



CAPITAL DISTRICT TRANSPORTATION COMMITTEE

One Park Place, Main Floor · Albany, NY 12205-2676
www.cdcmpo.org

e-mail:cdtc@cdcmpo.org

Phone: (518) 458-2161
Fax: (518) 729-5764

2020-22 UNIFIED PLANNING WORK PROGRAM

Capital District Transportation Committee
One Park Place
Albany NY 12205

TABLE OF CONTENTS

INTRODUCTION..... i

OVERVIEW OF THE UNIFIED PLANNING WORK PROGRAM ii

FEDERAL CERTIFICATION OF CDTC’S MPO PROCESS..... iii

CDTC’S NEW VISIONS REGIONAL TRANSPORTATION PLAN iv

KEY ACCOMPLISHMENTS OF CDTC’S 2018-20 UPWP..... v

MAJOR THEMES OF THE 2020-22 UPWP ix

Emphasis Areas under CDTC’s 2020-22 UPWP ix

Highlights of the 2020-22 Program x

- New Visions Long-Range Regional Transportation Plan x
- Transportation Improvement Program xi
- Regional Safety Plan xi
- Regional Trails xi
- Regional Coordinated Public Transit Human Services Plan xii
- Complete Streets..... xii
- Smart Communities xii
- Statewide MPO Association Support xiii

PROPOSED 2020-21 UPWP BUDGET..... xiv

FHWA PL CARRYOVER EXPENDITURE PLAN.....xiv

CONSULTANT ADMINISTRATION MANAGEMENT..... xv

RELATIONSHIP TO NYSDOT EMPHASIS AREAS..... xvi

CONSISTENCY WITH FEDERAL LEGISLATIVE REQUIREMENTS xvi

UPWP TASK DESCRIPTIONS xvii

2020-22 UNIFIED PLANNING WORK PROGRAM TASK DESCRIPTIONS 1

- 44.21.00 PROGRAM SUPPORT AND ADMINISTRATION..... 1
 - 1.51 Committee Activities..... 1
 - 1.61 Certification Review..... 1
 - 1.64 Americans with Disabilities Act (ADA) Compliance 2
 - 1.65 Unified Planning Work Program Development 2
 - 1.66 Environmental Justice Compliance, Title VI, and DBE..... 3
 - 1.67 Prospectus: Continuing Operations Plan & Operating Procedures 3
 - 1.68 NYSAMPO Administration 4

1.69 AMPO/NYSAMPO/TRB Committees and Working Groups	5
1.70 Public Participation	5
1.71 Provision of Community Services.....	6
1.73 CDTC/CDRPC Technical Assistance	6
1.75 Linkage Program Administration and Technical Support.....	7
44.22.00 GENERAL DEVELOPMENT AND COMPREHENSIVE PLANNING	8
2.25 Data Collection.....	8
2.28 Census	8
2.29 Geographic Information Systems (GIS).....	9
2.30 Highway Condition Inventory	10
2.30.1 Highway Condition Inventory Albany County	11
2.30.2 Highway Condition Inventory City of Albany	11
44.23.01 LONG-RANGE TRANSPORTATION PLANNING (LRTP) - SYSTEM LEVEL	12
3.11 STEP Model Development and Maintenance	12
3.21 Energy, Climate Change Initiative, Air Quality and Environment	12
3.31 Infrastructure & Financing Planning	14
3.41 New Visions and RTP Refinement.....	15
3.51 Performance-based Planning & Programming.....	16
44.23.02 LONG-RANGE TRANSPORTATION PLANNING (LRTP) - PROJECT LEVEL	18
3.12 I-787 Livable Corridor Study	18
3.22 Regional Operations and Congestion Management	19
3.32 Regional Signal Timing Program.....	19
44.24.00 SHORT RANGE TRANSPORTATION PLANNING (SRTP).....	20
4.17 Complete Streets/Arterial Management	20
4.21 Freight Planning	21
4.23 Every Day Counts	23
4.25 Energy Efficient Logistics Grant.....	23
4.30 Smart Communities.....	24
4.60 Capital Coexist	25
4.67 Bike/Pedestrian Planning	25
4.68 Capital District Trails Plan Implementation.....	26
4.70 Clean Communities	27
44.25.00 TRANSPORTATION IMPROVEMENT PROGRAM (TIP).....	28
5.01 TIP Development and Maintenance.....	28
5.10 Project Delivery and Tracking.....	29
5.51 Provision of Technical Services	30
5.61 TIP Project Development Support.....	30
44.26.00 PLANNING EMPHASIS AREAS (PEAS)	31
6.12 Human Service Agency Transportation	31
6.13 Transit Planning	31
6.14 Regional Travel Demand Management Effort	32
6.16.1 Safety Planning.....	33
6.16.2 Security Planning	34
44.27.00 OTHER ACTIVITIES.....	35

7.10.1 Town of Colonie GEIS Support.....	35
7.10.2 Town of Malta GEIS Support	35
7.20 Shared Transit Service Planning and Analytics Initiative.....	35
7.30 City of Albany Bicycle and Pedestrian Master Plan.....	36
7.40 Ballston Spa Pedestrian & Bicycle Master Plan.....	36
7.50 Menands Land Use Regulations Update	37
7.60 Scotia Downtown Connections Plan	37
7.90 Hoosick Street Parkway Implementation Study	37
STATEWIDE PLANNING EFFORTS	38
NYSAMPO Shared Cost Initiatives.....	38
State Planning Research (SPR) Funded Efforts	39

APPENDIX A: LIST OF TABLES

Table 1 Funds by Source for CDTC Staff
Table 1A Explanation of Calculations for PL Match
Table 2 In-Kind Service for CDTC Staff
Table 3 Funds by Source for NYSDOT
Table 4 Funds by Source for CDTA
Table 5 Funds by Source for CDRPC
Table 6 FHWA Planning (PL) Funds
Table 7 FHWA STP Project Development
Table 8 SPR Funds
Table 9 FTA Section 5303 (New 2020-21)
Table 9A New FTA by Activity Line Item Codes
Table 10 FTA Section 5303 (Old 2019-20)
Table 10A Old FTA by Activity Line Item Codes
Table 11 USDOE
Table 12 Annual Local Contributions
Table 13 NY-80-0030 Shared Cost Initiative

APPENDIX B: PUBLIC COMMENTS & CDTC RESPONSES

2020-22 UNIFIED PLANNING WORK PROGRAM

INTRODUCTION

The Capital District Transportation Committee (CDTC) is the metropolitan planning organization (MPO) for the Capital Region of New York State. Every metropolitan area in the United States with a population of over 50,000 must have a designated 'Metropolitan Planning Organization' (MPO) for transportation in order to qualify for any federal transportation funding. The purpose of each MPO is to provide a forum for State and local officials to discuss transportation issues and reach a consensus on transportation plans and specific programs of projects. The U.S. Department of Transportation relies on each MPO to make sure that transportation projects that use federal funds are the products of a continuing, comprehensive, and cooperative planning process, and meet the priorities of the metropolitan area. To emphasize the importance of the MPO process, the USDOT will not approve the federal funding of transportation projects unless they are on the MPO's transportation improvement program.

CDTC has its origins in the old Capital District Transportation Study (CDTS), set up in 1964 through agreements between New York State, the four Capital Region counties, and the 77 municipalities in those counties.

The CDTC is composed of elected and appointed officials from:

- Each of the four counties (Albany, Rensselaer, Saratoga, and Schenectady);
- Each of the eight cities in the four counties (Albany, Cohoes, Mechanicville, Rensselaer, Saratoga Springs, Schenectady, Troy, and Watervliet);
- Town of Colonie
- New York State Department of Transportation;
- New York State Thruway Authority;
- Capital District Transportation Authority;
- Capital District Regional Planning Commission;
- Albany International Airport;
- Albany Port District Commission;
- and at-large members representing the towns and villages.
- The Federal Highway Administration and Federal Transit Administration serve as advisory members.

While its initial mission was to develop a long-range transportation plan, CDTC's current efforts are much broader. The CDTC sets its own agenda for planning activities; and with a small professional staff and the assistance of other member agencies, it investigates issues critical to the future of the Capital Region. CDTC's planning agenda is intended to be action oriented, answering such questions as: "How will the expectations and role of the transportation system be different in the year 2050 from what they are today? How can future development patterns be encouraged through transportation investment? How can the transportation system be managed or improved to enhance the region's quality of life, protect the region's unique ecosystem, and sustain economic vitality? What are the financial requirements to provide the desired system and how can they be secured?"

The CDTC has conducted regional transportation planning for the Capital Region for more than 50 years. CDTC has always affirmed the need to conduct transportation planning in a cooperative and collaborative, as well as a sound technical manner. All planning has been conducted on a comprehensive multi-modal basis, with highway, transit, bicycle/pedestrian, and transportation system management measures all given consideration. Planning has been conducted on an integrated basis with consideration given to the wide range of impacts of transportation, and the need to coordinate transportation planning with land use planning. CDTC has emphasized the maintenance of a sound planning data base, since, without an intimate understanding of the current transportation system and of those factors that determine

the need for transportation facilities and services of various kinds, sound transportation planning cannot be conducted. These and other principles that form the foundation of CDTC's planning program are described in detail in CDTC's *Continuing Operations Plan 2020, MPO Planning Agreement*, and other documents and agreements.

OVERVIEW OF THE UNIFIED PLANNING WORK PROGRAM

One of CDTC's responsibilities is to develop a *Unified Planning Work Program (UPWP)* as a basis and condition for all FHWA and FTA funding assistance for transportation planning within the four county Capital Region. The CDTC has embraced the two-year UPWP concept, moving from annual to biennial development in 2006.

Development of the 2020-22 UPWP began with a discussion of ideas with CDTC's Planning Committee at its November and January meetings. The solicitation for the 2020 Community and Transportation Linkage Planning Program provided additional studies for next year's planning program. Specific studies will be recommended to the Planning Committee before its February meeting. The Planning Committee will review and endorse the full program on February 6, 2020. Following a 30-day public review period, the Policy Board will be asked to approve the program on March 5, 2020.

The Unified Planning Work Program identifies transportation planning and programming activities that are to be undertaken in the Capital Region during the upcoming two years, beginning on April 1, 2020 and ending on March 31, 2022. The intent of the comprehensive work plan is to coordinate all federally-funded transportation-related planning activities in the region.

The primary sources of federal planning funds supporting CDTC's UPWP activities include:

- Federal Transit Administration (FTA): Section 5303 and Section 5307
- Federal Highway Administration (FHWA): Planning (PL) Funds
- Statewide Planning & Research (SPR) Funds; Congestion Mitigation & Air Quality (CMAQ) Funds and other capital funds such as from the Surface Transportation Block Grant Program (STBG) and the National Highway Performance Program (NHPP) committed to planning efforts in the Transportation Improvement Program (TIP); and
- U.S. Department of Energy Funds supporting the Clean Communities Program

The New York State Department of Transportation (NYSDOT) Statewide Planning and Research (SPR) activities that directly pertain to the Capital Region are described in the text of the UPWP, but are not shown in the financial tables. Full documentation of the SPR program is available from NYSDOT and is posted at www.nysdot.gov.

Because the CDTC staff carries out specific activities that go beyond the normal MPO planning activities, the UPWP also includes additional studies and resources. The UPWP also includes contractual efforts with Albany County, the City of Albany, Town of Colonie, and the Town of Malta. Further, CDTC's *Community and Transportation Linkage Program* has increased the amount of local commitment to CDTC's annual work program effort. Typically, Linkage studies are carried out through consultant contracts held by CDTC using federal funds and local cash provided to CDTC by the sponsoring municipality.

Each task listed in the UPWP is undertaken by either the CDTC staff, CDTC's member agencies, or by consultants. The 2020-22 UPWP also includes resources for staff support for the New York State Association of Metropolitan Planning Organizations (NYSAMPO) activities.

The task descriptions in this UPWP include work over the 2 year period of this 2020-21 UPWP. However the tables below these descriptions and the tables following the last task only include funding for the first year (2020-21). The funding for the second year (2021-22) is assumed to be the same as the first year, unless an administrative change is made before the beginning of the second year.

FEDERAL CERTIFICATION OF CDTC'S METROPOLITAN TRANSPORTATION PLANNING PROCESS

In the last review for which we have results, the Federal Highway Administration (FHWA) and Federal Transit Administration (FTA) conducted a federally required quadrennial review of the metropolitan transportation planning process carried out by the Capital District Transportation Committee (CDTC) in March, 2016. The objective of the review was to determine whether the metropolitan transportation process meets the Federal requirements outlined in 23 CFR 450.300 and to assure that an adequate process exists to ensure conformity of plans and programs in accordance with procedures contained in 50 CFR Part 51. The Certification Review was based on routine FHWA and FTA interaction with staff in day-to-day operations; a review of CDTC planning products and processes; a field review meeting with staff from CDTC, NYSDOT, and CDTA; and a public comment period.

Based on the reviews conducted and ongoing oversight by the federal agencies, CDTC's metropolitan planning process received 6 commendations regarding our New Visions 2040 Long-range Regional Transportation Plan (LRTP) white papers and our funding ballot, our Unified Planning Work Program (UPWP) local bridge assessment study, our Transportation Improvement Program (TIP) benefit/cost ratio and merit scoring, our Title VI and Civil Rights program's ADA Working Group as a best practice in New York State, our Freight Planning process for engaging regional stakeholders and producing a regional freight plan, and our Intelligent Transportation System (ITS) program for incorporating traffic signal technologies. The review also concluded that the four recommendations cited in the previous 2012 report related to the TIP programming considering smaller communities, updating our website, improving our mailing lists, and assisting adjacent rural counties were all fully addressed in the last four years.

In the last certification in March 2016, CDTC was found to be "a very professional endeavor but due to the need to address corrective actions it is hereby certified with condition." Two corrective actions were issued – one dealing with TIP fiscal constraint and the other dealing with a financial plan. CDTC staff developed proposals to address both actions, which were submitted to FHWA and FTA before the deadlines. FHWA and FTA reviewed our submittals and submitted their comments. After the FHWA and FTA comments were addressed, the FHWA and FTA approved our resolutions of both actions.

The next formal in-person review will be in March 2020.

In accordance with the FAST Act requirements, CDTC is also required to complete a self-certification at least every 4 years and upon submittal of an updated TIP. The purpose of self-certification is to document that compliance of CDTC's transportation planning process with federal planning requirements continues. FHWA and FTA view self-certification as one of the critical mechanisms for ensuring the satisfactory implementation of these planning requirements. Our last self-certification process was carried out in 2019 with the adoption of CDTC's 2019-24 Transportation Improvement Program, and our next self-certification will be completed in 2022 with the adoption of the 2022-27 TIP.

As the Metropolitan Planning Organization (MPO) for transportation planning and programming in the Capital Region of New York State, CDTC has been recognized as one of the most innovative and successful planning organizations in the country by the USDOT and other professional peer

organizations. Nationally, CDTC has been at the forefront of MPOs in land use and transportation planning.

CDTC'S NEW VISIONS REGIONAL TRANSPORTATION PLAN

After four years of extensive outreach and technical analysis, CDTC adopted its landmark New Visions for a Quality Region Plan in October, 2007, and received a positive FHWA/FTA air quality determination later that year. While the plan is the long-range transportation plan for the region, it strives to have the region recognize the importance of land use design and smart growth management to maintain the quality of the region as well as the quality of the transportation system. The content of the plan, including its policies and expanded principles, frames the way this region will look at such items as transit service, mobility, safety, urban reinvestment, capital projects, expressway congestion issues, freight, environmental concerns, and the impacts of the many new transportation technologies..

The New Visions 2050 Plan, the latest update which will be adopted on September 3, 2020, is called New Visions for a Quality Region. The 2050 Plan reaffirms CDTC's principles, strategies, and actions while broadening the scope of the original plan to include more regional land use and technology issues.

New Visions 2050 supports keeping the region's highways and bridges in good condition; providing high quality transit service through continued investment in BRT; and building "Complete Streets". The Plan remains committed to the maintenance, repair, reconstruction, and right-sizing existing our highways and bridges. The Plan acknowledges the growing role that technology will play in the coming years – autonomous cars, self-adjusting signal systems, smart phone apps, ridesharing, carsharing, and bike sharing will all help mitigate congestion while providing more transportation opportunities to all residents of the region. The plan also deals with the increased demand for freight and direct delivery services; the importance of decreasing crashes, fatalities, and injuries; and increased consumer demand for mobility and transportation choices.

CDTC has sought public input in every stage of the long-range planning process. This Plan received public input from ten New Visions committees. Several public meetings were in all four counties, including stakeholder meetings and other small group meetings. We made major improvements to our plan website including surveys and polls; comments and questions, and social media.

In the coming months and years after the plan is adopted by our Policy Board, CDTC will implement a new effort to market and manage the plan, and to promote and implement its recommendations. We will partner with CDRPC, members, and other regional agencies to educate the public about the New Visions 2050 principles and recommendations, and train Planning, Zoning, and Town Boards and professional planners and elected officials. We will develop new tools and techniques that can be used to stakeholders and the public to learn more about the goals of the Plan, and we will also develop ways to encourage and incentivize adoption of the plan principles and recommendations.

KEY ACCOMPLISHMENTS OF CDTC'S 2018-20 UPWP

The 2018-20 UPWP focused on implementing recommendations of the New Visions 2040 Plan. Some of the key accomplishments of CDTC's 2018-20 UPWP include:

Performance Measures

- The Policy Board voted to approve the resolutions supporting the NYSDOT/ CDTA/ CDTC Performance Management Agreement, supporting the TIP Performance Management Amendment, NYS DOT Performance Measures and Target Approvals, and CDTA's Asset Management Performance Targets.
- CDTC adopted the Highway Safety Improvement Program (HSIP) targets set by New York State Department of Transportation (NYSDOT) for five safety performance measures required in the HSIP final rule (23 CFR Part 490). The five performance measures are:
 - Number of Fatalities
 - Rate of Fatalities per 100 million Vehicle Miles Traveled (VMT)
 - Number of Serious Injuries
 - Rate of Serious Injuries per 100 million VMT
 - Number of Non-Motorized Fatalities and Non-motorized Serious Injuries
- Performance Measures were adopted by CDTC for NHS bridges, NHS pavement, NHS system performance, and freight. During the reporting period, performance measures and targets for reliability and freight movement were updated by NYSDOT based on data analysis, and approved by the CDTC Policy Board.
- CDTC agreed to support CDTA's Transit Asset Management (TAM) performance measure targets by resolution, and received CDTA's federally required Transit Asset Management Plan.
- During the reporting period, CDTC staff evaluated 2019-2024 TIP candidate projects for their impact on USDOT performance measures. Each candidate project proposal was reviewed by staff and assigned a merit score for their potential impact on reaching the previously adopted performance measures and corresponding targets
- CDTC staff also began data collection for the more than 50 performance measures which are included in the New Visions 2050 update. The data collection includes regional summaries for the USDOT established, and CDTC adopted, reporting measures for: safety, infrastructure, congestion, reliability, freight movements, and environmental sustainability, as well as additional measures unique to the New Visions plan. The New Visions plan includes unique measures for: Regional Quality of Life, Environment and Technology, Bicycle and Pedestrian infrastructure, Complete Streets, and Regional Transit.

Infrastructure

- CDTC worked with a consultant on the development of a Regional Safety Action Plan, to be rebranded as the Regional Local Road Safety Plan. A draft report was provided to CDTC in March 2019 for review. The report contains crash data analysis, identifies safety emphasis areas, summarizes public and stakeholder input and identifies numerous strategies that local governments, with assistance from CDTC, can consider for implementation. A local government official survey was also conducted. The completed report is expected in February 2020.

- Staff worked with NYSDOT and other members on the development of the new 2019-24 Transportation Improvement Program (TIP), including:
 - Developing planning targets (available federal funding by fund source and year)
 - Reviewing existing TIP project costs and schedules
 - Reviewing set-aside and transit projects
 - Evaluating 100 new project applications requesting more than \$553 million in funding
 - Reviewing project evaluations with 6 advisory committees
 - Addressing comments received during the 60-day public comment period and the public meeting
 - Reviewing and ensuring that the TIP is fiscally constrained
 - Programming 50 new projects with an estimated cost of almost \$170 million, 78% of which were the highest rated projects in their project category
 - Transferring the new data to the State Transportation Improvement Program (STIP)

- Staff completed an air quality conformity analysis for the 2019-2024 A/GFTC and CDTC TIPs, the A/GFTC 2040 Ahead MTP, the CDTC New Visions 2040 MTP, and the Capital Program of Transportation Projects in Greene, Montgomery and Schoharie Counties, which demonstrates that these planning documents meet the Clean Air Act and Transportation Conformity rule requirements for the 1997 ozone NAAQS. CDTC staff had discussions with FHWA and Adirondack-Glens Falls Transportation Council to prepare for this conformity analysis, with help from the NYSDOT Environmental Science Bureau. The draft conformity document underwent interagency and public review, and all comments received were incorporated in the final documentation. The draft conformity documentation and project lists were posted to the A/GFTC, CDTC and NYSDOT web sites. The draft conformity documentation was summarized at a public meeting on May 7, 2019 at the Colonie Public Library.

- Received and evaluated 86 TIP (Transportation Improvement Program) project amendments for Planning Committee and/or Policy Board action. Additionally, staff worked with NYSDOT Region 1 Planning & Programming staff and our members to make TIP and STIP project changes, minor enough not to require committee action, to 171 projects.

- Continued GEIS contractual work with the towns of Colonie and Malta to develop mitigation costs for new developments in those towns, by calculating newly generated traffic, modeling the flow of that traffic with the GEIS area, and calculating fees. Staff completed 16 GEIS reviews for development projects in the Town of Colonie and 10 GEIS reviews for development projects in the Town of Malta.

- Continued longstanding contracts with the City of Albany and the County of Albany to evaluate the condition of all the streets owned and maintained by those municipalities.

- Completed federal-aid project tracking system reports for all local federal-aid projects, which are submitted monthly to the Planning Committee, along with member project briefs at design milestones and access to project management documents. Staff met with NYSDOT Region 1 Planning & Programming staff who agreed to share project management plans with CDTC.

- The 2018 and 2019 Albany County Highway Inventory data and the 2019 Albany City Highway Inventory data were collected, reviewed, field-checked, and compiled. The condition data file, maps, and a brief summary of findings were forwarded to the Albany County Department of Public Works and the Albany City Department of Engineering for use in planning for their upcoming paving season. The 2018 local sample and 2018 Rensselaer, Saratoga, and Schenectady Counties Highway Inventories and the 2019 Non-State federal aid Highway Inventory were also completed.

Safety

- In December 2018 CDTC launched the “Traffic Safety Ambassador Program” (mini-grants) providing \$25,000 in Federal funding, annually, toward bicycle and pedestrian safety education and training. After releasing a solicitation for projects, CDTC received 10 project proposals in February 2019 and chose 10 projects, totaling \$24,978, for funding. These projects include a variety of bicycle and pedestrian safety training, events, and demonstrations. Project sponsors must complete their projects by December 31, 2019.
- Staff continued to utilize safety data from the Accident Location Information System (ALIS) in CDTC Linkage Program planning studies, the Regional Safety Action Plan and the Transportation Improvement Program new candidate project evaluations.
- CDTC completed the first ever Regional Safety Action Plan, to be rebranded as the Regional Local Road Safety Plan. Along with extensive crash data analysis, focus group meetings were held in May 2018 and a regional safety summit was held in June with over 30 participants. Completed community outreach including an online survey and survey cards which were completed at tabling events. Events were held in Albany and Rensselaer Counties. Several presentations were given at CDTC Advisory Committees and Planning Committee on the project.

The plan reviewed crash data on roadways owned by Counties, Cities, Towns and Villages to identify high frequency crash locations, common crash types and transportation system risk factors. A variety of engineering, education and enforcement strategies were identified that have the greatest potential to reduce fatal and serious injury crashes. The need to emphasize systemic treatments that proactively address common crash types and risk factors is a key finding for local governments.

Linkage Studies

- Completed the following twelve Linkage Projects:
 1. Freemans Bridge Road Gateway Study
 2. Troy Bicycle Connections Plan
 3. City of Albany Washington Avenue - Patroon Creek Corridor Study
 4. Albany Shaker Road Corridor Study
 5. City of Schenectady Craig Street – Main Avenue Corridor Study
- A Complete Street Plan for Delaware Avenue in the Town of Bethlehem was adopted by Bethlehem’s town board. The plan calls for “right-sizing” the avenue by reducing the number of through traffic lanes, adding a center turn lane, and providing for safer bicycle space. The plan ensures compliance with requirements of the Americans with Disabilities Act (ADA)
- This Linkage Study project was completed during a previous reporting period. Staff has participated in the development of the Freemans Bridge Rd Gateway Study, funded by a New York Department of State Local Waterfront Revitalization Program grant. The project is advancing the recommendations from the Linkage Study
- CDTC and the City of Albany studied a segment of Washington Avenue roughly bounded by NY-85, I-90, the Harriman Campus and the University at Albany’s Uptown Campus. This particular area has had and continues to undergo development such as private dormitories, hotels and other commercial uses, leading to increases in vehicular and pedestrian traffic. Due to the width of Washington Avenue and the locations of the campuses in this area, pedestrians seek to cross at unsignalized locations,

creating potential conflicts between pedestrian and vehicular traffic. During the reporting period, the second public meeting was held, the advisory committee met twice, and the consultant completed the final report.

- CDTC and the City of Schenectady are performing complete streets study along Craig Street – Main Avenue (Craig-Main) from Albany Street to Crane Street in the City of Schenectady. This corridor currently experiences high bicycle and pedestrian activity, however, lacks the appropriate infrastructure to safely accommodate existing and future demand. With this study, the City intends to develop a series of recommendations for improved bicycle and pedestrian infrastructure along the project corridor and to secondary locations that include nearby businesses, educational, and community facilities.
- The *Troy Bike Connections Plan* was completed. This planning initiative was funded as part of CDTC’s Linkage Program and led by Parks and Trails New York. The plan is a guide for city officials and residents, advocates, and business owners to create a safe bicycle network that connects the Uncle Sam Bikeway and planned South Troy Riverfront Bikeway to neighborhoods throughout the city. An implementation plan was developed, which prioritizes projects and estimates costs

Bicycle/Pedestrian

- As part of Capital Coexist’s education efforts, CDTC purchased a series of webinars from the Association for Pedestrian and Bicycle Professionals (APBP) for the “Capital Coexist 2019 Education Series”. CDTC has served as a host site for these webinars since 2016 and invites members of various advisory committees to attend at no cost. On occasion, CDTC also hosted and/or provided registration information to members on related Pedestrian & Bicycle Information Center, Institute of Transportation Engineers, and FHWA webinars, as part of the Education Series, as well.
- Continued development of the GIS-based Bicycle Infrastructure database. Received feedback from CDTC’s Bicycle Infrastructure Data request from NYSDOT and the Town of Clifton Park. NYSDOT data pertaining to treatments for on-road sections of the Empire State Trail were added to CDTC’s Bicycle Infrastructure GIS database
- CDTC contracted with a consultant team led by Behan Planning to begin the planning process for an update to the 2007 *Tech Valley Trails* greenway vision: The 2018 Capital District Trails Plan. This project includes 5 tasks: Regional Greenway & Trails Vision, Regional economic impact analysis of greenways and trails, Best Practices for Trail Management & Maintenance, Branding and marketing plan for the Capital Region trail system, and Drone imagery & videography. The final Capital District Trails Plan was released in January

The Capital Region has over 100 miles of multi-use trails. CDTC has measured use and opinions on trails in 2006 and 2016. This data was used for the draft Capital District Trails Plan, an update to the 2007 Tech Valley Trails greenway vision. CDTC contracted with a consultant team led by Behan Planning in late 2017 to begin the planning process. This project includes 5 tasks:

1. Regional Greenway & Trails Vision
2. Regional economic impact analysis of greenways and trails
3. Best Practices for Trail Management & Maintenance
4. Branding and marketing plan for the Capital Region trail system
5. Drone imagery & videography

After a series of stakeholder and county meetings, a draft plan and video were released in the fall 2018 and the final Capital District Trails Plan was released in January 2019.

Completed several other follow up activities related to the release of the trails plan.

- CDTC, with input from the Complete Streets Advisory Committee, completed the 2018 Complete Streets Educational & Technical Assistance Workshop Series. The primary goal of the Workshop Series is to assist local governments in developing and implementing Complete Streets policies. Workshops were held in the Town of Niskayuna, City of Watervliet, Town of East Greenbush, and Village of Scotia during the 2018 series.
- CDTC recently completed a GIS-based inventory of existing sidewalk infrastructure in all 77 municipalities within CDTC's planning area. The inventory is to be used as a baseline in assisting communities with developing a screening process to evaluate ADA compliance of existing sidewalk infrastructure.
- CDTC staff launched a subcommittee of the Bicycle and Pedestrian Advisory Committee to test various bicycle and pedestrian Level of Service methodologies. The subcommittee met twice and completed an analysis of several Level of Service methodologies. Level of Traffic Stress (LTS) was identified as preferred for network analyses and Bicycle Level of Service (BLOS) was identified as the preferred methodology for evaluating design alternatives. These planning contexts are typical in CDTC's Transportation and Community Linkage Studies and will be CDTC's preferred methods in such studies unless stated otherwise. CDTC will also further explore the use of the LTS method to develop a bicycle suitability map for the region. A memo was written and will be included as part of the Bike/Ped White Paper in New Visions 2050.
- Conducted "Bike to Work" team challenge during National Bike Month in May 2018 and May 2019. In 2018 523 people registered, amounting to over 6,400 bicycle miles, conserving 260 gallons of fuel, eliminating 2.5 tons of CO₂, and burning about 279,000 calories. In 2019 678 people registered, amounting to over 6,732 bicycle miles, conserving 270 gallons of fuel, eliminating 2.7 tons of CO₂, and burning about 310,700 calories.

Human Services/ADA/Title VI

- Over 30 people attended the 2018 "Tools of the Trade" human services transportation symposium at The Crossings in Colonie on May 24th. Staff provided a follow-up presentation about topics discussed at the 2016 event. Local presenters discussed driver recruitment and retention, and visiting presenters discussed volunteer driver programs, including for Medicaid
- The update of our Coordinated Public Transit-Human Services Transportation Plan for the Capital District was completed. The plan reviews regional demographics and inventories existing public transit and specialized transportation services. It also identifies issues and opportunities as well as needs, gaps, and barriers to public-transit human services transportation coordination to better serve transportation disadvantaged populations. Finally, the plan outlines a number of draft strategies and actions to address gaps and improve efficient service delivery. The Planning Committee and the Policy Board approved the updated plan. The new plan will become part of our updated long-range regional transportation plan, New Visions 2050.

Freight

- Staff completed S. Pearl St. Heavy Vehicle Travel Pattern Study, a joint Freight and Environmental Justice effort in the City of Albany. The primary objectives were to research and analyze heavy vehicle travel patterns along S. Pearl St. – NY 32, and to develop potential strategies to mitigate the negative impacts of heavy vehicles on residents of the study area. A license plate survey was performed during the previous reporting period, and heavy vehicle data was analyzed to better understand travel patterns along the roadway network. A draft report was developed and shared with project stakeholders and the public for comments. The final report was developed and distributed.
- CDTC began participating in a study sponsored by NYSERDA to consider different energy futures and their impact on transportation, land use, and the region’s environment. A major focus of the study will be developing strategies for reducing greenhouse gas emissions. This is considered necessary to help the region achieve the State’s goal of reducing emissions by 80 percent by 2050.

Other Projects

- After several years in development, the *I-787/Hudson Waterfront Corridor Plan* was completed. The plan identified potential future transportation strategies for the corridor that support and balance economic development and revitalization efforts, transportation network resilience, and improved walking, biking, transit, and visual access to the waterfront. The plan outlines several initiatives that are currently progressing as well as potential longer term strategies that will require careful study
- CDTC released a solicitation for Smart Communities projects in early September 2018 and the Smart Communities Task Force evaluated the proposals and chose one project for funding. The Saratoga Smart LED Streetlight Guidebook will be developed by a consultant team led by Planning 4 Places. Meetings occurred throughout 2019, with a NightSeeing LightWalk Event occurring in September. An initial meeting for the project was scheduled for early May 2019.
- CDTC staff coordinated with the New York Public Transportation Association (NYPTA) and held the NACTO Transit Design Guide training in conjunction with the NYPTA Meeting in Albany in October.
- CDTC successfully held a Safety Summit related to development of its Regional Safety Action Plan in June 2018. CDTC also hosted a NHI speed management course and NACTO place-making training.
- The Policy Board voted to approve the resolutions endorsing the Transportation Improvement Program and certifying the Urban Transportation Planning Process in the Capital District Metropolitan Area is in conformance with Federal Requirements, both of June 6, 2019.
- For the bi-annual NYS Association of Metropolitan Planning Organizations’ (NYSAMPO) Conference in July 2019 staff assisted in organizing workshop sessions, assigning panelists, and scheduling speakers. Staff also attended and participated in this conference. Staff led the joint Safety/Bicycle & Pedestrian working groups meeting as well as the joint Climate Change/TSMO (Transportation System Management & Operations) working groups meeting. Additionally, staff moderated and presented in two conference sessions.
- CDTC in partnership with the Capital District Regional Planning Commission funded a second year of Community Planning Technical Assistance Projects in Bethlehem, Coeymans, Menands, Rensselaer and Scotia.

- CDTC hosted a two-day FHWA Workshop on Planning for Reliability: Advancing Reliability through Operations at the University at Albany in September 2019. The workshop helped transportation planners and system operators learn how to integrate reliability and operations into transportation planning using a performance-based approach. Participants learned about the new federally required travel time reliability performance measures and operational tools and techniques that can improve the reliability of the regional transportation system.
- CDTC received training in the use of the VERPAT (VisionEval Rapid Policy Assessment Tool). CDTC staff will use the VERPAT tool in the New Visions Plan update.
- CDTC staff completed a comprehensive update to the Systematic Traffic Evaluation Model (STEP Model), CDTC's regional travel demand model. The update included many refinements to the modeled roadway network, an evaluation of trip generation, and a comparison of estimated traffic volumes to actual traffic volumes.
- CDTC staff assumed the role of AMPO Board of Directors member in January 2020.
- Continued to host the statewide MPO association staff contract. Attended several dozen meetings and chaired 4 of the 8 Association working groups.
- Added significant improvements to website in September 2019.

MAJOR THEMES OF THE 2020-22 UPWP

CDTC moved from an annual to biennial development of the UPWP in 2006. The new approach remains successful because many of CDTC's activities are ongoing, and that UPWP task descriptions differ little year to year. Some activities, such as the Linkage Program, remain on an annual cycle; second year Linkage programming and other UPWP changes will be treated as amendments when necessary.

Emphasis Areas under CDTC's 2020-22 UPWP

The last federal surface transportation law, the Fixing America's Surface Transportation (FAST) Act of 2015, included several changes which impacted metropolitan transportation planning. One of those changes includes planning for and contributing to the below 10 planning factors found in the below federal regulation.

23 CFR 450.306 Scope of the metropolitan transportation planning process:

(a) To accomplish the objectives in § 450.300 and § 450.306(b), metropolitan planning organizations designated under § 450.310, in cooperation with the State and public transportation operators, shall develop long-range transportation plans and TIPs through a performance-driven, outcome-based approach to planning for metropolitan areas of the State.

(b) The metropolitan transportation planning process shall be continuous, cooperative, and comprehensive, and provide for consideration and implementation of projects, strategies, and services that will address the following factors:

- (1) Support the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency;

- (2) Increase the safety of the transportation system for motorized and non-motorized users;
- (3) Increase the security of the transportation system for motorized and non-motorized users;
- (4) Increase accessibility and mobility of people and freight;
- (5) Protect and enhance the environment, promote energy conservation, improve the quality of life, and promote consistency between transportation improvements and State and local planned growth and economic development patterns;
- (6) Enhance the integration and connectivity of the transportation system, across and between modes, for people and freight;
- (7) Promote efficient system management and operation;
- (8) Emphasize the preservation of the existing transportation system;
- (9) Improve the resiliency and reliability of the transportation system and reduce or mitigate stormwater impacts of surface transportation; and
- (10) Enhance travel and tourism.

(c) Consideration of the planning factors in paragraph (b) of this section shall be reflected, as appropriate, in the metropolitan transportation planning process. The degree of consideration and analysis of the factors should be based on the scale and complexity of many issues, including transportation system development, land use, employment, economic development, human and natural environment (including Section 4(f) properties as defined in 23 CFR 774.17), and housing and community development.

The tasks in this UPWP all contribute to the implementation of the strategies or goals described in these planning factors, and all have a positive impact on them. Some of the specific examples of these tasks and how they impact these planning factors follows. For more specifics regarding the impacts of each task, please see the task descriptions which follow this section.

Planning Factor	UPWP Task
(1) Support the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency	3.31 Infrastructure & Financing Planning 3.51 Performance-based Planning & Programming 4.23 Every Day Counts 4.30 Smart Communities
(2) Increase the safety of the transportation system for motorized and non-motorized users	4.60 Capital Coexist 4.67 Bike/Pedestrian Planning 6.16.1 Safety Planning

<p>(3) Increase the security of the transportation system for motorized and non-motorized users</p>	<p>3.21 Energy, Climate Change Initiative, Air Quality and Environment 3.31 Infrastructure & Financing Planning 6.16.2 Security Planning</p>
<p>(4) Increase accessibility and mobility of people and freight</p>	<p>4.21 Freight Planning 6.12 Human Service Agency Transportation 6.14 Regional Travel Demand Management</p>
<p>(5) Protect and enhance the environment, promote energy conservation, improve the quality of life, and promote consistency between transportation improvements and State and local planned growth and economic development patterns</p>	<p>1.66 Environmental Justice Compliance, Title VI, and DBE 3.21 Energy, Climate Change Initiative, Air Quality and Environment 3.41 New Visions and RTP Refinement</p>
<p>(6) Enhance the integration and connectivity of the transportation system, across and between modes, for people and freight</p>	<p>3.22 Regional Operations and Congestion Management 3.31 Infrastructure & Financing Planning 3.41 New Visions and RTP Refinement 6.13 Transit Planning</p>
<p>(7) Promote efficient system management and operation</p>	<p>2.25 Data Collection 3.11 STEP Model Development and Maintenance 3.22 Regional Operations and Congestion Management 4.17 Complete Streets/Arterial Management</p>
<p>(8) Emphasize the preservation of the existing transportation system</p>	<p>2.30 Highway Condition Inventory 3.31 Infrastructure & Financing Planning 3.51 Performance-based Planning & Programming</p>
<p>(9) Improve the resiliency and reliability of the transportation system and reduce or mitigate stormwater impacts of surface transportation</p>	<p>3.21 Energy, Climate Change Initiative, Air Quality and Environment 3.31 Infrastructure & Financing Planning 6.16.2 Security Planning</p>
<p>(10) Enhance travel and tourism</p>	<p>3.41 New Visions and RTP Refinement 4.67 Bike/Pedestrian Planning 4.68 Capital District Trails Plan Implementation</p>

Highlights of the 2020-22 Program

The full UPWP agenda continues to be ambitious and demanding, particularly with the development of an updated LRTP, and many new staff tasks and studies. Highlights of the draft 2020-22 program are summarized below:

New Visions Long-Range Regional Transportation Plan

The New Visions 2050 Plan is the Long-Range Regional Transportation Plan (LRTP) which will be adopted in September 2020. In the meantime between now and September we will follow an aggressive public outreach strategy, which includes online surveys and comments, social media, public meetings, small group meetings, and member education. The New Visions 2050 Plan included planning and investment principles and recommendations in each of the following areas:

- Quality of Life:
 - Land Use
 - Economic Development
 - Regional Equity
 - Big Idea/Big Ticket Initiatives
- Bicycle and Pedestrian
- Complete Streets
- Environment and Technology
- Financial Plan
- Freight
- Human Services Coordinated Plan
- Infrastructure
- Mobility/Demand Management
- Operations and Congestion Management
- Performance Measures
- Public Participation Plan
- Safety and Security
- Transit

The format of this new New Visions 2050 has been changed significantly in order to make it more readable for our readers. The discussion of the above programs is summarized, and the details which were part of the New Visions 2040 document are found in the preceding appendices. The result is a document which we think focuses the reader on the critical considerations and recommendations of each program, and which is about 66% smaller than New Visions 2040.

At the same time major improvements to New Visions 2050 include more detailed discussions of Transportation Mobility, Equity, Congestion Management, and Public Participation. Each of these programs now play a more important role in the transportation planning process.

This new Plan will continue to support these important components of the New Visions 2040 Plan and further develop and explore emerging opportunities. For example, the Plan update will more comprehensively consider changing trends in VMT growth, ride hailing, travel demand management, and the potential impacts of autonomous vehicles on travel patterns; and develop policies that consider these issues and potential implications for investments.

This new Plan will more comprehensively incorporate performance measures. New federal regulations require that the Plan incorporate performance measures for safety, reliability, freight, transit asset

management, and bridge and pavement condition. CDTC will meet these requirements and also seeks to go beyond the required treatment of performance measures to integrate other performance measures already included in the New Visions Plan: community quality of life, economic development impacts, greenhouse gas emissions, energy consumption, emissions that contribute to ozone pollution, pedestrian access, bicycle access, transit access, transit service, and complete streets measures. In addition to federally required performance targets, CDTC will develop realistic and aspirational targets that will help decision makers monitor and achieve the goals of New Visions.

Lastly instead of moving on to new tasks after the Plan's adoption in September, this new Plan includes new marketing, implementation, and management efforts. Staff will work with our large regional agencies, small neighborhood groups, and everyone in between to ensure that our residents know how we should plan for the future of transportation in the Capital Region.

ADA Transition Plan Assistance

Task 1.64 Americans with Disabilities Act (ADA) Compliance – On an annual basis, CDTC will work with a limited number of municipalities to fully update their self-evaluation and transition plans, including condition of pedestrian infrastructure. The municipalities will be selected on a competitive basis, and CDTC will solicit consultant assistance for this effort and hold the consultant contract on behalf of participating municipalities. The consultant contract amount is \$75,000 over two years.

Local Bridge Preservation Report

Task 3.31 Infrastructure & Financial Planning - CDTC delivered our first Local Bridge Preservation report on June 1, 2015. Because most municipalities do not have bridge engineering capabilities on staff, the report examined the condition of local bridges, selected the best preservation (repair/rehabilitation) treatments, and estimated the cost of these treatments. With this information, municipalities were then able to develop bridge preservation projects which could be submitted for competitive funding (BridgeNY program). This 2015 analysis will be completely updated under a modified scope of services using an expert bridge consultant. The consultant contract amount is \$105,000 over two years.

Regional Traffic Signal Timing Program

Task 3.32 Regional Signal Timing Program – Traffic signal retiming is a low-cost method of improving safety and operations at signalized intersections. Retiming is also an effective means of reducing fuel consumption and associated emissions. Retiming is also important for pedestrian safety, as safe crossing intervals may not be present at many intersections. According to the FHWA Traffic Signal Timing Manual, the benefit-cost ratio of traffic signal retiming may be greater than 40:1 due to the low cost of implementation.

CDTC will create a formal Regional Traffic Signal Timing Program with the following scope:

- Work with local public agencies to conduct a region-wide screening of signalized intersections to identify those with the greatest potential for timing improvements.
- Analyze travel time data, conduct field visits, and identify developments that may impact local travel demand.
- Select signals to retime via an open-solicitation competitive process.
- Hire a traffic engineering firm to conduct turning movement counts, develop optimized timings, and field-implement the timing directives. The consultant amount is \$110,000 over two years.
- Conduct before-and-after studies to quantify the benefit of the retiming.

- Establishing a proactive monitoring system, through which signals with recent changes in travel demand can be flagged for retiming.

Freight and Land Use Study

Task 4.21 Freight Planning – CDTC staff will also initiate the development of a Freight and Land Use Study in the Town of Rotterdam and the Town of Princetown, near NY 7 and NY 337/Burdeck St. NY 7 is an important route for regional freight movement with major freight facilities, such as the Price Chopper/Market 32 Distribution Center and the Rotterdam Industrial Park, located nearby. The corridor is currently experiencing development pressure from freight-intensive land uses.

Multi-use Trail Feasibility Study

Task 4.68 Capital District Trails Plan Implementation – CDTC will solicit on a competitive basis for consultant-led feasibility studies related to the recommendations in the 2019 Capital District Trails Plan. The recently completed Trails Plan includes a prioritized list of potential trails projects, which it recommends for construction. Feasibility studies will develop viable alternative alignments, cost estimates, timelines, etc. and will provide project sponsors with the information they need to apply for future funding. Sponsors will be required to provide a 25% cash match and CDTC will provide up to \$75,000 in PL funds. The consultant contract is \$100,000 over two years.

Bus Lane Feasibility Study

Task 6.13 Transit Planning – CDTC will partner with CDTA on a consultant-led Bus Lane Feasibility Study. One of the next steps for improving bus level of service is to determine if dedicated, bus-only lanes are feasible in our area. To date there are no such lanes in our region, though one is planned for the Washington-Western BRT line in the NYS Harriman State Office Campus and the UAlbany Campus in Albany. The consultant contract amount is \$100,000 over two years.

Statewide MPO Association Support

The CDTC successfully participates with the thirteen other New York MPOs in a statewide association. The association facilitates dialogue among MPOs and State/Federal agencies through regular meetings of MPO Directors, periodic technical meetings among MPO staff, and through conferences and training. The association also sponsors a biennial summer conference for MPO staffs. The Policy Boards of all fourteen MPOs authorized the use of pooled funds to contract with an individual or planning firm to provide staff support. Staff support is currently being provided by T.Y. LIN International LLC.

A major NYSAMPO accomplishment over the last four years includes the convening of several technical working groups for Safety, Bike/Pedestrian, Climate Change, Transit, Travel Demand Modeling, GIS, Freight, and Transportation Systems Management & Operations, which:

- Develop initiatives intended to improve MPO performance and planning
- Hold monthly or quarterly teleconferences with at least one in-person meeting each year
- Share best practices related to their subject matter both within and outside New York State
- Review and comment on related federal rulemakings related to MAP-21 and the FAST Act
- Coordinate with NYSDOT and its partners on data quality and accessibility
- Participate in the development and update of statewide plans
- Strengthen partnerships with other stakeholders within New York State
- Partner with each other on topics of mutual interest
- Provide training to MPO staff and member agencies/organizations

- Develop and promote related educational materials.

CDTC staff participates in each working group and chairs the Safety, Travel Demand Modeling, Freight, and Climate Change working groups.

PROPOSED 2020-21 UPWP BUDGET

The full UPWP agenda is ambitious and demanding. CDTC’s ability to pursue the proposed agenda is a result of the Administrative & Finance Standing Subcommittee’s confidence in the staff’s management and technical abilities, their stewardship of CDTC’s financial resources and contractual commitments, and their commitment to a stable staffing structure. The budget for the first year (2020-21) of the two-year 2020-22 UPWP has increased slightly from last year to reflect the increase in consultant services. The proposed CDTC staff budget for 2020-21 is shown in Appendix A: Financial Tables.

The two primary sources of federal planning funds supporting UPWP activities are FHWA’s Section 104(f) Metropolitan Planning (PL) funds and FTA’s Section 5303 Metropolitan Planning Program (MPP) funds. The federal funds in the 2020-21 UPWP from these programs are \$2,330,285 and \$355,052 respectively for 2020-21. CDTC staff activity is primarily matched by NYSDOT in-kind services that exceed \$500,000. The 2020 UPWP contains about \$931,375 in CDTC administered consultant contracts along with \$244,000 pass through funds to support CDRPC efforts. Table 1 shows the proposed staff budget for 2020-21, and includes all federal, state, and local funding.

Proposed 2020-21 UPWP Budget

Fund Source	Federal	State	Local	Total
FHWA Metropolitan Planning (PL)	2,330,285	397,940	122,647	2,850,872
STP Funded Tasks	108,000	27,000	-	135,000
2020-21 FTA Section 5303	362,815	68,028	22,676	453,519
2019-20 FTA Section 5303	50,000	9,375	3,125	62,500
FHWA SPR	80,000	20,000	-	100,000
Local In-Kind & Cash contributions	-	-	199,583	199,583
NY-80-0030 SCI	458,590	114,648	-	573,238
USDOE	94,000	-	-	94,000
Total Contract Value	3,483,690	636,991	348,031	4,468,712

FHWA PL CARRYOVER EXPENDITURE PLAN

CDTC staff recognized several years ago that CDTC’s PL carryover balance was significant. Like many other MPOs CDTC’s strategy for many years was to build up a fund balance so that CDTC could weather any unforeseen circumstances which may arise, such as failure of the U.S. Congress to approve a multi-year funding bill, a rescission of federal funding, or a change in a hosting agreement. In both the private sector and public sector, and even in personal finances, this “contingency” fund is reasonable and is often called a “rainy day fund.”

MPOs have 4 basic expenditures: Personnel costs, overhead costs, consultant costs, and pass-through costs. In order to spend down a significant carryover balance, a MPO must increase spending in one or more of these expense categories.

1. Personnel costs. CDTC's personnel costs have not increased significantly in years. Salary raises are not excessive, and the number of staff has not increased. In fact, due to senior staff retiring and the lower salaries of junior replacement staff, our salary costs have decreased recently. Hiring more staff is definitely not advisable, especially if the carryover balance is expended in a few years and that staff needs to be terminated.
2. Overhead costs. The overhead costs of MPOs are, by their very nature, kept lower than other organizations. The MPO hosting agreements are meant to reduce administrative staff and costs by relying on the host's resources to provide these services. We rely on our host for financial, personnel, auditing, legal, and purchasing services. We don't maintain a fleet of vehicles, and we don't have any special office needs. Increasing overhead costs is not a reasonable option for spending carryover balance.
3. Consultant costs. CDTC does have consultant contracts to provide specific services which staff cannot provide such as engineering and marketing, and to provide additional planning resources when needed. Most of our consultant contracts provide either services for our Linkage Program studies or for our more comprehensive regional studies, such as our Regional Freight, Regional Safety, and Regional Bicycle/Pedestrian studies. Consultant contracts are limited by the MPO host agency's ability and willingness to deal with the cash flow issue. In most cases (including CDTC) the host agency pays for monthly expenses, the MPO submits reimbursement requests to the NYSDOT, and several months later the host receives the reimbursement. At CDTC we are fortunate that our host agency, CDTA (our regional transit agency), has the financial ability and the willingness to deal with these issues. That said, every host agency has a limit, and increasing consultant costs can decrease a carryover balance over the long-term, and slowly and over a period of time.
4. Pass-through costs. Some MPOs pass MPO funding directly onto their members. This method is "fraught with danger" as members become very reliant on and competitive for these funds. There are never enough MPO funds to fund all members, and like MPO capital funding, members can rarely agree on who receives them and the amounts. For its entire history, CDTC has only passed funds to our fellow regional planning agency and member, the Capital District Regional Planning Commission.

Over the last 7 years, CDTC has averaged an annual fund balance of approximately -\$155,000. In other words, we have spent \$155,000 more than our actual revenue. This spending has reduced our carryover balance over these 7 years by approximately \$1,000,000, so that our 2017-18 estimated carryover balance was approximately \$785,000. Our 2019-20 estimated carryover balance is approximately \$781,000. This proposed 2020-22 UPWP increases consultant spending by approximately \$175,000 per year. We propose to continue spending at this rate, so that we would spend down our carryover balance in approximately 4.5 years.

CONSULTANT ADMINISTRATION & MANAGEMENT

The CDTC staff manages a large number of consultant contracts, most of which are for assistance with our Linkage Program studies and our regional plan development. For Linkage Program studies, the staff crafts study scopes in collaboration with communities, guides advisory committees, and oversees consultant activity. CDTC has streamlined the process for consultant selection by developing detailed

scopes-of-services before soliciting consultant interest by publishing a Request for Expressions of Interest (REI) instead of a general Request for Proposals (RFP), thereby minimizing the amount of up-front consultant effort. CDTC follows a “fair access” policy that provides work to a wide range of firms whenever there is not a compelling reason to select a particular firm. In order to obtain the widest audience, all of our consultant requests are advertised in the New York State Contract Reporter. More than 20 different firms have been selected in the past several years, broadening the region’s exposure to creative consulting firms.

For our larger consultant contracts such as those for our regional plans, CDTC still publishes Requests for Proposals (RFPs). The same policies as described above are followed to allow for a “fair access” policy.

CONSISTENCY WITH FEDERAL LEGISLATIVE REQUIREMENTS

Fixing America’s Surface Transportation Act (or the FAST Act), the successor to the Moving Ahead for Progress in the 21st Century (MAP-21), defines ten specific planning factors that must be considered when developing transportation plans and programs. All of those factors are addressed through various tasks in this UPWP.

MAP-21 also established performance-based planning as an integral part of the planning process. Performance-based planning refers to practices that apply system level, data driven performance management principles to transportation policy and investment decisions. MAP-21 requires that CDTC establish performance measures and targets that track progress toward attainment of critical outcomes. Information about CDTC’s work with performance measures is described in the New Visions Plan. CDTC has been practicing performance-based planning since the adoption of the first generation New Visions Plan in 1997.

In addition to the planning factors required by MAP-21, CDTC considered other federal and State initiatives relevant to the metropolitan planning process in the development of this UPWP. Tasks are included that address: climate change; sustainability & livability; operations planning; linking planning and the environment; freight delivery; and smart transportation technology.

The 2016 Federal Certification Review certified CDTC’s compliance with Title VI of the Civil Rights Act of 1964, the Americans with Disabilities Act (ADA), Executive Order 12898 (Environmental Justice), and other federal non-discrimination statutes and regulations.

UPWP TASK DESCRIPTIONS

The UPWP narrative summarizes tasks which have been initiated, tasks which are ongoing, and tasks which are expected to be completed in the 2020-22 period. In the summaries of the completed tasks, the key findings of the study are highlighted and a link is included for the draft or final report that resulted from the study. The activities of new and ongoing tasks are updated biennially in CDTC’s Progress Reports and discussed verbally at CDTC’s Planning Committee Meetings.

Each task listed in the UPWP is undertaken by either the CDTC staff, CDTC’s member agencies, or by consultants. The 2020-22 UPWP also includes resources for staff support for the New York State Association of Metropolitan Planning Organizations (NYSAMPO) activities. The task descriptions in this UPWP include work over the 2 year period of this 2020-21 UPWP. However the tables below these

descriptions and the tables following the last task only include funding for the first year (2020-21). The funding for the second year (2021-22) is assumed to be the same as the first year, unless an administrative change is made before the beginning of the second year.

For electronic versions of the UPWP, click the [imbedded link](#) or go to <http://www.cdtcmpo.org/about/unified-planning-work-program> and you will be directed to the corresponding report.

If you are interested in viewing a Linkage Program final report, once on the CDTC main page, select the *linkage program* tab in the middle of the home page, and on the following screen select *final reports*. There is also an interactive map on this page, if you prefer to search for linkage studies in certain areas within our region.

2020-22 UNIFIED PLANNING WORK PROGRAM TASK DESCRIPTIONS

44.21.00 PROGRAM SUPPORT & ADMINISTRATION

Task 1.51 Committee Activities

This task covers CDTC meetings, maintenance of committee membership and structure, personnel management, and other organizational activities. Resources are budgeted to carry out the necessary administrative activities related to staff supervision and development and the logistical needs of various CDTC committees. The staff will continue to monitor the progress of MAP-21, the FAST Act, and their associated federal rulemakings in order to proactively address any issues and opportunities related to the implementation of both federal laws.

CDTC Resources	Consultant	Local Cash	Local In-Kind	Local Total	Other (See Tables)	Total
\$80,000						\$80,000

Task 1.61 Certification Review

The Federal Highway Administration (FHWA) and Federal Transit Administration (FTA) conducted a federally required quadrennial review of the metropolitan planning process carried out by CDTC in March 2016.

Their October 2016 Certification Review Report included the following corrective actions:

- The 2016-2021 Transportation Improvement Program (TIP) does not demonstrate fiscal constraint by year.
- The Long Range Transportation Plan (LRTP) Financial Plan must clearly identify revenue sources and contain the forecast of revenue and cost estimates using identified inflation rates.

CDTC's response of March 8, 2017 to the TIP Fiscal Constraint corrective action was approved by FHWA and FTA on March 31, 2017. CDTC's responses of June 6, 2017, June 28, 2017, October 27, 2017, December 1, 2017, and January 10, 2018 to the LRTP Financial Plan corrective action are being reviewed by FHWA and FTA.

In accordance with MAP-21 requirements, CDTC's next self-certification will occur in June 2019 as part of the adoption of our 2019-2024 TIP.

The next formal in-person review is expected sometime in March 2020.

CDTC Resources	Consultant	Local Cash	Local In-Kind	Local Total	Other (See Tables)	Total
\$5,000						\$5,000

Task 1.64 Americans with Disabilities Act (ADA) Compliance

In response to municipal interest in moving forward with ADA transition planning and at the direction of the Planning Committee, CDTC formed an ADA Transition Plan Working Group in 2015. Participants include NYSDOT, CDTA, the Cities of Albany, Cohoes, Rensselaer, Saratoga Springs, Schenectady, Troy, and Watervliet, the Towns of Bethlehem and Halfmoon, and FHWA. In early 2018, staff completed an inventory of all sidewalks in the 4-county Capital Region on all roadways, including local roads, and distributed data packages with that information to each of the region’s villages, towns, and cities. This information can serve as a starting point for future development of full pedestrian facility condition inventories to be completed by jurisdictions as part of their ADA Transition Plans.

The group will continue to serve as a forum for information sharing and learning about ADA requirements primarily related to pedestrian facilities in the public right of way. Staff will continue to share new resources from the FHWA, NYSDOT, and local municipalities to assist in the development of ADA Transition Plans. To this end, staff will continue to update a running tally of regional progress toward creating transition plans. In addition, staff will research and compile relevant local laws and practices to encourage inter-municipal cooperation and understanding. Staff will continue to organize the working group, schedule meetings, provide research, and explore best practices and other tasks related to issues encountered in development of ADA transition plans and the pedestrian right of way.

On an annual basis, CDTC will work with a limited number of municipalities to fully update their self-evaluation and transition plans, including condition of pedestrian infrastructure. CDTC will solicit consultant assistance for this effort and hold the consultant contract on behalf of participating municipalities. The consultant contract amount is \$75,000 over two years.

Staff will continue to monitor CDTC’s policies, practices, and procedures including publications, public meetings, the website, and the office space to ensure ADA compliance.

Municipal Self-Evaluation and Transition Plans

Beginning Date	Percentage Completed	End Date
April 2020	0%	March 2022

CDTC Resources	Consultant	Local Cash	Local In-Kind	Local Total	Other (See Tables)	Total
\$35,000	\$37,500		\$4,000	\$4,000		\$76,500

Task 1.65 Unified Planning Work Program (UPWP) Development

CDTC’s UPWP describes all metropolitan transportation and air quality planning activities anticipated within a two-year period, regardless of funding source. The UPWP is developed in cooperation with NYSDOT and CDTA, and other members. Work under this task involves preparation of the UPWP document, negotiation of project funding, monitoring of program progress, and preparation and submittal of required applications and contract documents.

The UPWP will be amended to meet the requirements in the New York State Department of Transportation UPWP call letter of November 5, 2019. The requirements include more scheduling and progress information for tasks which are not regular, ongoing tasks such as planning studies, a plan to expend any FHWA PL carryover balance, and a format change to the FTA Activity Line Item codes. Also included is a requirement to address the 10 planning factors found in the FAST Act.

The new 2020-22 UPWP will be submitted to our Policy Board for their approval in March 2020. We will conduct an administrative update of this UPWP for the 2021-22 program.

CDTC Resources	Consultant	Local Cash	Local In-Kind	Local Total	Other (See Tables)	Total
\$10,000						\$10,000

Task 1.66 Environmental Justice, Title VI, and Disadvantaged Business Enterprise

CDTC is in full compliance with Title VI and Environmental Justice (EJ) requirements, which continue to be critical components of CDTC’s activities. This is reflected in CDTC’s work program, publications, public involvement efforts, and general way of doing business. We will conduct a Title VI/EJ analysis after each TIP update. We will continue to evaluate our process and timing for further conducting Title VI/Environmental Justice analyses and ensure that public participation efforts target traditionally underserved populations. In addition, staff will continue to demonstrate success in DBE contracting and purchasing.

CDTC’s Equity Advisory Committee meets bimonthly to advise CDTC on its funding program and planning studies as related to equity. It makes certain that CDTC takes reasonable steps to secure access to opportunities that ensure no person is denied benefits of CDTC’s planning process on the basis of minority and/or low income status, and to identify and address disproportionately high and adverse human health or environmental effects of CDTC’s programs, policies, and activities on minority and low-income populations. It accomplishes this in part by promoting collaborative problem solving on issues related to Environmental Justice and Title VI, and providing input on the most effective methods to engage and respond to Environmental Justice and Title VI populations. At each meeting staff provides updates on projects being implemented in Environmental Justice areas within CDTC’s planning area.

Activities are determined by the Advisory Committee but include recommendations on funding programs including the TIP and UPWP, and review of policies and planning studies, including Linkage Studies. We seek opportunities to collaboratively solve challenging issues with all effected parties. A Transportation and Poverty Analysis looking at the geographic relationship between poverty and transportation access in the Capital Region is underway and expected to be completed during 2020-2022.

Beginning Date	Percentage Completed	End Date
April 2020	0%	March 2021

CDTC Resources	Consultant	Local Cash	Local In-Kind	Local Total	Other (See Tables)	Total
\$35,000	\$15,000					\$50,000

Task 1.67 Prospectus: Continuing Operations Plan & Operating Procedures

The basic documentation defining the roles and responsibilities of CDTC member agencies is its five-year Continuing Operations Plan, called the *Prospectus*. The portion of the document that included a description of CDTC’s planning approach and agency roles and responsibilities was approved by the Planning Committee and Policy Board in 2011. A new MPO planning agreement was also approved. The continuing agreement between CDTA and NYSDOT regarding hosting arrangements was also

updated and approved, extending that agreement through 2020. This year an update of the 2011 plan was completed which will be submitted for Policy Board approval in June 2020.

Beginning Date	Percentage Completed	End Date
April 2018	95%	June 2020

CDTC Resources	Consultant	Local Share	Other (See Tables)	Total Effort
\$6,000				\$6,000

Task 1.68 NYS MPO Administration

The CDTC successfully participates with the thirteen other New York MPOs in a Statewide Association. The Association facilitates dialogue among MPOs and State and federal agencies through regular meetings of MPO Directors, periodic technical meetings among MPO staff, and through conferences and training. The Association engages more formally with NYSDOT on certain issues such as the development of formulas for distribution of federal planning funds and TIP funding allocations. The Association is also the focal point for the Shared Cost Initiative program – collaborative statewide planning efforts that use pooled State (FHWA SPR) and Federal (FHWA PL and FTA MPP) funds to support planning activities of a mutually beneficial nature. In order to assist the Association, the Policy Committees of all fourteen MPOs authorize the use of pooled funds to contract with an individual or planning firm to provide staff support. CDTC manages this statewide contract, which is currently provided by T.Y. Lin International.

This project has been critical in supporting the on-going coordination of the planning programs of New York’s fourteen MPOs, the on-going collaboration of the metropolitan planning organizations which are responsible for meeting federal requirements, and the on-going coordination of metropolitan and statewide planning programs. The convening and facilitation of NYSAMPO ensures that the identification of opportunities, issues, and associated action items is accomplished as thoroughly as possible and in a manner that would not occur absent a cooperative forum for the 14 MPOs and NYSDOT.

The proposed staff support budget will provide sufficient resources to manage the day-to-day operational needs of the Association, organize training opportunities, and coordinate with other state and national associations.

The consultant budget for this task has been set at \$250,000 using \$100,000 in SPR funding and \$150,000 in pooled MPO funds.

Beginning Date	Percentage Completed	End Date
April 2020	0%	March 2021

CDTC Resources	Consultant	Local Cash	Local In-Kind	Local Total	Other (See Tables)	Total
	\$250,000					\$250,000

Task 1.69 NYSMPO/AMPO/TRB Committees and Working Groups

CDTC’s staff serves on committees and working groups related to the Association of Metropolitan Planning Organizations (AMPO) and the New York State Association of Metropolitan Planning Organizations (NYSAMPO). These opportunities provide educational and networking benefits, allow CDTC staff to have input in the development of national and regional transportation policy and assist in developing CDTC planning and committee processes. In 2020, CDTC’s Executive Director will be serving on the AMPO Board of Directors and serves on the NYSAMPO Executive Committee. This task also supports CDTC staff involvement with the Transportation Research Board (TRB), including TRB committees and the Annual Meeting.

NYSAMPO has eight technical working groups related to Bicycle & Pedestrian, Climate Change, Freight, GIS, Safety, Transit, Transportation Systems Management & Operations and Travel Demand Modeling issues. The working groups address topics that MPOs may need to consider in their respective metropolitan transportation planning process.

The program area managers in the fourteen MPOs, assisted by a NYSAMPO staff support consultant, serve on the working groups. CDTC staff Chair the Climate Change, Freight and Safety Working Groups and directly participate on other working groups.

CDTC Resources	Consultant	Local Cash	Local In-Kind	Local Total	Other (See Tables)	Total
\$75,000						\$75,000

Task 1.70 Public Participation

CDTC has a long history of public involvement in its plans and programs. CDTC’s Public Participation Plan was designed as a resource for CDTC’s committees, staff, and general public to better understand CDTC’s overall public participation strategy and procedures, as well as the federal mandates that inform CDTC’s public outreach efforts.

CDTC is committed to improving its outreach process. In 2020-21, staff will:

- Continue to produce the newsletter, *InMotion*.
- Consider ways to improve newsletter distribution methods.
- Maintain the recently redesigned CDTC website and continue to add new content
- Continue social media outreach.
- Continue public outreach efforts for the *New Visions 2050*, CDTC’s regional transportation plan. This is also supported by Task 3.4 New Visions & RTP Refinement.
- Review successful strategies that have been used to engage the public regionally and elsewhere and compile case studies to and guidance to CDTC staff and members on best practice recommendations, with an emphasis on engaging Environmental Justice, low-income, and other underserved populations.

- Update Public Participation Plan
- Perform an annual social media audit to measure online engagement
- Develop video content, graphics and other visualizations to aid public outreach efforts.
- Consider ways to ensure meaningful access for persons having limited English proficiency.
- Develop a Citizen Planner Training Academy
- Develop public-facing materials for all major CDTC products (TIP, UPWP, & LRTP)

CDTC Resources	Consultant	Local Cash	Local In-Kind	Local Total	Other (See Tables)	Total
\$40,000						\$40,000

Task 1.71 Provision of Community Services

CDTC staff provides traffic data and other limited technical assistance to members, local agencies, businesses, the development community, engineering and planning consultants, students, and various community groups through this task.

Staff will entertain county and municipal requests for information and assistance, trip generation and distribution analysis for development, review of traffic impact studies, and small scale planning and traffic engineering studies designed to assess the feasibility and impact of complete street treatments, access management strategies, street network connectivity, pedestrian improvements, and any other action that would promote implementation of New Visions priorities. These should be simple efforts with defined timeline and scope which require limited staff resources.

Products would be limited to meetings, letters, memoranda, and very brief reports.

CDTC Resources	Consultant	Local Cash	Local In-Kind	Local Total	Other (See Tables)	Total
\$45,513					\$5,000	\$50,513

Task 1.73 CDTC/CDRPC Technical Assistance Program

The Community Planning Technical Assistance Program is jointly managed by CDTC and CDRPC and is intended to offer staff time and expertise to local governments undertaking small scale community planning initiatives. Proposed initiatives are selected through an annual solicitation and must be small in scale and scope, result in a defined product, and in some way relate to the principles of CDTC’s regional transportation plan.

The types of projects eligible for this program include:

- Guidance on comprehensive/neighborhood planning and zoning
- Data collection and analysis
- Research into a planning issue
- Public input

- Community visioning, surveys and mapping
- Transportation safety and operations planning such as:
 - Crash data analysis
 - Road safety assessments
 - Traffic signal operational analysis
 - Intersection analysis
 - Before and after studies of capital projects
 - Recommendation and scoping of ITS strategies.

CDTC Resources	Consultant	Local Cash	Local In-Kind	Local Total	Other (See Tables)	Total
\$52,212		\$5,000	\$10,000	\$15,000	\$47,788	\$115,000

Task 1.75 Linkage Program Administration and Technical Support

CDTC’s Community and Transportation Linkage Planning Program (the Linkage Program) was created to implement the principles of CDTC’s regional transportation plan. The Linkage Program provides integrated land use and transportation planning assistance to local governments through a consultant or through CDTC staff support. Planning initiatives are identified through an annual solicitation and are listed as individual tasks in the UPWP.

This task supports CDTC and CDRPC staff for the following:

- Annual solicitation and evaluation process to select new planning initiatives.
- Maintenance and implementation of CDTC’s Linkage Program Project Administration Guidelines.
- Maintenance of CDTC’s Linkage Program Interactive Map and project database.
- Coordinate quarterly Community Planner Forum meetings.
- Attend meetings, webinars, training and conferences

New in 2020: CDTC’s Linkage Program will turn 20 years old in 2020 and will be evaluated as to its success and impact on the region. Testimonials will be gathered, a report will be created and social media, CDTC newsletter articles and conference presentations will further highlight the significance of the Linkage Program. This, review along with the update of CDTC’s Regional Transportation Plan to New Visions 2050 may lead to adjusted eligible initiatives in future solicitations.

CDTC Resources	Consultant	Local Cash	Local In-Kind	Local Total	Other (See Tables)	Total
\$40,000					\$16,926	\$56,926

44.22.00 GENERAL DEVELOPMENT & COMPREHENSIVE PLANNING

Task 2.25 Collection of Transportation Data

Data collection is a critical component of CDTC’s work program and is an ongoing need. A consultant on retainer to CDTC will assist with data collection as will student interns. The following lists examples of data that need to be collected. Sites will be selected using criteria developed by CDTC staff.

- Traffic volume (AADT) counts
- Intersection turn movement counts
- Vehicle classification counts
- Vehicle speed/delay studies
- Pedestrian and bicycle counts
- Pedestrian and bicycle infrastructure
- Trail user counts
- Park and ride lot utilization
- Roadway and intersection characteristics

This task complements Task 2.29 Geographic Information Systems (GIS), Task 3.02 Safety Planning, Task 3.22 Regional Operations/Congestion Management and Task 4.67 Bicycle & Pedestrian Planning.

Beginning Date	Percentage Completed	End Date
April 2020	0%	March 2022

CDTC Resources	Consultant	Local Cash	Local In-Kind	Local Total	Other (See Tables)	Total
\$25,000	\$50,000					\$75,000

Task 2.28 Census

Work under this task is a joint CDTC/CDRPC effort.

CDTC will perform work as needed related to the 2020 Decennial Census.

CDRPC will work with CDTC to prepare customized data sets including updating the community indicators, provide pages and other data sets using American Community Survey (ACS) and decennial census data. Annual updates will be made as data sets are released by the Census Bureau. Additional technical assistance is anticipated related to analysis of 2020 decennial census data.

After the 2020 Census is released, CDRPC will begin to produce population and household data at the traffic analysis zone geography as well as population and household projections in ten-year increments by minor civil division to the year 2050. Work will also begin to prepare for the creation of employment projections by traffic analysis zone.

In addition, CDRPC will continue to develop and enhance the Capital Region Indicators website <http://captialregionindicators.org/> and provide data technical assistance to communities in the region. Each community profile page includes roughly 50 demographic and other indicators. Profiles pages feature data visualizations and ability to compare data overtime and across geographies. In addition, the platform features a mapping interface that allows users to explore data geographically down to the census tract and block group levels making current data products more accessible and useful for CDTC, communities and stakeholders throughout the region.

Beginning Date	Percentage Completed	End Date
April 2020	0%	March 2021

CDTC Resources	Consultant	Local Cash	Local In-Kind	Local Total	Other (See Tables)	Total
\$20,000					\$90,988	\$110,988

*\$20,000 of the \$90,988 is for consultant fees for updates and hosting/maintenance of the Capital Region Indicators website.

Task 2.29 Geographic Information Systems (GIS)

Work under this task is a joint CDTC/CDRPC effort.

GIS is an important planning tool that provides benefits to CDTC, its member agencies, and others by supporting state, regional, county, and local planning projects. GIS is the integration of hardware, software, and data used to collect, store, analyze, and display spatially referenced information.

New technical advances and methodologies to provide geospatial information in an efficient manner for use in various technical projects by CDTC, its member agencies, and others will continue to be reviewed by CDTC and CDRPC.

CDTC will continue to use geospatial technology in data collection, data analysis and map production. GIS and GPS technology will continue to be utilized to collect new data and enhance existing geographic datasets and mapping products, predominantly, but not limited to trail mapping, bicycle and pedestrian infrastructure and highway condition scoring. Over the next 2 years CDTC will likely be migrating our GIS software platform from ArcMap to ArcGIS Pro. This migration will likely require additional training and a considerable amount of staff time investment.

CDTC will continue to maintain and update its' existing interactive online GIS mapping applications. New applications will be developed if warranted and feasible within the constraints of CDTC's staffing, data, and software resources.

CDRPC will continue to process, manipulate and map information specific to the Capital Region and the communities within its jurisdiction. New map and attribute data will continue to be acquired and/or updated as it becomes available and map products will continue to be posted on CDRPC's website (cdrpc.org) for public consumption.

CDRPC will work in cooperation with the CDTC and CDTA staffs to coordinate data sharing, including the ACS census data, and to prepare customized maps to meet the needs of each agency without duplicating efforts. GIS mapping tasks will also include looking at regional growth, sustainability and renewable energy, and assisting CDTC with additional mapping and GIS services as needed.

In conjunction with VHB, CDRPC will continue to host/maintain, update and add user- suggested improvements to the application during the 2020-21 UPWP. In addition, CDRPC will be building out the interactive mapping features of the Capital Region Indicators website under Task 2.28.

CDRPC will continue to analyze and promote the smart growth and sustainability elements of the New Visions Regional Transportation Plan and the Capital District Sustainability Plan.

Beginning Date		Percentage Completed			End Date	
April 2020		0%			March 2021	
CDTC Resources	Consultant	Local Cash	Local In-Kind	Local Total	Other (See Tables)	Total
\$85,000					\$72,820	\$157,820

*\$18,000 of the \$72,820 is for consultant fees including updates and hosting/maintenance of the Census Mapping Application.

Task 2.30 Highway Condition Inventory

Both CDTC's long-range plan and capital program rely on pavement condition data that is comprehensive, reliable, and easily accessible. Staff conducts regular pavement condition surveys of Capital Region roads. The condition data collected over time has been useful in tracking changes in the condition of the region's street and highway system. Data is used to determine system level condition, calculate deterioration rates, calculate costs for system rehabilitation and repair, and to determine the effects of various repair strategies on pavement serviceability. For TIP development, the data is used to "red flag" roadway sections that are candidates for various preservation treatments or reconstruction. Continued collection of pavement condition data is critical for performance-based planning, now required by FHWA under the FAST Act.

In 2020 the 2019 Non-State Federal Aid roads condition data will be reviewed and compared to the 2018 NYSDOT pavement condition data collected for Non-State Federal Aid roads via the automated Profiler vehicle (if successfully obtained from NYSDOT). Based on these comparisons, the future of CDTC's Non-State Federal Aid biennial survey will be considered.

In 2021 the biennial survey of non-state federal aid roads will also be conducted, unless staff deems it unnecessary, now that NYSDOT has expanded their pavement scoring program to include this inventory using an automated scoring method.

All survey work will be completed by CDTC staff trained in the visual procedures developed and used by the New York State Department of Transportation, known as the Windshield Survey Method. This method rates pavements based on the frequency and severity of surface distress. All survey work will be conducted using CDTC's GIS & GPS platforms.

Staff may evaluate the need for additional data analysis, data summaries and mapping for the non-contractual, local inventories. These products will be created, if warranted and as staff time allows. This work is likely to be spread out over both years.

CDTC Resources	Consultant	Local Cash	Local In-Kind	Local Total	Other (See Tables)	Total
\$25,000						\$25,000

Task 2.30.1 Highway Condition Inventory Albany County

In 2020 and 2021 the annual survey of Albany County-owned roads (signed County Routes) will be carried out under the ongoing contract with Albany County. Contract deliverables include pavement ratings, tables, charts and maps, as well as GIS files and a final report summarizing current and historical pavement condition.

All survey work will be completed by CDTC staff trained in the visual procedures developed and used by the New York State Department of Transportation, known as the Windshield Survey Method. This method rates pavements based on the frequency and severity of surface distress. All survey work will be conducted using CDTC's GIS & GPS platforms.

CDTC Resources	Consultant	Local Cash	Local In-Kind	Local Total	Other (See Tables)	Total
					\$7,000	\$7,000

Task 2.30.2 Highway Condition Inventory City of Albany

To prepare for the biennial survey of Albany City-owned roads due in 2021, staff will continue to work with the City on any changes to the 2021 contract that may affect the required effort of CDTC staff or change the contract deliverables.

In 2021 the biennial survey of Albany City-owned roads will be carried out under the biennial contract with the City of Albany. Contract deliverables include pavement ratings, tables, charts and maps, as well as GIS files and a final report summarizing current and historical pavement condition.

All survey work will be completed by CDTC staff trained in the visual procedures developed and used by the New York State Department of Transportation, known as the Windshield Survey Method. This method rates pavements based on the frequency and severity of surface distress. All survey work will be conducted using CDTC's GIS & GPS platforms.

CDTC Resources	Consultant	Local Cash	Local In-Kind	Local Total	Other (See Tables)	Total
					\$14,440	\$14,440

44.23.01 LONG-RANGE TRANSPORTATION PLANNING (LRTP) – SYSTEM LEVEL

Task 3.11 STEP Model Development and Maintenance

CDTC continues to maintain the CDTC STEP Model (Systematic Transportation Evaluation and Planning Model), a four-county travel demand model that includes all federal-aid roads and highways in the Capital region. With consultant assistance, staff developed a transit model using the VISUM platform. The transit model includes a mode choice model which estimates transit demand and a transit network that includes all CDTC service schedules, stops, and stations. The transit network is integrated with the highway network. The transit model will be used to support transit planning and BRT planning in the region especially for scenario and/or transit planning. The transit model will need to be updated to reflect changes since its original development.

CDTC will update and enhance the STEP Model to incorporate the latest Census numbers for population and households, and will fully incorporate CDRPC forecasts of population, households, and employment, and recent traffic counts. Also, model forecasts will need to more comprehensively consider changing trends in VMT growth, ride-hailing and demand management and the potential impacts of autonomous vehicles on travel patterns. Finally, the new National Performance Management Research Data Set (NPMRDS) speed database provides the opportunity to refine the Model’s treatment of the relationship between traffic volume and congested speeds, including more explicit integration of incident related delay.

CDTC will work with NYSDOT to understand and analyze the 2016 NHTS data and its implications for the CDTC STEP model. As part of the 2019-2024 Transportation Improvement Program (TIP) update process, staff made many refinements to modeled roadway network. Staff has developed a more rapid methodology for comparing modeled traffic volumes and actual traffic volumes. The modeled traffic volumes and network are now more accurate than in previous iterations. Staff will continue to update the network and review modeled traffic volumes against actual traffic volumes. Staff will update the *Systematic Transportation Evaluation and Planning Model: the CDTC Step Model - Validation of the CDTC STEP Model*, to document the model’s development and performance.

CDTC Resources	Consultant	Local Cash	Local In-Kind	Local Total	Other (See Tables)	Total
\$50,000						\$50,000

Task 3.21 Energy, Climate Change Initiative, and Air Quality

Nationally, the debate on how to respond to the climate crisis in the U.S. while in New York State there are currently a variety of new and inter-related initiatives that will require task integration among CDTC’s state, regional and local partners. These include: the 2015 New York State Energy Plan; the NYSERDA Clean Energy Communities Program; and coordination with and assistance to CDRPC in their efforts as the region’s Climate Smart Communities Coordinator and their new role managing the Eastern NY State Community Partnership Program. Additionally, the NYS Climate Leadership and Protection Act may create new opportunities for coordination with regional and state partners.

At the core of CDTC’s activities are transportation and land use planning, both of which are of central importance to the region’s preparation to use less energy and to become more resilient and secure. Much of CDTC’s work is already directed at areas that prepare the region to respond to the climate crisis and

energy uncertainty. Reducing greenhouse gas emissions, improved air quality, energy conservation, and environmental protection are related and important goals.

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. Conformity determinations are required in these areas after February 16, 2019. 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, a conformity determination was completed for the 2019-24 TIP, with respect to the 1997 ozone NAAQS. CDTC will develop conformity determinations for the New Visions 2050 update and for any TIP updates. The next TIP update is expected to start in 2020.

In 2020-21 CDTC staff will:

- Collaborate with CDRPC, NYSDOT, NYSDEC and NYSERDA, to advance the transportation and land use elements of the Regional Sustainability Plan by promoting smart growth, electric vehicles, and other transportation and land use GHG emissions reductions options.
- New Visions 2050 continues to chart a course for environmental quality in the Capital Region. By encouraging sustainable development patterns and site design, urban reinvestment, and community based land use planning, along with transit, bicycle, and pedestrian investments, and strong participation in the Clean Communities Program and NYS sponsored grant activities related to regional GHG reduction, the plan seeks to create a sustainable transportation system. CDTC is rare among MPOs in the nation in its insistence on community-oriented, environmentally sensitive planning prior to consideration of programming projects.
- Staff will continue to work to collaborate with resource and infrastructure agencies such as the Environmental Facilities Corporation, NYSDEC and CDRPC to integrate information on best practices related to green infrastructure, low impact development, transfer of development rights/open space preservation and sustainability in land use/transportation planning activities. CDTC staff will continue to share this information with state and local partners as appropriate and to integrate it into Linkage Planning studies where applicable.
- Staff will continue to monitor the availability of GIS data resources for regional environmental features from federal and state agencies and other secondary sources. Staff will continue to map and document the environmental systems and natural and cultural resources present at the project and regional level to screen for potential impacts related to candidate projects on the TIP, in the study areas for Linkage Program planning initiatives and other regional studies.
- Staff will partner with CDRPC and NYSERDA, providing information on VMT and greenhouse gas emissions for communities on an as requested basis.

- Coordinate with CDRPC to develop a GHG Inventory for the Capital Region. CDTC will work with CDRPC to develop a tracking system, model, or formula to estimate annual GHG emissions from transportation.
- Perform/Scope a vulnerability assessment and resiliency/climate adaptation plan for vulnerable infrastructure. This is also supported by Task 6.16.2 Security Planning.
 - Phase I: Develop a vulnerability assessment tool that helps CDTC and local governments identify infrastructure vulnerable to hazards that result from the climate crisis, such as roads, bridges, and culverts.
 - Phase II: Create resiliency and climate adaptation strategies for vulnerable infrastructure.

CDTC Resources	Consultant	Local Cash	Local In-Kind	Local Total	Other (See Tables)	Total
\$25,000						\$25,000

Task 3.31 Infrastructure & Financial Planning

As part of the New Visions 2050 Long-Range Regional Plan, the Infrastructure White Paper was updated. CDTC reconvened its Infrastructure Working Group to provide advice and guidance on the development of the Infrastructure White Paper, which documents highway and bridge condition in the CDTC region and presents recommendations for maintaining state of good repair. Under this UPWP task, staff activities recommended in the white paper and endorsed in New Visions 2050 will be implemented. These activities include:

- Evaluate re-establishing both the bridge and pavement goals originally developed in 1995 relative to current needs and funding.
- Evaluate resources needed to collect and maintain better data on regional costs of bicycle and pedestrian infrastructure construction and maintenance.
- Evaluate resources needed to collect and maintain a regional traffic signal inventory, documenting the quantity and condition of the traffic signals in the Capital District.
- Evaluate the needs of emerging vehicle technologies like Automated and Electric Vehicles (AVs and EVs) and assess the impacts they might have on the physical transportation infrastructure as their total market share increases.
- Evaluate scenarios to determine the most cost effective mix of preservation and renewal treatments using HCPM and other available models. We know that the region cannot continue to rely on preservation treatments to improve overall pavement and bridge conditions. More significant reconstruction strategies that result in longer useful life will be necessary in the future.

In addition to the recommendations generated by the Infrastructure White Paper, three additional tasks will be continued from the prior (2018-2020) UPWP:

- CDTC delivered the Local Bridge Preservation report on June 1, 2015. This analysis will be updated under a modified scope of services using an expert bridge consultant. The consultant contract amount is \$105,000 over two years.
- In addition to pavements and bridges, maintaining large culverts is essential to the safety and reliability of the region’s highway infrastructure. Information on locally-owned culverts is severely incomplete, and will require a major effort to locate, inspect, and evaluate. The task force suggested that consideration be given to conducting a comprehensive inventory of local culverts. Staff will explore alternative ways of pursuing this recommendation.
- Develop and publish an infrastructure ‘report cards’ for roads and bridges for publication on CDTC’s website.

In response to a finding contained in CDTC’s last Federal Certification Review, CDTC developed an interim financial plan based on a best guess future state and federal transportation funding policy. Under this task, the financial plan shall be maintained and updated to reflect new future-year funding assumptions.

Beginning Date		Percentage Completed		End Date		
June 2020		0%		October 2021		
CDTC Resources	Consultant	Local Cash	Local In-Kind	Local Total	Other (See Tables)	Total
\$70,000	\$52,500		\$7,500	\$7,500		\$130,000

Task 3.41 New Visions and RTP Refinement

The New Visions 2050 Plan is the Long-Range Transportation Plan (LRTP) which is scheduled for adoption in September 2020. CDTC is required to update the Plan every 5 years.

New Visions 2050 is scheduled to be released for the first phase of public comment in March 2020 and a second phase in June 2020. At these times, CDTC will perform extensive public outreach. Some outreach and public engagement strategies planned include:

- Use of visualization tools to communicate concepts and information.
- Develop graphics, videos, and social media content that promotes New Visions 2050.
- Planning and hosting public meetings.
- Partnering with stakeholders and organizations in the Capital Region to conduct presentation the inform and gather public input.
- Develop and distribute surveys and polls, both online and in-person.
- Provide essential materials in visually-accessible formats and foreign languages, as needed.
- Develop a youth outreach program to get input from those who be affected most by the 2050 Plan.
- Reach out to bus riders through a series of Transit Talks pop-up meetings in coordination with CDTA.

- Develop and distribute “meeting-in-a-box” materials by request.

Following adoption of the New Visions 2050, CDTC will develop training materials for Planning Committee, Policy Board, and citizens on New Visions implementation. Short- and long-term actions and related performance measures will be monitored and CDTC will develop tools to assist local governments in transportation and land use planning initiatives. CDTC will coordinate and meet with regional, state, and federal partners regularly to assess ongoing challenges and planning topics in the Region. CDTC staff will plan a meeting of regional agency partners (CDRPC, CDTA, etc.) to discuss regional planning issues and challenges, funding gaps, and how agencies and organizations can partner to develop solutions and assist local governments. CDRPC will assist in this effort.

See Task 1.70 Public Participation for additional information and resources.

Beginning Date	Percentage Completed	End Date
April 2021	0%	March 2022

CDTC Resources	Consultant	Local Cash	Local In-Kind	Local Total	Other (See Tables)	Total
\$80,000	\$20,000		\$15,000	\$15,000	\$15,467	\$130,467

Task 3.51 Performance-Based Planning

Performance-based planning refers to practices that apply system level, data driven performance management principles to transportation policy and investment decisions. CDTC has long employed a data and performance driven approach to transportation planning, and has been practicing performance based planning in particular since the adoption of the first generation New Visions Plan in 1997.

Recent federal transportation bills including MAP-21 and the FAST Act have shown new light on the importance of such efforts, and required MPOs across the country to take a performance based approach in order to increase the accountability and impact of transportation investments. Chapter 23 part 150(b) of the *United States Code* [23USC §150(b)] includes the following seven national performance goals for the Federal-Aid Highway Program:

- Safety – To achieve a significant reduction in traffic fatalities and serious injuries on all public roads
- Capital Assets Condition – To maintain the highway infrastructure and transit capital asset systems in a state of good repair
- Congestion Reduction – To achieve a significant reduction in congestion on the National Highway System (NHS)
- System Reliability – To improve the efficiency of the surface transportation system
- Freight Movement and Economic Vitality – To improve the national freight network, strengthen the ability of rural communities to access national and international trade markets, and support regional economic development

- Environmental Sustainability – To enhance the performance of the transportation system while protecting and enhancing the natural environment
- Reduced Project Delivery Delays – To reduce project costs, promote jobs and the economy, and expedite the movement of people and goods by accelerating project completion through eliminating delays in the project development and delivery process, including reducing regulatory burdens and improving agencies' work practice

On the public transportation side, transportation performance management shall be utilized to advance the general policy and purposes of the public transportation.

CDTC has adopted statewide performance measures and targets that correspond to these national performance goals and developed. Additionally, CDTC developed specific objectives and corresponding performance measures for each CDTC program area as part of New Visions 2040 to further integrate the performance based planning approach into the long range planning process.

Work done in this task includes:

- Ongoing performance measures data collection, analysis of trends, and selection of targets for FAST Act and CDTC performance measures.
- Refine CDTC transit performance measures
- Coordinate with CDTA on the development of the Public Transportation Agency Safety Plan (PTASP) and related performance measures and targets.
- Continual monitoring and reporting of the measures to guide programming that will help the region meet transportation goals.
- Modeling and scenario planning to develop realistic and aspirational trends and targets.
- Ongoing updates to the New Visions Performance Measures chapter.
- Explore new ways to present performance measures to the public through the New Visions Plan and CDTC website.
- Review of Transportation Improvement Program selection process (as it relates to performance measures criteria) to ensure investment priorities remain firmly tied to the conditions, trends and goals outlined in the performance reports.

This work will be done in coordination and cooperation with NYSDOT efforts to establish and monitor statewide performance targets.

Other UPWP tasks are related to this new task such as Task 3.02 Safety Planning, Task 3.31 Infrastructure and Finance Planning, Task 3.07 Regional Operations & Congestion Management, Task 4.21 freight Planning, and Task 2.25 Collection of Transportation Data, among others. These tasks entail data collection, analysis and monitoring efforts that parallel much of the work involved with this transition.

CDTC Resources	Consultant	Local Cash	Local In-Kind	Local Total	Other (See Tables)	Total
\$30,000						\$30,000

44.23.02 LONG-RANGE TRANSPORTATION PLANNING (LRTP) – PROJECT LEVEL

Task 3.12 I-787 Livable Corridor Study

CDTC completed the I-787 Livable Corridor Study in 2019. The intent of this task is to keep the regional conversation going on the next steps including the prospect for feasibility studies, the establishment of a 787 regional task force and infrastructure condition monitoring.

CDTC Resources	Consultant	Local Cash	Local In-Kind	Local Total	Other (See Tables)	Total
\$5,000						\$5,000

Task 3.22 Regional Operations and Congestion Management

As part of the New Visions 2050 Long-Range Regional Plan, the Operations White Paper and Congestion Management Process (CMP) were updated. This update was overseen by the Regional Operations and Safety Advisory Committee (ROSAC). The ROSAC is charged with planning for implementation of ITS, incident management, congestion management and safety in the Capital Region. It serves as a regional forum to facilitate discussion and coordination of operations and safety initiatives, and to share best practices among jurisdictions. CDTC staff shall continue to facilitate ROSAC activities.

Under this UPWP task, the recommendations developed for the Operations White Paper and approved in New Visions 2050 shall be implemented. These recommendations include:

- Pursuing funding for operations by identifying funding sources and integrating operations into the TIP project selection process;
- Establishing a Community Traffic Engineering Services Program, through which local public agencies could partner with CDTC to obtain consultant technical assistance for operational improvements and ITS projects;
- Evaluating Active Traffic Management (ATM) Strategies;
- Establishing a Regional Traffic Signal Timing Program, through which local public agencies could partner with CDTC to implement optimized timing plans on signalized roadways;
- Establishing a Traffic Incident Management (TIM) Committee, to facilitate knowledge sharing, capacity building, and adoption of TIM best practices throughout the region;

- Build an inventory of signalized intersections, for the purpose of infrastructure reporting and planning future signal improvements;
- Conduct an ITS and TSMO Survey and Self-Assessment, to identify challenges in ITS deployment and TSMO adoption, along with areas where regional best practices could be shared among agencies;
- Develop a system to classify signalized arterials, based on their current and desired levels of operational capability and transit ITS deployment;
- Identify potential funding that may be used to pursue an Automated Traffic Signal Performance Measures Pilot; and
- Beginning development of a Regional TSMO Plan;

In addition, CDTC staff will continue the ongoing Congestion Management Process. Updated CMP methodology was established in the Operations White Paper. Staff will continue to develop and monitor more refined performance measures derived from NPMRDS travel time data. Staff will make continued use of the University at Albany’s AVAIL tool for this purpose. Staff will monitor implemented CMP strategies and conduct before-and-after analyses to evaluate the efficacy of these strategies as a means of implementing a performance management approach to congestion planning.

CDTC Resources	Consultant	Local Cash	Local In-Kind	Local Total	Other (See Tables)	Total
\$60,000						\$60,000

3.32 Regional Signal Timing Program

Traffic signal retiming is a low-cost method of improving safety and operations at signalized intersections. Retiming is also an effective means of reducing fuel consumption and associated emissions. Retiming is also important for pedestrian safety, as safe crossing intervals may not be present at many intersections. According to the FHWA Traffic Signal Timing Manual, the benefit-cost ratio of traffic signal retiming may be greater than 40:1 due to the low cost of implementation.

Per the FHWA Traffic Signal Timing Manual, traffic signal timing should be reviewed every three to five years and more often if there are significant changes in traffic volumes or roadway conditions. Retiming traffic signals every three to five years is “generally considered to be good engineering practice”. Per the Traffic Signal Timing Manual:

“Signal timing should be revisited when any of the following occur:

- Increased demand or changing turning movements (5 to 10 percent; lower percentage change critical when intersections operate at or near capacity);
- Reduced traffic flow (typically 10 to 15 percent reduction);
- Changed vehicle mix (increased truck percentages);
- Construction activities on the study route or on a parallel route;

- Changed land uses associated with development or travel patterns due to shifts in employment centers;
- Observed queue spillback caused by oversaturation of adjacent traffic signal; or
- Other factors (such as the addition of a new traffic signal to a corridor associated with new development or changes in the roadway network).”

There is very high interest in signal optimization from local public agencies, and no agencies currently retime on a regular basis. Retimings are only conducted ad-hoc in response to complaints. Because of this, there is high potential for operations improvements region-wide via a retiming program.

CDTC shall create a formal Regional Traffic Signal Timing Program with the following scope:

- Work with local public agencies to conduct a region-wide screening of signalized intersections to identify those with the greatest potential for timing improvements.
- Analyze travel time data, conduct field visits, and identify developments that may impact local travel demand.
- Select signals to retime via an open-solicitation competitive process.
- Hire a traffic engineering firm to conduct turning movement counts, develop optimized timings, and field-implement the timing directives. The consultant amount is \$110,000 over two years.
- Conduct before-and-after studies to quantify the benefit of the retiming.
- Establishing a proactive monitoring system, through which signals with recent changes in travel demand can be flagged for retiming.

CDTC Resources	Consultant	Local Cash	Local In-Kind	Local Total	Other (See Tables)	Total
\$25,000	\$50,000	\$5,000		\$5,000		\$80,000

44.24.00 SHORT-RANGE TRANSPORTATION PLANNING (SRTP)

Task 4.17 Complete Streets / Arterial Management

CDTC established the Complete Streets Advisory Committee in 2013 to research, learn, and share information with the Planning Committee, Policy Board, and other stakeholders on complete streets tools and techniques that could be integrated into plans and roadway projects. Fostering improved communication between municipal and project planners and designers continues as a major goal. Staff will continue to organize Complete Streets Advisory Committee meetings and carry out efforts as directed by the Advisory Committee, including the following:

- Develop Complete Streets Design and Implementation Guidelines.

- Encourage municipalities to adopt and implement Complete Streets policies.
- Continue documenting TIP project outcomes.
- Continue to provide staff and consultant resources for the Complete Streets Educational & Technical Assistance Workshops.

The workshops help our transportation planning practitioners and decision makers identify and overcome Complete Streets policy and implementation barriers. These free consultant-led workshops are highly interactive in nature, with the goal of building local capacity to implement Complete Streets approaches, and strengthening relationships between transportation practitioners, other departments, and the community. Key decision makers, stakeholders, and agency professionals learn how to more effectively balance the needs of all users and routinely create and maintain Complete Streets. The workshops are available to local governments through a competitive application process.

Complete Streets Workshops

Beginning Date	Percentage Completed	End Date
April 2020	0%	December 2020

CDTC Resources	Consultant	Local Cash	Local In-Kind	Local Total	Other (See Tables)	Total
\$50,000	\$50,000		\$10,000	\$10,000		\$110,000

Task 4.21 Freight Planning

Freight movement is an important planning factor in the Capital District. Evidence of the importance of freight and goods movement can be found in the Federal FAST Act, New Visions 2050, CDTC's TIP, CDTC's Linkage Studies, and nearly all other aspects of CDTC's work. CDTC's Freight Advisory Committee (FAC) meets quarterly and is a sustained meaningful outreach to regional public and private freight stakeholders. Freight and goods movement activity is expected to continue to grow steadily, in terms of both tonnage and value.

Freight and goods movement are strongly linked to regional economic competitiveness and quality of life. In 2016, CDTC completed a new Regional Freight & Goods Movement Plan ("Freight Plan"), to better understand the role and profile of freight transportation throughout the region. As part of the New Visions 2050 Update process, the key elements of the Freight Plan were reviewed and updated. The Freight Plan contributes to making appropriate investments to support the efficiency and safety of goods movement. As an area of increasing emphasis at the Federal level, it seems appropriate to take the next steps to implement the recommendations in the Freight Plan.

Working under the guidance of the FAC, CDTC will advocate for, and assist NYSDOT and local jurisdictions with, planning and implementing projects, programs, and policies identified in the CDTC Freight Plan and New York Statewide Freight Plan. To continue to further CDTC freight planning efforts and augment the Plan's recommendations and the following steps have been identified:

- Update and develop new freight data and GIS information for regional freight facilities and activity, as needed.
- Continue participation in the implementation of NYSDOT's Statewide Freight Plan.

- Implement and monitor the freight system performance measures, and collect appropriate data, as needed.
- Continue to build and grow the membership of the Freight Advisory Committee to bring public and private sector freight stakeholders together.
- Collect data as needed to monitor the regional Freight Priority Network and update as needed.
- Utilize available freight data sets and develop new data sets for forecasting & modeling, monitoring performance measures, and other freight planning activities.
- Continue to build a working relationship with regional higher education institutions, such as the Rensselaer Polytechnic Institute (RPI) Volvo Center of Excellence for Sustainable Urban Freight Systems, and the University at Albany, to support their freight-related activities and develop new initiatives.
- Involve the FAC in all of the above activities, including prioritizing freight planning initiatives and TIP project selection.
- Examine the feasibility of developing a Local Model Freight Ordinances and Land Use Best Practices program that educates local public officials, including planning and zoning boards, about freight movement. The program will create and disseminate materials with model ordinances and regulations for freight-related development. This is a recommended early-action in the CDTC Freight Plan, and has been identified as a priority by the FAC.

CDTC staff will also initiate the development of a Freight and Land Use Study in the Town of Rotterdam and the Town of Princetown, near NY 7 and NY 337/Burdeck St. NY 7 is an important route for regional freight movement with major freight facilities, such as the Price Chopper/Market 32 Distribution Center and the Rotterdam Industrial Park, located nearby. The corridor is currently experiencing development pressure from freight-intensive land uses.

The Study will examine freight movement and operations to, from, and through the corridor, and land use implications. The study will evaluate current and future land use policies, freight circulation, and truck parking in the area of NY 7 from I-88 to the Rotterdam Industrial Park, including the interchanges with I-88, the New York State Thruway, and the tandem lot. The study could also potentially include NY 337/Burdeck St Corridor and review the recommendations from the Burdeck St Corridor Traffic Study. The consultant contract amount is \$145,000 over two years.

NY 7 Corridor Freight and Land Use Study

Beginning Date	Percentage Completed	End Date
May 2020	0%	September 2021

Freight Planning Program

CDTC Resources	Consultant	Local Cash	Local In-Kind	Local Total	Other (See Tables)	Total
\$80,000	\$68,875	\$3,625	\$3,625	\$7,250		\$156,125

Task 4.23 Every Day Counts Initiative (EDC)

In 2009 FHWA launched **Every Day Counts (EDC)** in cooperation with the American Association of State and Highway and Transportation Officials (AASHTO) to speed up the delivery of highway projects and to address the challenges presented by limited budgets. EDC is a state-based model to identify and rapidly deploy proven but underutilized innovations to shorten the project delivery process, enhance roadway safety, reduce congestion and improve environmental sustainability.

Proven innovations and enhanced business processes promoted through EDC facilitate greater efficiency at the state and local levels, saving time and resources that can be used to deliver more projects for the same money. By advancing 21st century solutions, the highway community is making every day count to ensure our roads and bridges are built better, faster and smarter.

Since its inception there have been several rounds of EDC innovations and strategies implemented over a 2-year periods. The program is now in the process of developing EDC Round 6.

CDTC staff represents the State MPO Association (NYSAMPO) on the State Transportation Innovative Council (STIC). Staff attends regional conferences, webinars, and STIC meetings as the NYSAMPO representative, reviews EDC notices, State Action Plans, and other information materials, and disseminates and summarizes these materials for the other NYS MPO Directors at NYSAMPO meetings.

CDTC Resources	Consultant	Local Cash	Local In-Kind	Local Total	Other (See Tables)	Total
\$5,000						\$5,000

Task 4.25 Energy Efficient Logistics Grant

CDTC is participating in a US Dept. of Energy, Energy Efficient Logistics’ Living Lab Grant project team, with the Rensselaer Polytechnic Institute (RPI). The project, *Collaborative Approaches to Energy-Efficient Logistics in the Albany - New York City Corridor*, features a collaboration with Argonne National Laboratory, George Mason University, and multiple public and private-sector organizations operating in the Capital District and New York City regions.

The RPI project team—in collaboration with private sector companies and local transportation agencies— will aim to foster changes in freight demand patterns to reduce energy use, enhance the quality of life, improve economic productivity, incorporate efficient practices into freight logistics, and publish lessons learned. The project schedule is 3 years and the total project funding, including contributions from partners, is almost \$4,000,000.

Beginning Date	Percentage Completed	End Date
December 2017	<10%	December 2020

CDTC Resources	Consultant	Local Cash	Local In-Kind	Local Total	Other (See Tables)	Total
\$20,000						\$20,000

Task 4.30 Smart Communities

CDTC launched its Smart Communities program in 2018. As part of the program, a task force was assembled to act as a platform for local authorities to give them the opportunity to share and exchange their experiences adopting new technology. It will improve the local knowledge in the field of new technologies and how they can improve or work alongside mobility and transportation, including autonomous vehicles, internet of things, and improved traffic systems.

Some work related to this task may overlap with Task 4.70 (Clean Communities), 3.22 (Regional Operations), 6.14 (TDM) and .3.21 (Energy, Climate Change Initiative, Air Quality & Environment).

As part of this task, CDTC staff will:

- Research Smart City plans and implementations around the world.
- Identify data-driven innovations that could be applied to solve transportation issues and problems in the Capital Region.
- Research cyber security measures that could be implemented by municipalities to protect themselves from technology/communications infrastructure vulnerabilities. This is also supported by Task 6.16.2 Security Planning.
- Develop a regional Smart Communities Roadmap which includes priorities outline in New Visions 2050 Environment & Technology White Paper.
 - Develop guidelines for Connected and Automated Vehicle-Readiness planning
 - Develop guidelines for “Smart Corridors,” which include improvements to ITS, transit, and mobility services as well as integration of mobility hubs into land use planning.
- Identify technologies that can be implemented or developed in the Capital Region to improve mobility, connect people and stakeholders, and reduce GHG emissions.
- Solicit communities for consultant-developed Smart Community local plans.

All consultant-led efforts will require a 25% local share (cash or in-kind services).

Beginning Date	Percentage Completed	End Date
April 2021	0%	March 2022

CDTC Resources	Consultant	Local Cash	Local In-Kind	Local Total	Other (See Tables)	Total
\$15,000	\$75,000	\$10,000	\$15,000	\$25,000		\$115,000

Task 4.60 Capital Coexist

In response to public feedback, CDTC dedicated a portion of the Bike/Pedestrian planning funds for developing a bicycle and pedestrian education campaign, called Capital Coexist. The campaign continues to be successful since its inauguration in 2010. CDTC distributes safety education activity and comic books, safety tip rack cards, guidebooks, and other safety-related gear like reflective bracelets and LED bike lights, as requested by schools, community organizations, and municipalities in the CDTC-area.

CDTC also provides bicycle and pedestrian planning and design education to professionals in the CDTC area by hosting workshops and webinars referred to as the “Bicycle and Pedestrian Education Series.” CDTC purchases a webinar bundle from the Association of Pedestrian and Bicycle Professionals which are hosted at CDTC and provide AICP, ASLA, and PE credits to those who participate.

In order to continue to reach a greater percent of the Capital Region population, CDTC released a solicitation for bicycle and pedestrian safety projects. The program is called the “Capital Coexist Traffic Safety Ambassador” program and is a mini-grant program that makes up to \$5,000 per bicycle and/or pedestrian safety project or program. Some work related to this task may overlap with Task 4.67 Bicycle and Pedestrian Planning and 6.16.1 Safety Planning.

In 2020-21 CDTC staff will:

- Make up to \$25,000 (consultant effort) available each year for Traffic Safety Ambassador Grants and manage these small-scale bicycle and pedestrians projects and programs.
- Plan and host at least one training workshop (i.e. NACTO Urban Bikeway Design) with a cost of up to \$20,000 (consultant effort).
- Purchase and distribute materials that promote bicycle and pedestrian safety.
- Develop bicycle and pedestrian safety tools and resources, including development of materials about pedestrian and bicycle infrastructure (ex. how to use a Rectangular Rapid Flashing Beacon).
- Maintain Capital Coexist webpage on the CDTC website.

Beginning Date	Percentage Completed	End Date
April 2020	0%	March 2021

CDTC Resources	Consultant	Local Cash	Local In-Kind	Local Total	Other (See Tables)	Total
\$25,000	\$45,000		\$8,333	\$8,333		\$78,333

Task 4.67 Bikeway/Pedestrian Planning

CDTC continues to host a monthly, regional, bicycle and pedestrian forum referred to as the Bicycle and Pedestrian Advisory Committee. The Committee shares information on best practices in bicycle and pedestrian planning and safety, provides feedback to Planning Committee and Policy Board on capital projects and programs, and is a vital tool is promoting CDTC’s bicycle and pedestrian plans, projects, and programs. The program is guided by the New Visions 2050 goals outlined in the Bicycle and Pedestrian Action Plan. Some work related to this task may overlap with various other tasks such as Tasks 1.69

AMPO/NYSAMPO/TRB Committees and Working Groups, 4.60 Capital Coexist, 4.68 Capital Trails Plan Implementation, and 2.25 Data Collection.

In 2020-21 CDTC staff will:

- Plan, coordinate and host monthly Bicycle and Pedestrian Advisory Committee meetings.
- Develop/Update the bicycle and pedestrian prioritization tool.
- Participate in any NYSDOT solicitations for bicycle and pedestrian projects, like CMAQ.
- Participate in NYSAMPO Bicycle and Pedestrian Working Group.
- Distribute the Bicycle Facilities Visual Preference Survey, maintain responses, and calibrate LTS model for the Capital Region based on responses.
- Provide technical assistance to communities related to bicycle and pedestrian planning.
- Research best practices in design, maintenance, and construction of bicycle and pedestrian infrastructure.
 - Compile cost data for maintenance and construction
 - Compile snow removal policies and best practices related to sidewalks, trails, on-road bike facilities, and intersections.
- Explore online or smartphone application-based trail and other bike/ped facility mapping.
- Support the implementation of the Capital Trails Plan (Task 4.68)
- Design and establish an ongoing bike/ped count program.
 - Compare and evaluate different types of data collection methods.
 - Explore the purchase of automated counting technology for collecting trail count data.
- Explore the development and integration of health impact assessments in transportation plans, projects, and programs.

CDTC Resources	Consultant	Local Cash	Local In-Kind	Local Total	Other (See Tables)	Total
\$105,000			\$5,000			\$110,000

Task 4.68 Capital District Trails Plan Implementation

CDTC released the Capital District Trails Plan in 2019 which outlines an additional 200 miles of regional trails. This network consists of 18 core trails and 34 supporting trails. The plan sets a goal of constructing 10 miles of trail per year and has prioritized the Core Trails based on demand, population density, proximity to environmental justice areas, and the “readiness” of the project which refers to the availability of funding, funding already secured and available right-of-way. Below is a list of the Core Trails and their priority for implementation.

Capital District Core Trails: Prioritization Screening Tool							
Map Key	Trail Identification	Primary Type	Potential Peak PM Traffic Bike Trips Per Trail Mile	Population Served Per Trail Mile	Relative Proximity to Environmental Justice Area	Project Readiness for Development	Initial Priority Level
B	South End Bikeway Connector	On-Road	***	***	***	**	I
I	South Troy Riverfront Bikeway	On-Road	***	***	***	**	I
J	Uncle Sam Bike Trail	Off-Road	***	***	***	*	I
R	Schenectady Park Connector	On-Road	***	***	***	*	I
D	Patroon Greenway	Off-Road	***	***	**	*	II
G	Albany Hudson Electric Trail (AHET)	Off-Road	***	**	*	***	II
H	Rensselaer Riverwalk/RPI Trail	Off-Road	***	**	**	**	II
C	Albany Loop	On-Road	***	***	*	*	II
F	Mohawk-Hudson Bike-Hike Trail	Off-Road	*	**	**	***	II
P	Saratoga Greenbelt Trail	Off-Road	**	**	*	***	II
A	Albany County Helderberg-Hudson Rail Trail	Off-Road	*	**	*	***	II
N	Zim Smith Trail	Off-Road	*	**	*	***	II
M	Ballston Veterans Bike Trail	Off-Road	**	**	*	*	III
Q	Wilton-Moreau Trail	Off-Road	**	**	*	*	III
E	Hudson Northway	On-Road	*	*	**	*	III
O	Champlain Canal Trail	Off-Road	*	*	*	**	III
K	River Road	On-Road	*	*	*	*	III
L	River to Ridge Path	On-Road	*	*	*	*	III

In 2020-21, CDTC will solicit for consultant-led feasibility studies related to the recommendations in the Capital District Trails Plan. Project sponsors will be required to provide a 25% cash match and CDTC will provide up to \$75,000 in PL funds. This task may overlap or share resources with Task 4.67. The consultant contract is \$100,000 over two years.

Beginning Date	Percentage Completed	End Date
July 2020	0%	July 2021

CDTC Resources	Consultant	Local Cash	Local In-Kind	Local Total	Other (See Tables)	Total
	\$37,500	\$12,500		\$12,500		\$50,000

Task 4.70 Clean Communities

The U.S. Department of Energy’s Clean Cities Program is a voluntary, locally-based government and industry partnership. It is designed to advance the national economic and energy security of the nation by supporting local decisions to reduce use of petroleum fuels in vehicles. Clean Cities carries out this mission through a network of nearly 100 volunteer coalitions which develop public/private partnerships to promote alternative fuels and vehicles, fuel blends fuel economy, hybrid vehicles, and idle reduction. Capital District Clean Communities was formed in 1999 to take advantage of the environmental, public health, energy, and economic benefits that the program offers. In early 2001 CDTC agreed to assume the lead role in managing the program previously provided by Schenectady County. CDTC in its 17th year leading the coalition here in the Capital District and is currently the only MPO in New York to directly host a Clean Cities coalition.

The Capital Region is home to numerous large fleets containing alternative fuel and advanced technology vehicles including CDTA’s hybrid and anticipated electric buses, Albany International Airport’s CNG shuttles, RPI’s propane buses, municipal electric vehicle (EV) fleets, as well as various hybrid and propane school bus fleets and hybrid cabs. The Clean Communities Coalition has worked with various stakeholders and state agencies like NYSERDA to help develop a network of over 100 publicly accessible EV charging stations since 2012. Some work related to this task may overlap with Task 4.30.

In 2020 the coalition will be participating in a new pilot program lead by the National Renewable Energy Lab to test new approaches to Clean Cities support agreements. The pilot is designed to create a more flexible contract, allowing coalitions to add new efforts throughout the contract period as new opportunities present themselves and reduce time spent on reporting and invoicing.

The Capital District Clean Communities Coalition will complete the following tasks:

- Update and maintain Clean Communities website
- Submit an Annual Progress Report – a detailed tracking report of alternative fuel, advanced vehicle technology, and transportation energy efficiency integration metrics in the Capital Region.
- Collect fuel price information on a quarterly basis.
- Regularly collect infrastructure cost information and report to USDOE.
- Report area alternative fuel station openings and closings to the USDOE for use in the Alternative Fuel Station Locator.
- Conduct alternative fuel market analysis and technology integration.
- Participate in peer-to-peer information sharing – staff will attend National Clean Cities workshops, regional meetings, trainings, and other events as available and funding allows.

CDTC Resources	Consultant	Local Cash	Local In-Kind	Local Total	Other (See Tables)	Total
\$30,000					\$94,000	\$124,000

44.25.00 TRANSPORTATION IMPROVEMENT PROGRAM (TIP)

Task 5.01 Transportation Improvement Program (TIP) Development and Maintenance

One of CDTC’s most important responsibilities is the development and maintenance of a multi-modal program of transportation projects called the Transportation Improvement Program (TIP). In 2019, CDTC and the other thirteen New York State MPOs through NYSAMPO worked closely with NYSDOT and member agencies to make adjustments to the current Statewide Transportation Improvement Program (STIP) based on the current economic, legislative, and programmatic uncertainties (Highway Trust Fund insolvency and FAST Act reauthorization). This update of the STIP provided the opportunity to incorporate programmatic revisions necessitated by lower than anticipated federal revenues, and to

continue discussing ways of implementing innovative system preservation strategies that integrate sound asset management principles into the TIP project selection process.

Development and maintenance of CDTC’s TIP will continue to require a high level of effort in 2020-22, including administrative changes and regular TIP amendments which are approved by the Planning Committee and the Policy Board. CDTC will also work very closely with the NYS DOT and other members to carry-out NYS DOT’s infrastructure plan.

CDTC Resources	Consultant	Local Cash	Local In-Kind	Local Total	Other (See Tables)	Total
\$90,000						\$90,000

Task 5.10 Project Delivery and Tracking

CDTC recognizes the obstacles faced by local sponsors of federal-aid projects in complying with federal regulations while seeing a project through to completion that is both on schedule and within budget. Complications can lead to a project going over budget, continuing past schedule, or omitting crucial features. This task therefore monitors, and aids in the continued progress of, locally-administered, federal aid projects from TIP approval through to their completed construction.

The task requires CDTC staff to gather data on the original proposed project scope, schedule and budget, as well as periodic data gathering from project sponsors regarding any significant changes in scope, schedule or budget. Data gathering requires outreach to sponsors which facilitates opportunities for CDTC to help sponsors navigate the federal-aid process if needed. Final data collection on the completed project allows for a comprehensive analysis of what changes have been made in regards to scope, budget, and schedule throughout the course of the project.

Staff compiles this data into a project delivery database that tracks schedule and budget performance for sponsors, as well as information on initial scope and its evolution. This database will become the basis for strategic assistance to sponsors, scope change auditing, and future merit evaluation, among other uses. Specifically, this will help the Committee keep track of a sponsor’s project delivery track record as it relates to future TIP merit evaluation. Additionally, the project delivery database allows CDTC to ensure sponsors have included all elements detailed in their initial proposals/scope changes. Ideally, this effort will help to keep future locally sponsored projects in the region on schedule and within budget, while also allowing CDTC the opportunity to gather crucial data on sponsors’ project delivery capacity and changes in scope to constructed projects.

To continue to improve Project Delivery and Tracking efforts the following steps have been identified:

- Continue detailed data collection on changes in individual project scope, budget, and schedule for locally administered federal aid projects.
- Evaluate current sponsor outreach techniques and to identify opportunities for improved project data collection.
- Analyze locally administered federal aid projects that completed construction in FY 16-17, FY 17- 18, and FY 18-19 and begin to develop baseline statistics for project delivery performance.

CDTC Resources	Consultant	Local Cash	Local In-Kind	Local Total	Other (See Tables)	Total
\$20,000						\$20,000

Task 5.51 Provision of Technical Services

Staff will continue to work with the region’s municipalities to assist in the review of traffic impact studies related to land development proposals. Ongoing technical assistance is programmed for Albany County in connection with its annual contract with CDTC.

Staff will also entertain county and municipal requests for small scale planning and traffic engineering studies designed to assess the feasibility and impact of complete street treatments, access management strategies, street network connectivity, pedestrian improvements, and any other action that would promote implementation of New Visions. These should be simple studies that address operational questions with scopes priced under \$7,000.

Examples include:

- Road diet
- Traffic signal warrant analysis
- Traffic signal re-timing
- Impact of local street connections on arterial performance
- Driveway consolidation in commercial corridors
- Trip generation and distribution analysis for development

CDTC Resources	Consultant	Local Cash	Local In-Kind	Local Total	Other (See Tables)	Total
\$30,000						\$30,000

Task 5.61 TIP Project Development Support

CDTC staff continues to support NYSDOT Region 1 in developing traffic forecasts and other material for project development and design purposes, including traffic diversion analysis for construction work. This effort is funded with Surface Transportation Program (STP) funds as part of the TIP.

CDTC Resources	Consultant	Local Cash	Local In-Kind	Local Total	Other (See Tables)	Total
\$135,000						\$135,000

44.26.00 PLANNING EMPHASIS AREAs (PEAs)

Task 6.12 Human Service Agency Transportation

Staff will continue to fulfill requirements related to the 5310 Program: Enhanced Mobility of Seniors and Individuals with Disabilities, including by convening a regional rating and ranking committee for the program. Recipients of Section 5310 funds are required to certify that projects are derived from a locally developed and coordinated public transit-human service agency transportation plan.

In an ongoing effort to foster coordination among providers of mobility services for transportation disadvantaged populations, CDTC staff will continue to convene the Regional Transportation Coordination Committee (RTCC). Since its inception this group has come together to work on development of the Coordinated Public Transit Human Services Plan for the Capital District (Coordinated Plan) and its updates, coordination efforts, information sharing and assistance with 5310 project solicitation from non-potential project sponsor members of the RTCC. The most recent update of the Coordinated Plan was approved by the Planning Committee in May 2019. In addition, this group fulfills the requirement for coordination among federally funded public transportation services and other transportation services receiving federal funds.

Staff will continue to reach out to additional potential committee members, including representatives from appropriate federal and state agencies including the Department of Aging, the Department of Health and others. NYSDOT Public Transportation Bureau staff continues to be a valued key member of the RTCC. Staff will be available to assist RTCC members and other providers of human services transportation to improve inter-agency communication and coordination.

Together with RTCC members, staff will organize another “Tools of the Trade” Workshop. Last held in May 2018, these workshops provide a forum for information sharing among providers to improve efficiency and delivery of transportation to the people they serve.

CDTC will coordinate with the Albany Guardian Society to distribute the Senior Transportation Guide that our two agencies collaboratively created.

CDTC Resources	Consultant	Local Cash	Local In-Kind	Local Total	Other (See Tables)	Total
\$80,000						\$80,000

Task 6.13 Transit Planning

CDTC staff continues to support regional transit providers in exploring and developing alternative and innovative public transportation options. As needed, CDTC staff will provide planning support to CDTA for general transit system planning and will assist CDTA in meeting its Federal Transit Administration (FTA) requirements. CDTC staff will undertake the following:

- Support the update of the CDTA Transit Development Plan.
- Coordinate with CDTA on public outreach for the Transit Development Plan and the regional transportation plan.

- Coordinate with state, regional and local partners on the planning for the Albany Intermodal Center.
- Explore a Transit Related Pilot Program that could include testing bus only lanes, bus/bike lanes, bus/parking lanes, and mobility hubs at transit stops.
- Develop a Transit Access Toolkit that includes site design and transit stop design best practices and policies for use by local government.
- Attend meetings, transit related trainings, webinars and events

Related to Task 3.51 Performance-Based Planning:

- Refine CDTC transit performance measures upon completion of the regional transportation plan and CDTA Transit Development Plan updates.
- Coordinate with CDTA on the development of the Public Transportation Agency Safety Plan (PTASP) and related performance measures and targets.
- Partner with CDTA on a consultant led Bus Lane Feasibility Study. The consultant contract amount is \$100,000 over two years.

Beginning Date	Percentage Completed	End Date
April 2020	0%	September 2021

CDTC Resources	Consultant	Local Cash	Local In-Kind	Local Total	Other (See Tables)	Total
\$45,000	\$50,000		\$20,000	\$20,000		\$115,000

Task 6.14 Regional Travel Demand Management Effort

Transportation Demand Management (TDM) refers to various programs, policies and services that enable travel behavior change. Relevant strategies encourage more efficient travel patterns such as shifts from peak to off-peak periods, from automobile to other modes, and from dispersed to closer destinations. CDTA and CDTC will jointly administer this project and collaborate on reporting requirements.

CDTC's efforts under this task include the following:

- Provide ongoing support for the 511NY Rideshare regional portal, iPool2, including Guaranteed Ride Home registration and coordination NYSDOT and CDTA, maintenance of regional Park and Ride lot data currently hosted on iPool2, maintenance of a publicly available listing of existing vanpools and maintenance of other web information such as that on the CDTC website.
- Continue administering bicycle and pedestrian encouragement projects such as the Bike to Work Day Challenge, Cycling Guides and Walking Guides.
- Convene the Mobility Management Task Force as needed to foster regional and cross-industry collaborations related to TDM and to provide input and guidance on staff work.

- Develop informational materials such as toolkits that municipalities, neighborhood organizations, employers, and human services organizations can use to educate and inform about transportation options and the benefits of walking, biking, transit, carpooling, carsharing and vanpooling.
- Consider reinstating the successful Bike Rack Program in partnership with CDTA
- Provide technical assistance to consultants, developers, companies and member agencies.
- Through a consultant, administer a statistically robust commuter survey to identify the market segments that are open to considering commute changes to non-SOV modes. Develop a marketing plan and marketing collateral to launch a new campaign that raises awareness of all non-SOV modes by regional commuters. The consultant contract is \$70,000 over two years.
- Evaluate other CDTC programs such as the Linkage Program and the CDTC/CDRPC Technical Assistance Program to integrate support for TDM policies, programs and services into all of CDTC's work tasks.

Beginning Date	Percentage Completed	End Date
October 2020	0%	May 2021

CDTC Resources	Consultant	Local Cash	Local In-Kind	Local Total	Other (See Tables)	Total
\$65,000	\$35,000		\$5,000	\$5,000		\$105,000

TDM programs that are administered and funded by CDTA include:

- Ongoing support for vanpool and Guaranteed Ride Home registration and coordination;
- Maintenance and operation of regional Park and Ride lots;
- Operation of regional bikeshare system CDPHP's *Cycle!*
- Financial and technical assistance for Capital CarShare, a not-for-profit community based car sharing organization;
- Provide yearly transit pass subsidies to new homeowners, refugees and immigrants, and victims of domestic violence and abuse.

CDTC Resources	Consultant	Local Cash	Local In-Kind	Local Total	Other (See Tables)	Total
					\$600,000	\$600,000

Task 6.16.1 Safety Planning

CDTC's safety planning efforts continue to focus on providing tools and resources to reduce crashes, particularly fatal and serious injury crashes, on all public roads. CDTC's Local Road Safety Action Plan along with the State Strategic Highway Safety Plan identify strategies and actions that can be taken to reduce crashes in the key regional emphasis areas of intersections, lane departure, vulnerable users, age-

related, road user behavior and speed. This task complements Task 1.69 AMPO/NYSAMPO/TRB Committees and Working Groups, the proposed new TASK Local Safety and Operations Project Development Program and TASK 4.60 Capital Coexist and includes the following:

- Create lists of roadway risk factors and location characteristics for communities
- Evaluate timing plans for pedestrians at intersections
- Develop an ongoing safety oriented social media campaign
- Encourage use and implementation of FHWA proven safety countermeasures
- Participate in the development of the NYSDOT Intersection Safety Action Plan
- Participate in the development and testing of the NYSDOT CLEAR (Crash Location Engineering & Analysis Repository) application for crash data
- Update CDTC TIP safety benefit calculation and merit score methodology
- Develop a systemic safety toolkit
- Further Expand CDTC Education Programs
- Convene a Traffic Incident Management committee
- Attend traffic safety board meetings, safety related trainings, webinars and events

CDTC Resources	Consultant	Local Cash	Local In-Kind	Local Total	Other (See Tables)	Total
\$90,000						\$90,000

Task 6.16.2 Security Planning

CDTC will perform a vulnerability assessment and resiliency/climate adaptation plan for vulnerable infrastructure. This is also supported by Task 3.21 Energy, Climate Change Initiative, & Air Quality.

- Phase I: Develop a vulnerability assessment tool that helps CDTC and local governments identify infrastructure vulnerable to hazards that result from the climate crisis, such as roads, bridges, and culverts.
- Phase II: Create resiliency and climate adaptation strategies for vulnerable infrastructure.

CDTC will also coordinate with the Local Emergency Planning Committee (LEPC) in Albany, Schenectady, Rensselaer and Saratoga Counties as needed. Assistance could be offered in the form of detour modeling related to emergencies (i.e. crash, flooding or terrorism) and special events.

CDTC Resources	Consultant	Local Cash	Local In-Kind	Local Total	Other (See Tables)	Total
\$20,000						\$20,000

44.27.00 OTHER ACTIVITIES

7.10.1 Town of Colonie GEIS Support

This task includes contractual support for GEIS implementation in the Airport, Lisha Kill, and Boght Road areas of the Town of Colonie. Support of the mitigation program includes CDTC staff involvement in the review of each development application in the study area, calculation of the appropriate transportation mitigation cost for use by the town, and arterial management and site circulation issues, thus linking MPO principles to real-world implementation.

CDTC Resources	Consultant	Local Cash	Local In-Kind	Local Total	Other (See Tables)	Total
					\$63,000	\$63,000

7.10.2 Town of Malta GEIS Support

This task includes contractual support for GEIS implementation for the Town of Malta’s transportation plan. Support of the mitigation program includes CDTC staff involvement in the review of each development application in the study area, calculation of the appropriate transportation mitigation cost for use by the town, and arterial management and site circulation issues, thus linking MPO principles to real-world implementation.

CDTC Resources	Consultant	Local Cash	Local In-Kind	Local Total	Other (See Tables)	Total
					\$25,000	\$25,000

7.20 Shared Transit Service Planning and Analytics Initiative

This initiative will support a set of collaborative pilot applications of common transit mobility planning and analysis tools. The results of these pilots will guide a potential broader statewide hosting of these tools for use by MPOs, NYSDOT and Transit Systems in New York State. These tools have become more readily available and efficiently scalable at a Statewide level because they leverage commonly available statewide data sets (Census, General Transit Feed Specification (GTFS), employer, land use parcel, highway speed data, etc.), cloud computing and open source software development. If successful, the pilots may support a case for deploying a common statewide portal for these tools to support common analysis methods for service planning and evaluation across the State’s metropolitan areas.

The project’s goal is to ultimately deploy and provide multi-agency access to a common set of analysis tools (those listed below and other emerging open source tools as they become available) that would support standardized practices and reduce the need for, or cost of, consultant efforts for transit development plans, service planning, evaluation or reporting.

- Accessibility of transit services to jobs, population, medical/education institutions and workforce
- Ridership demand forecasting
- Operational scenario planning
 - Route, frequency and transfer analysis
 - Stop consolidation (BRT scenarios)
 - Detour impact analysis
 - Park and ride market analysis
 - Last mile connection analysis
 - Title VI analysis

If successful, the project would ultimately provide access, training and technical support for the use of common open source transit analysis tools.

CDTC Resources	Consultant	Local Cash	Local In-Kind	Local Total	Other (See Tables)	Total
					\$573,238	\$573,238

7.30 Albany Bicycle and Pedestrian Master Plan, City of Albany

This project will update the 2009 Bicycle Master Plan to reflect physical changes in the City and current industry standards while also integrating the needs of pedestrians to create a new Bicycle and Pedestrian Master Plan. The update will reassess the 2009 plan goals, update the City’s vision for an improved bicycle and pedestrian network, identify gaps and opportunities for the cycling/pedestrian community and prioritize plan implementation in order to serve cyclists and pedestrians of varying demographics.

The scope of work will include a review of existing plans and local policies, inventory and assessment of existing bicycle and pedestrian facilities and conditions, an extensive public participation program and the development of a plan with recommendations that consider infrastructure, safety, education, encouragement and policy enforcement.

Beginning Date	Percentage Completed	End Date
December 2019	0%	March 2021

CDTC Resources	Consultant	Local Cash	Local In-Kind	Local Total	Other (See Tables)	Total
\$30,000	\$67,500	\$22,500		\$22,500		\$120,000

7.40 Ballston Spa Pedestrian & Bicycle Master Plan & Linkage Study, Village of Ballston Spa

Develop a pedestrian and bicycle master plan and evaluate multi-use options to connect the Village to the Zim Smith Trail which ends in the Town of Ballston. Using a Complete Streets framework, the plan will describe where to improve, replace or add sidewalks in a focus area to improve access to the central business district, recreational facilities and the Malta Avenue school; provide safe crossings for pedestrians and cyclists; establish a link from the Zim Smith Trail to downtown Ballston Spa; and provide traffic calming on cut through village streets. The consultant contract is \$60,000 over two years.

Beginning Date	Percentage Completed	End Date
September 2020	0%	September 2021

CDTC Resources	Consultant	Local Cash	Local In-Kind	Local Total	Other (See Tables)	Total
\$15,000	\$22,500	\$7,500	\$5,000	\$17,500		\$50,000

7.50 Menands Land Use Regulations Update, Village of Menands

Update and revise the Village land use regulations to improve walkability, encourage redevelopment of vacant or underutilized commercial sites, and foster infill development and compact design. This effort will audit Village zoning and subdivision regulations with a focus on updating street standards using complete street principles, parking requirements, multi-modal facilities, access management measures and address impediments to mixed uses. The Village is particularly interested in addressing its commercial core and encouraging reactivation of several key sites along the Broadway Corridor. The consultant contract is \$80,000 over two years.

Beginning Date	Percentage Completed	End Date
September 2020	0%	September 2021

CDTC Resources	Consultant	Local Cash	Local In-Kind	Local Total	Other (See Tables)	Total
\$15,000	\$30,000	\$10,000		\$10,000		\$55,000

7.60 Scotia Downtown Connections Plan, Village of Scotia

The Downtown Connections Plan intends to improve the pedestrian, bicycle and mass transit experience in the Village's Central Business District along Mohawk Avenue (NYS Route 5). The current focus of this corridor, especially at the intersection with NYS Route 50, is the quick and efficient movement of commuters and freight through the Village. Although the importance of that cannot be minimized, the Village intends to increase the focus on other user groups and how their safety and enjoyment of the area can be enhanced. Additionally, the connection from the Central Business District to Collins Park will be analyzed with the goal of improving pedestrian flow and enhancing the user experience. The consultant contract is \$80,000 over two years.

Beginning Date	Percentage Completed	End Date
September 2020	0%	September 2021

CDTC Resources	Consultant	Local Cash	Local In-Kind	Local Total	Other (See Tables)	Total
\$15,000	\$30,000	\$7,500	\$5,000	\$12,500		\$57,500

Task 7.90 Hoosick Street Parkway Implementation Study

The City of Troy seeks to enhance the functioning of Hoosick Street and the two Hillside Neighborhoods, separated by the Route 7 bridge and roadway widening in the 1970's. The general study area includes

Hoosick Street from the Hudson River to 14th Street on the east, and the Hillside Neighborhoods from Jacob Street in the South to Middleburgh Street in the north. The study will develop affordable options to calm traffic on Hoosick Street and its feeders to connect both Hillside South and Hillside North with Route 7 and the River Street commercial corridor.

Particular attention will be given to bicycle accommodations, vehicle turning movements and potential rerouting options to reduce cut through traffic through the neighborhoods. The study will also develop neighborhood Complete Street concepts, streetscape enhancements and improved traffic patterns within both neighborhoods including connections to downtown commerce and transit services. This effort will build upon the 2004 Hoosick Street Phase II Corridor Linkage Study and the Route 7 Pedestrian Safety Study.

The study also includes \$5,000 in City of Troy in-kind staff services.

Beginning Date	Percentage Completed	End Date
June 2019	0%	July 2020

CDTC Resources	Consultant	Local Cash	Local In-Kind	Local Total	Other (See Tables)	Total
\$15,000	\$40,000					\$55,000

STATEWIDE PLANNING EFFORTS

NYSAMPO Shared Cost Initiatives (SCI)

The Shared Cost Initiative Program is a joint program of the State’s fourteen MPOs, with funding provided from each MPO and administration provided by a “host” MPO for each effort on behalf of the group. Planning efforts funded through this program support research and technical activities of a mutually beneficial nature to all fourteen MPOs in the State.

- NYSAMPO Staff Support: CDTC will continue to hold the annual contract for the Statewide Association staff support. For 2020-21, the contract will be \$250,000 (\$150,000 FHWA PL and \$100,000 NYSDOT SPR). CDTC will also continue to manage the contract.
- NYSAMPO Shared Cost Studies: There are no shared-cost initiatives currently programmed. The Association has decided not to add new projects at this time.
- NYSAMPO Staff Training: Will continue to provide for training opportunities related to planning (GIS, freight planning, environmental planning, simulation modeling, etc.), management, and staff development during 2018-20. The Genesee Transportation Council (GTC) will manage the program. \$118,667 is available for this training (\$92,513 FHWA PL, \$20,923 FTA MPP, and \$5,231 State Match (IKS)).
- AMPO Dues: The AMPO dues for all fourteen MPOs in the State are redistributed to the Binghamton Metropolitan Transportation Study (BMTS) which pays AMPO on behalf of all New York State

MPOs. There is \$41,292 in FHWA PL funds available for these dues. CDTC's AMPO annual dues is \$2,398.

State Planning Research (SPR) Funded Efforts

Seven studies which were directly applicable to the Capital Region have been completed using NYSDOT State Planning Research (SPR). See some examples below. Currently there are no SPR funded studies in our area.

- *I-87/Route 9 Integrated Corridor Management Study (Completed 2016)*: The primary goal of the study was to identify cost-effective ways to reduce traffic congestion related to incidents on the Northway. Because the Northway is part of a larger travel corridor that includes Route 9, connecting arterials and collectors, and bus routes, the study took a holistic approach that looks at ways to optimize travel in the whole corridor, not just the Northway. CDTC advanced this study on behalf of NYSDOT. The 20 percent local match for this \$500,000 study was being provided by NYSDOT.
- *Route 50 Saratoga Springs Bike/Pedestrian Safety Study (Completed in 2011)*: CDTC, NYSDOT Region 1, and NYS OPRHP completed a bicycle and pedestrian safety study of the Route 50 corridor in the City of Saratoga Springs. The 20 percent local match for this \$75,000 study was provided by NYSDOT.
- *Short-Term Traffic Data Collection Program (Completed in 2016)*: This program was comprised of inventory counts compiled for state and locally-owned roads, both on and off the federal-aid system. The budget for this task was set at \$2.75 million (for locations throughout Region 1 and Region 9).

NYSAMPO Working Group Support (Completed in 2012): The goal of this study was to cooperatively identify and address opportunities and issues of statewide significance as they relate to New York's 13 MPOs via activities conducted by NYSAMPO's working groups, of which NYSDOT is a participant. The budget was set at \$42,500 for 2011-12.