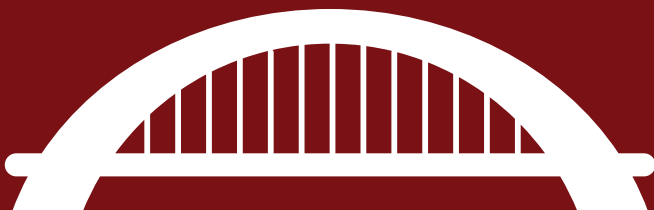
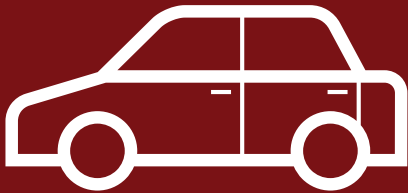




2022-2027 **TRANSPORTATION IMPROVEMENT PROGRAM APPENDIX**



Prepared by:
**Capital District
Transportation
Committee**
September 2022

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.

TABLE OF CONTENTS

APPENDIX A - GLOSSARY

APPENDIX B - FEDERAL FUNDING PROGRAMS

APPENDIX C - FEDERAL FUND SOURCE SPLITS

APPENDIX D - PUBLIC INVOLVEMENT AND CONSULTATION

APPENDIX E - PROJECT SELECTION & AMENDING THE TIP

APPENDIX F - 2022-2027 TIP PROJECT CANDIDATES

APPENDIX G - CDTC PROJECT EVALUATION METHODOLOGY

APPENDIX H - SELECTION OF NEW PROJECTS

**APPENDIX I - FEDERAL-AID TRANSPORTATION PROJECTS COMPLETED ON THE
2019-2014 TIP**

APPENDIX J - CDTC SELF CERTIFICATION

APPENDIX K - AIR QUALITY CONFORMITY

**APPENDIX L - ENVIRONMENTAL JUSTICE AND TITLE VI OF THE CIVIL RIGHTS ACT
OF 1964**

APPENDIX M - CDTC DEFINITIONS OF PRESERVATION & BEYOND PRESERVATION

APPENDIX N - CDTC MEMBERS

TITLE VI & NONDISCRIMINATION STATEMENT

The Capital District Transportation Committee (CDTC) is committed to ensuring that no person is excluded from participation in, or denied the benefits of, its metropolitan transportation planning process on the basis of race, color, national origin, gender, age, disability, or economic status, as protected by Title VI of the Civil Rights Act of 1964 and related statutes and regulations. It is also the policy of the CDTC to ensure that all programs, policies, and other activities do not have disproportionate adverse effects on minority and low-income populations. Additionally, the CDTC will provide meaningful access to services for persons with Limited English Proficiency.

Appropriate services can be provided to qualified individuals with disabilities who submit a request at least 48 hours prior to a meeting. Call 518-458-2161 or email cdtc@cdtcmpo.org. For more information on CDTC's Environmental Justice and Civil Rights Policies please see Appendix L.

APPENDIX A - GLOSSARY

Abbreviation	Description
ADA	Americans with Disabilities Act
AGFTC	Adirondack Glens Falls Transportation Council
BIL	Bipartisan Infrastructure Law
BRT	Bus Rapid Transit
CDRPC	Capital District Regional Planning Commission
CDTA	Capital District Transportation Authority
CDTC	Capital District Transportation Committee
CMAQ	Congestion Mitigation and Air Quality
EJ	Environmental Justice
FFY	Federal Fiscal Year
FHWA	Federal Highway Administration
FTA	Federal Transit Administration
HSIP	Highway Safety Improvement Program
IJA	Infrastructure Investment and Jobs Act
IRI	International Roughness Index
ITS	Intelligent Transportation Systems
LEP	Limited English Proficiency
LOTTR	Level of Travel Time Reliability
L RTP	Long Range Transportation Plan
MPO	Metropolitan Planning Organization
MTP	Metropolitan Transportation Plan
NHFP	National Highway Freight Program
NHPP	National Highway Performance Program
NHS	National Highway System
NSP	National Public Transportation Safety Plan
NYSDOT	New York State Department of Transportation
NYSTA	New York State Thruway Authority
PHED	Peak Hour Excessive Delay Per Capita
PIN	Project Identification Number (used by NYSDOT)
PSR	Present Serviceability Rating
PTASP	Public Transportation Agency Safety Plan
RTP	Recreational Trails Program
SFY	State Fiscal Year
SGR	State of Good Repair
SHSP	New York Strategic Highway Safety Plan
SMS	Safety Management Systems
SOV	Single Occupancy Vehicle
STAR	Special Transit Service Available by Request (Paratransit)
STBGP	Surface Transportation Block Grant Program
STBGP - Flex	Surface Transportation Block Grant Program - Flexible

Abbreviation	Description
STBGP - LG Urb	Surface Transportation Block Grant Program - Large Urban
TAM	Transit Asset Management
TAP	Transportation Alternatives Program
TERM	Transit Economic Requirements Model
TIP	Transportation Improvement Plan
TMC	Traffic Management Center
TTTR	Truck Travel Time Reliability
ULB	Useful Life Benchmark
UPWP	Unified Planning Work Program
USDOT	United States Department of Transportation

**APPENDIX B -
FEDERAL FUNDING PROGRAMS**

National Highway Performance Program (NHPP)

The National Highway Performance Program (NHPP) provides support for the condition and performance of the National Highway System (NHS), for the construction of new facilities on the NHS, and to ensure that investments of Federal-aid funds in highway construction are directed to support progress toward the achievement of performance targets established in a State's asset management plan for the NHS.

The BIL directs FHWA to apportion funding as a lump sum for each State then divide that total among apportioned programs. Within this process, a State's NHPP apportionment is calculated based on a percentage specified in law. The NHPP Program includes a 2% set-aside of a State's NHPP funding for State Planning & Research (SPR). [23 U.S.C. 505] A State may transfer up to 50% of NHPP funds made available each fiscal year to the Surface Transportation Block Grant Program, Highway Safety Improvement Program, Congestion Mitigation and Air Quality Improvement Program, National Highway Freight Program, Carbon Reduction Program, and PROTECT Formula Program. Conversely, subject to certain limitations, a State may transfer up to 50% of funds made available each fiscal year from each other apportionment of the State to NHPP. [23 U.S.C. 126]

The Federal share of NHPP funds is generally 80 percent. See the "Federal Share" fact sheet for more information¹.

Surface Transportation Block Grant Program (STBGP)

The Surface Transportation Block Grant Program (STBGP) is a flexible funding source with broad eligibility. The BIL requires 10% of STBG funds to be set-aside for Transportation Alternatives, and an additional 2% for State Planning and Research (SPR). An additional set-aside for bridges on public roads other than Federal-aid highways (commonly known as 'off-system bridges') was increased by BIL from 15% to 20% of the State's FY 2009 Highway Bridge Program apportionment. After set-asides, 55% of the remaining funding is suballocated to urban and rural areas in proportion to their relative share of the State's population. The remaining 45% may be obligated in any area of the State.

The BIL continues all funding features that applied to the STBGP under the FAST Act, with some exceptions.

The BIL continues all prior STBGP eligibilities and adds 16 new eligible project types. Newly eligible activities include projects and programs designed to reduce wildlife crashes, recreational trail maintenance, electric vehicle (EV) charging infrastructure, installation of intelligent transportation technologies, and more. The full list of new eligibilities is found in 23 U.S.C. 133(b).

¹ <https://www.fhwa.dot.gov/fastact/factsheets/federalsharefs.pdf>

As with the NHPP, funds may be transferred to or from the STBGP, subject to certain limitations [23 U.S.C. 126(a)]

The Federal share of STBG funds is generally 80 percent. See the “Federal Share” fact sheet for more information².

Surface Transportation Block Grant Program fund sources included on the 2022 – 2027 TIP include:

- ◆ STBGP FLEX (Includes STBGP Rural, STBGP Small Urban 5-50, STBGP Sm Urban 50-200)
- ◆ STBGP Large Urban (STBGP LG Urban)
- ◆ STBGP Off System Bridge (STBGP Off)

Highway Safety Improvement Program (HSIP)

The BIL continues the Highway Safety Improvement Program (HSIP) to achieve a significant reduction in traffic fatalities and serious injuries on all public roads, including non-State-owned public roads and roads on tribal land. The HSIP requires a data-driven, strategic approach to improving highway safety on all public roads that focuses on performance.

The BIL continues all funding features that applied to the HSIP under the FAST Act, with some exceptions.

The BIL allows a State to use up to 10% of its HSIP funds for specified safety projects, including projects that promote public awareness and inform the public regarding highway safety matters, facilitate enforcement, emergency vehicle infrastructure, safety-related research, and more.

As with the NHPP and STBGP, funds may be transferred to or from the STBGP, subject to certain limitations. [23 U.S.C. 126(a)]

Under the BIL, HSIP funds may now be used to purchase, operate, or maintain an automated traffic enforcement system (this was prohibited under FAST Act). The BIL adds six new HSIP eligible activities, including intersection safety improvements that provide for the safety of all road users, railway-highway grade crossing safety features or grade separation projects, traffic calming measures, traffic control devices for pedestrians and bicyclists, and more. The full list of eligible activities may be found in [23 U.S.C. 148(a)]

² <https://www.fhwa.dot.gov/fastact/factsheets/federalsharefs.pdf>

Full details on the eligibility requirements for federal-aid highway programs authorized in the BIL can be found on the Federal Highway Administration website at <https://www.fhwa.dot.gov/bipartisan-infrastructure-law/>.

APPENDIX C -

FEDERAL FUND SOURCE SPLITS



FEDERAL SHARE

Statutory citation: FAST Act §§ 1408, 1435; 23 U.S.C. 120

Overview

The maximum share of project costs that may be funded with Federal-aid highway funds (the “Federal share”) varies based upon the Federal-aid program from which the project receives funding. In some cases the Federal share is also adjusted based on related statutory provisions. The FAST Act made relatively few changes to Federal share and those changes are shown in boldface below.

“Standard” Federal share

23 U.S.C. 120 provides that except as otherwise provided, the Federal share payable shall be—

- 90% for a project on the Interstate System (including a project to add high occupancy vehicle lanes or auxiliary lanes but excluding a project to add other lanes); and
- 80% for any other project.

There are a number of exceptions and adjustments to the “standard” Federal share. See below (and program-specific fact sheets) for information about, and the applicability of, these exceptions and adjustments.

Adjustments to Federal share

Sliding scale

23 U.S.C. 120(a) and (b) authorize an upward adjustment (the “sliding scale”) to the Federal share for a State containing Federal and nontaxable Indian lands. A sliding scale State is eligible for an increased Federal share based upon the location of the project—90-95% for an applicable Interstate project and 80-95% for any other project. The amount of the upward adjustment is based on the percentage of Federal and nontaxable Indian lands in the State. (See FHWA [guidance](#) for the specific share allowable in each sliding scale State under this provision).

Other adjustments to Federal share

- *Designated types of projects.* Certain specified types of projects, mostly targeting safety improvements, are eligible to receive a Federal share of 100%. A State may apply this increased Federal share on no more than 10% of its combined apportionment under 23 U.S.C. 104. [23 U.S.C. 120(c)(1)]
- *Innovative project delivery methods.* A project incorporating innovations described in 23 U.S.C. 120(c)(3) is eligible for an increased Federal share of up to 100% if funded by the National Highway Performance Program (NHPP), Surface Transportation Block Grant (STBG) Program, or Metropolitan Planning program. **The FAST Act added specific mention of innovative engineering or design approaches and project delivery methods as activities eligible for this increased Federal share.** [FAST Act §1408(a)]
- *Workforce development.* Subject to project approval by the Secretary, a State may obligate NHPP, STBG, Highway Safety Improvement Program (HSIP) and Congestion Mitigation and Air Quality Improvement Program (CMAQ) funds for surface transportation workforce development, training, and education at a Federal share of 100%. Activities under the Local Technical Assistance Program limited to a Federal share of 50%. [23 U.S.C. 504(e)]
- *Appalachian Development Highway System (ADHS) projects.* For fiscal years 2012 through **2050 (previously through 2021)**, a State that uses apportioned funding to construct a highway or access road on the ADHS is eligible for a Federal share of **up to 100%** on that project. [FAST Act § 1435]

- *Projects within Indian reservations, national parks and monuments.* When an eligible project uses funds from a program apportioned under 23 U.S.C. 104 and that project is located within the boundaries of an Indian reservation, national park, or national monument, the Federal share may be 100%. For more information, see FHWA [guidance](#) on this provision. [23 U.S.C. 120(f)]
- *Toll projects.* A toll project under 23 U.S.C. 129 is eligible for a maximum Federal share of 80% (regardless of whether the project would have qualified for a higher Federal share if advanced as a non-toll facility). [23 U.S.C. 129(a)(5)]
- ***[Repealed] Projects to improve freight movement.*** Section 1116 of MAP-21 authorized an increased Federal share for certain projects that demonstrably improved freight movement. However, the FAST Act repealed this provision. [FAST Act § 1116(c)]

Increased non-Federal share

23 U.S.C. 120(h) authorizes a State to contribute an amount in excess of the non-Federal share of any project under title 23 U.S.C., thus decreasing the Federal share for the project.

Transfers of funding between FHWA and FTA

Federal-aid highway funds made available for a transit project or transportation planning may be transferred to the Federal Transit Administration (FTA) and administered in accordance with FTA's requirements (under chapter 53 of title 49). Similarly, Federal transit funding made available for a highway project or transportation planning may be transferred to FHWA and administered in accordance with title 23 requirements. In either case, the transferred funds remain subject to the Federal share that applied to the category from which the funding was derived. [23 U.S.C. 104(f)]

Federal Share for Selected Programs

Program	Federal share (%) ¹	Plus eligible for...					
		Sliding scale ²	100% for designated types of projects ³	Up to 100% for innovative delivery methods ⁴	100% for workforce development ⁵	Up to 100% for ADHS projects ⁶	100% within Indian reservations, national parks, and monuments ⁷
National Highway Performance Program	80 / 90 ^{8,9}	✓	✓	✓	✓	✓	✓
Surface Transportation Block Grant Program	80 / 90⁸	✓	✓	✓	✓	✓	✓
Highway Safety Improvement Program	90 ^{8,10}	✓	✓		✓		✓
Railway-Highway Crossings	90 ¹¹						
Congestion Mitigation & Air Quality Improvement Program	80 / 90 ⁸	✓	✓		✓		✓
National Highway Freight Program	80 / 90 ⁸	✓	✓			✓	✓
Metropolitan Transportation Planning	80 ⁸	✓		✓			
State Planning and Research	80 ¹²						
Transportation Alternatives	80 / 90 ⁸	✓	✓				✓
Recreational Trails Program	80 ¹³	✓					

Program	Federal share (%) ¹	Plus eligible for...					
		Sliding scale ²	100% for designated types of projects ³	Up to 100% for innovative delivery methods ⁴	100% for workforce development ⁵	Up to 100% for ADHS projects ⁶	100% within Indian reservations, national parks, and monuments ⁷
Tribal Transportation Program	100 ¹⁴						
Federal Lands Transportation Program	100 ¹⁴						
Federal Lands Access Program	80 / 90 ^{8,15}	✓	✓				
Nationally Significant Federal Lands and Tribal Projects Program	Up to 90 ¹⁶						
Puerto Rico Highway Program	80 / 90 ⁸	✓	✓				
Territorial Highway Program (or any project in the specified territories)	100 ¹⁷						
Emergency Relief	80-100 ¹⁸	✓					
Emergency Relief for Federally Owned Roads	100¹⁹						
Construction of Ferry Boats & Ferry Terminal Facilities	80 ²⁰						
Highway Research & Development Program	80 ²¹						
Technology & Innovation Deployment Program	80 ²¹						
Training & Education	80 ^{21, 22}						
Intelligent Transportation Systems Program	80 ²¹						
Advanced Transportation & Congestion Management Technologies Deployment	Up to 50²³						
Surface Transportation System Funding Alternatives	Up to 50²⁴						
Nationally Significant Freight and Highway Projects	60/80/100²⁵						

¹ The Federal share specified in this column may be subject (as specified) to one or more of the provisions referenced in the subsequent columns. In some circumstances the Federal share may also be modified by the provisions described above related to projects requiring Federal toll authority.

² 23 U.S.C. 120(a)-(b).

³ 23 U.S.C. 120(c)(1).

⁴ **23 U.S.C. 120(c)(3), as amended by FAST Act § 1408(a).**

⁵ 23 U.S.C. 504(e).

⁶ **MAP-21 § 1528(c), as amended by FAST Act § 1435. Increased Federal share applies through FY 2050.**

⁷ 23 U.S.C. 120(f).

⁸ "Standard Federal share" of 90% for a project on the Interstate System (including a project to add high occupancy vehicle lanes or auxiliary lanes but excluding a project to add other lanes) and 80% for any other project or activity. [23 U.S.C. 120(a)-(b)]

⁹ With respect to the second fiscal year beginning after the date of establishment of the process for State development of an asset management plan as required by 23 U.S.C. 119(e)(8), the NHPP Federal share for a State that has not developed and implemented an asset management plan will be reduced to 65% until it develops and implements its plan. [23 U.S.C. 119(e)(5)]

¹⁰ 23 U.S.C. 148(j).

¹¹ 23 U.S.C. 130(f)(3).

¹² The Secretary may increase this share (up to 100%) if he or she determines that this would best serve the interests of the Federal-aid highway program. [23 U.S.C. 505(d)]

¹³ 23 U.S.C. 206(f) (which cites to 23 U.S.C. 120(b), with some specified exceptions).

¹⁴ 23 U.S.C. 201(b)(7)(A).

¹⁵ 23 U.S.C. 201(b)(7)(B).

¹⁶ **FAST Act §1123(g). Federal funds other than those made available under titles 23 or 49 U.S.C. may be used for the non-Federal share.**

¹⁷ 23 U.S.C. 120(g).

¹⁸ Emergency Relief (ER) funds are typically subject to the standard Federal share: 80%, with 90% on Interstates, in both cases subject to the sliding scale. However, this share may be adjusted as follows:

- Up to 100% for eligible emergency repairs within 180 days of the disaster or catastrophic failure. The Secretary may extend this time period, taking into consideration any delay in the ability of the State to access damaged facilities to evaluate damage and the cost of repair. [23 U.S.C. 120(e)(1) & (3)]
- Up to 90% for eligible permanent repairs to restore facilities to pre-disaster condition if the State's ER-eligible expenses for the FY exceed the State's combined NHPP/STP/HSIP/CMAQ/NHFP/Metropolitan Planning apportionment for that FY. [23 U.S.C. 120(e)(4)]

¹⁹ **23 U.S.C. 120(e)(2) as amended by FAST Act § 1408(b). Prior to the amendment, eligible Federal Lands Access Transportation Facilities qualified for a Federal share of 100%. Per § 421 of the Department of Transportation Appropriations Act, 2016 (P.L. 114-113 , the FAST Act amendment applies to projects to repair or reconstruct facilities damaged as a result of a qualifying natural disaster or catastrophic failure that occurs after October 1, 2015.**

²⁰ 23 U.S.C. 147(b).

²¹ Except as expressly provided by the FAST Act or otherwise determined by the Secretary, projects and activities funded under Title VI (Innovation) of the FAST Act are subject to a Federal share of 80%. [FAST Act § 6002(c)]. The Federal share of activities carried out under a cooperative research and development agreement entered into under chapter 5 of 23 U.S.C. shall not exceed 80%, except that the Secretary may approve a greater Federal share if there is substantial public interest or benefit. [23 U.S.C. 502(c)(3)]

²² This share is reduced to 50% for activities carried out by a local technical assistance center and increased to 100% for activities carried out by a tribal technical assistance center. [23 U.S.C. 504(b)(3)]

²³ **FAST Act §6004, 23 U.S.C. 503(c)(4)(J).**

²⁴ **FAST Act §6020(g).**

²⁵ **The standard Federal share is up to 60%, but Federal assistance from other sources may increase this to 80%. Federal funds from sources other than 23 U.S.C. or 49 U.S.C. may be used to pay the non-Federal share of the cost of a project carried out under this program by a Federal land management agency. [FAST Act §1105, 23 U.S.C. 117(j)]**

APPENDIX D -

PUBLIC INVOLVEMENT AND CONSULTATION

CDTC hosted a series of public participation opportunities that employed a range of strategies and technologies in order to make the metropolitan transportation planning process reasonably accessible to as many stakeholders as possible.

The public participation opportunities included the following events and activities:

- ◆ TIP Feedback Portal
 - CDTC developed an interactive, [web-based form](#) to gather public input. This form includes materials that describe the TIP and programming process, [interactive map](#) and project data, a survey, and open-ended feedback form.
- ◆ Social and print media outreach
 - CDTC used its Twitter, Facebook, and Instagram to promote events, the TIP Feedback Portal, and to collect comments related to the 2022-2027 TIP.
 - Several press releases announcing public input opportunities, upcoming events, and closing of the comment period were distributed to all major and minor local media outlets.
 - CDTC developed print materials including a Public Comment Summary of the TIP Document, walk sheet booklets detailing the projects in each county along with analysis and data about the full program, survey and comment postcards, sandwich boards directing people to the TIP Feedback Portal, and a variety of maps and project listings that illustrate project locations and details.
 - CDTC worked with members and stakeholders to cross-promote the public participation opportunities.
- ◆ TIP Virtual Workshop
 - CDTC held a virtual workshop on Tuesday, July 19 6:00 p.m. It included an overview of the TIP, programming process, project information, and how to find details on each project contained in the TIP. The workshop was recorded and uploaded to the CDTC YouTube channel (where closed captioning was available), and it was embedded in the TIP Feedback Portal.
- ◆ TIP Open House & Pop-up Events
 - In order to reach as many stakeholders in the Capital Region as possible, CDTC partnered with local agencies and organizations, including CDTA, to engage the public at several community events. The following events were held in each of the four counties covered by CDTC:
 - Wednesday, July 27, 5:30 p.m.– 7:30 p.m., Open House at Saratoga County Office Building, 50 W. High Street, Ballston Spa, NY
 - Saturday, July 30, 9:00 a.m. – 2:00 p.m., Popup at Troy Waterfront Farmers' Market, Monument Square, Downtown Troy, NY

- Tuesday, August 2, 4:00 p.m. – 5:00 p.m., Popup in front of Albany Public Library Main Branch, 161 Washington Ave, Albany, NY
- Tuesday, August 2, 5:00 p.m. – 7:00 p.m., Open House at Albany Public Library Main Branch, 161 Washington Ave, Albany, NY
- Sunday, August 7, 10:00 a.m. – 2:00 p.m., Popup at Schenectady Greenmarket, around City Hall, Schenectady, NY
- ◆ Other consultation
 - CDTC invited federal land stakeholders in the Capital Region to participate in the public review and consultation period, including direct communication from the Executive Director, Sandy Misiewicz. While no comments were received for the TIP, further and ongoing contact is expected and may lead to deeper inclusion in the regional transportation planning process.
 - CDTC invited Tribal Nations with interests in the Capital Region to participate in the public review and consultation period. The Executive Director Sandy Misiewicz had the opportunity to attend a summit with representatives of the Tribal Nations in Ellicottville, NY in July. While we received no comments on the TIP, establishing a relationship with the Tribal Nations will allow for better communication and integration of their concerns into the regional transportation planning process.
 - CDTC collaborated with CDTA on public outreach events that attempted to reach populations that do not have access to a private vehicle. While some contact with this population happened at both farmers' markets, the tabling event at the Albany Public Library's Washington Avenue branch – where a CDTA bus stop is located – was the most fruitful. All public outreach events were all accessible by transit

In total, CDTC received 28 survey submissions, five comments by email, one comment via social media platforms, and one comment from CDTC's Equity Advisory Committee. In addition, CDTC staff interacted with approximately 150 people over the course of four events in each of the four counties covered by CDTC.

Of the comments received, several themes emerged:

- ◆ Over half of comments call for more funding weighted to non-motorized vehicle travel, particularly bike and pedestrian infrastructure
- ◆ Several comments wanted to see less emphasis on preservation and more emphasis on funding for a future less defined by the automobile
- ◆ Several cited a need for more transit and/or transit supportive funding

- ◆ A few comments brought up issues around the process of the formulating the TIP, specifically citing a lack of transparency/communication and desire for CDTC set a progressive agenda and encourage regional networks

A full list of comments received, and any actions taken in response to a comment(s) are included below.

1. Email from James Martin, Town of Glenville, submitted 2/17/22

Comment: "...[I]n logical conclusion to the Complete Streets Plan [previously] referenced... and the design development phase requested, I also request that the round-a-bout the intersection of Freemans Bridge Road and Route 50 be listed in the TIP for the Capital Region so that the project can advance to construction and implementation."

Response: As part of the development of the 2022-2027 Transportation Improvement Program, CDTC solicited state and local government sponsors for proposed projects to be considered for funding. Unfortunately, neither the Town of Glenville nor NYSDOT applied for federal funds to design and implement a roundabout project on Freemans Bridge Road. Therefore, we are also unable to include this project in the TIP.

2. Email from Ben MacKrell, City of Albany resident, submitted May 27, 2022

Comment: Based on an initial review of the project prioritization calculations based on the Merit Evaluations. It seems like this rubric has overvalued the "Preservation/Renewal of Existing" category. Certainly, there is value and cost savings in investing in existing infrastructure, but not to the point of being duped by the sunk-cost fallacy.

Comparing the 5 points of "Existing" infrastructure category to the 8 points of the "Environment & Health" feels like investing in the past instead of the future.

Response: The CDTC evaluation criteria does emphasize funding projects that preserve existing infrastructure instead of building out new pieces of the transportation system. This approach is consistent with the "Preservation First" Policy outlined in the NYSDOT Transportation Asset Management Program and helps support statewide pavement and bridge condition performance targets that are required by federal law. Although these criteria impact the project selection process, sponsor need, local priority, fiscal constraint, and other factors

also play an important role in the selection of new TIP projects by the CDTC Planning Committee

3. Email from Steve Strauss, Executive Director, Empire State Passengers Association, submitted June 21, 2022

Comment: Can you provide some idea of when you expect to include the Livingston Ave. Bridge replacement program in the TIP for the Capital Region? Are there any plans to more aggressively apply for discretionary funding in the federal infrastructure bill for transit and rail projects in the CDTC MPO area? There are billions of dollars in railroad grade separation funds in the bill for example.

Response: N/A

4. Email from Bob Derocher, Town of Colonie resident, submitted June 21, 2022

Comment: Can DOT explore the development of synchronized traffic lights along the Loudon Road corridor from 9R south to 378? The stop-and-go traffic flow is awful and only leads to longer traffic jams during rush hour. Route 9 traffic flow shouldn't come to a halt because one car wants to leave Newton Plaza.

Response: N/A

5. Email from Michael Volkman, City of Albany resident, submitted June 22, 2022

Comment: There is lots of talk about replacing 787 with a boulevard. While it seems like a nice idea, it's not very practical for the tens of thousands of commuters who live in the suburbs at work downtown. Remember three years ago when Amazon was asking for a place to have its second headquarters and Albany put in a bid? The colossal complex proposal would have been great for local growth but would have been a nightmare for commuters to be jammed into a confined area.

I have been reading your reports for 30 years. You repeatedly ask the question on whether it is worth for capital expense to build a "fixed guideway" system of mass transit. The answer you keep coming up with is "maybe," and your recommendations for going through with the building such a system are to wait

until the answer comes back as a definite “yes.” If that is even going to happen. My response to that is: if you build it, they will come. This region is not one with a centralized city. It has six clustered cities with heavily populated towns in between. The downtowns are congested with heavy traffic and numerous parking garages that are still not enough to meet the demand. This region is the only upstate region that is growing. We want to encourage more investment and growth. We want businesses to establish and expand. We want people to move here and stay here.

If they are entirely dependent on their own cars and slow buses, that is a disincentive. We need to have one more option that will make this area much more attractive: a metro! You think this area is not large enough for that? Maybe not at first, but there are so many reasons for doing it and having one will make the reasons get better and better.

There is one more thing that we must make it a big deal. With RPI, The College of Nanoscale Science, and University at Albany School of Engineering, along with all the businesses large and small as part of “Text Valley,” we have another muscle power to make this an international center of research and development for mass transportation technology using our metro as a living laboratory to create better transit systems to be used around the world.

Response: N/A

6. Comment submitted via online survey

Comment: Stop wasting money on 787 and tear it down already

Response: N/A

7. Comment submitted via online survey

Comment: For project 176253 in the Town of Wilton, the Northern Pines, Carr Road, Jones Road Project you are missing a tremendous opportunity to connect the Wilton community. There are 3 major developments that house a large portion of Wilton’s population and families along Northern Pines Road. Not extending the pedestrian and bike multiuser trail north to at least Lonesome Pines Road excludes these neighborhoods from using it and makes it extremely

dangerous if not impossible to access for those families. Northern Pines Road is basically a rural highway that became a connection road when developments got built along it. It is one of the major barriers to connecting Wilton's families. Please reconsider and extend this multiuse path or please note this when looking at future projects. By extending this path north to Lonesome Pines it would give these 3 neighborhoods, the 3 largest in Wilton, Geyser Crest, Estates of Northern Pines, and the Fairways full access to other neighborhoods, the elementary school, and Wilton's Recreation center Gavin Park among other benefits. It would help to take rural highway locked pocket communities and turn them into a real accessible community. I think the project is great but just needs a bit more to really provide actual community access and connection.

Response: N/A

8. Comment submitted via online survey

Comment: We live about 2 miles from Shaker Middle School, and yet there is NO safe way for my daughter to bike there. Route 155 needs a safe and separated bike lane. Until then 155 will continue to be clogged with cars every morning and afternoon with parents dropping off just 1 or 2 kids each. It is stressful car congestion for anyone traveling on this road, terrible for the environment, and a missed opportunity for our kids to get some exercise outside of a PE class or recess and learn the value of transportation alternatives.

Response: N/A

9. Comment submitted via online survey

Comment: Widen and expand traffic capabilities of Bridge at Ballard Road in Wilton, NY Exit 16

Response: N/A

10. Comment submitted via online survey

Comment: I want more investment into transit biking and walking. I do not support maintaining bridges and highways to suburbs and ex urbs. They should be toll roads because it only induces more traffic and VMT, which is a net loss for

everyone. Improve transit and walkability for our urban core and stop subsidizing the car commuters.

Response: N/A

11. Comment submitted via online survey

Comment: Any focus on road widening outside of a highway is misguided and will lead to increased pedestrian and vehicle collisions and deaths.

As a former car owner, my concern increasingly is with the frequency of service of available transit to get to where I want to go, as well as the safety of my commute when not driving. Many of the streets in Albany, Troy, and Schenectady are much wider than necessary, especially for an urban environment.

Transportation funding should be human scaled and considerate of all users, without prioritizing just those protected by a vehicle.

Response: N/A

12. Comment submitted via online survey

Comment: Central Ave: Please put in protected bike lines protected with a curb or bollards, not just paint Please do not design this road exactly like Madison Ave, the painted bike lanes in the door zone are unsafe and are too easy to double park in. Albany Shaker Rd corridor: Please do not put a bike shoulder on a high-speed roadway. Bike infrastructure on high-speed roads need to be separated by a curb or bollards, otherwise it is very unsafe and people will not use it.

In general, every major repaving project must include a redesign that puts in protected bike lanes and traffic calming otherwise we will lose our opportunity to create safer streets and people will die and get seriously injured because of our inaction It will also save you money in the long term because bike lanes do not need repaving nearly as often as car lanes. Thank you.

Response: N/A

13. Comment submitted via online survey

Comment: While I appreciate we have a lot of built infrastructure that requires significant maintenance I am disappointed that bulk of funding will go towards maintaining this infrastructure rather than supporting projects that would enhance multimodal experience for those who walk bike or utilize mass transit and encourage others to do so I can only hope that many of the projects going towards road and bridge infrastructure will use this opportunity to lead with enhancements to the pedestrian experience Too often we repave the same sins leaving those who do not drive to deal with unfriendly pedestrian infrastructure.

We should not be expanding infrastructure compounding future maintenance costs. Pavement beyond preservation projects should lead with improving pedestrian mass transit bicycling access. Far too little in this plan for bicycle and ped infrastructure. Any projects covered elsewhere should lead with improving bicycle pedestrian experience first than preserving or enhancing our infrastructure for vehicular use. Before expanding infrastructure, we need to get serious about improving multimodal safety at intersections in region but specifically in cities. Projects covered in other area e.g., Pavement Beyond Preservation should emphasize intersection safety. Far too little support to CDTA and mass transit in current plan. We need more support to projects that enhance multimodal experience in region. We have some good bones in place but there is a lot of work to improve pedestrian bicyclist and mass transit user experience from one mode to other.

Response: N/A

14. Comment submitted via online survey

Comment: It does seem like your hands are tied quite a bit more than is ideal both by the strings attached to various buckets of money the fact that municipalities need to submit projects to you rather than you suggesting advocating requiring ideal projects and the rules by which you need to evaluate proposals. One of the challenges of living in the Capital District is that all but the most mundane of errands trips involves passing through multiple municipalities each of whom seem to have different ideas of what an ideal transportation system should be. I'd like to see more interconnected projects. For me personally, Colonie to Albany or Colonie to Halfmoon /Clifton Park connections for bikes are both very desirable and absent. I love the Zim Smith extension project. I'd love it even more if there were a better way to get there from Colonie that didn't involve going through Waterford and Mechanicville. I'm also

cautiously optimistic about the improvements to Central Ave, though I'm disappointed that they're limited to the Albany portions of the street rather than the Colonie portions. That's a huge missed opportunity as it runs from downtown Albany to downtown Schenectady in a straight line. It should be a major transit pedestrian and cycling thoroughfare and one of the crown jewels of our region's transportation system. Instead, people keep dying on it and it's clogged with traffic.

Overall, as a cyclist, I'm disappointed in the lack of a consistent approach to creating cycling routes throughout our region. We may be more spread out than some MSAs. We're four times the size of Columbus OH, where I grew up for example, but there's no reason we shouldn't have a comprehensive network of safe cycling routes throughout. There's a vast difference between the municipalities that seem to be doing a good job - Watervliet is underrated in this respect - and those that just don't care, like my own Colonie. But, it wouldn't take all that much to create a good network. It's disappointing that the TIP seems to focus on disparate projects rather than a comprehensive vision in that respect.

Comments specific to the funding exercise: I used a largely arbitrary number here. The bottom line is that we need to maintain what we have, and this should take reasonable priority I have no idea whether twenty five percent is a reasonable percentage or not. Rivers and highways cut through our region. Crossing these without a car is difficult. More frequent crossings would be beneficial. Pavement reduction? Colonie, in particular (I can't speak to others), has absurdly wide streets and huge curb radii.

Response: N/A

15. Comment submitted via online survey

Comment: CDTA does an ineffective job at communicating to their target audience. The interactive map is of little use to the average CDTA rider. CDTA must invest in more user-friendly IT solutions in order to expand ridership. The average senior citizen cannot understand the bus routes with the tools provided, nor will a millennial choose to interface with the CDTA tools compared to Uber or google maps. IT is infrastructure too.

Response: N/A

16. Comment submitted via online survey

Comment: Central Avenue needs a redesign from downtown Albany to Schenectady not just repaving and some design work in downtown Albany. Look at the pedestrian deaths which occur in downtown Albany, but also in the more suburban portion of central Ave as well. The street needs a lot of signals installed to manage the traffic during the 20 hours a day where there is not enough volume to justify all those lanes of traffic.

Comments specific to the funding exercise: I drive every day in the region and over the last year I think I have seen two potholes This (pavement preservation) is not a big priority. We desperately need sidewalks and roadside trails throughout the region. My young kids have no independence because most of the streets in my area do not have sidewalks. If we had bike and pedestrian infrastructure, they could live more complete lives and I could get some peace and quiet. There are several Central Ave pavement projects, but this street needs a redesign from downtown Albany to Schenectady - probably among the most high crash street in the region. It does not work well for drivers or for pedestrians. Our bridges are fine. Please add sidewalks to bridges, yes. CDTA is a gem, but I think the thing that's most important for an increase in ridership is to make it more convenient and comfortable to walk to or from the bus stop. It is shocking that so many of our signals do not have pedestrian heads and that so few of our traffic signals are timed to cause traffic to flow in platoons This is cheap, basic easy stuff

Response: N/A

17. Comment submitted by the CDTC Equity Advisory Committee on 8/12/22

Comment: The Capital District Transportation Committee's Equity Advisory Committee discussed the Draft 2022-2027 Transportation Improvement Program (TIP) at its July 18, 2022 meeting. It identified several concerns regarding TIP #R350, Federal Street Corridor Improvements (Design Only). The Equity Advisory Committee wishes to share the following concerns with the CDTC:

First, it is difficult to assess a project and its impacts on environmental justice communities when the parameters of the project have not been set. Even so, although the current Linkage project is still incomplete, the public materials suggest that roundabouts are the preferred alternative treatment by the city.

The Equity Advisory Committee is concerned that vulnerable users, who frequently use the public right of way in the project area, will not be adequately protected from traffic conflicts by roundabout treatments.

Although some roundabouts can adequately accommodate pedestrians and bicyclists, doing so on a roadway with traffic volumes as high as Federal Street's would be very difficult because roundabouts are designed to keep car traffic moving. Of particular concern are the residents of the JFK Towers due to their more limited ability to negotiate traffic.

Thank you for the opportunity to comment on the Draft 2022-2027 TIP. We appreciate the opportunity to share our thoughts and concerns about upcoming projects.

Response: N/A

18. Exchange with username John (@tazees) via Twitter beginning 8/9/22

Comment from John: Personally, I wish better public contribution time was allowed. It did not seem to me at least there was any transparency. My thoughts on it.

CDTC response via Twitter: Thank you for your feedback, John. Would you care to provide further comment on what specifically lacked transparency, so as to better address your concern?

John: It was because of communication that by the time I heard of the projects, with the exception on 1, they were well into the final stages. That's what I meant about transparency. More of accessibility to the initial meetings. Thanks for the reply.

CDTC response via Twitter: Hi John, the projects that are being considered here, in the 2022-2027 TIP, are in the very early stages (no design or construction yet). Are you referring to the selection process for projects to receive funding via the TIP?

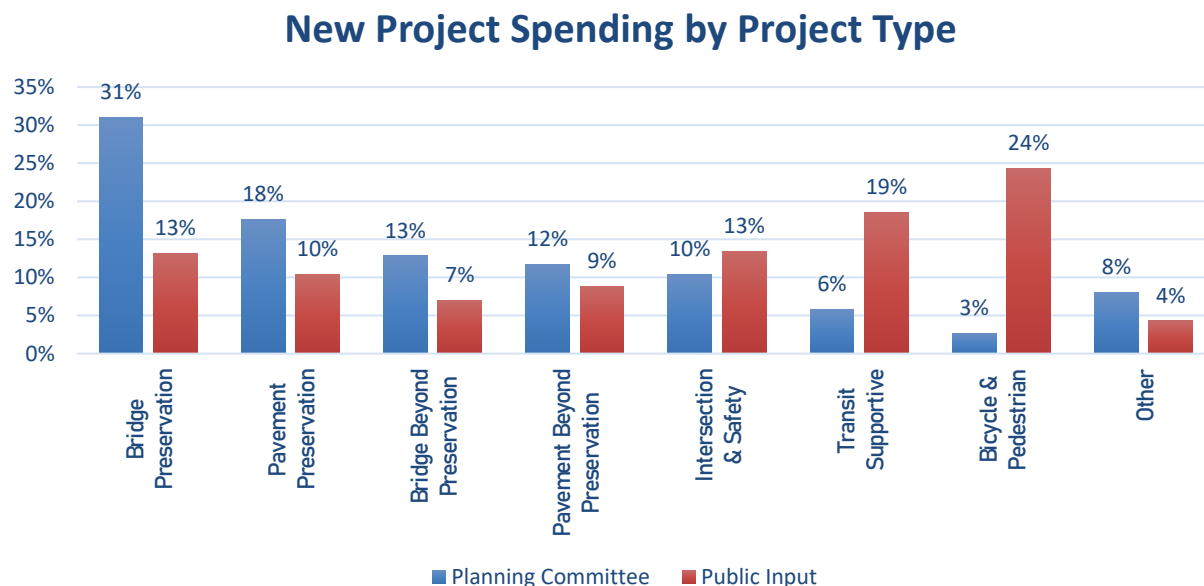
No further comment received.

CDTC TIP FUNDING PUBLIC SURVEY RESULTS

One of the methods of gathering public feedback CDTC employed was to create a survey that aimed to provide members with some quantitative data in addition to qualitative comments. The first element the survey was a funding exercise that asked respondents to mimic setting funding targets for each of the project types. Respondents were asked to spend a hypothetical \$100 in the 8 project type categories. CDTC received 28 survey submissions. The funding exercise resulted the following public preferred average funding shares by CDTC project type.

Project Type	Public Preferred Funding Share
Bicycle & Pedestrian	24.30%
Transit Supportive	18.60%
Intersection & Safety	13.40%
Bridge Preservation	13.10%
Pavement Preservation	10.40%
Pavement Beyond Preservation	8.80%
Bridge Beyond Preservation	7.00%
Other	4.30%
Total	100%

When compared to the funding targets adopted in the TIP, there is a distinct difference in priorities:



The second section of the survey posed five questions regarding the TIP. The questions asked respondents to rate how well the TIP performed on a 7-point scale (with an additional “Not Sure” option).

The results are as follows:

Question	Avg. Rating
Execute the principles outlined in the Capital District's Long-Range Transportation Plan, New Visions 2050?	4.3
Achieve an appropriate geographical distribution of site-specific projects within the Capital District?	4.7
Address the future transportation needs of the Capital District?	4.0
Appropriately consider environmental justice and equity in the TIP development process and in project selection?	4.1
How well do you understand the TIP development process?	4.2

The following pages include screen captures from the online TIP Funding Survey.



Select Language

Search CDTC



Address : One Park Place Albany, NY 12205-1606
Phone : (518) 458-2161 | Email: cdtc@edtcnpo.org

About Us

Committees

What We Do

Transportation Plans

Maps & Data

News & Events

Contact Us

Comment Period Closes August 12th

Tell Us What You Think about CDTC's Draft 2022-2027 Transportation Improvement Program

We value your opinion and appreciate your help contributing to the public commentary on CDTC's Draft 2022-2027 Transportation Improvement Program (TIP). Your feedback will provide valuable insight and direction for this -- and future -- federal transportation investments to benefit the Capital Region and its residents.

The TIP is the document that specifies which projects in the Capital District will receive federal funding over the next five years. For more information on what the TIP is and how it is developed, please visit the [TIP page](#).

How Would You Spend the Money?

Before we ask any specific questions about the TIP document or projects, we want to know how you would allocate federal funding. Given the many needs for transportation money from maintaining existing roads and bridges to reshaping our transportation system for the future, what balance would you strike?

In the exercise below, you will have \$100 to allocate in the categories listed below that correspond to the categories used in the TIP project evaluation and selection process. You must spend all \$100 and enter round numbers to submit your final answers.

Enter Your Allocations



Pavement Preservation *

\$

Add/Edit Comments



Pavement Beyond Preservation *

\$

Add/Edit Comments



Bicycle and Pedestrian *

\$

Add/Edit Comments



Intersection Safety *

\$

Add/Edit Comments



Bridge Preservation *

\$

Add/Edit Comments



Bridge Beyond Preservation *

\$

Add/Edit Comments



Transit Supportive *

\$

Add/Edit Comments



Other Allocation *

\$

Add/Edit Comments

Total Allocations (* Must Equal a Total of \$100)

\$0

Must equal a total of \$100.

Quick Links

WEBINAR: Learn about what the TIP is, how projects were evaluated and selected, which projects were selected, and analysis of the full program



[Read the Public Comment Summary of the Draft 2022-2027 TIP Document](#)

[Review the Full TIP Document or visit the TIP Update Webpage for all related documents](#)

[Explore the Draft TIP Interactive Project Map](#)

[Dive Into the Draft TIP Project Fact Sheets](#)

Events: Talk to CDTC staff in person about the TIP

Wednesday, July 27, 5:30p – 7:30p, Open House at Saratoga County Office Building, 50 W. High Street, Ballston Spa, NY

Saturday, July 30, 9a – 2p, Pop-up at Troy Waterfront Farmers' Market, Monument Square, Downtown Troy, NY

Tuesday, August 2, 5p – 7p, Open House at Albany Public Library Main Branch, 161 Washington Ave, Albany, NY

Sunday, August 7, 10a – 2p, Pop-up at Schenectady Greenmarket, around City Hall, Schenectady, NY

What's Your Opinion of the Draft 2022-2027 TIP?

Now we want to hear your thoughts on the draft TIP document for the next five years, including all the projects selected for funding. Please answer the following five questions on the five-point scale below (note: there are links on the right side of this page to documents and resources that you may find useful in your evaluation). Feel free to use the comment buttons to explain your answer.

How well does the Draft 2022-2027 TIP do the following:

Execute the principles outlined in the Capital District's Long-Range Transportation Plan, New Visions 2050 ([New Visions Summary](#))? *

Poor 1 2 3 4 5 Excellent Not Sure

Achieve an appropriate geographical distribution of site-specific projects within the Capital District ([View the interactive map](#))? *

Poor 1 2 3 4 5 Excellent Not Sure

Address the future transportation needs of the Capital District? *

Poor 1 2 3 4 5 Excellent Not Sure

Appropriately consider environmental justice and equity in the TIP development process and in project selection (environmental justice populations are mapped in the [interactive map](#))? *

Poor 1 2 3 4 5 Excellent Not Sure

How well do you understand the TIP development process? *

Poor 1 2 3 4 5 Excellent Not Sure

What other thoughts do you have on the Draft 2022-2027 TIP?

Thoughts on specific projects? On the TIP development process? Please leave your thoughts below. Please be as specific as possible.

APPENDIX E -

PROJECT SELECTION & AMENDING THE TIP

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.

There are a few procedures or principles that are not explicitly stated in the table of guidelines, but are just as much a part of those guidelines:

- A) 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.
- B) Any action explicitly taken by the Planning Committee cannot be overridden by anything less than a Planning Committee action.
- C) For a project that is both non-CDTA and non-state but the responsibility for a change lies with CDTA or NYSDOT, consent is also required of the project implementer and (if different) also the owner of the facility or whoever is responsible for the local match.
- D) If the same action can fit more than one description in the table, the one requiring the highest action is used. For example, a project consisting of \$0.600M in matched federal-aid could have the fund source switched to local. This is a fund source switch (3)(d) requiring only NYSDOT or CDTA approval, and it is also a deletion of a project from the federal-aid program (1)(c), since all federal funds are being removed, requiring Policy Board action. Therefore, the change requires Policy Board action as the deletion of a project from the federal-aid program (1)(c).
- E) An amendment normally requiring Planning Committee approval, linked to another amendment requiring Policy Board approval, also requires Policy Board approval.
- F) In the guidelines table, 1(h), "Combining a non-preservation project with any other(s)" requires Planning Committee approval because it is not necessarily desirable to combine any two specific projects. The reasons for that can vary and need to be considered on a case-by-case basis.

GUIDELINES FOR TIP CHANGES

Includes updates as of October 2, 2019

Type of Change	Responsibility		
	¹ CDTA or NYSDOT	² Planning Committee	Policy Board ³
(1) Addition or Deletion			
(a) Addition of project(s) from regional set-asides		Approve	---
(i) From placeholder set-asides	---	Recommend	Approve
(ii) As part of a project solicitation	---	Approve	---
(b) Addition/deletion of project under or equal to \$0.500M	---	Recommend	Approve
(c) Addition/deletion of project over \$0.500M	Approve	---	---
(d) Addition/deletion of project element less than or equal to \$0.250M ⁴	---	Approve	---
(e) Addition/deletion of project element over \$0.250M ⁴	---	Approve	---
(f) Addition of Transportation Alternatives project after approval by state advisory committee	Approve	---	---
(g) Combining two or more existing preservation projects ⁵	---	Approve	---
(h) Combining a non-preservation project with any other(s)	---	Recommend	Approve
(i) Other			
(2) Scope and/or Cost (Increase or Decrease)			
(a) Over 25% (minimum \$250 k) or over \$500 k ⁶	---	Approve	---
(b) Over 50% (minimum \$1M) or over \$3M ⁶	---	Recommend	Approve
(c) Scope change necessitating recalculation of system-level air quality conformity of non-exempt project	---	Approve	---
(d) Other significant scope change ⁷	---	Recommend	Approve
(e) Other			
(3) Fund Source Change (a thru e refer to CDTC funds)			
(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 ⁸	---	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) Change from any CDTC to statewide federal fund source	---	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 ⁹	Approve	---	---
(b) Any other schedule change	---	Approve	---

¹ CDTA has authority for transit fund sources and NYSDOT for highway fund sources.

² Changes requiring Planning Committee action are minor TIP amendments. The Planning Committee may defer approval to Policy Board, if desired.

³ Changes requiring Policy Board action are major TIP amendments.

⁴ A project element is a phase of the project (such as right-of-way acquisition), in one FFY funded by one fund source.

⁵ Proper documentation still needs to be provided to CDTC Staff. Also, for a scope change to, or removal of, one of the original projects, a scope change would be required.

⁶ Percentages are of total project five-year plus committed column federal cost. Use of toll credits increases the percentage.

⁷ A significant scope change is a significant change to the project limits, type or scope.

⁸ Change from a capital fund source to Metropolitan Planning Funds (PL) requires UPWP action by CDTC.

⁹ This includes funds programmed in the "Committed" column of the TIP that are not obligated by September 30 of the Committed fiscal year. Advancing construction funding to the current FFY without Planning Committee action requires all design phases to be complete.

APPENDIX F -

2022-2027 TIP PROJECT CANDIDATES

CDTC opened solicitation for new TIP candidate projects in September 2021 and received project applications for 93 new projects from state and local project sponsors. The following table is a complete list of the 93 projects that were evaluated to be included on the 2022 – 2027 TIP.

ID#	Sponsor	Project Name	Cost (\$M) (Matched And Inflated)
1	Albany County	Albany Shaker Rd Corridor Enhancement	5.991
2	City of Albany	Brevator Street Reconstruction Project	4.648
3	City of Albany	Broadway Reconstruction Project	1.900
4	City of Albany	Central Avenue Reconstruction Project	5.970
5	City of Albany	Frisbie Avenue Reconstruction Project - Second Avenue to Mccarty Avenue	0.624
6	City of Albany	Frisbie Avenue Reconstruction Project Second Ave to Garden Street	0.602
7	City of Albany	Russell Blessing Road Reconstruction Project	6.706
8	City of Albany	Washington Avenue Patroon Creek Improvement Corridor	9.633
9	City of Cohoes	City Of Cohoes Bedford Street Pedestrian Accessibility Enhancements	1.728
10	City of Cohoes	City Of Cohoes Bridge Avenue Pedestrian Accessibility Enhancements	1.210
11	City of Cohoes	City Of Cohoes Columbia Street Pedestrian Accessibility and Safe Routes To School Enhancements	5.935
12	City of Cohoes	City Of Cohoes Ontario Street Pedestrian Accessibility and Streetscape Enhancements	2.470
13	City of Mechanicville	Depot Square - Zim Smith Trail Improvements	1.927
14	City of Saratoga Springs	East Side Safe Routes to School Plus	1.234
15	City of Saratoga Springs	Pedestrian/Ada Traffic Signal Improvement Project	0.107
16	City of Saratoga Springs	Video Based Traffic Detection	0.972

ID#	Sponsor	Project Name	Cost (\$M) (Matched And Inflated)
17	City of Schenectady	Brandywine-McClellan Pedestrian Improvements	1.723
18	City of Schenectady	Craig Street Connector	4.792
19	City of Schenectady	Crane Street Bridge Major Rehabilitation	4.239
20	City of Schenectady	Schenectady Park Connector Expansion	0.536
21	City of Troy	Federal Street Corridor Improvements	4.823
22	City of Watervliet	25th Street Corridor Rehabilitation	5.554
23	NYSDOT	I-787 - South Mall Interchange Bridge Element Specific Repairs, Bins 1092940 &109299b	15.300
24	NYSDOT	I-787 -South Mall Interchange Bridge Element Specific Repairs, Bins 109298a, 109298b & 109298d	16.050
25	NYSDOT	I-787 To SME EB, City of Albany, Albany County	17.550
26	NYSDOT	I-87 Exit 16 Interchange Improvements and Bridge Replacement	9.000
27	NYSDOT	I-87 Pavement Resurfacing from Western Avenue to The Mohawk River	13.520
28	NYSDOT	I-88 Pavement Resurfacing Part 1 - I-90 To Weaver Road	11.500
29	NYSDOT	I-88 Pavement Resurfacing Part 2 -Weaver Road to Schoharie Co. Line	11.500
30	NYSDOT	I-890 Resurfacing From I-90 Exit 25 To Broadway/Erie Blvd	5.040
31	NYSDOT	I-90 Pavement Resurfacing Corporate Woods To I-787	3.906
32	NYSDOT	I-90 Pavement Resurfacing I-87 To Corporate Woods	4.232
33	NYSDOT	Nelson Avenue Extension Over I-87, City of Saratoga Springs	5.330
34	NYSDOT	Replace Route 146 Over Chrisler Avenue. Town Of Rotterdam, Schenectady County	7.560
35	NYSDOT	River View Rd Over I-87, Bridge Replace	7.975
36	NYSDOT	Route 143 Slope Repair	10.710

ID#	Sponsor	Project Name	Cost (\$M) (Matched And Inflated)
37	NYSDOT	Route 145 Slope Repair and Pavement Resurfacing Project	5.786
38	NYSDOT	Route 146 Over I-890, City of Schenectady, Schenectady County	8.940
39	NYSDOT	Route 2 At Swatling Road Safety Enhancements	4.950
40	NYSDOT	Route 29 Over D&H Rr, Bridge Replace, Saratoga Springs	1.936
41	NYSDOT	Route 32 Over Fish Creek, Town of Saratoga, Saratoga County	1.298
42	NYSDOT	Route 396 Over Coeyman's Creek	2.010
43	NYSDOT	Route 4 Over the Hudson River & Canal, Bridge Repair, Town of Northumberland, Saratoga County	20.000
44	NYSDOT	Route 5 (Central Ave.) Pavement Resurfacing and Drainage Repairs - Part 1	7.876
45	NYSDOT	Route 5S Slope Repair - Rotterdam	3.100
46	NYSDOT	Route 67 Slope Repair	6.760
47	NYSDOT	Route 7 Pavement Rehabilitation	12.720
48	NYSDOT	Route 7 Pavement Resurfacing	6.000
49	NYSDOT	Rt. 2 Congress St Element Specific Bridge Repair, Bin 1004279	3.300
50	NYSDOT	(Application Withdrawn) Rt. 22 Over Dill Brook, Town of Petersburg, Rensselaer County	1.520
51	NYSDOT	Rt. 5 Central Ave Drainage Repair and Pavement Resurfacing Part 2	10.500
52	NYSDOT	(Application Withdrawn) Rt. 9n Over Kayderosserass, Town of Greenfield, Saratoga County	2.720
53	NYSDOT	Water Street Over D&H Railroad, Element Specific Bridge Work	5.693
54	Saratoga County	CR 109 Kinns Road-Plank Road Intersection Improvement	1.977
55	Saratoga County	CR 33 (Ballard Road) Over Snook Kill Bridge Replacement	2.955
56	Saratoga County	CR 33 (Ballard Road) Pavement Preservation	1.647
57	Saratoga County	CR 49 (West Milton Rd.) Over Kayaderosseras Creek Bridge Rehabilitation	1.695
58	Saratoga County	CR 51 (Charlton Road) Pavement Preservation Project	2.346
59	Saratoga County	Dimmick Rd Bridge (Bin3304510) Replacement	1.805
60	Saratoga County	Dix Bridge Rehabilitation	2.298

ID#	Sponsor	Project Name	Cost (\$M) (Matched And Inflated)
61	Saratoga County	Rehabilitation Of Bin 3304520 - Heath Road Over Sturdevant Creek, Town of Corinth	0.374
62	Saratoga County	Rehabilitation Of the CR 64 (Nelson Ave. Ext.) Bridge Over Kayaderosseras Creek	0.557
63	Saratoga County	Replacement Of the Tabor Road Bridge Over Dwaas Kill	4.306
64	Saratoga County	Tiffault Road Superstructure Replacement	1.853
65	Saratoga County	Viall Avenue Over Anthony Kill Bridge Replacement	3.059
66	Saratoga County	Zim Smith Northern Trail Extension	9.452
67	Schenectady County	Charlton Road Van Vorst Road Intersection Safety Improvements	2.253
68	Schenectady County	Grand Boulevard Pavement Preservation & Bicycle Facility Improvement Project	1.123
69	Schenectady County	Grand Boulevard Pedestrian Safety Accessibility Improvement Project	1.716
70	Schenectady County	I-890 Exit 4C State Street Washington Ave. Transportation Planning and Environmental Study (Pel Study)	0.440
71	Schenectady County	Nott Street Pavement Preservation & Pedestrian Safety Accessibility Improvements	0.878
72	Town of Bethlehem	Cherry Avenue Extension Multiuse Path	2.040
73	Town of Clifton Park	Ny Route 146 Miller Road and Tanner Rd and Ny Route 146 Waite Road Intersection Improvements	4.724
74	Town of East Greenbush	Gilligan Road Sidepath and Multimodal Enhancements Project	2.200
75	Town of Glenville	Freemans Bridge Road Multi-Use Path Phase II	1.602
76	Town of Glenville	Maalwyck Park Sidewalk Safety Project	1.288

ID#	Sponsor	Project Name	Cost (\$M) (Matched And Inflated)
77	Town of Guilderland	Carman Road Sidewalk	0.788
78	Town of Guilderland	East Old State Road Sidewalk	1.184
79	Town of Guilderland	Gun Club Road Sidewalk	0.816
80	Town of Guilderland	Tawasentha Park Bike-Ped Path	1.271
81	Town of Guilderland	Willow Street Sidewalk	1.160
82	Town of Halfmoon	Intersection Improvements At Ny Route 236 And Guideboard Road (Cr 94)	5.274
83	Town of Malta	East Line Road And Route 67 Roundabout Project	4.463
84	Town of Malta	North Line Road, Old Post Road And Malta Avenue Intersection Improvement Project	4.559
85	Town of Milton	Town Of Milton Intersection Improvements At Ny Route 50 And Northline Road	4.690
86	Town of Milton	Town Of Milton Ny Route 50 Corridor Improvements	5.229
87	Town of New Scotland	Clarksville Hamlet Pedestrian Safety Project	2.077
88	Town of Westerlo	Westerlo Multi-Use Trail	0.152
89	Town of Wilton	Ny 50 Safety Improvements	6.290
90	Town of Wilton	Town Of Wilton Traffic Safety And Pedestrian Connectivity Improvement Project	3.774
91	Village of Green Island	Arch Street Reconstruction And Improvement Project	2.085
92	Village of Voorheesville	Voorheesville Pedestrian And Capital Region Connections	1.319

ID#	Sponsor	Project Name	Cost (\$M) (Matched And Inflated)
93	City of Troy	River Ferry Intersection	4.803

APPENDIX G -

CDTC PROJECT EVALUATION METHODOLOGY

INTRODUCTION

Each candidate project received in the 2022-2027 TIP Update Solicitation was evaluated by CDTC staff. Projects were evaluated both quantitatively and qualitatively. The quantitative evaluation was carried out by estimating the total project benefits and dividing by the annualized project cost, resulting in a benefit-cost ratio. The qualitative evaluation was carried out by assigning merit scores derived from New Visions principles. The benefit-cost score was then added to the merit score to calculate the total project score.

In lieu of a benefit-cost ratio, bicycle/pedestrian projects received a set of model-derived scores based on the project's potential market. This process is described later in this appendix.

A two-page fact sheet was prepared for each project summarizing the project's evaluation results. These fact sheets were provided to the Planning Committee to assist in the project selection process.

BENEFIT COST METHODOLOGY

The benefit-cost ratio of each project was estimated by summing the total project benefits and dividing by the annualized project cost. Project benefits and annualized costs are displayed on the fact sheets in units of thousands of current dollars per year. Five measures of project benefit were calculated: facility life benefits, mobility benefits, safety benefits, user cost benefits, and other benefits. Facility life benefits are calculated by using the CDTC STEP Model to estimate the regional travel impact of letting a road or bridge fall into disrepair. Mobility benefits are also calculated by using the STEP model for projects with an expected impact on traffic flow. Safety benefits are calculated for projects which implement safety countermeasures by applying a Crash Reduction Factor (CMF) to the total crash cost. User cost benefits are calculated by estimating the vehicle operating cost savings associated with pavement treatments. The methodologies used to calculate each of these components of the total project benefit are summarized in the following sections.

FACILITY LIFE BENEFITS

Facility life benefits are measured in the dollar value saved per year by deferring abandonment of the facility. Facility life benefits are a product of the percent extended life of the facility, and the mobility benefits that result from keeping the facility usable. Facility life benefits could also be described as "life cycle cost savings" or "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 facility life benefits of an infrastructure project are defined as:

$$\text{Facility life benefits} = (\text{Travel Time Savings}) \times (\text{Pct. Extended Life})$$

where:

Travel Time Savings is derived from the CDTC STEP Model as described below; and
% Extended Life = Years of Facility Life Added by Project ÷ Normal Facility Life

Regional Travel Time Savings attributable to the facility are calculated using the CDTC STEP Model, the regional travel demand model. The travel demand model is run once with the facility or service in place, and then a second time with the facility or service removed. The difference in regional system measures between the two model runs represents the total value of the facility or service.

For bridge projects, the facility is removed for modeling purposes by eliminating the bridge link entirely from the highway network. For pavement projects, 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.

Travel time savings for mobility projects are measured in the dollar value of the projected time and fuel saved by the implementation of the project, per year. Travel Time Savings is 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. This value was originally derived from NYSDOT Highway User Cost Accounting Package (August 1991) and then increased to reflect inflation. The average value of travel time of \$13.84 per vehicle hour is used.

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

MOBILITY BENEFITS

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. Current year 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 crashes 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 \$13.84 per vehicle hour is used. This value is based on the NYSDOT Highway User Cost Accounting Microcomputer Package, August 1991.

SAFETY BENEFITS

Safety benefits are measured in the dollar value of the projected reduction in crash costs per year for each project candidate. The crash reduction and cost is calculated using crash data, project countermeasures, Crash Reduction Factors and average annual crash cost data as follows.

Crash Data

Using the NYSDOT Accident Location Information System (ALIS), crash data are obtained for each of the candidate project locations for a five-year period (i.e. “pre-project crashes”). A project specific crash summary is developed for each project candidate. The crash summary identifies mainline segment and intersection crashes per year, identifies the crash severity in terms of fatality, injuries (all severities) and property damage only, and identifies bicyclist and pedestrian involvement.

Countermeasures and Crash Reduction Factors (CRFs)

The details of each project candidate are reviewed to identify planned safety countermeasures proposed for implementation and their corresponding crash reduction factors. A Crash Reduction Factor (CRF) is the percentage crash reduction that might be expected after implementing a given countermeasure at a specific site. CRF's used in calculating safety benefits are identified based on CDTC judgment and available data from FHWA's Crash Modification Factors (CMF) Clearinghouse (<http://www.cmfclearinghouse.org/>), FHWA's Proven Safety Countermeasures, and state DOT reports including those from Oregon.

Crash reduction factors (CRFs) are separated into groups: those that can be applied project-wide, those that can be applied against bicycle/motor vehicle and those that can be applied to pedestrian/motor vehicle crashes. Table H-1 provides a list of the CRFs used to estimate post-project crash reduction and Table H-2 provides a list of CRF references and notes.

Safety Benefit Methodology:

The safety benefit calculation is derived from methodology used by NYSDOT as discussed in the [NYSDOT Highway Safety Improvement Program Procedures and Techniques](#) and in form [TE 164, Safety Benefits Evaluation Form](#), Method 1. The following outlines the basic steps used for each project.

1. Based on the existing crash data, a significance check is undertaken to determine the cost/crash to be used to calculate the safety benefit. Significance is determined by comparing the existing number of project area crashes by severity against the expected number of crashes by severity for similar road and/or intersection types as calculated in the [NYSDOT-Safety Information Management System Average Accident Costs/Severity Distribution State Highways](#) data table.
2. Multiply pre-project crashes/year by the cost/crash identified in step 1 to calculate the annual crash cost pre-project. Then multiply pre-project crashes/year by the cost/crash and by the crash reduction factors to calculate the annual crash cost post-project.
3. Subtract the annual post-project crash cost from the annual pre-project crash cost for the annual safety benefit with the project, representing a dollar value of crashes avoided.

TABLE 1 – CRASH REDUCTION FACTORS

CDTC CRF #	Treatment Type	CRF Factor(s) All Crashes	CRF Factor(s) Pedestrian or Bicycle Crashes
1	Wider Edge Lines with resurfacing	0.09	
2	Pedestrian Refuge Island	0.26	0.56
3	Bike Lane	0.27	
4	Bike Lane urban 4-lane undivided collectors & local roads	0.57	
5	Buffered Bike Lane		0.47
6	Protected Bike Lane		0.59
7	Widen Shoulders	0.05 * ft. widened	
8	RRFB and Pedestrian Warning Sign		0.47
9	Advanced yield or stop markings and signs	0.11	0.25
10	Pedestrian hybrid beacon (HAWK) with advanced yield or stop markings and signs	0.18	0.57
11	Pedestrian Countdown Signal	0.09	0.7
12	High Visibility Crosswalk	0.19	0.4

CDTC CRF #	Treatment Type	CRF Factor(s) All Crashes	CRF Factor(s) Pedestrian or Bicycle Crashes
13	Replace Signalized Intersection with Roundabout	0.35	
14	Replace 2-Way Stop Intersection with Roundabout	0.25	
15	Road Diet (4-3 Conversion)	0.29	
16	Rumble Strips	0.29	
17	Install sidewalk		0.75
18	Install lighting - night crashes	0.32	
19	leading pedestrian intervals		0.13
20	Add left turn lane	0.25	

TABLE 2 – CRASH REDUCTION FACTORS REFERENCES AND NOTES

1	CMF Clearinghouse , FHWA Countermeasure
2	CMF Clearinghouse and FHWA Countermeasures
3	CMF Clearinghouse
4	FHWA Countermeasures
5	ODOT HSIP Countermeasures CRF appendix BP24
6	ODOT HSIP Countermeasures CRF appendix BP23
7	ODOT HSIP Countermeasures CRF appendix RD20, RD21, RD22
8	FHWA countermeasures and CMF Clearinghouse
9	FHWA countermeasures and CMF Clearinghouse
10	CMF Clearinghouse veh/ped and all
11	CMF Clearinghouse veh/ped and all
12	CMF Clearinghouse veh/ped and all
13	CMF Clearinghouse
14	CMF Clearinghouse
15	CMF Clearinghouse and FHWA Countermeasures
16	CMF Clearinghouse
17	Average from Florida Document cited in FHWA Countermeasures
18	CMF Clearinghouse and FHWA Countermeasures
19	FHWA Countermeasures
20	CMF Clearinghouse and FHWA Countermeasures

User Cost Benefits

Pavement projects have benefits beyond facility life extension. Newly resurfaced roadways have a smoother surface which results in benefits to vehicle operating costs in the form of reduced fuel consumption, tire wear, and vehicle repair & maintenance. NCHRP Report 720 (Estimating the Effects of Pavement Condition on Vehicle Operating Costs; 2012) contains estimates of vehicle operating cost savings as a function of roadway condition. These values

were converted into NYSDOT 1 through 10 pavement score values as seen in Table H-3. Please note that other components of vehicle operating costs, such as license and insurance fees, are not included in this analysis as they are not affected by pavement condition.

For candidate projects with pavement treatment components, the vehicle operating costs in Table H-3 were multiplied by the project's annual vehicle miles travelled (calculated as segment length times AADT) to estimate the total vehicle operating costs before and after the project. The difference in these values is the User Cost Benefits of the project.

Other Benefits

Other benefits may be calculated for projects with quantifiable benefits that are not accounted for in the other categories. In past TIP updates, other benefits were calculated for regionally significant projects that were expected to impact system-level performance measures as defined in the New Visions plan. Such projects were generally ones that affect the number of vehicle trips or the aggregate level of vehicle miles of travel in the Capital District. For the 2022-2027 TIP Update, other benefits were not calculated for any candidate projects.

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 8).

TABLE 3 – AVERAGE VEHICLE OPERATING COST BY PAVEMENT CONDITION

NYSDOT Pavement Score	Average Cost Per Vehicle Mile
10	\$ 0.2164
9	\$ 0.2164
8	\$ 0.2164
7	\$ 0.2173
6	\$ 0.2210
5	\$ 0.2267
4	\$ 0.2355
3	\$ 0.2538
2	\$ 0.2689
1	\$ 0.2689

Note: Vehicle operating cost per mile includes three components: fuel, tire wear, and vehicle maintenance. Other components of vehicle operating cost, such as license and insurance fees, are not impacted by pavement condition and are omitted from the calculation.

Sources:

- *Estimating the Effects of Pavement Condition on Vehicle Operating Costs (NCHRP Report 720; 2012)*

- <https://www.nap.edu/catalog/22808/estimating-the-effects-of-pavement-condition-on-vehicle-operating-costs>
- New York State Vehicle Registrations of File - End of year 2018
- <https://dmv.ny.gov/statistic/2018reginforce-web.pdf>
- Population and Activity of Onroad Vehicles in MOVES3 (USEPA; November 2020)
- https://cfpub.epa.gov/si/si_public_record_report.cfm?Lab=OTAQ&dirEntryId=328870

TABLE 4 – AVERAGE HIGHWAY VEHICLE OPERATING COSTS

Dollars Per Vehicle Mile Traveled, by Operating Speed and Posted Speed

Operating Speed (mph)	Speed Limit						
	30	35	40	45	50	55	65
2.5	0.849	0.868	0.886	0.904	0.923	0.940	0.958
5	0.849	0.868	0.886	0.904	0.923	0.940	0.958
7.5	0.796	0.818	0.841	0.863	0.878	0.892	0.906
10	0.744	0.769	0.795	0.821	0.833	0.844	0.855
15	0.666	0.693	0.720	0.736	0.758	0.775	0.793
20	0.626	0.648	0.670	0.690	0.715	0.726	0.738
25	0.600	0.618	0.635	0.654	0.674	0.689	0.704
30	0.586	0.600	0.615	0.629	0.646	0.663	0.679
35	NA	0.586	0.599	0.611	0.626	0.639	0.651
40	NA	NA	0.594	0.605	0.616	0.628	0.639
45	NA	NA	NA	0.603	0.611	0.620	0.629
50	NA	NA	NA	NA	0.608	0.616	0.625
55	NA	NA	NA	NA	NA	0.614	0.620
60	NA	NA	NA	NA	NA	NA	0.616
65	NA	NA	NA	NA	NA	NA	0.616

Operating costs are derived from the NYSDOT Highway User Cost Accounting Microcomputer Package, August 1991. Operating costs are increased by 28.7%, in order to agree with 2021 operating costs. Vehicle ownership costs per mile were included. This 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 \$13.84.

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

Surface Score	% Extended Life		
	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%

Surface Score	% Extended Life		
	Rigid Pavements	Overlay Pavements	Flexible Pavements
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 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 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 8 – 6% CAPITAL RECOVERY FACTORS FOR ANNUALIZED COSTS

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

TABLE 9 – DESIGN LIFE OF VARIOUS FACILITIES

Pavement Treatment	Service Life
Pavement Single Course Overlay or Mill and Fill	15 years
Pavement Multi-Course Overlay or Mill and Fill	25 years
Cold Recycling with Overlay	18 years

Pavement Treatment	Service Life
Thin HMA Overlay 1" (Formerly Armor coat)	10 years
Reconstruction	30 years

Source: NYSDOT Comprehensive Pavement Design Manual Appendix 5B Pavement Restoration Techniques (2018)

Bridge Treatment	Service Life
Bridge Element Specific Rehab	15 years
Bridge Deck Replacement	20 years
Bridge Superstructure Replacement	40 years
Bridge Replacement	75 years

Source: Correspondence from NYSDOT (December 31, 2021)

Other Treatment	Service Life
Major geometrics (roundabout, reconfiguration)	20 years
Minor geometrics (left turn lane)	15 years
High friction surface treatment	10 years
Signals and flashing beacons	10 years

Source: FHWA Countermeasure Service Life Guide (2021); Correspondence from NYSDOT (2021)

BICYCLE / PEDESTRIAN PROJECT MERIT EVALUATION METHODOLOGY

Introduction

Consistent with the previous TIP Updates, 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 Bicycle and Pedestrian Travel Score

This measure is based on the 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 2.5 miles. A pedestrian distance threshold of 2.5 miles was selected to allow for the extra distance between loading nodes in the model. This measure aims to get an indication of how many trips might be realistic candidates for conversion to cycling or walking.

For this analysis, project candidates are represented in the STEP Model using the conventions that correspond with biking or walking. In the STEP Model, illegal facilities are closed to bicycle and pedestrian travel, for example, Interstates have no bicycle or pedestrian access. The STEP Model discourages the use of very undesirable facilities, for

example, facilities with no sidewalks with a 1 MPH speed limit. For the pedestrian model, facilities with sidewalks were coded at 3 mph. For the bicycle model, bicycle-friendly streets were coded at 10 mph and bicycle lanes and bike/hike trails were coded at 15 mph.

Projects were modeled under this rubric to see how many short trips could potentially walk or cycle based on the project improvement. The process does not model how many walkers or cyclists there will be on a given day, rather it provides a relative estimate of how many people would have access to use the project improvement for walking or cycling. Each project is then given a potential market score of A, B, or C based on their relative levels of access provided in comparison with other projects.

Cost Score

Candidate projects are divided into three cost groups in comparison to each other and assigned scores of A, B, or C. The lowest-cost projects received a grade of "A", medium-cost projects a grade of "B" and high-cost projects a grade of "C".

Cost Effectiveness Score

Cost-effectiveness is calculated by comparing the market value score with the cost. This cost grade was compared to the grade given for market potential. Final cost-effectiveness scores were based on the following table:

Cost Score	Potential Market 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 CDTC Bicycle and Pedestrian Advisory Committee suggested this measure as a way of illustrating the safety enhancement which comes in making accommodations for cyclists and pedestrians within the transportation system. The potential safety benefit is calculated using the Federal Highway Crash Modification Factor (CMF) Clearinghouse. A CMF provides a quantitative estimate of the effectiveness of a proposed improvement (i.e., high-visibility crosswalks, bicycle lane, etc.) on decreasing crashes at the site where it will be implemented. The CMF score is dependent on traffic volume, existing conditions, and car-

bicycle and car-pedestrian crash histories. Candidate projects are given a safety benefit score of A+, A, A-, B+, B, B-, C+, or C based on their relative CMF in comparison with other projects.

Total Bicycle and Pedestrian Score

A weighted score for each project is calculated by assigning weighted score points as follows: A+=7, A=6, A-=5, B+=4, B=3, B-=2, C+=1, C=0. Market Potential and Safety are worth 2X Cost Effectiveness.

Qualitative Project Benefits

All candidate projects are evaluated qualitatively by CDTC staff by assigning merit scores in twelve categories:

- Community Quality of Life & Equity
- Appropriate Infrastructure
- Multi-modalism
- Environment & Health
- Regional Benefit
- Economic Development
- Safety & Security
- Operations & Technology
- Freight
- Performance
- Innovation
- Project Delivery

These scores reflect project contributions to meeting the goals and implementing the strategies outlined in the New Visions plan. The complete methodology used to calculate each component of the merit evaluation can be found on the [CDTC TIP Update Webpage](#).

Supplemental Bridge Project Scores Based on Condition

At the August 4th, 2021 meeting of the CDTC Planning Committee, NYSDOT staff proposed awarding bonus points to bridge projects based on the condition, AADT, and NHS status of the bridge. The bonus points proposed by NYSDOT are summarized in the table below. CDTC staff stated that awarding bonus points in this manner would be double-counting, as bridge condition, AADT, and NHS status are already accounted for in the evaluation process. As a compromise, Planning Committee approved a motion to include the proposed bonus points in an appendix to the TIP.

NYSDOT-proposed bonus points for bridge projects

Bridge Condition		AADT 0-1,000	AADT 1,000-5,000	AADT 5,000+
Structurally Deficient – Not Load Posted	On/Over NHS	+3	+6	+7
	Non-NHS	+2	+4	+5
Load Posted	On/Over NHS	+5	+12	+15
	Non-NHS	+3	+8	+10
Bridge Closed	On/Over NHS	+15	+20	+25
	Non-NHS	+10	+15	+20

Listed below are the bridge applications considered during TIP evaluation and the proposed bonus points they would be awarded in accordance with the table above.

Project ID	Sponsor	Project Name	NHS	AADT	Proposed Bonus Points	Explanation
19	City of Schenectady	Crane Street Bridge Major Rehabilitation	N	5,402	+5	Poor condition, no posted load
23	NYSDOT	I-787 - SOUTH MALL INTERCHANGE BRIDGE ELEMENT SPECIFIC REPAIRS, BINS 1092940 & 109299B	Y	2,275 - 7,719	+0	Neither span in poor condition
24	NYSDOT	I-787 -SOUTH MALL INTERCHANGE BRIDGE ELEMENT SPECIFIC REPAIRS, BINS 109298A, 109298B & 109298D	Y	2,123 - 10,161	+0	None of the 3 spans are poor condition
25	NYSDOT	I-787 to SME EB, City of Albany, Albany County	Y	9,047	+0	Not poor condition
26	NYSDOT	I-87 Exit 16 Interchange Improvements and Bridge Replacement	Y	10,815	+0	Not poor condition
33	NYSDOT	Nelson Avenue Extension Over I-87, City of Saratoga Springs	Y	693	+3	Poor condition, no posted load
34	NYSDOT	Replace Route 146 over Chrisler Avenue. Town of Rotterdam, Schenectady County	Y	8,881	+7	Poor condition, no posted load

Project ID	Sponsor	Project Name	NHS	AADT	Proposed Bonus Points	Explanation
35	NYSDOT	River View Rd Over I-87, Bridge Replace	N	899	+2	Poor condition, no posted load
38	NYSDOT	Route 146 over I-890, City of Schenectady, Schenectady County	Y	8,963	+0	Not poor condition
40	NYSDOT	ROUTE 29 OVER D&H RR, BRIDGE REPLACE, SARATOGA SPRINGS	Y	9,208	+0	Not poor condition
41	NYSDOT	ROUTE 32 OVER FISH CREEK, Town of Saratoga, Saratoga County	N	837	+2	Poor condition, no posted load
42	NYSDOT	ROUTE 396 OVER COEYMAN'S CREEK	N	2,529	+0	Not poor condition
43	NYSDOT	ROUTE 4 OVER THE HUDSON RIVER & CANAL, BRIDGE REPAIR, TOWN OF NORTHUMBERLAND, SARATOGA COUNTY	Y	3,791	+12	Poor condition, load posted
49	NYSDOT	Rt. 2 Congress St Element Specific Bridge Repair, BIN 1004279	Y	15,161	+0	Not poor condition
53	NYSDOT	Water Street Over D&H Railroad, Element Specific Bridge Work	Y	3,626	+0	Not poor condition
55	Saratoga County	CR 33 (Ballard Road) over Snook Kill Bridge Replacement	N	10,251	+0	Not poor condition
57	Saratoga County	CR 49 (West Milton Rd.) over Kayaderosseras Creek Bridge Rehabilitation	N	2,589	+0	Not poor condition
59	Saratoga County	Dimmick Rd Bridge (BIN3304510) Replacement	N	845	+3	Load Posted; not poor condition
60	Saratoga County	Dix Bridge Rehabilitation	N	n/a	+0	Permanently closed to motor vehicles
61	Saratoga County	Rehabilitation of BIN 3304520 - Heath Road over Sturdevant Creek, Town of Corinth	N	773	+0	Not poor condition

Project ID	Sponsor	Project Name	NHS	AADT	Proposed Bonus Points	Explanation
62	Saratoga County	Rehabilitation of the CR 64 (Nelson Ave. Ext.) Bridge over Kayaderosseras Creek	N	693	+0	Not poor condition
63	Saratoga County	Replacement of the Tabor Road Bridge over Dwaas Kill	N	1,040	+0	Not poor condition
64	Saratoga County	Tiffault Road Superstructure Replacement	N	44	+3	Load posted; not poor condition
65	Saratoga County	Viall Avenue over Anthony Kill Bridge Replacement	N	4,466	+0	Not poor condition

APPENDIX H -

SELECTION OF NEW PROJECTS

INTRODUCTION

On September 10, 2021, CDTC issued a solicitation for new TIP projects to be considered for the 2022-2027 TIP Update. A public notice was issued, and the solicitation notice was provided to the CDTC Policy Board, Planning Committee, state and local governments, and other potential project sponsors. In addition, a TIP update webpage was launched that included the solicitation and evaluation information, as well as supporting documents and data. TIP project submissions were due December 3, 2021. In total, 93 candidate project applications were received from 24 project sponsors.

Project sponsors were required to complete an online TIP project application form. Copies of the full project applications can be found on the CDTC TIP Update website. Project sponsors were required to provide information on project limits, scope, schedule, and cost sufficient to determine the federal-aid eligibility of the project and to provide the information needed for the project evaluation process. Candidate projects are categorized according to type and are evaluated quantitatively and qualitatively. The evaluation results prepared by CDTC are used by Planning Committee to prepare a recommended TIP Program for Policy Board approval.

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. As part of the TIP project solicitation, applicants are required to submit a local match assurance letter. The 20% local match may be reduced depending on the project type, the federal fund source and the availability of Marchiselli funding. 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.

EVALUATION CRITERIA

All candidate projects are screened for federal-aid eligibility. A summary of FAST Act eligibility guidelines was posted to the TIP Update webpage. Every project that meets the minimum requirements is evaluated quantitatively and qualitatively. The evaluation procedure uses the best available information from CDTC's models, from corridor studies, from CDTC and NYSDOT databases and from project sponsors. A benefit/cost ratio is developed for the quantitative component and a merit score is developed for the qualitative component. Project candidates are grouped for the evaluation based on the primary objective of the project. For the 2022-27 TIP evaluation process, the following project types were used:

- Bicycle/Pedestrian Facilities
- Bridge
- Pavement
- Intersection/Safety
- Other

Projects were additionally classified as 'Preservation' or 'Beyond Preservation' using definitions adopted by the CDTC Policy Board on September 2, 2021 and posted to the TIP Update webpage. 'Preservation' was defined as any activity that extends the service life of an existing asset, while 'Beyond Preservation' was defined as reconstruction of an existing asset or new construction.

The full definitions of 'Preservation' or 'Beyond Preservation' are included as Appendix M - CDTC Definitions of Preservation & Beyond Preservation.

Project evaluations are presented using a two-page 'Fact Sheet' format. The details of the evaluation procedure are outlined in Appendix G -

CDTC project evaluation methodology

PROGRAMMING CRITERIA AND PRINCIPLES

The TIP as a whole, must, according to federal law, be developed in cooperation with the state and public transit providers. The TIP should include capital and non-capital surface transportation projects, bicycle and pedestrian facilities and other transportation enhancements, Federal Lands Highway projects, and safety projects included in the State's Strategic Highway Safety Plan. The TIP should include all regionally significant projects receiving FHWA or FTA funds, or for which FHWA or FTA approval is required, in addition to non-federally funded projects that are consistent with the Metropolitan Transportation Plan (MTP). Furthermore, the TIP must be fiscally constrained.

The goal of CDTC is to produce a "balanced" TIP that contributes to implementation of the New Visions Metropolitan Transportation 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 MTP. CDTC staff prepared three funding scenarios based primarily on the candidate project evaluation results within each project category. Additional factors such as impact on federal performance measures, sponsor equity and geographic equity were also considered. These funding scenarios were brought to the Planning Committee for discussion, and the Planning Committee prepared a recommended TIP Program for Policy Board approval.

FTA GRANT PROGRAM 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 highway 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. The final decisions regarding project inclusion in the program are made by CDTC on a recommendation from the Planning Committee.

The following projects funded with dedicated transit funds are included in the 2022 – 2027 TIP. FTA releases their complete apportionment tables annually each spring, which provide the actual allocations for transit fund sources. The costs shown below are estimates and will be updated annually to reflect actual funds available for each project.

TIP #	PIN	Fund Source	Project Name
T11	1821.18	Sect. 5307	Passenger Facility Improvements at Various Locations
T14B	CDTC.08	Sect. 5307 – Sar	Transit Operations Support for Saratoga Service: Preventive Maintenance & Operating Assistance
T16	1821.80	Sect. 5307	Transit Support Vehicles
T17	1820.48	Sect. 5307 & 5339	Transit Bus Replacement / Expansion
T57	1TR6.04	Sect. 5307	Preventive Maintenance
T77	CDTC.20	Sect. 5307	Capital Cost of Contracting for Commuter Service in the Capital District to points North, West and South
T6B	1820.37	Sect. 5307	STAR Buses Replacement and Expansion

More details of projects funded with transit fund sources can be found in the project listings.

APPENDIX I -

**FEDERAL-AID TRANSPORTATION PROJECTS
COMPLETED ON THE 2019-2014 TIP**

FEDERAL-AID HIGHWAY PROJECTS AUTHORIZED FOR CONSTRUCTION IN THE 2019-2024 TIP

PIN	TIP#	PROJECT NAME	YEAR OF CONSTRUCTION AUTHORIZATION (FFY)	CONSTRUCTION COST(\$M)
1085.43	SA304	NY 146/NY 146A INTERSECTION: SAFETY IMPROVE, CLIFTON PARK	2019	4.265
1089.75	R320	BICYCLE AND PEDESTRIAN IMPROVEMENTS, ROUTE 4, NORTH GREENBUSH	2019	8.674
1528.82	A574	I-90 OVER FULLER RD, DECK REPLACE, ALBANY CITY, BIN 1034479; I-90 OVER ERIE BLVD, BRIDGE REPAIRS BINS 1092451/2	2019	14.021
1758.14	R289	BIN 3304080, CR 114 OVER POWAMPPOKONK CRK, RENSSELAER CNTY	2019	1.339
1759.83	SA280	GEYSER RD (CR 43) / BALLSTON AVE (NY 50) INTERSECTION	2019	3.754
1760.15	S236	BINS (2203120, 2256670, 2256680) BUNDLED CITY OF SCHENECTADY	2019	0.583
1760.30	A571	KRUMKILL RD CIPR FROM FONT GROVE RD (CR306) TO NORMANSKILL	2019	0.393
1760.31	A577	VOORHEESVILLE PEDESTRIAN CONNECTIVITY	2019	0.667
1760.33	A579	WATERVLIET BIKE PATH	2019	1.235
1760.36	R318	EAST STREET RECONSTRUCTION, CITY OF RENSSELAER	2019	1.676
1760.69	R322	BIN 2201870 MURDOCK RD OVER TSATSAWASSA CREEK, RENSSELAER CNTY	2019	0.952
1760.88	SA310	GEYSER RD CONNECTOR TRAIL, SARATOGA SPRINGS	2019	0.139
1806.61	RG37	HELP PROGRAM	2019	0.575
1809.58	RG110	BRIDGE PRESERVATION SFY19	2019	5.191
1810.09	RG123	CULVERT REPAIR OR REPLACEMENT SFY18	2019	3.978
1810.13	RG122	GUIDERAIL REPLACE SFY19	2019	0.739
1810.26	S238	181026 - NY 911F (FREEMANS BRIDGE) OVER THE MOHAWK RIVER, BIN 4050330	2019	3.424
1810.39	RG117	PAVEMENT CORRECTIVE MAINTENANCE	2019	14.525
1810.40	RG117	PAVEMENT CORRECTIVE MAINTENANCE SFY19 2ND PROJECT	2019	13.073
1933.56	S256	GRADE CROSSING SIGNAL UPGRADE: LOWER GREGG RD, ROTTERDAM	2019	0.406
1933.61	A591	GRADE CROSSING SIGNAL UPGRADE: NY 146, VILLAGE OF ALTAMONT	2019	0.384
1933.62	A592	GRADE CROSSING SIGNAL UPGRADE: PORT ROAD, CSX, CITY OF ALBANY	2019	0.532

PIN	TIP#	PROJECT NAME	YEAR OF CONSTRUCTION AUTHORIZATION (FFY)	CONSTRUCTION COST(\$M)
1001.36	R316	RT. 2 OVER THE POESTENKILL, BRIDGE REPLACEMENT, BIN 1000190 ROW INC AND ACQ	2020	2.911
1051.77	A572	I787 NB RAMP TO SME WB, BRIDGE REPAIR, BIN 109299A (1-4)	2020	11.296
1051.82	A588	105182 - ALBANY CORNING PRESERVE BIKE AND PED CONNECTOR RAMP, ALBANY COUNTY (D 5-6)	2020	11.463
1051.83	A597	I-787 PAVEMENT CORRECTIVE MAINTENANCE EXIT 3B TO EXIT 7	2020	4.112
1722.57	SA321	I-87 RESURFACING EXIT 11-13, MALTA, ROUND LAKE	2020	4.756
1754.59	R195	SOUTH TROY INDUSTRIAL PARK ROAD, CITY OF TROY	2020	3.610
1759.84	SA281	SITTERLY RD AT WOODIN RD AND CROSSINGS BLVD, CLIFTON PARK	2020	1.929
1760.29	A568	HUDSON AVE MILL-FILL FROM TIBBITS AVE TO WATERVLLET LINE	2020	0.725
1760.44	S244	HIGHBRIDGE RD AND EAST CAMPBELL RD. SIDEWALKS, ROTTERDAM	2020	1.184
1760.56	SA302	CR 13 (BARKERSVILLE FAYVILLE ROAD) OVER CADMAN CREEK: BRIDGE, SARATOGA CNTY	2020	1.011
1810.14	RG135	CULVERT REPAIR OR REPLACEMENT SFY19	2020	3.206
1810.29	R349	ADA COMPLIANCE SFY19	2020	1.670
1810.34	RG134	BRIDGE PRESERVATION SFY19	2020	4.911
1810.57	RG15	DURABLE PAVEMENT MARKING SFY20	2020	1.778
1810.67	RG136	PAVEMENT CORRECTIVE MAINTENANCE SFY20 2ND PROJECT	2020	8.543
1810.68	RG136	PAVEMENT CORRECTIVE MAINTENANCE SFY20C	2020	12.013
1810.74	A584	MENANDS BIKE/PED CONNECTOR: BROADWAY TO MOHAWK HUDSON BIKE TRAIL	2020	8.382
1933.45	SA308	GRADE CROSSING SIGNAL UPGRADE: ASHDOWN RD, HALFMOON	2020	0.380
1933.46	SA309	GRADE CROSSING SIGNAL UPGRADE: BLUE BARNS RD CROSSING OF PAN AM RR, MP 1.18, CLIFTON PARK	2020	0.509
1933.47	S251	GRADE CROSSING SIGNAL UPGRADE: AIR NAT'L GUARD RD, SCOTIA	2020	0.383
1933.48	S252	GRADE CROSSING SIGNAL UPGRADE: VAN BUREN RD, GLENVILLE	2020	0.377
1933.49	R324	GRADE CROSSING SIGNAL UPGRADE: HOWLAND AVE CROSSING, SCHAGHTICOKE	2020	0.297
1933.50	R325	GRADE CROSSING SIGNAL UPGRADE: OLD SCHAGHTICOKE RD	2020	0.827

PIN	TIP#	PROJECT NAME	YEAR OF CONSTRUCTION AUTHORIZATION (FFY)	CONSTRUCTION COST(\$M)
1933.52	S253	GRADE CROSSING SIGNAL UPGRADE: SACANDAGA RD (NY 147) SCOTIA	2020	0.467
1933.53	S254	GRADE CROSSING SIGNAL UPGRADE: VLEY RD, SCOTIA	2020	0.453
1933.54	S255	GRADE CROSSING SIGNAL UPGRADE: FREEMANS BRIDGE RD, GLENVILLE	2020	0.405
1001.36	R316	RT. 2 OVER THE POESTENKILL, BRIDGE REPLACEMENT, BIN 1000190 ROW INC AND ACQ	2021	2.329
1007.16	A576	BIN 1038070 RT. 144 OVER HANNACROIS CREEK, COEYMANS	2021	2.516
1043.58	R309	RT. 9 AND 20 SIDEWALK CONSTRUCTION, TOWN OF EAST GREENBUSH I-VI	2021	0.469
1051.82	A588	ALBANY CORNING PRESERVE BIKE AND PED CONNECTOR RAMP, ALBANY COUNTY (D 5-6)	2021	1.790
1085.40	A583	HSIP, ROUTE 146, CARMAN ROAD SAFETY WIDENING, GUILDERLAND ROW INC	2021	4.607
1089.79	R340	RT. 4/I-90 INTERSECTION SAFETY IMPROVEMENTS 1-4	2021	2.434
1306.81	A580	RT. 7 OVER THE HUDSON, BRIDGE REPAIR, BIN 1070869	2021	1.280
1525.39	S264	I-890 BRIDGES OVER ERIE BLVD. 5-7 REPAIRS 1-4	2021	7.257
1528.82	A574	I-90 OVER FULLER RD, DECK REPLACE, ALBANY CITY, BIN 1034479; I-90 OVER ERIE BLVD, BRIDGE REPAIRS BINS 1092451/2	2021	0.656
1528.88	R341	I-90 PAVEMENT CORRECTIVE MAINTENANCE EXIT 10.5 TO THRUWAY (PH. 1-4)	2021	4.481
1721.90	A240	I-87: EXIT 4, AIRPORT CONNECTOR, PART2	2021	2.002
1722.58	SA315	I-87 RESURFACING EXIT 13-15 5-6	2021	3.110
1722.74	SA334	SITTERLY RD OVER I-87, BRIDGE REPLACE, BIN 1033210	2021	5.860
1758.92	A526	BIN 3300880, CR9 OVER FOX CREEK, BRIDGE RECONSTR, ALBANY CO	2021	0.880
1760.33	A579	WATERVLIET BIKE PATH	2021	0.259
1760.34	R310	SAND LAKE HAMLETS SIDEWALK ENHANCEMENTS, TOWN OF SAND LAKE (1-4)	2021	0.627
1760.42	S242	BROADWAY MILL AND FILL, WEAVER ST. TO FOURTH ST., SCHENECTADY 1-4	2021	0.970
1760.44	S244	HIGHBRIDGE RD AND EAST CAMPBELL RD. SIDEWALKS, ROTTERDAM	2021	0.003
1760.46	SA297	ASHDOWN RD OVER THE DHRR BRIDGE REPLACEMENT, BIN 2202570, TOWN OF CLIFTON PARK	2021	1.591
1760.60	S249	NOTT ST. SAFETY ENHANCEMENTS, CITY OF SCHENECTADY	2021	0.819

PIN	TIP#	PROJECT NAME	YEAR OF CONSTRUCTION AUTHORIZATION (FFY)	CONSTRUCTION COST(\$M)
1760.62	S245	ROSA RD, WENDELL AVE, NOTT ST. INTERSECTIONS, CITY OF SCHENECTADY	2021	0.350
1760.80	A587	TAP/CMAQ - GLENMONT RD SIDEWALK/RT9W FEURA BUSH ROUNDABOUT	2021	2.589
1760.92	A590	PSAP CITY OF ALBANY PEDESTRIAN IMPROVEMENTS 1-4	2021	1.111
1760.93	SA312	PSAP - TOWN OF CLIFTON PARK PEDESTRIAN IMPROVEMENTS (DESIGN 1-4)	2021	0.473
1760.94	R327	PSAP CITY OF RENSSELAER PEDESTRIAN IMPROVEMENTS 1-4	2021	0.724
1760.95	S257	PSAP CITY OF SCHENECTADY PEDESTRIAN IMPROVEMENTS 1-4	2021	1.112
1761.18	S258	BRIDGE NY FRANCIS AVE OVER I-890 BRIDGE REHAB 1-4	2021	2.622
1761.19	R328	BRIDGE NY CAMPBELL AVE OVER WYNANTS KILL BRIDGE REHAB, TROY (1-6)	2021	2.686
1761.20	SA313	BRIDGE NY HANS CREEK RD OVER HANS CREEK, SARA CNTY I-IV	2021	0.416
1761.22	SA314	BRIDGE NY FOX HILL RD OVER LITTLE HANS CREEK, TOWN EDINBURG 1-4	2021	0.376
1761.65	R338	RENSSELAER, 3RD AVE PAVEMENT REHAB & BIKE/PED IMPROV. 1-4	2021	0.269
1761.66	S261	GUILDERLAND AVENUE PAVEMENT PRESERVATION PROJECT, TOWN OF ROTTERDMAN 1-6	2021	0.582
1810.74	A584	MENANDS BIKE/PED CONNECTOR: BROADWAY TO MOHAWK HUDSON BIKE TRAIL	2021	0.229
RT2005	SA332	CONSTRUCTION OF EAST WEST MULTI-USE TRAIL IN SARATOGA SPA STATE PARK	2021	0.276

FEDERAL-AID TRANSIT PROJECTS AUTHORIZED IN THE 2019-2024 TIP

PIN	TIP#	PROJECT NAME	PROJECT PHASE	YEAR OF AUTHORIZATION	PHASE COST (\$M)
1820.37	T6B	STAR BUS REPLACEMENT	VEHICLES	2019	0.640
1820.48	T17	TRANSIT BUS REPLACEMENT / EXPANSION	VEHICLES	2019	1.063
1821.18	T11	PASSENGER FACILITY IMPROVEMENTS AT VARIOUS LOCATIONS	FACILITIES	2019	0.200
1821.8	T16	TRANSIT SUPPORT VEHICLES	VEHICLES	2019	0.200
CDTC.08	T14B	TRANSIT OPERATIONS SUPPORT FOR SARATOGA SERVICE: PM & OPS	VEHICLES	2019	16.885
CDTC.09	T9	BUS WASHER REPLACEMENT	FACILITIES	2019	0.450
1820.37	T6B	STAR BUS REPLACEMENT	VEHICLES	2020	0.570
1820.48	T17	TRANSIT BUS REPLACEMENT / EXPANSION	VEHICLES	2020	1.538
1821.18	T11	PASSENGER FACILITY IMPROVEMENTS AT VARIOUS LOCATIONS	FACILITIES	2020	0.200
1821.8	T16	TRANSIT SUPPORT VEHICLES	VEHICLES	2020	0.260
1822.15	T123	WASHINGTON/WESTERN BRT PHASE 2	CONSTRUCTION	2020	5.514
1822.16	T124	HUDSON RIVER CORRIDOR BRT OPERATIONS SERVICE	PROFESSIONAL SERVICES	2020	5.544
1TR6.04	T57	PREVENTIVE MAINTENANCE	VEHICLES	2020	16.694
CDTC.08	T14B	TRANSIT OPERATIONS SUPPORT FOR SARATOGA SERVICE: PM & OPS	VEHICLES	2020	1.432
CDTC.20	T77	ADIRONDACK TRAILWAYS - 3RD PARTY CAPITAL COST OF CONTRACTING	VEHICLES	2020	0.626
CDTC122	T122	RIVER CORRIDOR BUS RAPID TRANSIT	CONSTRUCTION	2020	19.153
CDTC122	T122	RIVER CORRIDOR BUS RAPID TRANSIT	VEHICLES	2020	12.385
CDTC122	T122	RIVER CORRIDOR BUS RAPID TRANSIT	FACILITIES	2020	7.546
CDTC122	T122	RIVER CORRIDOR BUS RAPID TRANSIT	PROFESSIONAL SERVICES	2020	2.042
CDTC122	T122	RIVER CORRIDOR BUS RAPID TRANSIT	RIGHT OF WAY	2020	1.387

PIN	TIP#	PROJECT NAME	PROJECT PHASE	YEAR OF AUTHORIZATION	PHASE COST (\$M)
1820.37	T6B	STAR BUS REPLACEMENT	VEHICLES	2021	0.630
1820.48	T17	TRANSIT BUS REPLACEMENT / EXPANSION	VEHICLES	2021	1.791
1821.18	T11	PASSENGER FACILITY IMPROVEMENTS AT VARIOUS LOCATIONS	FACILITIES	2021	0.250
1821.8	T16	TRANSIT SUPPORT VEHICLES	VEHICLES	2021	0.360
1824.62	T109	WASHINGTON/WESTERN BRT PHASE 1	FACILITIES	2021	1.225
1824.62	T109	WASHINGTON/WESTERN BRT PHASE 1	RIGHT OF WAY	2021	0.953
1824.62	T109	WASHINGTON/WESTERN BRT PHASE 1	CONSTRUCTION	2021	0.500
1824.71	T134	WASHINGTON/WESTERN BRT PHASE 4	CONSTRUCTION	2021	34.482
1824.71	T134	WASHINGTON/WESTERN BRT PHASE 4	VEHICLES	2021	14.881
1824.71	T134	WASHINGTON/WESTERN BRT PHASE 4	PROFESSIONAL SERVICES	2021	12.673
1824.71	T134	WASHINGTON/WESTERN BRT PHASE 4	FACILITIES	2021	10.791
1824.71	T134	WASHINGTON/WESTERN BRT PHASE 4	RIGHT OF WAY	2021	2.367
1TR6.04	T57	PREVENTIVE MAINTENANCE	VEHICLES	2021	16.369
CDTC.08	T14B	TRANSIT OPERATIONS SUPPORT FOR SARATOGA SERVICE: PM & OPS	VEHICLES	2021	1.429
CDTC.135	T135	RETROFIT BUSES WITH UV DISINFECTING SYSTEM	VEHICLES	2021	0.825
CDTC.20	T77	ADIRONDACK TRAILWAYS - 3RD PARTY CAPITAL COST OF CONTRACTING	VEHICLES	2021	3.795

APPENDIX J -

CDTC SELF CERTIFICATION

The Federal Highway Administration (FHWA) and Federal Transit Administration (FTA) certified effective September 22, 2020 that the CDTC planning process meets and/or exceeds federal requirements in accordance with 23 CFR Section 450.336 and 49 USC 5303. Concurrent with the submittal of the 2022-2027 Transportation Improvement Program (TIP), the Capital District Transportation Committee (CDTC) as the designated Metropolitan Planning Organization for the counties of Albany, Rensselaer, Saratoga and Schenectady, excluding the Town of Moreau and the Village of South Glens Falls, is required to complete a self-certification of its planning process. This self-certification serves as documentation that CDTC is in compliance with federal planning requirements in accordance with 23 CFR Section 450.336 and 49 USC 5303.

A. Required Agreements

1. What is the status of the cooperative planning agreement between CDTC, NYSDOT and the Capital District Transportation Authority (CDTA)?

The cooperative planning agreement entitled “Agreement Defining Roles and Responsibilities for Metropolitan Transportation Planning in the Capital District” was approved in January 2009 and will be updated in 2022.

2. What is the status of the performance-based planning agreement between CDTC, NYSDOT and the Capital District Transportation Authority (CDTA)?

The performance-based planning agreement entitled “Performance Management Agreement between CDTC, NYSDOT, and CDTA was approved in March 2019.

B. Planning/Technical

1. UPWP - Does the Unified Planning Work Program (UPWP) cover relevant planning activity and needs, including how the UPWP supports the Metropolitan Transportation Plan.

Yes. In Fiscal Year 2022-2023, CDTC developed a one-year UPWP that was approved in March 2022 and will be updated annually. Development of the UPWP included a solicitation for planning projects from local governments in the CDTC planning area as well as a refresh of ongoing planning tasks as described in the previous year’s plan. The UPWP includes a section entitled “UPWP Planning Priorities for the CDTC Region”, describing the priorities of the Metropolitan Transportation Plan, known as New Visions 2050, and their relationship to planning tasks in the UPWP. There are no known progress or scheduling issues.

2. Metropolitan Transportation Plan – Discuss required elements and implementation, program level environmental mitigation activities and discuss current or planned activities for consultation with State and local agencies during plan development.

CDTC's Metropolitan Transportation Plan entitled "New Visions 2050" was adopted in September 2020, 2050 being the horizon year. In accordance with a United States Court of Appeals South Coast Air Quality Management District vs. EPA decision, a conformity determination for the plan was needed for the 1997 ozone NAAQS. Air quality conformity was approved in September 2020. The plan is based upon the best available estimates of long-range federal, state, and local revenue streams. TIP investments have tracked the budget priorities in New Visions.

Implementing New Visions 2050 is ongoing and CDTC continues to operate under the adopted principles and recommendations of the plan. CDTC requires careful community-oriented planning, including environmental consideration, prior to committing to major projects with potentially significant environmental impacts. In 2019, CDTC funded its first Planning and Environmental Linkage (PEL) study to support the documentation of environmental considerations prior to the detailed design and construction of a major investment project, the replacement of the NY 378 Bridge. Additional PEL studies are expected. CDTC also utilizes its Transportation and Community Linkage Planning Program as a planning tool to better integrate transportation and land use decision making with 98 collaborative planning studies funded to date.

CDTC refined its environmental mitigation procedure in New Visions 2050. CDTC maps environmental features for project and study locations for the 2022-2027 TIP, Linkage Program, Regional Plans and other major CDTC studies and document the possible project/study effects.

New Visions 2050 planning scenarios were developed using metrics set by state law and priorities, such as the "40 x 30" requirements in the NYS Climate Leadership and Community Protection Act and NYS Electric Vehicle Mandates set at that time. NYSERDA also supported and worked alongside MPOs in developing the VERPAT model, a regional greenhouse gas reduction analysis tool, used to develop the scenarios.

New York State agency staff were invited to participate in the New Visions subcommittees to provide input on white paper development and to review draft materials. Staff from NYSDOT, NYSERDA, and NYSDEC directly participated in the Environment & Technology Subcommittee and NYSDOT, NYSDOH, and

NYSOPRHP directly participated in the Bicycle & Pedestrian Subcommittee. All agencies were afforded the opportunity to comment on the draft plan.

3. Transportation Improvement Program (TIP)

- **When was the TIP and related Conformity document approved?**

The 2019-2024 TIP and conformity document were approved in June 2019 and will remain in place until at least September 30, 2022. The 2022-2027 TIP and conformity document is in development with tentative approval scheduled for September 2022. Projects were identified from municipal, State, and regional needs and evaluated using CDTC's Benefit-Cost/Merit Spreadsheet Evaluation Process.

- **Is the TIP fiscally constrained?**

As of June 2022, the 2019-2024 TIP is fiscally constrained. CDTC works cooperatively with NYSDOT Region 1 and CDTA to identify reasonable budgets for the CDTC metropolitan planning area and has programmed to those budgets. CDTC monitors fiscal constraint using a fiscal constrain table available on the CDTC website at <https://www.cdcmpo.org/tiplist19/table4.htm>.

- **Is the TIP consistent with the Metropolitan Transportation Plan, known as New Visions 2050?**

CDTC's TIP development process maintains a tight relationship with New Visions by using the New Visions budget as a guide in project prioritization. As a result, the TIP reflects the CDTC principle of "steady progress" across all plan elements with a much closer relationship between plan and TIP than is typical of most MPOs elsewhere. A merit score is used as part of project evaluation containing criteria specifically derived from New Visions 2050, directly connecting the plan to the TIP.

- **Does the TIP meet federal requirements?**

The TIP contains a priority lists of projects, plans and programs for five years; summaries of financial plans; a demonstration of fiscal constraint; project descriptions (including project type, termini, length, etc.); proposed federal funding obligations; identification of the relationship to the New Visions; a description of the TIP development process; air quality

conformity determinations; and documentation of the relationship of the TIP to all other federal requirements.

- **What are the consultation activities for the 2022-2027 TIP?**

Consultation on the 2022-2027 TIP will include outreach to federal land holders in the CDTC region including National Parks and the Department of Defense. Tribal nations with cultural resource interests in the CDTC region will also be consulted as well as state agencies including but not limited to NYSDOH, NYSDEC, NYSOPRHP and NYSERDA.

4. Technical Areas

In 2021, CDTC updated TIP materials used in soliciting projects, evaluating projects and managing project data. An online application form was developed, easing data entry and simplifying the project application process. The merit score category descriptions were refined to provide clarity and transparency to applicants. A new access database was developed for use by CDTC's staff to manage TIP data from the point of application all the way through the development of TIP project listings for the 2022-2027 TIP.

In addition, collaboration and innovation continue to be hallmarks of CDTC's planning process, reflected by continued support for CDTC's Linkage Planning Program and the development of regional plans such as the Patroon Creek Greenway Study, the Bus Lane Feasibility Study, the Smart Communities Toolbox, and the Regional Truck Parking Study among others. Implementation of actions identified in these studies/plans continue to be pursued through the TIP, federal discretionary programs, state programs and other avenues.

5. Title VI - How have Title VI concerns been addressed in the planning process and documented in the UPWP, TIP and MTP?

- **Environmental Justice (EJ)** – CDTC updated and approved its EJ/Title VI analysis report in June 2020. CDTC performs an EJ review after each TIP update and monitors CDTC's process. The analysis methodology includes CDTC staff created demographic parameters using data from the 2013-2017 American Community Survey (ACS). Threshold values were defined at the census tract level to identify geographic areas with populations of minority or low-income persons greater than the regional rate. Geographically identified projects located at least partially in an EJ area are shown in maps created in ArcMap.

- **Limited English Proficiency (LEP)** – Written executive summaries of the Long Range Transportation Plan, Transportation Improvement Program, Unified Planning Work Program, and Public Participation Program will be translated into languages covered by the safe harbor provision upon written or verbal request to CDTC and posted to CDTC’s website. In addition, written executive summaries of studies conducted in geographic subareas where language groups within the population constitute 1,000 people or 5% of the subarea will be translated into those languages upon request and posted online. With at least 72 hours of notice, CDTC will provide interpreting services at meetings, in person if possible.
- **Americans with Disabilities Act (ADA)** – CDTC has invested in consultant assistance to support municipal ADA infrastructure data collection and the development of transition plans. In addition, CDTC’s public meetings, including all Planning Committee and Policy Board meetings, are held in the CDTC offices at 1 Park Place, Albany, NY 12205 and since March 2020, have been available to the public virtually through Zoom and YouTube. When meetings are conducted in other venues, CDTC assures that the facility is accessible, externally, and internally. When possible, meeting locations are selected along public bus routes. CDTC provides or coordinates the provision of auxiliary aids or services and reasonable accommodations upon request by a person with a disability. The request must be made at least 72 hours prior to the meeting at which the aids, services, or accommodations are requested. CDTC has also updated its website to meet the Web Content Accessibility Guidelines (WCAG) 2.0 AA standard.
- **Disadvantaged Business Enterprise (DBE)** - CDTC has pursued DBE procedures and goals since 1984 and prepares and submits semi-annual DBE reports in a timely manner. CDTC is in compliance with the NYSDOT DBE plan.

6. Private Operators – Discuss how private operators are accommodated.

CDTA assumed authority over Northway Express services, in keeping with CDTC’s adopted Public-Private Transit Policy and CDTC continues to coordinate with CDTA and Upstate Transit on transit planning for this service. Clean Communities efforts are also of great interest and value to private operators as interest in

electric vehicle infrastructure and electrification of bus fleets has increased. Actions in recent years have provided ongoing federal transit support to Adirondack Trailways and provided for further system integration efforts through CDTA involvement.

7. Planning Factors – Discuss how the federal planning factors are considered in planning processes and products.

CDTC's incorporates the federal planning factors into its MTP, UPWP and TIP. Discussion is included in all three that directly relates the federal planning factors to the proposed projects, plans and programs.

8. Congestion Management Process (CMP): Discuss the status of CMP and how it is used.

An updated CMP was approved by CDTC in September 2020. The CMP will be updated in 2022 with completion expected in 2023. The CMP is used to develop programs and planning projects that will improve system reliability.

9. Participation Plan

- **Discuss the status of public involvement/participation plan procedures and a periodic evaluation process to determine its effectiveness.**

CDTC's public participation plan was adopted in March 2021 and is continually assessed to maintain its effectiveness.

- **Discuss how visualization techniques will be employed for Plans and TIPs.**

CDTC uses ArcMap and ArcGIS online as tools to display data via interactive maps for use by the public, particularly to identify the location of TIP projects. Infographics, interactive surveys, and other tools are also utilized.

- **Discuss status of making public information available in electronically accessible formats such as the World Wide Web.**

CDTC requires electronically accessible documents with recognizable text and videos with subtitles be available on its website and social media.

- **Discuss incorporation of consultations which are listed under “Transportation Plan” and “TIP” in this document.**

CDTC consults with federal land owners, tribal nations and others as part of the public review process for the MTP, TIP and UPWP.

- **Address coverage in the participation plan of users of pedestrian walkways, bicycle transportation facilities, and persons with disabilities.**

CDTC strives to make its meetings accessible to the public via hybrid meeting formats (in person and video). In person meetings are held at locations accessible to transit and accessible to persons with disabilities. CDTC’s Active Transportation Advisory Committee allows persons with disabilities and those who walk and ride bicycles to directly participate in the transportation planning process.

10. Coordinated Public Transit-Human Service Agency Transportation Plans:

Discuss the MPO’s coordinated planning process including development of or implementation of these Plans.

CDTC’s Coordinated Plan was adopted on June 6, 2019. CDTC’s Regional Transportation Coordination Committee (RTCC) assists CDTC staff in developing the Coordinated Plan and CDTC partnered with CDTA, particularly its para-transit division “STAR”, and senior centers to increase participation.

C. Administrative/Management

1. Progress Reports: Are progress reports submitted to FHWA/FTA on time?

Yes. CDTC updated the format to meet FHWA and FTA reporting requirements.

2. Bills: Are bills submitted and paid on time?

Yes. CDTC staff bills are submitted monthly for review and approval.

3. Audits

- **Are single audit requirements met through audits performed on an annual basis?**

Yes. CDTA audits and CDTC staff audits are complete through 3/31/21. CDTC’s audit for the fiscal year ending 3/31/22 is underway.

- **Are any identified deficiencies corrected?**

There were no identified deficiencies. CDTC continues to work with its host agency CDTA to strengthen internal controls.

4. Annual Program

- **Are FTA contracts closed out within three years?**

Yes. CDTC FTA programs are generally closed out within 20 months.

- **Are PL contracts closed out within six months?**

Yes. All bills are submitted within six months; contracts are generally closed out within a year.

5. Budget: Are grant budgets up to date?

Yes. Revisions and amendments are made as necessary. An annual budget update was adopted in March 2022 for the fiscal year 2022-2023 UPWP.

6. Consultant Selection:

- **Are acceptable consultant selection procedures in place?**

Yes. Consultant selection procedures are updated annually. CDTC developed a standard Memorandum of Understanding to define local sponsor roles for consultant selection and administration of Linkage studies, technical assistance program projects and Capital Coexist projects, among others.

- **What are the provisions for DBE's?**

DBE participation is a consideration but not a "quota" in CDTC's consultant selection process. CDTC seeks to achieve full participation of DBEs in contracting opportunities while maintaining strict prioritization by merit.

7. Central Staff/Host Relations: Discuss any staffing or recruiting issues. Indicate if staff has the political support it needs for effective accomplishments.

There are no current staff or recruiting issues. CDTC continues to have the political support it needs from member agencies to maintain its effectiveness.

8. Decision Making: Indicate if committees are adequately structured and staffed. Are reasonable decisions reached in a timely fashion?

Committees are adequately staffed and reasonable decisions are reached in a timely manner.

9. Governance

- **Are foundational documents for the MPO such as Memoranda of Understanding (MOUs), operating procedures and financial/staffing plans reviewed and updated periodically to ensure that they are still relevant to current MPO operations?**

CDTC's new Executive Director was appointed on August 1, 2021 and has been reviewing and updating foundational documents as needed through the Administrative and Finance Subcommittee. This will be an ongoing activity.

- **Do members and host understand and execute their roles in a way that supports independent and unbiased work by MPO staff and sound MPO decisions?**

Yes. CDTC's members and host understand and execute their roles in a way that supports independence and an atmosphere free of bias for CDTC's staff and CDTC's decision making process.

- **Discuss status of working relationships with other governments, i.e., local, international and tribal governments.**

CDTC regularly engages with local governments and provides multiple opportunities to participate in the metropolitan transportation planning process. Local governments are encouraged to apply for planning, project development and capital project funding. CDTC has been extremely successful at leveling the playing field between NYSDOT, CDTA and local governments. CDTC consults with tribal nations for its major initiatives such as the TIP.

10. Procurement

- **Does CDTC address FTA requirements for FTA funding recipients in a transparent manner and comply with FTA Circular Guidance 4220.1F, Third Party Contracting Requirements?**

Yes. CDTC follows and documents all FTA related activity according to the NYSDOT procurement guidance checklist.

- **Does CDTC maintain a written history of all FTA-Related procurements?**

Yes. CDTC maintains all documentation involving procurements for all studies and projects.

- **Does CDTC incorporate clauses and certifications for eligible FTA assistance program funding?**

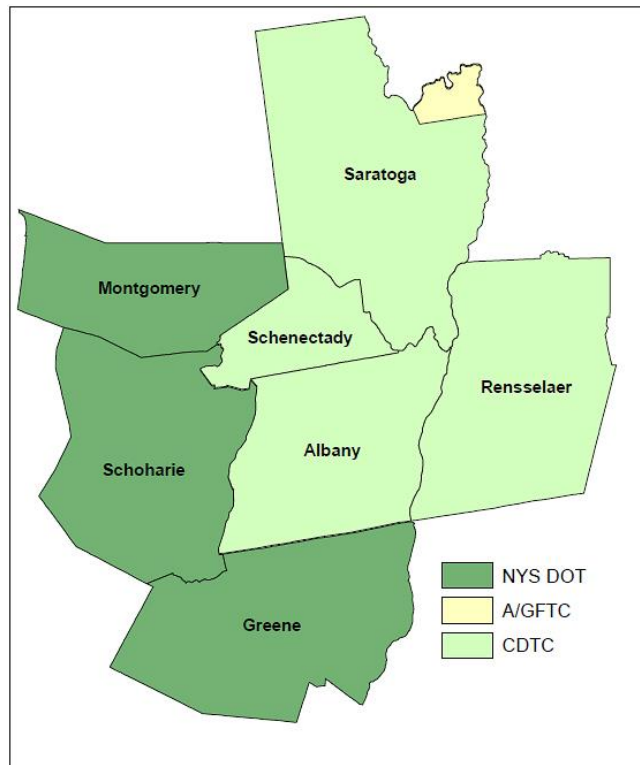
Yes. With the host agency CDTA's participation, CDTC has incorporated clauses and certifications for eligible FTA program funding.

APPENDIX K -

AIR QUALITY CONFORMITY

Albany-Schenectady-Troy 1997 8-Hour Ozone Non-Attainment Area Transportation/Air Quality Conformity Determination

September 1, 2022



**Capital District Transportation Committee
2022-2027 Transportation Improvement Program
and 2050 *New Visions* Metropolitan Transportation Plan**

**Adirondack/Glens Falls Transportation Council
2022-2027 Transportation Improvement Program
and 2040 *Ahead* Metropolitan Transportation Plan**

**Capital Program of Transportation Projects
in Montgomery, Greene, and Schoharie Counties**

Prepared by:

NYS DOT Environmental Science Bureau, CDTC and A/GFTC
in association with NYS DOT Regions 1, 2, and 9

Executive Summary

The Capital District Transportation Committee (CDTC) has developed a draft 2022-2027 Transportation Improvement Program (TIP). Adoption of TIP requires the CDTC and Adirondack/Glens Falls Transportation Council (A/GFTC), in cooperation with the New York State Department of Transportation (NYSDOT) Regions 1, 2 and 9, to adopt a new transportation air quality conformity determination for the seven-county Albany-Schenectady-Troy, NY ozone nonattainment area.

This report documents that the involved agencies have completed the transportation conformity process and confirms that the A/GFTC and CDTC Transportation Improvement Programs (TIPs) and long-range transportation plans (Plans) and projects in the non-urbanized portion of the Albany-Schenectady-Troy area meet all applicable transportation conformity requirements.

Clean Air Act (CAA) section 176(c) (42 U.S.C. 7506(c)) requires that federally funded or approved highway and transit activities are consistent with (“conform to”) the purpose of the State Implementation Plan (SIP). Conformity to the purpose of the SIP means that transportation activities will not cause or contribute to new air quality violations, worsen existing violations, or delay timely attainment of the relevant NAAQS or any interim milestones.

The United States Environmental Protection Agency’s transportation conformity rules, 40 CFR Parts 51.390 and 93, establish the criteria and procedures for determining whether TIPs, Plans and federally supported highway and transit projects conform to the SIP. Chapter 6 of the New York Codes Rules and Regulations (NYCRR) Subpart 240 (Part 240) is the SIP for transportation conformity consultation in New York State. Part 240 was approved by the USEPA, effective September 29, 2014. Part 240-2 identifies the agencies, procedures, and allocation of responsibilities for consultation and is consistent with consultation requirements in 40 CFR Part 93.105.

The consultation procedures were followed during the conformity determination process and are documented in the Section titled “Consultation” below. In summary, the CDTC, A/GFTC and NYSDOT staff discussed the content of this air quality conformity determination with the New York State Interagency Consultation Group (ICG) for air quality conformity during the development of the Capital Program of Transportation Projects in Greene, Montgomery, and Schoharie Counties as well as the new A/GFTC and CDTC TIPs and long-range transportation plans.

On February 16, 2018, the United States Court of Appeals for the District of Columbia Circuit in *South Coast Air Quality Mgmt. District v. EPA* (“*South Coast II*,” 882 F.3d 1138) held that transportation conformity determinations must be made in areas that were either nonattainment or maintenance for the 1997 ozone national ambient air quality standard (NAAQS) and attainment for the 2008 ozone NAAQS when the 1997 ozone NAAQS was revoked. The Albany-Schenectady-Troy, NY area was nonattainment at the time of the 1997 ozone NAAQS revocation on April 6, 2015, and was also designated attainment for the 2008 ozone NAAQS on May 21, 2012. Therefore, per the *South Coast II* decision, this conformity determination is being made for the 1997 ozone NAAQS.

This conformity determination was completed consistent with CAA requirements, associated regulations at 40 CFR Parts 51.390 and 93, 6 NYCRR Part 240 and the *South Coast II* decision,

as per the USEPA's *Transportation Conformity Guidance for the South Coast II Court Decision* issued on November 29, 2018.

Transportation Conformity Overview

The concept of transportation conformity was introduced in the Clean Air Act (CAA) of 1977, which included a provision to ensure that transportation investments conform to the State Implementation Plan (SIP) for meeting the Federal air quality standards. Conformity requirements were made substantially more rigorous in the CAA Amendments of 1990. The transportation conformity regulations that detail the criteria and procedures to successfully comply with the CAA conformity provisions were first issued in November 1993 and have been amended several times. The regulations establish the criteria and procedures for transportation agencies to demonstrate that air pollutant emissions from metropolitan transportation plans, transportation improvement programs and projects are consistent with ("conform to") the State's air quality goals in the SIP.

Transportation conformity is required under CAA Section 176(c) to ensure that Federally-supported transportation activities are consistent with ("conform to") the purpose of a State's SIP. Transportation conformity establishes the framework for improving air quality to protect public health and the environment. Conformity to the purpose of the SIP means Federal Highway Administration (FHWA) and Federal Transit Administration (FTA) funding and approvals are given to highway and transit activities that will not cause new air quality violations, worsen existing air quality violations, or delay timely attainment of the relevant air quality standard, or any interim milestone.

Albany-Schenectady-Troy 1997 Ozone Nonattainment Area

On June 15, 2004, the United States Environmental Protection Agency (EPA) designated the Albany-Schenectady-Troy, NY area consisting of Saratoga, Schenectady, Albany, Rensselaer, Montgomery, Greene, and Schoharie Counties nonattainment for the 1997 8-hour ozone standard (0.08 parts per million). This designation was based on the results of ambient air monitoring data collected by the New York State Department of Environmental Conservation from calendar years 2001-2003. These data established an 8-hour ozone "design value" of 0.087 ppm for the area. The current design value for the area, based on 2019-2021 data, is 0.057 ppm.

On July 20, 2012, the USEPA designated the Albany-Schenectady-Troy, NY attainment for the 2008 ozone standard (0.075 ppm). The area was designated attainment for the 2015 ozone standard (0.070ppm) on January 16, 2018.

Transportation Conformity Requirements

On November 29, 2018, EPA issued *Transportation Conformity Guidance for the South Coast II Court Decision*¹ (EPA-420-B-18-050, November 2018) that addresses how transportation conformity determinations can be made in areas that were nonattainment or maintenance for the 1997 ozone NAAQS when the 1997 ozone NAAQS was revoked but were designated attainment for the 2008 ozone NAAQS.

The transportation conformity regulation at 40 CFR 93.109 sets forth the criteria and procedures for determining conformity. The conformity criteria for long-range metropolitan transportation

¹ Available from <https://www.epa.gov/sites/production/files/2018-11/documents/420b18050.pdf>

plans (MTPs) and TIPs include latest planning assumptions (93.110), latest emissions model (93.111), consultation (93.112), transportation control measures (93.113(b) and (c)), and emissions budget and/or interim emissions (93.118 and/or 93.119).

For the 1997 ozone NAAQS areas, transportation conformity for MTPs and TIPs for the 1997 ozone NAAQS can be demonstrated without a regional emissions analysis, per 40 CFR 93.109(c). This provision states that the regional emissions analysis requirement applies one year after the effective date of EPA's nonattainment designation for a NAAQS and until the effective date of revocation of such NAAQS for an area. The 1997 ozone NAAQS revocation was effective on April 6, 2015, and the *South Coast II* decision upheld the revocation. As no regional emission analysis is required for this conformity determination, there is no requirement to use the latest emissions model, or budget or interim emissions tests.

Therefore, transportation conformity for the 1997 ozone NAAQS for the A/GFTC and CDTC TIPs and Plans, and the Capital Program of Transportation Projects in Greene, Montgomery and Schoharie Counties can be demonstrated by showing the remaining requirements in Table 1 in 40 CFR 93.109 have been met. These requirements, which are laid out in Section 2.4 of EPA's guidance and addressed below, are:

- Latest planning assumptions (93.110)
- Consultation (93.112)
- Transportation Control Measures (93.113)
- Fiscal constraint (93.108)

Latest Planning Assumptions

The use of latest planning assumptions in 40 CFR 93.110 of the conformity rule generally apply to regional emissions analyses. In the 1997 ozone NAAQS areas, the use of latest planning assumptions requirement applies to assumptions about transportation control measures (TCMs) in an approved SIP. There are no TCMs in any SIP in the Albany-Schenectady-Troy, NY area. Thus, the latest planning assumption requirement is not applicable for this conformity determination.

Consultation

The consultation requirements in 40 CFR 93.112 and 6 NYCRR Part 240 were addressed both for interagency consultation and public consultation.

Per 6 NYCRR Part 240, interagency consultation was conducted with the NYSDEC, NYSDOT, FHWA, FTA and USEPA. Representatives of these agencies comprise the Interagency Consultation Group (ICG) for air quality conformity in New York State.

On June 12, 2022, the ICG concurred with the classification of projects in the draft A/GFTC TIP and the Capital Program of Transportation Projects in Greene County (NYSDOT Region 1), Montgomery County (NYSDOT Region 2) and Schoharie County (NYSDOT Region 9). The ICG concurred with the classification of projects in the draft CDTC TIP on May 6, 2022.

All projects on the TIPs, MTPs and Capital Programs are exempt for the purposes of transportation conformity as per 40 CFR Part 93, 6 NYCRR Part 240 and the interagency

consultation process, except for CDTC TIP Bus Rapid Transit projects (projects RG131 and T124). A list of projects and their exempt codes is attached to the conformity statement.

Consistent with planning rule requirements in 23 CFR Part 450, the public was provided an opportunity to review and comment on the draft conformity determination and supporting documentation for at least thirty days in June and July 2022.

The draft conformity documentation was posted to the A/GFTC, CDTC and NYSDOT web sites. Evidence of public notice is attached to this final conformity documentation. No comments were received during the public comment period.

Timely Implementation of TCMs

There are no TCMs in the SIP for the Albany-Schenectady-Troy, NY 1997 ozone nonattainment area.

Fiscal Constraint

Transportation conformity requirements in 40 CFR 93.108 state that transportation plans and TIPs must be fiscally constrained consistent with DOT's metropolitan planning regulations at 23 CFR Part 450. The CDTC *New Visions 2050* MTP, the A/GFTC 2040 *Ahead* MTP and the 2022-2027 CDTC and A/GFTC TIPs are fiscally constrained, as demonstrated in the CDTC New Visions 2050 Financial Plan and the draft CDTC 2022-2027 TIP. The A/GFTC fiscal constraint demonstration is included in Appendix A of the A/GFTC TIP document.

Conclusion

The conformity determination process completed for the 2022-2027 A/GFTC and CDTC TIPs, the A/GFTC 2040 Ahead MTP, the CDTC New Visions 2050 MTP, and the Capital Program of Transportation Projects in Greene, Montgomery and Schoharie Counties demonstrates that these planning documents meet the Clean Air Act and Transportation Conformity rule requirements for the 1997 ozone NAAQS. The signed resolutions adopting this conformity determination are included in the final conformity documentation.

Attachments

1. Evidence of NYSDOT public notice/availability for comment
2. Evidence of CDTC public notice/availability for comment
3. Evidence of AGFTC public notice/availability for comment
4. Signed CDTC resolution adopting the 2022-2027 CDTC TIP and the Albany-Schenectady-Troy 1997 8-Hour Ozone Non-Attainment Area Transportation/Air Quality Conformity Determination
5. Signed AGFTC conformity resolution adopting the Albany-Schenectady-Troy 1997 8-Hour Ozone Non-Attainment Area Transportation/Air Quality Conformity Determination
6. CDTC TIP Project List
7. AGFTC TIP Project List
8. Exempt Projects reference
9. The Greene, Montgomery and Schoharie County Project Lists are available upon request by contacting the NYSDOT Environmental Science Bureau at 518-457-0212

Attachment 1
Albany-Schenectady-Troy, NY Air Quality Conformity Determination
for the CDTC 2022-2027 Transportation Improvement Program (TIP)

Evidence of Public Notice

The notice below was posted at <https://www.dot.ny.gov/programs/stip> on June 27, 2022 for a 30-day public comment period.

June 27, 2022:

NOTICE OF PUBLIC REVIEW

Transportation Air Quality Conformity Determination




The New York State Department of Transportation (NYSDOT) is announcing a thirty (30) day public review and comment period for the draft Albany-Schenectady-Troy, NY air quality conformity determination.

This conformity determination addresses all transportation projects in the Capital District Transportation Committee (CDTC) 2022-2027 Transportation Improvement Program and the *New Visions 2050* Long Range Plan, the Adirondack/Glens Falls Transportation Council (A/GFTC) 2022-2027 Transportation Improvement Program and *2040 Ahead* Long Range Plan and the Capital Program of Transportation Projects in Greene, Montgomery and Schoharie Counties.

The draft conformity determination is also available on the CDTC website at <http://www.cdcmpo.org> and the A/GFTC website at <https://agftc.org/>.

This period of review will begin on June 27, 2022, and end on July 26, 2022. Any comments should be submitted to STIP@dot.ny.gov under the subject matter "Air Quality Conformity Determination" no later than July 26, 2022.

Air Quality Conformity Downloads:

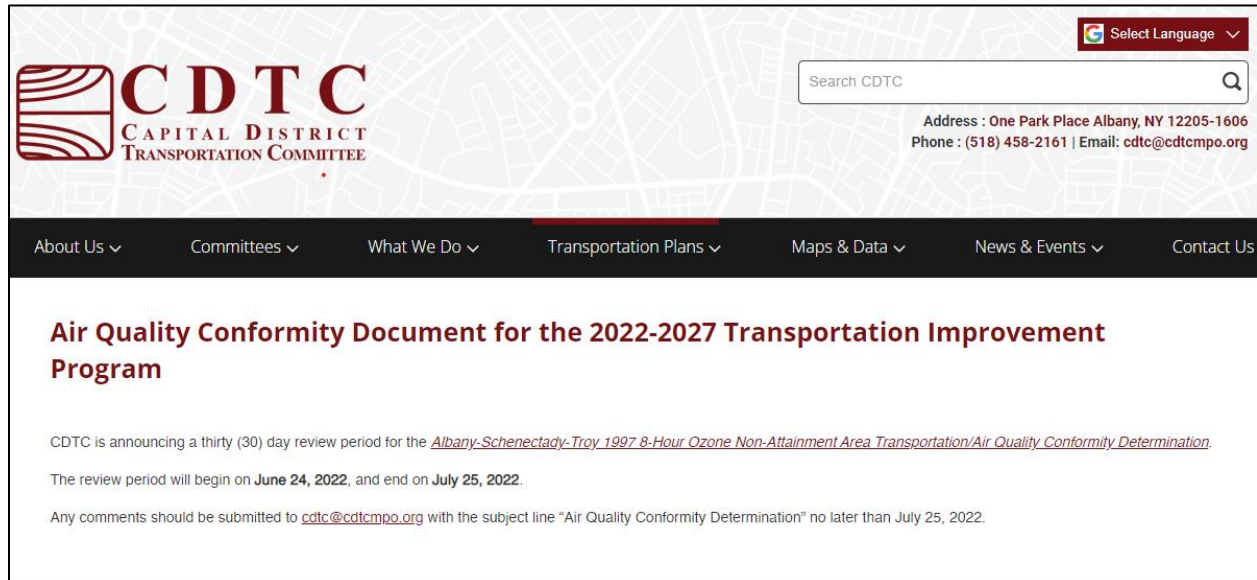
- Draft Albany-Schenectady-Troy Area Conformity Document (.pdf)  [PDF](#)
- Greene County New Projects List (.pdf)  [PDF](#)
- Montgomery County New Projects List (.pdf)  [PDF](#)
- Schoharie County New Projects List (.pdf)  [PDF](#)

No comments were received during the public comment period.

Attachment 2
Albany-Schenectady-Troy, NY Air Quality Conformity Determination
for the CDTC 2022-2027 Transportation Improvement Program (TIP)

Evidence of Public Notice

The following notice and downloadable files were posted to www.cdtcmpo.org on June 24, 2022:



No comments were received during the public comment period.

Attachment 3
Albany-Schenectady-Troy, NY Air Quality Conformity Determination
for the AGFTC and CDTC 2022-2027 Transportation Improvement Programs (TIP)

Evidence of Public Notice

The following notice was posted in the Post Star on June 19, 2022:

*** Proof of Publication ***					
<p>WARREN COUNTY AFFIDAVIT</p> <p>STATE OF NEW YORK:</p> <p>County of Warren, ss:</p> <p><u>Donna McCreary</u> being duly sworn,</p> <p>says that (s)he is an authorized designee for Lee Enterprises, publishers of THE POST-STAR, a daily newspaper published in Glens Falls, Warren County, State of New York, and that the printed notice attached hereto was cut from the said POST-STAR, and that the said notice was published therein, namely</p> <p><u>Adirondack/GFTC Trans Council - TIP</u></p> <p><u>June 19</u>, 20<u>22</u></p> <p>ADIRONDACK/GF TRANS COUNCIL-LEGALS</p> <p>11 SOUTH STREET, SUITE 203</p> <p>GLENS FALLS NY 12801</p> <p>ORDER NUMBER 123175</p> <p>Signed this <u>20th</u> day of <u>June</u>, 20<u>22</u></p> <p><u>Donna McCreary</u></p> <p>Sworn to before me this <u>20</u> day of <u>June</u>, 20<u>22</u></p> <p><u>[Signature]</u></p> <p style="text-align: right; padding-top: 20px;">BRIAN J. COFFRAN Notary Public - State of New York No. 01031539176 Qualified in Sullivan County My Commission Expires September 18, 2025</p> <p>Section: Legals Category: 001 Legal Notices - Warren County PUBLISHED ON: 06/19/2022</p> <table style="width: 100%; margin-top: 20px;"><tr><td style="width: 50%;">TOTAL AD COST:</td><td style="text-align: right;">38.50</td></tr><tr><td>FILED ON:</td><td style="text-align: right;">6/17/2022</td></tr></table>	TOTAL AD COST:	38.50	FILED ON:	6/17/2022	<p>PUBLIC NOTICE</p> <p>The Adirondack / Glens Falls Transportation Council, the designated Metropolitan Planning Organization for Warren, Washington, and northern Saratoga Counties, has released its draft Transportation Improvement Program (TIP) for public review and comment. The TIP is the five-year roster of planned federally-supported investments in the surface transportation system within the AGFTC planning and programming area for Federal Fiscal Years 2022-2027. The draft program contains improvement projects for highways, bridges, public transportation, and bicycle and pedestrian facilities. The draft program is available online at www.agftc.org under the Publications and Draft Documents tabs; comments or requests for hardcopies of the plan may be submitted to info@agftc.org or via conventional mail to AGFTC, 11 South Street, Suite 203, Glens Falls, NY 12801. Comments will be accepted through July 29, 2022.</p> <p>PUB: JUNE 19, 2022</p>
TOTAL AD COST:	38.50				
FILED ON:	6/17/2022				

No comments were received during the public comment period.

RESOLUTION #22-4

RESOLUTION OF CAPITAL DISTRICT TRANSPORTATION COMMITTEE TO APPROVE THE ALBANY – SCHENECTADY – TROY 1997 8-HOUR OZONE NON-ATTAINMENT AREA TRANSPORTATION / AIR QUALTY CONFORMITY DETERMINATION

WHEREAS, the Capital District Transportation Committee has been designated by the Governor of the State of New York as the Metropolitan Planning Organization responsible for the comprehensive, continuing, and cooperative transportation planning process for the four-county metropolitan planning area of Albany, Rensselaer, Saratoga, and Schenectady counties, except the Town of Moreau and the Village of South Glens Falls, as required by Title 23, U.S.C. Section 134 and Title 49 U.S.C. Section 5303; and,

WHEREAS, Title 23, U.S.C. Section 134 and Title 49 U.S.C. Section 5303 states the Capital District Transportation Committee, in cooperation with the State and any affected public transportation operator, shall develop a Transportation Improvement Program (hereafter referred to as the “TIP”) for the metropolitan planning area that contains projects consistent with the current metropolitan transportation plan, known as New Visions 2050; and, reflects the investment priorities established in the current metropolitan transportation plan; and once implemented, is designed to make progress toward achieving performance targets.

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

WHEREAS, the Capital District Transportation Committee approved a 2022-2027 Transportation Improvement Program requiring the adoption of a new transportation air quality conformity determination for the seven-county Albany-Schenectady-Troy, NY ozone nonattainment area; and,

WHEREAS, the Capital District Transportation Committee collaborated with the New York State Department of Transportation Regions 1, 2 and 9 and the Adirondack/Glens Falls Transportation Council to develop the requisite draft air quality conformity determination to accompany the 2022-2027 Transportation Improvement Program; and,

WHEREAS, that determination included no air quality non-exempt projects within the seven-county Albany-Schenectady-Troy, NY ozone nonattainment area; and,

WHEREAS, the Capital District Transportation Committee Planning Committee, the New York State Department of Transportation and the Adirondack/Glens Falls Transportation Council’s

Planning Committee reviewed and approved the draft air quality conformity determination, releasing it for a thirty-day public comment period.

NOW THEREFORE BE IT RESOLVED, that following completion of that public comment period, the Capital District Transportation Committee has approved the Albany-Schenectady-Troy 1997 8-Hour Ozone Non-Attainment Area Transportation/Air Quality Conformity Determination in the context of the 2022-2027 Transportation Improvement Program; 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.

Kathy M. Sheehan
Mayor, City of Albany
Chair, Capital District Transportation Committee

September 1, 2022



**Resolution 22-03 of the Adirondack / Glens Falls Transportation Council, approving the
2022-2027 Transportation Improvement Program, 2022 Self-Certification, and
Albany-Schenectady-Troy 1997 8-Hour Ozone Non-Attainment Area Transportation /
Air Quality Conformity Determination**

Whereas, the Adirondack / Glens Falls Transportation Council has been designated by the Governor of the State of New York as the Metropolitan Planning Organization (MPO) responsible for the comprehensive, continuing, and cooperative transportation planning process for the planning and programming area that includes Warren County, Washington County, and the Town of Moreau in Saratoga County; and

Whereas, Title 23 CFR Part 450 and Title 49 CFR Part 613 require that a Transportation Improvement Program (TIP) be developed and adopted by the Metropolitan Planning Organization; and

Whereas, the Planning and Programming area of the Adirondack / Glens Falls Transportation Council includes the entirety of Warren and Washington Counties and the Town of Moreau in northern Saratoga County; and

Whereas, the Planning Committee to the Council developed a draft 2022-2027 TIP update through the continuous, comprehensive and cooperative transportation planning process in coordination with state, regional and local officials; and

Whereas, the A/GFTC Policy Committee has reviewed and approved the draft 2022-2027 Transportation Improvement Program, 2022 Self-Certification and the Albany-Schenectady-Troy 1997 8-Hour Ozone Non-Attainment Area Transportation / Air Quality Conformity Determination for the required public comment and review period prior to final A/GFTC approval; and

Whereas, the availability of the draft TIP has been advertised and posted online for a period of thirty days or more as of June 15, 2022; and

Whereas, the A/GFTC Policy Committee, at its June 15, 2022 meeting, assigned final approval authority to the A/GFTC Planning Committee pending resolution of any substantive public comments received during the public review period; and

Whereas, the Council understands that only the first four years of project obligations that are contained within this five year Transportation Improvement Program are to be submitted to the New York State Department of Transportation for inclusion in the Statewide Transportation Improvement Program (STIP) without modification; and

Whereas, although the 2022-2027 TIP satisfies the requirements for fiscal constraint, the Council recognizes that the contents of this TIP represent only a portion of regional transportation system needs, a great deal of which remain unfunded or unprogrammed due to those constrained resources; and

Whereas, this document contains a listing of illustrative projects that carry A/GFTC endorsement as being needed and worthwhile investments in the transportation system that are not supported under existing funding requirements or allocation levels; and

Whereas, projects contained within this 2022-2027 Transportation Improvement Program collectively advance performance targets collectively identified by A/GFTC, New York State Department of Transportation, and Greater Glens Falls Transit designed to attain measurable outcomes with regard to infrastructure conditions, safety, and system performance; so

Now Be It Therefore Resolved, that the Adirondack/Glens Falls Transportation Council endorses the 2022-2027 Transportation Improvement Program, 2022 Self-Certification, and Albany-Schenectady-Troy 1997 8-Hour Ozone Non-Attainment Area Transportation / Air Quality Conformity Determination; and

Be It Further Resolved, that any projects in the 2019-2024 Obligated Element of the TIP that are not obligated by October 1, 2022 are to become part of Federal Fiscal Year 2022-23 or beyond as appropriate and as fiscal constraint allows; and

Be It Further Resolved, that the Adirondack/Glens Falls Transportation Council certifies that the requirements of 23 CFR Part 450.114(c) have been met; and

Be It Further Resolved, that in accordance with FTA regulations, the Council certifies that the population and square mileage of the Greater Glens Falls Transit System service area as well as the planning procedures used to determine the service area that are reported in the Transit element within this TIP are accurate; and

Be It Further Resolved, that the Council Secretary is directed to transmit this 2022-2027 Transportation Improvement Program to the Commissioner of the New York State Department of Transportation and to the Regional Administrator of the Federal Transit Administration.



**John Strough, Supervisor, Town of Queensbury
A/GFTC Policy Committee Chairman**



Date

APPENDIX L -

ENVIRONMENTAL JUSTICE AND TITLE VI OF

THE CIVIL RIGHTS ACT OF 1964

Title VI of the Civil Rights Act of 1964 prohibits discrimination based upon race, color, and national origin. Specifically, 42 USC 2000d states that “No person in the United States shall, on the ground of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance.” There are two Presidential Executive Orders that place further emphasis upon the Title VI protections of race and national origin. Executive Order #12898 (Environmental Justice) directs federal agencies to develop strategies to address disproportionately high and adverse human health or environmental effects of their programs on minority and low-income populations. Executive Order # 13166 (Limited-English-Proficiency) directs federal agencies to ensure that recipients of federal financial assistance provide meaningful access to their Limited-English-Proficiency applicants and beneficiaries.

One of the categories in the Merit Evaluation Process previously discussed considers Environmental Justice (EJ) and is based on modal analysis by race/ethnicity and income of the traveler, as discussed in CDTC’s 2020 Environmental Justice/Title VI Analysis, as well as Environmental Justice areas defined in that document. Those are census tracts where the proportion of low income or minority (non-white and non-Hispanic/Latino) residents is greater than the regional proportion. Projects within or directly connected to an EJ area and with a primary purpose or significant focus on transit, bicycling, walking, or carpool receive 2 points. Significant focus means that the improvements are provided over a portion of the project which is significant relative to the overall project. Projects within or directly connected to an EJ area and that maintain existing infrastructure, with a primary purpose or significant focus on automobiles receive 1 point. Included are most highway resurfacing, traffic operations improvement, bridge deck repair, and preservation and rehabilitation type projects. Projects excluding EJ areas and maintaining existing infrastructure, with a primary purpose or significant focus on automobiles receive 0 points. Projects A) within or directly connected to an EJ area and that could have negative impacts - those that are new construction, vehicle capacity improvements, or reconstruction projects which add auto capacity or B) excluding EJ areas and with a primary purpose or significant focus on transit, bicycling, walking, or carpool, receive -1 point. Of the 47 new site-specific projects added during the 2022-2027 Transportation Improvement Program update process, 23 are located in EJ areas, totaling approximately \$120M. No projects anticipated to have potentially negative impacts are located in EJ areas.

**APPENDIX M -
CDTC DEFINITIONS OF PRESERVATION &
BEYOND PRESERVATION**

DEFINITIONS FOR PRESERVATION AND BEYOND PRESERVATION PROJECTS (APPROVED BY CDTC'S POLICY BOARD 9/2/2021)

Overview

NYSDOT's "Preservation First" strategy prioritizes activities that maximize the service life of existing infrastructure assets over expansion or enhancement of the transportation system. This strategy was discussed in the 2019 NYSDOT Transportation Asset Management Plan (TAMP)³. It prioritizes managing conditions across the entire system, not just the National Highway System (NHS), by keeping preservable assets in the lower-cost preservation treatment cycle. In addition, CDTC's New Visions 2050 regional transportation plan⁴ identifies investing in a quality region and preserving and managing the transportation system as two of fifteen key planning and investment principles. These principles support CDTC's project programming process that is multi-modal and equitable, based on condition and function not ownership.

CDTC is developing guidance to define preservation and beyond preservation projects for the 2022-2027 TIP Update. The proposed definitions use the NYSDOT TAMP as a reference to update CDTC's priorities and practices. This guidance will apply to all federal-aid projects for transportation assets maintained by NYSDOT, NYSTA, CDTA and local governments. These definitions are intended to make CDTC's project programming process more transparent and will assist CDTC with meeting state and CDTC performance measure targets. This guidance is subject to change pending release of the NYSDOT 2022-2027 TIP/STIP Update Guidance document and potential changes to federal transportation policy.

Definition of Terms

Preservation activities extend or maximize the service life on an existing transportation asset. Preservation work includes preventive maintenance and preservation activities on pavements, sidewalks, shared use trails and transit infrastructure in addition to rehabilitation treatments on bridges.

Beyond Preservation activities address assets that have deteriorated beyond a state in which they can be preserved or meet statewide goals of economic development, resiliency or sustainability. Beyond preservation work includes road, sidewalk, shared use trail and transit infrastructure reconstruction, bridge replacement projects and construction of new roads, bridges, sidewalks, shared use trail and transit infrastructure.

³ NYSDOT TAMP www.dot.ny.gov/programs/capital-plan/repository/Final%20TAMP%20June%2028%202019.pdf

⁴ New Visions 2050 https://www.cdtcmpr.org/images/new_visions/NewVisions2050_Final_ForWeb_09_08.pdf

ADA Accessibility Standards for local projects are addressed in revised Chapter 13 of the Local Projects Manual (LPM)⁵. ADA standards do not determine preservation versus beyond preservation status and are specific to the provision of curb ramps. For additional information, please refer to Chapter 13 of the NYSDOT Local Projects Manual.

Preservation Project Definitions

Pavement Preservation Projects include preventive and corrective treatments. Reconstruction of sidewalks or shared use trails as part of road preservation projects shall not exceed 2,640 linear feet or 0.50 miles. There shall be no new sidewalk or shared use trail construction as part of road preservation projects.

- ◆ **Pavement Preventive treatments** are used for assets which are in fair to good condition but in need of specific repairs. Examples of Preventive treatments include thin pavement overlays, single course overlays, and concrete repairs. Preservation projects are subject to ADA standards. See Pavement Work Type Table on Page 4.
- ◆ **Corrective treatments** are required for assets which still have a potential for significant remaining service but show more distress, generally in fair to nearly poor condition. Examples of rehabilitation treatments include thick pavement mill and fill, and hot or cold in place recycling. Rehabilitation projects are subject to ADA standards. See Pavement Work Type Table on Page 4.

Bridge Preservation Projects include preventive maintenance and rehabilitation (corrective) treatments. Reconstruction of sidewalks as part of bridge preservation projects shall be limited to sidewalk quantities (measured in square feet) having element condition states of CS2 (fair) or worse as documented in the most recent bridge inspection report. There shall be no new sidewalk or shared use trail construction as part of bridge preservation projects.

- ◆ Preventive maintenance treatments are only applicable to assets that are still in relatively good condition. Examples of preventive maintenance treatments include bridge painting, joint resealing and waterproofing concrete. Preventive maintenance projects are not subject to ADA standards, including the provision of curb ramps.
- ◆ Rehabilitation (corrective) treatments are required for assets which still have a potential for significant remaining service but have a substantial number of components in need of repair, or major components in need of substantial repair. Examples of rehabilitation treatments include bridge deck replacement and element specific repairs as documented in the most recent bridge inspection report. Rehabilitation projects are subject to ADA standards, including the provision of curb ramps.

⁵ NYSDOT Chapter 13 of the Local Project Manual: <http://www.dot.ny.gov/plafap>

Sidewalk Preservation includes sealing, patching and repairing. Sidewalks are designed for pedestrians and are not designed for bicycles or other recreational purposes. Sidewalk preservation projects are subject to ADA standards.

Shared Use Trail Preservation includes repaving or resurfacing. Shared use trails provide off- road routes, are designed for a variety of users and are physically separated from streets by an open space or barrier. Shared use trail preservation projects are subject to ADA standards.

Complete Street implementation as part of a road or bridge preservation project includes treatments such as crosswalks or bike lane striping inside the pavement edges. Treatments outside the pavement edges such as granite curb resetting, any work between the curb and sidewalk, installation of pedestrian push buttons and bulb outs are beyond preservation. Complete street implementation as part of road or bridge preservation projects are subject to ADA standards.

Transit Infrastructure that is repaired or rehabilitated including transit stations and shelters is considered preservation. Construction of new facilities or reconstruction of existing transit facilities are beyond preservation. Transit infrastructure projects are subject to ADA standards.

Beyond Preservation Project Definitions

- ◆ System Improvement Projects provide capacity or operational improvements such as construction of new roadways, bridges, sidewalks, shared use trails, transit infrastructure, capacity projects and projects that result in any fundamental change in function or functional class. System improvement projects are subject to ADA standards.
- ◆ System Renewal Projects include bridge replacements; reconstruction of road and transit infrastructure; and the reconstruction of sidewalks and shared use trails, except as part of road preservation projects with less than 2,640 linear feet or 0.50 miles of reconstructed sidewalk/shared use trail or sidewalk replacement as part of bridge preservation projects for sidewalk quantities having element condition states of CS2 (fair) or worse as documented in the most recent bridge inspection report. Road reconstruction is not considered until the pavement has reached a majority condition rating of 6. System renewal also includes complete streets treatments, except treatments inside the pavement edges of road and bridge preservation projects such as crosswalks or bike lane striping. System renewal projects are subject to ADA standards.

Pavement Work Type Categories

Work Type Description		Category	Preventive and Corrective Maintenance
Paver Placed Surface Treatment (Novachip)		PREV	
Thin Hot Mix Asphalt Overlay (0.75" - 1")		PREV	
Singe Course Hot Mix Overlay (1.5" - 2")		PREV	
Single Course Hot Mix Overlay w/ T&L		CORR	
Mill and Fill		CORR	
Hot in Place Recycling with Overlay		CORR	
Cold in Place Recycling with Overlay		CORR	
Concrete Pavement Restoration (CPR) Light		CORR	
Mill and Fill with additional Overlay		CORR	
2 Course Asphalt Overlay		CORR	
Cold in Place Recycling with 2 Course Asphalt Overlay		CORR	
			System Renewal
Multi-Course Mill and Fill with Joint Repairs		REHAB	
Concrete Pavement Restoration (CPR) Heavy		REHAB	
Crack and Seat with Multiple Course Asphalt Overlay		REHAB	
Rubblize Concrete with Multiple Course Asphalt Overlay		RECON	
3 Course Asphalt Overlay		RECON	
Reconstruction of Asphalt Pavement		RECON	
Reconstruction of Concrete Pavement		RECON	
			Definitions
PREV	Preventive Maintenance slows the deterioration by sealing the pavement surface without adding significant structure		
CORR	Corrective Maintenance repairs distress in the top of the pavement structure and may add structural capacity		
REHAB	Rehabilitation restores the pavement above the subbase to like-new condition, add moderate structure to the pavement.		
RECON	Reconstruction creates or restores a new pavement structure		

APPENDIX N - CDTC MEMBERS

CAPITAL DISTRICT TRANSPORTATION COMMITTEE

Planning Committee Members (August 2022)

Susan Barden, *City of Saratoga Springs*
Philip F. Calderone Esq., *Albany County Airport Authority*
Mark Castiglione, *Capital District Regional Planning Commission*
Ross Farrell, *Capital District Transportation Authority*
Steve Feeney, *Schenectady County, Chair*
Patrick K. Jordan, Esq., *Albany Port District Commission*
Andrew Kreshik, *City of Troy*
Joseph LaCivita, *City of Watervliet*
Sean M. Maguire, *Town of Colonie, Vice-Chair*
Richard J. Marquis, *Federal Highway Administration*
Randy Milano, *City of Albany*
Sandra Misiewicz AICP, *Capital District Transportation Committee, Secretary*
Lisa Ramundo, *Albany County*
Robert Rice, *New York State Department of Transportation – Region 1*
Tom Richardson, *City of Mechanicville*
Joseph Seman-Graves, *City of Cohoes*
Michael Sheehan, *New York State Department Environmental Conservation*
Phil Serafino, *New York State Thruway Authority*
Kelly Hoffman, *Rensselaer County*
Michael Valentine, *Saratoga County*
Ketura Vics, *City of Rensselaer*
Chris Wallin, *City of Schenectady*

Town & Village Reps

Anna Feltham, <i>East Greenbush</i>	Paul Reuss, <i>Menands</i>	Rob Leslie, <i>Bethlehem</i>
Nadine Fuda, <i>Schodack</i>	John Scavo, <i>Clifton Park</i>	Donald Csaposs, <i>Guilderland</i>
Laura Robertson, <i>Niskayuna</i>	Jaime O'Neill, <i>Malta</i>	Peter Comenzo, <i>Rotterdam</i>
Elizabeth Kormos, <i>Ballston Spa</i>		

CAPITAL DISTRICT TRANSPORTATION COMMITTEE

Policy Board Members (August 2022)

- **Albany County:** *Daniel P. McCoy, Albany County Executive*
- **Albany County:** *Andrew Joyce, Chair, Albany County Legislature*
- **Albany City:** *Kathy M. Sheehan, Mayor*
- **Albany County Airport Authority:** *Philip F. Calderone, Esq.*
- **Albany Port District Commission:** *Patrick K. Jordan, Esq.*
- **Capital District Regional Planning Commission:** *Craig M. Warner*
- **Capital District Transportation Authority:** *Carm Basile, CEO*
- **Colonie Town:** *Peter Crummey, Supervisor*
- **Colonie Village:** *Thomas Tobin, Mayor*
- **Cohoes City:** *William T. Keeler, Mayor*
- **Federal Highway Administration:** *Richard J. Marquis*
- **Federal Transit Administration Region-2:** *Stephen Goodman, Regional Admin.*
- **Hoosick Town:** *Mark Surdam, Supervisor*
- **Mechanicville City:** *Michael Butler, Mayor*
- **NYS Department of Transportation Region-1:** *Patrick Barnes, Regional Director*
- **New York State Thruway Authority:** *Phil Serafino, Acting Albany Division Director*
- **Rensselaer City:** *Michael E. Stammel, Mayor*
- **Rensselaer County:** *Steven McLaughlin, Chair, Rensselaer County Executive*
- **Rensselaer County:** *Kelly Hoffman, Chair, Rensselaer County Legislature*
- **Saratoga County:** *Theodore T. Kusnierz Jr., Chair, Saratoga County Board of Supervisors*
- **Saratoga County:** *Thomas C. Werner*
- **Saratoga Springs:** *Ronald Kim, Mayor*
- **Schenectady City:** *Gary McCarthy, Mayor*
- **Schenectady County:** *Anthony Jasenski, Sr., Chair, Schenectady County Legislature*
- **Troy City:** *Patrick Madden, Mayor*
- **Watervliet City:** *Charles V. Patricelli, Mayor*