

Trans-Hudson Commuting Capacity Study – Findings & Recommendations

September 22, 2016

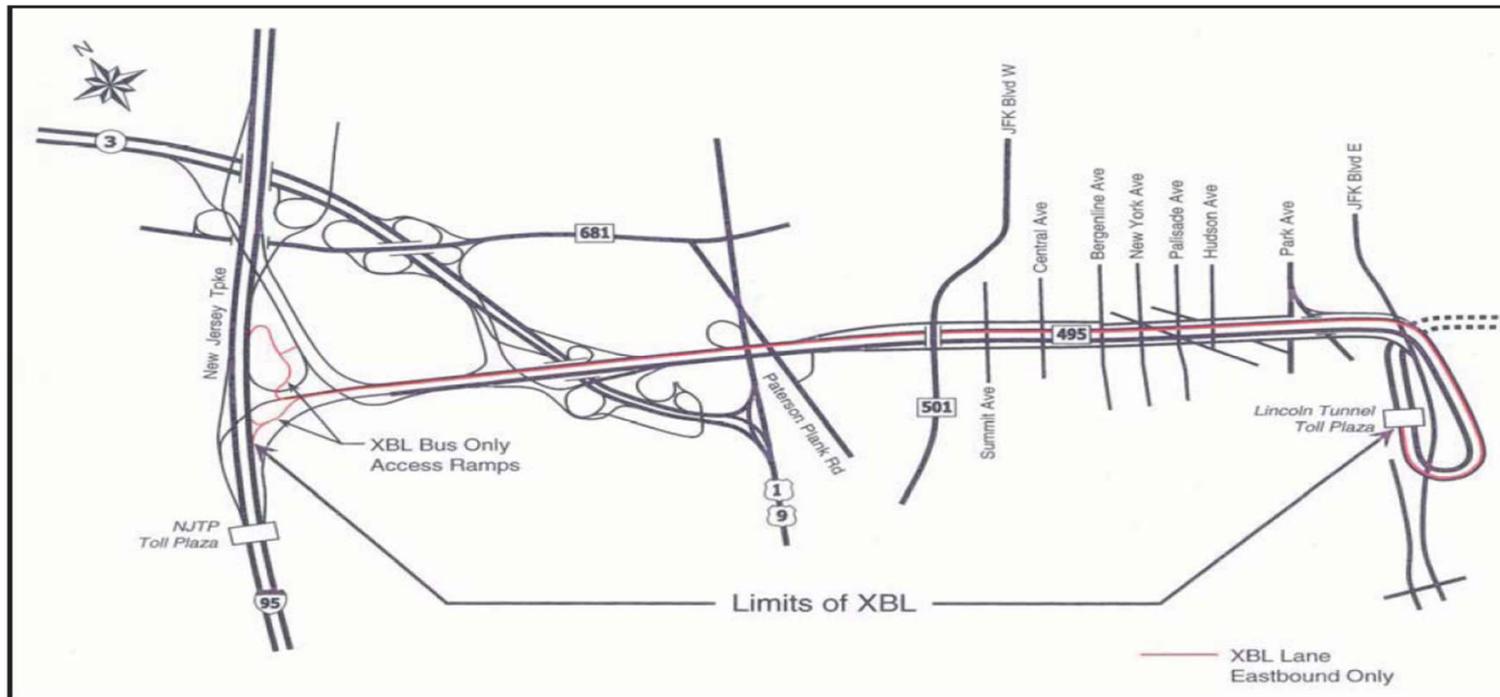
Board Resolution – Oct. 22, 2015

- Evaluate “Available Strategies to Meet and Manage Trans-Hudson Demand Over Next 30 Years...” Consider –
 - Rail, Ferry, and Other Modes
 - Improvements to Existing Infrastructure
 - Impact of New Technologies
 - Congestion Mitigation
 - Workplace Flexibility
 - Relative benefits of Trans-Hudson Alternatives

Study Approach

- **Focus on West-of-Hudson Transit Network – All Modes**
- **Assessment Independent of Midtown Bus Master Plan Effort**
- **Early Focus on Bus System to Inform Design and Deliverability Competition – Corridor Operations & Technology Opportunities**
- **Potential Factors Affecting Benchmark PABT 2040 Forecast:**
 - **Corridor Constraints and Strategies**
 - **Bus Diversion Opportunities**
 - **Potential Diversion to Other Modes**
 - **Other Factors Affecting Commuter Behavior**

Rte. 495-Lincoln Tunnel-PABT System



The XBL Today

The busiest bus lane in the US-

- **1,850 average daily buses**
- **650 buses in peak-hour**
- **66,000 weekday commuters**
- **Serves more commuters than PATH, Ferries, Penn Station Commuter Rail**
- **Saves commuters 20-30 minutes over auto trip**

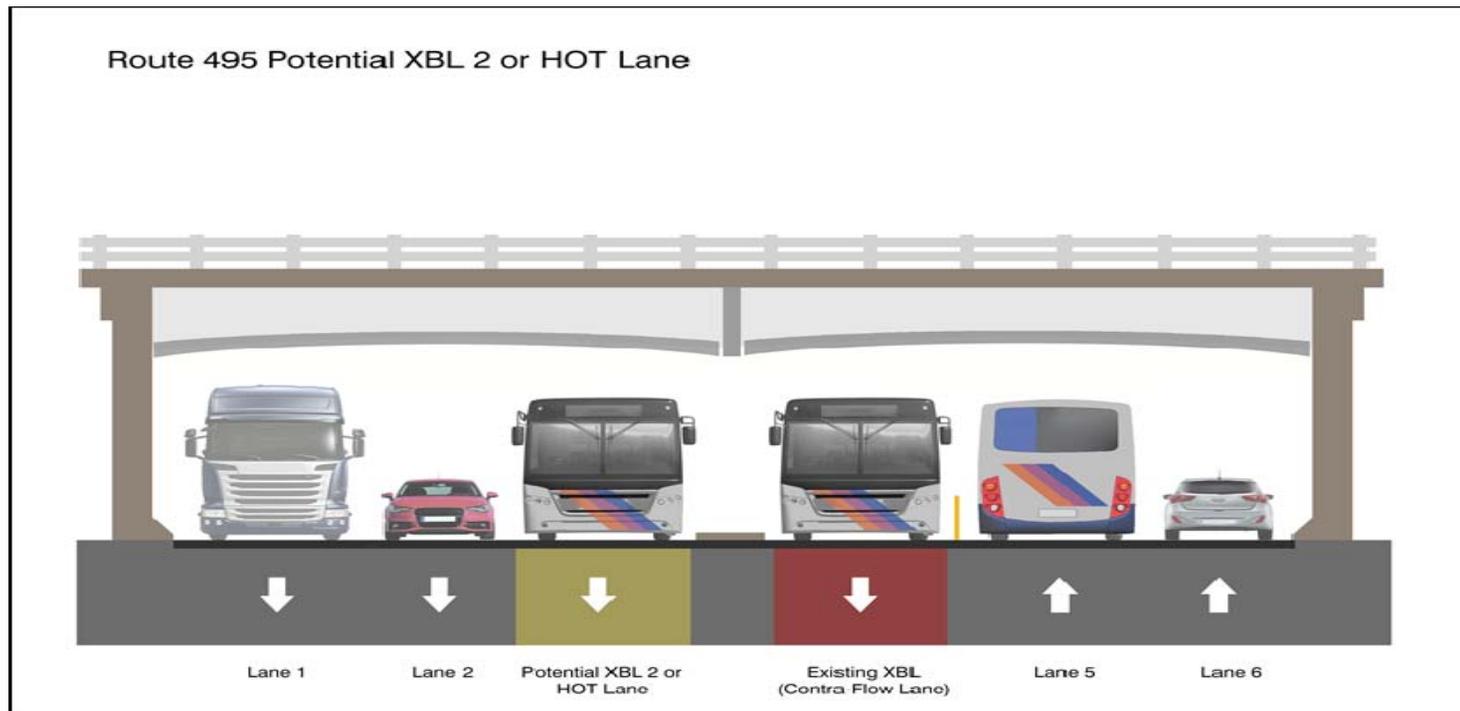


Upgrading Corridor Operations

- Improve Merges at ‘Teardrop’
- Apply Technologies for More Precise Bus Dispatching
- Investigate Phasing Bus Automation Technologies with NJT and private operators

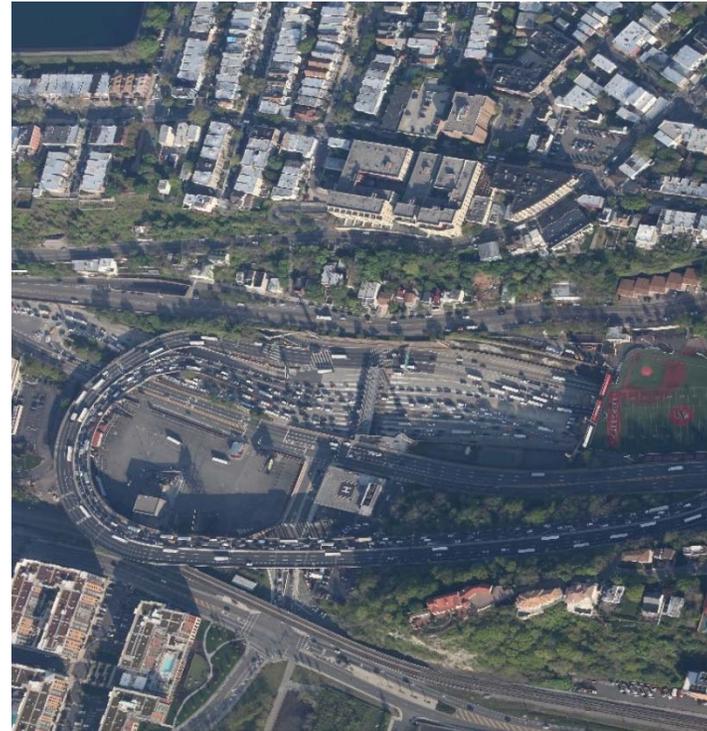


Potential for Expanded Bus Priority on 495



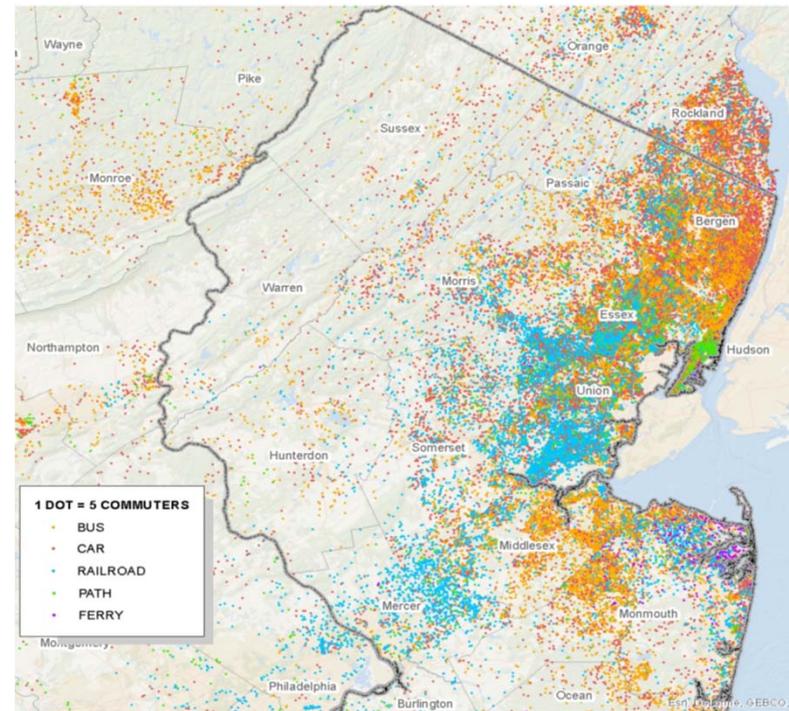
Lincoln Tunnel/Toll Plaza Operations

- **Throughput Constraints Are 495 Corridor, Existing PABT**
- **Plaza Can Process Added Buses With Technology, Lane Management**
- **Tunnel Throughput Is Adequate Assuming More Efficient Bus Terminal and Ramp Operations**
- **Continued Bus-Priority Policy Essential as Regional and Local Traffic Grow**



Transit Options Shape Commuter Choices

- **West-of-Hudson Rail**
- **Bus Network Coverage Extensive, Flexible- 40% of PABT Commuters from Bergen/Hudson Counties**
- **PATH Roles: Transfers at NJ Transit Hubs and Direct Links to NJ Urban Centers**



Bus Service Via Alternative Crossings

- **Test Other Options for Some Current PABT Users, via -**
 - **GWB Bus Station and Subway**
 - **Holland Tunnel**
 - **HT/LT West Midtown Loop**
- **Potential Total Reduction of 40-60 Peak-Hour 2040 Buses If Successful**
- **Requires Support by NJT, Private Operators, NYC**



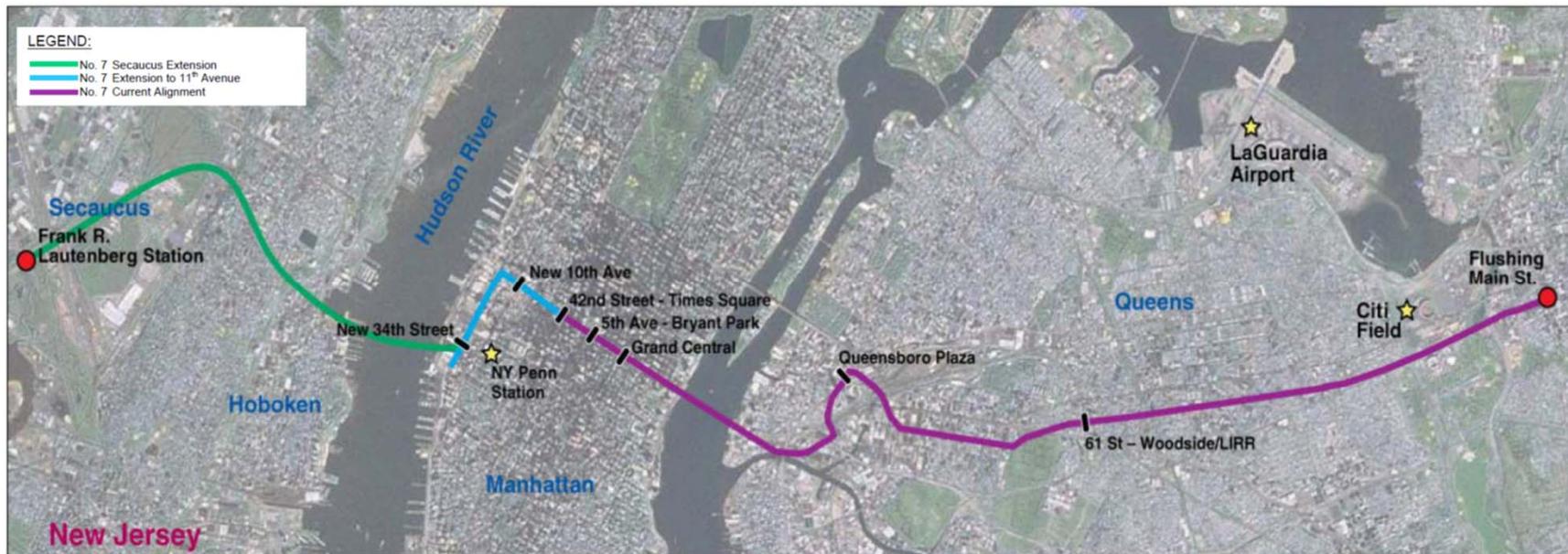
Diversion to Alternative Transit Modes

- **Expanded NJT Rail Service with Gateway Program**
- **No. 7 Line Extension to Secaucus w/Bus Facility**
- **Expanded PATH Service Capacity**
- **PATH Extension/Transfer at NEC Rail Link Station**
- **Hudson-Bergen Light Rail Transit Extension**
- **Expanded Trans-Hudson Ferry Services**
- **Hoboken Terminal Rail Expansion**

Gateway: Expanded NJT Rail Service



No. 7 Line to Secaucus w/ Bus Transfer



Commuting Capacity Study Findings

- **Robust Demand on Overall Trans-Hudson Network**
- **Crosscutting Trends May Affect 2040 PABT Forecast**
- **Potential for Reducing 2040 PABT Demand: 10-20 % -- Including Full Gateway Expansion for NJT Rail, Not No. 7 Line Secaucus Extension**
- **Factors Sustaining or Increasing 2040 PABT Demand:**
 - **Delays in Advancing Other Strategies**
 - **Changes in Commuting Patterns – Latent Demand**
 - **Flexibility of Bus Service to Absorb Market Changes**

Recommendations

- **Develop Partnerships for NJ Corridor Improvement to Complement Near-and Long-Term PABT Operations**
 - Respond to Continuing Demand Growth While Planning New PABT
 - Identify early options for bus staging and storage in both NYC and NJ
 - Manage Network to Prioritize Bus Access and Ease Local Congestion
- **Ensure New PABT Can Serve 2040 Forecast If Needed**
 - Seek “Scalable and Modular” Approaches
 - Provide flexibility to Handle Evolving mix of Bus Fleets, Sizes
- **Support Demand Management Strategies**
 - Investigate Wider Use of Flexible Work Hours for Peak-Hour Relief
 - Test markets for bus service via alternate crossings

Next Steps

- **Review Study with NYCDOT, NJT, Private Bus Operators, Community Stakeholders, Concerned Agencies**
- **Identify Initial Alternate-Crossings Bus Service Pilots**
- **Monitor Progress of Related Transit Projects**
- **Develop Interagency Strategy to Evaluate Bus Technologies**
- **Investigate Potential for Regional Effort to Promote Flexible Work Schedules to Ease Peak-Hour Demand**