

## Purpose and Need for Project

The NHDOT, in cooperation with the FHWA, the MeDOT, and the City of Portsmouth, plans to rehabilitate the Memorial Bridge and replace the Scott Avenue bridge. The Memorial Bridge is a vertical-lift bridge that carries U.S. Route 1 over the Piscataqua River. When fully open the bridge provides 150 feet of vertical and 275 feet of horizontal clearance. The roadway is 28 feet curb to curb with two variable width sidewalks.

The bridge is actually three structures:

- Scott Avenue Concrete Spans
- Memorial Bridge Truss Spans
- Kittery Viaduct

Originally constructed in 1922, the bridge:

- Is a vital link for Seacoast Region
- Lifts approximately 4000 times per year
- Carries 11000 vehicles per day
- Provides for pedestrian and cyclist use
- #1 Priority NHDOT Red List Bridge

The project needs are:

- Structural steel repairs to remove the 20 ton load restriction
- Replacement of the mechanical and electrical components
- Improved roadway and sidewalk safety
- Relocation of the control house for reliable operator access

## Project Schedule

### Part A

2003-2004

- In-depth Structural / Mechanical /Electrical Inspection
- Bridge Load Rating
- Preliminary Structures Report
- Historic Structures Report
- Emergency Repairs

### Part B

2005-2006

- Environmental Study
- Public Outreach
- Preferred Alternative Identification
- Historic / Archaeological Investigations
- 6 month - Mechanical Inspections

### Part C

2006-2007

- Final Design
- 6 month – Mechanical Inspections
- Potential Interim Repairs

### Construction

- Ready for Advertisement Nov 2007
- Actual construction depends on availability of funding

## Project Description

Major project components may include:

- Improved roadway and sidewalk surfaces



- Replacement of the Scott Avenue bridge



- Relocation of the control house to the south tower





## Construction Scheduling

The construction will involve either a partial closure option or a reduced partial closure with alternating one-way traffic. Local and regional traffic analysis will consider these options. The options are summarized in the table below:

Partial Closure	Reduced Partial Closure with Alternating One-way Traffic
24-month duration	24-month duration
5-month complete roadway closure	2-month complete roadway closure followed by 6 months alternating one-way traffic
probably 2-month closure for pedestrians and cyclists	probably 2-month closure for pedestrians and cyclists
2 to 3 day navigational closures during 5 month period	2 to 3 day vehicle and navigational closures during 6 month period
19-month normal two-way traffic	16-month normal two-way traffic
Traffic impacted March 1 to August 1	Traffic impacted March 1 to November 1
<ul style="list-style-type: none"> <li>• Shorter total traffic impact (5 months)</li> <li>• Longer complete closure (5 months)</li> <li>• only ½ summer impacted</li> <li>• more cost effective</li> </ul>	<ul style="list-style-type: none"> <li>• Longer total traffic impact (8 months)</li> <li>• Shorter complete closure (2 months)</li> <li>• impact entire summer season</li> <li>• additional delays during one-way traffic</li> </ul>

## Selection of Preferred Alternative

The preferred alternative for the project is:

### *Replacement of the Lift Span while utilizing the Partial Closure Option*

The decision is based on:

- Replacement is a more economical long term investment
- Replacement may result in construction time savings (less traffic disruption)
- Partial Closure is the public preference
- Partial Closure is more economical
- Partial Closure is the shortest traffic disruption

## Public and Officials Outreach

Project outreach has included:

- Coordination with regulatory agencies, natural resources agencies, and State Historic Preservation Officer
- Meetings with US Coast Guard, Portsmouth Planning, Portsmouth DPW, resource agencies
- Intercept survey at bridge in August 2005
- Navigational surveys mailed November 2005
- Business surveys completed February 2006
- Public officials meetings
- Public informational meetings

## Public Informational Meeting—April 6, 2006

# Memorial Bridge Rehabilitation Project Portsmouth-NH, Kittery-ME



## U.S. Route 1 over the Piscataqua River

Comments on the project can be forwarded to the following contacts:

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