

NEW VISIONS 2030 PRINCIPLES

INTRODUCTION

Planning and investment principles guide decision-making at CDTC. As statements of principle, they provide a framework for funding decisions, project selection criteria, and corridor-level planning. The original *New Visions* plan in 1997 led to the articulation of 25 principles which have been reaffirmed in subsequent updates of the plan. After more than ten years of public vetting, they have had significant impacts on how transportation planning is approached and where public transportation investments are made in the region. These 25 principles are carried forward into *New Visions 2030*.

The New Visions planning and investment principles have significantly impacted transportation in the region since 1997.

New planning requirements in SAFETEA-LU have further broadened CDTC's responsibilities and have put new emphasis on subjects such as safety, security, environmental mitigation and the congestion management process. With these new requirements in mind, six new planning and investment principles were developed as part of the *New Visions 2030* update process. Public comment on these principles has led to a consensus that they be incorporated into *New Visions 2030*, following the four themes that emerged in the 1997 version of the plan. The four broad themes are:

1. **Preserve and Manage.** CDTC's highest priority is preserving and managing existing investment in the region's transportation system. Capital investments will be directed by the CDTC based on function and need. The priority for improved design and condition of major facilities should not depend upon whether the facility is owned by the state, county, city, town or village.
2. **Develop the Region's Potential.** The Capital Region is a single economic unit containing a rich heritage, historic communities that cannot be replicated elsewhere, vibrant suburban areas, abundant open space and recreational opportunities, great natural resources and a highly educated work force. This region can grow into a uniquely attractive, vibrant and diverse metropolitan area. CDTC will consider community and economic development plans as essential factors in making transportation investment decisions.
3. **Link Transportation and Land Use.** Local land use decisions impact the function of the transportation system -- and vice versa. This relationship is paramount to all transportation planning and programming decisions. Achieving the plan's goals depends as much on achieving unprecedented success in the land use area as on improving the transportation system.
4. **Plan and Build for All Modes.** Transportation planning and project design must consider and accommodate more than just cars. Pedestrians, bicyclists, public transit,

delivery vehicles, long-distance trucks, rail crossings and intermodal terminal access are among the modes and modal considerations elevated by the plan.

Organizing the specific principles around these themes "cuts to the chase" of what CDTC participants are able to agree upon in terms of where we should be spending our limited planning resources and transportation dollars. The principles that follow state when and how CDTC believes transportation investment is warranted, and when it believes such investment is not warranted.

PRESERVE AND MANAGE

CDTC's highest priority is maintaining our investment in the existing transportation system.

CDTC's highest priority is preserving and managing our investment in the existing transportation system.

Strategically improving system performance, managing congestion, and balancing access concerns with safety are part of an overall principle that treats the transportation system as an asset and an investment. Continuous improvement to the planning process must be coupled with improvements to project design and delivery. Future transportation investments

must be wisely and carefully chosen in a fair process that results in timely project implementation. Improving the way we do business provides a limitless opportunity and a daunting challenge.

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.

Minimizing the overall costs of providing and using the system is a goal. Appropriate investment in repair and renewal of existing facilities is a higher priority than investment in expanded capacity. Appropriate investment includes balancing access and mobility needs, considering all modes, and coordinating infrastructure renewal with local land use planning efforts. Geometric standards for lane and shoulder width, provision of bike lanes and sidewalks, transit accommodations, vertical and horizontal alignment, and clearances will be based on the function of the facility, its adjacent land use, and the cost-effectiveness of the repair. Greater latitude in adjusting design parameters to local conditions is critical to providing highway and bridge infrastructure in a cost-effective manner.

Public transit, sidewalks, and bicycle facilities require routine consideration as part of the transportation infrastructure. Increased opportunities for public transit use and walking provide an alternative to auto travel that can reduce congestion and traffic conflict levels along Capital Region arterials. Transit service works best when it is considered as an integral part of roadway

design, development, and urban revitalization. Furthermore, the success of transit service is directly tied to accommodation of the pedestrian. While there are growth markets for park-and-ride services and for bike-transit connections, transit usually provides the middle leg of walking trips. Unless the pedestrian can travel quickly, safely and conveniently to and from the bus stop, there can be little success in maintaining or expanding the contribution of transit to the community. Wide, paved shoulders and/or sidewalks connecting residential areas to bus routes make bus travel more attractive. Cyclists are more inclined to bike to bus stops when there are safe shoulders or bike lanes, secure bike storage facilities, and/or bike racks on the buses. These types of improvements need to be routinely considered in project design.

The success of transit is directly tied to pedestrian accommodation.

Bicycle and pedestrian facilities require maintenance to a higher standard than motor vehicle facilities to insulate bicyclists and pedestrians from danger. Broken glass, snow, ice, and rough surfaces are common hazards on road shoulders. Frequent sweeping, plowing, and rehabilitation (repaving) is required. Increasing motorist awareness of cyclists and pedestrians by clearly signed and marked crosswalks and bike lanes is another requirement. Pedestrian phases at busy intersections (and near transit stops) provide additional protection. Separate bicycle stop lines at intersections increase visibility and give cyclists a chance to "pull away" ahead of turning vehicles. Signal phases and crosswalk/curb ramps should be designed to accommodate the mobility impaired population further enhance the safety and convenience of all pedestrians.

2) Funding for appropriate repair and renewal will be based on the function and condition of the facility -- not ownership.

All principal arterials and other major facilities in the Capital Region are vital to the economic life of the region, regardless of whether they are currently owned by a city, village, town or the state. Providing consistent and continuous systems and/or appropriate transition zones is a priority. State numbered highways and other facilities serving regional needs within city limits need equitable access to federal, state and county transportation funding.

3) Encouraging bicycle and pedestrian travel is a socially, economically and environmentally responsible approach to improving the performance of our transportation system.

Cycling and walking are legitimate components of a multimodal transportation system. According to the 2000 Census, more people commute to work by bicycle or on foot than by using transit in the Capital Region. In addition, most transit trips start with a walk. Through initiatives like the CDTC Spot Improvement Program and the NYS Department of Health Healthy Heart Program, the Capital Region has developed a solid foundation for investing in bicycle and pedestrian infrastructure. Building upon this foundation is essential to enhancing the bicycle and pedestrian travel environment and for improved quality of life. Investment in new bicycle and pedestrian

Bicycling and walking should be a safe option for short trips.

facilities will tap the latent demand for travel via these modes, encouraging people who would travel these ways "if it was safe" to do so. Even conservative estimates of use which take weather into account show that making bicycling and walking feasible can make a significant difference in people's choices. Importantly, many of the trips with the greatest potential for shifts from driving to cycling or walking are the very trips that contribute the most to air pollution (short "cold starts") and to congestion (summer, non-commute trips).

Many barriers to transit, bicycle and pedestrian travel can be removed quickly and inexpensively. Whether by smoothing over a rough shoulder with some blacktop or by re-timing a traffic signal to allow pedestrians (and mobility impaired individuals, including those in wheelchairs) adequate time to cross a busy intersection, bicycle and pedestrian accommodations are relatively low cost. This is particularly true when compared to roadway projects. They can be built both as additions to planned highway projects and as free standing efforts. Design features such as bus stops/shelters, pedestrian refuge medians on major arterials, crosswalks, curb ramps and pedestrian-actuated signals at intersections are central to successful urban project design -- not extras.

It is important that pedestrian initiatives appropriately address the needs of the mobility impaired and elderly population. Creation of crosswalks and incorporating walk phases into signal timing plans at the busiest Capital Region intersections will not necessarily accommodate the elderly or mobility-impaired user unless curb ramps, refuge areas, and adequate crossing times are also provided. As more mobility impaired persons are mainstreamed with regard to public transportation (as per the Americans with Disabilities Act), and our population ages, such considerations must become the norm.

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; and
- Transit provides essential mobility for those who do not operate a private vehicle.

These separate roles have distinct demands on resource requirements and differing implications for service design. The value of public investment in transit facilities and services must be considered in relation to these multiple objectives. Comparison of transit investment with other alternative uses of public resources, including other transportation investments, must fairly examine costs and benefits to transit users and non-users. Congestion management benefits accrue primarily to automobile users, for example, while emissions reductions provide a broad social benefit. Alternative mobility benefits a targeted segment of the population.

<i>Transit benefits non-users as well as users.</i>

The provision of essential mobility to those with few alternatives requires explicit recognition in transportation funding decisions. Cities currently shoulder an unequal proportion of the region's special needs populations, poor people, and households without cars. The drain that the

provision of social services places on urban areas lessens the amount of money available in municipal budgets for basic maintenance and rehabilitation of the transportation infrastructure. Social equity argues for emphasis in those areas where the need is the greatest.

5) Improve the safety of the regional transportation system by creating a traveling environment that is consistent with the community context and provides a reasonable range of risk for all users of the system.

This principle reflects the more integrated approach CDTC envisions for its safety planning activities on all public roads. It not only supports the continued use of traditional safety countermeasures on high speed facilities (clear zones, rumble strips, etc.), where appropriate, but also leaves room for the integration of the “Complete Streets” concept and innovative design

An integrated approach to safety includes both traditional and innovative design techniques.

techniques including the use of roundabouts, the use of “visual friction” or visual cues drivers get from the road environment to slow down, arterial management techniques, etc. as well as the education and enforcement efforts of a wide variety of local safety professionals who have a real

impact on driver behavior. It also integrates the community context in the design process as appropriate designs can help encourage responsible driving behavior.

Designing for a reasonable range of risk allows the transportation system to be forgiving such that when a crash does occur, lives are not threatened. This concept will help to reduce the level of risk for the region’s most vulnerable users of the transportation system, particularly bicyclists, pedestrians, children and the elderly. As required under SAFETEA-LU, CDTC’s safety planning efforts will be consistent with the 2007 New York State Strategic Highway Safety Plan and the New York State Transportation Master Plan.

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.

In the wake of the events of September 11, 2001, transportation security requirements have been given more emphasis. Federal and state agencies have been created to assess the vulnerability of infrastructure systems for all modes of travel and to support security strategies and measures. Security planning involves a cooperative approach of both monitoring and preparedness. Monitoring of the transportation system ensures that infrastructure and services are protected from foreseeable threats and that no infrastructure failures are in place. Preparedness ensures that there are procedures in place for dealing with situations where the roadway network is taxed in response to natural or man-made infrastructure or service interruptions. The goal is to balance security with system reliability and protect facilities while advancing other transportation goals.

7) The needs of the older driver will be considered as transportation facilities are maintained and rehabilitated.

By 2015, over one fifth of the population will be age 60 and above. The elderly population of 2015 will have grown up in an era of automobile dependency. These older people will tend to remain in the suburbs and have high expectations about driving and mobility. At the same time, aging causes problems related to depth perception, visual field, visual acuity and glare sensitivity.

Research by the federal government suggests that improving sign reflectivity, increasing letter heights, and improving stopping sight distances will help tremendously to accommodate the needs of the older driver. The 2003

Older drivers require updated standards.

Manual on Uniform Traffic Control Devices (MUTCD) addresses letter heights on signs and retroreflectivity. 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. Research in 2003 suggests that a 1 inch to 33 feet standard would benefit older users. With regard to retroreflectivity, no minimum standards have been set. However, the Federal Highway Administration (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. When intersections are reconstructed or redesigned, sight distances should be considered with the older driver in mind. These design standards allow older drivers to maintain their independence and mobility.

8) Increased efficiency in current vehicles/programs is preferable to fleet expansion to provide for special transportation needs.

Adding more buses to the transit fleet and/or adding more STAR (Special Transit Available by Request) vehicles is not the whole answer to accommodating increased demand for special transportation service. CDTA cannot keep up with the demand for STAR services. A wealth of transportation inventory is owned and operated by human service agencies; much of it is underutilized. The [Coordinated Public Transit-Human Services Transportation Plan](#) for the Capital Region focuses on three SAFETEA-LU programs (Jobs Access-Reverse Commute, New Freedom and Section 5310) laying out strategies for meeting the needs of the populations these programs serve. The plan, adopted in 2007, clearly calls for increased coordination among human service agencies, particularly as it pertains to provision of transportation. A [Regional Transportation Coordination Committee](#) was formed to help guide the recommendations put forth in the Coordinated Public Transit-Human Services Transportation Plan. This committee will continue to meet and will work towards implementing the recommendations included in the plan.

Manage Congestion

9) Management of demand is preferable to accommodation of single-occupant vehicle demand growth.

All things equal, actions that shift demand from single occupant vehicles to other modes, shift travel to uncongested periods of the day or reduce the need for travel are preferred over actions that accommodate the desire to travel without constraints. Demand management actions have both a spillover and a cumulative effect not present with physical actions. Demand management actions taken to relieve congestion in one corridor spill benefits over to other corridors by simultaneously moderating demand in those corridors, as well. Over a period of time, a cumulative benefit comes from the development of a critical mass of transit usage to support higher level transit service, from creating momentum for voluntary accommodation of pedestrian and bicyclists in new development design, or from establishing acceptance for innovative work schedules and telecommuting. These benefits are not present in actions that accommodate unconstrained single-occupant auto travel.

Demand Management provides multiple benefits.

10) Cost-effective operational actions are preferable to physical highway capacity expansion.

Building enough roadway capacity to handle all the traffic that wants to travel during the peak period at the same time without delay would be impractical and prohibitively expensive. Management and operational actions can often times be more helpful in advancing the region's mobility goals because they have been proven to promote more efficient land use and transportation systems. For example, in the Capital Region, a third of the 400 intersections analyzed by CDTC in the early 1990's had congested conditions that would respond to low-cost signal timing and lane-striping changes (more than 75 actions were implemented). More recently, many of CDTC's Community and Transportation Linkage Planning Program studies have given priority to operational actions which are many times more cost-effective than physical expansion.

Because competition for federal and state funding is extremely tight and regional needs extensive, other means of meeting the region's mobility needs are necessary by focusing on operational and management actions, including advanced traffic signal technology, signal re-timing, driveway consolidation, shared access, service roads, roundabouts, and other relatively low-cost actions which can help make the plan more affordable to both the public and private sectors.

11) Capital projects designed to provide significant physical highway capacity expansion are appropriate congestion management actions only under certain conditions.

These are the following:

- a. "Critical" levels of congestion are currently present or are expected to be present under short-range (no greater than ten year) forecasts;
- b. Demand management actions, such as instituting formal carpool, vanpool, flex-time, staggered work hour and telecommute programs and encouragement of transit usage, walking and bicycling; and operational actions are not expected to reduce congestion from "critical" levels;
- c. Demand management (including appropriate application of non-auto actions) and operational actions are incorporated into the design of the physical expansion to minimize expansion requirements and maximize the service life of the improvement;
- d. New development and/or existing trip generators contribute appropriately to the cost of the action (including the demand management and other non-construction aspects);
- e. A land use management program or agreement exists to provide reasonable assurance that the new capacity created will be effectively managed and preserved; and,
- f. The expansion is considered to be consistent with regional, county and local land use and development plans.

Projects primarily intended to serve through traffic or designed to serve statewide purposes are not subject to these criteria.

12) Significant physical highway capacity additions carried out in the context of major infrastructure renewal are appropriate only under certain conditions.

In cases such as the replacement of a bridge, long-lasting decisions about capacity expansion often must be reached long before critical congestion levels are reached and before local demand management actions are in place. In order to assure consistency of these decisions with the overall [Congestion Management Process](#), it is necessary to revise traditional design policies and procedures. Traditionally, facilities have been designed sufficient to accommodate projected demand at acceptable levels-of-service throughout the physical design life of the facility. For a bridge structure, for example, this involves designing to accommodate traffic projections for a date thirty years beyond the expected date of completion of the project. Variance from this policy has been granted primarily in situations in which there are practical impediments to full accommodation of future demand.

<p><i>A compelling case for adding capacity must be made.</i></p>

The revised design approach reaches a determination of facility design through a risk assessment (tradeoff analysis) that focuses on the opportunity cost of selecting alternative designs.

Assuming that it is a given that an infrastructure project is a priority at a given location, the risk assessment focuses on several factors:

- a. Incremental costs and benefits of designs which add capacity to accommodate future traffic, relative to less-accommodating designs;
- b. The projected amount of time that will lapse before a given design with greater capacity would be expected to have annual benefits sufficient to return an incremental benefit/cost ratio comparable to other *capacity* projects included in the TIP;
- c. The additional expense involved in providing the incremental capacity at that later date, rather than during the initial project;
- d. The degree of uncertainty present regarding future demand forecasts; and,
- e. The compatibility of the additional capacity with regional, county and local land use plans.

In these cases, capacity expansions can be considered consistent with the congestion management process under the following conditions:

- a. The risk assessment indicates that, even with effective operational and demand management actions, critical congestion is likely to occur at the location;
- b. The combination of time lapse until a competitive incremental benefit/cost ratio is reached and the additional expense of providing the capacity later points to doing the work now; and,
- c. The capacity expansion is compatible with regional, county and local land use plans.

In all cases, the desirability of the expansion must be fairly clear before the investment is made.

13) Incident management is essential to effective [congestion management](#).

While most congestion management actions are directed at recurring congestion, congested corridors experience significant "non-recurring" congestion due to accidents, vehicle breakdowns and similar incidents. This experience is most severely felt on limited access, high speed facilities operating at very high traffic densities. Minor incidents can generate significant delays. Effective incident detection and management can save as much time and operating cost as major investments in physical expansion.

Incident management is cost-effective.

14) Any major highway expansion considered by CDTC will include a management approach.

Expressways which experience congestion in the Capital Region experience both recurring congestion and incident related or non-recurring congestion. Adding new lanes may reduce recurring congestion, but will not prevent incident related delay. A management approach would include such features as a managed lane or managed toll. Examples of managed lanes include HOT lanes (High Occupancy Toll), which allow carpools and transit service to use premium service lanes and allow other users to pay for premium service lanes. Managed tolls can allow higher tolls for commuters during peak periods and lower tolls for through traffic. A managed approach gives flexibility to the system, and can be adapted as conditions change, either for incidents or special vacation travel peaks, or over a longer term to accommodate regional growth. Major highway expansion refers to adding through lanes to an expressway for several miles or more.

Managed lanes offer flexibility in addressing congestion.

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.

Trade offs among performance measures will be necessary in many projects. Congestion measures do not have higher priority than other *New Visions* performance measures. There are times when LOS (Level of Service) E or LOS F should be accepted, especially when community context or cost makes it inappropriate to widen the roadway or add lanes at an intersection.

16) The New York State Department of Transportation guidelines for roundabouts will be used for all CDTC federal aid projects that involve intersection improvements.

General objectives for intersection design are:

- a. To provide adequate sight distances.
- b. To minimize points of conflict.
- c. To simplify conflict areas.
- d. To limit conflict frequency.
- e. To minimize severity of conflicts.
- f. To minimize delay.
- g. To provide acceptable capacity for the design year.
- h. To accommodate transit stops, if they exist, and to provide safe stops.
- i. To provide safe pedestrian crossings.

Roundabouts are frequently able to address the above objectives better than other intersection types in both urban and rural environments and on high- and low-speed highways. Thus, when a project includes reconstructing or constructing new intersections, a roundabout alternative is to

be analyzed to determine if it is a feasible solution based on site constraints, including ROW (Right of Way), environmental factors, and other design constraints. Exceptions to this requirement are where the intersection:

- a. Has no current or anticipated safety, capacity, or other operational problems.
- b. Is within a well working coordinated signal system in a low-speed (<80km/h) urban environment with acceptable accident histories.
- c. Is where signals will be installed solely for emergency vehicle preemption.
- d. Has steep terrain that makes providing an area, graded at 5% or less for the circulating roadways, infeasible.
- e. Has been deemed unsuitable for a roundabout by the NYSDOT Roundabout Design Unit.
- f. Would unduly interfere with transit operation of a major bus route by forced bus stop relocations away from an intersection destination with a high volume of riders.

When the analysis shows that a roundabout is a feasible alternative, it should be considered the preferred alternative due to the proven substantial safety benefits and other operational benefits. Note: A feasible alternative is a reasonable solution that meets the objectives in a cost effective and environmentally sound manner. The preferred alternative is the feasible alternative that the implementing agency is leaning toward recommending for design approval. The preferred alternative can change if a new feasible alternative is identified and as the feasible alternatives are evaluated during preliminary design.

Protect Our Investment

17) Managing traffic flows on the Capital Region [expressway](#) and arterial system is critical for both economic and social reasons.

The Capital Region's economic competitiveness relies on the use of its expressway system for over-the-road freight movement and for connections with air, water and rail modes. In addition, the expressway system is heavily used for commuting and general circulation within the region. It enhances the region's quality of life by providing access to a wide range of local activities and to those of other regions. Investments in traffic management, particularly related to construction and incidents, are cost-effective investments in the safety of the highway system.

Mobility is essential to our region's economic health.

The Capital Region's expressway "system" includes technology and human resources that are critical to its effectiveness. The complete system includes traffic monitoring and control technologies that facilitate maintenance of traffic flows, as well as the staffs of transportation, police, fire, and medical service agencies that maintain traffic mobility or safety. The system includes the following activities or functions:

- traffic and weather condition monitoring;
- traffic control;
- inter-agency communication and coordination;
- appropriate incident response; and
- traveler information.

Proper management of the expressway system must also include management of arterial feeders and receivers that connect the expressways to the remainder of the roadway network. Expressways are not entities unto themselves, and access to and from arterials cannot be considered a "given." Making optimal use of the expressway system requires elimination of difficulties in connecting to/from local land uses. Guidelines for [arterial corridor management](#) have been developed within the existing regulatory and policy framework, and can be used in conjunction with existing land use and zoning control mechanisms such as site plan review and subdivision regulations.

18) Major capital projects must have a plan for operating budgets for the life of the project.

An emphasis on congestion management requires increased budgets for operations and maintenance. To ensure that our capital investments continue to yield benefits throughout their service lives, it is important to provide for the essential "upkeep" of these installations, whether they are of a structural or technological nature. Future transportation investments should include ongoing operations and maintenance commitments.

19) Maintaining the health and improving the efficiency of the existing [freight](#) facilities in the region through public/private partnerships is a high priority.

There are four primary freight facilities in the Capital Region: the Port of Albany/Kenwood Yards, the Albany International Airport, the Selkirk Rail Yards, and the Thruway/Interstate System. There are also a number of secondary facilities, both publicly and privately owned. Project eligibility under federal transportation law limits the extent of influence that the CDTC can have on internal intermodal facility efficiency. Regional public sector transportation planning activities and capital investments are therefore focused on surface access and safety issues. It is a higher regional priority to enhance our existing freight facilities than to build new facilities.

<p><i>It is a higher priority to enhance existing freight facilities than to build new ones.</i></p>
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Freight planning activities by the public sector are partnership opportunities. Historically, the private sector has provided efficient goods movement. The privately owned rail and trucking companies will continue to do so given the right environment in which to work. Building partnerships is key to maintaining the Capital Region's transportation system as an asset to our economic health.

DEVELOP THE REGION'S POTENTIAL

The Capital Region functions as a single economy. The economic health of the suburbs is inextricably tied to the health of the cities and the rural areas. The region has made few major mistakes -- we have a strong foundation to build on. The following set of planning and investment principles builds on the region's strengths and recognizes the great potential we have to grow into a uniquely attractive, vibrant, and diverse metropolitan area.

The Capital Region is a single economic unit that can grow into a uniquely attractive, vibrant and diverse metropolitan area.

Build Upon Our Strengths

20) The transportation system of the Capital Region is an important part of the region's attractiveness.

The Capital Region competes with other regions. Our transportation system enhances the region's competitive position. Protecting our economic base requires that the transportation system "work", that good connections are provided between and within regional centers and between modes, and that the region has a reputation for being accessible. As congestion and transportation problems become major issues in many metropolitan areas around the nation, the Capital Region can protect and strengthen its transportation system as a marketable asset.

The arterial street and highway system is the foundation of the area's surface transportation system. The arterial highway system primarily moves traffic; it provides local access to adjacent properties as a secondary function. Improving highways for their traffic movement function is only one objective. In order to improve the area's living environment, balance must be achieved between the rights of property owners for access and the need to protect arterial function and community safety. Sometimes the road's dual functions of local access and mobility will not be compatible. Difficult choices will have to be made. Community quality of life is an important criterion to weigh during these deliberations.

Road design must meet multiple objectives.

21) Transportation investments will help preserve and enhance the Capital Region's existing urban form, infrastructure, and quality of place.

The Capital Region already has many unique attributes that other regions strive for:

- The region is a collection of communities that work together and possess a livable, community scale.

- The region is multi-centered with the most intensive suburban development in the center of the region rather than at the fringe. Suburban and urban areas depend on each other for jobs, for housing, and for cultural activities.
- Traditional transit corridors link urban centers.
- The region's modest growth rate is a strength because it affords the time and the opportunity to put in place plans and policies that encourage growth in harmony with the region's objectives.
- The region is endowed with a diversity of parks, a relative abundance of open space and a wealth of recreation and tourism attractions.

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.

Transit's role in a community is defined not only by specific transit investment decisions but also by policies and decisions related to the provision of employer parking, design and density of new development and treatment of the pedestrian environment. Actions in these areas must work in concert with transit system design to allow transit to provide a significant contribution to the metropolitan area. Transit investments can serve as a tool to support regional and local land use policies.

23) Neighborhood-based local planning efforts are important to the success of an overall regional plan that emphasizes livable communities.

Transportation improvements must be designed to improve neighborhood integrity. Historically, many major transportation investments have been disruptive to neighborhoods. There is an opportunity to use transportation improvements to bring neighborhoods together -- to increase owner-occupancy, to provide increased accessibility, and to enhance community values. Regional transportation plans are implemented by other agencies -- NYSDOT, CDTA, and local governments. It is important that the principles and "paradigm shifts" that *New Visions 2030* advances be based upon and reinforced with local participation in planning efforts and project development activities. Through a convergence of "bottom up" and "top down" shifts in emphasis towards enhancing community quality of life, mutually beneficial solutions to regional and local problems will be achievable.

<p><i>Livable communities are achieved at the neighborhood level.</i></p>

LINK TRANSPORTATION AND LAND USE

Land use decisions are made at the local level. Major transportation investments are generally the result of a combination of regional policy and the availability of state and federal funding. Strengthening the relationship between these decisions is central to achieving the *New Visions* goals of protecting our infrastructure investment and developing the region's potential.

Local land use decisions profoundly impact the function of the transportation system -- and vice versa.

Encourage Local Land Use Management

24) Land use management is critical to the protection of transportation system investment.

Development in the Capital Region in coming years is expected to add significant traffic pressures along existing two-lane and four-lane arterials. Unconstrained development is likely to add to the number of driveways serving isolated developments. This will result in a deterioration of the through capacity and operating speed of these arterials, will aggravate the existing difficulty in effectively serving suburban development with transit and will frustrate any attempts to create safe travel opportunities for pedestrians and bicyclists. It will also frustrate efforts at efficient goods movement and local delivery. Without careful treatment, the land available for development along these arterials can support an amount of development that will far exceed the ability of these roads to handle through traffic (which is their primary function), local land access and effective accommodation of transit, bicycle and pedestrian modes.

Integrating Land Use and Transportation Planning is critical.

Coordinated transportation and land use plans provide a framework that facilitates predictable development. By engaging in coordinated land use/transportation planning, a community can weigh development decisions against its stated vision of the future. Knowledge of existing transportation facilities and their interaction with land use and other infrastructure needs lends predictability to the development process. Such predictability is important for public and private investment decisions. Transportation and land use plans must consider both local and regional impacts.

Since 2000, CDTC's [Community and Transportation Linkage Planning Program](#) has supported local planning efforts that link transportation and land use. These low cost, pro-active planning efforts have helped local communities prepare for redevelopment or future growth utilizing sound planning principles. The Program requires local coordination with regional principles, strategies and actions and has become the centerpiece of CDTC's public participation process. Support for the Linkage Program is high and it serves as a national model for [local planning in a regional context](#).

One specific area where local land use planning can be improved is siting of human service facilities for the elderly and disabled population. Downtowns and major urban corridors provide transportation choices that are not available in suburban and/or rural areas. As the "baby boom"

Human service facilities siting requires improved consideration of access and mobility.

generation matures the number of facilities providing services to the elderly and mobility-impaired elderly will likely increase. In addition, the State's emphasis on de-institutionalization will create additional "day program" facilities for the mentally disabled. The provision of transportation for these groups has become an important issue. As facilities are built, it is essential

that they be located in places where transit is easily accessible and walking is an option. The [Coordinated Public Transit-Human Services Transportation Plan](#) for the Capital Region identifies these issues and lays out strategies to address them.

Another specific area where local land use planning can be improved is in corridor protection and official street mapping, which are necessary to preserve transportation options. Long-range

Keeping options open through corridor protection tools is recommended.

[congestion management](#) must include protection of corridors for possible future transportation use. This includes protection of options for future provision of sidewalks, bicycle paths, transit connections, service roads and/or new collector or arterial highways. Opportunities for protection are presented in the

context of development approval, transportation project design, in conjunction with utility right-of-way creation or revision and during review of proposed abandonment of transportation facilities (such as a rail line.) Official action, through land acquisition or street mapping is minimal at present, and expanded use of these tools must be considered. Not all congestion management actions can be implemented immediately; options for future action must be preserved whenever possible. A risk assessment must be conducted to determine the merit of preserving a particular corridor.

25) Design of street layout and location of complementary uses creates a [pedestrian](#) scale and provides increased accessibility without compromising the attractiveness of development.

The Capital Region is rich in traditional, walkable neighborhoods. Pedestrian connections between land uses included in the design standards for new subdivisions and new commercial centers will have many benefits. Consistent with community design goals, pedestrian and bicycle enhancements to existing subdivisions and activity centers connect neighborhoods to each other and to commercial areas.

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.

The urban service area can be generally defined as the urbanized area in Albany, Rensselaer and Schenectady Counties and the Saratoga Sewer District in Saratoga County. This urban service area may be extended to include areas that already have infrastructure in place; but further study will be necessary to specifically define the boundaries. Adequate space exists within this urban service area to accommodate the urban growth foreseen for the Capital Region, especially if opportunities for infill and redevelopment are used. Once defined in the [context of regional planning](#) efforts, this Urban Service Area can direct transportation investments to benefit appropriate development within its boundaries. This policy is not intended to neglect legitimate safety and infrastructure condition needs in rural areas, nor the need for adequate connectivity between urban and rural areas for commerce and recreation.

Using transportation investments as a way to support urban reinvestment and infill provides tremendous advantages. The necessary transportation, water, sewer, and other infrastructure are already present -- thus reducing the cost of development. Transportation investments geared towards creating more livable, walkable urban places provide choice in the marketplace,

It's cheaper to provide urban services to a defined area.

allowing for increased diversity to flourish and the region as a whole to prosper. Furthermore, strong central places are engines that drive regional economic growth. The economic competitiveness of the Capital Region depends upon its city centers to serve as core areas for business, government, education, health care, culture and entertainment. There are eight cities in the Capital Region and various important urban corridors: these include the four central cities of Albany, Schenectady, Troy, and Saratoga Springs and urban radial arterials like Route 5 and Route 20. Failure to attract and support development in the city centers and urban corridors will contribute to further loss of activity in these areas and additional decentralization. Transportation investments supportive of growth and redevelopment in city centers and urban corridors promote the efficient use of land and existing infrastructure. They also enhance our main streets and central business districts, making them safer and more attractive for business and public activities.

In both suburban and urban centers, transportation investments can encourage community scale, mixed use development in locations with pedestrian and bicycle access and transit. When residential development occurs far from arterials or when the separation between residential and commercial development is too great, accessibility is limited to the auto only. When development occurs close to arterials with a mix of complementary uses, people are given transport choices in addition to the automobile. Transportation investments that provide pedestrian enhancements and transit centers in high-density urban and suburban corridors improve neighborhood integrity and community livability.

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.

Wise use of land can assist in maintaining an ecological balance between human activities and the natural environment. Such ecological balance and natural beauty are important determinants

CDTC has a role in environmental stewardship.

of the region's ability to provide a pleasant and habitable environment for all forms of life. Preservation of the environmentally significant features of the natural resource base further contributes to the maintenance of the ecological balance, natural beauty, and the economic well-being of the region.

Transportation planning and investment must improve or preserve the region's cultural and natural environment through emphasis on transportation/land use planning integration. Comparison of natural and cultural resources with locations of potential transportation investments early in the process will identify possible impacts on environmentally sensitive resources on a regional level and will identify opportunities for larger-than-project-specific mitigation activities, potentially yielding more regionally significant environmental benefits.

The Capital Region is part of a non-attainment area for ozone. CDTC will continue to meet the requirements of the Clean Air Act. CDTC will advance initiatives that have a positive impact on regional air quality through the CMAQ Program (Congestion Mitigation and Air Quality) and the [Clean Communities Coalition](#). Continued use of an innovative [Congestion Management Process](#) that encourages demand management; management and operations; carpooling, bicycle, pedestrian and transit modes; and land use planning will help the region make progress in improving air quality. All of these efforts further CDTC's role in environmental stewardship and maintaining the regional quality of life.

28) Transportation investments will not encourage development in [environmentally sensitive](#) areas and will help to preserve rural character.

Open space will be preserved as it is a valuable resource throughout the region. Development in environmentally sensitive areas is not desirable. Any transportation improvements proposed for known environmentally sensitive areas must be carried forth in an environmentally sensitive manner. Proposed improvements in such areas may require ecosystem sustainability analysis prior to initiating project development or any formal environmental process to identify appropriate modifications to proposed project scopes and how they are carried on the TIP.

Rural character will be preserved by appropriate transportation investments.

Transportation investments will be sensitive to the natural and physical landscape of rural areas and discourage urban or suburban type development in those areas. Rural features such as hamlets, villages, farmland, and open space will be preserved. Transportation project design will address access and circulation issues while being sensitive to the particular

characteristics of the affected area. Consideration of factors such as agricultural districts or lands, existing zoning and development patterns, and historic, scenic, and open space preservation assures that improvements are harmonious with the surrounding landscape. Transportation investments will not encourage development in areas lacking adequate provision of public water and sewer services, or at low densities outside the urban service area. Such development often renders rural roads insufficient, subsequently raising expectations for higher design standards on these roads.

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.

The arterial street system serves as the basic foundation of the region's transportation system elevating the importance of employing good arterial management practices to improve safety and accessibility for all users, reduce travel delays, and postpone or eliminate major capital expenditures for new roadway capacity.

Where and how the region's cities and towns 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, both supports a safe and efficient arterial street system and enhances transportation – land use compatibility. Such a program supports a “complete streets” approach where arterials are designed and operated to enable safe access for all users.

Planning and design of the places we work, live, and shop can have a real and direct impact on the functioning of the region's arterial street system.

For the Capital District's arterial management program to be effective, guidelines need to be flexible enough to deal with the region's various roadway types and settlement patterns. To impose the same guidelines on an urban arterial that may be applicable to a higher-speed, less developed rural road may lead to a loss of valuable economic development opportunities. More often, it leads to exceptions that, in the course of time, may weaken the program.

CDTC's adopted arterial management guidelines have proven to be very effective in corridor planning and design, and in helping communities work toward balancing efficient travel along their main roads with desirable development patterns. Development opportunities can be embraced when access, transit, and pedestrian issues are properly addressed. When proper planning occurs, the conflict with arterial function is minimized. Level-of-Compatibility measures have been routinely used at the system level and project development level to elevate the importance of reducing conflict between residential land use and through traffic, and between commercial access and through traffic.

PLAN AND BUILD FOR ALL MODES

Pedestrians, bicycles, freight, transit, air, and water transport -- and the connections between these systems -- have a legitimate and important role in the healthy function of a transportation system that meets people's needs. Regional transportation planning efforts must be comprehensive enough to look beyond eligibility for specific fund sources towards an interconnected intermodal system.

30) CDTC's planning efforts will be comprehensive enough to encompass all modes, including air, water, freight, intercity and local transit, pedestrian and bicycle.

Since 1997 when *New Visions* was originally adopted, CDTC has expanded its focus on transportation issues beyond the surface transportation network -- roads, bridges and buses. Transportation planning today routinely encompasses all modes and the connections between them. While recognizing our limitations in our ability to influence the private sector contributions to the transportation system, CDTC's planning and outreach efforts will continue to be far-reaching in order to address the region's needs. The Capital District Transportation Authority, the Capital District Regional Planning Commission, the Albany Port District Commission, the Albany Airport Authority, the New York State Department of Transportation and many others are vital partners in considering all modes in CDTC's regional planning activities. CDTC's [Unified Planning Work Program](#) will continue to reflect a wide variety of multi-modal planning efforts in the region.

Freight will be explicitly considered.

All transportation projects will specifically consider the impact on goods movement and economic development in their planning, design, and implementation. [Goods movement](#) is an integral part of economic well being of the Capital Region. An identified priority freight network deserves attention when improvements are considered, particularly where addressing current deficiencies that will significantly impact goods movement, improve system performance, and enhance economic development.

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.

Barriers to bicycle and pedestrian travel must be eliminated.

If a facility is not comfortable or safe for bicyclists and pedestrians, they will not use it. Still, the facility might be a potentially well-used bicycle/pedestrian travel route. Eliminating the *barriers* to bicycle and pedestrian use along facilities creates attractive routes for both local and regional travel, and enhances mobility for Capital Region residents with the fewest travel choices. Many Capital Region residents either choose not to or cannot afford to own a car. Not providing reasonable opportunities for bicycle or pedestrian travel limits mobility and creates dependence on transit schedules, transit coverage, taxis or friends. In addition, bicycle and pedestrian accommodations can eliminate the dependence on cars in suburban areas where subdivision designs and the local street network combine to effectively require car travel for all trips. Children will particularly benefit from increased travel choices.