

**NEW HAMPSHIRE  
DEPARTMENT OF TRANSPORTATION**

*Annual Report*

**FISCAL YEAR 2006**





*Letter from  
Commissioner Carol Murray...*

December 30, 2006

The New Hampshire Department of Transportation faced some major challenges in the past fiscal year, including responding to two catastrophic flooding events within seven months, and implementing the most significant technological upgrade perhaps in the history the Turnpike System. I believe the performance of this agency and its employees more than lived up to the challenges and has instilled further confidence among New Hampshire residents in the NHDOT's ability to get the job done whatever the obstacles.



The flooding first struck the Monadnock Region in October 2005. Damages to state maintained roads topped \$28 million. Within 10 days the 57 miles of closed state roads had been reduced to 4.5 miles. The agency-wide rapid response included "combat construction" and key roads being opened as soon as possible, with some requiring later attention for long-term improvements. Bridge inspectors fanned out across the region to ensure that all structures were safe for motor vehicle travel. The NHDOT's efforts received an "Outstanding Civil Engineering Achievement Award" from the American Society for Civil Engineers "based on the amazing amount of reconstruction that was accomplished in the southwest portion of the state in the wake of natural disaster."

In May 2006, the rains and the flooding unbelievably returned. This time the impact was more widespread and once again tested this agency's resolve, personnel, and resources. At the peak of the flooding over 700 sections of local roads and 80 sections of state-maintained highways were either under water or washed out. Again the state's transportation infrastructure was quickly restored, with NHDOT forces playing a major role.

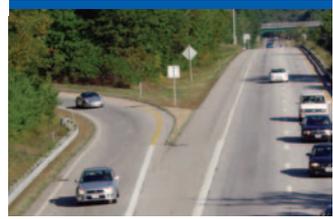
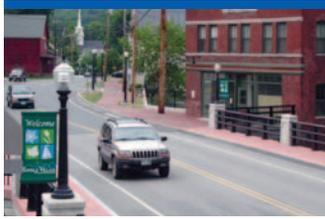
Amidst intense scrutiny from the media and public, the NHDOT successfully launched electronic tolling on the NH Turnpike System in August 2005. The aim of E-ZPass is to improve traffic flow and make toll transactions safer while reducing the impact of emissions on the environment. By the end of FY 2006 nearly half of all turnpike toll transactions were by E-ZPass.

The NHDOT also made advancements in partnering with communities to define transportation improvements with an approach known as "context sensitive solutions". This innovative perspective aims to improve transportation with a greater sensitivity to the wishes of the cities and towns, especially with regard to preserving scenic beauty, along with historic and environmental resources. Consistent with this approach, a first-in-the-nation Citizen's Transportation Plan issued by a Community Advisory Committee urged tightly linking land use and transportation planning as New Hampshire continues to deal with the pressures of growth while protecting its treasured way of life.

Sincerely,

A handwritten signature in black ink that reads "Carol A. Murray". The signature is written in a cursive, flowing style. It is positioned on a light-colored rectangular background that is slightly offset to the left of the main text area.

# IMPROVING MOBILITY



## Upgrading New Hampshire's Transportation System

During FY 2006 the NHDOT awarded 56 construction contracts to 33 prime contractors totaling approximately \$100 million. At the close of FY 2006 construction work was ongoing on approximately 90 contracts totaling \$295 million. A total of 56 contracts were completed and accepted for maintenance by NHDOT district forces. Major roadway work completed included the reconstruction of:

- I-293 in Manchester from South Willow Street to the I-93/I-293 split (\$8.4 million)
- Exit 4 on the Spaulding Turnpike in Newington (\$4.6 million)
- the Kancamaugus Highway (NH 112) in Albany (\$4.3 million)
- US Route 3 in Hooksett (\$3 million)
- NH Routes 9 and 10 in Keene and Swanzey (\$ 7.8 million)
- US Route 2 in Lancaster (\$2.5 million)
- NH 4A in Lebanon (\$2.2 million)
- US Route 3 in Nashua-Merrimack-Bedford (\$2.2 million)

*Bridge Construction work completed in FY 2006 included:*

- replacement of the NH 152 bridge over the B&M Railroad in Newfields (\$4 million)
- replacement of the NH 25 bridge over the Bearcamp River in Ossipee (\$4.5 million)
- replacement of the Main Street bridge over the Suncook River in Pembroke-Allenstown (\$2.4 million)

*Other notable completed construction projects in FY 2006 included:*

- emergency repairs to flood-ravaged NH 123 in Alstead and Walpole and emergency debris removal from Warren Brook and Cold River
- installation of the statewide emergency mile marker signing effort on the interstates
- widening of the I-95 ramp toll plaza in Hampton (\$6.8 million), and the expansion of the Bedford Toll Plaza (\$6.8 million)
- reconstruction of one-half mile of NH Routes 47/136 in Frankestown

*Construction work continues on:*

- the NH Route 111 Bypass in Windham and Salem
- reconstruction of the I-293 Exit 5 interchange in Manchester
- reconstruction of the NH Route 101/US Route 3/Kilton Road interchange in Bedford
- removal of unstable ledge on I-89 southbound in Sutton
- reconstruction of NH Route 16 in North Conway
- widening and reconstruction of US Route 3 in Tilton
- reconstruction of NH 25 in Warren and Wentworth
- reconstruction of NH 202 in Peterborough
- reconstruction of Routes 3A/11 in Franklin
- reconstruction of Candia Road in Manchester



## E-ZPass Electronic Tolling a Hit on the NH Turnpike System

The first year of E-ZPass electronic tolling on the New Hampshire Turnpike System saw consistent growth in the number of users and positive results in improving traffic flow.



The conversion of the entire toll collection system to E-ZPass was completed in August 2005 at the Bedford Toll, Hooksett Main and Hooksett Ramp, FE Everett Turnpike, Hampton, and Spaulding Turnpike.



In September 2005, commercial charge card accounts from approximately 3000 customers were phased out. Tokens ceased to be accepted for payment of tolls on December 31, 2005.

The total number of E-ZPass accounts in FY 2006 was approximately 168,000, with the total number of transponders sold totaling more than 295,000. As of June 30, 2006, the E-ZPass market share was at 48%.

A 30% discount is now applied to all New Hampshire based E-ZPass private accounts, and a 10% discount is applied to all New Hampshire based business accounts. This combined change in the discount program resulted in an increase of revenue to \$78.1 million, or approximately a 17% increase over FY 2005.

## First-in-the-Nation Citizen’s Transportation Plan Urges New Approach

### Transportation Community Advisory Committee Issues Final Report

The Community Advisory Committee (CAC), a task force formed by the New Hampshire Charitable Foundation and the New Hampshire Department of Transportation, issued its final report in June 2006, entitled the “New Hampshire Long Range Transportation Plan”. The Community Advisory Committee was made up of state and local officials, business leaders, housing advocates, environmental groups, and community organizations. Over 18 months, the CAC’s 24 members collected comments from across the state, including feedback received during a series of 19 public meetings.

The CAC’s long-range plan marks a shift in New Hampshire transportation planning policy. Its recommendations include:

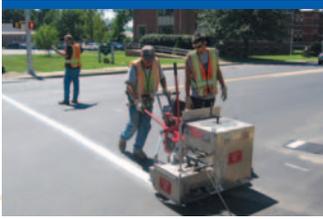
- tightly link land use and transportation planning;
- create incentives to coordinate land use and transportation at the local level;
- promote town centers and pedestrian traffic;
- strengthen New Hampshire partnerships across agencies, and jurisdictions, and with private and non-profit organizations;

*Approximately 360 miles of state highway were resurfaced.*

*The number of regularly scheduled bridge inspections performed totaled 2,196.*

*The Turnpikes Bureau processed approximately 114.5 million vehicles through the Turnpike Toll System.*

# IMPROVING MOBILITY



- increase street capacity to preserve state highway capacity;
- develop corridor management plans to protect road investments;
- engage the private sector to make more efficient use of the transportation system;
- focus on people and communities rather than roads and cars - recognizing that a growing number of New Hampshire residents do not drive due to cost, age, or disability;
- improve statewide public transportation services; and broaden and coordinate transportation services across all state agencies to improve choices.

The transportation plan includes recommendations for the New Hampshire Department of Transportation to implement at the statewide, regional, and community levels, and urges partnerships to improve coordination of transportation and land use planning.

## Statewide Planning and Research (SPR) Special Studies

The Bureau of Planning and Community Assistance administers federal funds for planning related studies. Ten studies were selected in FY 2006, including corridor studies/access management plan developments of NH 25 in Center Harbor and Marlborough; NH 120 in Lebanon and Hanover, South Willow Street in Manchester; US 3 through Allenstown, Pembroke and Hooksett; and NH 125 through Lee, Barrington and Rochester. Other projects selected include a regional safety plan, land use inventory, underwriting of a regional comprehensive transportation plan and regional bicycle/pedestrian work.

## Funding Assistance to Communities

The NHDOT has several Federal and State programs for funding improvements to local transportation systems, many of them municipally managed that are overseen by Planning and Community Assistance. Municipal management provides city and towns with the ability to lead and develop the scope and timeframe of the project subject to funding availability and program guidelines. Programs funded in FY 2006 include:

**Transportation Enhancement (TE):** The NHDOT received 57 TE applications for projects requesting approximately \$20 million in federal funds. 22 TE projects were selected totaling \$5.2 million. They include Lake Sunapee waterfront pedestrian improvements, a sidewalk project in Gilford, and town hall beautification, and safety improvements in Amherst. During FY 2006 there were 144 active TE projects.

**Congestion Mitigation and Air Quality (CMAQ):** The NHDOT received 23 CMAQ applications requesting \$20 million in federal funds, with nine projects selected, totaling \$8.4 million. Selected projects will increase transit service in the Seacoast, Nashua and Manchester areas, and provide signal coordination in Hudson. During FY 2006 there were 89 active CMAQ projects.

**State Bridge Aid:** The State Bridge Aid Program makes \$6.8 million in state funds available to municipalities under state law for the design and construction (rehabilitation or replacement) of municipally owned bridges. The State funds cover 80% of project costs and require a 20% local match. The program currently has 130 active projects programmed for construction



through 2013 and requests for preliminary estimates for 16 new projects.

A total of 27 projects advanced to construction in FY 2006. These included requests for emergency repairs at 14 bridges damaged by the May 2006 floods in nine communities. All of these projects are overseen by Planning and Community Assistance in coordination with the Bridge Design and Bridge Maintenance bureaus.



**State Aid Highway:** The State Aid Highway Program makes \$1.7 million in state funds available to municipalities under state law for the design and construction of improvements to Class II and III highways. The State funds cover two-thirds of the project costs and require a one-third match by the municipality. 19 projects were funded in FY 2006. The program currently has 28 active projects programmed through 2011.



**STP-Urban:** The STP-Urban program makes \$5 million in federal funds available annually to 56 towns and cities with urbanized areas for reconstruction of Class II and IV highways. There are currently 17 active projects.

**Block Grant Aid:** Highway Block Grant Aid funds (RSA 235:23 & 235:25) come from a portion of the total road toll and motor vehicle registration fees collected by the State and given to municipalities for the purpose of constructing, reconstructing, or maintaining Class IV and V highways. Funds totaling \$28.8 million were distributed to 234 municipalities in 2006.



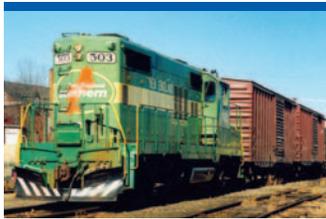
*Major progress was made in the construction of a new Emergency Operations Center in Concord (\$10.4 million) that will also house the NHDOT Transportation Management Center (TMC), statewide 911 and*

*State Police dispatch. The TMC will provide NHDOT dispatch and transportation management 24 hours a day, seven days a week for the safe and efficient management of New Hampshire's highway system.*

*The Bridge Design Bureau developed contract plans and documents for the replacement of 5 bridges and the rehabilitation of 11 bridges.*

*The Bureau of Highway Design advertised 51 highway construction contracts totaling approximately \$70 million.*

# IMPROVING MOBILITY



## Bureau of Aeronautics

Working with aviation agencies at the federal, state, and local levels to preserve and promote a system of airports necessary to guarantee the future of air transportation in New Hampshire, Aeronautics continued implementation of the State Airport System Plan in FY 2006 and processed registrations for 113 airports and more than 1,200 aircraft statewide. The Bureau is focused on improving the State's participation in airport capital improvement programs to encourage rehabilitation of primary aviation infrastructure and facilities such as runways and taxiways at all 24 public-use airports. Together with the Federal Aviation Administration's support, New Hampshire's airports received a total of \$37,506,324 in grant funds for reconstructing runways, replacing runway lighting systems, constructing new taxiways, installing security fences, tree clearing for safer approach surfaces, and residential soundproofing programs. This investment is roughly 10% of the entire state's infrastructure investment for all modes of transportation.

- Aeronautics generated \$926,126 in revenues from aircraft registrations, aircraft operating fees, and fines in calendar year 2005.
- distributed \$229,865 or 25% of the total revenues back to the public-use airports for improvement and maintenance projects.
- Laconia Municipal Airport received \$7,935,901, the largest single grant to a general aviation airport in the history of the FAA's New England Region. This project will redevelop the airfield at Laconia to meet FAA safety standards for aircraft operations.

## Bureau of Rail and Transit

Responsible for the state's railroad, public transportation, bicycle and pedestrian, and ridesharing programs, the Bureau encourages use of these alternative modes of transportation, promotes safety, and tries to expand access to alternative modes through grant programs, preserving and maintaining rail corridors, and assisting the public and other agencies with bicycle, pedestrian, rideshare, transit and rail projects.

During FY 2006 the Bureau of Rail and Transit:

- purchased 14 vehicles to support public transit or specialized transportation service.
- supported public transportation service in nine communities with state operating and capital assistance.
- assisted with the opening of a new public transportation service linking Littleton, Whitefield and Lancaster.
- promoted non-motorized modes through the 4th annual bike/walk to work day.
- assisted with a Safe Routes to School initiative at the Rumford and Kimball Schools in Concord and the Walk NH wellness initiative.
- made needed repairs to state-owned railroads, including installing new bridge decks, reconstructing railroad grade crossings, culvert replacements, brush clearing and track surfacing on many of the 200 miles of the active state-owned rail lines.
- conducted 75 inspections of railroad track conditions on many of the 460 miles of active rail line in the state, two inspections of the Mt. Washington Cog Railway, and 53 inspections of grade crossings and crossing signal systems.



- Assisted with the relocation of the state-owned Flying Yankee historic train to Lincoln for Phase 2 of its restoration.
- Provided training for 543 public transit and specialized transportation employees.
- Provided technical assistance to rural transit operators in New Hampshire in compliance with Federal drug and alcohol regulations, implementation of paratransit service required by the Americans with Disabilities Act, and a new web site for the NH Transit Association.
- Purchased and installed two new bicycle racks at the NHDOT headquarters in Concord.

## Bureau of Turnpikes

Along with the major challenge of implementing E-ZPass electronic tolling, the Turnpikes Bureau processed another high volume traffic year, with a total of 114.5 million vehicles passing through the Turnpike Toll System.

Additional Turnpike improvements and events in FY 2006 included:

- completed heating, venting and air conditioning (HVAC) replacements at the Dover, Rochester and Hooksett Ramp Toll Plazas and the Hampton Maintenance Facility.
- completed HVAC/electrical renovations at the Exits 10, 11 and 12 Toll Facilities in Merrimack.
- began repairs and replacement of underground storage tanks at 14 sites.
- completed the Joint I-95 Truck Weight Limit Exemption Study with the Maine DOT.
- extensive renovations of the Dover and Hampton Maintenance Garages.

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# MAINTENANCE AND PRESERVATION



## Mechanical Services Bureau Moves to its New Home in Concord

The Bureau of Mechanical Services undertook a major move from its longtime Stickney Avenue home in Concord to a massive 87,000 square foot facility on NH Route 106 next to the Traffic Bureau.

Visitors to the new \$10.2 million Mechanical Services complex will notice a lot of differences from its predecessor. There are some distinct improvements that will assist this bureau in managing the state's fleet of vehicles with its passenger car, heavy truck, welding fabrication, carpenter, machine and body shops.

Among the significant upgrades: the nine bays for passenger cars versus the two in the old building; the overhead cranes in the truck and welding shops; the heavy and light vehicle washing bays; the \$98,000 paint booth that will cure paint in four hours when it used to take overnight to dry; the welding exhaust fume extractors that replaced a fan; the bulk oil dispensing system; the outside video surveillance; and the additional office and meeting space.

## The Floods of October 2005 and May 2006

They were 100-year events that occurred within seven months of each other. Heavy rains and resulting flooding struck the Monadnock Region in October of 2005 and much of the southern part of the state in May 2006. Damages to state roads topped \$28.1 million in the October 2005 flooding and \$5.3 million the May 2006 floods.

Highway Maintenance personnel set up over 70 road closures and made emergence and permanent repairs throughout the state for these flood events. In addition, highway maintenance employees continued to make repairs and coordinate with the Federal Emergency Management Agency, the Federal Highway Administration and municipalities for reimbursements.

Three months worth of rain in just 30 hours took its toll on October 9, 2005, especially in Alstead and Hinsdale, when streams and rivers became raging torrents, washing out roads and bridges, destroying homes and claiming lives. The state emergency response to the devastation was immediate, significant and well coordinated. Key to the recovery were the contributions of the New Hampshire Department of Transportation, which was charged with repairing heavily damaged roads in several towns, including Hinsdale, Keene, Alstead, Walpole, Surry, Marlow and Sullivan.

Storm damage resulted in 57 miles of state roads being closed. By October 19 only 4.5 miles remained closed, 29 miles were open and 23.5 miles were open for emergency vehicles/local traffic. NHDOT bridge inspection teams were mobilized to inspect over 170 bridge structures across the state. Other NHDOT teams were mobilized to inspect roads, drainage structures and slopes.





Virtually all NHDOT Bureaus contributed to the response and recovery effort that in some locations took just hours or days to fix, with others taking months to restore.



The May 2005 flooding was not as catastrophic, but was much more widespread throughout southern and central New Hampshire. At the peak of the May flooding over 700 sections of local roads and 80 sections of state-maintained roads were either under water or washed out. Bridge inspection teams from the Bridge Design and Bridge Maintenance Bureaus were mobilized and inspected and evaluated more than 1,400 state and local bridges. Some 30 bridge maintenance projects resulted in 22 communities, which addressed everything from undermined abutments to completely washed out culverts.



### **Flood Response Recognized with Outstanding Civil Engineering Achievement Award**

The NHDOT's efforts in restoring the transportation infrastructure following the October 2005 flooding was recognized with an "Outstanding Civil Engineering Achievement Award" from the American Society of Civil Engineers (ASCE). The award was presented to the NHDOT in June 2006 "based on the amazing amount of reconstruction that was accomplished in the southwest portion of the state in the wake of natural disaster."

### **Restoration of the "Flying Yankee" Historic Train**

The state-owned "Flying Yankee" three-car passenger train, which once ran on New Hampshire rails in the 1930's, was moved to its new home in Lincoln, New Hampshire on August 10, 2005. It had been undergoing restoration in Claremont for several years.

The latest move to the site of the Plymouth and Lincoln Railroad sets the stage for Phase II restoration work that will get underway pending additional fundraising efforts. Approximately \$1.5 million will need to be raised before restoration work on the Flying Yankee can resume.



*The Bureau of Environment prepared/reviewed 107 environmental documents, and processed/recorded 215 permit applications/amendments and/or notifications.*

*Permanent snow fence was installed on 40 bridges to reduce annual installation and maintenance costs associated with temporary snow fence.*

# RESEARCH AND TECHNOLOGY



## **New Remote Weather Stations Promise More Timely and Accurate Information**

### *Air and Pavement Data Will Help Decision-Making for Both Maintenance and Motorists*

The ability to get real time weather information above, on and below the ground is critical in highway maintenance when it comes to making the roads as safe as possible.

That's the idea behind the NH Department of Transportation's introduction of mini-weather stations across New Hampshire to provide the building blocks for a Road Weather Information System (RWIS). These "environmental sensor stations" strategically located along highways will include the hardware, software and communications equipment to provide such valuable meteorological information as soil, pavement and air temperatures, wind speed and direction, water vapor (dew points and relative humidity), and rain and snowfall.

The first stage of the RWIS network for New Hampshire was a \$720,000 contract to buy, install and maintain 11 RWIS stations, including sites along the I-93 corridor (Salem, Derry, Canterbury, Sanbornton, Ashland, Woodstock, Littleton), I-89 (Springfield), NH 101 (Manchester), NH 112 (Woodstock) and NH 9 (Westmoreland).

Another ten sites are planned to complete the statewide network that also includes a site on NH 16 in Newington. Information collected at these sites from above and below ground sensors will be transmitted to Highway Maintenance District Offices and the new State Transportation Management Center in Concord.

## **Preventative Maintenance Pavement Treatments**

The NHDOT is experimenting with some preventive maintenance pavement treatments. A series of test sections were developed around the state, with the first test section treatment applied on a 1.3-mile section of NH Route 28 in Allenstown. The treatment is called micro-surfacing (also known as quick setting slurry seal) and consists of a mixture of water-based polymer modified asphalt emulsion, 100% crushed fine aggregate, mineral filler, water, and additives. The process was invented in the 1960's and 1970's in Germany for use on the Autobahn. The goal is to seal the surface of the pavement and extend pavement life.

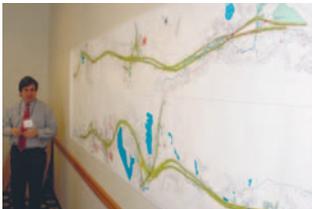
## **Reducing Winter Maintenance Salt Use**

The NHDOT has joined a pooled-fund study with eight other states to develop and implement a Maintenance Decision Support System (MDS). An MDS was identified as a component of the Department's salt reduction effort for the I-93 Salem-Manchester project.

The MDS receives input from Road Weather Information System (RWIS) stations, forecasting services, vehicle sensors and visual observations and provides output to winter maintenance forces in the form of road surface behavior predictions and feasible/preferred treatments.

## **Anti-Icing System on Bridge Decks**

A new anti-icing approach may help to make winter driving safer in New Hampshire. Fixed Automated Spray Technology (FAST) will be evaluated in a system being installed at the I-89



southbound bridge over the Connecticut River in Lebanon. A joint research project with the Vermont Agency of Transportation, the system will automatically apply liquid anti-icing chemicals to a bridge before the deck freezes. A partial Road Weather Information System (RWIS) and deck sensors will collect environmental data to control the system.

### Providing Important Mapping Information

The Planning and Community Assistance Bureau maintains and provides aerial images of towns, detailed state and local road information, maps of NH's transportation system, bridge inspection reports documenting the condition of municipally owned bridges, crash data mapping and other related transportation data to the public and any other customers. An interactive internet-based mapping display tool that works with the NHDOT Geographical Information System (GIS) was deployed

in April 2006. This tool allows the Planning and Community Assistance Bureau to publish maps on the Internet, which are then accessible by the public.

### Determining Flood Flow Frequency of NH Streams

Accurate and up-to-date flood-flow frequency estimating methods are necessary for the safe and economical design of bridges and culverts. This project being undertaken by the Materials and Research Bureau will provide the NHDOT with a quick and easy tool for obtaining flood-flow statistics for streams in the state at 2, 5, 10, 25, 50, 100 and 500-year intervals.

The project will also provide an automated GIS-based tool for estimating flood flows on any stream in New Hampshire.

### Improving Traffic Paint Drying Time

The placement of traffic cones to protect wet paint is a problem due to safety issues and the number of personnel required. This study will determine if heaters or blowers are a practical and efficient method for drying wet paint lines on the roadway.

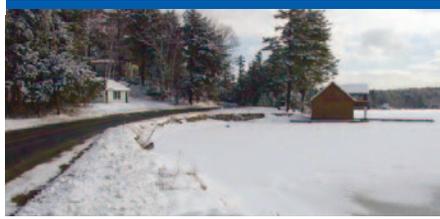


The project could result in changes to work methods, reduced hazards to workers, and fewer claims of paint damage to vehicles.

*Debris netting was installed under 18 bridges in Salem, Windham, and Londonderry to protect the public from concrete falling from the underside of these deteriorating bridges. As part of the I-93 rebuilding from Salem to Manchester, all of these bridges will be replaced.*

*The Subsurface Exploration Unit of the Materials and Research Bureau completed 668 test borings across the State, drilling through 12,198 feet of soil and 3,220 feet of bedrock in the process.*

# ENVIRONMENTAL STEWARDSHIP



## **A Better Way of Doing Business: Context Sensitive Solutions**

### *Partnering With Communities to Define Transportation Improvements*

The old way worked pretty well for the New Hampshire Department of Transportation.

Engineers developed a project by preparing a set of plans to show the solution to the public. They were plans weighted toward safety, mobility and uniformity. The problem was the solution did not take into account historical, environmental or community values. That solution did not always fit the context of the setting, and many times was met with opposition. Enter a new way of doing business called “Context Sensitive Solutions”.

According to the Federal Highway Administration, “Context sensitive solutions (CSS) is a collaborative, interdisciplinary approach that involves all stakeholders to develop a transportation facility that fits its physical setting and preserves scenic, aesthetic, historic and environmental resources, while maintaining safety and mobility. CSS is an approach that considers the total context within which a transportation improvement project will exist.”

Since November 2005, four two-day CSS training sessions have been held, with about half of the attendees representing various NHDOT bureaus, and the other half representing “stakeholders” such as communities, resource agencies, regional planning commissions and the Environmental Protection Agency.

“We have been heading in this direction for some time,” says Craig Green, Administrator of the Highway Design Bureau. “It’s changing the process to some extent, getting to the stakeholders in a city or town early to get their input on transportation

issues, thus enabling us to determine how solutions will fit within the context of their community.”

The CSS approach is currently being applied in three New Hampshire project locations, Meredith, Dublin (NH 101), and Bow-Concord (I-93), and the public response to the approach has been positive.

## **District 2 Works with New London to Limit Salt Impact on Little Lake Sunapee**

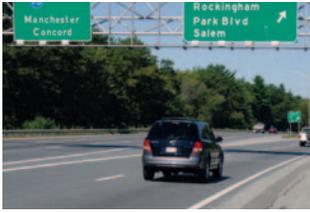
### *Two Reduced Winter Maintenance Areas Designated on NH 114 and Little Sunapee Road*

Responding to residents’ concerns and a formal request from the Town of New London, the New Hampshire Department of Transportation has approved two areas of “Reduced Winter Maintenance” as outlined in the NHDOT’s Snow Removal and Ice Control Policy.

The Little Lake Sunapee Protective Association has been monitoring water quality levels for a number of years and is becoming increasingly concerned with the levels of certain readings, particularly conductivity.

Conductivity measures water’s ability to conduct electricity. The presence of road salt increases conductivity. Failing septic systems, urban runoff and agricultural activities also affect conductivity.

State roads encircle Little Lake Sunapee, with NH 114 and Little Sunapee Road, often right on the shoreline, so the Department was a natural party to the water quality improvement effort. The 214 New London state maintenance facility is also immediately adjacent to one of the lake’s tributaries.



## I-93 Community Technical Assistance Program (CTAP)

The NHDOT is committed to a five year comprehensive Community Technical Assistance Program (CTAP) to support a region of 26 towns and cities that are in the area influenced by the reconstruction of Interstate 93.



The CTAP program is unique in that the NHDOT had not predetermined the specific type or form of assistance that communities can receive. Instead, over the past several months through a series of work sessions, the NHDOT engaged local governments, local non-profit organizations, community groups, and state, regional, and federal agencies in both planning and the technical assistance that is needed, and working together in providing this assistance over a five-year period. Fifteen representatives from non-profit organizations will work with representatives from government agencies and the 26 client communities to plan for the future of the region.



## Bureau of Environment

The NHDOT's Bureau of Environment has a principal role of evaluating transportation construction projects and maintenance activities relative to impacts on natural, cultural and socioeconomic resources, and identifying opportunities to avoid, minimize and/or mitigate those impacts. The Bureau acts as an environmental liaison between the Department and federal, state, local and non-governmental environmental agencies and organizations. Accomplishments in FY 2006 included:

- initiated an inventory of the Department's stormwater facilities along state maintained highways within the urbanized areas of the state and conducted a water sampling program to identify illicit discharges
- prepared and reviewed 107 environmental documents
- processed and recorded 215 permit applications/amendments and/or notifications
- compiled and submitted the third annual report for the small municipal separate storm sewer system (MS4) general permit, as required by Phase II of the National Pollutant Discharge Elimination System (NPDES II) administered by the EPA
- finalized the Cultural Resources Eligibility Evaluation Program (CREEP) database to track aspects of the Department's cultural resources identification and evaluation program
- organized, and participated in, the NHDOT's first Habitats & Highways class to raise awareness of wildlife issues as they relate to transportation facilities. This hands-on training included classroom instruction and field exercises to identify wildlife habitat and animal signs. This increases the understanding of wildlife movement through the landscape and interaction with the built environment.

*The Traffic Bureau achieved significant energy savings and potential reduced maintenance by converting 60% of yellow incandescent lamps on traffic signals to Light Emitting Diodes (LED's). All pedestrian signals have also been converted to LED's.*

# LEGISLATION

## Laws of 2006

<i>Chapter</i>	<i>Bill</i>	
0020	HB1119	Relative to naming the Richard Monahan Bridge in the town of Carroll.
0027	HB1471	Repealing the statutes relative to regional highway safety conferences.
0042	HB1765	Relative to funding for disaster relief efforts in response to the October 2005 floods and making an appropriation therefor.
0054	HB1179	Repealing a requirement that the Department of Transportation spend a certain amount for litter removal that is determined based on fees paid to the liquor commission.
0080	HB1313	Naming a bridge between the towns of Newfields and Stratham the United States Submarine Veterans of World War II Memorial Bridge.
0113	SB 254	Renaming a certain bridge in the town of Stratford the Janet Peaslee Bridge.
0116	HB1155	Creating a violation for failure to pay a highway toll.
0194	HB1223	Relative to the use of real estate brokers by the Department of Transportation.
0213	SB239	Renaming the bridge located on Main Street in Enfield, NH and crossing the Mascoma River as the Enfield Women's Memorial Bridge, and naming the bridge located on Main Street in Newmarket, NH and crossing the Lamprey River as the Newmarket Veteran's Bridge.
0240	HB2006	Relative to the state's 10-year transportation improvement plan, the exemption of projects from eminent domain, improvements on the FE Everett Turnpike/I-293 and certain segments of NH 101, a bridge across the Merrimack, and establishing a study committee.
0255	SB178	Designating a certain highway the Gold Star Mothers Highway.
0256	HB1767	Authorizing the state acquisition of real estate destroyed by the October 2005 floods, establishing a commission to determine the appropriate use of the property, and making an appropriation therefore.
0273	HB349	Relative to placement and removal of political advertising.
0279	HB1167	Relative to the Department of Transportation pilot program for effective investment of state highway mitigation funds and making an appropriation to the land and community heritage investment program.
0324	SB287	Making certain changes in the eminent domain statute and establishing a committee to study eminent domain issues.

# NH DOT ORGANIZATIONAL CHART

## COMMISSIONER

Carol A. Murray  
271-3734

## Assistant Commissioner

Jeff Brillhart  
271-3734

## Directors

**Audit**  
Carol Macuch  
271-1557

**Hearings Examiner**  
Marie-Helene Bailinson  
271-3734

**Public Information Officer**  
Bill Boynton  
271-6495

**Administration**  
James Marshall  
271-1697

**Director of Finance**  
Thomas Martin  
271-3466

**Aeronautics,  
Rail & Transit**  
Jack Ferns  
271-1676

**Operations**  
Lyle "Butch" Knowlton  
271-3736

**Policy**  
Edwin Smith  
271-1486

**Project Development**  
James Moore  
271-1486

**Assistant Director**  
Michael Pillsbury  
271-7419

**Assistant Director**  
William Cass  
271-1486

## Bureau Administrators and District Engineers

**Finance & Contracts**  
William Watson  
271-3466

**Aeronautics**  
Tricia Lambert  
271-2551

**Bridge Maintenance**  
Ed Welch  
271-3667

**Bridge Design**  
Mark Richardson  
271-2731

**Materials & Research**  
Alan Rawson  
271-3151

**Human Resources**  
Fran Buczynski  
271-3460

**Railroads & Public Transportation**  
Christopher Morgan  
271-2468

**Turnpikes**  
Harvey Goodwin  
485-3806

**Highway Design**  
Craig Green  
271-2171

**Project Management**  
Chris Waszczuk  
271-2171

**Labor Compliance**  
David Chandler  
271-6754

**Mechanical Services**  
Thomas Jelley  
271-3721

**Environment**  
William Hauser  
271-3226

**Right-of-Way**  
Bill Jannelle  
271-3222

**Health and Safety**  
Colleen Cook  
271-2467

**Traffic**  
William Lambert  
271-2291

**Construction**  
Ted Kitsis  
271-2571

**Planning & Community Assistance**  
Ansel Sanborn  
271-3344

## Highway Maintenance

**Public Works\***  
Mark Whittemore  
271-3516

Caleb Dobbins  
271-2693

**Office of Information Technology Services\***  
Dane Prescott  
271-3281

District 1	District 2	District 3	District 4	District 5	District 6
Lancaster Greg Placy 788-4641	Lebanon Alan Hanscom 448-2654	Gilford Mark Morrill 524-6667	Swansey Doug Graham 352-2302	Hooksett Hiram Morrill 485-9526	Durham Doug DePorter 868-1133

\* embedded State Bureau

# FINANCIAL MANAGEMENT - FY 2006 REVENUE

UNAUDITED - BUDGETARY	General 010	Highway 015	Turnpike 017	Capital 030	Total
<b>Unrestricted (Greater than \$1m):</b>					
Interest on Highway Surplus Funds		3,229,740			3,229,740
Sale of Service - Own Forces		4,204,969			4,204,969
Administrative Over Head Cost		1,466,841			1,466,841
Federal Over Head Billing		4,479,500			4,479,500
Turnpike Cash Management Interest			1,268,405		1,268,405
Cash/Token Toll Receipts - Blue Star			18,591,401		18,591,401
Cash/Token Toll Receipts - Central			18,328,702		18,328,702
Cash/Token Toll Receipts - Spaulding			6,118,773		6,118,773
Electronic Toll Collections - Blue Star			13,921,499		13,921,499
Electronic Toll Collections - Central			15,584,747		15,584,747
Electronic Toll Collections - Spaulding			4,088,009		4,088,009
Transponder Sales Revenue			2,515,165		2,515,165
Other Revenues (Less than \$1m)	711,497	808,862	2,973,440		4,493,799
<b>Total Unrestricted Revenue</b>	<b>711,497</b>	<b>14,189,912</b>	<b>83,390,140</b>	<b>-</b>	<b>98,291,549</b>
<b>Restricted (Greater than \$1m):</b>					
<b>Federal Funds</b>					
Public Transportation Division	3,165,701				3,165,701
Federal Aid Interstate		17,204,294			17,204,294
Highway Planning & Research (HPR)		3,302,647			3,302,647
Metropolitan Transportation Agencies		1,683,279			1,683,279
Federal Primary Projects		121,023,446			121,023,446
Bridge Replacement		17,353,167			17,353,167
FHWA Flood 2005		2,594,227			2,594,227
FEMA Flood 2005		3,338,711			3,338,711
FAA Projects				7,627,121	7,627,121
FAA Match				5,388,814	5,388,814
Federal Emergency Relief Funds		2,007,333			2,007,333
Federal Funds (Less than \$1m)		1,743,454		263,366	2,006,820
<b>Total Federal Funds</b>	<b>3,165,701</b>	<b>170,250,558</b>	<b>-</b>	<b>13,279,301</b>	<b>186,695,560</b>
<b>Revolving Funds</b>					
Garage Income - Equipment Usage		14,655,629			14,655,629
Highway Inventory		1,563,679			1,563,679
Motor Fuel		10,070,774			10,070,774
Revolving Funds (Less than \$1m)	369,942	482,143			852,085
<b>Total Revolving Funds</b>	<b>369,942</b>	<b>26,772,226</b>	<b>-</b>	<b>-</b>	<b>27,142,168</b>
<b>Private &amp; Local Funds</b>					
Interstate Bridge Authority		1,410,819			1,410,819
Primary Local Match		3,657,588			3,657,588
Private & Local Funds (Less than \$1m)	117,961	1,634,296			1,752,257
<b>Total Private &amp; Local Funds</b>	<b>117,961</b>	<b>6,702,702</b>	<b>-</b>	<b>-</b>	<b>6,820,663</b>
<b>Agency Income</b>					
Pavement Marking Program		2,572,596			2,572,596
Agency Income (Less than \$1m)	967,512	23,706,048	6,115		24,679,675
<b>Total Agency Income</b>	<b>967,512</b>	<b>26,278,644</b>	<b>6,115</b>	<b>-</b>	<b>27,252,271</b>
<b>Total Restricted Revenue</b>	<b>4,621,116</b>	<b>230,004,130</b>	<b>6,115</b>	<b>13,279,301</b>	<b>247,910,662</b>
<b>Total All Revenue</b>	<b>5,332,613</b>	<b>244,194,041</b>	<b>83,396,255</b>	<b>13,279,301</b>	<b>346,202,211</b>

Source: SNH A270 & A271

Receipts Collected by the Department of Safety:

Gasoline Road Toll	127,924,000
Motor Vehicle Fees	85,747,000
<b>Total Receipts</b>	<b>213,671,000</b>

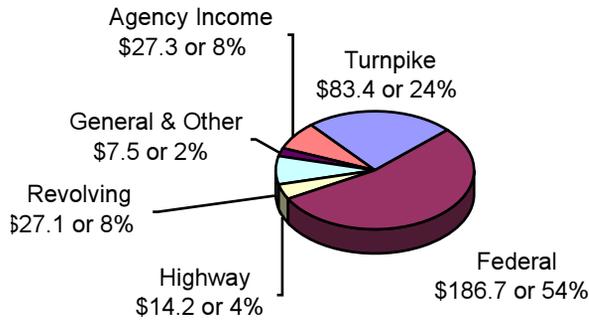
# FINANCIAL MANAGEMENT - FY 2006 EXPENSE

UNAUDITED - BUDGETARY	General 010	Highway 015	Turnpike 017	Capital 030	Total
<b><u>Operating Expenses:</u></b>					
Salaries	587,486	49,010,019	5,910,296		55,507,801
Benefits	248,512	27,476,322	3,937,438		31,662,272
Current Expense	19,531	20,963,413	2,157,052		23,139,996
Lease of State Owned Equipment	37,000	13,761,000			13,798,000
Rents & Leases - Non State	4,038	9,325,850	670,930		10,000,819
Equipment	4,846	6,552,244	1,435,416		7,992,506
Overtime & Holiday	6,482	6,098,630	545,828		6,650,940
Temporary Personal Services		1,458,274	3,108,642		4,566,916
Rent of State Owned Property			4,510,403		4,510,403
Heat, Electricity, & Water		2,010,112	1,161,082		3,171,195
Indirect Costs		906,716	172,619		1,079,335
In State Travel	1,415	769,903	20,593		791,911
Maintenance Other Than Buildings & Grounds		353,590	116,237		469,827
Audit Fund Set Aside		156,372			156,372
Contract Repairs		77,569	18,088		95,657
Organizational Dues	13,953	43,544	34,500		91,997
Maintenance Own Forces		59,906	6,094		66,000
Out of State Travel	902	41,954	4,605		47,460
<b>Total Operating Expense</b>	<b>924,164</b>	<b>139,065,420</b>	<b>23,809,823</b>		<b>163,799,407</b>
<b><u>Other Expense:</u></b>					
Debt Service		6,286,315	30,049,140		36,335,455
Retiree Benefits		8,284,412	905,846		9,190,258
Motor Fuel Inventory		10,057,386			10,057,386
Toll Collection Equipment			1,619,351		1,619,351
Toll Revenue Processing Service			4,421,602		4,421,602
Vehicle Transponders			5,476,649		5,476,649
Worker's Compensation		1,485,180			1,485,180
Administrative Overhead to DOT HWY			1,413,317		1,413,317
<b>Total Other Expense</b>	<b>-</b>	<b>26,113,293</b>	<b>43,885,906</b>	<b>-</b>	<b>69,999,199</b>
<b><u>Major Programs (Greater than \$1m):</u></b>					
Consolidated Federal Aid		181,471,577			181,471,577
Apportionment A & B		28,819,383			28,819,383
Betterments Program		21,932,876			21,932,876
Municipal Bridge Aid Program		4,040,676			4,040,676
State Aid Construction		1,004,324			1,004,324
New Garage/Test Lab Facility				13,575,770	13,575,770
Flood Expenditures		12,095,911			12,095,911
FAA Projects State and Local 5-10%				8,953,661	8,953,661
Central NH Turnpike Improvement			5,962,284		5,962,284
FAA Projects (2 1/2% Match)				5,560,736	5,560,736
Renewal & Replacement			4,566,595		4,566,595
Blue Star Memorial Highway			4,073,570		4,073,570
Rural Transport Assistance	1,914,856				1,914,856
Spaulding / US 4 / NH 16 / Improvement			1,463,572		1,463,572
RSA 228:24 Highway Inventory		1,301,937			1,301,937
Nashua River Bridge		1,189,324			1,189,324
<b>Total Major Program</b>	<b>1,914,856</b>	<b>251,856,008</b>	<b>16,066,021</b>	<b>28,090,168</b>	<b>297,927,053</b>
<b>Total Other Programs (Less than \$1m)</b>	<b>2,986,552</b>	<b>1,950,423</b>	<b>3,124,417</b>	<b>2,363,859</b>	<b>10,425,251</b>
<b><u>Transfer of Funds to Other Agencies:</u></b>					
Department of Safety		66,652,833			66,652,833
Office of Information Technology (OIT)		3,790,118			3,790,118
Judicial Branch		1,505,650			1,505,650
Department of Justice (DOJ)		923,045			923,045
DAS - General Services		789,217			789,217
Highway Safety		377,894			377,894
Health & Human Services (HHS)		356,622			356,622
Board, Tax, & Land Appeals (BTLA)		170,704			170,704
Department of Environmental Services (DES)		40,000			40,000
<b>Transfer of Funds to Other Agencies</b>	<b>-</b>	<b>74,606,082</b>	<b>-</b>	<b>-</b>	<b>74,606,082</b>
<b>Total Expense, Program, &amp; Transfer of Funds</b>	<b>5,825,572</b>	<b>493,591,227</b>	<b>86,886,167</b>	<b>30,454,026</b>	<b>616,756,992</b>

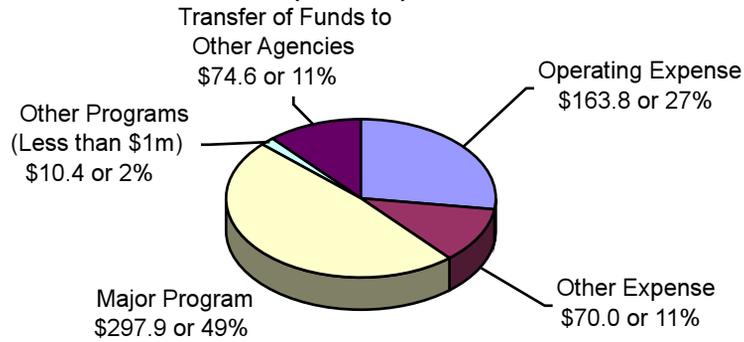
Source: SNH Statement of Appropriations

# FY 2006 ACTIVITY CHARTS

## Revenue (millions)



## Expense (millions)

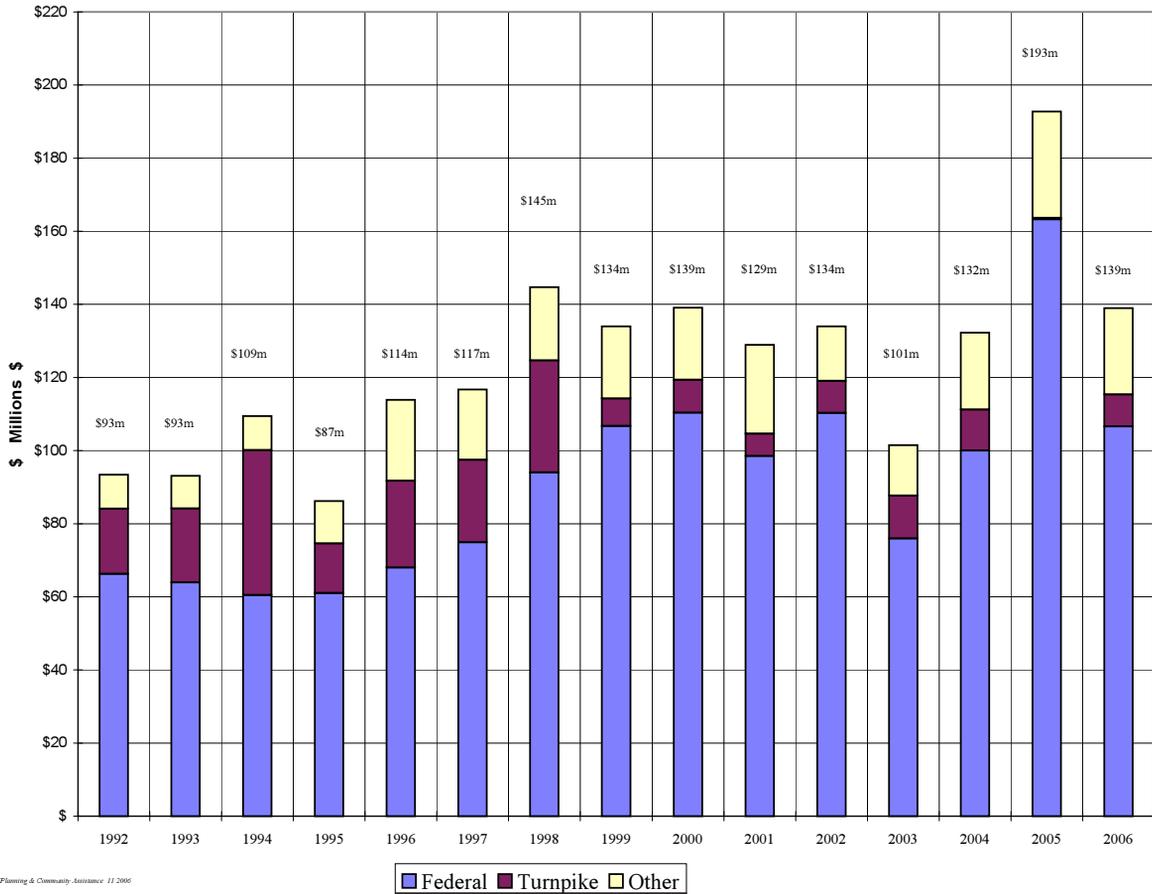


## PERSONNEL DATA

	NUMBER OF EMPLOYEES		
	6/30/2004	6/30/2005	6/30/2006
Unclassified	7	7	7
Classified	1,868	1,868	1,842
Temporary	427	546	478
<b>TOTAL</b>	<b>2,302</b>	<b>2,421</b>	<b>2,327</b>

## Construction Contracting \$ For Projects

Advertised in Federal Fiscal Years (October 1 to September 30)



## Physical Plant and Property As of June 30, 2006

Item	DOT (excluding Turnpikes)	Turnpikes	NHDOT Totals
Equipment	\$46,045,216	\$31,267,579	\$77,312,793
Buildings	\$45,816,072	\$4,828,312	\$50,644,383
Land	\$233,584,680	\$106,957,275	\$340,541,956
Highways, Rails & Bridges	\$2,636,815,321	\$536,114,221	\$3,080,523,752
<b>Totals</b>	<b>\$2,962,261,289</b>	<b>\$679,167,387</b>	<b>\$3,549,022,884</b>

Note: During FY 2002 the NHDOT converted from replacement costs to actual costs, per Government Accounting Standard Board (GASB#34) requirement.

# 2006 FACTS AND FIGURES

- More than 1,100 state and municipal bridges were inspected during the week immediately following both the October 2005 and the May 2006 floods.
- A total of 56 construction contracts were completed and accepted for maintenance by NHDOT District forces.
- The Bureau of Highway Design advertised 51 highway construction contracts totaling approximately \$70 million.
- The Preliminary Design section (Highway Design) reviewed 41 permit applications for major private developments and worked on conceptual designs for 43 active projects.
- The Design Services section (Highway Design) provided utility coordination on 158 projects and prepared 34 utility agreements valued at \$2.4 million.
- The deployment of E-ZPass electronic tolling technology led to the opening of approximately 168,000 accounts and the sale of more than 295,000 transponders. As of June 30, 2006, E-ZPass market share was at 48%.
- The Bureau of Right-of-Way processed approximately 1160 title abstracts, completed 363 appraisals, sold 14 properties, relocated 157 displaced homeowners and purchased approximately 320 properties at a cost of approximately 23 million dollars. The bureau also achieved an 86% settlement rate for all acquisitions.
- The Traffic Bureau managed monitored and processed the collection of traffic volume data on the state's non-interstate roads by the Regional Planning Commissions at about 2000 sites, and conducted speed studies at 24 locations.
- The Well Section of the Highway Maintenance Bureau administered 14 new well installations, awarded four damage awards, and decommissioned seven wells throughout the state.
- The Permit Section of Highway Maintenance issued over 32,500 oversize/overweight permits for travel within the State of New Hampshire. In addition, this section issued 300 parade permits.
- Delegates from 49 states attended a NHDOT-sponsored Subcommittee on Maintenance Conference at Loon Mountain.
- The 511 Traveler Information telephone number received 69,382 calls, a 14% increase over 2005. There was a record high monthly call volume of 11,146 phone calls during the month of May 2006, primarily due to flooding.
- Improvements in coning operations at the Traffic Bureau reduced back injuries from five in 2005 to zero in FY 2006.



*New Hampshire celebrated the 50th anniversary of the Interstate Highway System on June 29, 2006 with a ceremony in Concord and a vintage car caravan on Interstate 93. Commissioner Carol Murray said “the 225 miles of Interstate highway in New Hampshire have served us well, dramatically increasing mobility, fueling our economy and making our state an even more appealing place to live and visit.”*





**John H. Lynch, Governor**

**Executive Councilors:**

Raymond S. Burton - District 1

Peter J. Spaulding - District 2

Ruth L. Griffin - District 3

Raymond J. Wieczorek - District 4

Debora Pignatelli - District 5

**Carol A. Murray, Commissioner**

New Hampshire Department of Transportation

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[www.nhdot.com](http://www.nhdot.com)

*This report was produced by the New Hampshire Department of Transportation pursuant to RSA 20:6 & 228:41. Six hundred copies of this report were printed in the Department's Print Shop. It is also available at [www.nhdot.com](http://www.nhdot.com).*