Capital District Transportation Committee

TRANSPORTATION IMPROVEMENT PROGRAM (TIP) 2013-18

June 6, 2013

This Capital District Transportation Committee (CDTC) report was prepared in cooperation with local governments, regional agencies, New York State agencies, and the Federal Highway Administration and Federal Transit Administration of the United States Department of Transportation. The contents do not necessarily reflect the official views or policies of these governmental agencies.

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RESOLUTION #13-2 - RESOLUTION OF CAPITAL DISTRICT TRANSPORTATION COMMITTEE REGARDING SELF-CERTIFICATION

WHEREAS, the Capital District Transportation Committee (CDTC) is the designated Metropolitan Planning Organization (MPO) responsible for the performance of the transportation planning process for the Capital District Transportation Management Area (TMA), which includes the Albany and Saratoga Springs urbanized areas and the remainder of Albany, Rensselaer, Saratoga and Schenectady Counties (with the exception of the Town of Moreau in Saratoga County), and

WHEREAS, it is the responsibility of the CDTC to ensure that said policy, planning, and programming process is consistent with applicable Federal and State Law, and is also consistent with local area objectives, and

WHEREAS, it is recognized that the Federal Regulations (23 CFR 450) for metropolitan transportation planning were revised, the revisions becoming effective on October 28, 1993, in response to the passage of the Intermodal Surface Transportation and Efficiency Act (ISTEA), and

WHEREAS, the State and the MPO must now certify prior to TIP submission, that the MPO planning process is being carried out in conformance with all applicable requirements of specific Federal Acts and Regulations.

NOW THEREFORE BE IT RESOLVED, that the Capital District Transportation Committee does hereby affirm that:

1. the CDTC's metropolitan transportation planning process includes activities to support the development and implementation of a transportation plan and TIP and subsequent project development activities including the environmental impact assessment process, and,

2. the CDTC's planning process is consistent with Federal Laws, Acts, and Regulations pertaining to involvement of appropriate public and private transportation providers, and,

3. any problem identified through this certification review or FHWA's Program Management Review will be addressed by the appropriate CDTC member agencies, and,

BE IT FURTHER RESOLVED, that the CDTC does hereby certify that the CDTC planning process is being carried out in conformance with all applicable requirements of:

1. 23 U.S.C. 134, 49 U.S.C. 5303, and 23 CFR 450 Subpart C;

2. In nonattainment and maintenance areas, section 174 and 176 (c) and (d) of the Clean Air Act, as amended (42 U.S.C. 7504, 7506 (c) and (d)) and 40 CFR part 93;

3. Title VI of the Civil Rights Act of 1964, as amended (42 U.S.C. 2000d-1) and 49 CFR part 21;

4. 49 U.S.C. 5332, prohibiting discrimination on the basis of race, color, creed, national origin, sex, or age in employment or business opportunity;

5. Section 1101(b) of the SAFETEA-LU (Pub. L. 109-59) and 49 CFR part 26 regarding the involvement of disadvantaged business enterprises in USDOT funded projects;

6. 23 CFR part 230, regarding the implementation of an equal employment opportunity program on Federal and Federal-Aid highway construction contracts;

7. The provisions of the Americans with Disabilities Act of 1990 (42 U.S.C. 12101 *et seq.*) and 49 CFR parts 27, 37 and 38;

8. The Older Americans Act, as amended (42 U.S.C. 6101), prohibiting discrimination on the basis of age in programs or activities receiving Federal financial assistance;

9. Section 324 of title 23 U.S.C. regarding the prohibition of discrimination based on gender; and

10. Section 504 of the Rehabilitation Act of 1973 (29 U.S.C. 794) and 49 CFR part 27 regarding discrimination against individuals with disabilities.

BE IT FURTHER RESOLVED, that the CDTC does hereby request that New York State join this affirmation and certification and forward this joint State and MPO finding to both FHWA and FTA.

Scott T. Johnson, Mayor of Saratoga Springs
Chairman, Capital District Transportation Committee

June 6, 2013

RESOLUTION #13-3 - RESOLUTION OF THE CAPITAL DISTRICT TRANSPORTATION COMMITTEE ENDORSING THE TRANSPORTATION IMPROVEMENT PROGRAM

WHEREAS, Title 23, Code of Federal Regulations, Part 450; and title 49, Code of Federal Regulations, Part 613, require the development of a Transportation Improvement Program (TIP); and,

WHEREAS, the Capital District Transportation Committee (CDTC) has been designated by the Governor as the Metropolitan Planning Organization for the Capital District metropolitan area; and

WHEREAS, the adopted "metropolitan area boundary" for CDTC's Transportation Management Area includes the Census-defined Albany and Saratoga Springs urbanized areas; and,

WHEREAS, the central cities of the Albany and Saratoga Springs urbanized areas are represented on CDTC's Policy Board; and,

WHEREAS, the Capital District Transportation Committee, in cooperation with the New York State Department of Transportation, has reviewed and documented compliance of the CDTC planning process with all existing federal rules and regulations; and,

WHEREAS, the Capital District Transportation Committee, in accordance with Federal requirements for a Transportation Improvement Program, has developed an integrated program of federally funded highway, transit and other transportation projects for the Capital District metropolitan area; and,

WHEREAS, the Transportation Improvement Program shows reasonable estimates of project cost and staging, and the procedure for project selection at the State level for projects is incorporated into this TIP; and

WHEREAS, the procedure to update the project cost, scope and schedules of the TIP is contained in the TIP; and,

WHEREAS, the Transportation Improvement Program includes projects consistent with the *New Visions* long-range Regional Transportation Plan for the Capital District metropolitan area; and,

WHEREAS, it is recognized the Transportation Improvement Program document includes for informational purposes significant Thruway, state, local, and privately funded projects in addition to those metropolitan projects within the legal programming and responsibility of the Capital District Transportation Committee; and,

WHEREAS, the Planning Committee, at its May 8, 2013 meeting, recommended approval by the Capital District Transportation Committee of the 2013-18 Transportation Improvement Program for the Capital District metropolitan area.

THEREFORE BE IT RESOLVED, the Capital District Transportation Committee endorses the five-year Transportation Improvement Program for the fiscal period 2013-18; and,

BE IT FURTHER RESOLVED, that the Capital District Transportation Committee endorses the 2013-18 TIP as consistent with all current plans and programs and recommends the initiation of those projects and plans so specified; and,

BE IT FURTHER RESOLVED, that projects listed in the committed column of the TIP are automatically incorporated into the 2013-14 element if they are not obligated by September 30, 2013, as long as fiscal constraint is demonstrated; and

BE IT FURTHER RESOLVED, that the Capital District Transportation Committee provides latitude to the New York State Department of Transportation with regard to assigning fund sources to particular projects in order to obligate funds and implement the program, as described in CDTC's official policy on TIP changes (see Table 5, "Guidelines for TIP Changes") in the 2013-18 TIP document, and

BE IT FURTHER RESOLVED, that the Committee directs the Secretary to submit this resolution and appropriate documentation of the program through the New York State Commissioner of Transportation to the Federal Highway Administration and Federal Transit Administration as (1) amendments to the existing State Transportation Improvement Program as necessary and appropriate, and (2) a component of the new State Transportation Improvement Program to cover Federal Fiscal Years 2013-14 through 2016-17.

Scott T. Johnson, Mayor of Saratoga Springs
Chairman, Capital District Transportation Committee

June 6, 2013

SECTION I -

NARRATIVES

INTRODUCTION AND OVERVIEW

Overview of the Capital District Transportation Committee

The Capital District Transportation Committee (CDTC) is the designated Metropolitan Planning Organization (MPO) for the Capital District Transportation Management Area (TMA) which includes the metropolitan area of Albany, Rensselaer, Saratoga and Schenectady counties, with the exception of the Glens Falls urban area, which extends into northern Saratoga County. As the MPO, CDTC, in cooperation with the New York State Department of Transportation (NYSDOT) and the Capital District Transportation Authority (CDTA), is responsible for carrying out the continuing, comprehensive, coordinated transportation planning process for the Capital District region. Part of the planning responsibility is the maintenance of a long-range Regional Transportation Plan (RTP). CDTC's most recent RTP is called *New Visions*. Additionally, the Committee is responsible for maintaining short-range Transportation Improvement Programs (TIP's) for the metropolitan area's major highway and transit facilities.

The CDTC Policy Board is composed of representatives of local governments and transportation agencies. Its membership includes the chief elected officials of each of the region's eight cities and four counties and members representing the area's towns and villages. Representatives of NYSDOT, CDTA, the Capital District Regional Planning Commission (CDRPC), the New York State Thruway Authority, the Albany County Airport Authority, and the Albany Port District Commission complete the roster. The Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA) serve as advisory members to the Committee. Through this intergovernmental forum, local and regional transportation issues are discussed, and transportation policies and programs are developed. Further information concerning the organizational structure of CDTC, its responsibilities and the responsibilities of member organizations, is presented in CDTC's Continuing Operations Plan (Prospectus) and in *A Reference Guide to the CDTC*, 2013.

Overview of the Transportation Improvement Program

One of the important responsibilities of CDTC is to program for the implementation of the products of the planning process through development of a staged multi-year program of transportation improvements (the Transportation Improvement Program or TIP). Federal regulations require that transit, highway and other transportation improvement projects within the Capital District metropolitan area be included in this TIP if these projects are to be eligible for federal capital or operating funding from Titles I, III and IV fund sources (see appendix C for a list of these fund sources). The program should also include, for informational purposes, non-federally funded projects and New York State Thruway Authority projects located in the region. Sufficient information must be given in project listing to:

- identify each project;

- estimate total costs and the amounts of federal, state, and local funds proposed to be obligated by project phase during the program period by federal fiscal year against those costs;
- designate the proposed type of federal funds to be used by the project;
- identify the responsible party for project implementation;
- note the exempt/non-exempt status for air quality conformity purposes, and
- identify the planning reference from which each project was derived (23 USC §134 (a)(h) or FTA §8(a)(h)).

Appendix C contains a complete list of all funding programs required to be included in the TIP. All projects in the CDTC TIP are located within a defined metropolitan area boundary, for which the air quality designation is consistent throughout. Therefore, individual project listings do not specify location in terms of metropolitan versus non-metropolitan or attainment versus non-attainment designation.

In addition, the TIP should indicate present estimates of total TIP costs and revenues for the program period. The TIP must be constrained to estimates of federal-aid revenue attributable to the CDTC area by federal fiscal year (10/1 to 9/30). Meeting this requirement has necessitated adjustments to project schedules, and certain assumptions regarding the use of flexibility among federal-aid fund sources. Project Selection Procedures, presented on page 43, provide flexibility necessary when CDTC's TIP is incorporated in the State Transportation Improvement Program (STIP).

The TIP must also meet the requirements established by the 1990 amendments to the Clean Air Act (42 USC Sections 7140 et seq.) regarding the conformity of transportation plans and programs. This Air Quality Conformity finding begins on page 57. Federal regulations also require that the TIP be approved by CDTC as the MPO for the Capital District metropolitan area, undergo a minimum 30-day public comment period, and that a public meeting be held (23 CFR §450.324(c)).

The public review period was from March 8, 2013 until May 7, 2013. A summary of those comments appears in Appendix F.

THE NEW YORK STATE DOT FORWARD FOUR INITIATIVE

Introduction

In May 2012, the New York State Department of Transportation informed MPO members of new policies it was instituting for the spending of transportation funds on their roads and requested that those policies to be implemented for all federal-aid spending by the MPO's, such as CDTC. The policies are referred to as the "Forward Four", which refers to four forward looking principles: Preservation First; System Not Projects; Maximize Return on Investment; and Make It Sustainable. How these principles potentially affected the programming of federal funds on the 2013-18 TIP is summarized below with excerpts from the Program Update Guidance and Instructions SFY 2012 to SFY 2016 published by the New York State Department of Transportation, August, 2011.

Principal One: Preservation First

The primary focus is on system preservation and safety. Expected resources will not support a "build new" or "worst first" approach but must have a "preserve what we have" approach. A preservation first strategy focuses on preventive, corrective and demand work using Asset Management principles and data driven decision making. The highest priority is to preserve the functionality of the existing highway system. It is very important to recognize that a preservation first strategy is a long term commitment and will take years before we fully achieve the desired results. Inherent in this approach is a short term decline in conditions as resources are concentrated on stabilizing the backlog of preservation candidates. Once these assets are in the lower-cost preservation cycle, the future year savings are applied to other candidates to bring them into a state of good repair.

Principal Two: System Not Projects

Where warranted, we must also strategically advance a limited number of system replacement and expansion projects that promote economic development, livability, and system connectivity.

Principal Three: Maximize Return on Investment

We will replace bridges and highways only when absolutely necessary. We will perform focused rehabilitation work, fixing only those elements in need of repair, when we determine we can buy significant life with limited investment. We will do preservation work timed appropriately within the "window of opportunity". We will target safety improvements based on accident data that identifies locations where the largest reduction in accident can be achieved for the least dollars. We will constrain the scope of work to what is required to

achieve the full remaining life of the asset and include mobility and modernization projects only when it makes strategic and economic sense.

Principal Four: Make It Sustainable

We will focus on ways to preserve our existing transportation system; incorporate sustainability considerations into our decisions and actions; and support opportunities for innovation, economic growth and development. This must be done in a fiscally responsible manner by considering life cycle cost as well as fiscal cycles.

Strategies and Priorities

In addition to the four principals summarized above, the NYSDOT guidance includes strategies and priorities that, if followed by the MPO, would have a practical impact on programming the TIP. The NYSDOT guidance is a change from past update efforts to one where the focus is on preserving and extending the life of our assets, maintaining and operating our system in a safe and reliable manner, and recognizing the importance of location or system criticality to its users. The guidance provides the following hierarchy of priorities, which is expected to guide actions and influence programming decisions:

1) Demand Response: Safety of the system is the key component. Keep the system safe and reliable through: demand and corrective maintenance to structures; demand maintenance to pavement and roadside appurtenances; and response and restitution of system closures/restrictions due to human and/or natural emergencies.
2) Preservation: Preserve the system through preventive maintenance and additional corrective maintenance actions.
3) Enhance Safety: Enhance the safety of the system through nominal and substantive safety countermeasures, including "systematic" improvements and spot locations.
4) System Renewal: Strategically address system critical bridge replacements/major rehabs, pavement rehabs and reconstructions. System renewal projects are considered "Beyond Preservation" projects.
5) Modernization: Improve the system through strategic added capacity projects (e.g., HOV lanes), major widening, addition of lanes, rest areas, or other enhancements to existing facilities. Modernization projects are considered "Beyond Preservation" projects.

MAP-21

Introduction

On July 6, 2012, the Moving Ahead for Progress in the 21st Century Act (MAP-21) was signed into law, funding surface transportation programs for federal fiscal years (FFY) 2012-13 and 2013-14. Funding levels are maintained at FFY 2011-12 levels, plus minor adjustments for inflation.

CDTC's 2013-18 TIP update began shortly after MAP-21 was enacted. Since the final year of the bill would be the first year of the 2013-18 TIP, estimation of funds for the remaining four years of the TIP programming period was required. Fund sources changed significantly, changing to some degree, the mix of projects that could be funded. Below are highlights of the aspects of MAP-21 that represent changes from the previous bill (SAFETEA-LU) and its several extensions. Most of the below has been excerpted from the FWHA web page http://www.fhwa.dot.gov/map21/summaryinfo.cfm.

Fund Sources

National Highway Performance Program (NHPP): Under MAP-21, the enhanced National Highway System (NHS) is composed of approximately 220,000 nationwide miles of rural and urban roads. It includes the Interstate System, all principal arterials (including some not previously designated as part of the NHS) and border crossings on those routes, highways that provide motor vehicle access between the NHS and major intermodal transportation facilities, and the network of highways important to U.S. strategic defense (STRAHNET) and its connectors to major military installations. MAP-21 also establishes a performance basis for maintaining and improving the NHS. Therefore, as it pertains to the CDTC 2013-18 TIP, NHPP funds can be spend on Interstate roads, NHS roads, and federal-aid bridges on either of those systems. This encompasses projects that would have qualified under SAFETEA-LU for IM or NHS funds and some of those that would have qualified for HBRR funds.

Surface Transportation Program (STP): MAP-21 continues the STP, providing flexible funding that may be used by States and localities for projects to preserve or improve conditions and performance on any federal-aid highway, bridge projects on any public road, facilities for nonmotorized transportation, transit capital projects and public bus terminals and facilities. Most current STP eligibilities are continued, with some additions and clarifications. Activities of some programs that are no longer separately funded are incorporated, including transportation enhancements (replaced by "transportation alternatives"), recreational trails, ferry boats, truck parking facilities, and Appalachian Development Highway System projects (including local access roads). Explicit eligibilities are added for electric vehicle charging infrastructure added to existing or included in new fringe and corridor parking facilities, and projects and strategies that support congestion pricing, including electronic toll collection and travel demand management strategies and

programs. Also, a portion of each State's STP funds are to be set aside for bridges not on federal-aid highways (off-system bridges).

Highway Safety Improvement Program (HSIP): MAP-21 continues the HSIP from SAFETEA-LU. The HSIP emphasizes a data-driven, strategic approach to improving highway safety on all public roads that focuses on performance. The foundation for this approach is a safety data system, which each State is required to have to identify key safety problems, establish their relative severity, and then adopt strategic and performance-based goals to maximize safety. Every State is required to develop a Strategic Highway Safety Plan (SHSP) that lays out strategies to address these key safety problems. Every State now has an SHSP in place, and MAP-21 ensures ongoing progress toward achieving safety targets by requiring regular plan updates and defining a clear linkage between behavioral (NHTSA funded) State safety programs and the SHSP.

Congestion Mitigation and Air Quality Improvement Program (CMAQ): The CMAQ program, continued in MAP-21, provides a flexible funding source to State and local governments for transportation projects and programs to help meet the requirements of the Clean Air Act. Funding is available to reduce congestion and improve air quality for areas that do not meet the National Ambient Air Quality Standards for ozone, carbon monoxide, or particulate matter (nonattainment areas) as well as former nonattainment areas that are now in compliance (maintenance areas). States with no nonattainment or maintenance areas may use their CMAQ funds for any CMAQ- or STP-eligible project. CDTC is now in attainment, and therefore, will not be eligible for CMAQ funds beginning with the 2014-15 FFY (the second year of the 2013-18 TIP).

Transportation Alternatives Program (TAP): The Transportation Alternatives Program (TAP) was created under MAP-21, while the Recreational Trails and Transportation Enhancement Program (TEP) were dissolved under MAP-21. Projects for those two programs can now be funded under TAP. At the time of the adoption of this document, the NYSDOT Main Office has released a schedule for submission of candidates. CDTC will participate in this program.

HBRR (From SAFETEA-LU): The HBRR (Highway Bridge Rehabilitation & Replacement) fund source in SAFETEA-LU has been discontinued under MAP-21. HBRR funds could be used to fund repairs or replacements for bridges on any road, federal-aid or otherwise. Without HBRR funds, bridges can now mainly be funded under MAP-21 with one of the following three fund sources:

- NHPP: Bridges on Interstate or NHS roads can be funded with NHPP.
- STP Off-System Bridges: Bridges not on the federal-aid system can be funded with this fund source.
- STP: In addition to bridges on the Interstate or NHS systems there are additional bridges on the federal-aid system. For these bridges, there is no dedicated fund source. They must be funded with a more flexible STP fund source, such as STP Flex (for bridges on any federal-aid road) or STP Large Urban (for bridges on federal-aid roads in an urban area).

Performance Management

The cornerstone of MAP-21's highway program transformation is the transition to a performance and outcome-based program. States will invest resources in projects to achieve individual targets that collectively will make progress toward national goals. MAP-21 establishes the following national performance goals for federal highway programs:

- Safety: Achieve a significant reduction in traffic fatalities and serious injuries on all public roads.
- Infrastructure condition: Maintain the highway infrastructure asset system in a state of good repair.
- Congestion reduction: Achieve a significant reduction in congestion on the NHS.
- System reliability: Improve the efficiency of the surface transportation system.
- Freight movement and economic vitality: Improve the national freight network, strengthen the ability of rural communities to access national and international trade markets, and support regional economic development.
- Environmental sustainability: Enhance the performance of the transportation system while protecting and enhancing the natural environment.
- Reduced project delivery delays: Reduce project costs, promote jobs and the economy, and expedite the movement of people and goods by accelerating project completion through eliminating delays in the project development and delivery process, including reducing regulatory burdens and improving agencies' work practices.

2013-18 TIP UPDATE

Introduction

The 2013-18 TIP update followed the passage of new federal legislation MAP-21 (page 7) and the beginning of the New York State Forward Four (page 5) initiative to change the manner in which transportation funds are spent. These two elements made the TIP update different from any other previous TIP update at CDTC.

Following the guidance provided by the NYSDOT Main Office to its Regions, CDTC started the update process with the following expectations:

1) Most of the funding would be spent on "Preservation First" projects. These are defined below.
2) Some funds could be spent on "Beyond Preservation" projects if those projects met specific criteria, and received approval from the NYSDOT Main Office.
3) CDTC could also apply for additional Beyond Preservation funding for specific projects by participating in a statewide solicitation for these funds.
4) Projects on the 2010-15 TIP that did not meet any of the above criteria would lose their status as TIP projects, essentially removing them from the TIP. This included most or all of the projects added during the 2010-15 TIP update that involved flexible funding. If CDTC did not follow this guidance, it would risk loss of Marchiselli funding for specific projects that did not meet the criteria, or lack of NYSDOT concurrence with the entire TIP. Marchiselli funding is a 75% share of the 20% local match required for federal-aid projects, supplied by New York State for some projects.
5) Projects for which construction would be obligated before the end of federal fiscal year (FFY) 2013-14 would be exempt from the above, except that if the project did not receive Beyond Preservation approval from the Main Office, it may or may not receive Marchiselli funds. FFY 2013-14 would be the first year of the five-year 2013-18 TIP.
6) Just before approval of draft 2013-18 TIP project listings, CDTC was informed of the NYSDOT Strategic Transportation Enhancement Program (STEP) (page 13). This has no overlap with the federal Transportation Enhancement Program (page 35). More information follows below.

Estimation of Available Funds

Estimating available funds is mandated by federal law to be cooperative between the State, the MPO and transit authority. For the 2013-18 TIP update, the NYSDOT Main Office set aside highway funds for statewide initiatives, then provided allocations to its regions. Region One and CDTC staff then each produced proposed budget estimates for the CDTC area, using the Regional allocation. Region One's proposed CDTC planning targets (budget estimates) were extremely close to the amount determined by CDTC's historic approach. Therefore, planning targets proposed by Region One were accepted by the Planning

Committee without formal action and used for programming. It is CDTC's understanding that the final TIP reflects reconciliation of resource estimates for the CDTC area with those for the balance of the ten-county, NYSDOT Region One area.

The new TIP will take effect October 1, 2013 and cover the period through September 30, 2017 (the four-year federal period) and through September 30, 2018 (CDTC's full five-year period).

Since MAP-21 is only a two-year bill, with the final year being the first year of the TIP, funding for the final four years of the TIP is somewhat speculative. It is the understanding of CDTC that the Main Office assumed that the funding for the final four years of the TIP would each be the same as the first year. This understanding is consistent with the allocations provided by the Main Office to Region One.

Available transit funds in this TIP were taken from the Federal Transit Administration apportionment documents dated October 16, 2012. The six-month apportionments were doubled to calculate the annual amount and then the matched numbers calculated. Consistent with the budget estimates for highway funds, the funding was assumed to be the same for each of the years of the TIP.

Preservation First Projects

"Preservation First" projects preserve the system through preventive maintenance and additional corrective maintenance actions. These projects do not involve new construction or reconstruction; or replacement of a bridge. Rather, they seek to maintain the existing infrastructure. For bridges, this includes element specific work, which affects the repairs on only the deficient "elements" of a bridge, mitigating the need to reconstruct the entire bridge. For pavements, this includes treatments limited to preventive and corrective maintenance, and does not include major rehabilitations and reconstructions. The Planning Committee followed these guidelines without formal action.

Beyond Preservation Projects

Generally, projects that do not meet the NYSDOT definition of "Preservation First" are called "Beyond Preservation" projects. "Beyond Preservation" projects include system renewal projects that address bridge replacements and major rehabilitations; and pavement rehabilitations and reconstructions. NYSDOT has documented criteria that it will use to qualify projects as "Beyond Preservation" in its publication, Program Update Guidance and Instructions, SFY 2012 to SFY 2016, beginning on page 14. According to the NYSDOT guidelines, there are two ways to fund a Beyond Preservation project.

1) **Meet the Beyond Preservation Criteria**: The first is for the project to meet the Beyond Preservation criteria the Main Office set forth, and for the Main Office to approve of the project upon request. After obtaining such approval, the project would be programmed on the TIP by the MPO as usual.

2) **Statewide Prioritization Program**: The second is for the project to compete in a statewide competition managed by the Main Office. The Planning Committee followed these guidelines without formal action.
3) **STEP Projects**: As mentioned above, The Strategic Transportation Enhancement Program (STEP) was announced by NYSDOT just before Planning Committee approval of the draft project listings. This has no overlap with the federal Transportation Enhancement Program (page 37). Rather, this program is for transportation infrastructure projects that promote economic competiveness, livability and system connectivity to optimize the State's multi-modal transportation system. NYSDOT guidance was for the MPO Executive Directors and representatives from the rural counties and Region One to agree on five candidate projects for the Region to forward to the Main Office. The Main Office would then select which projects to fund. This guidance was shared with the CDTC Planning Committee and the procedure was then followed without formal action.

Year of Expenditure and the TIP

During the approval process of the State Transportation Improvement Program, NYSDOT is expecting to provide FHWA and FTA with a detailed report of how the project costs in there expect year of expenditure is addressed.

Cost estimates provided by NYSDOT include increases for inflation as detailed below:

SFY	Simple Year Over Year Inflation
2013-14	0.00%
2014-15	3.00%
2015-16	6.09%
2016-17	9.27%
2017-18	12.55%

PROGRAMMING PROJECTS IN THE 2013-18 TIP

Overview

The goal of CDTC is to produce a "balanced" TIP that contributes to implementation of the New Visions 2030 Plan. The CDTC approach meets both the letter and spirit of federal regulations by allowing CDTC to look at the array of projects and their relative merit, and to establish a program that best implements the range of goals included in the metropolitan transportation plan.

The 2013-18 TIP update followed the passage of new federal legislation MAP-21 (page 7) and the beginning of the New York State Forward Four (page 5) initiative to change the manner in which transportation funds are spent. These two elements made the TIP update different from any other previous TIP update at CDTC.

In previous TIP updates, CDTC started with projects in (what was at the time) the current TIP, that had not yet been obligated and added those to the new TIP. Then cost changes to those projects were acted upon. Finally, projects were added to the TIP, if funding allowed, in a three step process. In the 2013-18 TIP update, only the projects from the current TIP with expected construction obligation in FFY 2013-14 were added to the new TIP as its first year of projects. The costs were not explicitly approved, but were expected to reflect the 2010-15 TIP with changes expressed at the county-oriented TIP meetings in October 2012. Those that were not expected to be obligated by the end of FFY 2013-14, were added to the TIP, but at a lower priority, or were added to the post period. Details follow.

The final four years were programmed according to the NYSDOT guidelines regarding Preservation First, Beyond Preservation, the Statewide Prioritization Program and STEP projects.

Projects in the 2010-15 TIP

Projects in the 2010-15 TIP were added to the 2013-18 TIP in various ways. Regional set-asides (those with TIP numbers beginning with RG) and transit projects (those with TIP numbers beginning with T) were being added on a separate track. Other TIP projects were programmed in various FFY's depending on their schedules. Below is the default position for any project listed that is not funded via Preservation First, Beyond Preservation or STEP.

1) **Projects with construction phases in FFY 2012-13 in the 2010-15 TIP**: These projects (shown below) will be put in the committed period of the 2013-18 TIP. But any that are not obligated in the 2012-13 FFY automatically roll-over into the 2013-14 FFY and are treated as such (as indicated in the second category of projects).

    - A433, 175638, CR 53 (Jericho Road) Bridge over CSX Selkirk Yard
    - A434, 180645, Washington Avenue over NY 85: Bridge Replacement

- A436, 111135, Western Avenue, Fuller Road to Albany City Line
- A451, 105157, I-787, NYS Thruway Exit 23 to South Mall Expressway Complex
- A465, 175733, Guilderland Center Pedestrian Safety Construct Sidewalks
- A466, 175734, Westmere Corridor Pedestrian Improvements
- A467, 175535, Grant Hill Road Bridge Over Normanskill: Bridge Replacement
- A491, 152868, Patroon Island Bridge: Bridge Rehabilitation
- A502, 175802, Meads Lane/Van Dyke Road Intersection: Upgrade/Realignment
- A535, 193316, Warning Device Upgrade at New Cortland Street Rail Crossing
- A537, 172189, I-87 & NY 910F, Western Avenue to the Saratoga County
- R195, 175459, South Troy Industrial Park Road
- R198, 175470, New Sidewalks on the West Side of Brookside Avenue
- R240, 175520, Brookside Avenue over Wynantskill: Bridge Replacement
- R242, 175637, Spring Avenue Over Poestenkill: Bridge Replacement
- R249, 175697, First Alley Connector Sidewalk
- R254, 175715, Broadway, from US 20 to Broadway Viaduct Bridge: Reconstruction
- R257, 175536, NY 151 over East Street: Bridge Rehabilitation
- R261, 175722, Elm Street Bridge over the Little Hoosick River
- R266, 152863, I-90 Bridges over the Moordenerkill: Rehabilitations
- R268, 152868, Patroon Island Bridge: Bridge Rehabilitation
- R279, 175799, US 4/Mannix Road Roundabout
- SA136, 175457, Saratoga Springs Downtown Pedestrian Improvements
- SA201, 175660, Ballston Avenue, from Union Street to Hamilton Street
- SA217, 175736, Crescent Road Bike and Pedestrian Improvements
- SA222, 175709, CR 45 (Northline Road) Bridge over Kayderosseras
- SA223, 175710, US 4 (Central Avenue) Bridge Over the Anthony Kill
- SA233, 172223, NY 50 Bridge over I-87
- SA239, 175775, Town of Milton Sidewalks & Curbs
- SA267, 180871, Pavement Management Projects at Saratoga National Park
- SA270, 193319, Grade Crossing Signal Upgrade: Park Avenue
- S183, 152535, I-890, Thruway Exit 25 to NY 337 (Campbell Road)
- S212, 193295, Seneca St. Rail Crossing
- SA257, CDTC19, Park & Ride Lot at Wilton Mall

2) **Projects with construction phases in FFY 2013-14 in the 2010-15 TIP**: Construction, and any other appropriate, phases of these projects (shown below) will be put in the first year of the TIP (2013-14) in anticipation of their staying on schedule. However, construction for these projects may not be obligated before October 1, 2014 because of project delays, over-programming, or other factors. The list of phases of projects not obligated by October 1, 2014 cannot be known until at

least one year after the adoption of the 2013-18 TIP. Therefore, at the appropriate time, all unobligated phases of these projects will be put in FFY 2017-18 (fifth year) in the 2013-18 TIP at a lower priority than all other projects on the 2013-18 TIP, with the exception of the other categories of projects described below.

- R196, 175468, CR 111 (Pitts-Johns Road) Bridge over the Hoosick River
- A240, 172151, I-87 Exit 3 or 4 Airport Connector (Partial)
- A435, 175663, ITS Transit Signal Priority on Washington/Western
- A464, 175732, Helderberg Hudson Rail Trail: Phase 1
- A499, 175794, Carman Road Connector Sidewalk Sidewalks
- A500, 175795, Sheridan Hollow Sidewalks
- A526, 175892, CR 9 over Fox Creek: Bridge Reconstruction
- A527, 175891, CR 55 over Vloman Kill: Bridge Replacement
- A528, 175903, Weaver Road over Black Creek: Reconstruction
- A529, 175888, Plank Rd, Onesquethaw Creek Rd and Rowe Rd: Bridge Decks
- R188, 133518, NY 40 Bridge over Hoosick River: Replacement
- R246, 108964, US 4 over the Hudson River: Bridge Replacement
- R255, 175735, Route 20 Corridor Bike/Ped Improvements
- R260, 175721, Sand Bank Rd Bridge over the Little Hoosic River
- R280, 175805, ITS Signal Improvements on Pawling Avenue
- R299, 175904, White Church Road over Quackenkill: Replace
- R300, 175890, Broken Wheel Road over Hoosick River: Replace
- R301, 175905, White Creek Road Bridge: Replace or Reconstruct
- SA108, 108531, Balltown Road, River Rd to Glenridge Rd (Partial)
- SA225, 175754, Round Lake Road Traffic and Mobility Improvements
- SA244, 108964, US 4 over the Hudson River: Bridge Replacement
- SA259, 175900, Staffords Road CR 67 over Fish Creek: Reconstruction
- SA260, 175896, Mott Road over Snook Kill: Bridge Deck Repair
- SA261, 175897, North Main Street over Anthony Kill: Bridge Replacement
- SA262, 175894, Frances Street over Anthony Kill: Bridge Replacement
- S96, 108531, Balltown Road, River Rd to Glenridge Rd (Partial)
- S187, 175797, Mohawk/Hudson Bike Trail Crossing at NY 5S
- S188, 175800, Erie Boulevard/Jay Street/Nott Street/Front Street Roundabout
- S192, 175829, Hamburg Street Sidewalk Connection
- S203, 175902, Van Vorst over Alplaus Kill: Bridge Replacement
- S204, 175895, Kings Road (CR 65) over CSX: Bridge Reconstruction
- S206, 175889, Alplaus Avenue Bridge over Alplaus Kill: Reconstruction

3) **Projects with phases both before and after October 1, 2014 in the 2010-15 TIP**: Engineering phases for these projects (shown below) were put in FFY 2017-18 (fifth year) in the 2013-18 TIP at a lower priority than projects listed above. Construction phases for these projects were put in the Post-TIP as the top Post-TIP priority. Since this period is after the TIP period, these projects are not on the TIP. Their presence in

the Post-TIP period indicates that they are the next highest priority if funding were to become available. But they would still need to be added to the TIP.

- A240, 172151, I-87 Exit 3 or 4 Airport Connector (Partial)
- A290, 134707, Selkirk Bypass
- A295, 175360, New Karner Road (NY 155), US 20 to NY 5
- A450A, 105153, I-787, Broadway to NY 378: Multi-Course Overlay
- A453, 175922, Watervliet Shaker Road, Corridor Improvements
- A482, 101112, NY 145 Bridge Over Unknown Creek
- A487, 130677, NY 7, I-87 To I-787 Overlap: Minor Rehab
- A490, 180717, Loudonville Road Bridge over the I-90 Ramp
- R187, 130662, NY 7, Raymertown to Tomhannock: Recon.
- R235, 100131, NY 2 over Dayfoot Brook: Bridge Replacement
- R238, 104334, US 9 over NY 9J and 9 over AMTRAK & CSX
- R278, 175798, 126th Street/US 4 (2nd Avenue)
- R287, 175815, CR 68 Over Wynantskill Creek, BIN 3303610
- R289, 175814, CR 114 Over Powamppokonk Creek, BIN 3304080
- R296, 175893, East Road (CR 33) over Kinderhook Creek
- R297, 175898, Plank Road (CR 126) over the Deepkill
- SA88, 109618, NY 50, North of Saratoga Springs: Recon.
- SA108, 108531, Balltown Road, River Rd to Glenridge Rd (Partial)
- SA134, 182166, Replacement Buses, CDTA and Northway Express Service
- SA214, 172205, I-87, Exit 13 to Exit 15: Resurfacing
- SA235, 172225, Two I-87 Bridges over NY 146 (Exit 9): Replacement
- SA236, 172226, I-87, Saratoga County Line to Exit 10: Mill & Fill
- S96, 108531, Balltown Road, River Rd to Glenridge Rd (Partial)
- S124, 152529, I-890, Campbell Road to Exit 26: Reconstruction
- S167, 175533, Oak Street over CSX: Bridge Replacement
- S178, 130676, NY 7 Bridge Over I-890: Bridge Replacement
- S182, 103421, NY 5 Bridge over the Erie Canal: Replacement

4) **Projects with phases both before and after October 1, 2014 in the 2010-15 TIP – Second Group**: This group of projects is different from the previous in that they were originally programmed on the TIP contingent upon funding becoming available. Therefore, all phases for these projects (shown below) were put in the Post-TIP as a lower priority than those shown above. This is consistent with the fact that these projects were originally programmed on the TIP contingent upon funding becoming available. Since this period is after the TIP period, these projects are not on the TIP. Their presence in the Post-TIP period indicates that they are among the projects next to receive funding if funding were to become available. But they would still need to be added to the TIP.
   - A523, 175914, Albany Shaker Road & Northern Boulevard
   - A524, 175917, Albany County High Risk Rural Road - Safety
   - A525, 180821, NY 910D (Washington Avenue Ext), Recon.
   - R292, 175838, US 4, Couse Corners to Mannix Rd: Corridor Imp

- R294, 111129, US 20, US 4 to East Nassau Line: Reconstruction
- R295, 175915, 21st St Realignment & Hoosick St/Burdett Ave
- SA258, 175916, North Line Rd/Old Post Rd/Malta Ave Intersection
- S199, 175919, Lower State St & Washington Ave: Recon.
- S200, 175918, Hamburg Street (NY 146), Corridor Improvements
- S201, 175920, Broadway: Reconstruction and N. Westcott SW
- S202, 175921, Upper Union Street, Reconstruction

5) **Projects with all project phases after October 1, 2014 (FFY 2014-15 and Post-TIP) in the 2010-15 TIP**: All phases for these projects (shown below) were added to the Post-TIP as equal priority with the group immediately above. As stated above, since this period is after the TIP period, these projects are not on the TIP. Their presence in the Post-TIP period indicates that they are among the projects next to receive funding, if funding were to become available (equal in priority with the projects in the category immediately above). But they would still need to be added to the TIP.

- A489, 180716, NY 913T Bridge Over the D&H Ramp
- A521, 105168, I-787 Bridge Over Broadway
- A522, 105165, I-787, Watervliet South City Line to 8th St.
- R175, 175451, ITS Signal Upgrades, Broadway
- R277, 175796, Lansingburgh Sidewalks
- R286, 111134, NY 20 Bridge Over Kinderhook Creek
- R288, 108967, NY 4 Bridge Over Mill Creek
- R290, 111136, NY 20 Bridge Over Kinderhook Creek
- R298, 175899, Preservation of County Bridges
- SA144, 108963, NY 4 Over Hudson River
- SA242, 172230, I-87, Exit 10 to Exit 13: Resurfacing
- SA255, 194114, Lock 3 Access Rd Bridge over Champlain Canal
- S191, 175828, Mohawk-Hudson Bike-Hike Trail Kiosks

Transit Fund Sources

The funding of projects from transit fund sources was handled on a separate track from highway fund sources. CDTA proposed programming specifics to fully spend the estimated transit funding. Details are in Appendix A.

Preservation First Projects

CDTC staff and NYSDOT Region One staff produced lists of all possible non-state Preservation First bridge and road candidates in the CDTC area, based on federal-aid status (for roads) and condition. Possible sponsors were to then choose from those lists which projects they would like to sponsor. Lists of all candidates for Preservation First, as well as

the other categories of candidates are found in Appendix E. Since the response by local sponsors did not result in enough programming, set-asides were created from which to fund projects solicited for later. Even though NYSDOT Region One was able to identify specific projects on the state system for funding, much of the funding for state roads was also put in set-aside form. Set-asides were to provide funds through an annual or every-other-year solicitation as the year of construction approached. Preservation first projects are, by their nature, faster, easier and more predictable to implement than the type of projects that CDTC had been programming in previous updates. So, programming them several years in advance was expected to be less efficient. Also, local governments would more easily be able to earmark the appropriate match from their municipal budgets for projects one or two years into the future, than several years in advance. The list of Preservation First projects by funding source, with total funding for the final four years of the TIP is shown below. The funding is not necessarily distributed equally among all four years.

National Highway Performance Program

- RG15, Durable Pavement Marking, $4.200M
- RG16 & RG22, Bridge Inspection, $7.560M
- RG37, RG37A, RG37B & RG37C TMC Operations, ITS,HELP, $9.940M
- RG110, State Bridge Preservation, $23.520M
- RG117, State Pavement Preservation, $24.680M
- RG118, ADA Compliance, $1.500M
- R246, Rt. 4/Hudson River, $4.000M
- A538, South Mall ramp to I787, $3.700M
- A539, I787 NB to South Mall 2.300 $2.300M

Total Surface Transportation Program

- RG16 & RG22 Bridge Inspection, $5.040M
- RG110, State Bridge Preservation, $7.840M
- RG117, State Pavement Preservation, $8.230M
- RG125 & RG126, Local Bridge & Pavement Set-asides, $60.820M

Highway Safety Improvement Program

- RG23 Traffic Signals Safety Requirements, $1.400M

Statewide Prioritization Program

Generally, projects that don't fit the definition of Preservation First are considered Beyond Preservation by NYSDOT. According to NYSDOT guidelines, one way to qualify for Beyond Preservation funds is to apply for such funds via the Statewide Prioritization Program (SPP). Some project sponsors in the CDTC area filed applications for SPP funding for specific projects. CDTC staff evaluated candidate projects according to its merit evaluation criteria and presented those findings to the Planning Committee. According to NYSDOT Main Office guidelines, the Region could only send candidates to the Main Office totaling a $180M. As a result, Region One sent about half of the CDTC applications to the

Main Office for consideration for funding. At adoption of this document, CDTC has not heard which projects, if any, would be approved by the Main Office.

Beyond Preservation Projects Programmed by CDTC

As stated in the above paragraph, generally, projects that don't fit the definition of Preservation First are considered Beyond Preservation by NYSDOT. CDTC staff made the Planning Committee aware of the NYSDOT guidance regarding projects that are considered Beyond Preservation. The Planning Committee was also given a list of projects on the TIP that were likely not to be obligated by the end of the 2013-14 FFY. Project sponsors could then consider if they would seek Beyond Preservation funds or downscope those projects in the list that don't meet Preservation First criteria. Lists of all candidates for Beyond Preservation, as well as the other categories of candidates are found in Appendix E. According to NYSDOT guidelines, the MPO can spend up to 17% of its funds on Beyond Preservation projects that are approved by the Main Office. Therefore, CDTC did program several set-asides for capital projects and submitted Beyond Preservation applications to the Main Office. The list of those projects is below, and includes the total funding for the last four years of the TIP. The funding was meant to be spread equally over each of the four years.

- RG1, Park-Ride Lots for Carpools, $0.813M
- RG27, Travel Demand Management, $3.750M
- RG28, ITS Implementation for Operations, $4.93M
- RG29, CDTC Technical Services, $0.85M
- RG31, Corridor Management Initiative, $0.75M
- RG39, ITS Traffic Signals on federal-aid local system, $2.875M
- RG41, Spot Improvements for Bicycle & Pedestrian (include in RG103)
- RG102, Alternative Fuel Program for non-CDTA fleets, $1.488M
- RG103, Bicycle/Pedestrian Network Development, $3.056M
- RG109, BRT Implementation, $9.375M
- RG116, Goods Movement, $2.500M
- RG119, Linkage Program Implementation, $1.875M
- RG124, Intersection Safety Improvement Projects, $8.333M

STEP Projects

The Strategic Transportation Enhancement Program (STEP) was announced by NYSDOT just before the approval of draft project listings by the Planning Committee. Following NYSDOT Main Office guidance, the CDTC Executive Director met with the AGFTC Executive Director, the Region One Acting RPPM and representatives from Essex and Greene Counties to agree on an evaluation procedure and candidates for Region One to submit. Before final adoption of the TIP, CDTC, along will all other MPO's, was notified by the NYSDOT Main Office, that the STEP program was not intended to fund projects at this

time, but to serve as a tool to evaluate needs around the state. Therefore, no projects were funded.

Types of Regional Set-Asides

In order to clarify how programmed funds are spent from each regional set-aside, the different types of set-asides are defined below. Each regional set-aside was then designated as one type or the other.

1) **Block Funding**: These set-asides are for regional projects, usually multi-year, for which CDTC has no need or desire to approve individual elements as they are identified. The responsible agency can appropriate funds and implement projects as needed without adding the specifics to the TIP. An example would be RG15 (Durable Pavement Markings Set-Aside).
2) **Placeholder for Specific Projects**: These set-asides act as a budgetary placeholder in anticipation of specific projects being named later. Drawdowns on these set-asides need specific scopes and limits and need Planning Committee approval to be added to the TIP with funds taken from the set-aside. For some, a sponsor can propose a project be added from the set-aside via amendment letter and for others, CDTC will solicit for projects at a later time. The advantage of this type of set-aside over adding projects at an update is that the projects are normally small and/or not identified at the time of the update. This allows for easy inclusion by amendment later.
3) **Regional Set-Asides Designations**:
    - RG1, Park and Ride Lots for Carpools, Placeholder
    - RG15, Durable Pavement Markings Set-Aside, Block
    - RG16, Bridge Inspection Set-Aside: State Forces, Block
    - RG22, Bridge Inspection Set-Aside: Consultants, Block
    - RG23, Traffic Signal Set-Aside for State Roads, Block
    - RG27, Travel Demand Management, Block
    - RG28, Intelligent Transportation System (ITS), Placeholder
    - RG29, CDTC Technical Services, Block
    - RG31, Corridor Management Initiative, Block (must be described in UPWP)
    - RG37A, TMC Operating Costs, Block
    - RG39, ITS Set-Aside for Local Traffic Signals, Placeholder
    - RG102, Alternative Fuel Retrofit: Non-CDTA, Placeholder
    - RG103, Bicycle/Pedestrian Network Set-Aside, Placeholder
    - RG109, BRT Implementation, Placeholder
    - RG110, State Bridge Preservation Set-Aside, Placeholder
    - RG116, Goods Movement Set-Aside, Placeholder
    - RG117, State Pavement Maintenance Set-Aside, Placeholder
    - RG118, ADA Compliance Set-Aside, Block
    - RG119, Linkage Program Implementation, Placeholder
    - RG124, Intersection Safety Improvements, Placeholder
    - RG125, Non-State Bridge Preservation Set-aside, Placeholder
    - RG126, Non-State Pavement Preservation Set-aside, Placeholder

ADDITION OF NEW PROJECTS IN PROGRAM DEVELOPMENT

During the 2013-18 TIP update, CDTC's process for adding projects in program development was suspended in order to accommodate the NYSDOT Forward Four initiative. The documentation of this procedure has been maintained here, in the 2013-18 TIP, in order to provide a starting point for when it is used again; possibly for candidates for drawdowns on set-asides or during the next TIP update.

Traditionally, projects are selected for inclusion in the TIP based on the selection cooperatively developed by the CDTC Staff, NYSDOT, CDTA, other members of CDTC's Planning Committee and other interested parties. In general, the overall process requires the identification of candidate highway and transit projects, the objective evaluation of the merits of each project, and selection of projects in accordance with a set of principles. Project selection for dedicated transit funds (FTA Sections 5307, 5309, 5310, and 5311) is considered separately.

New candidate projects are evaluated for merit in three steps.

1. **Screen:** Minimum requirements were established that each project is required to meet. These screening criteria insure that every project considered for programming is consistent with *New Visions* and local land use plans, has a funding plan, could be constructed within the five-year TIP period, and is eligible for federal funds.

2. **Evaluate Merit:** A project must pass screen in order to proceed to merit evaluation. The merits of every project passing screen are fairly evaluated and summarized on a one-page fact sheet. A blank fact sheet is included for reference on page G-12. The merit evaluation procedure used the best available information from CDTC's models, from corridor studies, and from the project sponsor.

3. **Choose Projects**: A balanced Transportation Improvement Program (TIP) contributes to a staged regional plan for maintenance of essential facilities and services, demand management and capacity improvements. Before considering new projects, the balance of the TIP's existing commitments is examined, from a variety of perspectives -- project sponsor, geographic, and by project type. Then, programming capacity is normally assigned to projects in three rounds. Round One is based primarily on quantified merit, insuring programming status to the best candidates. This is done by project category; setting programming targets based on knowledge of the existing program balance. Round Two funds projects from any category for any reason, insuring an opportunity for projects whose benefits don't quantify well. After public review, in Round Three, CDTC may program the balance of the funds to projects, insuring some ability to respond to public comment.

The project selection process for new projects is detailed in Appendix G and the merit evaluation procedure is detailed in Appendix I. CDTC follows this procedure whenever evaluating projects competing for the same funds.

RECREATIONAL TRAILS PROJECTS

The Transportation Equity Act for the 21st Century (TEA-21) authorized the Recreational Trails Program. This program continued under the SAFETEA-LU legislation and now exists as a set-aside of the new Transportation Alternatives Program (TAP) in MAP-21. This program replaced the original National Recreational Trails Funding Program authorized by the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA). The U.S. Department of Transportation, Federal Highway Administration (USDOT/FHWA) administers the Recreational Trails Program in consultation with the Department of Interior (National Park Service and Bureau of Land Management) and the Department of Agriculture (U.S. Forest Service).

The Recreational Trails Program is a state-administered, federal assistance program to provide and maintain recreational trails for both motorized and non-motorized recreational trail use. The Recreational Trails Program legislation requires that states use 40% of their funds apportioned in a fiscal year for diverse recreational trail use, 30% for motorized recreation, and 30% for non-motorized recreation.

The New York State Office of Parks, Recreation and Historic Preservation (OPRHP) is the state agency administering this program in New York. It offers communities the opportunity to receive this federal transportation funding in support of trail development, maintenance and improvement activities. Awards can range from $5,000 to $100,000 with 20% match requirements.

The following is a list of eligibility requirements for proposed projects:

- The proposed project must be legally and physically accessible to the public, or be a portion of an identified trailways project which, when completed, will be legally and physically accessible to the public.
- The proposed project must be physically and environmentally developable as a trailway.
- The proposed project must be planned and developed under the laws, policies and administrative procedures of the state.
- The proposed project must be identified in, or further a specific goal of, a recreational trail plan, or a statewide comprehensive outdoor recreation plan (SCORP) required by the Land and Water Conservation Fund Act of 1965.

The following is a list of eligible activities:

- Maintenance and restoration of existing recreational trails

- Development and rehabilitation of trailside and trailhead facilities and trail linkages
- Purchase or lease of trail construction and maintenance equipment
- Construction of new trails, subject to certain conditions in cases where the new trails would cross federal lands
- Acquisition of easements and fee-simple title to property for trails or trail corridors

There are also activities specified as ineligible as follows:

- Condemnation of property or the use of the value of condemned land toward the match requirement
- "Upgrading, expanding or otherwise facilitating motorized use or access to trails predominantly used by non-motorized trail users, and on which, as of May 1, 1991, motorized use was prohibited or had not occurred" (basically, encouraging motorized use of trails historically limited to non-motorized use)
- Conducting trail feasibility studies
- Routine law enforcement
- Trail planning if it is the sole purpose of the project
- Improvements to roads and/or bridges intended to be generally accessible by regular passenger cars unless they are specifically designated for recreational trail use by the managing agency
- Construction of paths or sidewalks along or adjacent to public roads or streets unless they would complete missing links between other recreational trails.

There are also project activities that receive special consideration as funding priorities:

- Clearly and specifically provide access for the disabled
- Mitigate and minimize impacts to the natural environment
- Utilize the youth conservation or service corps to perform construction and maintenance of recreational trails
- Receive Millennium Trails recognition
- Are on National Scenic Trails, National Historic Trails or trails designated as National Recreational Trails

CDTC approved funding for this program in the TIP as project RG96. Since CDTC is not directly approving specific projects, it granted approval to the entire list of specific known candidates for the CDTC area. Therefore, whichever projects receive approval from the OPRHP are on the TIP for the funding approved by the OPRHP. The TIP project listing shows an estimate of funding for each year in the TIP, and is not intended to be a required minimum or maximum.

LOCAL ADVANCEMENT OF PROJECTS

Prior to the 1997-02 TIP, TIP projects were normally advanced by NYSDOT or CDTA. Beginning with the 1997-02 TIP, local (county, town, city, village or other) agencies advanced design of projects on facilities under local jurisdiction. By the time of the adoption of the 2007-12 TIP, local agencies had brought several consequential projects through design, to construction and completion. It is now considered routine for local agencies to be the lead (or implementing) agency. It is also now assumed that a local agency is the implementer of a project under its jurisdiction.

Still, NYSDOT involvement is essential in the implementation process, both as a repository of information and as an intermediary between the local agency and FHWA. An established reimbursement procedure and Municipal Agreement process is followed. For this to occur, the understanding is that the sponsoring agency will assume the lead in project development. The lead agency also takes responsibility for ensuring consistency of the project with the scope and cost approved in the TIP. Thus, delivering the ambitious agenda of projects included in the TIP is a shared responsibility.

FINANCING AGREEMENT FOR ALBANY-SHAKER ROAD AND WATERVLIET-SHAKER ROAD PROJECTS

Background

In response to growing development pressures in the early 1990s that included plans to reconstruct and expand the Albany International Airport, the Town of Colonie and Albany County initiated a planning effort called the Albany County Airport Area Generic Environmental Impact Study (GEIS) to develop a comprehensive plan for addressing the impacts of future growth in the area. The GEIS recommended eleven transportation actions and a plan for financing the implementation of those improvements. The plan called for careful strategy of managing development, demand management to reduce peak hour travel, and for a public/private partnership to advance several major roadway and transit projects. The plan called for 1) placing Northway access improvements (Exit 3 or 4) entirely in the hands of the public sector for financing, 2) developer contributions, or mitigation funds, to fully cover the cost of several other projects largely precipitated by local development, and 3) a mix of public and private funds to share in the cost of improvements to Albany Shaker Road and Watervliet Shaker Road.

The plan calls for roughly $90 million in improvements to the Airport Area's transportation system. Mitigation fees collected under the plan were expected to cover roughly 35 to 40 percent of the cost the recommended improvements.

TIP Programming of Albany Shaker Road and Watervliet Shaker Road Projects

Largely on the strength of the GEIS initiative, the Town and County's commitment to integrated transportation and community planning, and a financing plan that respected CDTC's adopted public/private financing policy, the CDTC Policy Board added the Albany Shaker Road and Watervliet Shaker Road projects to CDTC's Transportation Improvement Program in 1993. The projects were added with the understanding that the standard funding splits (80 percent Federal, 15 percent State, and 5 percent local) would cover half the cost of each project. Based on GEIS development forecasts, it was assumed that a combination of mitigation funds and right-of-way donations would cover the balance of the total costs of the two projects. At the time these projects were programmed, CDTC participants recognized the possibility that all the mitigation funds needed to cover 50 percent of project costs might not be "in the bank" prior to letting the project, and that it would be necessary for the County, as owner of the two roadways, to advance some of the project costs with County funds or bond proceeds. If this were to happen, the County would be reimbursed by mitigation funds as development occurred.

For the projects in the corridor (A275, A294, and A372) the project costs totaled $24 million in the 1997-02 Transportation Improvement Program. The TIP required that the public share would total no more than 50 percent of the project costs, or $12 million ($9 million Federal; $1.8 million State; and $0.6 million County). The TIP listed a private share of 50 percent, or

$12 million. The TIP noted that the private share would be covered by available mitigation funds and supplemented with public funds which would be reimbursed with mitigation funds as they are collected. Since the adoption of the 1997-2002 TIP, the costs of these three projects have increased to roughly $43 million. The cost of the Albany Shaker Road project by itself totaled $30 million. The current mitigation cost responsibility calculates to about $15 million for this project, and $22 million for all three projects.

Exploration of Alternative Funding Methods

Concerns over the pace of mitigation fund receipts and Albany County's responsibilities for advancing funds to cover project costs while awaiting the collections led to exploration of alternative funding methods during the development of the 1999-04 TIP. While the development plans in the airport area and the mitigation responsibilities assigned to specific projects seeking town approval were keeping pace with expectations at the time of GEIS adoption, the amount of mitigation funds collected, unspent and in escrow was modest. This is partly because funds are not fully collected until the completion of individual development projects and partly because a good portion of the mitigation responsibilities are kept "on paper" until roadway designs are complete and right-of-way credit is determined. The current 2008-10 recession further slowed the collection of mitigation funds because of the slowdown in new development in the Airport area and elsewhere in the Town.

The CDTC-NYSDOT-County-Town TIP Agreement

Under federal law, CDTC may finance projects at any federal participation level up to 80 percent. Thus, no outside approval is needed for CDTC to use federal funds to cover up to 80 percent of the private share of the Albany Shaker and Watervliet Shaker Road projects at the time the funds are obligated, and replenish these funds to the TIP as mitigation costs are collected. With this in mind, CDTC adopted the following provisions in 1999 to govern the financing of these two projects:

1. Albany County committed to full 20 percent non-federal share for remaining public share of the two projects, and would receive Marchiselli funds to offset 75 percent of this share.

2. CDTC committed to cover up to 80 percent of the private half of projects and established procedures for mitigation costs to replenish these funds to the TIP.

3. Mitigation costs “in hand” at the time of the loan would be applied against the requirement for a 20 percent match on the federal share for the private half. Any additional mitigation funds in hand at the time of the loan would reduce the size of the federal commitment on the private half of the projects.

4. As further mitigation costs assigned to the corridor are received by the Town, these funds are to be held in escrow by the Town. They would then be applied to other

TIP projects in the GEIS area to reduce the public share of these other projects. For example, they could be applied through a "betterment" agreement between the Town and State to reduce the Federal costs of intersection improvements related to project A240 (Exit 3) or similar planned actions that are slated for Federal funding.

5. CDTC retained the liability to adjust future TIP commitments should mitigation costs prove insufficient over time. Should mitigation costs prove insufficient, CDTC will end up having committed a greater amount of federal funds on these projects than initially intended, but will also end up having a facility with greater reserve capacity for through traffic than initially intended. The final federal share would end up being a share that matches the CDTC public-private financing policy.

6. When mitigation funds reach a total that covers the repayment installments, additional funds are to be kept in escrow to undertake future improvements in the corridor.

In addition to CDTC approval, NYSDOT, CDTC, Albany County, and the Town of Colonie agreed to jointly concur on financial responsibilities, mitigation cost transactions, and future betterments. This practice does not require formal NYSDOT or Federal concurrence.

Distribution of Mitigation Fees to the Albany Shaker Road And Watervliet Shaker Road Projects

As of April 1, 2013 roughly $18 million in development mitigation funds and right-of-way contributions have been collected for all Airport area FGEIS projects, of which $11 million, including about $3 million in right-of-way and other credits, has been allocated to the Albany Shaker Road and Watervliet Shaker Road projects. CDTC has covered the entire $15.0 million mitigation share with federal-aid, and includes the $7.7 million shortfall at the time the projects were let in 2001. (Including construction cost increases, the shortfall totaled $12.0 million). As of April 1, 2013, it looks like an additional $6.5 million in mitigation funds will be needed to “pay back” the federal advance. These “paid back” funds can be used to cover a portion of the costs of other federal-aid projects in the FGEIS plan. A detailed review of the mitigation cost program will be undertaken during 2013.

ENHANCEMENT PROJECTS

Transportation Enhancements Program

On June 26, 2001, CDTC sent letters to local communities and other potential applicants under New York State's second round of the TEA-21 Transportation Enhancements Program. Applications were due to NYSDOT by November 1, 2001. CDTC evaluated all applications within CDTC's TIP area and identified a short list of high priority projects, which NYSDOT compared with submissions from across the state in selecting projects for funding. Five CDTC area proposals were selected for Enhancements Program funding:

1. Albany County's Mohawk-Hudson Bike-Hike Trail: Widening and Resurfacing and Amenities (A425)
2. The Town of East Greenbush's Sherwood Avenue Sidewalks (R229)
3. Zim Smith Mid-County Trail (SA195)
4. Saratoga County's Historic Hadley Bow Bridge (SA196), and
5. The Town of Glenville's Glenville and Scotia Sidewalks (S161)

These projects were added to the TIP by amendment at the CDTC Planning Committee's November 6, 2002 meeting. The evaluation procedure for these projects is in Appendix J.

In April of 2006, NYSDOT began solicitation for the first round of the Transportation Enhancement Program (TEP) under SAFETEA-LU. Applications were due on June 30, 2006. A review team with representatives from CDTC staff, CDTA, NYSDOT Region 1, NYS Department of Health, and Parks and Trails New York evaluated all of the applications within CDTC's TIP area and developed a prioritized list of projects. This list was then forwarded to the Transportation Enhancements Advisory Committee (TEAC) where submissions were compared from across the state. Four CDTC area proposals were selected for Enhancements Program funding:

1. Clifton Park's Erie Canal Towpath Community Connector (TIP#)
2. The Town of East Greenbush's Luther Rd (NY 151) Pedestrian and Bicycle Access Improvements (TIP#)
3. The City of Cohoes' Erie Canal Heritage Trail
4. Milton's Sidewalk and Curb Project

The second round of SAFETEA-LU enhancements began in 2008. In May of 2008, CDTC sent out solicitation letters and program information packets to all of the municipalities in the Capital District. Applications were due in July. A review team with representatives from CDTC staff, New York State Department of State, the New York State Department of Health and CDRCP reviewed the applications using the evaluation criteria approved by the Planning Committee in May of 2008. A list of prioritized projects was forwarded to the Transportation Enhancements Advisory Committee (TEAC) where submissions were compared from across the state. NYSDOT did not participate in the MPO review of this round. Two projects in the CDTC area were selected for funding:

1. Day Peckinpaugh Motorship museum (removed from TIP)
2. Dix Bridge Rehabilitation Project (SA 253)

"Second Chance" Enhancements Program

CDTC's commitment to bicycle, pedestrian, and canal projects goes beyond the federal Enhancement funds. At its May 27, 1999 meeting, the CDTC Policy Committee voted to endorse the 1999-04 Transportation Improvement Program, which included as project RG83 a "second chance" program setting aside $1 million of STP-Flex funds for "high priority" Transportation Enhancements Program candidates not funded in Round One of the TEP. Following the March 21, 2000 announcement of statewide selection of projects for Round One of the Transportation Enhancements Program, CDTC solicited the responsible agencies for the highest-ranked unsuccessful candidates to inquire as to whether they wished to submit their proposals for consideration under the CDTC program. As the average total cost of initial proposals was over $850,000, and in the interest of getting as many strong projects implemented as possible, this solicitation included the requirement that candidates for the "Second Chance" program reflected a minimum 50% local match and/or a cap of $200,000 on the federal fund share of project cost. Three additional proposals were selected for funding as a result of this process: the City of Saratoga Springs' Spring Run Trail project (SA181), which was reduced in scope from the original proposal; Schenectady County's Mohawk-Hudson Bike-Hike Trail project (S156), for which the local match was increased to 50%; and the Town of Malta's Ruhle Road Bridge project (SA182), which was not modified from the original proposal.

Enhancement-Type Projects Funded with Flexible Funds

CDTC has also used additional funds (beginning with the 1997-02 TIP and continuing through the 2005-10 TIP) for bicycle, pedestrian, and canal projects. The intention is to administer these projects as if they were Enhancement Program projects. The significance of this is two-fold:

3. The Enhancement program was administered as a grant program. The federal contribution is fixed at the time of project programming at a maximum of 80% of project cost. *Any cost increases above 80% of the original project cost estimate are the responsibility of the project sponsor to absorb. Any cost decreases cannot have the effect of increasing the federal share above 80%.*

4. An agreement is negotiated with the project sponsor for project implementation. The project sponsor is the lead agency and builds the project on a reimbursement basis.

Since the original set of enhancement-type projects, others have been added. In some cases, the local match exceeds 20%. The TIP listings include a notation in the project descriptions

for these projects that they will be administered as Enhancement projects (regardless of federal funding source) and that the federal contribution is capped at the specified percentage of the original total cost estimate.

TABLE 1

ENHANCEMENT PROJECTS FUNDED WITH FLEXIBLE FUNDS

TIP#/PIN	SPONSOR	PROJECT
A377/1754.67	Voorheesville	Pedestrian Circulation
A406/1755.61	Albany (County)	Albany County Sign Management
A407/1755.62	Albany (City)	City of Albany Sign Management
A425	Albany County	Mohawk-Hudson Bike-Hike Trail
A436	Guilderland	McKownville/Western Avenue Sidewalks
A437	Cohoes	Hudson-Mohawk Bike-Hike Bridge Rehabilitation
A492	Cohoes	Erie Canal Heritage Trail
R178/1754.52	Troy	Troy-Menands Bridge Bicycle Access
R197/1754.69	Rensselaer (City)	Washington Avenue Sidewalks
R198/1754.70	North Greenbush	Brookside Avenue Sidewalks
R223/1755.66	Troy	Troy Pedestrian Bicycle Trail
R229	East Greenbush	Sherwood Avenue Sidewalks
R267	East Greenbush	Luther Rd (NY 151) Ped/Bicycle Access Improvements
SA136/1754.57	Saratoga Springs	Downtown Pedestrian Improvements
SA158/1754.71	NYSOPRHP	Peebles Island Bridge (Waterford)
SA160	Saratoga Springs	Pedestrian Improvements on Broadway
SA165	NYSTA	Rehabilitation of Lock C-5
SA181/1755.93	Saratoga Springs	Spring Run Trail Construction
SA182	Malta	Ruhle Road Pedestrian Bridge
SA195	Saratoga County	Zim Smith Mid-County Trail
SA196	Saratoga County	Historic Hadley Bow Bridge Preservation
SA200	Halfmoon	Canal Road Bike Path
SA238	Clifton Park	Erie Canal Towpath Connector
SA239	Milton	Sidewalk and Curb Project
SA246	Saratoga County	The Dix Bridge Rehabilitation Project
S140/1754.63	Schenectady (City)	Mohawk-Hudson Bikepath Improvements
S141/1754.65	Schenectady (City)	Rail corridor bridge improvements
S142/1754.64	Schenectady (City)	Kings Road sidewalks
S143/1754.66	Glenville	Lock 8 Bicycle and Pedestrian Access
S146	Schenectady (City)	State Street Transportation Corridor Streetscape
S156	Schenectady County	Mohawk-Hudson Bike-Hike Trail Connector
S161	Glenville	Glenville & Scotia Sidewalks
S165	NYSTA	Mohawk-Hudson Trail: Rotterdam Jct to Amsterdam

The Transportation Alternatives Program (TAP) was created under MAP-21, while the Transportation Enhancement Program (TEP) was dissolved under MAP-21. Projects for this program can now be funded under TAP.

SPOT IMPROVEMENT PROJECTS

Spot Improvement Program Introduction

At its July 31, 1997 meeting, the CDTC Policy Committee voted to endorse the 1997-02 Transportation Improvement Program (TIP), which included as project RG41 a "Spot Improvements for Bicycle and Pedestrian Access" program. This established an ongoing program that sets aside $100,000 per year of STP-Flex funds for projects whose scopes are too small for other programs like the Transportation Enhancements Program. RG41 was replenished in both the 1999-04 and the 2001-06 TIP's.

Spot Improvements are actions that address problems at specific locations such as intersections, short lengths of roadway, or single destinations (e.g., an office building or shopping center). They can be distinguished from other bicycle and pedestrian-related projects such as development of new trails in that they bridge physical or functional gaps in the system rather than in and of themselves providing new routes.

The first project to be funded as a drawdown under RG41 was the Bikes on Buses program (T58). This project was approved by the Planning Committee at its November 18, 1998 meeting. Since that time, projects were awarded funding through two competitive rounds. Round one began with a solicitation letter on January 12, 2000 calling for project proposals. The submission deadline was March 3, 2000 and a total of 17 proposals were received. After follow-up discussions with project sponsors and several discussions with the CDTC's Planning Committee, the Committee approved funding for 13 projects as listed in Table 2 below.

TABLE 2

SPOT IMPROVEMENT PROJECTS FUNDED IN ROUND ONE

TIP#/PIN	SPONSOR	PROJECT
A409/1755.72	Albany (City)	Bike Racks
A410/1755.73	Bethlehem	Sidewalks
A411/1755.74	Cohoes	Bike Racks
A412/1755.75	Colonie (Town)	Mohawk-Hudson Bike Trail
A413/1755.76	Green Island	Green Island Bridge Sidewalks
A414	Menands	Wards Lane Sidewalks
SA177	Malta	Malta Trail Improvements
SA178	Clifton Park	Arongen-Shenendehowa Public Library Multi-Use Path
SA179	Saratoga Springs	Station Lane Sidewalks
SA180/1755.81	Stillwater	Crosswalk and Four Pedestrian Signs
S153/1755.78	Niskayuna	Bike Trail Repairs
S154	Schenectady	Mohawk-Hudson Bike-Hike Trail
S155/1755.79	Scotia	Sidewalks

Round two began with a solicitation letter on May 1, 2002. The submission deadline was July 31, 2002 and a total of 17 proposals were received. A review committee with representatives from CDTC and NYSDOT Region One was established. After reviewing each of the proposals, the review committee ranked each project and offered three options to the Planning Committee. On September 4, 2002 the Planning Committee chose to program the eight top ranked projects as listed in Table 3 below.

TABLE 3

SPOT IMPROVEMENT PROJECTS FUNDED IN ROUND TWO

TIP#/PIN	SPONSOR	PROJECT
A422	Voorheesville	Railroad Pedestrian Crossing
A423	Guilderland	Carmen Road Sidewalks
R228	Hoosick Falls	Village Pedestrian/Cyclist Crosswalks
SA190	Schuylerville	Green Street Connector Sidewalk Reconstruction
SA191	Hadley	Hadley Sidewalk Improvement
SA192	Malta	Pedestrian Improvements
SA193	Milton	Property Streetscape Improvements
S160	Schenectady County	State/Washington Intersection Pedestrian Improvements

CDTC began round three with a solicitation letter on May 17, 2004. The submission deadline was July 30, 2004 and 22 proposals were received. As in previous rounds, a review committee was formed consisting of CDTC staff, NYSDOT Region 1, and Parks and Trails New York. After review of the proposals, funding options were offered to the Planning Committee. At their September 2004 meeting, Planning Committee agreed to fund the nine projects shown in Table 4 below.

TABLE 4

SPOT IMPROVEMENT PROJECTS FUNDED IN ROUND THREE

TIP#/PIN	SPONSOR	PROJECT
A445	Colonie (V)	Central Avenue Safety Improvements
A446	Colonie (T)	Paving MHBHT to Cohoes
A447	Guilderland	McKown Road Sidewalks
R248	Troy	9th Street Sidewalks
R249	Rensselaer (C)	First Alley Connector Sidewalk
R250	East Greenbush	Route 151 Flashing Beacons
R251	Castleton (V)	Scott Avenue Sidewalks
SA213	Mechanicville	South Street Sidewalks
Included with SA101	Clifton Park	Sherwood Dawson Trail

A fourth round of funding took place in 2006. A solicitation letter was sent out on July 31st with an application deadline of September 29, 2006. Eight proposals were received. A review committee was again formed with representatives from CDTC staff, NYSDOT Region 1 and the NYS Department of Health, to review the proposals and generate options for Planning Committee consideration. At the November 2006 meeting, the Planning Committee agreed to fund all eight of the proposals received, shown in Table 5.

TABLE 5

SPOT IMPROVEMENT PROJECTS FUNDED IN ROUND FOUR

TIP#	SPONSOR	PROJECT
SA230	Village of Waterford	Burton Ave. Project-Champlain Canalway Trail
A478	City of Albany	Southern Intersection of Euclid Ave w/Berkshire Blvd
A479	City of Cohoes	Western Gateway Speed Table
SA217	Town of Clifton Park	Crescent Road-Okte School Crossing Improvements
SA217	Town of Clifton Park	Crescent-Southbury-Lapp Roads Intersection Improvements
SA231	Town of Halfmoon	Halfmoon Physically-Challenged Fishing Access/Trail
A480	Town of Bethlehem	Elsmere Avenue and Feura Bush Sidewalk Connections
SA232	Town of Malta	Community Center Route 9 Spur

A fifth round of funding took place in 2008. A solicitation letter was sent out on June 16th with an application deadline of August 29, 2008. Thirteen proposals were received. A review committee was again formed with representatives from CDTC staff, NYSDOT Region 1 and the NYS Department of Health, to review the proposals and generate options for Planning Committee consideration. At the October 2008 meeting, the Planning Committee agreed to fund eight of the proposals received, shown in Table 6.

TABLE 6

SPOT IMPROVEMENT PROJECTS FUNDED IN ROUND FIVE

TIP#	SPONSOR	PROJECT
SA246	Town of Malta	Route 9/ Town Court Pedestrian Connectivity Project
A506	City of Albany	Catherine Street between S. Swan and S. Hawk
SA247	City of Saratoga Springs	Core Area Mobility Impaired Accessiblity Improvements
S191	Schenectady County	MHBHT Informational Kiosks
S192	Town of Rotterdam	Hamburg Street Sidewalk Connection
S190	City of Schenectady	Seneca Street and Maxon Road Canalway Trail Crossings

A sixth round of funding occurred in 2012. Solicitation materials were sent out in November and applications were due on December 7th. The solicitation was coordinated with a broader CMAQ solicitation. In total, 9 applications were received. CDTC staff conducted an evaluation of each of the projects based on number of trips and market potential. As of January 30, 2013, none of the projects have status on the TIP but are an important piece of Planning Committee discussions as the 2013-18 TIP is being developed.

All Spot Improvement Projects are funded with a maximum of 80% federal funds and are capped at the time of project programming. In cases where sponsors committed more than the minimum required 20% local match, the project was capped at the amount of federal funding requested. *Any cost increases above 80% of the original project cost estimate or the approved level of federal funding will be absorbed by the project sponsor. Any cost decreases cannot have the effect of increasing the federal share above 80%.*

For the 2013-18 TIP, the spot improvement program (RG41) was removed from the TIP. Any projects fitting the description of a spot improvement would now draw upon RG103, Bicycle/Pedestrian Network Set-Aside.

NEW VISIONS AND THE TIP

The *New Visions Regional Plan*

CDTC's New Visions plan has positively changed the Capital District. Since its adoption in March 1997, the actions of many parties to incorporate the plan's principles and strategies into programs and projects have produced commendable results.

Today, it is widely accepted across the Capital District that transportation investments can add significantly to community quality of life; that transit, bike, pedestrian, goods movement and aesthetic features are equally as important as motor vehicle accommodation in highway design; that technology can be used to assist the traveler; and that ensuring economic and environmental health is an important objective of the transportation system. In 1997, these were bold assertions by the members of CDTC.

New Visions reflects a regional consensus of residents, businesses, state and local government representatives and transportation providers to use transportation and public policy to:

- Promote sustainable economic growth with good-paying jobs
- Revitalize urban areas
- Help build community structure in growing suburbs
- Preserve open space and agricultural land
- Make communities more walkable and livable
- Provide meaningful transit options
- Connect all residents with job opportunities
- Manage increasing traffic congestion and maintain reasonable mobility on the highway system
- Encourage land use and transportation planning

As with the 1997 plan, full implementation of the current New Visions 2035 plan means steady progress with physical and technological improvements to the region's transportation system, coupled with significant land use and demand management actions that dampen the rate of travel growth. The plan focuses on managing and redesigning existing facilities, services and ways of doing business more than on physically expanding the system.

CDTC and its members have worked hard over many years to implement the New Visions plan. To a greater degree than typical for MPOs, CDTC has linked the plan to implementation. Progress has been and continues to be made across all project categories. Continued dialogue and discussion of transportation and land use policy has reaffirmed the basic New Visions plan and budgetary priorities. New Visions program recommendations ranging from a spot improvement program to significant funding for integrated transportation and land use planning have been successfully instituted by CDTC. As a result, it was not necessary for CDTC to reinvent its budgetary approach in New Visions 2035. Rather, the focus in the New Visions 2035 finance plan work was on adjustments of budgets for the

individual elements and a comparison of those funding requirements with reasonably anticipated revenues.

Programming Principles

The New Visions plan includes programming principles and a budget that calls for "comparable progress" across multiple project types is stated. All of New Visions 2035 planning and investment principles are organized under four broad themes:

1. **Preserve and Manage**. CDTC's highest priority is maintaining our investment in the existing transportation system. Strategically improving system performance, managing congestion, and balancing access concerns with safety are part of an overall principle that treats the transportation system as an asset and an investment. Continuous improvement to the planning process must be coupled with improvements to project design and delivery. Future transportation investments must be wisely and carefully chosen in a fair process that results in timely project implementation.

2. **Develop the Region's Potential**. The Capital Region is a single economic unit containing a rich heritage, historic communities that cannot be replicated elsewhere, vibrant suburban areas, abundant open space and recreational opportunities, great natural resources and a highly educated work force. This region can grow into a uniquely attractive, vibrant and diverse metropolitan area. CDTC will consider community development and regional development plans as key factors in making transportation investment decisions.

3. **Link Transportation and Land Use**. Local land use decisions impact the function of the transportation system -- and vice versa. This relationship is paramount to all transportation planning and programming decisions. Achieving the plan's goals is as much dependent upon achieving unprecedented success in the land use area as it is on improving the transportation system.

4. **Plan and Build for All Modes**. Transportation planning and project design need to consider and accommodate more than cars. Transportation planning today routinely encompasses all modes and the connections between them. Pedestrians, bicycles, freight, transit, air, and water transport -- and the connections between these systems -- have a legitimate and important role in the healthy function of a transportation system that meets people's needs. Regional transportation planning efforts must be comprehensive enough to look beyond eligibility for specific fund sources towards an interconnected intermodal system.

The principles state when and how CDTC believes transportation investment is warranted, and when it believes such investment is not warranted. *New Visions* budgetary guidance is stated as follows:

1. **CDTC desires full implementation of all plan elements.**

For example, reducing the percentage of deficient bridges to 20% (one element of the plan) and improving bike and pedestrian accommodations on a priority network (another element) are both important and complete implementation success is desired for both.

2. **Under constrained budgets, preserving the existing transportation system has a higher priority than making improvements or additions.**

   CDTC's existing principles and the *New Visions* effort have repeatedly emphasized the need to maintain what we currently have as a priority.

3. **Even under constrained budgets, making some degree of progress with improvements is essential.**

   It is realistic and appropriate to assume that some amount of highway or bridge improvement, bike accommodation or access management redesign will be included in CDTC's and members' action agendas -- even if budgets are reduced from historic levels.

4. **Availability of funds dedicated to a particular mode, system or purpose frees up "flexible" funds.**

   Sources with a tightly defined list of eligible purposes are a reality. These benefit specific purposes directly, and other purposes indirectly. Practically speaking, if CDTA receives a discretionary Section 5309 capital grant for bus replacement, or if State Dedicated Funds for state highway projects are increased, this increase reduces the demand for other, flexible fund sources.

5. **Priority for the use of flexible funds is not to be based on ownership.**

   This statement emphasizes CDTC's historic perspective, on funding, reaffirmed through the *New Visions* effort -- funding availability and project design should be based on function and location, not on issues of jurisdiction.

Based on these principles, CDTC's approach to TIP development is based upon the conclusions that:

- Flexible funds can be broadly targeted to specific project categories based on relative funding need -- after accounting for the availability of dedicated funds and after assigning extra weight to the funding requirements of preserving the existing system; and,

- Project priority within a project category can be determined based on need, cost effectiveness, urgency and other factors.

In addition to the direct budgetary link between the *New Visions* plan and the TIP, there are a number of policy linkages as well. Integration of the planning and investment principles adopted in *New Visions* influenced every aspect of TIP development, from the types of projects solicited from sponsors to the evaluation criteria used. Implementation of the projects in the TIP will continue to rely heavily on a multimodal performance-based approach to project development that takes into account community compatibility and economic development concerns.

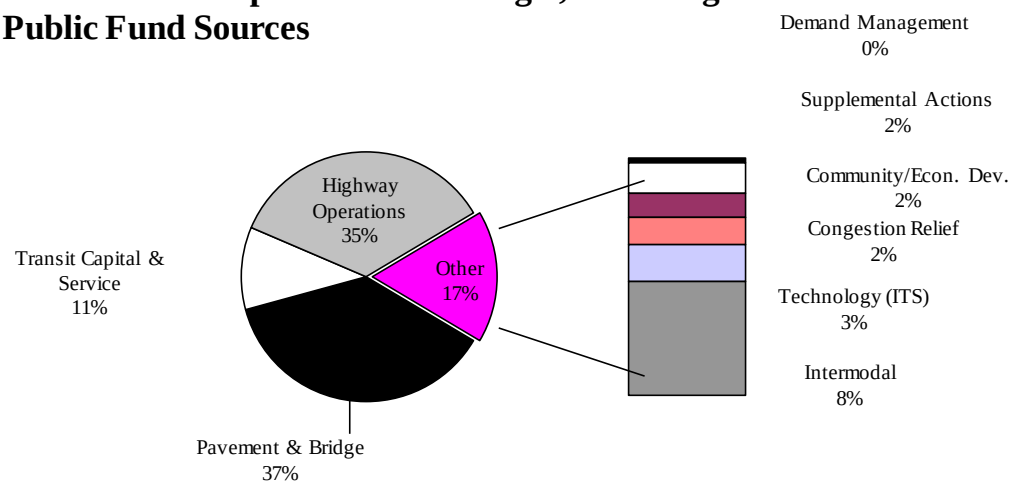
New Visions budgets include all fund sources (federal, state and local) over twenty years. The two pie charts on the next page compare annualized New Vision budget targets by project type with the overall transportation-funding picture for the 2013-18 period. The contribution of the federal-aid program to meeting important regional goals in transportation is highlighted. While federal-aid provides for less than 25% of the total expenditures, it provides for significantly larger share of system improvements.

The budget is overwhelmingly dominated by system preservation – “state of good repair” categories. Highway and bridge operations, maintenance, rehabilitation and reconstruction categories alone account for 70% of the annual budget requirement. However, work in these categories includes corrective and preventive work on transit, bicycle and pedestrian accommodations, and in some cases new accommodations where none existed before. It also often includes replacement of some or all of existing water lines and sewer systems and can include other utility work.

"Supplemental Actions" includes stand-alone bicycle and pedestrian accommodations, safety improvements, and goods movement actions, beyond those improvements incorporated into other projects. Using the federal-aid program to fund these types of projects is a major factor in the achievement of a high degree of correlation between the long range budget targets and the short-range capital program.

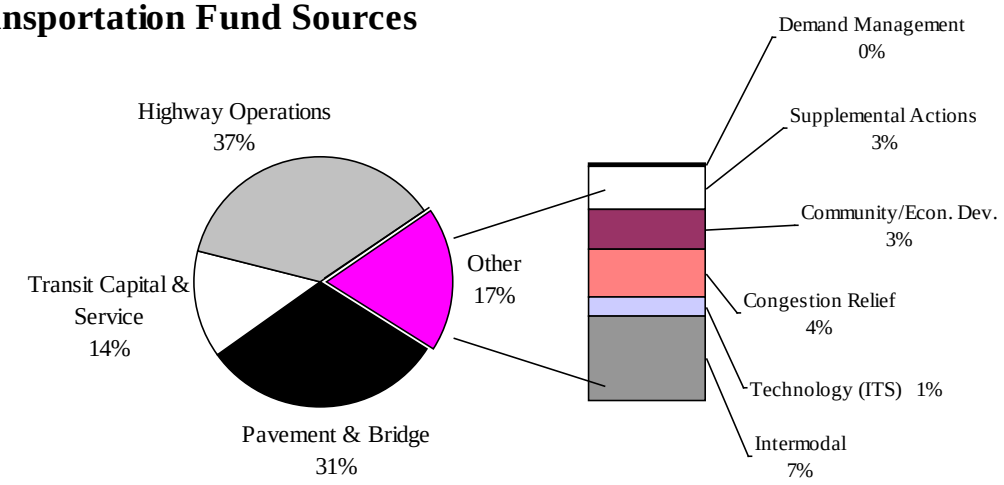
FIGURE 1: COMPARISON OF *NEW VISIONS* BUDGET TO TIP

New Visions Full Implementation Budget, Including All Public Fund Sources



Total funding is $660M annually (25-year average from 2006 to 2030). The *New Visions* plan calls for total transportation spending to grow over time.

2010-15 TIP Plus All Other Transportation Fund Sources



Total funding is $402M annually (average of 6 years from 2012 to 2018). The *New Visions* plan calls for total transportation spending to grow over time. Pavement work alone is 14% and bridge alone is 9.

PROJECT SELECTION FROM, AND AMENDING, THE TIP

Federal law requires that all projects in a given TIP be given a rank, which determines the order in which they may be obligated. CDTC has assigned the year of the element as the rank. So, all elements in the first year of the TIP are given top priority, and the projects in the second year are given second priority, etc. This, and the need for updates to project costs and scopes, as well as the addition and deletions of projects and project elements, necessitates that procedures be in place to make changes to TIP projects in between TIP updates. Therefore, responsibility to make changes to the TIP is shown in the chart below.

Normally, the TIP is updated every two years. However, three years passed between the 2007-12 update and the 2010-15 update. Therefore, during the 2009-10 FFY, it became necessary to allow NYSDOT the flexibility to move projects among all four years of the STIP and to make project selections from the fourth year of the TIP, instead of the third. That change has been carried over into the current project selection guidelines.

Changes from 1) any federal fund source to NHPP and 2) any STP fund source to any other STP fund source are covered in sections 3a and 3b, respectively. Section 3c, "Change between any other Title I federal fund sources" requires additional clarification too large for a footnote to the table. A change between any other Title I fund sources would be require Planning Committee approval. In such cases, in order to approximate equity with other candidate projects, the Planning Committee should consider the priority of the subject project relative to other candidates that did or will compete for those funds. This could necessitate that the project be evaluated and compared to projects in the previous solicitation.

TABLE 7

GUIDELINES FOR TIP CHANGES

An amendment normally requiring Planning Committee approval, linked to another amendment requiring Policy Board approval, also requires Policy Board approval.

Type of Change	Responsibility		
	CDTA or NYSDOT	**Planning Committee**[1]	**Policy Board**[2]
(1) Addition or Deletion			
(a) Addition of project from regional set-asides	---	Approve	---
(b) Addition/deletion of project under or equal to $0.500M	---	Approve	---
(c) Addition/deletion of project over $0.500M	---	Recommend	Approve
(d) Addition/deletion of project element less than or equal to $0.250M[3]	Approve	---	---
(e) Addition/deletion of project element over $0.250M[3]	---	Approve	---
(f) Addition of STP Enhancement Project after approval by state advisory committee	---	Approve	---
(g) Combining two or more existing projects	---	Approve	---
(h) Other	---	Recommend	Approve
(2) Scope and Cost			
(a) Over 25% (minimum $250 k) or over $500 k[4]	---	Approve	---
(b) Over 50% (minimum $1M) or over $3M[4]	---	Recommend	Approve
(c) Scope change necessitating recalculation of system-level air quality conformity of non-exempt project	---	Recommend	Approve
(d) Other significant scope change[5]	---	Approve	---
(e) Other	Approve	---	---
(3) Fund Source Change			
(a) Change from any federal fund source to NHPP	Approve	---	---
(b) Change from one STP fund source to another	Approve	---	---
(c) Change between any other Title I federal fund sources[6]	---	Approve	---
(d) Change from federal to non-federal fund source	Approve	---	---
(e) Change from non-federal to federal fund source	---	Recommend	Approve
(f) Change between Title III federal fund sources	---	Approve	---
(g) Any other federal fund source change	---	Recommend	Approve
(4) Schedule Change			
(a) All affected project elements are contained in the first four years of the TIP before and after the schedule change[7]	Approve	---	---
(b) Any other schedule change	---	Approve	---

[1] Changes requiring Planning Committee action are minor TIP amendments. The Planning Committee may defer approval to Policy Board, if desired.

[2] Changes requiring Policy Board action are major TIP amendments.

[3] A project element is a phase of the project, such as construction or right-of-way acquisition.

[4] Percentages are of total project five-year plus committed column federal cost. Use of toll credits increases the percentage.

[5] A significant scope change is a significant change to the project limits, type or scope.

[6] Change from a capital fund source to Metropolitan Planning Funds (PL) requires UPWP action by CDTC.

[7] This includes funds programmed in the "Committed" column of the TIP that are not obligated by September 30 of the Committed fiscal year.

PLANNING AND PROGRAMMING FOR PUBLIC TRANSIT & HUMAN SERVICES TRANSPORTATION

Introduction and Overview

Over the years there have been updates and changes to federal law resulting in revisions to regulations and guidance affecting planning and programming requirements for public transit-human services transportation. For instance, major civil rights legislation was passed in 1990, entitled the Americans with Disabilities Act (ADA), which instituted sweeping new requirements for accessibility improvements on all transportation services provided to the public; the ADA required that public transportation be made both available and accessible to the elderly and disabled. In response, CDTA worked with a special committee (Capital District Committee for Accessible Transportation) created by New York State legislation to develop a plan for implementation of the Americans with Disabilities Act requirements. The plan, containing recommendations concerning the paratransit, main line, and rural services operated by CDTA, was submitted to FTA and NYSDOT on January 22, 1992. As required by the ADA final rule, CDTC certified on March 19, 1992 that it had reviewed the plan and found it in conformance with the region's transportation plan developed under the joint FTA/FHWA planning regulations.

Subsequently, the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) legislation was passed in August 2005. SAFETEA-LU required that projects selected for funding under several programs related to transportation services for the elderly and disabled and low income citizens, which included the Section 5310 Elderly Individuals with Disabilities Program, the Section 5316 Job Access and Reverse Commute (JARC) Program, and the Section 5317 New Freedom Program, be "derived from a locally developed, coordinated public transit-human services transportation plan", and that the plan be "developed through a process that includes representatives of public, private and nonprofit transportation and human services providers and participation by the public." This Plan is required to be updated every four years. To comply with the regulations, CDTC convened a committee of stakeholders, called the Regional Transportation Coordination Committee or RTCC, to help develop the coordinated plan, identify areas of need and ensure that JARC, New Freedom and Section 5310 funds were spent appropriately. The committee has been meeting regularly since 2006 and has helped guide the many accomplishments that have been made in the region as documented both in the 2007 coordinated plan and the 2011 plan update.

MAP-21 authorized $10.6 billion in FFY 2012-13 and $10.7 billion in FFY 2013-14 for public transportation nationwide. According to the Federal Transit Administration (FTA), MAP-21 improves efficiency through consolidation of various programs including several focused on public transit and human services transportation for elderly, disabled and low-income citizens.

Notably, the Job Access and Reverse Commute (JARC) Formula Program (5316) is eliminated in MAP-21, but the activities carried out under this program are now eligible

expenses under the Urbanized Area Formula (5307) Program which allocates funds to the regional public transit agency or "designated recipient". CDTA is the designated recipient within the four county CDTC planning area.

Another significant change in MAP-21 is the combination of the Enhanced Mobility of Seniors and Individuals with Disabilities Program (5310) and the previous New Freedom Program (5317). This program provides formula funding to increase the mobility of seniors and persons with disabilities. Funds are apportioned based on each State's share of the targeted populations and new for MAP21 are now apportioned to both States (for all areas under 200,000) and large urbanized areas (over 200,000). As mentioned above, the former New Freedom program (5317) is folded into this program. The New Freedom program provided grants for services and facility improvements to address the transportation needs of persons with disabilities that went above and beyond those required by the Americans with Disabilities Act (ADA). Nationally, the enhanced 5310 program is funded at $254.8M for FFY 2012-13 and $258M in 2013-14, an overall increase when compared with $226M for the previous 5310 Elderly and Disabled and 5317 New Freedom programs combined in FFY 2011-12.

The revamped 5310 program requires that competitively selected projects are included in the Coordinated Human Service and Public Transportation Plan that was part of the SAFETEA-LU legislation. Other changes to the program include a provision allowing operating assistance as eligible expense and a requirement that 55% of a region's funding be planned and spent on projects that serve seniors and individuals with disabilities where public transit is not appropriate to serve their needs. The remainder of the funding can be used to initiate projects over and above ADA requirements to improve access to public transportation for individuals with disabilities. Funding levels are determined by statistics from the American Community Survey (ACS) rolling five year program and will be updated each year for the subsequent apportionments.

Another major change from MAP 21 is that 5310 funds are now apportioned to the large urban areas, such as the CDTC planning area, and these monies must be programmed for projects within those urban areas. Previously NYSDOT was the recipient of 5310 funds under SAFETEA-LU and a statewide competition for 5310 projects was conducted. Consequently, there must be new designations to accept and program these funds. During 2013-18 TIP development, the process for programming these funds was still being discussed among NYSDOT, the NYS MPO Transit working group and the current FTA designated Recipients, including CDTA. One option being explored is to designate New York State as the "recipient" in large urban areas with the acknowledgement that apportioned funds must stay within the area where they were originally allocated. Under this option, the State would develop a uniform solicitation package in coordination with the MPO's and then initiate the required competitive solicitation for funds and carry out required administrative activities with selected sub-recipients. MPO and regional partners, such as a project selection committee comprised of local RTCC members and MPO staff, would ensure selected projects are consistent with the region's Coordinated Plan.

Funds for the combined Enhanced Mobility of Seniors and Individuals with Disabilities (5310) program are distributed by formula in the way that New Freedom funding was previously distributed: 60% is apportioned to large urbanized areas (such as the Albany – Schenectady – Troy census defined urbanized area), 20% to small urbanized areas (such as the Saratoga census defined urbanized area), and 20% to rural areas. Apportionments to specific areas are based on the number of elderly and disabled residents. As mentioned above, the requirements for a locally developed, coordinated public transit - human services transportation plan were retained for the 5310 program but not for JARC type activities now to be eligible under the 5307 program. Block funding for the 5310 program is shown in the 2013-18 TIP. Subsequently, projects to be implemented using 5310 funds will be selected based on the required competitive solicitation process; such projects must be consistent with the regional Coordinated Public Transit-Human Services Transportation Plan.

According to information contained in the NYS Transit Planning Targets V 1.0 memo, dated January 31, 2013, there will be a combined $653,533 available per year in 5310 funds for the Albany- Schenectady Urbanized Area (includes Troy) and the Saratoga Springs Urbanized Area. Broken down by urbanized area, this includes unmatched amounts of $526,608 for the Albany-Schenectady area for FFY 2012-13 and $532,085 for each of the remaining years of the 2013-18 TIP; for the Saratoga Springs Urbanized area this includes unmatched amounts of $126,925 for FFY 2012-13 and $128,245 for each of the remaining years of the 2013-18 TIP. Match requirements for 5310 projects are 0% local match for administration projects, 20% local match for capital projects and 50% local match for operating projects. After projects are competitively selected, total matched amounts will be shown in the TIP.

Consistent with previous TIPs and in response to both federal and state policy, and local community goals articulated through the coordinated planning process, the following special services and efforts will be progressed during the 2013-18 TIP period:

1. **STAR (Special Transit Service Available by Request) Service:** CDTA's special transit service began operation in the summer of 1982. The service was designed for use by any Capital District resident unable to utilize CDTA's fixed route bus service because of a disability. STAR service was modified in January 1993 to comply with the guidelines set forth in the ADA. The changes affected eligibility, service area and fares. Additional changes to STAR service were instituted in January 1994 to comply with ADA milestones. "Next day" service became available in 1994; CDTA began to process requests for paratransit service up to 14 days in advance of the trip in 1994 as well. During 1995, CDTA installed a state of the art computer system to better manage the STAR service requests and routing. During 1998, CDTA refined the eligibility requirements for STAR access in an attempt to curb clientele growth and to encourage use of the accessible fixed route system. In Spring 1999, CDTA installed the Windows-based version of the STAR scheduling software which allows for faster turnaround times, automated cancellation and verification of trips and is a faster system overall. The STAR fare was raised to $2.50 on April 1, 2009 in conjunction with other CDTA fare increases and remains there today. In response to public comment during the public hearings in December 2008, this increase

was lowered from a $3 fare originally proposed. Since June 2007, STAR customers have been provided the option to establish a STAR debit account to pay for rides in advance. Since 2008, CDTA has also contracted with private taxi companies to provide service to customers which has increased the amount of service available and reduced the number of trip denials significantly.

The STAR fleet now consists of 36 cutaways. A total of $5.0 Million was programmed over five years in the 2010-15 TIP under project T6B using 5307 funds for the purchase of replacement and expansion STAR vehicles. For the 2013-18 TIP, STAR vehicles needed for expansion or replacement will again be funded through CDTA's 5307 allocation. MAP 21 continues the capital federal share percentage breakdowns of 20% local match with the Federal share remaining at 80% for Americans with Disabilities Act (ADA) non-fixed-route paratransit service, such as CDTA's STAR. 10% of a recipient's 5307 apportionment may be used.

260,000 elderly and/or handicapped people were provided specialized trips during FFY 2011-12; 220,521 in FFY 2009-10, and 217,474 in FFY 2008-09. The growth in STAR ridership is partially attributable to the fact that CDTA contracts for taxi service to meet demand, a trend that is likely to continue. The financial impact of the substantial subsidies required to provide this service is one of the major operating and fiscal issues that continues to face CDTA.

2. **STAR "Town Meetings":** CDTA conducts "town meetings" to gather feedback from users of the STAR service on an annual basis. The last meeting was held in May 2012. The sessions serve as a mechanism by which information regarding changes in STAR service can be disseminated. Also, the meetings provide an opportunity for STAR users to comment on how CDTA can better serve the disabled community. CDTA will continue to conduct STAR town meetings yearly.

~~3.~~ **Fare Policy:** Federal regulations mandate that transit fares for elderly and disabled riders during off-peak hours be no more than one-half the base peak-hour fare. CDTA revamped their fare policy in April 2005; the half-fare policy became effective during all hours, not just the off-peak hours.

4. **Other Special Efforts:** During 1987, CDTA adopted the policy that all future purchases of fixed route, mainline buses be handicapped accessible. In concert with this policy, CDTA replaced its entire fixed route fleet between 1998 and 2003 with low floor buses, making it 100% accessible. According to CDTA's 2011-12 Annual Report, annual wheelchair boardings on its fixed route system totaled 13,350. Wheelchair boardings on the fixed route system are consistently higher in the summer months.

CDTA continues to work with its municipal and NYSDOT partners on improving bus stop amenities and accessible pedestrian amenities. The "Preservation First"

set aside included in the 2013-18 TIP (RG118) includes American with Disabilities Act (ADA) compliance work, which will improve access to transit for the elderly and mobility disabled population.

5. **Northway Commuter Services:** The Northway Xpress or NX is a CDTA commuter service that runs from Saratoga County with stops at park & ride lots along the Northway (I-87) from as far as South Glens Falls, to downtown Albany. The NX was redesigned in October 2012 with improvements including a reduction in the number of fare zones, discounted pricing, an additional mid-day trip and the introduction of the NX *Swiper* pass good for usage on the entire CDTA route network. Ridership has increased more than 15% since the redesign. NX fare zones have been reduced to 3 zones with lower fares. Some customers save up to 30% from previous fares. The fleet used for the Northway Express (NX) service consists of 14 commuter buses that are fully accessible to the disabled. Sponsorship of this service transferred from Saratoga County to CDTA in 2003. The NX carried 229,203 passengers in fiscal year 08/09 and 183,664 in 2009-10. Ridership on this service is very sensitive to the price of gas, and was impacted by the 2009 fare increase. Ridership on the NX was 150,000 in 2011-12 prior to the redesign that went into effect in October 2012 which resulted in a 15% increase in ridership or an additional 22,500 trips.

Ongoing Initiatives

ACCESS Transit, a subsidiary of CDTA, is a brokerage of transportation services currently working with the Albany County Department for Aging, providing transportation for seniors in Albany County to medical appointments, shopping and social activities. Through this service, Albany County seniors call one central phone number to arrange trips which are brokered Monday through Friday. ACCESS Transit arranges transportation for the client, bundles trips for maximum efficiency and reimburses transportation providers for services rendered. A brokerage avoids duplication of service, unproductive trips and eliminates some deadheading.

As mentioned above, in 2005 SAFETEA-LU legislation was passed requiring that projects funded with certain formula grant programs (5310, 5316 and 5317) be "derived from a locally developed, coordinated public transit-human services transportation plan", and that the plan be "developed through a process that includes representatives of public, private and nonprofit transportation and human services providers and participation by the public." The coordinated plan is required to include three key elements: (1) an assessment of available services; (2) an assessment of needs; and (3) strategies to address gaps for target populations.

CDTC developed two Coordinated Plans (2007 and 2011 update) with the assistance of the Regional Transportation Coordination Committee (RTCC), comprised of stakeholders representing a range of public, private and non-profit human service agencies and transportation providers. In addition to helping develop the coordinated plan, the RTCC has assisted in identifying areas of need and ensuring that JARC, New Freedom and Section

5310 funds are spent appropriately. The committee has been meeting regularly since 2006. To help identify needs, the RTCC, in cooperation with United We Ride and others, has conducted two surveys of human service agencies (2006 and 2011) that both directly provide, contract or have clients in need of specialized transportation. The Coordinated Plan documents previous CDTC coordination efforts, the history behind creating Access Transit, United We Ride efforts, and information regarding STAR and transportation service provided by area human service agencies. The plan identifies unmet needs using results of the survey and lists recommendations for future focus. (See the web pages http://www.cdtcmpo.org/rtp2030/pubrev/hs-doc.pdf and http://www.cdtcmpo.org/rtp2035/transit.pdf for more information.)

Since 2007 the Coordinated Plan has provided the framework for competitive solicitations for JARC, New Freedom and evaluations of 5310 projects selected through NYSDOT's competitive 5310 vehicle selection process since 2007. With MAP 21 legislation changes now in effect, the RTCC will continue to meet to foster continued coordination, to update the Coordinated Plan and to ensure that Section 5310 projects selected during the 2013-18 TIP period are consistent with the Plan. The Coordinated Plan will be updated to incorporate the most recent human service agencies survey results and the Census and American Community Survey (ACS) data. FTA requires Coordinated Plans to be updated at least every four years.

REGIONAL EMISSIONS IMPACT OF THE CDTC TIP

Introduction

The CDTC area has been part of a non-attainment area for air quality for many years. In 2013, the Capital region's non-attainment status will be changing. This is good news for the Capital District, because it is based on data that has shown that air quality has been steadily improving, and the region now has air quality conditions that are acceptable even under the newer, stricter standards for ozone. However, making continuing progress in improving air quality is still an important goal. While the requirements for formal "conformity analysis" will not apply to the 2013-18 TIP, CDTC will continue to evaluate the impacts of the TIP and the New Visions Plan on air quality.

It should be noted that one disadvantage of the Capital District becoming an attainment area for ozone standards is that it is anticipated that CDTC will no longer be eligible for CMAQ funding after September 30, 2014.

Attainment/Non-Attainment Status

The United States Environmental Protection Agency (USEPA) promulgated the 2008 8-Hour Ozone National Ambient Air Quality Standards (NAAQS) on May 21, 2012 to be effective on July 20, 2012 classifying the Albany-Schenectady-Troy area attainment for the 2008 ozone standard. The EPA promulgated a new rule on July 20, 2012 revoking the Transportation Conformity requirements for 1997 8-Hour Ozone NAAQS effective on July 20, 2013. As a result, the CDTC and A/GFTC will not be required to make a transportation conformity determination under the new 2008 8-Hour Ozone NAAQS.

Methodology Used to Model the Emission Impacts of the TIP and *New Visions*

Regional emissions estimates were generated by using EPA's Mobile Model 6.2 software for 2002, 2018 and 2035 in conjunction with the CDTC STEP Model, described below. The following scenarios were tested:

1. Year 2002 "base year";
2. Year 2018 No-Build;
3. Year 2018 with 2013-2018 TIP and New Visions Plan;
4. Year 2035 No-build;
5. Year 2035 with 2013-2018 TIP and New Visions Plan;

The no-build scenario is a hypothetical scenario that would result if the TIP and the New Visions Plan were not implemented. In the coming year, CDTC will be migrating to the new EPA MOVES Model for air quality analysis.

The estimates of emissions were based upon the most recent population, employment, travel, and congestion information developed by the CDTC staff for the four counties. The calculation of travel and congestion data (VMT and speed) for the four county Capital District regional highway network was derived from CDTC's Systematic Traffic Evaluation and Planning (STEP) model. Using VISUM software, the regional STEP model directly generated VMT and speed data attendant to existing land use, traffic, and highway network conditions. In order to evaluate the impact of the TIP on emissions, the impacts of a "no-build" scenario were evaluated.

The STEP Model uses Census population and household values and forecasts prepared by the Capital District Regional Planning Commission (CDRPC) and used by CDTC in the New Visions 2035 Plan. CDRPC forecasts re-affirm previous forecasts with the continued forecast for a slow population growth and a slowing of the rate in outer years.

CDTC updated and calibrated the regional travel demand forecasting model. This work is documented in the report Systematic Transportation Evaluation and Planning Model: The CDTC STEP Model; Validation of the CDTC STEP Model, April 2010. The report provides a stronger documentation of the CDTC Model in base year 2000; provides a validation of the model against year 2007 counts; and also re-examines the issue of VMT growth. CDTC revised its methodology for estimating daily VMT from a peak hour model in a way that is consistent with NYSDOT Environmental Science Bureau suggested practice.

For estimates of daily emissions, a seasonal adjustment factor of 1.11 was applied to the rural interstates and expressways and an adjustment of 1.04 was applied to all other facilities, in order to represent summer emissions. EPA's Mobile Model 6 emission rates for volatile organic compounds (VOC) and nitrogen oxides (NOx) were applied on a link by link basis using speed and VMT estimates developed in the STEP model for each scenario. VOC and NOx emissions are precursors to ozone formation in the atmosphere.

Air Quality Impacts of the TIP and the *New Visions* Plan

Table 9 presents the results of the emission modeling of the 2013-2018 TIP and the New Visions Plan impacts. Table 9 indicates that although vehicle miles of travel are forecast to increase in the Capital District between 2002 and the year 2035, volatile organic compound (VOC) and nitrogen oxide (NOx) emissions will be reduced under all scenarios. Between 2002 and 2035, VOC and NOx emissions are forecast to be reduced by 80% and 91%, respectively. Reduced vehicle emission rates are the primary cause. Compared to the "no-build" scenario, VOC and NOx emissions will be reduced by the TIP and Plan by 2018, and also by 2035.

The dramatic reduction in pollutant emissions indicated in Table 9 is worth highlighting. Although the amount of miles driven is forecast to increase in the Capital District, the emissions of VOC and NOx are forecast to decrease dramatically because vehicle emission rates are declining rapidly. According to the EPA, "Today's new cars, light trucks, and heavy-duty diesel engines are up to 95 percent cleaner than past models…". In addition, the

emission rates used by CDTC come from the MOBILE 6 model and were developed in 2008 and do not fully reflect recent improvements such as the new CAFE (Corporate Average Fuel Economy) standards. CDTC will continue to update its models to incorporate the latest emission models in the coming year.

TABLE 9

AIR QUALITY IMPACTS OF CDTC'S TIP AND *NEW VISIONS* IN THE CDTC AREA

Scenario	Daily Vehicle Miles Traveled (Thousands)	Daily VOC (KG) Emissions	Daily NOx (KG) Emissions
Year 2002*	21,214	25,287	39,289
Year 2018 No-Build	24,403	6,686	8,112
Year 2018 with TIP and New Visions Plan	24,013	6,515	7,992
Year 2035 No-build	27,464	5,375	3,820
Year 2035 with TIP and New Visions Plan	26,071	4,979	3,616

Notes: VOC- Volatile Organic Compounds
NOx- Nitrogen Oxides
VOC and NOx emissions are precursors to ozone formation in the atmosphere.

ENERGY CONSUMPTION IMPACTS OF THE PROJECTS CONTAINED IN CDTC'S TIP

The Role of Transportation Planning in Reducing Energy Consumption in the Capital District

CDTC has, and is continuing to address energy and air quality concerns through the TIP and the New Visions Plan. Two of the most cost-effective methods of minimizing motor fuel consumption and traffic congestion problems are the reduction of traffic demand by CDTC's Transportation Demand Management program and activities of the Capital District Clean Communities Coalition, which are currently being carried out through CDTC's TIP and UPWP.

The Capital District Clean Communities Coalition (CDCC) is part of nearly 100 Clean Cities coalitions across the country, under the United States Department of Energy's Clean Cities program. The Clean Cities program advances the nation's economic, environmental and energy security by supporting local actions to reduce petroleum use in transportation. Clean Cities has displaced more than 4.5 billion gallons of petroleum since its inception in 1993.

The CDCC was formed in 1999. CDTC manages the coalition as part of their work program. The Capital District provides substantial opportunities for the expansion of the alternative fuel marketplace, particularly with the large vehicle fleet that operates in the area. Coalition activities focus on alternative and renewable fuels, idle-reduction policy and technology, fuel economy improvements and emerging transportation technologies. The CDCC thinks globally and acts locally. The committed and passionate stakeholders recognize the need to transition to alternative fuels in the Capital District to reduce our country's dependence on imported oil.

CDTC partners with the Capital District Transportation Authority to support a Transportation Demand Management Program. One of the most successful programs has been iPool2, an internet-based free ridesharing program powered by Ecology & Environment's GREENRIDE product administered cooperatively by CDTC and CDTA. iPool2 replaced the Commuter Register website in 2008, which was previously maintained by CDTC in house. There are over 800 active users. The website also provides registrants an opportunity to search for vanpool partners in connection with the Vanpool Program.

Registered iPool2 and Vanpool users are eligible for Guaranteed Ride Home (GRH). The GRH program provides a free taxi ride in case of an emergency. The program is important because it alleviates commuter concern about leaving a car at home, due to the rare occasion requiring immediate and quick transportation.

The 2013-18 TIP continues to support a number of operations and ITS (Intelligent Transportation Systems) projects which provide significant energy savings. TIP investments in the Traffic Management Center (RG37A, RG37B, RG37C), traffic signal improvements (RG23 and RG29), and HELP vehicles (RG37) provide significant support to operations and

ITS in the CDTC region. Operations strategies such as incident management, signal coordination, transit signal priority result in reductions in congestion and energy consumption. CDTC is exploring further ways in which operations can provide congestion benefits through the Regional Operations Committee.

Transit provides travel options, increases mobility and can support economic development. In addition, transit investments result in significant energy savings by providing an alternative to automobile use. Three percent of commuting trips in the Capital District are made by transit. Not only does this reduce gasoline usage by reducing the number of autos, but the added congestion that would occur if all transit riders were to switch to autos would result in significant increased energy consumption. The CDTC TIP continues to make a major investment in transit of $115.7 million over five years.

Bicycle and pedestrian investments encourage more biking and walking and provide direct energy benefits by reducing auto usage. CDTC has made a strong commitment to improving bicycle and pedestrian facilities. This means incorporating ADA compliant sidewalks and pedestrian crossings, and bicycle lanes in highway construction projects; encouraging site design by developers that provides high quality pedestrian access; developing bike/hike trails; encouraging the incorporation of bicycle and pedestrian accommodations into city, village and town plans. Studies funded by CDTC to explore the feasibility of car and bike sharing, and additional monies committed to help implement local car share and bike share programs, further reinforce the commitment made to improving bicycle and pedestrian facilities.

CIVIL RIGHTS AND ENVIRONMENTAL JUSTICE

Background

On February 11, 1994, President Clinton issued Executive Order 12898, "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations". This Executive Order is closely related to Title VI of the Civil Rights Act of 1964. As a federally funded agency, the Capital District Transportation Committee is required to be in compliance with both of these federal regulations. USDOT has encouraged a proactive approach to the implementation of Title VI and Environmental Justice. In April of 1997, USDOT issued an Order on Environmental Justice (EJ Order 5610.2) requiring DOT to implement the principles of Executive Order 12898 through the incorporation of EJ principles in all programs, policies and activities carried out by USDOT. In December of 1998, the Federal Highway Administration issued a similar order requiring the incorporation of EJ principles in all FHWA programs, policies, and activities.

Executive Order 12898 was created to bring federal attention to the environmental and human health conditions in low-income and minority communities with the goal of achieving EJ. The goal of Environmental Justice is to ensure that any adverse human health or environmental effects of any government activities do not disproportionately affect minority or low-income populations. EJ does not intend to provide preferential treatment to these populations, but rather fair treatment to all populations. Specific to transportation, Executive Order 12898 has been issued in order to ensure that all Federally-funded transportation-related programs, policies, and activities that have the potential to cause adverse affects, specifically consider the effects on minority and low-income populations. EJ is a public policy objective that has the potential to improve the quality of life for those whose interests have traditionally been overlooked.

Planning and Programming Treatment

CDTC's Civil Rights and Environmental Justice objective is to assure equitable access to, consideration within and effects of the planning agenda, planning products and program of federally-assisted transportation projects in the Capital District.

Within the context of the Transportation Improvement Program development, CDTC looks to the following to assist with full Civil Rights and Environmental Justice compliance:

1. CDTC's TIP is developed with a strong, budgetary relationship to the New Visions 2035 plan, including its commitment to urban revitalization.

2. CDTC's TIP is developed with a strong relationship to local planning activities. Since its adoption of the New Visions plan, CDTC has increased its local planning efforts through its Transportation and Community Linkage Planning Program. A total of 76 Linkage studies have been funded, including a number

specifically focusing on issues of Environmental Justice target areas and populations.

3. Project solicitation requests go out to all eligible parties, including not-for-profit corporations.

4. Merit evaluation processes include a GIS-based identification of location to ensure equitable treatment of both positive and negative project effects on EJ populations as well as on non-EJ populations. All candidate projects are identified in terms of the project's location in a minority area, in a low income area, in a minority and low income area, or in neither a minority area nor low income area.

5. Merit evaluation processes include articulation of the project's expected land use compatibility; community or economic development impacts; environmental issues; and business or housing dislocations.

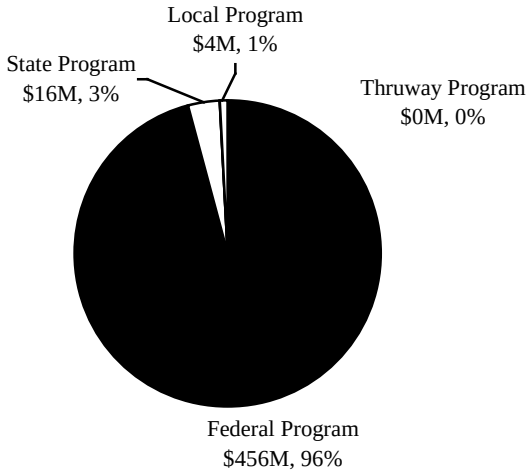
As a result, the needs of minority and low income areas are reasonably well represented in the outcome of the TIP process. CDTC's Environmental Justice Analysis Document will be updated with 2010 Census data in the summer of 2013.

SECTION II -

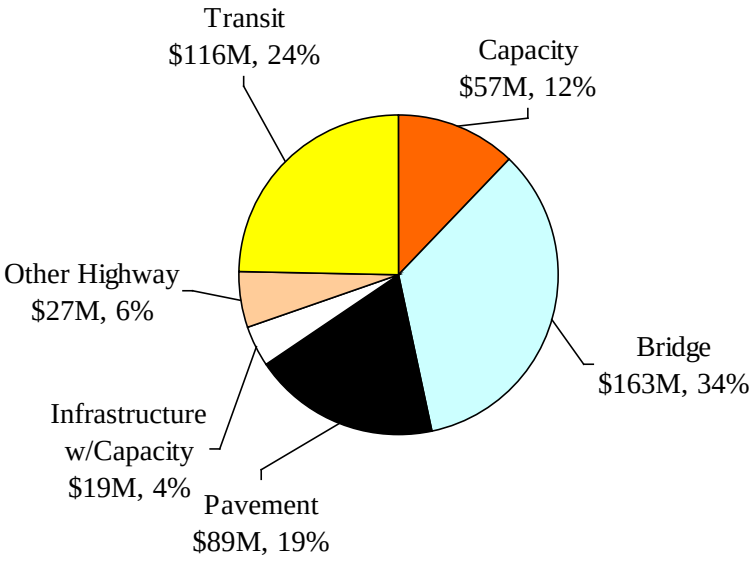
FINANCIAL SUMMARY TABLES

SUMMARY FIGURE 1: 2010-15 TIP REVENUES AND PROJECT EMPHASIS

REVENUES



PROJECT EMPHASIS



SECTION III -

PROJECT LISTINGS

SECTION IV -

APPENDICIES

APPENDIX A - TRANSIT PROJECT DETAILS

Millions of Dollars (Values in Parentheses are Quantities)

Project Description	2012-13 (Committed)	2013-14	2014-15	2015-16	2016-17	2017-18
T6B STAR Buses:						
STAR Buses (#)	1.000(8)	0.100(x)	0.100(x)	0.100(x)	0.100(x)	0.100(x)
T11 Passenger Facility Improvements:						
Bus Shelters						
Bus Signs						
Total	**.300**	**.149**	**.149**	**.149**	**.149**	**.149**
T16 Transit Support Vehicles:						
Sedans (#)						
Trucks (#)						
Total	**.400**	**.100**	**.100**	**.100**	**.100**	**.100**
T17 Transit Vehicles (Bus Replacement):						
Transit Buses (#)	10.000(x)	4.139 (x)	4.139 (x)	4.139 (x)	4.139 (x)	4.139 (x)
T62 Information Systems:						
Hardware						
Software						
Total	**.200**	**.100**	**.100**	**.100**	**.100**	**.100**

APPENDIX B - GLOSSARY

Names and Titles

ACAA	Albany County Airport Authority
ANCA	Adirondack North Country Association
ARRA	American Recovery and Reinvestment Act of 2009
ATMS	Advanced Traffic Management System (a.k.a. ITS)
BRT	Bus Rapid Transit
CDRPC	Capital District Regional Planning Commission
CDTA	Capital District Transportation Authority
CDTC	Capital District Transportation Committee
FHWA	Federal Highway Administration
FTA	Federal Transit Administration
HBRR	Highway Bridge Rehabilitation and Replacement
ISTEA	Intermodal Surface Transportation Efficiency Act of 1991
ITS	Intelligent Transportation Systems
IVHS	Intelligent Vehicle Highway Systems (a.k.a. ITS)
MAP-21	Moving Ahead for Progress in the 21st Century Act
MPO	Metropolitan Planning Organization
NEPA	National Environmental Policy Act
NHPP	National Highway Performance Program
NHS	National Highway System
NYSDOL	New York State Department of Labor
NYSDOT	New York State Department of Transportation
PMS	Pavement Management System
RABA	Revenue Aligned Budget Authority
SAFETEA-LU	Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users
SEQRA	State Environmental Quality Review Act
SIP	State Implementation Plan
Smart Bus	Transit Bus Equipped with Transit ITS
SPP	Statewide Prioritization Program
STAR	Special Transit Service Available by Request (Paratransit)
STEP	Statewide Transportation Enhancement Program
TA	Transportation Alternatives
TEA-21	Transportation Equity Act for the 21st Century
Thruway	New York State Thruway Authority
TIP	Transportation Improvement Plan
TMA	Transportation Management Area
TSM	Transportation Systems Management

TIP Number Prefixes

A	Albany
R	Rensselaer
RG	Regional
S	Schenectady
SA	Saratoga
T	Transit

Project Types

Airport	Airport Improvement
Bike/Ped	Bicycle or Pedestrian Project
Br.Recon'n	Bridge Reconstruction
Br.Replace	Bridge Replacement
Bridg/TrOp	Bridge Replacement and Capacity Improvement
Bridge/Cap	Bridge Replacement and Capacity Improvement (Subject to Federal Clean Air Act Analysis)
BridgeDeck	Bridge Deck Repair
BridgeMisc	Miscellaneous Bridge Work
CapitalFac	Capital Facilities Improvements (Transit)
CapitalVeh	Capital Vehicles Improvements (Transit)
Landscape	Landscaping Projects
Miscellan	Miscellaneous
New Bridge	New Bridge Construction (Subject to Federal Clean Air Act Analysis)
New Cons'n	New Construction Subject to Federal Clean Air Act Analysis)
ProbAsses	Problem Assessment
R&P	Rehabilitation & Preservation
Recon/Cap	Highway Reconstruction & Capacity Improvement (Subject to Federal Clean Air Act Analysis)
Recon/TrOp	Highway Reconstruction & Capacity Improvement
Reconst'n	Highway Reconstruction
Resurface	Highway Resurfacing
Safety	Safety Improvements
Traff Op'n	Traffic Operations Improvement
Trans.Misc	Miscellaneous Transit Project

Phases

C	Construction, Inspection and Supervision of Construction and Contingencies

D	Detailed Design (Highway Projects)
F	Facility Construction, Repair or Purchase
I	Right-of-Way Incidentals
P	Preliminary Engineering (Highway Projects)
P	Professional Services (Transit Projects)
R	Right-of-Way Acquisition
V	Vehicles Purchase (Transit)

Responsible Agencies

Airport	Airport Authority
CDTA	Capital District Transportation Authority
CDTC	Capital District Transportation Committee
City	City of Jurisdiction
County	County of Jurisdiction
NYSDOT	New York State Department of Transportation
Port	Albany Port District Commission
Town	Town of Jurisdiction
Village	Village of Jurisdiction

Miscellaneous Abbreviations

AVL	Automatic Vehicle Location
BRT	Bus Rapid Transit
EAP	NYSDOT Environmental Action Plan
EIS	Environmental Impact Statement (NEPA)
IS	Intersection
NA	Not Applicable
PIN	Project Identification Number (used by NYSDOT)
TMC	Traffic Management Center

Funding Sources

5307-Enh	FTA Section 5307 Transit Enhancement
5307-OP	FTA Section 5307 Operating Assistance
5307-S	FTA Section 5307 for Saratoga Springs
5316-Sar	FTA Section 5316 for Saratoga Springs
5317-Sar	FTA Section 5317 for Saratoga Springs
AIP	Airport Improvement Program
Bond	New York State 1988 Bond Issue

Byways	Scenic Byways Funds
CHIPS	Consolidated Highway Improvement Program
CMAQ	Congestion Mitigation and Air Quality Program
CMAQ-NY	CMAQ funds from the NY allocation, rather than the Region
Demo.	Federal Demonstration (Discretionary or Earmarked)
Demo.100	Demo. funds with no local or state match (100% federal)
FA	Miscellaneous Federal Aid
GRT	Gross Receipts Tax
HBRR	Highway Bridge Rehabilitation & Replacement
HBRR-Dis	Highway Bridge Rehabilitation & Replacement Discretionary
HBRR-NY	HBRR funds from the NY allocation, rather than the Region
HBRR-100	HBRR funds with no local or state match (100% federal)
HSIP	Highway Safety Improvement Program
IAP	Industrial Access Program
IM	Interstate Maintenance
IVHS	Federal IVHS Discretionary Fund Source
Local	100% Local (Above and beyond required match)
NFA	Miscellaneous Non-Federal Aid
NHPP	National Highway Performance Program
NHS	National Highway System
OperAssis	Operating Assistance
PLH	Public Lands & Highways
Rail	Rail crossing funds (a subset of HSIP)
Safety	HSIP at MPO discretion for highway use
SALB	State Aid for Local Bridges
SDF	State Dedicated Fund
Sec 3037	FTA Section 3037 (Access to Jobs)
Sec 5307	FTA Section 5307
Sec 5309	FTA Section 5309
Sec 5310	FTA Section 5310
Sec 5311	FTA Section 5311
Sec 5316	FTA Section 5316
Sec 5317	FTA Section 5317
SRTS	Safe Routes to Schools
State	100% State, including State Multimodal Program
Stim	Stimulus funding from the American Recovery and Reinvestment Act of 2009
StimNew	Stimulus funds not replacing other funding
StimRail	Stimulus funds for rail
StimT	Stimulus funds for transit
StimTNew	Stimulus funds for transit not replacing other funding
STP	Surface Transportation Program
STP-Enh.	STP Enhancements
STP-Flex	STP Flexible
STP-Rail	STP Rail
STP-Rur.	STP Rural

STP-Safe	STP Safety
STP-SMU	STP Small Urban Area
STP-Urb.	STP Urban
TCSP	Transportation, Community & System Preservation
Thruway	New York State Thruway Authority
TOA	State Transit Operating Assistance

Other Notes

Func. Class.	Functional Classification
Ln-Mi	Lane Miles
Mi	Mile(s)
Plan Ref.	Plan Reference
Res. Agency	Responsible Agency
Soft Match	In-Kind Services of Preliminary Engineering Provides Local Match

Functional Classifications

RI	Rural Interstate
RL	Rural Local
RmA	Rural Minor Arterial
RMC	Rural Major Collector
RmC	Rural Minor Collector
RPA	Rural Principal Arterial
UC	Urban Collector
UI	Urban Interstate
UL	Urban Local
UmA	Urban Minor Arterial
UPA	Urban Principal Arterial (Other Street)
UPE	Urban Principal Arterial (Expressway)

Plan References

504	Section 504 Plan
9W	Route 9W Corridor Study
ADA	Americans with Disabilities Act of 1990
Alb CBD	Albany Downtown Circulation Study
Ball	Balltown Road Study

Beth	Bethlehem Study
Bike	CDTC Regional Bicycle Transportation Plan
Burdeck	Burdeck Street Corridor Study (Rotterdam)
CapAlb	Capitalize Albany
CMS	Congestion Management System
E&H	Elderly and Handicapped Plan Recommendations
Erie	Erie Boulevard-Maxon Road Transportation Study
Exit26	Thruway Exit 26 Study
Exit3	Northway Exit 3 Study
GEIS/Air	Albany County Airport Generic Environmental Impact Study
GEIS/Lisha	Lisha Kill Generic Environmental Impact Study (Colonie)
Goods	Goods Movement Task Force Report
GOP	NYSDOT Goal Oriented Program
HWCond	Highway Condition Report
Multim	State Multimodal Program
NV	*New Visions* Regional Transportation Plan
N'way	Northway MIS
Park&Ride	CDTC's Park & Ride Recommendations
Pine	Pine Bush Study
RASP	Regional System Aviation Plan (CDRPC)
RenAmtrak	Rensselaer Amtrak Station Study
Rt50	Route 50 Corridor Study
Rt7	Route 7 Corridor Study
RTP	Regional Transportation Plan
SarNeed	Saratoga County Transit Needs Assessment
Schen2000	Schenectady 2000
SCOTS	Human Service Agency Transportation Coordination Study
TSM2	Traffic Count/Transportation Systems Management
UPWP	Unified Planning Work Program

APPENDIX C - FEDERAL FUNDING PROGRAMS

Title I (Federal-aid Highways)

National Highway Performance Program (NHPP)
Surface Transportation Program (STP)
Highway Safety Improvement Program (HSIP, shown as Safety in project listings)
Railway-Highway Crossings (HSIP, shown as Rail in project listings)
Congestion Mitigation & Air Quality Improvement Program (CMAQ)
Metropolitan Transportation Planning
Transportation Alternatives (TA)
Transportation Infrastructure Finance and Innovation Program
Tribal Transportation Program
Federal Lands Transportation Program
Federal Lands Access Program
Territorial and Puerto Rico Highway Program
Puerto Rico Highway Program
Territorial Highway Program
FHWA Administrative Expenses
Emergency Relief
Projects of National and Regional Significance
Construction of Ferry Boats and Ferry Terminal Facilities
Tribal High Priority Projects Program

Title III (Mass Transit)

Metropolitan, Statewide, and Nonmetropolitan Planning Programs (Sections 5303, 5304, and 5305)
Urbanized Area Formula Grants (Section 5307)
Fixed Guideway Capital Investment Grants (Section 5309)
Enhanced Mobility of Seniors and Individuals with Disabilities (Section 5310)
Rural Area Formula Grants (Section 5311)
Research, Development, Demonstration, and Deployment (Section 5312)
Technical Assistance and Standards (Section 5314)
Human Resources and Training (Section 5322)
Emergency Relief (Section 5324)
Asset Management Provisions (Section 5326)
Safety (Section 5329)
State of Good Repair Grants (Section 5337)
Bus and Bus Facilities Program (Section 5339)
Transit-Oriented Development Planning Pilot

APPENDIX D - FUNDING SOURCE SPLITS

Funding Source	Abbreviation	Federal	State	Local
Federal Highway Funding Sources:				
Highway Safety Improvement Program [1]	HSIP	90%	0%	10%
National Highway Performance Program	NHPP	80%	0%	20%
National Highway Performance Program funds used on Interstate roads	NHPP	90%	0%	10%
Safe Routes To School	SRTS	100%	0%	0%
Transportation, Community and System Preservation	TCSP	80%	0%	20%
All other, if state sponsored project		80%	20%	0%
All other, if not state sponsored, assuming availability of Marcheselli funds through legislature[2]		80%	15%	5%
Non-Federal Highway Funding Sources:				
100% Local Funds	Local	0%	0%	100%
100% State Funds	State	0%	100%	0%
100% Thruway Funds [3]	Thruway	0%	100%	0%
Miscellaneous Non-Federal Aid	NFA	0%	0%	100%
New York State 1988 Bond	Bond	0%	100%	0%
State Dedicated Fund	SDF	0%	100%	0%
Transit Funding Sources:				
FTA Section 5307 [4]	Sec 5307	80%	10%	10%
FTA Section 5307 Enhancement	5307-Enh	80%	10%	10%
FTA Section 5310 (Capital Expense)	Sec 5310	80%	0%	20%
FTA Section 5310 (Operating Expense)	Sec 5310	50%	0%	50%
FTA Section 5311	Sec 5311	80%	10%	10%
State Operating Transit Assistance	TOA	0%	100%	0%

[1] Some actions funded by HSIP are 100% federal. CDTC uses the fund source “Safety” for highway use of HSIP and Rail for grade crossing use of HSIP.

[2] If Marcheselli funds are not available, the local share is 20%. Projects eligible for the CMAQ "Bikes on Buses" program have a split of 95%, 0%, 5%. Projects eligible for the CMAQ "Transit Priority" program are 100% federal with no match required.

[3] 100% Thruway funds are from the New York State Thruway Authority and are not NYSDOT funds.

[4] Exceptions are noted in the descriptions of the project listings.

APPENDIX E - PROJECT CANDIDATES

The intention of this appendix is to supplement the documentation of the steps taken during the 2013-18 TIP update. Therefore, several lists of candidate projects from the 2013-18 update follow. The candidates in these lists could serve as a starting point in the next TIP update, or in any solicitation, if the Planning Committee and Policy Board desire to do so. However, local priorities could change, or the conditions of the facilities could change in such a way as to affect their qualifications for a specific category of candidate project. Therefore, the candidate lists that follow may not serve as a starting point at the next programming opportunity. The descriptions below define each list. For more complete information on candidates, see the sections 2013-18 TIP Update (on page 11) and Programming Projects in the 2013-18 TIP (on page 15) of this document.

Pavement Preservation First Candidates: These candidates appear in four lists, one for each county. These lists were prepared by Region One with some assistance from CDTC staff and are based on specific qualifying criteria. The lists were then supplied to facility owners, who were requested to sponsor projects they would like to implement with federal-aid. These candidate lists were reformatted for inclusion in this appendix.

Bridge Preservation First Candidates: These candidates appear in four lists prepared by Region One, one for each county, and are based on specific qualifying criteria. They were supplied to facility owners, who were requested to sponsor projects they would like to implement with federal-aid. These candidate lists were reformatted for inclusion in this appendix.

Pavement Beyond Preservation Candidates: These are projects for which funding was requested by facility owners that did not meet the requirements for inclusion in a Preservation First category. They appear in two lists: 1) those advanced to the Main Office by Region One for funding consideration, and 2) those not advanced to the Main Office.

Bridge Beyond Preservation Candidates: The description of these lists are the same as that for pavements directly above.

Strategic Transportation Enhancement Program (STEP) Candidates: These are candidates that were submitted for funding consideration under the STEP mechanism. They appear in two lists: 1) those advanced to the Main Office by Region One for funding consideration, and 2) those not advanced to the Main Office.

Albany County Pavement Preservation First Candidates

LOCATION	STNAME	PROPOSED TREATMENT	UNIT COST	2011 SCORE	AADT	F_Street	T_Street	Est Cost
CITY OF ALBANY	EAGLE ST	Do Nothing		6	6600	MADISON AVE	LANCASTER ST	$0.000
CITY OF ALBANY	HENRY JOHNSN BL	Mill & Fill	$0.150	7	25400	CLINTON AVE	LIVINGSTON AVE	$0.109
CITY OF ALBANY	WHITEHALL RD	Thin OL	$0.080	7	7700	CARDINAL AVE	NEW SCOTLAND A	$0.154
CITY OF ALBANY	WESTERN AVE	Mill & Fill	$0.150	6	26000	HILLCREST AVE	RUSSELL RD	$0.114
CITY OF ALBANY	HENRY JOHNSN BL	Single Course	$0.120	7	14820	CENTRAL AVE	CLINTON AVE	$0.093
CITY OF ALBANY	DELAWARE AVE	Mill & Fill	$0.150	6	17400	S CITY LINE	BOHL AVE	$0.195
CITY OF ALBANY	KRUMKILL RD	Mill & Fill	$0.150	6	11400	NEW SCOTLAND A	BENDER AVE	$0.108
CITY OF ALBANY	CORP WOODS BLVD	CPR Light	$0.150	7	10300	I-90	CITY/TOWN LINE	$0.054
CITY OF ALBANY	NEW SCOTLAND AV	Single Course	$0.120	6	7200	NYS THRUWAY	WHITEHALL RD	$0.031
CITY OF ALBANY	NEW SCOTLAND RD	Single Course	$0.120	6	7200	CITY LINE	NYS THRUWAY	$0.348
CITY OF ALBANY	HACKETT BLVD	Mill & Fill	$0.150	6	8200	RAMSEY PL	SYCAMORE ST	$0.063
CITY OF ALBANY	FRISBIE AVE	Single Course	$0.120	6	6400	MCCARTY AVE	CAVALERI DR	$0.043
CITY OF ALBANY	EAGLE ST	Single Course	$0.120	6	6100	MORTON AVE	PARK AVE	$0.040
CITY OF ALBANY	ONEIDA TER	Single Course	$0.120	6	6000	OSBORNE ST	MORTON AVE	$0.018
CITY OF ALBANY	ONEIDA TER	Single Course	$0.120	6	6000	GARDEN ST	OSBORNE ST	$0.046
CITY OF ALBANY	FRISBIE AVE EXT	Single Course	$0.120	6	5700	SECOND AVE	GARDEN ST	$0.044
CITY OF ALBANY	NEW SCOTLAND AV	Mill & Fill	$0.150	6	14000	BUCKINGHAM DR	S MANNING BLVD	$0.255
CITY OF ALBANY	HACKETT BLVD	Single Course	$0.120	7	8200	JOANNE CT	MARWILL ST	$0.012
CITY OF ALBANY	HACKETT BLVD	Single Course	$0.120	7	8200	FULLERTON ST	JOANNE CT	$0.018
CITY OF ALBANY	NEW SCOTLAND AV	Mill & Fill	$0.150	6	13500	S MANNING BLVD	S MAIN AVE	$0.180
CITY OF ALBANY	LARK ST	Single Course	$0.120	7	10330	STATE ST	WASHINGTON AVE	$0.037
CITY OF ALBANY	PEARL ST N	Mill & Fill	$0.150	6	12800	STATE ST	CLINTON AVE	$0.207
CITY OF ALBANY	PEARL ST S	Mill & Fill	$0.150	6	12200	I787 ACCESS	MORTON AVE	$0.456
CITY OF ALBANY	HOFFMAN AVE	Mill & Fill	$0.150	6	11700	MCCARTY AVE	SECOND AVE	$0.133
CITY OF ALBANY	LAKE AVE S	Single Course	$0.120	7	8800	MADISON AVE	WESTERN AVE	$0.124
CITY OF ALBANY	HACKETT BLVD	Mill & Fill	$0.150	6	8200	MARWILL ST	SAMARITAN RD	$0.212

CITY OF ALBANY	HACKETT BLVD	Mill & Fill	$0.150	6	8200	SAMARITAN RD	HOLLAND AVE	$0.144
CITY OF ALBANY	HACKETT BLVD	Mill & Fill	$0.150	6	8200	RAMSEY PL	FULLERTON ST	$0.170
CITY OF ALBANY	LIVINGSTON AVE	Single Course	$0.120	6	6500	N SWAN ST	HNRY JHNSN BLV	$0.146
CITY OF ALBANY	LINCOLN AVE	Thin OL	$0.080	7	5600	N ALLEN ST	MCKINLEY ST	$0.037
CITY OF ALBANY	NEW SCOTLAND AV	Mill & Fill	$0.150	6	10500	WHITEHALL RD	KRUMKILL RD	$0.161
CITY OF ALBANY	LINCOLN AVE	Thin OL	$0.080	7	5600	MCKINLEY ST	VERPLANK ST	$0.091
CITY OF ALBANY	NEW SCOTLAND AV	Mill & Fill	$0.150	6	10500	KRUMKILL RD	BUCKINGHAM DR	$0.093
CITY OF ALBANY	HACKETT BLVD	Mill & Fill	$0.150	6	10400	SYCAMORE ST	S MAIN AVE	$0.163
CITY OF ALBANY	HACKETT BLVD	Mill & Fill	$0.150	6	10200	S MAIN AVE	KEELER DR	$0.031
CITY OF ALBANY	MADISON AVE	Mill & Fill	$0.150	6	14740	NEW SCOTLAND	LARK ST	$0.244
CITY OF ALBANY	MADISON AVE	Mill & Fill	$0.150	6	14220	ONTARIO ST	LAKE AVE	$0.270
CITY OF ALBANY	MORTON AVE	Single Course	$0.120	6	7100	S SWAN ST	DELAWARE AVE	$0.099
CITY OF ALBANY	MORTON AVE	Single Course	$0.120	6	7100	S PEARL ST	CLINTON ST	$0.038
CITY OF ALBANY	PINE ST	Single Course	$0.120	6	7100	EAGLE ST	LODGE ST	$0.037
CITY OF ALBANY	PINE ST	Single Course	$0.120	6	7100	LODGE ST	PEARL ST N	$0.039
CITY OF ALBANY	RUSSELL RD	Thin OL	$0.080	7	2300	BERKSHIRE BLVD	WEST CITY LINE	$0.080
CITY OF ALBANY	SWAN ST S	Mill & Fill	$0.150	6	8600	STATE ST	WASHINGTON AVE	$0.048
CITY OF ALBANY	BERKSHIRE BLVD	Single Course	$0.120	6	3300	COLONIAL AVE	DAVIS AVE	$0.035
CITY OF ALBANY	BERKSHIRE BLVD	Single Course	$0.120	6	3300	DAVIS AVE	ORMOND ST	$0.014
CITY OF ALBANY	ONTARIO ST	Single Course	$0.120	6	4900	WASHINGTON AVE	CENTRAL AVE	$0.069
CITY OF ALBANY	LIVINGSTON AVE	Single Course	$0.120	6	6500	BROADWAY	N SWAN ST	$0.133
CITY OF ALBANY	LIVINGSTON AVE	Single Course	$0.120	6	6500	HNRY JHNSN BLV	JUDSON ST	$0.150
CITY OF ALBANY	QUAIL ST	Single Course	$0.120	6	6000	MADISON AVE	WASHINGTON AVE	$0.181
CITY OF ALBANY	SHAKER RD	Single Course	$0.120	6	5800	LOUDONVILLE RD	US 9 NB RAMP	$0.010
CITY OF ALBANY	CLINTON AVE	Thin OL	$0.080	7	5600	H JOHNSON BLVD	CENTRAL AVE	$0.578
CITY OF ALBANY	SOUTHERN BLVD	Single Course	$0.120	6	4610	MCALPIN ST	DELAWARE AVE	$0.104
CITY OF ALBANY	GREEN ST	Thin OL	$0.080	7	3000	S FERRY ST	MADISON AVE	$0.063
CITY OF ALBANY	PEARL ST N	Single Course	$0.120	6	3900	CLINTON AVE	LIVINGSTON AVE	$0.132
CITY OF ALBANY	SECOND AVE	Thin OL	$0.080	7	2500	DELAWARE AVE	BERTHA ST	$0.101
CITY OF ALBANY	WILLETT ST	Single Course	$0.120	6	2700	MADISON AVE	STATE ST	$0.106

CITY OF ALBANY	PEARL ST S	Thin OL	$0.080	7	2100	MADISON AVE	MORTON AVE	$0.092
CITY OF ALBANY	DOVE ST	Single Course	$0.120	6	2600	WASHINGTON AVE	MADISON AVE	$0.178
CITY OF ALBANY	DOVE ST	Single Course	$0.120	6	2600	MADISON AVE	PARK AVE	$0.099
CITY OF ALBANY	MYRTLE AVE	Single Course	$0.120	6	1900	QUAIL ST	ONTARIO ST	$0.052
CITY OF ALBANY	CHURCH ST	Single Course	$0.120	6	2300	BOAT ST	BROADWAY	$0.271
CITY OF ALBANY	PARK AVE	Single Course	$0.120	6	1600	EAGLE ST	MYRTLE ST	$0.087
CITY OF ALBANY	MORRIS ST	Single Course	$0.120	6	1600	PARTRIDGE ST	W LAWRENCE ST	$0.148
CITY OF ALBANY	HUDSON AVE	Thin OL	$0.080	7	1400	DOVE ST	LARK ST	$0.043
								$7.630
TOWN OF BETHLEHEM	ELM AVE	Mill & Fill	$0.150	6	8700	DELMAR BYPASS	DELAWARE AVE	$0.000
TOWN OF BETHLEHEM	ELM AVE	Mill & Fill	$0.150	6	8000	CREBLE RD	CR 53	$0.000
TOWN OF BETHLEHEM	SCHOOLHOUSE RD	Mill & Fill	$0.150	6	10300	GUILDERLAND TL	KRUM KILL RD	$0.109
TOWN OF BETHLEHEM	CHERRY AVE	Mill & Fill	$0.150	6	9860	DELAWARE AVE	KENWOOD AVE	$0.243
TOWN OF BETHLEHEM	KRUMKILL RD	Thin OL	$0.080	7	4500	SCHOOLHOUSE RD	RUSSELL RD	$0.033
TOWN OF BETHLEHEM	KENWOOD AVE	Thin OL	$0.080	7	4000	ELSMERE AVE	0.9 MILES E	$0.144
TOWN OF BETHLEHEM	CREBLE RD	Single Course	$0.120	6	5030	CR 53	ELM AVE	$0.147
TOWN OF BETHLEHEM	CREBLE RD	Single Course	$0.120	6	5030	.25 W OF 53	CR 53	$0.055
TOWN OF BETHLEHEM	CREBLE RD	Single Course	$0.120	6	5030	ELM AVE	US 9W	$0.207
TOWN OF BETHLEHEM	CREBLE RD	Single Course	$0.120	6	5030	NY32	.25W OF 53	$0.474
TOWN OF BETHLEHEM	KRUMKILL RD	Single Course	$0.120	6	4500	RUSSELL RD	BLESSING RD	$0.018
TOWN OF BETHLEHEM	KENWOOD AVE	Single Course	$0.120	6	4000	0.9 MILES E	DELMAR BYPASS	$0.163
TOWN OF BETHLEHEM	ELM AVE E	Single Course	$0.120	6	3000	ELM AVE	CR 53	$0.324
TOWN OF BETHLEHEM	KRUMKILL RD	Single Course	$0.120	6	2480	BLESSING RD	YALE AVE	$0.168
TOWN OF BETHLEHEM	KRUMKILL RD	Single Course	$0.120	6	2480	YALE AVE	ALBANY C/L	$0.036
TOWN OF BETHLEHEM	BLESSING RD	Single Course	$0.120	6	2400	NY 85	KRUMKILL RD	$0.290
TOWN OF BETHLEHEM	WEMPLE RD	Single Course	$0.120	6	1100	NY 910A	US 9W	$0.415
TOWN OF BETHLEHEM	WEMPLE RD	Single Course	$0.120	6	1100	US 9W	RR TRACKS	$0.313
								$3.139
CITY OF COHOES	N MOHAWK ST	Mill & Fill	$0.150	6	13300	MOHAWK ST	VLIET ST	$0.082
CITY OF COHOES	N MOHAWK ST	Thin OL	$0.080	7	6400	MANOR AVE	N CITY LINE	$0.085

CITY OF COHOES	N MOHAWK ST	Mill & Fill	$0.150	6	8700	VLIET ST	MANOR AVE	$0.187
CITY OF COHOES	VLIET ST	Single Course	$0.120	6	3600	BEND IN ROAD	N MOHAWK ST	$0.013
CITY OF COHOES	VLIET ST	Single Course	$0.120	6	3600	SUMMIT ST	BEND IN ROAD	$0.013
CITY OF COHOES	VLIET BLVD	Single Course	$0.120	6	4700	EDWARDS ST	DUDLEY AVE	$0.110
								$0.489
TOWN OF COLONIE	ALBANY SHAKER R	Single Course	$0.120	7	12200	SICKER RD	NY 7	$0.000
TOWN OF COLONIE	ALBANY SHAKER R	Single Course	$0.120	7	14900	WTRVLIET SHKR	AIRPORT PARK	$0.000
TOWN OF COLONIE	ALBANY SHAKER R	Single Course	$0.120	7	14900	AIRPORT PARK	BRITISH AMRCN	$0.000
TOWN OF COLONIE	ALBANY SHAKER R	Single Course	$0.120	7	12200	BRITISH AMRCN	SICKER RD	$0.000
TOWN OF COLONIE	SPARROWBUSH RD	Mill & Fill	$0.150	6	14290	FORTS FERRY RD	WADE RD EXT	$0.303
TOWN OF COLONIE	ALBANY SHAKER R	Mill & Fill	$0.150	6	26400	HERITAGE LANE	WTRVLIET SHKR	$0.101
TOWN OF COLONIE	WATERVLT SHAKER	Single Course	$0.120	7	9560	AIRLINE DR	SAND CREEK RD	$0.092
TOWN OF COLONIE	WATERVLT SHAKER	Mill & Fill	$0.150	6	9000	NEW KARNER RD	CONSAUL RD	$0.207
TOWN OF COLONIE	SPARROWBUSH RD	Single Course	$0.120	7	14290	WADE RD EXT	OLD SPARROWBUSH	$0.139
TOWN OF COLONIE	CONSAUL RD	Single Course	$0.120	6	7000	LISHA KILL RD	PEARSE RD	$0.158
TOWN OF COLONIE	CONSAUL RD	Single Course	$0.120	6	7000	PEARSE RD	ALBANY CO LINE	$0.045
TOWN OF COLONIE	JOHNSON RD	Single Course	$0.120	6	6600	COLUMBIA ST EX	MILLER RD	$0.159
TOWN OF COLONIE	JOHNSON RD	Single Course	$0.120	6	6600	MILLER RD	COLONIE T/L	$0.074
TOWN OF COLONIE	ST AGNES HWY	Thin OL	$0.080	7	4400	WESTERN AVE	COLUMBIA ST	$0.027
TOWN OF COLONIE	SAND CREEK RD	Mill & Fill	$0.150	6	12000	OSBORNE RD	OSBORNE RD	$0.044
TOWN OF COLONIE	SAND CREEK RD	Mill & Fill	$0.150	6	10000	OSBORNE RD	COLONIE CENTER	$0.607
TOWN OF COLONIE	PEARSE RD	Thin OL	$0.080	7	3200	CONSAUL RD	SCH CO LN	$0.023
TOWN OF COLONIE	WATERVLT SHAKER	Single Course	$0.120	7	9560	ALBANY SHAKER	AIRLINE DR	$0.213
TOWN OF COLONIE	FORTS FERRY RD	Single Course	$0.120	6	4500	NY 7	WADE RD EXT	$0.054
TOWN OF COLONIE	FORTS FERRY RD	Single Course	$0.120	6	4500	WADE RD EXT	ELINOR PL	$0.114
TOWN OF COLONIE	ST AGNES HWY	Single Course	$0.120	6	4400	BOGHT RD	WESTERN AVE	$0.075
TOWN OF COLONIE	SCHUYLER RD	Single Course	$0.120	6	4300	0.3 MILES N	SPRING ST RD	$0.157
TOWN OF COLONIE	SCHUYLER RD	Single Course	$0.120	6	4300	NY 378	0.3 MILES N	$0.075
TOWN OF COLONIE	ALBANY ST	Single Course	$0.120	6	4000	LISHA KILL RD	MORRIS RD	$0.045
TOWN OF COLONIE	SPRING ST RD	Single Course	$0.120	6	3000	US 9	SCHUYLER MDW RD	$0.127

TOWN OF COLONIE	LISHA KILL RD	Single Course	$0.120	6	2700	JONES DR	ALB/SCH CO LN	$0.087
TOWN OF COLONIE	LISHA KILL RD	Single Course	$0.120	6	2700	CONSAUL RD	JONES DR	$0.132
TOWN OF COLONIE	OLD NISKAYUNA RD	Single Course	$0.120	6	1490	MAXWELL RD	FOX RUN	$0.042
TOWN OF COLONIE	WADE RD EXT	Single Course	$0.120	6	0	FORTS FERRY RD	SPARROWBUSH RD	$0.294
TOWN OF COLONIE	WADE RD EXT	Single Course	$0.120	6	0	NY 7	FORTS FERRY	$0.000
								$3.395
TOWN OF GUILDERLAND	OLD STATE RD	Single Course	$0.120	7	14800	KINGS RD	LYDIUS ST	$0.205
TOWN OF GUILDERLAND	SCHOOLHOUSE RD	Single Course	$0.120	7	8110	US 20	TOWN LINE	$0.259
TOWN OF GUILDERLAND	CHURCH RD	Single Course	$0.120	6	6300	HUNGERFORD RD	US 20	$0.075
TOWN OF GUILDERLAND	CHURCH RD	Single Course	$0.120	6	6300	HARMONY HILL	HUNGERFORD RD	$0.212
TOWN OF GUILDERLAND	CHURCH RD	Single Course	$0.120	6	6300	JOHNSTON RD	HARMONY HILL	$0.067
TOWN OF GUILDERLAND	CURRY RD	Single Course	$0.120	6	5100	GUILDERLAND T/	KINGS RD	$0.145
TOWN OF GUILDERLAND	CURRY RD	Single Course	$0.120	6	5100	NY7 RAMPS	GUILDERLND TL	$0.289
TOWN OF GUILDERLAND	KINGS RD	Thin OL	$0.080	7	2400	OLD STATE RD	CURRY RD	$0.144
TOWN OF GUILDERLAND	LYDIUS ST	Thin OL	$0.080	7	1400	OLD STATE RD	BROOKVIEW DR	$0.244
								$1.639
VILLAGE OF MENANDS	WARDS LA	Single Course	$0.120	6	3900	BROADWAY	VAN RENSSELAER	$0.133

Rensselaer County Pavement Preservation First Candidates

LOCATION	STNAME	PROPOSED TREATMENT	UNIT COST	2011 SCORE	AADT	F_Street	T_Street	Est Cost
TOWN OF BRUNSWICK	PLEASENTVIEW AV	Single Course	$0.120	6	4600	MENEMSHA LA	CR 142	$0.078
TOWN OF BRUNSWICK	MT VIEW AVE	Thin OL	$0.080	7	2500	PAWLING AVE	CITY LINE	$0.019
TOWN OF BRUNSWICK	MT VIEW AVE	Thin OL	$0.080	7	2500	TROY C/L	CR130	$0.071
TOWN OF BRUNSWICK	SPRING AVE	Single Course	$0.120	6	3500	TROY C/L	PLEASANTVIEW	$0.299
TOWN OF BRUNSWICK	TAMARAC RD	Thin OL	$0.080	7	2200	NY 2	HERRINGTON LN	$0.547
TOWN OF BRUNSWICK	S LAKE AVE	Single Course	$0.120	6	3200	CITY LIMITS	CITY LIMITS	$0.142
TOWN OF BRUNSWICK	MCCHESNEY AVE	Single Course	$0.120	6	2300	HOOSICK RD	MCCHESNEY EXT	$0.113
TOWN OF BRUNSWICK	MCCHESNEY AVE	Single Course	$0.120	6	2300	MCCHESNEY EXT	TOWN OFFICE RD	$0.385
TOWN OF BRUNSWICK	TAMARAC RD	Single Course	$0.120	6	2200	HERRINGTON LN	PITTSTOWN T/L	$0.473
TOWN OF BRUNSWICK	LANSING RD	Single Course	$0.120	6	1400	SPRING AVE	MENEMSHA LN	$0.109
TOWN OF BRUNSWICK	MOON LAWN RD	Thin OL	$0.080	7	700	NY2	NY278	$0.335
TOWN OF BRUNSWICK	MENEMSHA LA	Single Course	$0.120	6	900	LANSING RD	CRANSTON RD	$0.078
TOWN OF BRUNSWICK	TOWN OFFICE RD	Single Course	$0.120	6	804	CR 134	NY 7	$0.384
								$3.031
TOWN OF EAST GREENBUSH	HAMPTON AVE	Single Course	$0.120	6	1930	EASTERN AVE	SUMMIT AVE	$0.059
TOWN OF EAST GREENBUSH	HAMPTON AVE	Single Course	$0.120	6	1930	SUMMIT AVE	HAMPTON AVE EX	$0.030
								$0.089
TOWN OF NORTH GREENBUSH	GEISER RD	Do Nothing		6	400	NY 43	TOWN BEACH	$0.000
TOWN OF NORTH GREENBUSH	WINTER ST	Single Course	$0.120	6	7300	US 4	NY 136	$0.381
TOWN OF NORTH GREENBUSH	WINTER ST	Single Course	$0.120	6	7120	NY 136	CITY LINE	$0.163
TOWN OF NORTH GREENBUSH	BLOOMINGROVE DR	Single Course	$0.120	6	5800	SNYDERS LAKE RD	US 4	$0.138
TOWN OF NORTH GREENBUSH	SNYDERS LAKE RD	Single Course	$0.120	6	3800	CR 65	WINDY WAY	$0.328
TOWN OF NORTH	SNYDERS LAKE RD	Single Course	$0.120	6	3800	MOHAMEDS FARM	PERSHING AVE	$0.097

GREENBUSH								
TOWN OF NORTH GREENBUSH	BROOKSIDE AVE	Single Course	$0.120	6	2700	NY136	NY66	$0.087
TOWN OF NORTH GREENBUSH	GEISER RD	Single Course	$0.120	6	400	TOWN BEACH	LAKE SHORE DR	$0.062
								$1.256
TOWN OF PITTSTOWN	TAMARAC RD	Thin OL	$0.080	7	1200	BRUNSWICK T/L	NY 7	$0.600
CITY OF RENSSELAER	HERRICK ST	Single Course	$0.120	6	5500	BROADWAY	EAST ST	$0.090
CITY OF RENSSELAER	THIRD ST	Single Course	$0.120	6	4100	PARTITION ST	WASHINGTON AVE	$0.318
CITY OF RENSSELAER	RIVERSIDE AVE	Single Course	$0.120	6	3600	CITY LINE	NORTH TO CORNER	$0.291
CITY OF RENSSELAER	BELMORE PL	Thin OL	$0.080	7	401	RIVERSIDE AVE	NELSON AVE	$0.010
CITY OF RENSSELAER	RENSSELAER AVE	Single Course	$0.120	6	277	COLUMBIA ST	CAMBRIDGE	$0.027
CITY OF RENSSELAER	BELMORE PL	Single Course	$0.120	6	277	NELSON AVE	CAMBRIDGE	$0.015
								$0.750
TOWN OF SAND LAKE	BEST RD	Thin OL	$0.080	7	1800	SAND LK T/L	NY 150	$0.262
TOWN OF SAND LAKE	EASTERN UNION T	Single Course	$0.120	6	2154	GLASS LAKE RD	NY43	$0.212
TOWN OF SAND LAKE	OLD ROUTE 66	Single Course	$0.120	6	1982	NY43	NY66	$0.362
TOWN OF SAND LAKE	EASTERN UNION T	Single Course	$0.120	6	147	NY66/NY43	GLASS LAKE RD	$0.312
								$1.148
TOWN OF SCHODACK	MAPLE HILL RD	Thin OL	$0.080	7	2647	NY150	UAB	$0.371
TOWN OF SCHODACK	BROOKVIEW RD	Thin OL	$0.080	7	1900	NY150	E GREENBUSH T/	$0.365
								$0.736
CITY OF TROY	RIVER ST	Single Course	$0.120	7	10580	FULTON ST	FEDERAL ST	$0.000
CITY OF TROY	MORRISON AVE	Mill & Fill	$0.150	6	18100	VANDENBURG AVE	CRESTWOOD AVE	$0.030
CITY OF TROY	MORRISON AVE	Mill & Fill	$0.150	6	18100	CRESTWOOD AVE	BURDEN AVE	$0.094
CITY OF TROY	NORTHERN DR	Mill & Fill	$0.150	6	13200	LEVERSEE RD	4TH AVE	$0.294
CITY OF TROY	CAMPBELL AVE	Mill & Fill	$0.150	6	11400	DONEGAL AVE	MILL ST	$0.173
CITY OF TROY	MILL ST	Single Course	$0.120	7	13700	BURDEN AVE	CAMPBELLS AVE	$0.214
CITY OF TROY	126TH ST	Mill & Fill	$0.150	6	12750	HUDSON RIVER	2ND AVE	$0.037
CITY OF TROY	OAKWOOD AVE	Mill & Fill	$0.150	6	13780	MIDDLEBURGH ST	FREAR AVE	$0.115

CITY OF TROY	OAKWOOD AVE	Mill & Fill	$0.150	6	13020	FREAR ST	CITY LIMITS	$0.676
CITY OF TROY	BURDEN AVE	Mill & Fill	$0.150	6	12400	MILL ST	1ST ST	$0.180
CITY OF TROY	KING ST	Mill & Fill	$0.150	6	12321	RIVER ST	RIVER ST	$0.133
CITY OF TROY	8TH ST	Single Course	$0.120	6	7300	CONGRESS ST	FEDERAL ST	$0.139
CITY OF TROY	3RD ST	Mill & Fill	$0.150	6	8200	JEFFERSON ST	4TH ST	$0.227
CITY OF TROY	6TH AVE	Single Course	$0.120	7	10400	HOOSICK ST	HUTTON ST	$0.089
CITY OF TROY	HILL ST	Thin OL	$0.080	7	5500	SPRING AVE	ADAMS ST	$0.103
CITY OF TROY	TIBBITS AVE	Single Course	$0.120	6	4100	BURDETT AVE	BOLIVAR AVE	$0.110
CITY OF TROY	TIBBITS AVE	Single Course	$0.120	6	4100	BOLIVAR AVE	S LAKE AVE	$0.174
CITY OF TROY	5TH AVE	Single Course	$0.120	6	7600	121ST ST	125TH ST	$0.171
CITY OF TROY	5TH AVE	Single Course	$0.120	6	7600	101ST ST	104TH ST	$0.224
CITY OF TROY	5TH AVE	Single Course	$0.120	6	7600	104TH ST	108TH ST	$0.171
CITY OF TROY	5TH AVE	Single Course	$0.120	6	7600	108TH ST	111TH ST	$0.129
CITY OF TROY	8TH ST	Single Course	$0.120	6	7300	JACOB ST	HOOSICK ST	$0.152
CITY OF TROY	RIVER ST	Mill & Fill	$0.150	6	9120	RENSSELAER ST	MIDLEBURGH ST	$0.123
CITY OF TROY	2ND ST	Thin OL	$0.080	7	3600	RIVER ST	DIVISION ST	$0.084
CITY OF TROY	6TH AVE	Single Course	$0.120	7	8800	HUTTON ST	FEDERAL ST	$0.187
CITY OF TROY	15TH ST	Single Course	$0.120	6	6810	SAGE AVE	COLLEGE AVE	$0.133
CITY OF TROY	15TH ST	Single Course	$0.120	6	6810	PEOPLES AVE	SAGE AVE	$0.077
CITY OF TROY	15TH ST	Single Course	$0.120	6	6810	EAGLE ST	PEOPLES AVE	$0.077
CITY OF TROY	15TH ST	Single Course	$0.120	6	6810	HUTTON ST	EAGLE ST	$0.034
CITY OF TROY	PARK BLVD	Single Course	$0.120	6	6700	OAKWOOD AVE	15TH ST	$0.060
CITY OF TROY	4TH ST	Mill & Fill	$0.150	6	8050	3RD ST	MAIN ST	$0.271
CITY OF TROY	S LAKE AVE	Single Course	$0.120	6	3200	HOOSICK ST	CITY LINE	$0.085
CITY OF TROY	S LAKE AVE	Single Course	$0.120	6	3200	CITY LIMITS	BRUNSWICK RD	$0.017
CITY OF TROY	PINEWOODS AVE	Single Course	$0.120	6	3000	PAWLING AVE	LAKEWOOD PL	$0.055
CITY OF TROY	MIDDLEBURGH ST	Single Course	$0.120	6	5800	6TH AVE	OAKWOOD AVE	$0.158
CITY OF TROY	NEW TURNPIKE RD	Single Course	$0.120	6	2800	NORTHERN DR	CITY LINE	$0.143
CITY OF TROY	MAPLE AVE	Single Course	$0.120	6	2300	PAWLING AVE	PINEWOOD AVE	$0.076
CITY OF TROY	1ST ST	Single Course	$0.120	6	3200	ADAMS ST	DIVISION ST	$0.081

CITY OF TROY	TIBBITS AVE	Single Course	$0.120	6	4100	15TH ST	BURDETT AVE	$0.117
CITY OF TROY	RIVER ST	Single Course	$0.120	6	3800	BROADWAY	FULTON ST	$0.063
CITY OF TROY	RIVER ST	Single Course	$0.120	6	3300	LIBERTY ST	FERRY ST	$0.088
CITY OF TROY	RIVER ST	Single Course	$0.120	6	3300	ADAMS ST	LIBERTY ST	$0.083
CITY OF TROY	2ND AVE	Single Course	$0.120	6	1100	TRAILER PARK	ROOSEVELT AVE	$0.051
CITY OF TROY	2ND AVE	Single Course	$0.120	6	1100	ROOSEVELT AVE	CITY LINE	$0.024
CITY OF TROY	124TH ST	Single Course	$0.120	6	1900	2ND AVE	4TH AVE	$0.060
CITY OF TROY	3RD AVE	Thin OL	$0.080	7	800	113TH ST	116TH ST	$0.085
CITY OF TROY	3RD AVE	Thin OL	$0.080	7	800	116TH ST	117TH ST	$0.028
								$5.896

Saratoga County Pavement Preservation First Candidates

LOCATION	STNAME	PROPOSED TREATMENT	UNIT COST	2011 SCORE	AADT	F_Street	T_Street	Est Cost
TOWN OF BALLSTON	BROOKLINE RD	Thin OL	$0.080	7	6320	NY50	NY67	$0.094
TOWN OF BALLSTON	KINGSLEY RD	Thin OL	$0.080	7	5800	BLUE BARNS RD	LAKE HILL RD	$0.061
TOWN OF BALLSTON	MIDDLE LINE RD	Single Course	$0.120	6	5710	MANN RD	BALLSTON T/L	$0.138
TOWN OF BALLSTON	MIDDLE LINE RD	Single Course	$0.120	6	5710	CR60	MANN RD	$0.262
TOWN OF BALLSTON	KINGSLEY RD	Thin OL	$0.080	7	3780	LAKE HILL RD	NY 50	$0.041
TOWN OF BALLSTON	MIDDLE LINE RD	Single Course	$0.120	6	2600	CHARLTON RD	CR60 BRKLN RD	$0.314
								$0.911
TOWN OF CHARLTON	STAGE RD	Thin OL	$0.080	7	3200	SCHECTADY C/L	LAKE HILL RD	$0.181
TOWN OF CHARLTON	STAGE RD	Thin OL	$0.080	7	2210	LAKE HILL RD	CHARLTON RD	$0.249
TOWN OF CHARLTON	LAKE HILL RD	Single Course	$0.120	6	3220	STAGE RD	SCHTDY CO LINE	$0.327
TOWN OF CHARLTON	CHARLTON RD	Single Course	$0.120	6	2446	SWAGGERTOWN	STAGE RD	$0.119
								$0.877
TOWN OF CLIFTON PARK	LONGKILL RD	Thin OL	$0.080	7	4410	USHERS RD	WOODSTEAD RD	$0.065
TOWN OF CLIFTON PARK	LONGKILL RD	Thin OL	$0.080	7	4410	WOODSTEAD RD	BALLSTON T/L	$0.072
TOWN OF CLIFTON PARK	USHERS RD	Single Course	$0.120	7	9370	VAN PATTEN DR	US 9	$0.042
TOWN OF CLIFTON PARK	LAPP RD	Thin OL	$0.080	7	3000	CR 92	CR91	$0.225
								$0.404
TOWN OF HALFMOON	FARM TO MARKET	Thin OL	$0.080	7	7689	CLFTN PRK LINE	SMITH RD	$0.249
TOWN OF HALFMOON	SITTERLY RD	Single Course	$0.120	6	7700	US 9	TOWN LINE	$0.198
								$0.447
TOWN OF MALTA	NORTH LINE RD	Thin OL	$0.080	7	7500	SARATOGA LINE	MALTA AVE	$0.032
TOWN OF MALTA	DUNNING ST	Single Course	$0.120	7	10610	US 9	PLAINS RD	$0.201
TOWN OF MALTA	NELSON AVE EXT	Thin OL	$0.080	7	510	SAR CITY LINE	ROWLEY RD	$0.032
								$0.266
CITY OF MECHANICVILLE	HILL ST	Thin OL	$0.080	7	4000	N MAIN ST	N CENTRAL AVE	$0.030

TOWN OF MILTON	NORTH LINE RD	Single Course	$0.120	7	10180	ROWLAND ST	NY50	$0.118
TOWN OF MILTON	NORTH LINE RD	Thin OL	$0.080	7	6640	CR50	ROWLAND ST	$0.079
TOWN OF MILTON	ROWLAND ST	Single Course	$0.120	6	7770	GEYSER RD	NY 29	$0.502
TOWN OF MILTON	NORTH LINE RD	Single Course	$0.120	6	7500	NY50	SARATOGA LINE	$0.012
TOWN OF MILTON	MIDDLE LINE RD	Single Course	$0.120	6	4030	ROCK CITY RD	NY 29	$0.467
TOWN OF MILTON	ROWLAND ST	Single Course	$0.120	6	4000	VILLAGE LINE	NORTHLINE RD	$0.150
TOWN OF MILTON	GALWAY RD	Single Course	$0.120	6	3640	HOGBACK RD	MILTON RD	$0.347
TOWN OF MILTON	GREENFIELD AV	Thin OL	$0.080	7	1900	VILLAGE LINE	NORTH ST	$0.005
TOWN OF MILTON	MIDDLE LINE RD	Single Course	$0.120	6	2600	NY50	CHARLTON RD	$0.280
								$1.958
CITY OF SARATOGA SPRINGS	NORTH LINE RD	Thin OL	$0.080	7	7500	MILTON LINE	MALTA LINE	$0.109
CITY OF SARATOGA SPRINGS	WEIBEL AVE	Single Course	$0.120	7	9600	TOWN DUMP	WILTON TN LN	$0.110
CITY OF SARATOGA SPRINGS	W CIRCULAR ST	Thin OL	$0.080	7	5200	BENEDICT ST	ELM ST	$0.044
CITY OF SARATOGA SPRINGS	WEIBEL AVE	Mill & Fill	$0.150	6	9600	NY 29	TOWN DUMP	$0.149
CITY OF SARATOGA SPRINGS	CRESCENT AVE	Thin OL	$0.080	7	5020	BROADWAY	NELSON AVE	$0.159
CITY OF SARATOGA SPRINGS	CRESCENT AVE	Thin OL	$0.080	7	3600	NELSON AVE	I87 NORTHWAY	$0.036
CITY OF SARATOGA SPRINGS	GICK RD	Thin OL	$0.080	7	3200	NY 50	WILTON TM LM	$0.044
CITY OF SARATOGA SPRINGS	BROADWAY	Mill & Fill	$0.150	6	16300	CIRCULAR ST	SPRING ST	$0.269
CITY OF SARATOGA SPRINGS	MARION AVE	Single Course	$0.120	6	4000	EXCELSIOR AVE	NY50	$0.028
CITY OF SARATOGA SPRINGS	BROADWAY	Mill & Fill	$0.150	6	12760	SPRING ST	GROVE ST	$0.325
CITY OF SARATOGA SPRINGS	CRESCENT ST	Single Course	$0.120	6	2800	JEFFERSON ST	NELSON AVE	$0.087
CITY OF SARATOGA SPRINGS	GRAND AVE	Single Course	$0.120	6	2490	ROBIN HOOD CT	CALLAGAN DR	$0.089
CITY OF SARATOGA SPRINGS	NELSON AVE	Single Course	$0.120	6	1700	CRESCENT AVE	GRIDLEY AVE	$0.196

CITY OF SARATOGA SPRINGS	HUTCHINS RD	Thin OL	$0.080	7	860	HAWTHORN BLVD	NY 50	$0.032
								$1.678
TOWN OF STILLWATER	LAKE RD	Thin OL	$0.080	7	2900	FLIKE RD	STILLWATER V/L	$0.222
TOWN OF WILTON	CARR RD	Thin OL	$0.080	7	6880	JONES RD	NORTHERN PNS R	$0.082
TOWN OF WILTON	BALLARD RD	Mill & Fill	$0.150	6	10060	1.21 MILES E	I87 SOUTHBOUND	$0.186
TOWN OF WILTON	NORTHERN PINES	Single Course	$0.120	6	5700	US 9	WORTH RD	$0.303
TOWN OF WILTON	NORTHERN PINES	Single Course	$0.120	6	4470	WORTH RD	TRAVER RD	$0.246
TOWN OF WILTON	JONES RD	Single Course	$0.120	6	3980	SARATOGA C/L	LEWIS RD	$0.386
TOWN OF WILTON	JONES RD	Single Course	$0.120	6	3980	LEWIS RD	CARR RD	$0.142

Schenectady County Pavement Preservation First Candidates

LOCATION	STNAME	PROPOSED TREATMENT	UNIT COST	2011 SCORE	AADT	F_Street	T_Street	Est Cost
TOWN OF DUANESBURG	DUANESBURG CHUR	Single Course	$0.120	6	600	NY 30	LAKE RD	$0.589
TOWN OF GLENVILLE	MAPLE AVE	Single Course	$0.120	7	11200	ALPLAUS AVE	GLENRIDGE RD	$0.170
TOWN OF GLENVILLE	MAPLE AVE	Thin OL	$0.080	7	7300	FREEMANS BRDG	ALPLAUS AVE	$0.318
TOWN OF GLENVILLE	MAPLE AVE	Thin OL	$0.080	7	6300	GLENRIDGE RD	HETCHELTOWN	$0.054
TOWN OF GLENVILLE	HETCHELTOWN RD	Single Course	$0.120	7	8300	MAPLE AVE	PASHLEY RD	$0.198
TOWN OF GLENVILLE	VLEY RD	Thin OL	$0.080	7	4800	RAMP	AMSTERDAM AVE	$0.167
TOWN OF GLENVILLE	SUNNYSIDE RD	Single Course	$0.120	6	7000	VILLAGE LINE	FREEMANS BRDG	$0.183
TOWN OF GLENVILLE	VLEY RD	Single Course	$0.120	6	4800	NY 5	RAMP	$0.024
TOWN OF GLENVILLE	VLEY RD	Single Course	$0.120	6	4800	WESTERN BLVD	MARION BLVD	$0.047
TOWN OF GLENVILLE	PASHLEY RD	Single Course	$0.120	6	3300	NY 50	HETCHELTOWN RD	$0.228
TOWN OF GLENVILLE	LAKE HILL RD	Single Course	$0.120	6	2800	VAN VORST RD	SARATOGA CO LN	$0.140
TOWN OF GLENVILLE	SPRING RD	Single Course	$0.120	6	1830	NY 147	CR 43	$0.634
TOWN OF GLENVILLE	RIDGE RD	Single Course	$0.120	6	600	NY 147	CR 36	$0.597
								$2.761
TOWN OF NISKAYUNA	AQUEDUCT RD	Thin OL	$0.080	7	6200	SCH CITY LINE	NY 146	$0.263
TOWN OF NISKAYUNA	PEARSE RD	Thin OL	$0.080	7	4800	ALBANY CO LINE	NY 7	$0.200
TOWN OF NISKAYUNA	VAN ANTWERP RD	Thin OL	$0.080	7	3740	CITY LINE	NY 146	$0.101
TOWN OF NISKAYUNA	EASTERN PKWY	Single Course	$0.120	7	8100	SCH CITY LINE	OREGON AVE	$0.180
TOWN OF NISKAYUNA	GRAND BLVD WB	Thin OL	$0.080	7	2500	REGENT ST	VAN ANTWERP RD	$0.038
TOWN OF NISKAYUNA	HILLSIDE AVE	Single Course	$0.120	6	3700	ROSA RD	PROVIDENCE RD	$0.067
TOWN OF NISKAYUNA	DEAN ST	Thin OL	$0.080	7	2100	SCH CITY LINE	NOTT ST	$0.073
TOWN OF NISKAYUNA	GRAND BLVD EB	Thin OL	$0.080	7	2000	REGENT ST	VAN ANTWERP RD	$0.034
TOWN OF NISKAYUNA	CONSAUL RD	Single Course	$0.120	6	2200	ALBANY C/L	SCH LN/BLTWN	$0.392
TOWN OF NISKAYUNA	NISKAYUNA DR	Single Course	$0.120	6	1900	HILLSIDE AVE	PROVIDENCE RD	$0.041
TOWN OF NISKAYUNA	NISKAYUNA DR	Single Course	$0.120	6	1900	DEAN ST	HILLSIDE AVE	$0.076

TOWN OF NISKAYUNA	MOHEGAN RD	Single Course	$0.120	6	500	ROSENDALE RD	NY 7	$0.073
								$1.538
TOWN OF PRINCETOWN	PANGBURN RD	Single Course	$0.120	6	2276	UAB	NY7	$0.092
TOWN OF ROTTERDAM	CHRISLER AVE	Single Course	$0.120	7	13400	NY 146 HAMBURG	SCH CITY LINE	$0.096
TOWN OF ROTTERDAM	HELDERBERG AVE	Single Course	$0.120	6	7400	NY 7 CURRY RD	ALB CNTY LINE	$0.400
TOWN OF ROTTERDAM	W CAMPBELL RD	Single Course	$0.120	6	6600	BURDECK ST	SCH CITY LINE	$0.112
TOWN OF ROTTERDAM	PRINCETOWN RD	Thin OL	$0.080	7	4200	THOMPSON ST	NY 7	$0.139
TOWN OF ROTTERDAM	BROADWAY	Mill & Fill	$0.150	6	15500	NY 7 CURRY RD	SCH CITY LINE	$0.311
TOWN OF ROTTERDAM	PUTNAM RD	Single Course	$0.120	6	2700	NY 159	RR TRACKS	$0.283
								$1.341
CITY OF SCHENECTADY	MAXON RD EXT	Single Course	$0.120	7	11000	ALEXANDER ST	VAN VRANKEN	$0.083
CITY OF SCHENECTADY	MAXON RD EXT	Single Course	$0.120	7	11000	FREEMAN BRIDGE	ALEXANDER ST	$0.111
CITY OF SCHENECTADY	BROADWAY	Mill & Fill	$0.150	6	18500	CAMPBELL AVE	GUILDERLAND AV	$0.057
CITY OF SCHENECTADY	ERIE BLVD	Mill & Fill	$0.150	6	27200	I890	STATE ST	$0.312
CITY OF SCHENECTADY	ROSA RD	Mill & Fill	$0.150	6	9000	GERLING ST	BELMONT AVE	$0.060
CITY OF SCHENECTADY	ROSA RD	Mill & Fill	$0.150	6	9000	BELMONT AVE	NOTT ST	$0.088
CITY OF SCHENECTADY	ROSA RD	Single Course	$0.120	6	7100	FULTON AVE	GERLING ST	$0.038
CITY OF SCHENECTADY	BROADWAY	Mill & Fill	$0.150	6	15500	GUILDERLAND AV	ROTTERDAM LINE	$0.485
CITY OF SCHENECTADY	CHRISLER AVE	Mill & Fill	$0.150	6	15300	ALTAMONT AVE	SCH CITY LINE	$0.069
CITY OF SCHENECTADY	EASTERN AVE	Thin OL	$0.080	7	7700	ELMER AVE	BRANDYWINE AVE	$0.107
CITY OF SCHENECTADY	STATE ST	Single Course	$0.120	7	12700	ERIE BLVD	LAFAYETTE ST	$0.210
CITY OF SCHENECTADY	VAN VRANKEN AVE	Single Course	$0.120	7	8200	HILLSIDE AVE	CITY LINE	$0.066
CITY OF SCHENECTADY	PALMER AVE	Thin OL	$0.080	7	4897	UNION ST	EASTERN PKWY	$0.023
CITY OF SCHENECTADY	BROADWAY	Single Course	$0.120	6	4700	STATE ST	HAMILTON ST	$0.065
CITY OF SCHENECTADY	HULETT ST	Single Course	$0.120	6	2300	ALBANY ST	FRANCIS AVE	$0.124
CITY OF SCHENECTADY	ALBANY ST	Single Course	$0.120	6	4000	VEEDER AVE	HULETT ST	$0.124
CITY OF SCHENECTADY	CRAIG ST	Single Course	$0.120	6	3900	EMMETT ST	ALBANY ST	$0.036
CITY OF SCHENECTADY	HAMILTON ST	Thin OL	$0.080	7	1400	BROADWAY	CLINTON ST	$0.014
CITY OF SCHENECTADY	HAMILTON ST	Thin OL	$0.080	7	1400	CLINTON ST	VEEDER AVE	$0.046

CITY OF SCHENECTADY	EIGHTH AVE	Single Course	$0.120	6	2100	CUTLER ST	CRANE ST	$0.162
								$2.282
VILLAGE OF SCOTIA	SUNNYSIDE RD	Thin OL	$0.080	7	7000	WASHINGTON AVE	VILLAGE LINE	$0.033
VILLAGE OF SCOTIA	VLEY RD	Thin OL	$0.080	7	4000	5TH ST	1ST ST	$0.061
VILLAGE OF SCOTIA	VLEY RD	Single Course	$0.120	6	4000	RR TRACKS	5TH ST	$0.056
								$0.150

Albany County Bridge Preservation First Candidates

Albany County -Bridge Preservation Candidates -2015-2018							***COMMENTS***
BIN	**Carried**	**Crossed**	**AADT**	**Condition Rating**	Work Type	Bundled Project Cost $M TBD	
				SCOUR, ELEMENT SPECIFIC			
3301160	COUNTY ROAD 201	BLACK CREEK	2,250	5.17	Scour, Joints		Federal Aid System
3301020	SO.ALBANY RD CR53	ONESQUETHAW CRK	870	5.40	Scour, Joints		
PAINT, ELEMENT SPECIFIC							
2200270	HENRY JOHNSON BVD	SHERMAN STREET	13,000	4.63	Concrete Repairs-Abutments,Bearings, Wearing Surface, Joints		Federal Aid System, City owned -Weathering Steel
3301500	COUNTY ROAD 352	FOX CREEK	575	5.86	Paint, Joints		Federal Aid System
3301400	FOX CREEK ROAD	FOX CREEK	562	5.33	Paint, Joints		Federal Aid System
3301440	COUNTY ROAD 351	TEN MILE CREEK	528	5.75	Paint, Joints		
DECK REPLACEMENT							
3301070	COUNTY ROAD 111	HANNACROIS CREEK	1,360	5.21	Deck Replacement		
3301310	ONESQUETHAW CK RD	ONESQUETHAW CREEK	140	4.63	Deck Replacement		Truss -Replace floorbeams, stringers and deck

Rensselaer County Bridge Preservation First Candidates

Rensselaer County -Preservation Bridge Candidates -2015-2018							***COMMENTS***
BIN	Carried	Crossed	AADT	Condition Rating	Work Type	Bundled Cost $M TBD	
SCOUR, ELEMENT SPECIFIC							
2024650	WINTER STREET	WYNANTS KILL	6,200	5.97	Scour, Bearings, Joints		Federal Aid System -City of Troy Owned
2202330	FIRST STREET	POESTEN KILL	3,589	3.79	Scour		Federal Aid System -City of Troy Owned -Replace
2202340	SECOND STREET	POESTEN KILL	2,250	5.89	Scour, Joints		Federal Aid System -City of Troy Owned
2202200	SOUTH STREET	MILL CREEK	2,027	4.49	Scour		Concrete slab leaking
3303590	CR79BL FACTORY RD	POESTEN KILL	1,440	4.80	Scour, Bearings, Wearing Surface		
PAINT, ELEMENT SPECIFIC							
2025330	151 151 14031002	EAST STREET	8,700	4.50	Paint, Joints, Concrete Repair -9 Spans		Federal Aid System - Do not bundle
3303740	TABORTON RD	HORSE HEAVEN BRK	1,820	4.68	Steel Culverts- need asphalt coating reapplied, Scour		
3303430	COUNTY ROAD 110	OTTER CREEK	1,020	5.09	Paint, Joints		
3303790	PRESBYTERIAN ROAD	KINDERHOOK CREEK	420	4.77	Concrete repairs, Joints, Bearings		No Paint -just element work
DECK REPLACEMENT							
3303420	COUNTY RD 115	TOMHANNOCK BACKWR	1,140	4.77	Deck Replacement, Paint, Concrete Repair, Bearings, Joints		Existing steel girder system to remain
3303400	COUNTY ROAD 117	TOMHANNOCK SPILL	1,020	4.56	Deck Replacement, Bearings, Joints		Truss- replace floorbeams, stringers, and deck

Saratoga County Bridge Preservation First Candidates

Saratoga County -Bridge Preservation Candidates -2015-2018							***COMMENTS***
BIN	**Carried**	**Crossed**	**AADT**	**Condition Rating**	Work Type	Bundled Project Cost $M TBD	
SCOUR, ELEMENT SPECIFIC							
3304280	FISH HOUSE RD C14	KENYETTO CREEK	1,820	4.22	Scour		Twin Concrete arch with steel culverts
2202770	USHERS ROAD	DWAAS KILL	880	5.71	Scour		Steel Culvert
3304740	BARKERSVILLE CR13	CADMAN CREEK	850	4.94	Scour		Steel Culvert
3304280	FISH HOUSE RD C14	KENYETTO CREEK	1,820	4.22	Scour, Concrete Repair		
2202960	4 4 15022011	ANTHONY KILL	15,400	4.72	Scour, Concrete Repair		Federal Aid System, City owned
PAINT, ELEMENT SPECIFIC							
2260020	JONES ROAD	DELAWARE & HUDSON	6,900	5.08	Paint, Bearings, Joints		Federal Aid System
3368290	COUNTY ROAD 27	HUDSON RIVER	6,300	6.07	Paint, Bearings, Joints		Federal Aid System
3304570	CR 49	KAYADEROSSERAS CK	2,800	4.78	Paint, Bearings, Joints		
3304560	CR 49 W MILTON RD	KAYADEROSSERAS CK	2,500	5.42	Paint		
3304630	COUNTY ROAD 54	ALPLAUS KILL	2,100	5.56	Paint, Scour		Federal Aid System
3304640	CR52	ALPLAUS KILL	2,050	5.32	Paint, Concrete repair, joints		Federal Aid System
DECK REPLACEMENT							
2260050	GRAND AVENUE	D & H	8,300	4.82	Deck Replacement		Federal Aid System -City Owned
2202570	ASHDOWN ROAD	DELAWARE & HUDSON	5,700	4.70	Deck Replace, Scour, Paint, Bearings, Joints		Federal Aid System
3304550	CR12 L DESOLA RD	KAYADEROSSERAS CK	1680	4.76	Deck Replacement		

Schenectady County Bridge Preservation First Candidates

Schenectady County -Preservation Bridge Candidates -2015-2018							*COMMENTS*
BIN	**Carried**	**Crossed**	**AADT**	**Condition Rating**	Work Type	Bundled Cost $M TBD	
SCOUR, ELEMENT SPECIFIC							
3304850	BRAMAN CORNERS RD	SCHOHARIE CREEK	553	5.73	Scour, Deck work, Joints, Concrete Pairs		Pier and begin abut need scour protection, Span 2 deck work needed.
PAINT, ELEMENT SPECIFIC							
2203090	CONGRESS STREET	CSX TRANS/ AMTRAK	4,750	5.06	Paint, Concrete Repairs. Joints		Federal Aid System - Do not bundle
3304880	DUANESBG CRCHS RD	S CHUCTANUNDA CRK	340	5.21	Repair plate arch and galvanize		Plate arch culvert
3304960	SCOTCH RIDGE RD	NORMANS KILL TRIB	120	5.56	Paint, Bearings		
DECK REPLACEMENT							
3304970	MUSELBECK ROAD	SANDSEA KILL	9,400	4.73	Deck Replacement, bearings, joints, paint		Steel girders
2203080	FRANCIS AVENUE	890I 890I16012009	3,200	5.08	Deck Work, Paint, Bearings, Joint		Federal Aid System- City bridge- Possible mondeck

Pavement Beyond Preservation Candidates Submitted to NYSDOT Main Office

BP-1 Final Submissions 11/9/12					
County	**Sponsor**	**PIN**	**Description**	**Full Cost (P,D,ROW, C,CI)**	**Index score (from BP-1)**
Rensselaer	NYSDOT	104327	Rt. 9 & 20 from Rt. 4 to Rt. 150	$15.000	8.54
Albany	NYSDOT	112518	Rt. 85 from Albany City Line to I-90	$24.000	8.28
Albany	NYSDOT	180821	Rt. 910D, Washington Ave. Ext. from Fuller Rd to Rt. 155	$12.000	8.22
Rensselaer	East Greenbush	175838	US RTE 4/I-90 EXIT 9 CORRIDOR IMPROVEMENTS	$6.740	7.48
Schenectady	City of Schenectady	175800	Erie/Nott/Jay street intersection improvement	$2.598	7.37
Schenectady	Schenectady Co.	175920	Broadway. CR 161 reconstruction	$2.650	7.08

Pavement Beyond Preservation Candidates Not Submitted to NYSDOT Main Office

BP-1 Final Submissions 11/9/12					
County	**Sponsor**	**PIN**	**Description**	**Full Cost (P,D,ROW, C,CI)**	**Index score (from BP-1)**
Schenectady	Town of Rotterdam	175918	Hamburg Street (within limits of NYSDOT PIN 108533)	$5.060	6.93
Schenectady	Schenectady Co.	175921	Union Street reconstruction	$3.390	5.80
Schenectady	City of Schenectady	175919	Lower State and Washington Ave. reconstruction	$10.940	5.30
Albany	City of Albany	175914	Albany Shaker Road Rehabilitation	$11.070	5.09
Rensselaer	City of Troy	175459	South Troy Industrial Park Road	$13.710	0.00

Bridge Beyond Preservation Candidates Submitted to NYSDOT Main Office

BP-1 Final Submissions 11/9/12

County	Sponsor	PIN	Description	Full Cost (P,D,ROW, C,CI)	BP-1 Index score
Schenectady	NYSDOT	108527	BIN 4038360 Rt 146 over Mohawk River	$20.000	67.30
Washington	NYSDOT	108968	BIN 4001080 RT. 4 OVER GLENS FALLS FEEDER CANAL	$1.300	61.12
Greene	Greene County	New	BIN 3302820, CR 47 over the Kaaterskill Creek	$1.350	58.29
Albany	Albany County	175903	BIN 3301210, WEAVER ROAD OVER BLACK CREEK: BRIDGE RECONSTR.	$1.231	56.37
Schenectady	City of Schenectady	175533	BIN 2203100; Oak Street over CSX Railroad -City of Schenectady	$4.091	55.69
Warren	Warren County	175913	BIN 2203370, BLAIR RD/MILL BROOK, BR REPLACE	$1.569	53.26
Rensselaer	NYSDOT	113060	BIN 1017000 RT. 22 OVER WALOOMSAC	$6.500	52.88
Rensselaer	NYSDOT	104334	BIN 2005510 RT. 9 OVER 9J, 9 OVER AMTRAK&CONRAIL	$10.400	50.97
Saratoga	NYSDOT	123625	BIN 1020680 Rt 29 over Fish Creek	$1.828	50.76
Saratoga	NYSDOT	New	BIN 1033340 Crescent Ave over I-87	$6.175	50.68
Rensselaer	Renss County	175890	BIN 2201740, BROKEN WHEEL RD OVER HOOSICK RIVER BR REPLACE	$0.701	50.65
Greene	Greene County	175924	BIN 3303210, CR17 (JEWETT HGT RD) OVER BATAVIA KILL, GREENE	$1.610	49.80
Rensselaer	City of Troy	New	BIN 2202290 Campbell Avenue over the Wynants Kill,	$1.300	48.71
Albany	NYSDOT	New	BIN 109298C SMX EB to I-787 NB ramp	$4.810	47.81
Greene	NYSDOT	New	BIN 1018000 Rt 23A over Kaaterskill Creek, Town of Catskill, Greene County	$0.900	47.62
Rensselaer	NYSDOT	New	BIN 1079410 Rt 7 over Sunkauissa Creek	$2.080	47.18
Albany	Town of Clifton Park	New	BIN 109297A I787 SB to SMX WB Sm off to Pearl St combine w/ BIN 1092970	$2.990	46.63
Saratoga	Clifton Park	New	BIN 2259980, Carlton Road over Cooley Kill	$0.900	46.47
Albany	NYSDOT	New	BIN 1092970 I787 SB to SMX EB combine w/ BIN 109297A	$8.840	46.32
Washington	Wash. Co	175532	BIN 3306360, CR113 OVER BATTEN KILL	$6.163	45.87
Albany	NYSDOT	New	BIN 109299A SME, I-787 NB to SXE WB	$9.230	44.90
Washington	NYSDOT	New	BIN 1029260 Rt. 67 over the Battenkill RR	$3.380	44.26
Essex	NYSDOT	172202	BINs 1033741, 1033742 I-87 OVER MEGSVILLE RD. BRIDGES	$9.100	43.86
Essex	Essex Co.	New	BIN 3301880 Lord Howe Street over Trout Brook Essex County	$1.750	42.42
Saratoga	NYSDOT	New	BIN 1033300 East High St. over I87	$5.200	41.15
Albany	NYSDOT	New	BIN 1078970 Rt 85A over Vly Creek	$0.975	40.75
Schenectady	City of Schenectady	New	BIN 22023130; Kings Road (CR 65) over CSX, Bridge Preservation	$2.751	34.45

Bridge Beyond Preservation Candidates Not Submitted to NYSDOT Main Office

BP-1 Final Submissions 11/9/12

County	Sponsor	PIN	Description	Full Cost (P,D,ROW, C,CI)	BP-1 Index score
Various	NYSDOT	180924	SUPERSTRUCTURE REPLACEMENT PROJECT, 5 BINS	$7.150	47.62
Schenectady	NYSDOT	175902	BIN 3304930, VAN VORST OVER ALPLAUS KILL: BRIDGE REPLACEMENT	$1.800	31.11
Essex	NYSDOT	172231	I-87 OVER RT. 9 TWO BRIDGES (pokomoonshine)	$2.600	55.08
Essex	NYSDOT	116119	RT. 86 WEST BRANCH OF THE AUSABLE RIVER, TOWN OF NORTH ELBA	$3.250	52.38
Albany	Albany County	175892	BIN 3300880, CR9 OVER FOX CREEK, BRIDGE RECONSTR, ALBANY CO	$2.310	44.62
Rensselaer	City of Rensselaer	175536	BIN 2025330, CR 151 (3RD AVE) OVER EAST ST AND AMTRAK RR	$4.010	40.89
Rensselaer	NYSDOT	100132	RT. 2 OVER RT. 22 AT PETERSBURG (removal)	$2.600	41.12
Albany	NYSDOT	New	Dunn bridge WB to I787 SB	$5.850	39.90
Rensselaer	Town of Sand Lake	New	BIN 2201980; Thais Rd over Wynantskill Rensselaer County	$1.050	39.30
Warren	NYSDOT	101809	RT.28 OVER HUDSON RIVER	$3.380	38.24
Greene	NYSDOT	New	Rt. 23 over 9W	$1.950	37.97
Albany	NYSDOT	New	Dunn Bridge ramp to I787SB	$5.850	37.18
Greene	NYSDOT	101311	RT.42 OVER SCHOHARIE CREEK	$0.975	36.17
Washington	NYSDOT	113070	RT 22 OVER WHITE CREEK	$1.950	35.06
Warren	NYSDOT	172209	DIAMOND POINT RD. OVER I-87	$1.950	31.35
Rensselaer	Renss County	175815	BIN 3303610, CR 68 OVER WYNANTSKILL CRK	$1.472	31.21
Saratoga	NYSDOT	New	I87 over Rt 29	$1.950	29.38
Albany	NYSDOT	100716	RT. 144 OVER HANNACROIS CREEK, COEYMANS	$1.950	28.14
Albany	NYSDOT	New	Water Street over the D&H	$2.730	27.40
Wash	NYSDOT	102407	Rt 196 over GF feeder	$2.643	27.31
Albany	NYSDOT	146042	Rt 32 over Mohawk River	$19.500	27.24
Essex	NYSDOT	138331	RT. 73 OVER CASCADE LAKE OUTLET	$1.300	21.10
Rensselaer	NYSDOT	New	Rt. 150 over Wyanskill Creek	$0.650	18.72
Rensselaer	Rensselaer County	175721	BIN 2201490; SAND BANK RD OVER LITTLE HOOSIC RIVER	$1.063	14.55

Strategic Transportation Enhancement Program (STEP) Candidates Submitted to NYSDOT Main Office

Project	Sponsor	Cost (millions)
I-87 Airport Connector Exit 4	Albany International Airport	$23.000
Washington/Western BRT	CDTA	$26.612
Black Bridge over Catskill Creek	Greene County	$3.000
Route 9 Gateway Corridor Improvement	Town of Lake George	$6.720
Route 50 (I-87 to Broadway)	City of Saratoga Springs	$24.900

Strategic Transportation Enhancement Program (STEP) Candidates Not Submitted to NYSDOT Main Office

Project	Sponsor	Cost (millions)
Bus Rapid Transit Study	City of Cohoes	$0.300
NY 73 (Lake Placid - Cascade Lakes)	NYS DOT	$25.000
Whiteface Veteran's Memorial Highway	Town of Wilmington	$5.500
Greenville Hamlet Corridor	Town of Greenville	$5.830
N. Central Avenue Pedestrian Safety	City of Mechanicville	$0.450
Route 4 Corridor Improvements	Town of North Greenbush	$19.000
East Street Reconstruction	City of Rensselaer	$5.600
Erie Blvd. Corridor	City of Schenectady	$8.500
South Troy Industrial Park Road	City of Troy	$8.500

APPENDIX F - PUBLIC COMMENTS

Although CDTC always entertains public comments, the public review period for the 2013-18 TIP began after the Policy Board meeting on March 7, 2013 and ended on May 7, 2013. One comment was received. That comment, and the response from CDTC staff are shown below.

From: jb6mb@aol.com [mailto:jb6mb@aol.com]
Sent: Saturday, March 16, 2013 6:18 PM
To: comments@cdtempo.org; CDTC; John P. Poorman; David P. Jukins
Subject: Suggested Addition

Mr. Poorman:
Tip# SA108 (PIN 1085.27) & tip# S96 (PIN 1085.31) will not correct the traffic problems on the Rexford Bridge by increasing it to four lanes. Since all the roads that feed it are only two lanes wide it will just move the problems. The traffic is constricted by three bridges Rexford/Balltown Rd NY Rte 146 Bridge, Northway I-87 Bridge, and US Rte 9 Bridge. The Traffic problems are growing on these highways that cross the Mohawk River. All it takes is a small accident or road work to make a traffic jam. Could you study building another two lane bridge between the Northway I-87 Bridges & the Balltown Rd Rte 146 Bridge to reduce the pressure on the existing bridges?

There are three good possible locations the new bridge.

1. A new bridge connecting British American Blvd, in Colonie, to Riverview Rd, in Clifton Park.
2. Or a new bridge connecting Buhrmaster Rd, in Colonie, to Riverview Rd, in Clifton Park.
3. Or a new bridge connecting Vischer Ferry Rd, in Clifton Park with Vischer Ferry Rd, in Niskayuna.
4.

This idea should be able to help all three problem areas for about the same cost.

Sincerely
John Bergener Jr

Dear Mr. Bergener,

Thank you very much for your comments on the draft CDTC 2013-18 Transportation Improvement Program.

The idea of an additional highway crossing of the Mohawk River has been suggested in the past and evaluated by CDTC. The CDTC New Visions Regional Transportation Plan has set the policy that a new river crossing should not be built. There are a number of reasons why CDTC is not recommending a new river crossing.

- **The CDTC New Visions Plan emphasizes congestion management rather than building new highways**. Funding is severely constrained and CDTC has identified maintaining our highways and bridges as a priority. Building a new river crossing highway would have an extremely high cost, and would not be affordable.
- **The improvements planned for the Rexford Bridge and Balltown Road between Riverview Road and Aqueduct Road will make a significant improvement to traffic flow**. A bottleneck exists in this road segment because Aqueduct Road and Balltown Road traffic combines entering the segment from the south, and Balltown Road and Riverview Road traffic combines entering the segment from the north. By improving this segment, the bottleneck will be ameliorated, and traffic flow will improve.
- **Building a new river crossing would significantly increase traffic levels on community streets**. For example, connecting Vischer Ferry Road in Clifton Park to Vischer Ferry Road in Niskayuna would significantly increase traffic on these community streets, leading to negative community impacts. In addition, a new bridge with a new roadway would be likely to experience congestion.
- **A new river crossing over the Mohawk River would be likely to have significant environmental impacts.** Sensitive wetlands and associated ecosystems exist throughout this entire corridor. Significant natural constraints to construction exist in this corridor.

Your comments are sincerely appreciated. Your comments will be presented to the CDTC Policy Board prior to final approval of the TIP.

Michael Franchini
Executive Director

APPENDIX G - SELECTION OF NEW PROJECTS

SPECIAL INTRODUCTORY NOTE

What follows in this appendix is the latest documentation of CDTC's process for selecting new projects. For the 2013-18 TIP update, this process was suspended in order to accommodate the NYSDOT Forward Four initiative. This documentation has been maintained in the 2013-18 TIP in order to provide a starting point for when the suspension of this process is terminated.

INTRODUCTION

Project sponsors are required to complete the Project Justification Package in Appendix I. Information provided by the sponsors is used to determine if the projects meet screening criteria and to produce merit evaluations. Every project is required to meet all of the screening requirements before progressing to merit evaluation. Those passing the screening test are categorized according to type, following the general organization of the budget categories in the *New Visions* Regional Transportation Plan, namely:

Bridges
Pavement
Transit Support
Safety
Community Compatibility/Economic Development
Congestion Relief
Bicycle and Pedestrian

The projects are then evaluated for merit. The results of the merit evaluations are used by CDTC to choose which projects receive funding.

SCREENING PROCESS

Introduction

The following are the screening criteria that must be met for a project to advance to merit evaluations:

1. Consistency with SAFETEA-LU, and CDTC and local plans
2. Provision of local matching funds
3. Defined scope and timing
4. Meeting an identified need
5. Federal-aid eligibility

Consistency with SAFETEA-LU, and CDTC and Local Plans

Regional Transportation Plan: Each proposed project is required to be consistent with the RTP. The relevant RTP is the *New Visions* Regional Transportation Plan, adopted in March 1997. *New Visions* includes a set of 25 Planning and Investment Principles to guide capital programming, in addition to 10 strategies (with 43 implementing actions, long and short term). Consistency with these principles and strategies is required to insure *New Visions* implementation.

Major projects with system level impacts are not considered for TIP programming unless they are a recommended action from *New Visions* or a sub-area or corridor study. Some of these projects may be further subject to a Major Investment Study (MIS) in order to progress towards implementation.

All capacity increasing projects should be consistent with the Congestion Management System (CMS). CDTC has performed extensive analysis of existing congestion in the Capital Region, as documented in CDTC's *Metropolitan Congestion Management System: A Structured Approach to Addressing Congestion Issues in Regional Transportation Plan Development, Short-Range Programming and the Management System*, which was adopted by the CDTC in December of 1995. CDTC's priority is to address existing congestion problems, with projected future congestion being a lesser priority, subject to a "risk analysis" (See *New Visions* Congestion Management Principles for more information).

Boundary Compatibility: Each proposed project is required to be consistent/complimentary with the facility (or proposed facility) in the adjacent jurisdiction if the project is near or crosses a jurisdictional boundary.

Land Use Linkage: Linear capacity improvements are required to be linked to local land use management. To maximize the effectiveness of existing facilities, a plan or commitment to access management, construction of new local streets or provision of supplemental transit services must be in place prior to major capacity work.

Public and Sponsor Support: All projects are required to be consistent with community desires as documented in local land use plans or other policy documents, at public meetings, or through other applicable means.

Seven Planning Issues of TEA-21: ISTEA established sixteen planning factors to be considered in the development of the TIP. TEA-21 summarizes these into seven planning issues. All projects were required to address at least one of these factors, as listed below:

1. Support the economic vitality of the United States, the States and metropolitan areas, especially by enabling global competitiveness, productivity, and efficiency;

2. Increase the safety and security of the transportation system for motorized and nonmotorized users;

3. Increase the accessibility and mobility options available to people and freight;

4. Promote and enhance the environment, promote energy conservation and improve quality of life;

5. Enhance the integration and connectivity of the transportation system, across and between modes, for people and freight;

6. Promote efficient system management and operation; and

7. Emphasize the preservation of the existing transportation system.

Provision of Local Matching Funds

Project sponsors are required to be willing and able to provide the local matching funds. All fund sources are not required to be "in hand", but need to have a "reasonable expectation" of being in place by the year of programming. Specifically, the issue of the provision of the required 20% local match share is required to be directly addressed. Public/private financing possibilities should be addressed, if applicable. Transit operators are required by FTA to document financial capacity in the adopted TIP. All facilities that require an ongoing operating budget to be useful are required to demonstrate that such financial capacity exists.

Defined Scope and Timing

All projects are required to be well defined. Project limits, the intended scope of work, and the project concept need to be clearly stated. Planning projects must have further defined longer-range federally eligible projects. Preliminary engineering and right-of-way are acceptable project phases, provided that the other screening requirements have been met for the project as a whole. Phases of larger construction projects are requested to be usable

segments that will provide benefit to the traveler. Properly completing the Project Justification Package will satisfy these criteria.

Phases programmed in the TIP must be able to be implemented by the end of the five-year programming period in that TIP.

Meeting an Identified Need

All projects are required to be justified based on meeting an identified transportation system need according to below criteria.

Bridge projects are required to meet NYSDOT criteria for a deficient bridge. This includes the following two conditions:

1. **Condition Rating:** The current Federal Sufficiency rating must be less than "50.0", and either (B), (C), or (D) applies;

   (B) State Condition Rating must be less than 3.5 by the year of programming, based on the current rating deteriorated at a rate of 0.1 points per year from the date of last inspection to the year of programming; or

   (C) Structure has one or more primary (critical) structural features[1] rated "2" or less, based on its last inspection; or

   (D) The municipality can demonstrate some deficiency not covered in (B) or (C), which makes major rehabilitation or replacement mandatory within 5 years.

2. **Approach Work**[2]: Approach work should not exceed 25% of the structure cost, or total cost of structure. Approaches using federal-aid should not exceed twice the cost if the project were done with state or local funds.

Pavement Projects: Pavement projects are required to be of a scope that is consistent with implementation with federal-aid funds. Because the pavement condition score does not fully describe overall road conditions or substandard design features, pavement score is not used as a screening criterion, although it plays an influential role in project merit evaluation.

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[1] Defined as (1) Beginning and ending abutment rating, (2) Pier rating (net), (3) Beginning and ending abutment erosion rating, (4) Primary member rating (net), (5) Pier erosion rating (net), where the net rating is the lowest value of all the similar elements rated; e.g. a bridge with two piers, one with a rating of "3" and one with a "4", would have a net pier rating of "3".

[2] Includes any realignment, reconstruction or resurfacing beyond the approach slabs (if any) to the structure. Features such as vertical and horizontal sight distances, curves, grades, intersection approaches adjacent to the structure will be evaluated. A detailed cost estimate is not expected; rather a qualitative assessment will be made.

Mobility Projects: Mobility projects must address a Level of Service of E or below, either under current conditions or projected conditions in the year of programming, in order to be evaluated further.

Other Project Types: Other project types are based on the project justifications provided by the project sponsor. Wherever possible, this justification includes the results of existing management systems or other performance-based standards.

Federal-Aid Eligibility

In a general solicitation, all candidates must be eligible for either the STP or CMAQ program. In a solicitation that is focused on specific fund sources, all candidates must be eligible for at least one of the fund sources being programmed. Eligible types of projects are listed below.

- Highway (limited access facilities)
  - Construction
  - Reconstruction
  - Resurfacing
  - Restoration
  - Operational improvements
  - Safety improvements and programs
  - Research and development and technology transfers

- Bridges
  - Construction
  - Reconstruction, including seismic retrofit
  - Resurfacing
  - Restoration

- Transit
  - Anything eligible for FTA funding, including fixed guideways, vehicles, maintenance facilities. Federal regulations prohibit the use of STP funds for ongoing operating expenses.
  - Safety improvements and programs
  - Research and development and technology transfers

- Streets and Roads (conventional facilities), functionally classified as urban collectors or above, or, in rural areas, minor collectors or above. All old FAU/FAS routes are grandfathered.
  - New signals and signal timing
  - Restriping
  - Resurfacing
  - Bus turnouts

- Construction

- Carpool projects

- Park and Ride lots

- Bicycle and pedestrian projects

- Traffic monitoring, management and control facilities and programs
  - Capital
  - Operating

- Planning programs

- Enhancement activities include the following. Note that Enhancements must relate to surface transportation.

  - the provision of facilities for pedestrians and bicycles,
  - acquisition of scenic easements and scenic or historic sites,
  - scenic or historic highway programs (including provision of tourist and welcome center facilities),
  - landscaping and other scenic beautification,
  - historic preservation,
  - rehabilitation and operation of historic transportation buildings, structures, facilities and canals,
  - preservation of abandoned railway corridors including the conversion and use thereof for pedestrian or bicycle trails,
  - control and removal of outdoor advertising,
  - archaeological planning and research,
  - environmental mitigation of water pollution due to highway runoff,
  - reduction of vehicle-caused wild-life mortality while maintaining habitat connectivity,
  - provision of safety or educational activities for pedestrian and bicyclists, and
  - establishment of transportation museums.

- Transportation Control Measures

- Development and establishment of management systems

- Wetlands mitigation

According to the TEA-21 and additional guidance made available by the FHWA, eligibility for CMAQ funds is achieved by meeting any of the following criteria:

- Projects in the adopted State Implementation Plan (SIP): As a marginal nonattainment area eligible for maintenance certification, the Capital District has no projects listed in the current SIP.

- Specific Transportation Control Measures (TCMs) listed in the Clean air Act Amendments of 1990, Section 108:

  (b)(1)(A)

  (i) programs for improved public transit;
  (ii) restriction of certain roads or lanes to, or construction of such roads or lanes for use by, passenger buses or high occupancy vehicles;
  (iii) employer-based transportation management plans, including incentives;
  (iv) trip reduction ordinances;
  (v) traffic flow improvement programs that achieve emission reductions;
  (vi) fringe and transportation corridor parking facilities serving multiple occupancy vehicle programs or transit service;
  (vii) programs to limit or restrict vehicle use in downtown area or other areas of emission concentration particularly during periods of peak use;
  (viii) programs for the provision of all forms of high-occupancy, shared-ride services;
  (ix) programs to limit portions of road surfaces or certain sections of the metropolitan area to the use of non-motorized vehicles or pedestrian use, both as to time and place;
  (x) programs for secure bicycle storage facilities and other facilities, including bicycle lanes, for the convenience and protection of bicyclists, in both public and private areas;
  (xi) programs to control extended idling of vehicles;
  (xii) programs to reduce motor vehicle emissions, consistent with Title II, which are caused by extreme cold start conditions;
  (xiii) employer-sponsored programs to permit flexible work schedules;
  (xiv) programs and ordinances to facilitate non-automobile travel, provision and utilization of mass transit, and to generally reduce the need for single-occupant vehicle travel, as part of transportation planning and development efforts of a locality, including programs and ordinances applicable to new shopping centers, special events, and other centers of vehicle activity;
  (xv) programs for new construction and major reconstruction of paths, tracks or areas solely for the use by pedestrian or other non-motorized means of transportation when economically feasible and in the public interest. For the purposes of this clause, the Administrator shall also consult with the Secretary of the Interior; and
  ~~(xvi)~~ EXCLUDED BY TEA-21: ~~programs to encourage the voluntary removal from use and the marketplace of pre-1980 model year light duty vehicles and pre-1980 model light duty trucks.~~

- Developing and establishing management systems for traffic congestion, public transportation facilities and equipment, and intermodal transportation facilities and systems demonstrably contributing to attainment;

- Capital and operating cost of traffic monitoring, management, and control facilities and programs demonstrably contributing to attainment; and the

- Construction of bicycle and pedestrian facilities.

CMAQ Eligibility

Eligible projects are those which achieve measurable emissions reductions, and which do not involve construction of new capacity for single-occupant vehicles. From the federal list, these include:

- transportation activities in an approved State Implementation Plan,
- transportation control measures to assist areas designated as nonattainment under the Clean Air Act Amendments (CAAA) of 1990,
- pedestrian/bicycles off-road or on-road facilities including modification of existing public walkways to comply with the Americans with Disabilities Act,
- ISTEA management and monitoring systems,
- traffic management/monitoring/congestion relief strategies,
- transit (new system/service expansion or operations),
- alternative fuel projects (including vehicle refueling infrastructure),
- public/private partnerships and initiatives,
- inspection and maintenance (I/M) programs,
- intermodal freight ,
- alternative fuels (including clean fuel fleet programs and conversions),
- telecommunications,
- travel demand management,
- project development activities for new services and programs with air quality benefits,
- public education and outreach activities,
- rideshare programs,
- establishing/contracting with transportation management associations (TMAs),
- fare/fee subsidy programs,
- experimental pilot projects/innovative financing, and
- other Transportation projects with air quality benefits.

NHS Eligibility

The below improvements are eligible for NHS funds if the improvement is made on segments of the NHS. Construction of, and operational improvements for, a Federal-aid highway not on the NHS and construction of a transit project eligible for assistance under the Federal Transit Act if (a) such highway or transit project is in the same corridor as, and in proximity to, a fully access controlled NHS highway, (b) the construction or improvements will improve the level of service on the fully access controlled highway and improve regional travel, and (c) the construction or improvements are more cost-effective than work on the fully access controlled NHS highway would be to provide the same benefits.

Funds apportioned to a State for the NHS may be obligated for:

- Construction, reconstruction, resurfacing, restoration, and rehabilitation,
- Operational improvements,
- Highway safety improvements,
- Transportation planning in accordance with 23 U.S.C. 134 and 135,
- Highway research and planning in accordance with Chapter 5 of Title 23, United States Code,
- Highway related technology transfer activities,
- Capital and operating costs for traffic monitoring, management, and control facilities and programs,
- Fringe and corridor parking facilities,
- Carpool and vanpool projects,
- Bicycle transportation and pedestrian walkways in accordance with 23 U.S.C. 217,
- Development and establishment of management systems under 23 U.S.C. 303,
- Natural habitat and wetlands mitigation efforts related to Title 23 projects,
- Publicly-owned intracity or intercity bus terminals,
- Infrastructure-based intelligent transportation systems capital improvements, and
- In the Virgin Islands, Guam, American Samoa, and the Commonwealth of the Northern Mariana Islands, any project eligible for STP funds, any airport and any seaport.

The following is a list of NHS Road segments in the CDTC programming area:

Fully Access-Controlled Highways

All Interstate Highways (I-87, I-88, I-90, I-787, I-890)
NY 7 from I-87 east to I-787
NYS Thruway Berkshire Spur (NY912M) from I-87 east to I-90

Other Highways

NY 7 from I-890 east to I-87
NY 7 from I-787 east to Vermont State Line
NY 29 from Fulton County line east to US 9 / NY 50
Erie Boulevard from I-890 north to Freemans Bridge Road

Freemans Bridge Road from Erie Boulevard to NY 50
NY 50 from Freemans Bridge Road north to I-87
US 9 from Columbia County line north to I-90
US 9 from I-87 north to NY 197
NY 197 from US 9 east to Washington County line
US 20 from Columbia county line north to I-90
US 20 from Schoharie county line east to I-88

Intermodal Access Highways

Albany Shaker Road from NY 7 south to I-87
Old Niskayuna Road from NY 7 south to Kelly Road
Kelly Road from Old Niskayuna Road to Albany Air Cargo Facility Dr.
US 20 from I-787 to Broadway (City of Rensselaer)
Broadway (City of Rensselaer) from US 20 to Partition Street
Partition Street from Broadway to East Street
East Street from Partition Street to Albany-Rensselaer AMTRAK sta.
Green Street (City of Albany) from I-787 to Church Street
Church Street from Green Street to First Street (Port of Albany)
Old School Road (Bethlehem) from Selkirk Rail Yard to Creble Rd.
Creble Road from Old School Road to US 9W
US 9W from Creble Road to NY 396
NY 396 from US 9W to I-87

MERIT EVALUATION CRITERIA

Every project that meets the minimum requirements (screening criteria) is fairly evaluated. The merit evaluation procedure uses the best available information from CDTC's models, from corridor studies, and from project sponsors. Wherever possible, measures that cut across modes, such as relative cost effectiveness, are used. The qualitative benefits of projects are directly incorporated into this merit evaluation procedure. This merit evaluation emphasizes different project attributes, although the same criteria are used, for the following project types:

- Bridge projects;
- Pavement projects;
- Transit Support projects;
- Safety projects;
- Bicycle and Pedestrian projects;
- Community Compatibility and Economic Development projects; and
- Mobility and Congestion Relief projects.

The data required for project analysis is outlined below.

Project merit evaluations are presented using a common format, as shown in the blank Project Evaluation Fact Sheet on page G-13. The merit evaluation procedure is detailed in Appendix H.

FIGURE 1
BLANK PROJECT FACT SHEET

CANDIDATE #, CANDIDATE NAME

LOCATION: **DESCRIPTION:** **PROJECT TYPE:** **COST:** $ M (total all phases) **LIFE:** yr **SPONSOR:** **CURRENT CONDITION:** **FUNCTIONAL CLASS:** **AADT:** **PRIORITY NETWORK(S):**	**BENEFIT/COST RATIO** TOTAL BENEFITS (k$/yr) SAFETY TRAVEL TIME ENERGY/USER LIFE CYCLE VALUE OTHER ANNUALIZED COST (k$/yr)

CONGESTION RELIEF:
AIR QUALITY BENEFIT:
REGIONAL SYSTEM LINKAGE:

LAND USE COMPATIBILITY (PLANNED OR EXISTING):
COMMUNITY OR ECONOMIC DEVELOPMENT:
ENVIRONMENTAL ISSUES:
BUSINESS OR HOUSING DISLOCATIONS:

BICYCLING:
WALKING:
GOODS MOVEMENT:
TRANSIT USE:
INTERMODAL TRANSFERS:

SCREENING ISSUES:
OTHER CONSIDERATIONS:

Programming Criteria and Principles

The TIP as a whole, must, according to federal law, conform to the Federal Clean Air Act, be financially "reasonable", be consistent with the long-range plan, and address seven planning issues spelled out in TEA-21. Conformity with the Federal Clean Air Act must be determined, in cooperation with NYSDOT, using a methodology developed cooperatively by NYSDOT and the U.S. Environmental Protection Agency (EPA). This methodology, which uses CDTC's Systematic Evaluation and Planning (STEP) model to estimate PM peak hour Vehicle Miles Traveled (VMT) and speed data, incorporates projected changes in land use and population and emissions estimates from the Environmental Protection Agency's MOBILE 5B software. Model runs are done after the TIP had been formulated. Financial "reasonability" is determined both at the project level and for the program as a whole. Consistency with the long range plan is determined on a project level at the time projects were screened for inclusion in the TIP, and the implementation of *New Visions* goals and objectives was one of the primary programming considerations, as outlined below. In addition, the Air Quality conformity analysis included examination of the long-range plan that has the five-year TIP as a component.

The goal of CDTC is to produce a "balanced" TIP that contributes to implementation of the *New Visions* plan. The CDTC approach meets both the letter and spirit of federal regulations by allowing CDTC to look at the array of projects and their relative merit, and to establish a program that best implements the range of goals included in the RTP. The following criteria/principles were intended to produce the best possible program of projects to benefit the Capital District transportation system, regardless of mode.

Geographic and Sponsor Distribution

The STP and CMAQ programs have minimal requirements for geographic distribution of funding. Considerations of geographic equity must stem from considerations addressed in the planning process. CDTC based its programming decisions upon relative project merit and the balanced attainment of progress towards long-range goals -- not on geographic considerations apart from *New Visions*.

Commitments Beyond Five Years

An emphasis on implementation of the long range plan goals and objectives should not lead to a program that creates larger future funding commitments than funds can reasonably be expected to be available.

CDTC's FTA Section 5307 Project Selection Process

The Capital District Transportation Authority (CDTA) is primarily responsible for submitting the requests to CDTC for transit related funded projects. This includes transit operating

assistance, equipment and support facilities. Unlike the project selection process for flexible funds described above, CDTC normally defers to the judgment of CDTA, the region's public transit operator, for project recommendations for transit fund sources from the state and federal governments.

Candidate capital projects are identified through transit improvement studies and evaluations of fleet and other capital requirements, keeping in mind transit development goals and supporting objectives established as part of CDTA's Capital Planning Process. CDTA maintains a short-range transit capital plan that identifies a series of actions and strategies that provide the basis for coordinating and prioritizing CDTA transit capital improvements. The TIP follows directly from the plan and generally is a simple project listing. Details of CDTA's capital program components are included in Appendix A. The final decisions regarding project inclusion in the program are made by CDTC on a recommendation from the Planning Committee.

Private Sector Participation in the Transit TIP

Projects proposed by private operators are also entertained under CDTC's TIP process, in accordance with CDTC's *Private Operators Policy*, adopted on February 19, 1987. For these projects, public sponsorship is a prerequisite for receiving federal or state financial assistance. Programming of funds by CDTC is based on the priority of the service need and on integration of the service into the regional transit system. CDTC's *Private Operators Policy* also identifies a set of policies and evaluation criteria with which to review private operators proposals. Involvement in the planning process is encouraged through routine notification of private operators.

PROGRAMMING NEW PROJECTS

Round One Programming

Round One programming is the phase of program building that considers new projects based on merit. Projects are grouped by category and arrayed according to merit after filtering the projects. The filtering process used is identical to that which proved successful in the last major CDTC programming effort in 1997. The filtering process focuses upon assigning Round One funds to cost-effective projects in important locations.

In each category, projects are listed in descending order of quantitative benefit/cost ratio in two groups: those that pass at least two filters and those that do not. The three filters are detailed below.

Benefit/Cost Ratio: Projects whose Benefit/Cost ratios are in the top half of the Benefit/Costs of a given category pass this filter. Those in the bottom half, fail this filter. For Bicycle/Pedestrian projects, a Weighted Score is used instead of Benefit/Cost ratios.

Functional Classification: Projects are awarded a passing status for this filter if the proposed work is on an NHS road or Principal Arterial. Other projects fail this filter. This filter serves as a way to make sure that regionally significant facilities are elevated in consideration.

Priority Network Score: Every project is assigned a priority network score. Projects in the top half of the priority network scores of a given category pass this filter. New Visions task forces defined priority networks as a way to focus investment where it is needed most and where the ultimate project design is likely to achieve multiple objectives. Priority network status is used as (an admittedly imperfect) proxy for the extent to which a project implements New Visions goals and principles. Relevant priority networks are assigned by project type, namely:

Project Category	**Relevant Priority Networks**
Bridge	Bicycle/Pedestrian and Freight
Pavement	All
Safety	All
Transit	All but Freight
Economic Development	All
Mobility	All
Bicycle/Pedestrian	Bicycle/Pedestrian, Access Management, Transit

CDTC Staff assigned points to specific projects as follows:

- 3 points for being on a relevant priority network with features that address priority network concerns;

- 2 points for being on the network (but no known features at this time);
- 1 point for including features (even if not on the network); and
- 0 points for not being on the network, and including no known features.

The following text is lifted from the New Visions 2021 plan to describe the contents of each of the priority networks.

Bicycle and Pedestrian Priority Network: A bicycle and pedestrian priority treatment network provides a "backbone" for a region-wide bicycle and pedestrian travel system. The network of approximately 355 miles contains those facilities which have high existing or potential bicycle and pedestrian travel but also present many barriers, including high traffic volumes/speeds, limited pavement space and busy or confusing traffic patterns. These facilities connect major activity centers, are accessible to residential areas via local roads, and have few practical alternatives nearby. The facilities included in the network are listed in the *Making the Capital District More Bicycle- and Pedestrian-Friendly: A Toolbox and Game Plan* technical report.

Arterial (or Access) Management Priority Network: The New Visions report entitled Land Use/Traffic Conflict Inventory and Measurement contains level of compatibility ratings for over 275 roads covering nearly 850 miles of Capital District roadway. The access management priority network is defined as:

- Those road segments that show a high degree of conflict between commercial or residential land use and traffic, resulting in poor compatibility (Level of Compatibility D, E or F); and

- Additional road segments where either the potential for commercial development or intrusion of vehicle traffic through residential corridors is high, or significant deterioration in arterial corridor function is forecast to occur by 2015.

This priority network tentatively includes about 220 miles of roadway. The network is predominantly composed of state highways in suburban towns.

Goods Movement Priority Network: The proposed priority road network for goods movement in the Capital District includes:

- The National Highway System, including intermodal connectors (approximately 826 lane-miles); and

- State touring routes that currently carry more than 10% trucks in the traffic flow (approximately 150 centerline miles).

Transit Priority Network: Traditionally-strong transit corridors such as NY 5, NY 32, US 20, US 4, and downtowns and potentially-strong corridors such as NY 7, US 9, NY 155 and Wolf Road represent priorities for improvements to transit amenities. Transit amenities

include bus stops, pull outs, and park and ride facilities. However, the single most important action to improve transit accessibility is a significant increase in sidewalk and crosswalk provision and maintenance throughout the region.

Intelligent Transportation System (ITS) Network: The Expressway Management Task Force identified a network of expressway and arterial facilities as the platform for the regional ITS. There should be centrally coordinated traffic control and/or guidance along these facilities. The logic is that advising travelers of preferable alternatives before they enter the most congested areas and facilitating smooth flows along the alternatives can keep overall traffic conditions from worsening. The regional ITS network contains:

- Priority expressways
- Arterials representing their immediate alternatives (ordinarily either parallel to or connecting the expressways)
- Their secondary alternatives (which entail more surface street travel), and
- Other arterials that are strategically important because they are spurs of the priority arterials and/or carry traffic across major travel gateways.

A county-by-county listing of this over 250 centerline mile network is included in the *Expressway Management Task Force Technical Report*.

Round Two Programming

Round Two provides funds for projects from any category for any reason, insuring an opportunity for projects whose benefits don't quantify well.

Round Three Programming

After public review, in step three, CDTC may program the balance of the funds to projects, insuring some ability to respond to public comment.

APPENDIX H – CDTC'S MERIT EVALUATION PROCEDURE

SPECIAL INTRODUCTORY NOTE

What follows in this appendix is the latest documentation of CDTC's process for evaluating new project candidates. For the most part, in the 2013-18 TIP update, this process was suspended in order to accommodate the NYSDOT Forward Four initiative. (The process was used to evaluate projects submitted to the Main Office for Beyond Preservation funds.) The documentation of this procedure has been maintained in the 2013-18 TIP in order to provide a starting point for when it is used again.

BENEFIT/COST CALCULATIONS

Introduction

Benefit to cost ratios are calculated by CDTC staff whenever possible. They are shown in the box in the upper right-hand corner of the project fact sheet. Consistent units of thousands of current dollars per year are used throughout. Instances where a benefit/cost ratio calculation is inappropriate or unable to be calculated are handled by further elaboration of the "non-quantifiable" or "qualitative" project benefits. Bicycle and pedestrian projects are handled differently, as explained below.

Five measures of project benefit are calculated, including safety, travel time, energy/user, and "other" benefits. Life cycle cost savings are applied primarily to infrastructure improvements. Life cycle cost savings are calculated by using the CDTC STEP Model to estimate the system traffic disbenefits of letting a bridge or pavement section deteriorate to the point of abandonment.

Safety Benefits

Safety benefits are measured in the dollar value of the projected reduction in crashes per year calculated by using the steps described below. Established counter measures and crash reduction factors are used to estimate the safety benefit of each project.

Project Limit Crash Data Summaries

Using the NYSDOT Accident Location Information System (ALIS) and Safety Information Management System (SIMS), crash data are obtained for each of the candidate project segments for a five-year period for state roads and a three-year period for non-state roads (i.e. "pre-project crashes"). CDTC staff then tallies a project specific crash summary for each project candidate.

This crash summary breaks out crashes by intersection and link, and crash type and severity in terms of fatality, injury, property damage only, and whether a bicyclist or pedestrian was involved. The crash severity is then used to assign project specific average crash costs based on methodology described in form TE 164a (9/91) as contained in the NYSDOT document Highway Safety Improvement Program Procedures and Techniques.

Average crash costs by crash type and applicable facility type, also distinguished by link or intersection, are obtained from the most recent NYSDOT Table entitled NYSDOT-Safety Information Management System Average Accident Costs/Severity Distribution State Highways shown on the pages below (for display purposes the severity distribution is omitted).

Identification of Countermeasures and Application of Crash Reduction Factors (CRFs)

The information provided by the project sponsor regarding planned improvements to be undertaken for each proposed project is used to identify applicable countermeasures and corresponding crash reduction factors. Staff uses judgment in selecting crash reduction factors obtained from the most recent information available on crash reduction factors from a variety of sources including, FHWA, NYSDOT and other research. Countermeasures and CRFs include those that apply to both motorized and non-motorized crash types. One major data source for countermeasures and corresponding crash reduction factors is the Desktop Reference for Crash Reduction Factors Report No. FHWA-SA-08-011 U.S. Department of Transportation Federal Highway Administration September 2008 available at: http://safety.fhwa.dot.gov/tools/crf/desk_ref_sept2008/desk_ref_sept2008.pdf.

Examples of crash reduction factors contained in the FHWA Desktop Reference are shown in Table H-1. (Note: CDTC continues to research crash reduction factors and will further update this data prior to its use in the 2009 project evaluation process.)

TABLE H-1
CRASH REDUCTION FACTORS EXAMPLES

Desktop Reference for Crash Reduction Factors — Intersection Crashes

Countermeasure(s)	Crash Type	Crash Severity	Area Type	Config	Control	Major Daily Traffic Volume (veh/day)	Minor Daily Traffic Volume (veh/day)	Ref	Obs	Effectiveness: Crash Reduction Factor / Function	Effectiveness: Std Error	Effectiveness: Range Low	Effectiveness: Range High	Study Type
Install advance warning signs (positive guidance)	All	All	All					1		35				
	All	All			Signal			28		22		3	40	
	All	All	Urban					15		30				Cross-section
	All	All	Rural					15		40				
	Right-angle	All			Signal			47	11	35		20	100	Simple Before-After
	Right-angle	All			Signal			28		35				
Provide overhead lane-use signs	Rear-end	All						51		10				
	Sidewipe	All						51		20				
PAVEMENT MARKINGS/MODIFICATIONS														
Add centerline and move STOP bar to extended curb lines	All	All			No signal			28		29				
	Right-angle	All			No signal			28		24				
Add centerline and move STOP bar to extended curb lines, double stop signs	All	All			No signal			28		9				
	Right-angle	All			No signal			28		0				
Add centerline and STOP bar, replace 24-inch with 30-inch stop signs	Right-angle	All			No signal			47		67	11	27	100	Simple Before-After
	Right-angle	All			No signal			28		67				
Improve pavement friction (groove)	All	All						28		25				
	Wet	All						28		59		42	75	
Improve/install pedestrian crossing	All	All						15		25				
	Ped	All						15		25				
Install pedestrian crossing	Ped	All						15		25				
	Ped	All						15		25				
	Ped	Fatal/Injury	Rural					38		60				EB Before-After
Install pedestrian crossing (raised)	All	All						5		30	67			Meta-analysis
	All	Fatal/Injury						5		36	54			Meta-analysis
	Ped	All						28		8				

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Countermeasures and applicable crash reduction factors from NYSDOT are available at: https://www.nysdot.gov/divisions/operating/osss/highway-repository/accident%20reduction%20factor.pdf

Additional crash reduction factors gleaned from other available research are illustrated in Table H-2A.

Crash reduction factors (CRFs) are separated into various groups: those that can be applied project-wide against link crashes, those that can be applied project-wide against intersection crashes, those to be applied at distinct locations within the project limits (i.e. specific intersections or curves for example) and those that can be applied against bicycle/motor vehicle or pedestrian/motor vehicle accidents only. Examples of project wide crash reduction factors include drainage improvements or shoulder widening. Intersection channelization or realignment of horizontal curves are factors related to intersections or distinct locations. Where multiple CRFs are applicable to a project, judgment is applied to determine whether it is most reasonable to average the CRFs or apply the one with the highest percent potential reduction in crashes, or apply that with greatest potential effectiveness.

Safety Benefit Calculation Steps:

Step 1: Multiply pre-project crashes by applicable crash reduction factors (CRF) to arrive at an estimate of post-project reduced number of crashes by link and intersection. If the crash history for a project area includes bike, pedestrian or severe crashes and the proposed project includes countermeasures to address these and there are applicable CRFs related to these countermeasures, pre-project and post-project reduced crashes are tallied for these categories as well.

Step 2: Subtract annualized post-project crashes from pre-project crashes to arrive at an estimate of crashes avoided due to the project.

Step 3: Multiply estimate of crashes avoided due to the project by project specific average crash cost (weighted by severity as described above) to arrive at dollar $ value of the project's estimated safety benefit. Crash costs are shown in Table H-2B.

TABLE H-2A
EXAMPLES OF ADDITIONAL CRASH REDUCTION FACTORS FROM VARIOUS SOURCES

Improvement	Average Reduction (% of Crashes) >5000 AADT/ln/<5000 AADT/ln	Remarks/Source
Consolidation of driveways	20/20	NYSDOT's 1995/1996 Five-Year Program included an estimate of a 26% reduction in accidents at locations where arterial management techniques are applied including consolidating driveways, inter-connecting parking lots, installation of frontage roads, etc. Azzeh et. al reported an estimated 20% reduction in accidents after consolidation of driveways.
Improvement	**Average Reduction (% of Crashes)** >5000 AADT/ln/<5000 AADT/ln	**Remarks/Source**
Installation of service roads	17/17	Wolf Road/Exit 3 Area Transportation System Study Planning Report, CDTC, March 1990
Installation of sidewalks	50/50	FHWA's Investigation of Exposure-based Pedestrian Accident Areas: Crosswalks, Sidewalks, Local Streets and Major Arterials. RD -88-038, Knoblauch, RI, Justin, BH, Smith, SA et al, 1988. Applied against pedestrian/mv accidents only
Painted and/or raised bicycle crossing at intersections - assumed to be installed with all bike lane projects	30/30	An estimated reduction of 30% in bicycle/motor vehicle accidents due to installation of raised and painted bike lane/path intersection crossing (Garder, Leden, and Pulkkinen, 1998) Applied against bicycle/mv accidents only
Traffic calming (bulb outs, etc)	40/40	Estimated 40% reduction in all intersection accidents from traffic calming aggregating for all improvement types including bulbouts, narrowings, crosswalks, etc. according to "Safety Benefits of Traffic Calming", Zein, Geddes, Hemsing, Johnson, 1997, Transportation Research Record 1578. Applied against intersection accidents only
Installation of pedestrian refuge island	57/57	Geddes et al found the following levels of crash reduction traffic circles and chicanes, 82% … multiple measures 65% … pedestrian refuges 57%. "Safety Benefits of Traffic Calming" Zein, Geddes, Hemsing, Johnson, 1997, Transportation Research Record 1578
Installation of Roundabout	39/39	According to Insurance Institute for Highway Safety as published in "Crash Reductions Following Installation of Roundabouts in the United States", by Persaud, Retting, et. al., March 2000. This figure was cited by the NYSDOT Roundabout group in a presentation made to the CDTC Policy Board in June 2004. This 39% is a conservative number with smaller, single lane roundabouts typically achieving higher rates of reduction than large, multilane roundabouts. Aggregated over all types, the Insurance Institute also states that 76% reductions were found for all injury accidents. Reductions in the numbers of fatal and incapacitating injury accidents were estimated to be about 90%. The most recent data available will be used for this CRF and are found in the FHWA report http://safety.fhwa.dot.gov/tools/crf/desk_ref_sept2008/desk_ref_sept2008.pdf
Travel Demand Management (TDM) Strategies	1:1 ratio	Available evidence suggests that a 10% reduction in mileage in an area provides a 10% (to 14%) reduction in crashes. ("Safe Travels: Evaluating Mobility Management Traffic Safety Impacts", Victoria Transport Policy Institute, Littman and Fitzroy, 2009) http://www.vtpi.org/safetrav.pdf

TABLE H-2B
AVERAGE CRASH COSTS

			Crash Severity Distribution (%)				Average Crash Costs				
		Classification	Fatal	Injury	Fatal/Injury	PDO*	Fatal	Injury	Fatal/Injury	PDO*	Average
1	L	FULL ACCESS, RURAL, DIVIDED, 4 LANE	0.41	16.36	16.77	83.22	$3,387,000	$90,500	$171,600	$5,200	$33,100
2	A	FULL ACCESS, RURAL, DIVIDED, 4 LANE	0.41	16.46	16.87	83.12	$3,382,000	$90,500	$171,400	$5,200	$33,200
3	L	FULL ACCESS, RURAL, DIVIDED, 5 LANE	0.41	16.36	16.77	83.22	$3,387,000	$90,500	$171,600	$5,200	$33,100
4	A	FULL ACCESS, RURAL, DIVIDED, 5 LANE	0.41	16.46	16.87	83.12	$3,382,000	$90,500	$171,400	$5,200	$33,200
5	L	FULL ACCESS, RURAL, DIVIDED, 6 LANE	0.41	16.36	16.77	83.22	$3,387,000	$90,500	$171,600	$5,200	$33,100
6	A	FULL ACCESS, RURAL, DIVIDED, 6 LANE	0.41	16.46	16.87	83.12	$3,382,000	$90,500	$171,400	$5,200	$33,200
7	L	FULL ACCESS, RURAL, DIVIDED, ALL LANES	0.41	16.36	16.77	83.22	$3,387,000	$90,500	$171,600	$5,200	$33,100
8	A	FULL ACCESS, RURAL, DIVIDED, ALL LANES	0.41	16.46	16.87	83.12	$3,382,000	$90,500	$171,400	$5,200	$33,200
9	L	FULL ACCESS, RURAL, UNDIVIDED, 2 LANE	0.53	19.62	20.15	79.85	$3,906,200	$90,700	$190,600	$5,200	$42,600
10	A	FULL ACCESS, RURAL, UNDIVIDED, 2 LANE	0.58	21.82	22.40	77.6	$3,711,500	$95,000	$188,400	$5,200	$46,200
11	L	FULL ACCESS, RURAL, UNDIVIDED, ALL LANES	0.53	19.62	20.15	79.85	$3,906,200	$90,700	$190,600	$5,200	$42,600
12	A	FULL ACCESS, RURAL, UNDIVIDED, ALL LANES	0.58	21.82	22.40	77.6	$3,711,500	$95,000	$188,400	$5,200	$46,200
13	L	FULL ACCESS, URBAN, DIVIDED, 4 LANE	0.37	36.93	37.30	62.7	$3,607,100	$96,700	$131,800	$3,800	$51,500
14	A	FULL ACCESS, URBAN, DIVIDED, 4 LANE	0.37	37.49	37.86	62.14	$3,572,700	$96,600	$130,600	$3,800	$51,800
15	L	FULL ACCESS, URBAN, DIVIDED, 5 LANE	0.37	36.93	37.30	62.7	$3,607,100	$96,700	$131,800	$3,800	$51,500
16	A	FULL ACCESS, URBAN, DIVIDED, 5 LANE	0.37	37.49	37.86	62.14	$3,572,700	$96,600	$130,600	$3,800	$51,800
17	L	FULL ACCESS, URBAN, DIVIDED, 6 LANE	0.37	36.93	37.30	62.7	$3,607,100	$96,700	$131,800	$3,800	$51,500
18	A	FULL ACCESS, URBAN, DIVIDED, 6 LANE	0.37	37.49	37.86	62.14	$3,572,700	$96,600	$130,600	$3,800	$51,800
19	L	FULL ACCESS, URBAN, DIVIDED, 7 LANE	0.37	36.93	37.30	62.7	$3,607,100	$96,700	$131,800	$3,800	$51,500
20	A	FULL ACCESS, URBAN, DIVIDED, 7 LANE	0.37	37.49	37.86	62.14	$3,572,700	$96,600	$130,600	$3,800	$51,800
21	L	FULL ACCESS, URBAN, DIVIDED, ALL LANES	0.37	36.93	37.30	62.7	$3,607,100	$96,700	$131,800	$3,800	$51,500
22	A	FULL ACCESS, URBAN, DIVIDED, ALL LANES	0.37	37.49	37.86	62.14	$3,572,700	$96,600	$130,600	$3,800	$51,800
23	L	FULL ACCESS, URBAN, UNDIVIDED, ALL LANES	0.35	32.25	32.60	67.41	$3,260,800	$91,700	$125,400	$3,800	$43,400
24	A	FULL ACCESS, URBAN, UNDIVIDED, ALL LANES	0.41	33.09	33.50	66.5	$3,251,100	$92,600	$130,900	$3,800	$46,400
25	L	PARTIAL ACCESS, RURAL, DIVIDED, 4 LANES	0.19	18.60	18.79	81.2	$3,245,600	$82,300	$114,900	$5,200	$25,800
26	A	PARTIAL ACCESS, RURAL, DIVIDED, 4 LANES	0.18	19.40	19.58	80.42	$3,245,600	$85,900	$114,800	$5,200	$26,600
27	L	PARTIAL ACCESS, RURAL, DIVIDED, ALL LANES	0.19	18.6	18.79	81.2	$3,245,600	$82,300	$114,900	$5,200	$25,800
28	A	PARTIAL ACCESS, RURAL, DIVIDED, ALL LANES	0.18	19.4	19.58	80.42	$3,245,600	$85,900	$114,800	$5,200	$26,600
29	L	PARTIAL ACCESS, RURAL, UNDIVIDED, 2 LANES	1.12	17.79	18.91	81.09	$4,123,300	$94,100	$332,900	$5,200	$67,200
30	A	PARTIAL ACCESS, RURAL, UNDIVIDED, 2 LANES	1.09	21.17	22.26	77.74	$3,956,100	$101,500	$289,500	$5,200	$68,500
31	L	PARTIAL ACCESS, RURAL, UNDIVIDED, ALL LANES	1.12	17.79	18.91	81.09	$4,123,300	$94,100	$332,900	$5,200	$67,200
32	A	PARTIAL ACCESS, RURAL, UNDIVIDED, ALL LANES	1.09	21.17	22.26	77.74	$3,956,100	$101,500	$289,500	$5,200	$68,500
33	L	PARTIAL ACCESS, URBAN, DIVIDED, 4 LANES	0.34	31.6	31.94	68.06	$3,524,700	$91,600	$128,000	$3,800	$43,500
34	A	PARTIAL ACCESS, URBAN, DIVIDED, 4 LANES	0.32	32.54	32.86	67.14	$3,567,100	$92,000	$126,400	$3,800	$44,100
35	L	PARTIAL ACCESS, URBAN, DIVIDED, 6 LANES	0.34	31.6	31.94	68.06	$3,524,700	$91,600	$128,000	$3,800	$43,500
36	A	PARTIAL ACCESS, URBAN, DIVIDED, 6 LANES	0.32	32.54	32.86	67.14	$3,567,100	$92,000	$126,400	$3,800	$44,100
37	L	PARTIAL ACCESS, URBAN, DIVIDED, ALL LANES	0.34	31.6	31.94	68.06	$3,524,700	$91,600	$128,000	$3,800	$43,500
38	A	PARTIAL ACCESS, URBAN, DIVIDED, ALL LANES	0.32	32.54	32.86	67.14	$3,567,100	$92,000	$126,400	$3,800	$44,100
39	L	PARTIAL ACCESS, URBAN, UNDIVIDED, 2 LANES	0.32	32.37	32.69	67.31	$3,254,600	$91,800	$122,900	$3,800	$42,800
40	A	PARTIAL ACCESS, URBAN, UNDIVIDED, 2 LANES	0.2	33.4	33.6	66.4	$3,254,600	$91,100	$109,800	$3,800	$39,400
41	L	PARTIAL ACCESS, URBAN, UNDIVIDED, ALL LANES	0.32	32.37	32.69	67.31	$3,254,600	$91,800	$122,900	$3,800	$42,800
42	A	PARTIAL ACCESS, URBAN, UNDIVIDED, ALL LANES	0.2	33.4	33.6	66.4	$3,254,600	$91,100	$109,800	$3,800	$39,400
43	L	FREE ACCESS, RURAL, DIVIDED, 2 LANES	0.23	21.03	21.26	78.74	$3,256,000	$92,200	$126,500	$5,200	$31,000

			Crash Severity Distribution (%)				Average Crash Costs				
		Classification	Fatal	Injury	Fatal/Injury	PDO*	Fatal	Injury	Fatal/Injury	PDO*	Average
44	A	FREE ACCESS, RURAL, DIVIDED, 2 LANES	0.46	23.32	23.78	76.22	$3,281,000	$94,700	$155,800	$5,200	$41,000
45	L	FREE ACCESS, RURAL, DIVIDED, 4 LANES	0.23	21.03	21.26	78.74	$3,256,000	$92,200	$126,500	$5,200	$31,000
46	A	FREE ACCESS, RURAL, DIVIDED, 4 LANES	0.46	23.32	23.78	76.22	$3,281,000	$94,700	$155,800	$5,200	$41,000
47	L	FREE ACCESS, RURAL, DIVIDED, ALL LANES	0.23	21.03	21.26	78.74	$3,256,000	$92,200	$126,500	$5,200	$31,000
48	A	FREE ACCESS, RURAL, DIVIDED, ALL LANES	0.46	23.32	23.78	76.22	$3,281,000	$94,700	$155,800	$5,200	$41,000
49	L	FREE ACCESS, RURAL, UNDIVIDED, 2 LANES	0.62	21.63	22.25	77.75	$3,890,600	$91,300	$197,600	$5,200	$48,000
50	A	FREE ACCESS, RURAL, UNDIVIDED, 2 LANES	0.64	23.14	23.78	76.22	$3,775,800	$93,600	$192,400	$5,200	$49,700
51	L	FREE ACCESS, RURAL, UNDIVIDED, 3 LANES	0.62	21.63	22.25	77.75	$3,890,600	$91,300	$197,600	$5,200	$48,000
52	A	FREE ACCESS, RURAL, UNDIVIDED, 3 LANES	0.64	23.14	23.78	76.22	$3,775,800	$93,600	$192,400	$5,200	$49,700
53	L	FREE ACCESS, RURAL, UNDIVIDED, 4 LANES	0.62	21.63	22.25	77.75	$3,890,600	$91,300	$197,600	$5,200	$48,000
54	A	FREE ACCESS, RURAL, UNDIVIDED, 4 LANES	0.64	23.14	23.78	76.22	$3,775,800	$93,600	$192,400	$5,200	$49,700
55	L	FREE ACCESS, RURAL, UNDIVIDED, ALL LANES	0.62	21.63	22.25	77.75	$3,890,600	$91,300	$197,600	$5,200	$48,000
56	A	FREE ACCESS, RURAL, UNDIVIDED, ALL LANES	0.64	23.14	23.78	76.22	$3,775,800	$93,600	$192,400	$5,200	$49,700
57	L	FREE ACCESS, URBAN, DIVIDED, 2 LANES	0.25	36.03	36.28	63.72	$3,410,400	$95,300	$118,400	$3,800	$45,400
58	A	FREE ACCESS, URBAN, DIVIDED, 2 LANES	0.28	37.23	37.51	62.50	$3,445,900	$95,300	$120,000	$3,800	$47,400
59	L	FREE ACCESS, URBAN, DIVIDED, 4 LANES	0.25	36.03	36.28	63.72	$3,410,400	$95,300	$118,400	$3,800	$45,400
60	A	FREE ACCESS, URBAN, DIVIDED, 4 LANES	0.28	37.23	37.51	62.50	$3,445,900	$95,300	$120,000	$3,800	$47,400
61	L	FREE ACCESS, URBAN, DIVIDED, 6 LANES	0.25	36.03	36.28	63.72	$3,410,400	$95,300	$118,400	$3,800	$45,400
62	A	FREE ACCESS, URBAN, DIVIDED, 6 LANES	0.28	37.23	37.51	62.50	$3,445,900	$95,300	$120,000	$3,800	$47,400
63	L	FREE ACCESS, URBAN, DIVIDED, 7 LANES	0.25	36.03	36.28	63.72	$3,410,400	$95,300	$118,400	$3,800	$45,400
64	A	FREE ACCESS, URBAN, DIVIDED, 7 LANES	0.28	37.23	37.51	62.50	$3,445,900	$95,300	$120,000	$3,800	$47,400
65	L	FREE ACCESS, URBAN, DIVIDED, ALL LANES	0.25	36.03	36.28	63.72	$3,410,400	$95,300	$118,400	$3,800	$45,400
66	A	FREE ACCESS, URBAN, DIVIDED, ALL LANES	0.28	37.23	37.51	62.50	$3,445,900	$95,300	$120,000	$3,800	$47,400
67	L	FREE ACCESS, URBAN, UNDIVIDED, 2 LANES	0.42	30.64	31.06	68.94	$3,532,400	$91,600	$138,200	$3,800	$45,600
68	A	FREE ACCESS, URBAN, UNDIVIDED, 2 LANES	0.37	32.40	32.77	67.23	$3,487,200	$92,300	$130,700	$3,800	$45,400
69	L	FREE ACCESS, URBAN, UNDIVIDED, 3 LANES	0.42	30.64	31.06	68.94	$3,532,400	$91,600	$138,200	$3,800	$45,600
70	A	FREE ACCESS, URBAN, UNDIVIDED, 3 LANES	0.37	32.40	32.77	67.23	$3,487,200	$92,300	$130,700	$3,800	$45,400
71	L	FREE ACCESS, URBAN, UNDIVIDED, 4 LANES	0.42	30.64	31.06	68.94	$3,532,400	$91,600	$138,200	$3,800	$45,600
72	A	FREE ACCESS, URBAN, UNDIVIDED, 4 LANES	0.37	32.40	32.77	67.23	$3,487,200	$92,300	$130,700	$3,800	$45,400
73	L	FREE ACCESS, URBAN, UNDIVIDED, ALL LANES	0.42	30.64	31.06	68.94	$3,532,400	$91,600	$138,200	$3,800	$45,600
74	A	FREE ACCESS, URBAN, UNDIVIDED, ALL LANES	0.37	32.40	32.77	67.23	$3,487,200	$92,300	$130,700	$3,800	$45,400
75	I	3 LEG, RURAL, SIGNAL, ALL LANES	0.70	26.27	26.97	73.03	$3,434,000	$96,400	$183,200	$5,200	$53,200
76	I	3 LEG, RURAL, SIGN, ALL LANES	0.70	26.27	26.97	73.03	$3,434,000	$96,400	$183,200	$5,200	$53,200
77	I	3 LEG, RURAL, NONE, ALL LANES	0.70	26.27	26.97	73.03	$3,434,000	$96,400	$183,200	$5,200	$53,200
78	I	3 LEG, URBAN, SIGNAL, 1-4 LANES	0.33	35.81	36.14	63.85	$3,412,000	$93,800	$124,500	$3,800	$47,400
79	I	3 LEG, URBAN, W/ LEFT TURN, SIGNAL,5& > LANE	0.33	35.81	36.14	63.85	$3,412,000	$93,800	$124,500	$3,800	$47,400
80	I	3 LEG, URBAN, NO LEFT TURN, SIGNAL,5& > LANE	0.33	35.81	36.14	63.85	$3,412,000	$93,800	$124,500	$3,800	$47,400
81	I	3 LEG URBAN, SIGN, 1-3 LANES	0.33	35.81	36.14	63.85	$3,412,000	$93,800	$124,500	$3,800	$47,400
82	I	3 LEG URBAN, SIGN, 4 LANES	0.33	35.81	36.14	63.85	$3,412,000	$93,800	$124,500	$3,800	$47,400
83	I	3 LEG URBAN, SIGN, 5 OR MORE LANES	0.33	35.81	36.14	63.85	$3,412,000	$93,800	$124,500	$3,800	$47,400
84	I	3 LEG URBAN, NONE, ALL LANES	0.33	35.81	36.14	63.85	$3,412,000	$93,800	$124,500	$3,800	$47,400
85	I	4& > LEGS, RURAL, SIGNAL, ALL LANES	0.82	32.53	33.35	66.66	$3,295,200	$107,100	$185,000	$5,200	$65,200
86	I	4& > LEGS, RURAL, SIGN, ALL LANES	0.82	32.53	33.35	66.66	$3,295,200	$107,100	$185,000	$5,200	$65,200
87	I	4& > LEGS, RURAL, NONE, ALL LANES	0.82	32.53	33.35	66.66	$3,295,200	$107,100	$185,000	$5,200	$65,200
88	I	4& > LEGS, URBAN, SIGNAL, 1-4 LANES	0.31	37.23	37.54	62.46	$3,530,300	$95,400	$123,700	$3,800	$48,800
89	I	4& > LEGS, URBAN, LEFT TURN, SIGNAL,5& >LANE	0.31	37.23	37.54	62.46	$3,530,300	$95,400	$123,700	$3,800	$48,800

			Crash Severity Distribution (%)				Average Crash Costs				
		Classification	Fatal	Injury	Fatal/Injury	PDO*	Fatal	Injury	Fatal/Injury	PDO*	Average
90	I	4& > LEGS, URBAN, NO LEFT , SIGNAL, 5& >LANE	0.31	37.23	37.54	62.46	$3,530,300	$95,400	$123,700	$3,800	$48,800
91	I	4& > LEGS, URBAN, SIGN, 1-3 LANES	0.31	37.23	37.54	62.46	$3,530,300	$95,400	$123,700	$3,800	$48,800
92	I	4& > LEGS, URBAN, SIGN, 4 OR MORE LANES	0.31	37.23	37.54	62.46	$3,530,300	$95,400	$123,700	$3,800	$48,800
93	I	4& > LEGS, URBAN, NONE, ALL LANES	0.31	37.23	37.54	62.46	$3,530,300	$95,400	$123,700	$3,800	$48,800
94	I	ON RAMP, RURAL, ALL CNTLS, MERGE W/1 LANE	0.00	18.90	18.90	81.10	$3,316,200	$93,600	$93,600	$5,200	$21,900
95	I	ON RAMP, RURAL, ALL CNTLS, MERGE W/2& > LANE	0.00	18.90	18.90	81.10	$3,316,200	$93,600	$93,600	$5,200	$21,900
96	I	ON RAMP, URBAN, ALL CNTLS, MERGE W/1 LANE	0.29	41.40	41.69	58.30	$3,290,600	$94,500	$117,000	$3,800	$51,000
97	I	ON RAMP, URBAN, ALL CNTLS, MERGE W/2 LANES	0.29	41.40	41.69	58.30	$3,290,600	$94,500	$117,000	$3,800	$51,000
98	I	ON RAMP, URBAN, ALL CNTLS, MERGE W/3& > LANE	0.29	41.40	41.69	58.30	$3,290,600	$94,500	$117,000	$3,800	$51,000
99	I	OFF RAMP, RURAL, ALL CNTLS, MERGE W/1 LANE	0.00	18.90	18.90	81.10	$3,316,200	$93,600	$93,600	$5,200	$21,900
100	I	OFF RAMP, RURAL, ALL CNTLS, MERGE W/2&> LANE	0.00	18.90	18.90	81.10	$3,316,200	$93,600	$93,600	$5,200	$21,900
101	I	OFF RAMP, URBAN, ALL CNTLS, MERGE W/1 LANE	0.29	41.40	41.69	58.30	$3,290,600	$94,500	$117,000	$3,800	$51,000
102	I	OFF RAMP, URBAN, ALL CNTLS, MERGE W/2 LANES	0.29	41.40	41.69	58.30	$3,290,600	$94,500	$117,000	$3,800	$51,000
103	I	OFF RAMP, URBAN, ALL CNTLS, MERGE W/3&> LANE	0.29	41.40	41.69	58.30	$3,290,600	$94,500	$117,000	$3,800	$51,000

* Includes Both Reportable and Non-Reportable Crashes
** A= All Accidents, L= Non-Intersection Accidents, I= Intersection Accidents

SOURCE: NYSDOT Safety Information Management System, Average Accident Costs State Highways, 2008, NYSDOT Safety Bureau 8/09

Travel Time Savings

Monetary benefits of *mobility* improvements are measured by calculating user operating cost savings and the monetary value of travel time savings that would result from project implementation. For most projects, these benefits are calculated using the CDTC STEP Model. Year 2010 traffic is assigned to the network with and without the proposed project. User operating costs and travel time costs are calculated as the difference between the costs resulting from these two assignments. The cost impacts resulted from the increased capacity and improved operation that the project is expected to provide, including the impact of traffic diversions that the STEP Model assignment predicts. Safety impacts are calculated if specific improvements included in the project are expected to reduce accidents as described in the previous section.

Travel time savings for mobility projects are measured in the dollar value of the projected time saved by implementation of the project per year. Travel Time Savings are the product of the change in total delay per year (based on delay per vehicle per day, the daily traffic volume and the number of days in a year when the condition exists), and a monetary equivalence factor. The average value of travel time of $8.18 per vehicle hour is used.

This value is derived from the NYSDOT Highway User Cost Accounting Microcomputer Package, August, 1991. Costs are increased to reflect inflation and increased minimum wage, consistent with an updated version of the Highway User Cost Micro-Computer Package to be published in the near future by NYSDOT. After adjusting for vehicle occupancy and other factors, each non-truck vehicle hour is currently valued at $7.20. The average vehicle hour of truck travel time is currently calculated to be $21.14 per hour. The average value of travel time for all vehicles used by CDTC is a weighted average calculated by assuming 7% truck traffic. The result is $8.18 per vehicle hour of travel.

Energy and User Cost Savings

Energy and user cost savings for pavement improvements are measured in the dollar value of the projected energy and user cost saved per year. Energy cost is the product of the daily change in operating fuel consumption (based on the FHWA-supported microcomputer procedures in most cases), the daily volume, the number of weekdays in a year, and a monetary equivalence factor from a standardized table. The maintenance costs before and after are taken from Table H-3 on page H-10. The savings are calculated from those numbers.

Energy and user cost savings for *mobility* projects are calculated based on the operating costs shown in Table H-4 on page H-10. These costs are also derived from the NYSDOT Highway User Cost Accounting Microcomputer Package, updated for inflation.

TABLE H-3
AVERAGE USER MAINTENANCE COST BY HIGHWAY CONDITION

NYSDOT Pavement Score	Average Cost Per Vehicle Mile[1]
10	$0.1287
9	$0.1287
8	$0.1312
7	$0.1347
6	$0.1400
5	$0.1470
4	$0.1570
3	$0.1666
2	$0.1786
1	NA

SOURCE: Vehicle Operating Costs, Fuel Consumption, and Pavement Type and Condition Factors, FHWA, 1982.

TABLE H-4
AVERAGE HIGHWAY VEHICLE OPERATING COSTS
(Dollars per Vehicle Mile Traveled) by Operating Speed and Posted Speed Limit

	Posted Speed (mph)					
Operating Speed (mph)	**30**	**35**	**40**	**45**	**50**	**55-65**
5	0.849	0.868	0.886	0.904	0.923	0.940
10	0.744	0.769	0.795	0.821	0.833	0.844
15	0.666	0.693	0.720	0.736	0.758	0.775
20	0.626	0.648	0.670	0.690	0.715	0.726
25	0.600	0.618	0.635	0.654	0.674	0.689
30	0.586	0.600	0.615	0.629	0.646	0.663
35	NA	0.586	0.599	0.611	0.626	0.639
40	NA	NA	0.594	0.605	0.616	0.628
45	NA	NA	NA	0.603	0.611	0.620
50	NA	NA	NA	NA	0.608	0.616
55	NA	NA	NA	NA	NA	0.614

Operating costs are derived from the NYSDOT Highway User Cost Accounting Microcomputer Package, August 1991. Operating costs are increased by 25%, in order to agree with 2008 operating costs from the Bureau of Transportation Statistics (BTS). Vehicle ownership costs per mile were added. Including vehicle ownership costs in vehicle cost per mile represents a new emphasis for CDTC benefit calculation. It is consistent with AAA estimates and the IRS allowances for driving costs. Truck ownership costs were added based on the assumption that the percentage of VMT consisting of trucks is 7%. If operating speed is less than posted speed, congestion is assumed. Travel time costs will be valued at $10.75, which is based on the NYSDOT HUCA updated for inflation to 2008.

[1] 0% grade, 30 mph, 40% small cars/pickups, 40% med. cars, 10% large cars, 7% 2 axle trucks, 3% 3 axle trucks.

Life Cycle Cost Savings

Life cycle cost savings are measured in the dollar value of the projected time saved per year by deferring abandonment of the facility. Life cycle cost savings are a product of the percent-extended life of the facility, and the mobility benefits that result from keeping the facility usable.

"Life cycle cost savings" could also be described as "extended facility value". Intuitively, repairing or replacing a facility or service integral to the regional system is important because of the value of that facility or service to the transportation system. Bridges are not replaced because they are in poor condition; they are replaced because it is important to keep those links open. Buses are not replaced because they are twelve years old; they are replaced because it is important to continue to operate a vital transit service. As a result, the life cycle costs savings of an infrastructure project are defined as:

Life Cycle Cost Savings = (Total Facility Value) x (Pct. Extended Life)

where:

Total Facility Value = Travel Time Savings + Energy and User Cost Savings

and

% Extended Life = Years of Facility Life Added by Project ÷ Normal Facility Life

Travel time savings and regional user cost savings attributable to the facility are calculated using the CDTC STEP Model. The model is run once with the facility or service in place, then a second time with the facility or service removed. The difference in regional system measures between the two runs is assumed to represent the total value of the facility or service.

For bridges, the facility is removed for modeling purposes by eliminating the bridge link entirely from the highway network. For highways, the facility is considered removed by reducing the travel speed to five miles per hour. Transit service is eliminated by adding passenger travel as vehicular travel on the highways that transit effectively serves.

Percent extended facility life is determined using the data in Table H-5, Table H-6, Table H-7, and Table H-8.

TABLE H-5
RELATIONSHIP BETWEEN THE EXTENDED LIFE
OF A HIGHWAY AND ITS SURFACE RATING

	% Extended Life		
Surface Score	**Rigid Pavements**	**Overlay Pavements**	**Flexible Pavements**
10	0%	0%	0%
9	5.9%	4.3%	3.8%
8	14.7%	8.7%	11.5%
7	26.5%	21.7%	23.1%
6	47.1%	43.5%	46.2%
5	79.4%	78.3%	69.2%
4	100.0%	100.0%	88.5%
3	100.0%	100.0%	100.0%
2	100.0%	100.0%	100.0%
1	100.0%	100.0%	100.0%

Source: Derived by CDTC from an internal NYSDOT memorandum regarding new pavement deterioration rates dated August 8, 1986.

TABLE H-6
RELATIONSHIP BETWEEN THE EXTENDED LIFE
OF A BRIDGE AND ITS RATING

Bridge Rating	**% Extended Life**
7	0%
6	22.2%
5	44.4%
4	66.6%
3	88.9%
2.5	100.0%
2.0	100.0%
1.0	100.0%

Source: CDTC

TABLE H-7
RELATIONSHIP BETWEEN THE AGE AND EXTENDED LIFE OF A FACILITY OTHER THAN BRIDGES AND HIGHWAYS

Age / Expected Life	% Extended Life
0	0%
.2	5%
.4	10%
.6	20%
.8	30%
.9	40%
1.0	50%
1.1	60%
1.2	70%
1.4	80%
1.6	90%
1.8	95%
2.0	100%

Source: CDTC

TABLE H-8
6% CAPITAL RECOVERY FACTORS FOR ANNUALIZED COSTS

Design Life in Years	Capital Recovery Factor
1	1.060000
2	0.545437
3	0.374110
4	0.288591
5	0.237396
6	0.203363
7	0.179135
8	0.161036
9	0.147022
10	0.135868
11	0.126793
12	0.119277
13	0.112960
14	0.107585
15	0.102963
16	0.098952
17	0.095445
18	0.092357
19	0.089621
20	0.087185
21	0.085005
22	0.083046
23	0.081278
24	0.079679
25	0.078227
26	0.076904
27	0.075697
28	0.074593
29	0.073580
30	0.072649
31	0.071792
32	0.071002
33	0.070273
34	0.069598
35	0.068974
36	0.068395
37	0.067857
38	0.067358
39	0.066894
40	0.066462
45	0.064700
50	0.063444
55	0.062537
60	0.061876
65	0.061391
70	0.061033
75	0.060769
80	0.060573
90	0.060318
100	0.060177

TABLE H-9
DESIGN LIFE OF VARIOUS FACILITIES

Facility	Design Life
Right-of-way, obstacle removal	100 years
Local pavement reconstruction [1]	30 to 50 years
Bridge Replacements	50 years
Other Major Structures	30 years
New Construction	30 years
Major Reconstruction	30 years
Sidewalks	30 years
Class 1 bike paths	30 years
Major Geometrics: change of intersection configuration, curve flattening, etc.	20 years
Concrete barrier (median or half section)	20 years
Rubblization	20 years
Grade crossing protection upgrades	20 years
Minor Geometrics: left-turn lanes, channelization	15 years
Lighting	15 years
Major sign structures	15 years
Metal median barrier	15 years
Bus	12 years
Signals and flashing beacons	10 years
Resurfacing (2 1/2")	10 years
Minor signing	10 years
Metal guide rail	10 years
Armor coat (1")	7 years
Concrete pavement grooving (less than 10,000 AADT per lane)	7 years
Concrete pavement grooving (greater than 10,000 AADT per lane)	5 years
Delineators and guide markers	5 years
Asphalt pavement grooving (less than 10,000 AADT per lane)	5 years
Oil and stone	4 years
Asphalt pavement grooving (greater than 10,000 AADT per lane)	4 years
Shoulder stabilization	4 years
Pavement markings: thermoplastic	3 to 7 years
Pavement markings: paint	1/2 year

Source: NYSDOT, From TE 204 Safety Project Benefit and Cost Summary, supplemented for additional project types

[1] Design life of pavements with AADT less than 30,000 are between 30 years and 50 years and vary with AADT.

Other Benefits

"Other" benefits of candidate projects capture the monetary transportation system impacts not included elsewhere in the calculations, but contained in the *New Visions* Core Performance Measures.

Supplemental monetary impacts beyond those identified elsewhere in the benefit to cost calculation are documented in the "Estimated Marginal Monetary Costs of Travel in the Capital District", April 1995. These supplemental monetary benefits (or disbenefits) of candidate projects included changes to the following system-level measures of transportation system cost which are not captured elsewhere in the list of project benefits:

- Private vehicle ownership
- Parking provision and use -- work trip
- Parking provision and use -- other commercial
- Parking provision and use -- residential
- Transportation related fire/police/justice expense
- Regional air pollution
- Global air pollution (climate change)
- Vibration damage
- Water quality damage
- Waste disposal
- Energy use impacts on costs of national security and impact on international trade

The *New Visions* plan relies heavily on these extensions to the traditional system costs and benefits. It should be recognized, however, that these are factors that are influenced primarily by *system-level* rather than *project-level* changes. That is, system-level success over the 20 years in increasing the amount of mixed use development, sidewalk connections and quality of transit service may influence total vehicle ownership in the region (and thus reduce the cost of providing residential garages), for example. However, it would be difficult to assign part of that cumulative benefit to a single TIP candidate project that, for example, building bus shelters.

As a result, monetary measures for "other benefits" are identified only for projects significant enough to affect system-level measures. Such projects are generally ones that affect the number of vehicle trips or the aggregate level of vehicle miles of travel in the Capital District.

Non-monetary benefits include increased access to transit service, greater flexibility or reliability and other measures from the *New Visions* Core Performance Measures list. To the extent that a TIP candidate project could be expected to change the values for these regional measures, the change is identified on the fact sheet.

Total Benefit/Cost Ratio

A total benefit/cost ratio is the sum of these five categories of quantifiable project benefits divided by the annualized cost of the project. Annualized costs are a product of the total project cost and the 6% Capital Recovery Factors (Table H-8 on page H-14).

BICYCLE/PEDESTRIAN PROJECT MERIT EVALUATION METHODOLOGY

Introduction

Projects are evaluated against their functional peers for the purpose of assigning classifications corresponding to low, medium or high potential benefit. For example, projects having particular potential to encourage bicycle trips (e.g., longer-distance trails) are evaluated against other bicycle projects, while sidewalks are evaluated against other pedestrian projects. This segregation is intended to ensure fair comparisons. This approach avoided a result of most of the overall top-rated projects being bicycle accommodations, which tended to have larger potential markets (as defined by number of nearby short trips) and potentials for conversion from driving.

Consistent with the 1997-02 and 2001-06 TIP update, CDTC staff again used potential market for bicycle/pedestrian travel, cost-effectiveness and potential safety benefits (e.g., accident reduction or avoidance) in the evaluation of bicycle and pedestrian projects. These measures are briefly defined below.

Potential Market for Bike and Pedestrian Travel

This measure is based on ***the better of*** a candidate's two classifications on (1) number of short trips originating or ending near the improvement and (2) modeled short trip response on the bicycle/pedestrian version of CDTC's Systematic Traffic Evaluation and Planning (STEP) model.

A potential bicycle trip table was created by selecting all PM peak hour trips from the CDTC STEP Model that are less than 10 miles. A potential pedestrian trip table was created by selecting all PM peak hour trips from the CDTC STEP Model that are less than 2 miles. (Allowances were made for TAZ size by increasing the 2 mile threshold by one half the distance between each TAZ pair.) "Short trips originating or ending near the improvement" are defined as potential bicycle or pedestrian trips to or from the Traffic Analysis Zones (TAZ's) in which the project is located or, if the project is on the border of more than one TAZ (as most candidates are), short trips to or from ALL adjacent TAZ's. The aim of this measure is to get an indication of how many trips might be realistic candidates for conversion to cycling or walking. "Modeled short trip response" is arguably a more stringent standard, for it requires that a project show an ability to capture bicycle and pedestrian trips from other possible bicycle/pedestrian travel routes.

Project candidates are modeled on the network using the same conventions applied in preparation of the Bicycle/Pedestrian Task Force's technical analyses. Routes are either opened up for the first time or made slightly faster by an improvement, starting from a preference-based network. This network shut down illegal facilities (e.g., the Northway has no bicycle or pedestrian access), discouraged the use of very undesirable facilities (e.g.,

Central Avenue in Colonie, or Wolf Road) via a 1 MPH speed, and made the lowest-order roads (e.g., local streets and bike/hike paths) the most attractive (at 10 MPH bicycle, 3 MPH walk). Improvements to sidewalks, pedestrian crossings and amenities where sidewalks already exit were modeled at 3 MPH and evaluated using 75% of the assigned short trips. Roads in between are coded based on functional class, existing accommodation, traffic volume and any other known influences on bikeability or walkability.

Given the narrower range of possible speeds on the pedestrian network, some additional points on preference-based coding protocol for pedestrians may be helpful.

1. To ensure an appropriate starting point, the null pedestrian network is first coded to reflect the best available information on the presence or absence of sidewalks, improved shortcut paths and other bonafide pedestrian accommodations across the Capital District. As is the case in preparation of the null bicycle network, special attention is paid to ensuring that the network contained no elements of any improvements to be developed under any of the candidate projects.

2. *Absolute shutdown* of a facility to pedestrians is accomplished by coding the subject link with a speed of 1 MPH (to prevent running into program errors triggered by 0 MPH link speeds in some model processes) and overtyping the link length with a length of 9.99 miles. In all cases where this is done, the result is absolutely no use of a facility.

3. Basically *unimproved, but walkable* facilities are coded with speeds of 1 MPH.

4. *Links with sidewalks*, *pathways* and *trails* are coded with speeds of 3 MPH (the maximum speed on the pedestrian network).

5. If an improvement would provide the level of comfort and physical separation from traffic typical of a sidewalk, a link's speed is increased from 1 MPH to 3 MPH for the length of the improvement.

Cost-Effectiveness

Cost-effectiveness is calculated as the modeled level of response to an improvement (in person-miles of travel, as calculated using the "short trip response" basis above) per $1,000 of annualized project cost. By definition, this measure is partially driven by the findings for the more stringent of the two market measures mentioned above. A grade was given to each project based on the overall cost of the project. Lowest cost projects received a grade of "A", medium cost projects a grade of "B" and high cost projects a grade of "C". This cost grade was compared to the grade given for assigned trips. Final cost effectiveness scores were based on the following tables:

Cost Score	Assigned Trips Score	Final Cost Effectiveness Score
A	A	A
A	B	A
A	C	B
B	A	A
B	B	B
B	C	C
C	A	B
C	B	C
C	C	C

Potential Safety Benefit

The Bicycle and Pedestrian Issues Task Force suggested this measure as a way of illustrating the safety enhancement which comes in providing cyclists and pedestrians with some separate space of their own on the highway network. Potential safety benefit is defined as the potential for an action to prevent future car-bicycle or car-pedestrian accidents. Candidate projects are determined to have low, medium or high potentials for accident prevention based on motor vehicle traffic volumes, available pavement or other bicycle/pedestrian accommodations, levels of cyclist/pedestrian use of facilities, and (where available) known car-bicycle or car-pedestrian accident histories.

NON-QUANTIFIED PROJECT BENEFITS

Calculated benefit/cost ratios capture transportation benefits well. However, transportation benefits alone are not sufficient to highlight project contributions to meeting the goals and implementing the strategies in *New Visions*. Therefore, considerable space on the project fact sheets is devoted to narrative descriptions of project benefits. The source of most of this information is the project justifications provided by the project sponsor.

Congestion Relief

Congestion relief can be measured as the daily excess person-hours of delay saved due to the implementation of projects. It is shown where it could be calculated, divided by both the annualized cost and the total cost to provide a measure of comparability between projects. The calculation of this measure is fully elaborated in CDTC's Congestion Management System report.

Narrative discussion is included under the first heading in the second box on the project fact sheet if numbers could not be calculated or to elaborate upon the congestion relief aspects of the project.

Air Quality Benefit

The hydrocarbon emissions reductions for each project considered for CMAQ funding is calculated using NYSDOT methodology as well as reductions in nitrogen oxides. Because the primary air pollution concern in the Capital District is with ozone precursors, this is the focus of the analysis. The cost effectiveness of the hydrocarbon emissions benefit is also calculated. If applicable, a similar analysis is performed for non-CMAQ mobility projects and the results recorded under this heading. Candidate projects that are eligible for the CMAQ program ONLY are noted here. A narrative discussion is provided if numbers could not be calculated or to elaborate upon the project's expected air quality benefits.

Regional System Linkage

Regional system linkage addresses the project's geographic and intermodal aspects. The emphasis of the discussion is on whether or not the project addressed a critical link in the transportation system (e.g., a major river crossing) or would provide a new linkage not previously provided (e.g. an intermodal transfer or new suburban transit service). The purpose of including this criterion is to focus on the transportation system impacts of the project. Boundary issues are also appropriately mentioned here.

Land Use Compatibility (Planned or Existing)

Linking transportation investments to land use is an important aspect of *New Visions*. The fact sheet provided the opportunity to cite local and regional plans that recommend or support the project, the existing adjacent land uses, or potential future developments. Specific consistency with *New Visions* arterial management principles and strategies are elaborated here.

Contribution to Community or Economic Development

Using transportation investments as a tool to make our communities better places to live and to improve regional economic health is another important aspect of *New Visions*. The fact sheets provided an opportunity to highlight the community-building or economic development benefits of a project. Potential negative impacts on the community or economy associated with the project are noted here as well. This part of the fact sheet provided space to note the dependence of economic development plans on the implementation of the project, including quantification of measures such as job creation/retention, increases in taxes collected, expansion in secondary services, and the enticement for additional enterprise. The degree of public support for a project could also be noted.

Environmental Issues

Known environmental issues, such as intrusion on sensitive lands (wetlands, woodlands, parklands, aquifers, and historical property) are chronicled on the project fact sheet. Other potential issues highlighted here included such things as the removal of billboards, inclusion of scenic easements, and archaeological considerations, where applicable. Whether or not the project is located in a known minority or low income area is also noted here per federal requirements related to environmental justice.

Business or Housing Dislocations

The need for right-of-way acquisition that would dislocate existing businesses or housing is noted on the project fact sheet. Historic preservation concerns are also noted here.

Facilitation of Bicycling

To supplement priority network information, the degree to which the project addressed bicycling needs is noted. The provision of bicycle features within the project (e.g. bike path, improved bus facilities, bike lockers at a park and ride lot) could be noted, if known.

Facilitation of Walking

To supplement priority network information, the degree to which the project addressed the needs of walkers is noted. The provision of pedestrian features within the project (e.g. sidewalks, pedestrian actuation of signals, crosswalks) is specifically noted, if known.

Facilitation of Goods Movement

To supplement priority network information, the degree to which the project addressed goods movement needs is noted. The provision of freight-friendly features within the project (e.g. improved geometry, rail safety, rest stops, and bridge height or weight restrictions) is noted here.

Facilitation of Transit Use

To supplement priority network information, the degree to which the project addressed transit needs is noted in the fourth heading in the fourth box on the project fact sheet. The existence (or lack) of fixed route transit within the project limits is noted here. The provision of transit features within the project (e.g. improved bus stops, shelters, and pedestrian access to a major bus route) is noted, if known. Projects that could decrease the current level of transit access, such as intersection improvements that eliminate a bus stop, are noted, as well as projects that decrease future access opportunities. The relationship of the project to the implementation of the ADA is highlighted, if applicable.

Facilitation of Intermodal Transfers

Intermodal transfer opportunities make the transportation system work better as a whole, particularly the transfer across modes. Intersection projects that take into account bus routing and pedestrian/bicycle actuation, for example, are highlighted under this criterion. To supplement priority network information, the degree to which the project facilitated intermodal transfers is noted.

Screening Issues

The project fact sheet provided a space to mention any outstanding screening issues. Things like outstanding data needs, concerns with ability to implement within five years, project justifications, or eligibility concerns are noted here. Any issues with the cost estimate or its components are noted here.

Match and Maintenance

The second heading in the bottom box on the project fact sheet provided a space to note what agency will provide the non-federal share of project costs and who maintain the project once built. This is also the proper place to note any ownership issues, overmatch, or ongoing operating budget concerns.

Other Considerations

A category for other project considerations is included in the last box in order to be able to mention any significant factors not covered above.

APPENDIX I - PROJECT JUSTIFICATION PACKAGE

PROJECT JUSTIFICATION PACKAGE

FOR CANDIDATE PROJECTS

(LAST USED FOR THE 2010-15 TIP UPDATE)

Transportation Improvement Program (TIP) Project Solicitation
Project Justification Package
Part A: General Information and Instructions

General Information: In order to apply for federal transportation funds a Project Justification Package (PJP) must be prepared for each project proposal. The PJP includes three parts:

- Part A describes PJP purpose, eligibility guidelines, deadlines, and contact information.
- Part B asks for specific information about the proposed project.
- Part C asks several questions about how the proposed project is related to the metropolitan transportation plan known as New Visions 2030 (www.cdtcmpo.org/rtp2030/2030.htm) and other local and statewide plans.

Purpose: The PJP asks for a variety of traffic, transit, land use and other information that will be used by the CDTC staff to evaluate the merits of each candidate project. This information will be compiled and shared with the CDTC Planning Committee to guide the selection of new projects for the 2010-15 Transportation Improvement Program. In developing the new TIP, CDTC will take into consideration the transportation funding expected to be available during the five years of the TIP. Projects selected for funding will likely be programmed in the last two years of the new TIP, 2013-2014 and 2014-2015. CDTC's TIP evaluation process will be posted on the CDTC website (www.cdtcmpo.org) on September 21, 2009.

Project Sponsors: Project sponsors (the agencies designated to implement projects) are responsible for initiating requests for TIP programming, applying for programmed funds, and carrying their projects to completion. Project sponsors must be public entities. Public sponsors include state agencies (i.e. NYSDOT, NYSTA, etc.), regional authorities (i.e. CDTA, Albany Port District, etc.), the counties of Albany, Rensselaer, Saratoga and Schenectady, and the cities, villages, and towns within those counties with the exception of the Town of Moreau and the Village of South Glens Falls. Ideas for projects can emerge from the private and non-profit sectors, but must obtain the support of one of the CDTC region's implementing agencies which would then act as project sponsor.

Eligibility: Transit, federal-aid roadway, bridge, safety, bicycle, and pedestrian projects are eligible under this solicitation. Specific eligibility requirements will be posted on the CDTC website (www.cdtcmpo.org) on September 21, 2009.

Workshops: Four workshops have been scheduled to give project sponsors an opportunity to ask technical questions about the CDTC TIP process and PJP. Sponsors may choose to attend any of the following workshops:

- Saratoga County: September 21, 2009 at 3:30 PM at the Saratoga County Office Building
- Rensselaer County: September 22, 2009 at 3:30 PM at the Rensselaer County Office Building
- Albany County: September 23, 2009 at 3:30 PM at the CDTC Office
- Schenectady County: September 24, 2009 at 3:30 PM at the Schenectady County Public Library Main Branch

Electronic Information: A downloadable version of these forms in Microsoft Word and Adobe PDF format is available on the CDTC website at www.cdtcmpo.org. The CDTC staff can provide additional applications via email or U.S. mail upon request. Please note that electronic submission of the PJP is not acceptable.

Deadlines and Transmittal Instructions: Five (5) copies of the completed PJP (Parts B & C) must be completed and returned to the office of CDTC by 5:00 p.m., November 9, 2009. Only mailed, faxed or hand delivered submissions will be accepted.

Mailing address: John Poorman, Staff Director
Capital District Transportation Committee
One Park Place, Main Floor
Albany, NY 12205

Fax: (518) 459-2155

CDTC Contact Information: For questions please contact David Jukins, Deputy Director or Glenn Posca, Senior Transportation Planner of the CDTC staff at (518) 458-2161 or by email pjp@cdtcmpo.org

Transportation Improvement Program (TIP) Project Solicitation
Project Justification Package
Part B: Candidate Project Information

Section 1: Sponsor Information

Project Name: _____

Project Location: _____

Project Sponsor (government body submitting the proposal): _____

Contact person with direct knowledge of the project (CDTC staff may need to contact this person for additional information)

Name: _____

Organization: _____

Title: _____

Street Address: _____

City/Zip: _____

County: _____

Telephone: _____

Email: _____

Check the following boxes to indicate:

☐ The sponsor has provided a signed cover letter along with this Project Justification Package.

☐ The sponsoring municipality or agency agrees to provide the minimum required local match (20% of the total project cost).

☐ The sponsoring municipality or agency acknowledges that the cost estimate provided by the sponsor may be adjusted by CDTC staff based on federal unit costs or other information related to federal aid projects.

Section 2: Project Information

Nature of the Problem:
Describe the nature of the problem that the project intends to mitigate or fix. For example, is it designed to address a current congestion, operational or safety problem? Is it designed to replace or reconstruct a deficient bridge or pavement? Is it designed to support or enhance use of public transit? Is it designed to improve the pedestrian or cycling environment?

_____
_____
_____

Project Description:
Prepare a narrative describing what will be done to address the problem described above. Be as specific as possible by including the following:

- Brief project history.
  _____
  _____
  _____
  _____
  _____

- All project elements, their location and design specifications.
  _____
  _____
  _____
  _____
  _____

- Note the need for drainage work, utility relocation, curbing, culvert installation or replacement, and other ancillary work.
  _____
  _____
  _____

- Include a location map, sketches, and renderings (attach to the completed Project Justification Package)

- Indicate if right-of-way is needed. If so, how much and where.
  _____
  _____
  _____

Project Type (check all that apply)**:**

☐ Transit	☐ Intersection Improvement
☐ Traffic Operations	☐ Roadway Repaving, Rehabilitation or Reconstruction
☐ Bicycle/Pedestrian	☐ Complete Streets
☐ Additional Roadway Capacity	☐ Economic Development
☐ ITS	☐ Bridge
☐ Safety	☐ ADA Compliance Project

Supporting Data:
Please provide the following information. Indicate N/A if the data item is not related to the proposed project. (Attach detailed data summaries to this application, if needed.) Much of this information can be obtained from data and analysis available from NYSDOT, CDTC, CDTA or municipal or consultant studies, etc.

Please tell us as much as you can about the existing and proposed traffic and land use conditions associated with the proposed project. For projects with cross section or intersection treatments that will be significantly different in various sections of the overall project limits, please provide the following information for each relevant section – do not average for the whole project limits.

Existing Conditions:

- Functional Classification: _____
- Road name or route number: _____
- Project limits: (from/to) _____
- Project length (ft or miles): _____
- Number of travel lanes: _____
- Width of travel lanes (ft): _____
- Pavement type: _____
- Pavement condition score: _____
- Shoulder type (paved/unpaved): _____
- Shoulder width (ft): _____
- Median type (raised/flush): _____
- Median width (ft): _____
- Width of parking lane (ft): _____
- Sidewalk width (ft): _____
- Bike lane width (ft): _____
- Multi-use Path width (ft): _____
- Average annual daily traffic (vehicles/day): _____
- Hourly traffic volumes (widening and new roadways only): _____
- Peak hour vehicle & pedestrian counts (at intersections): _____
- Annual number, type, & location of vehicle, pedestrian, bicycle crashes: _____
- Transit route(s) in project area: _____
- School bus route in project area (Yes or No):_____
- Number & location of transit stops: _____
- Number & location of bus pullouts: _____
- Number & location of commercial driveways (for intersection and arterial management projects only): _____

Proposed Project Characteristics:

- Number of travel lanes: _____
- Width of travel lanes (ft): _____
- Shoulder type & width (ft): _____
- Median type & width (ft): _____
- Intersection turn lanes & width (ft): _____
- Width of parking lane (ft): _____
- Sidewalk width (ft): _____
- Bike lane width (ft): _____
- Multi-use Path width (ft): _____

- Intersection Traffic Control (Replace existing signal(s)? New signal(s)? Replace or New Pedestrian Signal(s))? : _____
- Crosswalk location & type: _____
- Anticipated reduction in number of commercial driveways:_____
- Number & location of transit stops: _____
- Number & location of bus pullouts: _____
- Does the project include landscape or streetscape features? (Y/N): _____

Project Costs:

Accurate costs estimates are an important part of the benefit/cost scope of the project evaluation. Accurate cost estimates can prevent unintentional over-programming or under-programming of the TIP. Perhaps just as important, is that the costs of the candidate projects be consistent so all projects are treated equally. The latter indicates the value of an unbiased single source for all cost estimates.

CDTC staff has developed unit cost estimates for reconstruction and some additional project types based on recent federal-aid construction experience. Therefore, sponsors should complete the worksheet below using CDTC unit costs as applicable. The unit costs will be posted on the CDTC website at www.cdtcmpo.org on September 21, 2009. If the project includes an element(s) for which CDTC has no empirical unit costs or other experience, please provide a cost estimate and indicate its source for each element. Examples of such sources include:

☐ Professional judgment
☐ Consultant for the community or agency
☐ Preliminary engineering report
☐ Estimate prepared by NYSDOT

Project cost estimates will be inflated by CDTC staff. Construction cost inflation is a mutually agreed upon factor calculated by NYSDOT and CDTC based on inflation trends. The inflation factor is currently under review.

Project Costs:

Estimated Project Costs		Proposed Project Funding	
Construction Costs (in 2010 $)	$_____	Federal Funds Requested* *	$_____
+ Inspection Cost (12%)*	$_____	+ Additional Local Funds	$_____
+ All Design Phases (18%)*	$_____	+ Funds from Other Sources	$_____
+ Right-of-Way	$_____		
Total Project Cost (in 2010 $)	$_____	Total Funding	$_____

* Percentages shown are percentages of construction cost
** Include 20% local match

Describe any conditions that would affect project costs (steep slopes, poor soils, utility relocation or reconstruction, curb replacement, drainage or stormwater improvements, culvert reconstruction, etc.)

_____
_____
_____
_____

Project Priority:
Sponsors submitting multiple projects for the same project type should provide an indication of the relative priority of each project (high, medium, low).

Priority Level: _____

Transportation Improvement Program (TIP) Project Solicitation
Project Justification Package
Part C: Relationship to New Visions 2030 and Other Local & Statewide Plans

The following questions are designed to identify New Visions 2030 principles that are being addressed by the proposed project. All answers must be direct and brief. For example, for a project proposing new capacity, pointing to an access management plan that has been adopted by the municipality can be one way to show how the project meets the land use management requirements of New Visions 2030. A repaving project that includes sidewalk repair and high visibility crosswalks can point to New Visions 2030 principles related to infrastructure renewal and multi-modalism.

1. Does the project advance a specific recommendation from a completed Linkage Study, or similar planning study or municipal program (i.e. Municipal comprehensive plan, bike/ped plan, sub area study, Generic Environmental Impact Study (GEIS), etc.)? ☐ Yes ☐ No

   If **Yes** please indicate the name and date of the study and include appropriate citations, excerpts or pages from the plan.

   _____
   _____
   _____
   _____
   _____

2. Describe how the project is related to the long-range metropolitan transportation plan known as New Visions 2030 and its principles, strategies and actions. (www.cdtcmpo.org/rtp2030/nv.htm)

   _____
   _____
   _____
   _____
   _____

3. For projects adding capacity to the transportation system, describe how the project is consistent with CDTC's Congestion Management Process? (www.cdtcmpo.org/rtp2030/materials/cm-doc.pdf)

   _____
   _____
   _____
   _____
   _____

4. Linear capacity improvement projects are required to be linked to land use management actions. Describe the sponsor commitment to a local land use/transportation plan, access management, the construction of new local streets or the provision of supplemental transit services.

   _____
   _____
   _____
   _____
   _____

5. Describe the public process used to generate the local plans or other public support for the proposed project.

   _____
   _____
   _____

_____
_____

6. Describe the community context surrounding the project location (i.e. examples might include: downtown/town center, on a community shopping street, nearby uses such as a school, along a transit route, suburban arterial with a description of surrounding land uses, etc.)

_____
_____
_____
_____
_____

7. Is there a new economic development initiative being planned or constructed which would be dependent on this project? Describe the nature of the initiative and how the proposed project will support it.

_____
_____
_____
_____
_____

8. If the project is a bicycle/pedestrian project, how does it enhance the overall local and regional bike/ped transportation system?

_____
_____
_____
_____
_____

9. Describe how the project may potentially impact various categories of roadway users or land uses near the intersection(s) and along the adjacent roadway. For example, will land access be enhanced or diminished for certain parcels? Will pedestrian crossing distances be increased? Decreased? Will transit riders be impacted? Etc.

_____
_____
_____
_____
_____

10. Who will be responsible for the maintenance of the completed project (snow removal, grass trimming, repair, wiring, lights, etc.)? Please include a statement of willingness from the responsible party to fully maintain the completed project.

_____
_____
_____
_____
_____

11. If the project is near or crosses a jurisdictional boundary, is it consistent or complimentary with the facility in the adjacent jurisdiction? Please explain.

_____
_____
_____
_____
_____

12. Could the project encroach on or impact any historic, environmental, or recreational areas? If yes, provide as much specific information as possible. If wetland (or other) mitigation is necessary, are plans in place to implement mitigation? Is there a cost implication? (For general location information on select natural and cultural resources see New Visions 2030 maps at http://www.cdtcmpo.org/em-maps.pdf)

    _____
    _____
    _____
    _____
    _____

13. Describe any inter-modal connections that are being created or enhanced by the proposed project.

    _____
    _____
    _____
    _____
    _____

14. Does the project improve freight access? ☐ Yes ☐ No

    If **Yes**, explain how:

    _____
    _____
    _____
    _____

APPENDIX J - ENHANCEMENT EVALUATIONS

Introduction

What follows in this appendix is the latest documentation of CDTC's process for evaluating new project candidates for the Transportation Enhancements Program. A new solicitation for the Transportation Enhancements Programs is scheduled for the spring/summer of 2013. Because there is a statewide committee charged with reviewing the evaluation criteria, it is anticipated that there may be some minor changes to the criteria. As result, it is likely that any changes to the below process will occur during the 2013-18 TIP Update, and be included in the final 2013-18 TIP document.

Background

CDTC developed a basis for evaluating candidates for funding under the Transportation Enhancements Program (TEP). The basis for Round Two evaluation of proposals from within the Capital District reflects several changes to the Round One methodology.

In evaluating proposals to Round One of the TEP, a team of CDTC and New York State Department of Transportation (NYSDOT) Region One staff used a methodology approved by the CDTC Planning Committee on May 5, 1999 which applied criteria set forth in the NYSDOT *TEP Guidebook*. The methodology, as detailed in Appendix J of the CDTC's 2001-06 TIP, provided for point scoring of proposals based on eight criteria:

- Benefit to Enhancement Region and Environment
- Enhancement of Transportation Plans, Projects
- Relationship To/Support for Other Plans, Projects
- Size of Matching Share, Assurance of Availability
- Direct User Benefits to Immediate Proposal Area and Environment
- Innovation/Creativity/Mix of Activities
- Supportiveness of Master Planning in Recognized Areas of Special Significance
- Level of Community, Regional Support

While the *Guidebook*-based methodology was helpful in providing a framework for objective assessment of the merits of each proposal, discussions after the completion of Round One raised several concerns with this basis, particularly the following:

- the criterion set seemed to place too much weight on regional rather than local benefits
- on a related note, trails or other sorts of "tourism-oriented" proposals tended to be the only ones which could score well on most or all of the criteria
- safety benefits seemed not to get adequate weight
- partly related to the safety point, many important projects in urban areas did not see their true benefits reflected in point scores

- there was no explicit opportunity to consider cost-effectiveness in rankings

As a result, while there were 12 types of projects eligible for TEP funding, most proposals faring well in the rankings were for trail developments or extensions. In addition, higher-cost proposals tended to fare better than lower-cost proposals.

Summary of Modifications from Round One

For Round One of the TEP, the CDTC/NYSDOT evaluation team needed to base its evaluations on the *Guidebook*, for applicants developed their proposals based on the *Guidebook*'s listing of criteria. That is, as the *Guidebook* contained the first indications of what the basis for proposal evaluation would be, the team did not have the opportunity to introduce additional criteria, for it would arguably have been unfair to applicants to have their proposals evaluated based on a different set of criteria from those presented in the *Guidebook*.

For Round Two, a CDTC document discussing the evaluation methodology to be applied to Capital District proposals was provided to potential applicants at the informational workshop held at the start of the Round Two TEP effort and thereafter, with the CDTC document positioned as a companion document to the *Guidebook.* The CDTC document noted that while the CDTC evaluations would be more rigorous, considering criteria beyond those set forth in the *Guidebook*, applicants would *not* be compelled to do any more work in preparing proposals than would be expected based strictly on the *Guidebook*.

CDTC and NYSDOT Region One staff met to discuss their concerns with the Round One approach and to identify possible changes to the evaluation methodology which would ensure that evaluations of Round Two proposals would be based on broader opportunities for success. The group identified a series of modifications to the Round One evaluation process dealing with criteria and process. The CDTC Planning Committee discussed and concurred with these possible modifications at its March 7, 2001 meeting. The new approach reflects eight key changes:

7. Presentation of evaluation findings and preliminary rankings to the Planning Committee ***by Enhancements project category***, to facilitate Committee consideration of prioritized candidate lists reflecting a wider range of project types.
8. Addition of a new sub-criterion within the "Benefits" criterion group (see Modification 4 for a discussion of criterion groups) dealing with ***safety impacts.*** (In addition, as will be detailed later on in this document, the descriptions of the existing criteria in this group have been modified for purposes of clarity and consistency.)
9. ***Reallocation of maximum point scores*** to reduce bias toward very large projects.
10. The aggregation of criteria into three ***criterion groups*** within which evaluators would have a defined degree of flexibility in allocating points.
11. Provision to the Planning Committee of indications of how the proposals fare under ***supplemental screening criteria*** employing "A" through "C" grades for ***feasibility*** and ***cost-effectiveness.***

12. Application of ***model-based or otherwise quantitative assessments of potential proposal impact*** wherever possible (e.g., using the bicycle and/or pedestrian versions of the CDTC regional travel model). These assessments would be inputs to evaluator consideration of how proposals fare for level of benefit and cost-effectiveness.
13. Provision to the Planning Committee of evaluators' ***"overall impression" rankings*** for each project. These rankings may differ from point score-based rankings; in cases where these differences are significant, reviewers could provide one-sentence descriptions of why in their estimations the discrepancies exist.
14. Addition of ***new parties to the evaluation team*** and solicitation of ***feedback from the Bicycle and Pedestrian Issues Task Force*** during the evaluation period as a source of "reality checks."

Ranging Structure for Project Evaluation

The Round Two Transportation Enhancements Program (TEP) candidate evaluation methodology applies eleven criteria:

- Environmental Benefit (worth up to 10 points, excluding bonus)
- Economic Benefit (up to 10 points, excluding bonus)
- Access/Patronage Benefits (up to 10 points, excluding bonus)
- Transportation System Enhancement (up to 10 points, excluding bonus)
- Local Benefit and Community Enhancement (up to 15 points, excluding bonus)
- Safety Benefits (up to 15 points, excluding bonus)
- Relationship To/Support for Other Plans, Projects (up to 10 points, excluding bonus)
- Size of Matching Share (up to 5 points, excluding bonus)
- Level of Community, Regional Support -- Letters of Support, Resolutions, Endorsements (up to 5 points, excluding bonus)
- Innovation/Creativity (up to 5 points, excluding bonus)
- Mix of Eligible Enhancements (up to 5 points, excluding bonus)

The “ranging structure” prepared by CDTC staff presents details on how scores would be determined for each of these criteria, for example, what would merit fifteen points for "benefits to immediate proposal area and environment" as opposed to nine, or none. The structure gives sample indications of what might garner a proposal different point scores on individual criteria, and allows the evaluator to review guiding language from the Round One TEP Guidebook and CDTC interpretations and key in scores accordingly. The structure is reflected in a spreadsheet template, a completed version of which can be printed out and kept on file for each proposal. In addition, narrative rationales for scores may be included in the printouts.

Following presentation of the ranging structure, a sample application of the new structure to a series of proposals previously considered by CDTC for both Round One of the TEA-21 TEP and the final round of the ISTEA TEP is presented, to illustrate the types of changes to evaluation outcomes which could result from use of the new methodology.

Structure Basis

For four criteria, the point scores are direct functions of some quantifiable attribute:

- points for "Relationship to/Support for Other Plans, Projects" would be assigned based on how many such plans or projects are cited and/or known (and can validly be considered to be supported by the proposal)
- points for "Size of Matching Share/Assurance of Availability" would be assigned based on where the indicated matching share falls into a series of percentage ranges
- points under the "Innovation/Creativity" criterion would be assigned based on definable unique features and "model project" potential
- point assignments under the "mix" criterion would be based on how many TEP-eligible activities were incorporated into the proposal

For the remaining criteria, the ranging structure sets forth four illustrative "levels of success" that a proposal might achieve, with narrative descriptions of each: zero% (no success); 20% (low success), 60% ("high medium" success), or 100% (high success). These levels would correspond to zero, two, six and ten point scores for the ten point criteria; zero, three, nine and fifteen point scores for the fifteen point criteria; and zero, one, three and five point scores for the five point criteria. Again, these are *illustrative*; evaluators would award whatever point scores within the maximums were deemed appropriate based on individual proposal attributes.

In examining the ranging structure, it should be borne in mind that by such measures as transportation benefit or economic development, most TEP proposals would be seen at best as only having "low success" (that is, two points out of ten) potential compared to activities such as highway construction or the development of a new office building. It is arguably not appropriate to consider the potential benefits of Enhancement-type projects against the reference of all possible investments. Thus, the maximum potential (100%) "level of success" will be based on *what is possible for TEP-type projects in the Capital District*. This determination will require a combination of staff knowledge of existing TEP-type projects (including completed projects which were not funded under TEP but would have been eligible) and what the theoretical "best case" benefit of an Enhancement project could be. Staff would document the bases for all point scorings, and would have this supporting information available if needed when it presents the results of its reviews to the Planning Committee for approval before transmission to the statewide Transportation Enhancements Advisory Committee (TEAC).

Ranging Structure Summary Sheet

Project Name				
Project Sponsor				
Project Number:			01-R1-0##-CDTC	
SCORE			0	
SCORE-BASED RANK				
"OVERALL IMPRESSIONS" RANK:				
FEASIBILITY (A/B/C):				(A=HIGH/B=MEDIUM/C=LOW)
COST-EFFECTIVENESS (A/B/C):				(A=HIGH/B=MEDIUM/C=LOW)
			this	
		max	proj	
		Score	Score	
"Benefits" Criterion Group				
SUBTOTAL (Max 70):			0	
		10	0	B1. Environmental Benefit
		10	0	B2. Economic Benefit
		10	0	B3. Transportation Benefit 1: Enhancement of Access/Patronage
		10	0	B4. Transportation Benefit 2: Enhancement of Transportation System
		15	0	B5. Local Benefit and Community Enhancement
		15	0	B6. Safety Benefits
"Support" Criterion Group				
SUBTOTAL (Max 20):			0	
		10	0	S1. Relationship To/Support for Other Plans, Projects
		5	0	S2. Size of Matching Share
		5	0	S3. Level of Community, Regional Support: Letters of Support, Resolutions, Endorsements
"Innovation" Criterion Group				
SUBTOTAL (Max 10):			0	
		5	0.0	I1. Innovation/Creativity: Project is innovative or could serve as a model for similar enhancement projects.
		5	0.0	I2. Mix of Activities: Project encompasses two or more eligible transportation enhancement activities.
	TOT	100	0	

Detailed Discussions of Criteria and Scores

Note: For each criterion, space will be provided to enter information to clarify the basis for assigning a particular score. To save space, this is not represented in the criterion discussions.

Also note that the examples provided for low/medium/high potentials under each criterion should not be taken to be the *only* examples with regard to benefiting groups or project types which could qualify for points at the indicated level of success. Furthermore, the "medium" and "high" determinations could be the results of some cumulative consideration, e.g., the achievement of more than one type of "low-level" benefit.

BENEFITS CRITERION GROUP				
	sample	**max**	**this**	
	raw	**wtd**	**proj**	
	score	**score**	**score**	
		10.0	0	**B1. Environmental Benefit**
				Criterion Definition: The extent to which the project would preserve or positively influence natural, cultural or historic resources, scenic quality, air or water quality, wildlife habitat or migration.
	0	0.0		NONE (project not likely to produce ANY environmental benefit)
	1	2.0		LOW (project likely to have some minimal environmental benefit)
	3	6.0		MEDIUM (project likely to have modest but significant environmental benefit)
	5	10.0		HIGH (project likely to provide substantial environmental benefit)
	7.5	15.0		EXTRAORDINARY (150% of maximum)
				In general, this category focuses on the "natural" environment; however, the Guidebook notes that the rater has ***broad discretion*** *to interpret and define these terms. For example, the rater will form an opinion on "what is a cultural resource?" (there are many answers: one interpretation might be "areas of historical or archeological significance", while another could be "areas where human social interactions may occur"). Examples of indicators might be:*
				• Natural resources conserved or protected
				• Cultural resources conserved or protected
				• Historic resources preserved or enhanced
				• Scenic quality preserved or enhanced
				• Air and/or water quality directly improved as a result
				• Wildlife habitat/migration areas are preserved, restored, created, or otherwise enhanced

	sample	**max**	**this**	
	raw	**wtd**	**proj**	
	score	**score**	**score**	
		10.0	0	**B2. Economic Benefit**
				Criterion Definition: The extent to which the project would improve the quality of life through job creation, increased tourism, economic development, balanced distribution of funds and other socio-economic factors. Should be considered in the context of what is possible in these areas for an Enhancements-level project.
	0	0.0		NONE (project not likely to produce ANY economic benefit)
	1	2.0		LOW (project likely to have some minimal economic benefit)
	3	6.0		MEDIUM (project likely to have modest but significant economic benefit)
	5	10.0		HIGH (project likely to provide substantial economic benefit)
	7.5	15.0		EXTRAORDINARY (150% of maximum)
				This category focuses on the potential for positive economic impacts resulting from an enhancement project. Examples follow:
				• Additional jobs are created in the community
				• Existing jobs will be retained within the community
				• Tourism and visitor revenues will be enhanced through:
				• Additional hotel occupancy, increased restaurant and retail sales
				• Potential for "return-trips" increased
				• Economic Development potential (e.g. marketability of the community) is enhanced through:
				• Improved community aesthetics
				• Perception of a higher "quality of life"
				• Economically challenged individuals are assisted.
	sample	**max**	**this**	
	raw	**wtd**	**proj**	
	score	**score**	**score**	
		10.0	0	**B3. Transportation Benefit 1: Enhancement of Access/Patronage**
				Criterion Definition: The extent to which the project would increase or improve access to activity centers (business, school, recreation, shopping, etc.). Access is to be considered both in a general sense and for particular groups such as people with disabilities.
	0	0.0		NONE (project not likely to produce ANY transportation access/patronage benefit)
	1	2.0		LOW (project likely to have some minimal transportation access/patronage benefit)
	3	6.0		MEDIUM (project likely to have modest but significant transportation access/patronage benefit)
	5	10.0		HIGH (project likely to provide substantial transportation access/patronage benefit)
	7.5	15.0		EXTRAORDINARY (150% of maximum)
				The focus of this category should be on the enhanced mobility (especially with non-traditional modes) of persons or on significant improvement in the quality of the trip experience (improved access to sites, etc.). Examples here are best expressed in the form of questions:
				• What activity centers will be connected? Are the connections genuinely enhanced?
				• What is the current level of connectivity/access (i.e. how dramatic are effects of the proposed improvements)?
				• Is user safety/security a current issue?
				• Is access guaranteed to all individuals (e.g. ADA, private ownership are examples of issues)?

	sample	**max**	**this**	
	raw	**wtd**	**proj**	
	score	**score**	**score**	
		10.0	0	**B4. Transportation Benefit 2: Enhancement of Transportation System**
				Criterion Definition: The extent to which the project would build, extend or connect local and regional transportation systems for the purpose of facilitating non-motorized and/or intermodal travel.
	0	0.0		NONE (project not likely to produce ANY transportation system enhancement)
	1	2.0		LOW (project likely to have some minimal transportation system enhancement)
	3	6.0		MEDIUM (project likely to have modest but significant transportation system enhancement)
	5	10.0		HIGH (project likely to provide substantial transportation system enhancement)
	7.5	15.0		EXTRAORDINARY (150% of maximum)
				This category concentrates on the development of the intermodal transportation system envisioned by the ISTEA legislation and reinforced in TEA-21. Whereas the previous category looked at how the proposed project meets user "demand", this category looks at the "supply" aspects of the transportation equation. Examples include:
				• Transportation modes being connected (e.g. bikes and pedestrians, bikes and buses, bikes and autos, trains and pedestrians, etc.). Also, projects identified in transportation plans; a part of continuing or ongoing transportation programs.
				• System deficiencies being addressed (e.g. Pedestrian circulation systems, bikeway systems, etc.).
	sample	**max**	**this**	
	raw	**wtd**	**proj**	
	score	**score**	**score**	
		15.0	0	**B5. Local Benefit and Community Enhancement**
			0	
				Criterion Definition: The extent to which the project would provide or increase recreational or transportation opportunities for its immediate neighbors, and would be a neighborhood amenity rather than a source of local consternation.
	0	0.0		NONE (project not likely to produce ANY direct user benefits of these sorts)
	1	3.0		LOW (project likely to have some minimal direct user benefits of these sorts)
	3	9.0		MEDIUM (project likely to have modest but significant direct user benefits of these sorts)
	5	15.0		HIGH (project likely to provide substantial direct user benefits of these sorts)
	7.5	22.5		EXTRAORDINARY (150% of maximum)
				The aim of this criterion is to encourage consideration of the positive impacts a project will have at the most local level. It is important because some projects can have significant regional benefit while having little benefit -- if not in fact being a nuisance -- to their immediate neighbors. Among the considerations for this criterion will be the extent to which the project would do the following:
				• Create or enhance some sort of opportunity which is genuinely likely to be used by its neighbors.
				• Preserve community resources (e.g. neighborhoods, cultural facilities, gathering areas, etc.).
				• Enhance neighborhood ambiance or safety

	sample	**max**	**this**	
	raw	**wtd**	**proj**	
	score	**score**	**score**	
		15.0	0	**B6. Safety Benefits**
			0	
				Criterion Definition: The extent to which the project would enhance safety, particularly the safety of cyclists or pedestrians. Can also consider the benefit to all travelers attendant to remedying a known hazardous condition such as a poor line of sight or narrow roadway.
	0	0.0		NO safety benefit expected (proposal is for an effort which would in itself have no discernible impact on any kind of safety problem, e.g., a planning or historic preservation project)
	1	3.0		MODEST safety benefit expected (proposal includes improvements which will call attention to or otherwise provide guidance regarding a safety problem, but will not substantially resolve the problem, e.g., cautionary signage, crosswalks or other non-capital improvements)
	3	9.0		MEDIUM safety benefit expected (proposal includes elements which will substantially resolve but not eliminate a safety problem, e.g., bikeable shoulder/bike lane construction)
	5	15.0		HIGH safety benefit expected (proposal includes a hazard remediation or development of a new facility which would effectively eliminate a known safety problem)
	7.5	22.5		EXTRAORDINARY (150% of maximum)

SUPPORT GROUP		**CRITERION**		
	sample	**max**	**this**	
	Raw	**wtd**	**proj**	
	Score	**score**	**score**	
		10.0	0	**S1. Relationship To/Support for Other Plans, Projects:**
				Criterion Definition: The extent to which the project would implement goals in regional plans or other federal, state or local plans.
	0	0.0		NONE (project not likely to further any local, regional or state plan goals)
	1	2.0		LOW (project likely to further goals in one cited or known plan)
	3	6.0		MEDIUM (project likely to further goals in two or three cited or known plans)
	5	10.0		HIGH (project likely to further goals in more than three cited or known plans)
	7.5	15.0		EXTRAORDINARY (150% of maximum)
				The linkage to existing plans is critical. This is particularly true for projects within urbanized areas under the jurisdiction of a Metropolitan Planning Organization (MPO). Under the law, MPOs must not only approve projects for programming in their Transportation Improvement Program (TIP), the projects must relate to a Long Range Plan. Remember that a formal action from a MPO (e.g. resolution) represents the full support and approval of all of the member governments and participants in the metropolitan region. If a project is known to be consistent with, or actually may implement some aspect of various plans, ordinances, local master plans, etc., it is appropriate to make note of that fact.
	sample	**max**	**this**	
	Raw	**wtd**	**proj**	
	Score	**score**	**score**	
		5.0	0	**S2.Size of Matching Share**
% MATCH:				*Criterion Rationale:* A 20% minimum match is required; the provision of a match in excess of 20% benefits the overall program as it allows federal funds to be used for additional enhancement projects.
	0	0.0		<20% match (ineligible)
	1	1.0		20-24.99% match
	3	3.0		25-34.99% match
	5	5.0		35% or greater match
	7.5	7.5		EXTRAORDINARY (150% of maximum)
				NYSDOT Bonus Category Cutoffs (key bonus score into green box at left)
			0.0	20%
			1.0	21-30%
			2.0	31-40%
			3.0	41-50%
			4.0	51-60%
			5.0	60% or greater

	sample	**max**	**this**	
	raw	**wtd**	**proj**	
	score	**score**	**score**	
		5.0	0	**S3.Level of Community, Regional Support: Letters of Support, Resolutions, Endorsements**
				Criterion Definition: Letter(s) of support from elected officials; endorsement action from local governments (resolutions, etc.); endorsement action from local governments (resolutions, etc.);letters of support/endorsement actions from interest groups (e.g. Chambers of Commerce, advocacy groups, neighborhood associations, etc.)
				This is a critical category in that it represents the level of community and political support for the project. While transportation projects are often delayed (or terminated) as a result of significant opposition, projects that have the full backing of community groups and leaders/elected officials have a higher completion rate. Projects that demonstrate evidence of a combination of both "grass roots" support and support from the appropriate officials are more favorable than those that do not. The degree of support is also critical: letters from individuals are good, but resolutions, petitions, or other formal actions of support by groups of people are better.
	0	0.0		NO evidence of support provided
	1	1.0		SOME (LOW) support (e.g., one or two letters from individual citizens included in the proposal)
	3	3.0		MEDIUM support (e.g., one or two letter(s) from the parties described under the "Criterion Definition" section)
	4	4.0		HIGH support (e.g., letter(s) from the parties described under the "Criterion Definition" section, plus some official support, e.g., a resolution)
	5	5.0		HIGHEST support (outstanding indication of support, e.g., considerable quantity of letters/resolutions, indication of plans by outside parties to provide assistance with project implementation)
	7.5	7.5		EXTRAORDINARY (150% of maximum)

Innovation Criterion Group				
	sample	**max**	**this**	
	raw	**wtd**	**proj**	
	score	**score**	**Score**	
		5.0	0	**I1. Innovation/Creativity: Project is innovative or could serve as a model for similar enhancement projects.**
				Criterion Definition: The level of "innovativeness" or the suitability of the project as a "model" for other projects. Unique design or application, new technologies, development of public/private partnerships and multi-jurisdictional projects, are all good examples.
	0	0.0		• Project is routinely organized, designed, planned
	1	1.0		• Project has a couple of unique characteristics
	3	3.0		• Project has unique characteristics / some model potential
	5	5.0		• Project is extremely unique / definitely a model
	7.5	7.5		• EXTRAORDINARY (150% of maximum)
	sample	**max**	**this**	
	raw	**wtd**	**proj**	
	score	**score**	**score**	
		5.0	0	**I2. Mix of Activities: Project encompasses two or more eligible transportation enhancement activities.**
	0	0.0	0	• 1 eligible activity
	3	3.0	0	• 2-3 eligible activities
	5	5.0	0	• 4-5 eligible activities
	7.5	7.5	0	• EXTRAORDINARY (6+ eligible activities)
			0	<-- DOT "multiple activities" score (no need to key in -- will be copied to DOT sheet)
				Many transportation enhancement project proposals may technically encompass two or more eligible activities. If they do, the TEAC will consider this fact in their rating. However, each individual aspect of the proposal should "stand alone" in the sense; ***if the project were split by category, each would qualify on its own merits****: (e.g. landscaping might be only a side-effect to the development of scenic overlook and probably would not receive extra credit).*

APPENDIX K - PROJECTS COMPLETED SINCE THE FIRST TIP

This appendix does not yet include projects completed since the 2013-18 TIP update.

Federal-Aid Problem Assessment Projects
Committed For Obligation Since the 1977-82 TIP

TIP #	Project Description	Amount Committed (In Millions)	Year Obligated
RG120	Empire Corridor Planning Program	1.000	2009
RG121	NY to VT Bi-State Intercity Passenger Rail Program	0.500	2009
A36	Exit 24 Study	0.300	1980
A162	Route 5 Study	0.100	1988
A378	Tandem Lot Relocation Study	0.010	1998
R274	ITS Demo, Part 2: Research by RPI into ITS Methods	0.086	2005
SA16	I-87 Access Study (Exits 8A, 9, 9A)	0.250	1981
SA18	SESARCO Corridor Study	0.400	1981
S59	I-890/NYS Thruway Exit 26 to Rt. 5 Access Study	0.425	1985
Total Cost of Problem Assessment Projects		**$ 3.071**	

Federal-Aid Transit Projects
Committed For Obligation Since the 1977-82 TIP

TIP #	Project Description	Amount Committed (In Millions)	Year Obligated
T1A	Albany Bus Staging Area	0.2	1988
T6	Purchase of Vehicles for the Elderly and Handicapped	1.1	1977-85
T6A	16(B)(2) Vehicles for the Elderly and Handicapped	11.0	Ongoing
T6B	Special Purpose Transit Vehicles	15.2	Ongoing
T8	Building Addition, Albany Bus Garage Facility	1.1	1977-85
T9	Facility Improvements	34.4	Ongoing to 2013
T11	System Wide Improvements	5.3	Ongoing
T12	Data Processing Implementation	0.3	1977-82
T14	Transit Operations Support	138.3	1977 to 98
T14A	Non-CDTA Transit Operations Support	6.5	Ongoing
T14B	Transit Operations Support for Northway Commuter Service	5.5	2003-05
T15	Purchase of Two Suburban Buses, Saratoga	0.2	1977-82
T16	Transit Support Vehicles	3.0	Ongoing
T17	Transit Vehicle Buses	70.2	Ongoing
T18	Shop Equipment	0.4	1977-82
T19	Troy Bus Garage	2.3	1977-82
T20A	Articulated Buses and Small Buses (CDTA)	2.7	1977-82
T20B	New Express Buses, Saratoga	1.1	1977-82
T21	Preferential Treatment at Selected Intersections	0.0	1977-82
T22	Supplemental Technical Services	0.1	1977-82
T24	Registering Fare Boxes	1.4	1977-82
T26	Mini-Bus Replacement	1.0	1977-82
T27	Two-Way Radios	0.1	1977-82
T28	Electronic Passenger Information Aids	1.5	1977-82
T29	Maintenance Management System	0.1	1977-82
T30	Downtown Albany Pedestrian Walkway	5.8	1989
T31	Albany Trolley Buses	0.8	1988 & 1989
T32	Leasing Bus Tires	2.3	Ongoing to 2001
T33	Additional Saratoga County Express Buses	2.6	1989-1990
T34	Major Bus Components	1.7	Ongoing
T36	Contingencies, Administration and Planning	6.5	Ongoing
T37	Fare Collection Equipment	1.2	1993
T38	Park & Ride Transfer Facilities	2.1	1995 & 1996
T39	Privately Operated Transit Feeder Services	0.7	1995 & 1997
T40	Circular Trolley Service (Downtown Troy & Saratoga Springs)	0.3	1995
T41	Vanpools for Long Distance Commuters	0.1	1995
T42	Carpool Matching	0.03	1995
T43	Private Carrier Transfer	0.03	1994
T44	Transportation Ordinances	0.12	Multiple

TIP #	Project Description	Amount Committed (In Millions)	Year Obligated
T45	Transfer Scheduling	0.08	1995
T46	Intermodal Study	0.1	1995
T47	Transit Marketing and Promotion	0.1	1994
T48	Commuter Coach for Private Operator	0.5	1994 & 1997
T49	Guaranteed Ride Home	0.18	Ongoing to 2001
T50	Bus Purchase for Park & Ride Facilities	1.5	1995
T51	Transit in Construction Work Zones	1.2	Ongoing
T52	Section 18 Fixed Route Service	0.4	Ongoing
T53	I-87 Park & Ride Lots	4.1	1995 to 1997
T54	Rensselaer Amtrak Station	26.1	1997 to 2000
T56	Human Service Agency Brokerage Startup Fund	1.2	Ongoing to 2001
T57	Preventative Maintenance of Buses	68.5	Ongoing
T58	Bikes on Buses	0.33	1999
T59	Replacement Shuttle Vehicles	4.9	Ongoing
T60	Replace/Upgrade Radio System	3.0	2000
T61	Fare Collection Equipment	1.8	2001-03
T62	Information Systems	1.6	Ongoing
T64	Customer Information Systems	1.3	Ongoing
T65	Shop Equipment	0.05	Ongoing to 2001
T66	Welfare to Work	6.7	1999, 2003-12
T66A	Welfare to Work (Saratoga Springs)	0.3	2009-11
T67	Rensselaer AMTRAK Station ITS	0.05	2001-03
T69	NY 5 Bus Rapid Transit Vehicles	3.3	2003
T70	NY 5 Bus Rapid Transit Stations	9.9	2005-12
T72	Safety & Security	2.1	2003-13
T74	Park & Ride Lots on NY 5 Corridor	0.9	2003
T75	Transit Signal Priority on NY 5	1.2	2005-12
T76	Replacement Transit Buses for Saratoga Service	1.7	2003-10
T77	Preventive Maintenance for Commuter Service	3.4	Ongoing from ‘05
T79	New Freedom Transit Service	0.5	Ongoing from ‘05
T79A	New Freedom Transit Service in Saratoga Springs	0.14	Ongoing from ‘05
T80	NY 9 Corridor Transit Service in Albany and Saratoga Co	1.0	2009
T81	Rensselaer Station Capacity Improvements, Phase 2	12.0	2011
T83	CDTA Alternative Fuel Retrofit: 24 Buses	1.2	2009
T84	Saratoga Bus Garage Feasibility Study	1.2	2009

Total Transit Projects (1977-13) **$489.6**

Federal-Aid Highway Projects
Committed For Obligation Since the 1977-82 TIP

TIP #	Project Description	Amount Committed (In Millions)	Year Obligated
None	Post Emergency Contract	$3.249	1996
None	Attractions Signs	0.800	1998
None	Traffic Loops Installation	0.560	1998
None	Interstate Service Patrols	0.990	1998
None	Traffic Signals Requirements	0.800	2000
RG15	Durable Pavement Markings	21.273	Ongoing
RG16	State Bridge Inspection Set-Aside	13.592	Ongoing
RG21	Right-of-Way Fencing Set-Aside	2.918	1992
RG22	Local Bridge Inspection Set-Aside	10.050	Ongoing
RG23	Traffic Signals Set-Aside	6.512	Ongoing
RG26	Interim Scenic Byways Program	0.082	1993
RG27	Travel Demand Management	3.802	2005
RG28	Intelligent Transportation System (ITS)	4.613	1998
RG29	CDTC Technical Services	0.818	Ongoing
RG30	Interim Scenic Byway Program (ANCA)	0.075	1993
RG31	Corridor Management Initiative	0.373	Ongoing
RG36	Capital District Signing - Replace large signs	0.972	199x
RG37	HELP Program	1.000	2005
RG37A	TMC Operating Costs	17.600	Ongoing
RG80	Permanent Message Sings for Interstate Roads	0.650	2002
RG81	NY 5 & Wolf Road ITS Signal Component	4.500	2002
RG96	Recreational Trails Projects	0.720	Ongoing
RG99	ITS Elements & Transmit Systems for Interstates	5.473	2005-10
RG106	Scenic Byways Block Funds	0.800	Ongoing
RG108	Preventive Maintenance (1R) on the Local Federal-Aid System	1.791	2009
RG109	NY 5 BRT/ADA Compliance	7.500	2009
RG110	High Function State Bridge Preservation	6.600	2009
RG111	Bridge Painting For State and Local Bridges	16.160	2009
RG112	Bridge Repairs On Bridges Rated 5 to 7	4.400	2009
RG114	Bridge Cleaning	2.000	2009
RG115	Emergency Demand and Flag Repair	3.000	2009-12
None	Shaker Barn Preservation	0.200	1998
A1	Computerized Signal System	2.680	1980
A2	Ontario/Remsen/Mohawk	0.127	1981
A2A	Watervliet Signals	0.110	1985
A3A	Albany-Shaker Road/Old Wolf/New Wolf	0.779	1983
A3B	Albany-Shaker Road/Imp. West of Old Wolf	1.350	1987
A4	Route 155, Old State Road Intersection	0.241	1981
A7	Central Avenue Off Street Parking	1.090	1979
A7A	Central Avenue Improvements	1.039	1979
A9	North Mohawk Street	0.284	1978
A10	Green Island Bridge	12.665	1979
A12	Route 20 Improvement (I)	0.612	1977
A12	Route 20 Improvement (II)	3.748	1978
A13	Route 146 Bridge Over PCRR	1.532	1983
A14	Northern Boulevard Viaduct	2.668	1978
A15	Dunn Memorial Bridge Repair #2	1.630	1978

TIP #	Project Description	Amount Committed (In Millions)	Year Obligated
A16	Dunn Memorial Bridge Repair #3	1.735	1979
A19	Route 378 Bridge Over Route 32	0.240	1978
A20	Route 9W Southern Boulevard	7.154	1984
A22	Route 85, Route 85A to Kenwood Avenue, R&P	1.038	1978
A24	Cohoes Arterial, Stage 1 (Maplewood Interchange to Dyke Avenue)	7.974	1984
A24A	Cohoes Arterial, Stage 2	6.894	1986
A26	Hoosick Street Bridge Superstructure	11.125	1978
A28	I-787 Green Street to Hamilton Street	0.303	1982
A30	Alternate Route 7/I-87 Interchange	21.253	1983
A30A	Alternate Route 7/I-87 Interchange (Route 9 & Sparrowbush Road)	10.233	1982
A31	I-90 Additional Lanes	1.625	1978
A38	I-90 Bridge Over Central Avenue	0.289	1978
A43	Route 7 West City Line to Congress Street (Watervliet)	1.194	1981
A44	Route 32 - 13th Street to North City Line	0.984	1980
A45	Route I-87 (Exit 2 to Exit 6)	5.482	1987
A46	112th Street Bridge Repairs	0.460	1979
A47	Signal Installation Various Locations	0.222	1979
A49	Pine Street Connector	0.674	1980
A51	Signal Installation Various Locations	0.110	1979
A52	Route 7 Sch'dy County Line to I-87 Follow-Too-Closely Warning System	0.186	1978
A53	Alternate Route 7 (Latham to Elm Street)	6.234	1982
A53A	Alternate Route 7 (Maplewood to Elm Street)	11.165	1981
A54	State Campus Safety Improvements	0.195	1978
A55	I-787 Bridge Deck Repair	2.679	1980
A59	Quackenbush Square	0.275	1982
A60	Route 7 Over I-890	0.110	1979
A61	Route 9 South of the Mohawk River	.0 190	1978
A62	Route 32 in Menands Improvements	0.159	1978
A64	Route 85, 85A to 85A	0.640	1979
A67	Lower Hudson Avenue	0.219	1980
A69	Route 5 and Vly Road Signal	0.048	1981
A70	112th Street Bridge Electromagnetic Repairs	0.500	1980
A72	Route 5 Bus Turnout	0.016	1981
A73	Thruway Third Lanes	7.341	1981
A74	I-87 Rumble Strips	0.022	1982
A75	I-787 Mono-Deck Repairs (NB)	4.306	1981
A76	Route 7 Verdoy Firehouse Signal	0.014	1982
A77	Routes 20/146 Signal	0.043	1982
A78	Route 378 Bridge Decks	1.292	1982
A79	Route 85/Thruway, Route 140/D&H	0.502	1982
A80	Dunn Memorial Bridge Ramps	1.260	1982
A81	Alternate Route 7/I-787 Interchange	0.507	1983
A82	Pavement Markings, Route 9, 85, I-90, I-787	0.310	1982
A83	I-90/I-787 Interchange Mono-Deck Repairs	1.706	1983
A84	Route 7 and Wade Road	0.563	1983
A85	I-87 Speed Monitor Loops	0.008	1981
A86	Northway/I-90 Connection (Exit 1)	10.229	1984
A87	Routes I-87 & I-90 Thruway Connection (Exits 23A & 24)	28.210	1984
A89	Route 158 (Route 146 to Albany-Schenectady County Line)	0.153	1982
A90	Route 9W (Jericho Road to Delmar Bypass)	0.375	1983
A91	Routes 155, I-87 (NB Ramps) & Holly Lane Signal	0.055	1982
A92	Route 155, Middle School Access Road to Route 20, Pedestrian/Bike	0.052	1983
A93	Route 5, Fuller Road to Northway Inn, Pedestrian Accommodation	0.243	1983

TIP #	Project Description	Amount Committed (In Millions)	Year Obligated
A94	I-87 & 787 Pavement Markings	0.171	1983
A95	Albany Shaker Road/Osborne Road Improvements	1.750	1988
A96	Congress Street Bridge (see also R53)	0.878	1983
A97	Albany Street/Karner Road Improvement	0.762	1987
A98	Sign Improvements Various Locations (I-87, I-787, I-90)	0.157	1983
A99	Dunn Memorial Bridge EB (see also R56)	0.523	1983
A100	Route 9 Bridge Over Mohawk River Painting	0.101	1983
A101	Route I-87 Bridge Over Mohawk River Painting	0.575	1985
A102	I-787 SB Viaduct	2.600	1983
A104	I-90 WB to I-87 NB Ramp	7.409	1983
A105	Route 7 Reconstruction (Wade Road South to Rosendale Road)	13.377	1990
A106	23rd Street at I-787 NB Exit Signal	0.035	1983
A107	Route 155 Over Watervliet Reservoir	1.404	1990
A109	Route 32 Over Conrail Feura Bush	2.866	1989
A110	Route 146 Over Normanskill	0.475	1984
A112	Route 470 Over Mohawk River East	1.856	1987
A113	Johnston Avenue and Vliet Street Over Bike Path	0.750	1985
A114	NY 20/SUNYA, NY 7/Old Loudon Rd; Wash'n Ave Ext/Rapp Rd Signals	0.140	1983
A116	Sand Creek Road/Osborne Road Improvements	1.230	1990
A117	Albany Shaker Road and Everett Road, Intersection Improvements	2.084	1993
A119	I-787 Over 23rd Street and Over 25th Street	1.097	1984
A122	Curry Road Over I-890	1.198	1989
A124	Everett Road and Watervliet Avenue Extension	0.158	1984
A125	Dunn Memorial Bridge Westbound	0.555	1985
A127	I-787, I-90, Route 85 & Route 32 Signals	0.345	1985
A128	Route 20 Bridge Over Thruway	4.197	1987
A131	Exit 24 Electric and Toll Booth Collection	2.028	1984
A132	Exit 24 Heating & Ventilating	0.224	1984
A133	Exit 24 Plumbing	0.104	1984
A134	Old State Road Safety Improvements	0.106	1987
A137	Route 32 in Watervliet (Part 1)	0.670	1985
A137	Route 32 in Watervliet (Part 2)	0.775	1988
A138	Permanent Traffic Count Stations	0.044	1989
A139	Route 443 and Route 335 Intersection	0.279	1989
A140	Central Ave/Parkwood Dr & Lincoln Ave Intersection Improvements	0.134	1987
A141	Route 32, Northway to Latham Circle	0.536	1986
A142	Maywood Section Highway and Drainage	0.705	1985
A143	Sand Creek Road, Resurfacing	1.225	1985
A144	Routes 20/155, 146, 85 or 85A (Resurfacing)	1.179	1985
A145	Route 9, North of Latham Circle	0.250	1986
A146	I-890 Over Conrail & Spur; Everett Road Over I-890 and Conrail	4.875	1989
A147	Normanskill Farm Road Over Ravine	0.070	1985
A148	NY 155 Bridge Over Normanskill Creek, Bridge Replacement	2.308	1997
A150	Bridge Avenue Over Mohawk River	0.152	1986
A151	North Mohawk Street Over Filled Hydro Canal	0.010	1987
A152	Route 9, Birch Hill Road to Pine Street	1.200	1986
A153	CR 202 (Meadowdale Rd) Over Black Creek	0.209	1986
A154	Route 2, Latham Circle to Purtell Avenue	0.623	1989
A155	I-787 Over South Pearl Street and Thruway Ramps	10.449	1988
A156	Route 9W Over I-787 Ramps	1.978	1990
A157	Route 9W in Vicinity of Hoffman Avenue	0.419	1987
A158	Route 2 Over Hudson River	0.375	1986
A159	Route 378 Over Hudson River	0.508	1986

TIP #	Project Description	Amount Committed (In Millions)	Year Obligated
A160	Route 144, Route 396 to Conrail	0.376	1989
A161	Route 155, Old Wolf Road to Lincoln Avenue	1.396	1987
A162	Route 5, Sch'dy City Line to Fuller Road	6.380	1989
A164	North Albany Industrial Access Road	1.188	1988
A165	Washington Ave., Victor Ave. to Campus Approach	0.275	1990
A166	Northern Blvd., End of Viaduct to Livingston Ave.	0.303	1990
A167	Delaware Avenue over the Normanskill Replacement	6.713	1993
A168	Route 158 Bridge Over Bozenkill	0.616	1988
A169	Wards Lane Over Railroad & I-787	1.588	1990
A170	Lark/Dove Monodecks	3.647	1993
A171	Park & Ride Lot in Delmar	0.163	1989
A173	I-87,: Exit 24 Landscaping	0.364	1992
A175	Western Avenue, Gipp Road to Cornell Avenue	1.948	1990
A178	Frisbie Avenue Park and Ride Lot	0.928	1989
A179	Route 5: Route 155 to Schenectady Co Line, Resurfacing (Also S85)	7.932	1996
A181	Route 5, Albany City Line to I-87	6.032	1990
A183	Route 443 Culvert	0.241	1989
A184	Route 470 (112th St) Bridge Over the Hudson River (Also R102)	7.979	1995
A186	Route 155 Over Normanskill	0.209	1989
A187	I-90: Patron Island Bridge Deck Rehabilitation	21.341	1992
A188	Fuera Bush Road Over NYS Thruway	2.097	1990
A189	Route 155 Over Vly Creek	0.385	1990
A190	I-90 and I-787 Lark Dove Interchange, Monolithic Deck Repairs	4.840	1997
A191	Replace Route 146 Bridge over Thruway	3.340	1992
A192	Delaware Avenue Over Normanskill Creek	0.404	1990
A193	Route 470 Bridge over Mohawk River Replacement	1.706	1993
A196	Route 7 Bridge over I-890 Replacement	0.724	1993
A198	NY 7 Bridge over I-87	0.488	1993
A198	NY 7 Bridge over I-87 and I-87 Bridge over Watervliet Shaker Road	42.703	2008
A199	Route 32 Bridge over D&H at Ward's Lane	6.655	2003
A200	Rte. 155 Bridge over Lincoln Avenue Repairs	2.756	1993
A201	I-787 SME Resurfacing, Viaduct to Route 378	5.847	1991
A203	Cohoes D & H Crossing	0.745	1990
A204	I-787 SME Paint Bridge Over Hudson River	1.050	1991
A206	Large Signs I-90 & I-87	1.020	1990
A207	I-787 Clinton Avenue Viaduct, Bridge Paint	0.418	1991
A208	Route 32 Bridge over Route 9W Deck Repairs	0.741	1993
A209	Buckingham Drive Bridge Over NY 85, Replacement	3.500	1999
A209	Buckingham Drive Bridge over Route 85 Replacement	0.060	1992
A210	Route 32 Bridge over Normanskill Creek Replacement	0.041	1993
A211	I-87 Bridges & Wolf/ASR and Wolf/Central Intersection Imp.	7.654	1997
A212	South Mall Expressway Bridge Painting	1.020	1992
A213	Route 378 Over Hudson River	0.594	1990
A215	Krumkill Road Over Normanskill Creek	0.300	1991
A216	Old State Road Over Normanskill Creek	0.300	1991
A217	Schoolhouse Rd: Thruway Bridge & Int'n Imp. at NY 20 and I-87	3.268	1997
A218	I-787 Clinton Avenue Viaduct, Painting	0.499	1991
A219	South Mall Expressway Over I-787	0.290	1990
A220	Miscellaneous Bridge Cleaning	0.104	1990
A221	Route 9, Colonie to Saratoga Co. Line Resurfacing & Bridge Removal	2.143	1993
A223	NY 20, NY 158 to NY 146, Resurfacing	5.387	1997
A224	South Mall Expressway Bridges, Bridge Deck Repair	3.181	1997
A225	Washington Ave. over Thruway and Fuller Rd Extension Deck Repair	5.384	1993

TIP #	Project Description	Amount Committed (In Millions)	Year Obligated
A227	Lark/Dove Interchange, Repair Bridge Deck, Contract #3	3.600	1998
A228	Route 85 Bridge over Berkshire Blvd Rehabilitation	0.120	1993
A229	I-90 Exit 5A (Corporate Woods) to Patroon Island	20.972	2003
A230	I-787 Ward's Lane to I-90 Southbound lane	0.467	1993
A233	Route 443 at Delaware Plaza, Safety Improvements	0.960	1996
A235	Route 9 and Livingston Ave Intersection Improvements	0.242	1993
A236	Route 5 (Central Avenue), Locust Park and Jupiter Lane Intersection	0.299	1996
A237	Everett Road corridor Improvements	0.452	1993
A243	Lark-Dove Bridge Painting - Interchange I	1.742	1992
A244	Elm Ave Bikepath: Elm Ave Estates to Park & Ride Lot at NY 32	0.293	1997
A245	Lark-Dove Bridge Painting - Interchange II	0.616	1992
A246	Route 143 Bridge over Coeymans Reservoir Replacement	0.530	1993
A251	Route 20 from Route 146 to Route 155 Resurfacing	0.238	1993
A253	Switzkill Road Bridge Over Fox Creek, Bridge Replacement	0.721	1996
A254	CR 6 Bridge Over the Switzkill, Bridge Replacement	0.508	1996
A258	Route 143 Soils Failure Repair Coeyman's Hollow	4.396	1992
A260	NY 144 Bridge Over Conrail; Bridge Replacement	1.883	1996
A261	Route 32 from County Route 301 to Flatrock Road Reconstruction	0.060	1993
A262	NY 144 Bridge over Coeymans Creek:	3.566	2003
A263	Route 156 at Route 443 Reconstruction	1.882	1993
A264	NY 144 Over Vlomankill Bridge Rehabilitation	0.815	1999
A273	Thruway between Exit 23 and Exit 24 Resurfacing	8.400	1993
A274	Whitehall Road Reconstruction	3.048	2002
A275	Albany Shaker Road from NY 7 to Watervliet Shaker Rd	14.800	2002
A276	Thruway Exit 23 to Exit 26 Rehabilitation	16.100	1993
A279	Thruway Bridge over Coeymans Creek Reconstruction	2.760	1993
A280	Thruway Bridge at Milepost 134.93 Rehabilitation	1.800	1993
A284	Route 146 Bridge over the Thruway Reconstruction	1.000	1992
A287	North Mohawk Street, from Mohawk Street	9.200	2003
A288	North Street Railroad Crossing Upgrade	0.132	1992
A292	Pearl Street Reconstruction from Pine to Madison - Part 1	6.719	1997
A294	Watervliet Shaker Road/New Karner Road	2.265	1997
A296	Relocation of Maxwell Road Part 1	5.967	2009
A297	Front Grove Railroad Crossing Upgrade	0.121	1993
A298	Hilton Road Railroad Crossing Upgrade	0.121	1993
A299	23rd Street Railroad Crossing Upgrade	0.148	1993
A300	Elm Street Railroad Crossing Upgrade	0.148	1993
A301	I-87 over Mohawk River Bridge Painting	0.413	1993
A302	Morris Road Grove Railroad Crossing Upgrade	0.155	1993
A303	Lincoln Avenue Railroad Crossing Upgrade	0.155	1993
A304	Cordell Road Railroad Crossing Upgrade	0.155	1993
A306	Thruway Interim Paving from milepost 141.2 to 146.85	1.000	1993
A312	I-90 Exit 3 Connection to State Office Campus Bridge Reconstruction	1.404	1993
A315	I-787: NY 9W to NY 7, Resurfacing	1.560	2002
A322	Wolf Road, NY 5 to Exit 3/4	6.722	2001
A330	NY 443 over Onesquethaw Creek; Bridge Replacement	1.000	2000
A331	NY 145 over Unknown Creek; Bridge Replacement	0.440	1996
A333	Pearl Street Part 2 from McCarty-Madison: Full Reconstruction	3.600	2000
A333	Pearl Street Reconstruction Part 2, Pine to Livingston	10.430	2002
A334	Pearl Street Reconstruction Part 3, McCarty to Madison Avenue	9.075	2002
A336	New Karner Road Bridge over CSX:	2.240	2003
A338	Elm Avenue from Delaware Avenue (NY 443)	3.029	2003
A339	Cherry Avenue (CR 52) from Kenwood	2.989	2003

TIP #	Project Description	Amount Committed (In Millions)	Year Obligated
A341	Central Avenue (NY 5), from City Limits to Everett Road	2.513	2009
A343	Airport Cargo Facility Access	0.600	2004
A344	Church Street Reconstruction	2.228	2003
A347	Lincoln Avenue Sidewalk, Village Bike Route Designation	0.205	2000
A348	NY 85 over Onesquethaw Creek: Bridge	0.840	2003
A349	NY 85 Bridge over Normanskill; Bridge Replacement	3.000	2000
A350	I-87 Resurfacing: From I-90 to the Saratoga County	1.430	1997
A351	I-87 over Pollock Road & Sand Creek Road.	4.490	2002
A351	I-87 over Pollock Road; Bridge Replacement	4.000	2000
A353	I-87 over Sand Creek Road; Bridge Replacement	4.000	2000
A362	I-787 from NY 378 to NY 7	16.140	2001
A368	NY 910E (New Scotland Road) over the Normanskill	0.163	2006
A372	Watervliet Shaker Rd, Albany Shaker Rd to New Karner Rd	10.669	2002
A376	Waterfront Pedestrian Bridge	3.500	2002
A377	Village of Voorheesville Pedestrian Circulation	0.324	2004
A393	Dunbar Hollow/Hannacroix Creek	0.600	2002
A394	AMTRAK/NYSDOT Rail Initiative: Livingston Ave Bridge Replacement	15.000	2000
A395	AMTRAK/NYSDOT Rail Initiative: Rennselaer to Sch'dy Double Track	7.000	2000
A397	NY 143 Bridge over Hannacrois Creek:	1.185	2003
A399	NY 378 Bridge over D&H: Bridge	2.995	2003
A400	Old Ravena Road Bridge over CSX	7.829	2009
A401	CR 53 (Jerico Road over Dowerskill	1.085	2003
A404	Park and Ride Lot at the End of I-787	0.150	2003
A406	Albany County Sign Management	0.400	2004
A407	City of Albany Sign Management	0.525	2004
A408	Old Ravena Road over Conrail (South Crossing)	4.793	2004
A409	City of Albany Bike Racks	0.009	2003
A410	South Bethlehem Sidewalks	0.007	2003
A411	City of Cohoes Bicycle Racks	0.007	2002
A412	Mohawk-Hudson Bike-Hike Trail: NY 9 Corridor Interconnect	0.033	2000
A413	Green Island Bridge Sidewalks	0.062	2013
A414	Wards Lane Sidewalks, Menands	0.025	2000
A415	Albany Waterfront Intermodal Enhancements	1.231	2003
A420	New Scotland Road, City line to Thruway: Reconstruction	5.520	2004
A421	Freeway Travel Time Study	0.025	2003
A424	Cannon Street Reconstruction	2.657	2004
A425	Mohawk-Hudson Bike-Hike Trail: Widening and Resurfacing	0.508	2004
A426	Thruway, Milepost 121.2 to 134.9: 1 Coat Mill & Inlay Pavement Rehabilitation	7.393	2004
A427	Thruway Exit 23: Pavement Repairs	2.423	2004
A428	Thruway, Milepost 134.9 to 146.0: 1 Coat Mill & Inlay Pavement Rehabilitation	6.739	2004
A431	Gifford Hollow Over Switzkill	0.824	2009
A438	19th Street, from City Line to Congress Steet Bridge	7.522	2009
A440	Delaware Avenue, from Madison Avenue to Thruway Bridge	15.579	2009
A445	Central Avenue Safety Improvements	0.012	2009
A446	Mohawk-Hudson Bike-Hike Trail from US 9 to Cohoes City Line	0.028	2009
A447	McKown Road from Western Avenue to Woodscape Drive	0.065	2009
A448	Dunn Memorial Bridge and Ramps	10.287	2011
A449	NY 378 Over Hudson River	6.844	2012
A450A	I-787, from Broadway to NY 378: Multi-Course Overlay	7.608	2012
A451	I-787, NYS Thruway Exit 23 to South Mall Expressway Complex	27.133	2013
A452	I-87, from Western Avenue to the Saratoga County Line: Rehabilitation	8.283	2013
A461	Intersection of Fuller Road and Washington Avenue	2.190	2011
A462	Queue Jumper at the Intersection of Central Avenue and New Karner Road	0.741	2009

TIP #	Project Description	Amount Committed (In Millions)	Year Obligated
A463	Queue Jumper at the Intersection of Central Avenue and Wolf Road	0.595	2009
A468	I-787 Northbound Ramp to South Mall Expressway, Mainline on Clinton	17.546	2012
A477	Green Island Traffic Signals	0.241	2009
A480	Elsmere Avenue and Feura Bush Road Sidewalks	0.271	2009
A483	Dunn Memorial Bridge: Monodeck & General Repairs	4.530	2011
A491	Patroon Island Bridge: Bridge Rehabilitation	161.974	2013
A493	South Mall Expressway Access Ramps: To and From I-787	3.500	2007
A496	I-87 Bridge over Mohawk River: Replacement of Cables on Two Bridges	17.532	2009
A497	Central Avenue (NY 5), from Everett Road to Quail Street	2.000	2009
A498	City of Watervliet Alternative Fuel Retrofit: 5 Fire Trucks	0.051	2009
A504	Orchard Street Sidewalks: Crestwood Lane to Cherry Avenue	0.213	2009
A506	Catherine Street Sidewalk: South Swan Street & South Hawk Street	0.063	2009
A507	Patroon Island Bridge Repairs	1.791	2009
A508	Washington Avenue 1R Preventive Maintenance	3.040	2009
A509	Elm Avenue (CR 52), Delmar Bypass to Fuera Bush: 1R	0.242	2009
A512	I-787: Downtown Albany Pier and Capbeam Repair	2.949	2009
A531	Youman's Road Grade Crossing Elimination	0.769	2009
None	NY 9, Schodack Park & Ride Lot	0.250	1999
None	Taconinc Ridge Tarr Parcel	0.334	1998
R1	Northway Drive Traffic Engineering Improvements	0.719	1978
R2	15th St., Rte 7 & 40 Traffic Operations Improvements	0.508	1978
R4	Stowe/Morrison Improvements	0.357	1980
R5	Dunn Memorial Bridge Landscaping	0.282	1979
R7	Columbia Street	1.290	1980
R8	8th Street Improvements (Federal to Ferry St.)	1.742	1983
R8A	8th Street Improvements (Federal to Hoosick St.)	1.011	1983
R9	Rte 9&20 Over Route 9J Bridge Reconstruction	1.737	1979
R10	Hoosick St Improvements. Route 7, 10th Street to Troy City Line	0.124	1978
R13	Green Island Bridge	7.795	1979
R15	Hoosick Street Bridge	20.650	1978
R17	3rd Avenue Bridge	1.575	1983
R18	Campbell Avenue Bridge Over Wynantskill	1.118	1979
R19	Ferry Street Improvements	0.032	1979
R20	River Street Improvements	0.174	1979
R21	Traffic Light 112th Street and Second Avenue	0.086	1980
R22	Route 9J Improvements	3.055	1987
R23	Washington Avenue/Broadway Improvements	0.601	1982
R25	I-90 Logo Sign Installation	0.094	1979
R26	Route 43 Brack Drive to Mammoth Spring Road	0.118	1979
R27	Rensselaer County Signal Projects	0.012	1980
R28	Uncle Sam Bikeway	0.324	1980
R29	Park & Ride Lot, Route 4 & 43	0.336	1988
R30	Route 7 & 142 Signal Improvements	0.196	1982
R31	Routes 405 and 136 and County Route 70 Signal	0.132	1981
R35	Replace Signal at Hoosick and 15th Streets	0.067	1982
R36	I-90 Exit 8 Connection with Route 4 Phase 1	1.158	1993
R36	I-90 EXIT 8 Phase 2	10.222	1995
R37	Route 4 Defreestville Firehouse Signal	0.015	1982
R38	Route 9&20/Phillips Road Signal	0.050	1982
R39	Route 9&20/Hayes Signal	0.050	1982
R40	Dunn Memorial Bridge Ramps	0.067	1982
R41	Pavement Marking Route I-787	0.005	1982

TIP #	Project Description	Amount Committed (In Millions)	Year Obligated
R42	Speed Monitoring Route 43	0.003	1981
R43	Four Signals, City of Troy	0.067	1982
R44	Route 4 (Routes 9 & 20 to Troy City Line)	0.384	1982
R45	I-90, Exit 11 Logo Signals	0.006	1982
R46	Hoosick Street Directional Signals	0.005	1982
R47	Hudson Mohawk Heritage Trail (see also S40)	0.004	1983
R48	Winter Street Bridge	0.644	1984
R49	126th Street Bridge (see also SA21)	0.650	1983
R50	Route 7, Troy City Line to Route 42	0.628	1983
R51	Route 150, Route 9 & 20 to Payne Road	0.125	1983
R52	I-90 Pavement Markings	0.055	1983
R53	Congress Street Bridge (see also A96)	0.878	1983
R54	East Street Improvements	0.360	1985
R55	Route 66 (Wynantskill Improvements)	1.231	1984
R56	Dunn Memorial Bridge EB (see also A99)	0.523	1983
R57	Routes 4, 9&20 Monodeck Repairs	1.505	1983
R58	I-90, Exits 10 to 12	0.555	1984
R59	I-90, Exits 7 to 10, Joint Repair	0.541	1983
R60	2nd & 4th Street Bridges Over Poestenkill	0.846	1987
R61	Rensselaer Port Access	4.644	1988
R62	Pawling Avenue Bridge Over Poestenkill	0.986	1986
R63	Broadway Bridge Over Mill Creek	0.260	1985
R64	Second Avenue Bridge Over Mill Creek	0.150	1985
R65	Pawling Ave. Traffic Operations Improvements-Part I	1.951	1986
R65A	Pawling Ave. Traffic Operations Improvements-Part 2	1.873	1990
R67	Thirteen Bridges, Vicinity of I-90, Exits 7 to 11	3.079	1988
R69	Dunn Memorial Bridge Westbound	1.295	1985
R70	Route 4 and Route 378 Intersection	0.170	1984
R71	Route 2 Bridge Over Poestenkill	0.345	1985
R73	I-90 Bridges from Miller Road to Berkshire Thruway	0.343	1984
R74	Spring Avenue Over Poestenkill, City of Troy	0.140	1984
R75	South Street Over Mill Creek, City of Rensselaer	0.023	1985
R76	Washington St. Over Mill Creek, City of Rensselaer	0.105	1985
R78	Route 43 Resurfacing from Route 4 to Route 351	1.239	1985
R79	Route 150 Curve Improvement, Town of Sand Lake	3.010	1988
R81	Route 151 and Route 9 Resurfacing	0.975	1986
R82	Broadway Over Amtrak	0.752	1991
R83	Route 2 Over Hudson River	0.375	1986
R84	Route 378 Over Hudson River	0.508	1986
R85	Dunn Bridge Drainage Improvements	0.037	1988
R86	Route 40, Troy to Schaghticoke	0.660	1988
R87	Route 66, Route 351 to Route 355	0.952	1989
R88	Rt 7, Rt 2 & Rt 278 Intersection Improvements	2.275	1990
R89	Guiderails, Various Locations	1.359	1990
R91	Route 136 and Route 150, Resurfacing	4.586	1995
R92	Route 43, Safety Improvements	0.818	1994
R99	Guiderails, Various Locations	1.367	1991
R100	Route 43 Bridge over Wynantskill, Replace	0.418	1991
R101	NY 43 Bridge Over Wynantskill, Bridge Replacement	4.000	1998
R102	Route 470 (112th St) Bridge Over the Hudson River (Also A184)	7.979	1995
R104	Route 378 Bridge over Hudson River, Paint	0.594	1991
R105	Vandenburg Avenue Reconstruction	6.818	2002
R110	3rd Street & 3rd Avenue Reconstruction	5.650	2002

TIP #	Project Description	Amount Committed (In Millions)	Year Obligated
R111	NY 7, McChesney Ave to NY 142, Resurfacing	8.000	2001
R112	CR 7 Bridge Over the Nassau Lake Outlet, Bridge Replacement	0.529	1997
R113	Lawrence Street Bridge Over Hollow Creek, Bridge Replacement	0.791	1997
R115	Church Street Bridge over the Hoosick River	2.820	2001
R116	Muitzeskill Road Bridge (CR1) over Conrail, Bridge Replacement	0.947	1997
R117	Third Street Bridge Over the Poestenkill, Bridge Replacement	1.064	1997
R119	Depot Hill Railroad Grade Crossing	0.331	1992
R121	NY 2, Eagle Mills to Petersburg Resurfacing, & 4 Bridges	3.982	1997
R123	NY 22 in the Village of Hoosick Falls:	2.750	2003
R125	Routes 9 & 20, Schumann Road to Schodack Center, Safety	0.953	1997
R126	Route 2 from Grafton to Petersburg Resurfacing	0.060	1992
R128	NY 40 Bridge over the Tomhannock Creek:	2.340	2003
R133	NY 150 Bridge Over the Moordenerkill, Bridge Replacement	0.850	2000
R136	County Route 125 (Stillwater Bridge Road), Reconstruction	2.899	1996
R148	Thruway Berkshire Spur Bridge over Muitzekill	1.200	1993
R150	Thruway Berkshire Spur Bridge over Route 9	2.800	1993
R156	Burden Lake Bridges	2.016	2001
R157	US 9 & 20 Reconstruction (Part 1), Ames Plaza to US 4	5.289	2001
R158	Best Road From Western View Terrace to NY 151, Reconstruction	1.500	1998
R159	Route 29 Bridge Over the Hudson River	6.454	1994
R160	Scott Avenue Railroad Grade Crossing Closure	0.190	1993
R161	Staats Island Road Railroad Grade Crossing Upgrade	0.155	1993
R162	Green Street Railroad Grade Crossing Upgrade	0.155	1993
R164	NY 20 Bridge over the Valatiekill, Bridge Replacement	0.840	2001
R165	NY 7 at Ford Road, Safety Improvements	0.300	1998
R167	I-90 from Exit 10 to Exit 11, Reconstruction	9.000	1998
R169	Broadway/Waterfront Access	1.865	1998
R170	Riverfront Greenway Trail	0.600	1998
R172	Mechanic Street Bridge over B&M	0.144	2003
R175	Troy ITS Signals at Two Locations	0.081	2003
R176	US 9 & 20 (Part 2), US 4 to Miller Road	5.500	2001
R178	Troy-Menands Bridge Pedestrian and Bicycle Access	1.320	2009
R185	NY 22 Bridge over Kinderhook Creek: Bridge Replacement	2.104	2009
R186	NY 7 Bridge over Hoosick River: Bridge Replacement	8.275	2009
R190	NY 66 Bridge over Kinderhook Creek:	1.941	2003
R191	Cottrell Road Bridge over Walloomsac	1.374	2003
R192	Hansen Road over B&M Railroad, Schaghticoke	1.016	2002
R197	Washington Avenue Sidewalks	0.300	2004
R200	CR 59 over the Hoosick River, Buskirk Bridge Rehabilitation	0.950	2003
R201	NY 7 and CR 115 Safety Improvements	1.400	1999
R202	56 Road Bridge over Poestenkill Creek	1.134	2009
R203	CR 40 (Plank Road) Bridge over the Poestenkill Creek	0.638	2009
R204	CR 3 (S. Schodack Road) over Conrail	1.680	2002
R206	AMTRAK/NYSDOT Rail Initiative: Rensselear Shop Construction	20.000	2001
R209	Powers Road over Poestenkill	0.728	2002
R210	NY 7 from Troy City Line to McCHesney Ave., Reconstruction	5.500	2001
R218	Bennington Bypass	25.000	1999
R219	ITS Signal Improvements in the City of Troy	1.320	2009
R224	I-90, Exit 10 to Thruway Exit B1: Resurfacing	2.347	2005
R228	Village Pedestrian/Cyclist Crosswalks	0.017	2003
R229	Sherwood Avenue Sidewalks in East Greenbush	0.430	2003
R235	NY 2 over Dayfoot Brook: Bridge	0.225	2003
R236	NY 351 over Poestenkill: Bridge Replacement	0.075	2006

TIP #	Project Description	Amount Committed (In Millions)	Year Obligated
R237	NY 351 over Quakenkill: Bridge	1.135	2003
R239	NY 67 Bridge over Hoosick River: Bridge Replacement	2.194	2009
R241	CR 49 (Eastern Union Turnpike) over Wynantskill Creek	1.160	2012
R242	Spring Avenue Over Poestenkill: Bridge Replacement	3.424	2011
R243	Broadway Over AMTRAK Service Road: Bridge Rehabilitation	5.267	2012
R244	ITS Signal Improvements in the City of Troy Phase 2	3.471	2009
R245	NY 2, from 5th Avenue to 11th Street: Reconstruction	7.744	2009
R250	NY 151: Flashing Beacons Installation of Flashing Beacons	0.015	2009
R251	Scott Avenue (NY 150), from Prins Way to Ransom Avenue	0.075	2009
R254	Broadway, from US 20 to Broadway Viaduct Bridge	5.601	2009
R256	Caretaker Bridge Over Walooomsac River	1.216	2009
R259	CR 26 Bridge over Black Brook: Bridge Replacement	1.486	2009
R266	I-90 Bridges over the Moordenerkill: Rehabilitations	4.500	2012
R269	Dunn Memorial Bridge: Monodeck & General Repairs	4.530	2011
R270	Dunn Memorial Bridge: Overhead Signs	0.560	2005
R275	ITS Integration Component	0.086	2005
R282	Oakwood Avenue (CR 145), Troy City Line North to Troy City Line South	0.880	2009
R284	I-90, Patroon Island Bridge to Between Exits 10 and 11: Resurfacing	5.575	2010
None	Fourth Street Over Erie Canal, Waterford	1.000	1998
SA3	I-87 Over Route 146	1.159	1977
SA5	Route 146, Route 146A to Route 9	6.700	1987
SA7	I-87 Mohawk River to Route 146/Exits 8 & 9 Improvements	3.130	1979
SA9	Route 32, Peck Firehouse/Fourth & Pearl Streets, Signal Installations	0.038	1979
SA10	I-87 Logo Signal Installation	0.169	1979
SA15	Saratoga County Signal	0.142	1980
SA17	Parkwood Plaza (Route 9) Left-turn Improvements (Clifton Park)	0.100	1981
SA19	I-87 Speed Monitor Loops	0.015	1981
SA20	Route 4 (Waterford N. Village Line to Waterford Line)	0.262	1982
SA21	126th Street Bridge (see also R49)	0.650	1983
SA22	Route 4 & 32, (Broad St. to N Waterford Village Line)	0.440	1983
SA23	Rexford Bridge Substructure Repair (see also S42)	0.052	1983
SA24	Route 9 Bridge Over Mohawk River Painting	0.101	1983
SA25	Route I-87 Bridge Over Mohawk River Painting	0.575	1985
SA26	I-87, Exits 9 to 11	3.300	1984
SA27	Guiderails on Routes 29, 50 & 147	0.059	1985
SA29	Route 32, Cohoes Bridge to Waterford Village Line	0.873	1986
SA31	Burton Avenue Over Old Champlain Canal	0.550	1989
SA32	I-87, Exit 8 Southbound On-Ramp	0.108	1987
SA33	Route 146, Route 9 to Route 236	0.928	1986
SA35	Vischer's Ferry Road, Emergency Culvert Repairs	0.562	1988
SA36	Route 9, Mohawk River to Route 146	1.693	1987
SA38	Route 146, Route 236 to Mechanicville	1.001	1989
SA39	Riverview Road & Sitterly Road Over I-87	1.748	1990
SA40	I-87 Exit 8A Construction	5.640	1992
SA41	Route 9 Resurfacing, Saratoga Springs to Usher's Road (Includes SA42)	3.028	1992
SA43	Route 9 Culvert Replacement	0.265	1989
SA47	I-87, Saratoga County Line to Exit 9, Resurfacing	8.150	1998
SA50	Route 32 over Abandoned Canal Bridge Replacement	2.292	1993
SA55	Route 146A, Route 146 to Macelroy Road, Bridge Replacement	2.995	1992
SA56	Route 4, South Street to Francis Street	0.977	1990
SA57	NY 32/Barge Canal, Waterford	2.894	2002
SA58	Replace 2 Lane Crescent Rd Bridge Over I-87, with 3 Lane Bridge	4.610	1996

TIP #	Project Description	Amount Committed (In Millions)	Year Obligated
SA61	Ushers Rd and CP Rail Canadian Mainline over I-87: 3 Bridges	10.592	1998
SA63	I-87: Rehab or Replace 12 Bridges or Monodecks (Also A211)	3.778	1996
SA65	I-87 Freeway Traffic Management: Upstate Transit Buses	1.310	1992
SA66	B & M Rotterdam Line Grade Crossing	0.063	1992
SA69	Route 50 Bridge Over the Morningkill, Bridge Replacement	1.195	1994
SA72	I-87 Exit 9, Rest Area Reconstruction (Includes other PIN's)	5.274	1996
SA73	CR 52 Bridge Over the Glowgee Creek, Bridge Replacement	0.680	1999
SA74	Brookwood Railroad Grade Crossing Upgrade	0.140	1993
SA76	I-87, Seven Bridges in the Vicinity of Exits 12-14, Deck Repair	3.846	1995
SA77	Route 32 Bridge over Fish Creek Replacement	0.606	1992
SA79	NY 50, Reference Marker 1085 to 1110, Resurfacing	3.065	1997
SA81	Route 9N Bridge over Sturdevant Creek Replacement	1.028	1992
SA82	Route 29 Bridge Over Kayaderosseras Creek, Bridge Replacement	1.038	1995
SA83	I-87 Bridge over Round Lake Road Replacement	0.790	1993
SA85	Route 4 Bridge Over The Fishkill, Bridge Rehabilitation	1.722	1995
SA87	Route 9N and Middle Grove Road Intersection, Safety Imp.	1.317	1996
SA89	West Ave from Church St (NY 9N) to NY 50: Intersection Impr.	5.705	2000
SA90	I-87 Bridges Over D&H Railroad and City Sewer, Bridge Rehabilitation	5.542	1994
SA91	Route 50 Bridge over the D & H Railroad Reconstruction	2.320	1993
SA93	Middle Line Road (CR 59) from NY 50 and NY 67: Rehabilitate	3.331	2000
SA94	Locust Grove Road Railroad Grade Crossing Upgrade	0.094	1993
SA94	Russell Road Railroad Grade Crossing Upgrade	0.094	1993
SA94	Van Ness Street Railroad Grade Crossing Upgrade	0.141	1993
SA95	US 9 Intersection with Crescent Road & Church Hill Road	2.236	2001
SA96	Sixth Street Bridge Over Railroad, Bridge Replacement	1.490	1999
SA98	Moe Road from Grooms Road to NY 146: Resurface	2.000	2000
SA99	Grooms Road (CR 91) from NY 146 to Miller Road, Resurface	3.168	1999
SA100	South Broadway (NY 9): West Fenlon Rd to the Ave of the Pines	3.374	1999
SA101	Ushers Road and Vischer Ferry Road	4.470	1999
SA102	Ballard Road (CR 33) from NY 9 to I-87 Exit 16, Reconstruction	1.700	1998
SA109	Glenridge Road, from Maple Avenue to NY 146: Reconstruction.	12.330	2011
SA110	Clarke Road Railroad Grade Crossing Upgrade	0.138	1993
SA113	Canal Lock C-2 Rehabilitation	8.200	1993
SA114	I-87 Bridges over Mohawk Painting	0.413	1993
SA119	Corinth Rd (CR 9) Bridge Over the Hudson River, Reconstruction	3.530	1996
SA121	I-87 from Exit 9 to Exit 13, Resurfacing	17.611	2000
SA123	I-87 Bridge over the Kayderosseras, Bridge Replacement	3.576	1997
SA128	Saratoga Springs Bicycle/Pedestrian Path System	0.128	1996
SA129	Schuyler's Canal Towpath	0.158	1998
SA131	ITS Signal Upgrades at 21 Intersections	0.932	2003
SA132	CR 7 (S. Shore Road)/Batcheller Creek	1.094	2003
SA133	South Broadway/Ballston Avenue Intersection Improvements	0.541	2009
SA136	Saratoga Springs Pedestrian Improvements	0.560	2002
SA140	Eire Canal Lock E2 Rehabilitation	0.600	2001
SA148	CR 49 Bridge over Kaydeross Creek:	1.400	2003
SA152	NY 9N Bridge over the Hudson River: Bridge Replacement	7.547	2011
SA154	NY 29, Armer Road to Creek Road:	5.536	2003
SA155	CR 59 (Middle Line Road) Bridge over the	1.599	2003
SA156	Mechanicville Terminal Wall Rehabilitation	0.625	2001
SA158	North Bridge at Peebles Island	2.400	2003
SA164	Scenic Train: Corinth to North Creek	8.101	2004
SA166	Hans Creek Road Bridge over Hans Creek	2.300	2001
SA168	I-87 Resurfacing Part 2, Exit 9 to Exit 13	15.950	2001

TIP #	Project Description	Amount Committed (In Millions)	Year Obligated
SA169	CR 8 Bridge over Sacandaga Reservoir	15.100	2001
SA175	Sand Lake Road Bridge over Sand Creek: Bridge Replacement	0.463	2001
SA177	Town of Malta Trail Improvements	0.005	2003
SA178	Arongen-Shenendahowa Public Library	0.055	2003
SA179	Station Lane Sidewalks, Saratoga Springs	0.036	2001
SA180	Crosswalk and Four Pedestrian Signs in Stillwater	0.009	2002
SA181	Spring Run Trail Construction	2.173	2012
SA182	Ruhle Road Pedestrian Bridge, Malta	0.106	2001
SA186	Copeland Covered Bridge	0.028	2003
SA187	CDTA's Rural Transit Service in Saratoga	0.150	2003
SA190	Green Street Connector Sidewalk	0.032	2011
SA196	Historic Hadley Bow Bridge: Preservation	1.450	2004
SA197	Saratoga National Historic Park: Slide	1.000	2003
SA198	NY 9P over Saratoga Lake Outlet: Bridge Replacement	9.882	2010
SA204	Lakes to Locks Passage, All-American	0.084	2003
SA205	NY 4 over the Hudson River: Bridge	0.925	2003
SA206	I-87 Bridge over Mohawk River: Replacement of Cables on Two Bridges	13.444	2008
SA215	Malta Avenue (CR 63) Bridge Over I-87: Superstructure Replacement	3.531	2009
SA224	CR 4 Over Hudson River: Bridge Rehabilitation	NA	2004
SA227	Commercial Access Highway Improvements: Round Lake Gateway	0.952	2010
SA234	NY 9P Bridge over I-87: Bridge Replacement	6.674	2011
SA268	I-87, Mohawk River to Exit 12: 1R Resurfacing	8.276	2012
SA195	Zim Smith Mid-County Trail, Convert abandonded D&H railroad	1.637	2009
SA198	NY 9P over Saratoga Lake Outlet	12.018	2009
SA199	Bryant's Bridge Road Bridge over Fish Creek	1.320	2009
SA200	Canal Road Bike Path	0.470	2009
SA202	Saratoga Springs to Corinth	1.760	2009
SA212	Hudson Crossing Multi-Use Path	0.250	2009
SA215	Malta Avenue (CR 63) Bridge Over I-87	3.984	2009
SA216	Church Street (NY 9N), from West Avenue to North Van Rensselaer Street	3.136	2009
SA220	CR 7 Stewart Dam Bridge Over the Sacandaga Reservoir	3.334	2011
SA221	CR 43 (Geyser Road) Bridge Over D&H Railroad	2.019	2009
SA229	Stabilizing of Brookwood Road .	3.000	2009
SA231	Halfmoon Physically-Challenged Fishing Access	0.050	2009
SA234	NY 9P Bridge over I-87	11.351	2011
SA245	South Street Safety Upgrades	3.434	2012
SA247	Core Area Mobility Impaired Accessibility Improvement Program	0.030	2009
SA248	Shenendehowa Community Trails Network	0.649	2009
SA249	NY 4, Stillwater: Sidewalk Extension	0.393	2009
SA250	Dunning Street (CR 108), limits TBD: 1R Preventive Maintenance	0.464	2009
SA251	NY 50, MM 1502-1066 to MM 1502-1075: 1R Preventive Maintenance	0.445	2009
SA252	NY 9: 1R Preventive Maintenance, MM 1509-1030 to MM 1509-103	6.408	2009
SA253	Dix Bridge: Rehabilitation	3.125	2011
S1	Michigan/Brandywine Improvements	0.740	1978
S2	Highbridge Road	0.669	1981
S3	Hullett Street Bridge	2.700	1980
S5	Broadway/Crane/I-890 Intersection	1.965	1989
S6	Schenectady Downtown Improvement (Jay/State Streets)	1.173	1983
S6A	Erie Boulevard, Traffic Engineering Improvements	1.002	1987
S7	Route 147 Over PCRR/Vley Road	2.589	1981
S8	Route 50, Scotia to Saratoga County Line R & P	1.658	1977
S9	Route 50, Scotia Village Line to Route 5 R & P	0.602	1978

TIP #	Project Description	Amount Committed (In Millions)	Year Obligated
S11	Sitterly Road Bridge	0.046	1979
S14	Route 7 Crosstown/Union Streets to Watt Street	0.644	1979
S16	Altamont Avenue	6.445	1986
S19	Freeman's Bridge and Approaches	7.808	1982
S19A	Freeman's Bridge Stage 2 (Erie Blvd to Seneca St)	2.681	1984
S21	Signal Installation - Various Locations	0.092	1979
S22	Signal Installation-Route 5 & Rotterdam Junction	0.017	1979
S24	Helderberg Avenue	0.845	1980
S30	Niskayuna Isle, Vischer's Ferry Rd	0.510	1983
S31	Oak Street Bridge Over Conrail	0.982	1983
S33	Old Mariaville Road Bridge Over Poestenkill	0.106	1982
S36	Schenectady County Sign Improvement at Various Locations	0.110	1983
S37	Balltown and Consaul Road Signal	0.040	1982
S38	Route 5 (B & M RR to Scotia Village Line)	0.212	1982
S39	Route 158, Albany County Line to 1.3 miles North of Line	0.054	1982
S40	Niskayuna Bike & Hike Trail (see also R47)	0.369	1983
S41	I-890 Pavement Markings	0.051	1983
S42	Rexford Bridge Substructure Repair (see also SA23)	0.052	1983
S43	Signal Improvements Various Locations I-890	0.078	1983
S44	Gabion Failure Exit 26 Interchange Vicinity	0.200	1983
S45	I-890 Viaduct	3.422	1983
S46	Route 7 and Union Street	0.850	1983
S47	Route 58, Legario Lane to Route 103	0.100	1983
S49	Route 7 Construction, St David's Lane to Albany County Line	13.295	1990
S50	Congress Street Over Conrail	0.550	1985
S51	Route 158 Over Conrail	1.404	1988
S52	Route 159 Over D & H Railroad	2.251	1989
S54	Balltown Road/Consaul Road Intersection Improvements	0.349	1984
S55	Highbridge Road Over I-890, Monolithic Deck Repairs	3.135	1997
S55	I-890 Over Conrail; High Bridge Road Over I-890	3.248	1989
S57	Replace Route 146 Over Chrisler Ave. and Conrail	8.370	1991
S58	I-890 and Route 7 Signs	0.085	1985
S60	Guiderails on Route 159	0.049	1985
S61	Western Gateway Bridge	2.154	1985
S63	Intersections of Route 337/Route 159 & Route 337/Princetown Road	0.100	1984
S64	Permanent Traffic Count Stations	0.133	1988
S65	Route 5S, Bridge Over Plotterkill	0.289	1986
S66	Rosendale Road Over Lishakill	0.380	1986
S67	Route 147 Spring Street to Vicinity of Goldfoot Rd	1.055	1987
S68	I-890 Slab Settlement Repair	0.035	1987
S69	Route 146, Morrow Avenue to Saratoga County	1.000	1989
S70	Route 50 Bridge over Alplaus Creek Replacement	2.704	1993
S73	NY 103 Bridge over Erie Canal: Bridge Rehabilitation	3.200	1998
S76	I-890 Over Conrail	3.248	1989
S77	Route 159 Bridge Over Thruway, Rehabilitation	0.959	1991
S82	Route 7 Over Conrail	1.259	1990
S83	Route 50 Bridge Over Amtrak, Steel and Concrete Repairs	2.390	1996
S85	Route 5: Route 155 to Sch'dy Co Line, Resurfacing (Also A179)	7.932	1996
S86	I-890, Four Bridges in Vicinity of Exits 5 to 7	2.293	1990
S87	Schenectady Bridge Painting	0.437	1991
S89	Route 5 Bridge Over Conrail, Deck Repair	1.239	1995
S98	Exit 26 to NY 5 Bridge Over the Mohawk River, New 4-lane Bridge	11.144	1997
S99	Bikepath Construction and Sidewalk Extension on Nott Street East	0.098	1996

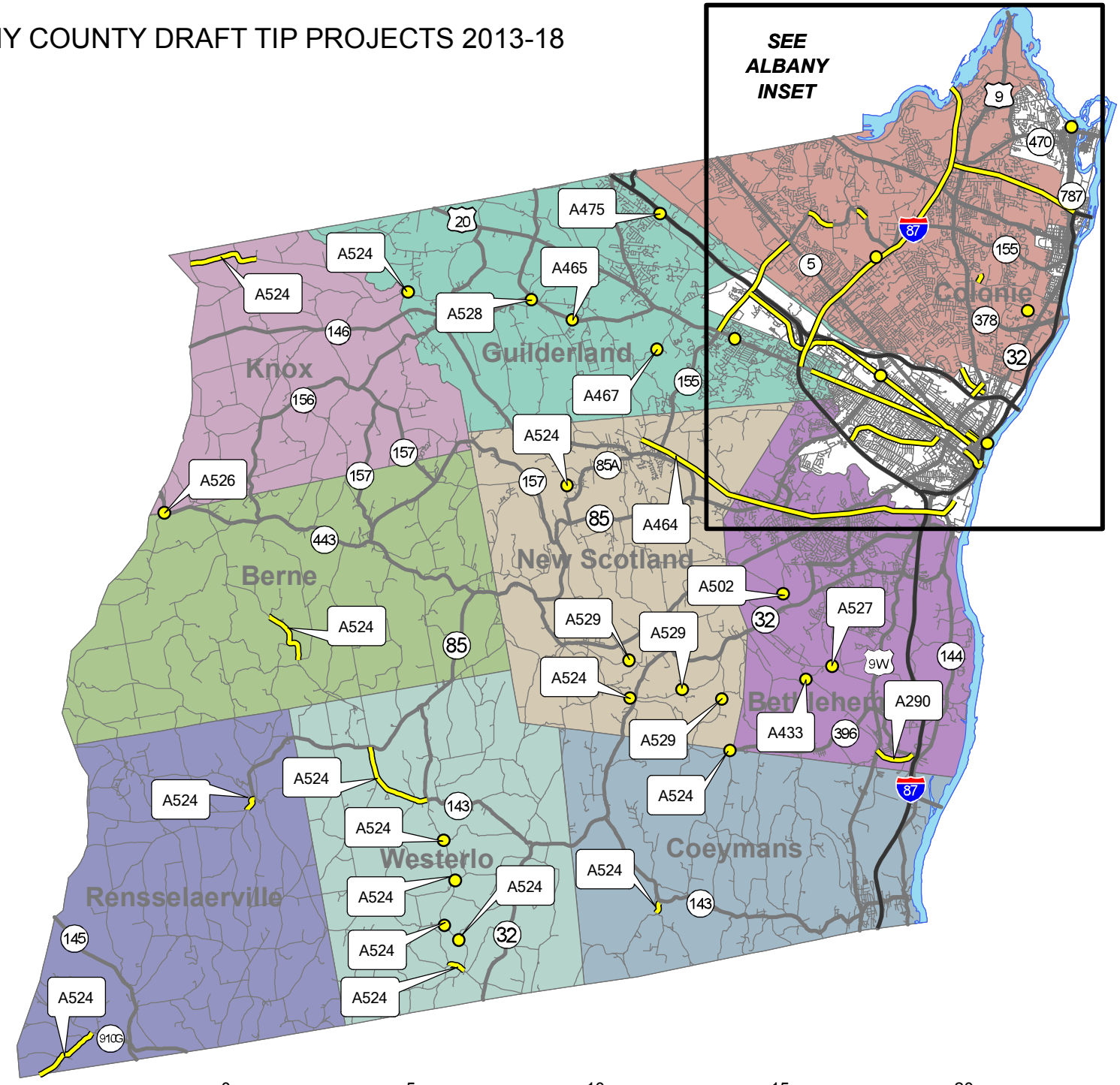
TIP #	Project Description	Amount Committed (In Millions)	Year Obligated
S100	B & M Rotterdam Line Grade Crossings	0.125	1992
S103	Route 5 Bridge Over Route 7, Deck Repairs	0.617	1996
S106	Eaton Corners Rd Bridge Over the Schoharie Creek, Deck Repairs	2.236	1997
S107	Schenectady Bridge Painting	1.485	1993
S108	Route 20 Bridge over the Schoharie Creek Replacement	4.712	1992
S109	NY 337 Bridge Over the Poentickill, Bridge Replacement	2.000	1998
S110	Aqueduct/Maxon Rd from Balltown Rd to Erie Blvd., Reconstruction	4.790	2000
S113	Thruway from 161.3 to 177.5 Rehabilitation and Safety	12.300	1993
S117	Dunnsville Road Bridge over Thruway Reconstruction	1.800	1993
S121	State Street (NY 5), from Furman Street	3.500	2003
S122	I-88 Bridge over D & H Railroad Safety and Resurfacing	1.705	1993
S123	Rynex Corners Railroad Grade Crossing Upgrade	0.141	1993
S126	NY 50 Bridge over the Indiankill: Bridge Replacement	1.350	2007
S127	Mohawk-Hudson Bike Hike Trail: Restoration	0.080	1998
S128	I-890 Interchange with NY 5S and Thruway Exit 26	7.589	1996
S140	Mohawk-Hudson Bike-Hike Trail: Corridor	0.120	2003
S140	Mohawk-Hudson Bike-Hike Trail: Corridor Improvements	0.115	2009
S141	Rail Corridor Bridge Improvements	0.270	2003
S142	Kings Road Sidewalks	0.370	2003
S143	Lock 8: Bike/Ped Access	0.310	2003
S144	State Street Streetscape	4.365	2003
S149	Cole Road Bridge over the Normanskill:	0.480	2003
S150	AMTRAK/NYSDOT Rail Initiative: Rensselaer to Sch'dy Double Track	7.000	2000
S152	Mohawk-Hudson Bike-Hike at Lock 8	0.025	2001
S153	Bike Trail in Niskayuna, Repairs	0.004	2003
S154	Mohawk-Hudson Bike-Hike Trail	0.024	2003
S155	Scotia Sidewalks	0.027	2003
S160	Mohawk-Hudson Bike-Hike Trail: Intersection & Trail	0.931	2009
S166	NY 7 over Normanskill: Bridge Replacement	1.544	2010
S168	Ferry Road over Backchannel Mohawk: Bridge Replacement	4.939	2009
S172	NY 7, I-890 to Saint David's Lane: Reconstruction	4.200	2007
S175	CR 103 (Pangburn Road) Bridge Over Normanskill	2.855	2009
S176	Schenectady Trail Rehabilitation	1.725	2009
S177	Erie Boulevard, from Liberty Street to I-890: Reconstruction	13.57	2011
S183	I-890, Thruway Exit 25 to NY 337 (Campbell Road): Minor Rehabilitation	5.383	2013
S189	New Traffic Signal at Intersection of Providence Avenue & Hillside Avenue	0.465	2009
S190	Seneca Street and Maxon Road Canalway Trail Crossing	0.078	2009
S194	River Road/Providence Avenue: 1R Preventive Maintenance	1.171	2009
S195	Rosendale Road, River Road to NY 7: 1R Preventive Maintenance	0.314	2009
S196	Van Vranken Avenue, Nott Street to Maxon Road: 1R Preventive Maintenance	1.770	2009
S198	I-88 Bridges over Pangburn Road and over NY 7: Deck Repair	1.813	2009
Total Highway Construction Projects (1977-13)		**$1969.774**	

APPENDIX L – TIP PROJECTS BY LOCATION

Overview

The following pages are maps of the Capital District with TIP numbers denoting locations of projects showing in the project listings of this document. For projects of short geographical limits, a large dot is used to show the location. For projects that are linear in nature, the facility is darkened for the length of the project. Projects that don't have short geographical limits and are not linear in nature are not shown in the maps. This includes some transit projects and regional set-asides, which can have multiple or variable locations, or a location that otherwise cannot be shown adequately on the maps.

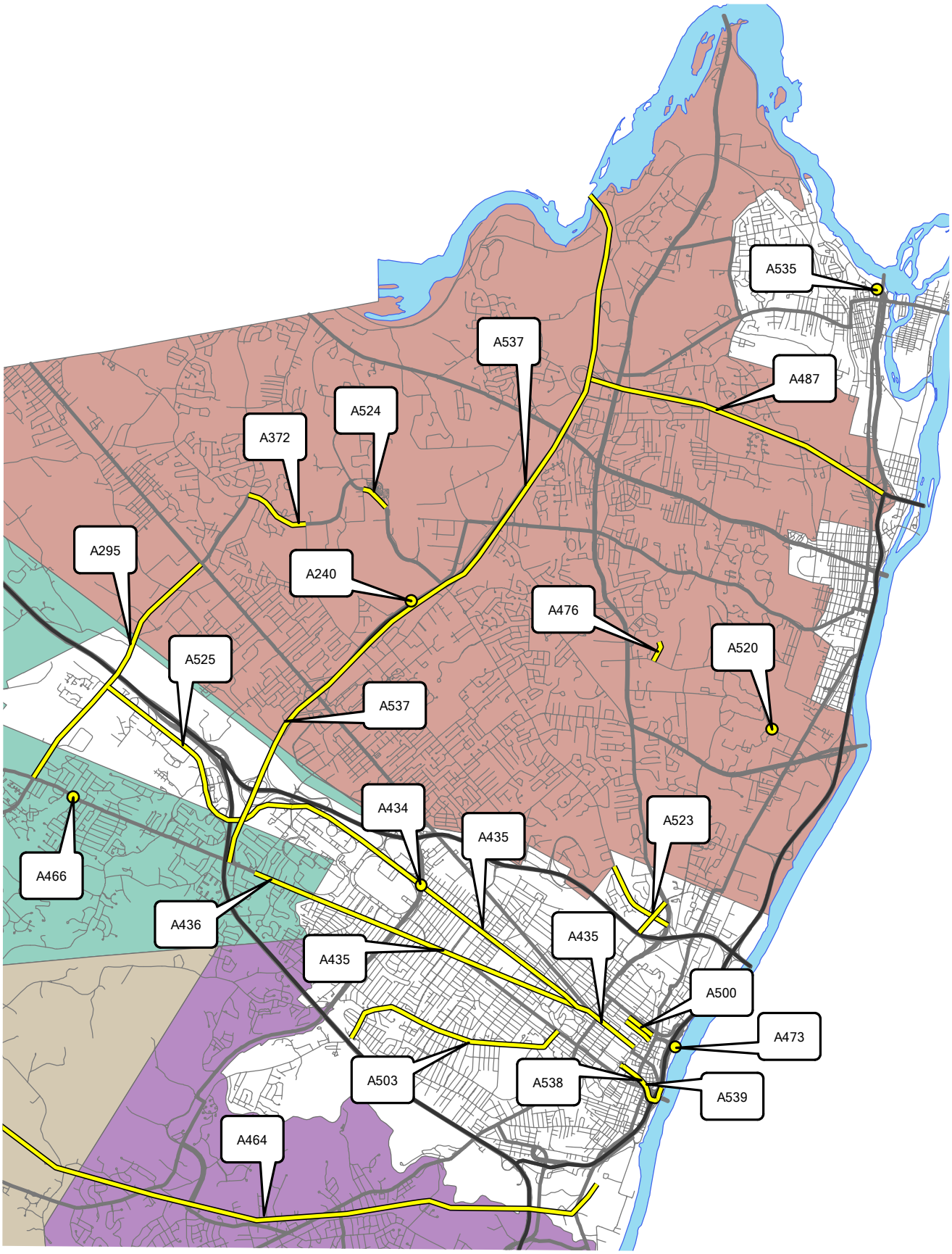
ALBANY COUNTY DRAFT TIP PROJECTS 2013-18



MAY 2013

CDTC
CAPITAL DISTRICT TRANSPORTATION COMMITTEE

ALBANY COUNTY INSET DRAFT TIP PROJECTS 2013-18



MAY 2013

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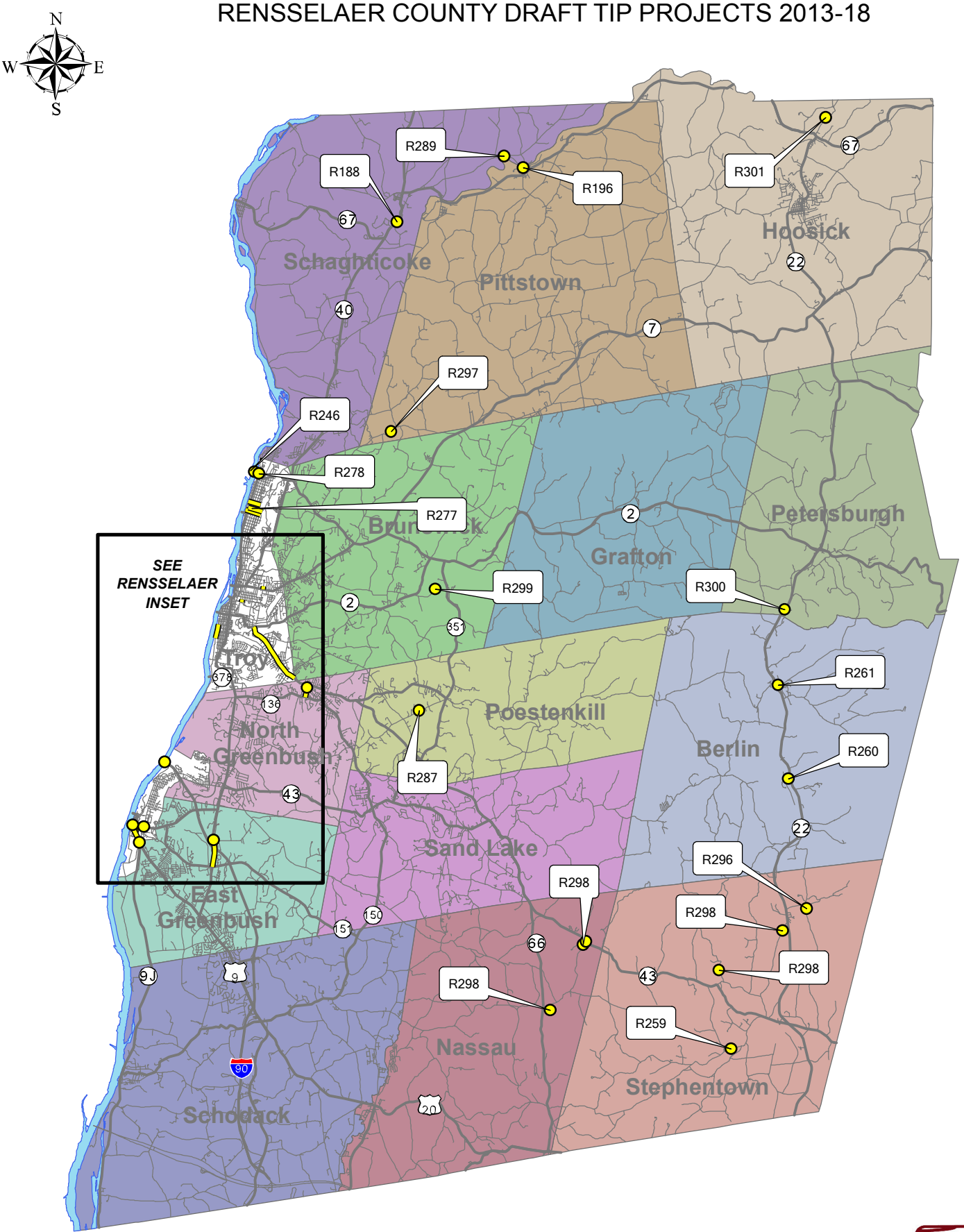
CDTC
Capital District Transportation Committee

RENSSELAER COUNTY DRAFT TIP PROJECTS 2013-18



MAY 2013

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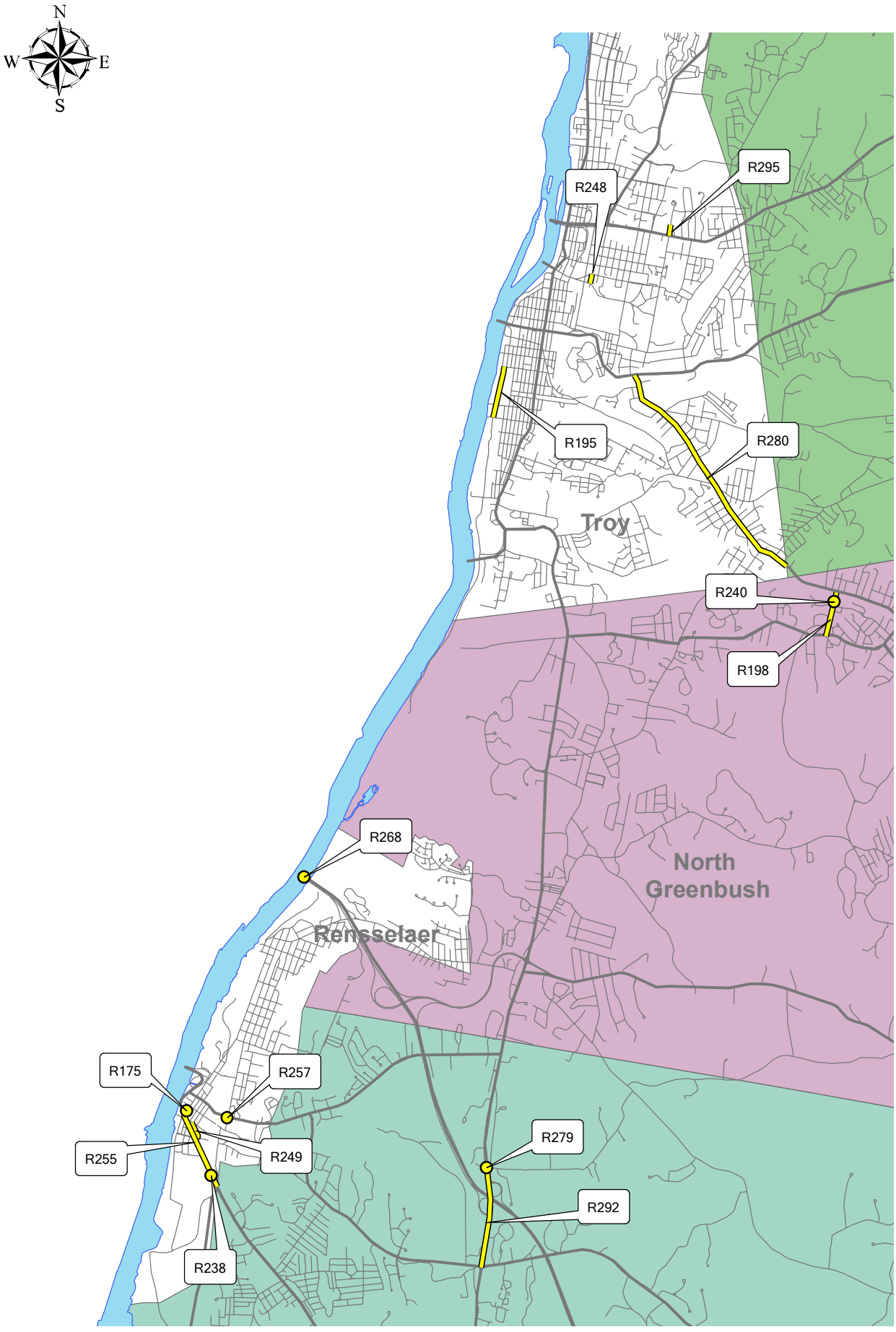
CDTC
CAPITAL DISTRICT TRANSPORTATION COMMITTEE

RENSSELAER COUNTY INSET DRAFT TIP PROJECTS 2013-18



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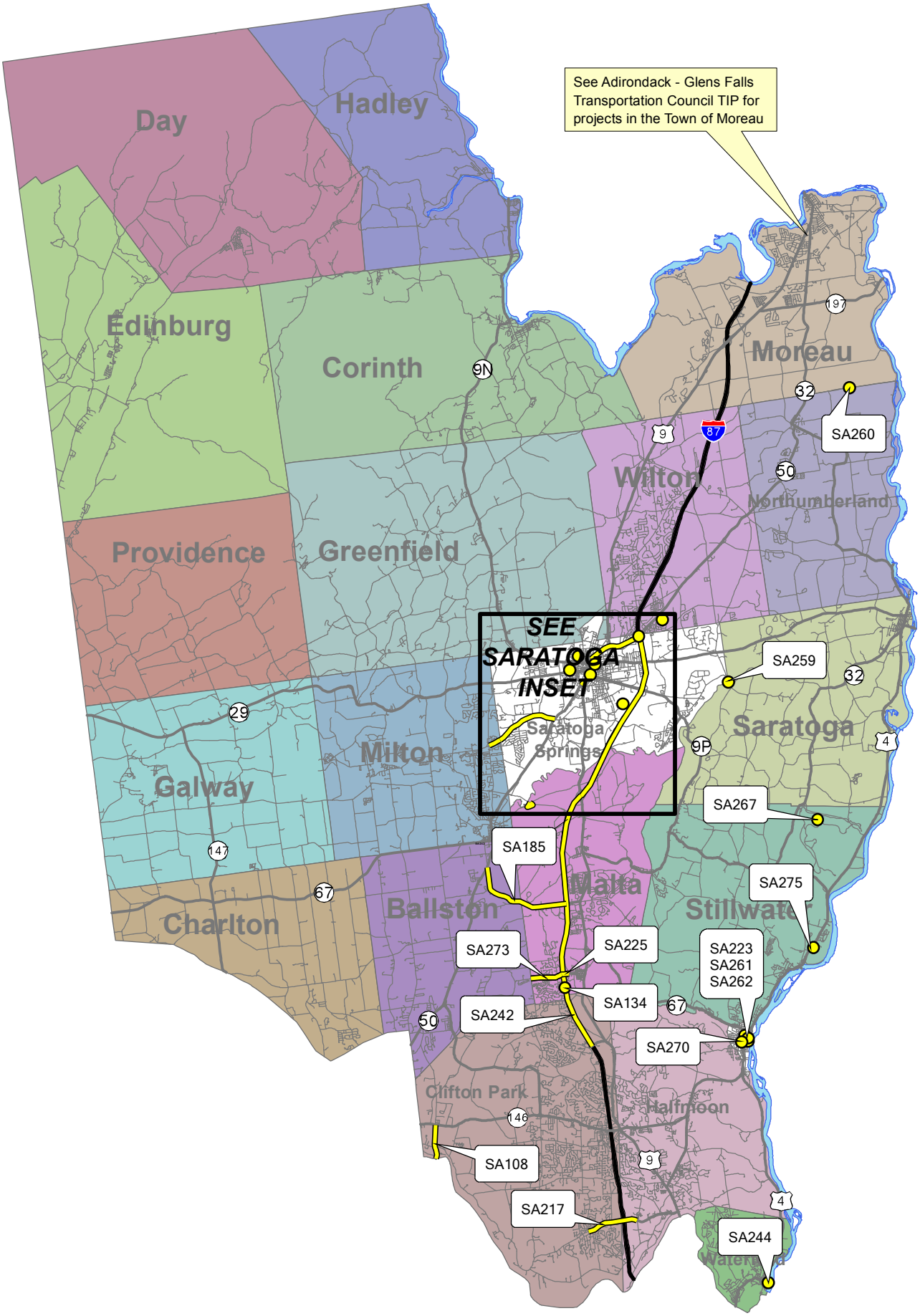
Capital District Transportation Committee

SARATOGA COUNTY DRAFT TIP PROJECTS 2013-18



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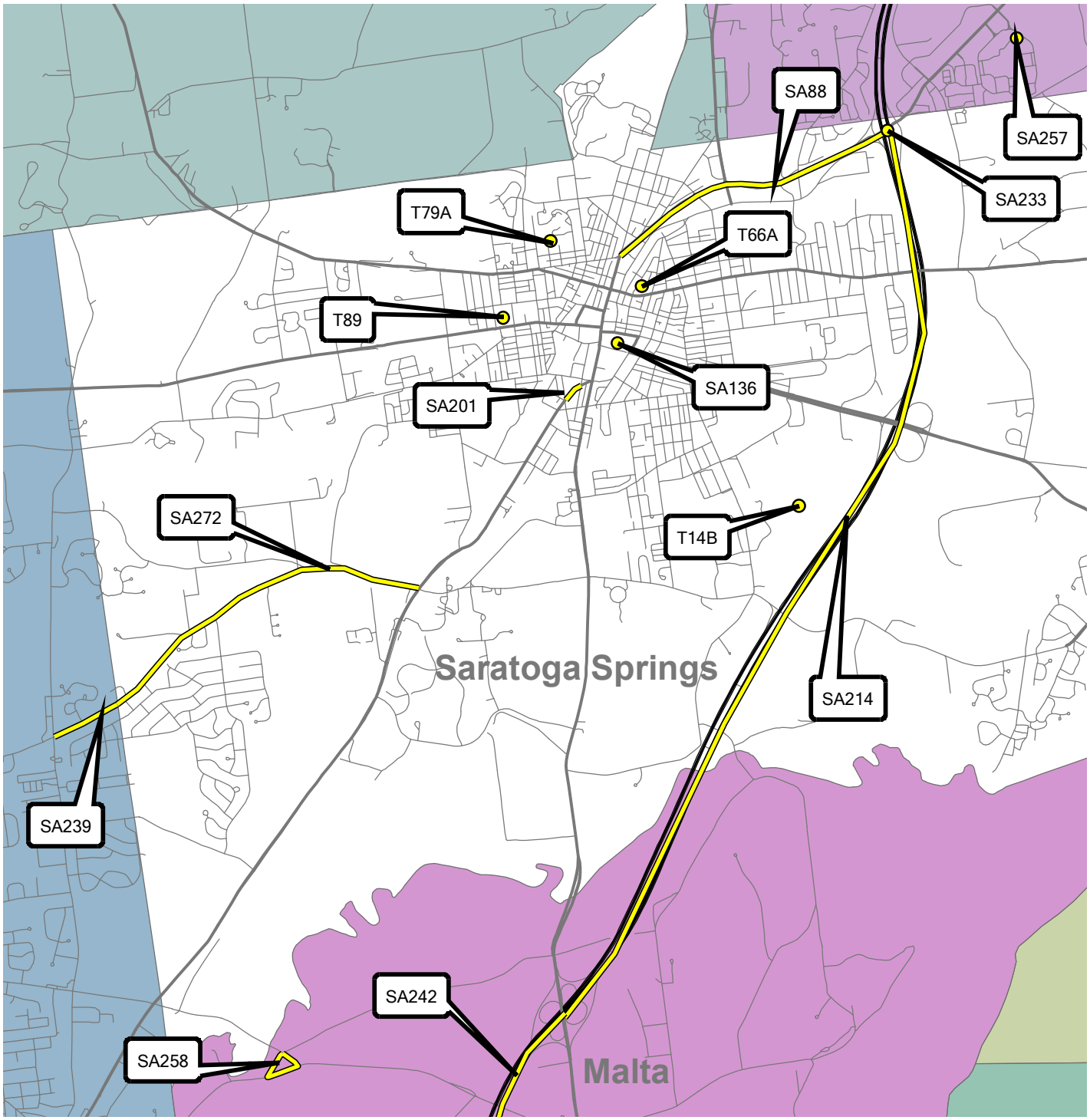
Capital District Transportation Committee

SARATOGA COUNTY INSET DRAFT TIP PROJECTS 2013-18



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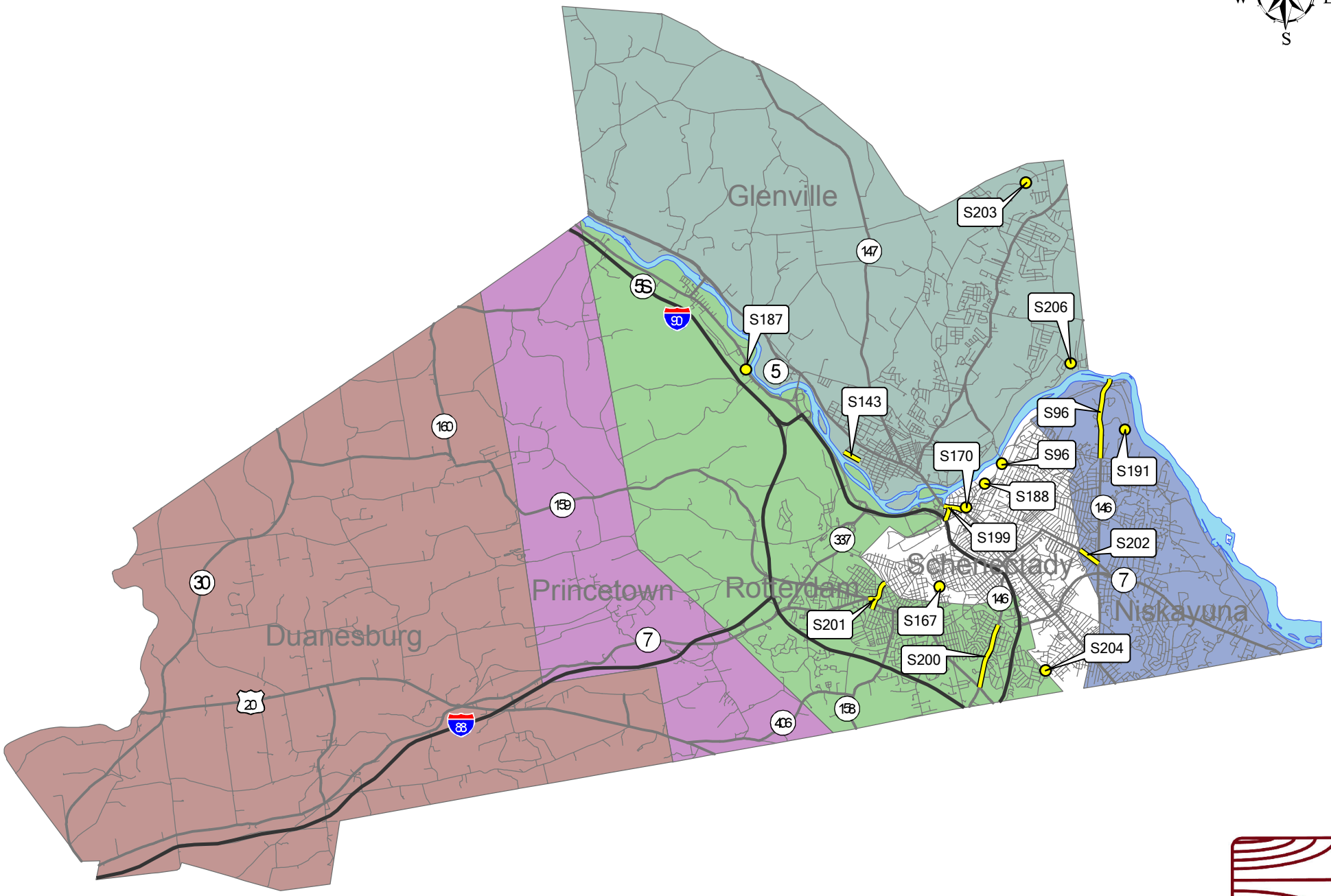
Capital District Transportation Committee

SCHENECTADY COUNTY DRAFT TIP PROJECTS 2013-18



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