Appendix B2 – Scoping, Public Informational, and Officials Meetings

Transportation Land Development Environmental Services



Kilton Road Six Bedford Farms, Suite 607 Bedford, New Hampshire 03110-6532 603 644-0888 FAX 603 644-2385

Meeting Notes Attendees: See List

Date/Time: June 25, 2003

4:00 pm

Project No.: 51425

Place: Newington Town Hall

Re: Newington-Dover, 11238

Scoping Meeting

Notes taken by: Peter Walker

Frank O'Callaghan

Chris Waszczuk opened the meeting by welcoming the attendees and introducing himself as Project Manager and representing the NHDOT, Bill O'Donnell representing FHWA, the lead federal agency, and Pete Walker and Frank O'Callaghan from VHB, consultant to the NHDOT. He reviewed the meeting agenda, reminded attendees of the handout package which includes copies of the PowerPoint slide presentation, study area maps and the project's purpose and need statement. He stated that the presentation would take approximately 60 minutes, and requested that attendees hold their questions and comments until the presentation was complete. Chris then explained the purpose of the Scoping Meeting: to confirm the project study area; to discuss the study framework and potential impacts that warrant study; to define a reasonable range of alternatives; and to receive public input.

Bill O'Donnell then described the FHWA role as the lead federal agency. Given the nature of the project and the eligibility for federal aid, FHWA would have federal oversight responsibility for preparation of the Environmental Impact Statement (EIS) in conformance with the requirements of the National Environmental Policy Act (NEPA). The EIS will address social as well as economic and environmental impacts. Bill mentioned a number of federally regulated resources including: public parks, recreational areas, wildlife/waterfowl refuges, historic resources, wetlands, navigable waterways, floodplains, farm lands and air quality. He also identified a number of agencies requested to be federal and state cooperating agencies for the project, including: US Army Corps of Engineers, US Environmental Protection Agency, US Fish and Wildlife Service, National Marine Fisheries Service, NH Office of State Planning, NH Fish and Game Department, NH Division of Historical Resources, and NH Department of Environmental Services.

Frank O'Callaghan then discussed the project background. He referenced the Route 16 Corridor Protection Study (1998) and the Newington-Dover Spaulding Turnpike Feasibility Study (2000) which both identified the current and future need for traffic operational and safety improvements to the Turnpike between the Dover Tollbooth and Exit 1 (Gosling Road and Pease Boulevard) in Newington. He described the Turnpike corridor between the Dover Tollbooth and Exit 1 by referring to a number of aerial photographs. He stated that 1980 average daily traffic volume

(30,000) on the Little Bay Bridges had more than doubled (70,800) by 2002. The increase in reported study area traffic accidents was more dramatic – 957 accidents within the 1997-2001 five year period, as compared to 575 accidents during the 1992-1996 five year period. He summarized 1996 peak hour traffic conditions as capacity constrained at Exits 3 through 6 due to both traffic volumes and substandard roadway geometry. He then referred to a series of current – June 2003 – aerial photographs of weekday AM and PM peak hour traffic flows which demonstrated AM congestion north of Exit 4 (Nimble Hill Road), across the bridge and through the Exit 6 interchange area to the Dover Tollbooth. Due to a minor accident in the vicinity of Hilton Park during the PM peak hour, northbound traffic was constrained to a rolling queue of vehicles which stretched back across the Little Bay Bridges to Exit 3 (Woodbury Avenue) and beyond. In both AM and PM peak hours, traffic flowed freely north of the Dover Tollbooth.

Frank described an Interim Safety Plan that will improve traffic operations and safety conditions in the Exit 4 (Nimble Hill Road/River Road) area by eliminating a number of traffic weaving conflicts and improving on and off-ramp geometry. The interim plan was a short-term recommendation of the Spaulding Turnpike Feasibility Study, and is currently under design. Frank concluded with a summary of study area issues and opportunities – identified by previous studies, local officials, regional planning officials, Advisory Task Force Members, and residents – which will form the context within which a long-term smart transportation solution will evolve. Some of those issues and opportunities include: evaluation of Exit 2/Fox Run Road interchange operations; future access to the Pease Tradeport, including a rail connection; changes in land use such as redevelopment of the Newington drive-in theatre; substandard deceleration, acceleration and traffic weaving conditions at Exit 4; use of the Turnpike as a local service road to reverse direction; stormwater management and water quality; coastal wetlands and floodplain areas; marine habitat and ecology; bicycle and pedestrian system connectivity; Little Bay Bridges' related deficiencies such as lack of shoulders, vertical alignment which limits driver sight distance, and the need for seismic retrofitting; General Sullivan Bridge considerations which include future use, long term maintenance and historic issues; Hilton Park related issues such as access, connectivity and boat ramp expansion; potential noise mitigation for businesses and residents located along Boston Harbor Road and in proximity to Exit 6 and Dover Point Road; and the transportation system constraint of two lanes across the Scammell Bridge and along US Route 4.

Chris Waszczuk then discussed the project purpose to improve transportation efficiency and reduce safety problems along this 3.5 mile segment of the Turnpike. With respect to the need for improvements, he noted that the Turnpike was a major limited access highway, linking the seacoast region with I-95, Concord, the Lakes Region and the White Mountains. The Turnpike is a principal arterial and part of the designated National Highway System; it is a major route for commuters, commerce and tourists. Traffic volumes have grown from approximately 30,000 vehicles per day (vpd) in 1980 to 70,000 vpd in 2001; traffic volume is projected to increase to approximately 100,000 vpd by 2025. The Turnpike currently is over capacity (level-of-service F) and is further characterized by substandard bridge and roadway geometry – bridge shoulder width and profile, and merge, diverge and weaving areas of Exits 3 through 6. Peak hour traffic congestion is severe and traffic accidents have substantially increased during the last 10 years. Due to the nature of the facilities in the area for which no other viable routes exist, crashes result in long delays. The Turnpike bisects residential, recreational and commercial areas and impedes connectivity for pedestrians, bicyclists and motorists. Chris also noted that the Little Bay Bridges were major structures which were not designed and constructed to current seismic Performance Category B requirements.

Chris concluded by noting that the proposed Turnpike improvement project was included in the State's Ten Year Transportation Improvement Program and is a long-term transportation priority of the Seacoast MPO. As regional development has occurred and traffic volume has grown along

Date: June 25, 2003 4:00 PM

Project: 51425

the Turnpike, traffic operations have degraded resulting in increased vehicle delays, increased traffic accidents and potential loss of commerce.

Peter Walker then presented a summary of the project study area. He reviewed a map of the proposed study area, explaining that the EIS will consider information not only from the immediate vicinity of the highway but also from a corridor approximately one mile wide. Areas in Newington to be studied include portions of the Pease Tradeport, land accessed by Nimble Hill Road, as well as the industrial and commercial lands to the east of the Turnpike. In Dover, the study area includes the portion of Dover Point west to the Scammell Bridge, north to a point just south of the Dover Tolls, and east to include the residential neighborhoods south of Roberta Drive.

Mr. Walker also summarized the list of sensitive environmental issues that would be addressed in the Environmental Impact Statement:

Natural Resources associated with the Great Bay Estuary

- ✓ Marine Habitat: All intertidal and submerged habitats in the vicinity of the existing bridges will be mapped with the assistance of the UNH Jackson Estuarine Laboratory.
- Coastal and Freshwater Wetlands and Wildlife Habitat: Will be mapped and evaluated in the field.
- ✓ Threatened and Endangered Species: Identified through coordination efforts with the NH Natural Heritage Inventory, the NH Fish and Game Department, and the US Fish and Wildlife Service.
- ✓ Floodplains: Based on FEMA mapping supplemented as needed.
- ✓ Water Quality: Focus centered on stormwater impacts.

Other Environmental Issues

- ✓ Air Quality: Conduct a hotspot analysis for CO emissions.
- ✓ Noise: Take traffic modeling results to predict noise levels under build and no-build scenarios.
- ✓ Hazardous Materials: Inventory known contamination sites in the corridor.
- Visual Character: Consider how reconstruction might affect scenic character of the Little Bay area.
- Farmlands: Although not substantial active agriculture, prime farmlands are present.

Cultural and Social Resources

- ✓ Socio-economic effects: Can be direct or indirect/cumulative. To be modeled using the REMI model with RKG Associates assistance. Indirect effects analysis to include as many as 32 towns as depicted in socioeconomic study area map.
- ✓ Historic Architecture: Consider all structures greater than 50 years old to determine eligibility for listing on the National Register of Historic Places. General Sullivan Bridge is most conspicuous element. US Coast Guard has asked for Gen. Sullivan Bridge to be removed due to its hindrance on navigation.
- Archeological Resources: Study area to be surveyed for archeological sensitivity.
- Recreational Areas: Particular attention to public parks, etc. Hilton Park most obvious example, with boat launch and other recreational facilities.

Mr. Walker then turned the presentation over to Frank O'Callaghan, who provided a summary of the project alternatives. Frank enumerated a range of possible alternatives:

- No Build
- Transportation System Management (TSM) Improvements
- Transportation Demand Management (TDM) Measures

• Upgrade Corridor

Combination of Above

The No Build Alternative is required to be analyzed as part of the Environmental Impact Statement (EIS) and is essentially a continuation and perpetuation of existing conditions and shortcomings of the current transportation corridor. The existing infrastructure would be maintained without any improvements or changes in travel characteristics. As such, the No Build Alternative serves as a baseline condition for comparison with other alternatives.

TSM Improvements are typically low cost measures to reduce congestion and improve safety. They are generally limited by existing right-of-way and might include small- scale improvements such as constructing turning lanes at intersections, restriping lane uses or installing traffic signals or roundabouts to improve traffic control. Frank referred to the previously described Interim Safety Plan at Exit 4 in Newington as a larger scale TSM-type improvement which is being pursued.

TDM Measures focus on reducing the travel demand on the transportation highway corridor. Such measures could include: bus service, passenger rail service, park-and-ride facilities, ride sharing programs, telecommuting, parking restrictions, work hours management (such as shift staggering and flexible work hours), and high occupancy vehicle (HOV) lanes. The suitability and potential effectiveness of these measures to be effective in reducing travel demands along the Turnpike will be evaluated as part of the EIS.

With respect to upgrading the corridor, Frank stated that in light of the sensitive environmental resources within the study area, new corridor alternatives would not be considered. Little Bay Bridge alternatives could include:

- widening/rehabilitating the existing bridges to provide 3 or 4 lanes in each direction;
- rehabilitation of the existing bridges in concert with construction of a new bridge to collectively provide 3 or 4 lanes in each direction;
- replacement of the existing bridge with new bridges to provide 3 or 4 lanes in each direction.

General Sullivan Bridge alternatives could include:

- rehabilitation for local traffic;
- rehabilitation for only bicyclists and pedestrians;
- bridge replacement for local traffic and bicyclists and pedestrians;
- bridge removal.

Corridor Upgrade alternatives could also include widening of the Turnpike main line to provide 3 or 4 lanes in each direction and reconstruction of the interchanges. Frank concluded by stating that a Combination of Alternatives, i.e. TSM and TDM and Corridor Upgrade, may also be considered.

Chris Waszczuk then described the five (5) phases of the EIS framework and process:

Phase 1 - Project Scoping/Date Collection/Issue Identification

Phase 2 - Conceptual Alternative Development and Screening

Phase 3 – Preliminary Design/Impact Assessment/Draft EIS

Phase 4 – Public Hearing

Phase 5 - Final EIS

Current Phase 1 activities include:

- collection of data
- base mapping
- assessment of existing conditions
- identification of the affected environment and issues of concern
- establishment of the project purpose and need
- projection of future travel demands
- identification of a range of potential alternatives
- preparation of the Scoping Report document

Phase 2 activities will include:

- refinement and evaluation of potential alternatives
- screening of alternatives and development of a constraints matrix
- development of a reasonable range of alternatives
- preparation of the Rationale Report document

The elements of Phase 3 include:

- refinement and further development of reasonable alternatives
- assessment of impacts
- identification of a preferred alternative
- identification of mitigation
- preparation of the Draft EIS document

Phase 4 involves the Public Hearing process and includes:

- submittal of federal and state permit applications
- conducting the Joint Public Hearing (ACOE, FHWA, NHDOT and NHDES)
- preparation of the Report of the Commissioner
- issuance of the Special Committee Report

Phase 5 constitutes the Final EIS process and includes:

- confirmation of the Least Environmentally Damaging Practicable Alternative (LEDPA)
- approval of the Mitigation Package
- preparation of the Final EIS document

Following the FEIS publication, Regulatory Agency permits are expected to be received; FHWA Record of Decision (ROD) issued; and the ACOE permit procured.

Chris then summarized the Project Schedule:

Phase 1: February 2003 – December 2003

Phase 2: January 2004 – August 2004

Phase 3: September 2004 – November 2005

Phase 4: February 2006 Public Hearing

Phase 5: March 2006 – December 2006

FHWA Record of Decision: March 2007

Final Design: March 2007 – October 2011

Construction: October 2008 - June 2014

He then reviewed the Public Participation process which includes an Advisory Task Force (ATF); Public Informational Meetings; meetings with the Resource Agencies; and a newsletter during each phase of the study. In addition, a project website – www.newington-dover.com to help disseminate information has been set up. The public hearing will also provide a formal avenue to offer public input. Chris noted that the next meeting of the ATF was scheduled for 6:30 PM, July 30, 2003 at Dover City Hall, and encouraged all in attendance to check out the project website. He stated that minutes of this evening's meeting as well as the PowerPoint presentation would be posted on the website.

Chris closed the presentation by identifying Bill O'Donnell, FHWA, Bill Hauser, NHDOT and himself as contacts for public feedback and information; and by thanking attendees for their attention and interest. He then opened the floor for questions and comments at approximately 5:10 PM.

Chris reviewed the meeting agenda, soliciting questions or comments on the meeting purpose, the role of the Federal Highway Administration, the project background, or the project Purpose and Need. No one in attendance had any questions or comments on those areas.

Two questions were asked regarding the study area:

John Burke, representing the City of Portsmouth, commented that there was on-going study to address the Portsmouth traffic circle and Route 1 Bypass. He inquired as to the coordination of the studies. He also pointed out that Woodbury Avenue runs parallel to the Turnpike and currently shares traffic demands with the Turnpike. Mr. Burke noted that the current study area does not include the Portsmouth section of Woodbury Avenue and questioned how the study could effectively evaluate alternatives without looking at Woodbury Avenue.

Chris Waszczuk replied that the EIS will, in fact, analyze a portion of the Woodbury Avenue. Frank O'Callaghan added that Woodbury Avenue would be studied from Exit 3 southeast to the Gosling Road intersection and that the study would identify traffic impacts at that intersection including the northwest Woodbury Avenue approach in Portsmouth. Frank also stated that the Portsmouth Traffic Circle study and the Newington-Dover study would utilize the same regional travel demand model in projecting future travel demands. John Burke commented that he felt that the study would benefit if it were expanded to assess Woodbury Avenue south from Gosling Road to Market Street Extension. He felt such an analysis would help the study better address the Purpose and Need for the project. Chris responded that NHDOT would take his request under consideration.

Tom Fargo, a member of the Project Advisory Task Force representing the Strafford Regional Planning Commission, asked why the study area was limited to the middle of the Scammell Bridge. He felt that limiting the study area in such a way would fail to recognize traffic constraints on the north side of the Scammell Bridge. In terms of the natural resources, the study area map implies that only half of the Bellamy River will be studied.

Chris Waszczuk replied that the study area is limited in this way because previous Hearings held for the Scammell Bridge project limited the bridge and approaching highway to a two-lane section. Therefore changes to the bridge are viewed as beyond the scope of the current project. Peter Walker added that since no changes to the Scammell Bridge were contemplated under the current project, no direct impacts to the Bellamy River were anticipated. Chris added that hydrodynamic modeling would allow extrapolation of data to other locations for tidal elevation impacts, if necessary.

Not hearing any further questions on the study area, Chris Waszczuk turned the discussion to the subject of sensitive environmental issues.

The first comment came from Barbara Ridolfi, resident of Dover Point. Mrs. Ridolfi asked when the local residents could expect to provide input on the planning of the project. She was concerned that the notification of the present meeting was not adequate, and stated that many residents of the area were unaware of the meeting. Chris Waszczuk replied that public involvement is a major emphasis of the NEPA process. He stressed that the Department is in the very beginning stage of the project and that there would be numerous public informational meetings over its duration. He also pointed out that there was opportunity for the public to obtain information through a project web site, including an area for public comment. Chris explained that there is a procedure for requesting one's name to be added to a project mailing list, ensuring that the Department will issue individual notification of future meetings.

In response, one attendee stated that he believed that everyone in the Dover Point area should be notified, and that the Department should be issuing a blanket notification to every property owner in the study area. He suggested that following the initial notice, responsibility for maintaining involvement would rest with the resident. Charles Garabdian asked why he was notified when others in his neighborhood were not. Chris Waszczuk replied that Mr. Garabdian had received a notice because he had specifically requested to be added to the project mailing list prior to the meeting.

Tom Morgan, Newington Town Planner, commented that the turnout for the scoping meeting was good, but suggested that the turnout would have been even better had the meeting been held in the evening. Chris Waszczuk replied that the meeting was scheduled at 4:00 PM because Scoping Meetings generally focus on a discussion with the resource agencies. The meeting was therefore scheduled in the late afternoon for the convenience of these public officials. Chris observed that all of the future public information meetings would be held in the evening so that they are more convenient for the public.

Cynthia Copeland of the Strafford Regional Planning Commission (SRPC) listed two concerns: The first related to the Purpose and Need that was distributed with the meeting handouts. Cynthia explained that the Purpose and Need does not address the aesthetics of the area or its environmental sensitivity. She suggested that the project area serves as a gateway to the lakes and mountains of New Hampshire and that should be reflected in the Purpose and Need Statement. As a second concern she explained that many in the communities to the north and west of the project area are concerned about the effects of this project, particularly as they may relate to changes in development pressures and travel patterns.

Chris Waszczuk asked Cynthia to send any ideas that she had for revising the Purpose and Need statement to him in writing. Chris introduced Jim Hicks of RKG Associates (an economist who is assisting with the study) and asked Jim to reply to Cynthia's concerns regarding the socioeconomic effects on the project. Jim Hicks explained the basis for the socioeconomic study, which would identify patterns of growth under both a No-Build scenario and under an improved roadway system. He explained that the economic model analysis would play into the decision as to which alternative was selected. Peter Walker further explained that the socioeconomic study area had been recently expanded to include the four northern-most communities in the Seacoast MPO including New Durham, Middleton, Brookfield, and Wakefield in response to concerns expressed by the Strafford Planning Commission on this subject at the previous ATF meeting.

Brian Mazerski of the Office of State Planning (Coastal Program) commented that the Fish and Game Department is currently planning to change the boat ramp at Hilton Park. He suggested coordination with Fish and Game Department be undertaken with regard to this issue.

A resident of Dover Point Road explained that she was considering making improvements to her historic home and asked whether she should actually make the improvements or hold off until the study was completed. Chris Waszczuk pointed out that the project time line is extended out over several years and that a final decision on the preferred alternative and its property impacts will not occur for quite some time.

Rich Roach of the U S Army Corp of Engineers commented that many areas along the shoreline in the study area were actually filled wetlands. Rich requested that the Department undertake a study of the historic changes in the shoreline to identify possible areas for environmental restoration to mitigate for any wetland impacts.

A resident questioned why the Dover tollbooth is not included in the study since he observed many near and actual accidents as a result of the tollbooth.

Chris Waszczuk explained that there were several reasons for not including the Dover tollbooth in the current study. First, the Route 16 Corridor Study (which had been described earlier during the evening's presentation) predicted that the turnpike would operate at an acceptable Level of Service north of the tollbooth well into the future. Chris also pointed to the aerial photographs which had been viewed during Frank O'Callaghan's presentation as evidence that the highway operates in a free flowing condition north of the tollbooth even when portions of the Turnpike and Little Bay Bridges are extremely congested. Furthermore, Chris explained that the toll issues are a major statewide policy issue. He explained that a study, recently completed on the toll system, has indicated that the elimination of tolls would require an increase in the gasoline tax or another revenue source to offset the loss of toll revenue, and that the state legislature to date has not had the political will to eliminate the tolls.

Several residents replied that, in their opinion, the tollbooths are a major issue. One resident stated that as the tolls were raised in the past, more traffic was diverted onto Dover Point Road causing increased traffic concerns for their neighborhood. Chris Waszczuk replied that he understands that tolls are a major issue across the state. Dover is not the only community in the state that has to deal with the issue. Chris suggested that people who are interested in the issue attend the July 30th meeting of the Advisory Task Force. At that meeting, representatives from the Bureau of Turnpikes will be discussing the toll study and the issue of the tolls.

A resident asked whether loss of property value is considered in making a decision about the project and what, if any, compensation is available for property depreciation? Peter Walker replied that property owners are compensated fair market value for any property that is needed for new right-of-way and that the Department of Transportation has a program in place to assist property owners through that process. He explained that the study would measure the number of property takings, which will be a key element of the alternatives analysis. He stressed that direct property takings are certainly not the only variable upon which an alternative might be selected. It is, however, a consideration that is weighed heavily in the alternatives analysis. Chris added that, in his experience, as mobility increases due to infrastructure improvements, property values generally increase over the long term.

A local resident stated that the noise from the highway was a major issue and that, in his opinion, the tollbooths should be eliminated.

Charlene Weed, a resident of Dover Point, explained that her home is located next to the Seacoast Furniture Store. She asked whether her property is within the study area boundaries. Peter Walker replied that her property appeared to be within the study area.

Another resident inquired as to the deadline for submitting written comments and will written comments have the same weight as the verbal comments expressed at the Scoping meeting? Chris replied the written comments would receive equal weight and could be submitted during the next month or two.

Barbara Ridolfi asked Jim Hicks whether there was a property value below which a property taking is considered "insignificant."

Jim Hicks replied that no such threshold exists. Mr. Hicks explained that he had been involved in 10 to 12 previous environmental impact statements and stressed that, in his opinion, the Department of Transportation takes serious consideration of the property impacts of its project. In further reply, Frank O'Callaghan explained that the EIS is an exercise in balancing all of the various public benefits and environmental issues. The proposed alternative will need to minimize impact on the environment and local property owners. Mr. O'Callaghan stressed that in addition to meeting the project purpose and need, the proposed alternative would need to be practical, affordable, must meet the requirements of the regulatory agencies, and must also be supported by the community. Frank pointed out that the project would not go forward unless all five of those requirements were satisfied.

Barbara Ridolfi explained that the neighborhoods of South Dover on Dover Point had been thought of in the past as one of the prime areas in Dover. She explained that she was very concerned that over time this quality of life had been eroded by the highway and tollbooths. She explained that the highway has created noise problems and has detracted from the area's scenic quality.

Bill O'Donnell replied that in certain cases noise barriers or visual barriers might be erected to help mitigate for noise or negative visual effects. Charlie Hood with the Department's Bureau of Environment explained the analysis that the Department would conduct to evaluate noise impacts explaining that noise levels in the future under both the Build and No-Build Alternatives would be evaluated. If predicted noise levels exceed a 66-decibel threshold, then the appropriateness and cost-effectiveness of a noise barrier would be evaluated.

Dominic Ridolfi stated that he had already seen preliminary designs for the highway improvements. Yet the information provided by the Department today suggested that the design would not occur until Phase III of the project. He asked whether the design was already completed.

Chris Waszczuk replied that the design had not yet been initiated. The information that Mr. Ridolfi had seen was from the 2000 Feasibility Study. That study was conceptual in nature and did not account for detailed conditions in the field, nor did it contain a detailed environmental analysis. The EIS study will build upon the information contained in the Feasibility Study but would develop a much more in depth analysis of study area conditions and eventually develop its own set of alternatives and recommendations.

Mr. Ridolfi explained that his review of the Feasibility Study showed a new road through existing historic structures. He inquired about the process for historic preservation. Chris Waszczuk explained the Department's approach to historic preservation is to first avoid any impacts if possible. If impacts are unavoidable, they need to minimized and/or mitigated. NHDOT consults with the state historic preservation officer and others in the preservation community to decide on mitigation for any unavoidable impacts.

Barbara Ridolfi asked rhetorically which "team" she should join to have the most influence on the project: the historic preservationists, the environmentalists, or another "team."

Date: June 25, 2003 4:00 PM

Project: 51425

Chris Waszczuk replied that she should stay involved in the issues that concern her most. Chris asked those in attendance whether they believed that there was a need for the project. The majority of the people in the room indicated that they agreed with project purpose and understood that the highway and bridges need to be upgraded.

An attendee commended the Department for the fine presentation. It obviously reflected a great deal of thought and hard work. She commented that the Department had provided a great deal of information and had provided handouts, which she found helpful.

Frank O'Callaghan encouraged all of those in attendance to stay involved in the project throughout its duration. He suggested that strong public involvement would result in a smart transportation solution.

A comment from the audience suggested that the Department would need to make better notification to encourage public involvement. The woman inquired as to whether the Department intended to notify all property owners in the future. Chris Waszczuk replied that it was impractical to provide individual notification to everyone in the project corridor, given the Department's limited resources. He suggested that anyone who wanted individual notification of future meetings request to be placed on the mailing list through the project web site or by contacting him. Mailing list members will be notified of future meetings at least one week in advance.

A resident inquired as to how one would sell property that might be affected by the project, given the current project status and uncertainty with respect to potential property impacts. Chris responded that, unfortunately, the affected properties would not be determined until the public hearing.

Hearing no further questions, Chris Waszczuk closed the meeting at approximately 6:15 PM.

MEETING SIGN-UP SHEL

PROJECT

Newington - Dover: Spaulding Turnpike improvements from exit 2 to Dover toll

LOCATION

Newington Town Hall

PROJECT NO.

NHS-027-1(37)

11238

Federal

State

Name	Agency Address	Comments
AZTHUR J. DUBOLS	ABUTTOR	
Joyce Mackey	chbritter	
Med Jenkins	Lee NH Sie-n4	
P.S. Jenkens		
m. E. Gallanstell	Daves, NH	
En Strawfridge	Down, nH	
JE Tollausher	Doner, NH	
Jameson Paine	NH WASTAL PRICERAM	
BRYAN MAZERSKI	Portsmonth	
Liz Chamberlain	senator Sununu	
Dave Helder	Portsmorth	
Jahran Hymns	Partmoult	
Michael Gar	Fester sparty Department	
Tole Broke	City of Portsmer L	
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Sheet 1 of 4

Date _____ June 25, 2003

EETING SIGN-UP SHEET

PROJECT

Newington - Dover: Spaulding Turnpike improvements from exit 2 to Dover toll

LOCATION

Newington Town Hall

PROJECT NO.

NHS-027-1(37)

11238 State

Federal

Name	Agency /Acklress	Comments
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Ray Jusselyn	Dover L NA	
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Sheet 2 of 4

Date June 25, 2003

MEETING SIGN-UP SHEL

PROJECT

Newington - Dover: Spaulding Turnpike improvements from exit 2 to Dover toll

LOCATION

Newington Town Hall

PROJECT NO.

NHS-027-1(37)

11238

Federal

State

Name	Agency / Address	Comments
Sen Iris Estabroch	District 21, Dover	
Maria Stowell	Pease Dev Auth	
South Hilton	NHOES	
CHARLES GARABEDIAN AN MAI	289 DOVER POINT RD.	
Roy Greenlent	Newinging Fine Digit	
James Changesen	298 Diven Pt RE	
Jesse De Gent Sylvier Moser	Port Harald DPR DOVEN	.4.
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Sheet 3 of 4

Date ______ June 25, 2003

<u>'EETING SIGN-UP SHEET</u>

PROJECTNewington - Dover: Spaulding Turnpike improvements from exit 2 to Dover tollLOCATIONNewington Town HallPROJECT NO.NHS-027-1(37)11238

Federal State

Name	Agency/Address	Comments
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Sheet 4 of 4

Date June 25, 2003

Transportation Land Development Environmental Services



Kilton Road Six Bedford Farms, Suite 607 Bedford, New Hampshire 03110-6532 603 644-0888 FAX 603 644-2385

Meeting Notes Attendees: Chris Waszczuk, NHDOT

Marc Laurin, NHDOT Mike Dugas, NHDOT Bill O'Donnell, FHWA Frank O'Callaghan, VHB Peter Walker, VHB Steve Lawe, RSG

Members of the Public (See Attached List)

Project No.: 51425

Place: Dover City Hall Re: Newington-Dover, 11238

Public Informational

Meeting

Date/Time: November 12, 2003

7:00 PM

Notes taken by: Peter Walker

At 7:00 Chris Waszczuk, Project Manager for the NH Department of Transportation (NHDOT), called the meeting to order. He introduced Frank O'Callaghan and Pete Walker from VHB, and Steve Lawe from RSG as members of the consultant team who would assist the Department in the evening's presentation. Chris also introduced Bill O'Donnell from FHWA and suggested to attendees that they could contact either Bill or him after the meeting to follow-up on any project related issues (a meeting agenda with contact information was distributed). He also suggested that the project website, www.newington-dover.com, was an excellent means of staying informed and offering comments.

Chris then reviewed the agenda and purpose of the public informational meeting which included a review of the project's scope and study area, a review of existing study area traffic conditions and environmental resources, and review of the project's purpose and need. He noted that a Scoping Report was being prepared to summarize these items and would document Phase 1 of the project's Environmental Impact Statement (EIS). He then stated the primary purpose of the project is to improve transportation efficiency and to reduce safety problems for an approximately 3.5 mile long section of the Spaulding Turnpike beginning at the Gosling Road Interchange in Newington and extending across the Little Bay Bridges to the toll facility in Dover. He noted that the purpose and need statement is an important document within the EIS since it identifies why the proposed action is being pursued. It is also particularly important for those unfamiliar with the project and the study area. Chris then reviewed the project need citing the importance of the Spaulding Turnpike from commuter, commerce, and tourist perspectives; its designation as part of the National Highway System (NHS); and its function as a limited access highway linking the seacoast region with I-95, Concord, the Lakes Region and the White Mountains. He cited the historic growth of traffic and future projections, the poor levels of traffic service, existing geometric constraints and deficiencies and the history of traffic accident experience. Chris also

noted that the Turnpike bisects local residential, recreational and commercial areas, and that there exists a need for local connectivity of motorists, pedestrians and bicyclists. He stated that the Little Bay Bridges were major structures located on an important highway in a moderate seismic area and not designed to meet the current seismic criteria for this region. He concluded by noting that the Newington-Dover Spaulding Turnpike project was included in the State's Ten-Year Transportation Improvement Program and was the highest long-term transportation priority of the Seacoast Metropolitan Planning Organization. He noted that as the area continues to develop and future traffic volumes increase, traffic operations and safety conditions would worsen. Chris then asked Frank O'Callaghan to review the project background.

Frank began by describing the project study area as extending north from Exit 1 (Gosling Road/Pease Boulevard) of the Turnpike on the south, traversing the Little Bay Bridges to a point just south of the Dover Toll Plaza, and bounded by the Piscataqua River on the east and Little Bay on the west. He noted many study area issues such as marine habitat, navigation, water quality, tidal and surface wetlands, park and recreational activities, historic and cultural resources and potential residential and commercial property impacts. He cited previous studies - NH 16 Corridor Management Study (1998) and the Spaulding Turnpike, Newington-Dover Feasibility Study (2000) - which identified poor traffic operating conditions for the study area under current and future traffic volume conditions. Frank noted that current weekday peak hour capacity constraints extended from Exit 6 southbound to Exit 3 (Woodbury Avenue) in the morning, and from Exit 4N northbound through Exit 6 in the evening. These capacity conditions are compounded by a number of geometric deficiencies including substandard shoulder width on the Little Bay Bridges, substandard turning radii at many of the interchange on and off ramps, and inadequate weaving distances in both the northbound (River Road) and southbound (Nimble Hill Road) Exit 4N - Exit 4 area. He also noted that US 4 was capacity constrained during both the weekday AM and PM peak hours.

Study area traffic accidents during the 1997-2001 period (908 total) increased by approximately 58 percent in comparison to the previous 5-year, 1992-1996, period (575 total). During the 1997-2001 period, accidents increased at approximately 11 percent per year in comparison to the average annual traffic volume growth of 3 percent per year. The Little Bay Bridges are the highest accident location in the study area. Frank concluded his remarks on traffic operations and safety by referring to an interim safety improvement plan that has been developed to improve traffic and safety conditions in the Exit 4 – Exit 4N, Nimble Hill Road and River Road area. The plan has been endorsed by Newington officials and is scheduled for implementation in 2005.

Frank O'Callaghan then presented some preliminary bridge findings by contrasting the Little Bay Bridges with the General Sullivan Bridge. The Little Bay Bridges are characterized by substandard shoulder widths and a 3.5 percent grade which limits driver sight distance to a 60 mph design speed (design speed being the maximum safe operating speed governed by the vertical alignment or profile). The 2-lane bridges have minor deterioration and the substructure for both bridges – composed of reinforced concrete – was designed and constructed in 1966 prior to seismic resistance requirements.

Frank then enumerated several factors which would affect the rehabilitation alternatives for the General Sullivan Bridge. A 4 percent grade limits driver sight distance to a 45 mph design speed. The cross-section is limited to 24' of pavement and 2'-11" sidewalks on each side. These geometric characteristics and the continuous truss nature of the structure will preclude the rehabilitation and reuse of the bridge to function as two freeway/turnpike lanes to complement the function and operation of the Little Bay Bridges and Turnpike. In addition, the deck, girders and truss members exhibit major deterioration, and there is extensive substructure deterioration. He noted that the piers are composed of unreinforced granite block and mortar, and in conjunction with the low internal redundancy of the truss design and the fatigue associated with

the age (1935 construction) of the structure, the General Sullivan Bridge is more vulnerable to a seismic event than the Little Bay Bridges. The General Sullivan Bridge is also historic and subject to costly lead paint removal and re-painting. Frank noted that the Kimball Chase 1991 inspection and evaluation of the bridge estimated rehabilitation costs ranging from \$8 million to \$16 million depending on the nature and extent of pier reconstruction or replacement. These 1991 cost estimates would be \$12 - \$20 million in 2003 dollars, and may underestimate the cost of painting. For example, the I-95 Piscataqua River Bridge was recently re-painted for approximately \$11.8 million. He concluded by reiterating the infeasibility of rehabilitating the General Sullivan Bridge to function as a Turnpike-like facility to complement the Little Bay Bridges.

Frank then introduced Steve Lawe who summarized the process to update the seacoast regional traffic model, the purpose of which is to estimate how future traffic patterns are impacted by land use and transportation policy alternatives, and to enhance the overall understanding of the transportation planning process. He identified data requirements such as seasonal and year round housing; auto ownership and household size; employment; roadway network characteristics such as functional classification, number of lanes, capacity, speeds, and intersection controls; transit routing and costs; tolls and auto costs; travel patterns, such as trip generation, length of trips, mode choice, and choice of travel route; traffic counts; transit ridership; and the 1992 seacoast household survey. Steve touched on the sensitivity of the model with respect to infrastructure improvements and changes in land use, and noted that increases in capacity may attract new vehicle trips and that increases in vehicle cost may decrease vehicle trips. The results or output of the travel demand model include: roadway volumes and delays, transit ridership, shifts in travel patterns and shifts in land use patterns consistent with the testing of transportation system improvement alternatives.

Steve concluded by summarizing the purpose, methodology and results of the 2003 Seacoast Travel Survey. He explained that the survey format was a series of computer-based dynamic questions whereby respondents "state" their preferences given a series of options, and that answers to a question are input to the next question. The survey was designed to estimate Seacoast residents' sensitivity to different transportation mode alternatives, and to assist in developing recommendations on how to improve transportation in the seacoast area. The survey was administered in June 2003 and included 1,537 respondents, approximately 50 percent higher than the 1,000 target response. The survey was computer-internet based with flyers containing the internet web address distributed at many public (toll booths, local transportation centers, city/town halls) areas and at local businesses and colleges. Steve summarized some of the survey findings: 74 percent of respondents were full time seacoast area residents; travel to/from work (60 percent) and work related business (13 percent) were the most prevalent trip purposes; 78 percent of travelers drove alone; 19 percent shared a ride; and of those who chose not to use a car, cost, congestion and preference for transit were cited as reasons for not driving. The Rockingham and Strafford regional planning commission are currently reviewing a draft summary report.

Peter Walker then provided an overview of environmental issues associated with the project. He briefly reviewed the project Study Area, and reminded the audience that the project is in the first phase of the EIS process. Perhaps the most obvious and significant feature of the study area is the Little Bay/Great Bay estuary, one of the largest estuarine environments on the east coast. The study area contains a number of natural resources including tidal and freshwater wetlands, wildlife habitat, rare species habitats and floodplains. VHB is consulting with the University of New Hampshire to conduct an inventory of subtidal (submerged) habitats.

Mr. Walker briefly reviewed the approach being taken to study potential air quality effects, noting that reduction in congestion would typically have a net positive effect on regional air quality. Noise impacts from the highway have been a concern expressed frequently during previous project meetings. He presented a summary of the noise study, showing a figure which depicts 14

noise sensitive areas determined to be present in the study area. A detailed noise model will be created that will help determine where noise mitigation measures might be necessary.

Mr. Walker briefly summarized the recreational and historical resources at Hilton Park on Dover Point. Because the project must comply with Section 106 of the National Historic Preservation Act, the Department must consider impacts to historic structures and archeological resources. The interested public is invited to participate in consultations on this subject among the NHDOT, the FHWA and the NH Division of Historical Resources. If residents own a historic property that may be affected, or if they belong to an organization concerned with historical resources, they may contact Mr. Harry Kinter of the FHWA to learn more about how they can become a consulting party.

Socio-economic effects will also be addressed in the EIS. Socio-economic effects can be direct - for example, property owners may be impacted if an expanded highway requires acquisition of new right-of-way. Effects can also be indirect and cumulative. For example, by changing the operation of the regional transportation network, patterns of residential and business development may change, which could have an effect on regional patterns of population growth. Pete Walker explained that the socio-economic study area would include more than just the Dover and Newington areas for purposes of analyzing these larger trends. A total of 32 communities, including portions of Carroll, Strafford, and Rockingham Counties would be included in the analysis.

Because of the limited time available for the evening's meeting, Mr. Walker could not touch in detail on all of the issues that will be analyzed in the EIS. However, he indicated that several other issues in addition to those already discussed would be considered. The list of issues includes: navigation, floodplains, aesthetic resources, aquifers and public water supplies, and potential hazardous contamination sites.

Frank O'Callaghan then summarized the reasonable range of alternatives, in addition to the No-Build alternative, that will be considered: Transportation System Management (TSM) improvements, Transportation Demand Management (TDM) measures, Upgrading the Corridor, and a combination of the above. He noted that at this point in the study, conceptual improvement alternatives have not been developed; rather, concepts will be developed from this range of alternatives and screened for feasibility in the next phase of the study. He went on to state that the No Build alternative perpetuates the existing transportation system, is the base case for comparing system improvement alternatives, and is required by the federal environmental review process. TSM improvements are generally low cost improvements and usually implemented within the existing right-of-way to increase efficiency or improve safety. Adding turn lanes or increasing traffic control at intersections or changing travel patterns are typical TSM actions. TDM measures, on the other hand, are directed at reducing the overall travel demand on the transportation infrastructure and may include bus, transit, rail, ride-sharing, park and ride, high occupancy vehicle lanes and work hour management alternatives. Frank noted that inventories of existing levels of bus, rail and park and ride services have been undertaken and current system improvement plans noted to assist in developing TDM-related improvement alternatives. For example, the consultant team is aware of the City of Dover's proposal for a new park and ride facility to be located in the Exit 9 area.

With respect to upgrading the corridor, alternatives to widen and rehabilitate the Little Bay Bridges, or to replace the Little Bay Bridges to provide 3 or 4 lanes in each direction would be considered. Alternatives to rehabilitate or replace the General Sullivan Bridge for local traffic, or for transit and HOV use only, or for pedestrians and bicyclists only, would be considered, as well as the alternative of removing the General Sullivan Bridge and providing a pedestrian/bicycle system connection as part of a Little Bay Bridges alternative. Bridge infrastructure alternatives

would be complemented by improvements to the mainline of the Turnpike and the interchanges. Frank concluded that he suspected a smart transportation solution would emerge that reflects a combination of TSM, TDM and Corridor Upgrade improvements, a solution that best balances meeting the purpose and need of the project with minimizing impacts on the environment and to property owners; a solution that is permittable, supported by the local communities and affordable.

Chris Waszczuk concluded the project team's presentation by identifying the five (5) phases of the project: (1) Scoping/Data Collection/Issue Identification; (2) Conceptual Alternative Development and Screening; (3) Preliminary Design and Impact Assessment of Alternatives that survive the Phase 2 screening/Draft EIS; (4) Public Hearing which presents and seeks approval for a Preferred Alternative; and (5) Final EIS which responds to comments. He noted that NHDOT and FHWA were currently reviewing the Phase 1 Draft Scoping Report, and that the Final Scoping Report would be posted on the project website once it was available for distribution.

Chris then reviewed the revised Project Schedule. He noted the effort to expedite the study in light of the priority and need for the project expressed by seacoast residents and local officials at past meetings and at the recent Governor's Advisory Council on Intermodal Transportation meeting held in Portsmouth on October 27th. He stated that the Public Hearing originally targeted for February 2006 had been moved up to target an October 2005 date. He also noted that the FHWA Record of Decision was now targeted for November 2006, which was a critical milestone and would allow funding for the final design and right-of-way acquisitions to commence. If funding is available, construction could begin as soon as 2008.

Chris also noted that the public participation process was open and inclusive. A project advisory task force (ATF) of 15 members has met and will continue to meet quarterly to discuss the project status and guide the project's development. The ATF is made up of representatives from the municipalities of Dover, Newington, Durham and Portsmouth, the Dover and Portsmouth Chambers of Commerce, the Strafford and Rockingham Planning Commissions, COAST, the environmental community, the NHDOT, and FHWA. The ATF meetings are open to the public. Public informational meetings will be held in each phase of the study and will include notification of the abutters within the project limits. Also, meetings with state and federal resource agencies are scheduled to continue on a regular basis. The project website hosts a wealth of information, and is updated periodically. All meeting notes, reports, plans, etc. will be posted on the website once available. Lastly, the public hearing, as previously mentioned, is targeted for October 2005. Chris finished his comments by reminding the attendees that they could contact Bill O'Donnell at FHWA or Bill Hauser and himself at NHDOT for further information or to offer further comment. He also requested that attendees remember to sign the attendance sheet before leaving.

OPEN DISCUSSION

At approximately 8:10, Chris Waszczuk opened the meeting to public discussion.

A member of the public asked whether the Powerpoint information presented during the meeting would be available on the project website. Chris Waszczuk replied that the presentation would be posted.

Randy Caruthers of 312 Dover Point Road asked whether the Department had given any consideration to constructing a tunnel under the Little Bay, rather than expanding the bridges. Chris Waszczuk replied that the Department had not, to date, considered building a tunnel. Chris explained that the existing bridges represent a substantial infrastructure investment. If at all possible, the Department wants to preserve this investment by rehabilitating/reusing portions of

the existing bridges to keep project costs reasonable. Construction of a tunnel would be prohibitively expensive, and thus had not been considered.

Edward Hoginski, of Dover Point Road, asked whether the Department has identified which houses will be taken for the highway project. Chris replied that Department has not yet initiated a detailed study of design alternatives. While the 2000 Feasibility Study identified some conceptual design alternatives, it could not evaluate whether those designs were feasible from an engineering perspective. The Department and its consultants will begin a study of design alternatives this winter and spring.

Gordon Smith commented that he felt the option of a tunnel made sense. He asked whether the Department is planning to also consider a multi-level bridge such as those found in Boston. Chris Waszczuk thanked Mr. Smith for his comment and indicated that the Department would consider the feasibility of a multi-level bridge.

A resident of Spur Road commented that, in his opinion, the noise from the highway is a significant problem. He asked how the Department plans to maintain traffic over the bridge during construction. He also commented that proper enforcement of the traffic laws in the area would encourage people to drive more safely, resulting in fewer accidents and fewer delays. Chris Waszczuk replied that, as part of the Environmental Impact Statement, the Department would evaluate ways to mitigate the noise issue. During design of the project, the maintenance of traffic during construction will be a large consideration and may actually affect the selection of the preferred alternative. Chris also commented that better enforcement may indeed help, but the NH State Police have limited resources to patrol the highways.

Kevin Duffy, a resident of Homestead Lane, asked whether representatives of the local communities are on the Advisory Task Force. Chris Waszczuk replied that members from Dover and Newington, as well as Portsmouth and Durham, are on the ATF. Mr. Duffy asked how construction would be phased. Chris replied that it is too early to know how the project would be constructed in any detail. The phasing would occur in such a way as to minimize construction impacts with the bridge likely being addressed first. It is likely that the project would be built in several contracts over several years to minimize disruptions. Mr. Duffy then followed up by asking who "approves" the project. Chris explained that several resource agencies would need to issue permits. Moreover, the layout of the project must be reviewed and ultimately approved by a "Special Committee" made up of three Executive Councilors. This Committee will be responsible for overseeing the public hearing process.

Roger Rivers, of Spur Road, asked whether the Tolls would be moved or expanded. Chris Waszczuk explained that previous studies had shown that traffic north of the tollbooths would operate at acceptable levels in the future. Tolls are a statewide concern, and have a set of separate complicating issues. Currently, there are no plans to modify the tolls as part of this project. Mr. Rivers also commented that there are no facilities at the toll plaza rest stop adjacent to Spur Road. This causes a problem, and Mr. Rivers requested that the state install toilet facilities at the toll plaza rest stop.

Kevin Duffy asked if the traffic backups would simply move to the tollbooths after the bridges are reconstructed. Chris explained that this question would be studied in detail in the EIS traffic analysis.

Pam Long, Dover Point Road, suggested that the Department consider a raised highway to minimize impacts on residential neighborhoods and Hilton Park. Chris Waszczuk replied that every opportunity to minimize the project footprint would be considered. The cost of such measures would be a factor in determining whether they are eventually implemented.

Carole Stiles, Dover Point Road, asked how the Department decides when to take a property in full versus only taking a portion of the property. Chris explained that this decision depends on a number of factors including the value of the land, whether a building on the property would need to be demolished, and the proportion of the property subject to impacts. Efforts to minimize property impacts include retaining walls and steepened slopes. If the property still has a high degree of impact, then a full acquisition would be considered.

Alice Briggs of Dover Point commented that she travels the highway daily during the worst hours. In her opinion, a significant problem is related to the Nimble Hill Road weave and the number of trucks attempting to access the Sprague Energy facility. She noted that part of the Interim Safety Project scheduled for construction in 2005 includes closing the reverse direction Exit 4. She recommends that the Department close Exit 4 now, rather than wait. Chris explained that the Interim Safety Project has already completed its public review. Early closure of Exit 4, prior to the related improvements to River Road and Nimble Hill Road, was not discussed. A decision to close Exit 4 early would need to go through a public review, which would be unlikely to conclude earlier than the current 2005 schedule for the Interim Safety Project.

Carole Appel, Isaac Lucas Circle in Dover, commented that there are a number of properties currently for sale in the project study area. She asked whether the Department would buy these properties as they come up for sale, which would limit the need to condemn on properties later. Chris Waszczuk replied that the Department is not authorized to acquire property until the federal Record of Decision (the decision of the Federal Highway Administration and its cooperating agencies on the project) is issued. FHWA's decision is not anticipated until 2006 under the current schedule.

Edward Hoginski asked how the Department intends to maintain two lanes of travel in each direction during construction. Chris Waszczuk suggested that the project construction sequence would need to carefully consider constructibility issues and the need to minimize impacts to traffic. Obviously, transportation in the area would not operate without at least two lanes in each direction. One possibility would be to construct a new bridge, then divert traffic to that new structure while the existing bridges are reconstructed. New lanes, either temporary or permanent, could be constructed in the median or outside the existing travel lanes to accommodate traffic.

Representative Art Pelletier (Dover) asked whether any consideration would be given to limiting access points on the highway. Chris Waszczuk replied that consolidation of access points would be a major feature of the design. Chris briefly reviewed the operation of the gas station at Nimble Hill Road under the Interim Safety Project design. There are currently too many access points within the study area, and too many of these have substandard geometry.

Representative Peter Smith (Dover) expressed considerable concern with increasing the size of the highway, explaining the "if you build it, they will come." While Rep. Smith sees problems with the suggestion of a tunnel or double-decker bridge related to prohibitive costs, he encouraged the Department to think creatively in developing a solution. For example, incentives for carpooling should be created. The goal should be to decrease congestion, not increase the number of cars the highway can accommodate. Chris Waszczuk indicated that he agreed with the Representative's comments and that the analysis will fully examine not only infrastructure upgrades, but also all available means of reducing traffic such as TSM and TDM measures. However, Chris noted that studies have shown that it is very difficult to get a significant portion of the public to use mass transit. The Department will ultimately try to develop a multi-modal solution.

Barbara Ridolfi, a resident of Pine View Drive, expressed concern that the Department needs to add signs at the bridge area specifying that drivers are to remain in their lanes. Mrs. Ridolfi criticized the Department for not taking action on her request sooner. Mrs. Ridolfi acknowledged that the Department intends to post the Scoping Report on the internet. But, she noted that all citizens of Dover should be concerned with the project and suggested that the Scoping Report be published on the front page of Foster's Daily Democrat. She also complained that she had not received a single piece of mail on the project, even though she asked to be on the project mailing list. In response, Mr. Waszczuk noted that he would discuss Mrs. Ridolfi's sign suggestion with the Bureau of Traffic, who is responsible for such matters. However, he noted that this is the first time that he has heard the suggestion. He also noted that, in addition to the internet, the Department will publish the Scoping Report in hard copy and will make it available in a number of places such as area municipal buildings and libraries. Finally, Mr. Waszczuk stated that he would ensure Ms. Ridolfi is listed on the project's mailing list.

Sam Bittner commented that the noise is his most substantial concern. He asked whether the locations of noise barriers would be identified on concept plans once completed. Also, Mr. Bittner commented that there should be a public hearing after the Final Environmental Impact Statement is issued. Mr. Waszczuk confirmed that concept plans would show the location of noise barriers. He also explained the public process. A major public hearing involving the regulatory agencies as well as the Special Committee (made up of three Executive Councilors) will follow publication of the Draft EIS which will identify the preferred alternative. A formal public comment period will follow this hearing. After this, the Department and the FHWA will consider and respond to all public comments in writing and by preparing the final Environmental Impact Statement. A subsequent public hearing following the final EIS is not anticipated.

Senator Iris Estabrook noted that she was in attendance mainly to listen to the Department's presentation and to hear public concerns. However, she inquired whether the planned Park & Ride project at Exit 9 might be constructed prior to the rest of the project and whether funding would be available. Chris Waszczuk replied that Park & Ride facilities qualify for CMAQ (i.e., federal Congestion Mitigation and Air Quality Program, administered by NHDOT) funding, which is available at about \$6 million annually. A park and ride facility could be constructed at Exit 9 with these funds sooner than the rest of the project.

A member of the public asked whether the Department could create a carpool lane now, rather than wait for the larger project. Chris Waszczuk replied that the Department would need to determine whether such a carpool (HOV) lane would be appropriately utilized and what type of traffic implications would result. In the long term, an HOV lane may be feasible. However, it may not be realistic in the short term to create a dedicated lane in the face of the severe current congestion.

Cynthia Copeland, representing the Strafford Regional Planning Commission, commented that there is the need to look at the bigger picture, including how residents of the area live and commute. By changing these patterns, the demand on the highway might be alleviated. The study must focus on all possible TDM strategies. Chris responded that realistic expectations of all feasible TDM strategies would be considered.

Edward Hoginski asked whether the study would ultimately make a recommendation about the fate of the General Sullivan Bridge. Mr. Waszczuk replied that the study would address the issue of the bridge, which would include rehabilitation and re-use or removal of the bridge.

A resident, noting that she had participated in the stated preference survey, asked whether transit options would be one way to reduce congestion. She stated that park and ride facilities may help the situation. Steve Lawe replied that about 5% of the respondents indicated that they would be

willing to change to a mass transit option if conditions for its use were optimal. The woman stated that the growth at the Pease International Tradeport had contributed to the highway congestion and suggested that employees of the Tradeport might be willing to use mass transit. Steve Lawe indicated that all feasible options for providing mass transit would be analyzed during the study. However, he noted that past studies had found that it is very difficult to encourage a significant number of commuters to change to transit options due to inherent issues of convenience.

Bill O'Donnell noted that the EIS would make recommendations on the final disposition of the General Sullivan Bridge. He noted that the State Historic Preservation Office would like to see the Bridge preserved. However, the US Coast Guard had indicated that the bridge is an impediment to safe navigation and therefore has suggested that the bridge be eliminated.

A general discussion of the General Sullivan Bridge followed. Since the bridge is eligible for the National Register of Historic Places, it can only be impacted if there is no other feasible alternative. The EIS will therefore study the costs and engineering issues associated with its reuse. The bridge is considered the second most historic bridge in NH. Sam Bittner noted that the bridge is a recreational resource. Some people use the bridge to walk or to fish. Mr. Bittner argued that the bridge should be preserved for these purposes, even if it cannot be used for transportation. Tom Keegan commented that a new bridge could be built that would accommodate pedestrian and recreational use.

Spencer Strubel, of Dover Point Road, stated that the Department should consider regional transportation patterns during the study. He stated that the Department should consider new highway/bridge connections in an entirely different alignment such as to the west to avoid impacting Dover Point. Chris Waszczuk noted that the Great Bay is too wide to span. Generally, new alignments on new locations do not minimize impacts. The focus of the study will be on the current corridor, which is a major north-south route.

Julie Porter asked about incident management. She asked whether it is possible to create an "early warning system" such that drivers in the region would be informed about accidents or congestion in an effort to redirect their route choice. Chris Waszczuk replied that such a program is currently near implementation. Variable message boards should be in place by the spring/summer of 2004. A discussion followed in which several residents encouraged the Department to expedite the creation of this system.

Bruce Woodruff, Dover City Planner, referring to an earlier statement by Steve Lawe, stated that 5% of 80,000 to 100,000 trips is indeed a large number. He stressed that transit options must be part of the solution. Such measures should include implementing an express bus service in the region, creation of exclusive HOV lanes, and creation of park and ride facilities.

Ilean Bittner spoke in favor of preserving the General Sullivan Bridge. She stated that many people, not just local residents, use the bridge for recreation. She has met people from Rochester, Portsmouth and Rye while walking the bridge.

Rep. Art Pelletier inquired about the aesthetics of future noise barriers. Chris Waszczuk stated that decisions on the type of noise barrier construction likely would not be decided until the final design stage following the EIS.

Chris Cross, Chair of the Advisory Task Force, stated that the project is the highest priority transportation project for the Seacoast Metropolitan Planning Organization. Accordingly, the Department has prioritized the project. Mr. Cross commended the Department for compiling the present background data, and thanked citizens in attendance for their good ideas. Mr. Cross

stated that he believes the process for studying the transportation issues is excellent, but requested that citizens be patient. While the study will ultimately lead to solutions for the short term, intermediate terms and long term, the process is designed to provide adequate assessment of a large number of issues.

At approximately 9:30 p.m. the meeting adjourned.

Noted by: M. Dugas, C. Waszczuk

cc: J. Brillhart

C. Waszczuk

M. Dugas

M. Laurin

H. Goodwin (Bureau of Turnpikes)

W. O'Donnell, FHWA

Town of Newington Selectboard Paul Beecher, Dover City Manager

Newington-Dover ATF

MEETING SIGN-UP SHEET

PROJECT	Newington - Dover: Spaulding Turnpike improvements - Public Informational Meeting		
LOCATION	Dover City Hall		
PROJECT NO.	NHS-027-1(37)	11238	
	Federal	State	

		State
Name	Agency or Address	Comments
ROGER RRIVERS	193 Spur RD DOVER	
JESSEN BOX	400 DONER PT. Rd	
KATHLYN G. BOX	400 DOVER PT. P.D	
Tom Fargo	SRAC	
TIM KOACHE	JR PC	
RICHARD PEASE	NHOES	
MARTIN POLENICA	416 DOLER PT.RD	
COMMUNICATIONS CLIVE	420 PULTER RD	
Jen Perenick	416 Dover Point Road	
SKIP Silver	17 Peakson Dr	
Roy Torselyu	N 22 24	
FRANK - MARGNET MALOW	* JaI DOVER PT. RO DOVER	
Ed + Prissille to	when 11. Boston Hg	
Critt albout	NEWINGTON: NH.	
Ed St. Pierre	22 heighton Rd Dover	
ART Pelletier	NH HOUSE OF REP	
Larissa Mulkern	Seawast Newspapers	
THOMAS KEEGEN	19 BOSTONHARBOR RD.	
Son. Iris Estabrook	Dist 21	
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		SOUND BARRIEN AT The BOG. NO. MY OF PROJECT - NOT AT THE EXAMPLED The musy RIUS OUT!
Lebbit Burd	345 Diver Pt Da aboves	Harry Carrier Co.
Jan MacMillan	14 Boston Harbor Rd	Very noisy now & had land taken away in
Gordon Smith	14 Boston Harbor Rd	last bridge construction. Concern of losing house
Edward HogiNski	230 DOWN RARY	The state of the s
JoAnn Frye	CLD Consulting Eng	
Dave While	City of Diver Desilet	Sponer built the better
James & Diana / lames	HO9 Dovel Pt. Road	CINCERUS ABOUT EVEL INCEITSING NOISE
Roy Browse	1995 Rie 20.	DOISE-COURSTION CONSTASOP
KICHARD D ISOM	6 HICTON ED	DOISE BARRAS.
JOANNE B ISOM	6 HILTON RD	
Robert Allia Bry	illate Dr	eliacipate reverse direction range
Guelyn & Allen Schintzius	23 Hadan's Way Door	- CARLOS CARCES SA PROPERTY
Chris CROSS	Rocking Phing Comission /	lentest on Rep
Jack Nowigh	Newick's Restaurant - Doven	

Sheet | of 2

Date November 12, 2003

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MEETING SIGN-UP SHEET

PROJECT	Newington - Dover: Spaulding Turnpike impro	vements - Public Informational Meeting
LOCATION	Dover City Hall	- The state of the
PROJECT NO.		11238
	Federal	State

		State
Name	Agency or Address	Comments
Harold Caton	403 Dover PtRd DoverN	Comments
Flowed trelanger	413 Dove RT RD	I would like To see Sound BURGEYS
LINDA N. STRUBLE	316 (DOVER PT RD	Transport of the Port of the Contraction of the Con
BARBARO	as werrooth ign	
luge (<	22 WentwoTh Ter	
Dave Duriels	27 wentwork Ter	
GARY LIMPSAY	197 SPURRP.	SOURD BANKINS ARE PINSLY NEEDED
Wormand Vote	Qui Tolent ad. Done.	7,500 7,500
Peter Schnidt	POBOX 1468 Dover	State tep.; Koep me better informed
BALLATA RISOFT	5 Pineriew Dr Dover	1 exect cost colled - comb la
BERRAMO LOFEMANN	18 WALLINGION AVE DOVEN	Dough Dicken 15 Best 1 De A.
JULIE PORTER	300 Wend Rd. Dover	South and The Italy
aroline French	123 ROCTOL HELDON	
Pam & Roul Long	418 Dover Pt. Rd	
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Date	November 12, 2003
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Vanasse Hangen Brustlin, Inc.

Kilton Road Six Bedford Farms, Suite 607 Bedford, New Hampshire 03110-6532 603 644-0888 FAX 603 644-2385

Meeting Notes

Attendees:

Chris Waszczuk, NHDOT

Marc Laurin, NHDOT

Steve Wells, COAST

Bruce Woodruff, City of Dover Tom Fargo, SRPC, Dover John Burke, City of Portsmouth

Mike Burlage, NHDOT Peter Walker, VHB

Frank O'Callaghan, VHB Members of the public (see

attached list)

Date/Time: June 30, 2004

Project No.: 51425

Place: Dover City Hall

Re: Newington-Dover, 11238

Public Information Meeting

Notes taken by: Frank O'Callaghan

Chris Waszczuk, Project Manager for the New Hampshire Department of Transportation (NHDOT) called the meeting to order at 7:10 PM by introducing himself and welcoming those in attendance. He stated that the evening's meeting was the first of two Public Information Meetings – the second being scheduled for the following evening, July 1, 2004, to be held in Newington. He briefly described the overall study process noting that the project team has considered many ideas, developed a number of preliminary improvement alternatives and is looking for public input from this evening's meeting. He noted that information packets were available to assist attendees in following and understanding the presentation, and that a project newsletter was also available which summarized many aspects of the study to date. Chris reminded attendees to sign in, and indicate if they were interested in being added to the project's mailing list.

Chris then introduced Mike Dugas, NHDOT, Marc Laurin, NHDOT, and Frank O'Callaghan, VHB, as members of the project team. He noted that Jamie Sikora, FHWA, was in attendance representing FHWA. He reviewed the composition of the Advisory Task Force (ATF), noting community representation and its purpose of providing guidance to the project team and acting as a conduit for disseminating project information to project stakeholders. Chris noted that the ATF meets regularly, usually every 2 to 3 months, and has met to date seven times over the course of the study.

Chris then reviewed the meeting agenda, noting that it would be interactive in nature, and that four (4) question and answer periods are scheduled during the presentation to make the digestion of information and dialogue with the public as convenient and effective as possible. He then reviewed the project's purpose which is to reduce safety problems and improve transportation efficiency for an approximately 3.5 mile long section of the Spaulding Turnpike beginning at the Gosling Road Interchange in Newington and extending across the Little Bay Bridges to the toll plaza in Dover.

Chris then reviewed the project need citing the importance of the Spaulding Turnpike from commuter, commerce, and tourist perspectives; its designation as part of the National Highway System (NHS); and its function as a limited access highway linking the seacoast region with I-95, Concord, the Lakes Region and the White Mountains. He cited the historic growth of traffic and future projections, the poor levels of traffic service, existing geometric constraints and deficiencies and the history of traffic accident experience. Chris also noted that the Turnpike bisects local residential, recreational and commercial areas, and that there exists a need for local connectivity of motorists, pedestrians and bicyclists between the east and west sides of the Turnpike in both Newington and Dover. He stated that the Little Bay Bridges are major structures located on an important highway in a moderate seismic area and were not designed to meet the current seismic criteria for this region. He noted that the Newington-Dover Spaulding Turnpike project was included in the State's Ten-Year Transportation Improvement Program and was the highest long-term transportation priority of the Seacoast Metropolitan Planning Organization. He stated that as the area continues to develop and future traffic volumes increase, traffic operations and safety conditions would worsen.

Chris then reviewed the five (5) phases of an Environmental Impact Statement (EIS) noting that the EIS is the highest order of study required by the National Environmental Policy Act (NEPA). The project Scoping Report, published in March 2004, summarizes the Phase 1 activities, which included the project's purpose and need statement, inventories of environmental resources, analysis of existing traffic conditions and projections of future travel demands, and the identification of the range of typical alternatives that would be considered. Currently, Phase 2 activities include the development and screening of potential alternatives to carry forward into Phase 3, the Draft EIS, for detailed analysis. Phase 4 is the FHWA/ACOE/NHDES/NHDOT joint Public Hearing on the Preferred Alternative, and Phase 5, the Final EIS, will respond to comments on the DEIS as well as identify the least environmentally damaging practicable alternative (LEDPA). He then reviewed the overall project schedule target dates including September 2004 for completion of Phase 2, and the fall of 2005 for the joint-public hearing. Assuming the availability of funding, construction – which would be phased - could begin as early as 2008. Prior to pausing for any questions on project purpose and need, or the phasing and schedule of the project, Chris noted the importance of public participation in the study, and emphasized the openness of the process. He identified the ATF as a 2-way conduit for stakeholder input and feedback. The ATF meets regularly and Chris noted that the next scheduled ATF meeting will be on August 25, 2004 at Newington Town Hall. He reminded all that there are public information meetings scheduled for each phase of the study, and that meetings with federal and state Resource Agencies are also regularly held to solicit their input. Project newsletters are also prepared at the conclusion of each phase of study, and the project website, www.newingtondover.com, provides a wealth of project related information and another means of public input to the project team.

At this point, Chris paused and asked for questions.

State Senator Iris Estabrook inquired as to the status of the Incident Management Program, i.e., message boards and signage. Chris Waszczuk responded that the project is currently under construction.

Ray Bardwell, a Spur Road resident, expressed concern over noise from truck braking and motorcycles associated with Motorcycle Week. Chris responded that noise impacts would be evaluated and addressed in the next phase (DEIS) of the study.

Nora Kelley, a Dover Point Road resident, suggested that public turnout at Informational Meetings could be maximized if notice of the meetings were carried on the local community (Channel 22) television channel. Chris responded that meeting notices were sent to Turnpike abutters, local newspapers, resources agencies, parties on the project's mailing list, local and regional Officials, and carried on the project website. Bruce Woodruff, City of Dover, added that in the future, he would take responsibility for notifying Channel 22.

At this point, there being no further questions, Chris Waszczuk turned the presentation over the Frank O'Callaghan to review the project background. Frank began by describing the project study area as extending north from Exit 1 (Gosling Road/Pease Boulevard) of the Turnpike on the south, traversing the Little Bay Bridges to a point just south of the Dover Toll Plaza, and bounded by the Piscataqua River on the east and Little Bay on the west. He noted many study area issues such as marine habitat, navigation, water quality, tidal and surface wetlands, floodplains, ground water, hazardous materials, visual resources, park and recreational activities, historic and cultural resources and potential residential and commercial property impacts. He stated that air quality and noise were also relevant issues, and each would be analyzed in detail during Phase 3 (DEIS) of the study. He also noted that indirect and cumulative socio-economic impacts would also be identified in the next phase (DEIS) of the study. He stated that the March 2004 Scoping Report summarized many of the inventories of environmental resources.

In summarizing safety conditions, Frank noted that study area traffic accidents during the 1997-2001 period (908 total) increased by approximately 58 percent in comparison to the previous 5-year, 1992-1996, period (575 total). During the 1997-2001 period, accidents increased at approximately 11 percent per year in comparison to the average annual traffic volume growth of 3 percent per year. He also reviewed traffic volume growth where average daily traffic (ADT) volume has increased from approximately 30,000 vehicles in 1980, to over 70,000 in 2003, and is projected to grow to over 101,000 vehicles per day by the year 2025. He noted that current weekday peak hour capacity constraints extended from Exit 6 southbound to Exit 3 (Woodbury Avenue) in the morning, and from Exit 4N northbound through Exit 6 in the evening. These capacity conditions are compounded by a number of geometric deficiencies including substandard shoulder width on the Little Bay Bridges, substandard turning radii at many of the interchange on and off ramps, and inadequate weaving distances in both the northbound (River Road) and southbound (Nimble Hill Road) Exit 4N - Exit 4 area. As traffic volumes grow, the safety and traffic operational conditions, which are currently constrained, will worsen.

Frank O'Callaghan then presented some general bridge information for both the Little Bay Bridges and the General Sullivan Bridge. He noted the length, width, main navigation span and vertical clearance of each bridge. The Little Bay Bridges are characterized by substandard shoulder widths and a 3.5 percent grade which limits driver sight distance to a 60 mph design speed (design speed being the maximum safe operating speed governed by the vertical alignment or profile). The 2-lane bridges have minor deterioration and the substructure for both bridges – composed of reinforced concrete - was designed and constructed in 1966 prior to seismic resistance requirements. Frank then enumerated several factors which would affect the rehabilitation alternatives for the General Sullivan Bridge. A 4 percent grade limits driver sight distance to a 45 mph design speed. The cross-section is limited to 24' of pavement and 2'-11" sidewalks on each side. These geometric characteristics and the continuous truss nature of the structure will preclude the rehabilitation and reuse of the bridge to function as two freeway/turnpike lanes to complement the function and operation of the Little Bay Bridges and Turnpike. In addition, the deck, girders and truss members exhibit major deterioration, and there is extensive substructure deterioration. He noted that the piers are composed of unreinforced granite block and mortar, and in conjunction with the low internal redundancy of the truss design and the fatigue associated with the age (1935 construction) of the structure, the General Sullivan

Bridge is more vulnerable to a seismic event than the Little Bay Bridges. The General Sullivan Bridge is also historic – being the second highest-ranking historic bridge in the state -- and subject to costly lead paint removal and re-painting.

At this point, Frank paused and solicited questions from the public. There being none, he began presenting the range of conceptual alternatives that have been developed including Transportation System Management (TSM), Transportation Demand Management (TDM), Bridge Alternatives and Roadway Alternatives. With respect to TSM improvements, Frank noted that these improvements are generally low cost in nature and usually implemented within the existing right-of-way, or requiring minor right-of-way, to improve safety and/or increase traffic operating efficiency. Examples of TSM-type actions are adding turning lanes and/or increasing traffic control at intersections, or changing pavement markings or increasing regulatory or directional signage.

Within the study area, Frank noted that signage on the bridge approaches that reminds drivers to stay in their lane has already been upgraded, and directional signage for NB travelers connecting to US4 at Exit 6W will be upgraded as part of a construction project this year. He then referred to conceptual graphics and described several TSM alternatives.

Dover TSM 1

This action involves extension of the NB deceleration lane to the loop ramp leading to US 4 at Exit 6W. Restriping of the shoulder area under the overpass will extend the deceleration lane by approximately 400′ without impacting the bridge abutment. This measure will prevent peak hour exiting traffic from backing up on the loop ramp onto the Turnpike and blocking NB through traffic on the Turnpike.

Dover TSM 2

This action involves merging the 2-lane SB on-ramp at Exit 6 to a single lane prior to the merge with the main line, coupled with carrying two (2) through lanes on the Turnpike through the Exit 6 interchange to merge with the single SB on-ramp. Currently, the 2 Turnpike through lanes merge to a single lane. The proposed changes will make it safer and easier for drivers to be in the proper lanes (either inside or outside) when planning to exit at Nimble Hill Road or Woodbury Avenue.

Interim Safety Plan (Newington)

The Interim Safety Plan will address the current safety and traffic operational problems at Nimble Hill Road and at River Road due to inadequate weaving distances between these roadways and the median SB to NB turnaround on the Turnpike. By providing a two-way, grade-separated connection under the Turnpike, between Nimble Hill Road and River Road, the median turnaround can be eliminated, thus making the current weaving conditions unnecessary. The existing SB on-ramp from the grade-separated turnaround from River Road will also be eliminated which will remove another safety and traffic operational problem. This project is under final design and scheduled for construction in 2005.

Other Newington TSM Actions

Upon completion of the Interim Safety Plan, the SB deceleration lane to Woodbury Avenue can be extended to provide improved operations. In addition, a NB auxiliary lane can be developed between Woodbury Avenue and River Road to provide a better merging and weaving condition for traffic entering the Turnpike from Woodbury Avenue and for traffic exiting at River Road. In addition, access from Woodbury Avenue to Shattuck Way/River Road via the River Road/Patterson Lane connection would be restricted to emergency vehicles only to preclude NB traffic from diverting

to River Road in an attempt to bypass Turnpike traffic and rejoin the Turnpike at Exit 4. The NB auxiliary lane will be included as part of the Interim Safety Project

While reducing the level of traffic turbulence and improving the safety of current traffic operations on both sides of the bridges, Frank reminded all that the basic capacity constraints of the bridges and Turnpike remain, resulting in peak hour congestion and vehicular delay.

Frank then reviewed the Transportation Demand Management (TDM) strategies that have been considered to reduce the overall travel demand within the corridor including rail, bus, park and ride facilities, high occupancy vehicle (HOV) lanes and employer-based measures. He noted that the project team had met with transit operators and regional planning staff in developing these alternatives. With respect to rail, he presented several alternatives.

Expansion of the Downeaster Service

The first rail alternative examined would involve expanding the Downeaster service by one train set. Currently, the Downeaster makes four round trips per day through the study area. However, only one of these trips coincides with the morning peak hour commuter time. Thus, the existing service is really not providing commuter service. By adding an additional train, it is expected that the service would be more convenient to commuters in the study area. The additional train set would run from Dover station to Boston during the weekday AM peak hour, and return from Boston during the PM peak hour. This alternative would require construction of a new layover facility in Dover in addition to the purchase of a new train set.

Based on a conceptual design, the infrastructure investment for this option is expected to cost between \$11.5 and \$17 million. It was assumed that there would not be a need to double track the existing rail corridor to the Massachusetts state line. If that double tracking is in fact required, then the capital investment would increase to about \$110-\$115 million. Frank noted that these estimates (for all rail and transit alternatives) did not include operational costs.

Regional Commuter Rail Service

A second rail alternative would involve development of a new commuter rail line to carry passengers between Rochester and Portsmouth. This alternative would utilize the existing Conway Branch line south from Rochester and then run along the Main Line West to Dover. From Dover there are two (2) options: continuing along the MLW to Rockingham Junction, and then running east to Portsmouth along the Portsmouth Branch line; or running south from Dover on new right-of-way paralleling the Turnpike and crossing the channel to meet the Newington Branch Line.

Capital cost estimates for these options range from approximately \$145 to \$170 million. This would involve upgrading the existing rail lines, purchasing new train sets and building new train stations in Rochester, Somersworth, Newmarket and Portsmouth. The cost estimate does not include operational costs. Preliminary ridership estimates would result in fewer than 100 peak hour vehicles being removed from the Turnpike for the Rockingham Junction option, and fewer than 150 vehicles being removed for the more direct route paralleling the Turnpike.

Commuter/Tourist Service to Conway

A third rail option would involve extension/upgrading of rail service from Dover along the Conway Branch to Rochester and then north to Conway. This option assumes that the NHDOT would restore the 22 miles of missing track in Ossipee, and could be developed to handle freight service and also

serve as a connection for tourists visiting the North Country or Boston. A preliminary cost estimate is approximately \$40 million.

Frank explained that ridership numbers are very preliminary and that these rail options appear to remove approximately 50 to 150 peak hour vehicle trips from the Turnpike, a relatively low number in relation to the total traffic volume along the Turnpike.

Pease Spur

A now inactive rail right-of-way exists in Newington which runs from the industrial area on the south and east portion of the study area (the Newington Branch Line), across the Turnpike and then into the Pease Tradeport. The rail right-of-way is at-grade and was active when Pease was used as a military base. Frank pointed out that all of the Newington conceptual roadway alternatives maintain a grade-separated right-of-way corridor for future restoration of this rail service.

Frank then described the three (3) bus alternatives that had been developed and preliminarily assessed:

Expand Intercity Service (Rochester-Boston)

C & J Trailways currently operates a coach service between Dover and Boston via Portsmouth. This service could be expanded by adding coaches and extending the service area to Rochester. The cost of this alternative would be approximately \$11.5 million in capital investment.

COAST Express Service

Frank explained that COAST plans to operate new express service between Rochester and Portsmouth along the Turnpike. This service is being funded through a CMAQ grant and is scheduled to begin in 2006. He noted that the express service could be further enhanced by adding Park and Ride facilities at Exit 9 in Dover and at Exit 12 in Rochester. The cost estimate for these Park and Rides is approximately \$5 million. The Park and Rides would allow commuters a place to transfer between their private vehicles and the bus service, as well as support ride sharing and vanpooling.

Enhance Local Bus Service

Wildcat Transit and COAST, specifically COAST Route #2 (Rochester-Portsmouth), Wildcat Route #4 (Dover-Portsmouth) and COAST'S Tradeport Trolley operate local bus routes in the study area. These services could be enhanced by adding additional buses to reduce headways and by providing an interconnection/transfer point at Exit 1 which would allow riders to transfer among the local bus operators. In addition, a new Park and Ride facility could be constructed at the intersection of Route 108 and US4 in Durham, which would support the Wildcat #4 route, encourage ride sharing and vanpooling and allow the capture of some traffic that would otherwise go to or from the UNH campus. Capital cost for this enhancement is expected to be about \$6.5 million.

There is some overlap among these bus alternatives. Therefore, if the three (3) alternatives were bundled and implemented together, the capital cost of the entire package would be about \$16 million. Preliminary analysis indicates that ridership for these bus alternatives would be equal to the rail alternatives - at a fraction of the cost. Frank noted that analysis of ridership continues. He concluded by stating that new park and ride facilities were proposed at Exit 9 in Dover, at Exit 12 in Rochester and at the US4/NH108 interchange in Durham. Such a site would also benefit Durham and UNH by allowing UNH visitors to park remotely and be shuttled to the campus.

With respect to High Occupancy Vehicle (HOV) and Reversible Lane alternatives, Frank described two (2) main options that were examined, in comparison to a standard 8-lane (4 NB and 4 SB) roadway cross-section, to potentially reduce the scale of future roadway and bridge infrastructure improvements. He reminded all that future travel demands require 4-lanes in each direction assuming current travel characteristics (i.e. mode split, vehicle occupancy rates, work hours, travel patterns, etc.).

Frank used a graphic to illustrate the cross-section of each of the options. The first option would be a 2+2+2 lane cross section, with the center two lanes intended as HOV or reversible lanes. The total cross-section of this alternative would be approximately 132 feet. However, the results of the traffic modeling completed to date indicate that a minimum of three lanes in the off-peak direction during summer and fall peak hours would be needed to meet future travel demands. Therefore, this option was not being pursued.

A second HOV concept would involve a 3+1+3 lane cross-section. The center lane would be an HOV or a reversible lane. Frank explained that in order for HOV lanes to be effective, they must be used by approximately 800 vehicles or more per peak hour. However, the traffic model predicts approximately 300 vehicles per hour would use the HOV lane assuming it would start at the Dover Toll Plaza and extend to I-95 in Portsmouth. Since potential traffic volumes would not justify this alternative, a second option was explored running from just south of Exit 6 to just north of Exit 1. This alternative would potentially maximize HOV ridership by extending HOV access to traffic from US4, Dover Point Road, and the Pease Tradeport. Unfortunately, given the compactness of the study area, the relatively short distance between Exits 6 and 1, and the distance necessary to safely accommodate the merging and weaving of traffic to enter and exit the HOV lane, this alternative was infeasible from a traffic safety and operations perspective. A third alternative was considered which assumed an HOV lane running from the Dover Toll Plaza to Exit 1. Similar to Alternative 1, the potential ridership estimate falls approximately 40% below the necessary threshold to justify its use.

In light of the infeasibility of HOV use, the 3+1+3 lane concept was tested from a reversible lane use perspective. Under this concept, the reversible lane would be utilized by the peak flow in the peak hour (i.e., southbound in the AM and northbound in the PM) and open to all vehicles. If this reversible lane extended from the Toll Plaza to Exit 1, approximately 1,500 vehicles per peak hour would use the lane, which is enough ridership to justify its use. Frank explained that this 3+1+3 cross-section would be approximately 152 feet in pavement width due to the shoulders and barriers that would need to be constructed between the reversible lane and the adjacent northbound and southbound lanes. He noted that this cross-section would actually be wider than the approximately 146-foot cross-section required for a typical 8-lane (4 NB and 4 SB) cross-section. As such, VHB concluded that the 3+1+3 reversible lane concept failed to offer a significant advantage over the traditional 8-lane cross-section — the 3+1+3 cross-section was wider than the typical 8-lane section and presented additional operational and maintenance costs. Frank added, however, that the 8-lane cross-section affords the flexibility to convert the inside shoulder/lanes to HOV or exclusive transit use in the future.

Frank then reviewed employer-based TDM strategies which could include transit subsidies, ride sharing, vanpools, alternative work schedules, bike and pedestrian facilities, on-site amenities (daycare, cafeteria, showers, bicycle storage areas) and a guaranteed ride home program.

Frank next reviewed bridge alternatives. Conceptually speaking, he noted that widening the existing Little Bay Bridges from 4 to 8 lanes had been considered to the west side of the existing bridges, to the