Chapter IV: Changing Transportation Needs and Impacts

A. Travel Modes

1. Passenger Vehicles

By far, the most common mode of transportation utilized in Onondaga County is the passenger motor vehicle, and the popularity of this mode of commuting continues to increase over time. Between 1990 and 2000, the percentage of those driving alone to work increased from 75 to 80 percent. The remaining modes of transportation noted in Table 4-1, including carpool, public transportation, and bicycling or walking, have shown a decline in usage since 1990.

According to the data published by the Census Bureau and the Bureau of Transportation Statistics, in addition to the passenger motor vehicle remaining the preferred mode of commuting, the travel time of the commute for the labor force has increased over the past decade. In 1990, the mean travel time to work in Onondaga County was 18.3 minutes, and in 2000 it increased to 19.3 minutes.¹

Table 4-1

<table>
<thead>
<tr>
<th>Transportation To Work</th>
<th>1990</th>
<th>2000</th>
<th>Total Increase / Decrease From 1990 - 2000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drove Alone</td>
<td>75.2%</td>
<td>80.1%</td>
<td>+ 4.9%</td>
</tr>
<tr>
<td>Carpooleled</td>
<td>12.1%</td>
<td>9.9%</td>
<td>- 2.2%</td>
</tr>
<tr>
<td>Public Transportation</td>
<td>4.5%</td>
<td>2.6%</td>
<td>- 1.9%</td>
</tr>
<tr>
<td>Bicycled or Walked</td>
<td>5.3%</td>
<td>4.1%</td>
<td>- 1.2%</td>
</tr>
<tr>
<td>Other</td>
<td>0.6%</td>
<td>0.5%</td>
<td>- 0.1%</td>
</tr>
<tr>
<td>Worked at Home</td>
<td>2.4%</td>
<td>2.8%</td>
<td>+ 0.4%</td>
</tr>
<tr>
<td>Total</td>
<td>100.1%</td>
<td>100%</td>
<td>----</td>
</tr>
</tbody>
</table>

Source: U.S. Census Bureau. Public Transportation includes buses, trains, taxicabs and related services. Other includes motorcycles.

The number of licensed drivers in Onondaga County in 2001 was 315,615, with the total number of all types of vehicles registered in Onondaga County at 346,360.² The mean number of vehicles per household remained relatively steady at 1.52 in 2000 (versus 1.54 in 1990).³ Worth noting, however, is that while the number of vehicles per household remained relatively constant, the number of persons per household fell over the same time period (2.4 persons per household in 2000 versus 2.6 persons per household in

¹ CTPP 2000, Table 1.
² www.nydmv.state.ny.us/stats.htm
³ CTPP 2000, Table 1
1990). This results in a higher vehicle per person ratio (i.e., larger number of smaller households with the same number of vehicles per household). This trend could logically lead one to ask – “Does this mean people are driving more?” In short, the answer is yes.

According to the Highway Performance Monitoring System (HPMS) provided by the New York State Department of Transportation (NYSDOT) Planning and Strategy Group, in 2002 the number of Daily Vehicle Miles of Travel (DVMT) in the SMTC Federal Aid Urbanized Area was 9,473,000. This represents a 35.52 percent increase over miles traveled in 1990 when the DVMT was 6,990,000. The following graph (Table 4-2) shows actual HPMS DVMT values for 1990 through 2002 and forecasted travel miles for the years 2003 through 2023. The forecasted DMVT shown in this graph was prepared by the WEFA Group, a forecasting consulting firm, for the NYSDOT in 2001.

**Table 4-2**

![WEFA* Vehicle Miles Traveled (VMT) Forecast 1990-2002 Actual Highway Performance Monitoring System (HPMS) Daily Vehicle Miles Traveled (DVMT)](chart)


*WEFA: Wharton Econometric Forecasting Association is a forecasting consultant group hired by the NYSDOT.
Journey to Work Forty-Year Trends

As previously stated, the preferred mode of transportation for commuting to work is the single-occupancy automobile. Table 4-3 summarizes the mode of choice for trips to work in Onondaga County from 1960 to 2000. There has been a substantial increase in private vehicle use over this forty-year period, while transit use and walking have declined over time.

Table 4-3

<table>
<thead>
<tr>
<th>Year</th>
<th>Private Vehicle/Carpool</th>
<th>Transit</th>
<th>Walked</th>
<th>Bicycled</th>
<th>Home Occupation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1960</td>
<td>70.9%</td>
<td>14.6%</td>
<td>9.9%</td>
<td>NA</td>
<td>3.1%</td>
</tr>
<tr>
<td>1970</td>
<td>80.3%</td>
<td>8.5%</td>
<td>7.6%</td>
<td>NA</td>
<td>2.2%</td>
</tr>
<tr>
<td>1980</td>
<td>84.4%</td>
<td>6.6%</td>
<td>6.8%</td>
<td>NA</td>
<td>1.4%</td>
</tr>
<tr>
<td>1990</td>
<td>87.3%</td>
<td>4.5%</td>
<td>5.1%</td>
<td>.2%</td>
<td>2.4%</td>
</tr>
<tr>
<td>2000</td>
<td>90.0%</td>
<td>2.6%</td>
<td>3.9%</td>
<td>.2%</td>
<td>2.8%</td>
</tr>
</tbody>
</table>

Source: U.S. Census Bureau

An examination of the mode of transportation to work by municipality in Onondaga County yields interesting information (see Table 4-4). For example, the City of Syracuse has by far the largest number of people (4,148) using public transportation to get to work, with the Towns of Camillus, Salina and Clay following with approximately 300 public transportation users each. Rural towns south of Syracuse such as LaFayette, Otisco, Fabius, Pompey, Spafford and Tully show very few people use public transportation to get to work.

In the City of Syracuse, 5,960 people walked to work in 2000. The Towns of Salina, Clay, DeWitt, Camillus and Manlius reported having between 200 and 300 walkers each. The towns with the fewest people walking to work were Spafford and Otisco.

The City of Syracuse, and the Towns of Clay, Manlius, Cicero and Lysander had a large number of people who work at home. Elbridge, Fabius, Otisco, and Spafford had the fewest home workers.
Table 4-4
Mode of Transportation to Work by Town in Onondaga County, 2000

<table>
<thead>
<tr>
<th>Towns in Onondaga County</th>
<th>Drove Alone</th>
<th>Car Pool</th>
<th>Public Transportation</th>
<th>Other Means</th>
<th>Walked</th>
<th>Worked at Home</th>
<th>Total Workers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Camillus</td>
<td>9,769</td>
<td>1,373</td>
<td>376</td>
<td>42</td>
<td>256</td>
<td>276</td>
<td>10,993</td>
</tr>
<tr>
<td>Cicero</td>
<td>12,367</td>
<td>1,076</td>
<td>27</td>
<td>47</td>
<td>161</td>
<td>444</td>
<td>14,122</td>
</tr>
<tr>
<td>Clay</td>
<td>26,618</td>
<td>2,700</td>
<td>239</td>
<td>214</td>
<td>255</td>
<td>737</td>
<td>30,763</td>
</tr>
<tr>
<td>DeWitt</td>
<td>9,321</td>
<td>997</td>
<td>170</td>
<td>102</td>
<td>237</td>
<td>402</td>
<td>11,229</td>
</tr>
<tr>
<td>Elbridge</td>
<td>2,386</td>
<td>346</td>
<td>55</td>
<td>20</td>
<td>80</td>
<td>55</td>
<td>2,942</td>
</tr>
<tr>
<td>Fabius</td>
<td>803</td>
<td>95</td>
<td>4</td>
<td>3</td>
<td>23</td>
<td>52</td>
<td>980</td>
</tr>
<tr>
<td>Geddes</td>
<td>6,564</td>
<td>853</td>
<td>152</td>
<td>39</td>
<td>112</td>
<td>168</td>
<td>7,888</td>
</tr>
<tr>
<td>LaFayette</td>
<td>2,184</td>
<td>228</td>
<td>0</td>
<td>9</td>
<td>67</td>
<td>89</td>
<td>2,577</td>
</tr>
<tr>
<td>Lysander</td>
<td>8,540</td>
<td>756</td>
<td>43</td>
<td>59</td>
<td>82</td>
<td>383</td>
<td>9,863</td>
</tr>
<tr>
<td>Manlius</td>
<td>13,388</td>
<td>993</td>
<td>124</td>
<td>76</td>
<td>230</td>
<td>584</td>
<td>15,395</td>
</tr>
<tr>
<td>Marcellus</td>
<td>2,706</td>
<td>255</td>
<td>24</td>
<td>6</td>
<td>161</td>
<td>117</td>
<td>3,269</td>
</tr>
<tr>
<td>Onondaga</td>
<td>8,280</td>
<td>758</td>
<td>106</td>
<td>44</td>
<td>67</td>
<td>282</td>
<td>9,537</td>
</tr>
<tr>
<td>Otisco</td>
<td>1,019</td>
<td>137</td>
<td>7</td>
<td>5</td>
<td>17</td>
<td>62</td>
<td>1,247</td>
</tr>
<tr>
<td>Pompey</td>
<td>2,397</td>
<td>187</td>
<td>0</td>
<td>0</td>
<td>98</td>
<td>263</td>
<td>2,945</td>
</tr>
<tr>
<td>Salina</td>
<td>13,891</td>
<td>1,561</td>
<td>243</td>
<td>138</td>
<td>317</td>
<td>345</td>
<td>16,495</td>
</tr>
<tr>
<td>Skaneateles</td>
<td>2,843</td>
<td>264</td>
<td>28</td>
<td>24</td>
<td>115</td>
<td>171</td>
<td>3,445</td>
</tr>
<tr>
<td>Spafford</td>
<td>708</td>
<td>90</td>
<td>0</td>
<td>3</td>
<td>5</td>
<td>64</td>
<td>870</td>
</tr>
<tr>
<td>Tully</td>
<td>1,072</td>
<td>128</td>
<td>3</td>
<td>11</td>
<td>61</td>
<td>96</td>
<td>1,371</td>
</tr>
<tr>
<td>Van Buren</td>
<td>5,197</td>
<td>593</td>
<td>67</td>
<td>36</td>
<td>89</td>
<td>163</td>
<td>6,145</td>
</tr>
<tr>
<td>City of Syracuse</td>
<td>38,936</td>
<td>8,114</td>
<td>4,148</td>
<td>678</td>
<td>5,960</td>
<td>1,205</td>
<td>59,041</td>
</tr>
</tbody>
</table>

Source: US Census Bureau 2000, SF3 Table P30 and CTPP Table 1-102

Commuting in Onondaga County

The 2000 commuting data (see Table 4-4) shows that most people commute in single occupant vehicles. Overall, a small percentage of work trips are made via public transportation. However, in certain zones in the urbanized area, transit is utilized more and is regarded as an indispensable mode of travel for many people. In no instance did bicycling reach even one-half of one percent of work trips made. Carpooling remains an alternative for many.

For those who commute to work, the mean travel time, depending on the county, varied from 19 minutes in Onondaga County to 24 minutes in Oswego County, both of which were lower than the statewide travel time of 31 minutes. The data regarding the percentage of the labor force working outside the county of residence clearly demonstrate that Onondaga County is where most of the jobs in the Central New York region are located. Only 5.9 percent of Onondaga County residents work outside Onondaga County.
County. This is contrasted by much higher percentages in adjacent counties. For example, 28 percent of residents in Cortland County and 49 percent of residents in Madison County travel to a different county to work. These commuting patterns of outlying counties commuting into Onondaga County for work highlight the need for maintaining a well-functioning highway network.

As noted previously, there has been a 35.52% increase in vehicle miles traveled (VMT) since 1990. Data from a 1995 New York National Personal Transportation Survey study (which has been verified to be reflective of current trends by the NYSDOT Planning and Strategy Group) shows that the Syracuse Metropolitan Planning Area (MPA) reported 30.28 daily VMT per driver. This number is slightly higher in comparison to Albany (at 26.05 daily VMT per driver), the only other upstate New York MPA of similar population size. As compared to other upstate MPA areas with less than 3 million people, Syracuse MPA’s daily VMT is about average.4

As shown in the 2000 Census data, the highest numbers of people commuting to work in Onondaga County are traveling to the City of Syracuse (87,779) as well as the Town of DeWitt (37,837) and the Town of Salina (17,337).5 The number of people commuting to work in a single occupancy vehicle is determined by where jobs are located as well as the density of residential areas and the transit available in those areas. In some cases, an increase in available transit would not be cost effective based on population density. As daily VMT and corresponding trends of an increase in commuting rise, sprawl will continue. For a discussion of sprawl, please see the discussion in the following paragraph and Appendix C. An additional factor in increasing the use of single occupancy vehicles and VMT is low fuel costs. If fuel is affordable (according to market conditions), people are more likely to drive greater distances.6

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When presented with an increase in commute times combined with an increase in the movement of residents to the outlying suburbs, one of the main concepts that needs to be addressed is suburban sprawl. The impacts of suburban sprawl greatly affect passenger vehicle transportation. As people move further away from goods, services, and places of work, the use of vehicles and travel time increases. The additional commuting trips increase the burden on the road network. In addition, when sprawl occurs, public transit options become less desirable due to cost and time efficiency factors. Sprawl and development tend to create more of a burden on the passenger vehicle transportation system. The presence and absence of existing infrastructure such as water and sewer systems directly influence development and sprawl. There is now a willingness of residents to move to the outskirts of Onondaga County and to other surrounding counties, where commuting greater distances is acceptable. One of the side effects associated with sprawl is cost. There are additional building and maintenance costs for roads, schools, retail, water and sewer systems, human services, transit services, and abandonment of existing infrastructure, among other things. The reliance of the interstate system is due to sprawl; as more sprawl occurs, more are reliant on the interstate system as this is how people move from one point to another.

The ongoing change in retail and related development also contributes to sprawl. Retail development that is built away from established areas draws housing development, which in turn entices people to move to these outlying areas. As people move to the new area, more retail development follows to fill in the gap of missing needs and services. The creation of additional housing occurs once again because now there is an established area of retail development. A few examples of this concept are found within Onondaga County along the Route 31 corridor in Clay and Cicero, as well as with the new Town Centre at Fayetteville.

As a result of suburban sprawl and its contribution of increased passenger vehicle trips made and longer travel times to work, most funding sources currently available for capital improvements on Onondaga County roadways are utilized for maintaining the current road network. As noted in Chapter 5: Safety Conditions and Infrastructure Maintenance, the majority of the funds for the road network are used to maintain the most heavily traveled routes in the county.

**Interstate Congestion**- There are many issues relating to the high rate of single occupancy passenger vehicles in Onondaga County and the surrounding areas. There is an increase in the amount of traffic on the commuter interstates (I-690 and I-481) as well as on the through-route interstates (I-81 and I-90). Local traffic combined with interregional traffic (i.e., truck freight movement and commuters) can create heavier traffic flow, primarily during peak hours, especially on I-81.

**Network**- Overall, there is a lack of options for passenger vehicles to move across the Syracuse MPA from east to west or vice versa. The main east west corridor is I-90 (New York State Thruway). Initial efforts are being made to examine the possibility of using different roads to provide an alternative for traffic moving in these directions across Onondaga County.
Interstate ITS- As mentioned in this report, current Intelligent Transportation Systems (ITS) initiatives are aimed at relieving recurring and non-recurring delay caused by passenger vehicle commuting in Onondaga County. Another issue that the ITS program will address is improving passenger vehicle mobility through incident management. Please refer to the ITS section for additional details.

Parking- Suburban sprawl has an additional impact on parking. Parking becomes more of an issue when increasing amounts of people are using passenger vehicles as a mode of transportation, and is of critical importance in dense areas that have a lack of parking such as University Hill and Downtown Syracuse. Park and ride and transit options are current ongoing efforts attempting to assist with reducing parking issues associated with an increase in passenger vehicle traffic.

Air Quality- Additionally, an increase in passenger vehicle traffic has a direct negative effect on air quality and also is a contradiction to the principals of the state energy plan.

City-Residential Demolition- As suburban sprawl continues, a direct result is the de-densification of housing units in the City. For data on demolitions, please see table 3-11. This has significant transportation infrastructure implications, noted below:

- The average commute to work in Onondaga County continues to increase.  
- An increased dependency on vehicles for transportation, as indicated through increases in vehicles per household in Onondaga County to a record average.  
- With larger travel distances to work, 2000 Census figures show decreases in walking, bicycling and public transit, as well as increases in private vehicle usage for commuting to work.  
- Providing accessible and cost-effective public transportation becomes more difficult, as residential and job centers are spread out across the County.

2. Bicycle and Pedestrian Travel

Census data detailing the modes of travel to work by workers in Onondaga County in 1990 and 2000 are shown in Table 4-5. Additionally, the 2000 Census data are separated to compare City of Syracuse patterns with those of the remaining suburban portions of Onondaga County.

Table 4-5

<table>
<thead>
<tr>
<th>Onondaga County Journey To Work Statistics, 1990-2000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Onondaga County</td>
</tr>
<tr>
<td>1990 Census</td>
</tr>
<tr>
<td>--------------</td>
</tr>
<tr>
<td>Workers (Ages 16 and Over)</td>
</tr>
<tr>
<td>Drove alone</td>
</tr>
<tr>
<td>Carpoled</td>
</tr>
<tr>
<td>Public Transportation</td>
</tr>
<tr>
<td>Walked</td>
</tr>
<tr>
<td>Bicycled</td>
</tr>
<tr>
<td>Worked at Home</td>
</tr>
<tr>
<td>Motorcycled or Other</td>
</tr>
</tbody>
</table>

Source: US Census Bureau 2000, SF3 Table P30, CTPP 2000

According to the 2000 United States Census, approximately 8,749 workers over the age of 16 within Onondaga County walk or bicycle to work. Of those who walk or bicycle to work, over 70% live within the City of Syracuse. Since 1990, Onondaga County has seen a decrease in pedestrian travel, potentially attributable to a decrease in city population over the past decade. Other factors such as the condition of pedestrian facilities, perceived safety, and alternative mode choices may also be attributable to the decrease.

Although the percentage of those bicycling to work has shown an increase of nearly 25%, upon further examination of the census numbers for bicycle commuting, the increase may not be statistically significant, as the number of bicycle commuters increased by only 97 people since 1990.

Another important factor in bicycle and pedestrian planning (as well as transit planning) is the accessibility of vehicles. Remaining relatively steady since 1990, the latest 2000 Census indicates that 12.6% of all households in Onondaga County do not have a vehicle, a 3.6% decrease from 1990. It is important that the Metropolitan Planning Organization (MPO) recognize the needs of those without personal motor vehicle transportation. In addition, there are various citizens’ groups that are interested in using non-motorized modes of transportation to travel to work.

*Typical Pedestrian and Bicycle Trip Lengths*

When planning new bicycle and pedestrian facilities or upgrading or reconstructing existing roadways to accommodate bicyclists and pedestrians, one of the items for transportation planners and engineers to consider is the typical trip length of pedestrians and bicyclists. According to the *Transportation Planning Handbook*, published by the Institute of Transportation Engineers, “bicycle and pedestrian trips are typically characterized by short trip distances: approximately one-quarter mile to one mile for
pedestrian trips and one quarter-mile to three miles for bicycle trips.” In addition, the American Association of State Highway and Transportation Officials (AASHTO) *A Policy on Geometric Design of Highways and Streets* notes that “the pedestrian most likely will not walk over 1 mile to work or over 0.5 mile to catch a bus, and about 80% of the distances traveled by the pedestrian will be less than 0.5 mile.”

With the majority of bicycle and pedestrian trips covering short distances, land use patterns play a critical role in the current and future development and use of bicycle and pedestrian facilities.

**Federal Legislation**

Over the past several years, federal legislation and funding for transportation has given increasing consideration to bicycle and pedestrian travel and related infrastructure. Through the 1991 Intermodal Transportation Efficiency Act (ISTEA), new national attention was placed on bicycle and pedestrian provisions and MPOs were mandated to consider bicycling and walking as transportation plans were prepared. The Transportation Equity Act for the 21st Century (TEA-21) of 1998 continued to expand both legislative requirements as well as funding opportunities for pedestrian and bicycle facilities to be used for transportation purposes.

One reason that these non-motorized modes of travel are gaining in stature and importance is their positive effects on air quality. The federal Congestion Mitigation and Air Quality (CMAQ) legislation and Transportation Enhancements (TE) programs administered by the Federal Highway Administration are principal funding avenues for bicycle/pedestrian projects across the country, as a way of encouraging alternatives to private automobile usage for transportation. Successful as many of these projects have been, both of these funding sources have been limited compared to other transportation funding mechanisms and are highly competitive in nature. The Transportation Enhancements program has concluded its last round of project solicitations and, until a successor program is developed within the next transportation reauthorization, is no longer an option for funding projects. It is anticipated that a similar program will be included but specific information is not available at the time of this report.

With the TEA-21 legislation expiring in 2003, the United States Department of Transportation (USDOT) is currently preparing for the reauthorization of surface transportation programs by working with Congress, State and local officials, tribal governments, and other stakeholders to develop its proposals. Discussions to date seek to build upon the successes of ISTEA and TEA-21, including a renewed emphasis on air quality enhancements and multimodal opportunities.

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Pedestrian/Bikeway Planning

Both Onondaga County and the City of Syracuse have bikeway plans and projects underway, several of which are funded through the MPO’s Transportation Improvement Program (TIP). Several examples are listed below. See Map 8.

- **Bicycle And Pedestrian Plan** – The SMTC is in the process of developing a *Bicycle and Pedestrian Plan for Onondaga County and the City of Syracuse*. The primary goals of this Plan are to preserve and enhance the bicycling and pedestrian network; and to improve the safety, attractiveness, and overall viability of cycling and walking as legitimate transportation alternatives to the transportation system in the Greater Syracuse area.

  *Onondaga Lake Trail*

  The SMTC has taken the lead role in the sponsorship of this project, and is completing the study in-house, with substantial input from the SMTC member agencies and citizen participants. This study is scheduled to be completed in 2004, and includes the following tasks: (1) evaluating and summarizing existing bicycle and pedestrian plans; (2) data compilation and summary; (3) gathering of existing conditions/creation of a suitability map; (4) identifying known and perceived bicycle and pedestrian issues; and (5) developing recommendations and action items that seek to improve the community’s bicycle and pedestrian environment.

- **Onondaga Lake Trail, also known as the “Loop the Lake Trail”** - The Onondaga County Department of Parks and Recreation continues to work on completing the planned bicycle/pedestrian trail around Onondaga Lake. In 2002, the West Shore Trail was opened to the public, representing another leg of the trail planned to encircle the entirety of Onondaga Lake. The County is also currently working with the U.S. Army Corps of Engineers on the design of a proposed trail opportunity along the eastern shoreline of the lake. The trail may be in the form of a causeway or boardwalk constructed well into the lake itself; creating a trail extension that avoids dangerous roadways and railroad corridors, and also providing for the creation of an expanded wetland habitat for plants and animals. The southwest shore trail segment continues to present obstacles due to environmental conditions, proximity of railroad facilities to the shoreline, and litigation over cleanup responsibilities. Funding totaling approximately $6 million for the trails completion is currently earmarked on the TIP. See Map 8 for the Onondaga Lake Trail, as well as other major exiting and proposed trail routes in Onondaga County.
• **Onondaga Creekwalk** – This multi-use trail system has been in existence since the early 1990s, with completed portions open in the Franklin Square and Inner Harbor areas in Syracuse’s Lakefront Area. (A temporary connection has been established as well, connecting the two segments until creekside property can be obtained and removed of pollutants.) The Onondaga Creekwalk is intended to be a continuous trail system on the edge of Onondaga Creek, stretching from Onondaga Lake to the southern city limits and beyond. Another TIP funded project (a Creekwalk extension project) is currently under design extending the trail further south to Armory Square, as well as north to the mouth of Onondaga Lake. A feasibility study for another southern extension, from Kirk Park north to Armory Square, is also on the current TIP. Several neighborhood advocacy groups have supported construction of the Creekwalk and are initiating grassroots campaigns to rediscover the Creek and its recreational opportunities.

• **New York State Erie Canalway Trail** - Portions of this planned 350+ mile trail have been completed within Onondaga County that link to the end-to-end statewide Erie Canalway Trail along the Erie Canal Corridor from Buffalo to Albany. This project is ongoing. The Syracuse segment of this trail is considered to be one of the most difficult gaps to complete, primarily due to the fact that the 15-mile segment that will connect Camillus in the west and DeWitt in the east traverses land that is the most urbanized along the entire state route. The proposed route also exhibits widely differing characteristics and features, as it passes over public streets, moderately maintained utility roads, seasonal access roads, multi-use trails, and a waste settling bed. The Onondaga Lake Trail and Onondaga Creekwalk will be incorporated as segments of the Canalway Trail system.

In 2002, New York State announced a $35 million state funding commitment toward the completion of the entire statewide trail. The Syracuse Area is slated to receive approximately $3 million towards the effort. Towns and villages along the canal system are attempting to capitalize on the revitalization of the Erie Canalway, and several municipalities such as the Village of Baldwinsville are requesting TIP and other funds for the construction of trail facilities and promenades along the canal. See Map 8 for the proposed routing of the Canalway Trail.
• **Centro Bicycle Racks** - Beginning in 1997, the Central New York Regional Transportation Authority (CNYRTA or Centro) began retrofitting all of its Centro passenger buses with bicycle racks, in an effort to encourage increased Centro usage combined with bicycling. Today, the vast majority of Centro’s fleet is equipped with bike racks attached to the front of their buses, and the SMTC has included informational panels on its *Bicycle Suitability Map* to educate bicyclists in proper usage of the racks.

Through various SMTC studies, the SMTC has been made aware of bicycle and pedestrian issues that exist within the MPO area. Commonly, the noting of bicycle and pedestrian issues are required elements of any transportation study. Some of the concerns regarding bicycle travel that the public has shared with the SMTC include a lack of facilities, disregard for safety and a general lack of awareness of the rules and regulations associated with safe bicycle travel. One of the most often stated comments relayed to the SMTC by the public is the lack of dedicated bicycle lanes and routes with appropriate signage within the MPO area. This and other related issues are being examined comprehensively via the Bicycle and Pedestrian Plan currently underway.

The SMTC has also been made aware of several pedestrian issues such as poor sidewalk conditions, inadequate clearing and maintenance of sidewalks, non-compliance with the Americans with Disabilities Act (ADA), and bus stop related issues such as a limited number of shelters and boarding surfaces. The majority of pedestrian issues relayed to the SMTC consist of a lack of continuity in pedestrian facilities as well as safe places to walk.

Another bicycle and pedestrian travel related issue that has been shared with the MPO is the need for connectivity between the major destinations within the MPO area, such as parks, shopping centers and colleges/universities. The SMTC’s Bicycle Suitability Map (recently published and distributed) furthers this perception as it shows that many of the “popular” destinations have less than favorably rated roadways available for access.

Bicycle and pedestrian improvements continue to be made throughout the SMTC planning area. Improvements such as the addition of bicycle and pedestrian amenities (i.e., bike racks) at key locations, the upkeep of sidewalks and roads, the building of new bicycle and pedestrian facilities, and the continued inclusion of bicycle and pedestrian planning in all aspects of SMTC’s work will further promote the use of non-motorized transportation in the MPA.

As stated above, the SMTC is currently completing a comprehensive, policy-based Bicycle and Pedestrian Plan. Since that study is currently a work in progress, it would be premature to rely on its issues and recommendations at this time. Upon the completion of the Bicycle
and Pedestrian Plan, the SMTC will have a policy tool that can be utilized by any entity in the MPA to further the cause of bicycle and pedestrian planning activities. The SMTC will utilize the results of this plan in the next iteration of this Long-Range Transportation Plan (LRTP).

3. Public Transit

Centro operates the public transportation system in Onondaga, Oswego and Cortland Counties. Centro operates fixed-route public transit systems and demand-responsive paratransit service with a total fleet of 207 buses housed in three garages— one in each county. The CNYRTA has made a commitment to convert as many of its buses as possible to clean fuel technologies and currently includes 114 compressed natural gas (CNG) buses in its Onondaga County fleet. This fleet of CNG buses comprises a significant proportion (86%) of Centro’s peak bus hour requirement of 132 buses. Centro plans to purchase five additional clean air diesel/electric hybrid, low floor buses in 2004. In an effort to promote multimodal transportation uses, bicycle racks can be found on the front of most Centro buses. All future bus purchases will include bike racks.

Centro transports 25,000 people per day in Onondaga County on over 100 transit routes with 18,000 to 20,000 riders per day. See Map 9 for transit routes in the MPO area. The majority of Centro’s routes meet at the central point of the regional hub-and-spoke system at the intersection of Fayette and Salina Streets in the City of Syracuse. It is at this "Common Center" that nearly two thirds (65%) of the Syracuse metropolitan region’s bus riders transfer to other routes. Other routes circulate within suburban areas without traveling into the center of Syracuse. In addition, locations such as regional shopping centers, the William F. Walsh Regional Transportation Center, and other outlying centers of activity serve as convergence points for transit routes.

Centro operates connecting routes between the Cities of Syracuse, Oswego, Fulton and Auburn, as well as city transit services within each of these cities. Within Onondaga County, service frequencies in the rush hours are such that all Common Center bus stops are in continuous and heavy use. In the midday and evening periods and on weekends, up to 16 Centro routes converge simultaneously and “line-up” at Common Center every 35 minutes; four at each nearside corner of the intersection. Suburban routes operate with a seventy-minute level of service (headway) during these time periods.

Centro’s routing system in Onondaga County was modified in November 2002 to better serve new markets and changing demographics. The updated Centro routing system provides better service to suburban markets, more “one-seat” rides for significant origin
and destination pairings and minimizes the percentage of people needing to transfer. In addition, changes were made to accommodate the growing percentage of elderly patrons by connecting senior living and community centers to likely destinations such as Carousel Center, the William F. Walsh Regional Transportation Center and the many medical facilities on University Hill. Finally, a new, simplified route numbering system has been implemented.

Centro bus stops, bus shelters, park-and-ride and rideshare locations can be found throughout the MPO area (see Map 9). Fares to ride Centro are $1.00 for travel within one fare zone with a $.25 charge for crossing into a new zone. Senior citizens and disabled citizens are charged $.60 for riding on Centro with a $.10 extension zone charge. Centro bus service operates primarily between 5:00 am and 12:00 am, seven days a week. Children under the age of 6 that are accompanied by an adult are free. The fare for children between the age of six and nine is $.50.

General ridership numbers for routes within the MPO area are noted in Table 4-6.

| Source: CNYRTA |

The CNYRTA ridership numbers noted in Table 4-6 represent Centro’s service within Onondaga County. Ridership is reported by fiscal year and includes paratransit service. Centro’s Onondaga County ridership levels decreased between 1990 and 2000. The Census 2000 demographics indicated that the use of public transportation for journey to work trips has decreased by almost 45% between 1990 and 2000. Nevertheless, Centro has reported increases in ridership in the last two years as new services have been implemented.

Centro also operates Call-A-Bus service to provide transportation options to the elderly and disabled who meet the criteria of the ADA. Call-A-Bus uses a fleet of 22 smaller transit vehicles to serve the geographic area and span the hours and days mandated by the ADA. Call-A-Bus service will travel up to three-quarters of a mile to either side of every
Centro regular bus route. Fares to ride Call-A-Bus are $1.25 within one fare zone, with a $0.50 charge for crossing into a new zone.

In 1998, the CNYRTA opened the William F. Walsh Regional Transportation Center in the City of Syracuse, located adjacent to Interstate Route 81, the Central New York Regional Market, P & C Stadium, and Carousel Center.

For the first time in the Central New York community, this intermodal facility brings together intercity rail, intercity bus lines, local and regional buses and taxi service. The CNYRTA subsequently restructured a number of its bus routes to maximize direct service to the William F. Walsh Regional Transportation Center from points throughout the region, furthering the ease of intermodal passenger travel. From the William F. Walsh Regional Transportation Center, travelers can access Greyhound and Trailways intercity coach service, shuttle bus service to Hancock International Airport, as well as Amtrak intercity passenger rail along the Empire Corridor and ground transportation services. The Empire Corridor serves all the major upstate New York cities such as Albany, Syracuse, Rochester and Buffalo as well as destinations along the Hudson Valley. Centro has experienced an increase of passengers due to the connectivity of the William F. Walsh Regional Transportation Center.

As part of the Regional Mobility Action Plan (ReMap) report completed by Centro in 1999, a Mobility Management Center (MMC) operated by Centro was created to coordinate transportation for people with transit needs (taxi, vans, etc.) that have non-traditional hours and locations, such as rural areas. This program recently provided service to its 25,000th customer. The Mobility Management Center has proven to be successful and effective.

Following is a list of the greatest challenges facing the public and private transit systems within the planning horizon:

- As of this writing, Federal legislation is being formulated to renew authorization for transportation expenditures through the Federal Highway Administration and Federal Transit Administration. The new legislation may change the funding formula used to distribute Federal funding for all transportation modes, including transit. The Federal funding allocation to New York State and, therefore, to CNYRTA may be reduced. If so, CNYRTA may face financial limitations for capital acquisitions and equipment maintenance in the future.
While Centro recently updated its routing system to better serve emerging markets, the dispersal of population to less densely developed suburban and exurban areas makes provision of efficient, effective mass transportation a continual challenge. Centro must continually react to changing land use and demographic conditions with a budget that has not grown commensurately over the years.

The transit system must attempt to accommodate the growing percentage of elderly patrons. This presents special challenges for the transit system as senior living and community centers proliferate, often in hard to serve locations. Serving the elderly well also may require acquisition of more expensive equipment, such as low floor buses, voice enunciator systems, etc.

There are operational and market-driven reasons for the location of Common Center at the intersection of Fayette and Salina Streets. In years past, efforts have been made to induce the Authority to move Common Center permanently to an alternate location. While discussions are ongoing, a new site has not been definitively identified. Planning for a new Common Center, capital acquisition, land acquisition, design and construction may take up to five years to accomplish.

Centro is researching hybrid diesel/electric (fuel cell) buses and is considering purchasing such vehicles in the future. Diesel/electric hybrid is a clean fuel technology as is compressed natural gas. While CNG buses will continue to comprise the bulk of the fleet, Centro will seek to diversify its bus fleet. All future buses purchased will be clean fuel, however, such equipment is more costly than diesel technology. If Federal funding is not forthcoming, this program may be jeopardized.

Centro is currently completing several ITS projects; including Automated Vehicle Locator (AVL), Automated Passenger Counter (APC) systems and a modern, more efficient radio communications system. These technologies will enable Centro to complete its mission with greater efficiency. If Federal funding is reduced future ITS projects may be jeopardized.

Centro also intends to enhance security throughout its transit system in response to Homeland Security concerns and in an effort to combat crime. Again, if Federal funding is reduced future security projects may be jeopardized.

Intermodal connectivity will be enhanced when the Ontrack railroad bridge over Park Street is completed. This will allow Ontrack Shuttle and special events trains to access the William F. Walsh Regional Transportation Center.

With the proposed development of the Carousel Center into DestiNY USA, there may be further opportunities for intermodal connectivity and enhancement of regional access to the William F. Walsh Regional Transportation Center, Hancock
International Airport and other major trip generators in the urbanized area of the region.

- In order to increase ridership, Centro must compete with the perception that the best mode of travel is via the single occupant passenger car.

- Detailed and comprehensive ridership data (by route and stop) should be collected in order to provide accurate transit information for planning studies.

- Centro has stated that a more stable funding source is needed for mobility brokerage activities of social services and paratransit services.

4. Water Transportation

The New York State Canal System is operated by the New York State Canal Corporation, a division of the New York State Thruway Authority. The Canal System is open approximately six months of the year, with the exact opening and closing dates subject to change based on (potential) seasonal flooding conditions or other factors.

As was pointed out in the Central New York Canal Plan in 1993, the Canal System has been adversely impacted by three major issues: (1) the gaps in the kinds of facilities and services available to canal users; (2) the inconsistencies in the quality of those facilities provided; (3) the unplanned geographic distribution of facilities and services, resulting in distances not within a convenient day’s travel for boaters. The Central New York portion of the Canal system is shown in Map 10.

Data does exist on the number of lockings through the area, as reflected in Table 4-7.

Lock E-23 is the busiest lock, and Lock E-24 the second busiest on the entire New York State Canal System. Forecasts for future years are not available.

Lock 24 in Baldwinsville, NY

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Table 4-7

Number Of Pleasure Craft Passing Through Lockings
(LOWERED OR RAISED FROM ONE LEVEL TO ANOTHER)

<table>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Lock E-23 State Canal Park, Town of Clay</td>
<td>7,598</td>
<td>8,924</td>
<td>7,372</td>
<td>7,553</td>
<td>7,469</td>
<td>8,072</td>
<td>6,295</td>
<td>7,115</td>
</tr>
<tr>
<td>Lock E-24 Village of Baldwinsville</td>
<td>3,973</td>
<td>4,484</td>
<td>3,426</td>
<td>3,746</td>
<td>3,826</td>
<td>4,171</td>
<td>3,382</td>
<td>4,152</td>
</tr>
<tr>
<td>Total NYS Canal System</td>
<td>115,684</td>
<td>126,051</td>
<td>127,699</td>
<td>138,619</td>
<td>141,929</td>
<td>141,965</td>
<td>129,304</td>
<td>135,181</td>
</tr>
</tbody>
</table>


In order to address these issues and capture the potential economic development benefits associated with increased tourism, the Canal Corporation is working with canal communities along the system to improve facilities and support the efforts of private entrepreneurs to improve the number, quality and spacing of privately sponsored facilities. The federal government has also been a source of financial assistance, through the US Department of Housing and Urban Development’s (HUD) Canal Corridor Initiative under the previous administration.

In 2002, these efforts were enhanced through federal designation of the Canal System as the Erie Canalway National Heritage Corridor and a Commission of 27 members representing Federal, State and local interests. The Commission has recently begun its activities and is expected to receive Federal funds of approximately $1 million annually for ten years to preserve the historical significance of the canal, promote tourism to spur economic development and expand recreational use.

With the added marketing support and services provided by the National Heritage Corridor designation, improvements identified in the Central New York Canal Plan will likely continue to be implemented, and most likely increase in intensity, through a gradual revitalization process. The public investments and initiatives are also expected to lure greater participation on the part of private investors in expanding the number of and improving the quality of facilities, making the NYS Canal system a viable and accessible means of transportation and recreation.
Although there are gaps in water transportation services and facilities in the MPO area, there is potential for increasing future use of the water features in the area. The major issues and opportunities relating to water transportation in the MPO area that have been identified relate to the canal system and possible future ferry service. The Canal system is being marketed as a tourist attraction, and the development of Inner Harbor on Onondaga Lake could improve as a featured destination for water transportation services. Additionally, the possible implementation of the ferry service across Lake Ontario traveling to destinations in Canada could greatly improve the capacity of water transportation services in the Central New York region.

5. Air Passenger Transportation

Hancock International Airport is the only airport providing commercial air passenger service in the SMTC area and the four-county Syracuse Metropolitan Statistical Area (MSA). Hancock International Airport is owned and operated by the City of Syracuse. The facilities are modern and attractive and space is available to expand to meet new opportunities. In addition to commercial passenger service, Hancock provides an extensive air cargo operation, including U.S. Customs inspection service, as well as general aviation services for private pilots and military operations.

There are three Federal Aviation Administration-designated general aviation reliever airports that support Hancock International Airport, one of which is within the SMTC planning area, Michael Airfield. Hancock Airport, the relievers and several other general aviation airports constitute the Central New York portion of the Federal Aviation Administration’s National Plan of Integrated Airport Systems. The general aviation airports provide alternative sites for privately owned aircraft whose pilots prefer a smaller airport setting. General aviation airports are particularly important to air transportation because of their role in providing private business decision makers and representatives with access to a geographically disbursed array of airfield choices, closer access to destinations and use of private aircraft operating according to the private firm’s schedule rather than an airline schedule.

Air Passenger Service

The number of enplaned passengers through an airport typically fluctuates in response to changes in the economy and other local, national and international conditions. The current passenger levels are still recovering from the adverse impacts of the terrorist attacks of September 11, 2001 and the economic downturn that followed, both in Syracuse and nationally.

The full utilization of Hancock International Airport also has been adversely affected by high airfares. This has caused some passenger diversion to other airports and other modes of transportation. The City of Syracuse has succeeded in bringing lower cost airlines to the airport that are now offering more competitive airfares. The City is continuing its efforts to attract more competition in the Syracuse market by expanding the
number of airlines offering lower airfares. Table 4-8 shows the number of enplaned passengers for the years 1998, 2000 and 2002.

**Table 4-8**

<table>
<thead>
<tr>
<th></th>
<th>Enplaned Passengers at Hancock International Airport</th>
</tr>
</thead>
<tbody>
<tr>
<td>1998</td>
<td>1,073,752</td>
</tr>
<tr>
<td>2000</td>
<td>1,069,123</td>
</tr>
<tr>
<td>2002</td>
<td>953,935</td>
</tr>
</tbody>
</table>

Source: City of Syracuse, Department of Aviation; data from the draft *Airport Master Plan Update*, being prepared by C&S Engineers, Inc.

**Forecasts**

Air traffic forecasts for the number of enplaned passengers vary depending upon the source as well as the point in time when a forecast is made. Table 4-9 shows the most recent forecast data available for enplaned passengers for the years 2007, 2012 and 2017 from the draft *Master Plan Update*, currently in preparation.

**Table 4-9**

<table>
<thead>
<tr>
<th></th>
<th>Forecasts of Enplaned Passengers at Hancock International Airport</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Proposed Preferred Enplanement Forecasts</td>
</tr>
<tr>
<td>2007</td>
<td>1,070,004</td>
</tr>
<tr>
<td>2012</td>
<td>1,242,667</td>
</tr>
<tr>
<td>2017</td>
<td>1,442,297</td>
</tr>
</tbody>
</table>

Source: City of Syracuse, Department of Aviation; Table 5 data from the draft *Airport Master Plan Update*, being prepared by C&S Engineers, Inc., based on the Proposed Preferred Airport Forecast.

**Changing Needs and Impacts**

Hancock International Airport, like all airports, continues to be in the midst of changing conditions. From one perspective, the events of September 11, 2001 and the ensuing economic downturn and the war in Iraq have had an adverse impact on the number of airline passengers. Nationwide, major airlines are faced with significant financial problems and possible restructuring as a consequence of these conditions. As the current national economic situation improves, a positive stimulus is being provided for growth in passenger activity at the airport.
From another perspective, the addition of lower-cost carriers entering the Syracuse market is helping to address a long-standing issue of high airfares at Hancock that have caused much complaint locally and a diversion of some travelers to other airports and modes of travel. The new lower airfares have had a positive impact on the ability to attract passengers and the City of Syracuse continues to support the addition of other low-cost carriers.

6. Passenger Rail Service

Rail passenger service in the SMTC area is provided through two companies. The National Railroad Passenger Corporation (Amtrak) provides intercity rail passenger service in the Central New York region. The OnTrack shuttle trains operate over trackage operated by the Syracuse, Binghamton & New York Railway, a subsidiary of New York, Susquehanna & Western Railway (NYS&W). The passenger rail system in Onondaga County is shown in Map 11.

Amtrak

Syracuse rail passenger traffic on Amtrak is substantial, traditionally ranking third behind New York City and Albany in ridership. The number of passengers initially increased, with enhanced accessibility provided by the opening of the William F. Walsh Regional Transportation Center in 1998 (see Table 4-10). The William F. Walsh Regional Transportation Center provides improved interconnectivity between bus and rail transportation modes, as well as a greater presence for Amtrak in the Syracuse Metropolitan Area. With the decrease in travel following the disaster of September 11, 2001 and the addition of discount airline services, patronage has declined during the last three years. Amtrak is examining additional marketing and service restructuring.

<table>
<thead>
<tr>
<th>Total Arriving and Departing Rail Passengers</th>
<th>William F. Walsh Regional Transportation Center</th>
<th>1980-2001</th>
</tr>
</thead>
<tbody>
<tr>
<td>120,547</td>
<td>118,147</td>
<td>125,459</td>
</tr>
</tbody>
</table>

As a result of Onondaga County’s efforts, a Task Force of County Legislative Chairs from across Upstate New York was formed in 1997 to address the issue of incremental implementation of High Speed Rail in New York State and the enhancement of rail freight service to the region.

The Task Force has been instrumental in working to make changes in local taxation of rail properties. For example, with only 17% of its tracks in New York State, CSXT (railroad) paid approximately 50% of its system-wide tax burden to New York State jurisdictions. Legislation supported by the Task Force and signed by the Governor in
February 2003 lowered the ceiling for municipal taxation of railroads and exempted certain capital improvements for a specified period, thereby reducing the costs of rail operations and shipping and making New York State more competitive. The legislation also has a provision for reimbursing the municipalities during a transition period.

OnTrack

The Syracuse, Binghamton & New York Railway began operation of OnTrack in 1994 with a recreational rail shuttle service. The service connects Carousel Center to Syracuse University with a stop at Armory Square in the Syracuse Central Business District. During the summer months, service occasionally continues on to Jamesville. A future extension is planned that will provide an additional stop at the William F. Walsh Regional Transportation Center. This future stop will provide passenger service to the adjacent P&C Stadium and Regional Market. Service is currently limited to eight trains in each direction, Wednesdays through Sundays with limited times throughout the day.

Changing Needs and Impacts

A number of initiatives being considered have the potential for improving passenger rail service in Central New York. The State of New York is currently assessing the feasibility of high-speed rail service across Upstate. If this service is implemented, changes will be required in the configuration of the William F. Walsh Regional Transportation Center to accommodate high-speed trains and the resulting increase in the number of rail passengers.

The proposed Carousel Center expansion to become DestiNY USA may include the construction of a fixed rail service, potentially connecting the Syracuse Hancock International Airport with the William F. Walsh Regional Transportation Center, DestiNY USA, various Downtown locations and the University Hill area. At this writing,
no decision has been made on whether to construct a fixed rail service but, if this occurs, there is presumably a potential for replacing the OnTrack service currently provided since the possible route and service points at this juncture would appear to overlap.

In the Central New York region, there is a need for improved service for passenger rail transportation. In the future, both OnTrack and Amtrak rail services may be in greater demand and should operate with greater consistency. An expansion of these services beyond the current capacity could improve viable transportation options. In addition, the possibility of studying high-speed rail service to be built for enhanced connectivity on a regional basis exists and is being examined throughout the State.

7. Freight Movement (Air, Highway, Rail and Water)

Among the attractions to doing business in Onondaga County and the Central New York region is the crossroads location of the County for air, highway, rail and water transportation and the variety of freight movement services available. Air cargo service is available at Syracuse Hancock International Airport, which is directly linked to Interstate 81. U.S. Customs inspection services are also available at Hancock Field. Two interstate highways intersect at Syracuse, the New York State Thruway (Interstate 90) and Interstate 81, providing excellent truck access to the SMTC planning area. Rail freight services in Onondaga County are available from three providers. Water transportation is available on the New York State Canal System. Each mode is discussed in greater detail below and the major freight movement modes/routes are shown on Map 12.

Air Cargo

*Hancock International Airport.* Hancock International Airport is owned and operated by the City of Syracuse and is the only commercial service airport in the SMTC planning area and Central New York region. Hancock has extensive air cargo operations, including U.S. Customs inspection service. The airport in recent years has undergone a substantial expansion in the capacity to handle air cargo. A highly successful effort has been made by the private sector and the City of Syracuse to expand and modernize air cargo facilities and services. Examples of freight carriers at Hancock include, but are not limited to, Airborne, Business Air, Emery, Federal Express and UPS. Over the past three decades, the tonnage of air cargo has increased from 5,000 in 1967 to over 13,832 in 2002. ¹¹

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¹¹ The 1967 data is from the Central New York Regional Planning and Development Board, *Central New York Regional Aviation System Plan*, 1996. The 2002 data is from the City of Syracuse Department of *Aviation Activity Reports*, October 17, 2003.
Of major importance to the area business community is the fact that Hancock Airport has the land area capability for substantially expanding ground facilities that will accommodate the growth of air cargo operations to meet future needs. Other New York State airports are reportedly constrained in this respect. In addition, the capability for expanding runway and taxiway facilities serves not only air passenger growth but air cargo carriers as well, offering greater capacity and flexibility to meet changing circumstances.

General Aviation Airports. There are currently no air freight services available at general aviation airports within the SMTC area or the larger Syracuse MSA. Some of the general aviation airports in Central New York do have the capability in terms of land and runway capacity to provide these services, should a firm be interested in such an opportunity.

Highway Freight

Most products utilized by industry or sold in retail outlets at some point move by truck. Air, rail and water intermodal shipments have a trucking aspect at both ends of their trip. In Central New York, a majority of freight shipments move directly by truck from origin to destination. With trucks playing an important role in freight transportation, almost 75% of motor carrier revenues come from long-distance trucking, and the remainder from local trucking. Most truckload freight travels less than 500 miles. Truckloads traveling over 500 miles are more economical if shipped via rail intermodal service. The local and regional nature of trucking was highlighted in the 1993 and 1997 U.S. Department of Transportation Commodity Flow Survey, which found that 30% of the value and 55% of the tonnage moves between locations that are less than 50 miles apart. The SMTC area has a system of Qualifying Highways (national network) and Access Highways designated for use by Special Dimension Vehicles in New York State. Although this network, shown on Map 4 (Functional Classification) is the primary network for truck movements, trucks with trailers measuring 48 feet or less in length are allowed on any roadway not otherwise restricted by local laws or regulations. The Syracuse Metropolitan Area, with Syracuse located at the interchange of the two major truck routes.
of Interstates 81 and 90 (New York State Thruway), is also home to many regional distribution centers serving the Northeast and eastern Canada, as well as major intermodal connectors to rail and freight networks.

*Rail Freight*

A substantial change over the last several years has benefited the area and strengthened the rail transportation industry. Mergers have created rail mega-carriers (such as Union Pacific/Southern Pacific and Burlington Northern/Santa Fe). There has also been a growth of the regional and shortline railroads as links and feeders to the larger carriers, making the railroad business in the United States a growing industry. In the Central New York region, there is one major (Class 1) carrier, CSX Transportation; one regional carrier, New York, Susquehanna & Western Railway; and one shortline railroad, Finger Lakes Railway.

**CSXT Transportation**- CSXT Transportation (CSXT) replaced Conrail as the major rail freight service provider in 1999 and operates the Chicago Main line that links Central New York with New York City, New England and the Midwest. The company also operates the Baldwinsville, Fulton and Montreal Secondary lines to the north of Syracuse, with the Montreal Secondary being the gateway to Montreal and Canada. CSXT has experienced a three-percent increase in local traffic annually over the last several years and currently handles about 600 carloads of local traffic weekly. Another significant segment of CSXT business is the rail/truck intermodal freight terminal located in the DeWitt rail yard. CSXT handles approximately 50,000 containers annually at the DeWitt facility and this number has grown significantly as former Conrail routes are integrated into the CSXT Service Lanes. CSX Intermodal is currently examining the expansion of the facility to accommodate growth of this market segment. The DeWitt yard is a major intermodal facility serving the Northeast and is the only terminal of its type between New York City and Buffalo.

**New York, Susquehanna & Western Railway (NYS&W)**- The NYS&W is a regional railroad company serving New York and New Jersey. In the Central New York Region, the railroad operates two lines: the Syracuse to Binghamton, and the Utica to Binghamton. In Syracuse, the NYS&W interchanges with CSXT and in Binghamton with the Norfolk Southern Railway and the Canadian Pacific Railway. The Utica traffic is interchanged at Syracuse via Binghamton. The NYS&W has recently been transformed into a carload carrier as automobile shipments have shifted to other routes via other railroads. The NYS&W has expanded its traffic base in Cortland County and in the Southern Tier. Much of the traffic base is in New Jersey on the railroad’s southern branches.

**Finger Lakes Railway**- The Finger Lakes Railway, operating the shortline between Solvay and Geneva, has produced significant results since taking ownership of the former Conrail Geneva Cluster (including the Auburn Branch). The Finger Lakes Railway has been able to stop the decline of rail traffic in its service area and has increased its business nearly 300 percent. Carloads have increased from 5,600 in 1995 to 14,347 in
2002 with an anticipated 15,000 for 2003. Each carload is a business choice made by a shipper in the region to most effectively and economically move their product. Each rail carload is the equivalent of four tractor-trailers resulting in the current years traffic on the Finger Lakes Railway keeping approximately 60,000 tractor-trailers off the regional highway network. There are positive air quality and highway maintenance impacts from this and other rail freight operations. Further examination of this aspect is included in the Freight Rail Bottom Line Report issued by the American Association of State Highway and Transportation Officials (ASSHTO) in 1993. In addition, the rail operation has had a positive impact on job creation and retention in Central New York. Finger Lakes Railway has increased from five employees in 1995 to thirty one currently. It has also indirectly created or secured 1,037 jobs in the manufacturing sector. The Finger Lakes Railway customers see benefits due to the interchange rights with two Class 1 railroads (CSXT and Norfolk Southern (NS)) instead of one. Interchange with CSXT occurs in Solvay and Lyons, while interchange with the NS occurs in Geneva.

Water Freight

Many are unaware that goods are still shipped using the New York State Canal System, with seasonal cargo movement across the State, linking the Port of New York, Port of Albany, Port of Oswego, Port of Rochester and Port of Buffalo, and connecting throughout the Great Lakes and beyond. Clearly, the tonnage shipped is not at levels rivaling tonnage levels of past decades and most cargo activity has been replaced by recreational boating as well as commercial passenger service.

The State Canal Corporation, together with private entrepreneurs, have been implementing a statewide revitalization program pursuant to seven regional canal plans and the New York State Canal Recreationway Plan. The SMTC area (Onondaga County) is included in the Central New York Canal Plan, which covers the entire Syracuse MSA of Cayuga, Madison, Onondaga and Oswego Counties.\textsuperscript{12} The Syracuse MSA accounts for approximately 19% of the entire State Canal System, with all or parts of the Cayuga-Seneca Canal, Erie Canal and Oswego Canal.

\textit{Port of Oswego}

While the readily available published data is not complete, it appears that the tonnage carried between 1995 and 1999 varied greatly, between 14,000 and 39,000 tons annually.\textsuperscript{13} The tonnage carried on the entire canal system has decreased significantly in


recent years. The most recent data available shows that in 2003 the total tonnage was 8,711.\textsuperscript{14}

Commercial passenger vessel traffic is also increasing. For example, tour ships sailing from Rhode Island traverse the Hudson River to the Erie Canal and proceed north on the Oswego Canal to Montreal and then south along the Atlantic Coast, returning to Rhode Island. As with the shipment of goods, the data is too incomplete to provide a statistical overview.

*Changing Needs and Impacts on Freight Movement*

The dual forces of the tragedy of September 11, 2001, and the worsening economy have adversely impacted all modes of transportation. The impact is not confined to the transportation sector but all modes are sensitive to maintenance issues when a shortfall in public funding occurs for routine maintenance and major repairs. Postponed maintenance generally makes infrastructure maintenance more costly over the long run. Beyond maintenance and repairs, all modes in the Central New York region are in need of funds for infrastructure modernization to improve the intermodal movement of goods and to capture new opportunities for growth.

In order to improve economic and regional growth in Central New York, the cost of freight movement needs to be lowered, better facilities should be made available (especially for truck freight), and the current system should be used to its full potential. The excess air, water, rail and road capacity leads to potential opportunities for expansion in all types of freight movement.

**B. Emerging Initiatives**

1. Onondaga County 2010 Development Guide / Onondaga County Settlement Plan

*2010 Development Guide for Onondaga County*

In 1998, the Syracuse-Onondaga County Planning Agency presented an update to its *2010 Development Guide For Onondaga County*. The 2010 Plan’s vision, goals and policies are intended to guide future individual government decisions on land use, transportation and infrastructure development, utilizing balanced goals that include economic growth, creating an attractive community, encouraging diversity and choice, and enhanced fiscal strength.

In furthering those goals, Onondaga County’s *Policies for Investment and Land Use*, as defined in the 2010 Plan, call for investment in existing communities, preservation of existing infrastructure and transportation assets, sustainable urban and suburban settlement patterns, and protection of the rural economy, agricultural land, and access to natural resources. The 2010 Plan encourages the public and private sector to make

\textsuperscript{14} New York State Canal Corporation data.
funding, permitting, and planning decisions utilizing these guiding principles, and to be cognizant of individual projects’ effects on the quality of life of all residents.

The following *Land Use Vision* map (Map 13) graphically summarizes the goals, strategies and policies outlined in the 2010 Plan, with a Land Use Vision identifying areas designated for both protection or expansion, areas for industry versus neighborhoods, and areas for dense development or open spaces. Established corridors are already largely in place to provide mobility within the county, connect centers of activity and help define the urban and rural landscape between communities.

The Land Use Vision does not replace planning by the City, towns and villages, but encompasses local plans within a countywide vision, and encourages coordinated implementation of programs and projects.

Growth is encouraged in areas currently served by infrastructure, especially transportation infrastructure. According to the Plan, premature extension of linear infrastructure creates a surplus of urban land that devalues public and private investments in existing communities and developments that have not been completed. Surplus urban land leads directly to the abandonment of the oldest community centers and neighborhoods and permanently destroys access to farmland and natural resources. City and suburban demographics analyzed in previous sections of this report illustrate these trends over the past several decades.

One action identified by the 2010 Plan that is necessary to facilitate the concepts identified in the plan is the modification of land use regulations within the respective city, towns and villages to allow for and encourage a renewed emphasis on mixed-use neighborhoods, higher-density developments, and preservation of open space. Existing zoning regulations tend to encourage strict separation of land uses, thus resulting in dependence on the automobile and de-densification of urban areas.

*Onondaga County Settlement Plan*

To facilitate this change, the Syracuse-Onondaga County Planning Agency enlisted the services of the firm Duany Plater-Zyberk & Associates (DPZ) in 1999 to prepare the *Onondaga County Settlement Plan*. Andres Duany of the DPZ firm is known to many in urban planning as one of the founders of the *New Urbanism* movement in planning, which celebrates traditional neighborhood development patterns from a century ago for its efficiency of land use, transportation opportunities, social interaction and mix of incomes.

The Settlement Plan for Onondaga County was designed to present a comprehensive “toolbox” of strategies to encourage the traditional neighborhood development patterns outlined by New Urbanism, as an alternative to conventional zoning and suburban development patterns which many deem an inefficient use of land and a burden on transportation facilities. The DPZ firm completed the Settlement Plan in four parts:
• **Transect Based Zoning:** The “Transect”, as coined by the DPZ firm, describes a style of zoning – not by use alone as in conventional zoning, but on the scaling, configuration and mass of buildings within its environment. The seven general Transect zoning districts range from gradations of rural to urban. Within each transect zone, a specific set of building specifications are detailed to foster desired patterns of growth, such as preservation of rural landscapes, or a dense, walkable urban center, and gradients in between. A model Transect Code was presented for Onondaga County’s towns and villages to utilize in changing their municipal zoning regulations.

• **Traditional Neighborhood Design (TND) Guidelines:** The TND Guidelines take the “transect” zoning to the next level of detail, providing a more descriptive illustration of TND concepts, as they relate to more fine-grained development specifications such as landscaping, architectural details, streetscaping, and parking lot design.

• **Regional Plan/Transportation Policies:** One of the most important concepts of the New Urbanism design philosophy is the creation of dense neighborhood centers that foster alternative transportation modes, such as walking or mass transit. The Settlement Plan presents a set of recommended municipal policies that would foster these concepts, especially creating walkable neighborhoods. Proposed policies include the restriction of high-speed roadways through neighborhoods, provision of intermodal opportunities in neighborhood centers, avoidance of cul-de-sacs to avoid overburdening collector roadways, and maximum block perimeters for increased walkability.

• **Pilot Studies:** To illustrate the concepts of the Settlement Plan and encourage usage of the new regulations, the study identified several “Pilot” study areas, where different elements of the plan were hypothetically put into action. For example, the largely abandoned Fayetteville Mall site was turned into a mixed-use village center, incorporating several design concepts to encourage transit usage, walkability and neighborhood scale facilities.

### 2. Environmental Justice

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.\(^\text{15}\)

*Changing Needs and Impacts*

To date, the SMTC has prepared a study to evaluate recent and future transportation planning projects/programs within the MPO area. 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 MPO area. 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 known to have been disproportionately distributed regarding the designated target populations. Future environmental justice initiatives will be incorporated into each planning study that the SMTC completes.

Future year reports will involve periodic assessments of the planning activities and their relevant implications, and participation from stakeholders throughout the MPO area. The following map (Map 14) represents consolidated target areas for environmental justice activities within the SMTC study area. It includes concentrations of minority, low income and elderly populations.

As of this 2004 Update, the most significant issue relating to Environmental Justice is defining the target geographic areas and populations to understand their transportation needs. Subsequent actions include strategies for improving the accessibility and distribution of goods and services at neighborhood levels through land use and development patterns.

3. Transportation Needs for Senior Citizens

At the suggestion of the FHWA in furthering environmental justice initiatives, and recognizing a growing elderly population (as discussed in previous chapters), 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, which provided the SMTC with much of the data contained in this section.

According to information currently available, there are at least 167 facilities (not including traveling services for seniors such as meal delivery) that meet a variety of human needs at specific locations within Onondaga County.¹⁶ These facilities are shown on Map 15 and are listed in Appendix G. Eleven types of facilities are available in Onondaga County as identified below; some locations have more than one type of facility on site.

- 3 Adult Family-Type Homes (single family homes in which the owner provides services).
- 11 Adult Homes (for adults of all ages).
- 6 Assisted Living Programs (personal and health care services provided).
- 8 Enriched Housing complexes (long-term care with all services provided).
- 85 Independent Living complexes (apartments).
- 1 Independent Living Services facility (an alternative to nursing home care).
- 8 Medical Model Adult Day Care Centers (medical and social/recreational daytime care).
- 13 Nursing Homes (skilled nursing and chronic custodial care).
- 10 Retirement Communities (apartments and town homes).
- 18 Senior Centers (social, recreational, health and human services support).
- 4 Social Model Adult Day Care Centers (social and recreational daytime care).

There are also many other types of services available for seniors that are not included in the previous list of facilities.

¹⁶ Onondaga County Department of Aging & Youth, *Resources for Seniors in Onondaga County*, 2000.
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 21 transportation services providing access to general or specific destinations are available (see Appendix G). 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, Bernardine 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 Towers, 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. However, at this juncture, no information is readily available to the SMTC on what these needs may be. 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 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. 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

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17 Onondaga County Department of Aging & Youth, *Resources for Seniors In Onondaga County*, 2000, p. 47.
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.

The LRTP 2004 Update is only beginning to examine the transportation needs of senior citizens and those employed at senior facilities. It is anticipated that more work will be undertaken in conjunction with the complete revision to the LRTP in future years.

4. Intelligent Transportation Systems (ITS)

ITS refers to the application of electronics, communications, hardware, and software that support various services and products to address transportation challenges. When deployed in an integrated fashion, ITS allows the surface transportation system to be managed as an intermodal, multi-jurisdictional entity, appearing to the public as a seamless system. The United States Department of Transportation has been advancing the development and deployment of ITS through various programs.

The NYSDOT in conjunction with the SMTC and its member agencies developed a strategic plan for deployment of ITS for the Syracuse Metropolitan Area (principally Onondaga County). In addition to providing recommendations for the NYSDOT, the study also included recommendations for the City of Syracuse Department of Public Works, the Onondaga County Department of Transportation (OCDOT), the New York State Thruway Authority (NYSTA) and the CNYRTA. The study was primarily concerned with traditional traffic flow; hence a detailed analysis of emergency service provider’s overall ITS needs were not part of this study. A comprehensive section of the plan listed all available technology related equipment that can improve performance in responding to transportation incidents without being specific.

The study’s regional ITS architecture framework also included recommendations, intended to be advisory, for key regional transportation agencies in the spirit of developing integrated ITS in the region. Please refer to the complete study for reference; this LRTP update includes only select excerpts and summarizations.

The ITS study created three key components: Technical Memorandum # 1 - ITS Concept Plan; Technical Memorandum # 2 - ITS Regional Architecture; and Technical Memorandum # 3 - ITS Implementation Plan.
**ITS Opportunities in the Region**

Onondaga County, with an area of approximately 800 square miles, contains the fourth largest upstate city (Syracuse) in New York. Onondaga County and the City of Syracuse occupy a central position within the local, regional, and national transportation system. The region’s roadways, public transportation, rail, and airport provide outstanding access to services and employment. In Onondaga County, two major interstates (Interstate 81, which provides connections to the north and south and the New York State Thruway - Interstate 90, which provides access to the east and west) meet in Onondaga County and provide access to all of the Northeast and Canada. In addition, I-690 runs through the City connecting the east to the west. There are approximately 3,100 miles of roadway and almost 500 bridges in Onondaga County. However, in some cases, connections among these facilities, and between these facilities and the local road network, is limited. There are some gaps in the transportation system, and some facilities have reached capacity. Implementation or expansion of ITS strategies/elements can improve the overall safety and mobility of Onondaga County as well as the entire region.

**ITS Stakeholder Coalition**

In order to build consensus to deploy ITS in an integrated manner, major ITS stakeholders in the region were identified and coalitions among them forged through monthly meetings, workshops and seminars. The core group of the stakeholders which met monthly for the duration of the project included representatives from the NYSDOT, the NYSTA, the SMTC, the City of Syracuse Department of Public Works, the OCDOT, the CNYRTA, the New York State Police (NYSP), the City of Syracuse Police, the Onondaga County Sheriff’s Office, the City of Syracuse Fire Department, and the Onondaga County Department of Emergency Communications 911 Center.

**ITS Vision & Goals**

The vision for the ITS strategic plan for the Syracuse Metropolitan Area depicts the future regional transportation system in a 20-year horizon. The ITS goals have been developed in view of the deficiencies identified in the region’s existing transportation system as well as the long-term vision of the future regional transportation system. The process of identification of vision, goals, and of selection and prioritization of the appropriate ITS service options involved the participation of a wide array of ITS stakeholders. A series of seminars/meetings/workshops were held to develop a consensus and understanding of the ITS goals and service needs for the area. Provided in Table 4-11 are the various stakeholders and their groupings under the two networks identified in the plan.
**ITS Implementation Plan**

The final product of this ITS study is an overall ITS implementation plan in the form of proposed individual projects to be deployed over a period of time. The implementation plan provides recommendations for the NYSDOT Region 3, the City of Syracuse Department of Public Works, NYSTA, OCDOT, and CNYRTA. The Table 4-12 provides a summary of costs for some of the recommended projects in the strategic plan.
Table 4-12
Summary of Recommended Project Costs

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<th>Agency</th>
<th>Deployment Time Frame</th>
<th>Number of Projects</th>
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<td>32</td>
<td>$18.1 M</td>
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</table>

Source: ITS Strategic Plan Executive Summary

**Recommended Interagency Projects**

The National ITS Architecture provides a common framework for planning, defining, and integrating intelligent transportation systems among agencies. This common framework represents the starting point for more detailed regional and/or project architectures in which local characteristics are more appropriately addressed (see http://www.nawgits.com/fhwa/itsarch_v5highlights.html for a detailed explanation of the ITS Architecture).

This has been the basis for the recommendations made and ITS projects defined in this study. The first and most important step in provision of integration and sharing of information is to build an electronic communication network among the agencies where regional construction activities, incidents and special events can be shared across boundaries. This Regional Information Sharing Network, also known as the Syracuse Metropolitan Area Regional Transportation Network (SMARTNET), has been defined as the first early action project upon which to build the basis of all future integration and information sharing needs. It is recommended to use the available ITS standards for
future ease of integration and compliance with the National Architecture. By using the approved ITS standards, all current and future local systems can translate their data into the same format via various data interfaces using the SMARTNET system. Even though this is considered an interagency project, the NYSDOT has assumed the Champion role and has acquired the needed funds and will lead this effort on behalf of the region.

SMARTNET will be a multimodal, multi-agency system. The architecture of the SMARTNET system should provide for future integration with ITS systems as well as dissemination of real-time information among agencies. As such, the next phase of the SMARTNET project will provide integration with the I-81 Freeway Management System in such a manner that real time traffic conditions can be collected along the I-81 corridor. This integration will take place via a Data Interface (DI) and will provide real time traffic condition on the State facilities to other agencies. Upon further expansion of the NYSDOT Region 3 freeway coverage (i.e., I-690, I-481, etc.) the DI will share additional traffic conditions with the appropriate agencies.

It is also recommended that the NYSTA, the City of Syracuse, the CNYRTA and Onondaga County will provide similar DIs from their existing and future systems to the SMARTNET for the benefit of all other agencies.

The existing and future planned expansion of the NYSDOT weather monitoring system will provide the region with a wealth of weather information. The study recommends the integration and sharing of this weather information via the METCON system.

Various information from the CNYRTA will also be integrated into this system. It is recommended to integrate SMARTNET and the future transit trips itinerary system to provide travelers with a single point of access to the regional information.

The study also recommends deployment of the Syracuse Regional Emergency Network (SYREN) under the 911 Center’s authority. This network will upgrade the existing network and will provide additional functionalities such as the E911 system, upgraded Geographic Information Systems (GIS), AVL, etc. A direct data interface is recommended between SYREN and SMARTNET to assure timely and real-time share of information.

The National ITS Architecture emphasizes, to the extent possible, sharing of each others’ resources. NYSDOT is about to deploy ITS along the I-81 freeway within the Syracuse Metropolitan area. There will be a minimum of eight cameras at the major interchanges. The City of Syracuse can benefit from video feeds from these cameras to enhance its operations. Both the NYSP and City of Syracuse Police can use the real-time video feeds to better manage traffic conditions and incidents along the roadways. The 911 Center can take advantage of real time information to better dispatch the needed resources to an incident scene. The study also recommends future expansion of the SMARTNET system to provide interagency video sharing ability across all facilities.

The development of a regional 911 system is another recommended interagency project that will take advantage of the SMARTNET system to provide travelers with unified, seamless transportation information. It is also recommended to share the Centro’s AVL infrastructure with City of Syracuse, Onondaga County and NYSDOT agencies to provide the AVL functionalities to each agency’s fleets.
The CNYRTA has funds on the TIP to deploy two kiosks. It is recommended to use this opportunity to integrate with SMARTNET and provide multi-agency, multimodal information to the users. Each agency can either develop or enhance their web sites and provide individual transportation information. It is recommended to use the SMARTNET database for a regional transportation website to provide comprehensive information to travelers. The study recommends co-location of Transportation Management Centers to the extent possible to assure proper and needed integration of information and resources as well as to minimize the cost of remote connections/integrations within agencies.

The NYSDOT, the City of Syracuse Department of Public Works and County Department of Transportation do not believe there is a need for coordination of interagency traffic signal systems at this time, however, the study does recommend further discussion on this issue. In particular, there are NYSDOT signals at the bottom of off ramps from major interchanges that need to be integrated with the existing City signal system.

The study recommends as a short-term project, the creation of an incident management group that includes all emergency service providers and transportation facility operators that will be responsible for the development of a regional incident management plan. This plan will be comprehensive, multi-agency and multimodal.

The study also recommends the continuation of ITS coordination activities as well as for revisions of the ITS Strategic Plan on a regular basis (every three to five years). This could take the form of a “Syracuse Regional ITS Policy Committee” or other formal (or informal) body that meets periodically to discuss issues and problems, and to plan for maintenance and continued upgrade of the region’s ITS. To assist in this effort, the SMTC sets aside some of its annual planning funds to facilitate this continued collaborative effort.

For comprehensive information relating to the ITS Strategic Plan please refer to either the “Syracuse Metropolitan Area Intelligent Transportation Systems Strategic Plan” or the complete Executive Summary.

5. Homeland Security

Since September 11, 2001, security has affected all levels of government in a substantial manner. Transportation is no exception. Most of the issues related to security and transportation are outside of the purview of the MPO. The MPO can, however, act as a conduit to facilitate interagency cooperation to that end. The NYSDOT has begun development of a transportation security plan. Also, Centro is in the process of implementing greater security. Future editions of the LRTP will articulate the content of these plans where appropriate.
C. Emerging Projects

1. University Hill Area

The University Hill area is one of the most intensive areas in terms of land use and transportation in the SMTC study area. Due to complex transportation issues in the University Hill area, a comprehensive transportation study known as the “University Hill Comprehensive Transportation Study” has been initiated.

Changing Needs and Impacts

In the past decade, the University Hill area has seen an extraordinary change in land use resulting from the proximity of numerous hospitals, universities, and affiliated medical/research facilities. This has changed the dynamics of transportation in the area. The intensive land use generates a significant amount of vehicular traffic and an increasing demand for parking. Also, the type and density of land use encourages a substantial amount of bicycle and pedestrian traffic creating numerous conflict points between these modes of transportation and vehicles.

The goal of the study is to develop a set of recommendations (policy and infrastructure) that address the wide range of transportation and land use issues in the University Hill study area. The study consists of three parts: the data collection and analysis, the identification of issues, and the presentation of alternative solutions and recommendations.

Due to the existing intensive land use in a limited geographic area, a comprehensive transportation study that includes parking, general vehicular access, bicycle and pedestrian access, and an examination of existing transit services and possible transit
alternatives is necessary. This study will also address parking issues such as enforcement, regulations, and residential and employee parking. There is also a need to look at non-automobile alternatives and improvements such as additional park and ride shuttle systems and other mass transit options. This study will also include of a cursory review of innovative transit options, specifically innovative Passenger Rail options.

The existing conditions portion of the University Hill Comprehensive Transportation Study has been completed, and the issues portion is currently underway. A summary of the alternatives and recommendations will be included in the next LRTP update.

For purposes of the study, the University Hill area is generally bounded by I-81 to the west, I-690 to the north, East Colvin Street to the south, and Westmoreland Avenue.

The primary goals of the University Hill Comprehensive Transportation Study are:

- **Land Use**- To develop land use and transportation recommendations that support growth and redevelopment of the land.

- **Access**- To develop recommendations to provide safe access to and from the University Hill study area from the north, south, east, and west for the long term. Also, to develop recommendations to seek to improve circulation within the University Hill study area.

- **Public Involvement**- To create and maintain on-going communication between the consultant, SMTC, and the Study Advisory Committee (SAC). Also, to ensure public awareness of the project and continued participation throughout the planning and decision making process.

- **Multimodal Transportation**- To develop recommendations for a multimodal transportation system that seeks to improve the mobility and safety of individuals traveling to, from and within the University Hill study area as well as encourage use of alternative modes of transportation.

- **Parking**- To develop recommendations to address existing and future parking needs of institutions, businesses and residents located in the University Hill study area.

*Marshall Street, University Hill*
2. Lakefront Development District

Over the past 15 years, the City of Syracuse and several public and private partners have been working to redevelop a long vacant and underutilized area in the northern part of the city. Sometimes referred to as Oil City due to the large concentration of oil storage facilities and industrial businesses, the area is undergoing a continued transformation into what is now known as the Syracuse Lakefront. Included in the 800-acre district are the Franklin Square district, the existing Carousel Center (regional shopping mall), and the Syracuse Inner Harbor.

In 1999, the City of Syracuse endorsed the Syracuse Lakefront Master Plan, which identified over $500 million in new investment opportunities and a vision for mixed-use development and recreational growth and redevelopment activity within the Lakefront Area. In 2003, the City adopted an updated Master Plan, which again encouraged urban scale mixed-use development and included updated redevelopment projects underway to date. New zoning regulations are currently being written for the area to reflect the New Urbanism concepts presented in the Onondaga County Settlement Plan, especially to reflect a vibrant, mixed-use, and accessible urban district, fitting with the context of neighboring areas in the city.

Some of the more significant redevelopment projects underway and proposed for the Lakefront Development area include the development of DestiNY USA, the continued redevelopment of abandoned manufacturing facilities into new mixed-use housing and offices in Franklin Square and the significant redevelopment of an underutilized canal port on the Barge Canal system at the southern end of Onondaga Lake. Similar to revitalization efforts across the entire Erie Canalway, the Syracuse Inner Harbor is being renovated into a recreational and tourism facility, inclusive of a public promenade, marina, amphitheater, mixed-use waterfront development, housing, and recreational amenities.
Undoubtedly the most significant development project in the Syracuse Lakefront is the DestiNY USA Initiative (formerly referred to as the Carousel Center Expansion). This initiative proposes a major expansion of the regional shopping center at the base of Onondaga Lake into an international resort destination.

Originally constructed as a catalyst for continued redevelopment of the Syracuse Lakefront, the developer has presented plans to transform the Carousel Center into a major shopping and entertainment destination through a large expansion of its facility, mainly to the south on former oil terminal land condemned by the Syracuse Industrial Development Agency in the 1990s. In 1998, the Pyramid Companies, owners of the facility, presented an environmental impact statement detailing construction of an expansion adding up to 3.25 million square feet to the existing 1.75 million square foot mall. A Payment in Lieu of Tax Agreement (PILOT) between the Pyramid Companies and the City of Syracuse was signed in 2000 to facilitate the project.

Since that time, however, the Pyramid Companies has unveiled a new look, a new scale, and a new focus to its mall expansion that includes plans to redevelop much of the surrounding lands in the area. Though changes to the originally adopted environmental impact statements have not yet been formally presented to the City of Syracuse, the DestiNY USA project has been presented in public forums. The most recent proposed DestiNY USA plan includes the creation of a world-class golf resort, thousands of hotel rooms, a water park and aquarium, restaurants, shops, entertainment venues and much more.

The DestiNY USA proposed development encompasses much of the 800-acre Syracuse Lakefront area, as well as subsequent related projects in nearby towns. In addition, the developer has advanced plans for the creation of what has been dubbed PARP, or “Petroleum Addiction Rehabilitation Park.” PARP, to be created on lands outside the Syracuse Lakefront District, would be a center for revolutionary research and production of renewable energy technologies aimed at reducing consumption of fossil fuels. DestiNY USA is touted to become the largest “green” building in the world.

Lakefront Planning Study

In order to facilitate the redevelopment of the lakefront area for large-scale tourism uses such as DestiNY USA, the City of Syracuse recently approved a Tourism Zoning District over much of the Lakefront area and a small portion of the city’s north side. The optional overlay sets design and other standards outside traditional zoning to regulate development projects over 30 acres, to ensure compliance with area goals and compatibility with adjacent land uses.
No matter what scale of development accompanies the growth from the expansion to the Carousel Center and surrounding Lakefront properties, major transportation impacts are anticipated. In an effort to understand the transportation needs and opportunities associated with the development and the implications of the full buildout of the Syracuse Lakefront Area, in 2002 the City of Syracuse commenced the Lakefront Transportation Planning Study, funded through the federal Transportation/Community Systems Preservation Pilot Program (TCSPP). According to the Phase I report, the goal of the project is to “analyze the existing transportation network in the Lakefront Development area and identify the needed improvements to accommodate alternative modes and users.”

The study has been divided into two distinct phases. The Phase I document represents a conceptual analysis of the existing and future transportation issues that can be expected over a 20-year planning horizon based on the anticipated development in the Syracuse Lakefront and general development in Onondaga County. Phase II is a more detailed analysis of the corridor level issues identified in the first phase.

*Syracuse Lakefront Area*

Work completed to date on the study identifies a wide variety of system constraints and a variety of potential multimodal solutions. The SMTC has participated in the study on its Advisory Committee and has provided information and technical assistance to the planning effort. The SMTC realizes the large impact that a full buildout of the Lakefront Area may have on the transportation system on a local as well as regional level and continues to play an active role in transportation planning for this dynamic area.