

# New Visions 2035 Plan Update

## APPENDICES

Appendix A: CDTC's Planning & Investment Principles  
Appendix B: New Visions Strategies and Actions  
Appendix C: Status Briefs: Major New Visions Subject Areas  
[Appendix D: Air Quality Conformity Statement](#)

September 2011

Capital District Transportation Committee  
Metropolitan Planning Organization (MPO)



## **PRESERVE AND MANAGE**

### **Improve System Performance**

1. CDTC is committed to the maintenance, repair, and renewal of the existing highway and bridge system in a cost-effective manner that protects and enhances rideability, public safety, and accessibility.
2. Funding for appropriate repair and renewal will be based on the function and condition of the facility -- not ownership.
3. Encouraging bicycle and pedestrian travel is a socially, economically, and environmentally responsible approach to improving the performance of our transportation system.
4. In addition to supporting desired land settlement patterns, transit service helps meet multiple regional objectives in the Capital Region.
  - Transit contributes to congestion management, air quality, and energy savings
  - Transit offers an alternative travel mode, reducing auto dependence
  - Transit provides essential mobility for those who do not operate a private vehicle
5. 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.
6. Transportation planning and implementation in the Capital Region 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.
7. The needs of the older driver will be considered as transportation facilities are maintained and rehabilitated.
8. Increased efficiency in current vehicles/programs is preferable to fleet expansion to provide for special transportation needs.

### **Manage Congestion**

9. Management of demand is preferable to accommodation of single-occupant vehicle demand growth.
10. Cost-effective operational actions are preferable to physical highway capacity expansion.
11. Capital projects designed to provide significant physical highway capacity expansion are appropriate congestion management actions only under certain conditions.

12. Significant physical highway capacity additions carried out in the context of major infrastructure renewal are appropriate only under certain conditions.
13. Incident management is essential to effective congestion management.
14. Any major highway expansion considered by CDTC will include a management approach.
15. In project development and design, other performance measures, such as pedestrian, bicycle and transit access, community quality of life, and safety will be considered along with congestion measures.
16. The New York State Department of Transportation guidelines for roundabouts will be used for all CDTC federal aid projects that involve intersection improvements.

### **Protect Our Investment**

17. Managing traffic flows on the Capital Region expressway and arterial system is critical for both economic and social reasons.
18. Major capital projects must have a plan for operating budgets for the life of the project.
19. Maintaining the health and improving the efficiency of the existing freight facilities in the region through public/private partnerships is a high priority.

## **DEVELOP THE REGION'S POTENTIAL**

### **Build Upon our Strengths**

20. The transportation system of the Capital Region is an important part of the region's attractiveness.
21. Transportation investments will help preserve and enhance the Capital Region's existing urban form, infrastructure, and quality of place.

### **Use Transportation Investment as a Tool**

22. Transit facilities and services can be an essential element of the social, economic, and cultural fabric if supportive policies and investments are in place.
23. Neighborhood-based local planning efforts are important to the success of an overall regional plan that emphasizes livable communities.

## **LINK TRANSPORTATION AND LAND USE**

24. Land use management is critical to the protection of transportation system investment.
25. Design of street layout and location of complementary uses creates a pedestrian scale and provides increased accessibility without compromising the attractiveness of development.

#### **Link Transportation Investments to Land Use Planning**

26. Transportation investments will encourage residential and commercial development to locate within an Urban Service Area defined for the Capital Region.
27. Environmental stewardship is one of CDTC's emerging roles and is crucial to the success of and quality of life in this region. Transportation investments must improve or preserve the region's cultural and natural environment.
28. Transportation investments will not encourage development in environmentally sensitive areas and will help to preserve rural character.
29. Arterial management guidelines will be flexible enough to deal with the Capital Region's various

roadway types and the specific land use patterns surrounding them

#### **PLAN AND BUILD FOR ALL MODES**

30. CDTC's planning efforts will be comprehensive enough to encompass all modes, including air, water, freight, intercity and local transit, pedestrian and bicycle.
31. Possible bicycle/pedestrian-related improvements will be considered from the perspective of developing a system – not just based on whether a particular facility is currently used.

## **[1] MAINTAIN GOOD INFRASTRUCTURE CONDITIONS**

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. A performance-based management strategy paints bridges before they corrode, builds long-lasting pavements, and matches design treatment to road function (not necessarily ownership or funding category). This provides baseline support to the regional economy.

There is a continuing need to devote a significant amount of CDTC's TIP resources to infrastructure renewal which has major budgetary consequences. Although the 2030 plan is fiscally balanced over time (based on historic trends), if public funding does not increase over the next 25 years as it has in the past, this could lead to serious, unacceptable declines in physical and service conditions. Embracing a risk assessment approach to designing infrastructure projects will result in less building of reserve capacity that may or may not be needed in the future. This trade-off frees resources to address *current* needs in other areas.

### **1) Ensure adequate highway and bridge maintenance efforts.**

Highway and bridge maintenance and operations is the single largest commitment of transportation resources in the Capital Region. Essential services, such as snow removal and pothole patching are captured in this category. Significantly, this area is out of the direct purview of CDTC's decision-making. However, successful implementation of *New Visions* will require continued commitment to adequate levels of expenditures for maintenance, as well as increased efficiencies resulting from intergovernmental coordination, consolidation, and joint purchasing. These assumed efficiencies permit improved service over the long run, such as more frequent shoulder sweeping on bike routes.

### **2) Pursue an effective highway and bridge rehabilitation and reconstruction program.**

An effective highway and bridge rehabilitation program is one that is adequately funded and uses life-cycle considerations and system management techniques to prolong good conditions and maximize the return on investment. This action calls for aggressive preventative maintenance efforts coupled with continued resurfacing and reconstruction of state highways at a schedule consistent with the state's Pavement Management System, using the type of repair called for in its and CDTC's pavement

models. This action also calls for treatment of higher-volume, higher-function non-state roads with a similar repair and reconstruction approach. Currently, such work on non-state roads is limited. While pavement condition alone can be maintained on these non-state roads using lower scale repair treatments, the importance of these roads warrants more significant work to produce a longer repair life, safer operations, and other benefits. Continuing current local (non-state) repair practice on other local roads appears to meet pavement goals.

It should be noted that resurfacing, rehabilitation and reconstruction projects must consider the community context and local planning objectives regardless of road ownership. For example, if replacing pavement from curb to curb is the goal of the project and there is local planning calling for improved pedestrian facilities on the subject roadway, then the project design process must incorporate such features wherever possible and feasible.

Pavement conditions in the Capital Region can be characterized as follows:

- Interstate system pavement conditions have improved from the conditions of 1994. However, the ages of these highways are now between 30 and 50 years and there have been few full reconstruction projects on these facilities. Without intervention, in another twenty-five years, the majority of expressway sections in the system will be 55 to 75 years of age.
- Non-Interstate arterials and collectors have had their pavement conditions decline from 1994 conditions on both the state and non-state systems. State arterials on the National Highway System now have conditions more similar to those on locally-owned arterials than to conditions on the Interstate system.
- The intended rate of progress in upgrading important non-state (federal-aid) roads has fallen short of New Visions goals over the past decade.
- Non-federal-aid roads (the lowest-function roads totaling 70% of the total lane miles in the four counties) have also had their pavement conditions decline, with the total percentage rated fair or poor increasing from 31% in 1992 to 50% in 2004.
- Budget requirements for pavement work are substantially higher than current levels of investment – double to triple the current \$55.0 M annual investment level from federal, state and local fund sources. Most of that increase is caused by the age of the Interstate system and the need for reconstruction. Even with the

higher funding, not all sections will be reconstructed by 2030.

Bridge conditions in the Capital Region can be characterized as follows:

- Interstate system bridge needs are substantial. Overall, they are estimated to require about one-half of the total bridge budget over the next 25 years. Included in this set of needs is reconstruction or replacement of the I-90 Patroon Island Bridge, I-787 viaduct structures, the I-87 Mohawk River crossing and others. NYSDOT Region 1 estimates a need of over \$500 M for Interstate work in the coming 12 years alone.
- While non-Interstate bridge conditions are improved over those from a decade ago, 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 alone will range from 24% (Thruway) to over 50% (NYSDOT owned Interstate bridges). 2030 conditions at current funding would be unacceptable. Funding sufficient to achieve the modest 20% goal is incorporated into the basic financial plan for New Visions 2030.
- The total budget requirements for bridge rehab and replacement are substantial, totaling nearly \$35 M annually above current investment levels of \$55.1 M.

### **3) Continue to maintain transit equipment and facilities in a state of good repair.**

Clean, reliable, up-to-date vehicles are required for transit to provide dependable service, keep operating costs under control and offer an attractive product in the competitive market place. The transportation system is not served well by equipment that suffers from deferred maintenance and lack of capital investment. Customers react to the condition of the vehicles they travel on and to their perceived cleanliness, both with regard to the physical cleanliness and with regard to emissions.

CDTA has developed a strategic fleet replacement plan using long-term procurement contracts with recurrent (annual) replacement of bus and paratransit fleets. CDTA has entered into a multi-year vehicle procurement contract with a single manufacturer to increase fleet consistency. To achieve a balanced approach to fleet replacement, normal replacement will be combined with early replacement and life extension through rehabilitation to develop an "approximately balanced fleet". Given a 12-year life, a perfectly balanced fleet would maintain an average age of 6 years (in a perfectly balanced fleet of 200 buses, approximately 17 buses are purchased each year; half the fleet is older than 6 and half is younger). CDTA ordered its first hybrid-electric bus in 2006; and plans to continue to replace a portion of the fleet with this technology, even though the incremental cost of this technology over straight diesel is significant. Customers have weighed in that they

like the look and "green feel" of these vehicles. The replacement strategy using hybrid-electric technology also fits well with the goals of the local Clean Communities coalition, which is organized using CDTC staff. It is anticipated that CDTA's fleet replacement strategy will cost about \$10-12 M per year.

In 2005, CDTA performed a comprehensive study of its operating facilities, including three bus garages/depots, two rail stations, park and ride lots, and stops and shelters. This resulted in a preventive maintenance plan for the overall facilities, and identified an ongoing need for replacement and maintenance to a state of good repair at between \$1 and \$1.5 million per year.

About 25 commuter coaches are used by other transit operators in the region for commuter services. These vehicles also require replacement on a regular basis, and with SAFETEA-LU are subject to accessibility requirements. CDTA operates the NX service (Northway Express Commuter Runs from Saratoga County to Downtown Albany); these buses are branded with CDTA's new bus design. The cost to keep these vehicles in a state of good repair is about \$0.5-1.0 M per year.

### **4) Embrace a "risk assessment" approach for capacity considerations in infrastructure project design.**

Rather than routinely designing bridge structures and roads to meet traffic projections of 25 or 35 years in the future, a risk assessment approach examines the costs and benefits of alternative designs and makes capacity treatment an explicit choice. A risk assessment approach to bridge reconstruction asks questions like:

- Do 20-year traffic projections justify widening the bridge now?
- Do 30 or 40-year projections?
- What is the projected congestion risk of replacement in-kind?
- How much does it cost to widen it now?
- How much more will it cost to widen the bridge at different points in the future?
- Are the future capacity constraints on this bridge of a higher priority than addressing existing current congestion elsewhere in the region?
- Can the future capacity concerns be directly linked with private developments, so private sector funding, through mitigation programs, are the more appropriate fund source?

While the concept of such analysis is slowly taking hold within the project development arena, the Travel Task Force has identified the need for further work on procedures to implement this action as a high priority for CDTC in the 2030 plan.

### **5) Maintain, update, and enhance priority treatment networks for transportation investments.**

CDTC has been utilizing priority networks in planning and project programming since they were originally developed by New Visions task forces for the 1997 plan. Priority networks exist for bicyclists and pedestrians, goods movement, intelligent transportation systems, arterial management and transit. These networks receive special treatment in planning and project programming and improvements to them are made as part of necessary renewal work. Since 1997, the priority networks have been refined and mapped and it is expected that they will continue to be maintained, updated and enhanced as needed.

*Priority networks reflect facility function and importance.*

Having priority networks does not imply that improvements off the defined networks are not warranted or desirable. For example, bicycle or pedestrian accommodation in a given corridor can often be provided more safely and/or cost-effectively on parallel facilities, rather than on the shoulder of a busy state highway. Flexibility is required in interpretation, so long as the basic message -- **these are important facilities** -- is not lost.

The following summarizes the current priority networks as defined for *New Visions 2030*. Further refinement of these networks is expected, as necessary.

#### Bicycle and Pedestrian Priority Network

A bicycle and pedestrian priority treatment network provides a "backbone" for a region-wide bicycle and pedestrian travel system. The ±465 mile network contains those facilities which have high existing or potential bicycle and pedestrian travel but also present many barriers, including high traffic volumes/speeds, limited pavement space and busy or confusing traffic patterns. These facilities connect major activity centers, are accessible to residential areas via local roads, and have few practical alternatives nearby. In addition to on-road facilities, all off road trails (i.e. Mohawk-Hudson Bike-Hike Trail and Zim Smith Trail) are considered part of the network.

It should be noted that priority network segments that have received improvements since 1997 when the network was first established are still included as more can always be done to improve the cycling/walking environment. A map of the priority network facilities is included in the *Bicycle and Pedestrian Game Plan and Toolbox* technical report. The bicycle and pedestrian Priority Network will be updated on a regular basis to include other facilities that meet criteria established by CDTC's Bicycle and Pedestrian Task Force. Improvements to the Priority Network will be used as the primary performance measure for defining the region's success in accommodating bicyclists and pedestrians.

#### Arterial Management Priority Network

CDTC's adopted arterial management strategy uses a performance measure, called Level-of-Compatibility to

help evaluate traffic/land use conflict in the Capital Region. Analogous to traffic level-of-service ratings, level-of-compatibility ranges from "A" the most desirable, to "F" the least acceptable. Measures for both residential and commercial corridors covering nearly 850 miles of Capital Region roadways were developed. Using these level-of-compatibility measures, the arterial management priority network is defined as:

- Those road segments that show a high degree of conflict between commercial or residential land use and traffic, resulting in "poor" compatibility (Level of Compatibility D, E or F); and
- Additional road segments where either the potential for commercial development or intrusion of vehicle traffic through residential corridors is high, or significant deterioration in arterial corridor function is forecast to occur by 2015.

This priority network includes about 220 miles of roadway. The network is predominantly composed of state highways in suburban towns. The level of compatibility ratings and the arterial management priority network will be updated following adoption of the *New Visions 2030* plan.

#### Goods Movement Priority Network

The priority road network for goods movement in the Capital Region includes:

- The National Highway System, including intermodal connectors (approximately 826 lane-miles); and
- State Highways that currently carry more than 10% trucks in the traffic flow (approximately 150 centerline miles).

The cycle of infrastructure repair on these routes will systematically remove barriers to goods movement. This should be done regardless of any changes in jurisdiction or other policy choices made in the context of overall infrastructure renewal. The priority truck network should be built to AASHTO (American Association of State Highway and Transportation Officials) standards (14.5 foot minimum clearance, 16.5 feet is desirable) regardless of ownership. Resource requirements are the baseline assumptions for infrastructure repair. If this baseline were reduced, the priority truck network would require special attention.

#### Transit Priority Network

The transit priority network has previously focused on traditionally-strong transit corridors such as NY 5, NY 32, US 20, US 4, and downtowns and potentially-strong corridors such as NY 7, US 9, NY 155 and Wolf Road. Transit amenities include bus stops, pull outs, and park and ride facilities. However, the single most important action to improve transit accessibility is a significant increase in sidewalk and crosswalk provision and maintenance throughout the region. Currently, the transit priority network considers all roadways served by fixed route transit as part of the network. As the Capital District

Transportation Authority (CDTA) continues its work on revamping transit routes in the Capital Region through the transit development plan, a revision to the transit priority network is expected.

#### Intelligent Transportation System (ITS) Network

The ITS Priority Network primarily developed around the expressway system. However, the role of ITS on the arterial system can not be ignored. Some ITS improvements to arterials which parallel the expressways will have direct benefits to expressway travel, especially by providing alternate routes during expressway incidents. Arterial management and physical improvements will be required for this to be effective. Nonetheless, ITS benefits from signal coordination, transit signal priority, or other improvements will also provide significant benefits to normal daily arterial function. Successful implementation of signal coordination along the Route 5 corridor in Albany, Colonie, Village of Colonie, Niskayuna and Schenectady has demonstrated the value of ITS for arterial performance. 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 (TMC) to facilitate diverted traffic during an incident.

The regional ITS priority network contains:

- priority expressways;
- arterials representing their immediate alternatives (ordinarily either parallel to or connecting the expressways);
- their secondary alternatives (which entail more surface street travel); and
- other arterials that are strategically important because they are important travel corridors, although they are not viewed as alternative routes for expressway travelers.

Updates to the ITS priority network identified in the Working Group B: Expressway System Options report include:

- Extending coverage on the Northway to Exit 15 for the near term, and to Lake George for the long term;
- Extending coverage of the Thruway to the CDTC boundaries for the near term, and to Amsterdam for the long term;
- Extending parallel routes for the Northway and Thruway: Route 9 to the Warren County line; Route 9W to the Greene County line; and Route 5S to the Montgomery County line.
- Extending coverage of I-88 to the Schenectady County line;
- Adding several priority arterial corridors not in expressway corridors, including Route 7 from Albany Shaker Road to I-890, and arterial corridors in the cities of Albany, Schenectady, Troy and Saratoga Springs.

#### **6) Explore changes in road ownership or state funding opportunities as ways to level the playing field between various roadway owners.**

Working Group D: Larger than Regional Policy Concepts discusses the uneven playing field that exists in the Capital Region and therefore New York State with respect to cities and suburbs.

With respect to road ownership, the report states:

*“Highway jurisdictional policy focuses county highway spending outside city limits and provides for state jurisdiction of state touring routes outside city limits while leaving cities to fund arterial maintenance and rehab largely from city budgets.”*

Although this is a statewide issue, CDTC can explore options that might help level the playing field between cities and suburbs. One approach to aligning funding with road function would be to consider increased state highway funding to cities in proportion to the mileage of state touring routes within their borders. Another approach would be to transfer jurisdiction of state touring routes to state ownership. A final approach would be to orchestrate a region-wide ownership swap. Higher-function non-state roads would be transferred to state jurisdiction, and lower-function state roads to local jurisdiction. Guidelines for such transfers could be developed, taking into account functional classification, volume of traffic and equity considerations. Complete consistency would require transfer of major arterials within the cities to state ownership. Legislation may be required to enable such widespread jurisdictional changes.

#### **[2] PRO-ACTIVELY PLAN VIBRANT COMMUNITIES**

While recognizing that land use decisions are made locally, providing a regional framework to achieve regional goals has seen demonstrated success at the local level. There continues to be a need to maintain and increase pro-active regional and local land use and transportation planning efforts as well as a need to educate local decision makers on the importance of pro-active planning. Considering the potential impacts of development *before* specific projects are proposed and having land use and transportation plans in place to address them is critical. Planning can be used to focus

*Jurisdictional transfers are one way to align function with ownership.*

growth and to reinforce existing and create new mixed use, vibrant neighborhoods that are efficient to serve with transportation. Recognizing and addressing situations where transportation design or use is incompatible with the surrounding neighborhood is important. Projects should be designed such that they are sensitive to the communities through which they traverse. Improving site and access design practices to better accommodate pedestrians, bicycles, goods movement, transit, and auto access is a key aspect of this strategy.

## 7) Prepare and maintain Regional Development Strategies

Local governments make land use and development decisions in the Capital Region, at times showing little concern about long-term regional impacts. Municipalities weigh the costs of development and supporting infrastructure against the benefits of the taxes generated. Where public opposition to development exists, developers seek locations with the least barriers, which may not be the most desirable locations from a regional perspective. The result can be that development threatens the community character of suburban and rural areas, while cities decline. Further, the lack of predictability in the development process can discourage economic development.

Working Group E: Assisting Local Decision Making in a Regional Context recognized the many challenges to regional planning in the Capital Region under current circumstances. As an alternative to mandated regional planning, the Working Group recommended that Regional Development Strategies be articulated as part of *New Visions 2030* to provide communities guidance with respect to how they can help implement the regional vision at the local level. Local communities would be encouraged to pursue these strategies in their everyday planning work. The strategies will focus on land use and transportation concepts and initiatives that support smart growth and potentially influence urban form wherever growth is occurring. Many of the land use and transportation planning concepts were in the 1997 version of the *New Visions* plan and simply needed to be updated and further highlighted.

The following transportation and land use planning concepts and initiatives will be encouraged as part of the Regional Development Strategies:

- **Development of municipal comprehensive plans that include a transportation element consistent with *New Visions 2030*.** Such plans will be encouraged to specifically include a bicycle and pedestrian element and a transit element. Inter-municipal or county wide comprehensive plans will also be encouraged as they provide additional regional benefits, particularly in the area of developing transit, bicycle and pedestrian networks.
- **Incorporation of the findings of the transportation element of the comprehensive plan into local regulations (zoning codes, design standards, etc.) which**
  - Allow for mixed use and/or transit oriented development in urban, suburban and rural areas alike;
  - encourage street layout and site design that supports a pedestrian scale and transit access;
  - avoid arterial conflict; and
  - promote arterial access management.

- **Incorporation of arterial management strategies into comprehensive plans, corridor plans and in local site plans** to mitigate land use/road function conflicts. Arterial management strategies include

- Use of official maps to show present and proposed future roads and street connections, allowing for future expansion of the regional road network to include greater use of service roads and collector streets;
- Securing easements for conflict reducing measures, such as service roads and shared driveways, as part of development mitigation for traffic impacts;
- Requiring pedestrian linkages between adjacent parcels and shared parking lots, particularly when the uses are complementary in terms of time-of-day use.

- **Improve site design practices** through enhanced municipal land use and zoning policies that create a coordinated pattern of land use that limits direct access to major roadways, is transit friendly, supports pedestrian circulation, contributes to the safety of the traveling public and enhances the environment. Routine incorporation of transit, bicycle, and pedestrian accommodation in site design practices minimizes their incremental costs.

- Locating buildings closer to the street and the majority of the parking in the back;
- Providing turning radii that meet bus requirements;
- Locating bus stops and shelters in locations that are convenient to customers and integrating them into the architectural design of the development;
- Providing for bike racks or lockers at shelters on site, allowing for bike "park-and-ride" at these locations;
- Incorporating park-and-ride parking spaces that allow the site's use as a transit and carpool terminal;
- Providing safe and effective pedestrian movement from the street to the site and from building to building on site;
- Where needed, providing service roads or other connections to allow pedestrians, bikes, buses and other vehicles to visit adjacent sites without using the arterial; and
- Designing subdivisions and shopping centers to facilitate pedestrian access to transit stops.
- Incorporating "green" design techniques such as increasing tree coverage, the use of green parking lot design, innovative stormwater techniques, etc.
- Incorporating appropriate site access practices that minimize traffic conflict, crashes and delay by limiting the number of conflict points, separate vehicle conflict areas, reduce vehicle deceleration requirements and remove turning vehicles and queues from the travel lanes.

- **Use of Integrated Community and Transportation Design techniques in the design of local, county and**

**state road systems.** Transportation projects that are designed to support and adhere to land use plans that promote compact development and emphasize connected streets, sidewalks, convenient transit access and human-scale design are critical elements of the process for fostering a sense of place and community.

- **Elevate consideration of transportation alternatives in siting facilities that primarily serve elderly and handicapped populations.** Facilities that primarily serve the elderly and handicapped, if located in places where fixed route accessible bus service is available and usable, provide essential mobility to these populations at the least public cost.
- **Improve delivery access for commercial vehicles.** At new developments, consideration starts with basic site design. Commercial parking programs in urban areas resolve persistent double parking violations and allow timely local deliveries. Targeted infrastructure improvements to improve delivery access include service roads in commercial areas, removal of clearance or other barriers on access routes, and implementation of arterial corridor management in areas with growing congestion. Regional goals of compact development and optimal use of existing industrial land can be fostered by encouraging freight-intensive industries to locate along active rail lines.

Cooperation among all parties, including attention to these issues by permitting agencies such as NYSDOT and the local municipality is critical to the success of this action. This can be facilitated if municipalities require formal site review of all major projects and provide for input from CDTA, CDTC, NYSDOT and others during the review process.

#### 8) Develop a [New Visions Planning Guidebook](#)

A New Visions Planning Guidebook will serve as a resource for local planners, Planning Board members and others involved with community development. The Guidebook will:

- Encourage local consideration of the regional impacts of development in the planning and development review process, particularly with respect to the transportation system;
- Include an [Integrated Community and Transportation Design](#) toolkit to ensure pursuit of enhanced environmental quality for transportation projects;
- Include illustrated examples of the Regional Development Strategies, perhaps in the form of companion summaries, fact sheets or “how-to” guides. The Greenway Guides produced as part of the [Greenway Connections Report](#) in Dutchess County, NY will serve as a model. The Greenway Connections report was produced as part of the Hudson River Valley Greenway Compact Program; and
- A smart growth/quality community matrix/checklist will be developed. Such a matrix/checklist could help

Planning Boards assess the ability of a development proposal or a local comprehensive plan to meet local and regional goals as outlined in New Visions.

Local governments could also create incentives to entice developers to develop in a more sustainable way through tax breaks, reduced development fees, etc. Finally the Guidebook will list existing tools/data sets available from CDTC, CDRPC, NYSDOT and other state, regional and local entities. Partnerships with these and other entities will be critical in the development of the Guidebook and Training program for New Visions.

#### 9) Continue to provide funding for and staff participation in community based planning through the [Community and Transportation Linkage Planning Program](#).

A coordinated land use/transportation planning process at the community and corridor levels provides a framework for predictable development consistent with community goals. Cooperative studies with local governments are the cornerstone of CDTC's planning and public participation efforts and are essential to implementing the Regional Development Strategies. CDTC is not an implementing agency -- it has no land use powers, operates no transit service, and is not responsible for maintaining the roads or bridges. For CDTC's plans and programs to be successfully implemented, a cooperative relationship with local government and operating agencies is required. The *New Visions 2030* Principles call for a land use management program or agreement to exist for any highway capacity expansion. Consideration of a transportation project's consistency with local, corridor and regional comprehensive plans has historically been and will continue to be an important part of the Transportation Improvement Program project selection process.

CDTC utilizes the Community and Transportation Linkage Planning Program (referred to as the Linkage Program) as its primary method of local planning assistance. This groundbreaking program was initiated in 2000 and is designed to provide direct financial and technical assistance to communities undertaking local planning initiatives that integrate land use and transportation. The studies are conceptual in nature and recognize that good site and community design can help realize the region's potential and that transportation actions will play a role.

Since the inception of the Linkage Program, 54 studies have been undertaken in 30 municipalities in the Capital Region representing over \$3 million in investment at all levels of government. The Linkage Program has been modified several times since its inception with the most recent, critical change being the introduction of seven specific program strategies which are related to the Regional Development Strategies articulated in *New Visions 2030*. These strategies identify the land use and transportation planning concepts that should be incorporated in all Linkage Program plans to help implement the regional vision. The strategies raise the bar for study proposals by challenging potential sponsors to

incorporate smart growth concepts in their local planning. The seven program strategies are to:

- Support urban revitalization and redevelopment of existing commercial/residential areas;
- Improve street connectivity and reduce driveway conflicts through access management;
- Enhance and develop activity centers and town centers;
- Enhance and develop transit corridors and transit supportive built environments;
- Encourage a greater mix and intensity of land uses;
- Develop bicycle and pedestrian-friendly design standards;
- Create an integrated multi-modal transportation network.

Bicycle and pedestrian issues are a large part of many of the Linkage projects. If a study has a large bicycle/pedestrian component, a single Bicycle and Pedestrian Task Force member may be invited to participate on the study advisory committee. The invitation would be on a case by case basis. This person would be responsible for representing the views of the Bicycle and Pedestrian Task Force as well as reporting on the project status at the regularly scheduled Task Force meetings.

As part of this action, the Linkage Program will be evaluated with respect to the level of implementation of completed local plans, the degree to which CDTC can further assist communities in implementing local plans and the need for additional modifications to the Linkage Program. This effort may highlight areas that represent weaknesses in implementation opportunities, weaknesses in the plans themselves or other lessons learned that can lead to an enhanced Linkage Program or additional assistance initiatives. Along with this review, the Linkage Program section of the CDTC website will be elevated as a go to resource for local land use and transportation planning issues. The site will include examples of “best practices”, funding announcements, links to other reference material, links to services offered by CDRPC and other entities such as state agencies and professional planning organizations.

In addition, the Linkage Regional Coordination Forum will be further developed. CDTC recently broadened the membership of the Forum to include all municipalities in the region, not just those involved in the Linkage Program. Outreach will continue to be made to entities such as the Center for Economic Growth, the NY Planning Federation, state agencies and others with an interest in local planning. In addition, this group will be charged with additional tasks such as reviewing and developing material for the New Visions Planning Guidebook and Training program.

**10) Develop a New Visions Training Program that specifically targets local planning board members and other local decision makers.**

Local planning boards need to be further educated with respect to considering the regional impacts of local development decisions. These local decisions impact not

only the transportation system, but many other aspects of regional quality of life. The normal development review process, which follows the environmental review process, does not easily facilitate a meaningful examination of the potential regional impacts of projects being locally reviewed. Even when state agencies are involved in such review, or coordinated review occurs, it is not guaranteed that a broader look will be taken.

***LOCAL  
AGENCIES NEED  
TOOLS TO  
ENHANCE THEIR***

CDTC, NYSDOT, CDTA, CDRPC, the Albany County Airport Authority and other state and regional agencies need to focus on providing local agencies with tools that will enable such consideration. In consultation with other partners in the Capital Region, particularly CDRPC and the New York State Departments of State and Transportation among others, a New Visions Training program for community development directors, local planners and Planning Board members, local government officials, neighborhood associations, not-for-profits and a wide variety of other stakeholders will be developed. The training program will be a two hour program that focuses on the Regional Development Strategies contained in New Visions and how they can be applied at the local level. The training program will complement the New Visions Planning Guidebook.

Such a training program will increase the visibility of CDTC in the region, it will increase the awareness of New Visions as more than just a transportation plan and it will assist in CDTC’s continuous public involvement and outreach activities. The training program will also demonstrate the public safety and capacity linkages of arterial corridor land use decisions and promote greater consideration of *New Visions* principles. CDTC staff will bring the training program to a wide variety of forums ranging from local planning board meetings to county or regional workshops. With the assistance of those at the local level, it is desired to have the local training program be eligible for education credits.

**11) Engage county planning and encourage intermunicipal planning and information sharing**

Of all the entities that serve in a regional capacity, county planning is one with real influence in New York State. County planning will be further engaged in all regional initiatives and will be viewed as true partners in getting the message to local governments. Some of this is already happening and additional effort will be made to help county planners support local planning while promoting the regional vision. The key is to get regional, county and local planners speaking the same language with respect to planning and development issues. A special working group comprised of county planners, CDTC and CDRPC staff will be considered.

Intermunicipal planning is also strongly supported by *New Visions 2030* and an incentive is offered in the Linkage Program for planning activities that involve more than one community. In addition to planning initiatives,

transportation projects that are multi-jurisdictional are also supported by New Visions. For example, future trail improvement projects will be encouraged to be multi-jurisdictional. Additional financial incentives may be developed to further encourage multi-jurisdictional planning and project development activities.

**12) Continue to undertake [access management plans](#) for priority network arterials as opportunities arise.**

A common approach to address corridor traffic circulation and safety concerns is to resolve driveway access issues on a case-by case basis. The result allows proposed development and lot widths to essentially dictate the spacing of driveways along a roadway. Ideally, such issues should be addressed within the context of corridor-wide access management that integrates land use and transportation planning objectives along the entire route.

Although the Linkage Program provides a great deal of local assistance on access management issues, the limited funding makes comprehensive corridor-wide access management planning challenging. CDTC's Corridor Management Initiative has been made available to assist communities with access management corridor planning in key transit corridors. Most recently, the Route 5 corridor from downtown Albany to downtown Schenectady has been approved for a corridor-wide access management plan. This corridor is regionally significant and will soon contain the Capital Region's first Bus Rapid Transit system. The corridor is also important as it has a number of freight service issues, numerous driveways, vehicle and pedestrian crashes, and high travel delay.

Implementing this action will strengthen the relationship between transportation and land use planning and create a set of strategies and guidelines that will influence both land development and highway design, and protect previous highway system investments. Compatibility of the transportation investment with the community is elevated to a priority equivalent to moving traffic. Because of the uniqueness of each of the region's communities, arterial strategies are best examined on a case-by-case basis. The arterial management plans will be developed in cooperation with municipalities, the New York State Department of Transportation and county highway and planning departments.

**13) Maintain a [program for transportation projects](#) directed explicitly at community enhancement or regional economic development.**

There has been considerable community support and creative thinking on transportation projects as catalysts for urban revitalization and economic development. In preparation for this outcome, the *New Visions* budget in 1997 established a category for these types of projects.

Community enhancement and economic development can be fostered both by advancing new transportation projects and through sensitive execution of routine maintenance and reconstruction. A serious investment in pedestrian

accommodation will have tremendous spillover benefits in urban revitalization and suburban livability. Coupled with sensible design policy that limits the width and speeds on urban thoroughfares, selective transportation infrastructure investments can make the Capital Region a better place to live. Projects that promote economic development in places where supportive infrastructure exists help the region as a whole.

*Transportation projects are tools that advance other goals.*

New highways, particularly bypasses of existing activity centers, are not the thrust of this program. However, there

may be instances where a bypass could enhance community cohesiveness by removing trucks from residential areas. A new road might support economic development in targeted areas. Two such examples are the Selkirk Bypass and the I-90 Phase 2 Connector to the RPI Technology Park. Such projects, however, will not be considered by CDTC unless the local planning has been undertaken to justify their need and purpose.

**[3] PLAN FOR A SAFER AND MORE SECURE TRANSPORTATION SYSTEM**

CDTC has been actively engaged in safety planning and programming since its inception. Under recent progressive federal transportation legislation, including SAFETEA-LU, safety and security of the transportation system was elevated in their level of importance in state and MPO planning and programming processes. For safety, CDTC will work collaboratively with the NYSDOT and other state, regional and local safety partners on implementing the [NYS Strategic Highway Safety Plan](#). For security, 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.

CDTC's safety planning philosophy extends far beyond the traditional approach of identifying high accident locations and countermeasures (such as rumble strips, clear zones and wide shoulders). Safety planning is also an important aspect of integrated transportation and community design. Smart growth policies can result in safer transportation systems through appropriate, or context sensitive, designs. Engineering is also just one aspect of this integrated approach and education and enforcement efforts must also be a part of CDTC's planning and public outreach efforts.

**14) Establish a [Safety Working Group](#) to coordinate CDTC's safety planning activities with regional safety partners.**

CDTC will establish a Safety Working Group which will serve as the regional forum on transportation safety issues. This group, which will include representatives from state and local governments as well as enforcement, education and emergency service stakeholders, will be charged with the task of further articulating CDTC's safety planning program including:

- 1) Develop an appropriate performance measure for the long range plan.
- 2) Develop a new or refined process to evaluate candidate transportation improvement program projects for their safety benefits, including safety set-aside projects.
- 3) Work with NYSDOT Region 1 and the Adirondack-Glens Falls MPO on developing a process to program High Risk Rural Road funds when they are available along with other regional safety funds as appropriate.
- 4) Develop a catalog of innovative safety treatments using cutting edge resources to help guide local communities on the options available to them. This may include traditional countermeasures (signs, rumble strips, guiderails, etc.) as well as innovative techniques such as Complete Streets, roundabouts, traffic calming, access management, walking and bicycling facilities, etc. which all seek to reduce fatalities and injuries on all public roads in the Capital Region. Facility function and the community context will also be considered in the articulation of appropriate countermeasures.
- 5) Evaluate CDTC's role in education and enforcement activities and if/how resources can be allocated to pursue those activities. Issues related to driver behavior will be a key component of the evaluation.
- 6) Work with emergency service providers on how best to incorporate their issues and concerns into the transportation planning process.

**15) Develop a formal safety management system for the Capital Region that goes beyond traditional approaches.**

CDTC's Safety Management System will go beyond the traditional approach of identifying high accident locations. It will recognize that safety is influenced by facility design, community design, enforcement and behavior. Safe accommodation of all modes of travel on all public roads is central to CDTC's safety planning work. Connecting our efforts with available data resources is vital to making progress on the most critical safety issues in the region. The forthcoming Accident Location Information System (ALIS) should enhance CDTC's access to safety data to enable regional safety analysis to be more efficiently undertaken.

The central elements to the CDTC Safety Management System are:

- 1) Collect, analyze and share available regional safety data with regional safety partners. CDTC plans to create a regional safety profile to help establish problem areas including locations experiencing a high number of crashes, particularly a high number of severe crashes, as well as to document trends related to driver behavior. This will help CDTC and the regions' safety stakeholders focus their safety planning resources on key issues. Particular focus will be given to the local road system. The safety needs of specific groups such as pedestrians and bicyclists, the elderly and disabled, motorcyclists and large trucks,

including the other emphasis areas identified in the NYS Strategic Highway Safety Plan will be evaluated. In addition, the relationship between land use and transportation will be evaluated through safety data in before and after analysis of regional transportation projects. The data will feed into the work of the Safety Working Group and will be used in both planning and programming activities.

- 2) Pilot Safety Projects. Since early 2006, CDTC has been working with Rensselaer County on a pilot safety data project. The purpose of the project is to review all available safety data files related to the county and create a detailed crash profile on all public roads. The timeliness and quality of the data on the local road system, particularly with respect to geographic coding, has been problematic. It is hoped that the ALIS project and the further implementation of TraCS (Traffic and Criminal Software) throughout the region will improve crash location data. CDTC will continue to work on this pilot effort to develop a manageable safety data analysis process for the other three counties in the region.
- 3) Use of Regional Geographic Information System (GIS). CDTC's GIS contains crash data for both the state and local road systems from roughly 1996 through 2003 for all crashes and 2004 through 2006 for reportable crashes. This data was extracted from the NYSDOT SIMS and is used for many of CDTC's data analysis and mapping activities. CDTC will continue and increase the use of GIS in its safety planning activities.

**16) Facilitate interagency cooperation and coordination of security planning activities.**

Security planning involves having a communication and cooperation strategy in place before an incident occurs that contains the number and type of resources available in the region and the offices that are equipped to dispatch those resources to the locations and residents in need. A strategy plan should include elements such as routing, sheltering, or public education. CDTC will continue to follow the lead of NYSDOT and CDTA with security related issues and continue to provide a forum for operational discussions related to the transportation system in the Capital Region. In addition, CDTC will provide a forum for discussion on coordinating incident/emergency response, for emergency agencies to coordinate surveillance and prevention strategies and coordinating public information dissemination strategies. If needed, CDTC will assist a security coordinating agency to the extent possible.

**[4] REACH OUT FOR FULL PARTICIPATION**

Reach out to local communities, policy makers, businesses and individuals through an open, participatory process with information, technical assistance and on-going opportunities to assist CDTC and its members in making transportation-related decisions. Partnerships should be built among all transportation stakeholders so that

transportation investments achieve multiple community objectives.

**17) Emphasize public participation in transportation planning, programming and implementation.**

*Meaningful participation changes outcomes.*

Transportation planning, programming, and project implementation must have a high level of *meaningful* public participation. A

public involvement orientation leads one away from "engineering" solutions and towards problem-solving that integrates community values, goals, and desires. An ongoing, inclusive dialogue about fundamental transportation decisions that impact everyone's lives is required. Traditionally underrepresented communities, such as the mobility-impaired, low income, minorities and senior citizens, deserve special outreach efforts as well as those in rural towns and villages that are not often directly involved with CDTC. CDTC will continue public participation efforts when involved with project implementation, although that usually falls with project sponsors and NYSDOT.

The cornerstone of CDTC's public participation efforts at the planning level is through the Community and Transportation Linkage Planning Program. Each Linkage Program study is required to have at minimum two formal public workshops/meetings in which to elicit comment on the concepts being developed and articulated for the community. In addition, CDTC will continue to develop its website to clearly display products and make announcements with respect to planning, programming and implementation activities in the Capital Region. The use of Geographic Information Systems (GIS) and other relevant software will also continue to provide visual devices such as maps, graphs and tables to display information. CDTC will provide opportunities for web-based comments to be received and considered. Specific portions of the website will be established to receive comments regarding specific plans, programs, policies, and any other transportation related issue.

Additional outreach techniques that will be utilized by CDTC include:

- The New Visions Training Program for local decision makers.
- Presentations to local groups on topics of interest and more formal presentations at conferences and other larger events.
- Continuing to have an open relationship with the press and granting reasonable interview requests.
- Formalizing the newsletter, with the format, content, and frequency of distribution to be determined. Each new version will be mailed to the overall CDTC mailing list and posted on the CDTC website.

CDTC will review and judge the effectiveness of its public participation strategy using the following performance measures:

- People were heard and respected during the conduct of CDTC business, particularly in the development of the RTP, TIP, UPWP, Linkage Program and major studies.
- The CDTC process is generally perceived by participants to be fair.
- Consensus was reached on major documents.
- Certification reviews reveal no deficiencies.

**[5] DESIGN EFFECTIVE FACILITIES**

CDTC's existing commitments make a substantial contribution to pavement and bridge conditions, preservation of transit services, intermodal connections and strategic transportation improvements linked to land use plans. Honoring CDTC's commitments to strategic transit and highway projects can best be accomplished by refining project scopes and designs to fit with the *New Visions 2030* principles. Effective transportation facilities accommodate bicyclists and pedestrians where appropriate, address the needs of an aging society, provide for goods movement and delivery, and reduce conflicts between local and through traffic. Community compatibility is as important as moving traffic under this definition of effectiveness.

*The New Visions definition of effective facilities changes project design parameters.*

Multiple objectives are embraced in **major** projects, rather than primarily focusing on physical condition or traffic capacity in the design process.

**18) Improve continuity between the planning, programming and design of transportation projects, regardless of fund source and road ownership.**

Transportation project design has historically been conducted in a step-wise fashion -- after planning but before construction. Connections to both involved "hand-offs" between departments, agencies, or contractors. A systems approach uses a team of planners, designers, and construction personnel to develop projects. Project-specific decisions are put in the context of overall transportation system policy, goals, and budget constraints. Particular emphasis must be placed between the planning and design processes to ensure that local planning priorities are integrated to the greatest extent possible in transportation

*More resources need to be devoted to early and inclusive project development.*

projects. The Linkage Program has significantly enhanced local planning activities in the Capital Region and those studies have

already been seen to have a positive impact on the quality of transportation project proposals. Carrying good ideas through the design process must be further enhanced. Implementing actions include:

- Increase use of steering committees in the project development process that include local, county, state and regional officials;
- Revise NYSDOT's project scoping and development procedures manual to allow increased flexibility in the design process;
- Enhance the existing [TIP](#) evaluation process by requiring that all of CDTC's competitive programs such as the Spot Improvement Program for small scale bicycle and pedestrian projects specifically require consistency with local land use planning in their evaluation criteria;
- Ensure that environmental issues (NEPA requirements), bicycle and pedestrian issues, safety issues and other issues are properly identified and appropriately addressed;
- Increase involvement of NYSDOT design personnel and city engineering departments in planning processes as has already occurred in CDTC's Linkage studies;
- Increase inter-agency communication and coordination; and
- Provide more effective (earlier, more frequent) public participation in project design.

The [project programming process](#) at CDTC is a very comprehensive process with each project facing intense scrutiny with respect to long established project evaluation criteria. These criteria must be refined as circumstances change in the region and more is learned. The *New Visions 2030* process has identified several areas for further investigation with respect to CDTC's transportation improvement program.

- CDTC's safety benefits calculation for the project evaluation process should be updated to reflect the availability of new safety data and new options with respect to project evaluation.
- The project justification package and the programming process (screening and merit evaluations) need to be updated to reflect *New Visions 2030* priorities. This will be undertaken in a manner consistent with Appendix A to Part 450 of SAFETEA-LU regarding linking the transportation planning and NEPA process/project development. This will ensure that candidate project scopes as provided in project justification packages are descriptive enough to reflect project purpose and need consistent with New Visions principles and environmental quality goals.
- Project descriptions should be expanded in both the TIP and the STIP to effectively highlight initial project objectives.

#### **19) Routinely make road projects [bicycle, pedestrian and transit](#) friendly.**

CDTC's Bicycle and Pedestrian Task Force has been very active since its inception during the development of New Visions in 1995. The [Bicycle and Pedestrian Game Plan and Toolbox](#) states that: "The region is doing well providing pedestrian accommodations to priority network facilities but lacking considerably in bicycle

accommodations." Bicycle and pedestrian improvements will continue to be encouraged for inclusion in transportation projects throughout the region and an attempt to track the costs of the bike/pedestrian components of larger projects (reconstruction or resurfacing) will be made. In addition, there is still a need to pay particular attention to pedestrian accommodations on bus routes, particularly in the area of accessibility (i.e. ADA curb ramps). The positive trend of increasing support for pedestrian facilities will require continued attention.

The safety and accessibility of bicyclists and pedestrians continues to be a key concern in the project design process. New York State identified pedestrians as an emphasis area to reduce fatal and serious injury crashes in its [2007 Strategic Highway Safety Plan](#). CDTC's safety and bicycle and pedestrian planning activities will more strongly encourage the incorporation of safe and efficient bicycle and pedestrian facilities in project design.

Referencing and distributing the [CDTC's Bicycle Signage Guidelines](#) to establish consistency along trail systems in the region will be continued. Projects that are not consistent with the signage guidelines should not receive priority for funding even if the signage is a small component of a larger scope of work (widening, resurfacing, or reconstruction). There should be increased awareness of the guidelines to the region as a whole.

In 2004, CDTA formalized the criteria used to determine placement of new bus shelters. Lower volume stops may be offered a bench as a way to stretch the budget and provide basic accommodation. Candidates for the shelter program are evaluated using a point system. The point system not only considers passenger densities, but also the presence or absence of safe pedestrian access, adjacent land uses and the road re-construction schedule—particularly if the capital project will pay for the concrete pad and electrical hookup.

There is one emerging area of road design – [roundabouts](#) – where particular attention to transit must be paid from the beginning, not as an afterthought. While there are considerable safety benefits to roundabouts in general, there is an inherent conflict between road design based on keeping traffic moving (albeit at a slower pace) and with urban transit operation that requires the vehicle to stop to pick up and discharge passengers. Only if transit is taken into account from the beginning can this inherent conflict be addressed in a way that minimizes the negative impact on customers.

Some specific areas for continued consideration of bicycle, pedestrian and transit issues include:

- Increasing the capacity for cyclists and pedestrians at the limited number of river crossings should be a priority. When a Linkage, or similar type study, has a river crossing in the study area, a task should be dedicated to accommodating non-motorized travel on the bridges.

- Bicycle and pedestrian treatments will be particularly considered on the bicycle and pedestrian priority network or where such treatments would connect to and support the development and access to regional systems. Linking these treatments with the transit priority network or where there are transit routes is vital.
- [Traffic calming](#) is an umbrella term for a variety of actions ranging from allowing on-street parking to installing speed bumps or speed tables to street closures. Traffic calming reduces dangerous conflicts between cyclists/pedestrians and motor vehicles and creates a comfortable balance between motor vehicle and non-motor vehicle activity. These actions make a street or area less attractive to cars, although only the most aggressive applications actually prohibit car use. When traffic calming occurs, motorists determine new "best routes" and traffic works towards a new equilibrium. Communities can advance traffic calming plans at modest cost, and if properly designed, at limited impact on regional mobility.

Providing additional travel choices connects communities in new ways. Children will significantly benefit from this approach. Instead of being chauffeured, they will be able to be more self-sufficient, as long as the alternatives provided are safe, affordable, and convenient.

#### **[6] ENHANCE THE MANAGEMENT AND OPERATION OF THE REGIONAL TRANSPORTATION SYSTEM**

The use of highway, transit, toll/fare and communications technology improves the safety, reliability and efficiency of the entire transportation system. Grouped together under the [Intelligent Transportation Systems \(ITS\)](#) umbrella, these technologies can help meet congestion relief, air quality, and accessibility goals. Coordination of public safety agency efforts create a unified, effective system that responds to accidents and other traffic tie-ups quickly on all major highways, therefore improving their operations. Improved data collection efforts and continued public education regarding arterial management techniques also offer opportunities to improve transportation system management and operations.

#### **20) Implement [Intelligent Transportation Systems \(ITS\)](#) on the priority network.**

ITS applies advanced technology to transportation management and uses a system approach which interconnects and coordinates various functions, services and emergency response and transportation agencies. It is multimodal and integrates public transit and demand management. ITS services such as electronic payment services allow for the integration of electronic transit fare, parking and toll collection, and the consideration of demand management through congestion pricing. In the Capital Region, transit technology is an explicit and important component of the overall ITS strategy.

The ITS initiative includes a major effort to coordinate signal timing on major city and suburban arterials. Transit-friendly application of that technology will include designing the operation of the signal system to achieve multiple objectives. Rather than optimizing signal timing for maximum traffic flow, signal system design can be developed that allows for efficient traffic progression at travel speeds that are compatible with pedestrian, bike and transit movements. This may provide for a win/win outcome. Even modest improvements in basic signal timing will show important results.

Improved signal equipment and timing is basic to the ITS initiative.
--

Many ITS initiatives have been implemented since *New Visions* was first adopted in 1997. The [Transportation](#)

[Management Center \(TMC\)](#) has been implemented and is being utilized to improve traveler information and enhance incident management. E-Z Pass is now commonplace and is used at non-Thruway facilities such as the Albany International Airport to allow users to pay parking fees. CDTA has implemented an electronic fare collection system including Swiper passes, has installed automated vehicle locator and communication systems on its buses, and has implemented the region's first queue jumper in the City of Troy. CDTA now sells transit fares on-line and is developing a 10 day "debit" card for riders that use the bus, but not frequently enough to make the Swiper pass an economical option. In addition, CDTA in partnership with the Albany Parking Authority has piloted the use of "smart parking meters" where transit customers with valid transit passes can occasionally use Albany Parking Authority surface lots in the Central Avenue corridor at a reduced rate when they need daytime access to their vehicles. Other technologies in the pipeline include more "real-time" passenger information at major bus stops and on the web, a web-based trip planner (possibly linked to Google Transit), increased use of alternative fueled vehicles and solar-powered shelters and transit signal priority technology.

Reliable and complete travel condition information will be one of the most important features of a flexible and functional transportation system in the future. CDTC will continue to support the TMC and other ITS information systems. CDTC will also take advantage of new and emerging technologies for traveler information, both in the near and long terms. The long term holds great promise for vehicle technologies, personal computer technologies, cell phone or other technologies that will improve traveler information and the quality of travel in the region and beyond.

#### **21) Continue to support the [Transportation Management Center](#) and incident management activities.**

Incident management is the planned, coordinated process of detecting and removing incidents to restore normal traffic operations as quickly as possible. With an estimated 60 percent of all expressway system delay caused by incidents -- ranging from vehicles with flat tires on shoulders to

major accidents -- quick detection and removal are critical to maintaining traffic flows, particularly during peak travel periods.

The Capital Region Transportation Management Center (TMC), located at State Police Headquarters in Albany, enables State Troopers, DOT HELP Trucks, and other emergency personnel to respond swiftly to crash scenes and other highway problems. When it is appropriate, DOT maintenance crews are dispatched quickly to help restore traffic flow quickly. Since the establishment of the TMC, traffic flow has improved for all Capital Region highway users. CDTC will continue to support the TMC.

In addition, CDTC along with NYSDOT Region 1 has established a [Regional Operations Committee](#) that focuses on coordination between transportation agencies, public safety, and emergency response teams and where appropriate, will be active participants in regional integrated corridor studies which include an operations component. The Operations Committee will also be looking at further developing performance measures for incident management and operations. Security issues and incident response mechanisms and plans will be integrated into operational plans for the region.

**22) Continue to promote sound [arterial management planning and design practice as one tool to improve transportation system performance on all Capital Region arterial streets.](#)**

Major roadways, including all of the region's surface arterials and certain strategic collectors serve both as the primary network for moving people and goods and are the focus for commercial and residential development. If access to arterial roadways is not properly designed, these roads can not accommodate development *and* retain their primary transportation function. Good access management is the single most effective element in improving safety and preserving arterial capacity.

The arterial management policy, adopted by CDTC and endorsed by its members, has helped to ensure that new and existing curb cuts meet appropriate standards. The four components of the access management policy are:

1. [Reinforce Street Hierarchy](#): Access to property should reinforce the roadway hierarchy in order to maintain traffic flow, preserve roadway capacity, and enhance safety. As a rule, access to property should be from local streets or collector roads and not from the arterial itself. Traffic should flow to and from the arterial over collector roads and enter/exit the arterial at controlled intersections.
2. [Guidelines for Driveway Spacing on Commercial Corridors](#): Driveway spacing standards limit the number of curb cuts on a roadway by stating the minimum desirable distance between driveways. Proper spacing helps reduce collisions, encourages sharing of access for smaller parcels, reduces conflicts with pedestrians and bicyclists, and improves

community character by discouraging haphazard placement of driveways along corridors.

3. [Signal Spacing Guidelines](#): Preserving the quality of traffic flow and safety along public streets requires spacing of traffic signals that assures continuous, progressive movement. This normally entails relatively uniform spacing of signals at sufficient distances to travel at reasonable speeds.
4. [Residential Street Standards](#): The intrusion of heavy traffic into residential neighborhoods impacts regional quality of life. The guidelines were developed using objective criteria from CDTC's highway system review and current research.

Guidance regarding driveway and intersection spacing and other strategies is set forth in the planning report, [Development of an Arterial Corridor Management Strategy for the Capital District Region](#), which will be updated following adoption of New Visions 2030. Guidance in this report allows for a reasonable balance between traffic engineering criteria and economic development demands.

Examples of the kinds of design treatments that would help achieve the driveway and signal spacing standards described above include but are not limited to:

- Regulate the maximum number of driveways per property.
- Increase property frontage along major roadways.
- Provide opportunities for shared access with adjacent developments.
- Encourage access between developments across parking lots.
- Require adequate internal design and circulation plans in addition to a traffic study for system impacts.
- Consolidate existing access whenever separate parcels are assembled under one development plan.
- Locate driveways away from the functional area of intersections.
- Allow access to arterials instead of a collector or local street only if a traffic study shows it is necessary or beneficial to overall traffic circulation.

Minimizing the number of driveways and traffic signals decreases traffic conflicts and preserves the traffic-carrying capacity of the region's arterial streets. Equally important is the maintenance/improvement of the living environment and visual character of the region's older residential arterials.

Incremental costs attendant to accommodating driveway and signal spacing, constructing local roads to complement the arterial street system, and fostering well-designed circulation systems are minimal if addressed during the development process. Some costs to the business community will be offset by additional development opportunities created by increased land and transportation efficiency. Retrofitting existing developed corridors will be more difficult and costly, but can be accomplished either in conjunction with site redevelopment or as part of routine

public highway reconstruction projects. For example, driveway and traffic signal consolidation was successfully implemented as part of the recent Wolf Road resurfacing project.

### **23) Facilitate the collection of transportation data to foster regional transportation planning and analysis.**

Collecting transportation data is critical to regional transportation planning and analysis. Through this action, CDTC is making a renewed commitment to facilitate data gathering on a variety of subjects including traffic counts, trip generation (cars and trucks in particular), the percentage of trucks in the motor vehicle traffic mix, pavement condition data, safety data, transit data, bicycle level of service, and pedestrian infrastructure. Such data will be used in a wide variety of planning activities as well as in CDTC's regional travel model and regional Geographic Information System for data analysis.

Building on the performance measures in the [Congestion Management Process](#), the Regional Operations Committee will develop enhanced performance measures for management and operations, including incident management. Data collection for these performance measures will include mining the new and emerging databases that are being made possible by ITS, including the MIST database, and the TRANSMIT system.

## **[7] SUPPORT INTERMODAL TRANSPORTATION**

Intermodal transport is an important component of the overall transportation system. Improving connections between modes -- both for freight and for people -- helps the whole system work better and provides economic benefits.

### **24) Improve [intermodal passenger connections](#) throughout the region.**

Tailoring transit service to meet the overall transportation needs of the 21st century includes improved intermodal passenger connections. Efficient transfer between private operator transit service and CDTA service is one component. Effective connections of local transit and taxi service with inter-regional bus, rail and airline service is another.

*Easy passenger connections allow entire trips to be taken using transit.*

The Rensselaer Amtrak and Saratoga Springs Amtrak stations were reconstructed several years ago. Both provide staging areas for buses.

Park and Ride spaces are designated at the Saratoga Springs station; the NX and Saratoga Springs city service both serve the station. Additional transit connections are provided during the busy Saratoga track season. A new convention center has been proposed for downtown Albany. The existing Greyhound/Trailways station is in the primary study area of the convention center planning

effort and the concept of incorporating an intermodal facility into the design is now being explored. CDTA's Transit Development Plan will consider opportunities for improving intermodal connections through alterations to CDTA's route system where they are appropriate. Coordination and information sharing is a key aspect of this action.

### **25) Continue to support and facilitate [goods movement planning](#) and intermodal activities.**

CDTC's Goods Movement Task Force has been active since the mid 1990's with respect to facilitating discussion on regional freight and goods movement issues, particularly with respect to major trade corridors such as I-87, I-90 and I-88. The task force has focused on intermodal activities in the region as they relate to trucks, rail, water and air. An issue of particular importance is that of freight security. As part of this action, CDTC will support implementation of security measures throughout the freight system, as identified by state and federal security agencies. In addition, the use of technology will be encouraged to the greatest extent possible to minimize the impact on freight movement efficiency and where feasible, extended to achieve motor safety objectives. For example, truck stop electrification at the New York State Thruway and NYSDOT rest areas should be encouraged and promoted for private truck stops as well.

The [Goods Movement Task Force](#) would also like to examine the contribution of truck traffic to expressway congestion in the Capital Region and attempt to identify the component of future congestion related to the growth in truck traffic. That would help to determine if investment in rail systems / intermodal systems for long-haul freight would have a noticeable impact on highway congestion in the region. To do this, local and through truck growth factors would need to be identified.

Also as part of this action, CDTC supports the improvement of the Canadian Pacific north-south rail corridor from Schenectady north toward the Canadian border to improve operating speed and travel time reliability for both Amtrak and freight movements. The I-87 Corridor Study High Speed Rail recommendations for implementation phasing, incorporating the freight benefit of the rail improvements into the evaluation of statewide priorities will be reviewed to identify future actions that CDTC might be able to support. In addition, the tandem truck lots currently at Exits 24 and 23 of the New York State Thruway should be relocated or fully redesigned for operational and safety reasons.

*Finally, the location of freight-intensive industries is an important factor in regional goods movement. Attainment of regional goals regarding compact development and optimal use of existing industrial land would be fostered by public policies encouraging the location of freight-intensive industries near existing rail lines and intermodal terminals.*

## 26) Improve surface access to the [Port of Albany](#).

On the Albany side, the Port of Albany is adjacent to I-787, but access is circuitous and hampered by the presence of at-grade railroad crossings. Two of the three access points to the Port of Albany (at Church Street and from South Pearl Street) have at-grade crossings that can cause major delays for egress and ingress, particularly with heavy rail traffic at the Kenwood Yards. Within the Port proper, signage and pavement condition is poor. Direct ship/rail, ship/truck, and rail/truck connections do exist, but would benefit from road and track improvements.

A two-pronged approach to improving surface access is proposed. In the long term, a direct access ramp from I-787 to the Port, eliminating the Green Street grade crossing and providing tandem facilities is desirable. In the short term, pavement, grade crossing, and signage improvements to the existing road network are desirable. Improvements to dockside rails should also be considered. Implementing the recommendations related to this area from the Albany County Commercial Transportation Access Study is desired.

## 27) Continue to support improved surface access to the [Albany International Airport](#).

Surface access to the Albany International Airport has been identified as a long-standing regional priority. The [2007-12 TIP](#) includes a commitment to a \$45 M project to build a new Exit 3 (or redesigned Exit 4) specifically to provide direct access to the Airport from I-87. Full construction of

*Improving surface access to the Albany Airport is a high regional priority.*

I-87 Exit 3 will require upwards of \$10 M (as of 2007) in right-of-way costs alone. Major environmental issues

involving historic sites and wetlands are being examined under NYSDOT's design process, currently underway. Lower cost alternatives that minimize environmental impacts are being explored in the scoping effort and are being given serious consideration. Improvements to Albany Shaker Road have been completed and are underway on Watervliet Shaker Road.

Albany International Airport provides state-of-the-art inter-modal air freight facilities with ongoing capital improvements including a new 5,500 square foot air-freight building for the US Postal Service that opened in 2004. A 53,000 square foot air cargo terminal and 15 acre ramp was opened in August 1998 housing FedEx, Wiggins, UPS and DHL/Airborne Express. In 2004, Mobile Air Transport, a freight forwarding company joined the cargo exclusive tenants of this terminal. Air cargo access improvements between the air cargo terminal and the National Highway System at State Route 7 and Interstates 87 and 90 were recently completed to facilitate the transport of 130,000 tons of cargo annually.

## 28) Eliminate [at-grade railroad crossings](#) where feasible and improve at-grade railroad crossing safety.

Grade crossings are considered a constraint to rail movement because of safety and liability considerations, particularly for high-speed train operation. An inventory of railroad grade crossings in the Capital Region was conducted in the mid 1990's and will be updated. SAFETEA-LU has a specific program targeting safety at rail-highway grade crossings. A new reporting requirement under SAFETEA-LU requires NYSDOT in its HSIP (Highway Safety Improvement Program) to develop an annual Rail Highway Crossing Report which documents the effectiveness of the [state highway rail grade crossing program](#). To complement this, CDTC has a Grade Crossing Safety Improvements set-aside in its Transportation Improvement Program.

In general, basic protection at public railroad grade crossings in the Capital Region has been achieved through previous efforts. The major locations where this is not the case are where local land use is impacting road traffic volumes significantly, or where a major change in rail service, namely high-speed operation, is being explored. Where practical and allowable under federal and state law, NYSDOT is allowed to fund improvements or consolidation of private crossings along intercity passenger rail corridors, and is required to promulgate standards and specifications for design and protection at such crossings in order to insure public safety. Funding for private grade crossing consolidation or safety upgrades is problematic as public funding often is not available for such improvements.

*Public at-grade crossings are generally adequately protected in the Capital Region.*

Grade crossing elimination has multiple transportation system benefits:

- improved railroad and highway safety,
- improved efficiency of freight movement, and
- allowance for technological advances that would otherwise be impeded.

The NYSDOT Grade Crossing Program “focuses on improving safety at existing highway-railroad crossings primarily through the installation of warning devices. Ultimately, the safest option regarding highway-railroad grade crossings is to eliminate or close them, thereby eliminating all possibility of vehicle/train contact. Such an objective can be obtained via crossing consolidation, closure and/or grade separation. Consequently, it has been the policy of New York State to reduce, wherever possible, the number of highway-railroad grade crossings on public thoroughfares. As a result of these efforts, New York has one of the lowest grade crossing accident rates in the country, even though traffic volumes on both the rail and highway system have shown steady and significant increases over the last 30 years.” (From the website <https://www.nysdot.gov/portal/page/portal/divisions/operating/osss/rail/grade-crossings>)

## **[8] PROVIDE RELIABLE, EFFICIENT AND ACCESSIBLE TRANSIT SERVICE**

Capital Region transit service must adapt to meet 21st century needs. Identified needs include reduced auto dependence, provision of essential mobility to those without cars (including those with special needs), management of congestion, and support of local development policy. [CDTA's Transit Development Plan](#) will restructure transit routes in the region, creating a more efficient and reliable transit system with improved regional accessibility. Implementation of the region's first [Bus Rapid Transit \(BRT\) system on the Route 5](#) corridor is well underway and exploration of additional regional BRT systems will likely be pursued. High quality transit service must be complemented by transit priority on key transit routes and transit supportive land use and urban design techniques.

### **29) Continue to restructure and enhance transit service to meet 21st century needs.**

CDTA recently undertook a major study of their services called the Transit Development Plan, or TDP. The TDP looked at CDTA service according to type of route: Trunk routes, Express Routes, Neighborhood Routes, Suburban Shuttle services and Rural/Other services. CDTA has established an annual service review process to look at service performance by these categories, and to establish implementation plans based on that analysis.

CDTA restructured its fares in 2006. CDTA's fare system, called SimpleFare, was developed to simplify the fare structure and ease the ride for their customers. Zone and express surcharges and free transfers were eliminated. A \$3.00 day card good for unlimited rides is now offered in place of the free transfer. There are fewer Swiper fare card options now that there is no longer a zone system. A person can purchase a 5-day Swiper or 7-day Swiper. In addition, the Swiper pass, STAR fare and the "summer fun pass" can be purchased on-line. Ten ride ticket books for the Northway Express service can also be purchased on-line. Under the SimpleFare structure, seniors and customers with disabilities with a valid ID card pay half fare all the time. Half-fare Swipers are also available. The SimpleFare was well received by the public, and was one of the major factors in increasing ridership. CDTA plans to simplify the fare structure for the NX and explore the market for additional fare products, such as a 3-day pass aimed at visitors, a ten-ride debit card, and a 30-day pass that is not tied to the calendar month, but rather the day of first use.

In general, CDTA has begun to explore alternative service design. Starting in 2006, CDTA began to use contracted taxi service to meet some of the demand for STAR service for those not in wheelchairs. The Saratoga Transit Plan calls for an exploration of "Dial-A-Ride" as an alternative service model in low-density rural areas. These initiatives, in combination with coordinated human services transportation, have the potential to improve service quantity and quality and to stretch program funding.

## **30) Support transit through design of the built environment and use of technology.**

Transit ridership is highly dependent upon travel time in comparison to auto travel. Bus transit in mixed traffic cannot compete head-to-head with auto traffic based on travel time for the vast majority of trips. The combination of increased congestion (from which the bus cannot escape) and continued scattering of development (which is more difficult for the bus to serve with frequent service) provide significant challenges. That said, there are some physical and technologic measures that can be taken to support transit on the regional roadway network.

### **Bus Rapid Transit**

Bus Rapid Transit (BRT) describes an approach to transit service that focuses on integrated information, passenger

*Preferential bus treatment shows promise.*

amenities, technology, expedited fare collection, vehicle design and roadway treatment to improve transit reliability and speed. Bus

Rapid Transit would be supported by stations at regular intervals, supplemental feeder service and traffic signal preemption to assure reliable and competitive operating speeds.

CDTC and CDTA have committed to the implementation of Bus Rapid Transit (BRT) in the Route 5 Corridor from downtown Albany to downtown Schenectady and are preparing to explore BRT in the Western/Washington Avenue corridor, which has the potential to incorporate exclusive right of way to enhance the rapid part of BRT. Additional BRT corridors may be evaluated at some future time.

*Travel time differences strongly influence mode choice.*

### **Preferential Treatment**

A major feature of Bus Rapid Transit is the ability of the transit service to bypass congestion and provide a travel time advantage to transit users. Some portion of that advantage can be provided to bus transit through preferential treatment in important corridors and service areas. Preferential bus treatment includes:

- *transit signal priority* that allows early or extended green time when a bus approaches a traffic signal;
- *slip ramps* between Interstate Highways and park-and-ride lots that can be used only by buses (or carpools); and
- limited *congestion bypasses such as queue jumpers* or more extended *bus lanes* that allow the bus to avoid recurring highway delay.

In the planned BRT for the Route 5 Corridor, BRT vehicles will be able to travel the corridor about 25% faster than current local buses, saving up to 17 minutes end to end, utilizing transit signal priority and queue jumper technology.

## Intensify Transit Corridors

As noted earlier, an important opportunity present in the Capital Region is the opportunity to build upon a strong base of walkable, mixed land use development in the cities and along transit corridors linking these cities. Private sector initiatives supported by public policies should be encouraged to invest in development along traditionally-strong and potentially-strong transit corridors, such as NY 5, NY 32, US 20, US 4, NY 7, US 9 and others. The opportunity to constrain the growth in vehicle travel associated with new economic activity is maximized when development is located within walking distance of transit routes. Opportunities for large-scale, new mixed-use development or transit oriented development exist within the strong transit service area.

This action effectively increases the size of the transit market without requiring increases in overall levels of activity or overall development densities. The number of trips that can safely and conveniently use the transit is increased.

### **31) Maintain the Regional Transportation Coordinating Committee to serve as the forum for coordinating the transportation activities of human service agencies and local transit services, such as CDTA.**

SAFETEA-LU requires that projects selected for funding under the Section 5310 Elderly Individuals with Disabilities Program, the Job Access and Reverse Commute (JARC) Program (Section 5316), and the New Freedom Program (Section 5317) be “derived from a locally developed, coordinated public transit-human services transportation plan”, and that the plan be “developed through a process that includes representatives of public, private and nonprofit transportation and human services providers and participation by the public.” Toward that end, a Regional Transportation Coordination Committee was formed to guide the work of the coordinated plan and to work toward better integration and coordination of services.

The 2007 “Coordinated Public Transit-Human Services Transportation Plan for the Capital District”, required under SAFETEA-LU guidelines, contains recommendations for service coordination among and between area human service agencies and CDTA services. One recommendation requires future recipients of Section 5310 funding to participate in a forum of human service agency coordination. In addition, on a parallel but separate track, Albany County through its United We Ride Effort, has initiated coordination of vehicles owned and operated by the agencies receiving funds from the Department of Aging. Group purchasing is also being pursued as part of the United We Ride effort. The United We Ride initiative, coupled with the proposed Section 5310 evaluation guidelines should result in two models of coordination that can be adopted by other counties and entities that currently do not coordinate service.

The Regional Transportation Coordinating Committee (RTCC) will continue to meet quarterly for the next year to oversee the project solicitation and evaluation for JARC and New Freedom projects. The committee’s frequency of second and third year meetings will be determined by the progress that is made in 2007/2008 with respect to coordination. The RTCC is committed to its goal of improving communication amongst agencies and in achieving improved levels of coordination. The RTCC will continue to meet to help foster these goals.

## **[9] TREAT ALL MODES FAIRLY IN THE CAPITAL PROGRAM**

A comprehensive re-examination of the project evaluation criteria used at CDTC, NYSDOT, and CDTA is a necessary implementation step in making *New Visions 2030* a reality. Doing this will ensure that all transportation projects reflect *New Visions 2030* principles, strategies and budgets. The main changes that are perceived to be needed are ones that better capture the external impacts of transportation decisions -- regional quality of life, environmental issues, and compatibility of transportation with adjacent land use.

*New Visions policies need to be applied to project evaluation criteria.*

### **32) Direct transportation funding to support *New Visions 2030* concepts.**

Flexible federal funding is expected to continue in coming years although currently resources are scarce and in high demand. The challenge of assigning priority to competing uses of scarce resources may become even greater in the future. CDTC's Transportation Improvement Program (TIP) is the vehicle through which federal highway and transit funds are assigned to particular projects. When *New Visions* was adopted in 1997, CDTC implemented changes to its TIP project selection procedures, including its project screening, "factsheet" evaluation, and program development to ensure consistency with *New Visions* concepts. Tying the TIP strongly to the *New Visions* Plan resulted in funding a far different set of projects than would have been the case prior to the plan's adoption. CDTC will again review its TIP project selection procedures to ensure continued linkage to the *New Visions 2030* plan.

*The TIP is CDTC's primary implementation mechanism for New Visions.*

### **33) Continue to provide funding for implementation of small, cost-effective improvements.**

Regional "set-asides" are currently used in the TIP to provide funding to implement small, cost effective projects related to traffic signals, pavement markings, bridge inspections, small scale bicycle and pedestrian improvements (through the Bicycle and Pedestrian Spot Improvement Program), Travel Demand Management (including transit pass subsidy programs and the guaranteed ride home program), grade crossing improvements and ITS.

In the 2007-2012 TIP, several new set-asides were established including alternative fuel retrofits, bicycle/pedestrian network improvements, safety improvements for non-state roads and a set-aside for intersections, queue jumpers and roundabouts. These commitments total roughly \$45 M over the five years of the TIP and continued support for these set-asides is expected to continue. New initiatives to be considered for incorporation in the next TIP development process include: [Spot Goods Movement Improvements](#)

Coordinate through the CDTC Planning Committee the possibility of using CDTC funds for small scale goods movement related projects. This would be modeled after the Spot Improvement Program for bicycles and pedestrians.

#### [Replace Street and Highway Signs to Accommodate Older Drivers](#)

Older people, because of the aging process, experience visual problems related to depth perception, visual field, visual acuity and glare sensitivity. Many of these people could continue to drive safely as they age with improvements in sign letter heights, sign reflectivity and improvements in stopping site distances.

In 1995, the standard letter height was 1 inch of letter height to 50 feet of legibility distance. In 2000, the standard was changed to 1 inch per 40 feet of legibility distance. Recent research suggests that a 1 inch to 33 feet standard would benefit older users. In addition, signs should be made of high performance retroreflective sheeting. With regard to retroreflectivity, no minimum standards have been set. However, in 2000, the standard was changed from “only regulatory and warning signs shall be retroreflective or illuminated” to “all signs shall be retroreflective or illuminated”. The 2003 MUTCD states, “regulatory, warning, and guide signs shall be retroreflective or illuminated to show the same shape and similar color by both day and night, unless specifically stated otherwise in the text discussion in this Manual of a particular sign or group of signs.” Finally, FHWA is proposing to amend the MUTCD to include a standard for minimum maintained levels of traffic sign retroreflectivity and methods to maintain traffic sign retroreflectivity at or above these levels. Adopting a 3.5-second perception-to-reaction time in determining stopping sight distances would better accommodate older drivers.

### **[10] ENHANCE DEMAND MANAGEMENT**

The economic health of the Capital Region can be enhanced by decreasing drive-alone, rush-hour trips. Demand management initiatives offer a number of benefits including the reduction of accident costs, emissions, and energy consumption together with reduced congestion. Demand Management initiatives include everything from offering incentives to use transit to encouraging carpooling to working with employers to encourage less drive alone

trips through parking management techniques, telecommuting and a wide variety of other techniques.

#### **34) Continue and expand [demand management initiatives](#) using the best available technologies.**

This area provides a large opportunity area for travel demand management in the region and should remain a regional priority. Demand management activities have taken the form of many initiatives over the past decade. CDTC maintains a local ridesharing board called the Commuter Register, which is an on-line mechanism that allows people to advertise for free for a carpool. It has become increasingly apparent that the [Commuter Register](#) needs a major facelift in format, to keep up with the technology that is currently state of the art. Currently, the Commuter Register is a self matching system; this needs to be modified using GIS technologies, so that potential carpoolers can receive a map based match list. Links to [CDTA](#) and other commuter services (Schoharie County Public Transportation, Brown Coach, Yankee Trails, etc) are also provided and those services are promoted. Guaranteed Ride Home programs are available through CDTA's Swiper program and for non-CDTA bus riders and carpoolers through the Commuter Register Program.

With regard to vanpools, the 2007-12 Transportation Improvement Program contains a \$120,000 set-aside for a Saratoga County Van Pool pilot project. The pilot will likely be coordinated with the Saratoga Economic Opportunity Council and will be coordinated with the Job Access and Reverse Commute program.

CDTA has made significant progress in their sales of corporate Swipers. Approximately 100 companies take advantage of the corporate Swiper program. CDTA has dedicated staff to market transit pass programs. The County of Albany partnered with CDTA to provide free (phase I) and low cost (phase II) Swiper passes to employees rescinding their parking permits. This program provides about 100 passes per month; it was pioneered when the parking facility used by the county was demolished. CDTA sells Swiper passes at a deep discount to NYS employees that belong to the PEF and CSEA unions. Overall, CDTA sells about 3000 Swipers per month through its corporate accounts.

Several private companies, through the encouragement of CDTA staff have adopted Internal Revenue Code Section 132, which allows employees to purchase their transit passes using pre-tax dollars, up to \$105 per month. NYS offers this incentive to downstate employees; negotiations are on-going to bring this benefit to the Capital Region. CDTA has specifically crafted targeted “Try Transit” campaigns with Downtown Saratoga Springs visitors, the healthcare industry and restaurants to introduce the benefits of taking transit.

CDTA and CDTC have also initiated a Homeowner's Incentive to try to encourage the revitalization of urban neighborhoods with transit service and transit supportive features (pedestrian accommodations, limited parking or

limited car ownership, transit dependent populations) that have homeowner incentive programs to attract and retain population at transit-supportive densities.

Another tool that offers great promise for the Capital Region is a Transportation Management Association (TMA). A TMA is a member-controlled organization that provides transportation services in a particular area, such as a commercial district, mall, medical center or industrial/office park. They are generally public-private partnerships, consisting primarily of area businesses with local government support. TMAs provide an institutional framework for a wide variety of transportation demand management programs and services.

### **35) Engage New York State as a full partner in parking management and transit promotion.**

New York State is in a unique position with regard to its responsibilities in the Capital Region. First, it is the region's primary employer. Second, it is the owner and operator of the highest function, most heavily-traveled highways. Third, it provides significant financial assistance to CDTA and other transit providers and is responsible for overseeing its effective use. Fourth, it is responsible under federal law together with CDTC and CDTA for providing a long-range transportation plan that meets the needs of the region. Fifth, it holds primary responsibility for meeting federal Clean Air Act requirements.

In coming years, New York State has an opportunity to help fulfill its multiple roles in the Capital Region with [Transportation Demand Management](#) initiatives. The State's actions as an employer that spread peak traffic loads; encourage ridesharing, walk, bike or transit use; or increase telecommuting all benefit its role as highway provider and transit financier, and as the primary agent responsible for an effective transportation plan and air quality attainment.

CDTA and CDTC staffs conducted a highly successful pilot transit subsidy program for NYS Department of Environmental Conservation (NYSDEC) employees in 2000, when they moved their offices from Wolf Road to downtown Albany. The program offered \$17 discounts for the purchase of weekly bus fare on three of the private commuter bus companies that serve the Capital Region -- Upstate Transit (now Northway Express), Brown Coach, and Schoharie County Public Transportation. The program was very successful—over 60 commuters permanently changed their commute mode to transit. An additional 40 people became part-time bus riders. About 35 employees rode the bus but determined that it did not work for them. Only 475 employees lived in zip codes that could potentially be served by these three bus companies. Over 12 percent permanently switched their commute mode to transit. Surveys indicated that the majority of these employees would not have given the bus a try had the transit subsidy not been offered.

NYS Office of General Services and more recently, the governor's office has become aware of this program. CDTC and CDTA staffs, along with advocates from the NYS Department of Environmental Conservation are trying to "sell" the concept to other NYS agencies within the Capital Region. NYS allows employees located in NYC to purchase their transit fare using pre-tax dollars; negotiations are on-going to bring this benefit to the Capital Region. Other proposed TDM benefits for NYS employees include the provision of low-cost, occasional daily parking for employees who suspend their OGS parking permit because they take transit or carpool to work, the appointment of transportation coordinators in all state agencies (for disseminating information regarding commutation choices such as mass transit, telecommuting, carpooling and compressed work week), and the provision of direct transit subsidies. The DEC Bus Subsidy Pilot Program revealed that employees who take mass transit to work are much more likely to give up their state-issued, OGS parking permits if they know that they can retain their seniority rights on their respective parking waiting list in case they need their permit back in the future.

In order for NYS employees to take advantage of some of these TDM initiatives, the state must implement the DEC "inactive waiting list" concept for all Capital Region state agency parking lists. Approximately 30,000 NYS employees work in the downtowns of Albany, Schenectady and Troy. A statewide TDM program such as the one described above could significantly reduce the need for constructing additional parking structures while at the same time reducing fuel consumption and air pollution.

### **36) Consider highway pricing (particularly congestion pricing) and broad parking policies (including cashing out).**

Modest highway pricing schemes may be achievable and can have many benefits. [Congestion pricing](#) on major facilities is one feasible option for the Capital Region. As the Thruway's electronic toll collection technology matures, it is a relatively small step to vary the toll by time of day or by carpool status, or to extend tolls to other facilities (such as the Northway on a managed lane). By adding a surcharge for peak hour usage, customers are encouraged to either shift mode or shift the time of travel, resulting in reduced congestion, reduced emissions, and lower overall costs of travel. The primary benefit of congestion pricing is better management of existing highway resources and reduced need for highway widening. However, the modest shift in demand to transit service warrants a

*Modest pricing schemes deserve further exploration.*

recommendation for consideration of pricing strategies from the transit perspective alone.

One of the goals of introducing a fast, high-performance transit service to the Route 5 corridor is to bring new riders onto the system. One of the ways to improve access to the transit system is to provide park-and-ride spaces at the proposed [BRT](#) stations. In this way, people who do not live along the Route 5 corridor but who work along the

corridor can drive to a station and use the BRT to reach their destination. Within Phase I, it is recommended to provide up to 250 park-and-ride spaces, some 20% of the ultimate total. Due to the lower cost and faster implementation of the capital leasing alternative over land acquisition and construction, shared use lots are recommended. These spaces will be built/leased at the following stations, in descending order of importance:

- Balltown
- Colonie Center
- Washington (Travel Center in Schenectady)
- North Allen
- McClellan
- Any other location where the opportunity arises

While improving access to the BRT service is important, and the park-and-ride spaces must be built in a location convenient to the station, the provision of such spaces should not override the goal of improving land use in the NY 5 corridor, particularly in the immediate vicinity of the stations. Thus, care must be taken in the design phase to ensure that a park-and-ride lot does not preclude new development that provides a comfortable and lively pedestrian environment at the stations.

*There is a direct relationship between parking policy and transit*

Broad parking policies incorporate employer cash out and transportation allowance programs described

under other actions, but go beyond. Increased transit ridership to urban, and potentially suburban centers of employment, is supported by parking surcharges or other means and the availability of park and ride facilities outside of these employment centers. Further, should the City of Albany, the City of Troy or other urban communities successfully obtain authority to create residential parking permit programs, the free on-street parking supply for commuters may drop significantly. Demand for, and market prices for commercial space would then rise. Residential parking programs adopted to meet residents' needs should be folded into a parking management program. Such a program would accommodate the loss in downtown parking through increased peripheral and remote parking, increased employer participation in transit pass programs and other transit service actions (as described above).

The Capital Region has fewer employers that rely on paid, commercial parking for employees than most metropolitan areas. This is largely due to the presence of state government as the primary downtown employer and the fact that it provides for its own parking facilities. Even so, there would be value in adoption of parking "cash out" legislation such as that in place in California and other areas. Cash out legislation requires any employer that purchases commercial parking spaces for employees to offer the cash value of the parking space directly to the employee as an alternative. This allows the

*"Cash out" programs are promising.*

employee the option of foregoing the parking space and applying the cash towards transit. Alternatively, the cost of a parking space could be shared with a carpool partner and the savings pocketed. The entire cash allowance could be retained by walking or biking to work. Cash out programs do not increase employer costs or prevent employer-subsidized parking.

Parking cash out was marketed as part of the CDTA/CDTC joint venture that provided transit pass subsidies to employees that worked in the Albany Downtown Business Improvement District (BID). However, none of the employers located in the BID took advantage of this program. There is an opportunity to again market this concept through a Transportation Management Association that may be developed at the Harriman Campus or other large developments in the region.

#### **[11] ENSURE THE ENVIRONMENTAL IMPACTS OF TRANSPORTATION ACTIONS ARE CONSIDERED WHILE CREATING A MORE SUSTAINABLE TRANSPORTATION SYSTEM**

Protecting the environment and creating a more sustainable transportation system is an important *New Visions 2030* strategy, particularly in light of global climate change. The environment must be considered in planning and programming processes at CDTC and steps must be taken to identify potential impacts of transportation decisions on the environment. Review of natural and cultural resource mapping and consulting with federal, state and local agencies on environmental issues are important aspects of the environmental mitigation process. CDTC also seeks to: 1) promote the use of alternative fuels, 2) ensure that traditionally underrepresented population groups are not unduly harmed by transportation actions and in fact may be helped by them, and 3) provide more transportation choices beyond the single occupant motor vehicle.

#### **37) Support the deployment and use of Clean Fuels and Clean Fuel Technology in the Capital Region**

The U.S. Department of Energy's (DOE) Clean Cities program is a voluntary, locally based government/industry partnership. It is designed to mobilize local stakeholders in the effort to expand the use of alternatives to gasoline and diesel fuel by accelerating the deployment of alternative fuel vehicles (AFV's) and building a local AFV refueling infrastructure. The Clean Cities program mission is to "advance the national, economic and energy security of the United States by supporting local decisions to reduce use of petroleum fuels in vehicles." Clean Cities carries out this mission through a network of more than 80 volunteer coalitions, which develop public/private partnerships to promote alternative fuels and vehicles, fuel blends, fuel economy, hybrid vehicles, and idle reduction.

Local efforts to participate in the federal Clean Cities program were undertaken by Schenectady County in early 1996. The county recognized the importance of this program and began to build a coalition of public agencies

and private businesses. Schenectady County formed a partnership with thirty-nine organizations, including Niagara Mohawk, NYSERDA, the New York State Thruway Authority, CDTC, the Capital District Regional Planning Commission, the Environmental Business Association, Environmental Advocates and others. This partnership became known as the **Capital District Clean Communities**. This group met regularly and, with Schenectady County and Niagara Mohawk taking the lead, they submitted a Clean Cities program plan to the U.S. Department of Energy on behalf of the Capital District Clean Communities. DOE accepted the program plan and the Capital District Clean Communities coalition became a designated member of Clean Cities in April 1999.

The Capital District Clean Communities (CDCC) formed primarily to take advantage of the environmental, public health, energy, and economic benefits that the Clean Cities program offers. Specifically, alternate fuels can benefit the Capital Region by creating commercial opportunities and jobs in the sale, conversion, and maintenance of AFV's and in the installation and service of associated infrastructure. In addition, benefits come from the research and development of new technologies and products through the reduced dependence on imported fuel.

The CDTC assumed the coordinator role for the CDCC in 2001. CDTC is the only MPO within NYS that supports the coordinator position. CDTC agreed to be the "home" of the Capital District Clean Communities program because the goals of the program fit well with the planning and investment principles that CDTC adopted as part of New Visions. The Capital Region provides substantial opportunities for the expansion of the alternative fuel marketplace, particularly with the large state vehicle fleet that operates in the area. Stakeholders in CDCC recognize the need to provide greater fuel choices in the Capital Region and to reduce its dependence on imported oil.

The CDCC advances the goals of the Clean Cities program through coalition building and networking. Currently, ethanol, bio-diesel, CNG, and Propane are the alternate fuels of choice in the Capital Region. Hybrid-electric technologies have also gained support. CDTA ordered its first six hybrid-electric vehicles in 2006 for deployment in the NY5 corridor. CDTA has set a goal of 20% of all future fleet purchases being hybrid technology, contingent upon funding availability and positive evaluation results from the initial purchases. In 2007, the incremental cost per vehicle of hybrid technology is about \$165,000/bus. This incremental difference may decrease over time as the technology matures and achieves greater market penetration.

CDTA is also willing to work with partners on emerging clean air technologies, including fuel cells and hydrogen power. With NYSERDA backing, the Albany County Airport Authority and CDTA will be looking at a hydrogen-powered sedan and SUV (sport utility vehicle) for non-revenue operation beginning 2008.

**38) 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.**

CDTC's Title VI-Environmental Justice initiative is intended to ensure that EJ principles are inherently integrated into the planning process at both the system and project level. The Environmental Justice Analysis Report documents the equitable distribution of transportation projects throughout the region (urban, suburban and rural areas) and provides an evaluation of CDTC's plans, programs and processes in relation to EJ issues. Policies related to public involvement are addressed in detail in CDTC's Public Involvement Policy. Additional transportation concerns with Title VI / Environmental Justice aspects (noise, etc.) have been fairly examined in the "big ticket, big initiative" work. CDTC's approach to Title VI/EJ policy, analysis, and documentation will continue to be updated and enhanced as programs change and as more recent and improved data becomes available.

**39) Specifically consider environmental and cultural resource impacts of transportation planning, project programming and design**

CDTC has considered the environmental impacts of its decisions as part of its planning and programming processes for some time. However, the SAFETEA-LU requirement for environmental mitigation has heightened awareness of this issue and has challenged CDTC to do more. As part of this action, CDTC will revise the TIP candidate project justification package, including the section in which preliminary identification of potential environmental issues is made. This revision will be undertaken to be consistent with Appendix A to Part 450 of SAFETEA-LU regarding linking the transportation planning and the NEPA process/project development process. This will ensure that candidate project scopes as provided in project justification packages are descriptive enough to reflect the project purpose and need which must be consistent with New Visions principles and environmental quality goals. Geographic information systems (GIS) information will be used to overlay the limits of candidate TIP projects that have the potential for significant environmental impacts against natural and cultural resources mapping. CDTC will coordinate with NYSDOT, NYS Department of Environmental Conservation (NYSDEC) and others on updating this mapping and corresponding GIS databases.

In addition, expanding CDTC's membership to restore the NYSDEC as a CDTC member will be explored. Adding NYSDEC as a member agency will allow for enhanced communication and information sharing regarding the region's critical environmental issues, environmental resources, and to ensure broader coordination of land use/transportation planning efforts (DEC withdrew from active participation years ago). As a CDTC member, NYSDEC would have a role in project planning, programming and design.

#### 40) Explore [Green Corridors](#) and opportunities to reinforce open space protection efforts in the Capital Region.

Green Corridors is an approach Saratoga County has utilized for its [Green Infrastructure Plan](#). Green corridors can help protect existing riparian buffers and woodlands, improve water and air quality, and lower storm water management costs. Greenways and trails are key components of green corridors. The Green Infrastructure Plan is a regional initiative to identify and safeguard valued community open space resources. The plan brings together the county's most important open space resources, including natural systems such as streams, wetlands and watersheds; working landscapes such as farms and managed forests; recreational and trail opportunities such as multi-use trails and fishing access; and cultural resources such as scenic and historic corridors.

CDTC will explore opportunities to reinforce open space protection efforts in the region. Along with the Green Infrastructure Plan in Saratoga County (which includes an open space component), the Open Space Institute's Open Space for Tomorrow: A Capital District Sprawl and Open Space Action Strategy, the NYSDEC's Open Space Plan and other resources will be reviewed to ensure open space protection efforts are considered at the regional level.

#### [12] EXPLORE BIG TICKET/BIG IDEA INITIATIVES

CDTC's exploration of Big Ticket/Big Idea Initiatives resulted in the identification of six common themes or pre-requisites for a big initiative like a regional greenway system to reach a point of regional commitment and implementation. Although 16 big initiatives were identified as possibilities for the region, none represent firm commitments in *New Visions 2030*. Examples of these initiatives include a riverfront access and urban redevelopment program, guideway transit system with transit oriented development, a managed lane program, clean, efficient vehicle program, and a highway noise program. Further exploration and refinement of these initiatives should be undertaken, including whether or not the six pre-requisites can be met in order to garner regional support for their commitment and implementation. The budget impact of Big Ticket/Big Idea initiatives is significant. Although some are relatively more modest in impact (less than \$100 M) some go well beyond what the region can currently afford (billions of dollars). New sources of revenue may need to be found or developed if a commitment to a big initiative is made at some future time.

#### 41) Refine and further articulate the [Big Ticket/Big Idea Initiatives](#) for the Capital Region

Big Ticket/Big Idea initiatives such as new rail systems, major expressway widenings or construction of significant mileage of new streets and highways **are not contained in *New Visions 2030***. CDTC's current policies hold that such big budget items are not feasible. The need is not urgent,

the benefits are not cost-effective, and the large scale resources required are not available to pursue them seriously.

At the same time, CDTC realizes that the Metropolitan Planning Organization (MPO) process is the public forum at which big ideas as well as incremental actions should have a place. To this end, the *New Visions 2030* effort has revisited a wide range of "big idea" and "big ticket" initiatives to determine if major, region-shaping projects and programs should be afforded status in a new 25-year transportation plan. The results of this review are included in the Big Ticket/Big Idea report.

The Big Ticket/Big Idea initiatives report noted that if the documented findings in the report are confirmed through additional public dialogue, then the implications for CDTC's planning process and *New Visions 2030* are that CDTC and its members and participants should:

- Continue to clarify, document and secure broad buy-in to statements of community values and regional objectives.
- Explore in a sketch manner the potential Capital Region application of those hypothetical "big initiative" concepts rated as being consistent with community values and standing a good chance of achieving a regional consensus for implementation.
- Explore the future feasibility of including a scaled-down version of those concepts in a financially-constrained long-range plan by raising the threshold of "reasonably expected" funding.
- Monitor the emergence of a sense of urgency and of potential champions that are necessary to generate support and financial resources for implementation of the consensus concepts.
- Be prepared to initiate serious consideration of the consensus concepts as soon as warranted by urgency and other conditions. Urgency can come from desire as well as need. The region may choose to pursue ideas because they are good, not just because they seem necessary.

The CDTC Planning Committee and Policy Board will be utilized in the decision making process for which Big Ticket/Big Idea Initiatives are refined in more detail, following the model of the Regional Greenway Concept.

#### 42) Continue to explore options for the [Regional Greenway Concept](#)

Along with work to describe and discuss other "big idea" initiatives, CDTC will continue exploring options and provide a forum for discussion regarding the Regional Greenway concept already articulated. The Greenway Concept will continue to be presented whenever possible to inform elected officials and advocates of the concept's regional benefits and to encourage local decision makers to consider integrating the Greenway Concept into their local planning as opportunities arise. It should be noted that the Bicycle and Pedestrian Task Force is very enthusiastic about finding ways to implement the concept while

understanding that a regional champion has not been identified and resources are limited. The Mohawk Hudson Bike Hike Trail and the Zim Smith Trail would likely be major components of a Regional Greenway System.

### **[13] SECURE ADEQUATE FUNDING TO FULLY IMPLEMENT THE PLAN**

This strategy makes all of the other strategies happen. The *New Visions 2030* plan is fiscally balanced over time – *but only if public funding increases regularly over the next 25 years as it has in the past*. An essentially “flat” level of revenues would lead to serious, unacceptable declines in physical and service conditions and make even modest improvements difficult to accomplish.

While it is reasonable to anticipate that funding will be available over coming decades to carry out all elements of the New Visions plan, **it is imperative that CDTC and its members work with all interested parties at the federal, state and local level to explore prudent and timely actions to secure these funds**. Discussion of “big ticket initiatives” must occur simultaneously with discussion of budget gaps for the basics. It may be necessary to link the “urgent” with the “desired” to elicit sufficient public support for legislative action to provide the necessary resources.

The Finance Report outlines different scenarios from basic system preservation to full implementation, but emphasizes the desirability of full implementation. Securing adequate funding is clearly going to require cooperative efforts, innovative thinking, and a lot of public support.

### **43) Build a coalition to lobby for regional transportation projects.**

Because the Capital Region has four central cities instead of a single central city, a unified lobbying position is necessary to be competitive in securing local, state and federal legislative support for regional transportation projects. The importance of regional transportation projects recommended in *New Visions 2030* will be promoted through the efforts of the Center for Economic Growth, ARISE, and other state, regional and local stakeholders. These groups and individuals can generate political support for projects that would benefit the Capital Region.

As part of the historic growth in [funding](#), note that CDTC's five-year 1989-1994 TIP averaged only about \$40 M annually in state and federal-aid projects (urban and rural, highway and transit), including match. The 2007-12 TIP averages nearly **\$140 M** annually for the same fund sources. Over time, there has been and can be expected to be some shifts among the sources of funds (user fees vs. bonds, state vs. federal, toll vs. other). Funding for maintenance and very modest system expansion requires conscious effort but can be reasonably anticipated based on this history; funding for major (“big ticket”) initiatives cannot be reasonably anticipated at the present time.

CDTC and its members must also communicate regularly with the region's representatives to Congress and USDOT regarding the federal role in Capital Region system preservation and improvement. New York's Congressional delegation was quite successful in protecting the state's and the region's interests in the passage of SAFETEA-LU in 2005. Further, Congressional action to provide earmarked funds for Bus Rapid Transit in the Route 5 Corridor, the Western Gateway Transportation Center, Erie Boulevard reconstruction, and the I-90 Exit 8 Phase 2 Connector and ITS components are remarkable -- not only for the level of financing, but also because of their solid connection to the New Visions Plan. Continued communication will be critical in coming years as SAFETEA-LU comes up for reauthorization.

### **44) Explore [local funding mechanisms](#) for implementation of the plan.**

If the Capital Region truly desires implementation of *New Visions*, local funding will need to be brought to bear. Working together to get the region's “fair share” of state and federal transportation funding will not be enough. Local funds leverage other funding sources (both public and private) and provide money for programs that truly advance the regional interest. Implementing this action will reduce the Capital Region's dependence on limited state and federal transportation fund sources, making us more regionally self-sufficient.

*Local funding will insure plan implementation.*

Certain local fund sources, particularly for local road and bridge maintenance operations, are assumed in the *New Visions* budgets.

These represent a base line for preserving the function of the existing transportation system. New transportation initiatives in this region will require exploration of additional locally generated revenues.

Nationwide, it is typical for major local transportation initiatives to include partial or primary financing through dedicating a portion of a

*Local option sales taxes are a common transportation finance tool nation-wide.*

broad-based tax, such as the sales tax. Few metropolitan areas in the nation undertake a major highway upgrade or fixed guideway system without new local funding. Generally these actions are offered to the public on a referendum basis and often are part of a broad package of both highway and transit initiatives.

### **45) Increase the use of [mitigation costs](#) and public/private partnerships to finance transportation improvements.**

Local governments in areas where development is occurring are encouraged to assess traffic impact in accordance with CDTC's public/private financing guidelines. This encouragement includes:

- distribution to and education of municipal staff and planning boards of the guidelines;
- technical assistance in implementation (on contract basis, as with the current arrangement with the Town of Colonie in the Airport Area);
- technical assistance in the creation of assessment districts for parking or other improvements; and
- additional legislation (if needed) to aid in the formation of transportation development districts.

Traffic mitigation costs on development can mitigate the negative local impacts of increased activity, while providing a revenue source for needed transportation improvements. Standard large-lot residential subdivision development has documented costs associated with it, including traffic congestion, land consumption, water pollution, air pollution, and impacts on environmentally sensitive areas. Publicly born costs include schools, public facilities (sewer, solid waste, water) and parks, the provision of public services, the construction and maintenance of roads, and public administration. These fiscal impacts occur over the long term regardless of whether mitigation to the initial development is collected. An initial assessment of impact provides at least some recompense to local governments trying to balance budgets over the long term.

CDTC will document examples of best practices from around the region and the state regarding the use of transportation mitigation costs, public private partnerships, transportation development districts, and other innovative financing techniques. This resource will be provided to decision makers at the local level and will be used to educate them on the available financing options. Due to scarce state and federal funds for transportation projects,

*Traffic mitigation costs provide local revenue and mitigate negative effects of development.*

the need to develop innovative project financing techniques has never been greater.

#### **46) Include demand management and transit support in developer-financed traffic mitigation programs.**

Travel demand management, including reliance upon transit use, can reduce the traffic mitigation costs of individual developments. Mitigation costs and other exactions and contributions from developers to offset

traffic impacts should be routinely made available not only for highway construction activities but also for ridesharing and transit services that serve as traffic mitigation.

The Town of Colonie is the only Capital Region community that provides direct subsidy to Travel Demand Management programs through developer mitigation costs. The Harriman Campus Linkage Study, recently released for public review, includes a major recommendation for the formation of a Transportation Management Association (TMA) to promote multi-modal travel in various ways, using parking fees as a finance mechanism. This TMA – the first of its kind in the Capital Region – would in the long term provide an internal shuttle system with connections to CDTA’s regional routes, bulk purchase and distribute transit passes for site tenants, support walk/bike connections in various ways, work with the regional agencies on carpooling and vanpooling initiatives, and other transportation coordination efforts. This TMA could be a model for other such developments in the region (such as the Luther Forest Technology Park and other existing large office park complexes).

#### **47) Explore changes in funding rules to better align funding with function.**

The alternative to changing ownership is to alter funding arrangements to provide for the necessary repair work on all facilities, regardless of ownership. This would be helped by the creation of direct revenue streams, such as user-based fees and tolls. Technological advances will permit time-based (higher for congested times) and impact-based (higher for heavy vehicles) fee structures. Legal authority would be required to extend these structures beyond current toll roads. These fees would finance the system-wide provision of safe facilities in a state of good repair.

*Existing funding rules don't always allow for the proper treatment of road function.*

To assist with aligning funding with function, CDTC can ensure that state touring routes and other facilities serving regional needs within city limits have equitable access to federal, state and county funding. Greater use of federal-aid money for local repair strategies would be required as part of this action.

## Financial Plan

### Background

CDTC's New Visions plan is unique among metropolitan plans in comprehensively assessing annual funding requirement for seventeen capital, operating, maintenance and planning budget categories. Additionally, the plan's strength draws from CDTC's commitment to achieve "steady progress" across all categories even if funding levels fall short of those needed for *full* implementation of all New Visions recommendations. The plan includes well-constructed, reasonable and modest annual budgets for the following categories:

- Intermodal facilities
- Transit capital
- Transit operations
- Priority highway rehab
- Other highway rehab
- Bridge rehab
- Highway and bridge operations
- ITS/ traffic infrastructure
- ITS operations
- CMS Strategic projects
- Community / Economic projects
- Supplemental bike/pedestrian actions
- Supplemental goods movement actions
- Supplemental arterial mgt actions
- Supplemental safety actions
- Demand management
- Integrated planning & outreach

### Reasonably Anticipated Revenues

The New Visions plan must be fiscally constrained. That is, CDTC may not identify 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.

In the New Visions 2030 plan, CDTC and its members committed to the necessary and appropriate rehabilitation of the entire transportation system over time, along with modest upgrades and improvements. Increases in the cost of materials coupled with the need to rebuild a nearly 50-year-old Interstate system pushed the cost of the plan up 40% over the previous plan – more than eating up funding increases provided in that period.

Even with these cost increases, CDTC asserted that the 2030 plan was fiscally balanced over time – *but only if public funding increases regularly over the following decades as it has in the past*. 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.

### What Has Transpired Since Adopting New Visions 2030

Financial circumstances and future prospects have experienced significant – and mixed – changes over the past three years.

#### Negative Factors

- State funding issues have placed a double squeeze on NYSDOT program – first seeing flat funding levels due to state fiscal problems and second, witnessing a steady decline in the percentage of dedicated transportation funds available to spend. The vast majority of the dedicated state funding stream now goes strictly to debt service for previous bonds.
- Efforts to establish a multi-modal five-year state funding program for transportation failed last year. The SAFETEA-LU federal legislation expired in September 2010 without a successor. Short term extensions are the rule.
- Operating funds for CDTA have been reduced in the past two years for the first time in memory. CDTA's ability to fully implement its carefully-constructed new service plan (including BRT) is being jeopardized by fiscal issues and compounded by the economic recession that reduced ridership.
- Improvements to pavement and bridge conditions have not kept pace with needs and the need established in 2007 for reconstruction of the aging Interstate system has gone unmet to date.

#### Positive Factors

- The rapid escalation of construction costs experienced for several years has abated; particularly since the global economic slowdown of 2008-09, project bid openings have ceased to routinely exceed engineers' estimates, reducing the size of inflation-related financial gaps.
- The American Recovery & Reinvestment Act (ARRA) provided an unanticipated "shot in the arm" to transportation capital finances, pumping approximately \$80 M of federal funding into CDTC highway, transit and rail projects above and beyond anticipated TIP funding. For the first time, this allowed significant funding of "4R" (simple resurfacing) projects with federal aid on state and local roads. The ARRA projects also demonstrated the collective ability of NYSDOT, CDTA, municipalities and others to deliver needed projects in a timely basis.

- Necessity has proven to be the mother of engineering invention, as evidenced by current NYSDOT plans for the Patroon Island Bridge (I-90 over the Hudson River). What could have been a \$300 M project was reduced to a \$100 M rehab with a 30+year life due to innovative design driven by budget considerations.
- Budget concerns have not led to the abandonment of multi-modalism in the Capital District. While delayed, CDTA remains committed to rollout of the NY 5 BRT system in 2011; high speed rail initiatives progress; and NYSDOT and other implementers continue to expand the pedestrian network, build roundabouts for safety and air quality benefits; and communities continue to refine integrated local plans and ordinances.
- The New Visions method of framing discussions of “big ticket” initiatives has succeeded; the distinction between what the base budget should support and what would require supplemental funding is well understood in the Capital District.
- Transportation legislation remains a hot topic at both the state and federal levels. Neither legislative leaders nor administrative officials at either level have surrendered in the battle to secure adequate public funding for transportation; leaders have chosen to enact short-term bills in lieu of long-term legislation that is under-scaled. The desire to avoid tax increases during a recession is the primary reason cited for the delay in enacting multi-year legislation.
- Further, transportation enjoys a unique and elevated status in the report of the Commission on Deficit Reduction in December 2010. While reduced federal discretionary and defense spending overall is a cornerstone of the report’s recommendations, trust fund increases – including a near-doubling of the federal gas tax – is recommended to underpin federal highway and transit funding.

## Conclusions

Events since adoption of the New Visions 2030 plan are consistent with the range of funding scenarios anticipated for the 2005-2030 period. Nothing that has occurred is sufficient cause for abandoning the reasonable, modest, balanced New Vision plan or the assumption that – through peaks and valleys, fits and starts – federal, state and local legislation will help meet the financial requirements of the plan. State funding is tight; stimulus funding was a windfall. Legislation has not been passed, but the desire to find adequate funding is real. This story is consistent with the budget assumptions of the New Visions 2030 plan. The New Visions 2035 plan thus does not require a revision to the long-term budget plan, nor an adjustment to estimates of budget requirements for each project category.

The current situation, however, does call for two clear areas of thought and activity for CDTC and its members over the coming year or two:

1. Reaffirming the steady progress precept. Discussions may need to portray current fiscal challenges as a call for a diet, rather than a call for a retreat. A diet brings to mind a healthy concern for balance, smaller

portions and the elimination of excess. This image is helpful in preserving the steady progress approach and achieving necessary cost savings. In contrast, retreat brings to mind abandonment of goals and cutting of losses. In large institutions, retreat is more easily embraced than a diet. It may be a role for the CDTC forum in the near future to champion the diet image to decision-makers.

2. Providing information in response to funding initiatives. The New Visions 2030 plan states, “*While it is reasonable to anticipate that funding will be available over coming decades to carry out all elements of the New Visions plan, it is imperative that CDTC and its members work with all interested parties at the federal, state and local level to explore prudent and timely actions to secure these funds. Discussion of “big ticket initiatives” must occur simultaneously with discussion of budget gaps for the basics. It may be necessary to link the “urgent” with the “desired” to elicit sufficient public support for legislative action to provide the necessary resources.*” This critical effort remains unfinished and more urgent than when first stated.

## Proposed Further Treatment for the 2040 Plan

As CDTC pursues the New Visions 2040 plan, it will be appropriate to fully revisit its financial plan. In addition to confirming or adjusting the basic structure of the financial plan and CDTC’s adopted finance-related principles, estimates for the annual average financial budget and anticipated resources will require new values. By the time of the 2040 update, CDTC will have had over fifteen years’ experience with its unique approach to defining system preservation and prioritizing (a steady progress of) system improvements. National and state-level climate action plans will also help shape CDTC’s fundamental review of budget requirements. The following areas will require a particularly greater level of attention than that given since development of the original plan:

1. Transit system scale – the New Visions plan commits to preservation of existing services with only modest incremental improvement. The 2040 plan update will be an appropriate forum to review CDTA’s successes in implementing New Visions service concept and the obstacles faced and to consider the fundamental role of continued – and possibly, more significantly expanded – transit services in the region.
2. Bicycle and pedestrian network – similarly, the New Visions plan represents a strong commitment to begin to address deficiencies in treating bicyclists and pedestrians with the same expectation of service quality as the motorist. After fifteen years’ track record, the scale of commitment and pace of improvements can be thoroughly re-examined.
3. Operations – the original New Visions plan made a bold leap into the Intelligent Transportation Systems (ITS) and operations arena. Looking forward to 2040, the plan update will present an opportunity for CDTC to reassess and redefine the role – and budget commitment toward – system-wide, real-time, reliable travel information and operations.

4. Pavement and Bridge approach – the original New Visions plan committed to a steady practice of reconstructing the federal aid system to new (that is, multi-modal, ADA-compliant, community-compatible) facilities consistent with CDTC's congestion management principles. The pace of major highway projects has been slower than anticipated at the time. The New Visions 2030 plan further upped the ante by also committing to a thirty-year plan for reconstruction the majority of the major highway system and its bridges. While the New Visions 2035 plan's budget is arguably sufficient to achieve these goals, CDTC will need to seriously explore contingency plans for alternative treatments if funding continues to lag behind the budget requirements for

major work. Contingency plans would include stretching out reconstruction plans by additional decades, trimming some of the system (as in closing low-volume bridges), and revising congestion management principles further to be even more conservative regarding capacity investments.

5. Funding alternatives – Depending upon the progress in Albany and Washington regarding adequate long-term financing options, CDTC may need to engage in a region-wide dialogue with community leaders and the public regarding local options for additional funding mechanisms for highway, transit and other needs such as public private partnerships, user fees, gas tax and sales tax add-ons, etc. as have been adopted in other regions throughout the country.

## Quality Region, Land Use/Transportation, and Integrated Design

### Background

The New Visions Plan recognizes the critical importance of land use and development. CDTC has sponsored the Linkage Planning Program which provides funding for cities, towns and villages to prepare community-based transportation and land use plans consistent with New Visions principles. Where and how the region's communities plan and design the places we work, live, and shop can have a real and direct impact on the region's arterial and collector street system. A comprehensive arterial management program that promotes properly located and spaced driveways and signalized intersections, use of raised medians, and emphasizes connected streets, sidewalks, and transit access, in the end, will provide a safe and efficient arterial street system and quality communities. At the regional level, CDTC has evaluated regional growth patterns and concluded that development which is transit-oriented and concentrated around centers holds the best hope for regional quality of life and a sustainable transportation system.

The ability of cities to play a regionally-optimal role in the future is challenged significantly by circumstances and by larger-than-regional policies that provide an uneven playing field. Significant efforts are required on the part of many parties to improve the ability of cities to participate in the future economy of the region and prepare suburban and rural communities to leverage development pressures to achieve community sustainability, livability and identity. The outcome is not likely to be successful without altering practices of the past.

The New Visions 2030 Plan calls for urban reinvestment, concentrated development patterns, and smart economic growth. The Plan provides clear evidence for supporting efforts to address the mismatch between highway function and financial responsibility within the region's cities. Such an effort would build on both CDTC's long-standing principle of access to resources based on need and function, not ownership and CDTC's long-standing objectives for urban revitalization and economic health.

The New Visions 2030 Plan responds to regional voices who have described the desirability of planning for a quality region: a region that develops and sustains healthy urban, suburban, and rural communities that function interdependently and readily adapt to change; a region that creates economic, educational, social, cultural and recreational opportunities and provides safe neighborhood environments and housing choices for all; a region that protects sensitive environmental resources and fosters community identity and "a sense of place" in all parts of the region. The relationship between land use planning and transportation is central to the Plan, which calls for urban investment, concentrated development patterns, and smart growth.

The New Visions 2030 Plan supports integrated design, arterial management, and complete streets. Integrated design means using transportation investment as a way to improve the community rather than as a way to get through the community. Integrated transportation planning and community design considers transportation and community planning in an integrated fashion. Such a program supports a "complete streets" approach where arterials are designed and operated to enable safe access for all users.

### What's Changed Since the 2030 Plan was approved in 2007

Examples of accomplishments since the 2030 Plan was approved are listed below. These projects and studies were a result of the CDTC New Visions Plan and illustrate implementation of the New Visions Planning and Investment Principles.

- Route 5 was rehabilitated in the City of Schenectady with The American Recovery and Reinvestment Act of 2009 (ARRA) funds. A section of the project area, which extended from Washington Avenue to Balltown Road and also included transit station/ADA improvements in coordination with CDTA's Route 5 BRT project, included a road diet on State Street in Schenectady from Fehr Avenue to just west of Balltown Road. A center lane turn lane was provided with one through lane in each direction. Complete street features and ADA compliance were incorporated.
- Phase 1 of the Fuller Road Reconstruction project was completed in the Town of Guelderland and the City of Albany, including sidewalks, four foot striped shoulders in some sections, and a roundabout at Tricentennial Drive. Phase 2 of the project, in the City of Albany and the Town of Colonie, and a project to construct a roundabout at the intersection of Washington Avenue and Fuller Road in the City of Albany, are underway.
- The Relocation of Maxwell Road, incorporating sidewalks and a new roundabout at the intersection of Maxwell and Albany Shaker Road in the Town of Colonie was completed. This project is a critical element in completing a functional service road system for Wolf Road. Service roads are considered a successful arterial management treatment. This project was an ARRA funded project through the CDTC TIP.
- The Slingerlands Boulevard was completed between North Bethlehem and the City of Albany and the intersection of New Scotland Road and Cherry Avenue Extension in the Town of Bethlehem. This project was based on community planning and supportive of economic development. Four roundabouts were included, and traffic was diverted from New Scotland Road. This project included the

construction of sidewalks on New Scotland Road. Roundabouts helped slow speeds, making this part of Slingerlands more walkable.

- The Round Lake Bypass was built to support the development of the Luther Forest Technology Park and to protect community quality of life in the Village of Round Lake.
- Delaware Avenue in Albany was reconstructed with special attention in design to community compatibility and complete street features, including sidewalk bulb-outs and shared lane markings or “sharrows”. This project, funded with ARRA funding through the CDTC TIP, represented an example of urban investment.
- 19<sup>th</sup> Street (Route 2) was reconstructed in the City of Watervliet. Complete street features including pedestrian accommodations were incorporated. This project was an ARRA funded project through the CDTC TIP.
- The Congress Street reconstruction project in the City of Troy, Phase 1, was completed. The project included complete street features and will support mixed use economic development in the City of Troy.
- New roundabouts were built at Curry Road/Carman Road in the Town of Rotterdam, Schoolhouse Road/Krumkill Road in the Town of Bethlehem, Fuller Road/Tricentennial Drive in the City of Albany, Sand Creek Road/Colonie Center Service Road in the Town of Colonie, Route 67 in Malta.

The American Recovery and Reinvestment Act of 2009 (ARRA) funds provided opportunities to implement livability and complete streets features in the Capital District.

The CDTC Linkage Planning Program has been used to complete a significant number of land use/transportation community planning studies since the New Visions 2030 Plan was approved. These studies represent partnerships with local communities to implement the New Visions Plan. Linkage studies completed or underway since 2007 include the following:

- Albany (City) Bicycle Master Plan
- Altamont Bicycle/Pedestrian Master Plan
- Bethlehem Delaware Avenue Hamlet Enhancement Study
- Bethlehem Route 9W corridor Study
- Broadway (Village of Menands) Transportation, Access and Land Use Study
- Clifton Park Town Center Plan
- Clifton Park/Halfmoon Exist 9 Land Use and Transportation Plan
- Cohoes Van Schaick Island Transportation and Revitalization Plan
- Guilderland Westmere Corridor Study
- Guilderland/Princeton Land Use and Transportation Study
- Mechanicville Central Corridors Linkage Study
- Neighborhood Master Plan for the Hamlet of Guilderland Center (Town of Guilderland)
- New Scotland Hamlet Area Master Plan

- North Swan Street Multimodal Accessibility Study (City of Albany)
- Railroad Avenue Corridor Study (Albany County/Towns of Colonie and Guilderland)
- Rotterdam Five Corners Land Use and Transportation Study
- Rotterdam NY 7 & NY 146 Land Use and Transportation Study
- Rotterdam NYS Thruway Exit 26 & I-890 Land Use and Transportation Study
- Route 32 Redevelopment Plan (City of Watervliet/Town of Colonie/ Village of Menands)
- Sand Lake Hamlet Linkage Study
- Schaghticoke Route 40 Corridor Study
- Schenectady (City) Route 5 Transit Gateway Study
- Schenectady (City) Route 5 Transit Oriented, Mixed Use Catalyst Project Study
- Scotia Waterfront Concept Study
- Wilton Exit 16 Linkage Study

The NYSDOT GreenLites Program is a NYSDOT self-certification program that distinguishes transportation projects and operations based on the extent to which they incorporate sustainable choices. NYSDOT project designs and operations are evaluated for sustainable practices and an appropriate certification level is assigned. NYSDOT uses GreenLites to incorporate transportation sustainability into their projects and operations, this ensures NYSDOT works to:

- Protect and enhance the environment
- Conserve energy and natural resources.
- Preserve or enhance the historic, scenic, and aesthetic project setting characteristics.
- Encourage public involvement in the transportation planning process.
- Integrate smart growth and other sound land-use practices.
- Encourage new and innovative approaches to sustainable design, and how facilities are operated and maintained.

CDTC in partnership with the Capital District Regional Planning Commission (CDRPC) continued to develop the Sustainable Development/New Visions Guidebook for planning boards, zoning boards and local officials. The goal of the guidebook is to present local examples through fact sheets on projects, plans and programs that best incorporate smart growth principles to illustrate that these kinds of efforts can be undertaken in the Capital Region and describe how they came to be. Complementing the projects are examples of regional development strategies that can be utilized to support good project design at the local level. The Linkage Forum continues to be used as a sounding board on the project which will be completed in the early part of 2011. Website design is underway. A brief brochure will be prepared to highlight the web material.

In June 2009 U.S. Secretary of Transportation Ray LaHood, U.S. Secretary of Housing and Urban Development Shaun Donovan, and U.S. Environmental Protection Agency Administrator Lisa P. Jackson

announced an interagency Partnership for Sustainable Communities to help improve access to affordable housing, more transportation options, and lower transportation costs while protecting the environment in communities nationwide. They outlined six livability principles to guide this partnership. The six livability principles include:

1. Provide more transportation choices.
2. Promote equitable, affordable housing.
3. Enhance economic competitiveness.
4. Support existing communities.
5. Coordinate policies and leverage investment.
6. Value communities and neighborhoods.

The CDTC New Visions Plan supports this definition of livability in many ways, and CDTC practice has been recognized in three national case studies sponsored by USDOT in the last year as an example of using regional planning to support livability.

CDTC won a [FTA/FHWA/APA award](#) from the 2010 Transportation Planning Excellence Awards (TPEA) Program for the Linkage program.

The Smart Growth and Public Infrastructure Priority Act (Chapter 433 of the Laws of 2010) went into effect in New York in the fall of 2010 and requires state agencies responsible for infrastructure and all state authorities to evaluate public infrastructure projects they fund or undertake against ten Smart Growth Criteria. If projects are not consistent with these Smart Growth Criteria, the agency or state authority must document justification for why the infrastructure project should proceed. The law also requires these agencies to create smart growth advisory committees to ensure state sponsored infrastructure spending: advances sustainable development; doesn't result in sprawl development; and involves a consultation process with residents, environmental groups, local officials and other stakeholders.

Proposals for complete streets legislation were advanced in the New York State Legislature in 2010, however a bill has not yet been passed. Complete Streets legislation would apply to all roads eligible for State and Federal funding and would require that pedestrian and cyclist accommodations be considered in the planning, design, and construction of all road projects receiving state or federal funds. Complete streets legislation would provide a stronger foundation for implementation of New Visions strategies and actions and would further encourage local communities to incorporate complete streets approaches into their municipal policies and road improvement and maintenance programs, such as the resolution recently adopted by the [Town of Bethlehem](#). Bethlehem's policy states it is "the intent of the Town of Bethlehem Complete Streets Policy is to recognize bicyclists and pedestrians as equally important as motorists in the planning and design of all new street construction and street reconstruction undertaken by the Town."

## Conclusions

Support for integrating transportation planning and land use planning has increased over the last three years at the State level with the passage of smart growth legislation. At the federal level, support for principles of sustainability and livability has served to further validate the New Visions Plan. At the community level, the CDTC Linkage program continues to confirm the direction of the plan. The New Visions 2035 Plan will continue to strongly support land use planning, urban reinvestment, concentrated development, and smart growth. CDTC will continue to partner with local communities through Linkage Studies to support the regional land use and development vision. CDTC continues to support integrated design, and complete streets.

## Proposed Further Treatment for the 2040 Plan

During the comprehensive update of the New Visions Plan, beginning in 2012, CDTC will explore further opportunities to reach out to Capital District communities.

The New Visions strategies and actions include the following: "Revise NYSDOT's project scoping and development procedures manual to allow increased flexibility in the design process". There is still a disconnect between New Visions planning principles and the project design process. Incorporating complete streets treatments into projects already occurs, and is supported by NYSDOT policy, but is constrained in scope and extent because of rules laid out in NYSDOT's Design Manual and Project Development Manual (formerly the Environmental Action Plan). For example, designing roads to achieve auto level of service D in the peak hour in 2035 or 2045 may conflict with the CDTC Congestion Management Process and the concept of a complete street. Designing roads to how fast drivers want to travel (i.e. 85th percentile speed) rather than what the community wants the speed to be can work against the concept of a complete street. The development of the 2040 Plan will provide an opportunity to explore ways to improve the integrated design process. Working with NYSDOT partners and other project implementers specific policies, strategies and actions needed to improve and implement the integrated design process will be pursued.

In 2010, the Capital District Regional Planning Commission submitted a grant application to the US Housing and Urban Development agency or HUD for development of a Capital District Sustainable Communities Plan to build off the policies of the existing New Visions Transportation Plan, particularly related to its land use/smart growth strategies, and also including a broader set and deeper treatment of additional issue areas such as affordable housing, workforce development, homelessness and the local food supply. To develop that plan, CDRPC pulled together a consortium of agencies, institutions, and groups within the region. While the grant was not awarded in this recent round of funding, there are aspects of the proposal that can be explored further and potentially incorporated into New Visions 2040 plan development.

First and foremost among these is the development of a Pattern Book for the purposes of providing our region's communities with a visual and graphic toolkit illustrating ways to implement New Visions principles related to integration of land use and transportation, walkable communities at the neighborhood, street and parcel level. Other components which could be considered include the Sustainable Housing Plan and the Sustainable Economy Plan; a Smart Growth Model Land Use Code; a Green Infrastructure Plan; a Sustainable Region Housing Plan; and a Community Food Assessment.

To support the New Visions 2040 update, CDRPC will utilize its geographic information system or GIS to document and assess land development patterns in the Capital District between 1997 and 2010. This will involve utilizing a combination of satellite, ortho-photography, and tax parcel data, along with field visits and interviews with local town/city planners. This information will help to guide development of the proposed Pattern Book.

## Infrastructure

### Background

The highest priority of CDTC's New Visions Plan is to maintain the Capital District's infrastructure, including all federal-aid roads and highways, and all state and locally owned bridges<sup>1</sup>. In order to help properly maintain these assets, CDTC together with the New York State Department of Transportation (NYSDOT) and some local municipalities, conduct regular surveys of the condition of Capital District roads. Bridge inspections are exclusively conducted for all area bridges by NYSDOT. Based on this information, CDTC has been able to identify those facilities that are in the greatest need of repair, and to develop a program to schedule those repairs.

The New Visions 2030 development included the use of a *Transportation Finance Task Force*. The task force consisted of representatives from the New York State Department of Transportation (NYSDOT) Main Office and Region One, CDTA, the New York State Senate, the Schenectady County Legislature, two local consulting firms and several local governments (city, county, town and village). The *Transportation Finance Task Force* included as part of its work, updates to the infrastructure part of the New Visions plan. The New Visions 2030 plan includes the products of the task force.

### What Has Transpired Since Adopting New Visions 2030

**Construction Inflation:** A major consideration in the New Visions 2030 update was the impact of construction inflation on the ability to finance infrastructure and other work, mostly because it had increased drastically and without much warning in the three or four years prior to the inception of this task force. The task force determined the magnitude of the inflation, its impacts on the recent past, and projected its impacts on the future. Since that time, construction inflation has tapered off to a more traditional rate.

**Funding:** The majority of federal funding in the Capital District is spent on the preservation of roads and bridges. Over the last five years, more than \$446 million (federal, state, and local) has been invested in the region's (federal-

aid eligible) roads and bridges<sup>2</sup>, including resurfacing, rehabilitation or reconstruction of about 300 lane-miles of pavement and repair or reconstruction of 47 bridges. Notable bridge projects include \$58M for the Batchellerville Bridge in Saratoga County and over \$40M for the Exit 6 Bridge over I-87 in Albany County. State and local highway funding, as well as transit funding, has experienced a combination of fiscal squeezes and one-time stimulus programs. Significant growth in real terms has not occurred (see the Financial Plan discussion).

**Maintenance Strategies:** Given the atmosphere of a shortage of funding, the strategy to perform the lesser expensive and short lasting repairs continues to be in effect for most roads and bridges. This maximizes the pavement condition benefit of funds at least in the short term. As a result, the New Visions strategy of reconstructing significant portions of the expressway system has not been performed. CDTA has transitioned to its continuous fleet replacement strategy, but funding gaps in the overall transit capital program are present.

**Road & Highway Condition:** As shown in Table 1, federal-aid roads held their own between 2005 and 2009; at the risk of overstating subtle trends, the data indicate that slight declines in locally-owned federal-aid pavement conditions are more than balanced by modest improvement in overall state pavement conditions. The CDTC sample-based estimate of the conditions of the region's non-state non-federal-aid system shows improvement from 2004 to 2008, but is likely that trends vary considerably from municipality to municipality and differ by level of municipality.<sup>3</sup> While funding constraints have not caused noticeable decline in pavement conditions, little progress has been made toward the New Visions 2030 goal of significant reconstruction of the expressway system that will range from 50 to 85 years of age by 2035. Additionally, financial "triage" has prevented the state and others from even programming necessary work on a number of roads in poor or low-fair condition; as a result, pavement conditions on state owned arterials on the NHS system appear to be more similar to those on locally owned arterials than to conditions on the Interstate system.

---

<sup>1</sup> *Federal-aid roads are typically the most heavily traveled routes and are functionally classified as arterials or collectors, serving both regional and inter-municipal travel needs. The remaining streets, classified as local, primarily serve property access. Roads on the federal-aid system are eligible to compete for certain categories of federal transportation funds through CDTC's Transportation Improvement Program. Federal-aid designation does not guarantee that the cost of roadway resurfacing or reconstruction will be covered by the Region's federal-aid resources.*

---

<sup>2</sup> *Many of the road and bridge maintenance projects include either new, or repairs to existing, bicycle and pedestrian facilities.*

<sup>3</sup> *CDTC rate the condition of a 100% sample of Albany City and Albany County roads annually; trends show slight decline (city) and general stability (county) of pavement condition.*

**Table 1**  
**Current Road & Highway Condition Compared to New Visions 2030 Update**  
**For All Roads & Highways in the Capital District By Ownership<sup>4</sup>**

Road Type	Lane-Miles	2004/05		2008/09		New Visions Goal	
		Percent Poor/Fair	Percent Poor+Fair	Percent Poor/Fair	Percent Poor+Fair	Percent Poor/Fair	Percent Poor+Fair
Federal-Aid							
New York State	2,850	10/37	47	8/32	40	13/20	33
Non-State (NSFA)	1,668	19/28	47	20/34	54	14/20	34
All Federal Aid	4,518	13/34	47	12/33	45	---	---
Non-Federal Aid							
Local	10,764	27/23	50	19/27	46	15/20	35
State	166	10/52	62	6/48	54	15/20	35
All Roads	15,448	23/27	50	17/29	46	---	---

**Table 2**  
**Current Bridge Condition Compared to New Visions 2030 Update**  
**For All Bridges in the Capital District By Ownership<sup>5</sup>**

Ownership	Number of Structures	Deficient Structure					
		2006		2010		2018 Forecast	New Visions Goal
New York State:							
NYSDOT Interstate	148	30%	(44)	38%	(56)	47%	24%
NYSDOT Non-Interstate and OGS	360	33%	(116)	34%	(123)	31%	20%
NYS Thruway	69	24%	(16)	35%	(24)	24%	24%
Local	348	30%	(104)	32%	(110)	39%	20%
Other	19	---	---	47%	(9)	---	---
All Bridges	944	30%	(283)	34%	(322)	40%	22%

**Table 3**  
**Capital District Bridge Deficiencies Expressed in Terms of Bridge Deck Area**

Ownership	Deck Area (Square Feet)	Deficient Deck Area				New Visions Goal
		2006	2010		2018 Forecast	
New York State:						
NYSDOT Interstate	3,057,278	65%	70%	(2,160,259)	68%	11%
NYSDOT Non-Interstate and OGS	4,452,460	47%	54%	(2,389,332)	36%	20%
NYS Thruway	1,166,339	---	55%	(644,586)	---	---
Local	1,014,578	45%	40%	(404,542)	37%	20%
Other	111,429	---	69%	(77,103)	---	---
All Bridges	9,802,084	---	58%	(5,675,822)	---	---

<sup>4</sup> New York State highway mileage and pavement condition data is derived from NYSDOT's 2005 Sufficiency Rating and 2009 Pavement Summary Table provided by NYSDOT. Information for non-state federal-aid and local non-federal aid roads was derived from CDTC's Pavement Condition Inventory. Non-state federal-aid data is based on 2005 and 2009 surveys. Local non-federal data is based on 2004 and 2008 pavement survey. NYS federal-aid data include highways under New York State Thruway jurisdiction.

<sup>5</sup> Information in this table was derived from NYSDOT's Annual Bridge Reports for 2005 & 2009. Values shown in parentheses in the table represent number of structures. NYSDOT defines a deficient bridge as one with a condition rating less than 5 on a 1-7 scale. A deficient condition rating indicates the presence of sufficient deterioration and/or loss of function to require corrective maintenance or rehabilitation. It does not mean that the bridge is unsafe. The federal bridge rating scale (not reported here) distinguishes between 'structural deficiency' and 'functional adequacy'. According to the federal scale, only about 25% of deficient bridges identified by NYSDOT can be considered 'structurally deficient'. Even then, federally identified 'structurally deficient' bridges are not necessarily considered unsafe.

**Bridge Condition:** CDTC staff reviewed bridge condition by ownership and compared current known conditions to the conditions at the time of the New Visions 2030 update and the goals of the 2030 plan. Overall, conditions worsened somewhat, consistent with forecasts developed in the 2030 plan update, giving back some of the gains achieved in prior years towards the long-term bridge condition goals of the plan. Since 2006, the number of deficient bridges increased from 30 percent to 34 percent of all bridges.

NYSDOT also expresses the magnitude of deficiencies for bridge deck area. Deck area normalizes for bridge size, giving a better basis for calculating cost-to-repair. In terms of deck area, Table 3 shows about 58 percent, or 5.7 million square feet, of total Capital District bridge deck area is considered deficient and in need of some type of repair. Of the region's 148 interstate bridges under the jurisdiction of NYSDOT, roughly 38 percent are considered deficient and 70 percent of the deck area is considered deficient.

**Transit Conditions:** CDTA's capital investment, on the whole, has kept pace with that of the New Visions 2030 plan. While capital budget gaps continue (projects on the TIP that seek or require additional capital funds), CDTA has succeeded with its transition to a program of routine fleet replacements and has made inroads with both vehicles and station improvements for BRT. Constraints and reductions in operating resources continue to be a much greater issue constraining service improvements.

**Intermodal Facilities:** Major capital investment at the Rensselaer station, Saratoga Springs station and the Albany International Airport were complete prior to adoption of the New Visions 2030 plan. Investment in these facilities, particularly the airport, has continued. Plans for rehabilitation or reconstruction of the Schenectady station are in place with partial funding in hand, and double-tracking and Livingston Avenue bridge rehabilitation has secured ARRA funding. The Port of Albany is well underway with wharf improvements, in part due to CDTC's support for ARRA highway funding – the only MPO in the state to offer such support for port projects.

## Conclusions

**Construction Inflation:** The New Visions 2030 Update incorporated the drastically increased inflation leading up to the update into the costs of repairs, but did not assume that it would continue at that pace. Instead, it was assumed that costs had been bumped up and more reasonable inflation would occur from the levels of those new, higher, costs. CDTC staff analysis shows that this is consistent with what has happened in the three years since the 2030 Update, requiring no adjustment to unit cost assumptions in the plan. (See also the Financial Plan discussion.)

**Funding (Traditional and Additional):** Funding levels have not increased substantially but continue to be a hot topic at state and federal levels; the New Visions 2030

long-term funding assumptions remain valid (see the Financial Plan discussion).

**Maintenance Strategies:** Short term changes to repair strategies would not be expected to have significant long-range effects. If budget-driven, lower-cost repair strategies were expected to be in place over a long term period, it would require updates to the data of the Highway Condition Project Model (HCPM), and new projections would need to be made. As stated above, the New Visions strategy of reconstructing significant portions of the Interstate system has not been performed. Since very little could have been done in the first three years of the period since the 2030 Update was approved, this is not cause for alarm. However, if this were to continue, the effects of it would need to be studied and incorporated into the next long-range plan. For the present, the New Visions 2030 policies remain valid.

## Proposed Further Treatment for the 2040 Plan

As with any long-range plan update, during the 2040 Plan Update, the following will need to be updated and incorporated into new cost and condition projections: cost of repairs (which are affected by construction inflation), funding (which could change in the next federal or state multi-year funding legislation), repair strategies and their effects, transit fleet and station treatments and intermodal facility needs. In particular, some focus will need to be placed on the reconstruction of Interstates, the scale and pace of other high cost infrastructure renewal projects and the relationship between transit operating funds and capital plans.

In addition to pavements and bridges, maintaining culverts is essential to the safety, reliability, and longevity of the region's roadway infrastructure. Many aging culverts have deteriorated beyond the point where they can withstand maximum flow, while others have filled with sediment, reducing their capacity and causing them to overtop prematurely. State-owned culverts are inspected by NYSDOT in a manner similar to bridges. Currently, of the 1,109 large culverts maintained by NYSDOT in the Capital District, 228, or 20 percent are rated structurally deficient<sup>1</sup>. Consideration should be given to conducting a comprehensive inventory of culverts maintained by region's counties, towns, and villages.

Consideration should also 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.

---

<sup>1</sup> The data for Region 1 reported here is considered subject to change based on new inspection data. Currently, of the 6,000 large culverts maintained by NYSDOT statewide, about 2,100 are rated structurally deficient.

Additionally, CDTC will re-examine its sampling approach to estimating the condition of non-federal-aid roads. It is possible that the variety of road types and the variety of municipality types calls for a larger or differently-structured sample to increase confidence levels in the results.

## Transit

### Background

Transit provides travel options, increases mobility and can support economic development. The 2030 New Visions Plan incorporated CDTA's Transit Development Plan which outlined a path to improve and grow a variety of transit services for the Capital District. "Big ticket" initiatives outlined a vision of potential further investment in BRT and fixed guideway transit systems as a means of supporting regional growth.

### What's Changed Since the 2030 Plan was approved in 2007

- Ridership on CDTA rose 22% as people faced \$4.00 per gallon fuel prices in 2008. There were 250,000 more boardings in April of 2008 than April of 2007. Most of the new riders had cars but couldn't afford the gas prices. The Route 5 Corridor between Schenectady and Albany and Route 22 between Troy and Albany had the most significant growth in ridership although ridership in general increased on all the routes. Increases in ridership remained fairly steady even when gas prices fell—proving that people are willing to change their driving behavior if a convenient, reliable and affordable alternative is available. Despite this trend in ridership, CDTA was forced to increase fares from \$1.00 to \$1.50 in April 2009. The cost of monthly bus passes increased by about 50% as well. A streamlined fare policy was implemented. The weak economy, combined with reductions in federal and state funding for mass transit left CDTA with a funding gap that threatened their ability to provide the level of service this region demands and deserves—at a time when more people than ever were using public transportation.
- Bus Rapid Transit- In 2007, the region made the decision to support Bus Rapid Transit or BRT in the Route 5 corridor (called "BusPlus"). Although large deficits loom, CDTA, with the support of CDTC board members, decided that they could not afford to walk away from the commitment to BRT. Bus Rapid Transit (BRT) combines the best features of rail with the flexibility and cost advantages of bus service. With BRT, buses travel on roadways with limited stops and signal priority to transport passengers quickly and efficiently.

The Route 5 BRT project is advancing. Twenty eight of the thirty six paired BusPlus shelters, serving the 18 limited stops along the entire route, have been built thus far. Agreements for several park and ride lots along the BRT corridor have been signed. The new service is easy to identify with a distinctive silver and red color scheme on buses, signs and stations. Construction of signature stations for the new BusPlus service began in 2009 in Albany, Colonie and Schenectady and has been substantially

completed. Later in 2011, modern bus and station technology will combine with transit signal priority at designated intersections to provide efficient limited-stop transit service to major workplaces, shopping destinations and residential areas along this heavily-traveled route. Over the next few years, when all the system elements are added, BusPlus will be the most convenient way to travel along Route 5. The BusPlus service was successfully rolled out on April 4th, 2011.

The Washington/Western Avenue Bus Rapid Transit Conceptual Design Study has been completed. CDTC supports CDTA's effort to initiate the Alternatives Analysis portion of the Federal New Starts process which could lead to project funding.

The combined Washington Avenue and Western Avenue Corridor is regionally important as the Capital District's second most heavily traveled transit corridor (after Route 5) with 2.5 million annual rides and includes a number of the Capital Region's most significant transit ridership generators including downtown Albany, UAlbany, and the Crossgates Mall. There is a significant student population in the corridor due to the proximity of the College of Saint Rose and the two UAlbany campuses with the main student neighborhood in the region located along Western Avenue between Lake Street and Allen Street. In addition, a number of major commercial mixed use redevelopments are located in the corridor including the Harriman Technology Park (formerly the Harriman State Office Campus), the NanoTech campus, and the Patroon Creek Office Park. The Conceptual Design Study developed three concept level alternatives; a full scale Alternative Analysis will provide further exploration and needed details.

- In 2008, the Capital District North/South Corridors Key Travel Market Assessment Study was commissioned by the High Speed Rail Task Force and CDTA and completed in early 2009. This study looked at existing and potential future transit travel markets along the north/south corridors throughout Albany, Rensselaer, Saratoga, Schenectady, Warren, and Washington counties.

The consultants considered a spectrum of BRT systems and looked at the market potential using CDTC's 2030 New Visions alternative growth future scenarios. The report concluded that:

- With the possible exception of the CP Rail Corridor, due to the relatively low return on ridership for a high transit investment, light rail should be deferred from consideration at this time for transit.
- For the US 9 and I-87 corridors, improvements to the existing NX Service and local bus services appear to

be sufficient to meet future demand. Managed lanes would be an option to prioritize transit.

- The River Corridor appears to have high potential benefits. Existing transit in this corridor enjoys high ridership, and transit improvements could reach new markets.
- Route Structure Improvements- Over the past two years, CDTA engaged in a major evaluation and update of their route structure. The purpose of this effort is to establish a new routing network that better aligns services to demand because where people live, work, shop and travel has changed dramatically over the years. The planning for the new route systems is based on ridership data, future developments, and most importantly, input from riders and residents. Route restructuring has been taking place county by county, with revisions to the Saratoga Springs routes occurring first. Ridership nearly quadrupled since that route restructuring took place. More recently, refinement of the Transit Development Plan for Schenectady was completed, and an effort to refine the TDP for Albany was initiated. Ridership has increased on Schenectady routes since the routes were restructured. The Albany restructuring should be complete by the end of 2011.
- The City of Albany is also currently working with CDTA to develop a Transit-Oriented Development zoning ordinance in the City's transit intensive corridors: NY5 (State/Central), Washington/Western Avenues and Route 32/Broadway. In addition to the TOD zoning ordinance, a TOD Guidebook will be developed and can be used throughout the Capital Region. This initiative will progress in 2011.

## Conclusions

Although budget issues have been challenging because of reductions in federal and state funding for transit, strong increases in ridership, especially in 2008, have reaffirmed the importance of transit and have validated the New Visions Plan's support of transit. Transit contributes to congestion management, air quality and energy savings; transit offers an alternative travel mode, reducing auto dependence; and transit provides essential mobility for those who do not operate a private vehicle. Major investments in transit such as the [BusPlus](#) project are integral to the New Visions policies on urban reinvestment, regional growth and economic development. The New Visions 2035 Plan continues CDTC's commitment to transit services and recognizes the importance of transit investment to the Capital Region.

## Proposed Further Treatment for the 2040 Plan

The development of the New Visions 2040 Plan will begin at the end of 2011 and will be a multi year effort that will give CDTC the opportunity to engage the public and stake holders in a broad and comprehensive dialogue about the Plan.

During the 2040 update, CDTA will continue to build upon the Route 5 BRT and will make a decision about implementing a BRT on Washington/Western Avenues. CDTA's concept of a 100 miles of BRT will be reviewed. Funding alternatives will be explored. The TDM and bicycle/pedestrian efforts will complement transit development. An update to the transit propensity index based on 2010 Census data will be undertaken.

Increasing investment in public transportation will pay dividends to the entire region. An investment in CDTA will:

- Create and sustain jobs and reduce our business and energy costs in the long
- term. Every \$1 invested in public transportation generates an average of \$6 in
- economic returns.
- Clear the air. Traffic congestion in the Capital Region is costly and wastes 2.8
- million gallons of fuel each year. By riding CDTA buses, we can save 2.6
- million gallons of gas, and reduce emissions by nearly 26,000 tons a year.
- Provide more mobility choices for future generations—by guiding the
- rebuilding of our street and highway infrastructure in ways that make them
- more efficient, effective and transit-friendly.

In recent years, budget constraints have slowed the implementation of BusPlus and other service improvements. If resources remain significantly restrained for transit, the 2040 Plan update will need to consider implications for long term transit system goals. Potential actions to address funding shortfalls should be considered. Additional revenue sources may need to be explored, including local revenues such as a sales tax increase.

## Congestion Management, Arterial Management and Expressways

### Background

The New Visions 2030 Plan incorporates the CDTC “Congestion Management Process” (CMP). The CMP recognizes that congestion is worst in the AM and PM peaks; and that the most unbearable congestion is related to incidents, especially on the expressway system. An accident during rush hour on the Northway can back up traffic for hours. The CMP calls for an emphasis on managing congestion—rapid clearing of incidents, information for travelers to avoid incidents, and taking advantage of technology (Intelligent Transportation Systems) including signal timing and coordination. The CMP also relies on travel demand management and encourages transit, pedestrian and bicycle travel. The Plan identifies the future option of managed lanes on the expressway system. An example of a managed lane could be a “HOT” lane on the Northway—a premium service lane that allows carpoolers for free, other drivers for a toll, and allows transit service to bypass congestion. A HOT lane is identified as one of the unfunded “big ticket initiatives” in the Plan.

One of the conclusions of the analysis performed for the New Visions 2030 Plan is that there is no feasible capital improvement such as widening that can eliminate daily recurring congestion in the peak periods. ITS, incident management and operational improvements represent the most effective strategies for expressway congestion management. The CDTC Regional Operations Committee will continue to explore operational improvements to manage traffic.

Arterial management has been, and will continue to be an important tool to improve transportation system performance in the Capital District. A comprehensive arterial management program that promotes properly located and spaced driveways and controlled intersections, use of raised medians, and emphasizes connected streets, pedestrian and bicycle treatments, and transit access, in the end, supports a safe and efficient arterial street system for all users and enhances a community’s quality of life – both of which are key to every community’s economic base.

The New Visions 2030 Plan supports the development of good access management programs that provide uniform standards and procedures, and that promote their fair and equal application. The New Visions 2030 Plan recommends that the CDTC staff continue to work with State, county, and municipal governments in arterial management planning.

### What’s Changed Since the 2030 Plan was approved in 2007

- *The Hudson River Crossing Study* was completed in 2008. The study evaluated traffic demand and operations for river crossings and made

recommendations for pedestrian and bicycle facilities across the Hudson River. The study recommended that capacity should not be increased on the Patroon Island Bridge, which supported the NYSDOT decision to rehabilitate the bridge rather than replace the bridge.

- *The Route 5 Arterial Management Study* was completed. A key set of products resulting from this study were designed to provide easy to understand, transferable tools for local development review boards in requiring access management at the site plan and broader corridor level. Other study objectives included providing a means for better coordination on access management issues across jurisdictions (i.e. municipalities/NYSOT) and to identify opportunity sites for short to medium term implementation of access management techniques. Specific study products included:
  - The NY 5 Access Management Plan Report
  - A Site Plan Review Access Management Checklist
  - An Access Management Toolbox
  - “Opportunity Site”/Study Area Recommendations for the Route 5 corridor
  - Sample Zoning Text
  - A Powerpoint Presentation focusing on benefits of access management to various roadway users, businesses and communities for use in education and outreach to Municipal Planning Boards and others throughout the Capital District
- *The Northway Integrated Corridor Management (ICM) Study* was initiated. Incident Corridor Management is the comprehensive management of freeway, transit, arterial, and parking systems within a corridor using intelligent transportation system (ITS) technologies and innovative practices. The ICM for the Northway corridor will examine the Northway, Route 9 and connecting routes, as well as transit service and arterial management. Incident detection and verification, emergency response, management of on-site emergency personnel, clearance of vehicles and debris, and recovery to normal traffic flow will be examined and improved. Opportunities to improve transit service in the corridor will be integrated into corridor operations.
- Exit 6 of the Northway was reconstructed as a single point urban interchange, resulting in a significant improvement in traffic operations at the interchange. Pedestrian and bicycle access was significantly improved.
- The CDTC Congestion Management Process (CMP) was recognized in the FHWA document *Congestion Management Process: A Guidance Document*, as a national case study. The way in which the CDTC CMP incorporates livability was highlighted.
- The CDTC Regional Operations Committee has developed a proposal for a regional operations initiative which would provide technical traffic

engineering and corridor planning services for municipalities supportive of maintaining traffic signal systems and other operations. The regional operations initiative has not yet been funded by CDTC due to limited funding.

- The City of Albany in partnership with NYSDOT has requested CDTC to conduct a planning study for the I-787 Corridor. This effort would be intended to answer questions regarding: (1) the short term and long term infrastructure needs for this facility; (2) the opportunities for alternative designs to reduce long

term infrastructure costs and/or improve transportation-community compatibility; and in the context of long term needs, (3) near-term access improvements to support the City's downtown and waterfront economic development initiatives.

- The following table illustrates the status of major projects, including congestion management capacity projects and community compatibility/economic development capacity projects.

**Table 1: Major Projects, Congestion Management Capacity Projects and Community Compatibility/Economic Development Capacity Projects**

Project Title	Total Cost (millions of dollars)	Project Type	Status
A240, Exit 3/Exit 4	43.912	Infra, CMP, Com/Econ	Project is nearing final design
A372, Watervliet Shaker Road, Sand Creek to New Karner	6.435	CMP	Project is being advanced by Albany County and the Town of Colonie.
A295, New Karner Road	17.275	Infra, CMP	Albany County plans to implement recommendations of the Pinebush Transportation Study Update of 2004
A290, Selkirk Bypass	8.104	Com/Econ	Town is pursuing Thruway Interchange, which would expand this project beyond Plan commitment
A392, Wolf Service Road (Maxwell Phase 2)	2.748	CMP	Phase 1 complete
SA108, S96 Balltown	37.916	Infra, Com/Econ	Project is being developed by NYSDOT
SA109, S120 Glenridge Road	15.137	Infra, CMP	Construction expected in 2011
S97, Route 50/Freemans Bridge Road	16.000	Infra, CMP	Cost and scope to be refined; funding is not shown in the TIP.
R173, I-90 Exit 8 Connector, Phase 2	90.000	Com/Econ	Demo funding (\$16.362M) is insufficient to complete project; change in scope is being explored; Plan support contingent on demo funding
A345, Bypass for Elm St. Industrial Access	5.675	Com/Econ	Project has not advanced beyond initial scoping
R195, South Troy Industrial Access road	6.648	Com/Econ	Project scope recently revised in the latest TIP
A491/R268 Patroon Island Bridge	100.000	Infrastructure	NYSDOT has decided to progress this project as a bridge rehabilitation project; the cost estimate is preliminary.
SA104, Batchellerville Bridge	58.000	Infrastructure	Bridge replacement; contract awarded

1. All costs in millions of dollars.

2. CMP stands for "Congestion Management Process". CMP projects are consistent with CDTC's Congestion Management Principles -- including addressing critical levels of congestion, integration with demand management strategies, compatibility with the community character and plans and expectation of local land use management.

3. "Com/Econ" refers to projects which address economic development and community compatibility purposes.

4. "Infra" stands for "infrastructure"

## **Conclusion**

The New Visions Plan recommendations on Congestion Management have been reaffirmed by USDOT emphasis on livability in transportation. The maintenance plan will continue with an emphasis on management and operations. CDTC will renew the Congestion Management Process approved in 2007, as well as the 10 Congestion Management Planning and Investment Principles. CDTC will continue to support the Transportation Management Center (TMC), ITS and operations projects.

## **Proposed Further Treatment for the 2040 Plan**

CDTC used a rich data source in the development of the New Visions 2030 Plan, called the MIST data set (Management Information System for Transportation). This data set, maintained by NYSDOT, provides information on speeds, volumes and incidents for each expressway lane, 24 hours a day, 365 days a year. This data set was used to develop a reliability performance measure for congestion management. In the 2040 Plan update process, this data set can be used to further refine CDTC's understanding of traffic flow and congestion.

Such analysis can be used to enhance and expand the capabilities of the CDTC STEP Model.

The MIST data is only available on selected segments of the expressway system. Emerging technologies and data collection systems based on using cell phones as probes hold the potential of significantly expanding the information available to CDTC for upgrading the STEP Model and increasing our understanding of congestion. Speed and delay data will be collected in greater detail and integrated into the CDTC Congestion Management Process. These data sets and their potential can be explored during the next generation Plan update. Improved data sets can also be used to improve day to day operations in managing the transportation system.

The 2040 Plan update will be able to take advantage of the completion of *The Northway Integrated Corridor Management (ICM) Study*. Opportunities to expand Integrated Corridor Management to other corridors in the region will be explored.

The 2040 Plan update will include a reassessment of major projects, congestion management capacity projects, and economic development/community compatibility capacity projects for status and priority.

## Bicycle/Pedestrian Transportation

### Background

Bicycling and walking are not just leisure activities; they are viable modes of transportation and mobility for many people throughout the Capital District. Most people agree that walking and bicycling help reduce pollution, traffic delays, and fuel usage. The benefits of walking and bicycling do not end there. In addition to enhancing quality of life measures, walking and bicycling have proven to provide important and much needed health benefits, as well as having a positive impact on economic development.

CDTC has made a strong commitment to improving bicycle and pedestrian facilities. This means incorporating ADA compliant sidewalks and pedestrian crossings, and bicycle lanes in highway construction projects; encouraging site design by developers that provides high quality pedestrian access; developing bike/hike trails; encouraging the incorporation of bicycle and pedestrian accommodations into city, village and town plans. One of the currently unfunded “big ticket initiatives” described in the Plan presents a vision for a regional greenways program that would result in 280 miles of bike-hike trails linking parks, natural areas, cultural features, historic sites, neighborhoods and retail areas.

The Policy Board approved the bicycle and pedestrian portion of New Visions 2030 which can be found at <http://www.cdtcmo.org/rtp2030/materials/bp-doc.pdf>

### What’s Changed Since the 2030 Plan was approved in 2007

There have been huge advances in bicycle and pedestrian planning since 2007, especially in terms of safety and education.

#### Capital Coexist

In April 2010, CDTC launched a localized bicycle education campaign, *Capital Coexist* (<http://www.capitalcoexist.org>). Capital Coexist was developed in response to the completed Albany Bicycle Master Plan and public requests for bicycle safety and education material.

#### Regional Bike Rack Program

CDTC staff worked closely with CDTA to develop the first regional [Bike Rack Program](#). The 2010 program was a success with more than 300 new bike racks being distributed. The program is expected to continue in 2011 using TDM funds.

#### NYS Pedestrian Action Plan/Statewide Bicycle and Pedestrian Advisory Committee

CDTC staff has played a major role in representing the NYSMPO Association on a committee looking to develop a statewide Pedestrian Action Plan. This Plan has been funded through the Governors’ Traffic Safety Committee

and includes a wide array of stakeholders. Staff has also represented the MPO Association on the NYSDOT Statewide Bicycle and Pedestrian Advisory Committee.

#### Linkage Planning Studies

The overwhelming majority of Linkage Program planning projects undertaken by CDTC with regional and community partners completed since 2007 consider bicycle and pedestrian issues, needs and potential improvements in development of their conceptual improvement plans. Some notable projects have included:

- **Altamont Pedestrian and Bicycle Plan:** In 2009, CDTC assisted the Village of Altamont in development of this plan with the main objective of establishing and expanding bicycle and pedestrian linkages between the Village’s primary destinations and neighborhoods via creation of a non-motorized network plan.
- **City of Albany Bicycle Master Plan:** December 2009 marked the completion of this plan that established a hierarchy of routes and identification of networks to advance the vision of the City to have bicycling a viable mode of transportation.

#### Bicycle and Pedestrian Issues Task Force

The Bicycle and Pedestrian Issues Task Force continued to meet on a monthly basis, providing technical and policy suggestions to the Planning Committee and Policy Board. Each month, the Task Force discusses on-going Linkage projects and is encouraged to review and provide feedback on draft materials as well as participate in public forum meetings. Individual members of the Task Force are very involved with AARP’s efforts to develop Complete Streets.

There are on-going discussions to improve the communication between the Task Force and the Planning Committee and Policy Boards.

#### Transportation Improvement Program (TIP)

CDTC was heavily involved in the **Transportation Enhancement Program** and the new SAFETEA-LU program, **Safe Routes to School**. Staff participated in the review, evaluation, and prioritization of the received applications.

Since New Visions 2030 was adopted, the Capital Region received funding for four Enhancement projects (2008). There were some concerns from the Planning Committee and Policy Board related to how projects were prioritized during the evaluation process. Staff has been working with NYSDOT Main Office to address these concerns and make suggestions to DOT Executive Management for statewide improvements to the Enhancement Program during the next solicitation.

CDTC continued its support of the **Spot Improvement Program** by increasing the funding availability during the 2010-2015 TIP update to \$250,000 per year. Unfortunately, CMAQ funding levels were over programmed resulting in a delay of the 2010 solicitation. This program has grown and is essential to getting small scale bicycle and pedestrian projects built that would normally fall under the radar of projects considered for federal aid.

The Spot Improvement Program has been able to fund a large variety of small-scale bicycle and pedestrian projects. In 2008, six projects were funded with continued emphasis of ‘filling gaps’ while maintaining geographic balance.

The Safe Routes to School Program provided an excellent opportunity for municipal/school district partnerships to be created to better the bicycle and pedestrian travel environment. In the first round, six projects were awarded funding in NYSDOT Region 1.

The ‘newness’ of the SRTS program meant there was a learning curve for NYSDOT and the MPO’s. There have been concerns about the distribution of the non-infrastructure funds. Staff is actively participating in a statewide task force to iron out existing concerns and to improve the overall program.

#### Additional Activities

CDTC is collaborating with several stakeholders to ensure that any rehabilitation to the Livingston Avenue Bridge include accommodations for bicycles and pedestrians. In addition to the Livingston Avenue Bridge, CDTC has participated in several regional forums that discuss bicycle and pedestrian issues.

Some progress has been made in implementing components of the *Greenway Concept Plan for the Capital Region*. See the *Big Ticket Initiatives* section for progress details.

#### American with Disabilities Act (ADA)

NYSDOT recently completed a draft-for-public-review [ADA Transition Plan](#) which includes information on ADA compliance status of NYSDOT facilities, including the state-owned pedestrian network. The plan outlines the steps and timeframe required to render the network compliant, with compliance defined as accessible by individuals with disabilities. To develop the ADA Transition Plan, NYSDOT undertook an extensive inventory of all state-owned sidewalks and produced region by region detailed listings and summaries of facilities needing improvement. The summary for Region 1 indicates 81% of the region’s pedestrian network is currently considered accessible, with a 100% compliance goal to be reached by 2019. A number of ARRA funded projects within the CDTC planning area included bringing pedestrian facilities along transit routes into ADA compliance in coordination with road resurfacing/rehabilitation projects and the NY5 BRT project. The ADA also requires municipal entities to develop ADA Transition Plans for their public facilities, including pedestrian facilities.

## **Conclusions**

The level of interest in improved bicycle and pedestrian facilities has greatly increased at the federal, state, and local levels. The New Visions 2035 Plan continues CDTC’s strong commitment to bicycle and pedestrian issues. Significant progress has been made in implementing bicycle pedestrian improvements, however, the needs are still great. As state and federal fiscal issues evolve, funding for bicycle and pedestrian improvements will be an important issue during programming discussions.

New Visions continues to highlight the importance of complete streets and the community health benefits of bike-ped improvements. Staff and the Task Force continue to build upon existing ideas. The Capital Coexist campaign will continue to serve as a bicycle education and safety tool.

## **Proposed Further Treatment for the 2040 Plan**

During the 2040 update, CDTC will continue to build bicycle and pedestrian related partnerships.

The Game Plan and Toolbox that was approved as part of New Visions 2030 will require significant updating to incorporate Capital Coexist and the other on-going tasks and projects. It is felt that the bicycle and pedestrian priority network that was established as part of TEA-21 and periodically updated needs to be revisited to make it more prominent and viable when making transportation funding decisions.

The 2040 plan will include additional data collection and inventory analysis of bicycle and pedestrian facilities, potentially including an ADA compliance inventory of the local pedestrian network as a complement to what NYSDOT recently completed for the state-owned system and similar to how CDTC conducts the Highway Pavement Condition Inventory. The possibility of using interactive mapping on the CDTC website will be explored.

The Bicycle and Pedestrian Issues Task Force has indicated the desire to increase the New Visions Plan funding commitment for bicycle/pedestrian improvement projects. This issue can be further explored in the 2040 Plan update process.

# Safety

## Background

New Visions 2030 lays out a clear strategy to meet a long-standing goal of improving the safety of the transportation system for all of its users both in response to new federal requirements and recent developments in the state of the practice. The plan relies on an integrated, multi-modal approach to safety planning. This approach not only supports the continued use of traditional safety countermeasures on high speed facilities (clear zones, rumble strips, etc.), where appropriate, but also encourages the “Complete Streets” concept (where arterials, collectors and local roads are designed and operated to enable safe access for all users). In addition, the approach supports the use of innovative design techniques such as 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 have a real impact on driver behavior and
- designing improvement projects in sync with surrounding community context can help encourage responsible driving behavior.

Taken together, this approach will help reduce the level of risk for the region’s most vulnerable users of the transportation system, namely bicyclists, pedestrians, children and the elderly.

## What’s Changed Since the 2030 Plan was approved in 2007

### NYSMPO Safety Working Group

CDTC staff has been heavily involved with the New York State MPO Association on safety issues through the Safety Working Group (SWG). CDTC staff has chaired the SWG since 2008 and has been actively involved with the group since it began in 2005. This high level of involvement is necessary to help build the capacity of not only CDTC staff but of all of New York’s MPOs to integrate safety into the planning process.

Since 2007, SWG activities have resulted in:

- direct training of CDTC staff on subjects such as Road Safety Audits, Older Drivers, Designing Pedestrian Safe Streets, and the AASHTO Highway Safety Manual.
- development of Safety Assessment (SA) Guidelines for local roadways which outline a process to improve safety on all types of local transportation facilities for all types of users. Completed in 2009 through a NYSDOT State Planning and Research grant in partnership with the MPO Association, these Guidelines have been promoted to CDTC’s member

agencies as a low cost tool to review and improve safety.

- the opportunity for the MPOs and especially CDTC to be at the table on safety related issues in NYS as the state implements the Strategic Highway Safety Plan, which was updated in early 2010 with SWG and CDTC staff involvement.
- an FHWA Highway Safety Improvement Program (HSIP) Peer Exchange hosted by the SWG at the MPO Annual Meeting in June 2010 through FHWA’s HSIP peer to peer program. The Louisiana DOT, the Mid-Ohio Regional Planning Council and the Delaware Valley Regional Planning Commission along with the NY MPOs, DOT and others participated in this one day event to share information on local safety planning initiatives. A summary of the event can be found at <http://safety.fhwa.dot.gov/p2p/ny/>.

### NYS Traffic Safety Information Systems Strategic Plan

New York State, through the Governor’s Traffic Safety Committee (GTSC) and the Institute for Transportation Safety Management and Research (ITSMR), implemented a multi-year strategic plan to improve the state’s traffic records systems. Updated annually, with an extensive update to be complete by June 2011, the NYS Traffic Safety Information Systems Strategic Plan addresses:

- deficiencies in state data systems such as crash, roadway, and vehicle data systems.
- changes to these systems to address issues such as data access, timeliness and quality.

The Strategic Plan process allows for federal funds through GTSC to be designated for projects that improve traffic records systems, specifically and significantly improving the safety data systems in NYS since 2007. CDTC staff has been actively involved in this process representing the SWG on the Traffic Records Coordinating Council.

### Accident Location Information System (ALIS) crash data application

In 2009, NYSDOT introduced the ALIS crash data application which was largely funded through the traffic records strategic planning process. This internet accessible database, that uses Geographic Information System technology, provides much more detail regarding the location of crashes on the off-state system, as well as the state roadway system, and allows for a direct download of crash data into other software types for additional analysis. The application includes two modules: the Location Editing/Simple Query Report (LESQR) and the Query Reporting Analysis (QRA). CDTC staff assisted NYSDOT on the development of the QRA module.

CDTC has used the ALIS application:

- to continue its work on the safety pilot project in Rensselaer County which is intended to analyze crashes on county and locally owned roadways to

identify locations of interest for additional safety analysis, perhaps through a Safety Assessment. This pilot project is intended to provide a model for the region in the development of a formal safety management system for CDTC.

- in the Transportation Improvement Program project evaluation process to calculate safety benefits.
- to identify existing safety issues in study areas of Linkage Program planning initiatives.
- in the evaluation process for projects ultimately programmed in the 2007-2012 TIP, for which CDTC established and programmed two safety related regional set-asides: RG104: Intersections, Queue Jumpers and Roundabouts Set-Aside (\$5.0 M) and RG105: Safety Set-Aside for Non-State Roads (\$7.52 M). Seven projects were funded through these set-asides. In addition, the 2010-2015 TIP update process led to the programming of three additional safety related projects.

Over the past three years much has also been achieved on bicycle and pedestrian safety and education. The details are described in the summary on bicycle and pedestrian issues but a few highlights include the launch of a localized bicycle safety education campaign, *Capital Coexist* ([www.capitalcoexist.org](http://www.capitalcoexist.org)) in April 2010 and CDTC's direct involvement in the Safe Routes to School program which funded four projects in the Capital Region.

ITS was identified in the New Visions 2030 Safety plan as important to improving safety in the Capital District. Much has also been achieved on operations and ITS (Intelligent Transportation Systems) since 2007. The details are described in the summary on Congestion, Arterial Management and Expressways.

## Conclusions

The progress made since 2007 has validated the principles, strategies and actions related to regional safety planning in New Visions 2030, the first long range regional transportation plan that dealt with the new era of safety planning as required in SAFETEA-LU. While much of the last three years has been spent in capacity building, the New Visions 2035 plan will continue to support this important aspect of safety planning and positions CDTC to be prepared for the future.

## Proposed Further Treatment for the 2040 Plan

It has been speculated nationally that the next federal transportation bill, in whatever form it takes, will have even more emphasis on safety than SAFETEA-LU. Therefore, the efforts undertaken on safety through the 2035 plan will position CDTC to quickly react to any future changes in federal safety policy for the 2040 plan. In addition, through the work of the Safety Working Group (SWG), CDTC will be looking at best practices in performance measurement for safety, an issue that has gained increased attention at the

federal level. CDTC will also continue to make progress on its safety initiatives, further integrating safety into the planning process and will continue to work with NYSDOT on identifying safety projects for the use of Highway Safety Improvement Program funds on important local system locations/programs.

The TIP evaluation process for new projects utilizes a benefit/cost ratio as a key consideration and safety benefits are one of the input values. With improved crash data access and an improving [national dataset on crash reduction factors](#) CDTC staff will continue to monitor updates to this dataset and to explore a refinement of the safety benefit calculation for the TIP.

## Travel Demand Management - TDM

### Background

The New Visions Plan continues to call for a variety of programs and initiatives aimed at managing travel demand. Park and Ride lots, encouraging car pooling and vanpooling, telecommuting, staggered work hours, employer based programs, guaranteed ride home, and support of use of non-auto modes such as transit, bicycling and walking are strongly supported by CDTC.

CDTC has made a strong commitment to designing and implementing Travel Demand Management or TDM programs. \$525,000 in Congestion Mitigation Air Quality (CMAQ) funds is programmed annually to support TDM activities. CDTA, the region's transit authority, has access to the funds and in cooperation with CDTC staff, identifies, designs and implements a variety of pilot and permanent TDM programs. The effectiveness of each program is assessed, and CDTA drafts an annual summary report highlighting all of the TDM programs.

### What's Changed Since the 2030 Plan was approved in 2007

A plethora of TDM activities have been advanced since the New Visions 2030 Plan was approved in 2007. CDTA created a "TDM Specialist" position within their organization for the purpose of developing and monitoring TDM programs and for reaching out to potential partners. These activities include:

#### Transit Pass Subsidies

One of the earliest efforts to promote transit with subsidies was a program targeted to New York State employees. Through this program:

- CDTA provided transit pass subsidies for members of the Professional Employees Federation (PEF) and the Civil Service Employees Association (CSEA).
- participants received a 25% discount (higher than offered through CDTA's regular Corporate Program) on the purchase of CDTA monthly bus passes (Swipers).
- Set a principal goal to establish a permanent commuter benefit program because of the high percentage of state employees in the Capital Region workforce. The transit subsidy program was very popular among state employees. However, the goal of establishing a permanent commuter benefit program was not achieved.
- CDTA then transitioned to an approach to continue the deep discount when the 3-year sunset on the use of CMAQ funds for the program came, until the inception of NYS-Ride program, which is a pre-tax commuter transit pass program for New York State employees.

#### Carpool/Ride Matching

In 2008, TDM monies programmed in the TIP were used to upgrade the Commuter Register on-line carpool information website to a GIS based platform, powered by GreenRide. At that time, a re-branding of the Commuter Register occurred, with the site renamed "iPool2" to complement CDTA's iRide campaign.

The [iPool2.org](http://iPool2.org) website:

- is designed to be a one-stop for all commuter related information.
- contains information on Park and Ride Lots (with Google maps for directions), Transit Services, and the Guaranteed Ride Home (GRH) Program. The GRH program was partnered with Access Transit, so that taxi rides are scheduled and pre-paid for by Access Transit, eliminating the requirement (except for after hours situations) for users to pay for an emergency ride home out of pocket and complete paperwork for reimbursement.
- has resulted in the creation of over 1,000 iPool2 accounts with the estimated number of carpools formed eliminating over a million miles of VMT and reducing about 400 tons of greenhouse gas emissions. Prior to the iPool2 platform, the Commuter Register averaged about 40 carpool ads per year.

#### Van Pools

In the spring of 2009, CDTC, CDTA, and the Albany Downtown BID partnered with VPSI, a national vanpool firm, and submitted a successful proposal to the New York State Energy Research and Development Authority (NYSERDA) to start a vanpool pilot project in the Capital Region.

The NYSERDA grant is used to subsidize the cost of the vanpool lease by \$500 per month and to do limited marketing, with the project partners supplying an in-kind match by marketing the program to area employers and individual commuters.

By March 31, 2011 fourteen vanpools were in operation. Each vanpool drives an average of 70 miles per day. With the longest commute of 95 miles and the shortest commute of 28 miles, the program has resulted in the elimination of about 760,000 miles of vehicle travel (VMT). The VMT data can be reported by CDTA to the National Transit Database (NTD). As a result, CDTA, which already reports to the NTD for Urbanized Area Formula funding for current bus service, will garner additional funding to go toward vanpooling. Because there is a two-year delay in receiving funding from the start of a vanpool service, the NYSERDA contract bridges the gap between the initiation of the program and the arrival of formula funding.

#### Additional TDM Programs

The [Occasional Use Parking](#) program is a partnership of CDTA, CDTC and the Albany Parking Authority which:

- allows Swiper transit pass holders to park up to 5 times per month in pocket lots located along Central Avenue, at the WAMC public lot at Central and Quail, and at the Quackenbush parking lot.
- using “Smart Meters” to track use and prevent fraud, allows CDTA customers the flexibility to drive to work on occasions when they need their personal vehicle, increasing the attractiveness of becoming a regular transit rider.

#### LINK

A long standing program, the LINK, provides free transfers to the CDTA system with a “LINK” Ticket to commuters arriving in the Capital District from a long-distance bus carrier, thereby encouraging bus commuting by allowing a free local connection to Capital District destinations. LINK also increases CDTA ridership and the viability of the long-distance carriers, resulting in a monthly average of 4,200 rides in 2010.

#### TMA

With the aid of a consultant, CDTA and CDTC staffs investigated the feasibility of a Transportation Management Association (TMA) in the Harriman Campus area. A TMA is a non-profit, member-controlled organization that promotes alternative modes of transportation in a particular area, such as a commercial district, mall, medical center, university campus, or industrial park. Surveyed employers indicated an interest in participating in a TMA; however, lack of traffic congestion, a clear champion, and stakeholder funding commitments significantly detracts from the likelihood of success at this point in time. The consultant recommended creation of a Transportation Coordinator Network as an informal TMA program, to demonstrate private sector leadership.

#### Additional CDTA Transit Pass Subsidies

Three programs provide free unlimited access 31-day rolling passes for CDTA fixed route services; participants are required to complete entrance and exit surveys to track each program’s effect on travel behavior:

- Homeowners’ Incentive Program
- Transit for Refugees and Immigrants Program
- Sustainable Housing Partnership

#### Regional Park and Ride

In early 2009, CDTA commissioned a consultant study of the existing park and ride lot infrastructure. The scope of work, crafted by CDTA and CDTC staff, includes an inventory of existing lots and their usage, determination of potential express transit service markets and identification of potential site locations for the development of additional park and ride facilities for transit, carpooling, and vanpooling.

#### Price Chopper AdvantEdge for Transit

In March 2010, an innovative pilot partnership with Price Chopper created a bus pass version of Price Chopper’s very

popular Fuel AdvantEdge Program. CDTA sells passes and tickets to Price Chopper at the 10% corporate discount. CDTA bus riders redeem Fuel AdvantEdge Points for discounts on bus passes, a \$2 discount is “equivalent” to each 10¢ fuel discount earned. CDTA and Price Chopper equally split the difference on pass and ticket sales that receive a discount greater than the 10% corporate discount. Recently, the program expanded and transit passes are now sold at all 42 Price Chopper stores in the Capital Region. This promotional effort addresses a number of objectives to make transit more attractive, including a long-term increase in the number of sales outlets, discounts for new and loyal riders, and a significant increase in the visibility of transit.

#### TDM Website

In November 2010 CDTA, in partnership with CDTC, was awarded a NYSERDA grant to develop a TDM website to increase awareness of various transportation modes and illustrate the impact of single-occupancy vehicle use on the transportation system and environment. CDTA and CDTC will work with Zone 5, a web and graphic design firm, to create the site which will include:

- an emissions calculator
- alternative transportation amenity maps
- vanpool routes
- photo and video galleries
- CDTA service advisory alerts.

The implementation of this website will have a positive impact on the existing transportation infrastructure and economic well being of the Capital District, while also helping protect the environment by increasing the visibility and appeal of existing resources that reduce pollution and consumption of energy resources.

#### **Conclusions**

With recent and expected continuing emphasis on the NYS Climate Action Plan and NYSDEC Climate Smart Communities program, of which several Capital District municipalities are now part, the marketing and outreach efforts of the 2035 Plan’s TDM strategies as continued from the New Visions 2030 Plan, sync well with the recommended actions of those two efforts to reduce greenhouse gas emissions.

The New Visions 2035 Plan strengthens CDTC’s commitment to transportation demand Management Programs. The strong record of implementing past plans via the TIP, resulting in significant annual allocations to support these TDM activities, has provided an established foundation for their continuation, producing a tangible set and variety of benefits to the region’s transportation system, quality of life, and environment.

#### **Proposed Further Treatment for the 2040 Plan**

During the 2040 update, CDTC will continue to build TDM programs and will continue to market them to area employers. The iPool2 website, powered by GreenRide, will be upgraded to GreenRide’s newest platform, GreenRide Connect, which will provide many user

enhancements to the existing iPool2 site. The NYSERDA grant for the vanpool pilot is expiring, so a heavy emphasis on marketing the vanpool program, with the help of NYSERDA's consultant, Action Research, will use results from an employer survey to identify employers that would be willing to entertain promoting vanpooling and carpooling to their employees. The Regional Park and Ride lot consultant study will provide recommendations for additional lots, additional express transit services, and transit priority on highways. These recommendations will be incorporated into the 2040 New Visions Plan.

The 2040 plan will present valuable statistics on the effectiveness of transit pass subsidies, vanpool subsidies, programs that make transit more attractive and parking policies.

## Demographics and Performance Measures

### Background

The Capital District Regional Planning Commission (CDRPC) conducted an in depth analysis of the demographic distributions and land use patterns for four scenarios to test the impacts of growth:

- Status Quo Trend- CDRPC's baseline forecast (9% growth in population, 15% growth in households by 2030, current development patterns continuing); this is the official Plan forecast;
- Concentrated Growth- the baseline growth rate with more concentrated development patterns resulting from urban reinvestment and suburban planning;
- Trend Hyper-Growth- hyper-growth (29% population growth and 35% household growth by 2030), with in trend patterns of dispersed development;
- Concentrated Hyper-Growth- hyper-growth occurring in a concentrated pattern resulting from more urban reinvestment and suburban planning.

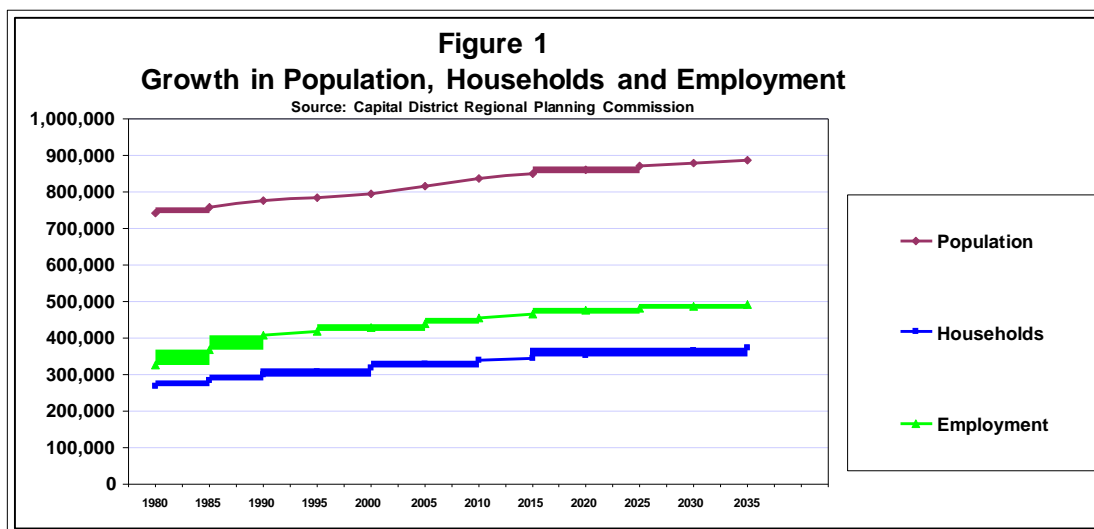
Under any growth scenario, it was found that the benefits of concentrated development patterns are significant for the transportation system and for regional quality of life. The New Visions Plan supports and encourages concentrated development in the Capital District. The urgency for coordinated, high quality planning is even greater under a scenario of high growth. This urgency will be necessary

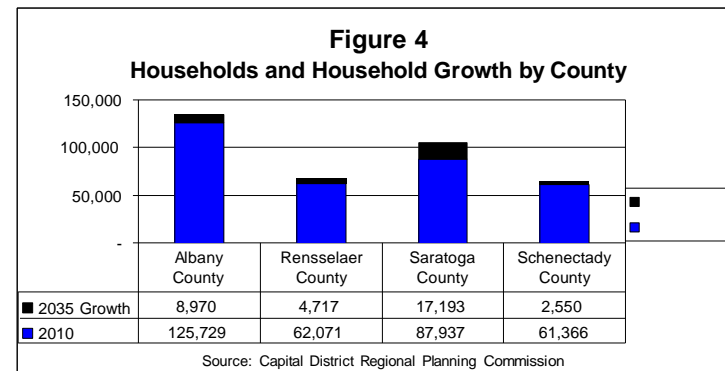
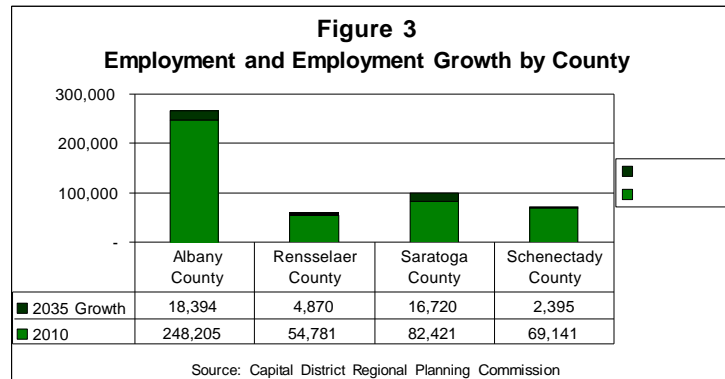
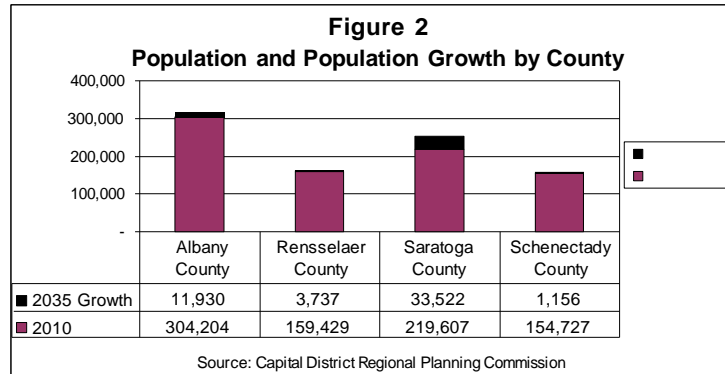
because the impacts of a high growth scenario with dispersed development patterns would threaten to make the region's quality of life unsustainable.

### What's Changed Since the 2030 Plan was approved in 2007

The Plan needs to be updated to include a new horizon year for future forecasts. CDTC has selected 2035 as the new horizon year. Forecasts of population, households and employment for 2035 were prepared by CDRPC. Adjustments were made at the county level to reflect the new 2010 Census population numbers. CDRPC demographic forecasts through 2035 are shown in Figure 1 for the Status Quo Trend Scenario. The STEP Model was used to forecast values for 2035 for the New Visions performance measures.

Population, households, and employment are forecast to grow modestly between 2030 and 2035; population and employment are forecast to grow by 1.0 %, and employment is forecast to grow by 1.6 % over the five year period (see Figures 1 through 4). Because the growth between 2030 and 2035 is modest, the analysis of future alternatives using 2030 forecasts is still valuable, and growth to 2035 does not change any of the future growth scenario conclusions. Therefore, CDTC performance measures were updated to 2035, and qualitative results for the 2030 growth scenarios are also shown. See Tables 1 and 2.





**Table 1**  
**New Visions System Performance Measures**  
**Summary of Existing and Future Conditions**

Selected Core Measures		2000 Conditions	2010 Conditions	2030 New Visions Plan With "Status Quo" Development	Qualitative Summary 2030 Plan Impacts	2035 New Visions Plan With "Status Quo" Development	2030 Alternative Futures		
							Concentrated Growth	Trend Hyper Growth	Concentrated Hyper Growth
Transportation Service									
ACCESS	Percent of PM Peak Hour Trips Transit Accessible	17.2%	× × □	15.2% (2015)	× × □	× × □	✓ □	× × × × □	✓ ✓ ✓ □ *
	Percent of PM Peak Hour Trips With Transit Advantage	0.37%	× × □	0.33% (2015)	× × □	× × □	✓ □	× × × × □	✓ ✓ ✓ ✓ □ *
	Percent of PM Peak Hour Trips Accessible by Bicycle	28.9% (1995)	× □	26.4% (2015)	× □	× □	✓ □	× × × × □	✓ ✓ ✓ □ *
ACCESSIBILITY	Travel Time between Representative Locations by Quickest Mode; see Table 2; Sample Time: State Office Campus to Northway Exit 10 (minutes, PM Peak)	36.4	42.8	47.4	× × × □	48.5	× □	× × × × □	✓ ✓ ✓ □ *
CONGESTION	PM Peak Hour Recurring Excess Person Hours of Delay	6,605	8,057	10,878	× × × × □	11,464	× × □	× × × × □	× × × × □ *
	Excess Person Hours of Peak Hour Delay Per PMT x 1,000	3.1	4.2	4.5	× × × □	4.7	× × □	× × × × □	× × × × □ *
	Excess Person Hours of Peak Hour Delay Per person x 1,000	8.3	9.8	12.6	× × × × □	13.1	× □	× × × × □	× × × × □ *
FLEXIBILITY	Reserve Capacity on the Urban Expressway and Arterial System (PM Peak Hour Vehicle Miles of Capacity)	1,255,211	1,250,754	1,179,184	× □	1,165,450	✓ □	× × □	✓ ✓ ✓ □ *
Resource Requirements									
SAFETY	Estimated Annual Societal Cost of Transportation Accidents, Millions of Dollars (\$M)	New safety performance measures are under development							
ENERGY	Fuel Consumption (Thousands of Gallons per Day)	1,086	1,166	793	✓ ✓ □	806	✓ ✓ □	✓ □	✓ ✓ ✓ ✓ □ *
ECONOMIC COST	Annual Vehicle Ownership and Operating Costs for Autos and Trucks, Millions of Dollars (\$M)	\$3,391	\$3,701	\$4,182	× × □	\$4,248	× □	× × □	× □ *
	Other Monetary Costs of Transport: Highway and Transit Facilities and Service, Parking Facilities, Environmental Damage, Millions of Dollars (\$M)				× × □		× □	× × × □	× × □ *
External Effects									
AIR QUALITY	Volatile Organic Compounds (VOC) Emissions (kg per day)	25,287 (2002)	8,134 (2015)	5,034	✓ ✓ ✓ ✓ □	4,996	✓ ✓ ✓ ✓ □	✓ ✓ ✓ ✓	✓ ✓ ✓ ✓ □ *
	Nitrogen Oxides (NOx) Emissions (kg per day)	39,289 (2002)	10,631 (2015)	3,944	✓ ✓ ✓ ✓ □	3,627	✓ ✓ ✓ ✓ □	✓ ✓ ✓ ✓	✓ ✓ ✓ ✓ □ *
LAND USE	Residential Use Traffic Conflict: Miles at LOC "E" or "F"	82.4 (1990)	na	126.2 (2015)	× × × × □	× × × × □	× × × □	× × × × □	× × × □ *
	Arterial Land Access Conflict: Miles at LOC "E" or "F"	29.9 (1990)	na	49.5 (2015)	× × × × □	× × × × □	× × × □	× × × × □	× × × □ *
	Dislocation of Existing Residences and Businesses				× □		× □	× □	× □ *
	Community Quality of Life- Factors that reflect community quality of life in the central cities, inner suburbs, outer suburbs, small cities and villages, and rural areas.	Trends include warning signals. Proactive strategies will be required to impact trends.			× □	× □	✓ □	× × × × □	✓ ✓ ✓ □ *
ENVIRONMENTAL	Number of Major Environmental Issues to be Resolved to Implement Existing Commitments			21	× □	× □	× □		
	Greenhouse Gas Emissions (Tons per Day)	2,895	3,109	2,114	✓ ✓ □	2,149	✓ ✓ □	✓ □	✓ ✓ ✓ ✓ □ *
ECONOMIC	How does the transportation system support the economic health of the region?	Transportation makes possible much of the region's economic activity.		Status Quo Development patterns do not achieve the economic developme potential that can be achieved with concentrated growth		× □	✓ □	× × × × □	✓ ✓ ✓ □ *

## Table 1 Continued

✓ ✓ ✓ ✓	Positive impact greater than 50%, relative to 2000.
✓ ✓ ✓ □	Positive impact between 25% and 50%.
✓ ✓ □	Positive impact between 10 and 25%.
✓ □	Positive impact less than 10% or not quantified.
	Negligible impact expected.
✗ □	Negative impact less than 10% or not quantified.
✗ ✗ □	Negative impact between 10 and 25%.
✗ ✗ ✗ □	Negative impact between 25% and 50%.
✗ ✗ ✗ ✗ □	Negative impact greater than 50%, relative to 2000.
*	Indicates impact has been quantified.

**Notes:**

1. Recurring delay refers to delay experienced under normal traffic conditions, without incidents or unusual weather conditions.
2. Non-recurring delay refers to delay that results from incidents, weather conditions, or special events.
3. Excess delay refers to the amount of delay that occurs at level of service "E" or "F".
4. Trips are considered transit accessible if the trip can be made in a reasonable time, relative to the auto travel time (door to door). The year 2000 number was interpolated from 1990 and 2015 estimates developed by the CDTC Mode Choice Model; 2030 Plan with Status Quo growth was extrapolated from 1990 and 2015 estimates. Trips are considered to have a transit advantage if they can be made faster by transit than by auto (door to door).
5. Year 2000 number interpolated from 1990 and 2015 estimates developed by the CDTC Mode Model; 2030 Plan with Status Quo growth extrapolated from 1990 and 2015 estimates. For Concentrated Hyper Growth, it was assumed that transit service on the Northway would have a travel time advantage over auto users.
6. Trips are considered to be accessible by bicycle if they are within a reasonable distance by routes that can be traveled by bicycle.
7. Volatile Organic Compound (VOC) and Nitrogen Oxide (NOx) emissions are derived from the
8. MOBILE6 emissions model based on levels of vehicle travel, speed and congestion by link.
8. Residential Traffic Conflict: Miles at Level of Compatibility (LOC) "E" or "F" refers to the number of miles of major arterials with this rating. The LOC index was developed based on an inventory of residential driveways on major arterials and traffic volumes. LOC "E" or "F" ratings occur at arterial segments with frequent residential driveways and higher traffic volumes.
9. Arterial Land Access Conflict: Miles at Level of Compatibility (LOC) "E" or "F" refers to the number of miles of major arterials with this rating. The LOC index was developed based on an inventory of commercial driveways on major arterials and traffic volumes. LOC "E" or "F" ratings occur at arterial segments with frequent commercial driveways and higher traffic volumes.
10. Fuel consumption was estimated for years 2000 and 2010 using the NYSDOT methodology from 2003. For years 2030 and 2035, the methodology was modified to incorporate new CAFÉ (Corporate Average Fuel Economy) regulations that require fleet fuel economy for new vehicles to be 35.5 miles per gallon by 2016. Other increases in CAFÉ standards have been discussed, but have not been incorporated into this analysis.
11. Greenhouse gas emissions were estimated using the NYSDOT methodology that calculates greenhouse gas emissions as a function of fuel consumption.

**Table 2**

**Accessibility: Travel time (in minutes) between representative locations in the capital district by quickest mode**

	PM Peak Hour			
	2000	2010	2030 Base	2035 Base
Albany CBD to Troy CBD	19.0	19.3	21.2	21.6
Albany CBD to Schenectady CBD	30.8	31.9	33.9	34.4
Troy CBD to Schenectady CBD	31.7	32.6	33.3	33.5
State Office Campus to Exit 10 of the Northway	36.4	42.8	47.4	48.5
Selkirk Yards to Saratoga Springs	69.2	80.5	81.4	83.5
Saratoga Springs to Selkirk Yards	54.2	54.0	55.9	56.2
Amtrak Station to NY 20 / NY 155	20.3	20.8	21.5	21.6
NY 20 / NY 155 to Amtrak Station	18.4	18.7	19.3	19.4
Wolf Road to NY 443/Cherry Avenue	18.8	18.5	18.6	18.8
Albany County Airport to North Greenbush (NY 4 / NY 43)	17.4	17.8	18.8	18.9
Albany County Airport to Schenectady County Airport	29.1	32.0	33.7	33.8

Year 2010 official Census numbers have been released for the Capital District:

- They are very consistent with CDRPC forecasts of 2010.
- Future forecasts have been adjusted at the county level to reflect the new census numbers
- A more in depth analysis of the 2010 Census will occur in the context of the 2040 plan update.
- The 2010 Census numbers validate previous forecasts and indicate that all four counties—Albany, Rensselaer, Saratoga and Schenectady—grew in population between 2000 and 2010. All eight cities in the Capital District experienced population growth during the last decade.
- The Census info is certainly positive for the Capital District, both in confirming the growth forecasts we've been using and showing stability throughout the region. On a macro scale, the data reaffirms this region's status as the most stable over the past century. Of the more than 700 current metro areas in the nation (based on 2003 county combinations), the Capital District is the only one with a population over 250,000 in 1900 (there were about 40 at the time) to have seen population growth in each and every decade since then (NYC, Philly, Detroit, Cleveland, St Louis, Pittsburgh, Milwaukee, New Orleans, Buffalo, Dayton, Syracuse, Toledo, Springfield MA and Scranton have not) while seeing cumulative growth that does not exceed 100% over that period.
- The changes between 2030 and 2035 are not expected to significantly change the dynamics of the region, and are much smaller in magnitude than those evaluated in

the scenario planning. The alternatives future analysis is still very informative and useful and is incorporated into the 2035 Plan Update.

- New CAFÉ (Corporate Average Fuel Economy) regulations require fleet fuel economy for new vehicles to be 35.5 miles per gallon by 2016. Based on this change, forecasts of future fuel consumption and greenhouse gas emissions have been revised. CDTC is now forecasting a reduction in fuel consumption and greenhouse gas emissions by 2035, even though auto vehicle miles of travel are forecast to increase.
- CDTC's STEP Model was validated against year 2007 traffic counts and continues to provide a useful tool for many transportation planning applications.

#### **How the Maintenance Plan Addresses that Change**

- The Plan update reaffirms CDTC's tempering of VMT for regional planning. The CDTC New Visions Plan was developed with the expectation that increases in daily vehicle travel would be dampened from the trend. This can be expected through a combination of actions, including the substitution of communication for travel, increased carpooling, increased non-auto travel (transit, walking and cycling), shorter trip lengths (due to proximity of activities), spreading of peak hour trips to off-peak hour, increased telecommuting and slowing of the projected growth in the number of cars. The New Visions Plan is much broader than highway capital projects. It includes travel demand strategies, operational strategies, land use policies (such as urban reinvestment and encouragement of mixed use development) and investments in transit, walking, and bicycle facilities. The policy forecast remains CDTC's target traffic condition used in project design and reflects plausible

success in implementing the plan through the horizon year of 2035.

- The maintenance plan continues to rely on the future growth scenarios. The evaluations for the year 2030 are still useful for understanding the impacts of these different growth scenarios. However, forecasts for the “Status Quo Trend” scenario have been extended to 2035 for the New Visions performance measures. The status quo trend scenario still represents the most likely planning forecast based on historic population and development trends and existing policies, and is considered the baseline growth scenario.

#### **Proposed Further Treatment for the 2040 Plan**

During the 2040 Plan Update, population, household and employment forecasts based on the year 2010 census will be comprehensively analyzed and refined, using 2040 as the horizon year. The CDTC STEP Model will be updated and expanded to more multimodal modeling features. The new MOVES model, developed by the Environmental Protection Agency, will be used to develop forecasts of volatile organic compounds, nitrogen oxides, and greenhouse gas emissions.

## Elderly and Disabled

### Background

The New Visions 2030 Plan addressed the needs of the elderly and mobility disabled population in several ways. The Plan recognized that the population is aging and that the mobility expectations of this next generation of “elderly” persons will be higher than its earlier counterparts. Some of the plan’s action items addressed this by recommending improved signage and sign reflectivity and improved site distances, particularly at intersections. Other action items addressed mobility concerns of both the elderly and mobility disabled populations. The Plan called for locating human service agencies, senior housing, assisted living and nursing homes in places that are easily served by transit. The plan also called for coordination of human service agency transportation and for regional mobility management.

During the last New Visions update, the newly passed SAFETEA-LU legislation contained a new requirement for coordination. The Legislation required projects selected for funding under the Job Access and Reverse Commute (JARC) Program, the New Freedom Program and the Section 5310 Elderly Individuals with Disabilities Program to be “derived from a locally developed, coordinated public transit-human services transportation plan”, and that the plan be “developed through a process that includes representatives of public, private and nonprofit transportation and human services providers and participation by the public”.

The result was the **Coordinated Public Transit-Human Services Transportation Plan for the Capital District**, drafted in early 2007 and adopted in June 2007. The Plan and its recommendations were incorporated into the New Visions 2030 material. Since the coordination requirements and recommendations of the Plan had been newly adopted as part of the New Visions 2030 Plan adoption, little had been done in the realm of implementation at that time.

### What’s Changed Since the 2030 Plan was approved in 2007

Coordinated Public Transit-Human Services Transportation Plan and the Regional Transportation Coordination Committee (RTCC)

#### JARC

With the direction of the Coordinated Plan and newly formed Regional Transportation Coordination Committee (RTCC), great strides have been made in the coordination arena since New Visions 2030 was adopted. For one, participation in the RTCC has grown and active dialogue between human service agencies has taken place.

Prior to the passage of SAFETEA-LU, Job Access and Reverse Commute (JARC) funds were not allocated to

states and regions by formula (based on the number of low-income persons), but were discretionary grants. Between 1999 and 2007, CDTA prepared applications for JARC funding, on behalf of its four constituent Capital District counties and had successfully garnered four discretionary grants totaling over \$2M.

The Coordinated Plan clearly recommended that the existing JARC program activities should be continued with formula allocations. However, SAFETEA-LU required that a funding solicitation be drafted and circulated in the region, opening up the application process to all those who were interested. CDTC staff drafted two JARC solicitations, one in 2007, and one in 2010. Both were advertised using Public Notices, email and on CDTC’s webpage. In both cases, CDTA was the only applicant and proposed to continue funding trip planner positions, the safety net brokerage and a mobility manager. These are all very successful aspects of the JARC program and are recommended to continue in the Coordinated Plan. It is uncertain if the JARC program will continue in future federal transportation legislation.

#### New Freedom Program (NFP)

The SAFETEA-LU legislation established the New Freedom Program (NFP) as a formula program based upon the number of persons with disabilities residing in the metropolitan area. The Albany-Schenectady-Troy urban area’s apportionment was about \$650,000 over 5 years. According to the legislation, the purpose of the NFP is to provide new public services and alternatives *beyond* the requirements of the Americans with Disabilities Act (ADA) to assist individuals with disabilities. As with the JARC program, SAFETEA-LU required that a funding solicitation be drafted and circulated in the region, opening up the application process to all interested parties. CDTC staff drafted two New Freedom solicitations, one in 2008, and one in 2009. Both were advertised using Public Notices, email and on CDTC’s webpage. Very few agencies submitted proposals, probably due to the required 50/50 match for operating service. An evaluation committee, drawn from the RTCC committee, was formed to evaluate the project proposals submitted by area human service agencies. Four very innovative projects were approved as a result of this process:

#### **Project 1: Trip Scheduling and Dispatch Software**

Catholic Charities of Schenectady County purchased, installed, and maintains trip scheduling and dispatch software. Sufficient licenses were purchased to enable Schenectady County ARC to use the software and to potentially add other Schenectady County human service agencies. Catholic Charities and Schenectady County ARC each provided 50% of the match. This project is a very successful collaborative effort and will likely grow to include additional human service agencies.

## **Project 2: Schenectady County Weekend Service for Mobility Disabled Persons**

Catholic Charities of Schenectady County received New Freedom funds to conduct a feasibility study of expanding weekend service to seniors, most of whom are frail and mobility challenged. Using New Freedom monies and match dollars, Catholic Charities began demand responsive accessible transportation service on weekends in October 2009. One way fees range from \$4.00 to \$6.00. This project addressed the need for additional weekend service for the mobility disabled population –a significant need outlined in the Coordinated Plan. Catholic Charities also has a contract with the Eddy, an area Nursing Home to provide weekend transportation to and from dialysis, expanding collaborative efforts even further. Weekend ridership is growing steadily. The van has also been booked by senior groups on weekends and during the evening hours to recreational and entertainment venues.

## **Project 3: Fixed Route Feeder Service in the City of Watervliet and Green Island**

The City of Watervliet requested funds to purchase a 15 passenger accessible vehicle that would be used to provide feeder transit service within the city, connecting senior housing and other residential complexes to retail and recreational facilities. The feeder service, which began in the summer of 2010, connects to CDTA's fixed route service and will serve a limited section of Green Island; ridership is growing steadily.

## **Project 4: CDTA Accessible Taxi Program**

Under the New Freedom Program, there is a separate allocation for the Saratoga Springs Urban Area. Although two separate New Freedom Solicitations were circulated, no proposers came forward with projects for the Saratoga Springs Urban Area. As a result, about \$21,000 was forfeited in FFY '06. The RTCC suggested that CDTA come forward with a project to spend down the remaining allocations for this area, so the region would not forfeit the remaining \$66,300 in federal funds. The RTCC suggested that CDTA use the remaining A-S-T New Freedom funds for accessible taxis in the greater urbanized area, a need identified in the adopted Coordinated Plan. CDTA submitted an application to purchase up to 10 accessible taxis (8 for deployment in Albany-Schenectady-Troy and 2 for deployment in Saratoga) and "lease" the taxis to taxi companies operating in Saratoga Springs and the greater Capital Region. The "lease" fee is considered match. An RFP was developed and Yellow Taxi was awarded the contract for the first two accessible taxi's which were deployed in late 2010.

A separate FFY 2011 allocation of New Freedom funds was made available to the Albany-Schenectady-Troy and Saratoga Springs urban areas even though the SAFETEA-LU legislation was not reauthorized. As a result, CDTC staff solicited for additional projects in February 2011. The following project was submitted and approved for funding. This project demonstrates how successful the Region has

been in garnering partnerships between diverse human service entities.

## **2011 New Freedom Project: Collaborative Digital Radio System**

Schenectady ARC, serving as the lead agency and fiscal agent, applied for \$178,362 in New Freedom Program funding in collaboration with Catholic Charities Senior Services in Schenectady, the Center for Disability Services in Albany and Senior Services of Albany. The application is to purchase Digital Mobil Radio technology for the aggregate fleet of 124 vehicles. This would put the four agencies in compliance with upcoming (January 2013) Federal Communications Commission mandates with the added benefit of expanding inter-agency communication and transportation coordination.

### Section 5310

The New York State Department of Transportation (NYSDOT), through its Transit Bureau, administers the Section 5310 program. Section 5310 funds can only be used to purchase vehicles in NYS, at an 80/20 federal to local match ratio. NYS has a well-established process, which includes an inter-agency review committee, for selecting fund grantees on a discretionary basis. CDTC is one member of the committee annually reviewing grant applications for this area. SAFETEA-LU legislation required that the MPO confirm that the proposed service to be provided by the requested vehicles would not duplicate effort and would be consistent with the coordinated plan. The result has been increased dialogue between human service agencies, additional members to the RTCC. Attendance at the Committee's meetings has grown as has involvement in coordination activities.

### Schenectady County Long Term Care Consortium

The Schenectady County Long Term Care Consortium was formed in 2002 to promote the long term health and well being of Schenectady County residents. In 2006, the Consortium released *Building Partnerships for an Aging Community: 2006-2008 Strategic Plan*. The Plan includes goals and milestones in three service priority areas – Information and Assistance, Service Coordination, and Transportation –the Consortium formed workgroups to provide leadership for advancing each strategic priority. A CDTA staff person chairs the transportation workgroup; CDTC staff is a participant. A special forum of Schenectady County Senior Transportation Service Providers was held in 2008 and was sponsored by the Transportation Committee of the Schenectady County Long Term Care Consortium. About fifteen community senior transportation service providers participated. Objectives of the event were threefold:

- To provide an overview of the Schenectady County Long Term Care Consortium mission, goals and objectives and engage community providers as active Consortium members,
- To identify barriers, gaps and opportunities in the Coordination of senior transportation services among

community providers from experienced community leaders,

- To explore future ways community providers might collaboratively address identified barriers to better serve their senior clients.

The event was well attended and several follow-up discussions between several human service agencies were held. Some coordination has taken place as a result.

#### CDTA's STAR Service, Special Fare Policies and 100% Accessible Transit Buses

CDTA's special transit service (STAR) began operation in the summer of 1982. The service was designed for use by any Capital District resident unable to utilize CDTA's fixed route bus service because of a disability. The STAR fleet consists of 34 vehicles. 220,521 elderly and/or handicapped people were provided specialized trips during fiscal year 09/10; 217,474 in FY 08/09. So far in FY 10/11. STAR is showing a 7% increase in ridership over 09/10 levels and demand is expected to continue to grow. The financial impact of the substantial subsidies required to provide this service is one of the major operating and fiscal issues facing CDTA.

Federal regulations mandate that transit fares for elderly and disabled riders during off-peak hours be no more than one-half the base peak-hour fare. CDTA, since 2008, has offered half fare to the elderly and disabled without time restriction – it is available all of the time. The total number of half fare rides was to close to 1.65 million in FY10. The cost of providing half fares was \$1,237,000. The growth in the cost of the program is attributable to changing demographics and the aging of the baby boom generation; costs will likely continue to grow.

CDTA replaced its entire fixed route fleet between 1998 and 2003 with low floor buses, making it 100% accessible. 14,896 wheelchairs were loaded on to a fixed route bus in fiscal year 08/09, and 14,439 in FY 09/10. Wheelchair boardings on the fixed route system are consistently higher in the summer months.

Over the past several years, CDTA has improved bus stop amenities and accessibility and has worked cooperatively with area municipalities and NYSDOT to improve ADA compliance and pedestrian amenities along transit routes. Work on pedestrian access, including issues related to the elderly and mobility disabled population, will continue as opportunities arise.

CDTA conducts "town meetings" to gather feedback from users of the STAR service on a biannual basis. The last two meetings were held in May 2010 and December 2010, and another is scheduled for May 2011. The sessions serve as a mechanism by which information regarding changes in STAR service can be disseminated. Also, the meetings provide an opportunity for STAR users to comment on how CDTA can better serve the disabled community. CDTA will continue to conduct STAR town meetings during the 2010-11 fiscal year.

#### **Conclusion**

With the SAFETEA-LU requirements for coordination still in effect, and the positive results this regional coordination has achieved, these enhanced efforts will continue under the New Visions 2035 plan. The Coordinated Public Transit-Human Services Transportation Plan for the Capital District must be updated every four years, a new Plan has been developed which documents the many achievements identified above. The updated Coordinated Plan also reflects 2010 Census data that was recently released.

#### **Proposed Further Treatment for the 2040 Plan**

During the 2040 update, CDTC will conduct another, shortened version of the 2006 survey of Human Service Agencies located in the Capital District. A partnership with the [211 system](#), run by United Way will allow CDTC staff to have access to the most recent data base of agencies. The survey will be conducted on-line, and United Way staff will pre-notify agencies and send out reminder notices as needed. An on-line instrument like survey monkey will be used, which will automatically summarize responses to the survey. The survey should be complete by Fall 2011 and will be added as an appendix to the 2011 Coordinated Plan.

CDTA will continue to run Access Transit which was formed in 1997 for the purpose of "brokering" medical trips for Medicaid clients. Approximately 206,000 trips were brokered by ACCESS Transit in both 2009 and 2010 to Medicaid eligible residents of Rensselaer and Schenectady counties. The number of brokered trips has been rising; in 2008 approximately 180,000 trips were brokered. CDTA has consolidated its call center operations to improve efficiency, and is positioning itself to attract additional brokerage contracts. STAR service will continue as well, and the number of trips provided is likely to increase. Feedback from the CDTA run "Town meetings" will also be used to tweak the system and will be incorporated into the 2011 Coordinated Plan.

## Environmental Impacts/Sustainability

### Background

The New Visions 2030 Plan addressed Environmental Impacts and Sustainability in several ways and provided a framework for improving regional environmental quality. With its strong emphasis on smart growth and fostering a safe, multi-modal and well managed system that works well for all users, the New Visions 2030 plan contributes to urban revitalization, attractive suburban and rural centers, and preservation of open space, while working to minimize capacity expansion for single occupant vehicles. Related beneficial environmental impacts include a reduction in energy consumption, avoidance of disruption of natural and cultural resources and reduction in air pollution, and protection of environmental justice populations. Protecting the environment and creating a more sustainable transportation system is an important *New Visions 2030* strategy, particularly in light of global climate change.

The New Visions 2030 plan was the first to be developed and adopted under SAFETEA-LU planning requirements. One new planning factor required that the projects, strategies and services considered and provided for in the regional long-range plan not only promote energy conservation, improve quality of life, and promote consistency between transportation improvements and State and local planned growth and economic development patterns, but also work to protect and enhance the environment. New requirements were also placed on both the content and consultation process in developing plan elements related to environmental protection including a discussion of potential environmental mitigation activities and potential areas to carry out those activities; this discussion was required to be developed in consultation with Federal, State, and tribal wildlife, land management, and regulatory agencies. CDTC initiated consultation on the draft plan with a wide array of agencies and groups responsible for land use management, natural resources, environmental protection, conservation and historic preservation within the region. A scan of CDTC's innovative practices included in the New Visions 2030 plan revealed a wide array of ways the region works to lessen the environmental impacts of transportation while fostering a sustainable region. CDTC also obtained a series of maps and geographic information system files on various natural and cultural resources and protected open space within the four county CDTC planning area. CDTC's approach to meeting these requirements was highlighted in a recent FHWA Case Study, [\*Environmental Mitigation in Transportation Planning Case Studies in Meeting SAFETEA-LU Section 6001 Requirements\*](#).

CDTC staff has performed the role of coordinator for the [\*Capital District Clean Communities coalition\*](#) since 2001. The Capital Region was designated a "Clean City" by the US Department of Energy in April 1999. The Capital District provides substantial opportunities for the expansion of the alternative fuel marketplace, particularly with the

large state vehicle fleet that operates in the area. Stakeholders in the Capital District Clean Communities (CDCC) coalition have become much more involved and proactive in the mission of the coalition. The alternative fuels currently in use in the Capital District are compressed natural gas (CNG), propane, bio-diesel, ethanol and electricity. Coalition stakeholders own and operate 374 CNG, 40 propane, 56 electric and 853 bio-diesel vehicles. In addition, there are 608 hybrid-electric and 2395 flex-fuel (ethanol) vehicles in the NYS fleet that are housed and operate primarily in the Capital District.

### What's Changed Since the 2030 Plan was approved in 2007

#### Alternative Fuel Projects

Since 2007, a range of alternative fuel related projects have been facilitated by the CDCC or have been funded through federal transportation or NYSEDA funds. Projects range from:

- establishment of twelve public E-85 fueling stations
- purchase of propane school buses for three area school districts, with several of these districts now intending to eventually power their full fleets by propane
- installation of a public CNG fueling station
- purchase of alternative fuel vehicles by UAlbany, Coca Cola, Verizon and National Grid for their fleets in the Capital Region using ARRA funds.

Using Congestion Mitigation Air Quality (CMAQ) monies programmed in the 2010-15 TIP as a set aside for a Diesel Retrofit program, four projects were funded in the cities of Watervliet and Schenectady, Schenectady County and the Town of Niskayuna. With setaside funds remaining, CDTA requested \$292,475 to retrofit 24 transit buses. Since 2007 CDTA committed to replacing much of their fleet with Hybrid Electric Vehicle (HEV) technology and now has over 60 hybrid electric buses. The hybrid transit buses achieve almost 25% improved fuel efficiency, are less noisy and operate in electric mode while idling. CDTA also has about a dozen non-revenue hybrid electric vehicles.

#### Partnership with NYSEDA

CDTC staff is in contact with staff from the NYS Energy Research and Development Authority (NYSEDA) on several fronts. First, NYSEDA is very active in the Capital District Clean Communities coalition and has aided coalition stakeholders in successfully competing for funds for Alternative Fuel Vehicles and Infrastructure, anti-idling programs and feasibility studies. NYSEDA's aim is to help New York meet its energy goals: reducing energy consumption, promoting the use of renewable energy sources, and protecting the environment.

Second, CDTC staff has been asked on several occasions to help evaluate proposals that NYSEDA receives in

response to Project Opportunity Notices (PONs) for project/programs that are geared to reduce vehicle miles traveled, reduce greenhouse gas emissions or to improve traffic flow through ITS technology. Many of these PONs are funded through the Regional Greenhouse Gas Initiative, or RGGI. The Regional Greenhouse Gas Initiative is an agreement among ten Northeastern and Mid-Atlantic States (Connecticut, Delaware, Maine, Maryland, Massachusetts, New Jersey, New Hampshire, New York, Rhode Island and Vermont) to reduce greenhouse gas emissions from power plants. The RGGI states implement RGGI through a regional cap-and-trade program using uniform quarterly auctions to sell nearly the entire annual regional emissions budget of approximately 188 million allowances per year. NYSDOT sells nearly 100% of New York's annual emissions budget.

#### Development of a NYS Climate Action Plan

In December 2009, CDTC staff became a member of the Climate Action Council's Transportation and Land Use Technical Work Group, charged with defining actions the state could implement to help achieve an 80% reduction in greenhouse gas emissions by 2050. The result of this Technical Work Group's efforts, along with those from the other Technical Work Groups, were incorporated into the full final draft [NYS Climate Action Plan](#) submitted to the Governor in the fall of 2010; public comment and review ends February 7, 2011. Recommendations from the Transportation and Land Use Technical Work Group are all consistent with CDTC's 2030 New Visions Plan and focus on many of the successful activities CDTC and CDTA have been involved in—land use planning, transit oriented development, smart growth, alternative fuels, TDM, and pedestrian and bicycle amenity programs.

The TDM activities (see TDM section) that CDTC is involved in contribute to a reduction in GHG emissions and maintaining environmental quality. It is estimated that the iPool2 program has reduced GHG emissions by almost 900,000 pounds. The vanpool program alone has reduced emissions by 592,000 pounds. Improved transit, pedestrian and bicycle amenities all contribute to a healthier environment.

#### Natural and Cultural Resources Mapping

During the 2010 – 2015 TIP Update proposed projects having potential for significant environmental impacts were mapped against natural and cultural resources location information to identify possible overlaps and generalized environmental impacts. Prospective project sponsors were provided a link to the environmental resources mapping to assist in discerning if a proposed project fell within a resource area and to potentially foster up front or "broader than project specific" mitigation efforts.

#### FHWA's *Everyday Counts* and *Planning and Environmental Linkages* (PEL) Initiatives

FHWA's *Every Day Counts* initiative sets up a framework for considering and incorporating documents and decisions from the earliest stages of project planning into the environmental review process through to project design. Through this integrated process, much of the data and

analysis undertaken during planning can be more easily carried forward into project development activities, better connecting the planning process and environmental assessment required during project development (design) under NEPA. In practice, these two processes are often disconnected. Use of FHWA's *Every Day Counts* initiative can lead to more seamless decision-making that minimizes duplication of effort, promotes environmental stewardship, and reduces delays in project development. FHWA is encouraging States and MPOs to explore ways to integrate EDC into the planning process by using some form of FHWA's Planning and Environmental (PEL) questionnaire to ensure that planning information is properly documented for use in the NEPA process.

CDTC has been participating in events, and is continually tracking available tools, related to FHWA's *Planning and Environmental Linkages* or PEL initiative which strives to bring transportation planning and implementation agencies together with natural and cultural resource agencies to facilitate earlier, enhanced coordination and communication. The intent is to link planning and programming with project development more strongly in a streamlined manner, hopefully resulting in avoidance of environmental impacts, more effective mitigation approaches, and even environmental enhancements when implementing projects. Through these initial efforts, updated web-based resource inventories are being disseminated.

#### Smart Growth

CDTC staff participates in the Capital District Smart Growth Forum facilitated by Empire State Future. This forum meets quarterly to discuss smart growth and sustainability efforts by a variety of public agencies and non-profits focused on affordable housing, historic preservation, regional planning, open space preservation, and the environment.

#### **Conclusion**

The New Visions 2035 plan maintains and strengthens CDTC's commitment to environmental sustainability. Consistent with recommendations in the NYS Climate Action Plan, the Capital District Clean Communities coalition will continue to expand as will TDM activities including a website to increase awareness of various transportation modes and illustrate the impact of single-occupancy vehicle use on the transportation system and environment.

Using recently developed web-based natural and cultural resource inventories as well as NYSDOT's Environmental Viewer, CDTC will be in a stronger position to refine the GIS-based screening process for TIP project candidates and other planning efforts, including Linkage planning studies. Consistent with the potential array of tasks to be undertaken as part of the *Energy and Climate Change Initiative* outlined in CDTC's current Unified Planning Work Program, staff will begin the process to create an integrated community and transportation design toolkit to help in developing sustainable transportation and

development projects, and other activities. This work will build upon the *New Visions Guidebook*. In addition, as recommended in the New Visions 2030 Plan, expanding CDTC's membership to restore the NYSDEC as a CDTC member will be sought once the new administration has settled in. Adding NYSDEC as a member agency will allow for enhanced communication and information sharing regarding the region's critical environmental issues, environmental resources, and to ensure broader coordination of land use/transportation planning efforts.

The New Visions 2035 Plan also provides the continued foundation for strengthening efforts to implement initiatives intended to more effectively link transportation planning with environmental review and other aspects of development/design of projects.

To meet the consultation requirements New Visions 2035 draft plan materials will be distributed to an updated consultation list that will include new sustainability focused groups such as the Capital District Smart Growth Forum, Sustainable Saratoga, ECOS, and the NYSDEC designated Climate Smart Communities in the region.

#### **Proposed Further Treatment for the 2040 Plan**

During the 2040 update, CDTC will continue to build membership in the Clean Communities coalition and will continue to fund the coordinator position. The coordinator will continue to attend USDOE national clean cities events and continue dialogue with other coalitions. Using map based information resulting from the work to be done by CDRPC to track land consumption as mentioned in the Integrated Design section, generalized impacts/encroachment on mapped natural and cultural resources will be monitored in relation to potential future transportation projects and programs. Federal and State level legislative and programmatic activities related to global climate change and adaptation will be monitored and incorporated into New Visions 2040 plan work.

## Public Participation

### Background

The New Visions Plan went through an extensive and in depth public participation process. The New Visions 2030 development included the Quality Region Task Force, five working groups, the Bicycle and Pedestrian Task Force, the Goods Movement Task force, and the Finance Task Force; and public involvement in dozens of Linkage studies at the local level. The CDTC Policy Board released draft Plan materials for public review. CDTC staff worked with the “Quality Region Task Force” to look for gaps in this new material and to help develop more polished summary materials for even wider public distribution. In October 2007 CDTC’s Policy Board approved the New Visions 2030 Plan, which fully reflects the planning requirements of SAFETEA-LU, including communication with an extensive list of natural and cultural resource stakeholders related to the new environmental mitigation/consultation requirements of the law, and the CDTC [Public Participation Policy](#). After the Plan was approved, a summary [New Visions brochure](#) for the New Visions 2030 Plan was developed and distributed widely.

### What’s Changed Since the 2030 Plan was approved in 2007

CDTC has continued to reach out for public participation, public information and comment through a variety of methods and forums including:

#### Websites

The [iPool2](#) commuter information and [Capital Coexist](#) bicycle awareness websites were launched providing carpool/alternative commuting options information and a localized education campaign geared towards cyclists and motorists safely *coexisting* when using the region’s roadways, respectively.

CDTC’s main website, [www.cdtcmpo.org](http://www.cdtcmpo.org) continues to provide a valuable tool to share information, post announcements and provide a central location for all CDTC products to be easily viewed. To the greatest extent possible, CDTC’s website is organized and formatted to accommodate persons with visual disabilities. Work has begun on a translator on the website for Limited English Proficiency (LEP), as well as a methodology to create interactive TIP mapping.

#### Social Media

CDTC has initiated the use of social media and recently adopted a new [social media policy](#) to address both the fast-changing landscape of the Internet and the way many people now communicate and obtain information online. The policy states that CDTC may use social media tools to reach a broader audience: CDTC encourages the use of social media to further its goals and the mission(s); and the best, most appropriate CDTC use of social media is to provide relevant, timely, and useful information to the public.

#### Newsletter

The new CDTC newsletter *In Motion* has been published regularly since its inaugural issue in the Spring of 2008. CDTC launched its newsletter to help carry out a commitment to meaningful public participation in the regional transportation planning process which requires a concerted effort to make the wealth of available information accessible to as many people as possible. The newsletter is intended to provide readers with helpful information on transportation planning, technology, projects, and programs in the Capital District region. Information on timely topics such as NY5 BRT, projects funded through the American Recovery and Reinvestment Act or ARRA program, development of the 2010-2015 TIP and others have been included in recent newsletters which are available on CDTC’s website and mailed to over 1,200 recipients.

#### Linkage Program

CDTC’s Community and Transportation Linkage Planning Program continues as the primary community level public participation tool designed to fulfill the adopted principles and strategies in New Visions 2030 by providing assistance to communities undertaking local planning initiatives to integrate land use and transportation. Since its inception, CDTC has funded 71 planning studies in 40 Capital Region communities ranging from the largest city to some of the smallest towns and villages. Each Linkage study must be guided by a Study Advisory Committee and each must hold at least two formal public outreach sessions, with some studies holding additional sessions or supplemental stakeholder outreach efforts. The first public session is typically held early in the process, while the second session is usually held at near the end of the planning process to allow for public comment on the ideas and concepts being proposed and to get ‘buy-in’ from key stakeholders. Meetings are usually held in the evening to be accessible to the greatest number of people. Public comment is accepted and encouraged at any point in the Linkage study process. The type of public outreach (charrettes, workshops, surveys, neighborhood meetings, etc.) varies to fit the study scale, what is appropriate to reach stakeholders, and compatibility with the community’s structure, politics and style.

#### Ongoing CDTC Task Forces

Task forces are working groups assigned a specific task or subject area and who are responsible to the Planning Committee for recommendations regarding their subject matter. There are currently has several issue-oriented task forces related to CDTC planning processes; these meet at their own schedule and pace, following overall guidelines dependent on the group. Mailing lists for meeting notices are developed and regularly updated to include interested parties; meetings are open to the public. Task Forces have their own ‘section’ of the CDTC website where products and other relevant materials are posted. Currently the most active Task Forces are the Bike/Pedestrian Task Force and

the Regional Transportation Coordination Committee, others include a Goods Movement Task Force and a Regional Operations Committee.

### **Conclusions**

The New Visions 2035 Plan will continue to support CDTC's extensive use of public participation in the planning process. The New Visions 2035 Plan will go through a wide public review. However, based on the strong support the New Visions Plan continues to receive, and because of the short time frame necessary for maintenance plan development, the public participation process for the maintenance plan will not be as in depth as for the 2030 Plan development. Instead, the development of the 2040 Plan, which will begin at the end of 2011, will offer the opportunity for more in depth dialogue with the public.

The New Visions 2030 Plan identified the need for broad community outreach to communities to explain the land use recommendations of the Plan and to seek broader and more consistent implementation of land use and smart growth principles at the community level. These efforts will continue. The completion of a Planning Guidebook is expected in 2011 to support these efforts.

### **Proposed Further Treatment for the 2040 Plan**

The development of the New Visions 2040 Plan will begin at the end of 2011 and will be a multi year effort that will give CDTC the opportunity to engage the public and stakeholders in a broad and comprehensive dialogue about the Plan. The timing of the 2040 plan update will allow for more comprehensive analysis and more extensive discussions with regional stakeholders, and will also afford us the opportunity to make the plan consistent with a new federal transportation reauthorization act, which is not expected until after 2011. The 2040 plan update will begin after October 2011 and will be a multi year effort that should be completed no later than by 2015.

There are many dynamic new tools that are emerging that can be used for providing information to the public and receiving comments and input, such as innovative web based surveys. During the 2040 Plan update, consideration can be given to expanding the tool set for public participation. Given that CDTC staff resources are limited, these tools may provide more efficient and effective ways to engage the public.

# Freight

## Background

Goods Movement has been an increasingly important aspect of transportation planning. SAFETEA-LU encourages MPO's to promote the safe and efficient management, operation, and development of surface transportation systems that will serve the mobility needs of people and freight. MPO's should also foster economic growth and development within and between states and urbanized areas, while minimizing transportation-related fuel consumption and air pollution through metropolitan transportation planning. The legislation also requires MPO's to plan for supporting economic vitality, protecting and enhancing the environment, promoting energy conservation, enhancing inter-modal facilities, and improving mobility, safety, security, etc. One overwhelming characteristic of freight movement for public-sector transportation planners is its rapidly and constantly changing nature – led by the private sector.

The New Visions Plan recognizes the importance of planning and developing appropriate programs to meet the increasing demands freight movements put on the transportation system. New Visions recognizes the importance of freight to the regional economy and to private sector businesses. Congestion management and infrastructure investments will support goods movement in the Capital District.

In 2007 CDTC's Policy Board approved the freight portion of New Visions 2030 which can be found at <http://www.cdcmpo.org/rtp2030/materials/gm-doc.pdf>

## What's Changed since the 2030 Plan was approved in 2007

Since 2007, CDTC has maintained relationships with the goods movement community and has moved forward on several New Visions 2030 recommendations related to freight planning and programming.

### Goods Movement and the TIP

Spot Improvement Setaside- A recommendation of the 2030 plan was to develop a [goods movement spot improvement program](#) for small scale freight related improvements. It was anticipated that this program would be solicited and administered similar to the Bicycle and Pedestrian Spot program. During the 2010-2015 TIP update, the spot program was developed and approved. Although it is in the out years of the current TIP, this spot improvement program is an integral step towards improved freight planning in the Capital Region.

Other TIP Projects/ARRA Funded Projects- Several projects were funded for the Port of Albany including one to improvements needed to fulfill requirements of the Maritime Transportation Security Act and an ARRA funded project for wharf and dock repairs.

## Freight Data Research

CDTC participated in research effort: *A Freight Data Architecture Application at the Local Level Using Commodity Flow Survey (CFS) Data*. The need for a freight data architecture has prompted several major studies, including one conducted for the National Cooperative Freight Research Program or NCFRP, entitled *NCFRP 12 Specifications for Freight Transportation Data Architecture*. The establishment of an architecture will make it possible to link together a variety of existing freight data and other related datasets to create a more robust understanding of freight activities and to provide local planning agencies with a clearer picture of freight movements at the local level. As part of this research, local administrative and primary survey data were collected as part of the ongoing Linkage study, Railroad Avenue Transportation and Revitalization Plan. Study outreach involved multiple visits to the study area by CDTC staff to invite business owners/tenants to a public meeting, to advertise the weblink for an online business owner/tenant survey and to inform businesses about the study background and purpose. During the visits, staff took anecdotal notes of each business's apparent business or service type. This information was then used to create a more detailed dataset beyond what was available through tax parcel datasets. Using this information in combination with other more detailed datasets (i.e. NAICS/SCTG) commodity flows were identified for each parcel. MPOs and municipalities can use these relationships to target their efforts when collecting data for freight modeling or activity-based modeling.

## Conclusion

The New Visions 2035 plan will continue to address opportunities to incorporate freight needs into the planning process. Enhanced approaches for incorporating available improved commodity flow data and other goods movement related information into CDTC's planning and programming processes will be used wherever possible. New areas of participation by the goods movement community will be explored and critically examined as part of the 2040 plan.

## Proposed Further Treatment for the 2040 Plan

During the 2040 update, CDTC will re-establish a consistent meeting schedule for the Goods Movement Task Force. The main objective will to build and foster relationships with public and private goods movement stakeholders. The 2040 plan should also explore additional mapping and data collection efforts that coincide with the Commodity Flow Survey project mentioned above and re-examine the Goods Movement Priority Network to ensure that the original intent of the description of this network remains valid and to update the data used to identify the network.

# Equitable Treatment

## Background

CDTC's Title VI-Environmental Justice (EJ) policies ensure that EJ principles are inherently integrated into the planning process at both the system and project level. The [Environmental Justice Analysis Report](#) drafted in March 2007 documents the equitable distribution of transportation projects throughout the region and provides an evaluation of CDTC's plans, programs and processes in relation to EJ issues. Policies related to public involvement are addressed in detail in CDTC's [Public Participation Policy](#). Additional transportation concerns with Title VI / Environmental Justice aspects (noise, etc.) have been fairly examined in the "big ticket, big initiative" work.

## What's Changed Since the 2030 Plan was approved in 2007

### CDTC's Environmental Justice Report

This report was last updated in March of 2007 and included mapping and analysis of 07-12 TIP Projects and 55 Linkage Projects to identify their distribution and location in relation to EJ population areas based on 2000 Census data on minority populations and populations below the poverty level. CDTC staff is waiting for 2010 Census data to duplicate this effort.

### Transit

Improvements to the transit flow within the Route 5 corridor will benefit large numbers of the EJ population, as this is a significant transit corridor within the region and home to a significant concentration of the region's EJ population. Transit type projects enhance the feasibility of utilizing an alternative mode of transportation, much like Bike/Ped Projects. Public transit use is particularly important to the EJ population, as households within EJ areas are more likely to be zero vehicle households.

### Linkage Program

CDTC's broad agenda in the New Visions plan provides access to Linkage funds for non-traditional planning efforts. These have included commercial revitalization efforts in Arbor Hill, neighborhood traffic calming in EJ neighborhoods, gateway planning in EJ neighborhoods and improved truck access routing in EJ neighborhoods. Nearly half of the Linkage studies are in the region's cities and over 70% of all Linkage studies have addressed EJ areas.

### Social Media

As discussed under the *Public Participation* write up, CDTC has initiated the use of social media; the new CDTC newsletter *In Motion* is published regularly; and the Linkage Program continues as a primary public participation tool that engages the public at the community level. Work has begun on a translator on the website for Limited English Proficiency (LEP), as well as a methodology to create interactive TIP mapping.

## Conclusions

The New Visions 2035 plan uses the 2007 Environmental Justice report as its basis for documenting EJ policies and concerns. The general TIP project selection process results in an equitable distribution of projects throughout the region. CDTC's Title VI-Environmental Justice initiative is intended to ensure that EJ principles are included in CDTC's planning process. At all times, CDTC seeks to keep the EJ/Title VI measures integrated into the overall system planning and project-level measures used for decision-making. In addition, the majority of transit projects are located within the region's cities and therefore are also located in EJ target areas. Many of these transit projects consist of improvements to the existing transit network, including transit facilities such as park and ride lots, passenger shelters, bike racks and passenger information systems. CDTA meets or exceeds the requirements of Title VI in terms of service provision, equity of distribution of passenger amenities, fleet deployment, and perceived customer service quality. CDTA intends to continue to improve its service to customers.

## Proposed Further Treatment for the 2040 Plan

CDTC's 2007 Environmental Justice report will be updated to reflect Linkage Projects funded since 2007 and the 2010-15 TIP project listings, once the 2010 Census data is available for minority and below poverty level populations. Future EJ analyses will seek to quantify additional aspects of transportation system performance in EJ areas and compare that performance to that elsewhere. Additionally, CDTC will continue to explore improved participation of traditionally under-represented groups in the transportation planning process.

# Security

## Background

In recent years, federal regulations have changed to require MPOs take a more active role in transportation security planning. In 2005, SAFETEA-LU made 'security' a stand alone planning factor. Previously security had always been coupled with safety.

Transportation security has become a major issue being discussed by policy makers and in the ongoing work activities of some MPOs. In the wake of the events of September 11, 2001, the security requirements took on a new emphasis. Federal and state agencies have been created to assess the vulnerability of infrastructure systems and support security strategies and measures. These agencies include the Office for Domestic Preparedness (ODP) and the Department of Homeland Security (DHS), which includes the Transportation Security Administration (TSA), and the Federal Emergency Management Agency (FEMA), among others. In addition, the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA) have issued draft guidance, which states that this new requirement must be in place prior to MPO and state adoption/approval of transportation plans addressing SAFETEA-LU provisions.

CDTC will continue to follow the lead of NYSDOT and CDTA with security related issues and continue to provide a forum for operational discussions related the transportation system in the Capital District. If needed, CDTC will assist a security coordinating agency to the extent possible.

The Policy Board approved the security portion of New Visions. The document can be found at <http://www.cdtcmpo.org/rtp2030/materials/s-doc.pdf>

## What's Changed Since the 2030 Plan was approved in 2007

CDTC has continued to collaborate with the security agencies to the degree possible. The participation by MPOs across the country (including CDTC) has been limited because of confusion over:

- The definition of security
- The distinction between security and safety
- The absence of funding specifically dedicated for security planning at the MPO level
- The indefinable and unexpected nature of terrorist threats
- The perceived competition for funding from other transportation priorities

Source: Incorporating Security into the Transportation Planning Process [NCHRP Report 525, Volume 3] Washington DC: Transportation Research Board pg 47.

A major obstacle to MPO participation is the highly sensitive nature of any data collected. MPOs have an open and transparent process that does not often coincide with the privacy and sensitivity requirements of The Department of Homeland Security.

CDTC, through the Regional Operations Committee, has begun to look at security in terms of incident management. Signal timing and prioritization have been discussed to help ensure the transportation system has limited delay during an incident.

## Conclusions

The New Visions 2035 Plan will continue to support CDTC's participation in security level planning. The New Visions 2035 Plan will go through a wide public review. However, based on the strong support the New Visions Plan continues to receive, and because of the short time frame necessary for the maintenance plan development, the public participation process for the maintenance plan will not be as in depth as for the 2030 Plan development. Instead, the development of the 2040 Plan, which will begin at the end of 2011, will offer the opportunity for more in depth dialogue with the public.

## Proposed Further Treatment for the 2040 Plan

During the 2040 Plan update, further development of the level of participation in security planning can be pursued. CDTC can work with the various agencies to help better define collaborative opportunities. CDTC will also explore security measures that affect data and electronic information as well as the surface transportation system. Integration of air, rail, and water travel should be incorporated.

## Big Ticket Initiatives

### Background

The New Visions 2030 Plan calls for consideration of potential “big ticket” initiatives. These initiatives would be supported by higher growth scenarios, yet they could be pursued with trend growth as well. Funding is not identified, yet the plan puts forward the vision of bold investments that could be feasible if the public supports the vision and funding can be found.

The Plan is cautious, because it does not commit to major system redesign or dramatic new services without the funds to support them. The “big ticket” initiatives also represent a creative approach, because the plan empowers CDTC members and others to continually explore big ideas. This innovative approach ensures that the Capital District maintains vision during periods of financial constraint.

The big ticket initiatives represent an investment tool that will help manage growth in a way that will sustain the Capital District as a quality region. Investments in the big ticket initiatives can catalyze a more concentrated development pattern under any growth scenario. The caveat is that the big ticket initiatives are currently unfunded, and by themselves will not induce high growth.

The Big Ticket Initiatives include:

- Regional Greenway Program
- Riverfront Access and Urban Development Program
- Street Reconstruction and Reconfiguration
- Roadway Widening and Connections Program
- Suburban Town Center Development
- Bus Service Expansion, BRT Program with Transit Oriented Development
- Guideway Transit System with Transit-Oriented Development
- Managed Lane Program
- Highway Noise Program
- Demand Management Program
- Clean, Efficient Vehicle Program Intelligent Traffic Management Program
- Video Surveillance and Enforcement Program
- Comprehensive Traffic Safety program

### What’s Changed Since the 2030 Plan was approved in 2007

- CDTC sponsored *Tech Valley Trails: A Greenway Concept Plan for the Capital Region*. This plan was an exploration of one of the Big Ticket Initiatives—the Regional Greenway Program. The plan is intended to generate interest and develop concepts that will help make a greenways system feasible if our region’s growth and economic and political climates change. The proposed trail system will help make it possible for more people to travel in the Capital Region by walking, bicycling, and other sustainable forms of transportation. Funding was recently sought

for components of the regional Greenway Plan in an application submitted by a partnership between Albany and Rensselaer Counties for USDOT’s TIGER II program. Components for which funding was sought included the Albany County Rail Trail, the Patroon Creek Trail, and the Mickey Mahar Trail. The grant was not awarded, however, partners continue to seek funding from various sources. Lands for the Albany County Rail Trail were secured by Albany County in 2010, with project development proceeding; current funding on the TIP will not cover the entire cost. The Rensselaer County Alliance for Trails received a grant from the Hudson River Valley Greenway to explore the feasibility of an extended Greenway system throughout Rensselaer County, including the Albany-Hudson Electric Trail which would follow an old trolley line from Nassau through Schodack and East Greenbush to the Hudson River.

- CDTA further developed a concept plan for 100 miles of BRT (Bus Rapid Transit) and published *An Assessment of Capital Region North/South Corridors to Improve Access to Emerging Employment Centers*, which evaluated light rail, commuter rail, and BRT in the Northway and Hudson River corridors. CDTA finished a study of BRT in the Washington-Western corridor.
- The City of Albany in partnership with NYSDOT has requested CDTC to conduct a planning study for the I-787 Corridor. This effort would be intended to answer questions regarding: (1) the short term and long term infrastructure needs for this facility; (2) the opportunities for alternative designs to reduce long term infrastructure costs and/or improve transportation-community compatibility; and in the context of long term needs, (3) near-term access improvements to support the City’s downtown and waterfront economic development initiatives. Some of the recommendations which emerge from this study could fall into the category of “Big Ticket Initiatives”, bold investments that could be feasible if the public supports the vision and funding can be found.
- The New York State Department of Transportation initiated the High Speed Rail Empire Corridor Project. CDTC has long supported high speed rail in Empire Corridor from New York City to Niagara Falls. High speed rail can be considered a big ticket initiative with component projects located in the Capital District. High speed rail is an example of a bold investment that until recently was unfunded. New York State received funding from The American Recovery and Reinvestment Act of 2009 (ARRA) for significant passenger rail improvements in the Empire Corridor.

- In the Capital District, these improvements included
  1. Livingston Avenue Bridge Rehabilitation, Albany;
  2. Rensselaer-Schenectady Double Track;
  3. Albany Rensselaer Station Installation of a fourth passenger track
  4. Albany Rensselaer Station Track Realignment.
  5. Western Gateway Transportation Center, Schenectady Station Rehabilitation.

CDTC is participating in the Project Advisory Committee for the High Speed Rail Empire Corridor Project lead by NYSDOT.

### **Conclusion**

The big ticket initiatives were developed as visionary proposals for which funding was not identified. As discussed under the Financial Plan, financial circumstances and future prospects have experienced significant – and

mixed – changes over the past three years. Nevertheless, the New Visions 2035 Plan puts forward the vision of bold investments that could be feasible if the public supports the vision and funding can be found.

### **Proposed Further Treatment for the 2040 Plan**

The development of the New Visions 2040 Plan will begin in the Fall of 2011 and will be a multi year effort that will give CDTC the opportunity to engage the public and stake holders in a broad and comprehensive dialogue about the Plan. The timing of the 2040 plan update will allow for more comprehensive analysis and more extensive discussions with regional stakeholders, and will also afford us the opportunity to make the plan consistent with a new federal transportation reauthorization act, which is not expected until after 2011. Further consideration of the big ticket initiatives can be included in the 2040 Plan Update.

# Transportation Improvement Program

## Background

One of CDTC's primary responsibilities is to prepare and adopt a financially balanced Transportation Improvement Program (TIP) that assigns approximately \$100 million in annual federal highway and transit funds to specific projects in the Capital Region. All projects on CDTC's five-year TIP must be consistent with and help implement the New Visions 2030 plan.

CDTC has followed innovative and effective TIP practices to ensure that federal funds build a transportation system that reflects the priorities of the New Visions 2030 plan. Project proposals from the state, localities or others are "screened" for compatibility with all of CDTC's principles. Funding is directed to projects that improve the balance of investments by project type (pavement, bridge, bike, pedestrian, transit, economic development, system operation, and the like) to match the budgetary priorities of the plan. Projects are also ranked in terms of cost effectiveness and overall user, community and environmental value.

## What's Changed Since the 2030 Plan was approved in 2007

Since 2007, CDTC faced a number of unusual challenges regarding federal funds and TIP practices. The New Visions 2035 papers on infrastructure and the financial plan describe many of the funding and infrastructure condition challenges facing the region. These challenges resulted in a number of tests of TIP practices since New Visions 2030 was adopted. CDTC was able to respond and move forward on the next program of transportation projects due to its innovative and effective TIP practices that are supported by the adopted policies of New Visions 2030. Notable changes and achievements related to TIP practices since 2007 include:

- American Recovery and Reinvestment Act (ARRA): The passage of ARRA in 2009 by Congress put additional federal funding on the table for transportation projects. CDTC agreed that the best way to spend the ARRA funds quickly was to focus on ready-to-go TIP projects and routine infrastructure projects that could be designed quickly (i.e. simple resurfacing projects). Roughly \$80 M in roadway, pedestrian, bicycle, transit, rail and port projects were funded with local (non-state) federal-aid eligible projects strongly represented. In addition, a commitment was made to projects in economically distressed areas of the region. CDTC's principle of equitable access to federal funds directly contributed to the inclusion of these local projects.
- Project Selection, Fiscal Constraint: CDTC adopted new project selection procedures as a direct result of the fiscal constraint rules set forth by NYSDOT which require the TIP to be balanced by year and by fund source. The changes allow more flexibility in moving projects among the four years of the TIP and refine the authority of NYSDOT and project sponsors to switch between Title 1 fund sources. Changes from any fund source to Interstate Maintenance and changes between the various STP fund sources can now be approved by NYSDOT while any other fund source change between any other fund source need to be approved by CDTC's Planning Committee.
- eSTIP and Website: Changes to the TIP listings in the STIP are now made directly by CDTC staff through the use of eSTIP. NYSDOT can no longer internally change the project listings in the STIP that are a part of CDTC's TIP. In addition, CDTC added more detail to the TIP listings available on its website including links to project fact sheets utilized in the project programming process.
- 2009-2014 TIP Update: In 2008, CDTC initiated the update process for the 2009-2014 TIP. Due to statewide delays caused by the passage of the ARRA, NYSDOT opted to delay the Statewide TIP update (STIP) for one year. Because CDTC had already made substantial progress on the TIP update, the CDTC Planning Committee approved changes to the 2009-10 and 2010-11 TIP listings of the draft 2009-14 TIP by Amendment into the 2007-2012 TIP. These changes were incorporated into the STIP. The later years of the draft 2009-14 TIP would serve as building blocks for the 2010-15 TIP.
- Regional Set-asides: In 2008, CDTC solicited for projects in several regional set-asides: Alternative Fuel Retrofit, Bicycle/Pedestrian Network Set-Aside, Intersections, Queue Jumpers & Roundabouts and Safety Set-Aside for Non-State Roads. A creative project solicitation process was utilized that honored the traditional TIP approach but was tailored to the specific data requirements for the individual set-asides. Projects were evaluated and programmed utilizing CDTC's traditional procedures resulting in the programming of sixteen innovative projects valued at over \$12 M dollars.
- 2010-2015 TIP Update: CDTC's Policy Board decided to undertake a broad anticipatory solicitation for new candidate projects for the 2010-2015 TIP as such a solicitation had not occurred since 2002. CDTC set a rough funding target of \$150 M for new projects. CDTC received 83 project applications totaling roughly \$500 million. Roughly \$108 M of projects in the categories of highway rehabilitation, regional set-asides (highway/bridge maintenance, goods movement, Linkage engineering and ADA), safety and bridges were funded in round one and a partial round two through June 2010. As Congress had not approved a new federal transportation bill, CDTC opted to put

any additional new project programming on hold and adopted the TIP in June 2010. CDTC's Planning Committee will resolve the completion of the programming process in the early part of 2011.

- Update of the TIP Project Solicitation and Evaluation Process: CDTC staff undertook a comprehensive review of the TIP project evaluation process to ensure that it matched New Visions 2030 principles and policies, especially with respect to regional quality of life, environmental issues, and compatibility of transportation with adjacent land use. This led to the update of the project justification package and the TIP project evaluation criteria prior to the solicitation for the 2010-2015 TIP. Workshops were held in each county to explain the changes to potential project sponsors.
- Major Project Status: CDTC comprehensively reviewed the status of major project commitments in early 2010 and reaffirmed its commitment to these projects as regional priorities. Highlights include the funding of the Batchellerville Bridge (CR 98) Replacement project, which began construction in 2010, the continued commitment to implementing Bus Rapid Transit on NYS Route 5 (which is further described in the New Visions 2035 transit paper) and the possible rehabilitation of the Patroon Island Bridge rather than reconstruction, potentially saving the region millions of dollars.

#### **How the Maintenance Plan Addresses the Changes**

CDTC has reaffirmed its established TIP practices, supported by numerous adopted New Visions principles, through its actions in the years since the New Visions 2030 Plan was adopted. Recent circumstances have bolstered CDTC's role as the decision-making forum for the use of federal aid but has also challenged TIP practices. However, the unique, strong tie between the long-range plan and CDTC's TIP has survived those challenges, validating the high level of effort put into the TIP by CDTC's members and staff. Therefore, the New Visions 2035 Plan will continue to guide funding decisions at CDTC.

#### **Proposed Further Treatment for the 2040 Plan**

The New Visions plan has been and will continue to be directly tied to the TIP, allowing for investment in important, cost-effective projects that are well coordinated with land use plans and regional objectives. The Capital District's track record for plan implementation has few equals and New Visions 2040 will continue to support this strong foundation.

If new federal policy is adopted as part of the next federal transportation legislation, New Visions 2040 will likely need to expand on existing subjects or respond to new ones which may result in the identification of new or updated principles, strategies, actions or even budgetary priority. Regardless of federal policy changes, CDTC staff has

identified the following items that will need further consideration by CDTC and its members in New Visions 2040.

- Priority Networks: While the use of priority networks as part of the TIP project evaluation process has been reaffirmed, the principles behind the networks and their use in evaluating projects need to be updated. In particular, what constitutes a project that addresses a priority network needs further articulation. A comprehensive review of these networks through working groups should be undertaken as part of New Visions 2040.
- Refined Safety Benefit Calculations: The TIP evaluation process for new projects utilizes a benefit/cost ratio as a key consideration and safety benefits are one of the input values. As mentioned in the Safety writeup CDTC staff will continue to refine this benefit calculation methodology as updated datasets and approaches become available.
- Bicycle and Pedestrian Project Evaluation Methodology: New Visions articulated a methodology for evaluating bicycle and pedestrian projects that is based on safety, market potential and cost effectiveness. The bicycle and pedestrian task force has noted that alternatives now exist to this methodology. New Visions 2040 should explore these alternatives.
- Major project commitments. Concerns have been raised by the CDTC Planning Committee regarding the slow implementation of some of the major projects. Options to expedite the project development process should be considered utilizing tools such as FHWA's environmental streamlining process and FHWA's Everyday Counts Initiative (see the New Visions 2035 paper on Environmental Impacts/Sustainability). If funding continues to remain uncertain, continued commitment to these projects may need to be seriously explored.
- Alternative Funding Resources: As noted in the Financial Plan summary, if resources to support the TIP remain uncertain, New Visions 2040 will need to explore alternative funding resources for transportation projects such as public private partnerships, user fees, sales taxes, etc. as have been adopted in other regions throughout the country.

**APPENDIX D**

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