Chapter 2

TIP BACKGROUND & DEVELOPMENT

What is the TIP?

As a condition for receipt of transportation funding, the federal government requires that the metropolitan transportation planning process include the cooperative development of a Transportation Improvement Program (TIP). The TIP identifies the timing and funding of all highway, bridge, transit, bicycle, pedestrian, and other surface transportation projects scheduled for implementation in a given metropolitan planning region using federal transportation funds.

The TIP typically covers a five-year period, and must be updated at least every two years. It must be consistent with the goals and objectives identified in the current Long Range Transportation Plan for the region, and adopted by the local Metropolitan Planning Organization (in this region, the Genesee Transportation Council).

The TIP must also be *financially constrained*. That is, the total amount of funds programmed in the TIP must not exceed the projected total amount of funds available to the region for that period. GTC staff worked with the New York State Department of Transportation (NYSDOT) to develop the revenue projections for the region included in and beyond the period covered by the Safe, Accountable, Flexible, Efficient Transportation Equity Act – A Legacy for Users (SAFETEA-LU).

While this region has been successful in securing discretionary funds, this revenue is not predictable and was not included in the revenue projections.

In some cases the TIP may also include, for *illustrative purposes*, major transportation projects for which federal funds are desired but not yet included in the financially-constrained revenue projection. The *2007-2012 TIP* does not include any projects for illustrative purposes.

In accordance with Federal Highway Administration (FHWA) guidance for demonstrating fiscal constraint, GTC staff prepared a table of anticipated revenue and programmed funds by funding source for Operations & Maintenance projects and Capital Improvement projects (Exhibit 3). The anticipated revenues are based on funding estimates used to develop the *2007-2012 TIP* and previously adopted TIPs (including interim amendments), as appropriate. Interim TIP amendments maintained the fiscal constraint established when these TIPs were adopted. Programmed funds reflect the amount needed to advance individual projects listed in the TIP.

This region's TIP spans a five-year period and is updated every two years. The Genesee Transportation Council *2007-2012 TIP* encompasses the period beginning October 1, 2007, and concluding September 30, 2012. It is developed in a fashion that directly responds to the goals and objectives identified in the current GTC Long Range Transportation Plan for the region (Exhibit 4).

Exhibit 3

FISCAL CONSTRAINT - ANTICIPATED REVENUES AND COSTS VERSUS PROGRAMMED FUNDING FOR PROJECTS *

Dollars in ($000's)

	FFY 2007/2008 to FFY 2011/2012					
	Programmed			Total		
	Preservation/ Maintenance	Operations/ Management	Expansion	Anticipated Revenue	Total Programmed	Balance
FHWA - Federal-aid						
National Highway System	$ 71,428	$ 584	$ 608	$ 77,669	$ 72,620	$ 5,049
Interstate Maintenance	$ 41,141	$ 3,064	$ -	$ 45,610	$ 44,205	$ 1,405
Surface Transportation Program (STP)						
STP-Flex	$ 43,186	$ 7,852	$ 20,181	$ 71,219	$ 71,219	$ -
STP-Urban	$ 31,411	$ 202	$ -	$ 31,613	$ 31,613	$ -
STP-Small Urban	$ 3,720	$ -	$ -	$ 3,720	$ 3,720	$ -
STP-Rural	$ 9,848	$ -	$ -	$ 9,848	$ 9,848	$ -
STP Total	$ 88,165	$ 8,054	$ 20,181	$ 116,400	$ 116,400	$ -
Highway Safety Improvement Program	$ 10,997	$ 4,171	$ -	$ 17,515	$ 15,168	$ 2,347
Highway Bridge Program	$ 96,522	$ 12,134	$ -	$ 110,054	$ 108,656	$ 1,398
Congestion Mitigation and Air Quality Program	$ 10,485	$ 30,535	$ 14,610	$ 59,459	$ 55,630	$ 3,829
High Priority Projects, Demonstration Projects, and Transportation Enhancement Projects	$ 18,948	$ 18,788	$ 12,653	$ 50,389	$ 50,389	$ -
FHWA FEDERAL-AID TOTAL	**$ 337,686**	**$ 77,330**	**$ 48,052**	**$ 477,096**	**$ 463,068**	**$ 14,028**
FTA - Federal-aid						
Section 5307 Capital Program	$ 47,006	$ 603	$ -	$ 47,609	$ 47,609	$ -
Section 5309 Capital Funding Program	$ -	$ -	$ 6,591	$ 6,591	$ 6,591	$ -
Section 5310 Capital Program	$ -	$ -	$ -	$ -	$ -	$ -
Section 5311 Capital & Operating Program	$ -	$ -	$ -	$ -	$ -	$ -
Section 5316 Job Access and Reverse Commute	TBD	TBD	TBD	$ 1,333	TBD	$ 1,333
Section 5317 New Freedom Program	TBD	TBD	TBD	$ 728	TBD	$ 728
FTA FEDERAL-AID TOTAL	**$ 47,006**	**$ 603**	**$ 6,591**	**$ 56,261**	**$ 54,200**	**$ 2,061**
FHWA/FTA FEDERAL-AID TOTAL	**$ 384,692**	**$ 77,933**	**$ 54,643**	**$ 533,357**	**$ 517,268**	**$ 16,089**
State Fund Sources						
State Funds	$ 70,293	$ 12,285	$ 6,005	$ 88,583	$ 88,583	$ -
STATE FUND SOURCES TOTAL	**$ 70,293**	**$ 12,285**	**$ 6,005**	**$ 88,583**	**$ 88,583**	**$ -**
Local Fund Sources						
Local Funds	$ 66,376	$ 7,755	$ 6,901	$ 81,032	$ 81,032	$ -
LOCAL FUND SOURCES TOTAL	**$ 66,376**	**$ 7,755**	**$ 6,901**	**$ 81,032**	**$ 81,032**	$ -
TOTAL ALL PROGRAMS	**$ 521,361**	**$ 97,973**	**$ 67,549**	**$ 702,972**	**$ 686,883**	**$ 16,089**

* Detail sheets for projects located in Seneca and Yates counties are included in the TIP for information purposes only; they are not included in this fiscal constraint analysis.

What Types of Projects are Included in the TIP?

Federal regulations require that any surface transportation project within the TMA that is to be funded with U.S. Department of Transportation funds must be included in the TIP. The following types of projects are eligible for federal funding:

- Projects on the federal aid highway system (e.g., road and bridge construction, reconstruction, rehabilitation, preventive maintenance, etc.)
- Public transportation (e.g., vehicle maintenance and operations, capital improvement projects, mass transit system construction, etc.)
- Projects that are not on the federal aid system, but may be eligible for federal funding for other reasons (e.g., bridge projects, bicycle and pedestrian facilities, etc.)
- Projects that improve air quality and/or mitigate congestion (e.g., alternative fuel infrastructure, vehicle retrofit/replacement, etc.)

A more detailed listing of eligible projects, as well as funding program information, is presented in Appendix C of this document.

In nonattainment areas, the TIP is required to include, for informational purposes, all regionally significant projects to be funded with non-federal funds. GTC and NYSDOT-Region 4 staffs reviewed the current and pending capital improvement programs (CIP) of the City of Rochester, Monroe County, and Ontario County. Discussions were conducted with those agencies that do not produce a CIP or whose CIP does not contain sufficient detail to determine regional significance. In an effort to be as thorough as possible, surveys were distributed to those agencies in order for GTC and NYSDOT-Region 4 staffs to make determinations of regional significance on non-federally-funded projects. None of the projects reviewed were deemed to be regionally significant.

What Geographic Area Does the TIP Cover?

The primary focus of the Genesee Transportation Council TIP is the Rochester Transportation Management Area (TMA). The TMA includes all of Monroe County, plus the adjacent developed areas of Livingston, Ontario, and Wayne Counties (see Exhibit 1).

Projects *outside* the TMA (in the counties of Genesee, Livingston, Ontario, Orleans, Wayne, and Wyoming) are under the purview of NYSDOT-Region 4. GTC and NYSDOT-Region 4 work together to coordinate programming of these projects and the projects within the TMA so as to maximize regional benefit.

NYSDOT-Region 3 programs projects in Seneca County and NYSDOT-Region 6 programs projects in Yates County. Projects located in these counties are included in the GTC TIP for *informational purposes only*.

What Agencies are Involved in TIP Development?

SAFETEA-LU specifically states that the MPO of a region will work with the State Department of Transportation and local transportation agencies to develop the TIP. In accordance with

SAFETEA-LU, GTC and NYSDOT work as a cooperative team with other interested parties to develop and manage this region's TIP.

To guide the TIP development process, GTC convened the TIP Development Committee (TDC) comprised of representatives from the TMA counties (Livingston, Monroe, Ontario, and Wayne), the City of Rochester, Rochester Genesee Regional Transportation Authority (RGRTA), and NYSDOT. This Committee also meets regularly to assist GTC and NYSDOT in maintaining the TIP between updates, including review of substantive changes in projects that may require amending the adopted TIP. The Genesee/Finger Lakes Regional Planning Council serves as an advisory member to the TDC.

How are Projects Selected for the TIP?

Key steps in the TIP development process are:

1. Solicitation of project proposals (late-August 2006 – mid-October 2006)

   GTC and NYSDOT-Region 4 issued a Call for Projects letter to GTC member agencies and the appropriate officials of eligible counties, municipalities, and authorities, notifying them of the opportunity to prepare and submit project proposals in accordance with the TIP project evaluation and selection process. A TIP Applicant Workshop was held in September for prospective applicants to review the proposal requirements and receive answers to their questions.

2. Proposal evaluation and ranking (mid-October 2006 – early-December 2006)

   The GTC/NYSDOT staff team scored all project proposals pursuant to the Project Evaluation Criteria included in Appendix A. The resulting scores provided a preliminary basis for ranking project proposals within each mode (mode categories include Highway & Bridge, Public Transportation, Bicycle & Pedestrian, Goods Movement, Intelligent Transportation Systems, and Other).

3. Preliminary program development (early-December 2006 – late-January 2007)

   These preliminary rankings were reviewed and discussed with the TDC, and adjustments to rankings were made as necessary to reflect overall funding considerations, geographic balance, and other factors not specifically captured by the Project Evaluation Criteria. A list of projects recommended for funding as well as those projects proposed but not recommended for funding was prepared for public review.

4. Public review (early-February 2007 – early-April 2007)

   The preliminary financially constrained program (Draft TIP) was then issued for a 45-day public review, including four public meetings in various locations within the TMA. Approximately 125 written and verbal comments were received during this outreach. These comments were presented to the TDC and the GTC Planning Committee. These committees recommended no changes to the list of projects recommended for funding. A synopsis of all public comments received is included in Appendix B.

5. Finalize program (mid-April 2007)

   After full consideration of the comments received during the 45-day public review period, the Draft TIP was finalized by the GTC Planning Committee and forwarded to the GTC Board with a recommendation to adopt the Final Draft TIP.

6. Board action (June 2007)

   The GTC Board adopted the *2007-2012 TIP* at its June 21, 2007 meeting.

The *LRTP: 2007-2027 LRTP Update* identifies the following seven goals and associated objectives that wholly incorporate the eight planning factors identified in SAFETEA-LU:

1. **Support the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency**

   A. The transportation system should support balanced community and economic development of the metropolitan area

   B. The transportation system should be a distinguishing competitive feature of the metropolitan area relative to other areas, serving the needs of existing businesses and enhancing the region's attractiveness to new business

2. **Increase the safety of the transportation system for motorized and non-motorized users**

   A. Transportation designs, services, and education programs should enhance and protect life, health, and property

3. **Increase the ability of the transportation system to support homeland security and to safeguard the personal security of all motorized and non-motorized users**

   A. The transportation system, and its associated programs and services, should support both national and personal security initiatives

4. **Increase the accessibility and mobility options available to people and freight**

   A. The transportation system should provide the capacity, coverage, and coordination necessary to provide mobility to the region's population and commercial activities in a fashion consistent with the overall intent of Goal 1

   B. Reasonable travel alternatives should be available to all persons in the area regardless of age, physical or mental ability, and/or income

5. **Protect and enhance the natural environment, cultural heritage and community appearance, and promote energy conservation**

   A. Transportation planning and decision making should support and reinforce local land use and development objectives

   B. Transportation planning and decision making should recognize local priorities balanced with broader community goals

   C. Transportation planning and decision making should strive to address issues on a corridor level, recognizing both the multi-jurisdictional component of travel and the interrelationship between transportation and non-transportation policies and investments

   D. The transportation system should encourage the efficient use of non-renewable energy resources and the exploration of renewable alternatives

E. Transportation planning and decision making should strive to embrace designs and processes which respect the natural environment and enhance the overall contribution of the transportation system to community livability

6. **Promote efficient system management and operations**

A. The transportation system should be designed and managed in a fashion which minimizes lifetime maintenance and user costs

B. Transportation investments should advance the Long Range Transportation Plan's goals and objectives in a fashion which maximizes benefits relative to costs

C. Transportation and land use planning should be integrated in a fashion that optimizes the use of existing transportation and other municipal infrastructure

D. Transportation investments should be guided by cooperative planning, design, and maintenance standards to promote system continuity and uniformity across jurisdictional boundaries

7. **Facilitate partnerships in planning, financing, and the execution of transportation initiatives**

A. The transportation planning and decision making process should be multi-jurisdictional, fostering coordination and cooperation among local, county, state, and federal governments, concerned agencies, and the private sector

B. The transportation planning process should be conducted in as open and visible a manner as possible, encouraging community participation and interaction between and among citizens, professional staff, and elected officials

C. Financial and non-financial support for transportation initiatives should be provided by all levels of government and the private sector in a fashion which reflects their relative responsibilities for, and/or benefits from, the initiatives and related economic and social impacts

D. Innovative financing/partnerships for transportation initiatives that reflect the full scope of interests impacted or served should be explored

E. Transportation and transportation-related information resources should be developed and shared in a fashion that promotes informed public and private sector decision making

F. Awareness should be promoted regarding the impact of individual, public, and private sector decisions on the quality of mobility and the potential impact of these decisions on others

Air Quality Considerations

As the designated Metropolitan Planning Organization for the nine-county Genesee-Finger Lakes region, the Genesee Transportation Council (GTC) is responsible for ensuring that this region's federally-funded transportation planning, policy, and investment decision making are conducted in a fashion which promotes transportation's contribution to attainment of federal clean air standards and regulations as established through Congress and the U.S. Environmental Protection Agency (EPA).

GTC recognizes and concurs with the underlying public health concerns that drive the federal clean air standards. Accordingly, public health is the principal consideration underlying GTC's actions and policies in executing its air quality-related responsibilities.

On April 15, 2004 the EPA designated the Rochester, New York Metropolitan Statistical Area (Rochester MSA) as being in nonattainment of the National Ambient Air Quality Standard (NAAQS) for ground-level ozone. The Rochester MSA includes the following six counties: Genesee, Livingston, Monroe, Ontario, Orleans, and Wayne. All areas designated as being in nonattainment of a NAAQS are required to determine if transportation improvements in these areas conform to Federal air quality requirements.

GTC staff prepared the *Transportation Conformity Determination for the Long Range Transportation Plan for the Genesee-Finger Lakes Region: 2007-2027 Update and 2007-2012 Transportation Improvement Program* (Conformity Statement).

The analysis documented in the Conformity Statement demonstrates that the *Long Range Transportation Plan for the Genesee-Finger Lakes Region: 2007-2027 Update* and the *2007-2012 Transportation Improvement Program*, as well as all transportation programs in the Rochester MSA, are in conformity with the rules and regulations established by the EPA and NYSDEC, and as such the State Implementation Plan.

Continuing past efforts, GTC has established priorities to address air quality concerns in the context of its regional transportation planning efforts and is advancing initiatives based on these priorities. These include:

- Maintaining the safety and efficiency of the region's existing transportation system through means other than capacity expansion is the leading investment priority.
- Promoting further development and increased use of alternative modes of transportation.
- Advancing planning initiatives that address the development of a region-wide multi-use trail system.
- Developing a comprehensive congestion management process that improves the overall efficiency of the regional transportation system through coordinated corridor-level and regional solutions, thereby minimizing the contribution of transportation-related emissions to ozone levels.
- Initiating a comprehensive air quality planning program, focusing on the development of enhanced information and analysis capabilities to conduct transportation and air quality modeling of various planning, policy, and investment alternatives. In addition, GTC has and

continues to work with other entities (public and private) to improve air quality in the region.

Analysis of Emissions and Energy Consumption

Pursuant to the New York State Energy Plan, a comprehensive analysis of the *2007-2012 TIP* was conducted. The results demonstrate that the actions being undertaken by GTC will result in reductions in all measured pollutants and overall energy consumption.

Background

Pursuant to the New York State Energy Plan, GTC staff undertook an analysis of the impact of the *2007-2012 TIP* on the emission of five pollutants and on energy usage. Emissions analysis was done for the following pollutants:

1. Volatile Organic Compounds (VOC)
2. Nitrogen Oxides (NOx)
3. Carbon Monoxide (CO)
4. Greenhouse gas – Carbon Dioxide (CO_2)
5. Particulate Matter (PM)

Energy usage was calculated for two "types" of energy:

1. Direct Energy – the energy consumed by vehicles using a transportation facility
2. Indirect Energy – the energy consumed to construct a transportation facility

Analysis Methodology

The analysis was based on guidance received from NYSDOT Environmental Analysis Bureau. The analysis was done for the Rochester TMA, the area covered by GTC's regional travel demand model.

GTC staff updated the future year (2012) regional travel demand model to include all of the "model-able" regionally significant projects in the *2005-2010 TIP* (this became the No-Build scenario for the analysis). The model-able projects that are new to the *2007-2012 TIP* were then added to the No-Build scenario (thereby creating the Build scenario for the analysis). A comparison of the output from the two model scenarios shows the impact of the projects new to the *2007-2012 TIP*.

VOC, NOx, and CO were analyzed by applying Emission Factors (grams emitted, per mile, of each pollutant based on vehicle speed and roadway functional classification) to the output from the two model scenarios.

Direct energy was calculated by applying Fuel Consumption Rates (gallons of fuel used, for three vehicle classes, based on speed) to the output from the two model scenarios. Indirect energy was calculated by applying Construction Energy Factors (energy consumed, per lane-

mile, for specific types of roadway and bridge improvements) to the output from the Build scenario.

Direct and indirect greenhouse gas (CO_2) emissions were calculated based on the results of the direct and indirect energy calculations. Direct greenhouse gas emissions were calculated by multiplying the total direct energy impacts (by vehicle class) for each of the two model scenarios by Carbon Emission Coefficients (carbon emitted during fuel consumption for gasoline and diesel fuels). Indirect greenhouse gas emissions were calculated by multiplying the total indirect energy impact of the Build scenario by the Carbon Emission Coefficient for diesel fuel.

Particulate matter emissions (PM-2.5 and PM-10; the number specifies the maximum size, in microns, of the particles) were analyzed qualitatively. This analysis consisted of a consideration of the potential impacts of project types (e.g., transit replacement and roadway reconstruction projects) from the TIP on the emission of particulate matter.

Qualitative analysis was also undertaken for those projects new to the *2007-2012 TIP* that were not model-able. This analysis consisted of a consideration of the potential impacts of these projects on emission levels and energy usage.

The impact of carpooling on travel in the TMA was determined by estimating the number of work trip-related carpool passengers and calculating how many vehicle miles of travel would be added to the TMA roadways if each of these carpool passengers drove their own car.

Analysis Results

The results of the quantitative analyses demonstrate that the projects new to the *2007-2012 TIP* will decrease the emissions of VOC, NOx, CO, and CO_2 and the amount of direct energy consumed, albeit by small amounts.

The qualitative analyses suggest that the Transit, Intelligent Transportation Systems, and Other projects new to the *2007-2012 TIP* will bring about additional decreases in emissions and direct energy usage. A second qualitative analysis suggests that the projects new to the *2007-2012 TIP* should result in a decrease in transit-based particulate matter emissions, no increase in these emissions related to highway vehicle miles of travel, and minimal construction-related particulate matter emissions.

Finally, continued funding of the region's Rideshare program, which supports carpooling efforts, should help reduce the number of automobile trips (and the emissions and direct energy consumption associated with these trips).

Environmental Justice Considerations

Background

In response to concerns about environmental justice and the equity of investments in the transportation system, GTC staff developed a process to assess the impacts of the transportation projects included in this TIP. This section presents the results of this assessment.

Environmental justice builds on Title VI of the Civil Rights Act of 1964. Title VI prohibits discriminatory practices in programs and activities receiving federal funds. Executive Order 12898 requires federal agencies to make achieving environmental justice part of their mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of their programs, policies, and activities on minority and low-income populations (the "target" populations).

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

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

As recipients of federal-aid dollars, Metropolitan Planning Organizations such as GTC are required to identify and address the Title VI and environmental justice implications of their planning processes and investment decisions. GTC incorporates Title VI and environmental justice considerations in all of its transportation planning activities, recognizing that such consideration improves both the planning and decision making processes and the results of these activities.

Neither Title VI nor Executive Order 12898 prescribe specific methods or processes for ensuring environmental justice in transportation planning. The analyses presented below represent GTC's efforts to determine whether the benefits and burdens of the transportation projects in this TIP are distributed equitably among "target" and "non-target" populations.

Note: for purposes of this document, Title VI and environmental justice are collectively referred to as "environmental justice".

Analysis Methodology

It is recognized that transportation projects may have an impact beyond their immediate project limits. For this reason, geographic proximity analyses were used to determine how the location of the transportation projects in this TIP correlate to the location of minority and low-income populations in the region.

The data on minority and low-income populations is derived from the 2000 Census. The data was analyzed at the census block group level, which is the smallest geographic area at which both race and income data are available. The percentages of minority and low-income residents were calculated for each block group within the TIP Region. These were then compared to averages for the region as a whole, using the regional averages as thresholds for determining whether or not block groups should be considered as having above average concentrations of minority or low-income populations.

Using this methodology, the following thresholds were developed:

- Above average concentration of minority population in households: 18.0% or more of the 2000 population in a block group was from a minority group (i.e., non-white and/or Hispanic).
- Above average concentration of low-income population: 10.4% or more of the 2000 population in a block group was at or below the poverty level.

The block groups that exceeded the thresholds were identified in the GTC Geographic Information System (GIS). The GIS was used to determine how many of the transportation projects in the TIP lie within or are adjacent (within one-half mile) to these block groups.

Note: projects located in Seneca and Yates counties are not included in this analysis; projects in these counties are programmed by NYSDOT-Region 3 and NYSDOT-Region 6, respectively. Projects located in these counties are included in the GTC TIP for *informational purposes only*.

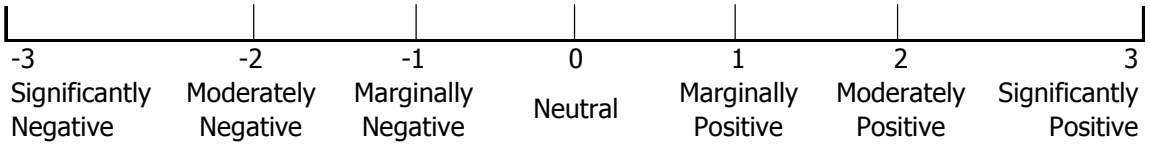
Only those transportation projects with a *specific location* (i.e., "*map-able"* projects)were included in these analyses. For example, an intersection improvement project is specific to one location (map-able), while the purchase of new buses serves a large area (not map-able). The impacts of projects that are not map-able, including most of the transit and Intelligent Transportation System (ITS) projects, are generally spread over a county, several counties, or the region. There are 206 map-able projects with a total cost (federal share only) of approximately $346 million in this TIP.

Analysis Results

The block groups flagged as having above average concentrations of minority population encompassed 71 percent of the region's minority population in 2000. Of the 206 map-able projects in this TIP Update, 63 (31 percent) are located in or adjacent to these block groups. These 63 projects have a combined cost (federal share) of $173 million, or 50 percent of the total.

The block groups flagged as having above average concentrations of low-income population encompassed 53 percent of the region's low-income population in 2000. Of the 206 map-able projects in this TIP Update, 103 (50 percent) are located in or adjacent to these block groups. These 103 projects have a combined cost (federal share) of $239 million, or 69 percent of the total.

Each map-able project in or adjacent to an environmental justice target area was evaluated as to its likely benefits and impacts on the minority and low-income populations in the region. Projects were evaluated based on their effects on accessibility, mobility, congestion, safety, and recreational opportunities using the scale presented below.



The table below presents the results of the evaluation of benefits and impacts of the 106 map-able projects in or adjacent to environmental justice target areas included in the *2007-2012 TIP*.

	Number of Projects	Total Federal Share
Significantly Negative	0	$0
Moderately Negative	0	$0
Marginally Negative	0	$0
Neutral	71	$90,239,864
Marginally Positive	30	$129,758,800
Moderately Positive	4	$22,554,000
Significantly Positive	1	$5,280,000

The results suggest that both the minority and low-income populations in the region should receive equitable shares of the benefits arising from the transportation projects in the *2007-2012 TIP* while not being subjected to inequitable shares of any of the burdens.

Next Steps

GTC environmental justice efforts will continue to build on these analyses. More advanced methodologies are currently under development to better assess the needs of, and analyze the potential impacts of GTC policies and programs on, minority and low-income populations. GTC is also engaged in the continuous improvement of its public involvement processes to further engage all segments of the population, including minority and low-income populations, in the transportation decision making process.

As GTC environmental justice analysis and public outreach activities increase, they will enhance the project selection and decision making processes and help ensure the equitable distribution of the benefits and burdens of future transportation projects in the region.