between 1997 and 1999. According to the New York State Canal Corporation’s 1999 Traffic Report, Erie Canal East commercial traffic increased 68 percent, in part, due to increased tour boat activity (New York State Canal Corporation 2000).

On the Erie Canal, Lock 22 is located on the eastern end of Oneida Lake at Sylvan Beach and Lock 23 is on the western end at Brewerton. There was an increase in annual pleasure vessel traffic at Lock 22 (10%) and Lock 23 (7%) between 1997 and 1999. For the same years, annual hire boat, tour boat, and commercial vessel traffic increased 16 percent at Lock 23 and 242 percent at Lock 22. In the year 2000, Lock 23 was the busiest lock along the entire NYS canal system. These statistics support an increasing trend in economic activity in the watershed due to the region's water resources.