



Winter 2008

New Hampshire's 10-Year Transportation Plan Gets a Painful Reality Check ***NHDOT Drops Many Projects to Make the Process "Financially Constrained"***

Planning a decade ahead for transportation projects in New Hampshire began with formalizing a process into law in the mid-1980's known as the "Ten Year Transportation Improvement Plan".

The goal was to develop a prioritized blueprint for transportation improvements based on local and regional input that would be reviewed and updated every two years.

Once a project is listed on the Ten-Year Plan it still must meet four criteria to proceed: it must be technically feasible, environmentally permissible, affordable and have public acceptance.

The 10-Year Planning process has worked reasonably well for 20 years. Many projects have been built across New Hampshire to both expand and upgrade the transportation system in one of the fastest growing states in the country. However, in the more recent past, shortcomings have appeared.

The latest Ten-Year Plan cycle has revealed a wide and growing disparity between the projected costs of the projects in the plan and the anticipated revenues available to pay for those projects. It's not a problem unique to New Hampshire. Construction costs have jumped 45 percent in just the past three years while monies raised by gasoline taxes at both the state and federal levels have remained relatively flat. Increased land prices, environmental permitting, the diversion of Highway Funds to other agencies and the skyrocketing costs of steel, asphalt, petroleum products and concrete have all contributed to the growing crisis.

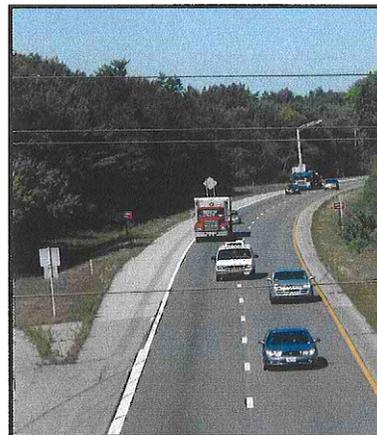
The result, according to interim NHDOT Commissioner Charles O'Leary, was that the existing Ten-Year Plan had ballooned to over \$4 billion and would take 35 years to complete with current revenues and no changes to the existing plan along the way! That was the grim message the Commissioner began delivering to lawmakers several months ago. It was the same message conveyed to citizens at 33 public meetings across the state this past fall.

"Every state is going through what we are," Commissioner O'Leary told the Governor's Advisory Commission on Intermodal Transportation (GACIT). "How we respond to it will make the difference here in New Hampshire."

Drastic times called for drastic measures. The New Hampshire Department of Transportation set out to produce a "fiscally constrained" Ten-Year Plan that more accurately reflects what projects could realistically be addressed in the years 2009-2018 with \$2.1 billion of revenue anticipated over that period.

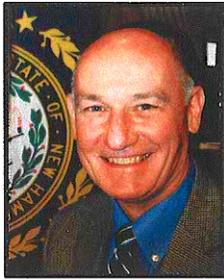
Many projects holding places in the previous Ten-Year Plan were prepared to be dropped. The most current draft of the Ten-Year Plan reflects a major shift from new construction to preserving the existing system. It focuses on the critical need to repair the State's Red List bridges, an accentuation on infrastructure preservation, and priority improvements along Interstate 93 between Salem and Manchester to address Red List bridges, safety and capacity.

Under the NHDOT proposal, a substantial majority (89) of Red List State bridges will be replaced or rehabilitated over the next ten years, approximately 30% of the program. Excluding the I-93 project, which has elements of preservation, modernization and expansion, approximately 55% of the plan is focused on preservation needs, compared to historic trends of approximately 40% dedicated for preservation.



Rebuilding I-93 between Salem and Manchester remains a top priority in the Ten-Year Plan, including the replacement or rehabilitation of 18 Red List bridges along the corridor.

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Commissioner's Corner

by Charles O'Leary

Editor's note: Chuck O'Leary's tenure as interim DOT Commissioner ended on December 3, 2007. This column was published in the November/December NH Highways Magazine.

Much Needed Turnpike Construction Work is on the Way

I am pleased to report that the recent toll hike on the New Hampshire Turnpike System is in place and is good news. Actually it's very good news for commuters, visitors, truckers, bus drivers and anyone who drives on the 93 miles of highway designated as "turnpike" in the southern part of the state.

Now I know toll increases are rarely characterized as a positive change by the news media or motorists who have to dig deeper into their pockets. In this case, it's the first time in 18 years that toll rates have been increased, and taking a closer look at the needs of the roads and bridges quickly reveals it's sorely needed and long overdue. And while not necessarily embracing it, there at least appears to be a widespread acceptance among New Hampshire residents that it was necessary.

The decisive action by the Executive Council, with the full support of Governor Lynch, to increase the toll rates came with the grim recognition that it's time to address the long-delayed rehabilitation or replacement of 15 "Red List" bridges on a turnpike system that was no longer living up to its one-time recognition as the "jewel" of the New Hampshire highway network.

After extensive briefings on the growing disparities between turnpike revenue and needs, the Governor and Council saw the problems close-up in a field trip along the Spaulding Turnpike on September 5. It was not a pretty picture. They saw bridges with deteriorating concrete, exposed and rusting steel and decks supported by wooden shoring that dated back to the early 1990's.

"We can't delay. There is a real sense of urgency going forward, and what we've seen today reinforces that," Governor Lynch said during the tour.

The media also listened and responded editorially. *The Union Leader* – "Without a rate increase, toll revenues soon won't be able to cover needed improvements and expansion work. It is past time the state charged drivers more for using the turnpikes." *The Concord Monitor* – "Raising tolls and taxes is, to say the least, politically unpopular. But not raising them puts the state's economy and the safety of its visitors and residents at risk." And from *Foster's Daily Democrat* – "No, we don't want higher toll rates. But we do want what they will buy — better and safer turnpikes. We also want the turnpike system to become self-sustaining, as it was meant to be."

The benefits from the toll hike that went into effect on October 22 will be immediate. The additional \$24 million in revenue will translate into more than \$200 million in bonding capital. Construction contracts previously on hold will begin advertising before 2007 ends. The top priority will be replacing Red List Bridges and improving safety on the Spaulding Turnpike between Exits 12 and 16 in Rochester. Another project that can now move forward early in 2008 is the replacement of the Merrill's Marauders Bridge on the Everett Turnpike in Merrimack.

This does not mean New Hampshire's transportation funding challenges are resolved. Far from it. The Ten Year Transportation Plan is woefully under funded and current attempts to scale it back are painful and problematic at best. But the toll rate hikes are a crucial first step in addressing some critical transportation needs along some major travel corridors in New Hampshire.



Winter 2008

Governor.....John H. Lynch
Commissioner.....Charles O'Leary
On the Move Editor.....Bill Boynton

PRINTED IN THE NHDOT PRINTSHOP ON RECYCLED PAPER

NHDOT Employees Care - One and a Half Tons of Food and Presents for 170 Children

In their latest display of generosity, Department of Transportation employees once again rose to the occasion during the holiday season. "Operation Santa" resulted in donated Christmas gifts for 170 children, everything from bicycles to dolls to clothes.

A separate "Fill This Truck" drive for the NH Food Bank did just that, filling a new plow truck with 1 1/2 tons (3,062 pounds) of food that was delivered to a Manchester warehouse on December 14.



Turnpikes Bureau employees kept Marty Wilson (Mechanical Services) busy topping off an already full plow truck with food at the last stop on December 14 before it headed on to the NH Food Bank in Manchester. Driving the truck and providing valuable assistance was Jim Lamora (Mechanical Services). In the left photo, NHDOT Hearings Officer Kathleen Mulcahey-Hampson adds another present to the ever-growing pile of gifts being readied for delivery for "Operation Santa".



On behalf of all of us here in the NH Senate, I want to thank you for your generosity and efforts on behalf of those New Hampshire residents who are in need of NH Food Bank donations. I enjoyed seeing the plow truck filled to the brim with an amazing one and one half tons of donated food. Please convey my heartiest thanks. So far I believe your Department's holiday spirit wins the prize.

With thanks and warm greetings of the season,

Sylvia B. Larsen

Senate President
New Hampshire State Senate

(Ten Year Plan - continued from page 1)

The priority construction on I-93 will replace 18 Red List bridges (10 of which are considered the 14 worst bridge priorities), reconstruct inadequate interchanges, and address the narrow width of the highway.

On November 28, the Executive Council and Commissioner O'Leary (GACIT) endorsed a \$2.2 billion plan with the additional recommendation that increased bonding or other revenue enhancements be considered to finance additional projects. The borrowed money would help pay for \$114 million in state projects, including the southern segment of the Conway Bypass, that were previously slated to be cut from the program.

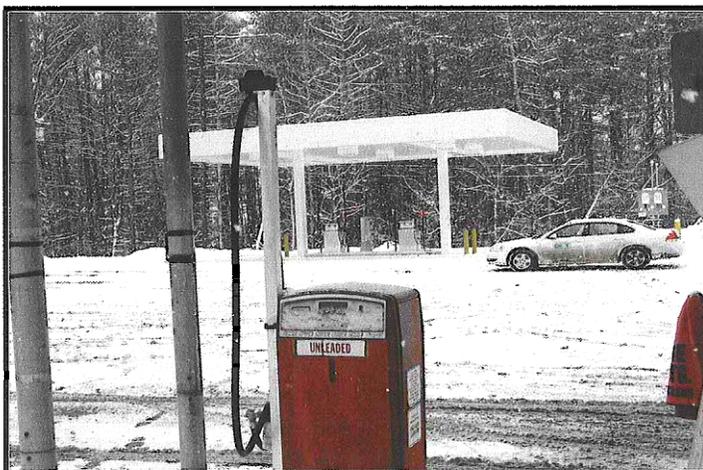
The latest Draft Ten-Year Plan will not be an easy pill to swallow for some who have seen projects of interest eliminated, deferred or reduced. Governor Lynch responded by calling it a "financially responsible and realistic plan," adding that the Ten-Year Plan had turned into a 35-year wish list, with no money to back it up. The Governor is scheduled to submit the latest Ten Year Plan to the Legislature by January 15. Lawmakers will then have until July 1, 2008 to approve the plan into law.

Preventing “LUST” in New Hampshire: Leaking Underground Storage Tanks *The NHDOT is Working to Upgrade Fuel Facilities Across the State*

The post World War II automobile boom resulted in the construction of thousands of gasoline stations across the country. With the new stations came the installation of steel tanks underground to store gasoline. The average life of those steel tanks was estimated at 30 to 50 years.

There are an estimated 653,621 active Underground Storage Tanks (USTs) in the United States, including 2,935 in New Hampshire. Since the 1980's, corrosion of these USTs, along with their improper installation and operation, has resulted in major environmental challenges. These tanks can leak and release contaminants into the soil and groundwater.

The New Hampshire Department of Transportation manages approximately 194 USTs at Operations Division facilities across the State that last year supplied 900+ accounts (state and municipal) with over five million gallons of fuel. These customers include snowplows, police cars and school buses, and the state fuel reserves could prove vital in a state or national emergency. An average NHDOT underground fuel storage tank holds



Upgraded fuel distribution systems, like this one at the NHDOT District 2 North Haverhill patrol facility, are replacing older systems (foreground) that date back to the mid-1980's and have only single-walled underground storage tanks.

10,000 gallons of fuel. Also included in the count of UST's are heating oil tanks and other tanks.

“We are charged with a huge responsibility and a huge potential liability,” says Isaac Carney, a Contamination Programs Specialist and the NHDOT's new Environmental Stewardship Manager. “A lot of the Department of Transportation's tanks were installed in the mid-1980's and are approaching their life expectancy.”

According to Environment Bureau Contamination Program Specialist Dale O'Connell, “There have been a lot of band-aid solutions in the past, using even borrowed parts to make repairs. Now we are taking a more comprehensive look at what we have for USTs, monitoring their condition and operation, applying consistency to parts and repairs, and prioritizing when they can be replaced. It can't be done all at once.”

New laws and regulations are now requiring the replacement of single-walled steel USTs with double-walled fiberglass tanks by 2015. Ten single-walled tanks at five NHDOT fuel sites (North Haverhill, Wentworth, Hooksett, Rindge, and Enfield) have been replaced in the past year, leaving 41 more single-walled tanks to be replaced. According to Isaac Carney, some of the tanks replaced in the past year were actually in very good condition.

Current plans are to replace or upgrade USTs at six to eight NHDOT facilities per year. Funding in the State's Capital Budget began with \$1.8 million in the 2006-2007 biennium, and \$3 million was appropriated for 2007-2008. Fuel facilities scheduled for UST replacement in the coming year include Sunapee, Twin Mountain, Milford, Manchester, Tamworth, Thornton, Warner, Derry and Alton. In addition, several heating oil tanks are being replaced with smaller above-ground tanks. With assistance from a consultant and the Department of Environmental Services, the NHDOT's Environment Bureau has been working to inventory the tanks, assess their condition and even answer basic questions like, “Who's responsible for the tanks?” or “Which tanks have overfill protection?”

A Strategic Planning Group has been formed, chaired by NHDOT Assistant Director of Operations Mike Pillsbury, to develop and implement a comprehensive tank management program. This will ensure the Department's compliance with applicable tank regulations and minimize potential releases into the environment.

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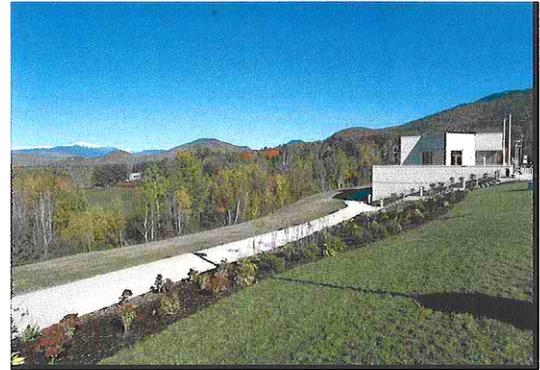
Unique New Intervale Scenic Vista Center Offers Great Views of Mt. Washington Valley



After years of planning and revisions, the new Intervale Scenic Vista Center is now a reality. The \$2.6 million facility opened to visitors in early October, with a unique design built into the hillside that offers a spectacular and unimpeded view of the Mt. Washington Valley.

The Scenic Vista Center on US 302 is modeled after an in-ground visitors center in Jackson Hole, Wyoming that overlooks the National Elk Refuge.

Greg Goucher (Public Works) has worked on the project from its beginning way back in 1999.



“Given that you build what you can afford, I am pleased with how things turned out. It’s been a long process,” Goucher told *The Conway Daily Sun*.

Visitors will enter the semi-circular building at ground level, then take an elevator or stairs down 12 feet to the main steel and concrete structure with a New Hampshire granite exterior.

The Intervale Vista Center will be staffed by District 3 employees and volunteers from the Mt. Washington Chamber of Commerce.



District 4 Office Improvements

The District 4 headquarters in Swanzey is getting a facelift and much needed improvements. This photo taken in late October shows structural steel being erected for the District 4 office addition and renovations.

The project is a \$1.04 million Public Works contract that is part of the State’s Capital Improvement Program. It includes a 27-foot addition, renovation of the existing office building interior, roof structural improvements, and roofing replacement.



NEW HIRES

Nicholas Alexander, Program Specialist 4, Planning
David Borry, Highway Maintainer 2, District 2
Frank Crowe, Heavy Equipment Mechanic, Mech. Services
Timothy Guilmette, Highway Maintainer 2, District 1
Mark Hollis, Highway Maintainer 2, District 2
James Huckins, Geological Tech. 1, Materials & Research
Laurel Kenna, Environmentalist 1, Environment
Christopher Lanza, Engineering Tech. 2, Construction

Stephen Lowe, Survey Team Tech. 1, Highway Design
Gary Mailhot, Engineering Tech. 2, Materials & Research
Timothy Mallette, Civil Engineer 3, Highway Design
William Pearson, Highway Maintainer 2, District 5
Richard Roberts, Heavy Equip. Mechanic, Mech. Services
Lee Savary, Telecommunications Tech. 2, Traffic
Christopher Spingola, Engineering Tech. 2, Construction
Cory Tiede, Bridge Maintainer 1, Bridge Maintenance

PROMOTIONS

Louis Albert, Bridge Maintainer 3, Bridge Maintenance
William Arbello, Bridge Maintainer 3, Bridge Maintenance
Jonathan Asmund, Construction Foreman, Bridge Maintenance
Arvid Bacon, Highway Maintainer 3, Turnpikes
Todd Bellefeuille, Ass't Highway Patrol Foreman, District 4
Lysa Bennet-Crouch, Engineering Tech. 5, Highway Design
Mindy Boisvert, Pavement Marking Foreman 1, Traffic
Timothy Boodey, Civil Engineer 4, Bridge Maintenance
Benjamin Bundy, Highway Maintainer 2, Turnpikes
Edward Coulombe, Ass't Highway Patrol Foreman, District 5
Robert Foster, Traffic Signal Technician 4, Traffic
John Gibbons, Highway Maintainer 3, District 5
Steven Glines, Civil Engineer 6, Construction
Arthur Grenier, Highway Patrol Foreman, District 4
William Janelle, Assistant Director, Commissioner's Office
Karla Kemp, Program Specialist 1, Finance & Contracts
Scott Kemp, Highway Maintainer 2, District 4
Michael L'Esperance, Highway Maintainer 3, District 5
Timothy Labounty, Highway Maintainer 2, District 1
James Lacasse, Highway Maintainer 2, Turnpikes

Megan Lane, Survey Team Tech. 2, Highway Design
Jennifer Leslie, Administrative Secretary, District 5
Jeffrey Lewis, Toll Attendant 2, Turnpikes
Matthew MacDonald, Engineering Tech. 5, Construction
James Naumes, Toll Attendant 2, Turnpikes
Lorijo Place, Engineering Aide 2, Highway Design
Robert Poggi, Bridge Maintainer 3, Bridge Maintenance
Salvatore Rabbia, Toll Attendant 1, Turnpikes
Henry Radwanski, Highway Maintainer 3, District 5
Dominic Saladyga, Bridge Maintainer 2, Bridge Main.
Robert Shields, Highway Maintainer 3, District 5
Barbara Silva, Account Clerk 3, Bridge Maintenance
Daniel Taylor, Civil Engineer 2, Bridge Design
Gerard Turco, Highway Patrol Foreman, District 2
Matt Urban, Environmentalist 2, Environment
Deborah Watts, Toll Attendant 2, Turnpikes
Ellison Welch, Engineering Technician 5, Construction
Michelle Winters, Supervisor 6, Rail & Transit
Sean Wolters, Ass't Highway Patrol Foreman, District 3
Trent Zanes, Civil Engineer 4, Highway Design

RETIREMENTS (years of service)

Joe Bush, District 3 (29)
Virginia Cail, Turnpikes (11)
Alan Garland, District 6 (31)
Edward Gould, District 5 (30)
Bruce Inglis, Mechanical Services (32)
Lionel Levesque, District 5 (32)

Sudhindra Luckoor, Highway Design (20)
Patrick McGranaghan, Bridge Maintenance (30)
Laurie Minichiello, Human Resources (14)
Albert Piattoni, District 1 (39)
William Rothney, Mechanical Services (29)
Kenneth Smith, District 3 (19)



SERVICE AWARDS



January through March 2008

40 YEARS

David Reimers, Construction

35 YEARS

David Coffey, Bridge Design

30 YEARS

Jeff Brillhart, Commissioner's Office
Kenneth Giberson, District 5
Richard Atwood, District 3
Barbara Novak, Turnpikes
Suzanne Babula, Turnpikes
Carl Hussey, Traffic

25 YEARS

Wayne Massey, District 6
Victor Dumont, Turnpikes

20 YEARS

Phillip Miles, Right-of-Way
David Evans, District 5
Darrell Johnson, Mechanical Services
Albert Soucy, Mechanical Services
Robert Critchett, District 6
Arthur Johnson, Materials & Research
Craig Cormier, Highway Design
Craig Cleveland, Materials & Research
Wildred Graves, District 3
Walter Dudley, Highway Design
David Cloutier, Highway Design
Kevin Winn, Construction

15 YEARS

William Watson, Planning
Margaret Savage, Turnpikes
Thomas Clement, Bridge Maintenance
Marc Brodeur, District 1
Alan Locke, District 1

10 YEARS

Linda Ferguson, Bridge Maintenance
Milton Norcross, District 3
Randy Colbath, Mechanical Services
Dennis McAllister, District 2
Philip Rogers, Bridge Maintenance
John Barrell, District 2

One Bridge at a Time - NHDOT Bridge Inspectors Profiled in Print

Editor's Note: The following article was written by reporter Sarah Liebowitz and published by the Concord Monitor on October 7, 2007. The article and photo are reprinted with permission.

These days, bridges are in the public eye. The collapse of a Minneapolis bridge over the summer turned national attention to trusses and decks, to the work of inspectors and the country's aging infrastructure. In New Hampshire, lawmakers have been forced to confront the sorry state of the Transportation Department's finances. Last week, executive councilors voted to increase tolls in an attempt to shore up bridges and roads on the state's cash-strapped turnpike system.

But behind the headlines, New Hampshire's bridge inspectors are doing what they've done for years: monitoring roughly 3,800 state and municipal bridges, testing concrete and years-old railings, scanning the underbellies of bridges for signs of deterioration, making sure all bolts are properly placed.

Since the Minnesota disaster, "there are more people watching," said David Powelson, chief of the existing bridge section in the Transportation Department's Bureau of Bridge Design. "We have always and we still are keeping bridges safe to drive on, doing it as best we can."

The safety of New Hampshire's bridges depends on a handful of Transportation Department employees. They are overseeing bridge safety at a time when the structures are aging - many are more than a half-century old - and money is tight. Interim Transportation Commissioner Chuck O'Leary recently proposed slashing more than \$1 billion worth of projects from the 10-year highway plan, saying that the state has made too many promises at a time of rising construction costs and lagging tax and toll revenues.

As of the middle of last week, there were six full-time bridge inspectors; two more started training Friday. Powelson and a chief bridge inspector review the data collected by inspectors in the field. One engineering position is vacant, forcing bridge division officials to "borrow an engineer for the last year," Powelson said. Those inspectors and engineers are charged with examining every bridge greater than 10 feet in length. The state law is more stringent than federal regulations, which defines a bridge as a structure longer than 20 feet, said Mark Richardson, administrator of the bridge design bureau. The workload is set to grow, as inspectors add larger culvert structures - many of which date to the 1950s and 1960s - to their lists.

"We were doing it with four people not too long ago, and we were struggling to keep up," said Assistant Transportation Commissioner Jeff Brillhart. "It will remain to be seen whether six is enough people; I think it is right now," he said, referring to the eight full-time inspectors. "I feel comfortable myself, here in the front office, that we are taking care of business and keeping an eye on things, so we won't be in the position Minnesota was," Brillhart said.

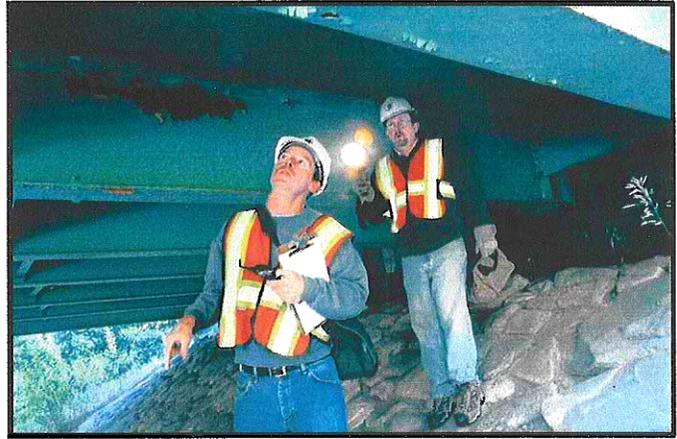
On the job

By 8 a.m. one morning last month, Jeff Lorden and Frank Mead had reached their first bridge of the day: An Interstate 89 span above Hopkinton's Pine Street.

Their list includes 1,600 bridges, all in the southwest portion of the state, Lorden said. Some inspections take longer than others, but the pair averages five bridges a day, a pace that keeps them on track to inspect each bridge at least once every two years, in accordance with federal standards.

The Interstate 89 bridge wasn't on the "red list" - a list of bridges with structural deficiencies or other issues, such as reduced load-carrying capacity - and Lorden and Mead hadn't been there for a couple of years. But they remembered the details: The spot where a large truck driving on Pine Street clipped the bottom of the bridge deck; the best route to scramble up to the deck; the areas that had been repaired.

As work-bound drivers rushed by, Lorden and Mead walked the length of the bridge, using a hammer to "sound" the deck and check for deterioration. They took digital photographs of a railing that had separated slightly from a wooden post. Using flashlights, they examined the underside of the bridge, peering at crevices and the cement pillars, searching for cracks and other signs of decline, taking note of the structure's condition.



NHDOT bridge inspectors Jeff Lorden and Frank Mead inspect bridge 17 on Interstate 89 in Contoocook.

(continued on page 9)

(Bridge Inspectors - continued)

In the bucket of his truck, Lorden maneuvered himself into the nooks of the bridge's underside for a closer look. Although striking the hammer on one section dislodged a small piece of cement, overall the 244-foot-long bridge constructed in 1959 and rehabilitated in 1991 - was "in good condition," Lorden said.

With the examination complete, information about the bridge goes into a laptop, along with digital photographs of any damage. From there, the data is sent to the Transportation Department's bridge design office, where the chief inspector takes a look. Steel deterioration, falling concrete, broken structural members: All raise flags, Powelson said.

"Most bridges don't change condition particularly much during an inspection cycle, so the data just kind of slides into the inventory," Powelson said.

Heavy loads

But signs of trouble can prompt bridge workers to lower the permitted load capacity or, in extreme cases, shut down a structure. In one recent case, a bridge in Andover was deemed not structurally sound enough for a crane - which is short and heavy - to cross. Without the crane, a modular home sat in two pieces near the foundation where it was supposed to be placed.

As the state's infrastructure ages, bridge design workers could be forced to reduce permitted load capacities on more structures.

Most of the state's bridges were built to last 50 years. Many have crept long past their predicted life spans. Turnpike system bridges date to the late 1950s, while most interstate system bridges date to the 1960s and 1970s, Powelson said. As for municipally owned bridges, there were large building projects in the aftermath of the 1927 and 1936 floods and the 1938 hurricane, he said.

In the intervening years, vehicles have become heavier and the volume of traffic has increased. "We're expecting more out of our bridges than when they were built," Powelson said. "Some of the older covered bridges were built when state law sort of implied that the maximum load would be a six-ton wagon or 25 head of cattle." Bridge design employees work closely with bridge maintenance workers. When there's a problem with a state-owned bridge, "in many cases, we can realistically get something fixed before it becomes an issue," Powelson said. For municipally-owned bridges, however, the state can do little more than make recommendations.

Currently, there are 505 New Hampshire bridges on the "red list," most of which - 356 - are municipally owned. Roughly 140 state-owned bridges are on the list, along with a handful of federally owned and county owned structures. Hundreds more are close to being placed on the list, which also includes structures that are unable to bear normal loads, such as covered bridges.

Inspectors examine state-owned "red list" bridges twice a year and municipally-owned "red list" bridges every year.

In the end, repairs come down to money.

"It is a challenge to try and develop bridge projects that are going to be long-lasting and cost-effective," Richardson said. "Sometimes different materials of treatments can extend the longevity of a bridge structure, but they cost quite a bit more."

"In the past, we've been very good at building new infrastructure, and we have not focused as much on maintaining and preserving the existing infrastructure," Richardson added.

But transportation officials and lawmakers are now turning their attention to maintenance of the aging system, rather than new construction. Money from the toll increases, for example, will pay for the repair and replacement of 14 "red list" bridges and for road construction on the turnpike system.

It's unclear, however, whether lawmakers will raise more money for the remainder of the state's bridges and roads. Money from tolls only pays for improvements to the turnpike system.

"I think we can maintain the bridges," Brillhart said. "What we're trying to accomplish is to move money from new construction . . . toward preservation."

"We won't wait around in the future," Brillhart said.

NHDOT People



A 40th Anniversary!



Ten days after he got married, Jim Law began working at the New Hampshire Department of Public Works and Highways on December 11, 1967. The Landscape Specialist (Construction Bureau) is still on the job. He celebrated his 40th anniversary milestone on 12/11/07 by sharing some cake and memories with co-workers. The Hooksett native (and current Pembroke resident) graduated from the University of New Hampshire with a Forestry Degree and spent his first few years on the job landscaping the Interstate System across New Hampshire, which still had a lot of gravel slopes. Jim says he knows people in every town in the state and still enjoys renewing old acquaintances in his travels. He has served under seven Commissioners and has visited 47 states (all except Oregon, Washington and Alaska).



Lionel "Joe" Levesque has been the man running the loader out of District 5's Candia Patrol Shed (#509) for as long as anyone can remember. The Highway Maintainer 3 retired from State service on October 31 after nearly 32 years on the job. Joe's retirement plans include more camping, fishing, playing horseshoes and family activities.



Michelle Marshall (Highway Design) was a "featured volunteer" on The Transportation and Civil Engineering Program (TRAC) website. Michelle has volunteered at Belmont High School and helps coordinate competitions like the "Popsicle stick bridge" competition (above) held on November 27 at the NHDOT's Concord headquarters.



Climbing Some Tall Rock Piles

Who says the folks in the Materials & Research Office aren't constantly reaching new heights? Overcast skies couldn't dampen the spirits of this band of hikers as they conquered two 4,000 foot peaks, Mt. Flume (4,328 ft.) and Mt. Liberty (4,459 ft.) at the southern end of the Franconia Range in the White Mountains on October 3rd. Pictured left to right are: Dicky Fry, Andy Hall, Ken Cogswell, Glenn Roberts, Jim Amrol, Bill Real and Alan Rawson.

Seabrook Welcome Center Staff Commended for Medical Emergency Responses

Responding to an occasional medical emergency goes with the territory if you work at a Welcome Center along a highway in New Hampshire. Labor Day Weekend proved to be especially busy for those working at the Seabrook Welcome Center on Interstate 95.

On Thursday, August 30, a man lost consciousness near the entrance to the men's restroom. Seabrook Welcome Center Attendant Lenore Wright immediately called 911 to get help on way. Coincidentally, there were several medically trained visitors in the Welcome Center at the time. When Lenore returned to the fallen man, she found that CPR was in progress. A doctor who offered assistance had not been able to find a pulse and determined that CPR was necessary. Lenore retrieved the recently purchased Automated Electronic Defibrillator (AED) from the wall behind the counter. The doctor prepared the AED for use just as EMT's arrived to take over care of the victim. Lenore then turned to helping the man's wife and provided directions to Exeter Hospital where the man was taken.

"Lenore remained calm throughout the entire ordeal and did an excellent job relaying information to and from the 911 operator and the medically trained personnel who were working on the victim," said Dix Bailey, Turnpikes Maintenance Superintendent.

The following day (August 30) Seabrook Welcome Center Attendant Brian Sullivan was told that a young boy was in distress in the men's room and that 911 should be called. Brian entered the men's room and found a woman tending to her young son, who apparently was experiencing an allergic reaction to food. He was conscious but very sick. The mother explained that the boy was allergic to nuts. She had already administered one dose of epinephrine and was preparing another. The Seabrook ambulance arrived and the young boy was taken to Exeter hospital.

"Brian did an excellent job in working with the mother to help the boy while collecting and documenting all of the details," Dix Bailey said.

As if that wasn't enough excitement for the weekend, on Sunday, September 2, a male patron using a walker fell while leaving the Welcome Center building. Seabrook Attendant Steve Pierog and a bystander assisted the man up onto a bench. The attendants then provided first aid to the man's wife to treat a cut on his right wrist.

"It gives me great comfort to know that we have such a professional and well-trained staff at the Seabrook Welcome Center. In each of the three situations that occurred over the long weekend the staff did an excellent job in comforting not only the victims but their family members as well," Dix Bailey wrote in a letter to Seabrook Welcome Center staff.

Fertile Land along I-89 in Warner Leads to Arrest of Marijuana Farmer

Why did the man cross the road? Answer: To tend to his marijuana crops on both sides of Interstate 89 in Warner.

State Police arrested 37-year old Frank Drake of Concord on October 4 after they found him tending his marijuana plants less than 50 feet from the roadway. Police confiscated 44 marijuana plants on the south side of I-89 and 88 plants on the north side of the interstate. Lt. Terry Kineen of the State Police narcotics unit described the plants as high quality with an estimated street value of \$132,000. "They were grown by someone who knows what they are doing," Lt. Kineen told the *Concord Monitor*.

State Police had been tipped to the marijuana growing operation and began watching it. They spotted Drake when he pulled up to the site, unloaded his equipment, and then drove to the nearest exit before returning on foot with a Great Dane and a .357 handgun. He offered no resistance when arrested.



LETTERS

September 8, 2007

For the past several years, my husband, Leon Konieczny, Chairman of the Goffstown Cemetery Trustees, has been working with the state to improve the area that separates Westlawn Cemetery from the state property (District 5 #507).

This past year, my husband had been working with state officials again regarding the possibility of building a buffer between the three new buildings abutting Westlawn. Once again, the DOT was extremely cooperative, cutting down and spraying all the sumac areas along the fence that separates the properties and suggesting types of shrubs that Trustees could use successfully along the area to make it aesthetically appealing.

My husband passed away very suddenly on August 12. I drove to the cemetery on Friday, and to my surprise, eight beautiful Dark American Arborvitae were planted along the fence. I felt it appropriate to write this letter of thanks since he worked so hard to beautify this area of Westlawn, which was his appointed cemetery as a Trustee.

Special thanks to Guy Giunta as Supervisor of Roadside Development, Paul Rushlow, Barbara Rollins, Gerald Barss, Scott Gould, and everyone at Shed #507 for the wonderful job. My husband was extremely impressed by the cooperative efforts for the Department of Transportation from the beginning of his quest. He would have been so pleased with the finished results!

Joan B. Konieczny
Goffstown, NH

Grafton County Commissioners

November 27, 2007

Dear Commissioner O'Leary,

As a Grafton County Commissioner and Executive Councilor, I write you and your NHDOT Bridge Crew, under the leadership of Steve Canton, with commendations on the superior work done on the Swiftwater Bridge in Bath, NH.

NH Covered Bridges are in constant need of attention and preservation and Steve Canton's entire crew has proven themselves many times over in their professional skills in the repair of wooden bridges.

Raymond S. Burton
Bath, NH

On October 3, 2007, my wife Mellanee and I were traveling in your great state. We had the misfortune of having a mechanical problem with our motor home. In fact, we lost all of the automatic transmission fluid in the power steering and power brake system.

We were able to enter the parking lot of the Wallis Sands State Beach where we located a crew of the New Hampshire Department of Transportation. A short while later (District 6 Patrol Foreman) Randy Linscott arrived, who offered to drive to a nearby store for us. He refused to take any money and said if the store had automatic transmission fluid he would purchase it and we would settle up after the purchase was made. We were in luck.

I cannot find words to express how impressed we were with Mr. Linscott. His actions, in the presence of his crew, demonstrated outstanding leadership. It is our opinion that Mr. Linscott is an incredible asset to your organization. We cannot thank him enough for his assistance.

*Lloyd and Mellanee Kilpack
Bountiful, Utah*

Aeronautics Bureau Helps Life-Saving Helipad Become a Reality in Errol



A new strip of asphalt in a rural area of New Hampshire's North Country may soon be a lifesaver for someone seriously injured in an accident. A ceremony was held October 7 to recognize the new helipad at Errol International Airport and those who made it possible, including Michael Pouliot of the NHDOT's Aeronautics Bureau, who helped secure a State grant to help pay for the \$12,860 project.

The cost doesn't seem like much, but the benefits could be huge. Because Errol Airport's landing strip is a gravel and grass runway, it poses a problem for helicopters which can draw dust into the engines. That meant seriously injured patients had to be driven 26 miles to Colebrook, jeopardizing the so-called "golden hour" during the chances of survival increase significantly if the patients reach a hospital.

"The helipad will provide a critical air link to that part of the state for air ambulances, law enforcement and Fish and Game," Michael Pouliot told *The News and Sentinel* of Colebrook. "I think it must be a great comfort for the people who live in that area."

Those who pilot the DHART medical evacuation helicopter from Dartmouth Hitchcock Medical Center in Hanover are already calling the new helipad "one of the nicest in the state".

Mike Pouliot is now pursuing additional grant money to allow for the installation of lights around the 65 x 65-foot Errol helipad, which could be activated by a helicopter during its landing approach.

Bicyclists Accommodated With New Bike Rack at Nashua Welcome Center



This new bicycle rack at the Nashua Welcome Center is convenient for bicyclists using Boston Express.

The Nashua Welcome Center off Exit 6 of the Everett Turnpike has installed a new bicycle rack in response to the needs of travelers using bicycles to access the new Boston Express bus service.

This summer it came to the the Rail and Transit Bureau Bicycle and Pedestrian Section's attention that bicyclists were using Boston Express and locking their bicycles to anything they could at the Welcome Center - light poles, fence posts - anything that provided security.

Working with the Bureau of Turnpikes, the Bicycle and Pedestrian Section purchased a new bicycle rack and had it installed on a new concrete pad in front of the Boston Express bus stop.

District 4 Study Tracking Critters Crossing Under the Roads *Evidence Shows Culverts Connect Habitat in Wetland Areas*

by Kelly Schmidt/Antioch University

It's that age-old question of how does the animal cross the road? In this case it's under the pavement. The New Hampshire Department of Transportation and Antioch University in Keene have partnered together to study culverts as a means of connectivity to wildlife and a way to mitigate road mortality. Biologists nationwide have been researching ways to cross wildlife under roads. This is particularly important because wildlife populations are threatened by human population growth and expansion, habitat loss and fragmentation, climate change, invasive species and disease.

In Cheshire County studies were conducted this past summer to investigate the amount of herpetological species (reptiles and amphibians) found dead on the road (DOR). Animals were photographed while passing through culverts, providing evidence that culverts can assist in habitat connectivity in wetland areas.

Lead researcher Kelly Schmidt (Antioch University) and District 4 Access Control Supervisor Rene Fish worked together to install infrared monitors and cameras into culverts in Marlow, Keene, Sullivan, Swanzey and Fitzwilliam. Each culvert had running water passing through which made installation a challenge in some locations. In situations where waders could be worn, Schmidt and Fish attached metal culvert strapping with cement anchors into the walls of the culvert. The monitor and camera were then bolted onto the strapping and programmed. Large culverts (i.e. 17' x 22') where wading was impossible due to the depth of the water, and in situations with small diameter pipes (1-2 ft), the installation had to be done from above. Metal strapping and angle iron were bent and attached from atop the culvert. The photos were triggered by a degree temperature difference in the ambient environment and by the motion of the animal. The animals had to set off the monitor twice in 30 seconds in order for the camera to take the picture.

Numerous mammals including muskrat, beaver, raccoon, and otters were photographed passing through the culverts. A couple of turtles were identified and Canadian geese, mallards and wood ducks were also photographed using the culverts. It's clear from the photos taken that aquatic mammals are using culverts when they are present and passable. On Route 101 by Webber's Nursery, the culverts were small and blocked with debris. It had been reported that otters were found dead on the road in previous years, possibly from lack of passage under the road.



Mounted infrared cameras were triggered by temperature changes and animal motion.

Maintenance of culverts large enough for mammal passage (2 ft diameter) is recommended to ensure wetland connectivity under roadways. Whether reptiles and amphibians will navigate through a culvert instead of over a road is still an unknown and research should continue to aid these dwindling populations. Barrier-wall culvert systems, box culverts and amphibian tunnels have been discussed as a means to prevent road mortality. The key to creating sustainable plans regarding our activity in the environment is an open dialogue during the planning process between all concerned parties. Ultimately, it will take a collaborative approach between DOT's, conservationists and other pertinent constituents to problem solve and create the most cost effective yet sustainable plans involving roadways and wildlife.



This small otter was seen passing through a culvert on Arrowcrest Drive in Swanzey.

Plans Continuing on Project to Honor the “Old Man of the Mountain”

Groundbreaking for the \$4.8 Million Memorial Set for Summer 2008

It wasn't a typical “Front Office Project Review” when District 1 Engineer Greg Placy outlined on November 19 the tentative plans for building an “Old Man of the Mountain Memorial” at Franconia Notch State Park.

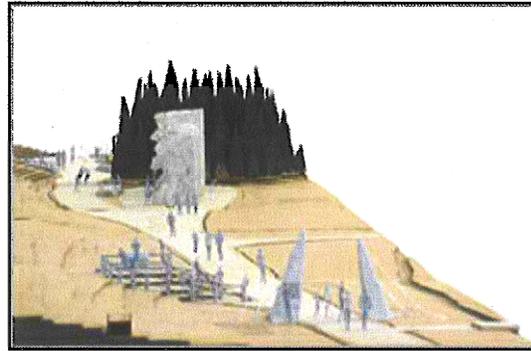
Planning for what has become a \$4.8 million project began soon after the great stone face (7,200 tons of granite) fell from the cliffs of Cannon Mountain on the night of May 3, 2003.

A three-part design chosen from a nationwide competition begins with an entry gate that will feature two large granite stones held in place by cable and turnbuckles to pay tribute to the volunteer caretakers of the “Old Man”.

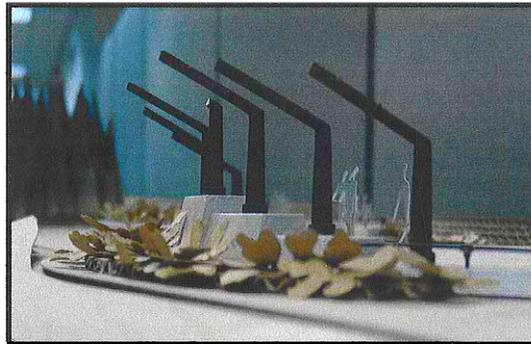
Visitors will proceed to the “Five Monoliths”, where five huge stones (each at 22 feet high and weighing 130 tons) will be positioned so their edges will form a composite likeness of the famous profile.

Moving on near Profile Lake, visitors will be able to use “Profilers” (angled metal structures) that will point to the distant cliff where the “Old Man” once stood. By sighting along irregular edges, visitors will be able to recreate the outline of the profile against the mountain edge.

For more information on the project, visit www.oldmanofthemountainlegacyfund.org

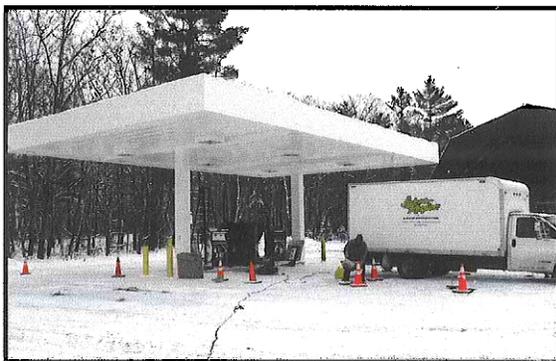


The above rendering shows how visitors to the Old Man Memorial will pass through a stone entry gate and approach a series of five large stones lined up to resemble the famous profile.



“Profilers” positioned near the shore of Profile Lake will allow visitors to line up ragged edges on the metal structures to envision what the Old Man looked like extending from the cliffs of Cannon Mountain.

(USTs - continued from page 4)



Final activity on December 4 prepared the new fuel pumps at the District 2 Wentworth patrol facility for opening. Similar UST upgrades have occurred at fuel sites in Haverhill, Hooksett, Ringe and Enfield.

The upgraded systems will have double-walled piping, along with redundant leak monitoring and control systems and alarms. The latest fuel dispensing technology is being installed to meet, and in some cases exceed, current industry and regulatory standards. Exceeding current guidelines is an environmental “best practice” that also promises to extend the life expectancy of the new USTs.

While Dale O’Connell points out that the NHDOT is still out of compliance in a number of areas, he emphasizes that much progress is being made with USTs.

“We’re taking this very seriously and moving forward O’Connell says. “At this rate we should be able to make the 2015 deadline.”

Retired District 3 Patrol Foreman Discovers First Birthday Cake - 89 Years Later!

Along the way between his 1st and his 89th birthday, Donald Fadden worked for 46 years for the NH Department of Transportation, most as a Patrol Foreman in District 2.

Twin brother Robert ran the family farm in Piermont until he retired in 1986.

Both turned 89 last March. Their very first birthday cake, cooked for them in 1919 by their Aunt, was discovered recently while they were rummaging through a box of family heirlooms.

According to *The Bridge Weekly Sho-Case*, the small cake, mostly intact but hardly edible, still had the remnants of a single candle on top that had long since melted in the heat of an attic. Their parents, Dana and Esther Fadden, apparently had wanted to keep the cake and had placed it in a small box.



Twin brothers Robert and Donald Fadden hold onto the remnants of their first birthday cake, discovered in a box more than 89 years later. Both were surprised by the discovery and neither could remember the cake.

36 Million Drivers Would Flunk Drivers Test

If you think a lot of drivers you encounter have no clue about some of the basic rules of the road, you're right.

According to research done by GMAC Insurance, one in six people out on the roads, an estimated 36 million licensed drivers, would flunk their driver's test if they had to take it today.

While many New Hampshire residents would agree that Massachusetts drivers certainly earn their #48 rating, they can take little comfort in finding out that Granite State drivers come in at #37.

"The results were pretty eye-opening to us," says Gary Kusumi, president and CEO of GMAC Insurance. "Not only did they indicate that there are wide differences in terms of state scores, but there were significant trends that demonstrated the general public might have forgotten must-know items from when they first took their driver's test."

The two biggest questions that stumped surveyed drivers? The first has to do with the correct action to take when approaching a steady yellow traffic light. The answer is stop if it's safe to do so, not speed up. The second question most often missed is the proper following distance from a car in front of you (answer: two seconds).

The New Media

Rapidly changing technology is certainly changing the way people convey and receive news and information. Here are some statistics provided by Nicole Whitley (NH Health and Human Services) in a presentation entitled "The New Media".

- Over 70% of Americans have cell phones.
- I-Phones provide users with e-mail, internet, texting, phone, video, music and photos.
- 12.5% of household do not have a landline phone, up from 5% in 2004.
- There are 71 million blogs (short for web log) on the internet.
- Google monitors 19.2 billion webpages.
- In 1992 there were one million computers connected to the internet.
- Today there are 1.2 billion internet users worldwide.
- "MySpace" is the world's sixth most popular website.