

NH Rail Transit Authority
Presentation to the:

**8th Annual Regional
Infrastructure Summit**

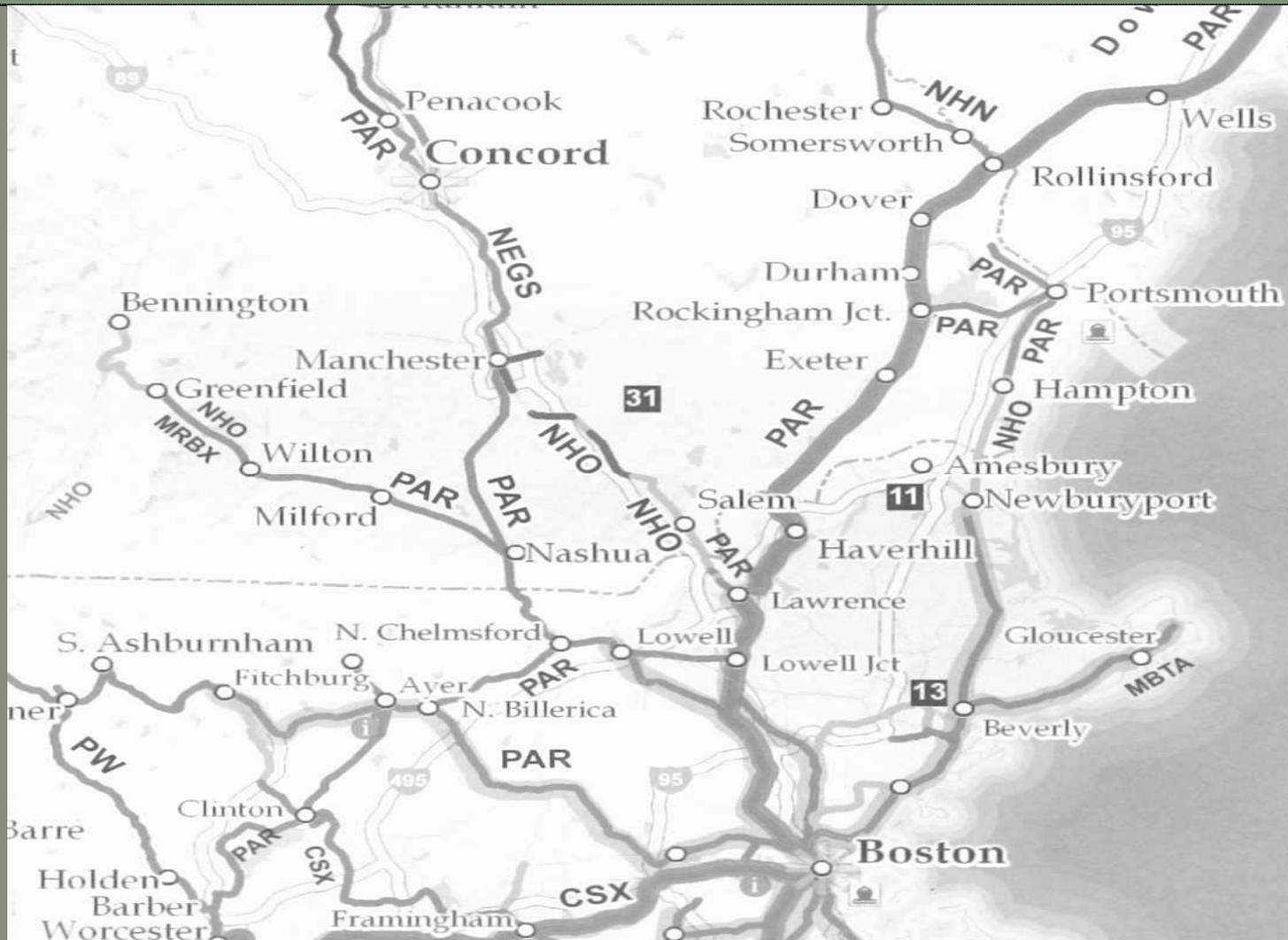
October 28, 2008

NH Rail Transit Authority (NHRTA)

Overview of NHRTA

- Established July 2007 by SB75
- NHRTA Board Consist of 27 Members Including 2 Rail Experts
- NH Capitol Corridor Program has been approved by the NHRTA
- NHRTA Next Steps:
 - Establish an Executive Board
 - Focus on Service to Manchester via the NH Capitol Corridor

NH Capitol Corridor Program Site Map



NH Capitol Corridor Program Description

- **Commuter Rail Service From Manchester to Boston**
 - Manchester-North Station- Approx. 58 Miles
- **Three NH Passenger Rail Stations (assumed)**
 - Manchester
 - Bedford/Airport
 - Nashua
- **Extend MBTA Lowell Service to Manchester**
 - 33 Miles From Lowell
- **Right-of-Way Ownership South of State Line**
 - Executive Office of Transportation (EOT)
- **Right-of-Way Ownership North of State Line**
 - Pan Am Railways

NH Capitol Corridor Alternatives for Ridership

- *Alternate No. 1*- Low Frequency (3 Peak Trains)-Minimum per MBTA requirements
- *Alternate No. 2*- Medium Frequency (4/5 peak trains)-extension of previously planned Nashua service
- *Alternate No. 3*- High Frequency (6 peak trains) Extension of all Lowell trains
- *Alternate No. 4*- Express service-medium frequency (4/5 peak trains) stops at NH stations (3), Chelmsford, Lowell, Anderson, North Station
- *Alternate No. 5*- Express service-Low Frequency (3 peak trains)) stops at NH stations (3), Chelmsford, Lowell, Anderson, North Station

NH Capitol Corridor Assumed Operations

<i>Description</i>	<i>Station Stops</i>	<i>Station Dwell time</i>	<i>Travel time (1)</i>	<i>Headways (Minutes)</i>	<i>Total number of Trains</i>
<i>Alt. 1</i>	<i>11</i>	<i>30 Seconds</i>	<i>88 Minutes</i>	<i>P-60 OP-180</i>	<i>12</i>
<i>Alt. 2</i>	<i>11</i>	<i>30 Seconds</i>	<i>88 Minutes</i>	<i>P-45 OP-90</i>	<i>18</i>
<i>Alt. 3</i>	<i>11</i>	<i>30 Seconds</i>	<i>88 Minutes</i>	<i>P-30 OP-60</i>	<i>22</i>
<i>Alt. 4</i>	<i>6</i>	<i>30 Seconds</i>	<i>79 Minutes</i>	<i>P-45 OP-90</i>	<i>18</i>
<i>Alt. 5</i>	<i>6</i>	<i>30 Seconds</i>	<i>79 Minutes</i>	<i>P-30 OP-60</i>	<i>22</i>

1 Manchester to Boston, North Station (minutes) includes station dwell time
 2 Weekday Service Frequencies AM Peak (P) 6AM-9AM, Mid day Peak Off peak (OP) 9AM-4PM) PM Peak 4PM-7PM, Evening OP-7PM+

NH Capitol Corridor Program

Potential Station Locations

- ③ *Nashua*- Location To Be Determined
- ③ *Bedford/Airport*-Located North of the New Airport Access Road Between the Merrimack River and NH Route 3
- ③ *Manchester*-To Be determined

NH Capitol Corridor Program Infrastructure Improvements

- **Lowell to Nashua** (Approximately 11 Miles)

- One Station and Train Layover
- Up-Grade Five Highway Crossings
- Double Track - Rehabilitate and Restore
- New Train Control System (TCS)
- Relocate Existing Fiber Optic Cable
- Operational Control Center (OCC) Upgrades

- **Nashua to Manchester** (Approximately 22 Miles)

- Two Stations
- Sections of Double and Single Track
- Up-Grade 16 Highway Crossings
- New Train Control System (TCS)
- Relocate Existing Fiber Optic Cable
- Operational Control Center (OCC) Upgrades

NH Capitol Corridor Program

Order of Magnitude Costs

Estimated Capitol Costs \$302 M

• Lowell to Nashua	\$ 48 M	
• Nashua to Manchester	\$ 94 M	
• Equipment	\$ 58 M	
• Engineering, Contingency & Escalation (Year 2013)		\$ 102 M
• Assumptions		

- Work completed by Force Account
- Service Operator-MBTA
- Three NH Stations
- Equipment-19 New Coaches and one New locomotive
- Train Layover Facility
- Rehabilitate 16 Existing Grade Crossings
- Approximately 33 miles of Track, Civil, and Train Control Upgrades
- Double Track to Train Layover Facility
- Single Track North of Train Layover Facility w/ Sections of Double Track (passing sidings)
- Control Center Modifications

Estimated Annual Operating Costs-\$10M to \$12 M

NH Capitol Corridor Program

Next Steps

- ⊙ Fund Alternative Analysis and Preliminary Engineering
- ⊙ Complete Alternative Analysis and Preliminary Engineering
 - Affirm Commuter Rail Alternative
 - Station locations
 - Operations
 - Commuter Rail Operator
 - Cost Estimates
- ⊙ Identify Funding for Capitol and Operating Costs
- ⊙ Fund Final Design
- ⊙ Complete Final Design and Implement Operating/Force Agreement with Railroad(s)