Status of Study Activities

The I-87 Multimodal Corridor Study Team, working closely with its Study Advisory Group (SAG), recently completed the first of the Study’s two phases. Earlier this spring, the Study’s Goals and Objectives were established in conjunction with the SAG. During the first phase of the study, the Study Team assessed overall conditions in the corridor, defined its most critical transportation needs and opportunities, and identified potential methods of addressing them. This effort resulted in a “long list” of possible improvement concepts to address critical corridor transportation needs. The elements of this long list are summarized in this newsletter. Under the next phase of the study, the long list of improvement concepts will be screened to select those that warrant more detailed consideration during the Study’s second phase or subsequent studies.

An additional component of the study is a Pre-Feasibility Assessment of High Speed Rail Service in the New York City – Montreal Corridor (“HSR Study”). This component is being conducted in cooperation with the Québec Ministry of Transportation (MTQ), which is addressing corridor issues in the province of Québec. The study is looking at both European-type high-speed service (150 MPH) and more modest improvements to existing passenger rail service. Presently, the route has only one train per day and the trip takes over ten hours. The results of the studies by NYSDOT and MTQ to date are discussed below.

High Speed Rail Pre-Feasibility Study

The HSR Study discusses existing passenger rail operations in the corridor and compares them against possible improvement scenarios. The segment from New York City to Albany is already designated as a High Speed Rail Corridor, 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. The study’s final results will be included in the High Speed Rail Pre-Feasibility Study report to be released separately.

The Study is evaluating a variety of options for the Albany to Canadian border segment. These can be grouped into two broad categories:

- Incremental Improvements to Existing Service, which includes two sub-categories:
  - Moderate improvements, such as minor curve modifications and reduction in stops. The moderate improvements include utilization of existing Amtrak fleet cars or diesel motor unit (DMU) engines. DMU engines also provide the opportunity to improve commuter service between smaller urban areas.
  - Extensive improvements, such as tilt trains and corresponding curve improvements in addition to reduction in stops. The extensive improvements consider the use of jet train locomotives and tilt cars.
- Full High-Speed Rail Service - Full high speed rail service has the possibility to reduce travel times from the existing ten hours to four hours.

Present Albany-to-Montreal service takes 10 hours. Preliminary results from the HSR Study indicate possible time savings of 2-3 hours for the more modest improvement scenarios, to a 6-hour savings under the full 150-mph service between Albany and Montreal.

The “Smart Corridor” Concept

Based on the analyses completed under Phase I 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 transportation and trade patterns have 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 ensure 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 ever changing. Economic conditions change, and investments in transportation and trade will likely be needed.
- Transportation improvement philosophies with roots dating back to 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 treatments which adjust to and control congestion, takes full advantage of the available tools.
The preliminary Long List of improvement concepts for the corridor includes a broad range of strategies to address existing and projected demands and opportunities on the corridor’s transportation network and services. The list is based on the Study Team’s review of the corridor’s existing transportation and economic conditions, and on extensive discussions with agencies and public and private entities involved in the corridor’s transportation and economic decision-making.

The concepts are grouped by traditional modes (highway, waterborne, air service, etc) as an initial starting point for presentation purposes. The intent is to structure these concepts, individually and/or in combination, to advance the Smart Corridor Concept. The Concept is supported by four overarching corridor themes aimed at enhancing economic development; intercity, commuter and recreational travel; movement of goods; and quality of life.

The travel components involve vastly different markets:

- **Intercity Travel** – longer distance trips within the corridor are made for a variety of personal and business trip functions. With longer distance comes a broader range of modal options (air, rail, auto, bus).

- **Commuting Travel** – shorter journey-to-work trips, usually by car, are made on a daily basis, and compressed along routes leading to and from major employment centers. As the speed and reliability of travel increases, longer travel markets (e.g., New York City to Albany) can become part of a regular commuter shed.

- **Recreational Travel** – the corridor includes important recreational and natural areas that attract travelers from throughout the Northeast and beyond. Origin-Destination studies at the US/Canadian border confirmed that the majority of the auto travelers on I-87 heading into Canada are making some form of recreational trips.

- **Goods Movement** – Continued high post-NAFTA truck and rail volumes at the Champlain/Lacolle/Rouses Point border crossings make it one of the most important US-Canada freight gateways. Goods movement demand vary substantially by area, in terms of the types of goods moved and the variety of competing modes.

The structuring of the concepts around the themes will evolve and be refined throughout the remainder of this Study.

The four corridor themes include: Smart Highway, Smart/Safe Driver, Smart Freight, and Smart Public Transportation.

- **Smart Highways.** As noted above, our understanding of the causes of highway congestion, especially when it occurs only during limited times of the day, has expanded significantly since the early days of highway expansion in the 1950s and 1960s. With this knowledge comes an equal expansion in the methods available to meet those congestion problems. While earlier solutions were often limited to simply expanding the number of highway lanes or making bigger interchanges, newer solutions focus on (1) better control over and management of highway capacity, including who uses it, when and how it’s used, and effective response to any problems that limit its use or effectiveness or safety; (2) supporting modes that can move people or goods most efficiently; and (3) achieving the movement of people and goods with a minimum of public and private costs, including minimizing environmental impacts.

- **Smart Freight.** In addition to expediting the movement of trucks along the corridor’s key highways, a key aspect of the corridor is its role as an international trade route. The events of September 11th have worsened the already serious truck delays at the Champlain border crossing. Already a significant time and cost savings. The nationwide 511 “Travel Info” program is looking to address a part of this need for all travel modes. The I-87 corridor is joining or developing a number of traveler information programs to address these needs, but it is behind others. The challenges are very different along, say, the High Peaks section of the highway compared with commuter-crowded sections of the Northway in rush hours.

- **Smart/Safe Drivers.** Auto drivers always want advanced knowledge about construction, traffic problem areas, bad weather and similar information when planning their trips. Additional real-time information (e.g., warning about a recent accident causing delays in a given area) provide a further benefit, as do systems that provide prompt response when vehicles break down or accidents occur. Truckers need these same types of advanced and real-time information, since more reliable, safe and repeatable shipment plans mean significant time and cost savings. The nationwide 511 “Travel Info” program is looking to address a part of this need for all travel modes. The I-87 corridor is joining or developing a number of traveler information programs to address these needs, but it is behind others. The challenges are very different along, say, the High Peaks section of the highway compared with commuter-crowded sections of the Northway in rush hours.

Statewide, the number of registered vehicles has grown by roughly 19% (1.4 million vehicles) in the past ten years, and vehicle miles of travel (VMT) have grown by 21%. Census statistics for the Capital District, the corridor’s most congested area, indicate that over the 1990-2000 period, more people chose to drive alone to work while less carpooled or used transit. With these types of patterns, a Smart Highway approach is critical.

- **Smart/Safe Drivers.** Auto drivers always want advanced knowledge about construction, traffic problem areas, bad weather and similar information when planning their trips. Additional real-time information (e.g., warning about a recent accident causing delays in a given area) provide a further benefit, as do systems that provide prompt response when vehicles break down or accidents occur. Truckers need these same types of advanced and real-time information, since more reliable, safe and repeatable shipment plans mean significant time and cost savings. The nationwide 511 “Travel Info” program is looking to address a part of this need for all travel modes. The I-87 corridor is joining or developing a number of traveler information programs to address these needs, but it is behind others. The challenges are very different along, say, the High Peaks section of the highway compared with commuter-crowded sections of the Northway in rush hours.

*Study Next Steps*

- Complete High Speed Rail Study
- Select Improvement Concepts
- Develop & Evaluate Concepts
- Recommendations/Strategies
- Final Report
Highway Improvement Concepts
Key issues:
• Traffic volumes and congestion;
• Safety and vertical clearances;
• Linkages to economic activity nodes.
Improvement concepts:
• Interchange 3 (Airport Connector)
• NYS Thruway Authority Albany Corridor
• NYS Route 73
• Adirondack Northway Exits 1 to 8
• Luther Forest Technology Campus Access
• Access Improvements to SUNY technology hub
• Northway Interchange 18 (Corinth Road)
• Rts. 4, 19, 149 from Northway Interchange 20 to Vermont state line
• Champlain/Lacolle Port of Excellence Improvements
• Tappan Zee Bridge/I-287-I-87 Corridor
• Commercial Vehicle Access Improvements to the Port of Albany
• Selkirk Yard Access Improvement

Intelligent Transportation Systems (ITS) Concepts
Key issues:
• Incident and congestion management;
• Communication along the Northway;
• Traveler information; and
• Corridor safety and security.

Improvement concepts:
• Fixed Automated Spray Technology
• Integrated Incident Management System
• Advanced Cell Phone Communication System
• Radio Broadcast Data System/Radio Data System Radio-based Communication
• Traveler Information Kiosks
• Coordinated Communication Vehicle ID/Screening
• Statewide Wireless Communication System
• Call Box Replacement/Expanded Cell Phone Service
• Electronic Data Distribution System
• HOT Lanes-congested highway segments
• “Supply chain” Container Security & Tracking System
• Traveler Info System: Albany-Saratoga Commuter Shed
• I-87 Transportation Management Center
• US Route 9 ITS Improvements

Waterborne Improvement Concepts
Key issues:
• Economic activity and trends within the shipping industry;
• Present condition and operational abilities of the corridor waterborne network’s physical infrastructure; and
• Linkages to multimodal or economic activity nodes within the corridor.
Improvement concepts:
• Port of Albany:
  • Security System Upgrade
  • Wharf Upgrades
  • Marine Yard Upgrades
  • Refrigerated Storage Capabilities
  • Container Handling Operations
  • Roll on/Roll off loading and unloading capabilities
• Hudson River Navigational Improvements, North of Coxsackie to Port of Albany
• Navigable Water Route Improvements north of Albany

Rail Improvement Concepts
Key issues:
• Reliability and safety (condition of infrastructure)
• Capacity and congestion (passenger vs. freight rail)
• Clearances (double stack container traffic)
• Connectivity (links to key economic activity nodes)

Improvement concepts:
• CP Canadian Mainline - Double Track
• CP Rail Freight Mainline - Double Track
• CP Colonie Mainline - Double Track
• CSX River Subdivision - Double Track Ravena to Coxsackie
• CSX NE Wye Connection
• CSX Hudson Subdivision - Double Track Rensselaer to Schenectady
• Saratoga Yards Improvements
• CP Rail Clearance Improvements
• Cabbage Island Branch
• Saratoga-Albany Commuter Rail Service
• CP Canadian Mainline Signal Improvements
• CP Rail Track Rehabilitation
• Vertical Array Cargo Inspection System

Border Crossing Improvement Concepts
Key issues:
• The importance of ensuring realization of planned and ongoing programs, and
• Enhancements that are needed to improve effectiveness of existing programs and facilities.

Improvement concepts:
• Port of Excellence Project
• FAST and NEXUS Marketing

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Aviation Improvement Concepts

Key issues:
- Adequacy of service to all locations within the Aviation Study Area;
- Conformance with FAA design standards;
- Provision of basic general aviation services at all airports;
- Provision of sufficient terminal facilities at all commercial airports; and
- Adequacy of runways.

Key issues:
- Expand/replace terminal bldg/facilities
- Extend Runway 34
- Schenectady County: Construct corporate aviation facilities
- Lake Placid/Adirondack Regional: Provide hangar facilities
- South Albany Airport: Provide hangar facilities

Rest Area Improvement Concepts

Key issues:
- Signage and traveler information;
- Consistency of spacing between rest areas, especially in the North Country;
- Rest area safety and security;
- Rest area facility condition and quality of services; and
- Commercial vehicle parking and services, including truck stop electrification.

Rest Area Improvement Concepts

Key issues:
- Rest Area Network Improvements (including facility spacing and safety improvements, better signage and traveler information, commercial vehicle services, etc.) and
- Truck Stop Electrification

Intermodal Improvement Concepts

Key issues:
- Reliability and safety (condition of infrastructure)
- Capacity and congestion
- Clearances (especially in connection with double stack container traffic)
- Connectivity (highway-to-rail, rail-to-rail and water-to-rail connections, along with links to key economic activity nodes, such as existing or planned warehouse centers)

Improve runway & add new facilities
Schenectady County: New general aviation airport
Albany International Airport:
- New terminal building & facilities
- Replace basic general aviation facilities
- Retain subsidized air service
Westport Airport:
- Acquire airport from private owner
- Improve runway & add new facilities
Schroon Lake Airport:
- Improve airfield & acquire property
- Construct general aviation facilities
Ticonderoga: Construct general aviation facilities
Essex County: New general aviation airport
South Albany Airport: Provide hangar facilities

Improve runway & add new facilities
Plattsburgh International Airport:
- New terminal building & facilities
- Replace basic general aviation facilities
- Acquire airport from private owner
Westport Airport:
- Acquire airport from private owner
- Improve runway & add new facilities
Schroon Lake Airport:
- Improve airfield & acquire property
- Construct general aviation facilities
Ticonderoga: Construct general aviation facilities

Improve runway & add new facilities
Albany International Airport:
- Expand runway 19
- Expand airport terminal/air cargo facility
Stewart International Airport:
- Improve airfield & acquire property
- Construct general aviation facilities
- Retain subsidized air service

Improve runway & add new facilities
Plattsburgh International Airport:
- New terminal building & facilities
- Replace basic general aviation facilities
- Acquire airport from private owner
Westport Airport:
- Acquire airport from private owner
- Improve runway & add new facilities
Schroon Lake Airport:
- Improve airfield & acquire property
- Construct general aviation facilities
Ticonderoga: Construct general aviation facilities

Smart Public Transportation. Increasing public transit use has historically been a challenge for smaller urban areas as well as suburban and rural areas. The “many-to-many” travel patterns in those areas pose a problem for modes that require more concentrated travel markets to operate efficiently. Further, potential transit users are often unaware of what services are available, where to get them, how much they cost, or whether they can get to a particular destination using transit. Various traveler information systems in the Greater New York City Area and the Capital District, and similar efforts across the country, have shown that by using a variety of media – computers, phone, informational kiosks, etc., potential travelers can obtain information, and a passenger base for services can be established. Transit providers can then plan ways to maximize the use of their services to satisfy a broader variety of travel markets, and make the critical transit linkages (e.g., bus-to-train) that can substantially expand the market areas that transit operators can serve. For longer distance, intercity trips, air and rail service can play important roles. The significance of their roles has changed over time, although not always in a positive manner. Finding ways to take greater advantage of these modes need to be fully considered.