

Figure 3-1  
Future Year (2025) AADT Growth in Urban Centers

### 3 FUTURE CONDITIONS

Future traffic projections were developed for the Route 11 study corridor based on historical traffic growth trends as well as anticipated socioeconomic growth within the study area.

#### 3.1 Future Traffic Forecasts

Future traffic growth rates within the Route 11 Corridor Study were provided by NYSDOT. The projected annual traffic growth ranged from about 1/2 percent on most of the rural segments to 2 percent on the more urbanized segments of the corridor. These growth rates reflected anticipated growth in population and employment within the North Country. The Route 11 Corridor was divided into 22 segments, excluding the major village centers of Gouverneur, Canton, Potsdam, Malone and Rouses Point. Growth rates and other statistics are provided in Table 3-1.

The forecasted traffic growth projections reveal an average traffic increase of 15 percent from 2005 to 2025. This growth is mostly concentrated in the town centers along the corridor.

For the major village centers, shown in Figure 3-1, Route 11 in Watertown will carry the highest traffic with more than 28,000 vehicles daily in 2025. Gouverneur, Canton,, Potsdam, Malone, and Rouses Point will carry 14,190; 18,190; 15,170; 24,900; and 11,130 vehicles per day respectively. Rural segments on the other hand would see little growth and remain below 10,000 vehicles daily.

##### 3.1.1 Truck Traffic Forecast

Growth in truck traffic was also a consideration in this study. Nationally, between 1980 and 2002, truck travel grew by more than 90 percent while lane miles of travel increased just 3 percent according to the FHWA. Growth in truck traffic is expected to continue, with overall U.S. truck traffic expected to grow 92 percent between 1998 and 2020.

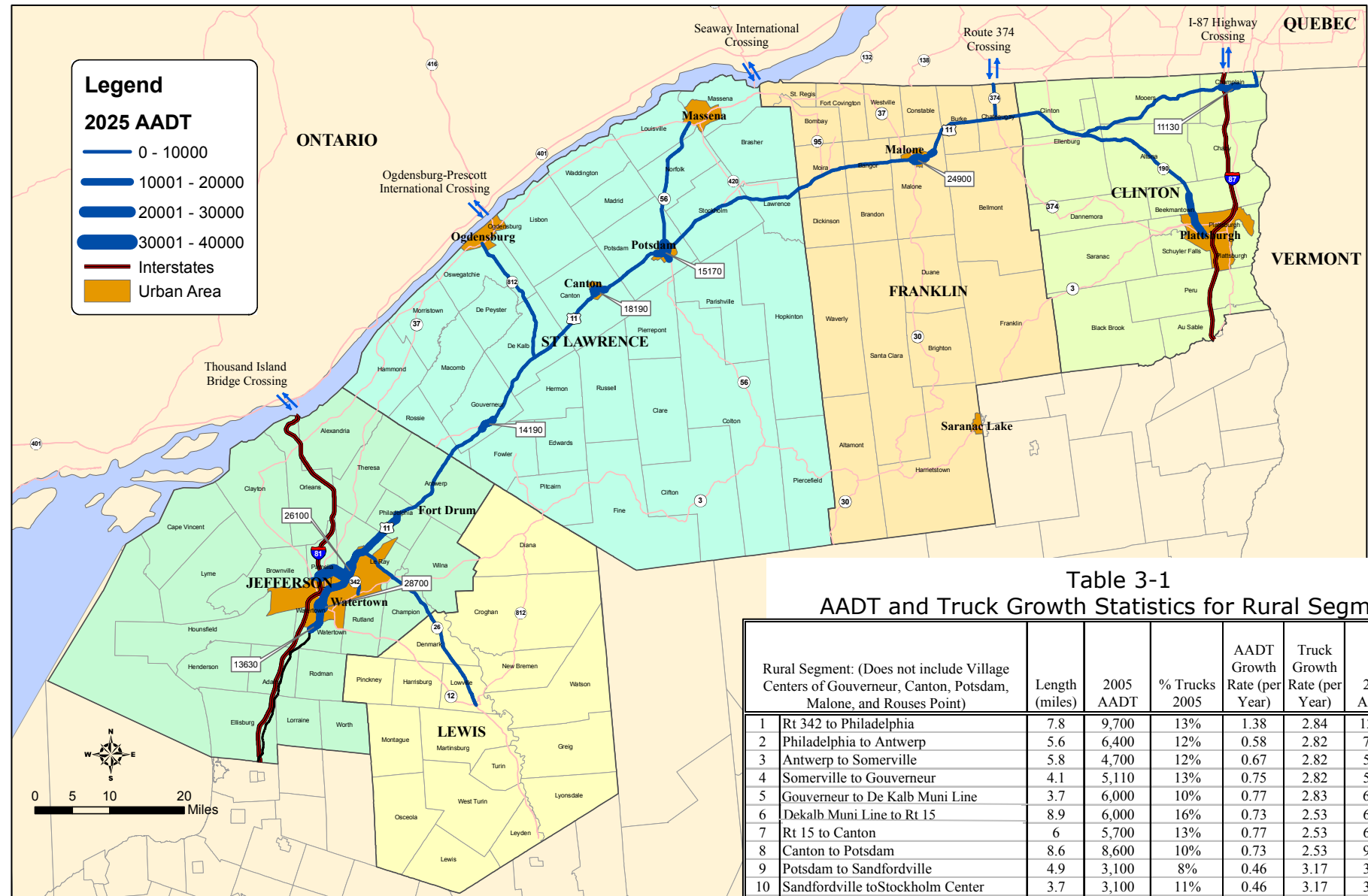


Table 3-1  
AADT and Truck Growth Statistics for Rural Segments

Rural Segment: (Does not include Village Centers of Gouverneur, Canton, Potsdam, Malone, and Rouses Point)	Length (miles)	2005 AADT	% Trucks 2005	AADT Growth Rate (per Year)	Truck Growth Rate (per Year)	2025 AADT	% Trucks 2025
1 Rt 342 to Philadelphia	7.8	9,700	13%	1.38	2.84	12759	17%
2 Philadelphia to Antwerp	5.6	6,400	12%	0.58	2.82	7185	19%
3 Antwerp to Somerville	5.8	4,700	12%	0.67	2.82	5372	18%
4 Somerville to Gouverneur	4.1	5,110	13%	0.75	2.82	5934	20%
5 Gouverneur to De Kalb Muni Line	3.7	6,000	10%	0.77	2.83	6995	15%
6 DeKalb Muni Line to Rt 15	8.9	6,000	16%	0.73	2.53	6939	23%
7 Rt 15 to Canton	6	5,700	13%	0.77	2.53	6645	18%
8 Canton to Potsdam	8.6	8,600	10%	0.73	2.53	9947	14%
9 Potsdam to Sandfordville	4.9	3,100	8%	0.46	3.17	3398	14%
10 Sandfordville to Stockholm Center	3.7	3,100	11%	0.46	3.17	3398	19%
11 Stockholm Center to Lawrenceville	8.9	2,450	12%	0.63	3.17	2778	20%
12 Lawrenceville to Moira	5.6	2,200	12%	0.49	3.17	2426	20%
13 Moira to Brushton	2.4	5,200	11%	0.61	3.17	5873	18%
14 Brushton to North Bangor	5	5,200	10%	0.61	3.17	5873	17%
15 North Bangor to Malone	2.4	4,100	10%	2.20	3.17	6336	12%
16 Malone to Rt 122	4.6	3,300	16%	0.65	3.49	3757	28%
17 Rt 122 to Chateaugay	6.1	5,600	13%	0.56	3.21	6262	22%
18 Chateaugay to Clinton Cnty Line	2.7	5,000	12%	0.45	3.05	5470	20%
19 Clinton Cnty Line to Rt 189	4.9	4,300	12%	0.12	3.06	4404	21%
20 Rt 189 to Ellenburg Depot	7.4	3,800	12%	1.01	3.05	4646	18%
21 Ellenburg Depot to Champlain Town Line	16.5	3,700	12%	0.28	2.69	3913	19%
22 Champlain Town Line to I-87	2.9	4,300	12%	0.44	2.81	4695	19%
23 I-87 to Rouses Point	6.7	8,200	12%	0.29	2.81	8689	20%

The percent of urban interstate highways carrying 10,000 or more trucks per day is expected to grow from 27 percent in 1998 to 69 percent in 2020 according to a state profile of Michigan by the FHWA. Inter-regional linkages to and from the North Country do not have the capacity to handle such demand, and as such, the movement of goods will need to be accommodated elsewhere. Figure 3-2 illustrates truck growth on study area roadways.

### 3.1.2 Additional Growth Potential

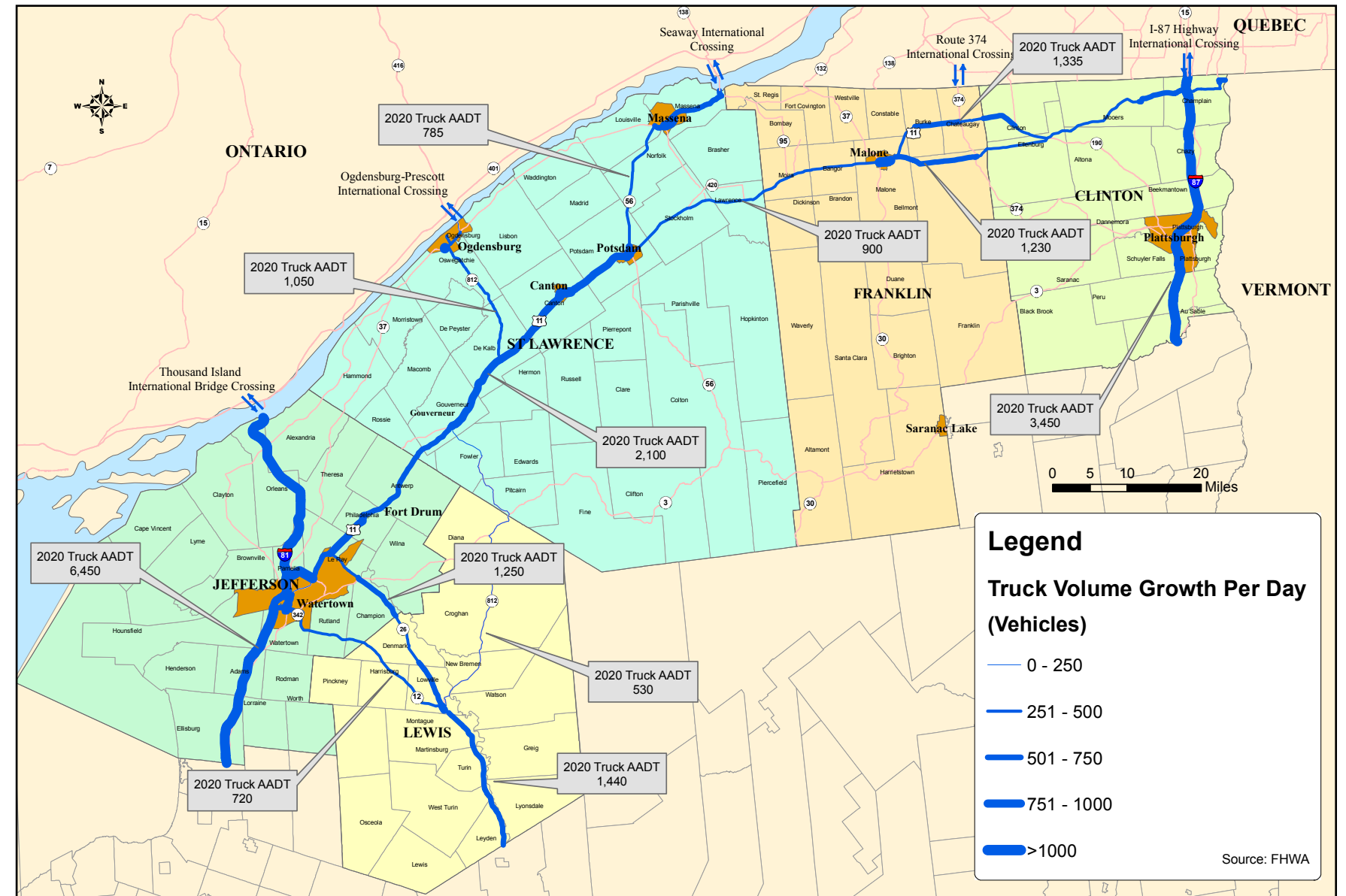
Two major expansion projects in the North Country could generate additional economic development growth and traffic along Route 11. These projects are:

1. The Can-Am Connection Project; and
2. The Fort Drum Expansion Project.

**Strategic Importance of the Can-Am Connection** - The Can-Am Connection is a proposed east-west highway from Maine to Western New York. The primary function of this facility would be to provide accessibility to the economically distressed regions of the northeast states and a more direct route to the United States, through the Port of Halifax for example, for goods arriving from Europe. The Route 11 and Route 37 alignments are expected to tie into the proposed Can-Am Connection that will connect the New England states with Canadian markets (Toronto, Montreal) and to the Midwest United States. Based on a recent study, the Can-Am Connection is expected to generate approximately 370,000 trucks per year and 718,000 cars per year. Over half of this traffic is expected to be international traffic (Canada-to-Canada and Canada-to-United States) and will travel to/from the United States through the North Country's border crossings. The remainder of the traffic is expected to be domestic (between the New England states and the Midwestern states). It is important to note that an ongoing study is looking at the economic impacts of the Can-Am Connection and the results from that study could have a significant impact on the strategic significance of the Route 11 NTE.

**Strategic Importance of Fort Drum** - In 2003, a series of transformations at Fort Drum were initiated as part of a plan to implement an Army-wide modular force concept. In 2004, stationing of a third brigade at Fort Drum was also announced. These changes, along with several subsequent additions to troop strength, have necessitated a number of both military and community expansion projects to accommodate growth.

Figure 3-2  
Forecasted Truck Growth



As a result of these increases, total troop strength at Fort Drum has grown from about 10,700 in 2003, to projected end strength of 18,927.

In addition, total family members are projected to increase to 27,716, and the Fort Drum civilian workforce will grow to 4,339. Economic modeling shows that 12,666 nonmilitary jobs have also been created in the community as a result of the presence of Fort Drum. While the impacts of the population growth at Fort Drum have been only partially felt due to large scale deployments, anticipated increases in population are expected to have a significant impact on traffic growth on the Route 11 Corridor.

### 3.2 Future Needs

Using the forecasted traffic growth, future traffic and safety conditions along the Route 11 Corridor were estimated. Without any improvement to the corridor, existing conditions will continue to worsen. By addressing the five study goals of mobility, safety, economic competitiveness, environmental compatibility, and security, the future needs along the corridor are presented in the following paragraphs.

#### 3.2.1 Mobility and Reliability

Congestion is currently an issue primarily in the major village centers of the study corridor. In 2025, over half of the street network within these communities will experience recurrent congestion during peak hours of the day. Increased congestion invariably leads to longer travel times and delays. In addition to congestion within the villages, limited opportunities to pass slower vehicles along the rural segments of Route 11 create additional delay. Vehicles can form platoons behind slower moving cars and trucks, and as traffic increases the opportunities to pass will become less frequent. As mobility is diminished, driver frustration increases.

On an average annual day in Year 2025, travel time delay from Watertown to Champlain will be about 25 minutes. It should be noted that these delays represent a

conservative estimate because they do not include non-recurrent delays that could develop as a result of accidents, inclement weather, construction or maintenance work on Route 11. In addition, peak tourism days will naturally experience greater delay as they represent an above average traffic condition.

To improve mobility in the near-term, several strategies are appropriate. Improving traffic signals and intersections within the villages can reduce some of the delay associated with stopping at traffic lights. Reducing left-turn conflicts by improving access to land parcels along Route 11 can improve traffic flow and further minimize delay. Finally, constructing passing lanes along the rural segments of Route 11 can help break up vehicle platoons by allowing slower vehicle to move out of the higher speed travel stream.

#### 3.2.2 Safety

Accidents are costly in terms of life and property. They also contribute to the overall delay experienced on the road; therefore it is important to address the locations that have chronic problems. Accidents that temporarily obstruct a travel lane on a two-lane arterial create substantial upstream congestion. Even after an incident is cleared from the travel lane, it can take a long time before flow is restored and delays are diminished. The effects of traffic accidents do not only impact those involved in the accident, but numerous other people delayed by the event.

Frequency and severity of traffic accidents are usually correlated to traffic volume, substandard roadway conditions, and high vehicular speeds. Several locations along Route 11 are experiencing accident frequencies that are unusually high for similar roadways in the state. If improvements are not made, additional accidents can be expected as traffic continues to increase in the future.

There is no single solution to addressing accidents along Route 11. In fact, it is likely that several solutions working in concert will need to be employed to improve safety and minimize the negative impacts associated with

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The solution to the transportation needs in the North Country should be a series of strategic investments, phased over time, that will improve mobility and safety, support the economy, preserve the environment, and be secure from threats. Route 11 is a vital resource to the cities, villages, hamlets, businesses, and learning institutions along its path. The future development of this corridor must be based on sound planning and responsible decision making.

traffic accidents. Near-term improvements to guide rails and deteriorated pavement can help prevent more serious accidents. Controlling vehicular speed can also have a marked effect on accident reductions in several ways. High speed vehicles traveling along rural sections of Route 11 must transition to slower speeds as they enter the villages. As conflict points increase within the villages, slower speeds are required for adequate response time and braking distance. Conversely, on the rural sections of Route 11, faster vehicles must be given opportunities to overtake slower traffic or those vehicles will either pass illegally or without adequate distance to do so. Finally, access management improvements can reduce conflicts associated with vehicles making turns into driveways - a common cause of accidents.

### 3.2.3 Economic Competitiveness

Transportation investment alone does not provide a sufficient condition for economic growth. But, infrastructure is necessary to link jobs with skilled labor forces and to get products to markets, but an economically distressed region must also have pre-existing potential for economic expansion that is currently constrained by lack of access and mobility. In other words, labor pools and housing must be available, and goods and services must be produced and consumed for effective trade to take place.

The NCTS determined that sufficient resources exist to fuel a growing economy in the North Country, provided transportation systems are improved to enhance mobility and accessibility to the region. Without additional investment in transportation, economic growth will be minimal and will largely be focused within the existing village centers. The stagnation of economic activity within the region will result in low travel demand along a majority of Route 11. The region is in a difficult situation; low travel demand does not warrant significant transportation investment, and lack of investment constrains economic growth which drives travel demand.

The Route 11 Corridor is in need of a phased transportation solution that addresses mobility and safety

deficiencies in the near-term, while providing the building blocks for economic growth and longer-term solutions to fuel that growth. Passing lanes and improvements within the village centers can provide some near-term relief without precluding future improvements that involve more significant roadway expansion. Ultimately, an expressway solution that bypasses the major villages holds the greatest potential for enhancing economic competitiveness.

### 3.2.4 Environmental Compatibility

Transportation plans are accountable for ensuring that responsible decisions are made with regard to impacts to the environment. This includes not only natural resources, but the built environment as well. Preserving communities and quality of life are as essential to project development as enhancing mobility. The North Country needs transportation solutions that satisfy all the study goals without destroying its significant assets.

The Adirondack Park is a natural resource of national significance, and as such must be preserved and protected. Transportation improvements that negatively impact this resource need to be eliminated from consideration or the impacts be mitigated to acceptable levels.

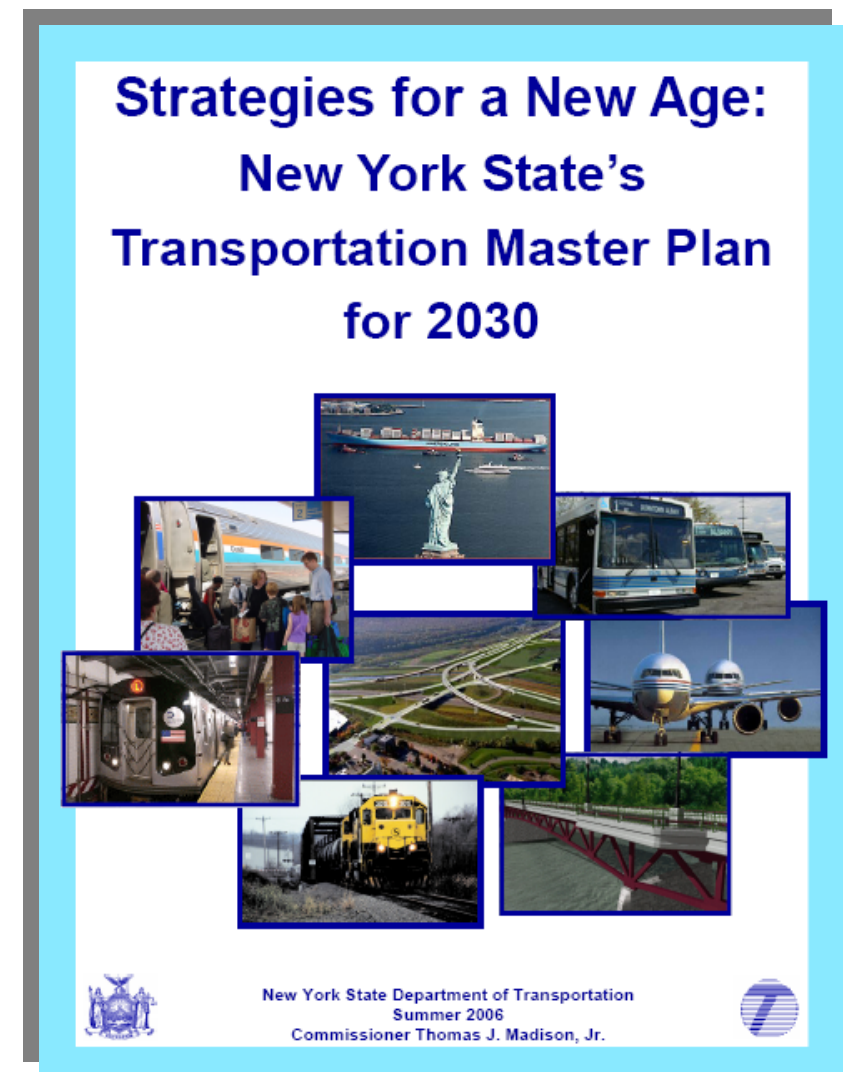
Furthermore, any improvement that induces traffic has the potential for increasing noise and air pollution, harming sensitive resources, and disrupting communities. This is an important consideration when evaluating what is best for the region as a whole. Clearly, improving mobility and safety are essential to the long-term well being of the North Country's population and economic status; however, improvements should not address these goals to the detriment of the established villages and hamlets along the corridor.

### 3.2.5 Security

Statistics show that almost 11 percent of the nation's gross economic product is involved in the transportation industry, representing more than \$1 trillion in

NYS DOT's Priority Results Areas are defined in NY State's 2030 Transportation Master Plan, and have been adopted as the Goals of this study:

- Mobility and Reliability
- Safety
- Economic Competitiveness
- Environmental Compatibility
- Security



expenditures per year. Because transportation is the backbone of this nation's economy, planning for and prevention of intentional and unintentional damage to this vital resource is imperative.

Providing system redundancy is one solution to addressing security needs in the North Country. Although rural highways are not typically prime targets for terrorist activities, they can serve as a necessary conduit for the evacuation of people and emergency response personnel in the event of a natural or man-made disaster. Route 11 serves as one of the few east-west options within the North Country, connecting I-81 with I-87 and feeding several border crossings into Canada. Route 11 also provides access to Fort Drum, home to the 10th Mountain Division and one of the nation's largest training facilities for the Army.

Improving mobility by adding capacity along Route 11 provides a level of system redundancy. Currently, the 2-lane highway is not sufficient for moving heavy volumes of traffic in a safe and efficient fashion. A 4-lane expressway would enhance the regional highway grid while providing relief in a time of emergency.

Border crossing security is also a major consideration in the North Country. This involves cooperative and coordinated strategies among the Canadian and U.S. federal governments and the owners of the border facilities. Because truck traffic potentially poses a major threat to security, pre-clearance programs for freight should be implemented. These programs have an added benefit in that they not only ensure cargoes are safe, but they can expedite or eliminate processing delays for haulers who do not present a security threat.

In addition to land crossing, the ports along the St. Lawrence Seaway must be kept secure. Major responsibility for ensuring the security of ports and waterways rests with the federal government. The Maritime Transportation Security Act of 2002 required high risk vessels and port facilities to conduct vulnerability assessments and develop security plans that include passenger, vehicle, and baggage screening procedures. The Act called for security patrols,

establishment of restricted areas, personnel identification procedures, access control measures, and installation of surveillance equipment. The ports within New York State are in compliance with the Maritime Transportation Security Act and have developed compliance plans that will draw upon the latest surveillance, screening, and technology strategies to ensure the security of cargoes, vessels, and other vulnerable facilities.