

# Capital District Transportation Committee

Federal Certification Review – 2012

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## Acknowledgement

We wish to acknowledge Mr. John Poorman for his 35 years of dedication and innovation in the field of urban and metropolitan transportation planning. Mr. Poorman retired in May 2012 after serving as Executive Director of CDTC since 1981.

John is recognized as a national leader in the transportation field, and it is largely due to his leadership and personal charisma that the CDTC embraced its highly successful approach to the metropolitan planning process. He fostered cooperative working relationships among agencies and groups involved in the transportation, business, regional planning and educational disciplines, as well as with the local communities. John served for 14 years as chairman of the New York State Association of Metropolitan Planning Organization (NYSAMPO) and is a past vice-chairman of the Association of Metropolitan Planning Organizations. He also served on the Transportation Research Board's Executive Committee; on the Eno Transportation Foundation's Board of Advisors; and on the National Research Council's Surface Transportation Environmental Cooperative Research Program (STECRP) Advisory Board.

John is presently serving as Chairman of Schoharie Recovery, a nonprofit relief group formed after the tropical storms Irene and Lee that devastated much of Schoharie County, New York.

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# Table of Contents

Executive Summary.....	i
Introduction.....	1
• The Federal Certification Process .....	2
• Status of 2008 Recommendations.....	4
• 2012 Review .....	5
CDTC’s Approach to Planning.....	7
• Unique Prospectus.....	7
• Holistic Approach .....	8
• Identifying Community Values.....	8
• A Sense of Place .....	9
• Complete Streets Concept .....	10
• Overcoming Institutional Barriers.....	10
• Cooperative Approach to Regional Planning & Development .....	11
<u>Certification Topics</u>	
<b>I. Organizational Structure of the CDTC .....</b>	<b>13</b>
• The CDTC .....	14
• Planning Area Boundaries .....	15
• Structure and Membership.....	17
• Agreements and Contracts .....	18
• The Central Staff Structure .....	19
• Host Agency .....	20
• New Executive Director .....	21
<b>II. Unified Planning Work Program .....</b>	<b>23</b>
• Current UPWP .....	23
• Travel Forecasting.....	24
• Data Systems.....	25
• Consultant Administration & Management .....	25
• Statewide Efforts.....	26
<b>III. Metropolitan Transportation Plan .....</b>	<b>27</b>
• <i>New Visions</i> Plan Update Process .....	28
• Evolution of <i>New Visions</i> .....	29
• Quality Region Initiative .....	30
• Alternative Development Scenarios .....	31
• Fiscal Forecast & Fiscal Constraint.....	32
• Policy-Based Travel Forecasting.....	33
• Plan Investment Approach.....	34
• Economic Development Coordination.....	34
• Uncertainty .....	35

---

- “Big Ticket” Items ..... 36
- Preparing for *New Visions 2040*..... 38
- IV. Linkage & Livability..... 39**
  - *The Community and Transportation Linkage Planning Program*..... 40
  - Hudson River Crossing Study ..... 41
  - Implementation of the Albany Airport GEIS ..... 42
  - Safety Planning ..... 43
  - Pedestrian and Bicycle Planning ..... 45
- V. Transportation Systems Operations & Management..... 47**
  - CDTC Approach to Accommodating Travel ..... 48
  - Congestion Management Process..... 48
  - Regional Operations ..... 51
  - Intelligent Transportation System ..... 51
- VI. TIP Programming Investments..... 53**
  - TIP Investment Principles..... 54
  - Risk Management & Tradeoff Analysis ..... 54
  - TIP Development Process..... 55
  - ARRA..... 56
  - Listing of Obligated Projects ..... 57
- VII. Public Involvement ..... 59**
  - CDTC Approach ..... 60
  - Public Participation Methods ..... 60
  - Reaching Traditionally Underserved Populations ..... 62
- VIII. Preservation of Existing Infrastructure..... 65**
  - Slow Deterioration of Infrastructure..... 66
  - Definition of “System Preservation” ..... 66
  - Reevaluation of Future Approach ..... 67
- IX. Multi-Modal Coordination ..... 69**
  - Transit Planning ..... 69
  - Transit Development Plan ..... 70
  - Bus Plus ..... 70
  - Pedestrian & Bicycle Planning..... 71
  - Integrated Corridor Management ..... 72
  - Coordination with Human Service Agencies ..... 72
- X. Linking Environment & Planning ..... 75**
  - Framing the Issues..... 75
  - Every Day Counts ..... 77
  - Air Quality..... 77
- XI. Energy & Climate Change..... 79**
  - CDTC Approach ..... 80
  - UPWP Climate Change Task..... 80

---

DRAFT

- Clean Communities ..... 81
- Energy & Greenhouse Gases Analyses..... 81
- iPool2 ..... 82

**XII. Title VI/Environmental Justice ..... 83**

- CDTC Approach ..... 84
- Identifying Populations..... 84
- TIP Development ..... 85
- Americans with Disabilities Act Compliance ..... 85

**XIII. Freight ..... 87**

- Goods Movement Task Force ..... 88
- Priority Network..... 90
- Freight Reengagement Strategy ..... 91
- Freight Brainstorming Session ..... 91

**XIV. Security Planning ..... 93**

- Definition of “Security” ..... 93
- Critical Infrastructure ..... 94
- CDTC’s Approach ..... 94
- Response vs. Recovery ..... 95
- Schoharie County ..... 96

Endnotes ..... 97

Appendix A: Certification On-Site Review Agenda

Appendix B: CDTC’s 31 Adopted Planning and Investment Principles

Appendix C: Universal Truths to consider when involved in developing Climate Change Plans

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# Acronyms and Abbreviations

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3C	Continuing, Cooperative and Comprehensive
AADT	Average Annual Daily Traffic
ADA	Americans with Disabilities Act
AGFTC	Adirondack Glens Falls Transportation Council
ARRA	American Recovery & Reinvestment Act)
ARISE	Regional Initiative Supporting Empowerment
ATMS	Advanced Traffic Management System (ITS)
ATR	Automatic Traffic Recorder
BRT	Bus Rapid Transit
CAAA90	Clean Air Act Amendments of 1990
CBD	Central Business District
CDCC	Capital District Clean Communities
CDRPC	Capital District Regional Planning Commission
CDTA	Capital District Transportation Authority
CDTC	Capital District Transportation Committee
CDTS	Capital District Transportation Study
CEG	Center for Economic Growth
CFR	Code of Federal Regulations
CMAQ	Congestion Mitigation/Air Quality Improvement Program
CMP	Congestion Management Process
CNG	Compressed Natural Gas
CO	Carbon Monoxide
CO <sub>2</sub>	Carbon Dioxide
CSS	Context Sensitive Solutions:
DOE	U.S. Department of Energy
EJ	Environmental Justice
EPA	U.S. Environmental Protection Agency
ESTA	Empire State Transportation Alliance
FHWA	Federal Highway Administration
FTA	Federal Transit Administration
GEIS	Generic Environmental Impact Statement
GHG	Greenhouse Gas
GPS	Global Positioning System
H.E.L.P.	Highway Emergency Local Patrol
HOV	High Occupancy Vehicle
HOT	High Occupancy Toll
ISTEA	<i>Intermodal Surface Transportation Efficiency Act of 1991</i>
ITS	Intelligent Transportation System
JARC	Job Access Reverse Commute
LOS	Level of Service
M&O	Transportation System Management & Operations
MAB	Metropolitan Area Boundary
MAP-21	Moving Ahead for Progress in the 21st Century Act
MIST	Management Information System for Transportation
MPA	Metropolitan Planning Area

# Acronyms and Abbreviations

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MPP	FTA Metropolitan Planning Program funds
MPO	Metropolitan Planning Organization.
MSA	Metropolitan Statistical Area
NAAQS	National Ambient Air Quality
NEPA	National Environmental Policy Act of 1969
NHS	National Highway System.
NO <sub>x</sub>	Nitrogen Oxides
NYSDEC	New York State Department of Environmental Conservation
NYSDOT	NYS Department of Transportation
NYSERDA	NYS Energy Research & Development Authority
NYSAMPO	New York State Association of MPOs
PL	FHWA's Metropolitan Planning Funds
PM-10	Particulate Matter with a diameter less than 10 micrometers
PM-2.5	Particulate Matter with a diameter less than 2.5 micrometers
SAFETEA-LU	<i>The Safe, Accountable, Flexible, Efficient, Transportation Act: A Legacy for Users</i>
SCI	Shared Cost Initiatives
SEQRA	State Environmental Quality Review Act.
SHSP	Strategic Highway Safety Plan
SIP	State Implementation Plan for air quality
SOV	Single Occupant Vehicle
STIP	Statewide Transportation Improvement Program.
STP	Surface Transportation Program
TANF	Temporary Assistance to Needy Families.
TAZ	Traffic Analysis Zone.
TCSP	Transportation and Community and System Preservation Program
TDM	Transportation Demand Management activities
TE	Transportation Enhancement
TEA-21	<i>Transportation Equity Act for the 21<sup>st</sup> Century</i>
TIP	Transportation Improvement Program
TMA	Transportation Management Area
TOA	NYS Transit Operating Assistance.
TSM	Transportation System Management
UAB	MPO's Urbanized Area Boundary
UZA	Bureau of the Census' Urbanized Area Boundary
UPWP	Unified Planning Work Program
USDOT	United States Department of Transportation
VHD	Vehicle Hours of Delay.
VMT	Vehicle Miles of Travel



# Executive Summary

## Background

The Federal Highway Administration and the Federal Transit Administration reviewed the CDTC transportation planning process in accordance with the requirement of 23 CFR §450.334 that all urbanized areas over 200,000 be reviewed at least every four years to assure that the process is in accordance with federal regulations.

## Main Conclusions

The Capital District Transportation Committee's transportation planning process is an exemplary endeavor and is hereby fully certified. The CDTC planning process is in compliance with the requirements of Section 134 of Title 23, Section 8 of the Federal Transit Act, Sections 174 and 176(c) and (d) of the Clean Air Act, as well as the other sections of law mentioned in 23 CFR §450.334 (a). The MPO is congratulated for the cooperative nature of its process, the use of innovative approaches to foster land use and transportation coordination at both the local and regional level, and the excellent technical capabilities that CDTC Staff and member agencies have developed.

## Recommendations

We offer a number of recommendations on elements of the CDTC planning process in a partnering effort to further improve CDTC's excellent process:

### Transportation Improvement Program

- CDTC should consider how projects in smaller communities might compete better in the project selection process. (page 57)

### Public Involvement

- CDTC should evaluate and potentially redo its website to better enhance public involvement. (page 63)

- CDTC should develop and maintain a more comprehensive mailing list that can be used for targeted outreach and for the issuance of an electronic version of the *In Motion* newsletter. (page 63)

### Security

- CDTC should continue to explore ways in which it might assist rural adjoining counties like Schoharie in developing planning capabilities in order better respond during and after significant and unexpected occurrences. (page 96)

## Noteworthy Practices

Good examples of planning practices abound at CDTC. As part of the federal certification review, we often highlight an MPO's noteworthy activities in order to improve metropolitan transportation planning nationwide. We highlight below 11 noteworthy activities which illustrate the truly exemplary character of CDTC's process. We believe that the following areas are noteworthy activities and practices from which other MPOS can benefit:

- Holistic approach to regional planning and development (page 7)
- The *New Visions* development process (page 28)
- Big Ticket Initiatives concept (page 39)
- The *Community and Transportation Linkage Program* (page 40)
- Participation in the Albany Airport GEIS mitigation activity (page 42)
- Congestion Management Process (page 48)
- Risk Assessment, life cycle costs and tradeoff analysis approach to capital investment (page 54)
- Transportation Improvement Program development process (page 55)
- CDTC's public involvement practices (page 60)
- Bicycle and Pedestrian Program, including the Continuum of Training for Law Enforcement (page 71)
- Lead role in coordinating Clean Communities effort (page 81)

The CDTC process demonstrates the value of gaining cooperation among regional stakeholders. We fully expect that the CDTC will continue fulfilling its crucial role in shaping the area's transportation system for the economic benefit of the region and the quality of life of the entire Capital Region. We commend John Poorman and David Jukins for their leadership and the work of the entire CDTC Staff for its professional capabilities. The Review Team wishes to express our appreciation to CDTC for their hospitality during the onsite review.

**Table 1. Key Planning Products**

	Who Develops?	Who Approves?	Time Horizon	Content	Update requirements	CDTC Status
<i>UPWP</i>	MPO	FHWA & FTA	1-2 years	Planning Studies & Tasks	1-2 years	<i>2012-14 UPWP approved 3/20/2012</i>
<i>Plan</i>	MPO	MPO	20 years	Future Goals, Strategies & Projects	Every 4 years in air quality nonattainment areas	<i>New Visions 2035 Plan Update approved 12/9/2011<sup>a</sup></i>
<i>TIP</i>	MPO	MPO & Governor	4 years	Transportation Investments	Every 4 years	<i>2010-15 TIP approved 9/30/2010<sup>b</sup></i>
<i>Congestion Management Process</i>	MPO	MPO	---	Performance measures and strategies	Periodically	<i>Congestion Management Process approved 6/7/2007<sup>c</sup></i>
<i>Public Participation Plan</i>	MPO	MPO	---	Process to provide reasonable opportunities to be involved.	Periodically	<i>Public Participation Plan approved 6/2/2011</i>
<i>Statewide Transportation Improvement Plan</i>	State DOT	FHWA & FTA	4 years	Transportation Investments	Every 4 years	Approved by USDOT 9/30/2010

- a. In air quality nonattainment or maintenance areas, FHWA & FTA must approve air quality conformity determination before the Plan becomes valid. The MPO approved the *New Vision 2035 Plan Update* on September 15, 2011, and FHWA & FTA, in consultation of EPA, approved the Plan's conformity determination on December 9, 2011
- b. In air quality nonattainment or maintenance areas, FHWA & FTA must approve air quality conformity determination before TIP becomes valid. CDTC approved the *2010-2015 TIP* on June 3, 2010, and the TIP's conformity determination was approved by FHWA & FTA, in consultation of EPA, on September 30, 2010
- c. The CMP was readopted with the *New Visions 2035 Plan Update 12/9/2011*

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# Introduction

Every urban area in the United States that the Bureau of the Census identifies as having a population of 50,000 persons or more must have a designated Metropolitan Planning Organization (MPO) in order to receive federal highway and transit funds. Another prerequisite for such funding is that the projects are developed through a continuing and comprehensive transportation planning process carried out cooperatively by the MPO, the State, and the public transportation operators. The characteristics of such a process are detailed in 23 CFR 450.

The adequacy of the planning process is assessed by federal agencies at two specific points. First, when the MPO approves a Transportation Improvement Program (TIP) containing the projects targeted for federal funds, the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA) must jointly “find” that the TIP is consistent with a Metropolitan Transportation Plan produced by an adequate transportation planning process. This finding is primarily based on the federal agencies’ knowledge of MPO operations and the MPOs “self-certification” that its process meets federal requirements, together with an accompanying explanation as to why the MPO reached this conclusion [23 CFR 450.328(a)]. The Capital District Transportation Committee (CDTC) is the designated MPO for the Albany-Schenectady, New York urbanized area. CDTC approved its most recent self-certification on December 1, 2011.

An additional federal assessment is done exclusively in those metropolitan areas having an urbanized population of 200,000 or more persons; such areas are classified as Transportation Management Areas (TMAs). In TMAs, the FHWA and FTA must review and evaluate the transportation planning process and certify that the MPO is (or is not) meeting the joint planning regulations. This certification is required at least every four years. The Capital District area (also referred to as the Capital Region) is classified as a TMA and is thereby subject to the FHWA/FTA certification review.<sup>1</sup> This document summarizes the findings of the 2012 review.

## The Federal Certification

The federal statutory and regulatory legislation detailing the requirements of a MPO transportation planning process is contained in 23 CFR 450, the latest version of which is dated February 14, 2007. CFR 450's intent is to assure that an urbanized area is developing a transportation system that serves the mobility interests of people and freight through a multifaceted metropolitan planning process. The certification review itself is to assure that the MPO is addressing the major issues facing the area, and that the planning process is being conducted in accordance with:

- 1) 23 U.S.C. 134, 49 U.S.C. 5303 and 23 CFR 450;
- 2) In nonattainment and maintenance areas, sections 174 and 176 (c) and (d) of the Clean Air Act, as amended (42 U.S.C. 7504, 7506 (c) and (d)) and 40 CFR part 93;
- 3) Title VI of the Civil Rights Act of 1964, as amended (42 U.S.C. 2000d-1) and 49 CFR part 21;
- 4) 49 U.S.C. 5332, prohibiting discrimination on the basis of race, color, creed, national origin, sex, or age in employment or business opportunity;
- 5) Section 1101(b) of the SAFETEA-LU (Pub. L. 109-59) and 49 CFR part 26 regarding the involvement of disadvantaged business enterprises in USDOT funded projects;
- 6) 23 CFR part 230, regarding the implementation of an equal employment opportunity program on Federal and Federal-aid highway construction contracts;
- 7) The provisions of the Americans with Disabilities Act of 1990 (42 U.S.C. 12101 *et seq.*) and 49 CFR parts 27, 37, and 38;
- 8) The Older Americans Act, as amended (42 U.S.C. 6101), prohibiting discrimination on the basis of age in programs or activities receiving Federal financial assistance;
- 9) Section 324 of title 23 U.S.C. regarding the prohibition of discrimination based on gender; and
- 10) Section 504 of the Rehabilitation Act of 1973 (29 U.S.C. 794) and 49 CFR part 27 regarding discrimination against individuals with disabilities.

The Federal certification process evaluates an MPO's process, identifies strengths and weaknesses, and makes recommendations for improvement. The recommendations that result from the federal review aim to improve the effectiveness and efficiency of the planning process. More broadly, the review is also an opportunity for federal reviewers to identify noteworthy or innovative practices to share with other states and MPOs. Following the review and evaluation, FHWA and FTA can take one of four certification actions:

- Full certification of the transportation planning process - allows federally funded programs and projects of any type to be approved in the TIP over the next four years in accordance with the continuing planning process.
- Certification subject to specified corrective actions being taken - allows all projects to move forward in the process while corrective actions are taken; this option may take the form of a temporary certification for a certain number of months rather than the full four years.

- Limited certification - allows only certain specified categories of program and project funding to move forward while corrective actions are being taken.
- Certification withheld – the Secretary may withhold up to 20 percent of the funds attributable to the metropolitan planning area of the MPO for projects funded under title 23 U.S.C. and title 49 U.S.C. Chapter 53 in addition to corrective actions and funding restrictions.

The previous federal certification review of the CDTC process was conducted in March 2008 and a final report was released in November 2008. At that time, the FHWA and FTA fully certified CDTC as meeting the federal transportation planning requirements, with ten examples of “best practices” being cited. Recommendations for consideration were also made in five categories (see Table 2).

Table 2. Status of 2008 FHWA/FTA Recommendations		
Federal Statements	Status	
<p><b><u>Transportation Improvement Program</u></b></p> <p>The State, the MPO and the public transportation operators must cooperatively develop a TIP financial budget as the next TIP is being developed</p>	Done.	√
<p>CDTC should reevaluate its Guideline for TIP Changes in light of the new definitions of Amendment and Administrative Modification. CDTC should revisit the issue of how to evaluate TIP amendments that switch 100% non-federal projects to federally funded projects.</p>	Done	√
<p><b><u>Prospectus</u></b></p> <p>By 6/1/2009, the CDTC should update its Prospectus to include specific provisions for information related to the development of financial plans that support the metropolitan transportation plan.</p>	Done	√
<p><b><u>Air Quality MOU</u></b></p> <p>CDTC must execute a written agreement with the NYSDOT, NYSDEC, affected local agencies and the Glens Falls MPO that describes the process for cooperative planning and air quality analyses of all projects outside the CDTC planning area but within the air quality nonattainment area.</p>	Done	√
<p><b><u>Security Planning</u></b></p> <p>CDTC should open a discussion with its members on its appropriate role in furthering the coordination and cooperation among member agencies on the security issue.</p> <p>CDTC should consider obtaining agreement on how decisions involving the use of emergency relief funding would be made.</p>	Done	√
<p><b><u>Public Involvement</u></b></p> <p>CDTC should work to clarify the relationship between the TIP and STIP information on their website</p>	Done	√

## 2012 Review

The 2012 certification review of CDTC's process officially began in February 2012 with the transmittal of correspondence notifying CDTC of the upcoming review and identifying the primary topics for discussion. The site visit dates were coordinated with the Executive Director and the Deputy Executive Director. The CDTC Staff notified the CDTC member agencies and the public of the review and the opportunity to participate.

Before the on-site visit, the FHWA and FTA conducted an internal desk audit of CDTC material, including CDTC's latest self-certification statement, the *2012-14 Unified Planning Work Program*, the *2010-15 Transportation Improvement Program*, *New Visions 2035 Plan Update*, and materials available on the CDTC website.

## Site Visit

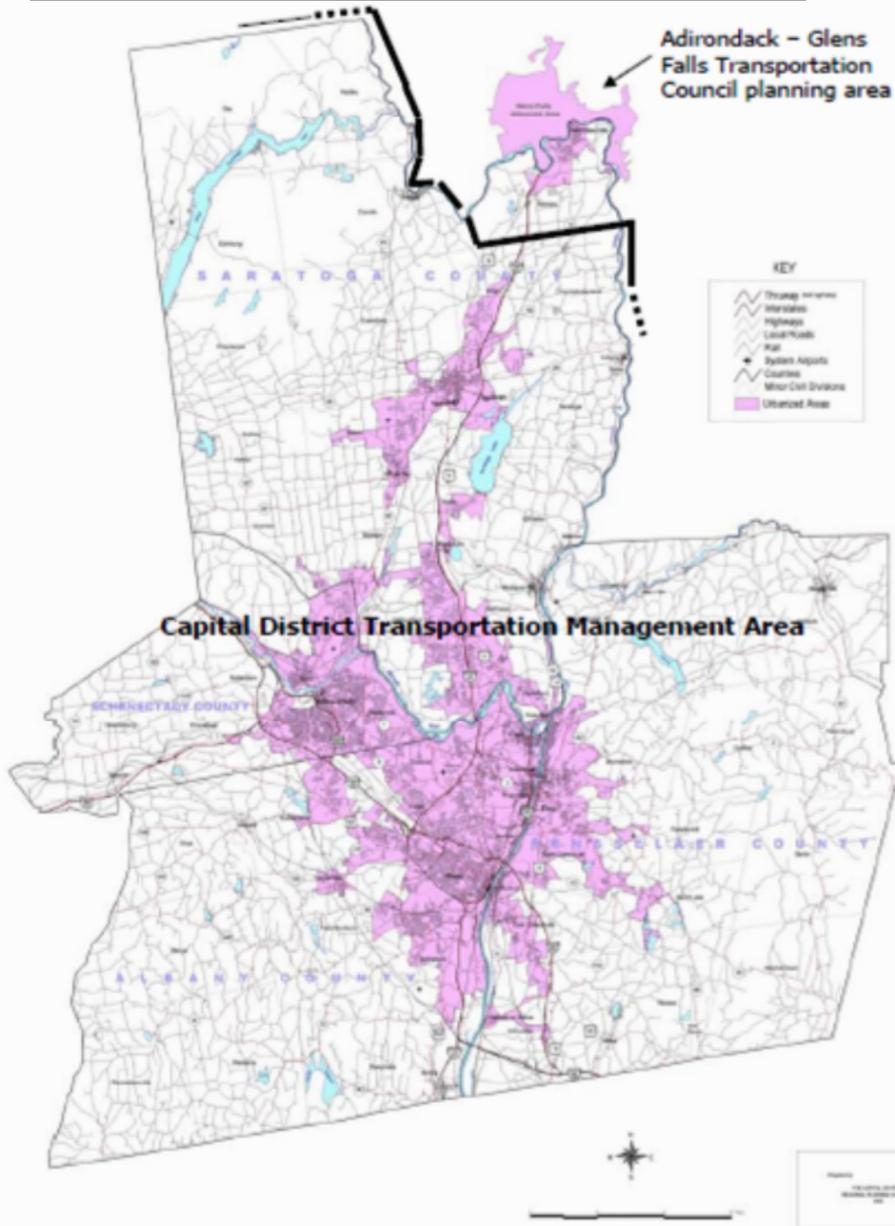
From March 27-28, 2012, the Federal Review Team (the Review Team) visited CDTC offices at One Park Place in Albany. The Review Team consisted of Leah Flax (FTA-Region 2 Office), and Maria Chau and Joseph Rich (FHWA-NY Division Office).

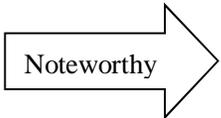
The two-day agenda is attached as Appendix A. The discussions were primarily with the CDTC Staff, including John Poorman (then Executive Director) and David Jukins (Deputy Director). Representatives of NYSDOT's Main Office and Region One Office also participated throughout. All CDTC member agencies were welcome to attend. The Review Team subsequently discussed the CDTC's planning process on April 12<sup>th</sup> with Mayor James Gaughan of Altamont (at his request), a voting representative on CDTC's Policy Board.

## Report Preparation

Following the site visit, the Review Team developed a draft version of the report that was shared with the MPO for technical comment. The comments received are reflected herein.

**Metropolitan Planning Boundary**  
Figure 9-1 in *Prospectus*





# CDTC's Approach to Planning

## Unique Prospectus

CDTC's *Prospectus* is one of the most unique MPO operations plans in the nation and lays out a clear philosophical framework for conducting transportation planning within the Capital Region. In addition to the normal compellation of agency responsibilities, committee structures and operating procedures that all MPOs operator under, CDTC has an 80-page introductory section titled *Planning Approach - An Intention to Succeed*, which puts forth with insightful clarity the planning principles under which CDTC operates. In this section CDTC states that MPO "activities are meaningful and beneficial only if they are integrated with all related subjects...Successful organizations move beyond the narrow confines of their particular subject matter and embrace a culture that fits that subject matter into the broader context."<sup>2</sup> Major elements of the MPO's philosophical framework are described in this section to provide background on CDTC's approach to planning and the subjects reviewed during the federal certification review.

## Holistic Approach

CDTC's *Prospectus* uses the descriptive 'holistic' to characterize its approach to transportation planning. CDTC pursues a course of action that "balances transportation service with community enhancement, operational improvements with physical changes, and provision of modal alternatives with improving highway levels-of-service."<sup>3</sup> This approach requires "transportation facilities and services to be considered in a broader context," and that transportation professionals recognize they are working with a subject that "has substantial influence over much of the social, environmental, economic and political agenda of modern life."<sup>4</sup> CDTC sees the framework of holistic transportation as having five aspects:

- community structure and regional form;
- environmental sustainability;
- quality of life and personal expression;
- public health; and
- economic productivity and competitiveness.

Planning produces projects, and capital planning processes need to balance transportation service with community enhancement, operational improvements with physical changes, and provision of modal alternatives with improving highway levels-of-service. Potential actions are evaluated from the perspective of qualitative as well as quantitative measures of performance. There must be a willingness to establish additional performance measures as new relationships between transportation actions and other conditions are identified, and an acknowledgment that the transportation decision process involves clarifying community values and balancing competing objectives – not pursuing the correct engineering solution.

## Identifying Community Values

CDTC's decision-making flows from a transportation planning process that continually seeks to clarify and document community values so that the region's preferences can be used to balance competing objectives. CDTC has conducted attitudinal surveys in the Capital District to assess perceptions and preferences. The NYS Association of MPOs and the local press have done likewise. The MPO has extensively engaged community and business groups, such as the Center for Economic Growth, the Business – Higher Education Roundtable, and ARISE. In the 2004 Siena Research Group survey, 83% of Capital District respondents favored the use of public funds to create parkland and protect farmland; 64% supported greater funding for sidewalks, bike lanes, paths and crosswalks over building new highways; and 68% supported greater funding for trains, buses and light rail over building new highways. The progressive approach to the *New Visions* development process, coupled with ongoing public surveys, places the MPO's transportation planning agenda repeatedly in the public eye, allowing in-depth scrutiny and the formation of a regional consensus.

The result of this activity is a decision-making process that makes choices based on what is good for the community in the context of its values and priorities, not what is deemed necessary by some strict

engineering guideline. Planners and engineers can get stuck thinking there is a mandate to address traffic level of service as the first priority. In many cases, the tradeoff between traffic congestion and community quality of life is an easier choice for the public than one may think. Decisions are made in a context sensitive manner; rather than automatically improving congestion to a level of service (LOS) "C" or higher, CDTC assesses if something lower, more compatible with the community's values, is sufficient. This assessment is made in part through repeated surveys of public opinion. For example, CDTC conducted a survey of 14,000 residents and businesses along Route 5, a heavily congested arterial, 80% of the responders said that the existing LOS ("F" in several places) was acceptable if other benefits/improvements were implemented. This result played out in other surveys, leading CDTC to conclude that travel time reliability and predictability are valued more highly by travelers than is level of service. So, when designing a project, LOS is now only one consideration/ principle among many that CDTC considers.

## A Sense of Place

The Capital District has adopted the goal of achieving a "quality region." In developing the *New Visions 2030* CDTC convened a Quality Region Task Force which authored "*Pursuing Quality in the Capital Region.*" - a key policy document for the MPO. This document outlines many advantageous characteristics embraced by quality regions, one of them being that the region "fosters community identity and **"a sense of place"** in all parts of the region."<sup>5</sup>

The holistic planning process strives to avoid becoming an "anywhere" type of community with bland development patterns. CDTC tries to cultivate a sense of place - even in a new locality. The sense of place approach considers that a street going through a community isn't just a facility to get from one point outside the community to another point also outside, but rather the street must be considered as part of the community. For example, a roundabout can be seen as a gateway to a community. A holistic planning process considers transportation facilities and services in a broader context because the transportation system greatly influences the social, environmental, economic and political fabric of everyday life.

Integrated transportation planning and community design considers transportation and community planning in a cohesive fashion. In essence, *integrated design* means using transportation investment as a way to *improve* the community rather than as a way to *get through* the community. It is inclusive of all transportation modes (road, rail, pedestrian, transit, etc.), and it puts an emphasis on weaving a community's transportation system and activity centers into the urban fabric through collaborative decision-making. CDTC's holistic approach attempts to use transportation to highlight the common sense of the public; when leaving work and driving home – would you like to live in a community that has a sense of place or not? Most would choose the former.

## Complete Streets Concept

On August 19, 2012, Governor Cuomo signed the Complete Streets Act, which requires project sponsors for road projects receiving state and federal funds to consider the needs of all users in the planning, design, construction, reconstruction, restriping and rehabilitation of the road, using complete streets features such as sidewalks, curb cuts, road diets, and bike lanes. It is noted that CDTC's process has been doing this for years. CDTC agrees that communities are more livable when streets accommodate more than automobile travel. A complete street provides all users, including pedestrians, bicyclists and transit users. It considers the needs of children, elderly, disabled persons, and those that use the street as public space for leisure and to socialize. CDTC is engaging in safety planning activities with this in mind (see Section IV).

## Cooperative Approach to Regional Planning & Development

Cooperation among municipal and regional entities is essential for regional planning and development to be successful. CDTC has achieved credibility with numerous stakeholders that are not at the MPO table but are necessary to achieve their regional vision. CDTC is successful in gaining cooperation because of the proven results of their planning process. Just getting praise for the process without achieving results as a Region is falling short in the CDTC's vision of an MPO. There are several working relationships in the Capital District region that have been fostered through the CDTC process to the greater benefit of the region.

- **Capital District Regional Planning Commission**

CDTC has long enjoyed a cooperative relationship with the Capital District Regional Planning Commission (CDRPC), a voting member on the Policy Committee. CDRPC was established as a regional planning board in 1967 by a cooperative agreement between the counties of Albany, Rensselaer, Saratoga, and Schenectady. Over time, the purpose or mission of the Planning Commission has evolved in response to changes in the region's needs, funding sources, organizational structures, and information technology. CDRPC's role has expanded into aviation planning, crime control coordinator, Economic Development District, Foreign-Trade Zone administrator, and data and information center. CDRPC has *no direct* authority over land use and therefore *no direct* say in the local decision making process. Furthermore, local governments are *not required* to consult with CDTC or CDRPC on local land use or transportation planning. CDTC's *Linkage Program* efforts have helped to fill this planning need.

CDTC's relationship with CDRPC has always been close (CDRPC was the original host for the CDTC Staff). CDRPC undertakes demographic and land use data collection using UPWP funding, and it conducts forecasting activities on the part of the MPO. Although CDTC's *New Visions* is not a true regional development plan, it does identify agreed-upon regional land use policies, and it allows CDRPC to explore the implications of alternative growth and development scenarios for the region.

- **Center for Economic Growth**

CDTC has reached out to the Center for Economic Growth (CEG), which is a private, not-for-profit, membership-based economic and business development organization promoting regional economic expansion throughout the Capital Region and 'Tech Valley'. This area covers the four counties in CDTC plus seven surrounding counties: Columbia, Fulton, Greene, Montgomery, Schoharie, Warren, and Washington.

The CEG make possible the Capital Region Local Government Council, a group composed of chief elected officials (with a significant overlap with CDTC's Policy Board), which engages not only in regional marketing but also in the subjects of regional growth patterns, suburban sprawl, workforce development and urban revitalization.

The CDTC and CEG have a good working relationship with each other. CEG recognized that CDTC had done a lot of the coordinating groundwork for regional consensus and development principles. CEG produced a Regional Development Strategy, which led to the creation of a *Regional Development Coordinating Council* (RDCC) of regional entities, including CDTC, CDRPC, Albany-Colonie Regional Chamber of Commerce, Mayor, City of Cohoes, Albany International Airport, and the CDTA. As part of the *New Visions 2030*, a joint CDTC/CDRPC/CEG/University of Albany study analyzed the fiscal impacts of alternative growth scenarios on transportation, sewer, water, public protection and schools. As a result, CDTC's activity is part of the economic vision for the region.

## Overcoming Institutional Barriers

CDTC has created the following Table (Table 3) to demonstrate how they have overcome institutional barriers and fostered good working relationships.

<b>Table 3. Institutional barriers and required cultural change</b>	
<b>Institutional barrier</b>	<b>Required cultural change</b>
<b>The process is seen to exist primarily because of federal statute.</b>	Participants must move toward seeking opportunities rather than emphasizing requirements.
<b>Transportation planning traditionally has relied on certain (typically technical) skill sets.</b>	The transportation planning process must be staffed with a balance of planning professionals, not dominated by transportation engineers and modelers.
<b>Participating agencies (state departments of transportation, for example) protect their own authority and are reluctant to share decisions within the planning forum.</b>	The process must build technical and political credibility in traditional transportation planning and acknowledge others' authority before seeking to expand the subject range.
<b>The four-step modeling process is viewed as a central piece of planning technology.</b>	The process must view system modeling as only one small element of the available toolbag and acknowledge its severe limitations in models' handling of situations of constrained capacity and uncertainty of forecasts. The process must move away from forecasting with a false sense of accuracy and toward long-term visioning.
<b>Performance measures are quantitative in nature and traditional in scope; new measures have limited acceptance.</b>	The process must acknowledge that traditional measures (value of time, accident costs) are equally as abstract and debatable as new measures (public health impacts, value of reliability, external costs of carbon dioxide production) and move to broaden the set considered.
<b>Qualitative measures have little status in tradition.</b>	The process must affirm that the importance of a subject is not defined by its ability to be easily measured and provide an opportunity for qualitative factors to "trump" other measures when appropriate.
<b>Data are insufficient due to funding limitations.</b>	The process must make greater use of data secondary to the transportation planning process—archived data from traffic management centers; attitudinal surveys performed by research centers; remote sensing data; and building permit information on land development.
<b>Time is insufficient to engage in processes outside the transportation planning process.</b>	Responsibilities among participants must be "divvied up" and delegated to ensure participation from and awareness of local planning, business development and environmental group efforts as well as from and of public safety and traffic and transit operations.
<b>Most problems (such as land use control) lie outside the purview of the transportation planning process.</b>	The process must recognize that transportation planning funding is extremely flexible and can be directed to areas of greatest need. If local land use planning support is more important than enhancement of traffic modeling, it should be funded accordingly.
<b>Freight industry representatives are reluctant to participate or share in a process that focuses on projects with multi-year lead times.</b>	The process must incorporate short-range activities, including traffic operations and incident management, to provide "value added" to private sector representatives.
<b>Metropolitan planning funds are insufficient to achieve an integrated process. Unlimited funding tends to be available for project development work, consuming 10 to 20 times the budget of the planning program</b>	The process must acknowledge that adequate flexibility exists, even with the federal program, to redirect resources to improve the planning process.

Source: John Poorman, *A Holistic Transportation Planning Framework for Management and Operations* ITE Journal, May 2005 <http://www.ite.org/membersonly/itejournal/pdf/2005/JB05EA28.pdf>

# Organizational Structure

## REGULATORY BASIS

*“23 U.S.C. and Section 8 of the Federal Transit Act ... require that a Metropolitan Planning Organization (MPO) be designated for each urbanized area and that the metropolitan area has a continuing, cooperative and comprehensive transportation planning process that results in plans and programs that consider all transportation modes and supports metropolitan community development and social goals.”*

- 23 CFR Section 450.300

Among various requirements in 23 CFR §450, Federal law calls for a “3 C” multimodal transportation planning process that shall be continuous, cooperative, and comprehensive, and which provides for consideration and implementation of projects, strategies, and services that address specific planning factors. Throughout the regulations, at the very core of the requirements is a strategic focus on cooperative decision making through the active engagement of a wide variety of interested parties. The metropolitan planning organization (MPO) is the federally recognized forum for decision making by local elected officials, public agency officials who administer or operate major modes of transportation in the metropolitan planning area, and State transportation officials who are involved in the planning and programming of Federal transportation investments.

## Capital District Transportation Committee

The "Capital District Transportation Committee Policy Committee" is the designated MPO for the "Albany -- Schenectady New York urbanized area."<sup>6</sup> Capital Region is so named because Albany is the Capital of New York State. The MPO was originally established in January 24, 1974 when Governor Wilson designated the "Policy Committee" of the then-existing Capital District Transportation Study as the MPO for the Capital Region. The MPO's official name was changed to the "Capital District Transportation Committee" shortly thereafter. The Capital Region also includes a second urbanized area - Saratoga Springs - designated as such by the 2000 Census.

The MPO's planning area is defined as the four counties (Albany, Rensselaer, Schenectady and Saratoga) and contains eight cities (Albany, Schenectady, Troy, Saratoga Springs, Cohoes, Watervliet, Mechanicville and Rensselaer). The CDTC Policy Board includes elected and appointed officials from all four counties and eight cities. The total 2010 Census population of 837,967 represents a 5.5 percent growth over 2000. All four counties experienced growth, with Saratoga experiencing the greatest increase of 9.5 percent, representing over 40 percent of the Region's overall growth. All of the eight cities in the Capital District are growing, some for the first time in 50 years.

Success through the  
 cooperation of member  
 agencies

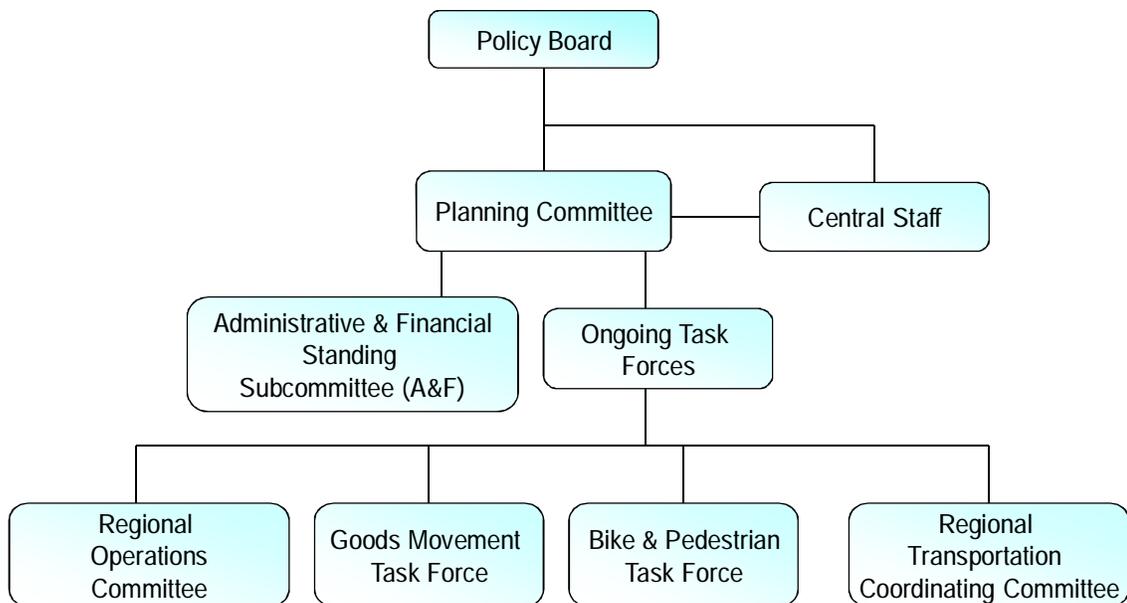
As part of its public outreach efforts, CDTC issues a "Reference Guide to the Capital District Transportation Committee," which is designed to be easily read and comprehended and details the purpose of the MPO, how it is structured, member agencies, roles and responsibilities, etc. This Guide is updated periodically, the last update being 2009.

<b>County</b>	<b>2010</b>	<b>2000</b>	<b>Percent Change</b>	<b>Percent of Growth</b>
Albany	304,204	294,565	3.3%	22%
Rensselaer	159,429	152,538	4.5%	16%
Saratoga	219,607	200,635	9.5%	43%
Schenectady	154,727	146,555	5.6%	19%
<b>TOTAL</b>	<b>837,967</b>	<b>794,293</b>	<b>5.5%</b>	<b>100%</b>

## CDTC's Planning Area Boundaries

CDTC deals with four boundaries that impact its metropolitan planning process:

- Census Urbanized Area (UZA): After each decennial Census, the Bureau establishes a Census Boundary for each urbanized area and provides maps showing what communities (or parts thereof) comprise the urbanized population. An urbanized area is a geographic entity consisting of a densely settled core created from census tracts or blocks and adjacent densely settled territory. Together, they contain at least 50,000 people, with an overall population density of at least 1,000 people per square mile. The UZA sets the urbanized area's population for apportionment of FHWA's STP-Large Urban and FTA's Section 5307 funds. As noted previously, there are two urbanized areas within CDTC's jurisdiction: Albany and Saratoga Springs. The UZA maps for the 2010 Census designations were in the process of being released during this review.
- FHWA Urban Area Boundary (UAB): Using the UZA as a starting point, an MPO establishes its UAB by adjusting the UZA outwards to better reflect an area's transportation needs. This adjustment requires agreement among "the responsible State and local officials in cooperation with each other" [23 U.S.C. 101(a)(37)]. The UAB is the official "urban/rural" boundary for highway functional classification, roadway design standards, eligibility for regular FHWA-funded improvements, eligibility for Emergency Relief funding, and outdoor advertising control.<sup>7</sup> The UAB is approved by the USDOT Secretary of Transportation. Following the 2000 Census, separate UABs were established for CDTC's two UZAs.
- Metropolitan Planning Area Boundary (MPA): This is the geographical area within which the MPO's transportation planning process is carried out. The MPA includes the UAB plus any area that the MPO anticipates to become urbanized in 20 years, and the MPO and the Governor must agree on the MPA.<sup>8</sup> CDTC's MPA covers all of Albany, Rensselaer, Schenectady and Saratoga Counties, excluding the Town of Moreau in Saratoga County which is in the Glens Falls urbanized area. Following the 2000 Census, Saratoga Springs was recognized as a separate urbanized area, which allowed the possibility of forming a separate MPO for Saratoga Springs if the local officials so desired. After consultation with CDTC members, the local officials in Saratoga Springs chose to remain under the CDTC planning umbrella. It is expected that the four-county MPA will remain the same after the 2010 UAB(s) is established.
- Air Quality Nonattainment/ Maintenance Area Boundary - In air quality nonattainment/ maintenance areas, the MPA must include the entire nonattainment area – unless the Governor and the MPO agree otherwise.<sup>9</sup> In the Capital District, the Governor and the MPO did agree otherwise and chose to keep separate - for transportation planning purposes - the four counties of the MPO from the three associated rural counties in the nonattainment area: Greene, Schoharie and Montgomery. Coordination of air quality analyses is accomplished according to a Memorandum of Understanding among CDTC, AGFTC and NYS DOT.



## CDTC Structure and Membership

**REGULATORY BASIS** Federal legislation (23 U.S.C. 134(d)) requires the designation of an MPO for each urbanized area with a population of more than 50,000 individuals. The legislation requires that the policy board of the MPO shall consist of local elected officials, local agency officials who administer or operate major modes of transportation within the area, and appropriate State officials.

**POLICY BOARD.** The CDTC purposely uses the term “Policy Board” rather than “Policy Committee” in order to reduce the amount of confusion over the term “committee”. The Policy Board is composed of the principal elected officials of general purpose local government, as well as the principal officials of regional and State transportation agencies (Table 3). The majority of Policy Board members are non-State entities, and all CDTC voting members have an equal vote.

CDTC membership is dynamic. Over the years, CDTC has expanded its original voting membership to include new intermodal transportation providers, such as the New York Thruway Authority, the Albany Port District Commission and the Albany County Airport Authority. CDTC also takes the position that any municipality over 50,000 population should have a permanent seat on the Policy Board; as a result, the Town of Colonie was added as a voting member.<sup>10</sup> The Policy Board currently has 25 voting members. The Federal agencies are non-voting members of the Board.

Voting is by consensus. CDTC has adopted a “consensus” approach to its policy board decision-making. Consensus is determined by agreement among all affected parties. When consensus cannot be reached at a meeting, action is deferred to give time to address the issues of concern.<sup>11</sup> All affected CDTC voting members have an equal vote (i.e., virtual veto) over any major decision affecting them. The Policy Board meets four times a year.

CDTC will maintain a dynamic membership structure and a flexible agenda.

2009 Agreement  
CDTC-CDTA-NYS DOT

**PLANNING COMMITTEE.** Under the Policy Board is the Planning Committee, which is responsible for developing the UPWP and the TIP, and meets monthly. Like the Policy Board, the Planning Committee includes wide representation from the State, Regional, City and local municipalities - generally, the Planning Committee is composed of the technical counterparts of the Policy Board members.

**SUBCOMMITTEES & WORKING GROUPS.** Planning Subcommittees are established by the Policy Board for particular tasks. The Administrative and Financial Standing Subcommittee is the only standing subcommittee at this time. There are four working groups/task forces: the Bicycle/ Pedestrian Task Force, the Goods Movement Task Force, the Regional Operations Committee, and the Regional Transportation Coordinating Committee.

TABLE 4. CDTC POLICY BOARD	
Entity	Representation
Counties (8)	Albany County Executive; Albany County Legislature; Rensselaer County Executive; Rensselaer County Legislature (chair); Schenectady County Board of Representatives (chair); Member-at-large named by Schenectady County Board of Representatives; Saratoga County Board of Supervisors; Member-at-large named by Saratoga County Board of Supervisors
Cities (8)	City of Albany (Mayor); City of Cohoes (Mayor); City of Troy (Mayor); City of Schenectady (Mayor); City of Mechanicville (Mayor); City of Saratoga Springs (Mayor); City of Watervliet (Mayor); City of Rensselaer (Mayor)
Towns & Villages (3)	Supervisor, Town of Colonie; Rotating members: At-large town representative(s) and/or At-large village representative(s). These two rotating positions are chosen annually.
Regional Bodies (4)	Capital District Transportation Authority; Capital District Regional Planning Commission; Albany Port District Commission; Albany County Airport Authority
State Agencies (2)	NYS Department of Transportation NYS Thruway Authority
Federal Agencies (2)	Federal Highway Administration (NY Division); Federal Transit Administration (Region 2) - <i>Federal agencies are non-voting members</i>

## Agreements and Contracts

**REGULATORY BASIS** Federal legislation (23 U.S.C. 134) requires the MPO to work in cooperation with the state and public transportation agencies in carrying out a continuing, cooperative, and comprehensive (3C) metropolitan planning process. These agencies are allowed to determine their mutual roles and responsibilities, and they develop procedures governing their cooperative efforts. These working relationships must be formally established, usually through agreements or memorandum of understanding between the MPO and the State, and between the MPO and the public transit operators [23 CFR 450.314(a)]. The regulations also require an agreement between the MPO and the designated agency for air quality planning under the Clean Air Act.

The CDTC's basic document defining the roles and responsibilities of the various parties is its five-year *Continuing Operations Plan*, which was adopted by the Policy Board in June 2010. As discussed in the previous section of this report, the Operations Plan is a unique document among MPOs in that it contains both the procedures for operation as well as CDTC's philosophical approach to transportation planning.

There are several other major agreements among the member agencies:

- CDTC-CDTA-NYSDOT agreement defining the roles and responsibilities of these three entities, including mandatory elements regarding financial planning and publication of obligations<sup>12</sup> (December 2009).
- CDTA and NYSDOT continuing agreement detailing the hosting arrangements of CDTC's Central Staff (2012).
- CDTC-NYSDOT-AGFTC Memorandum of Understanding describing coordinated analysis efforts in undertaking air quality analyses for Saratoga County's Town of Moreau which is within the Glens Falls MPO (Adirondacks/Glens Falls Transportation Council) area of responsibility (December 2009).

Formal agreements help to detail working arrangements of the core transportation entities. However, how those arrangements function in practice is often determined by individuals. A comfort level among collaborating parties is necessary, and it takes time to develop working relationships. One of the greatest advantages of CDTC's evolving *New Visions* approach (see Section III of this report) is that the process has provided a mechanism for developing such relationships, giving real meaning to CDTC's agreements and real capacity to carry out the 3C planning process.

## Staff

The CDTC carries out its transportation planning activities through a cooperative process involving a Central Staff, the staffs of member agencies, and consultant services as needed. The Central Staff performs the bulk of the federally funded MPO planning activity.

NYSDOT, CDTA, Capital District Regional Planning Commission (CDRPC), the Town of Colonie and the local municipalities provide state and local financial support to the program.

CDTC's Central Staff has a national reputation of being highly capable, innovative and professional. It is composed of 12-15 individuals (including interns), which is rather small for an MPO this size. Our previous certification reviews have recognized both the Staff's professional creativity and its ability to develop very professional and readable products, and that tradition continues. Nationally, it is at the forefront of MPOs in land use and transportation planning.

The (CDTC) staff seeks to apply a diverse set of skills to assure that CDTC's deliberations are founded on solid technical work and broad public access.

[A Reference Guide to the CDTC](#)

The CDTC's organizational structure is "flat" rather than hierarchical, with no intermediate managers between the Executive Director and the rest of the CDTC Staff (except for oversight responsibility for the interns and planning aides). Staff members come together and form work teams when dealing with studies/projects of overlapping interest, and the effort to cross-train on many subjects is ongoing. This organizational structure requires both personal initiative and teamwork, and it has been successful.<sup>13</sup>

There have been relatively few personnel turnovers in the past 15 years, even though the workload and responsibility on each member is greater than many MPOs larger in size.

The staffing plan is set by the Administrative and Financial Standing Subcommittee (A&F Subcommittee), a subcommittee of the Policy Board. The A&F Subcommittee is composed of the CDTC Chairman and other appointees; A&F handles CDTC personnel and housekeeping issues on behalf of the Policy Board.

As previously noted, the staff's size is somewhat small for an MPO with CDTC's responsibilities, and the addition of positions in response to an increase in Federal planning resources is not automatic. For example, as FHWA's metropolitan planning (PL) funding resources increased under previous federal legislation, CDTC consciously chose to support of the *Linkage Program* rather than having a corresponding increase in staff size. This decision has greatly benefited local land use and transportation planning efforts.

The staff enjoys the trust of the CDTC member agencies, and they have achieved a good rapport with communities around the region. The Staff is presently located at perhaps the most prestigious sounding address in the Capital District: 1 Park Place.



## Host Agency

The administrative host of the CDTC Staff is the Capital District Transportation Authority (CDTA), the major transit provider for the region. CDTA is recognized as a model host agency within New York. CDTA's host function is to provide logistical support to the CDTC Staff, functioning primarily as a funnel for the funding. CDTA houses CDTC Staff administratively but not physically, meaning they pay the salaries before federal reimbursement, and execute contracts on behalf of CDTC Staff. When transportation planning funds flow through NYSDOT to third-party entities, there must be a formal agreement in place approved by the State Comptroller. The continuing NYSDOT-CDTA Host Agency Agreement was updated on May 10, 2011, and it was formally endorsed by CDTC with a resolution of thanks to CDTA on March 1, 2012. The agreement's horizon date is 2020.

CDTC Staff receive direction from the Policy Board and Planning Committee through the Staff Director. This arrangement allows that the CDTC Staff to be independent in their professional recommendations and remain unbiased toward any member agency's viewpoint.

## **New Executive Director**

In June 2012, CDTC appointed Michael V. Franchini as the new Executive Director. The CDTC established a search committee, advertised nationally, and interviewed qualified candidates during the four-month process to find a replacement for the recently retired Executive Director John P. Poorman. Mr. Franchini previously worked as the City of Albany Commissioner of Water, Albany County Commissioner of Public Works, and Albany County Director of Operations. He was also the Albany County representative at the CDTC for 14 years and served as the CDTC Planning Committee Chairman for seven years.

## **Federal Findings**

None

DRAFT

# Unified Planning Work Program

## REGULATORY BASIS

23 CFR 450.308(c) requires MPOs to develop Unified Planning Works Programs (UPWPs) in cooperation with the State and public transit agencies and sets forth the elements to be included in the UPWP. MPOs must include a discussion of the planning priorities facing the metropolitan planning area, and identify work proposed for the next one- or two-year period by major activity and task [including activities that address the planning factors in 23 CFR §450.306(a)], in sufficient detail to indicate:

- i. who (e.g. MPO, State, public transportation operator, local government, or consultant) will perform the work,
- ii. the schedule for completing the work,
- iii. the resulting products,
- iv. the proposed funding by activity/task, and
- v. a summary of the total amounts and sources of Federal and matching funds.

## CDTC's UPWP

The work program is set annually through CDTC's UPWP developed by the Planning Committee and adopted by the Policy Board. The UPWP also describes the federally-assisted transportation planning work by CDTA, NYSDOT, CDRPC, local governments and others, as well as other planning studies in the region, as part of the overall CDTC effort. The current UPWP is a two-year document covering the period of April 1, 2012 to March 31, 2014. It is supported by the two primary sources of federal planning funds: FHWA's Section 104(f) Metropolitan Planning (PL) funds and FTA's Section 5303 Metropolitan Planning Program (MPP) funds. The federal funds in the 2012-14 UPWP from these sources are \$2,166,553 and \$338,072, respectively for 2012-13. CDTC Staff activity is primarily matched by NYSDOT in-kind services of approximately \$500,000.

The 2012-13 year of the UPWP totals \$4,291,677 of work. In addition to the above federal funds, the UPWP also includes the following resources:

- \$140,000 FHWA SPR funds<sup>14</sup>
- \$135,000 FHWA STP funding for CDTC Staff activity on specific project development activities
- \$84,000 from the Town of Colonie and Albany County
- \$181,000 cash contribution to support CDTC's *Linkage Program* from local sponsors
- \$525,000 in FHWA's CMAQ funding for three CDTA projects<sup>15</sup> in the TIP that are planning related
- \$104,000 from the Department of Energy<sup>16</sup> and New York State Energy Research Agency

CDTC's capable management of UPWP tasks and studies is duly noted; CDTC is a model MPO in this respect. Descriptions of tasks, funding sources, expected products and participating agencies are made clear in the document. Studies are completed in a timely manner and multi-year tasks are clearly tracked.

## Travel Forecasting

CDTC's travel demand forecasting model is called the Systematic Traffic Evaluation and Planning (STEP) Model, which utilizes VISUM software as its basic platform.<sup>17</sup> The model was calibrated and accepted by the New York State air quality group, known as the Interagency Consultation Group (ICG), for use in air quality conformity analyses in 2010.

The STEP Model contains 1,000 traffic analysis zones (TAZs) that cover the entire four counties region (925 TAZs from the 2000 Census, an additional 31 zones were for external zones plus 44 zones for special trip generators). The network includes all federal aid highways in the four counties, as well as selected streets not on the federal aid system. Altogether, there are 10,686 directional links and 4,168 nodes. In 2010, CDTC revised its methodology for estimating daily vehicle miles of travel (VMT), and the model now shows daily VMT growing faster than peak hour VMT, as has been observed. Part of this is due to the investment strategies outlined in *New Visions*, which are targeted at moderating peak hour VMT rather than daily VMT.

### Key Activities for 2012-2014 UPWP

- SAFETEA-LU Succession
- *New Visions 2040 Plan*
- *New Visions* Implementation
- Transportation Improvement Program
- Data Collection
- Technology
- *New Visions* Environmental Initiative
- Regional Operations Initiative
- Integrating Safety into Planning
- Public Transit System Planning and Development
- Integrated Corridor Planning Efforts
- Planning and Environmental Linkages

Where possible, CDTC uses locally-determined trip generation rates. The MPO has collected extensive field information on site-based trip generation rates to permit a significant refinement from the use of nationwide averages. Mode-choice is not yet part of the model, but CDTC Staff have started work on a mode-choice model using the VISUM platform at the request of CDTA; this will support additional Bus Rapid Transit (BRT) planning in the region.

## Data Systems

CDTC has the following data systems in place:

- NYSDOT annual bridge inventory (850 bridges)
- NYSDOT annual scoring of touring route system (2500 lane miles)
- CDTC biennial scoring of non-state Federal-aid (FA) system (1400 lane miles) since 1983
- CDTC quadrennial sample scoring of local roads (9400 lane miles) since 1984
- CDTC supplemental 100% scoring of Albany county roads
- CDTC supplemental 100% scoring of Albany city roads
- Transit system infrastructure age, rehab/ replacement plans
- Facilities
- ITS
- Signal system, ITS capital needs estimates
- Sidewalk inventories, "ped friendliness"
- Operations and maintenance costs of the transportation network

As part of the New York State Association of MPOs, CDTC is participating in a Data Collaboration Scan sponsored by NYSDOT. The purpose of the scan is to determine how New York's MPOs and NYSDOT can share existing data and use data collection resources more efficiently to avoid duplication. On July 6, 2012, President Obama signed into law P.L. 112-141, the Moving Ahead for Progress in the 21st Century Act (MAP-21). The new legislation requires MPOs and states to develop transportation plans and transportation improvement programs through a performance-driven, outcome-based approach to planning. Performance-based planning may require CDTC to collect new data and accelerate data collection efforts. CDTC will explore the use of consultants to supplement the intern-based program. The CDTC did explore the prospect of serving a stronger role as a transportation data repository and manager but had to dismiss the idea due to fiscal and staff constraints.

## Consultant Administration and Management

The CDTC Staff manages a large number of consultant contracts, the major contributor to this workload being the *Linkage Program*, wherein CDTC Staff manages the local land use/transportation consultant studies funded through the UPWP. The Staff crafts the study scope in collaboration with the community, guides the study steering committee, and reviews and oversees consultant activity. CDTC has streamlined the process for consultant selection by developing detailed scopes of services before soliciting consultant interest and publishing a Request for Expression of Interest (REI) instead

of a full-blown Request for Proposal (RFP), thereby minimizing the amount of up-front consultant effort. The 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. Nearly 20 different firms have been contracted in the past few years, broadening the region’s exposure to creative consulting firms.

In addition to overseeing consultant contracts, CDTC Staff provides site impact review assistance upon request to municipalities; in one town, an ongoing contractual relationship gives the staff responsibility to review proposals and identify appropriate development mitigation fees.

## Statewide Efforts

The thirteen MPO Directors in New York State have formed the *New York State Association of Metropolitan Planning Organizations* (NYSAMPO). This coalition of MPOs work together on planning and research efforts toward common goals, and they have agreed to pool some of their FHWA PL and FTA Section 5303 planning funds on joint projects. A consultant serves as the Association’s staff. The 2012 budget for this activity is \$175,000, and CDTC administers the contract.

MPO members of NYSAMPO undertake joint activities called “Shared Cost Initiatives” (SCI). By pooling resources, the MPOs can undertake studies of topics of mutual interest that they individually might not be able to afford. Prior to the signing of MAP-21 on July 6, 2012, NYSAMPO decided not to begin any new SCI efforts until after planning resources are better known.

## Federal Findings

None

# Metropolitan Transportation Plan

## REGULATORY BASIS

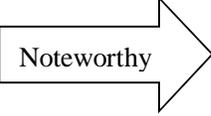
Federal requirements for long-range transportation plans are contained in 23 CFR §450.322. Of particular relevance to this review, 23 CFR §450.322(f)(10) calls for a Metropolitan Transportation Plan that, at a minimum, includes “a financial plan that demonstrates how the adopted transportation plan can be implemented.”

Federal regulation 23 CFR 450.322 requires the development of a Metropolitan Transportation Plan (MTP) with a minimum 20-year planning horizon as a key product of the metropolitan planning process. MTPs must include both long-range and short-range strategies/actions that lead to the development of an integrated multimodal transportation system to facilitate the safe and efficient movement of people and goods in addressing current and future transportation demand. The MTP is to be updated every four years in nonattainment and maintenance areas and every five years in attainment areas to ensure its consistency with changes in land-use, demographic, and transportation characteristics. The minimum contents of the MTP are defined in 23 CFR 450.322(f).

## Background in Capital District

Livability, sustainability, smart growth – phrases with slightly different meanings and subtleties – all portray the desire to achieve a quality living environment. All these concepts were woven into the CDTC planning process long before these phrases became known in planning circles.

The excellence of the CDTC planning process is cultivated by the MPO's methodical and visionary approach to regional issues. The process has produced a series of *New Visions* regional transportation plans (RTPs) which fulfill the federal requirement for an MTP. The latest of CDTC's RTPs is *New Visions 2035 Plan Update - Choosing Our Future*. The CDTC philosophy embodies a holistic concept that transportation by itself means nothing – it has to relate/interrelate with other concerns of the community. The *New Visions 2035 Plan Update* (September 2011) is the fifth installment in the series of “vision” documents. While it is the required MTP for the Capital District, it purposefully incorporates the importance of land use design and smart growth management so that both the quality of the region and the quality of the transportation system are mutually maintained. A key to the *New Vision's* effectiveness is that it is grounded in regional consensus, incremental changes, and fiscal constraint. The strength of the plan is in the degree to which consensus on key principles is achieved and in the affordability of the recommended actions.



Noteworthy

### ***New Visions* Plan Update Process**

The MPO's approach to long range planning has been very deliberate and notably different from many other MPOs. The federal requirement is for the MTP to be reviewed and updated every four years, five years if in an air quality attainment area. Most MPOs have chosen an eight year cyclical process wherein it has a major “start from scratch” effort in year one, an update of “facts” and system conditions four years later, and then another major “start from scratch” effort in year eight. While acceptable, insights about how and why people travel in the region are generally no better known in year eight than in year one.

The *New Visions* approach to regional transportation planning continually adds fresh layers of insight into how and why people travel, shared values, and how better to coordinate regional vision with land use and transportation at the local level. CDTC's *New Visions* RTP was first adopted in 1997 and has been used to establish transportation planning and investment principles for the region. The updated plan has not backed off of the original *New Visions* principles or objectives and remains focused on outcomes for the region. CDTC does not go into the same level of detail on the updates, but rather refines and expands on previous work. It looks for ways to test, reinforce, and support that vision with each update. This approach has been characterized as adding successive layers of “rightness” to a “core” of knowledge and practice. The outcome has been that the vision statement itself has changed little over the years, with subsequent updates adding enhancements and refinements of the MPO's understanding of what constitutes a holistic plan for a quality region.

The current MTP plan for the Capital District is the *New Visions 2035 Plan Update* which was adopted in September 2011. The 2035 Plan reaffirms the CDTC's principles, strategies and actions, updates forecasts through 2035, and broadens the scope of the original plan to include more regional land use and development issues.

## Evolution of *New Visions*

When the MPO first embarked on the *New Visions* approach in 1993, it was novel among New York MPOs. The traditional approach had been to develop an RTP by forecasting future travel and population growth and then attempting to accommodate them. CDTC chose to step back and take a comprehensive, grass-roots look at where the Capital District *wanted* to go in the next 25 years, and then estimate the financial resources necessary to get there. It was a proactive plan rather than a reactive plan. It was a holistic evaluation of regional planning and development, wherein transportation planning was to play an integral part in helping the region develop in the way the public wanted. Many MPOs now embrace this concept, but not to the full extent CDTC does.

What CDTC did in the 1990s with *New Visions* was fairly unique - it established regional forums for the investigation of fundamental paradigms about how to achieve its holistic goals. Nine task forces were established and charged with five overriding considerations: safety, land use, environmental impact, resource efficiency, and social justice and equality. These task forces were composed of interested parties (citizens and groups), CDTC Staff, and Planning and Policy Board representation. The task forces made no specific recommendations on the suggestions – their role was to develop facts, figures and realistic costs that would later be further investigated as to what these facts and costs mean to the Capital District's future.

CDTC made concrete policy decisions on the eventual allocation of resources:

1. Meet basic system preservation *first*;
2. Pursue funding sufficient levels to permit full implementation of the entire plan of reasonable actions; and
3. Seek progress across *all* fronts whenever funding levels exceed the basic system preservation level.

The plan development process resulted in several exceptional policy decisions that still guide the CDTC decision-making process.

- Jurisdictionally-blind transportation investment. Investment is to be based on function and need, not upon facility ownership. Member agencies agreed to put all funds (NHS, CMAQ, STP) on the table; the best projects are selected according to CDTC investment strategy (and Federal eligibility guidelines), and then money is assigned.
- Capacity improvements are discretionary. “System preservation” is defined in terms of maintaining existing facilities at the current (1996) conditions. Capacity and safety improvements and design upgrades carried out in conjunction with facility renewal are considered separately in the plan as *discretionary* improvements, similar to stand-alone capacity, safety, or bike/pedestrian actions.
- Steady across-the-board progress. The plan establishes a policy that, after system preservation needs are met, steady progress is to be pursued *across-the-board* in 17 budget

categories. If necessary, CDTC will steer federal funds to certain categories to ensure a balanced investment program in the TIP.

- The Region will build strong urban, suburban and rural communities, knitting them into a cohesive metropolitan area.

By mutual agreement of the member agencies, the principles, strategies and budgetary emphases established in *New Visions* developed in 1997 would guide TIP project decision making. This decision greatly reduced institutional and jurisdictional barriers, and it was highly effective in shepherding transportation investment along regional desires. Not unexpectedly, issues change over the years, as do available revenues. CDTC revisits these issues in each version of the Plan.

*New Visions* is centered on 31 principles, grouped into four categories:

- Plan and build for all modes of transportation, including pedestrian, bicycle, public transit, and cars and trucks.
- Preserve and manage the existing investment in the region's transportation system.
- Develop the region's potential to grow into a uniquely attractive, vibrant, and diverse metropolitan area.
- Link transportation and land use planning to meet the LRTP's goals for urban investment, concentrated development patterns, and smart economic growth.

## Quality Region Initiative

As CDTC prepared for the *2030 Plan* in 2006/2007, they explored issues relating to the quality of life in the region- a topic upon which consensus was not obtained in earlier versions of the Plan. This included solutions to congestion in some major corridors, funding availability, and priority of need.

CDTC and CDRPC created the Travel Task Force to better explore the issue of what a quality region might mean to the Capital District (see text box to the right). This initiative served two complementary needs: the update of CDTC's *New Vision* RTP and the update of CDRPC's *Regional Development Plan*. The Travel Task Force was a small group of individuals that were assembled to help identify the issues and investment decisions that must be

### Quality Region Definition

A QUALITY REGION develops and sustains healthy urban, suburban, and rural communities that function interdependently and readily adapt to change. A quality region creates economic, educational, social, cultural and recreational opportunities and provides safe neighborhood environments and housing choices for all; protects sensitive environmental resources and fosters community identity and "a sense of place" in all parts of the region.

*Pursuing Quality in the Capital Region*

considered in order to achieve a quality region. It was not a policy group, and its mission was not to set policy or reach conclusions. Instead, it researched what issues have been raised in the past and compiled draft technical papers to distribute to a more diverse set of interested parties and stakeholders for review.

CDTC and CDRPC then issued “*Pursuing Quality in the Capital Region*,” a draft discussion document to begin the regional dialogue on the current and future prospects for job growth, settlement patterns, government structure, migration patterns and community stability even apart from transportation issues. The document was revised based on the comments received and finalized in April 2003. As defined in said document, a region that fully achieves a "quality" status incorporates all of the positive attributes of the Capital Region and, at the same time, it addresses the identified weaknesses -- the disparities, the urban decline, the mixed success of suburban development. The definition emphasizes the need for quality *throughout* the region and the need for ensuring that benefits extend to *all* residents.<sup>18</sup>

## Alternative Development Scenarios

Beginning with the development of the *New Visions 2030*, CDTC utilized CDRPC to analyze different scenarios of demographic growth in order to test the fiscal impacts of growth.<sup>19</sup> The MPO then considered CDRPC’s in-depth analysis of the demographic distributions and land use patterns for four scenarios:<sup>20</sup>

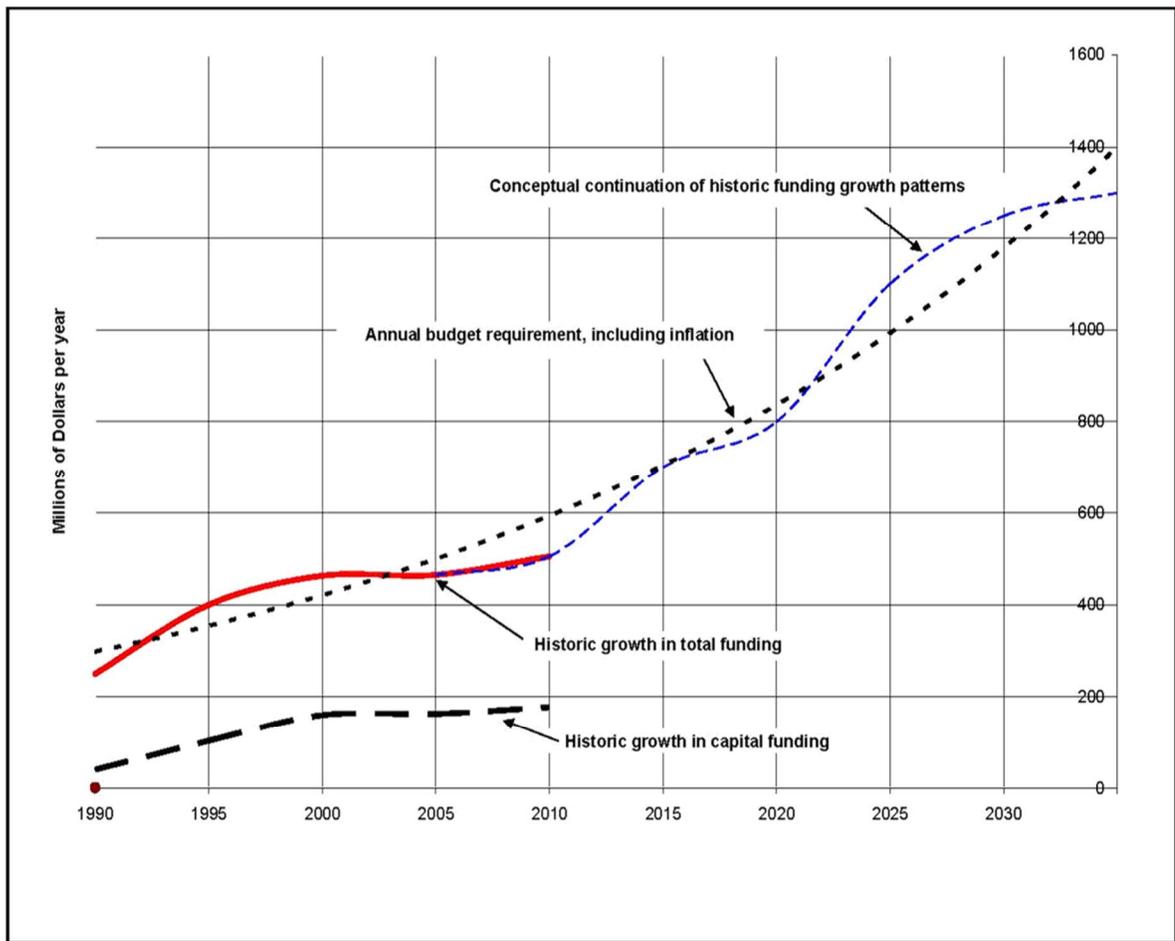
1. **Status Quo Trend-** This is CDRPC’s baseline forecast (9% growth in population, 15% growth in households by 2030, and the current development patterns continuing); this is the official *New Visions* Plan forecast, and it is considered the most likely scenario based on past trends; under this scenario, the Region will grow by approximately 73,000 people by 2030.
2. **Concentrated Growth -** This scenario assumes an above baseline growth rate, but with more concentrated development patterns resulting from urban reinvestment and suburban planning;
3. **Trend Hyper-Growth-** This scenario assumes “hyper-growth” (29% population growth and 35% household growth by 2030), with trend patterns of dispersed development; the rate of growth mirrors the national average of one percent per year; this scenario would forecast approximately a growth of 230,000 people by 2030.
4. **Concentrated Hyper-Growth-** This scenario assumes the above hyper-growth occurring in a concentrated pattern resulting from more urban reinvestment and suburban planning.

Under any growth scenario, the MPO concluded that the *positive benefits of concentrated development* patterns are significant for the transportation system and for regional quality of life, and so the *New Visions* RTP supports and encourages concentrated development in the Capital District – but projects selected for implementation in the TIP are compatible with all scenarios.

## Financial Forecast & Fiscal Constraint

In accordance with 23 CFR 450.322(f)(10), transportation plans must be fiscally constrained. This means that the plan includes sufficient financial information for demonstrating that projects in the plan can be implemented using committed, available, or *reasonably available* revenue sources, with reasonable assurance that the federally supported transportation system is being adequately operated and maintained. The fiscal constraint requirement is intended to ensure that transportation Plans and TIPs reflect realistic assumptions about future revenues and project costs, rather than being lists that include many more projects than could realistically be completed with available revenues. Because the MPO is a nonattainment area for air quality, CDTC must conduct an air quality conformity analysis, and it cannot show actions or projects as “committed” if it is not reasonable to anticipate that revenues will be available to advance the actions or projects at the intended time.

Projecting future transportation revenues is an imprecise science, but CDTC’s approach to long range financial forecasting is distinctive. Rather than trying to guess at the future levels of the individual funding pots (federal, state and local), CDTC estimates the total revenue pot without necessarily



identifying individual source contributions. Growth in the total pot is much easier to anticipate than growth in a specific funding stream.

CDTC's estimation of future revenue is based on several sensible assumptions: (a) the historic patterns of funding initiatives followed by funding lulls will continue; (b) funding to cover constantly-increasing unit costs of delivering services and maintaining facilities will be (eventually) secured; and (c) funding authorizers at local, state or federal levels will also include resources for modest system expansions or redesign. With these assumptions, CDTC projects its estimate of total revenue available. *New Visions* is fiscally balanced over time – but only if public funding increases regularly as it has in the past. The MPO recognizes that an essentially “flat” level of revenues would lead to serious, unacceptable declines in physical and service conditions and make even the most modest improvements difficult to accomplish. CDTC believes it is unreasonable to conclude that there will be a permanent shortfall leading to continuous and dramatic declines in system condition and performance.

While CDTC's approach to forecasting future revenues is somewhat unconventional, it has proven accurate. For example, although regular federal funding resources have not increased in years, the American Recovery & Reinvestment Act (ARRA) stimulus package in 2009 infused the Capital Region with an additional \$100 million for transportation investment. Although state transportation resources have not increased recently, in 2012 NYSDOT opted for an increased use of the Advance Construction option. FHWA and FTA agree that *New Visions* is fiscally constrained given its reasonable assumptions.

## Policy-Based Travel Forecasting

CDTC bases travel forecasts on optimal system capacity not traffic growth rates. CDTC contends that traffic trend lines will not continue unabated. This premise is based on the idea that most households currently have a vehicle, there is a limit to the number of miles a person can drive in a day, and therefore VMT growth will be aligned to population growth rather than past VMT trend lines. Furthermore, forecasting models often don't take into account aversions to driving because of the rising cost of fuel.

This has led CDTC's members to identify a policy target for future traffic levels and invest heavily in local land-use planning in order to achieve *reduced* growth rates.<sup>21</sup> Traffic forecasts used in CDTC's planning and project development activities reflect the 20-year target level of traffic rather than trend level forecasts. Target levels assume that the CDTC will be successful over time in reducing the growth in vehicle miles of travel through improvements in street design, community structure and regional settlement patterns. Projects are thus designed for compatibility not with trend traffic forecasts, but with planned – sustainable – traffic levels. Thus, the forecasted VMT is policy-based.

CDTC employs a “backcasting” technique in which they start by determining the actions needed to achieve a particular outcome. CDTC assumes success of *New Visions*, and it fully expects that otherwise-anticipated increases in daily vehicle travel will be dampened from the 1996-2015 trend

forecast of 30% growth to approximately one-third to one-half that level (10-15% growth). By having forecasts that fit *New Visions*, CDTC avoids incurring over-design costs. To support the vision-based backcasting approach, the *New Visions* has strong policies regarding land use planning, site design and demand management. CDTC's *Linkage Program* of local planning support is a direct result of the backcasting. We note that the FHWA Office of Planning has cited CDTC's backcasting approach as an example of how Context Sensitive Solutions can result in community benefits.<sup>22</sup>

## Plan Investment Approach

CDTC's transportation investment decisions do not seek transportation as an end in itself. "Quality" is not defined solely by travel speed and rigid levels of service; rather, transportation is something that must be experienced daily by the Region's residents, workers, and visitors.

*New Visions* has comprehensive annual 20-year budgets for the 17 capital, operating, maintenance and planning budget categories. Overall, the budget is overwhelmingly dominated by system preservation – "state of good repair" categories. Highway and bridge operations, maintenance, rehab and reconstruction categories alone account for over 70% of the annual budget. The members agree that the Plan does not commit to major system redesign or dramatic new services without the funds to support them.

Discretionary system expansion budgets are modest. The Plan reflects CDTC's "steady progress" principle – i.e.; until funding levels match the Plan's budget levels in real dollars, funding commitments can be made to individual projects across all project types but at a slower pace of implementation than in the financial plan. CDTC will continue to seek bike and pedestrian accommodations, intermodal improvements, transit service improvements, new system operations initiatives along with system preservation projects even while working with its partners to secure the necessary funding for full implementation. CDTC believes that it will not be possible to achieve long-term system objectives across all subject areas without making steady progress (at a pace affordable by current funding) in all subject areas over the next 30 years.

The projects and actions included in *New Visions 2035 Plan Update* can be funded based on CDTC's revenue projections as long as, over time, fiscal resources keep pace with inflation and travel growth. Short-term investment decisions (TIP project selection) are guided by the principles noted in Section VI of this report.

## Economic Development Coordination

In 2011, Governor Andrew M. Cuomo created ten regional economic development councils to guide economic development in the State. The CDTC region is covered by the Capital Region Economic Development Council (CREDC) which is comprised of eight counties (Albany, Columbia, Greene, Rensselaer, Saratoga, Schenectady, Warren, and Washington). CREDC published their five-year economic development strategic plan, Success Today, Opportunity Tomorrow in November 2011.<sup>23</sup>

Success Today, Opportunity Tomorrow has proven largely consistent with the *New Visions 2035 Plan Update* which clearly states the link between economic health and quality of life. The business community supports CDTC’s long-held belief that transportation is an important component of livability. CDTC does not have representation on CREDC and was not directly involved in drafting the strategic plan. When the governor created the CREDC, regional entities were not given lead roles in order to get fresh voices and perspectives, particularly from the business community. However, because *New Visions* had already percolated among regional leaders the strategic plan that CREDC ultimately produced was positively influenced by the dialogue CDTC has long been fostering.

One particular area of nexus between CREDC’s plan and *New Visions* is smart growth investments that will increase walkability and transportation options strengthening the networks capacity so that it can support economic development. When different growth scenarios for the region were considered by the Center for Economic Growth (CEG), their findings also concurred that the implementation of smart growth strategies were a good fit for the Capital Region.

## Uncertainty

The *New Visions 2030* website has a section which addresses uncertainty about the future. It states:

*“History has shown that it is difficult to forecast future conditions accurately. Changes in technology often make rapid inroads into daily life (cell phones and computers, for example). Political events are also difficult to anticipate and the climate, petroleum supplies and the global economy may be changing in ways that are also hard to predict.”<sup>24</sup>*

Flexibility is key to a region’s ability to respond to the “wildcards of life”, as John Poorman characterized events like Katrina and Irene. CDTC has tried to avoid an over-reliance on forecasting and incorporate factors that consider uncertainty in its processes. *New Visions*, for example, downplays the use of specific future traffic forecasts and focuses more on creating flexibility and reliability in the system. *New Visions* therefore does not make project-level commitments to projects 15 and 20 years away, concentrating instead on near term projects and long-term vision and resources. This approach can best be described as a “sustainable” approach – one that meets current needs and preserves options for future decision-makers.

*Prediction is difficult, especially about the future.*  
- Yogi Berra

## “Big Ticket” Initiatives

Similar to most MPO Plans, *New Visions* makes no financial commitments to any new large scale projects in the “out years.” CDTC’s approach is to consider such large scale, unfunded new projects

Noteworthy

as part of a vision toward which the Region can strive. This is a different method from what other MPOs call “illustrative” projects and can be considered a “noteworthy practice.” The difference in CDTC's approach is in what constitutes the “trigger” to move a large scale project forward.

*New Visions* identified the following regional conditions to be pre-requisites for such initiatives:

- A sense of urgency is typically present.
- The initiative reflects the sensibilities and community values of the region, producing a strong community consensus.
- A *champion* is typically a critical element as catalyst and sustainer of the initiative.
- Commitment to a major initiative is as much related to a subjective rationale as to objective analysis.
- Funding is achieved through a combination of local sources and state or federal funds – reflecting a willingness to pay.

Identifying these conditions is not often part of the transportation planning process. For example, the fourth bullet acknowledges that a region or community may want to pursue an idea for *subjective* reasons, such as promoting economic growth, rather than pure *objective* reasons (e.g. we can only pursue light rail when a population density exists that would make it financially feasible). Such subjective considerations are common when considering a new convention center or sports stadium; the existing financial conditions may not be immediately present but a community (*champion*) decides that the economic growth attracted by such a facility would be of overall benefit to the region and thus is *willing to pay* for the facility (the fifth bullet). The same subjective consideration should be afforded transportation initiatives.

The big ticket initiative approach solves a major problem with the traditional planning approach – it enables discussion to continue in a respectful manner based on an agreed upon set of principles and vision. It crafts “permission” for ongoing discussions in the context of agreed-upon conditions that must be present before future consideration of any major project/idea. This approach creates a safe environment in which to discuss these large scale ideas as often as necessary, and it helps to reduce dismissive reactions when such initiatives are suggested for reconsideration.

The key to this approach is that CDTC gained widespread agreement on both the pre-requisites that need to be present in order to pursue the big ticket initiatives and on the fact that the conditions did not presently exist. CDTC now continually monitors the conditions through ongoing community discussions in various venues to see if the conditions vis-à-vis the pre-requisites are changing.

**Maximum Twenty-Year Scale of Hypothetical “Big Initiatives”  
In the Capital District (Implementation between 2010 and 2030)**

	Hypothetical “Big Initiative”	Approximate <i>Maximum</i> Twenty-year scale in the Capital District	Twenty-year cost estimate	Comments
	Regional greenway program	10 miles per year; 280 total including existing	\$150 M	Scale reference is Seattle’s plan for 800 miles of paths. Cost at approximately \$500 K/mile based on local experience.
	Riverfront access and urban development program	Implementation of a majority of existing plans	\$1,000 M	Could draw from multiple fund sources, not just transportation. If significant Interstate redesign is included, could approach \$3 B - \$4 B based on Boston’s Central Artery precedent.
	Street Reconstruction and Reconfiguration	40 lane miles per year; 800 total	\$2,400 M	New Visions intended to address 25 lane miles per year; this is 50% more aggressive. Cost at approximately \$3 M per lane mile.
	Roadway widening and connections program	10-15 lane miles per year; 200 total	\$1,000 M	Scale comparable to double the intended ten-year implementation in New Visions 2021 plan. Mix of modest (\$2.5 M per lane mile) and costly (\$7 M per lane mile) projects.
	Major highway system construction	Approx. 20-25 arterial and 5-10 lane miles of expressway annual	\$3,000 M to \$5,000 M	Not consistent with community values or public policy (such as the State Energy Plan, State Transportation Plan and the New Visions Plan).
	Suburban town center development	5-10 lane miles per year; 150 total	\$175 M	Cost at approx. \$1 M+ per lane mile as mix of access and collector roads. Developer-built or financed connections not included in the total.
	Bus service expansion, BRT program with transit oriented development	100 route miles total including NY 5	\$200 M capital \$400 M add'l oper.	Scale and cost estimated at 5-10 times that for NY 5 BRT.
	Guideway transit system with transit-oriented development	50 route miles guideway with 50 route miles of non-guideway BRT.	\$2,100 M capital \$1,450 M add'l oper.	Scale comparable to planned expansion in Portland over 20 years; capital cost of \$40 M/mile derived from Portland, Phoenix, and Columbus plans. Operating cost estimated at \$1.25 M/year per linear mile. Includes ½ of BRT non-guideway plan also.
	Managed lane program	50 route miles total with approx. 75 lane miles	\$750 M \$10 M operating	Scale at one or two lanes per center-line mile where physically feasible in Interstate system in Albany County, extensions north, east, west. Cost at \$10 M per lane mile.

### Preparing for *New Visions 2040*

CDTC has already begun the process for preparing the next update to the *New Visions* RTP which will be more comprehensive. According to the current UPWP, the first year of the *2040 Plan* development will focus on foundational topics including but not limited to demographic and economic forecasting; performance measure development; simulation model improvements to include a transit model; and expanded collaboration with the region's business community and other stakeholders. After this, CDTC will assess the direction of the recently passed *Moving Ahead for Progress in the 21st Century Act (MAP-21)*.

Based on federal and state policy guidance and the results of the above work efforts, CDTC will engage the public and stakeholders in a broad and comprehensive dialogue about the options for developing a *New Visions 2040* RTP that will build on the progress already made and pursue further opportunities. CDTC will refine demographic forecasts based on the 2010 Census, and it will review and refine performance measures, including potential performance measures for livability, housing-transportation affordability and safety. Most significantly, CDTC will revisit the financial plan in order to evaluate its current practice of estimating available revenues and its adopted finance-related principles

## Linkage & Livability

*“The transportation plan shall include both long-range and short-range strategies/actions that lead to the development of an integrated multimodal transportation system to facilitate the safe and efficient movement of people and goods in addressing current and future transportation demand “*

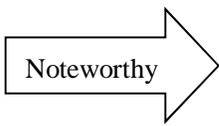
- 450.322(b)

Livability is not a new concept – it is a name for a series of good planning practices that have circulated through the planning field for many years. CDTC has been pursuing livability principles for over 10 years. At its core, livability supports a holistic approach to linking local development with regional vision. Under the objective of livability the purpose of transportation investments can be seen as a way “to improve the standard of living, environment, and quality of life for all communities, rural, suburban, and urban...providing more transportation choices for families, by walking, biking, and transit,” as well as driving.<sup>25</sup> Livability encompasses multi-dimensional issues relative to community design, land use, environmental protection and enhancement, mobility and accessibility, public health, and economic well-being. In other words, livability confesses that a good transportation planning process must consider broader community goals.

As noted earlier, *New Visions* is the Capital District Region’s RTP and it has a strong livability agenda. *New Visions* explicitly states that, even with the full implementation of CDTC’s desired capital investments in the plan, the region would still fall short on quality of life measures if there is no dampening of growth. A simplistic view is that goals occur at the regional level, but growth occurs at the local level. Reaching livability goals often breaks down because of this disconnect between the lofty goals of an MPO’s regional plan and the pragmatic development decisions made at the local level. Innovative, intelligent and coordinated local planning and private investment is as important – if not more important – than regional transportation investment in meeting livability goals. CDTC

recognized early-on that a mechanism for translating regional vision into local action is needed.<sup>26</sup> Accordingly, CDTC launched the *Linkage Program* in 2000 to offer assistance to local entities in developing specific plans to reflect and implement the *New Visions* philosophy.

Besides the *Linkage Program's* regional/local focus, CDTC has also embarked on a complementary statewide-regional-local initiative that translates NYSDOT's statewide corridor program down to the Capital District Region level and then ultimately into CDTC investment considerations using the lens of *New Visions'* holistic principles. Two major corridors in the region are being closely studied using a multi-modal and context sensitive approach: (1) I-87/US 9 in Albany and Saratoga Counties; (2) I-787 through downtown Albany.



### **The Linkage Program**

*Linkage* or *Linkage Program* is shorthand for CDTC's award-winning *Community and Transportation Linkage Planning Program*.<sup>27</sup> The *Linkage Program* is one of the most significant cooperative regional efforts in the nation to reflect, in practice, what representatives of the region's counties, cities, towns and villages as well as state and local transportation providers have adopted as policy. *Linkage* is cited as a best practice case study in FHWA's *Livability in Transportation Guidebook*<sup>28</sup>, and it won FHWA's Transportation Planning Excellence Award in 2010.<sup>29</sup> The *Linkage Program* is the cornerstone of CDTC's local planning assistance and public outreach efforts.

The *Linkage Program* is a land use/ transportation planning assistance program to support local planning initiatives. It is a key implementation activity of *New Visions 2035 Plan Update*, which is predicated on reducing the growth of vehicular travel in the Capital Region. The *Linkage Program* has jump-started proactive planning, particularly in those communities with limited local staff and financial resources. Key components of the program are as follows:

- **Competitive program** - Federal funds from the UPWP are allocated to planning studies. Candidate planning studies require the local sponsors to commit to a minimum local match requirement of 25% cash in order to be considered for selection. Local sponsors can commit to extra cash or in-kind services to bolster their application's credentials. There is no set minimum size for requests, and the maximum size is \$90,000 (\$67,500 in federal funds plus \$22,500 local cash match); the total study cost can exceed \$90,000 if the local agency contributes additional match.
- **CDTC Staff assistance** - Studies are performed by either CDTC Staff or by private consultants under CDTC's overall management. \$10,000 is set aside for CDTC staff efforts on each study. For the 2012-13 year, CDTC has reserved \$150,000 for consultant activity and \$100,000 for CDTC staff assistance. If a selected study will be done by a consultant, CDTC Staff manages the project, works with project sponsors to develop requests for proposal, evaluates proposals, selects consultants, develops contracts, participates in study advisory committees, monitors work progress and solicits and evaluates proposals for future *Linkage Program* projects. *Linkage* procedures require that study advisory committees be established (a CDTC Staff person is a required member). CDTA, the MPO's host agency,

ultimately holds these *Linkage Program* consultant contracts, and we congratulate the CDTA for its willingness to take the risk on this new concept.

- **TIP ramifications** - CDTC requires that TIP candidate projects must derive from local plans before they are eligible for TIP consideration. This results in a high level of coordination between the recommendations from completed studies and new proposals to the TIP.
- **Diversity in sponsors** - The CDTC entertains study proposals from a wider group beyond its regular members. Study sponsors have been diverse, representing 40 separate urban, suburban and rural communities and non-profit organizations. Several proposals from non-profit groups have been funded. These non-profit groups do not physically receive federal funds because CDTC holds the consultant contract, but they are intimately involved in identifying a problem and coming up with solutions; the affected municipality, of course, has to concur in the eventual project recommendation.
- **Diversity in activities** - To date, CDTC has funded a total of 71 *Linkage* studies totaling more than \$4.0 million in federal, state and local funds. Planning efforts include bike and pedestrian planning, urban neighborhood revitalization, suburban town center retrofitting, pre-development master planning for a major suburban area, urban truck/neighborhood compatibility planning, waterfront revitalization and intermodal center exploration.
- **Diversity in consultants** - CDTC developed a "Request for Expressions of Interest" (REI) procedure that minimizes consultants' preparation work and reviewers' work in selecting consultants; this procedure also maximizes the extent of potential consultants' participation. The CDTC Staff follows a "fair access" policy in consultant selection. The consultants realize this, and competition for award of contract is lively - as many as 17 consultants have bid on some of the less than \$50,000 studies. CDTC's oversight and management have been popular with the local municipalities.
- **Ongoing dialogue** – Recipients of *Linkage* studies are expected to participate in the ongoing "*Linkage* Regional Coordination Forum" on a regular basis. This forum provides a regional planning roundtable for sharing of planning experience among at least two dozen municipalities as well as regional and state entities. The Forum is also used as a sounding board for developing CDTC's regional development strategies, *New Visions* guidebook and *New Visions* training program.

Embracing the *New Visions* approach to planning of "what do we want to happen?," CDTC acts in a way that fosters local community ownership of the final product identifying a "sense of place." CDTC strives to empower the locals during the development of land use and transportation recommendations and eventual decisions thereon. This approach is largely analogous to advanced community planning at the local level. The effort, especially for those local sponsors who are not directly represented on CDTC committees, helps to bring them into the process.

## Hudson River Crossing Study

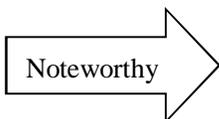
Similar to how *Linkage* applies the concepts of *New Visions* at the local level, CDTC's Integrated

Transportation Corridor Effort evaluates NYSDOT’s statewide major corridor program relative to the Capital District’s holistic principles and livability objectives. The Hudson River Crossing Study (HRCS) was the first of these efforts.<sup>30</sup> While not part of the *New Visions* planning effort per se, the HRCS demonstrates how *New Visions* principles can infuse the planning process in the region.

CDTC and NYSDOT initiated the HRCS to take a broad look at transportation and multimodal mobility issues related to the I-90 Patroon Island Bridge and adjacent Hudson River crossings. The Patroon Island Bridge would soon need either rehabilitation or replacement. The study included an examination of the entire system of bridges within the region under the four future growth scenarios as defined in CDTC’s *New Visions 2030* document in order to forecast multimodal transportation needs and regional development opportunities. These forecasts were made by CDTC’s regional STEP model and its micro-simulation VISSIM model.

The Study analyzed the bridge system’s relationship to regional mobility from a multimodal perspective, analyzing highway, transit, bicycle and pedestrian river crossing needs. Traffic volumes and patterns on the Patroon Island Bridge, as well as other nearby crossings, were analyzed in order to consider the function of the whole system of bridges within the region and their impacts on regional mobility. A steering committee, a study advisory committee, and a regional stakeholder group of elected officials and private organizations were created to take a broad look at transportation and mobility issues related to the bridge and to the adjacent Hudson River Crossings. The traffic analysis indicated that widening of the Patroon Island Bridge was not necessary to provide reasonable traffic operation. Because all of the scenarios evaluated in this study resulted in this same conclusion, the risk of not providing sufficient capacity was very low, and the amount of delay that would be reduced by widening the bridge did not warrant the cost of additional lanes.

The HRCS effort used CDTC’s regional vision, four alternative growth scenarios, the congestion management process’ trade-off analysis, and the *New Visions*’ investment principles to come up with recommendations in keeping with adopted holistic values. CDTC is now similarly working with NYSDOT and others on several land use/transportation studies including the *I-87/US 9 Integrated Corridor Study*, *I-787 Integrated Corridor Study*, and the *Albany Transit Oriented Development Study*.



### **Implementation of the Albany Airport GEIS**

CDTC policy clearly differentiates between public and private responsibility for highway improvements needed to mitigate and accommodate local development. A prime example of this is the MPO’s involvement in assessing “mitigation fees.”

The 8,500-acre area in the vicinity of the Albany County Airport is a choice business location. Under the New York State Environmental Quality Review Act (SEQR), communities in New York can prepare a Generic Environmental Impact Statement (GEIS) to evaluate the potential cumulative impacts of expected or planned development in an area. Recognizing the inevitable pressure to develop the land and that development’s potential impacts to transportation infrastructure, the Town of Colonie and the County of Albany prepared a GEIS (1990) to address the impact of expected

increased airport activity and continued land use development over the next 20 years. The GEIS analyzed the transportation infrastructure's ability to accommodate additional development in the area, and came up with appropriate mitigation strategies.

Infrastructure improvements are now being funded through a public/private partnership, with the private share of project costs calculated through "mitigation fees." Transportation improvements and land development are proceeding in tandem. Infrastructure improvements keep pace with anticipated levels of development, and conversely, the pace of the land development approvals is limited to reflect reasonable expectations for infrastructure improvements. CDTC, NYSDOT, Albany County and the Town of Colonie have agreed on a set of principles on how and when these transportation projects are moved onto the CDTC TIP.

Mitigation fees were calculated based on the development's percentage consumption of new peak-hour, peak-direction traffic capacity by link, and the cost (by link) of creating that capacity. In other words, the mitigation fees are based on the development's impact on travel, not on the square footage of the facility. This ensures that the development pays for the traffic it generates and gives developers an incentive for implementing TDM measures. Other innovative features of the mitigation fee program include CDTC Staff involvement in the review of each development application in the study area (under an annual contract to the town), and CDTC Staff calculation of the appropriate transportation mitigation fee for use by the town.

The implementation stage of the Airport GEIS effort has been underway for approximately 21 years. CDTC Staff has participated in the assessment of over 250 site reviews under contract with the Town of Colonie. Other areas of Colonie (Lisha Kill and Boght Road areas) have also used a GEIS approach and benefited from CDTC Staff assistance.

## Safety Planning

One of the major elements of livability is safety. Over the past 50 years, most roadways have been designed primarily for safer automobile and truck travel, which can make them less safe for pedestrians, older adults, children, people with disabilities, or bicyclists. Making roads safer for all users brings the added benefits of improving access to jobs and services, reducing congestion, and sparking business and neighborhood investment.

CDTC's fifth principle from their "31 Planning & Investment Principles" is to "improve the *safety* of the regional transportation system by creating a travel environment that is consistent with the community context and that provides a reasonable range of risk for all users of the system."<sup>31</sup> The CDTC Safety Plan (2007) relies on an integrated approach that supports both the continued use of traditional safety countermeasures on high speed facilities (clear zones, rumble strips, etc.) as well as encouraging the use of the "Complete Streets" concept (where arterials, collectors and local roads are designed and operated to enable safe access for all users) and innovative design techniques.<sup>32</sup> These include use of roundabouts, "visual friction" (the visual cues drivers get from the road environment to slow down), and access management techniques (to reduce conflict points between users of a roadway). This integrated approach also recognizes that education and enforcement efforts by local safety professionals also has a real impact on driver behavior and that designing improvement projects

in sync with surrounding community context can help encourage responsible driving behavior (see following discussion of ‘Training’).

The MPO is also working with NYSDOT on implementing its safety principles within the Strategic Highway Safety Plan (SHSP). However, the SHSP is data driven, and thus it is largely focused on traditional aspects of transportation safety such as the identification of high crash locations and the development of countermeasures. In keeping with its holistic approach to transportation planning, the MPO believes that full consideration of safety must reach beyond reducing fatalities and serious injuries and should include the connection between land use and transportation.

▪ **Safety Working Group**

CDTC is heavily involved in the NYSAMPO’s Safety Working Group (SWG), which is currently chaired by a CDTC staff member. The SWG was formed in 2005 to “advance initiatives intended to preserve, maintain, and improve traffic safety for all users in New York State.” The group includes representatives from all thirteen New York MPOs, as well as the FHWA New York Division Office, the Governor’s Traffic Safety Committee (GTSC), NYSDOT, and the New York State Police.

CDTC uses the NYSAMPO “Safety Assessment” process to identify potential low cost improvements to address high crash locations off the state highway system. A Safety Assessment is a formal safety performance examination of an existing or planned transportation facility (e.g. road, intersection, sidewalk, multiuse path, or access to land use development) by an independent, qualified, and multidisciplinary team.<sup>33</sup> An assessment team considers the safety of all users, qualitatively estimates and reports on safety issues, and suggests opportunities for safety improvement.

▪ **Training**

As will be discussed in Section IX, CDTC began Capital Coexist in 2010. This is a localized bicycle education campaign geared towards educating cyclists and motorists on how to safely coexist while using the roadways. One of the more innovative safety outreach efforts occurred in January 2012, when CDTC (through the Capital Coexist campaign) partnered with the AGFTC on a *Continuum of Training in Pedestrian and Bicycle Safety for Law Enforcement*. The training by *We BIKE etc.*<sup>34</sup>, a private organization based in Wisconsin, aimed to increase police officers’ pedestrian and bicycle safety knowledge, which should subsequently lead to increased enforcement activity and a greater sense of security for pedestrians and bicyclists. The two-day in-person training was held this year at the NYS Police Academy Training Center in Albany. It focused on the 3 E’s of the highway safety triangle: Engineering, Education and Enforcement. Multiple types of media – written, video, interactive computerized-based training, and personalized classroom instruction - were employed. Twenty-one officers from ten different enforcement agencies attended.

● **Activities for 2012-2014**

According to the 2012-2014 UPWP, safety planning and management work will progress along several related tracks:

- CDTC will work collaboratively with NYSDOT and other state, regional and local safety partners on implementing the SHSP as well as CDTC’s integrated approach to safety

planning. Education and enforcement efforts will also be a part of CDTC's planning and public outreach efforts.

- CDTC will create a static regional GIS crash database to identify high crash locations off the state highway system and to identify system level safety issues that either compliment or may be different than current statewide priorities (pedestrian and lane departure crashes). CDRPC Staff will assist CDTC Staff in the analysis of crash data on a regional scale and will develop appropriate mapping of key regional safety issues.
- CDTC will work with NYSDOT toward the development of a documentation process for projects off the state highway system.
- CDTC will also continue its involvement in the statewide NYSAMPO Safety Working Group.

## **Pedestrian and Bicycle Planning**

CDTC has a significant role in the safe provision of access to the network by pedestrians and bicyclists. The MPO established a Bicycle & Pedestrian Task Force that deals with issues ranging from public education to facility planning. The Task Force members provide technical guidance on *Linkage Program* projects and other bicycle and pedestrian related projects throughout the region. The Task Force meets monthly at the CDTC office. This effort is further discussed in the Sections IV and IX of this report.

## **Federal Findings**

None

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# Transportation Systems Operations & Management

*“Transportation systems [management and operations] M&O refers to multimodal transportation strategies to maximize the efficiency, safety, and utility of existing and planned transportation infrastructure. M&O strategies encompass many activities”*

- FHWA *Planning for Operations*

## Regulatory Basis

As a TMA, CDTC is required to have a Congestion Management Process (CMP) that provides for safe and effective integrated management and operation of the multimodal transportation system through the use of travel demand reduction and operational management strategies [23 CFR 450.320(a)].

A CMP presents a systematic process for managing traffic congestion and provides information on transportation system performance. A CMP must:

- Measure multi-modal transportation system performance.
- Identify the causes of congestion.
- Assess alternative actions.
- Implement cost-effective actions.
- Evaluate the effectiveness of implemented actions.

Per 23 CFR 450.320(c), a CMP must be established cooperatively and include a data collection and monitoring system, a range of strategies for addressing congestion, performance measures or criteria for identifying when action is needed, and a system for prioritizing which congestion management strategies would be most effective. The process is also required to include an implementation schedule, implementation responsibilities, and possible funding sources for each

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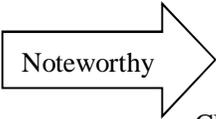
strategy (or combination of strategies) proposed for implementation as well as a process for evaluating the effectiveness of the implemented strategies

## CDTC Approach to Accommodating Traffic

FHWA put forth in a primer published in January 2012 that many transportation planners, operators and stakeholders are not fully aware of the role that the MPO may play in achieving livability and sustainability goals. The primer, entitled The Role of Transportation Systems Management & Operations in Supporting Livability and Sustainability, describes how systems management and operations (M&O) strategies can support these goals in a cost-effective and timely manner.<sup>35</sup>

The Capital District region is an exception in that they are aware of the potential to use M&O strategies in achieving their livability and sustainability goals. As noted earlier, *New Visions*' holistic principles are integral to CDTC's approach to planning, and likewise CDTC's approach to M&O directly draws upon the Plan's philosophical bent. Reducing traffic congestion is important, but *it is not the preeminent goal of transportation planning in the region*. CDTC has found, through using multiple public outreach efforts including surveys, that the public wants more multimodal options, more lively urban centers, and more livable communities. CDTC has investigated the principles and reasons why people travel, challenging certain traditional assumptions. For example, a traditional approach to congestion is to identify present or future locations of congestion and make improvements to achieve a certain Level of Service (LOS), the assumption being that an *improved* LOS would be the choice of the public. However, the people of the Capital District have expressed their opinion that congestion should not be looked at as the sole measure of whether or not a highway improvement should be made. During the survey of residents along the relatively congested Route 5 corridor, 79% said existing level of congestion along Route 5 would be acceptable *if other services were improved* (transit, pedestrian, etc.). In other words, *maintaining* the existing level of congestion was acceptable if the quality of life improved.

All of CDTC's congestion reduction objectives are balanced with multiple planning objectives. A key MPO approach for supporting livability goals is to minimize construction of new pavement and to address travel time reliability problems that travelers have identified as their greatest concern. CDTC is committed to reducing travel by one-third to one-half through travel demand management (TDM) efforts and land use strategies. Much of the reduction will be guided by the principles and proposed actions contained in the Congestion Management process (CMP). Projects are designed for the traffic *target*, not for the trend.



Noteworthy

### Congestion Management Process

CDTC's CMP is closely linked to the vision and principles in *New Visions*. In fact, CDTC updates its CMP as part of each *New Visions* RTP; thusly congestion mitigation is directly related to *New Visions*' goal concerning mobility: mobility is best maintained by providing for convenient travel while reducing inefficient travel behavior. The CMP incorporates the full range of the *New Visions*

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core performance measures; for congestion, the core performance measure is *excess delay*. Person hours are used for all values except for truck traffic, for which vehicle hours are considered more relevant.

CDTC's process departs from the traditional approach to addressing travel needs in that the MPO strives first to maintain existing conditions and reduce the impact of forecasted travel by implementing demand management programs *before* considering capacity expansion; it uses the concept of risk assessment and tradeoff analysis in designing projects; and it takes a fresh look at why travel occurs and why gridlock often does not.

- **Identifying Congestion**

In quantifying congestion, CDTC presently uses STEP, its travel forecasting model. CDTC maintains a current traffic count file containing all NYSDOT, CDTC and local machine and manual traffic counts. CDTC uses the concept of *excess delay* rather than Level of Service (LOS) to identify areas of congestion. Excess delay is the amount of time spent at a given location that exceeds the maximum amount of time that is generally considered acceptable. For auto and freight travel, excess delay is the amount of time spent at an intersection or along a highway segment in LOS E and F conditions that exceed the maximum LOS D time. In this scenario, if you sit in your automobile for more than 40 seconds waiting to go through an intersection, you are experiencing congestion at that particular location.

Since the transportation user's *perception* of congestion is related to its magnitude and/or severity, CDTC has identified those corridors that have significantly greater congestion than typical. These corridors are defined as contiguous highway segments that, in aggregate, exceed certain thresholds.

- **Measuring Non-Recurring Delay**

Congestion is considered to be more tolerable to most travelers when it is predictable, allowing them to anticipate travel times and adjust their schedule accordingly. When congestion is unpredictable (e.g. due to an accident), the congestion can be more frustrating and unacceptable because it is far more disruptive. Generally, expressway corridors are more sensitive to incident disruption than others, and are therefore more unpredictable. To get a better appreciation of the predictability and reliability of major highways in the region, CDTC has employed a measure developed by the Texas Transportation Institute (TTI) called the "planning time index."

Planning time indices were calculated on Capital District expressway segments for AM and PM peak periods using Management Information System for Transportation (MIST) data. Indices were calculated based on an entire year of data for 2003, and separate indices were calculated for summer and winter travel. The facility level indices indicate that the highest planning time index value is 2.27, which occurs on I-90 in the westbound direction in the AM peak during the winter. This high value is likely due to the high traffic volumes near the Patroon Island Bridge and the geometry of I-90 near the bridge compounded by difficult winter driving conditions.

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Travel times on the Northway (I-87) indicate that travel in the off-peak direction is very reliable, with travel speeds almost always at or greater than the speed limit. The Northway peak directions (AM southbound and PM northbound) have reliability issues, with the PM northbound travel being more unreliable than the AM southbound travel. The maps indicate that unreliability in the morning occurs north of the Twin Bridges, and in the afternoon unreliability occurs predominantly south of the bridges.

- **Investment Decisions**

Serious congestion in the Capital District rarely exists for more than one hour on a particular roadway unless it results from a traffic accident, bad weather, seasonal shopping peaks, vacation travel, or a Presidential visit. The CDTC philosophy is that forced flow conditions can be accepted when the negative impacts of adding capacity outweigh the benefits. Improving traffic flow is only one performance measure of many that are considered. The impacts to community quality of life, pedestrian and bicycle access, transit access, safety, cost and other impacts are to be considered in any transportation improvement. Trade-offs among performance measures are necessary in many projects. Congestion measures do not have higher priority than other *New Visions* performance measures. There are times when LOS E or LOS F *should* be accepted, especially when community context or cost makes it inappropriate to widen the roadway or add lanes at an intersection.

CDTC views investments as a *choice* – there is no “we have to do it.” CDTC views the choice as – where do we want the traffic and what physical condition do we want the system to be in? CDTC has modified the traditional approach to transportation investment in general, and highway congestion in particular, through its use of the concept of risk management. The CMP establishes two main goals in making investment decisions:

- Support the growth in economic activity and quality of life by limiting the amount of excess delay; and
- Implement demand management programs *first*, before performing capacity expansions.

The CDTC strategy for reducing congestion is to employ a combination of TIP capital investments, incident management, demand management strategies, access management strategies, and operational measures.<sup>36</sup> Increasing a roadway’s *physical* capacity is not a CDTC management strategy because the increased physical capacity is generally ineffective in addressing nonrecurring delay, often results in higher traffic volumes, and may actually worsen traffic at other bottlenecks.<sup>37</sup>

During the TIP project development process, CDTC does not entertain a stand-alone congestion project unless it is on the critical CMP list. If an infrastructure project is up for discussion, it has a better chance of selection if it is also on the critical list. Candidate TIP projects go through a three-step process: screening, evaluation of merits, and project selection. During the screening process, candidate projects must be determined to be *consistent with* the CMP component. Any significant capacity additions carried out in the context of major infrastructure renewal are appropriate only under

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compelling conditions. CDTC requires a tradeoff analysis inherent in the concept of risk assessment that focuses on the opportunity cost of selecting alternative designs (see Section VI).

## Regional Operations

To help integrate management and operations into the planning process, CDTC and NYSDOT created a joint *Regional Operations Committee* in 2008. This Committee was intended to create a platform for operations/planning professionals from federal and state transportation agencies, the MPO, regional planning agencies, highway and transit agencies, the airport and port, local municipalities, and law enforcement agencies to coordinate and integrate various traffic and transportation operations activities in the Capital Region.

The Committee was inactive until this year when CDTC reconvened the Committee to further explore the formal development of a “regional concept” for overall transportation operations in the region. The role of the Regional Operations Committee in emergency and security planning will be explored as well. These exchanges are expected to mesh the day-to-day operation with the long and short-term planning process.

Because CDTC has found that system reliability and predictability are more important to the public than recurring congestion delay, the MPO sees strong potential for the 511 system, ITS, and new technologies (such as GPS) to provide data that will lead to a better understanding of reliability issues. CDTC Staff have been working with the Committee to develop performance measures related to reliability. New opportunities for monitoring speed and delay on arterial corridors using the floating car survey technique with GPS technology will be further explored. The use of cell phones to measure real time speeds was explored. These expanded performance measures will be used to revise the CMP identification of critical congestion corridors.

## Intelligent Transportation System (ITS)

A significant component of safety and security is the ability to quickly and effectively manage major disruptions in the transportation system, and the cornerstone of that ability is effective and coordinated communications. Intelligent Transportation Systems (ITS) concepts are central to this effort - it is the intelligent use of highway, transit, toll and communications technology in a coordinated fashion that will make the existing transportation system more flexible to changing travel patterns.

In developing *New Visions 2030*, the Expressway Management Task Force identified a network of expressway and arterial facilities as the platform for regional ITS. *New Visions* calls for centrally coordinated traffic control and/or guidance along these facilities. The logic is that advising travelers of preferable alternatives *before* they enter the most congested areas, and facilitating smooth flows along the alternatives, can keep overall traffic conditions from worsening.

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CDTC's ITS priority network is primarily developed around the expressway system, but the arterial system is not ignored. For routes that parallel expressways, ITS holds the promise of allowing the signal coordination and timing plan to be changed by the Transportation Management Center to facilitate diverted traffic during an incident. Several ITS projects have been funded through the TIP.

- **Capital District Transportation Management Center**

The TMC was established by the New York State Police and NYSDOT to operate a high-tech system to monitor, assess and respond to roadway emergencies on some of the busiest highways in the Capital Region. It is located at State Police headquarters in Albany and is jointly operated. CDTC has supported the TMC with CMAQ and STP funding in the TIP.

**Federal Findings**

None

# TIP Programming Investments

## REGULATORY BASIS

*“The MPO, in cooperation with the State(s) and any affected public transportation operator(s), shall develop a TIP for the metropolitan planning area. The TIP shall cover a period of no less than four years, be updated at least every four years, and be approved by the MPO and the Governor.”*

- 23 CFR §450.324(a)

One of CDTC’s most important responsibilities is the development of a multi-year program of transportation improvements that implement recommendations of the planning process, particularly those in *New Visions*. The Transportation Improvement Program (TIP) identifies the timing and funding of all highway, bridge, transit, bicycle, and pedestrian transportation projects scheduled for implementation over a five-year period using FHWA or FTA funding, and it also estimates project effects on regional air quality. Federal regulations require that these projects be included on a TIP in order to be eligible for federal funding.

The goal of CDTC’s TIP development process is that everyone understands where the allocations came from and thinks that the process is fair, albeit not ideal. How much money is on the table and how much is available for each of the different project categories changes from year to year. The current CDTC TIP for 2010-2015, adopted by CDTC in June 2010, lists approximately \$1.2 billion million in Federally-aided transportation projects. The TIP may be viewed in an interactive map via the CDTC website on an ARCGIS platform.<sup>38</sup>

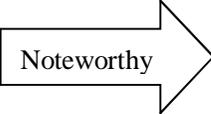
Regional level concepts  
can translate to local  
level decisions if MPO  
commitment exists

## TIP Investment Principles

CDTC's choice of what projects to place on the TIP is guided by several policy principles that were agreed upon in *New Visions*. These principles are called the "31 Planning & Investment Principles," and they are meant to maintain integrity, equity and objectivity while building credibility.<sup>39</sup> The foremost principles are described in Section III and are:

- Decisions are based on function and need, not facility ownership.
- Defining "system preservation" is key to targeting investments.
- Steady progress will lead to realization of the regional vision.
- Urban revitalization is a high priority.

The success of CDTC's project selection approach during TIP development comes out of the agreements reached in *New Visions*. A local project that fits within the broad transportation concepts agreed to at the regional level is more likely to be funded because there is a point of consensus from which to start evaluating the project (e.g. "you've agreed that X is a good idea at the regional level, so...").



Noteworthy

## Risk Management & Tradeoff Analysis

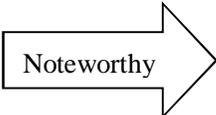
Because of CDTC's historic approach of making system preservation a top priority, infrastructure tends to eat up a significant portion of CDTC's capital resources. CDTC employs a risk management strategy in its overall investment policy considerations to maximize available funding, and a common sense tradeoff analysis whenever capacity additions are considered in the context of an infrastructure replacement project.

The risk management approach begins with the premise that significant physical highway capacity additions carried out in the context of major infrastructure renewal are only appropriate under certain conditions. Capacity and safety improvements and design upgrades carried out in conjunction with facility renewal are considered separately as discretionary improvements, similar to stand-alone capacity, safety, or bike/pedestrian actions. Rather than seeking infrastructure *improvement*, this approach seeks first to *preserve* existing infrastructure (1996 condition), and improvements are evaluated along with other types of objectives.

The traditional approach to project development is designing improvements to achieve a certain Level of Service (LOS) in the future. For example, a bridge rehabilitation/replacement project (structure rated "poor") may be presently uncongested but forecasted to have congestion in 25 years due to normal growth in traffic. The traditional approach involves designing to accommodate those future traffic projections. A risk management approach, however, examines the costs and benefits of alternative designs and makes capacity treatment an explicit choice. A risk management approach asks questions like: Do 20-year traffic projections justify widening the bridge now? What is the projected congestion risk of replacement in-kind? What would be the additional expense involved in providing the incremental capacity later?

When considering various alternatives for improving a LOS E intersection, a risk assessment would evaluate the risk of providing for a future LOS D (because the intersection has a chance that it may not be congested in 2030) as opposed to improving the intersection to accommodate a LOS C (i.e.; the traditional approach). How much more does it cost to get a LOS of ‘xyz’ in 2030? Do you invest funds solely based on peak hour VMT when the capacity is not needed during the rest of the day? Thus, a facility’s design through a risk assessment (tradeoff analysis) focuses on the opportunity cost of selecting alternative designs. This trade-off frees resources to address current needs on other projects.

To some extent, the concept of risk management is already evident in NYSDOT’s Context Sensitive Solutions (CSS) program.<sup>40</sup> CSS is an interactive process that attempts to develop a transportation solution that fits into its local context. CSS is not a separate process or set of standards, but rather a philosophical approach from the project-scoping phase through design and into construction and maintenance. The emphasis is on finding the project’s context – how it fits into the community and surroundings. The cornerstone of successful CSS is early, effective, and continuous public involvement. Under CSS, a proposed project has early and effective public involvement to identify community issues through continuous venues for exchanging ideas (workshops, committees). There is a strong effort to collaborate with local governments to deliver well-built projects that add value to the community with minimal disruption. NYSDOT then considers alternative solutions in order to benefit a broad range of stakeholders, while at the same time recognizing the limited fiscal resources and eligibility constraints.



Noteworthy

## CDTC’s TIP Development Process

The multi-step development process begins with a screening step that identifies viable projects based on where the project/initiative came from and which of the *New Visions* principles it is tied to. Secondly, the merits of the project are identified quantitatively based on metrics such as safety and air quality benefits. Thirdly, it is considered for its priority by three factors: prioritized categories, gaps in types of projects, and public input. This third step allows for persuasive arguments based on geographic balance and other merits. Certain project types will get a boost for first year funding if they are a strategic priority - this is determined by the Planning Committee. Project selection for dedicated transit funds are considered separately.

Normally, CDTC sends letters of notification to the chief elected officials throughout the Capital District, informing them of the commencement of the process to develop a new TIP. This is done nine months prior to Policy Board approval. Other agencies in the Capital District that are capable of sponsoring transportation projects (e.g., New York Thruway Authority, private railroads, etc.) also receive notification letters. Applications are submitted as Project Justification Packages (CDTC’s template for providing project information). After available funding estimates are established, the project selection process normally plays out in three “Rounds” of discussion and three set-asides of funding for each.

**Round 1:** project evaluation process that considers new projects based strictly on quantitative merit guidelines and numeric scores. Information is summarized on a one-page Project Fact Sheet. The quantitative information reflects financial

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benefits of the project described as benefit/cost ratios (\$/year) in the categories of safety (accident reductions), travel time, energy/user costs, life cycle value, and “other benefits.”<sup>41</sup> The sum of these five categories divided by the annualized total benefit/cost of the project is the project’s total benefit/cost ratio. Sponsors have to explain in writing why and how the candidate projects meet *New Visions* principles.

**Round 2:** a smaller pot of funds is available to all projects in all categories that pass the screening test but were not selected in Round 1. This Round illustrates CDTC’s concept of holistic planning, as it attempts to highlight its conviction that numbers don’t tell the whole story. Additional considerations are applied: compelling non-quantitative arguments, geographic distribution, and other issues to ensure a balanced steadily-progressing program. Which of the seventeen categories of projects are still under-funded after Round 1? Which categories of projects are under-represented? What compelling arguments exist for projects, regardless of numeric score?

**Round 3:** an even smaller pot of funds are set aside to respond to compelling public input received in the draft TIP public comment period. This ensures an opportunity for CDTC to address issues that may have been overlooked or that may have arisen since Round 2. This is not intended to be an exercise where the Policy Board’s “mind” is changed, but rather an opportunity for the public to point out where the MPO might have missed something.

As part of this Certification Review, the review team had a telephone conversation with Mayor Gaughan of the Village of Altamont at his request as he was not able to attend the review in person. Mayor Gaughan currently serves as the town/village voting representative on the CDTC Policy Board. His concern is that the TIP project selection process is to some extent biased toward larger communities. FHWA and FTA found that in Round 1, where most of the available funds are allocated, the process is more favorable toward the higher volume roadway projects; it is difficult for the smaller communities like Altamont to persuade the Policy Board of a project’s merits. While that is the purpose of Round 2, it is still difficult, especially where there is a scarcity of available funding after Round 1.

## **ARRA**

The MPO participated in the allocation of funds coming from the American Recovery & Reinvestment Act (ARRA) stimulus package in 2009. This amounted to an additional \$100 million for transportation investment in the Capital Region. The project selection process went well, and CDTC completed the assignment in approximately one month, whereas it would normally take five months. A major reason for CDTC’s expedient selection of projects was they did not use a solicitation process but embraced the “shovel ready” concept and sat down with NYSDOT Region 1 and the Planning Committee for approval. The focus was on local projects that were already on the program without right-of-way or environmental issues. During the review, CDTC noted that the county-level criterion for “economic distress” in the ARRA

selection process was off-base because it did not capture economically distressed cities within economically stable counties.

### **Listing of Obligated Projects**

MPOs are required by Title 23 to annually publish the list of projects for which federal funds have been obligated in the preceding year (23 CFR 430.322). CDTC publishes its annual listing of obligated projects on its website, although it is not easy to locate thereon. CDTC has a good working relationship with NYSDOT but seeks to improve data sharing in regards to project programming. They may be switching project management software in the near future from PSS to Primavera. CDTC also hopes to address issues with file format compatibility when sharing or reporting information (e-documents vs. pdfs vs. excel files).

### **Federal Findings**

- It is recommended that CDTC consider how projects in smaller communities might compete better in the project selection process.



# Public Involvement

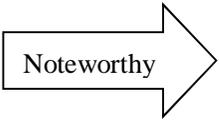
## REGULATORY BASIS

*“The MPO shall develop and use a documented participation plan that defines a process for providing citizens, affected public agencies, representatives of public transportation employees, freight shippers, providers of freight transportation services, private providers of transportation, representatives of users of public transportation, representatives of users of pedestrian walkways and bicycle transportation facilities, representatives of the disabled, and other interested parties with reasonable opportunities to be involved in the metropolitan transportation planning process.”*

- 23 USC 450.316(a)

Federal requirements for public involvement in metropolitan planning are contained primarily in 23 CFR §450.316. MPOs are required to maintain a public participation plan developed in consultation with all interested parties, and all interested parties are to have a reasonable opportunity to comment on the contents of the transportation plan [49 USC 5303(i)(5)(B)(i) & (ii) and 23 USC 134(i)(5)(B)(i) & (ii)].

In June 2007, the CDTC adopted its first *Public Participation Policy* to guide their planning projects, policies, and strategies in response to SAFETEA-LU requirements. The *Public Participation Policy* formalized how CDTC incorporates public involvement into all of their MPO activities. Among the items discussed are: policy guidelines, a definition of reasonable access to technical information, the MPO’s public participation methods, the MPO process for responding to comments, special efforts to reach underserved populations, and means for evaluating effectiveness. During the 2011 update to *New Visions*, CDTC adopted a revised *Public Participation Policy* which included a new section on social media, and refined the public participation process for the *Linkage Program*.



## CDTC Approach

CDTC believes in constant public involvement at the broadest scale possible. They do not focus on how many public meetings they hold, but rather strive for a continuous and intelligent conversation with the region at all times. The CDTC recognizes that an informed public can participate and add value to the planning process because they are the experts on their community. The policy guidelines that CDTC uses to for public participation remain the same as they were in the 2007 *Public Participation Policy*:

- Builds public knowledge about the process and issues
- Identify public concerns and values
- Gather information, develop consensus, resolve conflict, and lead to better decisions
- Gain the fresh perspectives of empowered citizens which can lead to creative approaches
- Enhance the accountability of government decisions
- Reduce later delays and costs from not having involved the public
- Build trust and partnerships

Incorporating the seven items above into the planning process has enabled CDTC to gain credibility with the public through their planning process. As cited in previous certification reviews, CDTC has a dynamic and evolving public participation process that is tailored to the level, frequency, and flexibility required for a plan, task force, or policy initiative.

## Public Participation Methods

CDTC has increasingly emphasized participation in multiple forums, heavy reliance on localized planning, continuous consideration of “big picture” ideas at the MPO table, and involvement in forums outside the MPO table. The goal is to assure residents and other stakeholders that their involvement has an influence on the outcome. The following is a sample of some of CDTC's more intensive efforts.

### **Community and Transportation Linkage Planning Program**

CDTC’s 30-year-old policy has been to not embrace a specific improvement without engaging the local community first. The *Community and Linkage Planning Program* (discussed in Section IV of this report) has been the backbone of this goal with over 70 *Linkage* projects in the past decade, reaching thousands of people in the region. The *Linkage Program* provides a significant local public participation component for the development and refinement of regional policies and their implementation.

Public involvement during *Linkage* studies at a minimum includes two formal public participation opportunities and an Advisory Committee convened jointly between CDTC and the study sponsor. The Advisory Committee is made up of one staff member each from CDTC, CDRPC, NYSDOT, CDTA, and representative(s) from the county(ies) and local community(ies)

where the study is located. Members of the public can also participate in Advisory Committee meetings. Events include charrettes, workshops, surveys, and neighborhood meetings. The type and extent of public involvement varies depending upon the individual requirements of a community and the nature of the project.

CDTC frames their outreach as “we are having a meeting about what *New Visions* means in your community and we want your help in planning for the future.” CDTC’s first step is always to review the *New Visions* principles and get the community on board with the larger picture; this is an excellent opportunity to re-engage the community on the subjects of the *New Visions* plan. CDTC is to be commended for developing and implementing the *Linkage Program* in a way that not only reinforces planning goals for the region but engages the public in meaningful ways. Their targeted efforts to support and guide communities in implementing local projects is a great example of how the MPO is able to add value to the region as a whole and within specific communities.

### **World Wide Web**

Over the past eight years, CDTC has made a focused effort to increase the amount of information available to the public via its website <http://www.cdcmpo.org/>. Today, the CDTC website acts as a central location for all CDTC products and the latest announcements. Most recently, CDTC added a language translator to the website and included an “education corner.”

Despite the large amount of information available through the site, the review team had difficulty locating some materials we were seeking for the review and often times found that the best way to find the most up-to-date version of a document was to do a Google search (the search function on the website was not found to be helpful). In some cases, only draft documents were available online despite having already been adopted by the Policy Board. And as noted in the previous section (VI. TIP Programming Investments), the annual listing of obligated projects is not easily located. Admittedly, part of our difficulty was that we were not as familiar with the site as a frequent user would be. However, our experience probably echoes that of the average member of the public visiting the site.

The website functions as a gateway to the MPO. CDTC states in its *Public Participation Policy* that it intends to provide opportunities for web-based comments to be received and considered in the future. As the potential use of the CDTC website expands to include opportunities for public comment, and in consideration of the speed at which the Internet has evolved since CDTC first made their website, we recommend that CDTC evaluate and potentially redo its website. We recognize that a website is an ongoing effort and expense, but investing in an improved site can lead to better public involvement and will in fact be easier to use and maintain by CDTC Staff. The websites of other MPOs can be looked at easily through the AMPO directory.<sup>42</sup> Some particularly good examples for CDTC’s consideration are:

- Corpus Christi Metropolitan Planning Organization - <http://www.corpuschristi-mpo.org/index.html>
- South Western Regional Planning Agency (SWRPA) - <http://www.swrpa.org/>
- Delaware Valley Regional Planning Commission (DVRPC) - <http://www.dvrpc.org/>

### **In Motion Newsletter**

In response to a recommendation from the 2004 federal certification review, CDTC launched a new newsletter in the spring of 2008. It was called “*In Motion*” and its purpose was to inform and provide information on the MPO’s activities in the Capital District region. The newsletter was found to be particularly useful as a communication tool when updating the TIP, during ARRA programming, and in introducing the CoExist Campaign.

Publication was suspended from the Summer of 2010 through Summer 2012 because CDTC did not have the time and staffing necessary to produce and disseminate the newsletter. During the 2012 review, CDTC indicated that they could be acting as more of a mouthpiece for the region by publishing press releases and announcements and are hoping to come up with a more time-efficient and effective means of distributing information to stakeholders in the future. It is probable that the future iterations of their newsletter (or other method for informing the public of the MPO’s activities) will be electronic.

We recommend that CDTC devote efforts to maintaining a more comprehensive mailing list that can be used for targeted outreach. The mailing list for *In Motion* included committee members, goods movement mailing list, health and human service organizations, and other resource agencies. CDTC could expand their mailing list to include not just organizations, but individuals who have attended meetings (currently when individuals attend events their contact information is not added to a master list). Information to record could include name, e-mail address, mailing address, type of contact (resident/business/NGO/government, etc.), and what type of issues they are most interested in. A link on the front page of the website could also allow visitors to provide their e-mail address if they are interested in receiving updates from CDTC.

### **Social Media**

In 2010, CDTC adopted a [Social Media Policy](#)<sup>43</sup> to guide CDTC’s use of Facebook,<sup>44</sup> Twitter,<sup>45</sup> and other social media sites. CDTC encourages social media use to further its goals and mission and to help provide relevant, timely, and useful information to the public. Information received by social media users in the form of comments, @replies, direct messages, or any other method allowed by third-party social media sites will be treated as feedback and discussion. However, the information received is not considered official public comment. Whenever possible, links are provided to CDTC sites that accept official comment.

## **Reaching Traditionally Underserved Populations**

The CDTC has set a goal to ensure that all persons, regardless of race, color, religion, income status, national origin, age, gender, disability, marital status, or political affiliation have an equal opportunity to participate or comment on the MPO’s planning processes. CDTC is to be commended for recognizing that the planning community needs to go to the traditionally underserved populations for input rather than expecting them to come to the planners. This

outlook has enabled them to make the necessary efforts to engage the broadest public possible. Some of the specific steps that CDTC has taken are:

- Holding meetings in accessible locations, and providing Special Transit Service Available by Request (STAR) service free of charge.
- Conducting charrettes and other all-day type activities that allow people to participate at whatever time of day works best for them.
- Holding a second meeting and doing a better job advertising when attendance is not high enough.
- Conducting stoop surveys and direct outreach (such as at Arbor Hill).
- Work with the Human Services Agencies on public education.
- Place notices in additional publications including minority community newspapers/newsletters.

## Federal Findings

- CDTC should evaluate and potentially revise its website. In consideration of the speed at which the Internet has evolved since CDTC first made their website, and realizing that CDTC intends the site to be a major opportunity for public comment, such an effort would be worthwhile.
- CDTC should develop and maintain a more comprehensive mailing list that can be used for targeted outreach and for the issuance of electronic version of the *In Motion* newsletter.

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# Preserving the Existing Infrastructure

## REGULATORY BASIS

*“The metropolitan transportation planning process shall... emphasize the preservation of the existing transportation system.”*

- 23 CFR §450.306(a)(8)

The principle of preserving and managing the region’s transportation system is CDTC’s highest stated priority in *New Visions 2030*, and CDTC’s investment strategies require that preservation has the first claim on available resources. The *New Visions* RTP lays out a performance based management strategy (e.g., painting bridges before they corrode, building more durable pavements, matching design treatment to road function rather than ownership or funding category). CDTC’s strong emphasis on maintaining transportation infrastructure can be seen in the allocation of *New Visions* RTP resources, almost 75% of which go to infrastructure renewal.

CDTC addresses the maintenance, repair and renewal of the existing highway and bridge system in a cost-effective manner. Appropriate investment in repair and renewal is said to be a higher priority than investment in expanded capacity. Public transit, sidewalks and bicycle facilities are included in the considerations.

“Maintaining the region's roadways, bridges, trails, sidewalks and transit system in a state of good repair is the smart thing to do. Not a lot of new roads are being built; therefore existing facilities must be preserved and enhanced.”

CDTC Strategy #1

*New Visions* adopts a strategy of maintaining infrastructure in good condition, while focusing transportation investment identified for the priority treatment networks.<sup>46</sup> To achieve this preservation strategy, the plan details specific actions such as the following:

- Make the transportation system safer.
- Continue adequate highway and bridge maintenance efforts and seek efficiencies in practice.
- Carry out an effective highway and bridge rehabilitation and reconstruction program to improve overall pavement and bridge conditions to meet stated condition goals.
- Maintain transit equipment and facilities in a state of good repair.
- Embrace a “risk assessment” approach for capacity considerations.
- Establish priority treatment networks for improvements beyond basic infrastructure renewal to be used for identifying and incorporating bicycle and pedestrian treatments, arterial corridor management treatment, ITS components, and removal; of barriers to freight movement into regular project design.

## Slow Deterioration of Infrastructure

Interstate highways in the Capital District are now between 30 and 50 years old, and there have been few full reconstruction projects on these facilities. Without intervention, in another 25 years, the system would be 55 to 75 years of age. Pavement conditions on non-Interstate arterials and collectors have declined from 1994 conditions on both the state and non-state systems. The condition of state arterials on the National Highway System is now more similar to conditions on locally-owned arterials than to conditions on the Interstate system. Pavement conditions on non-State federal-aid roads (70% of the total lane miles in the four counties) have also declined, with the total percentage rated fair or poor increasing from 31% in 1992 to 50% in 2004.

Bridge needs are similar. Interstate bridge needs amount to about 50% of the total bridge budget over the next 25 years. While non-Interstate bridge conditions have improved over the past decade, current funding is short by about one-half of the amount needed to achieve the modest bridge condition goals of having no more than 20% of all bridges in the deficient category. At current funding, the number of bridges rated deficient by 2018 will range from 24% (Thruway) to over 50% (NYSDOT-owned Interstate bridges).

This decline is attributed to the fact that federal, state and local transportation funding has not kept pace with the increase in per mile project costs. Federal transportation funding increased under *SAFETEA-LU* but has remained flat through nine extensions of that legislation. Current federal funding is inadequate to address major highway and bridge reconstruction on the Capital District expressway system.

## Definition of “System Preservation”

The first *New Visions* plan (1997) defined “system preservation” in terms of maintaining existing facilities at their current conditions. Current conditions were defined as those conditions (and benefits)

existing in 1996. Subsequent iterations of *New Visions* seek to maintain or improve the overall transportation service quality from 1996 conditions and enhance the quality of life in the region.

This definition of preservation has implications for project investments. Capacity and safety improvements and design upgrades carried out in conjunction with facility renewal are considered *discretionary* improvements, similar to stand-alone capacity, safety, or bike/pedestrian actions. The first priority is given to the tightly-defined system preservation needs. This approach is different than that taken in most MPOs, where the primary goal is to improve the condition of the infrastructure. CDTC seeks first to preserve existing infrastructure and any proposed improvements are weighed equally with other types of objectives. This preservation-first approach is becoming more widespread among MPOs as funding resources dwindle; CDTC was using this paradigm in 1997.

The preservation-first approach also applies to the transit program, where preservation needs are defined in terms of maintaining the transit system at current size and condition. Upgrades and expansions are treated as improvements. Funding priority is assigned to preservation, and transit improvements are advanced along with other desired improvements as funding permits.

## Reevaluation of Approach

The slow decline of the pavement and bridge conditions in the Capital District is not the result of the MPO's preference for new facilities over system preservation, ribbon-cutting over repaving. *New Visions* is extremely careful to limit commitments to those that will not compromise the region's ability to preserve and renew its basic infrastructure. However, CDTC's investment principles emphasize steady progress across all project types, which means all systems are vulnerable to deterioration.

With federal funding levels flat, and state infrastructure initiatives concentrating on state facilities, a new approach on asset allocation is probably worthy of investigation. The 2012-2014 UPWP notes that, as part of developing *New Visions 2040*, consideration should be given to developing a comprehensive asset management plan that includes pavement, bridge, culvert, guiderail, traffic signal, transit and "green" assets. A comprehensive asset management plan would be particularly valuable in refining the financial plan for preservation of the whole system. Likewise, the UPWP notes that, as part of TIP development, CDTC should begin discussions in developing ways of implementing innovative system preservation strategies that integrate sound asset management principles into the TIP's project selection process.

## Federal Findings

None

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# Multi-Modal Coordination

*“In the past, population and economic growth have always led to large increases in highway travel. This is because most communities’ have built transportation systems that only allow people and goods to move by road.”*

*- Ray LaHood, Secretary of Transportation*

## Transit Planning

The Capital District Transportation Authority (CDTA) is the major transit operator for the Capital District area covering the same four-county area as the MPO. Created by the New York State Legislature in 1967, CDTA’s legislative purpose is “...the continuance, further development and improvement of transportation and other services related thereto within the Capital District Transportation District (Albany, Schenectady, Rensselaer, and Saratoga Counties) by rail road, omnibus, marine and air...” The legislation gave broad powers to the Authority to fulfill its purposes in the four-county area, with provision for other counties to elect to participate.

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The CDTA fleet of approximately 250 vehicles provides service to the 2,300 square-foot region with over half of residents living within ¼ mile of bus service. CDTA service includes local, limited stop-express, park & ride and suburban shuttle service. In addition to regular route service, CDTA provides rural bus service to a number of communities in the region. The transit system is currently serving over 15 million customers a year, a number which has steadily risen over recent years despite budgetary constraints. On weekdays, more than 50,000 customer boardings occur on CDTA buses.<sup>47</sup>

The CDTA is an organization widely recognized for its professionalism. It is a voting member on the CDTC Policy Board and it is an exceptional host agency for the CDTC Central Staff. CDTA has been very supportive of the transit service recommendations produced in the series of *New Visions* plans.

## Transit Development Plan

CDTA completed its first Transit Development Plan (2009-2014)<sup>48</sup> (TDP) in May 2008. The TDP provided guidelines for strategic planning and service changes over the past five years. Much of what was called for in the 2009-2014 TDP has been implemented, including the ongoing monitoring of route performance, county-wide route restructurings, and BusPlus service on NY5.

The existing TDP will be updated in 2012/2013 by CDTA's staff and with assistance from CDTC. It will build upon the previous vision for transit in the region, but with a greater level of detail. New components of the TDP will include strengthening the park & ride system, developing a long-range plan for a BRT system, and developing more detailed productivity standards for route classifications based on time-of-day and day-of-week. The new TDP will also take into account CDTA's current fiscal situation as this is not likely to be resolved in the near future. CDTC is offering assistance in modeling and may help facilitate public involvement.

## BusPlus

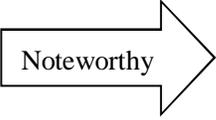
A good example of effective collaboration between the transit operator and the MPO is the ongoing planning and implementation of elements of Bus Rapid Transit (BRT) service called "BusPlus" along NY5 between the cities of Albany and Schenectady. The addition of BRT has served as a catalyst for more sustainable and transit/pedestrian-oriented development land use to help reduce the dependence on automobile use along the NY5 corridor. Since implementation of BusPlus on NY5, transit ridership on the corridor has increased by 13 percent and has risen to become the leading route on the entire CDTA system. Furthermore BusPlus is the timeliest service in the CDTA system, with fewer than 6 percent of busses arriving late and customers benefiting from travel time savings of up to 25 percent over local service.

CDTC is continuing to work with CDTA on their efforts to implement BRT elements in the region through the



Washington/Western Alternatives Analysis. The MPO anticipates that they will assist CDTA with modeling the different alternatives considered as part of the study.

CDTC is continuing to work with CDTA on a Transit Oriented Development (TOD) project for Albany. The goal is to ensure that development of Albany supports transit and transit access. The work includes developing language to be incorporated in Albany's comprehensive zoning ordinance update and a significant public outreach element. The zoning approach may also have further application in other municipalities where BRT is developed.



Noteworthy

## Pedestrian & Bicycle Planning

CDTC convenes a Bicycle & Pedestrian Task Force that works on issues ranging from public education to facility planning. The members meet monthly and provide technical guidance on *Community and Transportation Linkage Planning Program* projects and other bicycle and pedestrian related projects throughout the region. The organizations represented on the Task Force include local municipalities, NYSDOT, NYS Department of Health, Guilderland Pathways Committee, Saratoga County Heritage Trails Committee, CDTA, Hudson River Valley Greenway, the New York Bicycling Coalition, and the Mohawk Hudson Cycling Club among others. CDTC has also been able to use Travel Demand Management (TDM) funds for bicycle racks throughout the CDTA service area. The locations are selected through a solicitation process and schools and other public areas are also considered eligible.

In 2010, CDTC began Capital Coexist <http://www.capitalcoexist.org/>. This is a localized bicycle education campaign geared towards educating cyclists and motorists how to safely coexist while using the roadways.<sup>49</sup> Since then, the campaign has established its own website, publicized their “be seen” message through public advertisements, and distributed informational materials such as palm cards. The website includes related cycling information and a discussion forum which serves as an excellent public participation opportunity. As the campaign continues, there has been a great deal of interest and requests for materials. Under the Capital Coexist logo, CDTC has agreed to re-print bicycle education and safety activity books that were previously funded through the Governor's Traffic Safety Committee.

Law enforcement training on bicycle and pedestrian safety was a central focus of efforts during 2012. CDTC (through the Capital Coexist campaign) partnered with the Adirondack Glens Falls Transportation Council (AGFTC) and *We BIKE etc.* to conduct a *Continuum of Training in Pedestrian and Bicycle Safety for Law Enforcement*.<sup>50</sup> This innovative outreach effort was discussed on page 48.

CDTC is currently assisting the City of Watervliet with efforts to develop a Bicycle Master Plan. The plan will identify bicycle network needs and improvements and will address bicycle policies, signage and safety issues throughout the City. Of particular interest is an evaluation of alignment options for the segment of the Mohawk-Hudson Bike-Hike Trail that is currently located on Broadway. Other issues to be investigated include options for rerouting the existing Route 32 NYSDOT bike route to facilitate bicycle transportation in the City, the adequacy of bicycle parking in the City and the availability of appropriate bicycle storage/parking in proximity to the Route 32 and Route 2 CDTA transit corridors.

The region has seen the greatest success for bicycle and pedestrian mobility, accessibility, and safety in municipalities with a staff planner and active community involvement. Because the MPO cannot always act as the trigger for action a certain level of local drive and support is necessary. The Town of

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Bethlehem is a good example – they have used their compressive plan (August 2005) and small planning staff to focus on the “three Es” (education, engineering, and enforcement) and were able to secure a New York State Energy Research and Development Authority (NYSERDA) grant for a bicycle and pedestrian program initiative. The MPO’s emphasis for 2012/2013 will be to expand their focus to better include pedestrian improvements. CDTC has observed that in order for pedestrians to be respected, the setting must clearly indicate to drivers that the road is shared by multiple roads. Hybrid pedestrian signals (a multi-phased pedestrian vehicle signal) are one possible improvement CDTC hopes to invest in – currently two are being installed at Exit 6.

## **Integrated Corridor Management**

As noted earlier, Integrated Corridor Management studies are a good example of CDTC’s efforts to ensure that multi-modal linkages are considered before transportation investments are made. The Integrated Corridor Management Studies are initiated by NYSDOT, supported with SPR funds, and co-managed by CDTC Staff. Currently CDTC co-manages the I-87/US 9 Integrated Corridor Study, and I-787 Integrated Corridor Study. The purpose of the integrated management approach is to reduce congestion and minimize incidents in a timely manner such that future options for the corridor will not be inadvertently foreclosed. For example, the a goal of the I-87/US 9 study goal is to optimize travel in the whole corridor, not just the Northway or Route 9.

For the Hudson River Crossing Study, CDTC was able to frame the issues as ‘how urgent is it to replace the structure?’ This allowed time for a broad spectrum of perspectives to be heard and consideration given to how the crossing will impact other routes and corridors. Ultimately it was deemed undesirable to put a bicycle and pedestrian linkage over the crossing and the Livingston Avenue Bridge was identified as a more appropriate option. By engaging in a shared study, CDTC was able to help facilitate an outcome that was in the best interest of multiple stakeholders/modes.

## **Coordination with Human Service Agencies**

Federal legislation requires recipients of Job Access and Reverse Commute (JARC), New Freedom, and Section 5310 funds to certify that projects are derived from a locally developed and coordinated public transit-human service agency transportation plan.”, and that the plan be “developed through a process that includes representatives of public, private and nonprofit transportation and human services providers and participation by the public.”

CDTC convenes a Regional Transportation Coordination Committee (RTCC) Task Force which meets quarterly to help meet these requirements. The RTCC works to develop the coordinated plan, identifies areas of need, solicits projects, and ensures that JARC, New Freedom and Section 5310 funds are spent appropriately. The RTCC consists of over two dozen agencies which include the Regional Steering Committee that was formed by the CDTA to guide the JARC efforts and others that were added to ensure that representation fulfills the guidelines set forth in the SAFETEA-LU legislation. In particular, the Schenectady County ARC (Advocacy Resources Choices) and Catholic Charities of the Diocese of Albany have been models of involvement in the RTCC.

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During project solicitation the RTCC tries not to turn down any applications. When there is a gray area about eligibility they try to get the applicant to join the RTCC in order to help them understand the programs and potentially tap other more suitable resources. Overall, about 80-100% of the project proposals get funded and CDTC feels the applications are getting better every year.

CDTC's first Coordinated Human Services Transportation Plan was adopted in June 2007. An update to the Plan was adopted in September 2011.<sup>51</sup> The update was an opportunity to reflect on the impact of funding and coordination efforts and review the success of past projects. The update also included the results of a simplified version of the human service agency survey that was conducted in 2006 to gather information about needs, barriers, and gaps in transportation service. A 2011 survey, shorter than the 2006 version, was conducted by United Way through agreement with CDTC. By shortening the survey, the United Way was able to gain broader participation; however, the gaps and needs that emerged were ultimately similar to those of the 2006 survey.

**Federal Findings**

None

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# Linking the Environment and Planning

*“The metropolitan transportation plan shall, at a minimum, include... A discussion of types of potential environmental mitigation activities and potential areas to carry out these activities, including activities that may have the greatest potential to restore and maintain the environmental functions affected by the metropolitan transportation plan. The discussion may focus on policies, programs, or strategies, rather than at the project level. The discussion shall be developed in consultation with Federal, State, and Tribal land management, wildlife, and regulatory agencies.”*

- 23 CFR §450.322(f)(7)

MPOs are required by 23 CFR §450.306 (a)(5) to “protect and enhance the environment.” In developing their metropolitan transportation plan, MPOs must discuss potential environmental mitigation activities and the potential areas to carry out those activities in. [23 CFR §450.322 (f)(7)] This discussion must be developed in consultation with federal, state, tribal, wildlife, land management, and regulatory agencies. The regulations are non-prescriptive regarding how these requirements should be met. CDTC’s mitigation process is cited by FHWA as a case study of a worthwhile innovative practice.<sup>52</sup>

## Framing the Issues

When evaluating the potential environmental impacts of policies and projects, CDTC considers both the natural and human environment. This is in keeping with its concept of a “quality region”:

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*“A quality region creates economic, educational, social, cultural and recreational opportunities and provides safe neighborhood environments and housing choices for all; protects sensitive environmental resources and fosters community identity and ‘a sense of place’ in all parts of the region.”*

In keeping with its holistic approach to planning issues, the MPO strives to consider how the region functions together with its natural, built, and human environment, rather than developing environmental mitigation as a result of impacts. This approach requires more abstract thoughts and ideas, but CDTC believes that it ultimately results in avoidance of environmental impacts.

CDTC employs a challenging process that marries investment decisions in the TIP to the adopted goals and principles of its vision of a quality region. CDTC has adopted 31 planning and investment principles to guide its decision-making. As statements of principle, they provide a framework for funding decisions, project selection criteria, and corridor-level planning. *New Visions 2030* added the new principle of *environmental stewardship*.

Investment decisions are linked to its quality region principles by:

- Investing in such a way as to encourage residential and commercial development to locate within an Urban Service Area defined for the Capital Region;
- Assuring that investments improve or preserve the region’s cultural and natural environment; and
- Discouraging investments that encourage development in environmentally sensitive areas, thereby helping to preserve rural character.

As discussed in the *New Visions* section of this report, CDTC encourages sustainable development patterns in site design, urban reinvestment, community-based land use planning, and multi-modal investments (transit, bicycle, and pedestrian). CDTC’s *New Visions* plan is listed on FHWA’s Environmental Review Tool Kit<sup>53</sup> as a case study of an effective practice for Long Range Planning, and the *Linkage Program* has won several federal awards for translating the long-range plan down to the local level. During the development of *New Visions*, CDTC worked cooperatively with the CDRPC, the Center for Economic Growth, and the University of Albany Department of Geography and Planning to explore the potential consequences related to alternative growth and development pattern scenarios in the Capital District.

CDTC has also adopted specific strategies and actions that will help carry out the principles of the *New Visions* RTP. CDTC Policy Board actions #37-40 are meant to further ensure that the environmental impacts of transportation actions are considered while creating a more sustainable transportation system:

- Support the deployment and use of Clean Fuels and Clean Fuel Technology.
- Continue to update CDTC’s Title VI/Environmental Justice (EJ) document and consider the impacts of planning, project programming and project design on CDTC’s Title VI/EJ populations.
- Specifically consider environmental and cultural resource impacts of transportation planning, project programming and design.

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- Explore Green Corridors and opportunities to reinforce open space protection efforts in the Capital Region.

## Every Day Counts

In an ideal world, the planning process and the environmental assessment required during project development (preliminary design) under the National Environment Policy Act (NEPA) work in tandem with the results of the transportation planning process feeding into the NEPA process. FHWA's Every Day Counts (EDC) initiative sets up a framework for considering and incorporating documents and decisions from the earliest stages of project planning into the environmental review process. This can lead to seamless stewardship, and reduces delays in project development.

One of the ways that an MPO can integrate EDC into the planning process is by using some form of FHWA's Planning and Environmental (PEL) questionnaire. CDTC has included the PEL questionnaire in the most recent update to the *Linkage* study procedures and will work with study sponsors to complete the questionnaire. In addition, CDTC Staff is working with *Linkage* study sponsors and NYSDOT to determine the most effective method for ensuring *Linkage* study recommendations and documentation are readily available to NYSDOT project development staff/designers once studies are complete.

CDTC Staff is also participating in a PEL Working Group convened by NYSDOT and FHWA. The purpose of the Working Group is to identify ways to improve how planning studies are carried out and results are documented in order to ensure they can efficiently feed into the NEPA process.

## Air Quality

The transportation sector is required to be an active participant in the work to achieve attainment of the health-based National Ambient Air Quality Standards (NAAQS). Nonattainment areas are those geographic regions designated by the Environmental Protection Agency (EPA) as not meeting one or more of the NAAQS due to monitored levels of pollutants. Presently, the Albany-Schenectady-Troy nonattainment area is designated in nonattainment of the 8-hour ozone standard (0.08ppm) and is classified under EPA regulations as a "former subpart 1" basic nonattainment area. Besides the four urban counties, the nonattainment area includes the rural counties of Montgomery, Greene and Schoharie.

Regulatory Basis: Nonattainment areas, such as the Capital District, are subject to two sets of related regulations: the USDOT's metropolitan transportation regulations (23 C.F.R. Part 450) and EPA's transportation conformity regulations (40 C.F.R. Parts 51 and 93). FHWA and FTA- funded projects – and regionally significant projects even without Federal Funds – that are located in nonattainment areas cannot proceed unless they come from an air quality "conforming" TIP and Plan.

**DRAFT****Transportation Conformity**

The conformity analyses for TIPs and MTPs are required emissions analysis covering the entire nonattainment area. The existing 2010-2015 TIP and *New Visions 2035 Plan Update* received positive FHWA/FTA conformity determinations on September 9, 2010 and December 9, 2011 respectively.

**Agreements and Consultation**

The transportation planning regulations require formal agreements within air quality nonattainment areas under certain circumstances, two of which apply to CDTC:

1. Agreement among MPO, State, State Air Quality Agency and others describing planning and Air Quality Conformity process in “Donut” areas.<sup>54</sup> As noted above, the Capital District ozone nonattainment area includes Greene, Montgomery and Schoharie - three rural counties outside (“donut” area) of CDTC’s planning area. There is no formal agreement per se among the parties; however, informal procedures have been worked out. Because these counties are outside of the CDTC’s modeling area, NYSDOT analyzes the air quality build/no-build impacts of individual projects in the three rural counties, and the results are added to the CDTC’s analysis to determine an overall regional analysis. The Interagency Consultation Group<sup>55</sup> for air quality has considered this arrangement adequate.
2. Agreement between MPOs and the State when more than one MPO serves the nonattainment area.<sup>56</sup> The Town of Moreau in Saratoga County is in the Glens Falls MPO (A/GFTC). In the 2008 review, FHWA and FTA noted that a formal agreement between the two MPOs regarding air quality analyses was needed. CDTC, NYSDOT and AGFTC adopted a MOU in 2009 to fulfill this requirement.

**Potential Change in AQ Status**

In April 2012 the EPA designated nonattainment areas for the new Ozone standard of 0.075ppm. Under the new standard, the capital District will be reclassified as Unclassifiable/Attainment for the Ozone standard as of July 20, 2013. Because the old ozone standard was also revoked for transportation conformity purposes, Capital District will no longer be subject to transportation conformity analyses after July 20, 2013.

This new status will have three major implications on CDTC:

- These areas will no longer be subject to the transportation conformity analyses.
- Attainment areas are required to update their Plan every five years, rather than every four years as a nonattainment area.
- The area will still be eligible to expend CMAQ monies.

**Federal Findings**

None

## Energy and Climate

*“Growth is smart when it gives us great communities, with more choices and personal freedom, good return on public investment, greater opportunity across the community, a thriving natural environment, and a legacy we can be proud to leave our children and grandchildren.”*

- *This Is Smart Growth, International City/County Management Association, 2006*

In recent years, “smart growth” and “sustainable growth” concepts have gained national attention as answers to the challenges associated with growth and energy usage. Consequently smart and sustainable growth concepts have also been presented as solutions to mitigate the potential impacts of climate change. In New York, The Smart Growth Public Infrastructure Priority Act was passed in 2010, directing NYS agencies to make their infrastructure spending decisions in accordance with smart growth principles. The Act was intended to minimize the “unnecessary cost of sprawl development” and requires state infrastructure agencies, including NYSDOT, to ensure public infrastructure projects undergo a consistency evaluation and attestation using criteria set out in the Act. NYSDOT has not yet decided how it will implement this Act, but the CDTC process is fully compatible with smart growth principles.

This section discusses CDTC’s specific efforts targeted at energy and climate change. Other sections of this report address CDTC’s planning practices that are in keeping with the principles of smart and sustainable growth.

The decision to give specific consideration to climate change in the metropolitan transportation planning process is presently a voluntary one from the federal standpoint. “Climate change” is not mentioned in the 23 CFR 450 regulations, but “energy conservation” is included as a required planning statewide and metropolitan factor [23 CFR 450.206(a)(5) and 450.306(a)(5) respectively]. As most of the energy used in transportation is fossil fuel, and this is a major source of anthropogenic GHG emissions, transportation energy is fundamental to any effort to address GHG reductions.

## **CDTC’s Approach**

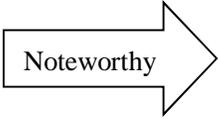
Climate change has been a major topic on the agendas of federal transportation planning workshops in the last several years. MPOs were offered numerous suggestions by other MPOs, federal agencies, and interest groups on how an MPO planning process might mitigate (slow) or adapt to the impacts of a changing climate. CDTC does not take the MPO standard approach of giving the issue a special elevated status, treating it as a separate and totally new item. While believing that climate change *should* be part of the overall planning considerations, CDTC believes that it should not be considered as a completely separate and overriding component of the process. CDTC maintains that a holistic approach calls for incorporating climate change considerations as a *part* of the overall planning approach, not the overriding issue.<sup>57</sup> While not part of CDTC's official approach per se, Mr. Poorman previously elaborated upon the 'Universal Truths' that need to be part of any approach to developing climate change strategies (see Appendix C).

## **UPWP Climate Change Initiative**

In its previous UPWP, CDTC initiated a task entitled *Energy and Climate Change Initiative* to begin considering climate change so that the region would be prepared to address expected requirements of the new transportation and climate legislation. While specific requirements related to GHG did not materialize in MAP-21, CDTC Staff is now beginning the process of creating an integrated community and transportation design toolkit to help develop sustainable transportation and development projects.

We note that CDTC also participated on the New York State Climate Action Council and is represented on the Transportation and Land Use Technical Work Group that developed the *NY Climate Action Plan Interim Report*.

CDTC’s entire planning process takes a holistic approach to the environment, beginning with land use and transportation linkages, investment strategies and the promotion of a quality region. Besides the overall process, MPO staff and member agencies also have several individual initiatives that impact energy usage and greenhouse gas emissions including the Clean Communities efforts, Energy and GHG analyses in TIPs and plans, and *iPool2*.



## Clean Communities

CDTC is in its thirteenth year as the host for the *Capital District Clean Communities* program (CDCC).<sup>58</sup> Presently, six urban areas of New York State have joined the Clean Cities Program, and CDTC is the *only* MPO in New York to directly host the effort.

CDCC is an effort of the U.S. Department of Energy; the coalitions formed are voluntary, locally based government/industry partnerships whose purpose is to mobilize local stakeholders in an effort to expand the use of alternatives to gasoline and diesel fuel, accelerate the deployment of Alternative Fuel Vehicles (AFV), and build a local AFV refueling infrastructure.<sup>59</sup> CDTC agreed to assume the lead role in managing the program previously provided by Schenectady County. The coalition’s planning area includes the four CDTC counties as well as Fulton, Montgomery, Schoharie, Otsego, Warren, Washington, Greene, and Columbia Counties, an area with a total population of almost 1.3 million people.

The coalition group meets quarterly at CDTC offices to work on the program plan and to implement the national Clean Cities goals. Today, there are 86 stakeholders, 43 of whom are private entities. According to its 2011 Annual Report, over 1.2 million gallons of gasoline were reduced in 2011 due to its efforts. CDCC also works on projects with the New York State Energy Research and Development Authority (NYSERDA) in its \$1 million USDOE grant to conduct charging infrastructure readiness/planning. NYSERDA is the lead applicant on behalf of the Electric Vehicle Infrastructure Coalition of eleven Eastern States (from Maryland to Maine). The goal is the development of a plan and accompanying guidance documents to accelerate the introduction of a network of electric vehicle charging stations throughout the Northeast and Mid-Atlantic regions of the United States.

## Energy and GHG Analyses of TIPs and Plans

The New York State Energy Plan requires State agencies and MPOs to conduct energy and greenhouse gas analysis of its programs. NYSDOT developed guidelines on how the energy and GHG analyses in TIPs and Plans should be done; both the direct energy (energy that will be used after the project is open) and the indirect energy (energy needed to build the project) are calculated.<sup>60</sup> Carbon dioxide (CO<sub>2</sub>) is the surrogate for all GHGs in these analyses. CO<sub>2</sub> emissions (tons per year) are calculated by multiplying the energy consumed in both the direct and indirect phases of the projects by carbon emissions coefficients (both gasoline and diesel engines) and then by a factor representing the amount of carbon that is oxidized.

The energy and GHG analyses at present are a “build” versus “no-build” comparison, not “build” less than a certain date (e.g.; 2002). So far, the analyses of the TIPs and Plan have always shown that the “build” scenarios would use less total energy and emit less GHG than the “no-build.” Despite the capacity of the energy analysis process for raising awareness, it is unknown whether estimates of energy use and CO<sub>2</sub> emissions would, by themselves, influence transportation investments. Policies are more likely to be implemented in response to traditional air quality concerns (e.g., ozone).

## iPool2

iPool2 is an internet free ridesharing program administered by CDTA with support from CDTC.<sup>61</sup> GIS-based, iPool2 replaced CDTC's Commuter Register website in 2008. The website allows users to post rideshare information and find others who match their schedules. iPool2 contains links to bus schedules and fares, maps park-and-ride lot locations, tracks eligible guaranteed ride home participants, and provides a 'commute tracker' where registrants can view the environmental, financial, and health benefits of their alternative transportation choices. The website also provides registrants an opportunity to search for vanpool partners in connection with the Vanpool Program.

## Other efforts

Other energy and climate related activities undertaken by CDTC are:

- The City of Albany was awarded a Cleaner, Greener Communities Regional Sustainability Planning grant from NYSERDA and is leading a consortium consisting of the City of Albany, the Capital District Regional Planning Commission, and other local municipalities. CDTC staff serves on a technical committee to assist with data collection and other tasks associated with development of the Plan. The grant will provide for up to \$1,000,000 in funding to prepare the plan for the region (Albany, Saratoga, Rensselaer, Schenectady, Columbia, Greene, Warren and Washington Counties).
- Climate Smart Communities related tasks: In coordination with CDRPC's work as the Climate Smart Communities Regional Coordinator, CDTC staff will assist with development of a regional GHG inventory. Using the STEP model estimates of VMT, GHG estimates will be calculated consistent with guidance provided for local government as referenced in NYSDEC's Climate Smart Community Guide. CDTC staff has previously completed GHG estimates for Schenectady County and the Town of Bethlehem.
- In 2001, CDTC hosted and participated in an FHWA workshop on Climate Change, presented by FHWA, including one of the authors of this report.

## Federal Findings

None

# Title VI & Environmental Justice

## REGULATORY BASIS

*“... the metropolitan transportation planning process is being carried out in accordance with all applicable requirements including... (3) Title VI of the Civil Rights Act of 1964, as amended (42 U.S.C. 2000d–1) and 49 CFR part 21; (4) 49 U.S.C. 5332, prohibiting discrimination on the basis of race, color, creed, national origin, sex, or age in employment or business opportunity;”*

- 23 CFR 450.334(a)(3) & (4)

The Civil Rights Act of 1964 guarantees equal protection under law and prohibits intentional discrimination based on race, color, or national origin. In 1984, Federal regulations implementing Title VI were amended to prohibit recipients of Federal aid from carrying out any policy or program that has the *effect* of discriminating against individuals covered under the 1964 Civil Rights Act. As part of its adoption of the TIP, the MPO self-certifies that its planning process adheres to Title VI. CDTC last self-certified in June 2010 in conjunction with the development of the 2010-2015 TIP.

In 1994, President Clinton issued the Executive Order on Environmental Justice (Executive Order 12898), citing the 1964 Civil Rights Act and Title VI as foundational pillars. The Executive Order directs all federal agencies to incorporate, as part of their mission, the goal of achieving environmental justice by ensuring that federally-funded policies and programs do not subject minority and low-income communities to “disproportionately high and adverse human health or environmental effects.” As it relates to transportation, Executive Order 12898 was issued to ensure that all federally-funded transportation-related programs, policies, and activities that have the potential to cause adverse effects, specifically consider the effects on minority and low-income populations.

In March 2007, CDTC completed an *Environmental Justice Analysis* that outlines CDTC's standard procedures to include Environmental Justice issues and analysis in the MPO's planning process. The analysis also discusses in depth how CDTC incorporates Environmental Justice issues into their TIP, UPWP, and public participation processes. CDTC plans to update the analysis after the 2010 Census data becomes available at the Traffic Analysis Zone (TAZ) level. The measures for effectiveness used are not anticipated to change.

CDTC is aware of the revised FTA Title VI circular (C 4702.1B) released in August 2012, the FTA Environmental Justice circular (C 4703.1) released in July 2012, and the FHWA directive on Environmental Justice released in June 2012. CDTC is appropriately anticipating that increased focus in certain areas and coordination with CDRPC may be necessary to meet new requirements. CDTC is commended for preparing to incorporate these new requirements by identifying this potential compliance issue in their 2012-2014 UPWP.

## CDTC Approach

CDTC's Civil Rights and Environmental Justice (EJ) objective is to “assure equitable access to, consideration within and effects of the planning agenda, planning products and program of federally-assisted transportation projects in the Capital District.”<sup>62</sup> CDTC seeks to fulfill Title VI and Environmental Justice requirements proactively through the planning process. CDTC takes the following steps to fulfill this objective:

1. Educate staff on regulations, issues, and components – All CDTC Staff are held responsible for meeting the requirements of Title VI and Environmental Justice.
2. Provide staff with case studies of successful implementation.
3. Collaborate with NYSDOT and other MPO's regarding their status/approach concerning implementation.
4. Formulate a standard procedure that allows for the realistic implementation and documentation of analysis and principles.

## Identifying Populations

CDTC has previously worked with 2000 Census data and defines “special concern areas” requiring consideration for Environmental Justice and civil rights examination as those with a higher concentration of persons below poverty level and/or minority persons than the four-county regional average. CDTC plans to update their analysis of “special concern areas” after the 2010 Census data becomes available at the Traffic Analysis Zone (TAZ) level. Percentage “thresholds” are calculated by determining the four-county planning area percentages of minority and Hispanic populations, based on the 2000 Census, CDTC identifies any TAZ with a minority population greater than 11.2% or a Hispanic population of 2.6% as an area of special concern. The region overall has seen about a two percent increase in minority persons between the 2000 and 2010 census.

The 2000 Census data showed that 8.9% of the population in the four counties was below the 1999 poverty level. Therefore, any TAZ with 8.9% or greater population below the poverty level is

considered a low income target area of special concern. Based on 2000 Census, 44 % of the region's TAZs were Environmental Justice target population areas.

## TIP Development

Within the context of TIP development, CDTC takes the following steps to comply with Title VI and Environmental Justice requirements:

1. CDTC's TIP is developed with a strong, budgetary relationship to *New Visions 2030*, including its commitment to urban revitalization.
2. CDTC's TIP is developed with a strong relationship to local planning activities. Since its adoption of *New Visions*, CDTC has increased its local planning efforts through its *Transportation and Community Linkage Planning Program* which has included a number of studies specifically focused on addressing issues in areas with high minority and low-income populations.
3. Project solicitation requests go out to all eligible parties, including not-for-profit corporations.
4. Merit evaluation processes include a GIS-based identification of location to ensure equitable treatment of both positive and negative project effects on Environmental Justice populations as well as on non-EJ populations. All candidate projects are identified in terms of the project's location in a minority area, low-income area, minority and low-income area, or neither minority nor low-income area. CDTC plans to update the TIP maps when 2010 Census data becomes available at the TAZ level and is also considering mapping disabled, elderly, and zero-vehicle households.
5. Merit evaluation processes include articulation of the project's expected land use compatibility; community or economic development impacts; environmental issues; and business or housing dislocations.

## Americans with Disabilities Act (ADA) Compliance

NYSDOT adopted its *ADA Transition Plan* in early 2011, detailing information about the condition of state-owned pedestrian facilities as well as the next steps needed to make all state-owned transportation facilities accessible by disabled individuals.<sup>63</sup> As of March 2010, roughly 70 percent of New York State facilities (existing state-owned sidewalks, trails, etc.) within NYSDOT Region 1 were in compliance with requirements of the Act. The time-frame established in the *ADA Transition Plan* for full system compliance is March 2019.

CDTC has taken the lead among NYS MPOs in working with NYSDOT to organize a meeting and training on sidewalk accessibility ratings and condition inventories for all the MPOs. This training will likely be based on NYSDOT's *Rating Scale for Accessibility of Pedestrian Facility Segments or Points*.<sup>64</sup> Building off of this work and in an effort to assist municipal partners with meeting obligations under ADA, actions may include physical collection of data such as sidewalk condition and intersection friendliness.

## Federal Findings

None

DRAFT

# Freight Planning

## REGULATORY BASIS

The metropolitan planning process should provide for consideration and implementation of projects, strategies, and services to “*Increase accessibility and mobility of people and freight*” and “*Enhance the integration and connectivity of the transportation system, across and between modes, for people and freight.*”

- 23 CFR §450.306(a)(4) and (6),

CDTC has a long history of incorporating freight concerns and the movement of goods into its transportation planning process. This effort started as a result of the 1991 ISTEA legislation where freight transportation planning requirements, especially intermodal considerations, were added to metropolitan planning regulations. ISTEA made it a national policy “*to encourage and promote development of a national intermodal transportation system in the United States to move goods and people in an energy efficient manner provide the foundation for improved productivity growth, strengthen the nation's ability to compete in the global economy and obtain the optimum yield from the nation's transportation resources*” [49 USC §302(e)]. This trend emphasizing the need to invest in goods movement continues to grow with the passage of successive national transportation legislation. The newest legislation, MAP-21, includes a section on *National Freight Policy and Prioritization of Projects to Improve Freight Movement*.

## Goods Movement Task Force

CDTC is one of a handful of mid-sized MPOs to embrace freight planning early on, and they have been recognized by FHWA and others for their approach and in forming a *Goods Movement Task Force* to address regional freight issues.<sup>65</sup> In 1993, CDTC initiated their *Goods Movement Task Force* with representatives from both the public and private sectors of the freight community in the Capital Region. Members included NYSDOT, NYS Thruway Authority, Albany International Airport, Port of Albany, NYS Motor Truck Association, UPS, Conrail, CDRPC, and several higher learning institutions local to the area. This group was tasked with prioritizing goods movement issues and data collection.

### • Freight Planning Framework

As part of the initial *New Visions* planning effort in 1995 the *Goods Movement Task Force* produced a report titled “Goods Movement in the Capital District: A Performance Report.” This report served as the framework on what to consider in relation to freight and how freight planning is conducted in the Capital Region. In the report the *Vision Statement* established by the *Goods Movement Task Force* elevated the importance of an intermodal system for goods movement stating:

*“The Goods Movement Task Force envisions an intermodal transportation system that is treated as a valuable asset to the region. This vision recognizes the existing role of the Capital District in interregional freight movement and seeks to maintain and enhance that function. As a crossroads for multi-modal traffic with a wide range of destinations, the Albany region should provide competitive facilities and services when compared with other similarly sized regions. An effective distribution system within the region is also essential to support goods movement and economic health over all.”<sup>66</sup>*

The report detailed methods to implement the vision through the following strategic stances:

- Building public/private partnerships at every opportunity;
- Integrating the system (provide “seamless” transportation) by making connections and transfers easy;
- Preserve operations and opportunities for intermodal goods movement (i.e.; be proactive not reactive!);
- Support private sector innovation, particularly in technology-testing and implementation; and
- Remove/reduce existing barriers to the free flow of freight and erect no new barriers through public sector actions.<sup>67</sup>

As performance management is currently at the forefront of national transportation discussion, this report was ahead of its time as it aims to measure the health of freight movement through a performance report. Sections in the report are devoted to discussing and defining these performance measures.

### Core System Performance Measures<sup>68</sup>:

- Access: Major freight movements with modal alternatives
- Accessibility: travel time between representative locations, including major intermodal facilities, peak and non-peak
- Congestion: Recurring congestion impacting freight
- Congestion: Non-recurring (incident-related) congestion impacting freight
- Safety: Cost of Accidents
- Economic Cost: Average Annual Capital, Maintenance, and Operating Costs
- Economic Cost: Daily value of commercial time in travel
- Air Quality: Daily Emission Levels and Attainment Status
- Land Use: Community Quality of Life
- Environmental: Noise Exposure
- Economic: Economic activity supporting or constraining features of the transportation system.

The report also includes an ancillary section *Supplemental Performance Measures* specifically addressing intermodal/multimodal performance measures not captured in the *Core Performance Measures*.

**Supplemental Performance Measures**<sup>69</sup>:

- Highway Infrastructure Constraints
  - Highway Bridge with vertical clearance restrictions
  - Highway Bridges with load limits
  - Intersections with inadequate turning radii for 53' tractor trailers
  - Locations with narrow lanes
  - Locations with a high rate of truck accidents
  - Commercial facilities (e.g. rest stops) to serve trucks/truckers
- Railroad infrastructure Constraints
  - At-grade crossings
  - Railroad bridges on freight main lines with vertical clearance restrictions
- Port of Albany and Canal Operations
  - Tonnage processed through the Port of Albany
  - Vessel calls at the Port of Albany
  - Canal Operations
  - Revenue Generated to Local Economy by Port of Albany
- Airport Operations
  - Tons of Air Cargo at Albany County Airport
  - Business Activity Generated by the Albany County Airport

The performance measures identified in both of these sections align with present thought on proposed national performance measure for freight monitoring.

• **Task Force Activities**

CDTC benefited from a very active task force with strong participation from members for many years. They conducted quarterly meetings that brought together private freight operators and public freight planners to share information on local freight issues and events.<sup>70</sup> They assisted in planning roundtable discussions related to goods movement. They educated members and stakeholders on freight operations through tours of freight and intermodal facilities, and held conferences that brought together the freight community to discuss the vitality of regional goods movement and trade corridors affecting the Capital District.

- Champlain-Hudson Trade Corridor Conference (1999) Albany, NY and Plattsburgh, NY
- Regional Goods Movement Symposium (2006), Albany, NY

The *Goods Movement Task Force* remained active from 1993 to 2007, producing an updated *Goods Movement Plan* as part of *New Visions 2030*.<sup>71</sup> While the *Task Force* has not held quarterly meetings these past few years, freight issues that have arisen have been addressed through other forums as the Port of Albany, Albany Airport Authority and the NYS Thruway Authority are permanent members of CDTC's Planning Committee and Policy Board. NYS DOT Region One, which has been active in the freight community in the Capital District, also serves as a valuable resource.

Since the last certification review, CDTC continues to work in freight planning within the context of their *Linkage Program* and has met a number of successes in the area of goods movement planning as a result of the structure established through the vision of the *Goods Movement Task Force*. This includes:

- The Port of Albany's award of \$4.918M for wharf repair and reconstruction in 2009 through the *American Recovery and Reinvestment Act*
- CDTC Policy Board approval a set-aside for spot freight related projects in 2011
- The *Goods Movement Plan – New Vision 2030* update in 2007
- Completion of several studies addressing freight concerns
  - *Route 9W Corridor Study* (Selkirk Yard, track issues) in 2008,
  - *Railroad Avenue Corridor Study* in 2010.

## Goods Movement Priority Network

In 1997, CDTC established the *Goods Movement Priority Network* to guide investment decisions benefiting freight movement. This priority network considered both capital and system improvements and is connected to their *Linkage Program* focusing on the routes most traveled to and from freight activity centers. Currently, the priority road network for goods movement in the Capital Region includes:

- The National Highway System, including intermodal connectors (approximately 826 lane-miles)
- State Highways that currently carry more than 10% trucks in the traffic flow (approximately 150 centerline miles)
- Locations on the priority truck network where load limits, clearance restrictions, turning radii, and narrow lanes impact goods movement.<sup>72</sup>

Since the creation of this priority network there have been several changes to the list of freight activity centers such as the addition of Half-Moon Mechanicville Intermodal Facility managed by Norfolk Southern and Pan Am Railways. CDTC is in the process of revisiting all the freight activity centers in the region and updating the *Goods Movement Priority Network*.

## Freight Reengagement Strategy

A ‘*National Freight Policy*’ has been proposed by most transportation bills since SAFETEA-LU, starting with Oberstar’s transportation bill in 2009. As such the importance of preparing an organization to meet the requirements of the new transportation legislation is very important. CDTC is taking steps to reflect on their current approach in freight planning and process the changes in goods movement in the nearly 20 years since the start of the *Goods Movement Task Force* in order to reengage in freight planning in a meaningful way. Some of their steps to date include:

- Completing their 2009 and 2011 MPO Freight Program Assessment
- Hosting FHWA Freight Performance Measure Workshop for Region
- Supporting the formation NYSAMPO Freight Working Group
- Revisiting Good Movement Priority Network (See Goods Movement Priority Network section)
- Holding brainstorming session with FHWA Division and NYSDOT Region One

### • MPO Freight Program Assessment

In 2009 FHWA started requesting that MPOs complete a biannual Freight Program Assessment. This assessment covers the information on an agency’s organizational freight capacity, the relationships developed to address freight planning is conducted on planning, programming, and operational levels. CDTC has submitted their Freight Program Assessments for both 2009 and 2011 which can serve as a self-assessment of CDTC’s freight program.

### • FHWA Freight Performance Measure Workshop

CDTC hosted the *FHWA Freight Performance Measure Workshop* which brought together participants from NYSDOT Main Office, NYSDOT Region One, other MPOs in the area, University at Albany and Rensselaer Polytechnic Institute. This workshop not only discussed different types of freight performance measures that could be used in freight planning, but also introduced the American Transportation Research Institute (ATRI) web-based tool that could be used to assess the volume of regional and national freight routes.

CDTC indicated that they are participating in a research effort to apply freight data architecture at the local level using commodity flow survey data. This effort intends to link a variety of existing freight data and other related datasets to create a robust understanding of freight movements in the Capital Region through freight transportation modeling.<sup>73</sup> As a part of hosting this workshop ATRI built out CDTC’s regional freight network. This tool which includes private sector data can be one source of information used for freight planning.

## Freight Brainstorming Session

This past year, CDTC held a brainstorming session with FHWA Division and NYSDOT Region One. A major theme of the session was how to engage the private sector. Freight planning is not as straightforward as other types of transportation planning because of the competitive nature of the private sector and reluctance to share data that is proprietary.<sup>74</sup>

The attendees brainstormed ways for CDTC to be proactive and participate in industry meetings rather than expecting the freight industry to embrace the MPO planning process. CDTC is exploring this concept. In some ways, CDTC already engages with private industry through their Clean Cities Program (see Section X. Linking Environment & Planning). They have formed relationships with

many private sector freight partners through the program's truck diesel retrofit component. CDTC is looking at leveraging those relationships for freight planning and public participation.

CDTC also discussed revisiting the idea of holding an Annual Freight Conference. In the past, the conference had reinvigorated stakeholders from both the public and private sector and lead to introspection on goods movement within the Capital Region. A freight conference could assist in directing the region in updating their approach to freight planning by understanding and collectively addressing current needs and freight legislation by restarting the dialogue within the Capital Region on Goods Movement.

## **Federal Findings**

None

# Security

## REGULATORY BASIS

*“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: ... (3) Increase the security of the transportation system for motorized and non-motorized users.”*

- 23 CFR §450.306(a)(3)

“Security” deals with significant disruptions to the transportation system, either long term or short term, intentional or not. Prior to SAFETEA-LU, security was coupled with safety (“safety and security”) as one unified factor. Calling out the security of the transportation system to be a stand-alone planning factor in SAFETEA-LU signaled an increase in importance from prior legislation.

USDOT recognizes that the role of the MPO in security planning will vary from one region to another. In the 2008 federal review, we recognized that CDTC has met minimum (though undefined) federal requirements of an MPO for considering the security of the transportation system. We recommended that CDTC open a discussion with its members on an appropriate role in furthering the coordination and cooperation among member agencies on the security issue.

## Definition of “Security”

Finding a common definition of “security” in the MPO planning context is challenging. Some MPOs seek a clear description of what “security planning” means, while others are comfortable with a vague definition. The FHWA generally defines “security planning” as that related to an event that is beyond

the ability of local authorities to handle and respond to, and that outside resources will be necessary to assist. There is no checklist that defines “security” in the context of MPO planning. Rather, each MPO is encouraged to create a local definition that both fits local needs and addresses the planning factor.

To reflect the increased interest on security of the system, CDTC adopted a new principle in their *New Visions 2030 Plan*:

*“Transportation planning and implementation in the Capital District includes examination of security issues and incorporation of security actions that: protect lives and coordinate the use of resources and manpower through established plans and protocols; provide services during and after disaster emergencies to aid citizens and reduce human suffering resulting from a disaster; and provide for recovery and redevelopment after disaster emergencies.”<sup>75</sup>*

## Critical Infrastructure

CDTC defines “critical infrastructure” as systems and resources (whether physical or virtual) so vital that the incapacity or destruction of such systems and resources would have a debilitating impact on security, national economic security, national public health or safety, or any combination of those matters. For the Capital District, a critical transportation infrastructure plan includes the following:

- Albany International Airport and other community airports
- The interstate highway system, particularly at key nodes, such as the I87/ I90 merge
- Key bridges or overpasses, both in the interstate highway system and local road network
- Capital District Transportation Authority (CDTA) bus transit transfer areas and Amtrak Stations
- Critical freight and inter-modal areas, such as Selkirk Rail Yard, The Port of Albany, and the Port of Rensselaer
- National Highway System (NHS) Inter-modal Connectors, as identified by the FHWA

## CDTC’s Approach to Security Planning

CDTC defines Security planning in *New Visions 2030* as “both the monitoring of the system to ensure that no infrastructure failures are in place as well as the preparedness for dealing with situations where the roadway network fails or where the roadway network could fail due to overcapacity usage.”<sup>76</sup>

Monitoring and preparedness are two different concepts. The monitoring aspect includes ITS, 511, the Traffic Management System and so on (see Section V). Monitoring, especially incident management, is the activity which CDTC is most involved at present. Although CDTC is not an agency specifically charged with preparedness, they are well-positioned to serve as an informational forum and to offer technical assistance as needed. Therefore, CDTC’s basic role is as follows:

### **Follow New York State and CDTA’s Lead**

CDTC resolved to follow and support the strategies developed by NYSDOT’s Statewide Transportation Plan (STP) *Strategies for a New Age: New York State’s Transportation Master Plan*

for 2030.<sup>77</sup> CDTC will work collaboratively to address the issues outlined and work towards balancing security with system reliability and protect facilities while advancing other transportation goals. The same strategy is used for CDTC coordination with CDTA's *System Safety Program Plan*.

### **Consider Funding Opportunities**

CDTC has funded activities that impact the operations of the transportation network, such as the Transportation Management Center (TMC) and the Highway Emergency Local Patrol (H.E.L.P.) program. It has also shown a willingness to help fund key initiatives at rail, port, air, and inter-modal facilities. CDTC is open to funding new strategies/technologies/projects that can help prevent events, speed response to an incident, or support recovery strategies.

### **Modeling**

CDTC offers its modeling capabilities in forms that discuss appropriate evacuation routes and the adequacy of these routes to carry the necessary amount of traffic in the event of an incident or emergency.

### **Function as an Informational Forum**

As noted in Section V, the Regional Operations Committee focuses on coordination among transportation agencies, public safety, and emergency response teams. While not directly involved in security operations per se, the MPO enjoys direct communication and interaction with key security agencies; the MPO process has such agencies as the Port of Albany, the Albany International Airport, NYSDOT, and the four Counties on both the Planning Committee and Policy Board. Security issues and incident response mechanisms and plans will be integrated into operational plans for the region. CDTC will consider the following topics as appropriate:

- Providing a forum for discussions on coordinating incident/emergency response
- Providing a forum for emergency agencies to coordinate surveillance and prevention strategies
- Coordinating public information dissemination strategies

## **Response vs. Recovery**

Understanding and addressing the distinction between planning for disaster response and planning for disaster recovery is important. The MPO process holds potential for facilitating disaster recovery efforts. For example, if a bridge were to be destroyed in a natural or man-made disaster, federal recovery funds typically would be subject to “limits of eligibility” and thus be allocated for the sole purpose of replacing that bridge. If the MPO had already identified this bridge as a potential route for transit expansion, it would be an ideal time to reconstruct the bridge with this capacity. But, perhaps enhanced capacity is not a desirable outcome. Making this decision in the context of regional vision is the hallmark of CDTC's investment principles. Evaluation of traditional design parameters, risk assessment and tradeoffs in the context of regional vision are a significant strength in the CDTC process. If CDTC has the flexibility to allocate recovery funds in keeping with its investment

principles, the security planning process would be significantly enhanced and recovery-related funding could further *New Vision* goals and vision.

Recent events in Schoharie County highlighted both the strengths of the MPO process as well as the weaknesses.

## Schoharie County

The potential role of CDTC in security planning took on significance in light of the severe impacts of flooding in the aftermath of Hurricane Irene. In August 2011, rainfall in the Catskills exceeded a foot in 24 hours. Powerful flood waters in the Schoharie Valley covered a substantially greater area than the established flood plain and reached areas that had never been touched during the more than 300 years of western settlement in the area. The damage was particularly unexpected because most damaged properties lie outside the FEMA 100-year flood zone boundary. In the village of Schoharie, approximately 80 percent of all homes and 100 percent of local businesses experienced major damage. Except for a public school, every public building (town, village and county offices, police and fire facilities) was damaged.

Besides the physical impact on the greater Capital District region, the damage had an emotional one as well. Schoharie County, although not one of the four counties in CDTC, is in the commuting shed of the Capital District, so much so that it is included in the Capital District's air quality nonattainment area. Motivated by the extent of the damage to its neighboring county, as well as the lack of available plans for assisting in its recovery, both the Planning Committee and Policy Board discussed ways in which CDTC could be a resource for emergency planning.

The 2012-2014 UPWP includes a task on security planning. The possible role of the Regional Operations Committee will be discussed. In addition, CDTC will research how they can have a more active role in security planning. An inventory of existing emergency plans in the region is underway. Next steps are to identify gaps in these plans and then to discuss options with the Planning Committee. This is seen as an important issue to be discussed as *New Visions 2040* is developed. Because Schoharie County is included in CDTC's air quality nonattainment area (vis-à-vis commuting), said activity would be eligible for FHWA PL funding.

## Federal Findings

- It is recommended that CDTC continue to explore ways in which it might assist rural adjoining counties like Schoharie in developing planning capabilities for response during significant and unexpected occurrences.

# Endnotes

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- <sup>1</sup> *Federal Register*, July 18, 2012, p. 42354 -42359. <https://federalregister.gov/a/2012-17514>
- <sup>2</sup> *CDTC Operations Plan (Prospectus)*, May 5, 2010, p. 15, <http://www.cdcmpo.org/ops.pdf>
- <sup>3</sup> *Ibid.* p. 21.
- <sup>4</sup> *Ibid.* p. 17.
- <sup>5</sup> *Pursuing Quality in the Capital Region* A Discussion Paper for Use in the Capital District Transportation Committee and Capital District Regional Planning Commission's Quality Region Initiative prepared by the Quality Region Task Force to help guide regional policy and technical explorations, April 2003
- <sup>6</sup> This represents a name change by the Census Bureau following the 2010 Census. The previous name of this urbanized area was the "Albany, New York urbanized area"
- <sup>7</sup> Visible advertising signs adjacent to the Interstate system and highways designated as part of the primary system on 6/1/91, as well as signs beyond 660 feet outside of urban area, are controlled. The section does not allow new sign permits beyond 660 feet of the right of way outside of the urban area. Changing the UAB, whether from growth or census definition, affects the number of billboards allowed along the freeways. If the boundary moves out, then new signs are allowed. If the boundary moves in, then FHWA and the States have the issue of whether to grandfather or remove existing signs. *See 23 CFR § 750.704*
- <sup>8</sup> *Ibid.*
- <sup>9</sup> 23 CFR 450.308(a) as it read prior to SAFETEA-LU. Now, 23 CFR 450.312(a) states that those boundaries that existed in August 10, 2005 shall be retained as the MPA boundary unless the Governor and the affected MPO agree otherwise.
- <sup>10</sup> In 2003, CDTC examined the status of the town of Colonie on the board. Colonie, with a population of 80,000, is both the region's second-largest city or town (after Albany) and the region's most centrally-located community, housing the regional airport. Limiting Colonie's formal role at CDTC to the rotating at-large membership was considered inadequate by CDTC.
- <sup>11</sup> *CDTC Operations Plan*, pg. 102
- <sup>12</sup> <http://www.cdcmpo.org/policy/dec09/agreement.pdf> approved December 2009
- <sup>13</sup> Former Executive Director Poorman worked part-time for the past 5½ years, made possible because of the Central Staff's experience and qualifications. Deputy Director David Jukins took over many of the Director's responsibilities and performed in an exemplary manner.
- <sup>14</sup> Conceptual Design for BRT in the Western/Washington Corridor (\$250,000); I-87/Route 9 Integrated Corridor Study (\$500,000); Future Transportation Revenues; and the Mohawk-Erie Multimodal Transportation Corridor Study (\$3,100,000).
- <sup>15</sup> Travel Demand Management (\$420,000), Corridor Management Initiative (\$153,000), and Transportation Management Center Operating Costs (\$20,000).
- <sup>16</sup> Support towards the Capital District Clean Communities program hosted by the CDTC.
- <sup>17</sup> In 2007, CDTC converted its travel demand forecasting platform from TMODEL2 to VISUM.
- <sup>18</sup> *Pursuing Quality in the Capital Region*
- <sup>19</sup> *Estimating the Fiscal Impact of Alternative Futures for the Capital Region*, prepared by Capital District Regional Planning Commission, Capital District Transportation Committee & University at Albany Dept. of Geography & Planning, October 2007, <http://www.cdrpc.org/Fiscal-Impact.pdf>
- <sup>20</sup> *Effects of Alternative Development Scenarios in the Capital District*, prepared for the Capital District Transportation

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- Committee's Quality Region Task Force, May 25, 2007 <http://www.cdtcmppo.org/rtp2030/materials/wa-doc.htm>
- 21 John Poorman, *A New Model of Regional Planning in the Context of Home Rule*, February 2006.
- 22 *Integrating Context Sensitive Solutions in Transportation Planning*, FHWA  
<http://www.fhwa.dot.gov/Planning/csstp/cssfsalb.htm>
- 23 [http://capitalregionopenforbusiness.com/Newsroom/NewsStories/11-11-14/Council\\_Releases\\_Strategic\\_Plan.aspx](http://capitalregionopenforbusiness.com/Newsroom/NewsStories/11-11-14/Council_Releases_Strategic_Plan.aspx)
- 24 <http://www.cdtcmppo.org/rtp2030/say-un.htm>
- 25 AASHTO, "The Road to Livability." 2010 <http://downloads.transportation.org/LR-1.pdf>
- 26 CDTC 1998, "System Goals", *New Visions for Capital District Transportation*, page 25.
- 27 <http://www.cdtcmppo.org/linkage.htm>
- 28 *Livability in Transportation Guidebook* Planning Approaches that Promote Livability  
[http://www.fhwa.dot.gov/livability/case\\_studies/guidebook/livabilitygb10.pdf](http://www.fhwa.dot.gov/livability/case_studies/guidebook/livabilitygb10.pdf)
- 29 <http://www.fhwa.dot.gov/planning/tpea/>
- 30 <http://www.cdtcmppo.org/linkage/udson/final.pdf>
- 31 <http://www.cdtcmppo.org/planning/may11/nvapporg.pdf>
- 32 <http://www.cdtcmppo.org/rtp2030/materials/sp-doc.pdf>
- 33 [http://www.nysmpos.org/safety\\_audit\\_process.html](http://www.nysmpos.org/safety_audit_process.html)
- 34 <http://webike.org/about-us>
- 35 <http://www.ops.fhwa.dot.gov/publications/fhwahop12004/c1.htm#s3>
- 36 Capital District Transportation Committee. *New Visions 2030: The Plan for a Quality Region Summary Document*, p. 12, August 2007.
- 37 *New Visions Working Group B Report: Expressway System Options*, April 2007
- 38 <http://www.arcgis.com/apps/Legend/main/index.html?appid=c817401cce35450d9acbf4acbf765cd>
- 39 <http://www.cdtcmppo.org/planning/may11/nvapporg.pdf>
- 40 <http://www.dot.state.ny.us/design/css/css.html>.
- 41 The average value of travel time is set at \$8.18 per vehicle hour used, as per NYSDOT's Higher User Cost Accounting Microcomputer Package (1981), adjusted to reflect inflation and increased minimum wage. Life cycle costs savings are a product of the percent-extended life of the facility and the mobility benefits that result from keeping the facility usable. Additional monetary impacts not included in the previous benefit/cost categories but contained in the *New Visions* Core Performance measures. Only those projects that are significant enough to affect system-level measures have these benefits calculated.
- 42 <http://www.ampo.org/directory/index.php>
- 43 <http://www.cdtcmppo.org/socialmedia.pdf>
- 44 Facebook.com/CDTCMPO
- 45 CDTC@MPOCDTC
- 46 Priority treatment networks were identified by the Bicycle and Pedestrian Issues Task Force, the Arterial Corridor Management task Force, and the Goods Movement Task Force.
- 47 [http://www.cdta.org/about\\_operational\\_summary.php](http://www.cdta.org/about_operational_summary.php)
- 48 [http://www.albany.ga.us/filestorage/1798/2879/2941/Final\\_Albany\\_TDP\\_5-14-08.pdf](http://www.albany.ga.us/filestorage/1798/2879/2941/Final_Albany_TDP_5-14-08.pdf)
- 49 <http://www.capitalcoexist.org/>

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- 50 <http://www.cdtcmppo.org/policy/dec11/training.pdf>
- 51 <http://www.cdtcmppo.org/rtcc/coord11.pdf>
- 52 FHWA: Environmental Mitigation in Transportation Planning; Case Studies in Meeting SAFETEA-LU Section 6001 Requirements, October 2009, [http://www.environment.fhwa.dot.gov/integ/pubcase\\_6001.asp#four-b](http://www.environment.fhwa.dot.gov/integ/pubcase_6001.asp#four-b)
- 53 <http://environment.fhwa.dot.gov/integ/practices.asp#link>
- 54 23 CFR 450.314 (b) If the MPA does not include the entire nonattainment or maintenance area, there shall be a written agreement among the State department of transportation, State air quality agency, affected local agencies, and the MPO describing the process for cooperative planning and analysis of all projects outside the MPA within the nonattainment or maintenance area. The agreement must also indicate how the total transportation-related emissions for the nonattainment or maintenance area, including areas outside the MPA, will be treated for the purposes of determining conformity in accordance with the EPA's transportation conformity rule (40 CFR part 93). The agreement shall address policy mechanisms for resolving conflicts concerning transportation-related emissions that may arise between the MPA and the portion of the nonattainment or maintenance area outside the MPA.
- 55 EPA's conformity regulations require a high degree of coordination among Federal, State and local entities and therefore have rules for the establishment of formal procedures of *Interagency Consultation* to ensure that all groups are involved. In New York, the Interagency Consultation Group (ICG) is composed of five permanent members: FHWA (New York Division), FTA (Region II), NYSDOT, NYSDEC and EPA (Region II), with equal representation by the MPO when the subject matter directly pertains to said MPO.
- 56 23 CFR 450.314(d) If more than one MPO has been designated to serve an urbanized area, there shall be a written agreement among the MPOs, the State(s), and the public transportation operator(s) describing how the metropolitan transportation planning processes will be coordinated to assure the development of consistent metropolitan transportation plans and TIPs across the MPA boundaries, particularly in cases in which a proposed transportation investment extends across the boundaries of more than one MPA. If any part of the urbanized area is a nonattainment or maintenance area, the agreement also shall include State and local air quality agencies.
- 57 Climate Change at the MPO Table; A Natural Extension of a Holistic Planning Approach, August 2010, <http://www.nescaum.org/documents/northern-transportation-and-air-quality-summit/meeting-presentations>
- 58 <http://www.ipool2.net/CC/cdcc.htm>
- 59 Clean Cities Game Plan 1998/99, U. S. Department of Energy.
- 60 NYSDOT has released three basic guides: • *Air Quality Analysis of Transportation Improvement Programs, Regional Transportation Plans, and Capital Project programs – Technical Guidance to Assist Metropolitan Planning Organizations and Department of Transportation Regional Offices Meet the Objectives of the 2002 New York State Energy Plan* (January 21, 2003); • *Development of Revised NYSDOT Energy Analysis Guidelines (Draft), Subtask 12a: Energy Analysis Guidelines for TIPs and Plans* (June 21, 2002); and • *Development of Revised NYSDOT Energy Analysis Guidelines (Draft), Subtask 12b*
- 61 [www.iPool2.org](http://www.iPool2.org)
- 62 CDTC's Title VI/Environmental Justice Program [http://www.cdtcmppo.org/ej/ej.htm#\\_ftn1](http://www.cdtcmppo.org/ej/ej.htm#_ftn1)
- 63 <https://www.dot.ny.gov/programs/adamanagement/ada-transition-plan>
- 64 <https://www.dot.ny.gov/programs/adamanagement/ada-transition-plan/appendices/rating-scale>
- 65 [http://www.fhwa.dot.gov/planning/freight\\_planning/archive/guidel2.cfm](http://www.fhwa.dot.gov/planning/freight_planning/archive/guidel2.cfm),  
[http://www.ctps.org/BostonMPO/4\\_resources/1\\_reports/1\\_studies/4\\_bicycle/boston\\_freight/part4.pdf](http://www.ctps.org/BostonMPO/4_resources/1_reports/1_studies/4_bicycle/boston_freight/part4.pdf)
- 66 Younger, K, *Goods Movement in the Capital District: A Performance Report*, Albany, New York, 1995.
- 67 Ibid, p.11
- 68 Ibid, p. 33
- 69 Ibid, p.69

## DRAFT

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70 <http://www.cdtcmpto.org/goodstf.htm>

71 <http://www.cdtcmpto.org/rtp2030/materials/gm-doc.pdf>, <http://www.cdtcmpto.org/rtp2030/materials/gm-plan.pdf>,

72 <http://www.cdtcmpto.org/maps.htm>

73 Purvis, J, "*Freight Follow Up*" email to FHWA, Albany, NY, 2011

74 Ibid

75 <http://www.cdtcmpto.org/rtp2030/materials/s-doc.pdf>

76 [Ibid.](#)

77 <https://www.dot.ny.gov/main/transportation-plan/transportation-plan>