High Speed & Intercity Rail

Building a Regional Vision

CONNECTICUT DEPARTMENT OF TRANSPORTATION
Background

Earlier State Efforts

- All 3 states were previously involved in rail planning efforts & collaboration
- Smaller scale efforts focused on more regional services
  - CT & MA: NHHS commuter rail
  - MA & VT: Conn R. valley
  - MA: Spr – Boston

National HSR program

- Provided new focus, broader vision, more funding
Broader National Vision: national network of high-speed & intercity rail

Northeast Corridor: key part of national vision
Regional Vision as evolving in CT, MA, VT

1. NYC – NH – SPR – Boston
   - “Inland Route”
   - Alternate to NEC coast

2. SPR – VT – Montreal
   - Knowledge Corridor
   - “Montrealer Route”
The Northeast needs & is well suited for high speed & intercity rail
Northeast is most densely settled region of U.S.
Density is apparent even in nighttime satellite imagery.

Biggest concentration of lights:
- Boston
- New York
- Philadelphia
- Baltimore
- Washington

NIGHTFALL in U.S.
Northeast corridor is also most congested air traffic corridor

High-Speed Rail:
- competitive alternative
- trips: 100 – 400 miles
- can reduce air traffic congestion

“Innovative Approaches to Addressing Airport Capacity Issues in Coastal Mega-regions”
Airport Coop. Research Program, 2010
Highway congestion in CT corresponds to most densely developed areas.

Rail works well in this densely settled corridors & provides a convenient alternative to congested highways.

Fast convenient rail service can also reduce road congestion.
Broad goals of New England Rail Vision

- Expand rail to support:
  - economic growth
  - livable communities
- Promote energy efficiency
- Reduce automobile, truck, & air congestion
- Improve mobility & connectivity
Specific rail objectives

- Implement high-speed, intercity & regional rail services from NYC to:
  - New Haven - Springfield
  - Boston
  - Montreal
- Provide major connections to:
  - Northeast Corridor
  - Regional Rail Connections – New Haven Line, Shore Line East
  - New York Penn Station
  - Bradley International Airport
  - New Britain-Hartford Busway
- Provide freight capacity & reliability
- Restore 2nd main line between New Haven & Springfield
- Restore inland route & service capacity between NYC & Boston
- Restore service to Montreal
Success requires partnership

- CT DOT
- MassDOT
- VT AOT
- Amtrak
- freight operators
- MetroNorth
- communities
- FRA & FTA
Proposed service improvements: **More Trains**

<table>
<thead>
<tr>
<th>WEEKDAY ROUNDTrips Selected Locations 2010</th>
<th>WEEKDAY ROUNDTrips Selected Locations VISION</th>
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Numbers are not additive

25 total

26 total
Proposed service improvements: **Faster Trains**

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<th>Vision</th>
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Cut HFD – NYC travel time by more than a half-hour.
Timelines, Phasing, Costs

Status of Existing Projects:

Funded in Round 1 of HSIPR

**Massachusetts**
- $70 million
- Upgrade single track Connecticut River line

**Vermont**
- $50 million
- Upgrade single track line thru VT

**Connecticut**
- $40 million
- double track 10 miles
FUTURE PROJECTS

Massachusetts
- Complete Inland Route/Boston to Montreal Study
- Boston to Springfield Capacity Expansion
- New stations in Palmer and Suburban Boston
- Enhanced Intercity Service on the Knowledge Corridor
- South Station Expansion

Vermont
- Signal and Speed Improvements
- Restore Connection to Montréal

Connecticut
- Electrification Study
- Major Infrastructure work
  - Connecticut River Bridge
  - Hartford

MA / VT / CT
- Equipment Procurement?
NHHS STATUS

Phase 1
• Round 1 – funded $60 million ($40M fed)
• 10 miles of double track

Phase 2
• Round 2 – application August 6
• $480
  • $260 million state (balance = federal)
• Full double track
• Interlockings, signals, communications
• Culverts & small bridges
• Stations & grade crossings
NHHS Benefits

- Average speed – From 38 to 54 mph
- Top Speed – From 80 to 110 mph
- Double Ridership on the corridor
- 1.4 million annual new riders (2030)
- Reduction of 92 million VMT annually
- Reduction of 32,000 metric tons of carbon emissions
- Expanded Freight Capacity
SIGNIFICANT TRANSIT-ORIENTED DEVELOPMENT

Corridor is “ahead of the curve” in many communities

- Enfield
- Windsor
- Windsor Locks
- Berlin
- Meriden
- Wallingford
- North Haven
- New Haven
• Working together to advance rail throughout the six state region.

• Reaching out to our partners in NY State and Quebec

• Recognize the key connections beyond NYC through the Northeast Corridor
New England Rail Vision

- New England DOT Partnership
- Recognition of the regional nature of the each state’s individual projects.
- Collaboration between the states.
- AASHTO & CONEG
Beyond the New England Rail Vision

- Passenger Rail Investment and Improvement Act of 2008.
- Northeast Corridor Commission.
- Multistate Planning Process
New England Rail Vision

- Future rounds of HSR funding.
- Climate Bill.
- Local funding for O&M costs.
Proposed track improvements

SPRINGFIELD LINE CORRIDOR IMPROVEMENT PROGRAM
PHASE I CONFIGURATION – CT ARRA FUNDED

FINAL CONFIGURATION – TO BE EVALUATED THROUGH OPERATIONS ANALYSIS / NEPA

BASELINE FINAL PHASE INFRASTRUCTURE ASSUMPTIONS AFFECTING PROPOSED OPERATIONS

NORTHEAST CORRIDOR MASTER PLAN | NEW HAVEN TO SPRINGFIELD OPERATIONAL SCHEMATIC | FINAL CONFIGURATION (Rev 5.4) | Drawing Prepared by Amtrak Policy & Development Dept. | ADO | Scale: None | Printed: 7/16/2010