### Frequently Asked Questions

#### O. Is the No-Build Alternative a viable long-term solution?

- A. No. The purpose of this project is to improve transportation efficiency and reduce safety problems while minimizing social, economic and environmental impacts. Travel demand management alternatives expanded bus and rail service and employer-based programs such as ridesharing and flexible work hours will not in and of themselves, or in conjunction with short-term transportation system management (TSM) improvements, significantly improve the current level of traffic congestion nor eliminate the major safety deficiencies (e.g., lack of adequate shoulder areas on the bridges and bridge approaches, inadequate auxiliary lanes and close spacing of interchanges) within the study area. Future No-Build traffic conditions will significantly increase both the level and duration of daily traffic congestion with or without implementation of transit and other TDM alternatives, and the probability of increased vehicle crashes.
- Q. Were high occupancy vehicle (HOV) lanes considered as an alternative to reduce the number of lanes required and reduce the width of pavement cross section?
- A. Several HOV lane alternatives were considered. Unfortunately, given the compactness of the study area, the relatively short distance between Exits 1 and 6 in comparison to the distance required to safely merge and weave traffic entering and exiting the HOV lane, and the relatively low level of projected ridership, HOV alternatives between Exits 1 and 6 are infeasible from a traffic safety and operations perspective. Also, the seven-lane and eight-lane HOV alternatives require a wider pavement cross-section than the eight-lane typical section.
- Q. Why are four lanes of travel in each direction recommended between Exits 3 and 6, as opposed to three lanes of travel in each direction?
- A. Three general purpose lanes and one traffic management lane are required between Exits 3 and 6 to provide a satisfactory level of traffic service for the design year (2025) and beyond, as well as allowing traffic to safely enter, change lanes or exit the Turnpike between Exits 3 and 6. Three lanes in each direction combined with the most aggressive transit and TDM program will not provide a safe and satisfactory level of traffic service, thus would not meet the project's purpose and need.
- Q. Why is the General Sullivan Bridge (GSB) recommended for rehabilitation, as opposed to removing the bridge and providing a multi-use path attached to the rehabilitated and widened Little Bay Bridges?
- A. The GSB is a significant historic bridge and as such, is protected under federal law. It provides an important systematic connection for pedestrians and bicyclists, and is used for recreational activities. The net project cost for rehabilitation is less than \$10M or approximately 5 percent of the overall project cost. Rehabilitation and reuse of the GSB is supported by the FHWA, the NH Division of Historic Resources, the Strafford Regional Planning Commission, the Dover City Council and the Newington-Dover Advisory Task Force.
- Q. Why are Exits 3 (Woodbury Avenue) and 6 (US 4/Dover Point Road) being reconfigured?
- A. Reconfiguration of Exit 3 will allow full access from the north and south to both Woodbury Avenue and Arboretum Drive (Pease Tradeport).

  Reconfiguration of Exit 6 allows full access from the north and south to US 4 and Dover Point Road and improved local connections between Spur Road and Boston Harbor Road, and between US 4 and Dover Point Road. These full-service interchanges will eliminate some of the circuitous travel that presently occurs on the Turnpike.
- Q. At Exit 6, why is the signalized diamond interchange preferable for northbound exiting traffic to US 4, in comparison to the current loop ramp?
- A. Future travel demands would require a 2-lane loop ramp. The signalized northbound off-ramp (double left-turn) will be safer, cost approximately \$2M less to construct and would avoid the potential for vehicles queuing back from the Dover toll facility and blocking the new northbound on-ramp which would occur under the 2-lane loop ramp concept.
- Q. Won't traffic signals at Exit 6 cause excessive delay for exiting northbound traffic headed westbound to US 4?
- A. No. Once existing traffic turns left towards US 4, traffic will flow freely onto the Scammell Bridge. The existing traffic signal at Boston Harbor Road/Spur Road will be eliminated, and westbound traffic will not be required to stop at the proposed southbound on-ramp traffic signal.
- Q. Why must Exits 2 (Fox Point Road) and 5 (Hilton Drive) be closed?
- A. Given the proximity of Exit 2 to Exit 3, and the proximity of Exit 5 to Exit 6, both are proposed to be closed due to traffic operational and safety concerns. In addition, redesign of the Exit 5 ramps to minimum standards would severely impact both Hilton Park and the Wentworth Terrace neighborhood.
- Q. Have noise impacts been addressed?
- A. Yes. Sound barriers are proposed along both sides of the Turnpike from Hilton Park north to approximately 2,000 feet beyond the Dover toll plaza. Structure type and appearance of the barriers have yet to be determined.
- Q. What is the extent of wetlands impact and what is proposed as mitigation?
- A. Approximately 12 acres of wetlands in Newington and 8.5 acres of wetlands in Dover will be impacted as a result of the project. The recommended wetlands mitigation program includes restoration of approximately 2,700 feet of Railway Brook (Newington), preservation of the Watson property (35 acres in Newington), preservation of the 120-acre Tuttle Farm in Dover and preservation of approximately 35 acres of the Blackwater Brook area in Dover. The recommended mitigation program was developed in close coordination with the local conservation commissions and state and federal resource agencies.
- Q. How much will the project cost to construct, and what is the construction schedule?
- A. The estimated construction cost of the "Preferred Alternative" is \$170 M (2006 dollars). The total cost, including right-of-way acquisition, engineering, TDM/TSM measures, and mitigation is estimated to be \$203 M (2006 dollars). Construction is planned to occur from 2009 to 2015. During construction, two lanes of traffic flow in each direction will be maintained and expanded bus service, as proposed, will be provided.

#### **Project Contacts**

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## Newsletter #2 Summer 2006



# Spaulding Turnpike Improvements Newington-Dover

NHS-027-1(37), 11238

## **Project Status**

- ✓ Study initiated January 2003
- ✓ Sixteen Advisory Task Force meetings held between April 2003 and January 2006
- ✓ Scoping Meeting held June 25, 2003 at Newington Town Hall
- ✓ Seven Public Informational Meetings held between June 2003 and November 2005
- ✓ Scoping Report published March 2004
- ✓ Rationale Report published January 2005
- ✓ Draft Environmental Impact Study (DEIS) pubished July 2006
- ✓ Public Hearing scheduled for September 21, 2006
- ✓ Final Environmental Impact Statement planned for July 2007
- ✓ FHWA's Record of Decision planned for October 2007
- ✓ Construction planned for 2009 through 2015, dependent on funding



### Project Development

During the past 18 months, the project team, advisory task force (ATF), and interested Seacoast stakeholders have evaluated a range of reasonable alternatives to identify a preferred alternative to improve long-term mobility and safety along the Spaulding Turnpike between Exit 1 and the Dover toll plaza. The Turnpike in this area is characterized by closely spaced interchanges, substandard geometry and shoulder areas, and capacity constrained conditions during the weekday morning and evening commuter periods. Currently, the Turnpike carries in excess of 70,000 vehicles per day. From 1997 to 2003, the average annual number of vehicle crashes within the study area has increased at twice the average annual rate of daily traffic growth. Future travel demand projections (approximately 95,000 vehicles per day are forecasted in 2025) indicate that if the Turnpike is not improved, weekday traffic congestion will spread to additional hours of the morning and evening, and safety conditions will continue to deteriorate.

evaluated included the No-Build; implementation of Transportation System Management (TSM) actions; implementation of Travel Demand Management (TDM) actions (such as public transit) that would reduce travel demand on the Turnpike; Turnpike widening and interchange improvements; and combinations of these alternatives. Numerous alternatives, and combinations of alternatives were identified, evaluated and refined by the project team and the Advisory Task Force, and reviewed with local officials, the general public, and state and federal resource agencies. A number of short-term TSM-type of traffic safety and operations improvements have been implemented or are under construction. The long-term improvement alternatives were evaluated with respect to the potential impact on the natural environment, air quality, noise, cultural resources, parks, recreational and open space, aesthetics, channel navigation and disposition of the General Sullivan Bridge. Additionally, socio-economic impacts including indirect and cumulative impacts, hazardous materials, federal and state regulations,

The range of alternatives that were

transportation benefit, constructability, affordability and community support were evaluated.

Based on the evaluation of alternatives, and with the concurrence of the ATF and affected communities, a Preferred Alternative is recommended.



# **Preferred Alternative**

- ✓ Reconfigure Exit 3 providing full access (northbound and southbound) to Woodbury Avenue and Arboretum Drive (Pease Tradeport).
- ✓ Provide for future rail connection (over the Turnpike) to the Pease Tradeport.
- ✓ Eliminate Exit 2 (Fox Run Road).
- ✓ Retain on- and off-ramps to Nimble Hill Road and Shattuck Way (Exit 4).
- ✓ Widen Turnpike between Exit 3 (Newington) and Exit 6 (Dover) to three through lanes and one auxiliary lane in both northbound and southbound directions.
- ✓ Widen Turnpike between Exit 1 and 3 in Newington to provide three lanes in each direction and match into existing cross-section of Exit 1.

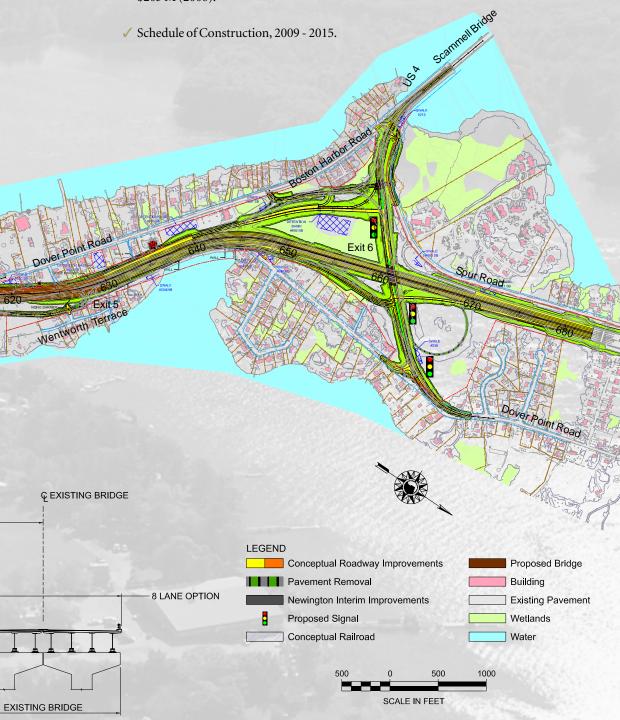
- ✓ Widen Turnpike north of Exit 6 to the toll plaza to provide three lanes in each direction and match into the width at the toll plaza.
- ✓ Widen and rehabilitate the Little Bay Bridges to provide three through lanes and one auxiliary lane in each direction while maintaining the existing profile (suitable for 60 mph design criteria).
- ✓ Rehabilitate the General Sullivan Bridge for non-motorized vehicles and pedestrians, thereby preserving a landmark historic structure.
- ✓ Reconfigure Exit 6 (US 4/Dover Point Road) to provide a full-service diamond-type interchange under traffic signal control. Replace and widen US 4 bridge to accommodate both EB and WB traffic over the Turnpike.
- ✓ Construct new local connection under US 4 linking Spur Road with Boston Harbor Road. Remove existing traffic signal at Spur Road/Boston Harbor Road, and limit access to right-turns.
- ✓ Close Exit 5 (Hilton Drive) and provide two-way connector adjacent to channel under the Turnpike linking Wentworth Terrace and Dover Point Road.
- ✓ Install sound barriers along both sides of the Turnpike from Hilton Park to approximately 2,000 feet north of toll plaza.

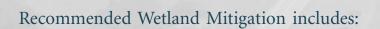
G GENERAL SULLIVAN BRIDGE

151' OUT-TO-OUT

Bridge Cross Section, Looking North

- ✓ Expand local and commuter bus service during construction period.
- ✓ Develop Park and Ride facilities in Dover, Rochester and Lee.
- ✓ Increase Downeaster Service through a joint-sponsored CMAQ proposal.
- ✓ Promotion of Employer-Based TDM programs through support to Seacoast Commuter Options, the seacoast area TMA.
- ✓ Estimated Construction Cost \$170 M (2006 dollars), total cost including right-ofway acquisitions, engineering, TDM/TSM measures and mitigation is estimated to be \$203 M (2006).





- Preservation of the Watson property (Newington).
- Restoration of 2,700 feet of Railway Brook (Newington).
- Preservation of the historic Tuttle Farm (Dover).
- Preservation of land in the Blackwater Brook area (Dover).