Chapter III: MPA Updated Data and Trends

The existing conditions and needs within the Syracuse Metropolitan Transportation Council (SMTC) study area have stayed remarkably consistent since the last updates with minor exceptions as noted in the following portions of this chapter. This chapter’s purpose is to summarize the current state of the SMTC study area as it relates to the mission of the SMTC, and to point out the continued trend of certain demographic and land use conditions. Additionally, the possible continuation of these trends may equate to future needs of the transportation system being somewhat different than they are today. This need will have to be examined in future plans if these trends continue.

A. Metropolitan Planning Area Revisions

1. Metropolitan Planning Area Boundary

The Metropolitan Planning Area (MPA) is defined as the area in which the Metropolitan Planning Organization (MPO) is responsible for transportation planning defined by the most current Census as being urbanized, plus the area anticipated to be urbanized by the year 2020.

In Spring 2003, the MPO area boundary was revised based on the 2000 Census. The former boundary included all of Onondaga County and a small portion of Oswego County (Town of Schroeppel including the entire Village of Phoenix). The revised boundary includes the entire former portion as well as some additional areas of Oswego County and Madison County. The new areas of Oswego County extend north along Interstate 81 and New York State Route 11. The Madison County portion includes the Bridgeport area along Oneida Lake as well as a portion along I-90. See Map 4 for the updated MPO boundary based on the 2000 Census.

2. Urban Area Boundary

Along with the revisions of the new MPO Area Boundary, the Urban Area Boundary was also revised. The former Urban Area Boundary surrounded the City of Syracuse metropolitan area and remained within Onondaga County. The revised Urban Area Boundary expanded to additional metropolitan areas within Onondaga County, and now includes the urbanized portions of Oswego County and Madison County that are contiguous to Onondaga County. The portions of the Urban Area Boundary and the MPO Boundary that are outside of Onondaga County coincide (e.g., the only portions of the MPO that are outside of Onondaga County are the expanded urban areas.). See Map 4 for the updated Urban Area Boundary based on the 2000 Census.

3. Metropolitan Planning Area Highway System

The following contains a brief description of the surface transportation network in the MPA. Additional details on specific topics relating to the MPA Highway System are contained in the corresponding sections of this Long-Range Transportation Plan (LRTP) 2004 Update.
The MPA’s surface transportation system includes a total of approximately 3,227.47 centerline miles of roads. The roads are owned/maintained by various jurisdictions including the New York State Department of Transportation (NYSDOT), the New York State Thruway Authority (NYSTA), the Onondaga County Department of Transportation (OCDOT), the City of Syracuse, and the towns and villages in Onondaga, Oswego and Madison Counties.

Within the MPA area, there are various jurisdictions responsible for the highway network. The NYSDOT and the NYSTA own approximately 14.5% of the system (which equals about 468.02 centerline miles). The NYSDOT system contains the majority of the main commuter routes. Other key jurisdictional ownerships in the MPA are the OCDOT and City of Syracuse. The OCDOT is responsible for 24.9% of the system (802.72 centerline miles) and the City of Syracuse is responsible for 13.2% of the system (424.65 centerline miles). In addition to those itemized above, other jurisdictions are responsible for the balance of the system. These jurisdictions include Oswego and Madison Counties, as well as numerous towns and villages in all three counties.

The transportation system is organized by a scheme called “Functional Classification.” Functional classification is the process by which roads are categorized into classes according to the type of service they are meant to provide. This topic is discussed in detail in the following section.

The vast system of existing highways and bridges in the MPA area require a large amount of maintenance in order to ensure adequate operational characteristics. The majority of money spent on the Transportation Improvement Plan (TIP) from Federal Highway Administration (FHWA) (non-transit specific funds) is used for maintaining the existing road network. The most recent three-year 2003-2006 TIP includes a total of $129.680 million in FHWA funds. Of that amount, $13.686 million (10.5%) has been allocated for transportation related enhancements such as trails and enhancement projects for bicycles and pedestrians. The remainder of all FHWA funds, a total of $115.994 million (89.5%) is for maintenance related projects.

As depicted, it is clear that the majority of capital money for the surface transportation network in the MPA area is for maintenance, leaving modest funds and need for system expansion. In past TIP documents, there were capacity improvement projects planned that utilized FHWA obligated funds (i.e., the Belgium Bridge over Route 31), but generally, there have been minimal new capacity projects and system additions in recent years.

The sections that follow contain greater detail about the surface transportation system including detailed discussions on functional classification, bridge and pavement conditions, incident management/tracking and other related topics.

4. Functional Classification

Functional classification is the process by which streets and highways are grouped into classes or systems according to the character of service they are intended to provide. Basic to this process is the recognition that individual roads and streets do not serve
travel independently but are part of a greater network. This network “channels” traffic in a logical, safe and efficient manner helps define the functional classification hierarchy. A simplified hierarchy of a functional classification (from lowest class to highest) consists of local roads, major and minor collector roads, minor arterial, and principal arterials.

Table 3-1 provides the number of centerline miles by functional classification for the various MPA jurisdictions. Functional classification is further detailed in the next section of this Update.

<table>
<thead>
<tr>
<th></th>
<th>Principal Arterial</th>
<th>Minor Arterial</th>
<th>Major/Urban Collector</th>
<th>Minor Collector</th>
<th>Local</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>NYSDOT</td>
<td>187.59</td>
<td>107.31</td>
<td>111.98</td>
<td>24.39</td>
<td>5.39</td>
<td>436.66</td>
</tr>
<tr>
<td>NYSTA</td>
<td>31.36</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>31.36</td>
</tr>
<tr>
<td>OCDOT</td>
<td>28.33</td>
<td>89.30</td>
<td>160.38</td>
<td>110.22</td>
<td>414.49</td>
<td>802.72</td>
</tr>
<tr>
<td>Oswego County</td>
<td>0</td>
<td>0</td>
<td>5.78</td>
<td>0</td>
<td>2.48</td>
<td>8.26</td>
</tr>
<tr>
<td>Madison County</td>
<td>0</td>
<td>0</td>
<td>10.34</td>
<td>0</td>
<td>1.90</td>
<td>12.24</td>
</tr>
<tr>
<td>City of Syracuse</td>
<td>19.73</td>
<td>65.21</td>
<td>32.59</td>
<td>0.00</td>
<td>307.12</td>
<td>424.65</td>
</tr>
<tr>
<td>Towns/Villages</td>
<td>0.00</td>
<td>8.50</td>
<td>42.04</td>
<td>2.26</td>
<td>1458.78</td>
<td>1511.58</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>267.01</strong></td>
<td><strong>270.32</strong></td>
<td><strong>363.11</strong></td>
<td><strong>136.87</strong></td>
<td><strong>2190.16</strong></td>
<td><strong>3227.47</strong></td>
</tr>
</tbody>
</table>

Source: SMTC’s Geographic Information System

Functional classification codes are given to all federal-aid eligible roads. There are four functional classification codes used in the SMTC study area. They include principal arterial, minor arterial, collector and minor collector. Arterials provide the highest level of mobility, at the highest speed, for long, uninterrupted travel. Arterials generally have higher design standards than other roads, often with multiple lanes and some degree of access control. Collectors provide a lower degree of mobility than arterials. They are designed for travel at lower speeds and for shorter distances. Collectors are typically two-lane roads that collect and distribute traffic from the arterial system. The minor collectors code applies to rural parts of the SMTC study area.¹

At this time, the functional classification system has been revised to take the 2000 Census and revised MPO boundaries into consideration, however the revisions have not yet received NYSDOT and FHWA approval. Changes in the system will be discussed in detail and included in the next LRTP. See Map 5 for the current Functional Classification system.

¹ Definitions taken from the Federal Highway Administration’s Conditions and Performance Report, Chapter 2. For further information, visit the website: http://www.fhwa.dot.gov/environment/flex/ch03.htm
B. Metropolitan Planning Area Trends

This 2004 Update includes a basic profile of some of the most important demographic trends and changing conditions that affect transportation planning in the SMTC area. More comprehensive analysis of 2000 Census data, including the analysis of an expanded SMTC MPA, will occur in the next SMTC LRTP.

The Syracuse MPA has seen notable changes since 1990 in population, economic transition and land use shifts. The trends are typical to most Northeast communities, including:

- 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 towards 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.

Following is a brief analysis of these demographic trends, and how they relate to transportation planning in the SMTC area.

1. Population

Population Distribution

Population shifts within Onondaga County are occurring, mostly from the City of Syracuse to suburban towns. Table 3-2 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 2000, it made up only 32% of the total County population. The table illustrates a growing suburban population, at the expense of a declining City population.

According to 2002 Census Bureau estimates, the trend continues. The Bureau estimates that between 2000 and 2002, the City of Syracuse has continued to lose people at a rate of 1.5%, while Onondaga County suburbs show a 1.45% increase. The Town of Geddes is the only suburban municipality projected to have lost population (-0.4%) utilizing these estimates since 2000.

Map 6 graphically shows Central New York’s regional population distribution. 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 SMTC’s Urban Area boundary, the most populated areas of

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2 Source: US Census Bureau, April 1, 2002 Population Estimates
Onondaga County continue to be in the City of Syracuse and nearby towns to the north and east.

### Table 3-2

![Onondaga County Population Trends 1950-2000](image)

Source: US Census Bureau, Population of Counties by Decennial Census 1900-1990, 200 SF 3 Table P1

The average population density in Onondaga County is 588 people per square mile, which includes a peak density of 5,871 persons per square mile in the City of Syracuse and a low density of 42 persons per square mile in the rural Town of Fabius. ³

#### Age Distribution

As shown on Table 3-3, between 1990 and 2000, some age cohorts rose while others fell across Onondaga County. Births are declining in Onondaga County. In addition, age cohorts representing young adults (age 18-34) and recent retirees (age 60-74) also posted losses during the 1990s.

The age makeup of the City and suburban populations has also been undergoing change, similar to communities across the country. Migration patterns within the County have resulted in age group shifts. The median age in Onondaga County is 36.3, with Syracuse tending somewhat younger with a median age of 30.5, and the combination of Onondaga County Towns tending somewhat older at 39.3. The large college student population decreases the median age in Syracuse.

This map is for presentation purposes only. Neither SOCFA or SMTC guarantee the accuracy or completeness of this map.
Senior age cohorts (age 75+) show an approximate 20% increase over the past decade, a national trend attributed largely to longer life expectancies. The mobility limitations and reliance on public transportation for this segment of the population will continue to present challenges in transportation planning, especially as the “Baby Boom” generation nears retirement age in lower density suburbs, as opposed to urban areas most conducive to efficient public transit.

The 40-58 age bracket represents the “Baby Boomer” segment of the population. Children of “Baby Boomers” are also represented in the rising 10-14 and 15-17 age brackets. The “Baby Boom” generation is generally expected to enter retirement age between 2010 and 2030. During these critical years, demand for housing and transportation services for seniors will increase. Out-migration to warmer climates is also expected to have its greatest effect on the County’s overall population during this time period.

Analysis of age distribution among Onondaga County municipalities (Table 3-4) shows a slight difference between older suburbs versus those showing more recent growth. The older “inner ring” suburbs of DeWitt, Geddes, and Salina average the highest concentrations of people age 65 and older, and the lowest percentages of children under 18. Newer suburbs saw an increase in young families. Suburban towns with the most recent growth, such as the larger towns of Cicero, Clay and Lysander, show the highest percentages of children under 18 and young adults between the ages of 18 and 34.
Table 3-4

Age Groups in Onondaga County

Source: US Census Bureau 2000, Summary File 1, Table DP-1

Families and Households

Table 3-5 is a summary of Census 2000 family and household characteristics for Onondaga County Households, including comparable 1990 information.

Table 3-5

<table>
<thead>
<tr>
<th>Household and Family Characteristics</th>
<th>Onondaga County 1990 and 2000</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1990</td>
</tr>
<tr>
<td>Number of Households</td>
<td>177,898</td>
</tr>
<tr>
<td>Family Households</td>
<td>118,575</td>
</tr>
<tr>
<td>Non-Family Households</td>
<td>59,323</td>
</tr>
<tr>
<td>Householder Living Alone</td>
<td>47,047</td>
</tr>
<tr>
<td>Average Household Size</td>
<td>2.55</td>
</tr>
<tr>
<td>Average Family Size</td>
<td>3.12</td>
</tr>
</tbody>
</table>

Source: US Census Bureau 2000 SF1 Table P18, 1990 STF1 Table P015

The 2000 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 3% decrease in the number of Family Households, and an 11% increase in Non-Family Households. Of those Non-Family Households, almost 80% were one-person households. The implications of these trends on transportation planning in the SMTCA 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.
Income and Poverty

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, the poverty is concentrated clearly in the City of Syracuse, where residents have a median income of just over $15,000 and a poverty rate at least three times that of surrounding Onondaga County Towns, as shown in Table 3-6.

**Table 3-6**

<table>
<thead>
<tr>
<th>Income &amp; Poverty</th>
<th>Per Capita Income</th>
<th>% of Individuals Below Poverty Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Camillus</td>
<td>$22,591</td>
<td>4.3%</td>
</tr>
<tr>
<td>Cicero</td>
<td>$21,527</td>
<td>5.1%</td>
</tr>
<tr>
<td>Clay</td>
<td>$22,011</td>
<td>5.7%</td>
</tr>
<tr>
<td>DeWitt</td>
<td>$29,198</td>
<td>7.2%</td>
</tr>
<tr>
<td>Elbridge</td>
<td>$18,682</td>
<td>6.9%</td>
</tr>
<tr>
<td>Fabius</td>
<td>$21,206</td>
<td>5.7%</td>
</tr>
<tr>
<td>Geddes</td>
<td>$20,986</td>
<td>8.2%</td>
</tr>
<tr>
<td>LaFayette</td>
<td>$24,591</td>
<td>5.1%</td>
</tr>
<tr>
<td>Lysander</td>
<td>$26,187</td>
<td>3.8%</td>
</tr>
<tr>
<td>Manlius</td>
<td>$31,825</td>
<td>3.3%</td>
</tr>
<tr>
<td>Marcellus</td>
<td>$25,628</td>
<td>3.2%</td>
</tr>
<tr>
<td>Onondaga</td>
<td>$25,522</td>
<td>4.2%</td>
</tr>
<tr>
<td>Onondaga Nation</td>
<td>$15,425</td>
<td>7.6%</td>
</tr>
<tr>
<td>Otisco</td>
<td>$19,726</td>
<td>5.7%</td>
</tr>
<tr>
<td>Pompey</td>
<td>$27,970</td>
<td>3.9%</td>
</tr>
<tr>
<td>Salina</td>
<td>$21,839</td>
<td>7.4%</td>
</tr>
<tr>
<td>Skaneateles</td>
<td>$28,624</td>
<td>3.2%</td>
</tr>
<tr>
<td>Spafford</td>
<td>$24,014</td>
<td>5.2%</td>
</tr>
<tr>
<td>Syracuse (City)</td>
<td>$15,168</td>
<td>27.3%</td>
</tr>
<tr>
<td>Tully</td>
<td>$25,223</td>
<td>6.7%</td>
</tr>
<tr>
<td>Van Buren</td>
<td>$20,997</td>
<td>6.6%</td>
</tr>
<tr>
<td><strong>Onondaga County</strong></td>
<td><strong>$21,336</strong></td>
<td><strong>12.2%</strong></td>
</tr>
<tr>
<td>United States</td>
<td>$21,857</td>
<td>12.4%</td>
</tr>
</tbody>
</table>

Source: US Census Bureau 2000, Summary File 3, Table DP-3

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. Local Economy

Transportation Crossroads

The highest concentrations of population and economic activity in Central New York are in the City of Syracuse and adjacent urban areas of Onondaga County. According to the Central New York Comprehensive Economic Development Strategy, over 72% of employment opportunities in Central New York are located in Onondaga County. There are additional centers of activity along major transportation corridors and in smaller cities such as Auburn, Cortland, Oneida, Oswego and Fulton.

Onondaga County benefits economically as the transportation crossroads of the region. Interstate 81 is a significant north-south corridor reaching from Canada to the southern States, which intersects the New York State Thruway just north of the City of Syracuse in the center of Onondaga County. The NYS Thruway runs east-west across all of New York State linking to major interstate corridors into neighboring states. New York Route 481 also plays a role in the regional transportation network, stretching north to the City of Oswego from Onondaga County. Other significant corridors include NYS Route 20 that spans across New York State and through three Central New York counties, and NYS Route 5 that carries traffic between Onondaga County and neighboring counties. Additionally, NYS Route 31 serves as the northern Onondaga County connector.

Historic development patterns along the Erie Canal and railroad transportation corridors led to Onondaga County’s early prominence. This significant network of interstate highways has continued to ensure its sustainability. Though global economic factors have negatively influenced the area’s transportation and goods producing heritage, opportunities remain to take economic advantage of the major transportation assets in the Central New York region.

Regional Economy

As defined by the New York State Department of Labor, the Central New York Labor Market Region consists of five counties—Cayuga, Cortland, Madison, Onondaga and Oswego. While broader than the SMTC Study Area, it is important to understand the regional economy and its impact on the transportation system.

The Central New York region covers an area of 3,120 square miles and has an estimated population of 780,000. The region generally forms an area of interdependent economic

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activity, with Onondaga County at its core. Table 3-7 summarizes some key economic indicators for each of the counties in the Central New York region. As shown, Onondaga County accounts for approximately two thirds of the total Central New York labor force.

Table 3-7

<table>
<thead>
<tr>
<th>Central New York Economic Indicators</th>
<th>September 2002 and 2003</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Labor Force Sep '02</td>
</tr>
<tr>
<td>Cayuga County</td>
<td>38,400</td>
</tr>
<tr>
<td>Cortland County</td>
<td>23,200</td>
</tr>
<tr>
<td><strong>Onondaga County</strong></td>
<td><strong>241,300</strong></td>
</tr>
<tr>
<td>Oswego County</td>
<td>57,500</td>
</tr>
<tr>
<td>Madison County</td>
<td>35,500</td>
</tr>
<tr>
<td><strong>Central NY Region</strong></td>
<td><strong>360,300</strong></td>
</tr>
</tbody>
</table>

Source: NYS Department of Labor. Local Area Unemployment Statistics Program

**Employment**

Central and Upstate New York employment has remained relatively stable over the past several years, though affected by the ongoing national recession. Many of the region’s largest employers are located in Onondaga County. These companies and institutions include Syracuse University, Niagara Mohawk, State University of New York Upstate Medical University, New Venture Gear, Bristol Myers Squibb, Verizon Communications, Lockheed Martin, Welch Allyn, Blue Cross/Blue Shield, and Anheuser-Busch. (Of note: One of Syracuse’s largest and most prominent manufacturers, the Carrier Corporation, announced in 2003 the elimination of over 1,200 jobs from its DeWitt plant, representing almost ½ of its workforce.)

Despite the continued gradual decline of high-profile manufacturing jobs in Central New York, the area is reporting continued job growth, and Onondaga County has been recognized as one of the most diversified metropolitan economies in the State. The unemployment rates for Onondaga County and the Central New York region remain significantly lower than the New York State average (6.3% in September 2003).

The strongest economic sectors in Onondaga County are in health care and education, largely located in the City of Syracuse. Employment in health care and social services sectors reached an all-time record high (40,700) for the area in 2003. Other strong

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6 Ibid.
sectors include retail, wholesale trade, transportation and warehousing, government and accommodation/food services.\(^7\) Manufacturing still accounts for over 13% of employees in Onondaga County.

**Size of Firms**

Over 83% of establishments in Onondaga County employ fewer than 20 employees; only 16 establishments in Onondaga County employed over 1,000 people in 2001. Table 3-8 graphically shows the breakdown of size of establishments in Onondaga County based on the number of employed workers. Job growth increases in Onondaga County generally come from smaller businesses, while employment by large firms continues to decline.

![Table 3-8](image)


The trend towards smaller businesses is growing. Smaller commercial and manufacturing firms have become more prevalent in Onondaga County. Suburban multi-tenant campuses, consolidating a number of smaller businesses, are also becoming more common than large scale, single tenant campuses.

**Development Projects and Incentives**

In an effort to encourage new business and expansion within the Upstate New York Region, New York State has expanded its *Economic Development Zone* Program, now known as *Empire Zones*, within Onondaga County. This program offers a variety of tax incentives and utility reductions to facilitate business growth in selected target areas. The City’s Downtown Area, as well as corridors along I-690, Salina Street and Lakefront locations have been targeted. The County’s Empire Zone acreage continues to grow, allowing for expansion of existing commercial sites along with new targeted development locations.

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An added business development incentive for the City of Syracuse was announced in 2002, with the designation of the City as a Federal Empowerment Zone by the Department of Housing and Urban Development (HUD). See Map 7. This designation entitles business owners in targeted areas to receive regulatory relief and tax breaks to encourage community revitalization.

The following are some of the sites that Onondaga County is marketing for industrial and commercial development through the Empire Zones, Empowerment Zones or other statewide industrial and high-tech development initiatives:

- Clay Industrial Park (SemiNY) 245 acres
- Radisson Industrial Park 50 acres
- Town of DeWitt (BuildNow-NY) 108 acres
- Syracuse (University) Research Park (BuildNow-NY) 100 acres
- Hancock Air Park (Empowerment Zone, BuildNow-NY) 175 acres
- Salina Power Park (Empowerment Zone) 78 acres

In addition to the Town of DeWitt 100+ acre Build Now-NY site, the Interstate 481 corridor, generally in the Town of DeWitt, also houses several existing, and planned commercial and industrial businesses, as well as large amounts of vacant land to support growth.

Also of particular note is the public and private partnership, including a $37 million commitment by New York State to create a Center of Excellence in Environmental Systems (CoE-ES) in the Syracuse University area, now slated for Downtown at the former Midtown Plaza site. This project is aimed at making Syracuse a worldwide leader in environmental systems engineering (see Changing Needs and Impacts: University Hill Area), and the planned development of a Biotechnology Research Center in partnership with local higher education institutions.

Economic Development Activity

As a result of efforts by economic development officials and planners, with the assistance of the SMTC, several new commercial, residential and retail projects affecting the County’s land uses have been initiated or completed since the last LRTP Update. Specific areas of activity include:

- The continued redevelopment activity within the Syracuse Lakefront, including the proposed DestiNY USA project, the Inner Harbor and Franklin Square (see Changing Needs and Impacts: Lakefront Development District).

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- Part of a Downtown Syracuse redevelopment effort to retain and attract employers, a $45 million parking, office, and commercial/residential development will be constructed.

- The completion of Downtown’s Clinton Square renovation project and continued focus on Downtown’s urban parks, monuments and cultural attractions. The City of Syracuse formally endorsed the creation of a Cultural Corridor in Downtown Syracuse.

- Over 100 new apartment units have been reintroduced to Downtown Syracuse, in Hanover Square, the Leów’s Landmark Building, and on West Genesee Street. Hanover Square also saw new tenants in many of its commercial storefronts.

- New infrastructure enhancements and façade improvement programs to facilitate the North Salina Street corridor, also known as the Little Italy project.

- Retail corridors have emerged in three specific areas within the County in recent years – the Route 31 Corridor near Great Northern Mall continues to see expansion of commercial strip growth; the former Fayetteville Mall has been reconfigured and revitalized with new tenants, becoming the Towne Center at Fayetteville, loosely based on the recommendations of Andres Duany in the Onondaga County Settlement Plan; and the renovation of the PennCan and Marketplace Malls in Cicero, including a large scale Driver’s Village automobile sales establishment.

- Recently developed and/or proposed residential development projects continue to rise at the outer limits of the SMTC urbanized area, including particular activity in the towns of Cicero, Clay, Lysander and Onondaga.

In an effort to attract new jobs and increase population, several new exciting projects are taking place in the SMTC Area, with many more being planned. With that, care must be taken to preserve the separation between urban and rural land uses; encourage investment in existing communities and transportation corridors; and consider natural resources, environmental constraints and infrastructure costs when dealing with new suburban development.

3. Land Use

The 1995 SMTC LRTP and subsequent updates identified five general types of land use prevalent in the SMTC Study Area, including a moderately dense urban core; suburban towns, villages and hamlets; farmland; shoreline; and scattered development. These
types remain indicative of present conditions, though the trend towards suburbanization and outward growth of the metropolitan area is beginning to affect the distinction between land uses and are creating new patterns of development in the County. Several economic development and residential projects, both planned and underway, may have impacts on future development patterns as well.

**Effects of Suburbanization in Onondaga County**

While the Onondaga County population has shown a slow population decline, changes in the geographic distribution of the County signify internal population shifts. Population changes in recent history depict a population that is slowly migrating away from the urban core, first to an inner ring of older closer suburbs, and now even further to a new second ring of suburbs.

In the 1970s, Onondaga County had seen decades of population growth, and as projected, continued growth into the future. Accordingly, transportation, water and sewer infrastructure was expanded into the suburbs with significant capacities to accommodate a need for new housing for an expanding population. However, population since 1970 has steadily declined and Onondaga County has seen little job growth, leaving an underutilized infrastructure network.

The aging urban housing stock, available undeveloped land, affordable housing, water and sewer costs, access to transportation infrastructure and increased personal mobility have encouraged the expansion of housing into areas long vacant or farmed.

This trend is shown illustratively here and graphically in Tables 3-9, 3-10 and 3-11. Residential construction in Onondaga County in the 1990s has occurred largely in this outer ring – most notably in the towns of Cicero, Clay, Lysander, Manlius, and Onondaga. Areas of growth within the inner ring of suburbs, such as the towns of DeWitt, Salina and Geddes see a slowing of growth since 1980.
### Table 3-9

#### Building Permits In Onondaga County By Town

**1990 to 2003**

<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>Camillus</td>
<td>83</td>
<td>59</td>
<td>46</td>
<td>22</td>
<td>39</td>
<td>45</td>
<td>78</td>
<td>65</td>
<td>54</td>
<td>76</td>
<td>491</td>
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<tr>
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<td>112</td>
<td>163</td>
<td>99</td>
<td>133</td>
<td>149</td>
<td>171</td>
<td>159</td>
<td>245</td>
<td>249</td>
<td>1,389</td>
</tr>
<tr>
<td>Clay</td>
<td>161</td>
<td>103</td>
<td>177</td>
<td>93</td>
<td>126</td>
<td>158</td>
<td>109</td>
<td>106</td>
<td>135</td>
<td>196</td>
<td>1,168</td>
</tr>
<tr>
<td>Dewitt</td>
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<td>35</td>
<td>26</td>
<td>30</td>
<td>34</td>
<td>135</td>
<td>72</td>
<td>54</td>
<td>91</td>
<td>116</td>
<td>533</td>
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<td>8</td>
<td>11</td>
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<td>16</td>
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<td>24</td>
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<td>9</td>
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<td>15</td>
<td>10</td>
<td>7</td>
<td>108</td>
<td>154</td>
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<tr>
<td>Geddes</td>
<td>29</td>
<td>20</td>
<td>23</td>
<td>18</td>
<td>15</td>
<td>15</td>
<td>10</td>
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<td>6</td>
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<td>10</td>
<td>8</td>
<td>10</td>
<td>15</td>
<td>26</td>
<td>67</td>
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<tr>
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<td>85</td>
<td>84</td>
<td>71</td>
<td>92</td>
<td>128</td>
<td>123</td>
<td>223</td>
<td>200</td>
<td>108</td>
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<td>Manlius</td>
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<td>58</td>
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<td>87</td>
<td>91</td>
<td>112</td>
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<td>36</td>
<td>11</td>
<td>21</td>
<td>19</td>
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<td>44</td>
<td>58</td>
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<td>76</td>
<td>89</td>
<td>76</td>
<td>93</td>
<td>75</td>
<td>647</td>
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<td>19</td>
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<td>34</td>
<td>40</td>
<td>48</td>
<td>48</td>
<td>42</td>
<td>41</td>
<td>40</td>
<td>333</td>
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<td>Salina</td>
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<td>17</td>
<td>15</td>
<td>100</td>
<td>60</td>
<td>46</td>
<td>17</td>
<td>24</td>
<td>5</td>
<td>384</td>
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<tr>
<td>Skaneateles</td>
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<td>16</td>
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<td>32</td>
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<td>36</td>
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<td>Spafford</td>
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<td>20</td>
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<td>13</td>
<td>10</td>
<td>7</td>
<td>7</td>
<td>102</td>
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<td>6</td>
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<td>3</td>
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<td>10</td>
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<td>17</td>
<td>17</td>
<td>85</td>
</tr>
<tr>
<td>Van Buren</td>
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<td>29</td>
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<td>26</td>
<td>23</td>
<td>17</td>
<td>24</td>
<td>11</td>
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<tr>
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<td>173</td>
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<td>35</td>
<td>16</td>
<td>79</td>
<td>83</td>
<td>60</td>
<td>58</td>
<td>657</td>
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<td><strong>Total County</strong></td>
<td><strong>1,186</strong></td>
<td><strong>743</strong></td>
<td><strong>957</strong></td>
<td><strong>663</strong></td>
<td><strong>872</strong></td>
<td><strong>1,051</strong></td>
<td><strong>1,094</strong></td>
<td><strong>1,168</strong></td>
<td><strong>1,232</strong></td>
<td><strong>1,199</strong></td>
<td><strong>8,966</strong></td>
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</tbody>
</table>

Source: Syracuse-Onondaga County Planning Agency

**Note:** Building permits does not show demolitions (and therefore net change). Please see Table 3-11 for demolition data.
### Table 3-10

City and Town Households, 1960-2000

<table>
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<th></th>
</tr>
</thead>
<tbody>
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<td>City of Syracuse</td>
<td>67,830</td>
<td>67,671</td>
<td>66,961</td>
<td>64,945</td>
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<td>7,992</td>
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<td>9,315</td>
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<td>Cicero</td>
<td>4,028</td>
<td>5,960</td>
<td>7,401</td>
<td>9,014</td>
<td>10,538</td>
</tr>
<tr>
<td>Clay</td>
<td>4,641</td>
<td>10,162</td>
<td>17,299</td>
<td>21,095</td>
<td>22,294</td>
</tr>
<tr>
<td>Dewitt</td>
<td>6,375</td>
<td>8,422</td>
<td>9,211</td>
<td>9,729</td>
<td>10,068</td>
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<td>Elbridge</td>
<td>1,328</td>
<td>1,642</td>
<td>2,011</td>
<td>2,228</td>
<td>2,322</td>
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<td>Fabius</td>
<td>401</td>
<td>446</td>
<td>591</td>
<td>612</td>
<td>686</td>
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<tr>
<td>Geddes</td>
<td>5,647</td>
<td>6,389</td>
<td>6,669</td>
<td>6,889</td>
<td>7,262</td>
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<td>1,476</td>
<td>1,724</td>
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<tr>
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<td>3,282</td>
<td>4,497</td>
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<td>Manlius</td>
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<td>9,633</td>
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<td>12,553</td>
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<td>2,061</td>
<td>2,311</td>
<td>2,378</td>
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<tr>
<td>Onondaga</td>
<td>3,513</td>
<td>4,513</td>
<td>5,961</td>
<td>6,557</td>
<td>7,679</td>
</tr>
<tr>
<td>Otisco</td>
<td>319</td>
<td>405</td>
<td>667</td>
<td>780</td>
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<td>Salina</td>
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<td>2,881</td>
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<tr>
<td>Spafford</td>
<td>257</td>
<td>313</td>
<td>510</td>
<td>572</td>
<td>631</td>
</tr>
<tr>
<td>Tully</td>
<td>488</td>
<td>563</td>
<td>802</td>
<td>886</td>
<td>1,030</td>
</tr>
<tr>
<td>Van Buren</td>
<td>2,375</td>
<td>3,157</td>
<td>4,322</td>
<td>5,234</td>
<td>5,288</td>
</tr>
<tr>
<td>Onondaga Nation Territory**</td>
<td>194</td>
<td>200</td>
<td>168</td>
<td>221</td>
<td>304</td>
</tr>
<tr>
<td><strong>Total Households</strong></td>
<td><strong>124,090</strong></td>
<td><strong>145,322</strong></td>
<td><strong>165,677</strong></td>
<td><strong>177,898</strong></td>
<td><strong>181,153</strong></td>
</tr>
</tbody>
</table>

*figures include respective villages  
** Separate Native American Territory  

The gradual expansion of residential and commercial land uses has significant implications on community land uses and the economy, including an increased demand and cost for transportation infrastructure, utilities and public services, increased commute times and reliance on the automobile for more and longer trips.

However, the demand for affordable land, free parking, large lots and low density have proven difficult to deter. The metropolitan area is gradually expanding, as illustrated by the expansion of SMTC’s MPA and Urban Area Boundary, which reflect changing land use patterns and growth.

**Planning Efforts**

Several efforts are being undertaken to combat the environmental, fiscal and social implications of sprawl in Onondaga County. New land use patterns, focusing on mixed use, higher densities, infill and clustered development are being encouraged by Onondaga
County, through its 2020 Development Guide: A Framework For Growth, and the recently produced Onondaga County Settlement Plan, which outlines strategies to encourage New Urbanism development practices within Onondaga County. The first private residential development project based on the principles of New Urbanism, Annesgrove, began construction in 2000 in the Town of Camillus.

Annesgrove, in the Town of Camillus

Led by Onondaga County’s 2010 Development Guide, efforts are being made to discourage unnecessary creation of new infrastructure into un-urbanized areas until existing built infrastructure nears capacity. This policy is intended to assist in providing cost effective infrastructure investments and curbing suburban sprawl by focusing capital investments on maintaining existing urbanized areas rather than creating new ones.

The City of Syracuse is considering a change to its zoning code within its Lakefront Development area to encourage new high-density, mixed-use development, consistent with the principles outlined in the Onondaga County Settlement Plan. This zoning code may serve as a model for future revisions to antiquated zoning regulations throughout the City and County.

To help the City compete for population and economic opportunities, with funding assistance from the federal government and local private contributions, the Syracuse Neighborhood Initiative (SNI) was established in 2000. SNI plans and initiatives focus on improving the City housing market and position City neighborhoods to successfully compete for investment.

An important focus of the first phase of the SNI was to address the large dilapidated, aging housing stock in the City. The construction of new housing units throughout the suburbs of Onondaga County has resulted in an oversupply of housing. This results in the abandonment of older homes, close to the City core.

According to the 2000 Census, of the City’s 68,196 housing units, 8,710 stand vacant. In addition, 48% of housing units in the City were built prior to 1940. The City partnered with resident groups to identify hundreds of blighted properties for rehabilitation (the preferred option for preservation of urban densities) or demolition. Later phases concentrated on preservation of owner equity in properties, and the development of
neighborhood plans for revitalization. Table 3-11 illustrates the significant difference in climate for housing development, in comparing the City of Syracuse with the collective towns in Onondaga County in terms of building and demolition permits over the past twenty years.

Table 3-11

<table>
<thead>
<tr>
<th></th>
<th>Residential Building and Demolition Permits</th>
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</thead>
<tbody>
<tr>
<td>Building</td>
<td>17,139</td>
</tr>
<tr>
<td>Demolition</td>
<td>149</td>
</tr>
<tr>
<td>Net Gain/Loss</td>
<td>16,990</td>
</tr>
</tbody>
</table>

Source: SOCPA- based on municipal building permit data.

The situation the City of Syracuse faces is not unique to this City, and is common to almost every city in the United States. Significant attention across the nation is now being centered on the “costs of sprawl,” and the economic and social benefits of reinvesting in existing city centers, villages and hamlets. With current government fiscal constraints across New York State, out-migration, and limited economic growth projected in Central New York over the next several years, the costs of sprawl become more important. However, in this same economic climate, municipalities find it difficult to discourage new private development on the basis of sprawl, especially given the relatively large amount of undeveloped land within Onondaga County.

Land Use and Transportation

Acknowledging the important effects of land use on transportation options, the SMTC has been involved in several activities and studies that examine land use alternatives as well as transportation system alternatives in its transportation planning activities. For example, the current University Hill Comprehensive Transportation Study being prepared by the SMTC will focus heavily on land use and transportation strategies to address the congestion and parking issues faced by students and employees within the University Hill area. Similarly, the Interstate 481 Corridor Study is examining the effects of continued build-out of industrial and commercial uses on the transportation infrastructure and the importance of preserving capacity on major state and county highways.

In 2003, the SMTC also began the process to update its existing TMODEL Travel Demand model software, which utilizes current and projected population and land use statistics to estimate impacts on proposed transportation infrastructure projects. This modeling is a useful tool, helping planners to project necessary improvements and predict typical impacts of land development actions. The updated software, TransCAD, will provide more accurate information regarding transit usage, as well as allow for more accurate modeling at a site-specific scale. In addition to updating the software, the base information data that is put into TransCAD will be updated as well.
In addition, the NYSDOT is also continuing to recognize the important linkage between land use and transportation. Introduced by the NYSDOT in 2000, and supported by the FHWA, *Context Sensitive Solutions* (CSS) is “a philosophy wherein safe transportation solutions are designed in harmony with the community. CSS strives to balance environmental, scenic, aesthetic, historic, cultural, natural resources, community and transportation service needs.”9 The new CSS approach seeks to incorporate smart, aesthetic and accessible solutions into all phases of the transportation planning process. The process realizes the importance of quality of life and seeks to minimize the effects of major transportation infrastructure on the communities in which they are built, through creative and context-sensitive design.

**C. Travel Demand Modeling**

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, etc.); 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, etc.).

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

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9 Source: NYSDOT web site: Power Pt. Presentation on Context Sensitive Solutions
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 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 Chapter 7 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.

Travel Demand Modeling at the SMTC is currently in transition due to new software and updating its forecasting information. The SMTC is developing a more accurate and user friendly travel demand model that can be used by the agency’s staff on a regular basis as a tool to predict future traffic volumes and patterns with a higher degree of credibility than the current model.

The current travel demand model at the SMTC is based on TMODEL2 software. There are limitations as to the ability of the software due to its age and design. For example its graphical output is quite limited and it has no real Geographic Information Systems (GIS) connectivity. Additionally, existing staff is not fluent in the software, and since it is no longer a “popular” modeling platform nationally – it is hard to find either trained staff or available training for the model. This has led the SMTC to utilize consultants for all of the current modeling activities. This is both expensive and cumbersome. The SMTC discussed these modeling concerns with other NYS MPOs that utilize TMODEL2 as their model and discovered that other MPOs have similar concerns.

In an attempt to solve the common concerns among the MPOs using TMODEL2 software, the SMTC led a statewide initiative to examine the options available to the MPOs that wanted to migrate to another software platform. This process was well attended by other MPOs in the state and was comprehensive in nature. The year-long process led to a final recommendation of TransCAD software as a first choice for replacing TMODEL2 models in New York State. Many of the participating MPOs have either migrated or are in the process of migrating to this new modeling platform as a result of this effect.

The SMTC has recently retained a consultant to develop a new and improved TransCAD model. Most of the new model is being recreated from scratch however, selected
elements are being migrated from the TMODEL2 model. At the time that this document is being written the process is approximately 50% complete. The SMTC expects that the new model will be in place in time for the next LRTP compilation.

In addition to simulating vehicular traffic, the model will be able to adjust for transit vehicles, bicycles and pedestrians. The model will be a traditional, four-step model that involves the processes of (1) trip generation, (2) trip distribution, (3) mode choice, and (4) trip assignment. The new model will utilize TransCAD software and include a Geographical Information Systems (GIS) interface. Once completed, the model will be utilized by the SMTC staff to perform a wide range of transportation planning activities.