Chapter 5. Demographic Profile of the Target Populations

Lower Hudson Valley

Introduction

This chapter presents demographic characteristics of the three target populations: older adults, persons with disabilities, and persons living below poverty level with the ultimate objective of identifying areas of the greatest need – where large numbers of the target populations live and also where the highest densities of these populations are located. Analysis is presented through tables and maps, using demographic data at the county, place, zip code, and tract level from the 2010 US Census, 2007-2011 American Community Survey 5-year estimates, and 2009-2011 American Community Survey 3-year estimates. Since some individuals may fall into more than one target population, the total numbers are not additive.

Consistent with the other elements of this study, the demographic analysis is based on the NYMTC region as well as three subregions:

- λ   New York City – data is presented for New York City as a whole and for each of the five boroughs of Manhattan, Brooklyn, the Bronx, Queens and Staten Island. The analysis for New York City is based on Census tracts and ZIP Code tabulation areas for some presentation purposes.

- λ   Lower Hudson Valley – data is presented for the entire Lower Hudson Valley region as well as individually for Westchester, Putnam and Rockland counties. Data for the Lower Hudson Valley is shown by Census tract, but aggregated by Census place for analytical and presentation purposes.

- λ   Long Island – data is presented for the whole of Long Island as well as individually for Suffolk and Nassau counties. Similar to the Lower Hudson Valley subregion, Long Island data is also shown by Census tract and aggregated by Census place for analytical and presentation purposes.

Demographically, each subregion within the wider NYMTC region has unique characteristics. NYC has very high densities of the target populations, but the region also has extensive public transportation, much of which is accessible. On Long Island, the South Shore has much higher need than the North Shore, and densities of target populations are highest in the towns west of Brookhaven.

Definitions and Methodology

For purposes of the analysis, the target populations have been defined as follows:

- λ   Older Adults – Individuals 65 years of age and older from the 2010 Census

- λ   Persons with Disabilities – The American Community Survey (ACS) replaced the decennial long form so that disability data was not collected in the 2010 Census. For

purposes of this analysis, the Census American Community Survey 2009-2011 3-year estimates "Disability status of the civilian noninstitutionalized population" were utilized. In 2008 the questions on disability were changed, resulting in ACS disability data being available only at the county level since a larger sample, which is collected over five years instead of three, is required for the smaller geographies of Census tracts and block groups.

The ACS question, found in 2008 and later, concerning disability covers six disability types:

- **Hearing difficulty** - deaf or having serious difficulty hearing.

- **Vision difficulty** - blind or having serious difficulty seeing, even when wearing glasses.

- **Cognitive difficulty** Because of a physical, mental, or emotional problem, having difficulty remembering, concentrating, or making decisions.

- **Ambulatory difficulty** Having serious difficulty walking or climbing stairs.

- **Self-care difficulty** Having difficulty bathing or dressing.

- **Independent living difficulty** Because of a physical, mental, or emotional problem, having difficulty doing errands alone such as visiting a doctor's office or shopping.

Respondents who report to have one of the six disability types listed above are considered to have a disability. In 2013, the first 5-year estimates on the disability status of individuals will be produced for all geographies including Census tracts and block groups – that data is currently not available.[1]

Since the disability question was changed to focus on the impact certain conditions might have on basic functioning, the Census warns that data after 2008 should not be compared to previous years or the disability data from the 2000 Census.

λ   Persons Below Poverty – As with the disability data, the 2010 Census did not contain information on poverty. Instead the American Community Survey 2007-2011 5 year estimates table S1701: "Poverty status in the past 12 months" was utilized. The Census Bureau created definitions of poverty status based on income and the number of people per household. The data was not available at the block group level so tracts were substituted. Note that the 2009 Plan utilized ratio of income to poverty level, this update uses poverty status in order to align with NYMTC's RTP 2015-2040: Environmental Justice Assessment Appendix.

The demographic characteristics for each of the 10 NYMTC counties have been analyzed in terms of both the number and density (persons per square mile) of the target populations. Data is shown by Census tracts and by zip codes for New York City and by place for the Lower Hudson Valley and Long Island subregions. Data is presented graphically in maps and in table format.

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[1] Source: http://www.census.gov/people/disability/methodology/acs.html

Tracts vary in size, both geographically and in population. Therefore, two maps per target population were created – one that shows the absolute number of individuals living in the tract, and another displaying the density of the population, allowing differentiation between these separate factors. For example, a large geographic area will dilute the density of a large population, while a smaller population spread over smaller geographic area will have a higher density. Thus the two separate maps, when viewed together, help give a more accurate view of conditions in each county than one map alone.

The maps show Census tract data and zip codes, with demographic data summarized in a series of tables. This data is aggregated by zip code for New York City and by Census place for the Lower Hudson Valley and Long Island, where available, and highlight the zip codes or places with the highest density and number of members of the target populations. Given the large population size and density in NYC, Census zip code tabulation areas were used to identify significant locations within each borough, providing an easily recognizable geographic unit for readers. For Lower Hudson Valley and Long Island, aggregating by municipality is logical given population sizes and distributions, but, like disability data and poverty data, all place data is not available.

Lower Hudson Valley

North of New York City, the Lower Hudson Valley (LHV) subregion of Rockland, Westchester, and Putnam Counties straddles the Hudson River. Rockland borders New Jersey, while Westchester's south border touches the Bronx.

Population – This subregion has the lowest population of the three subregions at 1.36 million, and covers a total area of 838 square miles. The area grew by 4.2 percent from 2000 to 2010, two percentage points higher than NYC's growth. The subregion contains six cities, all of which are located in Westchester, in addition to 30 towns and 50 villages.

Changes in Population – In the year 1900, the population of the LHV was approximately 236,300 – greater than the combined populations of Queens and Staten Island at the time. The region grew by 48 percent from 1920 to 1930, surpassing the half million mark, and reached 1 million residents by 1970. Growth then slowed considerably during the next few decades, as shown in Figure 5-1.

Figure 5-1   Population Change by County – LHV

	2000	2010	Change	% Change
Putnam	95,745	99,710	3,965	4.1%
Rockland	286,753	311,687	24,934	8.7%
Westchester	923,459	949,113	25,654	2.8%
LHV	**1,305,957**	**1,360,510**	**54,553**	**4.2%**

Source: Census 2000 and 2010

Population Density –LHV has the lowest population density of the three subregions, at 1,619 persons per square mile in 2010, based on the subregion's 838 square miles of land. This is still substantially higher than New York State's population density of 410.

Population Age – At 39.4 years, the LHV's median age is nearly two years higher than New York State's median. Older adults (65+) comprise 14.3 percent of the population.

Income – With a median household income of $82,714, the LHV surpasses the state average by more than $25,000. The subregion contains 125,430 persons below the poverty level, comprising 9.2 percent of the population. In comparison, the nation as a whole has 15 percent living below the poverty level and NYC, 19 percent.

Employment – Nearly 68 percent of the subregion's citizens are in the labor force, which is comparable to state and national numbers. The area has the highest percentage of people working in management, professional, and related occupations at 45 percent. Sales and office jobs employ 24 percent of employed residents and the service industry, 18 percent.

Administrative Divisions – New York State has a unique method for dividing up its counties into municipalities. Within each county, residents may live in a city, town, or village. Instead of classifying land areas based on their population or geographic size, in New York State the citizens decide what type of government they want, which then must be approved by the state legislature. Thus in many cases, cities have a population smaller than the largest village, and 150 of the state's 662 villages have population higher than the smallest city. Cities have the most autonomy, providing all of their own services to residents, while towns have a town board rather than an executive branch. City and town boundaries do not cross one another, nor do towns or cities ever cross county boundaries. Villages, on the other hand, may be wholly contained within a town or may cross town boundaries. In addition, hamlets consist of unincorporated areas that are not part of a village and have no legal status.[2]

Therefore, subsequent analysis in this chapter utilized two methods to understand target populations in the LHV. The maps show population number and density by town and city. Accompanying tables show the top density and number for each target population by town/city and by village. Since villages occur within towns and sometimes cross town boundaries, these numbers tell different stories of the population distribution. In a few cases, like Scarsdale, the town and village boundaries are the same. Other times, villages like Briarcliff Manor straddle two towns – Ossining and Mount Pleasant.

Target Populations

Figure 5-2 breaks down the target populations by county. In general, the target populations as a percent of total population remain fairly consistently spread throughout the counties, with the main outlier being the persons living below poverty level population in Putnam, which is generally half that of the other counties. Both the persons living below poverty level and persons with disabilities populations are lower in the LHV than at state and national levels. The populations are much older than the US as a whole, however, with an average of 14.3 percent of the population over 65 in the Lower Hudson Valley.

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[2] State of New York Department of State. Local Government Handbook. 2008.

Figure 5-2   Target Populations by County – LHV

	Total Population	Older Adults (65+)	Percent Older Adults	Persons with Disabilities	Percent with Disabilities	Persons Below Poverty	Percent Below Poverty
Putnam	99,662	12,417	12.5%	9,526	9.6%	5,346	5.4%
Rockland	308,682	41,841	13.4%	24,100	7.8%	35,077	11.4%
Westchester	944,249	139,122	14.7%	80,143	8.5%	85,007	8.9%
LHV	**1,352,593**	**193,380**	**14.3%**	**113,769**	**8.4%**	**125,430**	**9.2%**
NY State	**19,302,448**	**2,219,782-**	**11.5%**	**2,063,351**	**10.7%**	**2,760,250-**	**14.3%**
USA	**306,603,772**	**28,820,755**	**9.4%**	**36,499,048**	**11.9%**	**-44,457,547**	**14.5%**

Sources: Total Population and Older Adults - Decennial Census 2010

Persons Below Poverty - ACS 5-Year Estimates 2007-2011

Persons with Disabilities - ACS 3-Year Estimates 2009-2011

Putnam County

The most rural of the 10 counties in the NYMTC region, Putnam lies the farthest north, bordering Westchester. Putnam was a part of Dutchess County until 1812, when it split off into its own county.

Population – The population of the County is over 99,700 people living in six towns as of 2010. Within those towns are three villages and 19 Census tracts. On average, the area of each town is 41 square miles while the villages are on average 0.7 square miles. From 2000 to 2010, the county gained 4.1 percent more residents, faster than Westchester, but less than half the rapid growth rate of Rockland.

Changes in Population – Putnam's growth rate accelerated between1920 and 1930, when population grew by 27 percent. Its population surpassed 50,000 by 1970, a decade of 79 percent growth.

Population Density – Putnam has the lowest population density of all 10 counties in the NYMTC region with 433 people per square mile over its 231 square miles of land, which is on par with the New York State population density. Because the county has only six towns and three villages, and the towns are vastly larger than the villages, the towns end up having high *numbers* of each target populations while the small villages have high *densities*. Thus, since Putnam has only six total places, each of the following tables includes all six rather than trying to rank them by high number or density.

Population Age – Putnam residents have a median age of 41.2, which is older than the LHV median. Older adults make up 12.5 percent of the population, which is about average compared to the rest of the NYMTC counties.

Income – Putnam has the highest median household income of all 10 counties at $92,711, which is $30,000 higher than the national median. Thus, it follows that Putnam has a very low percentage of persons below poverty level – 5.4 percent.

Employment – Sixty-eight (68) percent of the population is in the labor force. More than 44 percent of employed residents work in management, professional, and related occupations, while another 25 percent work in sales and office. Sixteen percent of employed residents have jobs in the service industry.

Older Adults

Putnam is home to 12,417 older adults. Figure 5-3 summarizes of the number of older adults by place in Putnam County.

Figure 5-3   Older Adults by Place – Putnam

Place	Square Miles	Total Population	Older Adults	Per Square Mile
OLDER ADULTS BY **PLACE**				
Carmel	36	34,305	4,263	118.4
Southeast	32	18,404	2,362	73.8
Kent	40	13,507	1,716	42.9
Patterson	32	12,023	1,205	37.7
Putnam Valley	41	11,809	1,374	33.5
Philipstown	49	9,662	1,497	30.6

Source: Decennial Census 2010

Figure 5-4 and Figure 5-5 show the number and density of older adults by Census tract. Carmel, which is also the county seat, has numerous seniors spread throughout the place, while the high density of older adults occurs in isolated Census tracts scattered throughout the county.

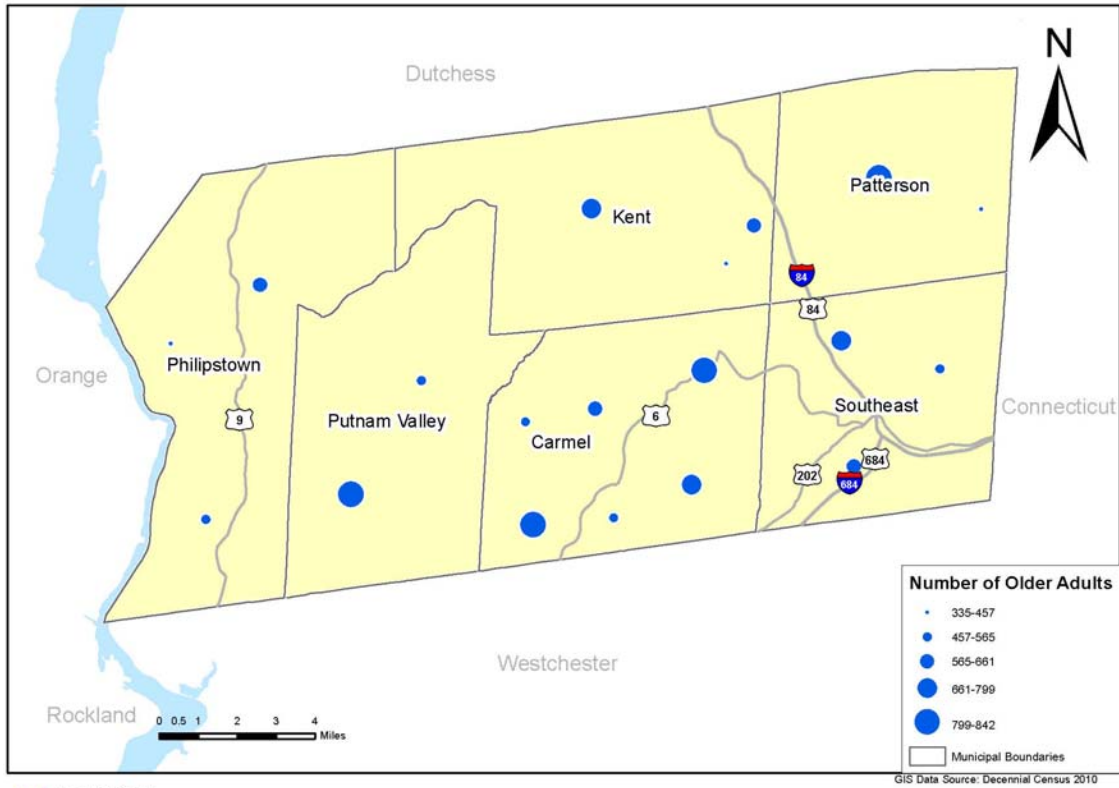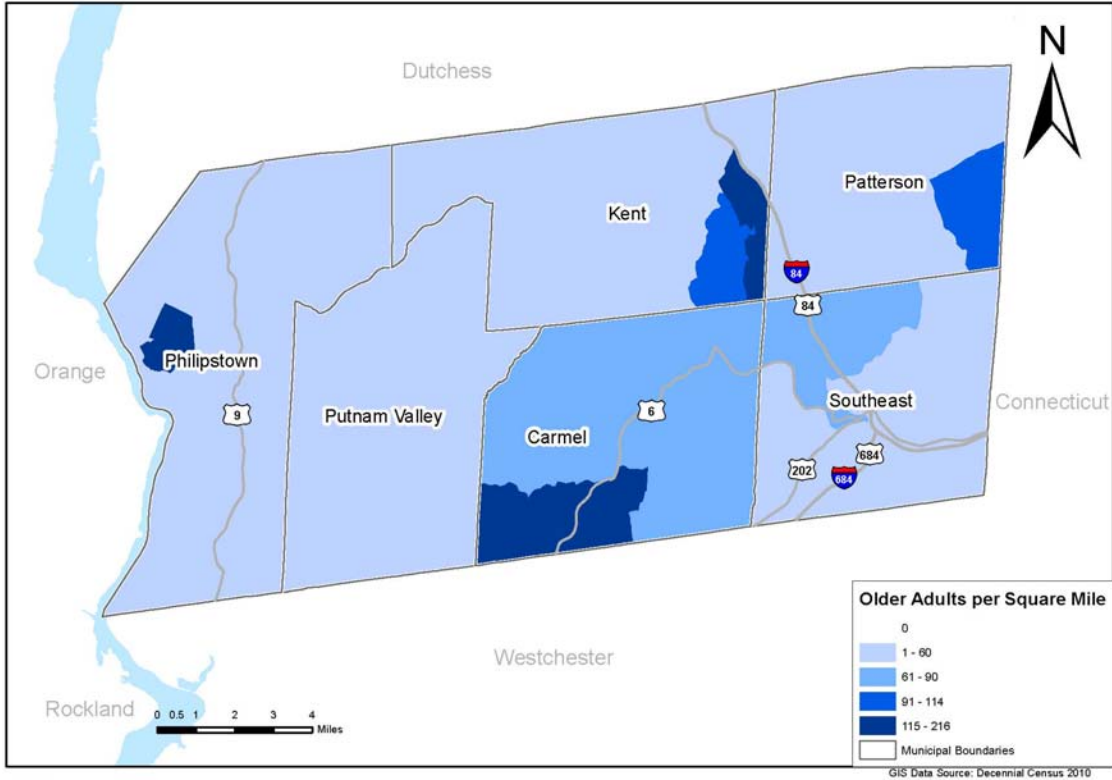**Figure 5-4   Number of Older Adults (65+) by Census Tract - Putnam County**

Figure 5-5   Older Adults (65+) per Square Mile by Census Tract - Putnam County

Persons with Disabilities

The American Community Survey only provides data for one county subdivision in Putnam County. As shown in Figure 5-6, the total number of persons with disabilities for Carmel is 3,131, 9.2% of the population.

Figure 5-6   Persons with Disability by County Subdivision – Putnam County

County Subdivision	Square Miles	Total Population	Persons with Disabilities	Per Square Mile
PERSONS WITH DISABILITIES BY COUNTY SUBDIVISION				
Carmel	41	34,031	3,131	76

Source: ACS 3-Year Estimates 2009-2011

Persons Below Poverty Level

Putnam has just 5,346 persons living below the poverty level, by far the lowest number for all ten counties. Figure 5-7 shows the breakdown of persons below poverty level in Putnam County. Patterson and Carmel have the highest densities of people living below the poverty level.

Figure 5-7   Persons Below Poverty Level by Place – Putnam County

Place	Square Miles	Total Population	Persons Below Poverty Level	Per Square Mile
PERSONS BELOW POVERTY LEVEL BY PLACE				
Patterson	32	12,023	1,187	37.1
Carmel	36	34,305	1,191	33.1
Southeast	32	18,404	1,020	31.9
Putnam Valley	41	11,809	671	16.4
Kent	40	13,507	585	14.6
Philipstown	49	9,662	692	14.1

Source: American Community Survey 5-Year Estimates, 2007-2011

Figure 5-8 and Figure 5-9 show the number and density of persons below the poverty level. The highest densities occur in Southeast and in the southern part of Carmel. In Southeast, the Census tract with the high density is generally coterminous with the village of Brewster.

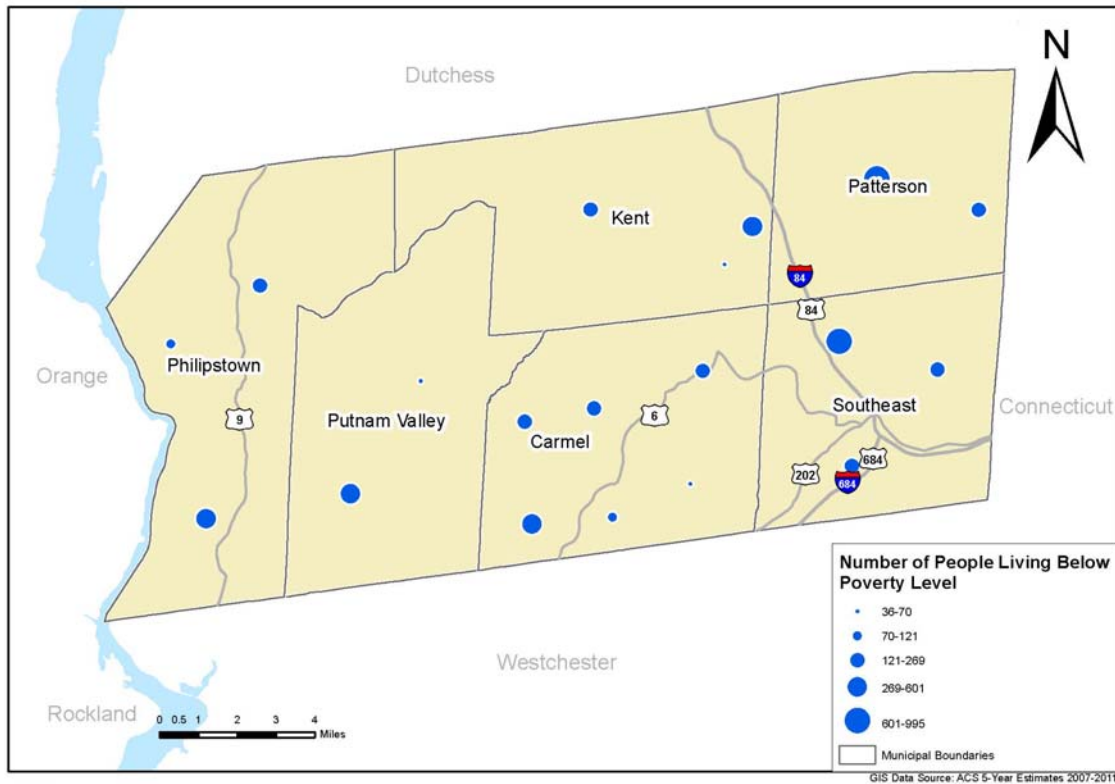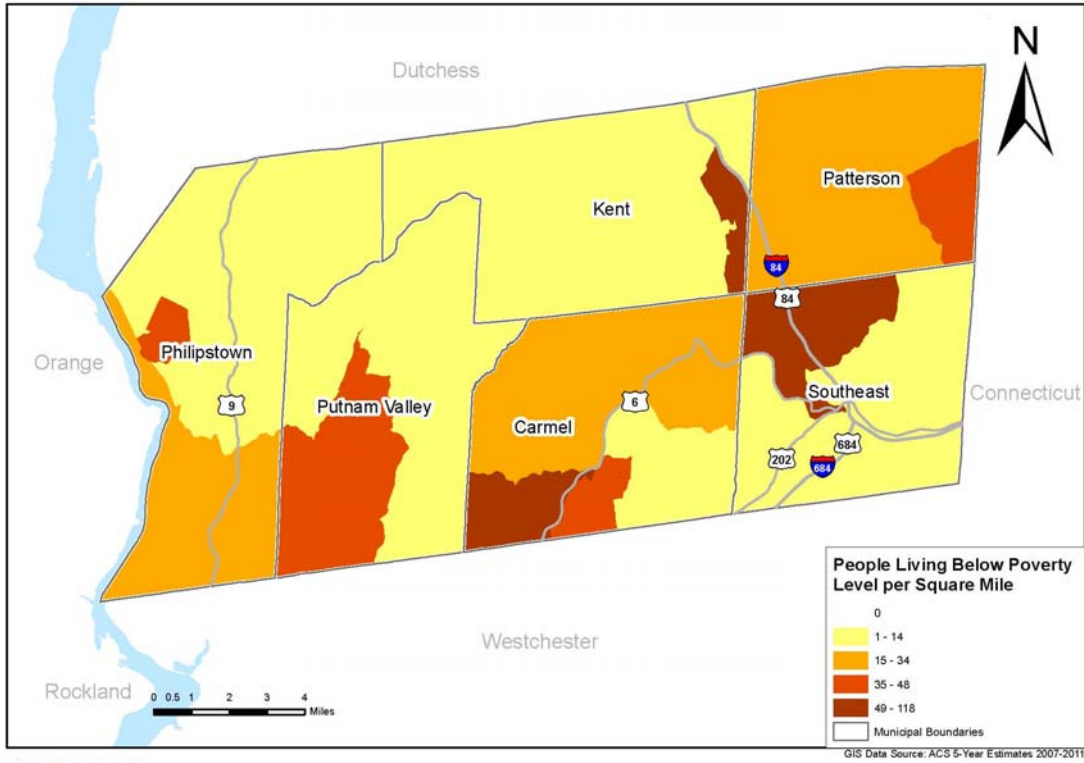**Figure 5-8   Number of Persons Below Poverty Level by Census Tract - Putnam County**

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Figure 5-9   Persons Below Poverty Level per Square Mile by Census Tract - Putnam County

Rockland County

The only NYMTC County west of the Hudson River, Rockland shares a southern border with New Jersey.

Population – The County's population topped 311,000 by 2010, with an 8.7 percent population growth since 2000, the highest of the Lower Hudson Valley counties. Rockland contains 65 Census tracts divided among five towns. The county has 19 villages, more than half of which are located in the town of Ramapo. On average, the towns cover 40 square miles and the villages, 1.8 square miles.

Changes in Population – In the year 1900, Rockland was home to nearly 38,300 people. The area grew steadily along with the rest of the LHV, surpassing the 100,000 mark by 1960. Population increased by 68 percent from 1960 to 1970, and then decreased, reaching 286,753 by 2000.

Population Density – At 174 square miles of land, Rockland covers the smallest area of the three LHV counties; it is approximately three times larger than Staten Island. The county has a population density of 1,774 people per square mile as of 2011.

Population Age – Rockland's median age is slightly lower than that of New York State at 36.8 years, and slightly lower than that of the Lower Hudson Valley. Thirteen percent (13%) of the population is 65 years of age or older.

Income – Persons below the poverty level make up 11 percent of Rockland's population, which is the highest percent for LHV counties. The population earns a median household income of $84,661, more than $30,000 more than the US average.

Employment – Sixty-six (66) percent of the population is in the labor force. The biggest employment category is management, professional, and related occupations at 44 percent of the population. Another 25 percent work in sales and office, and 18 percent work in the service industries.

Older Adults

Rockland County is home to more than 41,841 older adults Figure 5-10 lists the older adult population by place in Rockland County.

Figure 5-10   Older Adults by Place – Rockland County

Place	Square Miles	Total Population	Older Adults	Per Square Mile
OLDER ADULTS BY **PLACE**				
Orangetown	24	49,212	8,467	352.8
Clarkstown	38	84,187	13,352	351.4
Ramapo	61	126,595	13,167	215.9
Haverstraw	22	36,634	4,499	204.5
Stony Point	28	15,059	2,356	84.1

Source: Decennial Census 2010

Figure 5-11 and Figure 5-12 display the number and density of older adults by Census tract. The older adult population generally lives in Spring Valley and eastern Haverstraw, as well as a small cluster in Suffern.

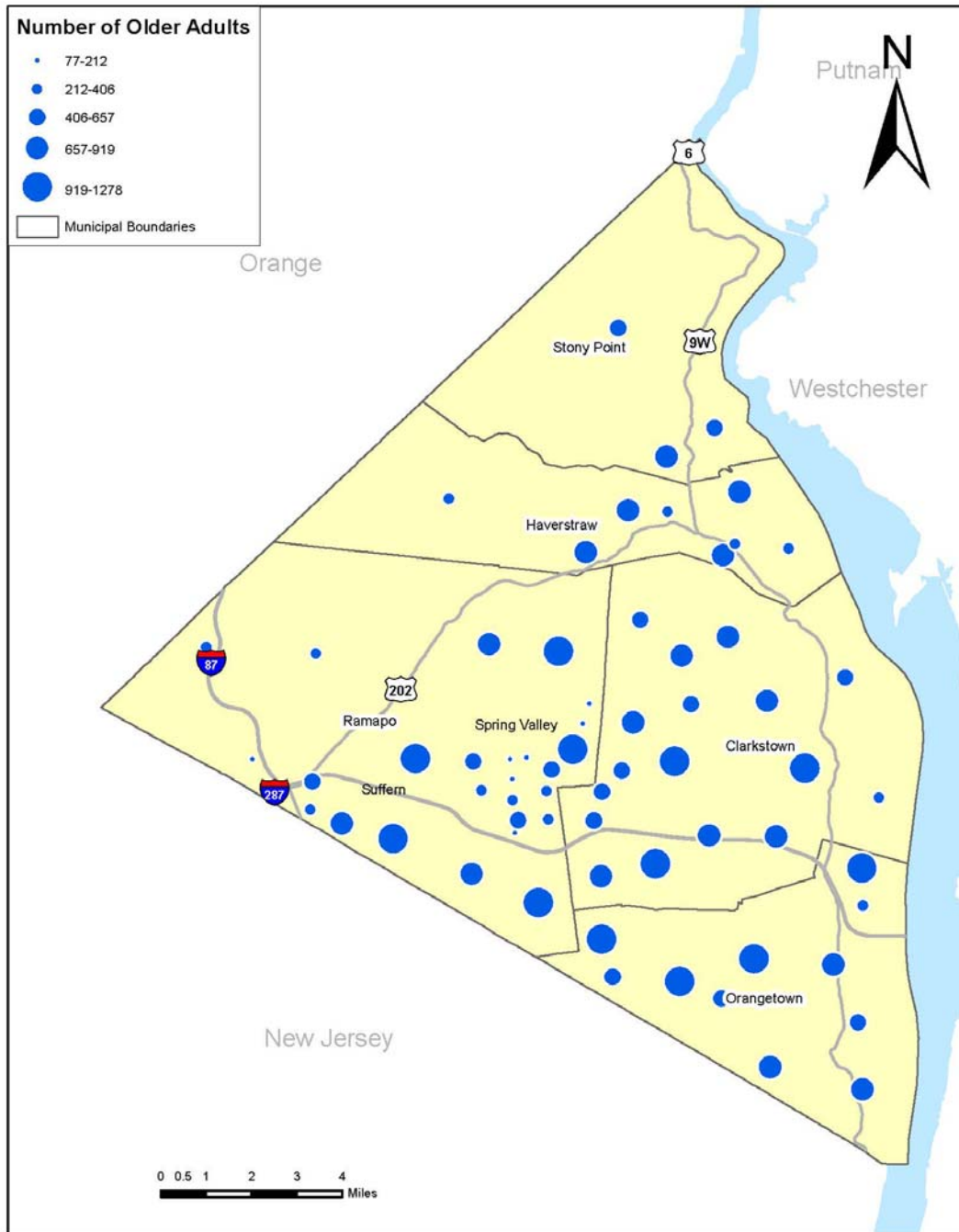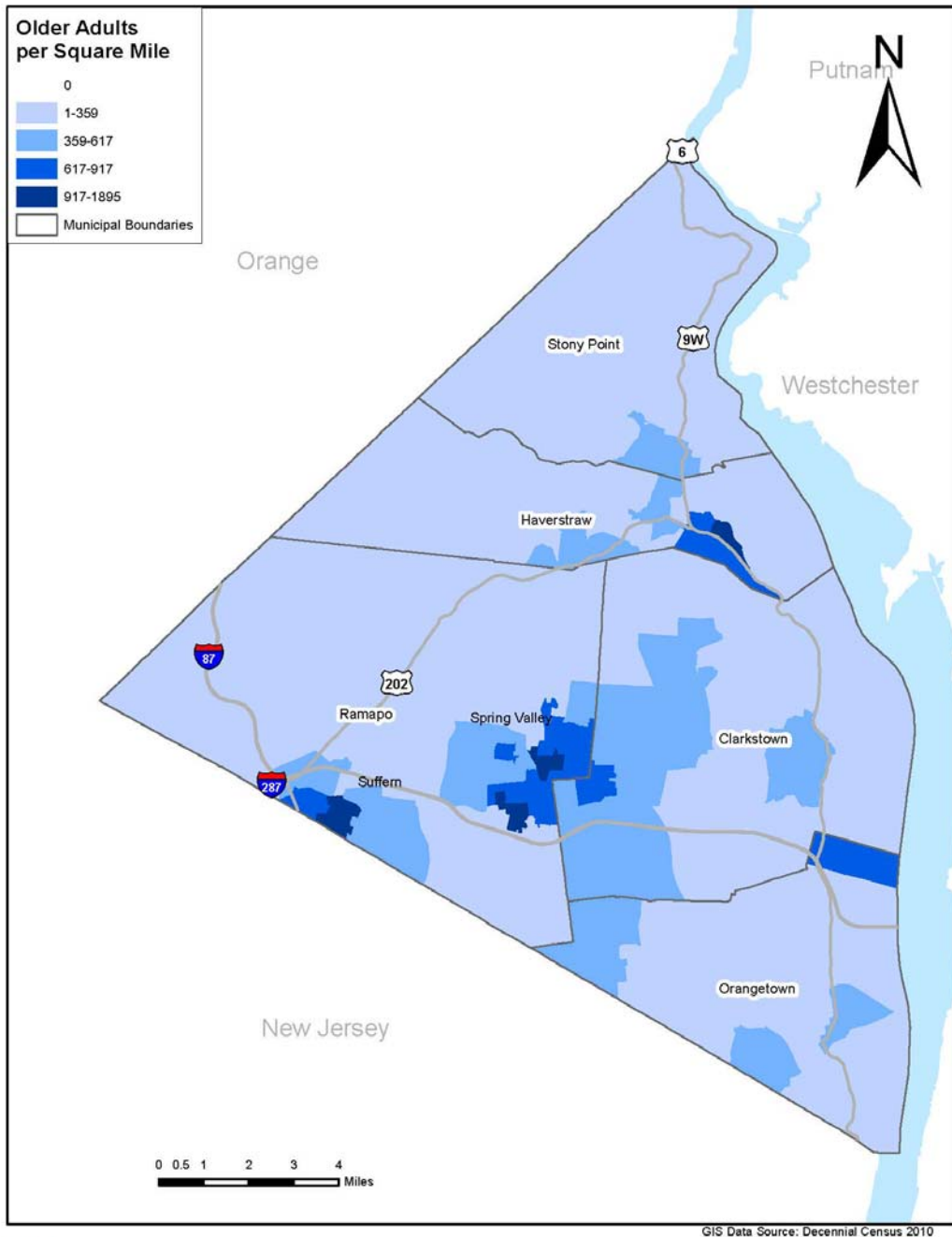**Figure 5-7   Number of Older Adults (65+) by Census Tract - Rockland County**

Figure 5-8   Older Adults (65+) per Square Mile by Census Tract - Rockland County
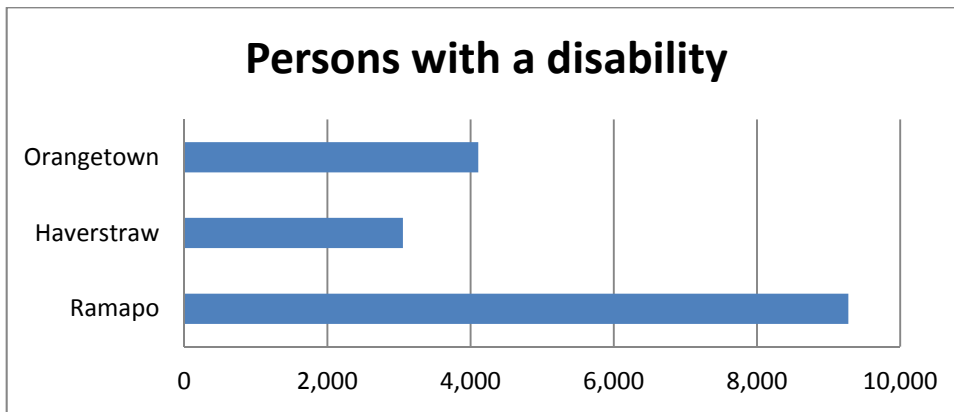
Persons with Disabilities

The American Community Survey only provides disability data for three county subdivisions in Rockland. As shown in Figure 5-13, Ramapo has the highest number of persons with disabilities in Rockland County.

Figure 5-9   Persons with a Disability by County Subdivision – Rockland County

County Subdivision	Square Miles	Total Population	Persons with Disabilities	Per Square Mile
PERSONS WITH DISABILITIES BY COUNTY SUBDIVISION				
Ramapo	62	125,450	9,277	150
Haverstraw	27	36,453	3,055	113
Orangetown	31	48,895	4,107	132

Source: ACS 3-Year Estimates 2009-2011

Figure 5-14   Number of Persons with a Disability by Census County Subdivision – Rockland County

Persons Below Poverty Level

Rockland has 35,077 people living below poverty level. Figure 5-15 shows the population of people living below poverty by place.

Figure 5-15   Persons Below Poverty Level by Place – Rockland County

Place	Square Miles	Total Population	Persons Below Poverty Level	Per Square Mile
PERSONS WITH BELOW POVERTY LINE BY **PLACE**				
Ramapo	61	126,595	24,115	395.3
Haverstraw	22	36,634	4,176	189.8
Orangetown	24	49,212	2,504	104.3
Clarkstown	38	84,187	3,759	98.9
Stony Point	28	15,059	523	18.7

Source: American Community Survey 5-Year Estimates, 2007-2011

Figure 5-16 shows the number of persons living below poverty level by Census tract and Figure 5-17 the density of persons below the poverty level. The highest density can be found in eastern Ramapo in the Spring Valley area. The population distribution map shows that eastern Haverstraw also contains many people below poverty levels.

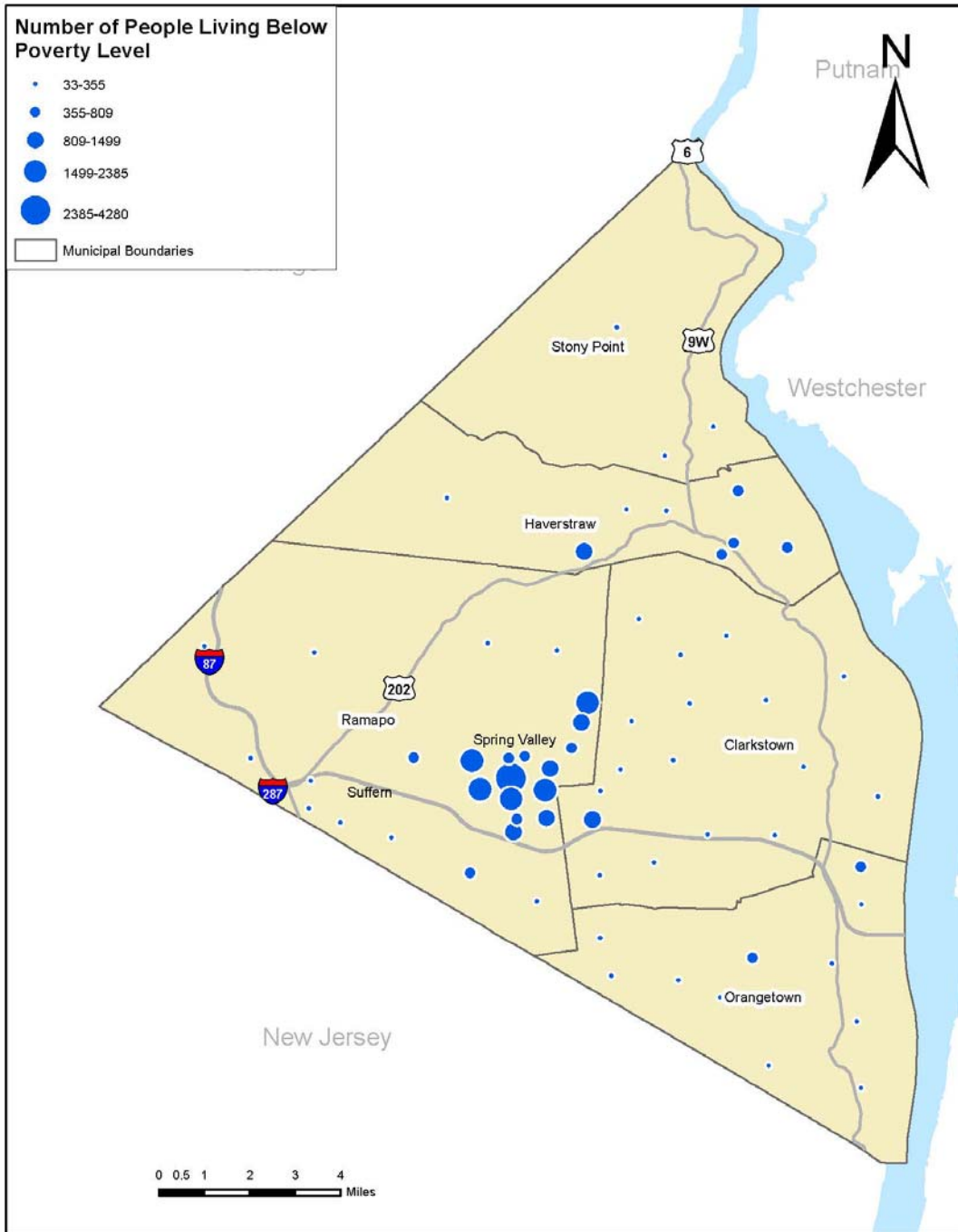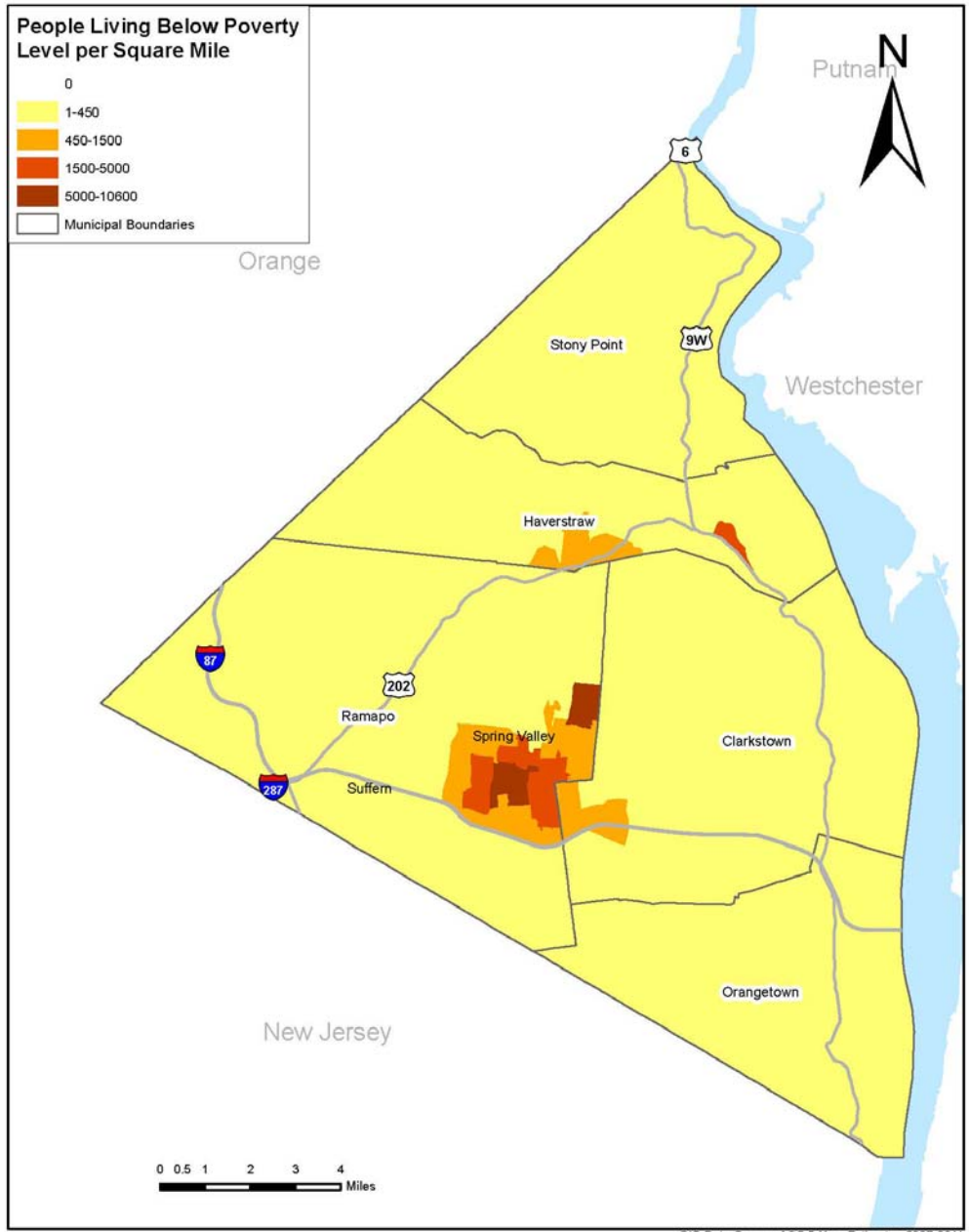**Figure 5-16   Number of Persons Below Poverty Level by Census Tract - Rockland County**

Figure 5-17   Persons Below Poverty Level per Square Mile by Census Tract - Rockland County

Westchester County

Westchester borders the Bronx to the south and Connecticut to the east. The southern portion of the county has a high population density, and the northern part of the county has generally lower densities.

Population – The population of Westchester is approximately 950,000, making it by far the most populous county in the LHV. It experienced the least population growth from 2000 to 2010 – less than 3 percent, which is still a larger increase than the state as a whole during this same time period. The county contains six cities and 16 towns, spread over 223 Census tracts. In addition, the county has 20 villages and three town/villages. On average, each city and town measure 19 square miles while villages average 3.4 square miles.

Changes in Population – Early on, Westchester had a fairly high population. In the year 1900, 184,257 people lived in the county, more than Queens' 1900 population. In the meantime, Rockland held approximately 38,300 residents and Putnam, just 13,800. Growth in Westchester slowed by around 1940, while Rockland and Putnam began expanding more rapidly. Westchester population dropped 3 percent from 1970 to 1980, and then began quickly increasing again to 950,000 in 2011

Population Density – Westchester has the second largest land area of all counties in the NYMTC region. The county has a population density of 2,191 people per square mile in 2011.

Population Age – The median age in Westchester is 39.9 years, which is more than two years higher than the state median. Older adults account for 14.7 percent of the total population.

Income – Westchester has the lowest median household income of the three LHV counties at $80,725. The County has over 85,000 residents below the poverty level.

Employment – After Manhattan, Westchester has the highest percentage of employed residents who work in management, professional, and related occupations at 45 percent. Twenty-four (24) percent work in sales and office and another 18 percent, in the service industries.

Older Adults

Westchester has over 136,956 older adults. Figure 5-18 shows the density (persons per square mile) of older adults and displays the places with the highest density of each target population.

Figure 5-18   Older Adults by Place – Westchester

Place	Square Miles	Total Population	Older Adults	Per Square Mile
OLDER ADULTS BY **PLACE**				
Mount Vernon	4	67,292	9,318	2,329.5
Yonkers	18	195,976	28,776	1,598.7
New Rochelle	10	77,062	11,711	1,171.1
Eastchester	5	32,363	5,532	1,106.4
White Plains	10	56,853	8,672	867.2

Source: Decennial Census 2010.

Figure 5-19 and Figure 5-20 show the population distribution and density of older adults. The population distribution map shows a high number of older adults along the Bronx border and south of I-287. Many Census tracts along the north border of the county have high numbers of older adults, as well. The density map shows that many older adults reside throughout Yonkers and Mount Vernon, as well as in White Plains, New Rochelle, and the Town of Rye.

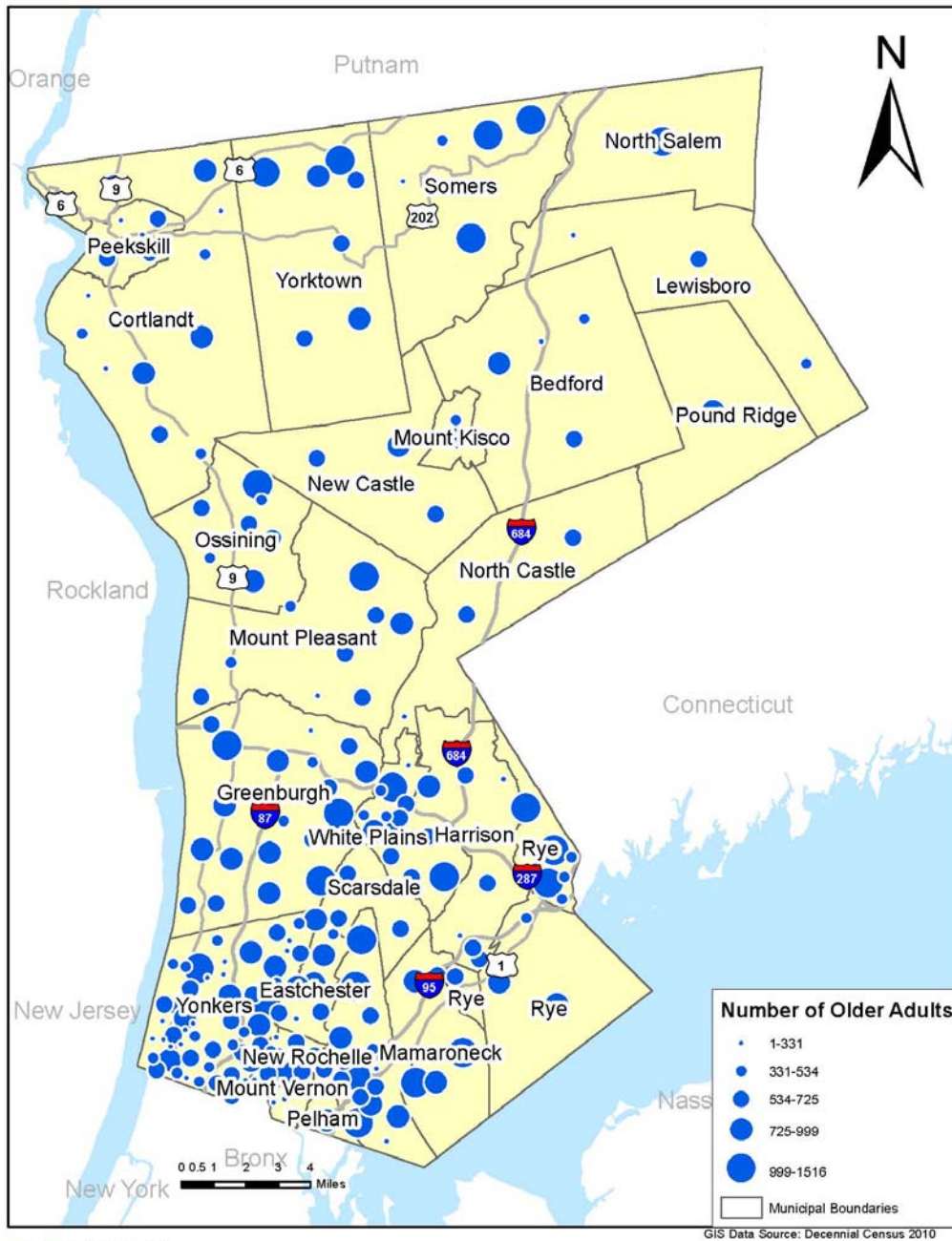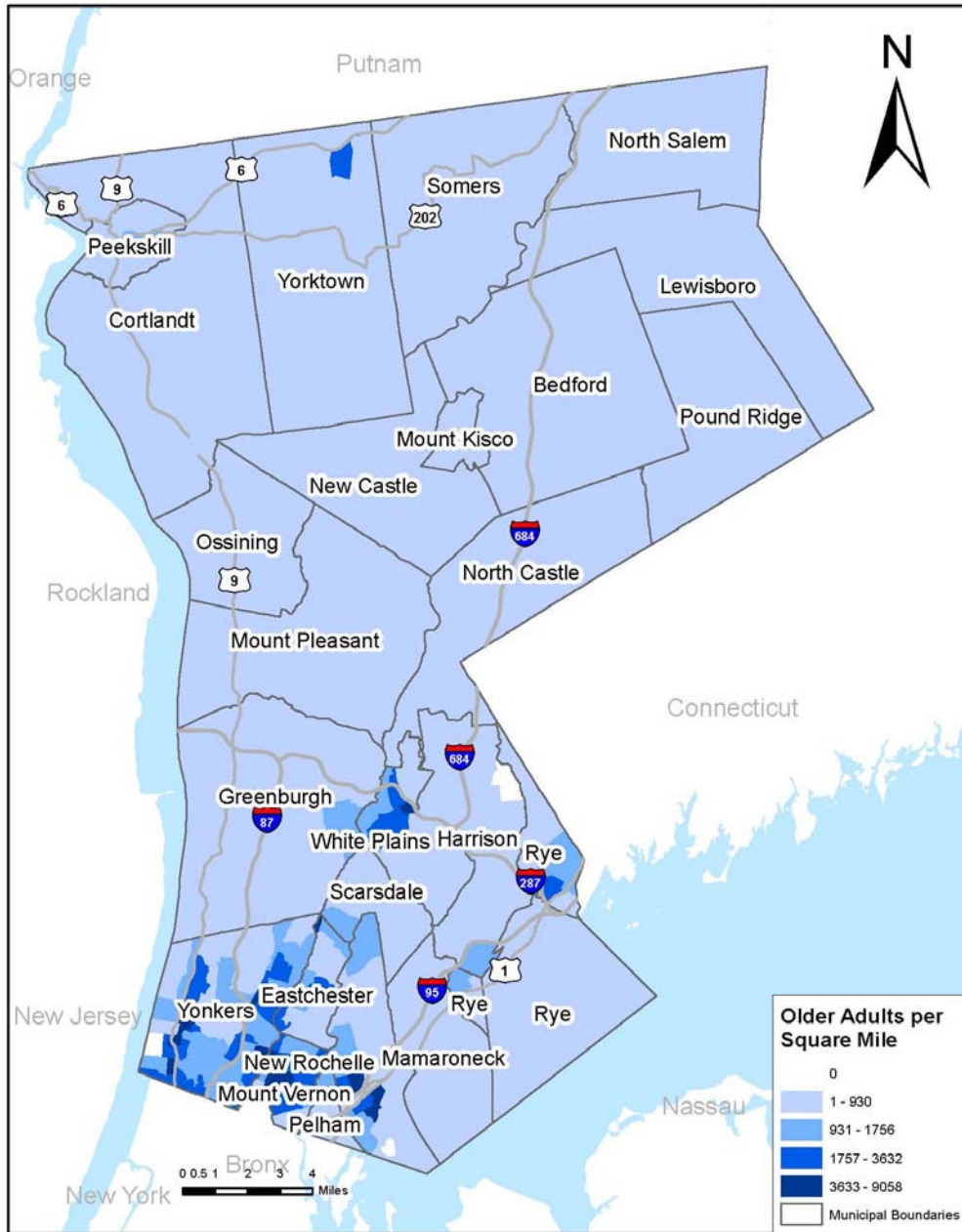## Figure 5-19 Number of Older Adults (65+) by Census Tract - Westchester County

Figure 5-20   Older Adults (65+) per Square Mile by Census Tract - Westchester County
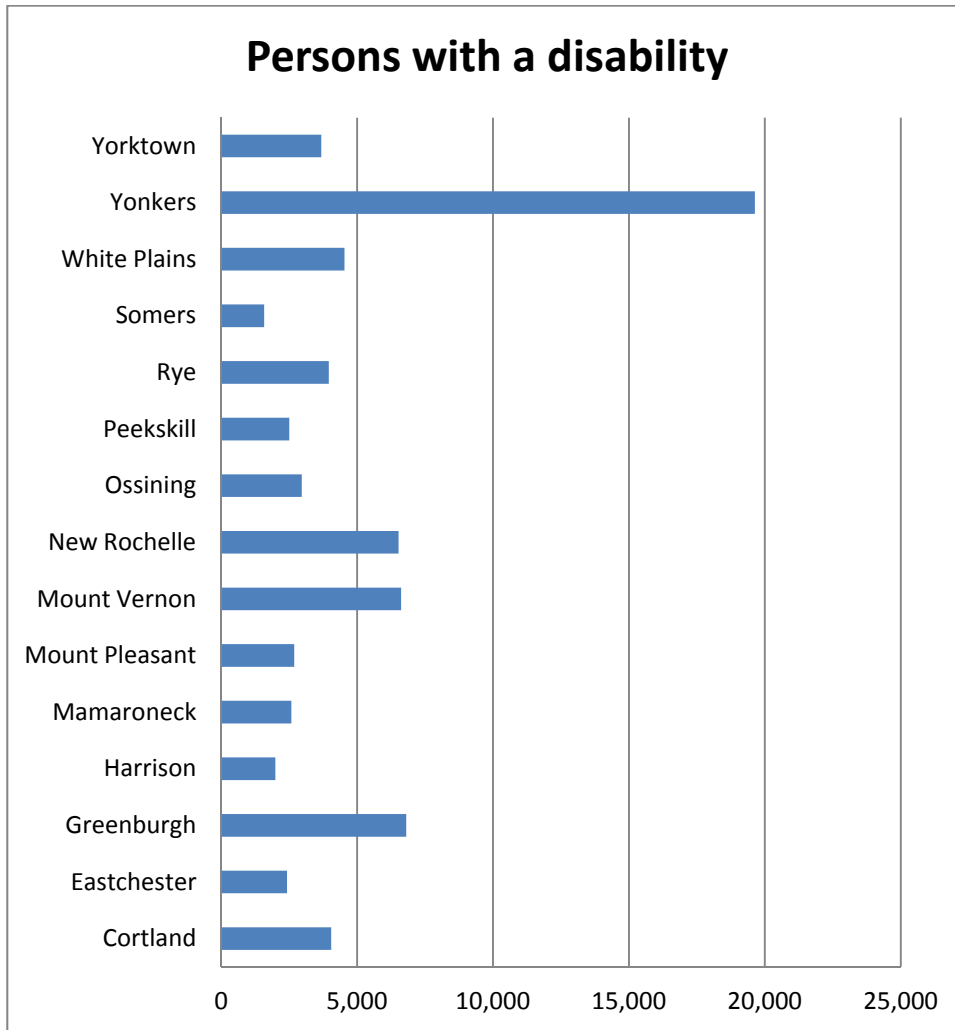
Persons with Disabilities

The American Community Survey provides data for 15 county subdivision in Westchester County. The total number of persons with disabilities within these 15 subdivisions is 72,547. Figure 5-21 shows the county subdivisions with the breakdown of persons with disabilities in Westchester County. The county subdivision of Yonkers has the highest number of people with disabilities, but Mount Vernon has the highest density of people with disabilities.

Figure 5-21 Persons with a Disability by County Subdivision – Westchester County

County Subdivision	Square Miles	Total Population	Persons with Disabilities	Per Square Mile
PERSONS WITH DISABILITIES BY COUNTY SUBDIVISION				
Yonkers	20	195,278	19,636	982
Greenburgh	36	87,241	6,806	189
Mount Vernon	4	66,844	6,618	1654
New Rochelle	13	75,996	6,525	502
White Plains	10	56,253	4,538	454
Cortland	50	40,850	4,046	81
Rye	7	45,667	3,961	566
Yorktown	39	35,722	3,680	94
Ossining	16	35,024	2,965	185
Mount Pleasant	33	41,388	2,687	81
Mamaroneck	14	28,890	2,581	184
Peekskill	6	23,495	2,505	418
Eastchester	5	32,379	2,425	485
Harrison	17	27,436	1,991	117
Somers	32	19,938	1,583	49

Source: ACS 3-Year Estimates 2009-2011

Figure 5-10   Number of Persons with a Disability by Census County Subdivision – Westchester County

Persons with a disability

Persons Below Poverty Level

Approximately 85,075 persons living below poverty level reside in Westchester. Figure 5-23 shows the places with the five highest densities.

Figure 5-23   Persons Below Poverty Level by Place - Westchester

Place	Square Miles	Total Population	Persons Below Poverty Level	Per Square Mile
PERSONS LIVING BELOW POVERTY LEVEL BY **PLACE**				
Mount Vernon	4	67,292	66,448	2,328.0
Yonkers	18	195,976	193,604	1,598.6
New Rochelle	10	77,062	8,638	863.8
Town of Rye	7	45,928	4,869	695.6
Peekskill	4	23,583	3,377	844.3

Source: American Community Survey 5-Year Estimates, 2007-2011

Figure 5-24 shows the number of persons living below the poverty level by Census tract. The population distribution map follows a very similar pattern to the older adult maps. Figure 5-25 maps persons living below the poverty level by density. Yonkers and Mount Vernon show the highest densities.

**Figure 5-24   Number of Persons Below Poverty Level by Census Tract
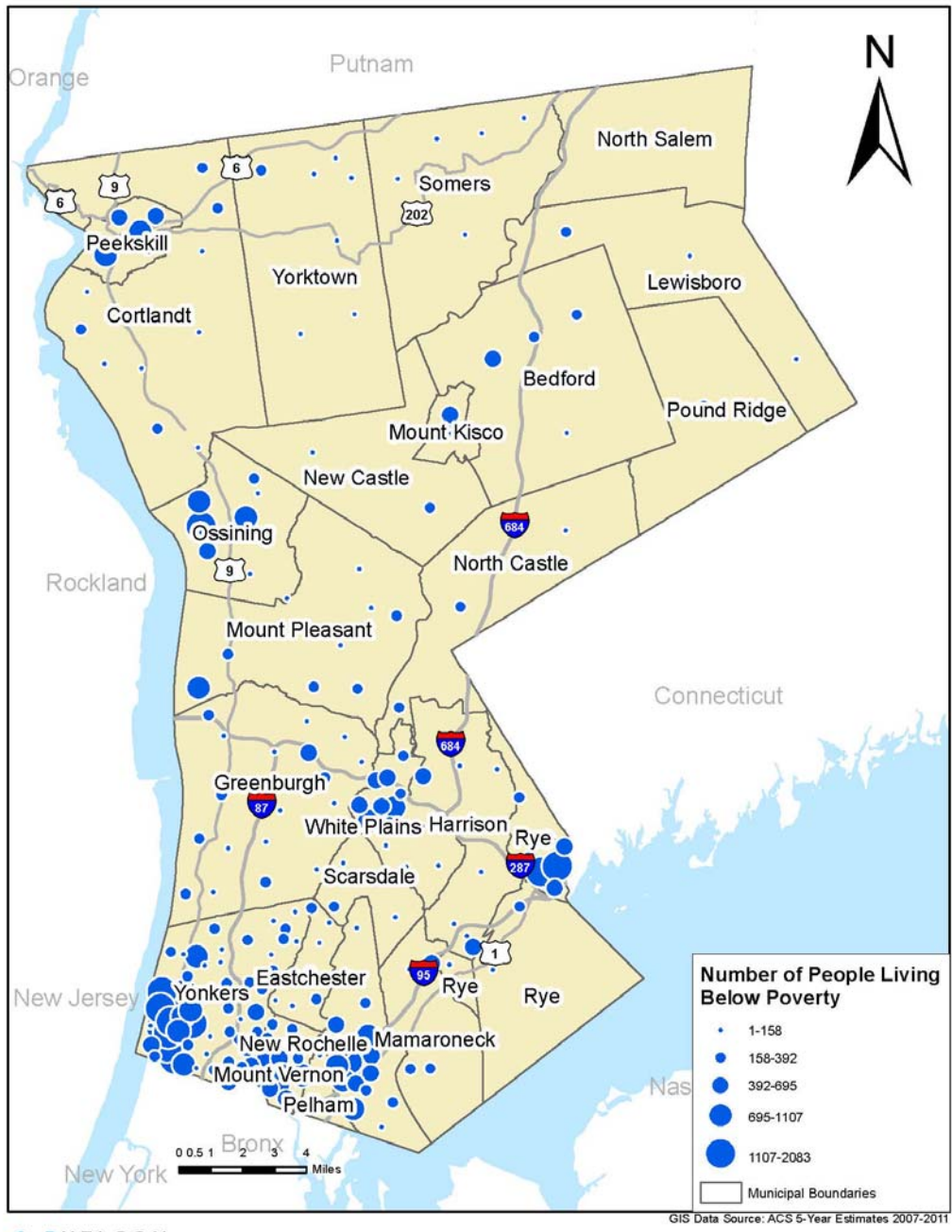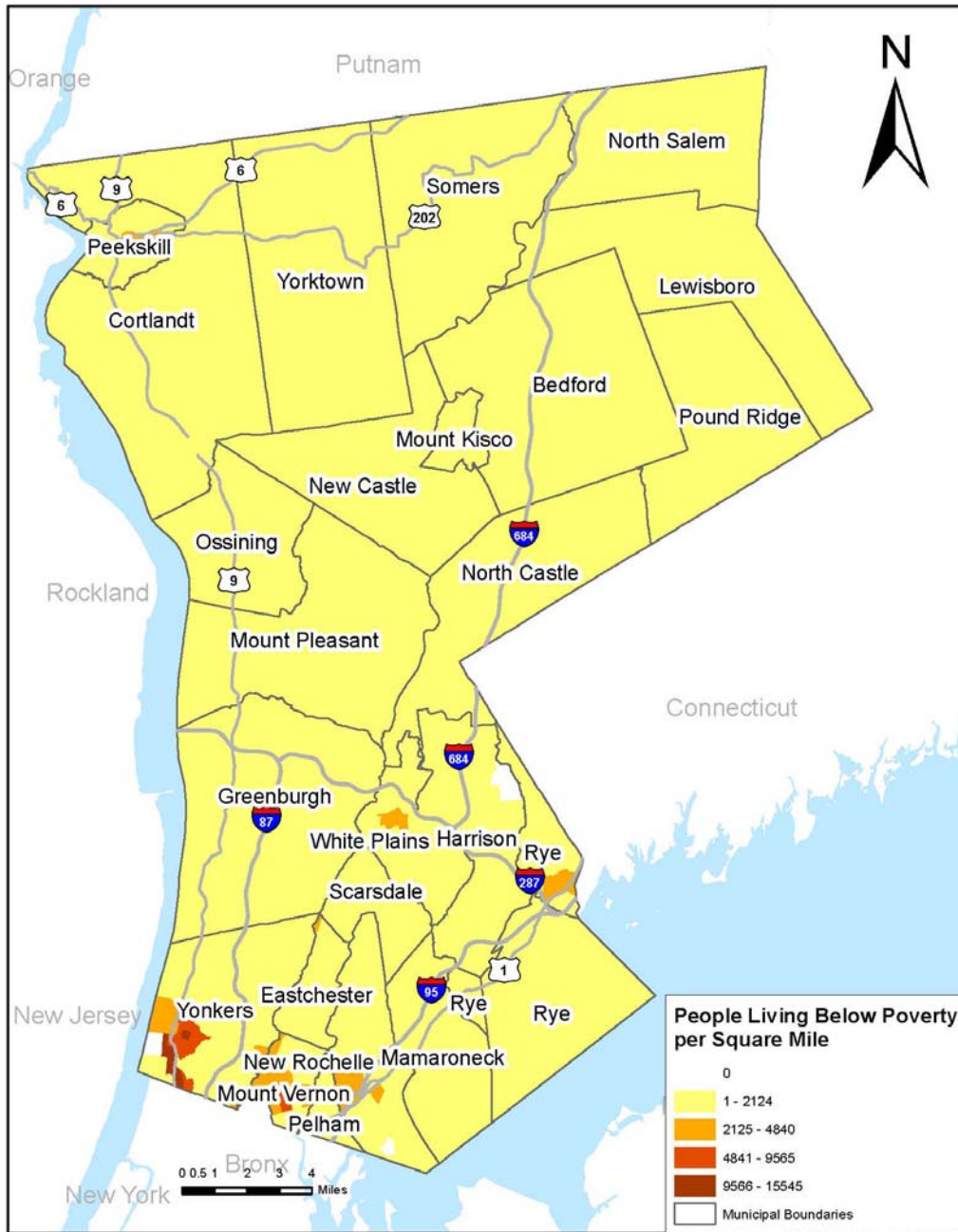- Westchester County**

Figure 5-25   Persons Below Poverty Level per Square Mile by Census Tract - Westchester County

Needs Assessment

In most cases, the Lower Hudson Valley towns and villages that have high concentrations of older adults (65+), and also have high concentrations of people below poverty level. Concentrated groups of the two target populations, older adults and people with low income, have remained relatively consistent since the previous study in 2009; however, there are a few exceptions: Most people below the poverty level and older adults are concentrated in a few towns, including Yonkers and Mount Vernon, and smaller pockets in White Plains, Spring Valley, and Carmel.