



Victoria F. Sheehan
Commissioner

THE STATE OF NEW HAMPSHIRE
DEPARTMENT OF TRANSPORTATION



William Cass, P.E.
Assistant Commissioner

December 1, 2016

Her Excellency, Governor Margaret Wood Hassan
State House
Concord, New Hampshire 03301

The Honorable Chuck Morse
President of the Senate
State House, Room 302
Concord, New Hampshire 03301

The Honorable Shawn Jasper
Speaker of the House
NH House, State House, 3rd Floor
Concord, New Hampshire 03301

The Honorable Gene G. Chandler
Chairman of House Public Works and Highways Committee
LOB Room 201
Concord, New Hampshire 03301

The Honorable Gene G. Chandler
Chairman of Capital Budget Committee
LOB Room 201
Concord, New Hampshire 03301

Tammy L. Wright
Senate Clerk
State House, Senate Chamber
Concord, New Hampshire 03301

Paul C. Smith
House Clerk
State House Room 317
Concord, New Hampshire 03301

Michael York
State Librarian
20 Park Street
Concord, New Hampshire 03301

RE: NH RSA 235:23-a: FY 2014 Betterment Report

Per NH RSA 235:23-a please find attached a report detailing the expended funds of the Betterment Program and an explanation of the accomplishments of the betterment Program.

Should you have any questions or comment, please do not hesitate to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "Victoria F. Sheehan". The signature is written in a cursive style with a large initial "V".

Victoria F. Sheehan
Commissioner

Attachment

NH RSA 235:23-a established a Highway and Bridge Betterment Program. The program is funded by \$0.03 per gallon of the road toll collected under **NH RSA 260:32**. 88% of the program funds are distributed to each of the six state Highway Maintenance Districts based on the percentage of the total state-maintained class I, class II and class III highways and based on the percentage of state-maintained bridges on these state highways found in each District. The remaining 12% of the funds are distributed to each city, town and unincorporated place as explained in **NH RSA 235:23- I**. The Betterment Program follows the state fiscal year. The 2016 Betterment program was from July 1, 2015 to June 30, 2016

The major purpose of the Betterment Program is to provide funds to insure adequate maintenance and improvement of the state highway system not supported with Federal Aid. Betterment funds are used to support; highway construction, reconstruction, resurfacing, highway maintenance, bridge construction, bridge reconstruction and bridge maintenance projects. The Department breaks up the Betterment Program into categories to allow the Department to target specific areas such bridge repair, drainage, force account, reconstruct secondary roads, resurfacing, pavement levelling, traffic signals, and standalone projects.



The **Bridge** Category is used to provide materials and equipment for NHDOT Bridge Maintenance forces to reconstruct and repair NH's bridges not funded through the Federal program. Funding from these projects allow Department forces to repair, reconstruct and replace: bridge decks, bridge abutments, end dams, expansion joints, wing walls, bridge rails, bridge footings, bridge steel, bridge shoes, bridge membranes, pipe inverts, and many other components. Repair or minor reconstruction at the right time can extend the life of a bridge and greatly reduce the overall life cycle cost of the structure. This work also allows some bridges to continue carrying legal loads and avoids weight restrictions or worse, closing the bridge altogether. Twenty-five bridge projects were funded during FY 16.

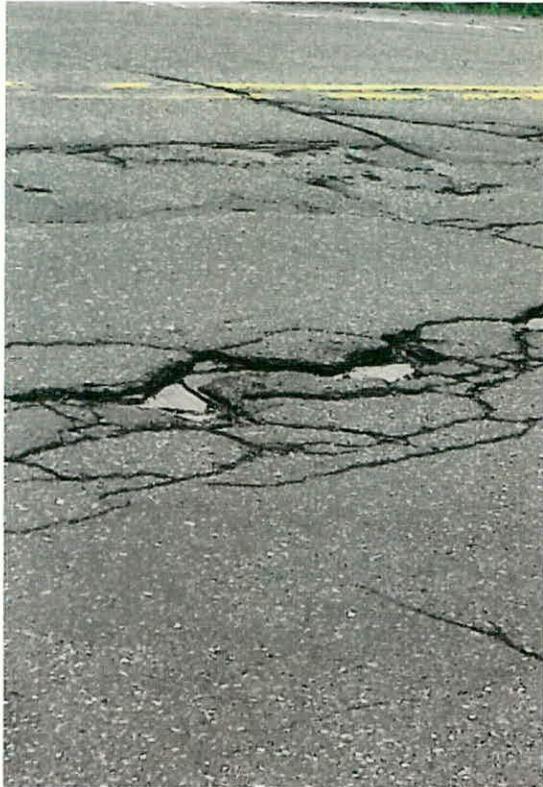
The **Drainage** Category provides funds for competitively bid contracts or allows NHDOT forces to purchase materials and rent equipment to reconstruct, repair, slipline, or replace larger failing pipes, culverts and their appurtenances. These funds allow the Department to repair storm damaged pipes and headwalls damaged by storms or other causes that are not eligible for FEMA reimbursement. The Department is facing a challenge with a large number of corrugated steel pipes that were installed over the last 60 years that continue to rust away. Three projects were funded in FY 2016.



The **Force Account** Category provides funds to allow NHDOT forces the ability to prepare and advertise contracts or rent equipment and purchase materials for the unforeseen events that happen along our roadways and roadsides that need immediate attention. The six NHDOT Highway Maintenance Districts have discretion over the use of these funds and use them to address failing roadway elements including pipes, catch basins and retaining walls. These funds also allow the Districts to proactively replace end of life drainage pipes and structures ahead of the resurfacing projects.

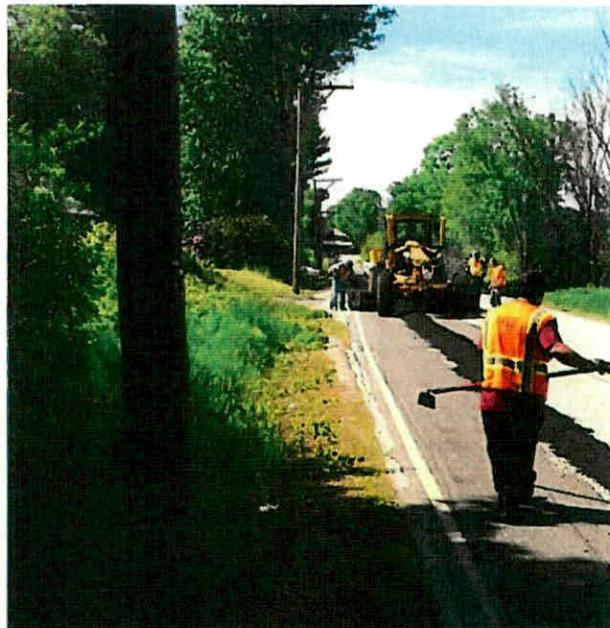
The **Reconstruct Secondary Roads** category funds projects where the Department reconstructs sections of poor roadway. This work is efficient as it is designed in the field and accomplished with state forces, rented equipment, locally purchased gravels and low bid Contractors. During FY 2016 reconstruction was reduced to less than 10 miles in favor of paving very rough roads.

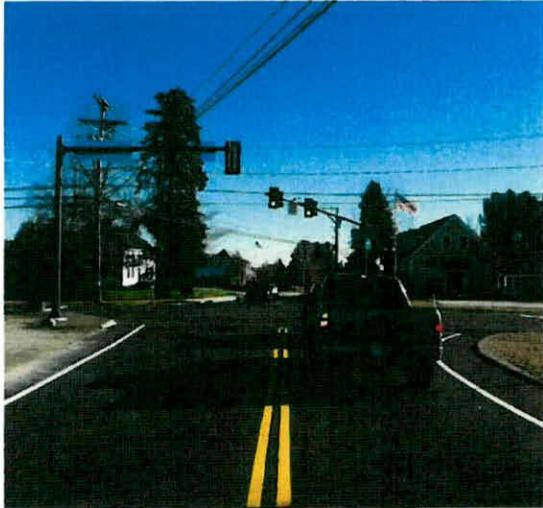




The **Resurfacing** category makes up more than $\frac{1}{2}$ of the Betterment program. In FY 2016 the Department paved 265 miles using Betterment funds. The Department recognizes pavement preservation strategies as the most efficient way to keep good roadways good. Preservation strategies require regular thin lift overlays including chip seals, micro surfacing and thin lift pavements to keep good roads sealed and to prevent water, salt and other elements from deteriorating the pavement and the gravels below. The Department invests in as much preservation paving as possible but the bulk of the resurfacing goes to poor roads and serves to provide surface maintenance that provides a better ride for several years before the existing cracks reflect through. This surface maintenance strategy is necessary to keep the roads passable and to facilitate plowing the roads in the wintertime.

Pavement Levelling is another surface maintenance paving treatment. The Department purchases the hot mix asphalt from an approved supplier and either places the mix with our own forces and a grader or uses private contractors for this work. This treatment is very thin and is used to fill the ruts in the road, restore the crown back into the road and/or hold a broken up section of road together. The Districts have discretion over where this work takes place as often the roadway conditions change even in April, May and June and pavement levelling is used to keep the roads passable and provide a surface that is drivable.





The Department maintains more than 435 traffic signals on the state highway system. The **Signals** category provides funding to upgrade existing traffic signal systems. The Department has converted span wire signal systems to mast arm systems and upgraded traffic signal hardware. The 2016 Betterment funds were reallocated to resurfacing.

The **Stand Alone** Betterment funding category is reserved for unforeseen emergencies that will not be refunded by FEMA or Federal highway Administration Emergency relief funds. Slope failures are one such common unforeseen emergency that occur on state maintained roads that run along the state's river banks. These failures are often discovered during routine roadway maintenance and fixed before they are seen from the road. Occasionally a larger failure will take some of the road requiring a closure and detour.



Betterment funding allocations are dispersed to each of the six highway maintenance districts for each Betterment category. These allocations are based on the projected revenues and are used to plan the projects within each district. Unused or unspent allocations carry forward from year to year within the Betterment Program. As projects are completed within the fiscal year planned and final expenditures are determined, the balance of funds are reallocated to other existing or new projects. Figure 2 shows the percentage of FY 2016 expenditures per highway maintenance district.

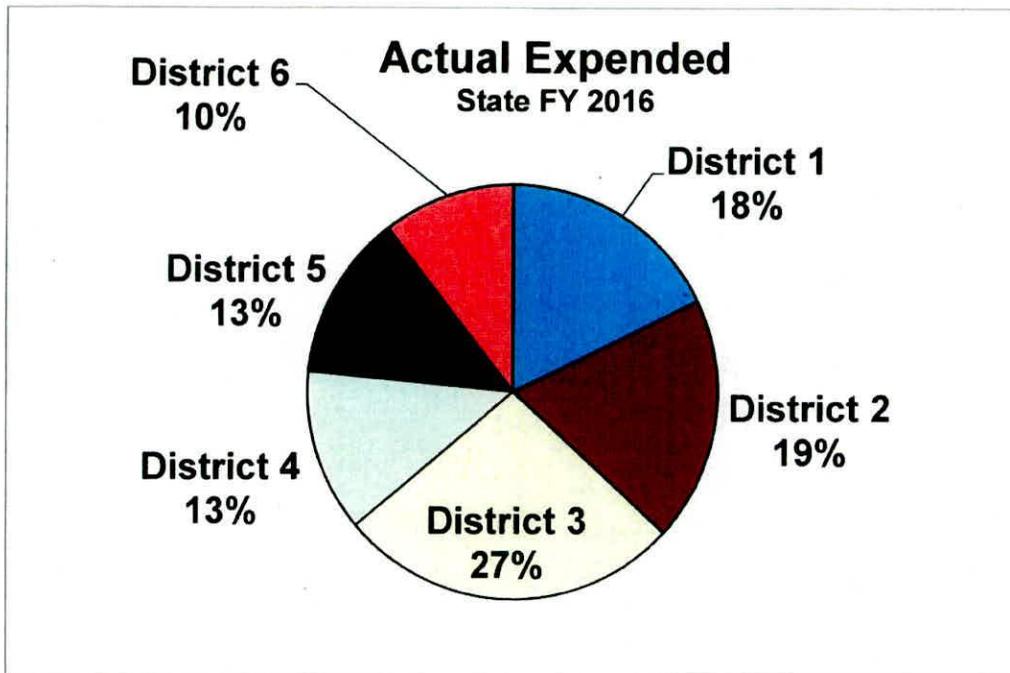


Figure 2. FY 2016 Betterment percentage of funds spent per District

Figure 3 shows the value of projects programmed for each District compared to the actual amount expended.

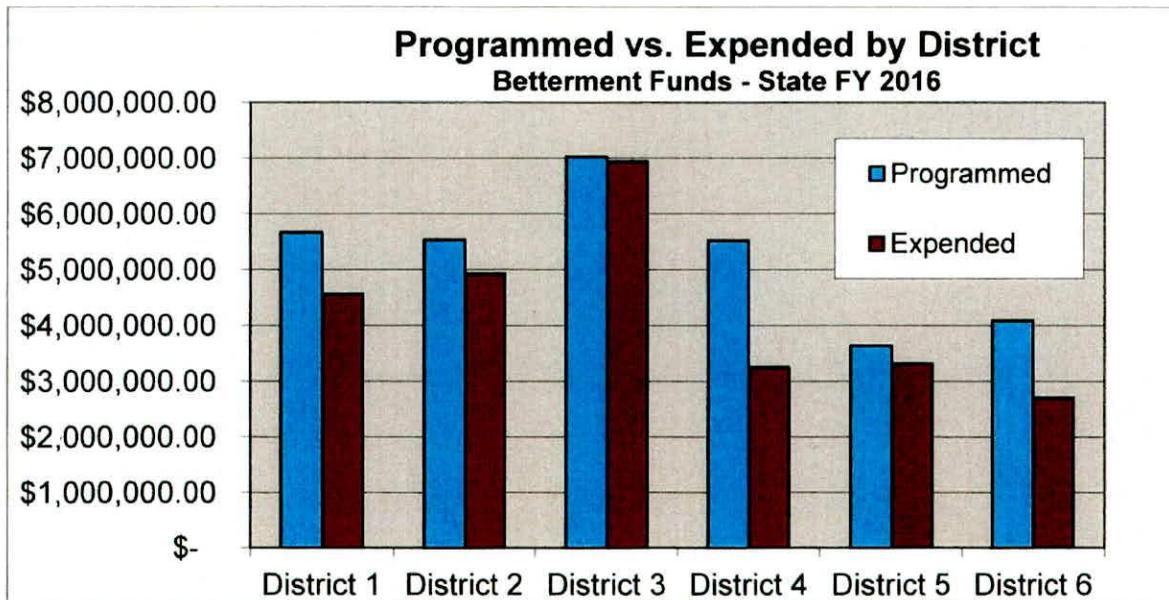


Figure 3. Programmed Projects vs. Expenditures

The following information on the Betterment Program is attached to support this report:

- The FY 2016 Betterment Projects list.
- NH RSA Section 235:23-a Highway and Bridge Betterment Program

Betterment Investment by Project/Location Fiscal Year 2016

FY 2016 Betterment Projects

Project Name/Location	Project Number	Route / Road	Betterment
ACWORTH, HILL ROAD	40597	HILL ROAD	138,051.50
ALBANY	29570	BEAR NOTCH ROAD	32,716.68
ANTRIM	99877Z	VARIOUS	(825.00)
ANTRIM	99807Z	VARIOUS	(55.20)
AUBURN	40084	NH ROUTE 121	1,779.00
BATH	28896	NH 135	43,419.79
BEDFORD	25234	BRIDGE MAINT - BEDFORD 3-SIDED SHED	96.97
BEDFORD	M594	DISTRICT 5 NON-MATS DISTRICT-WIDE CHARGES	3,885.40
BEDFORD	99884Z	VARIOUS	(147.18)
BEDFORD	99844Z	VARIOUS	131.10
BENTON	29703	NH 116	275.00
BERLIN	40716	NH 110	61,416.22
BRISTOL	16026	CENTRAL SQUARE	32,581.09
BROOKFIELD	29038	GOVERNORS ROAD	44,712.00
CANAAN	M205	CANAAN PATROL SECTION	520.00
CANTERBURY	40178	INTERVALE ROAD	212,896.07
CANTERBURY	M525	CANTERBURY PATROL SECTION	112.37
CARROLL	99802Z	VARIOUS	(276.87)
CHARLESTOWN	29036	NH 12A	9,525.03
CHARLESTOWN - SPRINGFIELD, VT	29801	NH 11	86,907.89
CHESHIRE COUNTY	STM77011	CHESHIRE - COUNTYWIDE FY16 STORM	246.31
CHICHESTER	M503	CHICHESTER PATROL SECTION	371.14
COLUMBIA	M102	COLUMBIA PATROL SECTION	19.66
CONCORD	40780	I393 - EMERGENCY CULVERT REPAIRS	52,686.98
CORNISH	29782	CORNISH TOLL BRIDGE ROAD	(72.80)
CORNISH	M212	CORNISH PATROL SECTION	522.41
DISTRICT 1	11661X	VARIOUS	404,267.81
DISTRICT 1	40357	VARIOUS	124,025.40
DISTRICT 1	40881	VARIOUS DISTRICT 1 ROADS	462.70
DISTRICT 1	11661Y	VARIOUS DISTRICT 1 ROADS	90.29
DISTRICT 1 REHABILITATION	29222	NH 26	152,937.47
DISTRICT 1 RESURFACING	16161C	VARIOUS	(1,301.79)
DISTRICT 1 RESURFACING	16161D	VARIOUS	2,418,303.65
DISTRICT 1 RESURFACING	29571	VARIOUS	1,920,496.13
DISTRICT 2	M298	DISTRICT 2 ADMINISTRATIVE CHARGES	5,175.00
DISTRICT 2	40334	VARIOUS	399,557.96
DISTRICT 2	40344	DISTRICT WIDE	248.61
DISTRICT 2 PAVEMENT LEVELING	11662W	DISTRICT 2	29,814.26
DISTRICT 2 RESURFACING	16162D	VARIOUS ROADS	1,719,970.06
DISTRICT 2 RESURFACING	29217	VARIOUS	(2,913.51)

Betterment Investment by Project/Location Fiscal Year 2016

Project Name/Location	Project Number	Route / Road	Betterment
DISTRICT 2 RESURFACING	29552	VARIOUS	1,365,064.03
DISTRICT 3	16102D	VARIOUS LOCATIONS	325.00
DISTRICT 3 REHABILITATION OF SECONDARY ROADS	29237	VARIOUS ROADWAYS	497.00
DISTRICT 3 REHABILITATION OF SECONDARY ROADWA	29664	VARIOUS	100,497.00
DISTRICT 3 RESURFACING	16163C	VARIUOS	(23,066.02)
DISTRICT 3 RESURFACING	16163D	VARIOUS ROADWAYS	4,377,631.70
DISTRICT 3 RESURFACING	16163E	VARIOUS	4,897.17
DISTRICT 3 RESURFACING	29573	VARIOUS	339,677.26
DISTRICT 4	11664X	VARIOUS ROADS IN DISTRICT FOUR	54,495.29
DISTRICT 4	40897	MULTIPLE	12,069.52
DISTRICT 4 RESURFACING	16164C	VARIOUS	1,785.48
DISTRICT 4 RESURFACING	16164D	VARIOUS ROADWAYS	1,403,653.49
DISTRICT 4 RESURFACING	29574	VARIOUS	1,013,205.05
DISTRICT 5	40356	VARIOUS	85,411.12
DISTRICT 5 INMATE	16101C	DISTRICT 5 ROADS	1,500.00
DISTRICT 5 INMATE	16101D	DISTRICT 5 ROADS	5,613.94
DISTRICT 5 PAVEMENT ROADWAY LEVELING	11665X	DISTRICT 5 ROADS	176,456.67
DISTRICT 5 REHABILITATION OF SECONDARY ROADS	29238	VARIOUS ROADWAY'S	967.75
DISTRICT 5 RESURFACING	16165C	VARIOUS	8,103.12
DISTRICT 5 RESURFACING	16165D	VARIOUS ROADWAYS	1,561,525.58
DISTRICT 5 RESURFACING	29575	VARIOUS	950,622.94
DISTRICT 5 SLOPE PIPES	40052	I-93/I-293/I-89/I-393	63,092.77
DISTRICT 6	40606	VARIOUS ROADS IN DISTRICT SIX	45,178.23
DISTRICT 6	40724	VARIOUS ROUTES	18,000.00
DISTRICT 6	11666X	VARIOUS ROADS IN DISTRICT SIX	169,757.89
DISTRICT 6	40398	VARIOUS ROADS IN DISTRICT SIX	5,675.80
DISTRICT 6 RESURFACING	16166C	VARIOUS	1,784.85
DISTRICT 6 RESURFACING	16166D	VARIOUS ROADWAYS	1,029,769.54
DISTRICT 6 RESURFACING	29576	VARIOUS	936,410.30
DIXVILLE-COLEBROOK	40518	GOLF LINKS ROAD	27,042.71
DOVER	M606	DOVER PATROL SECTION	76.00
DURHAM	M698	DISTRICT 6 ADMINISTRATIVE CHARGES	1,126.00
EAST KINGSTON	40673	108	24,053.57
EFFINGHAM	24038	NH RTE 153	82.61
EFFINGHAM	29812	NH 25	(275.00)
ENFIELD	28876	SHAKER HILL ROAD	2,868.42
ENFIELD	29777	NH ROUTE 4A	18,761.24
ENFIELD	M224	ENFIELD PATROL SECTION	534.68
ERROL	40885	NH-16/NH-26	47.35
ERROL/DIXVILLE	M103	ERROL/DIXVILLE PATROL SECTIONS	2,140.00
FREEDOM	29175	MOULTON ROAD	13,788.64

Betterment Investment by Project/Location Fiscal Year 2016

Project Name/Location	Project Number	Route / Road	Betterment
FUEL	40372	STATEWIDE	986.17
FUEL - 2015 COMPLIANCE	29728	VARIOUS	785.23
GILFORD	29666	NH 11C	284,809.32
GILSUM	40441	NH 10	564.00
GREENVILLE	M415	GREENVILLE PATROL SECTION	23.88
HAMPTON	27896	RT 101	26,629.93
HARRISVILLE	29538	CHESHAM ROAD	1,100.00
HARTS LOCATION	23509	NH 302	(185.59)
HAVERHILL	14154	NH 10	3,430.71
HILLSBOROUGH	40476	COOLEIDGE RD	47,700.47
JAFFREY	40483	POOLE ROAD	85,224.50
JEFFERSON	28973	NH115A	1,394.00
KINGSTON	M611M	KINGSTON PATROL SECTION	150.00
LANCASTER	40471	ROUTE 3	2,313.78
LANCASTER	40522	NH 135	859,008.57
LANCASTER	M194	DISTRICT 1 NON-MATS DISTRICT WIDE CHARGES	133.34
LANCASTER	99801Z	VARIOUS	(376.04)
LANDAFF	99404Z	NH 112	51,828.80
LEBANON	26644	NH ROUTE 120	112,517.22
LEBANON	26723	NH ROUTE 120	34,100.00
LEE	26883	NH 125	1,268.31
LINCOLN	M115	LINCOLN PATROL SECTION	28.75
LISBON	M114	FRONT & REAR PATROL SECTIONS & WEBSTER SHED GAR	20.21
MILLSFIELD	99425Z	NH 26	128,238.54
MOULTONBOROUGH	16436	NH 109	1,475.00
MOULTONBOROUGH	16437	NH 109	13,404.00
MOULTONBOROUGH	40860	NH 25	5,920.37
NEW BOSTON	29662	NH 136	18.18
NEW BOSTON	99402Z	NH 13	12,918.10
NEW HAMPTON	M324	NEW HAMPTON PATROL SECTION	130.00
NEWFIELDS	99806Z	VARIOUS	31.48
NEWPORT	40482	NH ROUTE 10/11/103	128,000.00
NORTH HAMPTON	16060	WALNUT AVENUE	3,282.56
NORTH HAMPTON/RYE	M610	NORTH HAMPTON/RYE PATROL SECTION	200.00
NORTH HAVERHILL	M204	NORTH HAVERHILL PATROL SECTION	1,018.08
NORTHFIELD	29784	I-93	4,484.04
ORFORD	40856	NH25A	233.31
PLAISTOW	40619	125-ACCESS ROAD	10,874.99
PLYMOUTH	40679	FAIRGROUNDS ROAD	21,431.72
PORTSMOUTH	99891	I95	(629.75)
PORTSMOUTH	99897	VARIOUS	691.75

Betterment Investment by Project/Location Fiscal Year 2016

Project Name/Location	Project Number	Route / Road	Betterment
RANDOLPH	28334	US 2	4,854.47
RAYMOND - CHESTER	40332	NH 102	21,654.25
ROLLINSFORD	16284	NH RTE 4	69,995.01
RUMNEY	99810Z	VARIOUS	313.22
RYE	40707	1A	20.64
SALEM TO MANCHESTER	13933I	I-93	3,076.29
SANBORNTON	28635	NH 132	299,887.97
STATEWIDE	40550	BETTERMENT BRIDGE PRESERVATION	13,461.72
STATEWIDE	10878	VARIOUS	2,435.30
STATEWIDE	23780F	VARIOUS	25.00
STATEWIDE	23790E	VARIES	100.00
STATEWIDE	23790F	VARIOUS ROADWAY	25.00
STATEWIDE	28902	VARIOUS - SIGNAL CABINET	24,306.64
STATEWIDE	28994	VARIOUS	(95,435.09)
STATEWIDE	29137	VARIOUS	13,193.60
STATEWIDE	29793	VARIOUS	1,660,216.66
STATEWIDE	29794	VARIOUS	25.00
STATEWIDE	40831	VARIOUS	25.00
STATEWIDE	40387	STATEWIDE	35,000.00
STATEWIDE	28339	SPECIAL	(254.25)
STATEWIDE	99901Z	STATEWIDE	17,643.50
STATEWIDE	29638	STATEWIDE	490.01
SUNAPEE	99804Z	VARIOUS	(672.75)
SUNAPEE	M213	SUNAPEE PATROL SECTION	1,215.20
SWANZEY	M494	DISTRICT 4 NON-MATS DISTRICT-WIDE CHARGES	439.00
TILTON	40916	NH11/US3	19,332.59
TROY	M411	TROY PATROL SECTION	836.60
WAKEFIELD	40859	NH ROUTE 109	2,732.23
WALPOLE - WESTMINSTER, VT	40070	NH123	25.00
WARNER	29778	KEARSARGE MOUNTAIN ROAD	13,610.37
WEARE	40882	NH ROUTE 77	353.94
WENTWORTH	40912	WENTWORTH VILLAGE ROAD	35,538.12
WEST MILAN	M105	WEST MILAN PATROL SECTION	486.73
WESTMORELAND	29282	ROUTE 12 - ATKINS	200.00
WINCHESTER	29483	NH 10	62,961.27
WOODSTOCK	40474	RAILROAD BRIDGE	124.84
WOODSTOCK	40895	NH 175	129.79
Total by Accounting Unit Fiscal Year 2016			25,747,029.09

TITLE XX TRANSPORTATION

CHAPTER 235 FEDERAL AND STATE HIGHWAY AID

Construction and Reconstruction Aid

Section 235:23-a

235:23-a Highway and Bridge Betterment Program; Funding. –

I. There is established a highway and bridge betterment program for the purpose of highway construction, reconstruction, and resurfacing, and for bridge construction, bridge reconstruction and bridge maintenance, in each highway district in the state and for the purpose of insuring adequate maintenance and improvement of that portion of the state highway system not supported with federal aid.

II. The program shall be funded from \$.03 per gallon of the road toll imposed under RSA 260:32; of these revenues, in each fiscal year 88 percent shall be deposited into a separate account established in the highway fund called the highway and bridge betterment account, to be allocated as provided in paragraph III. The amount deposited into the highway and bridge betterment account is hereby continually appropriated and shall be nonlapsing. The remaining 12 percent shall be distributed in accordance with the formula in RSA 235:23, I, and shall be in addition to any amounts to be allocated under that paragraph.

III. The commissioner shall allocate the funds in the highway and bridge betterment account for the 6 state highway districts in the following priority:

(a) [Repealed.]

(b) For each state highway district in the state, based upon a formula in which 1/2 of the amount of the funds distributed is based upon the proportion which the mileage of state-maintained class I, class II, and class III highways, excluding turnpikes, in each district, as of January 1 of the previous year, bears to the total of such mileage in the state; and 1/2 of the amount of the funds distributed is based upon the proportion which the number of state maintained class I, class II and class III highway bridges, excluding turnpikes, in each district as of January 1 of the previous year bears to the total of such number of bridges in the state.

IV. The commissioner shall prepare a report not later than December 1 of each year which details the way in which the transportation department has expended funds for highway construction, reconstruction, and resurfacing, and for bridge construction, bridge reconstruction and bridge maintenance according to the provisions of paragraph III. The report shall also clearly evaluate how well the betterment program is achieving its purpose using quantitative measures wherever practical. The report shall be submitted no later than December 1 of each year to the president of the senate, the speaker of the house, the governor, the senate clerk, the house clerk, the state library, the chairperson of the house public works and highways committee, and the chairperson of the senate capital budget committee.

Source. 1991, 249:2. 1992, 289:64, III. 1994, 155:3; 311:1, 2. 1995, 9:32, eff. June 11, 1995. 1998, 101:1, eff. July 1, 1998.

<http://www.gencourt.state.nh.us/rsa/html/xx/235/235-23-a.htm>