I-87 Multimodal Corridor Study

Study Advisory Group Meeting
December 2, 2003
Albany, NY
Meeting Agenda

- Review Phase I Studies
  - High-Speed Rail
  - Existing Conditions
  - Long-List Concepts
- Review Concept Screening
- Phase 2 Tasks
**High Speed Rail Study**

- Pre-Feasibility Study
- Concurrent with MTQ Study
- Analyzed:
  - Full 150 MPH HSR
  - Incremental Improvements
High Speed Rail Study

• Common Assumptions with MTQ Study:
  • 150 MPH Service (240 km/hr.)
  • Non-electrified alignment
  • Jet-Train Tilt Train Technology
**High Speed Rail Study - Results**

- Possible Time Savings -- NYC to Montreal:
  4 Hrs. 10 Min. vs. 10 Hrs. 15 Min.
- Assumes:
  - No Stop for Customs
  - NYC to Albany savings
  - Albany to Border: 3 vs. 9 Stops
  - Dedicated HSR Alignment:
    Albany to Border
  - 150 MPH Service In Quebec
High Speed Rail Study

• Incremental Improvement Options - Address Key Causes of Delay:
  • Poor track conditions
  • Extensive curves with inadequate “banking”
  • Inadequate sidings, crossings & signal systems
  • Single track
High Speed Rail Study

- Incremental Improvement Options
  - Use existing equipment, alignment & stations
  - Improve
    - Curves
    - Crossings
    - Sidings
    - Signal Systems
**High Speed Rail Study**

- **Incremental Improvement: Examples**

<table>
<thead>
<tr>
<th></th>
<th>Track Maintenance Upgrades</th>
<th>Curve Improvements (Superelevation)</th>
<th>Grade Crossing Improvements</th>
<th>Improved Signal Systems</th>
<th>Train Equipment</th>
<th>Faster Speed On Curves</th>
</tr>
</thead>
<tbody>
<tr>
<td>MU</td>
<td>Yes</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>Existing</td>
<td>Yes</td>
</tr>
<tr>
<td>S3 [1]</td>
<td>Yes</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>Existing</td>
<td>Minimum</td>
</tr>
<tr>
<td>S8 [1]</td>
<td>Yes</td>
<td>Moderate</td>
<td>Moderate</td>
<td>New</td>
<td>Existing</td>
<td>Moderate</td>
</tr>
<tr>
<td>S12</td>
<td>Yes</td>
<td>Extensive</td>
<td>Major</td>
<td>New</td>
<td>Tilt Train</td>
<td>Major</td>
</tr>
<tr>
<td>[1]</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

[1] Assumes only 3 stops between Albany and Rouses Pt.

- **MU = Maintenance Upgrade (assumed in all incremental scenarios)**
- **HSR = 150 mph scheme (for comparison)**
## High Speed Rail Study

### Capital Costs, Time Savings & New Riders

<table>
<thead>
<tr>
<th>Cost (Mill.$)</th>
<th>Time Savings</th>
<th>Millions $ Per Min.</th>
<th>Additional Riders</th>
<th>$ Per New Rider</th>
</tr>
</thead>
<tbody>
<tr>
<td>MU $20</td>
<td>14</td>
<td>$1.4</td>
<td>25,000</td>
<td>$800</td>
</tr>
<tr>
<td>S3 $20</td>
<td>62</td>
<td>$0.3</td>
<td>75,000</td>
<td>$267</td>
</tr>
<tr>
<td>S8 $130</td>
<td>91</td>
<td>$1.4</td>
<td>125,000</td>
<td>$1,040</td>
</tr>
<tr>
<td>S12 $270</td>
<td>106</td>
<td>$2.6</td>
<td>150,000</td>
<td>$1,800</td>
</tr>
<tr>
<td>HSR $4,000</td>
<td>369</td>
<td>$10.8</td>
<td>550,000</td>
<td>$7,273</td>
</tr>
</tbody>
</table>

- Time savings relative to existing service
- New riders = annual Albany-Montreal riders
- Only HSR shows 1-hr. Customs savings
High Speed Rail Study

- Market Issues
  - Demand for HSR Relative to Costs
  - Express & Local Service
  - Capital District Service
- Passenger & Freight Conflicts
  - Slow & Fast Trains
  - Higher Maintenance Issue
High Speed Rail Study

- Next Steps
  - Finalize NY Studies
  - Coordinate NY and MTQ Findings
  - Prepare Joint NY-MTQ Summary
  - Assess Need for Further Studies
Existing Conditions Analysis

- Established Critical Analysis Areas
- Completed Assessments by mode
Established Critical Analysis Areas

Completed Assessments by mode

Completed Economic Zone assessments
Existing Conditions Analysis

- Identified Improvement Concepts by Mode
- Group Concepts by Travel Markets:
  - Commuter
  - Intercity
  - Recreational
  - Freight
Existing Conditions Analysis

• Guiding Theme: I-87 as a Smart Corridor
  • Smart Highway
  • Smart/Safe Driver
  • Smart Freight
  • Smart Public Transportation
I-87 Multimodal Corridor Study

Group by Travel Market

Complete Assessment Process

Develop Corridor Improvement Strategies

Select Concepts for Detailed Assessment

Long List of Improvement Concepts

Commuter Market

Intercity Market

Freight Market

Recreational Market

Goals & Objectives Screening

Effectiveness in Addressing Travel Market Needs

Potential Key Role in Smart Corridor Process

SAG Concept Ranking Input

Phase II I-87 Corridor Improvement Strategies

PHASE II CONCEPT FINAL SELECTION SCREENING

Commuter Concepts

Intercity Concepts

Freight Concepts

Recreational Concepts

PHASE II DETAILED CONCEPT DEVELOPMENT
Phase II Concept Final Selection

**SCREENING**

- Selection Issues:
  - Constraints Screening
  - Overall “Scoring” in Assessment Process
  - Good Early-Start Concept
  - Fits Phase II Time & Cost Limits
Recommended Phase II Concepts

#1: ITS/CVO

#2: I-87 Corridor Transportation Management Center (TMC)

#3: Luther Forest Access Improvement

#4: Capital Region Intermodal

#5: Northway Capital District

#6: Recreation Services

#7: HSR/Rail Commuter Shed
Recommended Phase II Concepts

- Concept “Packages”
  - Mixture of Improvement Concepts
  - Often Short – and Long-Term Components
  - Elements of Corridor Improvement Strategy
Concept #1: ITS-CVO Program

- **Market:** Corridor Truck Freight Movements

- **Possible Components:**
  - Coordinate & Expand Programs (ITS-6)
  - Expand FAST Use (B-2)
  - Communications Backbone (ITS-9)
Concept #2: I-87 Trans. Mgmt. Center

- **Market:** All Corridor Travel Markets

- **Possible Components:**
  - Corridor & Statewide Transportation Mgmt. Center (ITS-13)
  - Consistent Data Platforms
  - Agency Coordination
Concept #3: Luther Forest Connector

- **Market:** Commuter Congestion (Exit 11-12)

- **Possible Components:**
  - Improved Access (H-5)
  - TSM Program (IP-1)
Concept #4: Capital Region Intermodal

- **Market:** Corridor Truck & Rail Freight

- **Possible Components:**
  - New/Expanded Yard (I-1)
  - CP Mainline Signal & Track Improvements (R-12 & 13)
  - Related Elements: Double-Stack Clearance
Concept #5: Northway/Capital District

- **Market:** Commuter Congestion: Saratoga County → Albany

- **Possible Components:**
  - Maximize I-87 Operations (ITS-2, ITS-3, ITS-12)
  - Coordinate with Alternative Routes (ITS-14) & Modes (IP-4, ITS-10)
  - Capacity Improvements (H-4)
Concept #6: Recreation Services

• **Market:** Recreational Traveler
• **Possible Components:**
  - Better Transit Links (IP-2)
    - North Country
  - Central Adirondack Region
  - Information Kiosks (ITS-5)
  - Adirondack General Aviation Airport (Several Options)
I-87 Multimodal Corridor Study

Concept #7: HSR/Rail Commuter Shed

- **Market:** Intercity & Commuter (Glens Falls - Saratoga - Albany)

- **Possible Components:**
  - Build on HSR & Track Improvements
  - Needs Rensselaer Station - to-Albany Area Links
Corridor Improvement Strategy

- Two Phase II Elements
  - Initial Concept
  - Ranking
  - Detailed Concept
  - Development & Assessment
  - Short- & Long-Term Improvement Strategy
I-87 Multimodal Corridor Study

Next Steps

- Complete High Speed Rail Study
- Finalize Concept Selection
- Develop & Evaluate Alternatives
- Complete Short/Long-Term Strategy
- Prepare Draft Report
- Final Report

PROJECT REPORTS  SAG MEETINGS (TENTATIVE)  FACT SHEETS