EXISTING CORRIDOR CONDITIONS AND OPPORTUNITIES

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1. INTRODUCTION

1.1. Project Overview

The I-87/Autoroute 15 corridor provides a direct international connection between the largest metropolitan area in the United States (New York City) and the second largest metropolitan area in Canada (Montreal) through the Lacolle/Champlain border crossing. The corridor, through its connections to crossing highways and to other modes, serves a broad area that includes the Mid-Atlantic States, New England and Eastern Canada and a total population of approximately 80 million people.

Growth in trade and in tourism has placed increased demands on this vital corridor. Between 1996 and 1999, truck traffic at the US-Canada border crossing increased 40%. In 1999, the I-87/Champlain border crossing handled over 800,000 trucks carrying $14 billion worth of goods, making it the fifth busiest US-Canada border crossing. In addition, nearby rail border crossings carried nearly $2 billion value of freight in 2000. The growth in traffic during this period and new security concerns have led to slower processing of vehicles at the border, and extended delays have presented problems for continued growth of economic activity and for security.

To respond to these pressures, a comprehensive study has been initiated by the New York State Department of Transportation (NYSDOT) to identify improvements to the transportation network in the I-87/Autoroute 15 Corridor in New York State and Quebec. These actions would address past growth in the corridor while allowing the full potential growth in the economy of the corridor and region to be achieved. The I-87 Multimodal Corridor Study (“the Study”) will be integrated with the findings and results of the New York and the New World Economy study previously completed for NYSDOT, which focused on major changes in the regional, national and international economies and trade patterns, and the consequences of those changes on future transportation patterns and requirements.

The goal of the Study is to identify and analyze recommended transportation initiatives and rank them in terms of their ability to enable New York State to respond to these changing economic forces and trends. This Report presents the results of the first phase of this study.

1.2. Study Areas

As shown in the figure, the Primary Study Area for the Study extends along the I-87 corridor extending from just below the Albany Capital District on the south to the border crossing with Canada on the north. The Secondary Study Area includes both the corridor portions north and south of the Primary Study Area – i.e., from the Tappan Zee Bridge to the Capital District, and along Autoroute 15 in Quebec from the Lacolle/Champlain border crossing to Montreal. However, this Primary/Secondary focus relates primarily to the corridor’s highways and major roadways, as discussed in the section of this report dealing with that portion of the transportation network. Each of the other modes being...
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analyzed in this multimodal corridor study – air service, waterborne operations, rail freight, etc. -- essentially has its own study area, defined by the location and extent of its facilities and operations within the corridor.

1.3. Study Phases

The Study is divided into two phases (see figure). Phase 1 started with the development of the Study’s Goals and Objectives and the related selection criteria to be used to identify the most promising improvements concepts. Those were reported in a separate technical memorandum, *I-87 Multimodal Corridor Study Goals And Objectives And Screening Criteria*. The remaining Phase 1 study elements have been completed and the results of those activities are summarized in this Technical Memorandum.

During this first phase of the Study, the I-87 Multimodal Corridor Study Team assessed conditions in the corridor, defining its most critical transportation limitations, identifying emerging opportunities and developing a “long list” of possible corridor actions to address them. These possible improvement concepts have been grouped in the following categories:

- Highways
- Rest Areas
- Rail Infrastructure
- Airport Services
- Border Crossing Facilities
- Waterborne Transportation
- Intelligent Transportation Systems (ITS)
- Inter- and Intra-city Public Transportation
- Intermodal Facilities

These possible actions, which are presented in this report, will be screened to select those that warrant more detailed consideration in the study’s second phase or subsequent studies. While the identified actions are grouped by traditional modes, for ease of reference, the intent as the study progresses is to integrate these actions into the themes that address the corridor’s travel market needs and encompass the Smart Corridor concept.

1.4. High Speed Rail Study

Another significant component of the Study is the Pre-Feasibility Assessment of High Speed Rail (HSR) Service in the New York City - Montreal Corridor ("HSR Study"). Being completed in cooperation with the Quebec Ministry of Transportation (MTQ), this study includes a preliminary look at the viability of implementing true European-type high-speed service (150+ mph throughout). The HSR Study is also investigating various incremental improvements to the existing New York-to-Montreal passenger rail service, which is presently limited to one train per
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day and takes over 10 hours. MTQ is looking at similar HSR service over the portion between Montreal and the US-Canadian border. The remaining New York State segment from New York City to Albany is part of the Empire Corridor already designated as a High Speed Rail Corridor, and has been addressed by previous projects and is part of other on-going rail studies of the New York City - to - Albany corridor. The remaining section – from Albany to the US-Canadian border – is the focus of the HSR Study being completed as part of this multimodal corridor study. The results will be included in the High Speed Rail Pre-Feasibility Study report to be released separately.

1.5. I-87 As A Growing High-Tech Corridor

The fact that the I-87 Corridor includes some of the nation’s earliest and most significant high technology concentrations is no longer a secret. With the dawn of the next technology generation, from nanotechnology to new frontiers in biotechnology, it is also clear that the corridor is already actively participating on these fronts, and positioning itself to respond to all future opportunities. A recent article in eWeek magazine confirmed that New York’s Capital District is one of the top three hot spots for technology jobs in the country, and that the problem will be attracting and training the required staff fast enough to meet the demand.

Over the 1969-2000 period, employment along the corridor grew over twice as much as the State as a whole, and the trend has continued. Further information on these trends is presented later in this report. An important goal of this study is to identify the right kinds of transportation improvements -- with Smart Improvements for a Smart Corridor -- to permit the corridor to fully respond to future economic opportunities.

If the ideas identified in this report are advanced to implementation, the corridor will reflect 21st Century transportation innovations and act as a catalyst for the economy by ensuring efficient, low-cost passenger and freight transportation and encouraging businesses to locate or remain in the corridor.

1.6. The “Smart Corridor” Concept

Based on the analyses completed under Phase 1 of the Study, a number of characteristics have emerged:

- New York State has been a national leader in both developing transportation technologies and applying them as part of comprehensive networks (e.g., the Erie Canal, the New York State Thruway, etc.)

- Along with these developments, and in part because of them, certain patterns formed over time. These extend back to the initial concentration of industry near ports and the dramatic expansion of the population and economy of New York City to the later dispersion of
population and jobs outside of central cities and the increased reliance on over-the-road freight and passenger modes.

- From the past development of IBM and other international leaders in the technology field to recent achievements in nanotechnology and major re-investments by IBM and others, the corridor has confirmed its position on the high-technology stage. Every effort must be made to insure that this critical aspect of the corridor’s economy is fully supported by its transportation network.

- There are a growing number of transportation technologies – some new and others variations on long-available ones – that are available to transportation planners to address the transportation demands of the 21st Century. However, the economics of air service, rail and waterborne freight, intercity rail passenger service, and virtually every other mode, are constantly evolving, and the way that the public and private sectors are involved in them is also changing. However, economic conditions change, and investments in this area or other modes will likely be needed.

- Ideas with roots in the 1950s and 1960s – e.g., if a highway is congested, just add lanes – cannot and should not be depended upon in isolation. Smart highway expansion, with real-time interactive management, priority treatment for the most efficient modes and operations that both adjust to and control congestion, takes full advantage of the available tools.

The improvement concepts developed in this technical memorandum are built around this Smart Corridor theme.

1.7. Summary of Data Collection Efforts

1.7.1. Data Sources

An extensive information and data collection effort was performed in the early stages of the Study to establish baseline conditions in the transportation network within the corridor. The focus of these efforts generally was not on new field data collection. Instead, the Study Team depended almost exclusively on the substantial amount of data available from the numerous transportation and economic development agencies active in the corridor. The primary sources of information, both through direct contact, interviews, and database searches, included:

- New York State Department of Transportation
- New York State Department of Labor
- Empire State Development Corporation
- New York State Thruway Authority
- New York State Police
- Metro-North Railroad
- Amtrak
- Poughkeepsie-Dutchess County Transportation Council
- Adirondack-Glens Falls Transportation Council
1.7.2. Data Collection Activities

The data collection phase included the following major activities:

- **Database Search/Retrieval.** Many of the agencies and organizations listed above, especially NYSDOT, had extensive databases with relevant data on existing transportation conditions in the corridor. These included extensive information on present transportation system operations -- e.g., traffic volumes, high accident locations, roadway and bridge conditions, rail network ridership, freight movements, etc. -- and historic and recent employment and population statistics.
### Review of Existing Corridor Studies

A comprehensive search was completed for all available and relevant studies addressing transportation conditions in the corridor and relative economic development assessments, data and projections. A list of these studies is included in Appendix B.

### Interview with Key Transportation and Economic Development Agency Staff

Numerous one-on-one type meetings, interviews and phone conversations were held with representatives of relevant agencies to insure that all available information was being obtained, to discuss key corridor issues, and to review any planning and improvement activities by those agencies for possible relevance to the Study.

### Economic Development Zone Meetings

To better establish the link between the corridor's transportation network and its role in supporting economic development in the corridor, a series of meetings were held with key groups and individuals involved in fostering economic development in these areas.

The data collection process was an iterative one, with many of the initial contacts and discussions with corridor participants leading to further requests for data and discussions about the issues of concern. Under Phase 2 of the Study, further data collection efforts will be undertaken as needed to assist in the more detailed definition and assessment of improvement concepts under that phase.

#### 1.8. Report Format

The following section presents the results of the review of existing conditions in the I-87 corridor. The section, which is organized by mode (highway, waterborne, rail, etc.), presents the procedures used to select areas in the corridor warranting further attention in this study, the corridor's needs and potential opportunities, the results of the existing conditions assessments in those areas, and the list of “improvement concepts” identified by the Study Team to address the corridor needs defined as part of these assessments. As part of the assessment at the US/Canadian border crossing at the northern end of I-87, the results of the origin/destination study recently performed at that crossing are presented. Finally, a brief review of economic and demographic trends in the corridor, and on tourism and recreation and their role in transportation demand in the corridor is also discussed.