# PAGE 8 OF 8

# **CORRIDOR NEWS**

CONTRACT 14633F will finalize the reconstruction of Exit 5, tying into the recently completed ramps project and the new Park-and-Ride. This project involves:

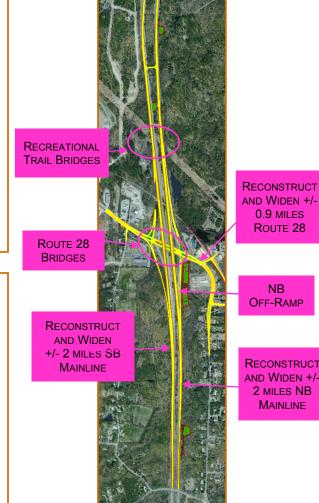
- Replacement of a total of four red-listed bridges over Route 28 and the Recreation Trail
- Reconstruction and widening of approximately two miles of I-93 NB & SB
- Reconstruction and widening of approximately 0.9 miles of Route 28
- Construction of a new NB off-ramp and connections to the NB on-ramp and SB on and off-ramps recently constructed under the previous Exit 5 ramps project
- Reconstruction of segments of Perkins and Auburn Roads, and Liberty and Independence Drives
- Construction will be facilitated through the use of temporary median crossovers, temporary widening and temporary ramps for traffic control.

## **Additional Project Information:**

- This project is located on an inactive Railroad Corridor. The tracks have been removed and the railroad corridor in this area is currently used and maintained by the NH Department of Resources and Economic Development (DRED) as a Recreational Trail for both summer and winter trail use. Project work will necessitate some short-term periods of closure of the trail.
- The proposed I-93 bridges over Route 28 are single span structures approximately 170' long with steel plate girders. Dry standpipes are proposed on the south ends of both bridges to assist the local Fire Department in responding to accidents on the highway.
- The proposed I-93 bridges over the Recreation Trail are single span structures approximately 90' long with concrete

Traffic Implications: Construction will be facilitated through the use of temporary median crossovers, temporary widening and temporary ramps. The SB lanes will be widened to the west (including the two SB bridges). SB traffic will then be shifted to the widened section and the east side of the SB lanes will be constructed. Once SB is complete. NB traffic will be shifted to the newly constructed eastern SB lanes with NB and SB traffic separated by concrete barrier. This will allow the NB section, including NB bridges over Route 28 and the Recreational Trail. to be built out of traffic. Once the NB bridges are complete, traffic will be returned to its normal configuration. With the exception of occasional lane closures and traffic shutdowns during low volume periods, two lanes of traffic will be maintained on both NB and SB at all times. All work performed over the travel lanes of NH 28 involving structural steel and concrete deck removal shall be done with traffic shutdowns during off-peak hours.

## **CONTRACT 14633F ~ CONSTRUCTION LIMITS**





0.9 MILES

ROUTE 28

OFF-RAMP

AND WIDEN +/

2 MILES NB

MAINLINE

The New Hampshire Department of Transportation's

# CORRIDOR NEWS

I-93 Construction News and Highlights

Spring/Summer 2010 ~ Issue No. 8

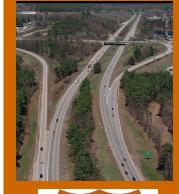
#### Content:

**Project Status** Brookdale Rd Bridge Mitigation PNR Update Bus Ridership Corridor Field Office **Project Graphic** 4 - 5 **Project Summary Exit 3 Projects Exit 1 Area Project Exit 5 Area Project** 

# **New Hampshire Department of Transportation**

John O. Morton Building 7 Hazen Drive Concord. NH 03302-0483

For more information, phone (603) 271-2171 or email Contact@ Rebuilding193.com





# ~ I-93 Improvements ~ *Moving Ahead* ~

# I-93 Moves Ahead

With an estimated total cost of \$795M the improvements to the 20 mile stretch of I-93 from Salem to Manchester is the largest project that the DOT has ever undertaken. The DOT has been very busy in moving the project forward.

# **Overall Project Estimated Cost**

Construction: \$612M ROW: \$112M Engineering: \$ 71M Total: \$795M

Construction is being prioritized to address "red list" bridges and needed safety and capacity improvements. The prioritized sections include the six-mile section

## **Breakout of Construction Projects**

- 18 Road/Bridge
- 5 Park-n-Rides
- 1 Intelligent Transportation System (ITS)

### **Current Project Status**

Design: Entire corridor 70% complete ROW: Acquisition complete on 227 of 413 parcels Wetland Mitigation: 930 out of 980 acres preserved Construction: Total # of Construction projects = 24 Projects Complete = 8

Projects Currently Underway = 4

from Exit 1 (Salem) to Exit 3 (Windham) and the Exit 5 interchange (Londonderry). These portions of I-93 contain 19 "red-list" bridges; to date eight have been replaced. To date, \$150M of construction has been either completed or is underway. As priority areas are completed, construction will begin on the remaining portions of the highway.

# **Incremental Implementation of the Selected Alternative**

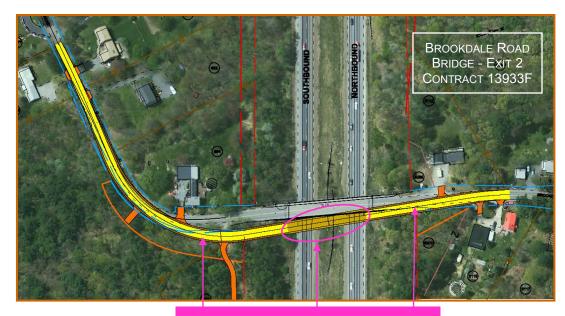
As the project progresses, a number of environmental concerns are being addressed, not the least of which is the chloride loadings in Beaver Brook, Dinsmore Brook, the north tributary to Canobie Lake and Policy Brook. In 2004/2005 the original Environmental Impact Statement (EIS) and Record of Decision (ROD - FHWA's approval of the project) addressed the issue of salt in these water bodies by mandating that no additional chloride loadings from the project would be allowed. The conclusion of the ROD was that through the improvement of salt application practices, three lanes in each direction could be maintained without increasing the loadings to the impaired water bodies. Therefore the approach to building I-93, known as the "Incremental Implementation of the Selected Alternative", is to build bridges and roadway to accommodate a final 4-lane highway, but at this time only pave and operate three lanes in each direction. The fourth lane will be completed and open to traffic when an agreement is reached with NHDES on chloride issues.

Since 2005, NHDOT and FHWA have been working with NH Department of Environmental Services (NHDES) conducting a study (known as the TMDL study) to outline a solution to the chloride loading issue. The end result of the study is that NHDOT, along with local towns and the private sector, are developing plans to reduce salt usage. The end result of the successful implementation of the salt reduction plan would be to improve the quality of the water and remove the chloride impaired status of the four water

Additional project information related to construction contracts, environmental concerns and schedule can be found on the project website at: Rebuildingl93.com



CORRIDOR NEWS PAGE 2 OF 8



CONTRACT 13933F
BROOKDALE ROAD BRIDGE AND APPROACHES
ADVERTISED APRIL 27, 2010

CONTRACT 13933F will replace the existing bridge carrying Brookdale Road over I-93 in Salem just north of the Exit 2 interchange. This bridge was constructed in 1961 and is currently on the state's "red list" for deficient structures. The new 310-foot long, two-span bridge will be two lanes wide and will accommodate the future reconstruction of the interstate. Approximately 1,000 linear feet of Brookdale Road will also be reconstructed as part of this project. This project was advertised for bids on April 27, 2010, and contract award is anticipated for June/July 2010. The estimated cost of the project is \$6M.



Existing Brookdale Road Bridge



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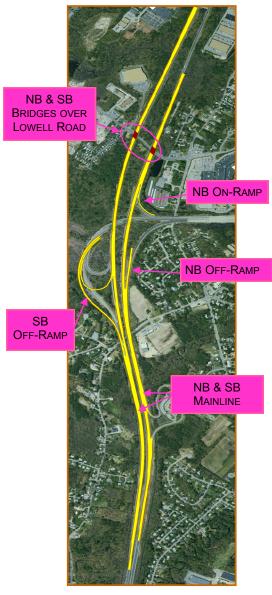
**EXIT 3 BRIDGE INSTALLATION, MAY 2010** 





**TRAFFIC IMPLICATIONS:** Crossing traffic on routes 111 & 111A; minor disruptions to I-93 SB during blasting operations. Both projects employ a "**Smart Work Zone**" to keep the public informed on traffic conditions to improve safety and mobility.





CONSTRUCTION LIMITS ~ CONTRACT 13933D

Contract 13933D involves the reconstruction and widening of NB and SB I-93 mainline in Salem in the vicinity of Exit 1 to just south of Exit 2, replacement of the NB and SB I-93 bridges over Lowell Road, and reconstruction of the Exit 1 NB and SB Ramps. Also included is approximately 1,600 linear feet of sound wall along the SB mainline in the vicinity of Lowell Road and construction of the Baggett Wetlands Mitigation Site.

**WETLAND MITIGATION:** Contract 13933D includes the creation of a potential 2 - 3 acres of new wetlands in the **Baggett wetland mitigation site** located off NH 38 (Lowell Road) in Salem. The six-acre site is intended to provide critical flood storage and preserve wildlife habitat.



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CORRIDOR NEWS PAGE 6 OF 8

EXIT 3, SOUTHBOUND OFF-RAMP
AND NORTHBOUND BRIDGES (CONTRACT 13933K)

This project was 88% complete as of June 1, 2010.

To ultimately reconfigure Exit 3 to a diamond interchange, a new SB off-ramp is being constructed to replace the existing loop ramp. This new ramp, located north of NH 111, will help to improve the interchange capacity and improve safety on the mainline. Two new bridges to carry the relocated NB mainline over NH 111 and NH 111A are being constructed under the 13933K contract, allowing two red list bridges to be removed from service.

Over the 2009/2010 winter, substantial progress was made in earth and rock excavation and construction of the Route 111 and 111A bridges. This project was awarded to Middlesex Corporation of Littleton, MA on October 8, 2008. It is anticipated the project will be completed by October 2010.

CONTRACT 13933G WILL CONSTRUCT TEMPORARY CROSSOVERS, CONNECTING THE NEW SECTION OF NB TO EXISTING SB. INSTEAD OF PUTTING NB TRAFFIC ON THE NEW SECTION, SB TRAFFIC WILL TEMPORARILY (FOR 2—3 YEARS) USE THE NEW ROADWAY, ALLOWING A PORTION OF THE EXISTING SB TO BE RECONSTRUCTED WITHOUT DIRECTLY IMPACTING TRAFFIC.

#### **EXIT 3, NORTHBOUND MAINLINE (CONTRACT 13933G)**

Roadway construction on this ARRA funded project is 32% complete as of June 1, 2010

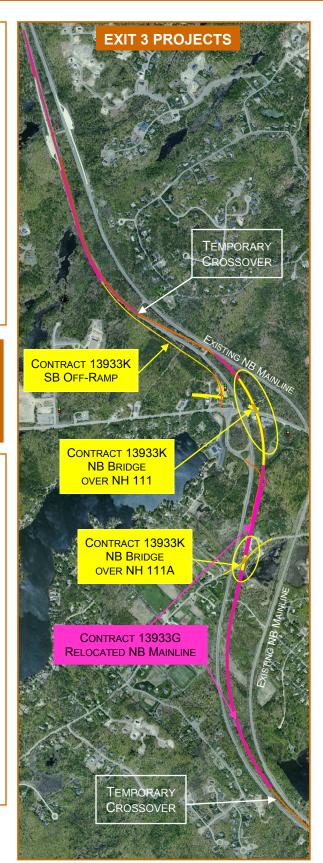
Construction continues on a new section of roadway to relocate the NB lanes closer to the existing SB lanes. This construction will tie in the two bridges constructed under 13933K, thus eliminating two red list bridges. This contract was awarded to George R. Cairns & Sons, Inc. on May 6, 2009.

In support of the DOT Incident Management initiatives, an emergency access ramp from North Lowell Road (just above Exit 3) was constructed to NB and SB I-93, thus reducing the amount of time required for incident response. New mile marker signs were posted along the entire 20-mile corridor, allowing emergency responders to more accurately locate accidents.

A Corridor Field Office was opened at 77 Indian Rock Road in Windham. Open office hours will be posted soon.

This project is targeted for a November 2011 completion.





Page 3 of 8 Corridor News

From the onset of the I-93 Improvements project planning, the NHDOT has carefully studied the impacts on wetlands. Throughout the planning stages, mitigation of wetland impacts have followed a sequential approach of:

- 1. <u>Avoidance</u> ~ selection of the alternative that provides maximum roadway improvements while minimizing impacts to wetlands.
- 2. <u>Minimization</u> ~ using design standards such as steeper side slopes or construction of retaining walls to minimize wetland impacts.
- 3. Compensation ~ creating new wetland areas and/or preserving existing wetlands and conservation land.

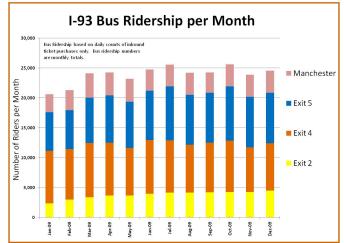
Even though the practices of avoidance and minimization were employed, direct wetland impacts resulting from the proposed improvements are anticipated to be 86 acres. In order to compensate for these impacts NHDOT has developed a significant mitigation package which includes:

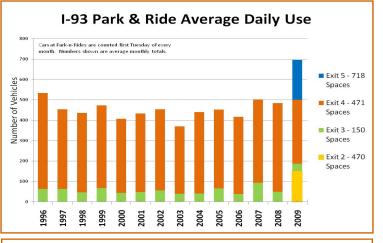
- Wildlife Crossing studies at existing culverts
- \$3M in funding to the NHDES Drinking Water Supply Land Grant Program
- \$3.5M in funding for the Community Technical Assistance Program (CTAP)
- \$5.5M for chloride TMDL studies

NHDOT has been diligent in obtaining mitigation property and to date has acquired 95% of the 980 acres slated for mitigation at a cost of over \$20 million. The total cost for the I-93 mitigation package is estimated to be \$43M.



PARK-AND-RIDE UPDATE: Over the last decade the utilization of Park-and-Ride (PNR) facilities along the I-93 Salem to Manchester corridor has been steady but without growth, averaging approximately 450 cars per day. In 2008, upgrades to the PNR at Exit 4 were completed and new PNR facilities were opened at Exits 2 and 5 in an effort to increase capacity and utilization. This increase in capacity generated an instant increase in use. During 2009 the average daily usage of the corridor's PNR facilities was almost 700 vehicles per day, representing an increase of approximately 55%.





**BUS RIDERSHIP UPDATE:** With the addition of new and upgraded bus terminals at the Exit 2, 4 & 5 PNR facilities, new bus routes were added to the Manchester to Boston corridor. In 2009, over 286,000 passengers were transported, averaging more than 23,800 riders per month.

The increase in PNR usage and bus ridership helps the DOT in its goal of reducing traffic and congestion on the highway.



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#### **NHDOT ADDS TWITTER FOR I-93**



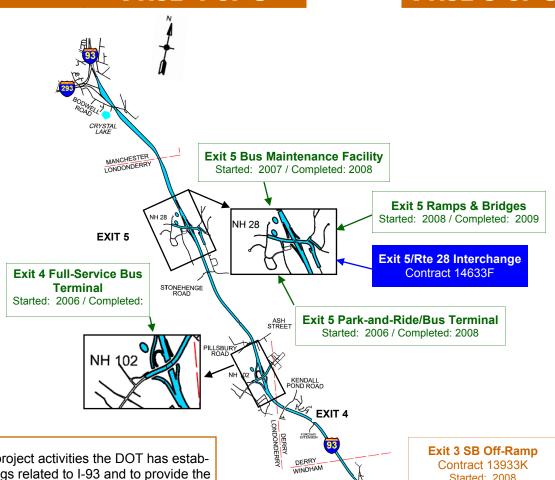
The NHDOT's Transportation Management Center (TMC) created its first Twitter homepage to assist in the dissemination of high priority traffic alerts to followers via email and/or text messages.

To view the NHDOT I-93 Twitter homepage, go to: http://twitter.com/nhdoti93. To become a follower of this group, sign up for a personal account, then follow the group 'NHDOTI93'. This will allow you to receive real-time traffic alerts for I-93.

The NHDOT advises motorists to use this service responsibly. Have a passenger view the information or "Know before you go."

For real time traffic conditions, please click on the link by the flagman at Rebuilding193.com.





I-93 PROJECT SUMMARY of PROJECTS TO DATE Constructed Cost **Contract Status Project Description Number** To/From (M) \$7.2 Cross Street Bridge 13933B 11/06 - 10/08 Complete \$23.7 Complete Exit 1 Ramps & Bridges 13933C 09/07 - 10/09 Complete Exit 2 Bus Terminal/PNR 10418G 03/07 - 10/08 \$6.9 Complete Exit 4 Bus Terminal/PNR 10418M 01/06 - 05/07 \$1.4 Complete Exit 5 PNR/Rockingham Road 104181 12/06 - 10/08 \$7.9 Complete Exit 5 Bus Terminal/Maintenance Facility 10418N 08/07 - 10/08 \$7.0 Bus Procurement/Operation Costs for Ex-Service Began 10418L \$10.0 Complete panded Service 11/08 07/08 - 05/10 Complete Exit 5 Ramps & Bridges 14633E \$16.1 In Progress Exit 3 NB Mainline 13933G 05/09 - 11/11 \$27.2 \$26.9 In Progress Exit 3 SB Off-Ramp & NB Bridges 13933K 09/08 - 06/10 Phase I Intelligent Transportation Systems In Progress 10418Z 11/09 - 11/11 \$3.8 **Advertised** Brookdale Road Bridge 13933F 06/10 - 07/12 \$6.0

Projects completed total \$80.2M. Projects in progress total \$63.9M. There are still over \$474M in projects to be completed over the next eight years.

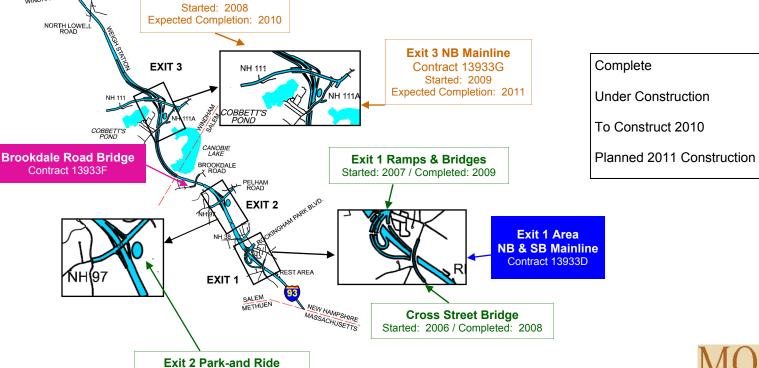
I-93 Corridor Field Office: In order to provide a central location for project activities the DOT has established the I-93 Corridor Field office. The office will be used for meetings related to I-93 and to provide the public with a location for obtaining information on the I-93 Salem to Manchester Project. Personnel that are knowledgeable of the project will be available to answer the public's questions. Additionally, project graphics will be on display to provide an overview of construction details and project schedules. The field office is located at 77 Indian Rock Road in Windham (approximately ½ mile west of the Exit 3 interchange at the old Freda Hardware location). If you are interested in finding out more about the project, please check the project website, Rebuildingl93.com.





I-93 Corridor Field Office Meeting Room





Started: 2006 / Completed: 2008



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