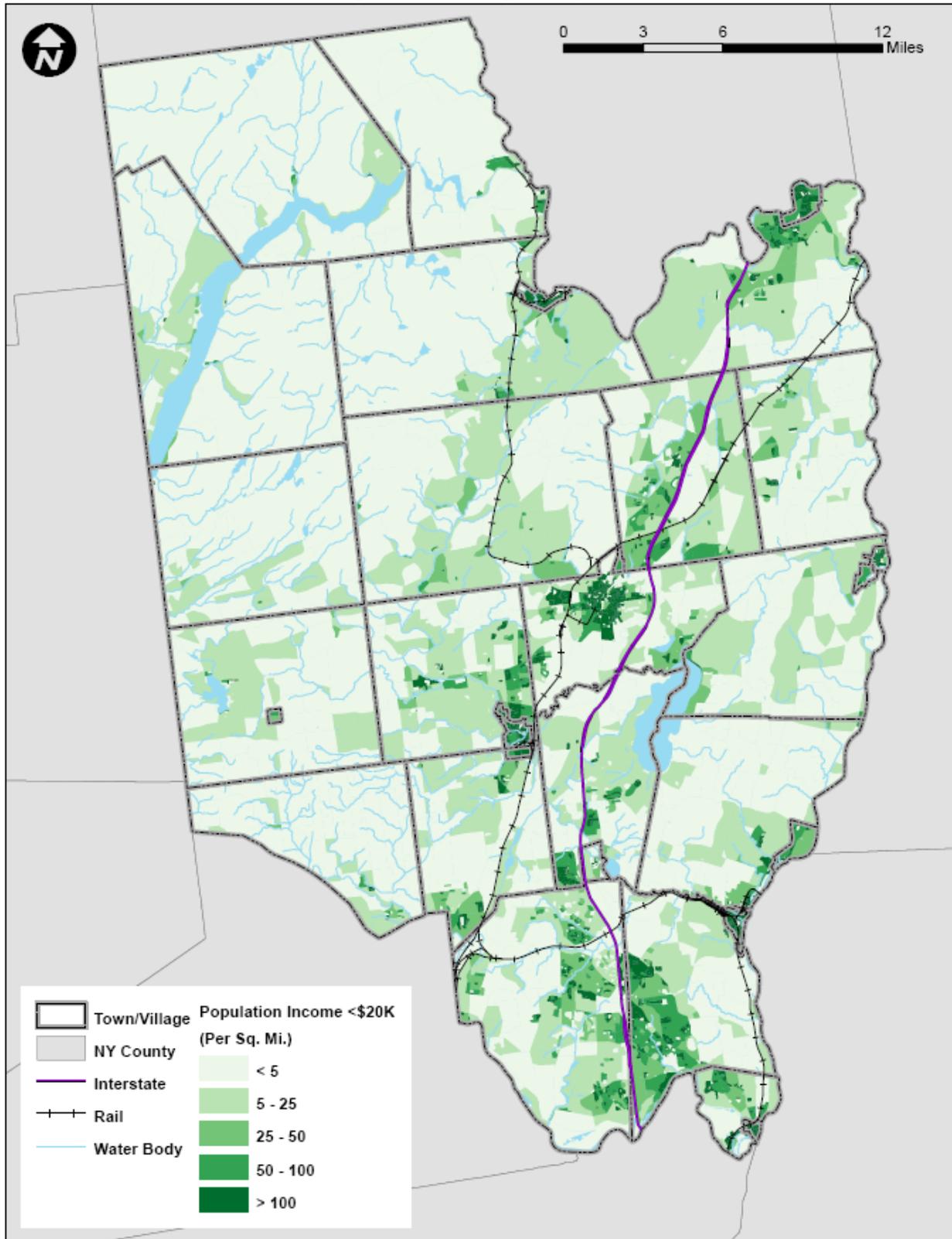


Figure 4-8. Distribution of Low-Income Population in Saratoga County, New York



Source: HAZUS-MH MR3, 2007

GENERAL BUILDING STOCK

The 2000 U.S. Census data identifies 78,165 households in Saratoga County. The U.S. Census data identified 86,701 housing units in Saratoga County in 2000. U.S. Census defines household as all the persons who occupy a housing unit, and a housing unit as 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. Therefore, you may have more than one household per housing unit. The median price of a single family home in Saratoga County was estimated at \$120,400 in 2000 (U.S. Census, 2000).

The data in HAZUS-MH MR3 estimates a total building replacement value (structure and content) of greater than \$24.8 billion for Saratoga County. Approximately 90.7% of the buildings and 69.5% of the building stock structural value are associated with residential housing. Table 4-2 presents Building Stock Statistics by Occupancy Class for Saratoga County, based on HAZUS-MH provided data.

Table 4-2. Building Stock Replacement Value by Occupancy Class

Location (Municipality)	Total	Residential	Commercial	Industrial
Town of Ballston	\$981,429,000	\$705,548,000	\$154,102,000	\$58,466,000
Village of Ballston Spa	\$670,215,000	\$436,695,000	\$155,816,000	\$29,230,000
Town of Charlton	\$448,009,000	\$394,007,000	\$27,839,000	\$10,014,000
Town of Clifton Park	\$4,633,011,000	\$3,367,323,000	\$1,015,472,000	\$119,530,000
Town of Corinth	\$301,704,000	\$268,066,000	\$18,506,000	\$8,372,000
Village of Corinth	\$280,235,000	\$159,019,000	\$54,396,000	\$25,254,000
Town of Day	\$311,923,000	\$263,208,000	\$17,014,000	\$16,463,000
Town of Edinburg	\$350,033,000	\$322,793,000	\$11,226,000	\$4,773,000
Town of Galway	\$472,152,000	\$420,467,000	\$26,290,000	\$7,989,000
Village of Galway	\$24,657,000	\$18,736,000	\$2,113,000	\$118,000
Town of Greenfield	\$683,176,000	\$549,795,000	\$76,486,000	\$24,553,000
Town of Hadley	\$202,491,000	\$181,094,000	\$12,852,000	\$3,103,000
Town of Halfmoon	\$1,943,765,000	\$1,405,643,000	\$413,701,000	\$79,312,000
Town of Malta	\$1,477,322,000	\$1,132,409,000	\$238,491,000	\$67,653,000
City of Mechanicville	\$487,845,000	\$368,191,000	\$90,735,000	\$9,766,000
Town of Milton	\$1,176,294,000	\$865,010,000	\$162,954,000	\$69,392,000
Town of Moreau	\$993,509,000	\$719,329,000	\$192,946,000	\$36,511,000
Town of Northumberland	\$406,959,000	\$352,122,000	\$34,178,000	\$9,817,000
Town of Providence	\$187,863,000	\$151,942,000	\$13,726,000	\$6,948,000
Village of Round Lake	\$68,688,000	\$44,542,000	\$19,788,000	\$1,422,000
Town of Saratoga	\$397,328,000	\$313,194,000	\$44,499,000	\$16,798,000
City of Saratoga Springs	\$4,825,875,000	\$2,659,812,000	\$1,279,612,000	\$168,138,000
Village of Schuylerville	\$141,009,000	\$88,076,000	\$32,779,000	\$5,073,000
Village of South Glens Falls	\$328,997,000	\$230,861,000	\$75,933,000	\$3,349,000
Town of Stillwater	\$551,522,000	\$423,924,000	\$61,986,000	\$42,977,000
Village of Stillwater	\$147,913,000	\$116,644,000	\$14,529,000	\$4,471,000
Village of Victory	\$48,021,000	\$37,775,000	\$3,410,000	\$1,110,000
Town of Waterford	\$780,046,000	\$560,956,000	\$68,312,000	\$132,677,000
Village of Waterford	\$218,964,000	\$159,687,000	\$32,253,000	\$2,945,000
Town of Wilton	\$1,294,768,000	\$914,295,000	\$292,597,000	\$28,801,000
Saratoga County	\$24,835,723,000	\$17,631,163,000	\$4,644,541,000	\$995,025,000

Source: HAZUS-MH MR3, 2007



Note (1): The valuation of general building stock and the loss estimates determined in Saratoga County were based on the default general building stock database provided in HAZUS-MH MR3. The general building stock valuations provided in HAZUS-MH MR3 are Replacement Cost Value from R.S. Means as of 2006.

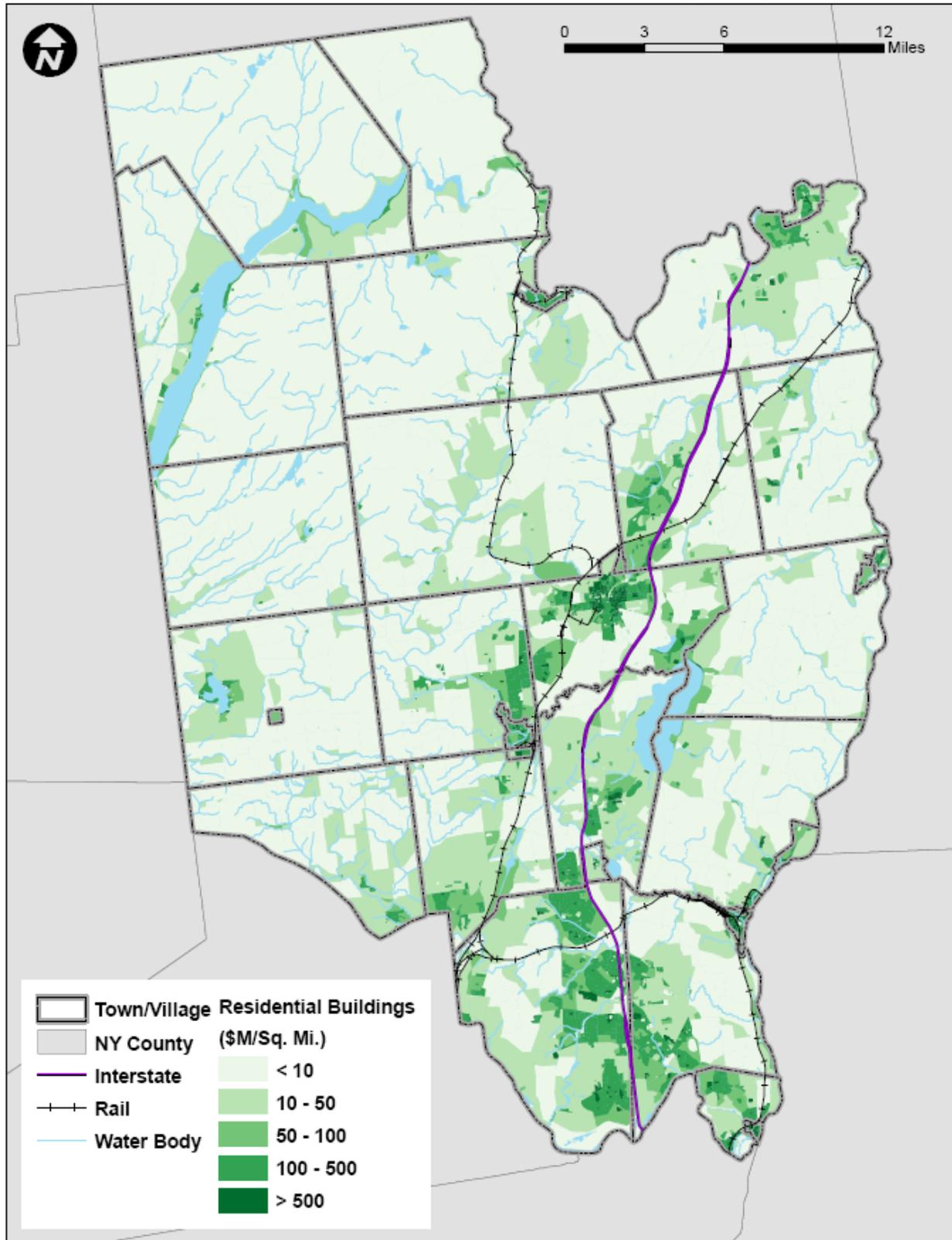
Note (2): Value reflects the replacement cost for building structure and contents. Generally, contents for residential structures are valued at about 50 percent of the building's value. For commercial facilities, the value of the content is generally about equal to the building's structural value. Building stock is generated by using 2000 U.S. Census data. Total is total of all building classes (Residential, Commercial, Industrial, Agricultural, Religious, Government and Education).

The 2000 Census data identify that the majority of housing units (60.6%) in Saratoga County are single-family detached units. The 2005 U.S. Census Bureau's County Business Patterns data identified 4,864 business establishments employing 63,795 people in Saratoga County. The majority (54.8%) of these establishments employed between one and four employees.

Figure 4-9 through Figure 4-11 show the distribution and exposure density of residential, commercial and industrial buildings in Saratoga County. Exposure density is the dollar value of structures per unit area, including building content value. Generally, contents for residential structures are valued at about 50 percent of the building's value. For commercial facilities, the value of the content is generally about equal to the building's structural value. The densities are shown in units of \$1,000 (\$K) per square mile.

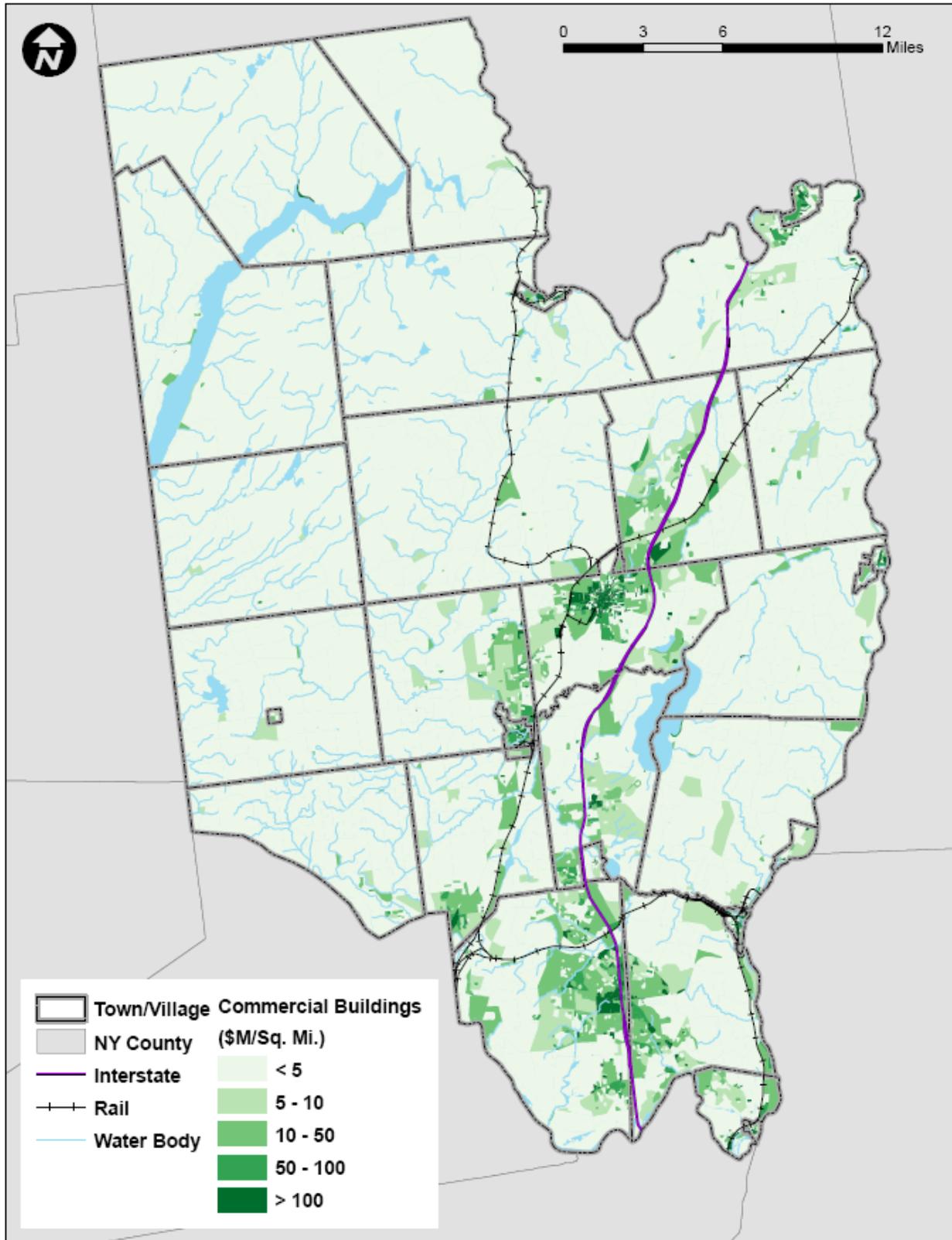
Viewing exposure distribution maps such as Figures 4-9 through 4-11 can assist communities in visualizing areas of high exposure and in evaluating aspects of the study area in relation to the specific hazard risks.

Figure 4-9. Distribution of Residential Building Stock Replacement Value in Saratoga County



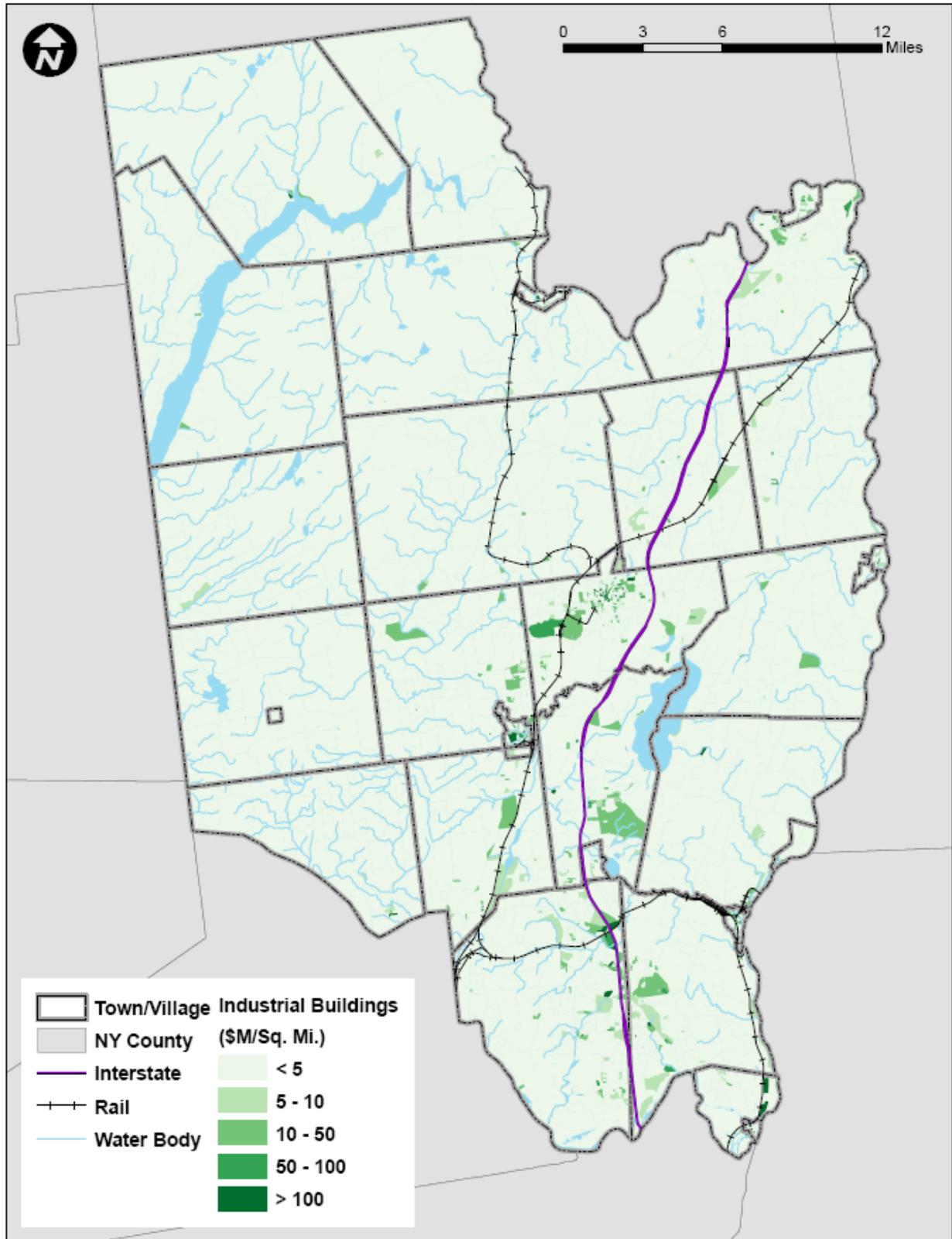
Source: HAZUS-MH MR3, 2007

Figure 4-10. Distribution of Commercial Building Stock Replacement Value in Saratoga County



Source: HAZUS-MH MR3, 2007

Figure 4-11. Distribution of Industrial Building Stock Replacement Value in Saratoga County



Source: HAZUS-MH MR3, 2007

LAND USE AND POPULATION TRENDS

Land use regulatory authority is vested in New York State's towns, villages, and cities. However, many development and preservation issues transcend location political boundaries. DMA 2000 requires that communities consider land use trends, which can impact the need for, and priority of, mitigation options over time. Land use trends significantly impact exposure and vulnerability to various hazards. For example, significant development in a hazard area increases the building stock and population exposed to that hazard.

This Plan provides a general overview of population and land use and types of development occurring within the study area. An understanding of these development trends can assist in planning for further development and ensuring that appropriate mitigation, planning, and preparedness measures are in place to protect human health and community infrastructure.

Land Use Trends

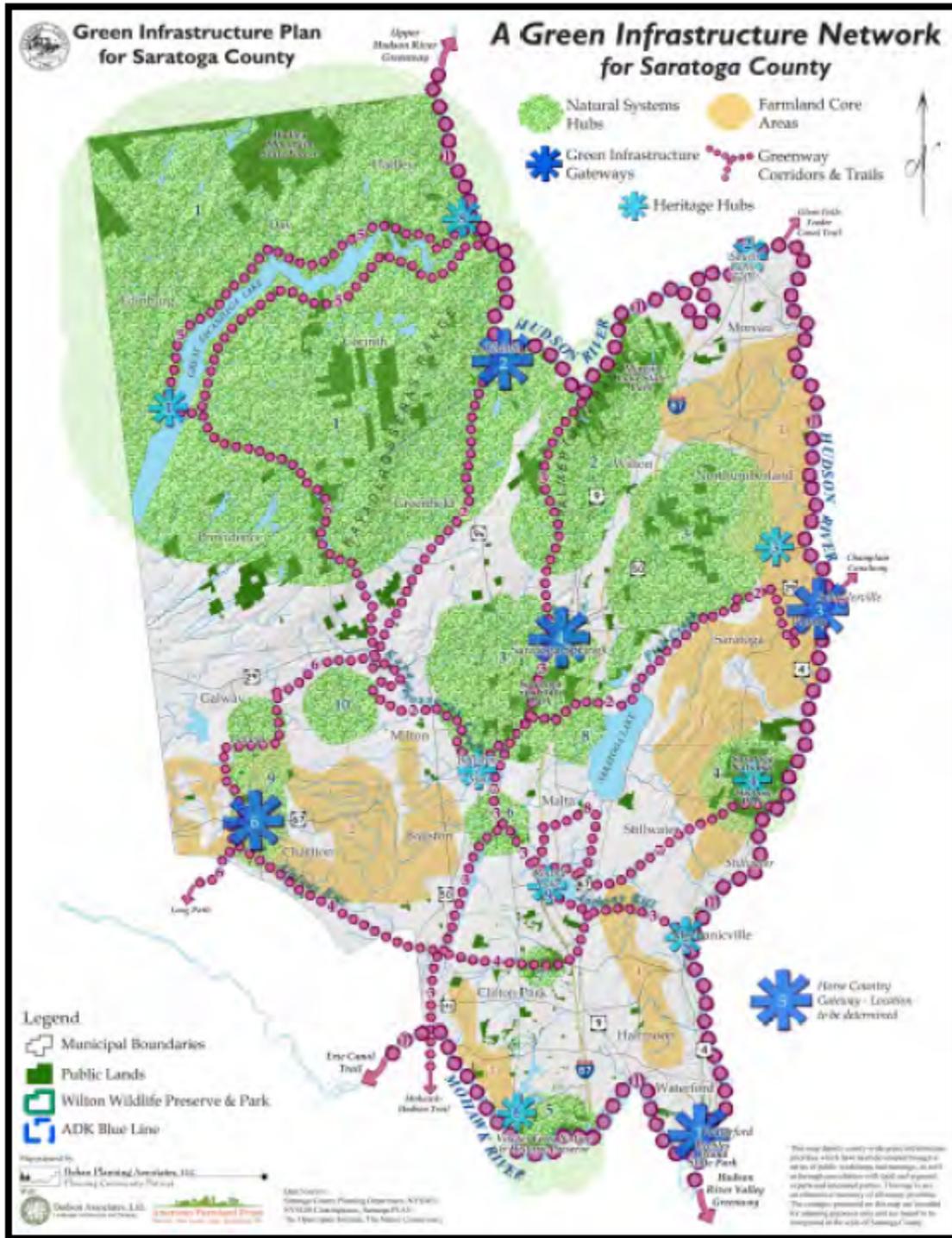
The Green Infrastructure Plan for Saratoga County summarizes the County's priorities. The County has experienced growth and development from historic downtown revitalization in Saratoga Springs, economic development by the County's wastewater collection and treatment system and recent initiatives toward creating the Luther Forest Technology Campus. The County has invested in their "grey infrastructure" (for example, highways, water systems) but also recognizes the importance of conserving natural and cultural resources and investing in the County's "green infrastructure" (Saratoga County Green Infrastructure Plan – NY, Date Unknown and Green Infrastructure for Saratoga County, Date Unknown).

According to the Green Infrastructure Plan for Saratoga County Executive summary, the County plans to protect working farmlands and natural resources to ensure the 'character of the county, the sense of place, will be part of our economic prospect for current and future generations.' Figure 4-12 illustrates the vision for the County's 'green infrastructure network' (for example, rivers, wetlands, forests, etc.): 1) farmland core hubs; 2) natural systems hubs; 3) green corridors and trails; 4) heritage hubs and 5) green infrastructure gateways (Green Infrastructure for Saratoga County, Date Unknown).

Other agencies/programs the County has in place include the Saratoga County Industrial Development Agency and the Farmland/Open Space Preservation Program. The Saratoga County Industrial Development Agency 'promote(s), develop(s), encourage(s), and assist(s) in the construction, expansion, and equipping of economically sound industrial and commercial facilities in order to advance the job opportunities, general prosperity, and economic welfare of the citizens of Saratoga County' (Saratoga County Government, Date Unknown).

According to Saratoga County's webpage, in 2003, the County introduced a Farmland/Open Space Preservation Program. This program is '...one of only a few in the entire state.' The program's goal is to acquire federal, state, local and private matching funds to preserve thousands of acres of farmland and open space parcels within the County. At the program's onset, the County provided \$333,000 in funding for the program; and in 2008, the Board of Supervisors increased the budget amount to \$750,000. With the adoption of the Green Infrastructure Plan in 2006, interest in the grant program has increased. The County has assisted municipalities work toward preservation of farmland and open space and Planning staff are responsible for updating the County's two consolidated agricultural districts that comprise of approximately 111,000 acres of viable agricultural land (Saratoga County Government, Date Unknown).

Figure 4-12. Saratoga County’s Green Infrastructure Network



Source: Green Infrastructure for Saratoga County, Date Unknown

Agricultural Land

Agriculture is one of the industries in Saratoga County. According to the 2007 Census of Agriculture, approximately 55-percent of farm operators reported farming as their principal occupation. The market

value of agricultural products sold from County farms totaled \$58.2 million, with total sales averaging \$90,836 per farm. Crop sales accounted for \$15.1 million (26-percent) of total sales and livestock sales accounted for \$43.1 million (74-percent) of total sales. The leading agricultural products sold were dairy products (67-percent), nursery and greenhouse (11-percent), other crops and hay (8-percent), fruits, tree nuts and berries (6-percent), cattle (6-percent), and grains and dry beans (2-percent) (U.S. Department of Agriculture, 2007).

The average value of land and buildings per farm in 2007 was \$515,230. Machinery and equipment were valued at \$81,832 per farm. The total production expenses in 2007 were \$55.1 million for an average of \$85,901 per farm (New York Agricultural Statistics Service, 2007).

Saratoga County ranks 32nd in the State for number of farms and 42nd for land in farms (New York Agricultural Statistics Service, 2005). According to the 2007 Census of Agriculture, Saratoga County had 641 farms and 75,660 acres of farms in 2007. The average size of a farm was 118 acres and the median size of a farm was 45 acres. The amount of land used for farming as decreased by 171,431 acres between 1940 and 2007. The majority of the land is used for dairy farming and to raise crops for dairy farming. Other crops include nursery and greenhouse, fruits and nuts, hay and other crops, and grains and dry beans. In 2007, there were 42,952 acres covered by cropland, 17,212 acres covered by woodland, 8,209 acres covered by pastureland, and 7,293 acres for other uses (New York Agricultural Statistics Service, 2007). Table 4-3 shows the number of farms and land use in Saratoga County.

Table 4-3. Farms in Saratoga County, New York

Year	Number of Farms	Land in Farms (acres)	Total Cropland (acres)	Permanent Pasture (acres)	Total Woodland (acres)	Other Land (acres)
1940	2,591	247,091	N/A	N/A	62,319	N/A
1950	1,795	200,349	111,032	22,816	53,167	13,364
1959	1,151	161,686	90,007	17,815	41,740	12,124
1969	595	99,102	60,441	N/A	25,459	N/A
1978	541	92,166	57,011	6,030	21,801	7,321
1982	580	31,445	55,621	5,948	21,265	8,611
1987	590	85,700	54,100	4,500	20,000	7,100
1992	520	77,400	47,800	6,000	17,400	6,200
1993	530	76,500	47,200	5,800	17,000	6,500
1994	540	75,800	47,000	5,700	16,400	6,600
1995	545	77,000	47,600	6,100	16,300	7,000
1996	555	77,000	48,600	6,200	15,900	6,300
1997	565	78,400	48,500	6,500	15,800	7,600
1998	560	77,800	48,600	6,400	15,400	7,400
1999	570	78,100	49,400	6,100	15,100	7,500
2000	555	78,900	48,600	6,000	15,000	9,300
2001	550	77,600	N/A	N/A	N/A	N/A
2002	590	75,000	47,522	5,623	15,510	6,245
2003	590	74,900	N/A	N/A	N/A	N/A
2007	641	75,660	42,952	8,209	17,212	7,293

Source: U.S. Department of Agriculture, New York Agricultural Statistical Service, 2005; 2007 Census of Agriculture, 2007

* Totals were calculated using data provided by the 2007 Census of Agriculture

Economy

Saratoga County is part of the Capital District of New York State. Employment in the Capital District has grown in the Region's major employment sectors. The only sector that has not seen growth over the past 10 years is manufacturing. Most of the Region's major employers have been stable or growing in the recent past (Capital District Regional Planning Commission, 2004).

Major employers for Saratoga County include: Stewart’s Ice Cream Company, General Electric – Silicone Division, Saratoga Springs City School District, Navy – West Milton, Lockheed Martin – Knolls Atomic Power Lab, Ace Hardware Distribution Center, Adirondack Trust Company, and AYCO (Saratoga County Chamber of Commerce, Date Unknown).

According to the New York State Department of Labor, the education, health and social services industry employees the most number of people in Saratoga County. Retail trade is employs the second highest number of people, followed by the manufacturing industry. This information is displayed on Table 4-4.

Table 4-4. Number of Employees, By Industry, in Saratoga County

Industry	Number of Establishments	Number of Employees	Sales, Shipments, Receipts (\$1,000)
Manufacturing	128	5,684	\$1,395,541
Wholesale trade	220	3,465	\$2,655,159
Retail trade	756	11,105	\$2,196,328
Information	83	1,187	N
Real estate; rental and leasing	163	852	\$138,279
Professional, scientific and technical services	510	h	D
Administrative and support; waste management and remediation services	213	2,163	\$138,939
Educational services	38	248	\$14,449
Health care and social assistance	437	6,718	\$422,920
Arts, entertainment, and recreation	119	1,569	\$146,393
Accommodation and food services	402	5,959	\$74,818
Other services (except public administration)	277	2,020	\$36,414

Source: U.S. Census Bureau, 2002

h 2,500 to 4,999 employees

D Withheld to avoid disclosing data for individual companies

N Not available or not comparable

Population Trends

This section discusses population trends to use as a basis for estimating future changes that could significantly change the character of the area. Population trends can provide a basis for making decisions on the type of mitigation approaches to consider and the locations in which these approaches should be applied. This information can also be used to support planning decisions regarding future development in vulnerable areas.

The U.S. Census Bureau estimates Saratoga County’s 2007 population to be 215,852 persons, which is a 7.05 percent increase from the 2000 Census population of 200,635. From 1800 to 2007, the County has experienced a fluctuation in its population. The largest increase was seen between the years 1960 to 1970, when the County experienced a 26.78 percent (32,583 persons) population increase. The largest decrease was seen between the years 1910 and 1920, when the County experienced a 3.15 percent (-1,888 persons) population decrease. The smallest increase was seen between the years 1900 and 1910, when Saratoga County only experienced a 1.34 percent (828 persons) percent increase. The County experienced an overall population increase from 1990 to 2007, totaling 19.07 percent (34,576 persons) (U.S. Census Bureau, 2007). Table 4-5 displays the population and population differences from 1800 to 2007 in Saratoga County. Figure 4-13 depicts the past, current, and projected population statistics/trends for the County.

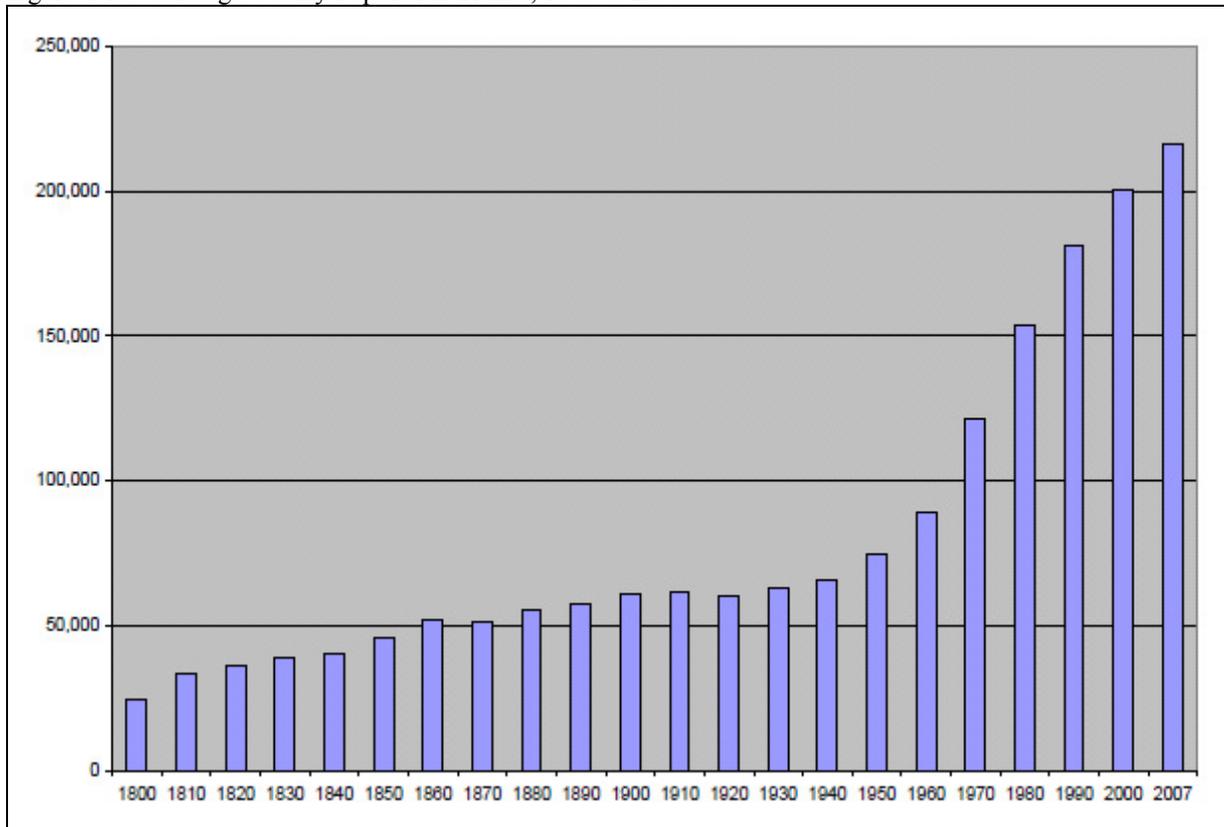
Table 4-5. Saratoga County Population Trends, 1800 to 2007

Year	Population	Change in Population	Percent (%) Population Change
1800	24,483	-	-
1810	33,147	8,664	26.14
1820	36,052	2,905	8.06
1830	38,679	2,627	6.79
1840	40,553	1,874	4.62
1850	45,646	5,093	11.16
1860	51,729	6,083	11.76
1870	51,529	-200	-0.39
1880	55,156	3,627	6.58
1890	57,663	2,507	4.35
1900	61,089	3,426	5.61
1910	61,917	828	1.34
1920	60,029	-1,888	-3.15
1930	63,314	3,285	5.19
1940	65,606	2,292	3.49
1950	74,869	9,263	12.37
1960	89,096	14,227	15.97
1970	121,679	32,583	26.78
1980	153,759	32,080	20.86
1990	181,276	27,517	15.18
2000	200,635	19,359	9.65
2007	215,852	15,217	7.05

Source: U.S. Census Bureau, 1995 and 2007; University of Virginia, 2004

Note: Change in population and percent in population change was calculated from available data

Figure 4-13. Saratoga County Population Trends, 1800 to 2006



Source: U.S. Census Bureau, 1995 and 2007; University of Virginia, 2004

Potential Growth and Development

Saratoga County is the site of the largest private construction project in the US at this time. The construction of the Global Foundries micro chip manufacturing plant at the Luther Forest Technology Park in Malta. This project will generate several thousand jobs both at the new facility and support and spin off business. It is anticipated, base on estimates from other areas where such plants were constructed, the county could witness a 20-25% growth in population over the next 10 years. This would add approximately 45,000 to the population. This growth will put pressure on the housing market and housing stock. It is anticipated that developers will have increasing more difficult time finding suitable land for housing projects. This will result in developers looking harder at land that may have significant wetlands or may have portion in flood zone areas. Saratoga County will need to assist local governments in developing creative and safe ways to allow for development and yet keep the environment and population safe (Lent, Saratoga County Office of Emergency Services, 2009).

Saratoga County anticipates that as a result of the micro-chip plant there will be several commercial developments undertaken in support of the plant. Most of that development will probably occur in the corridor south of Malta along the Adirondack Northway (I-87). This development is predicted to be support software and hardware businesses that are specifically geared toward the micro-chip industry.

In the Town of Halfmoon just outside the City of Mechanicville Norfolk Southern and Pan-Am rail lines are in the process of developing a new rail yard where freight destined for New England will be classified and moved to appropriate trains. This is happening on the site of the former Delaware and Hudson RR