

## 2 EXISTING CONDITIONS

### 2.1 DEMOGRAPHIC OVERVIEW

The existing conditions and needs within the Syracuse Metropolitan Transportation Council (SMTC) study area have stayed relatively stable during the course of the past LRTP updates with minor exceptions as noted within the following sections. This chapter summarizes the current demographic conditions of the SMTC study area as it relates to the mission of the SMTC, and to point out the continued trend of certain demographic, economic, and land use conditions. This 2011 Update includes a basic profile of some of the most important demographic trends and changing conditions that affect transportation planning in the SMTC area.

The Syracuse MPA continues to experience the following types of population change, economic transition, and land use shifts that are not uncommon to most Northeast communities:

- A declining metropolitan area population, and a shift in population away from the city core to suburban and rural areas,
- A changing economic base from manufacturing to a more diversified information and service-based economy,
- A continued land-use pattern toward suburban sprawl and decreasing density,
- A concentration of poverty in the City of Syracuse, and
- Increased commuting into Onondaga County and from the City to the suburbs.

During the past decade, Onondaga County, the City of Syracuse, and several towns and villages within the MPA have developed plans that identify growth management strategies designed to address these trends. For instance, the Onondaga County Settlement Plan (2001) and the Onondaga County 2010 Development Guide (1998) support, among other things:

- redirecting growth towards urban centers,
- capitalizing on infill opportunities,
- Smart Growth and New Urbanism Planning Principles, and
- managing growth through the provision of sustainable, cost-effective infrastructure.

Onondaga County is in the process of creating a new County plan (Onondaga County Sustainable Development Plan) with a focus on settlement patterns that will foster sustainability. This new effort will replace the 1998 Development Guide, but will include many of the same principals. The County Plan will be closely linked with the County's Climate Change Action Plan (currently being developed) and the LRTP.

The City of Syracuse also undertook extensive planning efforts during the development of its Comprehensive Plan 2025 (2005). The City's plan complements many of the recommendations and policies established within the Settlement Plan and the 2010 Development Guide, most notably by

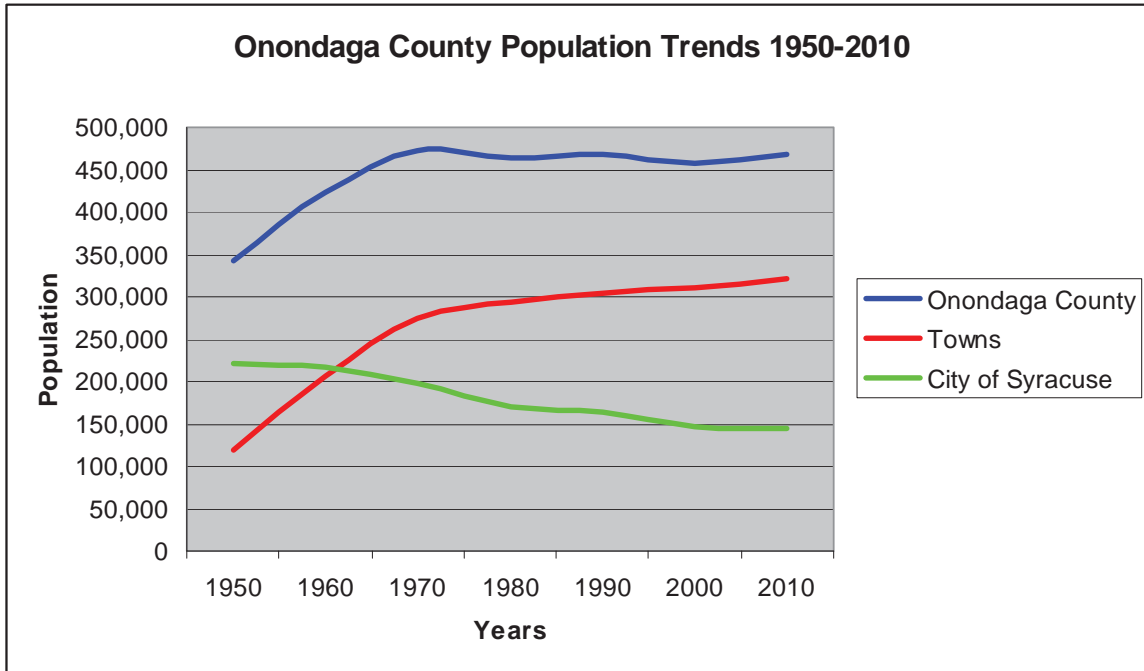
recapturing growth and development opportunities. Through the implementation of effective enhancement strategies, the City is striving to maximize the use of its existing infrastructure that once supported a population of more than 220,000.

Analyzing demographic trends and how they relate to transportation planning in the MPA enables the SMTTC to develop effective transportation recommendations that support and complement local and regional planning goals, including LRTP goals. Please note that limited 2010 Census data are readily available at this time, therefore some sections below reference data from the 2000 Census.

### 2.1.1 CURRENT POPULATION DISTRIBUTION

Population shifts within Onondaga County continue to occur, mostly as a shift in population from the City of Syracuse to suburban towns. Table 2-1 charts the historic population changes in Onondaga County since Syracuse’s peak population of 220,583 in 1950. At that time, the City of Syracuse made up 65% of the total County population. In 2010, it made up only 31% of the total County population. The table illustrates a growing suburban population, at the expense of a declining City population.

Table 2-1



According to the 2010 Census, fewer people have left the City of Syracuse over the last ten years (see Table 2-2). In addition, Onondaga County on the whole over the last ten years has seen a slight increase (1.9%) in population.

Between 2000 and 2010 the City of Syracuse lost 0.9% of its population, while many surrounding towns within Onondaga County have shown increases. The following towns grew by more than 10% since 2000: Lysander (12.8%), Cicero (13.0%), and Pompey (15.0%). The Town of Onondaga showed an increase of nearly ten percent (9.7%), in its population over the last ten years, and the Town of Hastings grew by 7.3%. The towns of Camillus, Van Buren and DeWitt saw increases of around 4% in their populations.

The following towns lost population between 2000 and 2010: West Monroe (-4.0%), Geddes (-3.5%), Elbridge (-2.8%), Skaneateles (-1.6%), Marcellus (-1.7%), Clay (-1.0%), Otisco and Schroepfel (-0.8%), and Fabius (-0.5%).

**Table 2-2**  
**Total Population Change for SMTC MPA**  
**Local Government Areas, 2000 to 2010**

Geographic Area	Total Population		Population Change	
	April 1, 2000	April 1, 2010	Number	Percent
<b>Onondaga County</b>	458,336	467,026	8,690	1.9
Camillus town	23,152	24,167	1,015	4.4
Cicero town	27,982	31,632	3,650	13.0
Clay town	58,805	58,206	-599	-1.0
De Witt town	24,071	24,967	896	3.7
Elbridge town	6,091	5,922	-169	-2.8
Fabius town	1,974	1,964	-10	-0.5
Geddes town	17,740	17,118	-622	-3.5
LaFayette town	4,833	4,952	119	2.5
Lysander town	19,285	21,759	2,474	12.8
Manlius town	31,872	32,370	498	1.6
Marcellus town	6,319	6,210	-109	-1.7
Onondaga town	21,063	23,101	2,038	9.7
Onondaga Nation Reservation	1,473	468	-1,005	-68.2
Otisco town	2,561	2,541	-20	-0.8
Pompey town	6,159	7,080	921	15.0
Salina town	33,290	33,710	420	1.3
Skaneateles town	7,323	7,209	-114	-1.6
Spafford town	1,661	1,686	25	1.5
Syracuse city	147,306	146,041	-1,265	-0.9
Tully town	2,709	2,738	29	1.1
Van Buren town	12,667	13,185	518	4.1
Hastings town, Oswego Cty	8,803	9,450	647	7.3
Schroepel town, Oswego Cty	8,566	8,501	-65	-0.8
Sullivan town, Madison Cty	14,991	15,339	348	2.3
West Monroe town, Oswego Cty	4,428	4,252	-176	-4.0

Source: U.S. Census Bureau. 2010 Census Redistricting Data (PL 94-171). Released March 24, 2011.  
 Compiled by Empire State Development.  
 Restructured by SMTC, 4/2011.

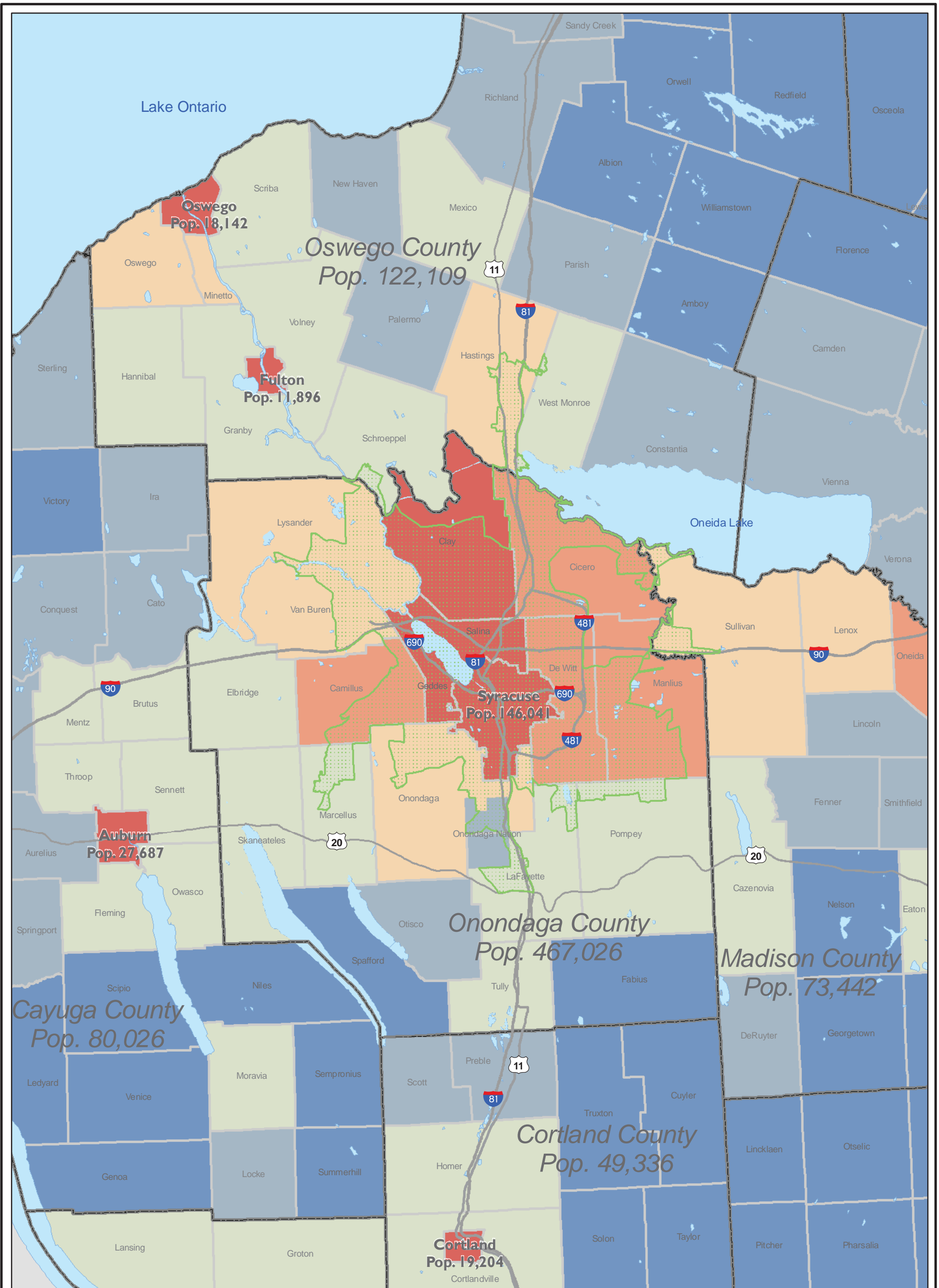
Map 2-1 shows Central New York's regional population distribution using population density (people per square mile of land area) data from Census 2010. Onondaga County is the most populous county in Central New York, with the City of Syracuse as its traditional city core, surrounded by suburban and rural towns, villages and hamlets. As represented by SMTTC's Urban Area boundary, the most populated areas of Onondaga County continue to be in the City of Syracuse and nearby towns to the north and east.

According to the 2010 Census, the population density in Onondaga County is 600 per square mile, which includes a peak density of 5,796.7 persons per square mile in the City of Syracuse and a low density of 42.2 persons per square mile in the rural Town of Fabius.<sup>1</sup> In comparison, the population density of New York State is 411.2 persons per square mile, and the United States population density is much lower at 87.4 persons per square mile.<sup>2</sup>

---

<sup>1</sup> *Table 1: Total Population, Housing Units, Land Area, and Population Density, New York State Local Areas, 2010 Census: Public Law 94-171 Data* (<http://www.esd.ny.gov/NYSDataCenter/Census2010.html> Census 2010).

<sup>2</sup> *US Census 2010* – <http://2010.census.gov/2010census/data/index.php>



100 Clinton Square  
126 North Salina St, Suite 100  
Syracuse, NY 13202  
(315) 422-5716  
Fax: (315) 422-7753  
www.smtcmpo.org

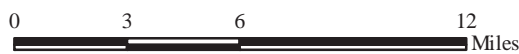


Basemap Copyrighted by NYSDOT  
Data Sources: SMTC, NYSDOT, 2010  
U.S. Census Bureau 2010  
Prepared by SMTC, 04/2011

## Regional Population Density

### Long-Range Transportation Plan 2011 Update

Map 2-1



This map is for presentation purposes only.  
The SMTC does not guarantee the accuracy or completeness of this map.

**Legend**

- Urban Area (2000 Census)
- County
- City/Town
- Persons per Square Mile**
- 0 - 49
- 50 - 99
- 100 - 199
- 200 - 499
- 500 - 1000
- 1000 +

**2.1.2 AGE DISTRIBUTION**

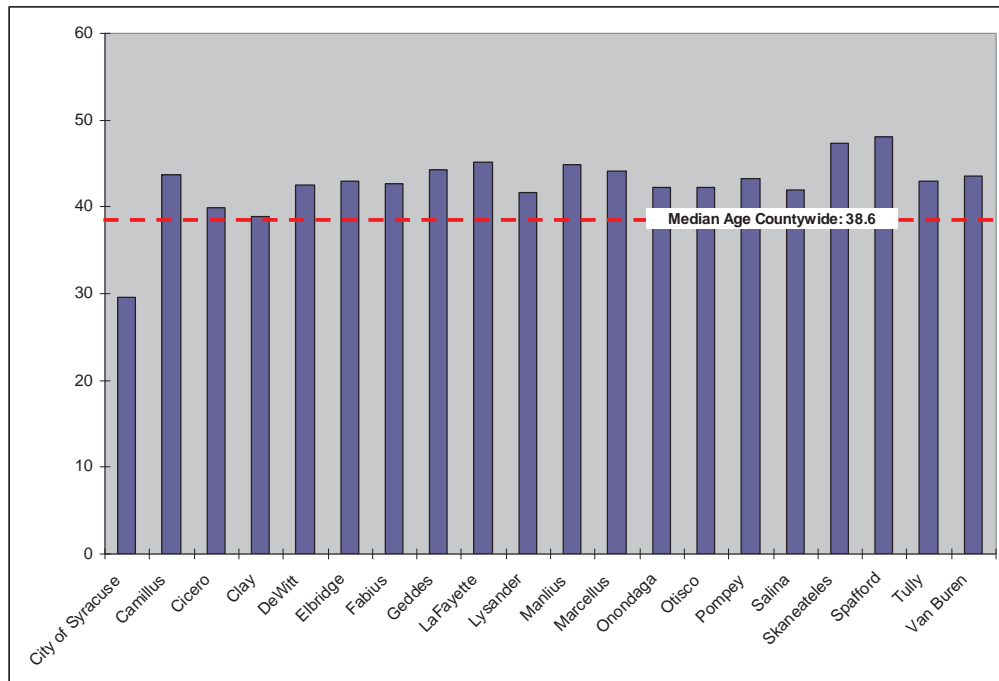
*Median Age*

Nationally, the trend is toward an aging population, largely driven by the aging of the Baby Boom generation. The median age in the United States was 30 in 1980 and has been rising steadily since then; in 2009 it was 36.8. In Onondaga County, the median age was 38.6 in 2010, up from 36.3 in 2000. The median age increased in all of the towns in the county between 2000 and 2010 (note that at the time of this writing, data are not yet available for the Onondaga Indian Reservation).

Data for the City of Syracuse runs counter to these trends. The presence of Syracuse University, with an enrollment of approximately 20,000 undergraduate and graduate students, has a substantial impact on the city’s age distribution. As Table 2-3 shows, the city’s median age, 29.6, was substantially lower than that of any of the towns in the county. The city’s median age fell slightly in 2010, from 30.5 in the year 2000. Half of the city’s residents were under 30 in 2010; in the county’s 19 towns, 36 percent of the population was under 30.

**Table 2-3**

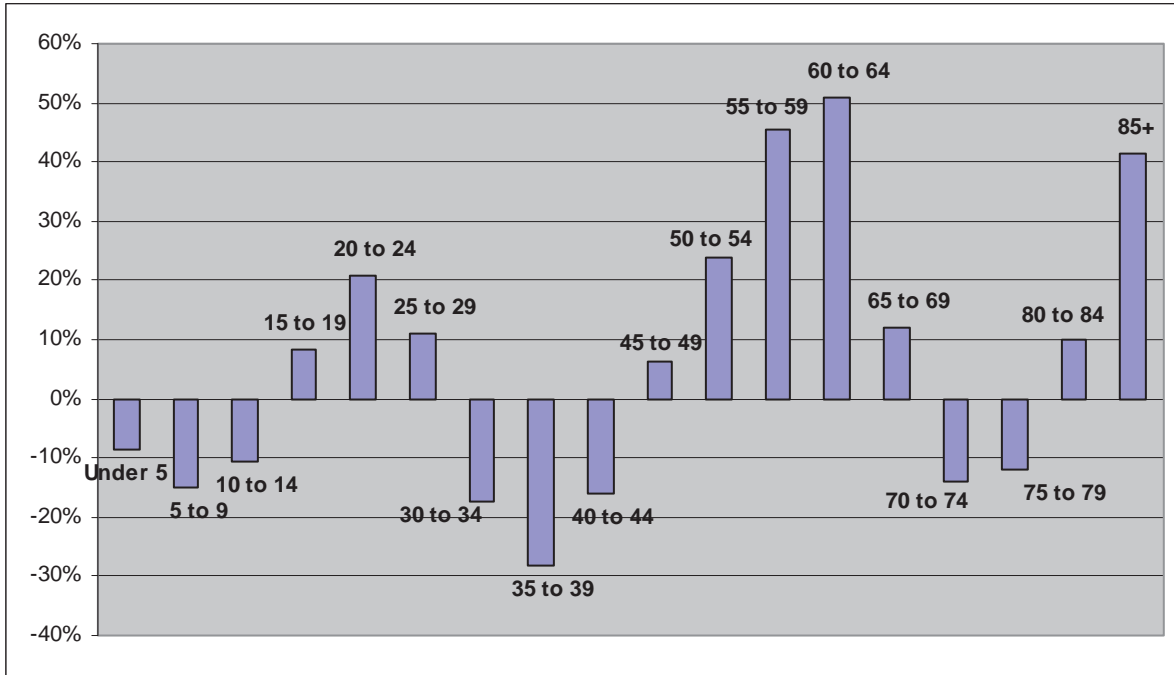
**Median Age in Onondaga County, City of Syracuse and Towns, 2010**



Source: US Census, 2010 Demographic Profile Data

Table 2-4

Percent Change in Age Groups, Onondaga County, 2000 to 2010



Source: 2000 Census (SF1) and 2010 Census Demographic Profile Data

### Population Change by Age Group, 2000 to 2010

#### *Children and Young Teens*

Countywide, the population age 14 and under fell between 2000 and 2010. This trend held in all towns in the county and in the city of Syracuse: in both the city and the county as a whole the decline was 11 percent. In a few towns, such as Pompey, Lysander and Cicero, the decline was smaller (five percent or less); no town saw an increase in this age group. This decline was also seen at the state level: the number of children under 15 fell by ten percent statewide in this period. Nationally, the size of this age group increased three percent between 2000 and 2010 (note that at the time of this writing the most recent data available at the national level is from the 2009 US Statistical Abstract; national level data is referred to as being from 2010 for ease of comparison).



*Teens and Young Adults (15 to 29)*

Sometimes called “Echo Boomers”, because they are the children of Baby Boomers, the 15 to 29 year old age group grew substantially between 2000 and 2010, both locally and nationally. This age group is not as large as the Baby Boom generation (roughly the population ages 45 to 64). In Onondaga County, Echo Boomers make up 22 percent of the population, while Baby Boomers make up 27.5 percent of the population. Nevertheless, this generation’s relatively large size means that it is likely to affect the provision of public transportation services, such as public school buses, parking and – as more members of this generation enter the workforce and become commuters – highway capacity.

Onondaga County gained population in this 15 to 29 year old age group between 2000 and 2010. This segment of the population grew by 13 percent countywide, eleven percent in the City of Syracuse and by much higher proportions in towns such as Onondaga, DeWitt and Pompey (54 percent, 47 percent and 30 percent, respectively). All towns gained population in this age group, other than the Towns of Tully and Spafford, where it shrank by one percent and 12 percent, respectively. The 15 to 29 year old age group grew by eight percent statewide and eleven percent nationally.

*Ages Thirty to Forty-Four*

Table 2-4 shows substantial losses in Onondaga County in the population age 30 to 44. Countywide, this age group shrank by 21 percent; the City of Syracuse and all towns in the county also saw a double-digit drop in this group. Statewide and nationally there were substantial declines in this age group between 2000 and 2010 (14 percent and six percent, respectively). This drop is primarily the result of the unusually large size of the Baby Boom generation: Generation X (made up of children born between the mid-1960s and late 1970s) is substantially smaller than the Baby Boom generation.

*Ages 45 to 64*

In 2011, the oldest members of the Baby Boom generation (born between 1944 and 1964) turned 65, a significant milestone because of this generation’s size: it makes up more than a quarter of the nation’s population. As a result, the number of people in the 45 to 64 year old age group represents the greatest growth between 2000 and 2010, both locally and nationally.

In Onondaga County, this age group grew by 27 percent; in New York State it grew by 22 percent and nationally it grew by 28 percent. In the City of Syracuse, this age group grew by 23 percent. All towns saw double-digit increases in this age group, with Otisco, Cicero, Lysander, Pompey and Onondaga registering growth above 40 percent.

*Ages 70 to 79*

Statewide, the population age 70 to 79 fell by six percent, possibly driven by out-migration to Sunbelt states such as Arizona, Florida and Nevada. In Onondaga County, this population group declined by 13 percent and in the City of Syracuse it shrank by 34 percent. Several towns had large

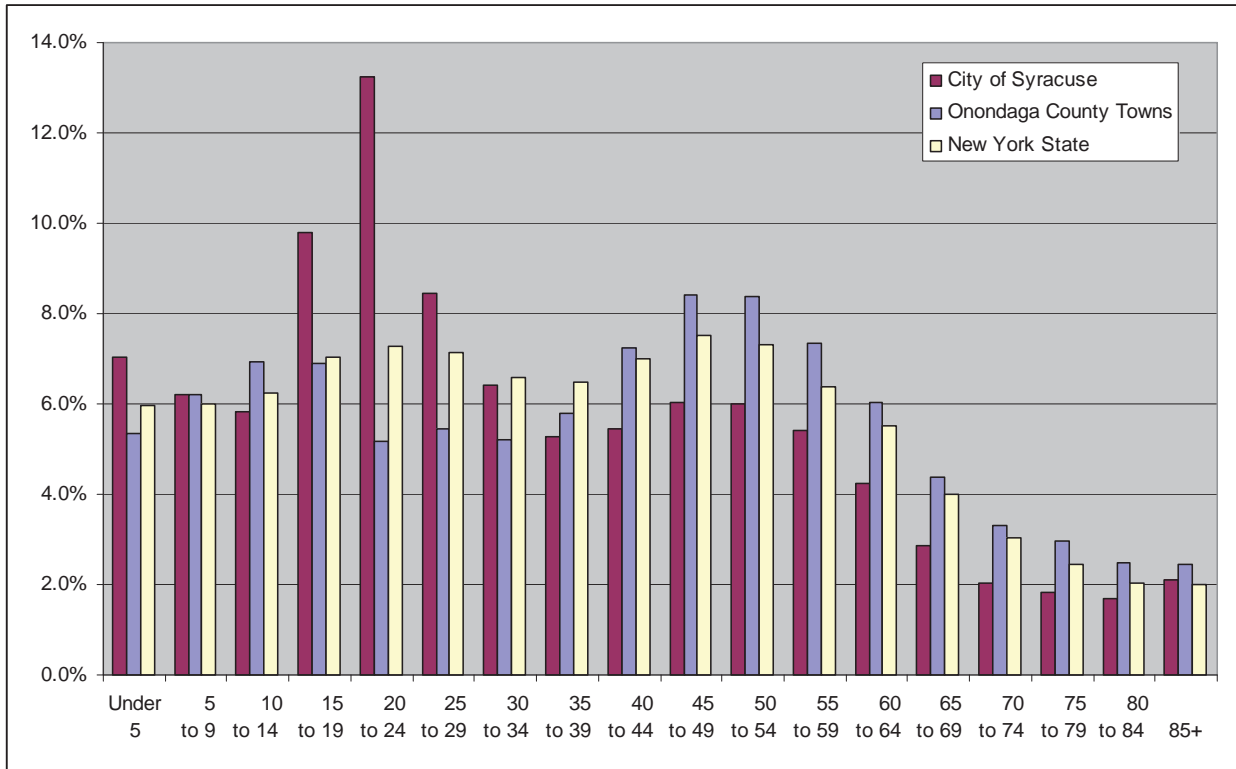
increases in this population group, however, including Pompey, Fabius, Tully and Lysander (53 percent, 30 percent, 30 percent and 25 percent, respectively).

*Ages 80 and Above*

Significantly, the population age 80 and above increased substantially countywide from 2000 to 2010 and by very high rates in some towns (as high as 91 percent in the Town of Lysander, although it should be noted that these proportional increases represent fewer than 500 people in most cases). At the same time, the population in this age group fell by 12 percent in the City of Syracuse.

This suggests that the challenge of providing public transportation to senior citizens will continue to pose a problem to transportation planners. Seniors generally have a greater reliance on public transportation and are more likely to have limited mobility than other parts of the population. With more seniors in low density suburban towns, rather than urban areas more conducive to efficient public transit, creative approaches to serving this population may be needed in the future. See Table 2-5 for a comparison of population by age group in the towns of Onondaga County, the City of Syracuse and New York State as a whole.

**Table 2-5  
Proportion of Population by Age Group in Onondaga County Towns, City of Syracuse and New York State, 2010**



*Transportation Needs for Senior Citizens*

At the suggestion of the FHWA in furthering environmental justice initiatives, and recognizing a growing elderly population (as discussed above), the LRTP 2004 Update represents the first time that the SMTC has devoted specific attention to senior citizen transportation needs. In preparing the LRTP 2004 Update, discussions were held with the Onondaga County Department of Aging and Youth.

According to the most recent information available, there are at least 140 facilities (not including traveling services for seniors such as meal delivery) that meet a variety of human needs at specific locations within Onondaga County<sup>3</sup>. The Office for the Aging indicates that they are aware of various difficulties in trying to meet the transportation needs of senior citizens. A major issue for many of their clients is the lack of access to desired destinations using Centro's public transit buses or Centro's Call-A-Bus, the latter providing more individual curb-to-curb service. The Office for the Aging indicated that some of these accessibility issues are due to individual decisions by seniors regarding their place of residence. While some people may express frustration with the fact that public transit buses do not meet their needs, there is not always a recognition that living in a relatively isolated location that is removed from the public transit network is a self-created hardship.

Even for those living near the Centro transit bus network, accessibility can be a problem as a result of a lack of mobility due to physical limitations. In that environment, the client needs to rely on non-Centro based community transportation services, family and/or acquaintances; these alternatives may not always offer the exact type of support desired. According to recent Office for the Aging information, at least 25 transportation services providing access to general or specific destinations are available<sup>4</sup>. The list does not include church or other local services that may be available.

In addition to the transportation needs of seniors traveling from senior facilities to various destinations, it is possible that a need exists by those employed at the senior facilities for traveling to the workplace, particularly in view of the fact that many of these jobs are in the lower wage scale. A few examples of senior facilities that are currently serviced by Centro include Brighton Towers, Bernadine Apartments, Iroquois Nursing Home, Loretto Geriatric Center, Onondaga Senior Apartments, Conifer Village, St. Mary's Apartments, Limestone Gardens, Redfield Village, Bennett Manor, James Square Apartments, Colonial Village, St. Camillus Health & Rehab, Bishop Ludden Apartments, Toomey Abbott Tower, Menorah Park, Van Duyn Hospital, and Villa Scalabrini. Some employees may not have access to an automobile and need to rely on public transit to reach the work site, or utilize a carpool arrangement if feasible. A key opportunity for future study is the coordinated communication between representatives of non-drivers (Office of the Aging, Department of Social Services, etc.) for the future transportation needs of the elderly population.

The nation is undergoing demographic changes, resulting in a larger aging population (including the aging baby boomer generation). This change is substantial in Onondaga County because of the dual factors of the aging population as well as a declining total population. Over a single generation, the

---

<sup>3</sup> *Onondaga County Department of Aging & Youth, Resources for Seniors and Long Term Care Services in Onondaga County, 2007, pp 29-47.*

<sup>4</sup> *Onondaga County Department of Aging & Youth, Resources for Seniors in Onondaga County, 2007, p. 50.*

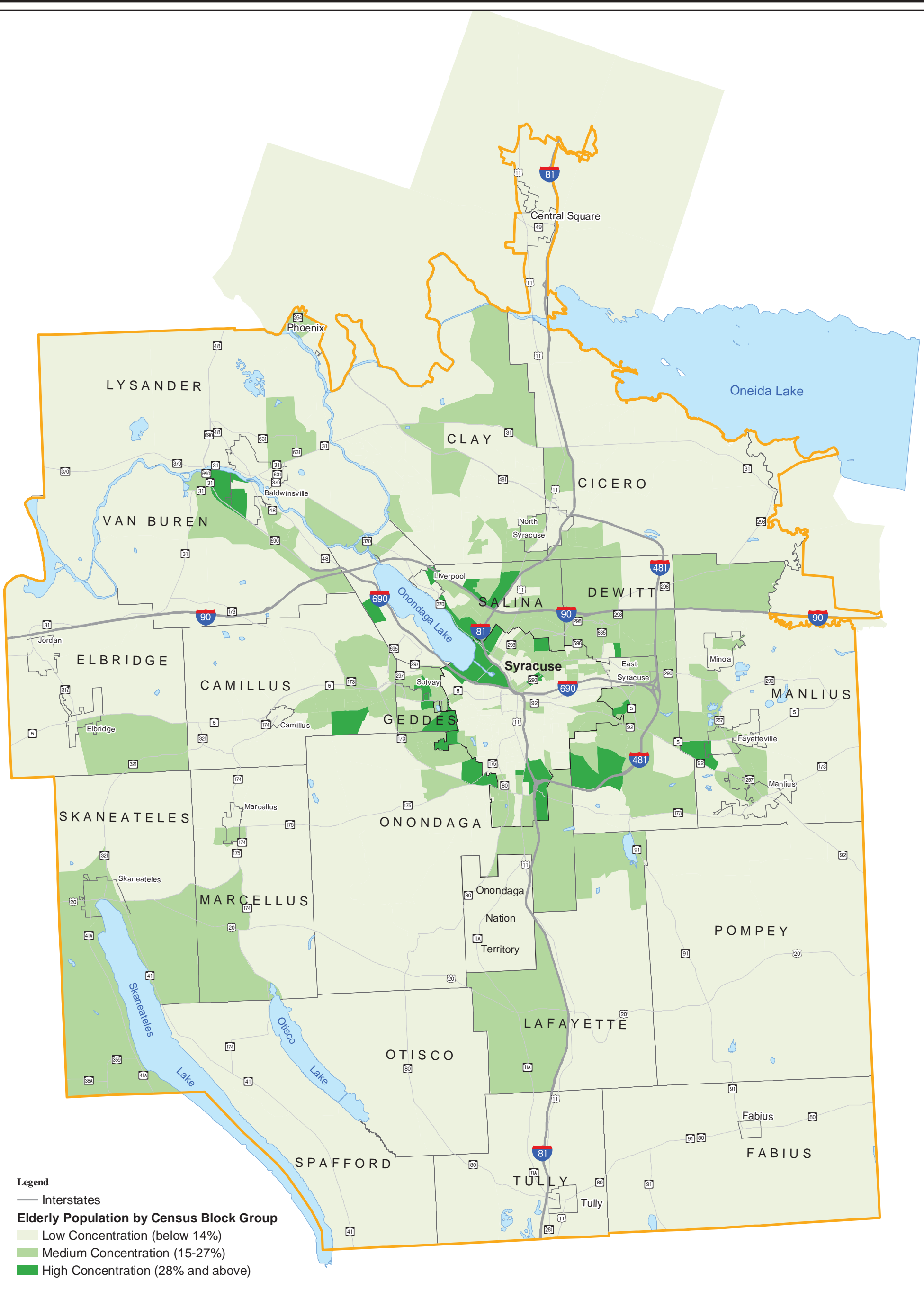
number of those 65 and older in Onondaga County has more than doubled. In 1970, the total Onondaga County population was 472,835, of which 26,632 were 65 and over, or 5.6% of the population. By 2000, the Onondaga County population had declined to 458,336 and the number of those 65 and over had grown to 63,294, or 13.8% of the population.<sup>5</sup> Please see Map 2-2 for concentrations of elderly populations (65+) in the MPA.<sup>6</sup> These data suggest that Onondaga County is facing conflicting changing conditions. While the portion of County resources available for non-mandated programs (Federal and State) is declining, due primarily to mandated Medicaid programs, the number of people who are becoming eligible for Medicaid assistance and the resulting cost is growing. Consequently, resources available for meeting other needs, such as non-Medicaid support for senior citizens, are shrinking.

Transportation needs for senior citizens vary as age increases. For example, seniors in the 65-85 age group have different mobility requirements than seniors that are over age 85. Potential transportation needs for senior citizens that may increase in future years include walkable neighborhoods with a variety of goods and services nearby, transit and paratransit options, and visual improvements to the transportation system such as larger signs, wider pavement markings, and more handicapped parking. The current land use pattern and transportation system options may not address the needs of the growing population of senior citizens.

---

<sup>5</sup> U.S. Bureau of the Census, 1970 and 2000.

<sup>6</sup> Syracuse Metropolitan Transportation Council, *Coordinated Public Transit – Human Services Transportation Plan*, December 2008, p. 6: *The elderly community, for the purposes of the Coordinated Plan, consists of individuals at or over the age of 65. However, it should be noted that federal policies allow individual organizations some flexibility in defining this value. As a whole, the elderly community constitutes nearly 14% of the total population within the SMTC MPO. This sets the low concentration threshold at block groups with less than 14% of elderly individuals. Block groups with over 28% of elderly individuals are considered high concentration areas. Medium concentration areas occur when between 15% and 27% of the population is considered elderly.*



100 Clinton Square  
 126 North Salina St, Suite 100  
 Syracuse, NY 13202  
 (315) 422-5716  
 Fax: (315) 422-7753  
 www.smtcmpo.org



Basemap Copyrighted by NYSDOT  
 Data Sources: SMTC, NYSDOT, 2010  
 U.S. Census Bureau 2000  
 Prepared by SMTC, 04/2011

## Concentrations of Elderly Population (65+)

Long-Range Transportation Plan Update 2011

Map 2-2



This map is for presentation purposes only.  
 The SMTC does not guarantee the accuracy or completeness of this map.

**Legend**

- SMTC MPA
- Interstates
- Federal/State Routes

### 2.1.3 FAMILIES AND HOUSEHOLDS

Table 2-6 provides a summary of Census 2010 family and household characteristics for Onondaga County Households, including comparable 2000 and 1990 information.

**Table 2-6**

<b>Household and Family Characteristics Onondaga County 1990, 2000 and 2010</b>					
	<b>1990</b>	<b>2000</b>	<b>2010</b>	<b>Change 1990-2000</b>	<b>Change 2000-2010</b>
Number of Households	177,898	181,153	187,686	1.83%	3.61%
Family Households	118,575	115,320	115,283	-2.75%	-0.03%
Non-Family Households	59,323	65,833	72,403	10.97%	10.0%
Householder Living Alone	47,047	53,225	57,606	13.13%	8.23%
Average Household Size	2.55	2.46	2.40	-3.53%	-2.44%
Average Family Size	3.12	3.07	3.02	-1.60%	-1.63%

*Source: U.S. Census Bureau, 2010 Table DP-1, 2000 SF1 Table P18, 1990 STF1 Table P015*

As with the changes between 1990 and 2000, 2010 Census data show a continuing national trend represented in Onondaga County with smaller families, fewer married families, and more individuals living alone. The data shows a negligible decrease in the number of Family Households, and a 10% increase in Non-Family Households between 2000 and 2010. Of those Non-Family Households, nearly 80% were one-person households (just as they were between 1990 and 2000). The implications of these trends on transportation planning in the SMTC area may prove significant in terms of personal mobility and housing choice, and resulting in changes in vehicles per household, vehicle usage, carpooling, and land use development patterns.

#### 2.1.4 INCOME AND POVERTY

*Please note that as of the writing of this document the U.S. Census Bureau has not yet released 2010 data on income and poverty. However, data from 2009 (American Community Survey data) are discussed as included as appropriate.*

As part of the 2007 LRTP Update, the SMTC examined income and poverty for individuals living within the MPA. The Census Bureau uses the federal government's official definition for poverty. "Following the Office of Management and Budget's (OMB) Statistical Policy Directive 14, the Census Bureau uses a set of money income thresholds that vary by family size and composition to determine who is in poverty. If a family's total income is less than the family's threshold, then that family and every individual in it is considered in poverty. The official poverty thresholds do not vary geographically, but they are updated for inflation using Consumer Price Index (CPI). The official poverty definition uses money income before taxes and does not include capital gains or noncash benefits (such as public housing, Medicaid, and food stamps)."<sup>7</sup>

In 2000, Onondaga County residents had a per capita income of \$21,336 and a poverty rate of 12.2%; both rates coincide closely with national averages. However individuals living below poverty are concentrated in the City of Syracuse, where residents have a per capita income of just over \$15,000 and a poverty rate (27.3%) at least three times that of surrounding Onondaga County towns, as shown in Table 2-7. In 2009<sup>8</sup>, Onondaga County residents had a per capita income of \$27,038 and a poverty rate of 13.7%. City of Syracuse residents have a per capita income of \$17,652 in 2009, and although current poverty rate data are not available at this time for Syracuse, the per capita incomes reported in 2009 inflation-adjusted dollars (U.S. Census Bureau, 2005-2009 American Community Survey Estimates) tend to indicate that this trend continues.

<sup>7</sup> *US Census Bureau – Poverty. How the Census Bureau Measures Poverty (Official Measure). Source: U. S. Census Bureau, Housing and Household Economic Statistics Division. Last Revised: December 14, 2005. [http://www.census.gov/hhes/www/poverty/povdef.html].*

<sup>8</sup> *U.S. Census Bureau, 2005-2009 American Community Survey Estimates*

**Table 2-7**

	2000 Per Capita Income*	2000 % of Individuals Below Poverty Level	1990 % of Individuals Below Poverty Level	1980 % of Individuals Below Poverty Level	2009 Per Capita Income Estimates**
Camillus	\$22,591	4.3%	3.1%	3.3%	\$29,863
Cicero	\$21,527	5.1%	3.7%	4.3%	\$29,170
Clay	\$22,011	5.7%	4.0%	4.3%	\$28,849
DeWitt	\$29,198	7.2%	5.8%	5.8%	\$36,311
Elbridge	\$18,682	6.9%	5.8%	9.0%	\$24,518
Fabius	\$21,206	5.7%	4.5%	NIA	\$27,614
Geddes	\$20,986	8.2%	5.9%	4.9%	\$27,203
LaFayette	\$24,591	5.1%	3.5%	3.0%	\$29,201
Lysander	\$26,187	3.8%	4.5%	4.1%	\$36,828
Manlius	\$31,825	3.3%	2.7%	4.1%	\$37,790
Marcellus	\$25,628	3.2%	4.8%	5.6%	\$29,060
Onondaga	\$25,522	4.2%	2.7%	4.9%	\$31,865
Onondaga Nation	\$15,425	7.6%	2.9%	NIA	NIA
Otisco	\$19,726	5.7%	7.8%	NIA	\$25,718
Pompey	\$27,970	3.9%	2.9%	5.1%	\$38,985
Salina	\$21,839	7.4%	3.6%	4.3%	\$25,908
Skaneateles	\$28,624	3.2%	3.6%	4.2%	\$44,524
Spafford	\$24,014	5.2%	5.1%	NIA	\$35,136
Syracuse (City)	\$15,168	27.3%	22.7%	18.4%	\$17,652
Tully	\$25,223	6.7%	5.1%	NIA	\$32,401
Van Buren	\$20,997	6.6%	4.4%	6.4%	\$25,313
Onondaga County	\$21,336	12.2%	10.3%	9.6%	\$27,038
United States	\$21,857	12.4%	13.1%	13.0%	\$27,041

Source: U.S. Census Bureau 2000, Summary File 3, Table DP-3; U.S. Census Bureau 1990, Summary File 3, Table DP-4; U.S. Census Bureau 1980, Census of Population – General Social and Economic Characteristics. \*Per Capita Income is not included for 1990 and 1980 due to the fact that the dollar amounts would have to be adjusted for inflation to be comparable to Census 2000 Per Capita Income dollars. NIA= No Information Available., \*\*in2009 inflation-adjusted dollars - Source: U.S. Census Bureau, 2005-2009 American Community Survey Estimates. Note: 2010 data on percent of families and individuals below the poverty level was not available at the time of this writing.

This trend appears to have continued over time, with the City of Syracuse holding a greater percentage of the population living below the poverty level. In general, the majority of towns in Onondaga County have seen either an increase in those living below poverty level or fluctuation of increases/decreases in those living below the poverty level since 1980. The Towns of Marcellus,



Otisco, and Skaneateles have seen decreases in the percentage of residents living below the poverty level over all three decennial censuses.

The outward population shift from Syracuse of those with greater financial resources has resulted in a disproportionate concentration of people facing a variety of challenges. From a transportation planning perspective, this group is an important concentration of potential clients for transit utilization (i.e., for those not having access to an automobile due to income, age and other related issues). A larger reliance on public transportation and greater use of alternate forms of transportation such as walking or bicycling are prevalent in the City, likely due to the concentration of poverty, significant elderly populations, and the dense pattern of land use in the City of Syracuse.

### 2.1.5 ENVIRONMENTAL JUSTICE POPULATIONS

In recent years, the concept of environmental justice has become a very important aspect of transportation planning. The USDOT, which governs the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA), has mandated that environmental justice be included in all aspects of transportation planning. The value of such an analysis is important to transportation planning operations in that agencies and related contractors who receive federal funding are required to comply with various relevant regulations set forth by the USDOT. This concept focuses on the equal and fair treatment of all persons, particularly racial or ethnic minorities and low-income populations. In addition, it is unlawful to disproportionately distribute the benefits or disadvantages of transportation planning amongst disparate areas of minority/income group concentration.

There are three fundamental principles at the core of environmental justice planning:

- To avoid, minimize, or mitigate disproportionately high and adverse human health and environmental effects, including social and economic effects, on minority populations and low-income populations.
- To ensure the full and fair participation by all potentially affected communities in the transportation decision-making process.
- To prevent the denial of, reduction in, or significant delay in the receipt of benefits by minority and low-income populations.<sup>9</sup>

After taking into consideration the federal definition of environmental justice, the SMTC determined that for this region, there might be other variables that should be considered in the analysis portion of the report. The USDOT's planning regulations require MPOs to "seek out and consider the needs of those traditionally underserved by existing transportation systems, including, but not limited to, low-income and minority households." Additionally, the USDOT notes that the elderly and the disabled are groups that could experience adverse impacts.<sup>10</sup> Therefore, the SMTC

<sup>9</sup> *Transportation & Environmental Justice Case Studies*. U.S. Department of Transportation Federal Highway Administration, Federal Transit Administration. December 2000. pp ii.

<sup>10</sup> <http://www.fhwa.dot.gov/environment/ejustice/facts/index.htm>

explanation was broadened to also include senior citizens and disabled populations. Since these groups may have transportation related needs, data was gathered and maps produced as part of the SMTC's environmental justice reporting process.

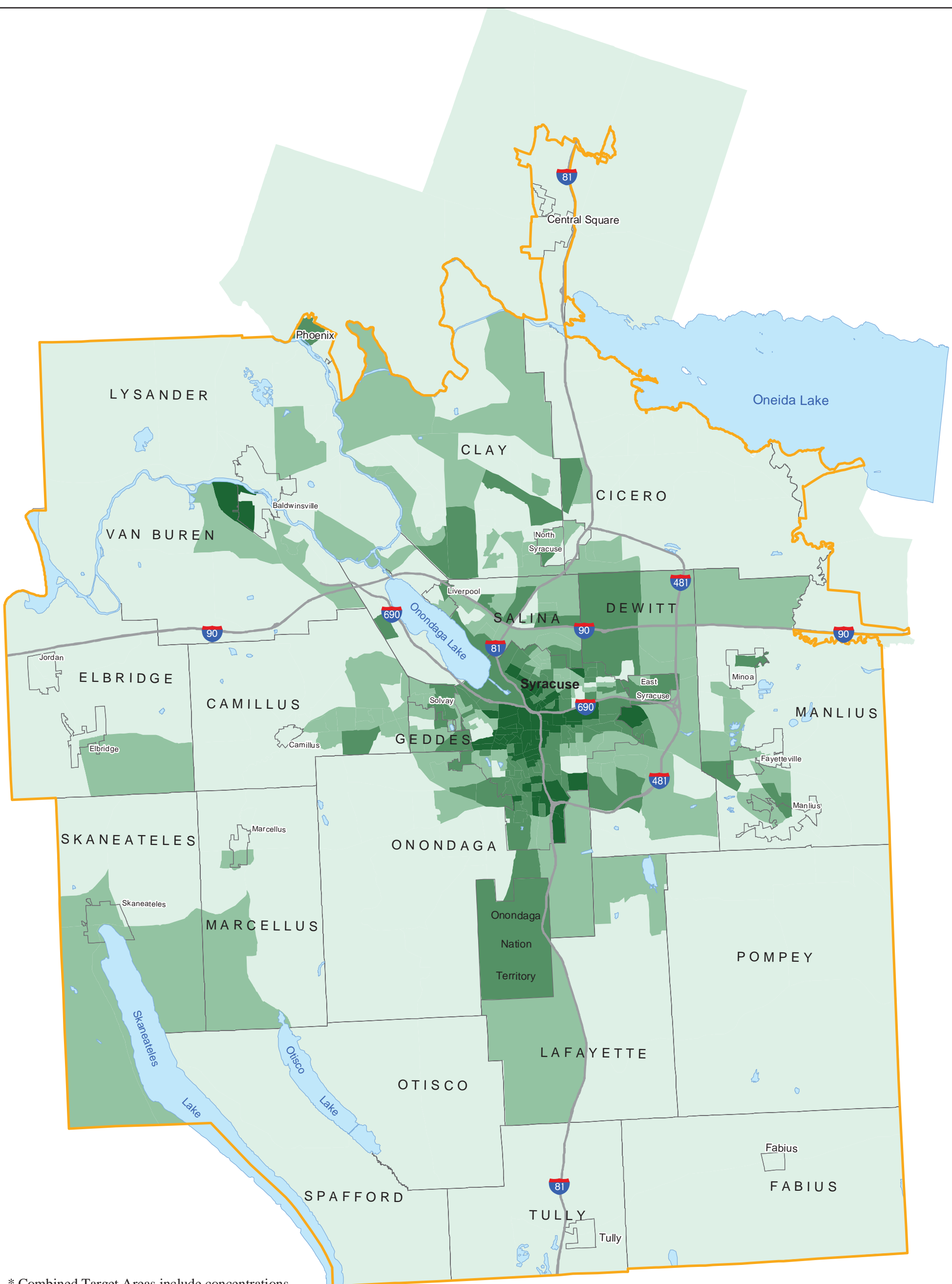
To date, the SMTC has prepared a study to evaluate recent and future transportation planning projects/programs within the MPA. Through the utilization of Census 2000 data, the *Environmental Justice Analysis* was specifically developed for identifying transportation planning projects/programs in relation to Block Groups within the MPA. The goal of this analysis was to ensure that both the positive and negative impacts (construction/rehabilitation related improvements, maintenance of the existing infrastructure, congestion) of transportation planning conducted by the SMTC and its member agencies are fairly distributed amongst all socioeconomic populations. Based upon the primary assessment, the environmental justice study showed that the transportation planning activities performed by the SMTC are not known to have been disproportionately distributed regarding the designated target populations. In an effort to further evaluate and define environmental justice populations and transportation data together, the *Environmental Analysis* document was updated in 2005 to utilize Census Transportation Planning Package (CTPP) data. CTPP "is a special set of tabulations from the decennial census designed for transportation planners that can be used to evaluate existing conditions, develop and update travel demand models, and to analyze demographic and travel trends. The CTPP provides tabulations of households, persons, and workers and summarizes information by place of residence, place of work, and for worker flows between home and work."<sup>11</sup> CTPP data analyses included the examination of several tables based on poverty and disability characteristics. These particular datasets were also mapped at the Census Block Group level in GIS to provide a visual representation of current travel trends and mobility options available to said populations.

Future year activities will involve periodic assessments of the planning activities and their relevant implications, and participation from stakeholders throughout the MPO area. The following map (Map 2-3) represents consolidated target areas for environmental justice activities within the SMTC study area. It includes concentrations of minority, low income, and elderly populations. Mapping and reporting via the SMTC's *Environmental Justice* document will be updated once 2010 Census data is readily available in an appropriate format.

Subsequent actions include strategies for improving the accessibility and distribution of goods and services at neighborhood levels through land use and development patterns.

---

<sup>11</sup> <http://www.fhwa.dot.gov/ctpp/about.htm>



\* Combined Target Areas include concentrations of minority, low-income and elderly populations as defined in SMTC's Environmental Justice Report.

**SMTC**  
 100 Clinton Square  
 126 North Salina St, Suite 100  
 Syracuse, NY 13202  
 (315) 422-5716  
 Fax: (315) 422-7753  
 www.smtcmpo.org

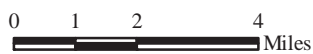


Basemap Copyrighted by NYSDOT  
 Data Sources: SMTC, NYSDOT, 2010  
 U.S. Census Bureau 2000  
 Prepared by SMTC, 04/2011

## Environmental Justice Target Areas

Long-Range Transportation Plan Update 2011

Map 2-3



This map is for presentation purposes only.  
 The SMTC does not guarantee the accuracy or completeness of this map.

**Legend**

- SMTC MPA
- Interstates
- Combined Target Areas\*  
By Block Group**
- Below Threshold
- Low-Priority Areas
- Medium-Priority Areas
- High-Priority Areas

## 2.2 FUTURE PROJECTIONS

### 2.2.1 TRAVEL DEMAND MODELING

Travel demand model software uses current and projected population and land use statistics to estimate impacts of proposed transportation infrastructure projects. Modeling is a useful and essential tool, helping planners to project improvements and predict typical impacts of land development actions. Additionally, it is mandated that the SMTC utilize modeling as part of its air quality conformity process (see Appendix B for further discussion of modeling and air quality conformity).

Travel demand modeling is the utilization of a computer software package to replicate the “real world” transportation system around us including roads, intersections, traffic control devices, congestion delays, use of a transit system, etc.

Once the computer model can accurately replicate the existing conditions of an area, it can then be used to predict future travel patterns and demands based on changes in the transportation system (e.g., new roads, wider roads with more capacity, closed roads); changes in land use (e.g., more residential development, a new industrial site, etc.); and changing demographics (e.g., more or less people in a specific area, access to a vehicle.).

Travel demand forecasting is a state-of-the-art analysis tool used in the transportation planning process. By simulating the current roadway conditions and the travel demand on those roadways, deficiencies in the system can be identified. It is also an important tool in planning future network enhancements and analyzing currently proposed projects. Travel demand models are developed to simulate actual travel patterns and existing demand conditions. Networks are constructed using current roadway inventory files containing data for each roadway within the network.

Travel demand is generated using socioeconomic data such as household size, automobile availability, and employment data. Once the existing conditions are evaluated and adjusted to satisfactorily replicate actual travel patterns and vehicle roadway volumes, the model inputs are then altered to project future-year conditions. Using these inputs, the model is able to derive future capacity limitations relative to the current roadway system. Once these deficiencies are identified, potential improvements are evaluated by rerunning the model with an “improved or modified” transportation system.

A range of different street networks, and even different land use patterns, are tested this way. Future-year traffic projections are based on numerous assumptions about how population, employment, automobile operating costs, and other factors will change over time. As such, future-year projections are only as good as the assumptions that are made. By simulating the current

roadway conditions and the travel demand on those roadways, deficiencies in the system can be identified.

The purpose of travel demand modeling at the SMTC is to enable the agency to more accurately predict future travel patterns and volumes. This tool is therefore valuable in transportation planning activities to assist in determining the best solution for identified transportation problems and issues. Additionally, it can be used to examine the consequences of capital investments via the TIP. For example, the model can perform a before and after comparison of a bridge replacement or road widening project and yield traffic volumes for the segments of interest. This will allow the SMTC to better understand the regional impact of the project. Because of the utility of travel demand models at predicting future travel patterns and volumes, they are also critical to the process of Air Quality and Conformity (discussed in Appendix B in detail).

The model allows for the agency to predict future volumes and speeds on selected roadway elements and then, by following an involved procedure and additional computer software analysis, the impact on air quality can be quantified to a degree.

In addition to simulating vehicular traffic, the model can be adjusted for transit vehicles, bicycles, and pedestrians. The model is a traditional, four-step model that involves the processes of (1) trip generation, (2) trip distribution, (3) mode choice, and (4) trip assignment. SMTC's travel demand model utilizes TransCAD software and includes a Geographic Information Systems (GIS) interface. The model is used by the SMTC staff to perform a wide range of transportation planning activities.

For a detailed discussion of the model, its inputs and outputs, and the model development process please refer to the SMTC's *Travel Demand Model Validation Report* or for a discussion on the model outputs as they relate to VMT and air quality conformity, please refer to Appendix B.

## **2.2.2 MODEL INPUTS FOR FUTURE YEAR PROJECTIONS**

Based on SMTC's travel demand model outreach meetings with community representatives, projected population for the MPA area for the year 2035 is approximately 455,000. This represents an approximate decrease of 3% for the region over a 28 year period (2007 to 2035).

Table 2-8 shows the change in households for municipalities within the MPA between 2007 and 2035. The table indicates that the number of households in the region is projected to grow by nearly 4% over this 28 year period. There is generally a decline in households in the City of Syracuse and growth in communities outside the City. Map 2-4 depicts the anticipated change in household density between 2007 and 2035 within the MPA.

The projected increase in households and decrease in population indicates a declining average number of people per household in the region. These population and household projections were developed prior to the release of 2010 US Census data.

**Table 2-8**  
**Households by Municipality in 2007 and 2035**

Municipality	Households			
	2007	2035	Change	% Change
Camillus	9,306	10,220	914	9.8%
Cicero	11,210	12,838	1,628	14.5%
Clay	22,204	24,476	2,272	10.2%
Dewitt	10,190	10,527	337	3.3%
Elbridge	2,478	2,627	149	6.0%
Fabius	701	838	137	19.5%
Geddes	7,491	7,469	(22)	-0.3%
Lafayette	2,213	2,472	259	11.7%
Lysander	7,731	9,782	2,051	26.5%
Manlius	13,077	14,865	1,788	13.7%
Marcellus	2,413	2,725	312	12.9%
Onondaga	8,290	10,009	1,719	20.7%
Otisco	903	1,045	142	15.7%
Pompey	2,269	2,605	336	14.8%
Salina	13,978	14,163	185	1.3%
Skaneateles	3,210	3,253	43	1.3%
Spafford	749	808	59	7.9%
Syracuse	56,981	50,565	(6,416)	-11.3%
Tully	1,078	1,209	131	12.2%
Van Buren	5,227	5,746	519	9.9%
Onondaga Nation*	*Included in the Towns of Lafayette and Onondaga			
<b>Onondaga County</b>	<b>181,699</b>	<b>188,242</b>	<b>6,543</b>	<b>3.6%</b>
Hastings	1,910	2,157	247	12.9%
Schroepfel	1,031	1,112	81	7.9%
West Monroe	119	130	11	9.2%
<b>Oswego County</b>	<b>3,060</b>	<b>3,399</b>	<b>339</b>	<b>11.1%</b>
Sullivan	1,084	1,313	229	21.1%
<b>Madison County</b>	<b>1,084</b>	<b>1,313</b>	<b>229</b>	<b>21.1%</b>
<b>MPA TOTALS</b>	<b>185,843</b>	<b>192,954</b>	<b>7,111</b>	<b>3.8%</b>

*Note: Towns include Village data; Household data does not include group quarters; Madison and Oswego County Data is limited to SMTC MPA*

Map 2-4: Change in Household Density between 2007 and 2035

