



Source: FHWA

Environmental Justice Analysis

“Examining the relationship between socio-economic and demographic data with that of transportation systems, plans and activities to ensure equality for all persons in the transportation planning process.”

Syracuse Metropolitan Planning Area

Final Report

2004-2006 UPWP



Syracuse Metropolitan Transportation Council

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March 2006

This document was **Acknowledged** by the SMTC Policy Committee on March 13, 2006, which shall mean that staff has completed this particular UPWP task in compliance with the Scope of Work. It does not mean that each of the SMTC Member Agencies is in full agreement with, or agrees to implement, any and or all of the recommendations included in the report.

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Environmental Justice

Executive Summary

The Syracuse Metropolitan Transportation Council (SMTC) has undertaken this study on Environmental Justice to evaluate recent and future transportation planning projects and programs within the Metropolitan Planning Area (MPA). The goal of this analysis is 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 and that no one population is adversely affected or neglected. This goal has been set to ensure the SMTC's compliance with Title VI of the Civil Rights Act of 1964, which states that "no person in the United States shall, on the basis of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance."

In developing a methodology for the analysis, the SMTC staff created demographic parameters based on Summary File 3 data from the 2000 United States Census. These parameters included threshold values that were assigned at the Block Group level with the purpose of identifying geographic areas with significant populations of minority persons, low-income persons, disabled persons and senior citizens. Staff also examined information relative to various transportation to work tabulations provided by the Census Bureau's Census Transportation Planning Package (CTPP). The CTPP tabulations examined in this analysis related primarily to persons with a disability or in poverty.

As the goal of this analysis was to evaluate the impact of the SMTC's and its member agencies' planning activities on minority, low-income, and senior populations, other methodologies were employed to implement this assessment. The SMTC staff identified the agency's Public Involvement Plan and Long-Range Transportation Plan as documents that aid in ensuring environmental justice compliance. Staff also used Geographic Information Systems (GIS) to create maps locating the SMTC's Unified Planning Work Program (UPWP) projects since 1991, as well as all projects on the agency's 2005-2010 Transportation Improvement Program (TIP). These project locations were mapped against the designated target areas for environmental justice concern, developed as a result of the Census data analysis. Additionally, the SMTC staff mapped available transit options against the target areas, as well as against the locations of senior citizen facilities. The SMTC's Bicycle and Pedestrian Plan and freight planning activities were also highlighted in this analysis.

Based upon this primary assessment, the study showed that the transportation planning activities performed by the SMTC are not known to have been disproportionately distributed amongst the designated target populations. However, the SMTC has not fully examined the impacts of its studies to date. Many SMTC projects that are complete, in the process of being completed, or currently proposed, strive to enhance the viability of individual neighborhoods and the region as a whole to improve the transportation network utilizing multi-modal transportation planning practices. This approach is evident

throughout the primary Environmental Justice target areas where corridor studies or other initiatives were undertaken. In general, the SMTC's planning activities have been distributed proportionally amongst the residents of the MPO. While some gaps exist in transportation options for some of the MPO's citizens, the SMTC has asserted to mitigate these issues with reports such as the Job Access and Reverse Commute (JARC) study.

This current study is a continuation of the preliminary assessments in the original report approved during the 2003-2004 program year. The SMTC's Environmental Justice analysis will continue through multiple program years, as the agency will perform periodic assessments of its planning activities and their relevant implications. This report analyzed additional data including the disabled population and transportation to work data. Future analyses may consider additional evaluation activities. This may include, but is not limited to, continued participation from the project specific Study Advisory Committee consisting of the SMTC's member agencies, coordination with other MPOs involved in similar processes, receipt of input from stakeholders, individual citizens or community groups, and research and updating of data sources that may prove useful to the analysis.

TABLE OF CONTENTS

Section 1: Introduction.....	1-3
I. Background Information.....	1
II. Legislative History.....	1-3
Section 2: Definition of Target Populations.....	4-22
I. Background.....	4
II. Geographic Area Covered by Analysis.....	4
III. Methodology.....	5-6
A. Minority Concentration.....	5
B. Low-Income Concentration.....	5
C. Senior Citizen Concentration.....	5
D. Disabled Concentration.....	6
IV. Definition of Environmental Justice Analysis Concentration Areas.....	6-8
A. Minority Concentration.....	6
B. Low-Income Concentration.....	7
C. Senior Citizen Concentration.....	7
D. Disabled Concentration.....	8
V. Summary of Individual Factor Target Areas.....	8-10
VI. Final Target Area Determination for Analysis.....	10-15
Map 1: SMTC MPA.....	16
Map 2: Minority Areas of Concentration.....	17
Map 3: Low-Income Areas of Concentration.....	18
Map 4: Senior Citizen Areas of Concentration.....	19
Map 5: Disabled Areas of Concentration.....	20
Map 6: Low Population Areas.....	21
Map 7: Target Areas.....	22
Section 3: SMTC Activities and Environmental Justice.....	23-40
I. Public Involvement Plan.....	23
II. Long-Range Transportation Plan.....	23-24
III. Transportation Improvement Program.....	24
IV. Unified Planning Work Program.....	24-27
V. Transit.....	27-30
VI. Bicycle and Pedestrian Planning.....	30-31
VII. Freight.....	32-33
Map 8: Centro Fixed Route Service.....	34
Map 9: Senior Facilities and Centro Routes.....	35
Map 10: OnTrack Rail Service.....	36
Map 11: Trail System.....	37
Map 12: TIP Projects.....	38
Map 13: UPWP Projects.....	39
Map 14: UPWP Projects.....	40
Section 4: CTPP Data and Analysis.....	41-53
A. Disabled Persons/Means of Transportation to Work.....	41-43
B. Persons Below Poverty/Means of Transportation to Work.....	43-44
C. Persons Below Poverty, No Vehicle Available.....	44
D. Persons Below Poverty, Vehicle(s) Available.....	44-45
Map 15: Disabled Persons Transportation to Work: Vehicle.....	46
Map 16: Disabled Persons Transportation to Work: Bus.....	47
Map 17: Disabled Persons Transportation to Work: Bike or Walk.....	48
Map 18: Persons Below Poverty Transportation to Work: Vehicle.....	49
Map 19: Persons Below Poverty Transportation to Work: Bus.....	50

Map 20: Persons Below Poverty Transportation to Work: Bike or Walk..	51
Map 21: Persons Below Poverty, No Vehicle Available.....	52
Map 22: Persons Below Poverty, Vehicle(s) Available.....	53
Section 5: Conclusions and Future Analysis.....	54
Appendix 1: 2005-2010 TIP FHWA/FTA Funds Program Listing for EJ	
Appendix 2: UPWP Studies FFY 1991-2005	

Section 1: Introduction

I. Background Information

In recent years, the concept of Environmental Justice has become an increasingly important aspect of transportation planning at each level of government (Federal, State and Local). The United States Department of Transportation (USDOT), which governs the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA), has mandated that Environmental Justice activities 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. Environmental Justice places a high value on the equal and fair treatment of all persons, particularly racial or ethnic minority groups, low-income groups and the elderly. It is unlawful to disproportionately distribute the benefits or disadvantages of transportation planning amongst specific race, ethnic, income or age groups.

The Syracuse Metropolitan Transportation Council (SMTC) has undertaken this study to evaluate recent and future transportation planning projects/programs within the Metropolitan Planning Organization (MPO) area. The goal of this analysis is 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, and that no one population is adversely affected. To aid in this process, the SMTC staff identified four target populations (minority, low-income, senior citizens, and disabled) using Census 2000 data in Geographic Information System (GIS) software and overlaid transportation planning project boundaries from previous years for geographic comparisons.

This study was specifically developed for identifying transportation planning projects/programs and capital activities in relation to Block Groups within the MPO area. This study is not to be used for any other purpose.

II. Legislative History

The U.S. Environmental Protection Agency's Office of Environmental Justice defines Environmental Justice as:

“The fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. Fair treatment means that no group of people, including a racial, ethnic, or socioeconomic group, should bear a disproportionate share of the negative environmental consequences resulting from industrial, municipal, and commercial operations or the execution of federal, state, local, and tribal programs and policies.”

The first Federal regulation enacted that was a precursor to all Environmental Justice initiatives was Title VI of the Civil Rights Act of 1964 that states “no person in the United States shall, on the basis of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance.”

This piece of legislation is useful in all Environmental Justice analyses because it designates which persons are to be included in such a study. Within this act are guidelines that clarify which race/ethnicities are considered minority populations. The four groups considered as minority populations are:

- Black
- Hispanic
- Asian American/Pacific Islander
- American Indian and Alaskan Native

The provisions of Title VI apply to Federal agencies and any other agency or private contractor that is a recipient of Federal funding. Legislation was soon enacted that developed federal regulations that deal with equal opportunities for employment and consideration of the needs for the aforementioned populations. Other Federal regulations apply to Title VI, such as Executive Order 11246 and Executive Order 11375, which prohibit federal contractors and federally-assisted construction contractors and subcontractors, who do over \$10,000 in government business in one year, from discriminating in employment decisions on the basis of race, color, religion, sex, or national origin. The executive orders also require federal contractors to develop affirmative action plans and utilize equal employment opportunities for minorities.

On February 11, 1994, President Bill Clinton issued Executive Order 12898 that stresses the provisions of Title VI, stating that “each Federal agency shall make achieving Environmental Justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations.”

The USDOT issued the DOT Order 5610.2 in 1997 to “summarize and expand upon the requirements of Executive Order 12898 on Environmental Justice.” The order is used as a framework for incorporating Environmental Justice into every USDOT activity, policy and program. Expanding on the DOT Order, in 1998 the FHWA issued DOT Order 6640.23 that requires the FHWA to implement Environmental Justice practices described in both the DOT Order 5610.2 and Executive Order 12898 into all FHWA activities.

The provisions of these laws and executive orders apply to the SMTC and to all agencies that participate in the SMTC via contracts with the New York State Department of Transportation (NYSDOT) or Federal agencies for the receipt of Federal funds. These also include the Central New York Regional Planning and Development Board, which serves as the SMTC’s host agency, and any consultants or subcontractors to these agencies.

Environmental Justice is more than a collection of definitions for disproportionate or adverse populations; it is an understanding of different socioeconomic populations whose environment is affected by governmental and transportation planning policies and the interaction between the public and the designated agency. Environmental Justice relates to these issues by focusing on three fundamental principles:¹

- 1) 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.
- 2) To ensure the full and fair participation by all potentially affected communities in the transportation decision-making process.
- 3) To prevent the denial of, reduction in, or significant delay in the receipt of benefits by minority and low-income populations.

After taking into consideration the federal definition of Environmental Justice, the SMTC determined that for this region, there might be other variables that should be considered in the analysis portion of the report. This is because the USDOT's planning regulations require MPOs to "seek out and consider the needs of those traditionally underserved by existing transportation systems, including, but not limited to, low-income and minority households." Additionally, the USDOT continues on to say that the elderly and the disabled are groups that could experience adverse impacts.² Therefore, the SMTC explanation was broadened to also include senior citizens and disabled populations. Since these groups may have transportation related needs, data was gathered and maps produced in this report in order to take these demographics into consideration when planning for transportation services.

¹ Transportation & Environmental Justice Case Studies. U.S. Department of Transportation Federal Highway Administration, Federal Transit Administration. December 2000. pg. ii

² <http://www.fhwa.dot.gov/environment/ejustice/facts/index.htm>

Section 2: Definition of Target Populations

I. Background

In order to conduct an analysis of the Syracuse Metropolitan Transportation Council's (SMTC) planning activities that are relevant to Environmental Justice, staff had to develop a methodology for locating areas of concentration. These areas would represent locations of high concentrations of minorities, low-income populations, senior citizens, disabled persons or a combination of any of these target populations. Then, the analysis could geographically compare these areas of concentration with the locations of the SMTC's and other agencies' transportation projects for determination of current status and gaps in service.

The raw data used to delineate the areas of concentration, or "target" areas were available from the United States Census Bureau. Please note that verbiage used to describe target areas, concentration/high concentration Block Groups and the priority classified Block Groups is not specifically focused on any one population or area in the MPO. The terms used are provided by guidance from the USDOT and meant for analysis purposes only.

As part of the 2000 version of the decennial census, the Census Bureau released the Summary File 3 (SF3) dataset. This dataset includes tallies for various demographic variables based on a one in six sample of households who submitted the Census Long Form.

II. Geographic Area Covered by Analysis

The SMTC's designated planning area is displayed on Map 1. The MPO planning area was revised based on the 2000 Census, and therefore is different than the planning area designation mapped and analyzed in the 2004 Environmental Justice Final Report. The MPO is responsible for transportation planning activities for the entire region. The SMTC's area of jurisdiction includes all of Onondaga County and small portions of Oswego (the Village of Phoenix and a small portion of the Town of Schroepfel) and Madison Counties, in New York State. Expansion areas included additional portions of Oswego County (the Village of Central Square and areas adjacent to the village in the towns of Hastings and West Monroe) as well as a portion of the Town of Sullivan in Madison County. The expanded geographic region accounts for changes in the Syracuse urbanized area according to the U.S. Census Bureau. Because all analysis was conducted using Census Block Groups, entire Block Groups in Oswego and Madison Counties, even though a small percentage of the Block Group is within the MPO area, were included in this analysis. This is because the smallest geographic area that contains the datasets needed for this analysis are block groups. The block group data cannot be divided into smaller parts with any amount of accuracy, therefore the maps contained in this report represent areas with data that are not part of the MPO area.

III. Methodology

Using SF3, various methodologies were employed to develop meaningful threshold values to delineate areas of Environmental Justice concentration via Block Groups. This is the smallest geographical area for which these data are available. Various local demographic analysts and SMTC member agencies provided guidance to decide which variables would be adequate for analyses. In addition, guidance was provided from the FHWA and the FTA on threshold designations. The following variables were utilized to determine these values.

The federal definition of populations that need to be addressed in Environmental Justice analysis includes (at a minimum) minorities and low-income populations. Additionally, at the discretion of the MPO if they deem so necessary, other populations may be considered in their region. The SMTC determined that the elderly and disabled populations should be included in the analysis. These data are included in Sections 2 and 3. Additionally, specific transportation related data corresponding with populations of poverty and disabled are further discussed in Section 4.

A. Minority Concentration

When examining concentrations of minorities for Environmental Justice purposes, the previously mentioned guidelines define minorities as any populations self identified as *non-white only*, with 2000 Census race classifications. Additionally, those who consider themselves to be Hispanic are also to be included as part of the analysis. However, *Hispanic* is not considered a race category according to the Census. Instead, it is listed as an ethnicity. Therefore, Hispanics who consider themselves to be included in the *white only* race category also need to be considered in this analysis.

After consultations with the demographic analysts and member agencies, it was determined that the SF3 population variable known as P7 (*Hispanic or Latino by Race*) would be used to calculate the population of all *non-white only* populations and the *Hispanic, white only* population. For the purposes of this study, the word *minority* will also include Hispanics who consider themselves white only.

B. Low-Income Concentration

Based upon research of other income analyses by SMTC staff, it was decided that SF3 population variable P53 (*Median Household Income in 1999 Dollars*) would be the most suitable for this analysis to aid in the identification of low-income concentrations at the Block Group level.

C. Senior Citizen Concentration

Population data by age are available as part of SF3 population variable P8 (*Sex by Age*). Staff tallied the total population of senior citizens in each Block Group by adding the counts of all age groups of persons aged 65 years or older, for both males and females.

D. Disabled Concentration

Based on the information from the SAC to improve upon the initial Environmental Justice Report, another variable was added for the 2005 report. Persons with disabilities are part of the SF3 population variable P42 (*Sex by Age by Disability Status by Employment Status*). The US Census Bureau defines the term disability as a “long-lasting physical, mental, or emotional condition.” They continue by explaining that this condition “can make it difficult for a person to do activities such as walking, climbing stairs, dressing, bathing, learning, or remembering. This condition can also impede a person from being able to go outside the home alone or to work at a job or business.”

With the raw data collected from the Census Bureau, staff could now work to develop the parameters that would identify Block Groups where significant concentrations of target populations exist. No agencies, Federal or otherwise, provide absolute figures to be used in the determination of these population concentrations. Rather, only general guidelines from these various agencies are available to aid in this process. Therefore, in order to ensure that meaningful thresholds were developed by the SMTC for the analysis, staff researched the guidelines that had been set forth by the U.S. Department of Housing and Urban Development (HUD), the Census Bureau, and by other MPO and local municipality Environmental Justice studies.

IV. Definition of Environmental Justice Analysis Concentration Areas

Once all supporting information was considered, staff made the following determinations for population thresholds. Each population variable would be divided into two separate categories, labeled as *Concentration* and *High Concentration* areas, in order to account for higher concentrations of one population. All concentration thresholds are based on Block Group values.

A. Minority Concentration – Map 2 (refer to Section I for a definition of minority populations)

Concentration Area: Block Groups with 17% to 31% minority population.

High Concentration Area: Block Groups with 32% or greater minority population.

According to the 2000 Census, the total population for Block Groups in the MPO planning area is 484,281, while the minority population is 75,532. This results in a mean MPO area minority concentration of 16 percent. After researching the available materials regarding minority concentration guidelines and consulting with demographic analysts and member agencies, it was determined that this Block Group mean percentage would represent a suitable threshold value. It was then decided that doubling the percentage would provide a suitable measure to define *High Concentration* areas. Using this method, staff could locate minority concentrations within the City of Syracuse where higher population densities exist. With the exception of the Onondaga Nation Territory and one block group in the Town of Clay, no Block Groups outside of the City of Syracuse had a minority concentration greater than double the MPO planning area mean.

B. Low-Income Concentration – Map 3

Concentration Area: Block Groups with 50% to 80% of the MPO area’s median household income.

High Concentration Area: Block Groups with less than 50% of the MPO area’s median household income.

The low-income concentration areas used in this study were determined by utilizing the HUD Division of Community Planning and Development Block Grant Program (CDBG) guidelines for identification of low-income populations. As defined by HUD, a block group is labeled as a low-income block group when its median household income does not exceed 50% of the metropolitan area median household income. Block groups whose median household income does not exceed 80% of the value are considered to be moderate income block groups. For the purposes of this study, the SMTC will use the labels *High Concentration Area* and *Concentration Area* in place of the low income and moderate income block group designations, respectively, though the calculations are the same.

The median household income for the MPO planning area is \$43,629; therefore, \$34,903 would represent 80 percent of this value and \$21,814 would represent 50 percent. According to the FHWA, a State or locality may adopt a higher threshold for low-income as long as the threshold is not selectively implemented and is inclusive of all persons at or below the Department of Health and Human Services (HHS) poverty guidelines.³ The HUD parameters employed for this variable incorporate all households at or below the HHS poverty guidelines.

C. Senior Citizen Concentration – Map 4

Concentration Area: Block Groups with 15% to 27% population aged 65 years or over.

High Concentration Area: Block Groups with 28% or greater population aged 65 years or over.

Fourteen percent of the MPO’s population is over age 65. Since there are no specific guidelines that have been developed to measure senior citizen concentrations, the SMTC staff along with member agencies determined that the MPO mean would represent the most suitable *Concentration* parameter. The threshold for *High Concentration* areas was set at double that value, or 28 percent. Please note that a threshold value of 15 percent or greater for senior citizen populations covers a significant portion of the MPO area, and expands the target area for this study beyond an area that is reasonable for this analysis. Therefore, senior citizen *Concentration* areas will be considered to a different extent than *Concentration* areas for low-income and minority populations.

³ HHS poverty guidelines differ according to household size. The HHS guidelines in 2005 ranged from \$9,570 for one person, to \$32,390 for households with eight family members. For each additional family member, the 2005 poverty guidelines add an additional \$3,260. The average household size for the SMTC MPA is approximately 2.55 persons.

D. Disabled Concentration – Map 5

Concentration Area: Block Groups with 17% to 31% of the MPO area’s disabled population.

High Concentration Area: Block Groups with 32% or greater of the MPO area’s disabled population.

The US Census Bureau defines the term disability as a “long-lasting physical, mental, or emotional condition”. Based on the SF3 data, 16 percent is the mean percentage of the population in the MPO area that has some type of disability that could require the use of transportation services. Since there are no specific guidelines that have been developed to measure disabled concentrations, the SMTC staff along with member agencies determined that the MPO mean would represent the most suitable *Concentration* parameter. The threshold for *High Concentration* areas was set at double that value, or 32 percent. It was found that the disabled populations are widespread throughout the MPO area much like the senior citizen concentration. Therefore, the addition of this new variable is significant, because Environmental Justice determinations are “based on effects, not population size. It is important to consider the comparative impact of an action among different population groups”. This means that there are new areas of *Concentration* or *High Concentration* added as part of the disability variable, and these geographic locations are important for environmental justice analysis.

With the individual population thresholds identified, it is now possible to combine them to develop the target areas for the Environmental Justice analysis.

V. Summary of Individual Factor Target Areas

Map 2 displays the *Concentration* and *High Concentration* areas based on the minority thresholds. Minority concentrations are generally more centralized than the low-income and senior populations, and the areas of highest priority occupy a significant portion of land in the City of Syracuse. This area of minority concentration spreads across the central portions of the city, as well as significant sections of the southern and eastern portions of the city. Minority populations are concentrated in some non-central city areas and suburban areas where high-density residential complexes (apartments/mobile home parks) are located.

The Syracuse Metropolitan Area is also unique compared to most other urbanized areas because it includes a Native American Nation. The Onondaga Nation Territory is also included in the designated *High Concentration* area. Although it is a priority of the SMTC to include the Onondaga Nation in their planning activities, the nation has often declined to participate in the SMTC’s activities as an affirmation of their sovereignty. Please note that the data provided by the Census Bureau regarding the Onondaga Nation may include several inaccuracies. However, these data were determined to be the most reliable source of demographic information pertaining to the Nation that was available to the SMTC.

Map 3 displays the *Concentration* and *High Concentration* areas based on the low-income percentages. The areas of highest concentration, the Block Groups with median household incomes less than 50 percent of the MPO median, were located in the City of Syracuse and a western Block Group of the Village of Baldwinsville and the Village of East Syracuse. Most of the *High Concentration* areas in the City were clustered around the downtown area, with a few others scattered on the fringes of the city.

In addition, most of the Block Groups with median household incomes falling between 51 and 80 percent of the MPO median were also found in the City of Syracuse. A few of the *Concentration* areas were located in the older village cores of East Syracuse, North Syracuse, Phoenix, and Solvay. There are also areas of *Concentration* in some suburban locations where large settlements of mobile homes and apartment complexes are present (i.e., the Town of Clay). Please note, some of these Block Groups are part of sparsely populated areas where industrial and vacant land uses dominate, and where a few low-income residence clusters also exist.

Map 4 displays the *Concentration* and *High Concentration* areas based on the senior citizen concentration thresholds. In general, these areas of concentration are more decentralized than the minority and low-income areas. Most of the *High Concentration* areas were situated in suburban areas adjacent to or on the outskirts of the City of Syracuse. For many of these areas, large senior residential facilities contribute to the high concentrations.

The *Concentration* areas for seniors, where the senior population equals 15 to 29 percent of the total population, are widespread throughout the MPO area. These cover most of the suburban areas immediately adjacent to the City of Syracuse in addition to several scattered rural areas in outlying towns. There is also a block group in the Village of Phoenix, Oswego County that has areas of *Concentration* for senior citizens.

Map 5 displays the *Concentration* and *High Concentration* areas based on the disabled threshold. There are several areas of *High Concentration* of disabled persons that are located in a decentralized fashion throughout the city. The remainder of these block groups are in other parts of Onondaga County such as western Cicero and southern DeWitt. These areas include between 17 and 32 percent of the disabled population in the MPO area.

The majority of the disabled populations are in widespread areas labeled as *Concentration* primarily located in the northern portion of Onondaga County as well as areas in Oswego and Madison Counties. The block groups that represent this population are above the mean percentage (16%) of people that consider themselves disabled according to Census data. These areas of *Concentration* are both within and outside of the urbanized area. This shows that there is a geographically disperse population of persons with a disability, all who may need access to transportation services.

Map 6 (Low Population Areas) defines block groups with low residential population density identified by shading. Also included are areas with stars, which are the locations that people do live within the non-densely populated block group. This map, as well as the subsequent Target Areas map (Map 7) helps to show where low-density block groups are located.

VI. Final Target Area Determination for Analysis

The SMTC staff used a three-level approach to define the analysis target areas, much like the multiple concentration approach used for each population segment. Individual concentration factors for each target population were combined to form a main target area designation for this study. These areas are listed as follows, and are illustrated on Map 7.

Within the three individual population variables (i.e., minority, low-income and elderly), Block Groups designated as *Concentration* areas were assigned a value of one, while Block Groups designated as *High Concentration* areas were assigned a value of two. The values of the *Concentration* and *High Concentration* areas of three target populations were then added together. When all of the variables are added, the maximum total is 6, and the minimum is 1. A value of 0 is considered to be “below threshold”. Each variable is weighted equally. Based upon the final sum of these values, each Block Group was included in the appropriate priority area as designated below, or was excluded from the analysis of the target areas altogether. All Block Groups receiving a value of zero were excluded from the analysis.

- **High-Priority Target Areas**

Block Groups that have been given a cumulative score of 4, 5 or 6, based on the aforementioned scheme have been designated as *High-Priority* target areas. With the exception of one area in the Village of Baldwinsville, all of the Census Block Groups that fall within this category are located within the City of Syracuse. They fall within the southeast, near west, north and downtown areas. The most intensive analysis as part of this study will concentrate on these Block Groups.

- **Medium-Priority Target Areas**

Block Groups that have been given a cumulative score of 2 or 3, based on the aforementioned system, have been designated as *Medium-Priority* target areas. These areas exhibit less significant concentrations of the target populations, but are still an important part of the Environmental Justice analysis. These concentrations tend to be located where minority and low-income populations are somewhat significant. The majority of these areas are located in the remainder of the city block groups. There are also other areas, suburban areas, and rural areas where low-income and senior factors tend to identify these areas as *Medium-Priority* areas. Areas where there are *Medium-Priority* block groups outside of the City include southern and northern (Carrier Circle area) DeWitt, small areas in the Town of Manlius, a portion of the village of North Syracuse, and some areas in Clay and Cicero. Also, a block group in the village of

Phoenix is identified as *Medium-Priority*. While these Block Groups represent a lesser degree of required emphasis than the *High-Priority* target areas, *Medium-Priority* target areas will also be considered to a significant degree in this study.

- **Low-Priority Target Areas**

Block Groups that have been given a cumulative score of 1, based on the aforementioned system, have been designated as *Low-Priority* target areas. Areas of low-priority for Environmental Justice consideration cover an extensive portion of the MPO area. The vast majority of these Block Groups are areas of *Concentration* for the senior citizen population. A few Block Groups, particularly those that are adjacent to areas of higher concentration, are areas of *Concentration* for low-income as well. While it is important to acknowledge that there are higher concentrations of senior citizens, low-income and minority persons throughout the metropolitan area, this study will focus primarily on *High-Priority* and *Medium-Priority* target areas. For the purposes of this study, it is recommended that the *Low-Priority* target areas are accessible to transit in suburban areas and paratransit services in rural areas.

- **Low Population Areas**

Several Block Groups have been specifically called out in this report as they are dominated by vacant or non-residential land uses. These areas include the Woodard Industrial Park, the Cicero Swamp, Clay Marsh, Hancock International Airport, the LeMoyné College campus, the Syracuse University south campus, and others. While population densities in these areas are generally low, their populations have been recognized in this report as falling within the parameters employed in the Environmental Justice analysis. These areas should not be filtered out of the study based on population density because in each Block Group there is a population that has a recognized need for analysis according to this report. These 21 Block Groups that are described below can be looked at in conjunction with Map 6: Low Population Areas. Map 6 notes block groups with low populations with designated striping, as well as noting the areas that residential population does reside with a numbered star and corresponding list on the map. These stars are also used on the Target Area map, as the block groups have a special low-density designation.

1. Town of Hastings, *Population 2,345*

- Entire Northwest Block Group data utilized. Although the total MPO acreage in this block group is minute compared to the overall acreage of the Block Group, the residents have transportation needs and therefore should be included in this study. Residences are located in the US 11/Northern Boulevard/County Route 4 area.

2. Town of Hastings, *Population 2,634*

- Entire Northeast Block Group data utilized. Although the total MPO acreage in this block group is minute compared to the overall acreage of the Block Group, the residents have transportation needs and therefore should be included in this study. Residences are located primarily north of the Village of Central Square along Barker Road and Shanty Creek Road.

3. Town of West Monroe, *Population 3,196*

- Entire Northern Block Group data utilized. Block Group data is the “smallest” geography incorporated in this analysis. Residences are clustered near the intersection of Mulroney Drive and County Route 37.

4. Town of Hastings/Village of Central Square, *Population 3,824*

- Entire Southern Block Group data utilized. Residences are located primarily within the Village of Central Square.

5. Town of West Monroe, *Population 1,232*

- Entire Southern Block Group data utilized. Residences are located to the east of County Route 37 near the western edge of Oneida Lake.

6. Town of Schroepfel, *Population 6,315*

- Entire Block Group data utilized. Residences are located at the southern portion of this block group in close proximity to County Route 57.

7. Woodard Industrial Park Area, *Population 322*

- This Block Group is dominated by industrial land uses. However, residential housing complexes can be found in the extreme southeastern corner of the region, near Vine Street.

8. Clay Marsh State Wildlife Management Area, *Population 596*

- Much like the Woodard Industrial Park, residential housing is located on a few acres of land. Residents of this Block Group are generally located at the north side of Bear Road in the Town of Clay.

9. Cicero Swamp State Wildlife Management Area, *Population 1,961*

- Like Number 8, this is an area dominated by open space characteristics. Persons residing in this area are commonly in the community of Bridgeport on this large Block Group’s eastern end.

10. Town of Sullivan, *Population 1,516*

- Entire Northern Block Group data utilized. Residences are primarily located in the northern portion of this block group along the shoreline of Oneida Lake.

11. Hancock International Airport/DeWitt Industrial areas, *Population 929*

- The Hancock International Airport dominates the northern portion of this Block Group, while the southern portion is dominated by railroad yards and other industrial/commercial zoned properties. Residential areas can be found primarily in the southwestern corner of this Block Group in the vicinity of New Court Avenue.

12. Town of Sullivan, *Population 2,632*

- Entire Southern Block Group data utilized. Residences are located in close proximity to Adams Road and Fyler Road in the southwest section of the block group.

13. Woodlawn Cemetery area, northern Syracuse, *Population 621*

- This Block Group is comprised of significant acreage designated as cemetery. On the Block Group's western edge are single- and multi-family homes.

14. Rosamond Gifford Zoo, *Population 0*

- Entire Block Group is comprised of the Rosamond Gifford Zoo.

15. Syracuse University/SUNY ESF Campus, *Population 4,210*

- This Block Group includes a significant transient group quarter population who require various transportation alternatives. Therefore, this area should not be excluded from analysis based on the large percentage of transient college students that reside here.

16. LeMoyne College Campus, *Population 1,685*

- Although this Block Group includes a significant transient group quarter population, there are also residential areas east of the LeMoyne campus. Therefore, this area should not be excluded from analysis based on the large percentage of transient college students that reside here.

17. Syracuse University South Campus, *Population 2,200*

- Like Number 16 above, this Block Group is comprised mainly of transient persons. However, there are a few residences located in the northeast corner of the Block Group.

18. Green Lakes State Park, *Population 1,150*

- The Green Lakes State Park comprises the vast majority of acreage for this block group. However, residents that reside in the block group are located in the northeast section of the Village of Fayetteville off of Route 5.

19. Jamesville Quarry, *Population 986*

- The Jamesville Quarry dominates the southern portion of this block group in acreage. Residences are located along Woodchuck Hill Road and developments off of Woodchuck Hill Road.

20. Jamesville Correctional Facility, *Population 1,401*

- The Jamesville Correctional Facility is located in the eastern half of the block group. Residents that populate this block group, excluding the correctional facility, are in proximity of the Hamlet of Jamesville and to the west of the hamlet along Route 173.

21. Onondaga Nation, *Population 1,473*

- As discussed briefly in the aforementioned section, the Nation is a sovereign territory and should be included in this analysis.

Numbers 15, 16, and 17 in this list include a large percentage of persons residing in institutional quarters. The SMTC recognizes that it is important to address the transportation needs of all individuals to the same degree as permanent residents.

Maps 1-7

Section 3: SMTC Activities and Environmental Justice

I. Public Involvement Plan

The SMTC recognizes that the active involvement of the entire community, in addition to the SMTC Policy, Planning and Study Advisory Committee (SAC) members, is paramount to good transportation planning. Public comments are valued because they can shape the direction of a particular transportation study or planning activity, and may help to identify new transportation projects that are important to resident citizens.

For many SMTC activities, a project-specific Public Involvement Plan (PIP) sets the framework for the public involvement opportunities that will be available throughout the course of a project. The PIP also pinpoints when in the project schedule that public involvement meetings will be held to allow for the exchange of information and input. In addition to public meetings, the SMTC also recruits the necessary technical personnel and community representatives to serve on a project-specific SAC. Such a committee is created for nearly all SMTC planning activities to assist in managing projects, as well as to provide needed input and direction.

Other methods the SMTC utilizes to inform and invite the public to participate include the use of press releases to announce various meetings, project updates, and available reports; the production of its newsletter, *DIRECTIONS*; distribution of various project-specific fact sheets and flyers; and the use of public comment cards and questionnaires. In addition, the SMTC web site, www.smtcmpo.org, supplies up-to-date information on all SMTC transportation planning activities.

The Environmental Justice study is primarily focused on the transportation planning activities of the SMTC and its member agencies, and the identification of disproportionately affected populations as defined by the USDOT.

II. Long-Range Transportation Plan (LRTP)

The LRTP serves as a blueprint that guides the Syracuse Metropolitan Area's transportation development over a 25-year period. The LRTP is based on projections of growth and travel demand coupled with financial assumptions, and is updated every three years to reflect changing conditions and new planning principles. The LRTP specifically examines major urban transportation planning concentrations, such as environmental/air quality, complete access to transportation, alternative transportation modes, the impact of land development on the transportation system, the impact of single occupancy vehicles, and maintenance of the existing infrastructure. The SMTC completed the 2004 LRTP Update in May 2004. The SMTC is currently working on a new LRTP, which will be completed in mid 2007.

Throughout the process of the LRTP 2004 Update, the SMTC reached out to the community in an effort to gather the informed views of the public regarding preferences for future development and transportation needs.

III. Transportation Improvement Program (TIP)

The Transportation Improvement Program (TIP) is the agreed-upon five-year list of specific projects for which federal funds are anticipated. Required by federal law, the TIP represents the transportation improvement priorities of the Syracuse Metropolitan Area. The list of projects is multi-modal and includes highway and public transit projects, as well as bicycle, pedestrian, and freight-related projects. All TIP projects are required to be consistent with the vision provided by the SMTC Long-Range Transportation Plan. System preservation is the focus of the majority of TIP projects.

Within the *High-* and *Medium-Priority* target areas there are 47 SMTC TIP projects from the 2005-2010 TIP that total \$181.912 million. These projects are dispersed amongst the following categories:

- Bicycle/Pedestrian: 11 percent or \$20.724 million
- Mobility: 28 percent or \$50.45 million
- Bridge: 47 percent or \$85.063 million
- Transit: 14 percent or \$25.675 million

The projects are referenced in Appendix 1, and shown on Map 12. Please note that multiple points may represent one TIP project that includes several disparate locations.

Five current TIP projects are funded either partially or in full through the Congestion Mitigation/Air Quality (CMAQ) program. This program requires demonstration of air quality improvements that will result from the implementation of the project. The five CMAQ projects include three mobility, one bicycle/pedestrian and one transit projects. The mobility projects reflect expansions to the traffic signal interconnect system to improve traffic flow and pedestrian safety. The bicycle/pedestrian project will implement a user-friendly pedestrian and bicycle trail system. The transit project will implement a ridesharing program. All of the CMAQ projects are located in *High-Priority* target areas and will be analyzed for air quality improvements.

One area of concern mentioned during the SMTC's FHWA/FTA Certification review has been the Onondaga Nation, which has traditionally chosen not to participate in the TIP process. The NYSDOT has one project on the current TIP involving three bridges that will be replaced or rehabilitated within the Onondaga Nation territory.

IV. Unified Planning Work Program (UPWP)

The Unified Planning Work Program (UPWP) identifies the annual transportation planning activities that are to be undertaken in the Syracuse Metropolitan Area in support of the goals, objectives and actions established in the Long-Range Transportation Plan.

The SMTC Planning and Policy Committees must approve all UPWP studies and projects before work can begin. Specific UPWP projects completed in the past fourteen years that have study specific boundaries, other than the entire MPO, have been mapped with the SMTC's Geographic Information System (GIS) for use in the Environmental Justice study.

Since 1991, the SMTC has undertaken approximately 73 UPWP projects in the MPO area. The 73 projects have been separated into 12 general categories:

- Air Quality: 5 projects (7%)
- Bicycle/Pedestrian 3 projects (4%)
- Corridor Studies: 5 projects (7%)
- Economic Development: 4 projects (5%)
- Environmental Justice: 5 projects (7%)
- Intermodal: 6 projects (8%)
- Miscellaneous: 5 projects (7%)
- Planning: 10 projects (14%)
- Safety: 3 projects (4%)
- Traffic Needs: 19 projects (26%)
- Transportation & Land-Use: 5 projects (7%)
- Transit: 3 projects (4%)

The Traffic Needs category comprises the majority of UPWP projects undertaken in the past 14 years. Of the 19 projects, 8 are located mostly in *Medium-* and *High-Priority* target areas. For a complete list of UPWP projects, refer to Appendix 2. Specific UPWP projects are described below and displayed on Map 13 and Map 14.

Corridor studies are further discussed to show the importance and value they have to preserving the character and overall effectiveness of a viable transportation network in a targeted area.

Corridor Studies

Corridor studies completed at the SMTC typically involve a comprehensive examination of the multi-modal transportation network and overall transportation needs and desires of concentrated citizens within a defined geographic area. Five corridor studies (*James Street*, *Old Liverpool Road*, *Seneca Turnpike*, *South Salina Street* and *West Genesee Street*) have been completed in the SMTC MPO area since 1991, two of which fall in *High-Priority* target areas (*Seneca Turnpike* and *South Salina Street*). The *South Side Transportation Study* is also located in a *High-Priority* target area. One of the five corridor studies is contained within a *Medium-Priority* Block Group (the *Old Liverpool Road* study). Each corridor study strives to preserve and enhance the existing transportation network and environment of the corridor being examined.

The end result of each corridor study is a series of recommendations aimed at improving a specific corridor for local residents as well as through travelers. The recommendations are typically separated into two categories: those that apply to the entire corridor, and those that apply to key site-specific locations along the corridor.

Corridor wide recommendations are primarily proposed to alleviate perceived and real transportation issues discovered in an entire corridor. These recommendations are usually broad in nature and aimed primarily at enforcement and organizational/education and regulatory measures to help preserve and enhance the transportation network in a defined corridor. Site-specific recommendations are intended to provide suggestions for transportation issues that are exclusive to key locations within a corridor, such as intersections and gateways. Recommendations provided within the majority of SMTC corridor studies are separated into short and long term categories to identify various timeframes and costs for suggested improvements throughout a specific corridor.

Other UPWP Projects Found in Target Areas

There are several completed or in progress UPWP projects/studies that are not noted or displayed in this report. These projects are not specific to any target area, as the intention is to make improvements on a system-wide basis while maintaining the existing infrastructure. For example, the Job Access and Reverse Commute Plan (JARC) and the Bicycle and Pedestrian Plan examine transit and bicycle/pedestrian facilities respectively within the entire MPO area.

Noted below are system-wide projects located in *High-Priority* target areas, many of which are within the Greater Syracuse Metropolitan Area:

- *South Side Transportation Study*
- *Congestion Management Systems (county-wide)*
- *Intelligent Transportation Systems (county-wide)*
- *Clinton Square Analysis*
- *City of Syracuse Truck Route Study*
- *University Hill Special Events Study*
- *University Hill Transportation Study (in progress)*
- *Downtown Circulation Study*
- *Suburban Transit Demand and Marketing*

Projects listed below are contained in *Medium-Priority* target Areas. Like the *High-Priority* target areas, these projects are located primarily in the Greater Syracuse Metropolitan Area, specifically in the outlying suburbs to the immediate east and west of the city line:

- *Clay/Cicero Route 31 Transportation Study*
- *Lakefront Area Planning*
- *Dewitt Comprehensive Plan Transportation Component*
- *Eastern Onondaga County Transportation Plan*

From the 20 UPWP projects that have distinguishable boundaries and displayed on Map 13, nine are focused in the *Medium-Priority* and *High-Priority* target areas. Each consolidated target area is overlapped by a project boundary, or the entire Block Group contains an individual UPWP project.

Since 1991, the SMTC's UPWP projects have generally been concentrated in the urban core and adjacent suburban areas to the north and east of Syracuse. The greatest concentration of UPWP projects can be found adjacent to the central business district (CBD) of the City of Syracuse. Given that there are several Block Groups defined as *High-Priority* areas in the CBD, these areas have been covered by several UPWP studies. All *High-Priority* areas have been included in the SMTC's UPWP studies. There are no known adverse or negative effects to be found from these studies, however, the SMTC has not fully examined the impacts of its studies to date. It is important to note though, that each SMTC project is aimed at improving the transportation network, as the goals of the majority of studies have centered on system preservation and increased mobility.

While most *Medium-Priority* target areas are located where SMTC UPWP projects have taken place, there is a number of concentration Block Groups to the south and west of Syracuse that have received minimal coverage; this area includes the Onondaga Nation Territory.

V. Transit

The availability of public transportation to disadvantaged populations is a prime concern in addressing Environmental Justice. Populations that may have little or no access to motor vehicle transportation rely on transit to increase their mobility. Transit must be comprehensive in its times of operation and locations served in order to best suit the population. Additionally, the availability of public transit encourages the reduction of automobile trips, which may improve air quality in the SMTC region. Several options for public transportation are available in the Syracuse area with differing scopes of operation.

Centro

The Central New York Regional Transportation Authority (CNYRTA) operates Centro as the public transit system for Onondaga and adjacent counties. Centro operates fixed route transit systems including over 100 designated routes throughout the region. Many of these routes converge at a transit hub located in downtown Syracuse. From this hub, the routes diverge into various directions to serve localities throughout the region. Other routes provide service across towns or circulate through the suburbs without passing into Syracuse. Additionally, locations such as the region's many shopping centers, the Regional Transportation Center, and other outlying centers of activity serve as convergence points for transit routes.

Centro operates "city" and limited commuter routes in Syracuse, Oswego, and Auburn as well as intercity connector services between Syracuse/Oswego and Syracuse/Auburn. Throughout most areas of the City of Syracuse, including *High-Priority* target areas,

these routes operate with at least a thirty-five minute headway, while in the suburban areas most routes operate with a seventy-minute headway or more in off-peak periods. “Headway” is defined as the time interval between two vehicles traveling in the same direction on the same route. For example, if a bus passes a shelter at 2:00 PM and has a thirty-minute headway, the next bus on the same fixed route will pass at approximately 2:30 PM. Where several routes overlap, buses normally pass more frequently than each individual route’s headway interval.

Fares to ride Centro are one dollar for travel within one fare zone with a twenty-five cent charge for crossing into a new zone. Senior citizens and disabled citizens are charged fifty cents for riding on Centro with a ten-cent extension zone charge. Centro bus service operates from the early morning hours to the nighttime, seven days per week.

Transit service operates frequently in the *Medium-Priority* and *High-Priority* target areas of the MPO. Please see Map 8 for a comparison of Centro’s fixed route system with the target areas of this study. However, the JARC Plan (conducted by the SMTC in 2000) identifies areas where transit service does not adequately link disadvantaged populations with clusters of employment. This study focused on addressing transit needs of welfare and other low-income employees throughout the MPO area. The JARC report presents results of a study on the mobility needs of people moving from welfare to work and other low-income persons. It serves as a comprehensive plan for addressing gaps in transportation and is required by the FTA JARC grant program.

Contained in the findings section of the report are 11 gaps in the transportation network. This list then focused on six primary areas, which were reviewed in more detail. The six areas included:

1. Carrier Circle Area
2. Henry Clay Boulevard and Morgan Road Industrial Area
3. Erie Boulevard to Bridge Street/NYS Route 290/Manlius Center Road
4. Taft Road
5. Cicero/Route 11/South Bay Road/Route 31
6. Farrell Road/Stiles Road

The primary focus of the JARC report was issues that dealt with the availability of public transit. Not every person in the county has access to a vehicle, meaning they must find other options to and from work (Section 4 contains various maps and details as they relate to transportation to work alternatives). As part of the JARC report, the SMTC conducted a telephone survey to formulate transit concerns/issues the employees may have had. Utilizing collected survey information, recommendations were created to improve existing Centro routes, and to plan new routes to better serve the public.

The JARC report used 1990 Census figures to create maps and locate desired populations. Although the maps are very useful to the JARC report, they will not be used for further analysis in this study. Rather, Census 2000 figures were used in the

compilation of the Environmental Justice study. Current demographic and socio-economic data may be summarized to update the JARC report figures.

Since the JARC report was released in 2001, the CNYRTA has conducted a comprehensive restructuring of its fixed routes. Updates have been implemented to service the six gaps in transportation recognized from the JARC report. Many of the changes made involve renumbering the routes to make them easier for the public to understand. The existing Centro system now provides service to areas that were not served when the JARC Plan was compiled. Additionally, in late 2000/early 2001, Centro implemented new services for people coming off public assistance and the working poor through a newly formed Mobility Management Center (MMC). The MMC utilizes FTA JARC and State TANF (Temporary Assistance for Needy Families) grant funds to provide work trip transportation for the target populations to areas and jobs not well served by the regular route system. To date, the MMC has brokered over 50,000 trips through a number of service contracts with taxi and delivery transportation companies.

On a triennial basis, the CNYRTA must prepare an internal Title VI report that outlines the agency's activities to show conformity with Title VI requirements as defined by the FTA under the Civil Rights Act of 1964. The FTA approved the CNYRTA Title VI report in August 2004. A series of twelve requirements were documented for the approval process ranging from the utilization of the latest Census to locate minority populations to creating a documentation process to deal with complaints and lawsuits that "allege discrimination on the basis of race, color or national origin with respect to service or other transit benefits" (Title VI Compliance Review of the CNYRTA September 2000).

Centro and Senior Citizens

The CNYRTA operates demand responsive Call-A-Bus paratransit service to provide transportation options to the elderly and disabled who meet the criteria of the Americans with Disabilities Act (ADA). The ADA requires Call-A-Bus to serve the same area and operate during the same hours and days as Centro bus routes. Call-A-Bus service will travel up to three-quarters of a mile on either side of the Centro bus routes. Service beyond this area is not offered through Call-A-Bus.

Many of Centro's routes either directly serve or are adjacent to senior residential housing and common destinations for senior citizens. Please see Map 9 for a comparison of senior center facility locations and transit routes. As shown on the map, there are numerous facilities that lie outside the Centro route system. Many of these facilities are located in outlying areas where it is not feasible, based on ridership, to augment the route system to serve these locations. However, some facilities are located within a reasonable distance of existing routes where future expansion or realignment of the transit system could be considered.

OnTrack

The Syracuse, Binghamton & New York Railway began operation of OnTrack in 1994 with a recreational rail shuttle service. The service connects the Carousel Center with Syracuse University and Armory Square in Downtown Syracuse. A future extension is planned that will provide additional stops at the William F. Walsh Regional Transportation Center, Alliance Bank Stadium, and the Central New York Regional Market. Service is currently limited to eight trains in each direction, Friday through Sunday, on a seasonal basis.

OnTrack operates special trains (Orange Express) for Syracuse University football and basketball games as well as major concerts and events. The trains run from both Carousel Center and Armory Square to the Carrier Dome, as illustrated by Map 10, thus helping to eliminate traffic that would impact nearby low-income neighborhoods. The reduction in traffic and its related mobile emissions can be viewed as a significant benefit to target areas.

The William F. Walsh Regional Transportation Center

In 1998, the CNYRTA opened the \$21 million William F. Walsh Regional Transportation Center in Syracuse. Located adjacent to Interstate Route 81, the Central New York Regional Market, Alliance Bank Stadium, and Carousel Center, this intermodal facility brings together, for the first time in the Central New York community, all ground transportation services, including intercity rail, intercity bus, local and regional bus, and taxi service.

The CNYRTA simultaneously restructured a number of its bus routes in order to maximize direct service to the Center from points throughout the region, furthering the ease of intermodal passenger travel. From here, travelers can access Greyhound and Trailways intercity coach service, airport shuttle service to Hancock International Airport and ground transportation services, as well as Amtrak passenger rail along the Empire Corridor.

With the concentration of the CNYRTA routes through the William F. Walsh Regional Transportation Center, a greater level of accessibility to all intercity transportation options for targeted populations is provided. Additional future opportunities may also exist for intermodal connectivity and accessibility upon the completion of the OnTrack railroad bridge over Park Street, allowing the OnTrack Shuttle and special events trains to access the Transportation Center. With the proposed development of the Carousel Center into DestiNY USA, there may be further opportunities for intermodal connectivity and enhancement of access for the concentration populations.

VI. Bicycle and Pedestrian Planning

The SMTC examines bicycle and pedestrian transportation issues and opportunities in nearly every study undertaken by the agency. Within the SMTC's transportation studies

pedestrian and bicycle facilities (such as sidewalks, curb ramps, existence of bicycle routes and/or lanes, and the availability of bicycle racks) are examined.

Existing and proposed trails for both transportation and recreation throughout the MPO area are displayed in Map 11: Trail System. The trails are exposed to many Environmental Justice target areas, particularly along the Onondaga Creekwalk corridor. These trails are beneficial not only for transportation purposes, but for increasing the beautification of the communities they travel through, some of which are located in identified target areas.

The SMTC recently approved a policy level Bicycle and Pedestrian Plan for the MPO area. The primary purpose of this Plan is 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 options within the transportation system in the MPO area.

The following goals were identified for the Bicycle and Pedestrian Plan:

1. To encourage the use of bicycling and walking as legitimate modes of transportation;
2. To improve the safety of bicyclists and pedestrians;
3. To educate bicyclists, pedestrians, motorists, law enforcement officers, and others regarding traffic laws and safety measures;
4. To promote the improvement of travel and tourism and business opportunities along bicycle and pedestrian infrastructure;
5. To encourage planners and municipalities to develop bicycle and pedestrian resources; and
6. To develop a methodology for tracking bicycle and pedestrian improvements.

One notable aspect of this project has been the wide array of public outreach that has taken place. Staff held numerous SAC meetings for every phase of the project. The SAC is comprised of representatives from the SMTC's member agencies, all who have an interest in transportation planning and in creating an effective bicycle and pedestrian environment in the MPO area. There were also citizen representatives on the SAC. Stakeholder and volunteer meetings were held to solicit the assistance of cyclists in rating roads for the bicycle suitability map. In addition, multiple public meetings were held to explain the process and purpose of the Bicycle and Pedestrian Plan, present the relevant existing bicycle and pedestrian transportation data, and review the conditions inventory data that the SMTC has compiled.

The Bicycle and Pedestrian Plan will uphold the goals of Environmental Justice through determining (via the bicycle suitability map, bicycle and pedestrian awareness survey, sharing information with the public, etc.) where holes in the existing bicycle and pedestrian network exist, and what can be done to alleviate these gaps and plan for the future. The development of recommendations and action items that seek to improve the community's bicycle and pedestrian environment will benefit all socioeconomic groups.

VII. Freight

Overview

The movement of goods by truck, rail and air can create negative pressures on an urbanized area. Of particular concern would be those areas adjacent to freight facilities such as a rail yard, intermodal terminal, airport, or distribution center. Freight traffic can produce uncomfortable levels of air pollution, noise and traffic, as well as safety concerns affiliated with truck traffic and rail-highway grade crossings. With respect to new federal legislation on Environmental Justice, it is the duty of the MPO to ensure that neighborhoods housing predominantly low-income or minority populations are not being subjected to a disproportionately high percentage of the negative impacts caused by freight movement. Environmental Justice is an important consideration as domestic freight movement is anticipated to grow by nearly 90 percent by 2020 and international freight by nearly 110 percent.

In the Syracuse metropolitan area, the modal breakdown by freight tonnage is approximately 88 percent truck and 12 percent rail. Air and water tonnages are statistically insignificant. The greatest percentage of rail traffic is attributed to inbound raw materials to the metropolitan area. Truck traffic (both through and local) is concentrated on Interstate roadways such as I-81, I-690, I-90 and I-481. These highways are constructed and maintained to standards acceptable for large trucks. The regional freight network also consists of designated New York State Access Highways that link the Interstates with truck terminals and warehouses. This network allows for access by special dimension vehicles such as automobile carriers, tandem trailers and trucks with 53-foot trailers. There are also locally designated truck routes in the City of Syracuse and various towns and villages.

Freight Related UPWP Studies

There have been several freight related studies conducted by the SMTC that are located in the *Medium-* or *High-Priority* areas. The first was the *1996 Rail Corridor Inventory (updated in 2003)*, which included all rail corridors in the metropolitan area including the Woodard Industrial Park area (a *High-Priority* area). The rail corridor study was primarily an inventory of existing conditions and ownership of rail lines within the metropolitan area.

A recently completed study that overlaps with *High-Priority* areas is the *City of Syracuse Truck Route Study*. This study involved a comprehensive review and analysis of truck routes, related signage and constraints on truck routes within the City of Syracuse. This study was requested by the City of Syracuse Department of Public Works to create a current database of signage and confirm the viability and necessity of the currently designated truck route system.

Prior to the completion of the *City of Syracuse Truck Route Study*, a comprehensive review of designated truck routes in the City of Syracuse had not occurred in quite some

time. There was also an absence of a database for truck related signage (such as “Truck Route”, “No Trucks”, etc.) within the City limits. In addition, placement of “No Truck” signs throughout the City over time may not have been consistent with previously determined route designations. To enhance urban freight mobility, inconsistencies were identified and addressed in the analysis.

The *City of Syracuse Truck Route Study* focused on locating all of the ‘No Truck’ signs within the City limits, creating an inventory of the signs, and identifying currently designated truck routes. Areas of concentration relating to signage, constraints and routes were identified and recommendations to alleviate inconsistencies were made.

Freight Related TIP Projects

Projects in the SMTC TIP are generally not freight specific as they encompass several other key focus areas including safety, mobility and air quality (to name a few). However, several TIP projects are located in areas designated as *Medium-Priority* areas and are important to freight movement. One such project is the First Street Reconnect in the Village of East Syracuse. Currently traffic (including the CSX TransFlo facility for trans-loading products from rail to truck) is restricted to one access point and the reconnection of two road segments would provide improved additional access for trucks as well as increased safety and mobility for the neighborhood.

Other projects located within *High-Priority* areas that benefit freight mobility include interstate projects on I-81 and I-690, as well as several bridge projects. The signal improvements related to the Syracuse Signal Interconnect and Operations project, also enhance traffic flow and improve air quality in the designated *High-Priority* areas. Benefits of freight related projects through capital programs include construction related activities and operational access. In addition, benefits of freight related activities are determined based on the identification of freight related needs through studies conducted by the SMTC and its member agencies. Relevant negative impacts of freight related projects include noise, high traffic volumes, safety issues, lack of service/access and mobility. These projects are noted in Appendix 1.

Maps 8-14

Section 4: CTPP Data and Analysis

This section, *CTPP Data and Analysis*, has recently been added to the environmental justice analysis in an effort to further evaluate and define environmental justice populations. The Census Transportation Planning Package (CTPP) “is a special set of tabulations from the decennial census designed for transportation planners that can be used to evaluate existing conditions, develop and update travel demand models, and to analyze demographic and travel trends. The CTPP provides tabulations of households, persons, and workers and summarizes information by place of residence, place of work, and for worker-flows between home and work.”⁴ The SMTC added the use of CTPP data to the environmental justice analysis in order to more easily examine transportation data and demographic data together⁵. Note that some Census figures may contain various inadequacies due to inherent limitations of the data. Therefore, what is displayed graphically may not accurately depict the current or actual conditions within each Block Group. This situation is prevalent with the Oswego County Block Groups where analysis was completed to include data for entire block groups when only a small percentage of the total block group area lies within the SMTC MPA. Further note that all data included within this document is over five years old. For specific limitations associated with each dataset please refer to the Census Bureau’s website, www.census.gov.

For this section of the report, the SMTC focused on examining poverty and disability data. Please note that the variable “Low-Income” (as discussed in Section 2) differs from the term “Poverty” (which is defined below).

The official Census Bureau definition for poverty is as follows: “the Census Bureau uses a set of money income thresholds that vary by family size and composition to detect who is poor. If a family’s total income is less than that family’s threshold, then that family, and every individual in it, is considered poor. The poverty thresholds do not vary geographically, but they are updated annually for inflation with the Consumer Price Index. The official poverty definition counts money income before taxes and excludes capital gains and non-cash benefits (such as public housing, Medicaid, and food stamps).”⁶

To clarify, previous sections of the Environmental Justice Report that discuss “Low-Income” populations were determined according to HUD’s low-moderate guidelines. This low-income determination is based exclusively on block group median household income when compared to the MPA median household income. The SMTC did not apply the median household income to family size or the associated poverty threshold when identifying low-income concentrations.

⁴ <http://www.fhwa.dot.gov/ctpp/about.htm>

⁵ Sections 1-3 of the Environmental Justice Analysis use various 2000 Census demographic data, like the joint SMTC/Centro Title VI document prepared in 2004 for Centro’s Triennial Review. Section 4 of this document uses CTPP specific tabulations. CTPP data was not included in the Title VI document, only select socio-economic profiles.

⁶ <http://www.census.gov/population/www/cps/cpsdef.html>

Also, as previously noted in Section 2, the US Census Bureau defines the term disability as a “long-lasting physical, mental, or emotional condition”.

The SMTC examined several tables based on poverty characteristics for this analysis, including **Persons Below Poverty/Number of Vehicles Available**, and **Persons Below Poverty/Mean of Transportation to Work**. Additionally, CTPP disability data has been included in this analysis (i.e., **Disability Status/Mean of Transportation to Work**).

A. Persons with a Disability/Mean of Transportation to Work – Maps 15-17

Staff examined CTPP Table 1-008, *Disability status for persons age 16 and over by Mean of Transportation to Work* (i.e., vehicles, buses and bicycle/walk). The vehicle category has been tabulated to include persons who drove alone, those who participate in carpooling (vehicles with 2 or more persons), taxi and motorcycles. Persons that are identified with a disability according to the Census Bureau, regardless of disability type and number of disabilities, have been included in this tabulation.

Map 15 (Persons with a Disability, Transportation to Work: Vehicle) portrays the distribution of persons with a disability throughout the MPA using a vehicle as their primary transportation to work. Excluding the Town of Schroepfel block group, two block groups outside the City of Syracuse contain the highest number of disabled persons that utilize some type of vehicle to get to work. Those block groups are the southern Town of Sullivan block group and a block group north of the Village of Liverpool, immediately west of Morgan Road. Each block group has approximately 220 disabled persons that utilize a vehicle as their choice of transportation to work. The block group in the City of Syracuse that contains the largest number of persons who utilize a vehicle to reach work can be found in the vicinity of LeMoyne College. This block group is comprised of approximately 240 disabled persons that take a vehicle to work as their main mode of transportation. Of the 419 block groups that encompass the MPA, three block groups have either no identified disabled persons or no disabled persons taking a vehicle to work.

Map 16 (Persons with a Disability, Transportation to Work: Bus) depicts that those identified with a disability in the rural areas of the MPA do not necessarily utilize the fixed route service provided by Centro to travel to work. Of the 419 block groups that comprise the MPA for this analysis, 293 block groups, or 70 percent, have no one identified with a disability riding the bus to work. However, it should be noted that the bus routes do not serve every locality of the planning area and may not provide service to certain sectors of the planning area where jobs may be located. These areas are found predominantly in the rural sections of southern Onondaga County. Conversely, disabled persons who reside in the City of Syracuse comprise the vast majority of block groups that use the bus service as their primary mode to work, particularly those centralized near the Syracuse University South Campus (60 people are identified as using transit here). A few block groups at the periphery of the city have been identified where disabled persons use Centro service to work.

Map 17 (Persons with a Disability, Transportation to Work: Bike or Walk) depicts those individuals that have a disability and walk or bike to work. The City of Syracuse is a more densely populated area when compared to other locations in the MPA. It contains the block groups with the highest number of disabled persons that either walk or ride a bicycle to work. These block groups are primarily located in the University Hill area. The Syracuse University block group contains 70 disabled persons, and the block group immediately south of Euclid Avenue and east of Comstock Avenue contains 75 disabled persons. Additionally, the southern block group in the Town of Pompey depicts that approximately 30 disabled persons either bike or walk to work. Other than the centralized block groups in the City of Syracuse, the majority of the rural and remaining urban areas of the planning area do not contain any disabled persons that either bike or walk to work. There are a few disparate block groups scattered throughout the planning area that contain at least four disabled persons that chose to either bike or walk to work. Of the 419 block groups that comprise the MPA for this analysis, 287 block groups, or 68 percent, have no one identified as disabled that bike or walk to work.

B. Persons Below Poverty/Means of Transportation to Work – Maps 18-20

Block Groups that contain residences determined to be at or below poverty via the Census are dispersed throughout the MPA. According to the CTPP, Block Groups in the central core of the City of Syracuse have the most densely concentrated number of persons below poverty. Utilizing CTPP Table 1-036, *Poverty Status in 1999 by Means of Transportation to Work*, the SMTC examined various transportation alternatives to work (i.e., vehicles, buses and bicycling/walking). Similar to the disability/transportation to work parameters, the vehicle category has been tabulated to include persons who drove alone, those who participate in carpooling (vehicles with 2 or more persons), taxi and motorcycles. The poverty tabulations included in this section have been determined exclusively for workers that reside within a household. Also, as discussed in previous sections of this analysis, each map portrays entire block groups where only a small percentage of the total block group area lies within the SMTC MPA boundary, such as those block groups in Oswego County. Staff has examined the following characteristics and details for the poverty variable:

Map 18 (Persons Below Poverty, Transportation to Work: Vehicle) illustrates that the majority of persons identified as living below poverty according to the Census Bureau utilize a vehicle as their primary mode of transportation to work. According to CTPP data, the Syracuse University South Campus block group had the highest number of persons at or below poverty that use a vehicle to travel to work (i.e., 265 persons). Excluding several block groups in the City of Syracuse, the Town of Schroepfel and a block group immediately west of the Woodard Industrial Park, the remaining block groups in the MPA contain anywhere between 1-90 persons in poverty that utilize some type of vehicle to get to work. Seventy-one (71) of the 419 block groups have no one identified as below poverty that take a vehicle to work. This may mean that there are no impoverished persons residing in these 71 block groups or, that there is no vehicle available for their use (vehicles available are discussed below).

Map 19 (Persons Below Poverty, Transportation to Work: Bus) shows individuals that are at or below poverty and take the bus to work. Of the 419 block groups that comprise the MPA for this analysis, 332 block groups, or 79 percent, have no one identified as being below poverty that ride the bus to work. As depicted earlier in this analysis, Centro operates a fixed route service throughout the majority of the planning area, particularly around high employment locations, areas where senior citizen facilities exist, and where there is adequate population density. Like Map 18, the highest number of persons in poverty who take a bus to work can be located within the block group that contains the Syracuse University's South Campus. Additionally, the City of Syracuse has the majority of block groups where persons in poverty utilize public transit service. There are a few block groups around the periphery of the city that have one or more persons in poverty that utilize Centro service. CNYRTA and their subsidiaries continue to examine possible route expansion to various areas of the planning area that are underserved or have no service currently available. Map 19 further illustrates that a block group in the Town of Otisco contains between 1-15 persons below poverty who utilize bus service to reach work. However, please note that Centro currently does not provide a Park-n-Ride location or transit routes to the Town of Otisco. Therefore, this data anomaly should be overlooked.

Map 20 (Persons Below Poverty, Transportation to Work: Bike or Walk) depicts those people at or below poverty and walk or bike to work. Persons in poverty that either bike or walk to work can be found primarily in the City of Syracuse, particularly in the University Hill area. The block group immediately south of Euclid Avenue and east of Comstock Avenue contains the highest number of persons in poverty that either bike or walk to work (i.e., 215). Three hundred and nine (309) out of the 419 block groups, or 74 percent, have no person(s) identified as being at or below poverty that bike or walk to work. According to a New York State fact sheet prepared by the Surface Transportation Policy Project, 35% of all trips under a half-mile are made in a vehicle in New York State. In addition, only 6.2% of commutes in New York State are completed on foot.⁷

C. Persons Below Poverty, No Vehicle Available – Map 21

According to CTPP Table 1-032, *Vehicles Available by Poverty Status in 1999*, there are 2,703 persons at or below poverty that have no vehicle available. In addition, of the 419 block groups in the MPA, 271 block groups have one or more vehicles available for persons determined impoverished (this parameter is discussed below). Like all other CTPP variables discussed thus far, the Syracuse University South Campus block group contains the largest number of persons in poverty that have no vehicle available (i.e., 155), most likely due to the high student population. Excluding the 271 block groups with some vehicle available, most block groups have between 1-80 persons with no vehicle available for their use. Those block groups are predominantly within the City of Syracuse.

⁷ Surface Transportation Policy Project, Walking in New York, 12/16/03 < <http://www.transact.org/report/asp?id=205>> (2005)

D. Persons Below Poverty/Vehicle(s) Available – Map 22

According to CTPP Table 1-032, there are 9,550 persons at or below poverty that have one or more vehicles available to them. Map 22 shows that in the City of Syracuse, the Syracuse University South Campus block group has approximately 360 persons below poverty that have a vehicle available for their personal use. Similarly, the block group located to the south of Euclid Avenue and east of Comstock Avenue is comprised of 381 persons at or below poverty that have a vehicle available. Transient college students dominate these two block groups, most likely causing the numbers to skew substantially. The map also depicts that other block groups adjacent to the University have between 27 and 196 persons at or below poverty that have a vehicle available to them. The remainder of the City of Syracuse has between 1-196 persons in poverty per Block Group with a vehicle available for their use.

For the rural areas of the MPA, two block groups in the Town of Elbridge and one in the Town of Lafayette have between 27-50 persons in poverty with a vehicle available. The remaining block groups in the rural areas have anywhere between 1-26 persons in poverty with a vehicle available.

The block groups in the urbanized portion of the MPA are comprised of 1-196 persons in poverty with a vehicle available. The block group in the urban area (not including Syracuse) with the highest number of persons in poverty with a vehicle available is located just north of the Village of Liverpool between John Glenn Boulevard and Morgan Road (i.e., 130 persons). For the majority of variables examined in this CTPP section, analyses show that block groups in the vicinity of the three colleges/universities (LeMoyne, SUNY ESF and Syracuse University) within the city contain the highest distributions or concentrations of individuals living at or below poverty. These areas are predominantly domiciled by transient college students, thereby inflating the data for those block groups when compared to other non-institutionalized block groups.

Each municipality in the MPA has at least one Block Group where either persons with a disability or persons in poverty reside. Therefore, improved outreach efforts on behalf of the SMTC and its member agencies should continue to determine any actions that could potentially improve transportation options and personal movement throughout the MPA. As previously noted in Section 3, Centro provides various work trip transportation options for disabled persons, low-income and needy families in the planning area. For those persons/families that do not have any vehicle available, the fixed route service and other programs available through Centro may provide assistance for personal movement throughout the planning area and ultimately an improvement to quality of life. Additionally, the newly signed transportation bill, *Safe, Accountable, Flexible, Efficient Transportation Equity Act - A Legacy for Users (SAFETEA-LU)* illustrates that MPOs and state departments of transportation could undertake efforts to presumably alleviate issues and concerns associated with the disadvantaged disabled, low-income and minority populations. The transportation bill highlights various programs and funding source options that may be applied to aid in the development of projects and programs geared towards the remediation of disadvantaged areas (either infrastructure improvements or

quality of life improvements). As more details and guidance are provided in relation to SAFETEA-LU, the SMTC will determine what actions are necessary relative to environmental justice.

Details on environmental justice endeavors and the new transportation bill can be found at the following web addresses:

- 1.) www.fhwa.dot.gov/safetealu
- 2.) www.fhwa.dot.gov/environment/ej2.htm

Maps 15-22

Section 5: Conclusions and Future Analysis

This study complies with all mandates set forth by the FHWA and the FTA for Environmental Justice initiative.

Based upon this primary assessment, the study showed that the transportation planning activities performed by the SMTC are not known to have been disproportionately distributed regarding the designated target populations. However, the SMTC has not fully examined the impacts of its studies to date. Many SMTC projects that are complete, in the process of being completed, or that are proposed, strive to enhance the viability of individual neighborhoods, corridors and the region as a whole to improve the transportation network utilizing multi-modal transportation planning practices. This approach is evident throughout the primary Environmental Justice target areas where corridor studies or other initiatives were undertaken. While some gaps exist in transportation options for some of the MPO's citizens, the SMTC has asserted to mitigate these issues with reports such as the JARC study. In general, however, the benefits of the SMTC's planning process appear to have been distributed proportionally amongst the residents of the MPO.

This current study is a continuation of the preliminary assessments in the original report. The SMTC's Environmental Justice analysis will continue through multiple program years, as the agency will perform periodic assessments of its planning activities and their relevant implications. This report analyzed additional data including the disabled population and transportation to work data. Future analyses may consider additional evaluation activities. This may include, but is not limited to, continued participation from the project specific Study Advisory Committee consisting of the SMTC's member agencies, coordination with other MPOs involved in similar processes, receipt of input from stakeholders, individual citizens or community groups, and research and updating of data sources that may prove useful to the analysis.

APPENDIX 1

2005-2010 TIP FHWA/FTA FUNDS PROGRAM LISTING FOR EJ

**Appendix 1
2005-2010 TIP
Federal Highway Administration/Federal Transit Administration Funds
Program Listing for EJ**

PIN	SPONSOR	PROJECT DESCRIPTION	TOTAL PROJECT COST
382145	CNYRTA	CNYRTA BUS PURCHASES	\$5.200
382173	CNYRTA	REPLACE CALL-A-BUS VANS	\$2.015
382174	CNYRTA	DOWNTOWN COMMON CENTER SECTION 5307	\$3.875
382174	CNYRTA	DOWNTOWN COMMON CENTER SECTION 5309	\$7.250
382206	CNYRTA	JOB ACCESS REVERSE COMMUTE	\$0.397
382207	CNYRTA	RIDES FOR WORK 05/06-07/08	\$0.188
382217	CNYRTA	NOVA REPLACEMENT	\$6.750
301016	NYS DOT	RT 92, SYRACUSE CITY LINE TO RT 5	\$3.974
303494	NYS DOT	ERIE BLVD BRIDGE OVER WEST ST ARTERIAL	\$1.890
304362	NYS DOT	ROUTE 11 AT CIRCLE DRIVE	\$0.189
305618	NYS DOT	I481 FREEWAY INCIDENT MANAGEMENT SYSTEM PHASE IV	\$1.950
310418	NYS DOT	BEAR STREET OVER ONONDAGA CREEK	\$8.780
328717	NYS DOT	ONONDAGA LAKE PARKWAY, RT 370	\$3.450
350144	NYS DOT	I81, I690 TO RT. 11 MATTYDALE	\$10.220
350145	NYS DOT	I81, SENECA TURNPIKE BRIDGES	\$6.914
350151	NYS DOT	I81, RT 173 TO VIADUCT	\$6.260
350153	NYS DOT	I81, CORTLAND CO LN - RT 173	\$9.680
350631	NYS DOT	MIDLER AVE OVER I-690	\$1.560
350632	NYS DOT	REHAB 9 BRIDGES I690/WEST ST INTERCHANGE	\$4.430
350634	NYS DOT	I690 RESURFACING PROJECT	\$1.725
350635	NYS DOT	I690 OVER CSX RAILROAD	\$17.022
375216	NYS DOT	BUTTERNUT, SPENCER, COURT, BEAR/I81 BRIDGES	\$9.490
375389	NYS DOT	FIRST ST RECONNECTION/BRIDGE ST RAMPS	\$0.256
380403	NYS DOT	ONONDAGA NATION BRIDGES- GIBSON RD, RT 11, QUARRY RD	\$2.186
380466	NYS DOT	BRIDGE REPAIR PHASE 2	\$15.474
380469	NYS DOT	REHAB OF 3 BRIDGES IN ONONDAGA COUNTY	\$1.265
380519	NYS DOT	BRIDGE STREET AT I690 WB RAMP	\$1.500
375303	OCDOT	BUCKLEY ROAD, OLD LIVERPOOL ROAD TO TAFT ROAD	\$1.880
375330	OCDOT	HOSMAN RD, TOWNLINE RD TO NORTHERN BLVD	\$1.578
375355	OCDOT	ONONDAGA LAKE CANALWAYS TRAIL	\$8.500
375416	OCDOT	MORGAN RD PAVING, COMMERCE BLVD TO BUCKLEY RD	\$1.235
375425	OCDOT	BUCKLEY RD BRIDGE OVER CSX RR	\$1.542
375426	OCDOT	WILLIS AVE BRIDGE OVER CSX RR	\$3.843
301916	SYRACUSE	ROUTE 173 OVER ONONDAGA CREEK	\$2.344
303484	SYRACUSE	ERIE BLVD OVER ONONDAGA CREEK	\$2.763
375272	SYRACUSE	LODI ST/N SALINA SIGNAL IMPROVEMENTS	\$2.082
375285	SYRACUSE	GEDDES/GENESEE STS SIGNAL INTERCONNECTION	\$3.269
375288	SYRACUSE	FINEVIEW BRIDGE OVER RENWICK AVE	\$0.864
375289	SYRACUSE	DORWIN AVE OVER ONONDAGA CREEK	\$1.236
375290	SYRACUSE	DICKERSON ST OVER ONONDAGA CREEK	\$0.872
375292	SYRACUSE	MIDLAND AVE BRIDGE	\$1.076
375299	SYRACUSE	CREEKWALK PHASE 1, ARMORY TO CAROUSEL	\$8.284

Appendix 1
2005-2010 TIP
Federal Highway Administration/Federal Transit Administration Funds
Program Listing for EJ

PIN	SPONSOR	PROJECT DESCRIPTION	TOTAL PROJECT COST
375307	SYRACUSE	HIAWATHA BLVD IMPROVEMENT, STATE FAIR BLVD TO PARK	\$1.862
375313	SYRACUSE	TEMPLE ST OVER ONONDAGA CREEK	\$1.512
375407	SYRACUSE	STREETSCAPE IMPROVEMENTS TO NORTH SALINA STREET	\$0.490
375436	SYRACUSE	SOUTH SALINA ST - VALLEY PLAZA CORRIDOR IMPROVEMENTS	\$1.822
375437	SYRACUSE	SOUTH SALINA ST PAVING IMPROVEMENTS	\$0.968
GRAND TOTAL- TRANSPORTATION IMPROVEMENT PROGRAM			\$181.912

APPENDIX 2

UPWP STUDIES FFY 1991-2005

**Appendix 2: UPWP Studies
FFY 1991-2005**

Category	Project Name	Current Years Status of Project	Included on maps
Air Quality	STOP II (Signal Timing Optimization)	complete	
Air Quality	Air Quality, Conformity & Energy	in progress	
Air Quality	Clean Air	in progress	
Air Quality	Congestion Management System	complete	yes
Air Quality	TIP Conformity Determination	complete	
Bicycle/Pedestrian	Bicycle/Pedestrian Plan	complete	
Bicycle/Pedestrian	Bicycle/Pedestrian Planning Program	in progress	
Bicycle/Pedestrian	F-M Road/Rt 257 Pedestrian Accommodation Feasibility Study	in progress	
Corridor Study	Seneca Turnpike (Rt 173) Corridor Traffic Study	complete	yes
Corridor Study	Town of Camillus-West Genesee Street Corridor Study	complete	yes
Corridor Study	James Street Corridor Traffic Study	complete	yes
Corridor Study	South Salina Street Corridor Study/Transit Traffic Signal Preemption Program	complete	yes
Corridor Study	Town of Salina Old Liverpool Road Study	cancelled	yes
Economic Development	Air/Water Planning	in progress	
Economic Development	Town of Clay- Industrial Park Study	cancelled	
Economic Development	DestiNY	in progress	
Economic Development	Lakefront Area Planning	in progress	
Environmental Justice	Environmental Justice	in progress	yes
Environmental Justice	Job Access Reverse Commute Plan	complete	
Environmental Justice	Public Participation	in progress	
Environmental Justice	ADA Plan Implementations	complete	
Environmental Justice	Title VI Report	complete	
Intermodal	Conrail/CSX Intermodal Terminal Access	complete	yes
Intermodal	City of Syracuse Truck Route Study	complete	yes
Intermodal	Rail Corridor Inventory	complete	
Intermodal	Transportation Center	complete	yes
Intermodal	Freight Data Training	complete	
Intermodal	CSX Intermodal Transportation Study	in progress	
Misc	Dewitt Comprehensive Plan-Transportation Component	complete	yes
Misc	Miscellaneous Activities & Special Technical Assistance	in progress	
Misc	Operations and Integration	in progress	
Misc	Geographic Information Systems	in progress	
Misc	General Administration	in progress	
Planning	Intelligent Transportation Systems (ITS)	in progress	
Planning	UPWP Development	in progress	
Planning	TIP Development and Maintenance	complete	yes
Planning	2020 Long Range Transportation Plan	complete	
Planning	Long-Range Transportation Plan	in progress	
Planning	Census Data Compilation and/or Analysis	in progress	

**Appendix 2: UPWP Studies
FFY 1991-2005**

Category	Project Name	Current Years Status of Project	Included on maps
Planning	Data Collection Compilation and/or Analysis	in progress	
Planning	Travel Demand Modeling	in progress	
Planning	Functional Classification System Review	in progress	
Planning	Rail, Truck and Transit Planning	in progress	
Safety	Safety Improvement Analysis	complete	
Safety	Bridge & Pavement Condition Management System	in progress	
Safety	Traffic Safety	in progress	
Traffic Needs	University Hill/Downtown Traffic Circulation Study/Special Events Trans Study	complete	yes
Traffic Needs	Break in Access-Soule Rd	complete	yes
Traffic Needs	Eastern Onondaga County	complete	
Traffic Needs	Eastern Onondaga County Transportation Study-Phase II	complete	
Traffic Needs	Village of East Syracuse "south side" Circulation Study	complete	yes
Traffic Needs	Liverpool Area-Onondaga Lake Parkway Transportation Study	complete	
Traffic Needs	South Side Transportation Study	complete	yes
Traffic Needs	Skaneateles Traffic Study	complete	yes
Traffic Needs	Convention Center Traffic Access Study	complete	yes
Traffic Needs	University Hill Transportation Study	in progress	
Traffic Needs	Town of Clay-Maple Road Extension Planning Study	complete	yes
Traffic Needs	Eastern Area Study	complete	
Traffic Needs	I-481 Industrial Corridor Transportation Study	complete	yes
Traffic Needs	Downtown Parking and TMO Feasibility	complete	
Traffic Needs	Clinton Square Analysis/Traffic Improvement and Urban Design Plan	complete	yes
Traffic Needs	Taft Road & Nothern Blvd Study	complete	yes
Traffic Needs	I-90 Corridor Planning	in progress	
Traffic Needs	Salina Street Valley Plaza TSM	complete	yes
Traffic Needs	Clay/Cicero Route 31 Transportation Study	in progress	
Traffic Needs	Waste Collection Route Optimization Study	in progress	
Trans & Land-Use	Eastern Onondaga County Transportation Planning Study	complete	yes
Trans & Land-Use	Land Use Monitoring	complete	
Trans & Land-Use	Route 31 and 57 Land Use Circulation Study/Corridor Study	complete	yes
Trans & Land-Use	Transportation/Land Use Educational Outreach	in progress	
Trans & Land-Use	Northern MPA Planning	in progress	
Transit	Transit Development Plan	complete	
Transit	CENTRO Common Center Analysis	complete	yes
Transit	Suburban Transit Demand and Marketing	complete	yes