Presentation to
Senate Transportation Committee

NHDOT Overview,
CY2016 Construction & Major Projects
& A Look Ahead

Presented by:
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Deputy Commissioner & Director of Project Development

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Mission

Transportation excellence enhancing the quality of life in New Hampshire

Purpose

Transportation excellence in New Hampshire is fundamental to the state’s economic development. The Department is charged with providing safe travel options for people and goods and to provide a system that is well maintained, efficient, and reliable.
Key Facts About NHDOT

- 1,639 permanent employees
- 2,159 State Bridges
  - State Red List – 154 (7%)
  - State near red List – 289
- 1,687 Municipal Bridges
  - Municipal Red List – 344 (21 %)
- All bridges inspected every two years, red list bridges inspected more frequently
Key Facts About NHDOT

- Approx. 4,600 centerline miles of roadway managed (additional 300 town maintained)
- Annual paving totals 550 centerline miles per year
- Maintain more than 100,000 highway signs, 75 million feet striping, 430 traffic signals
Key Facts About NHDOT

- FY 2016 Actual Expenditures = $600 million
  - Operating Costs = $241 million
  - Municipal Aid and Construction Costs = $359 million

- Comprised of various funding sources
  - Highway Fund, Turnpike Fund, Federal funds, General Fund, Other revenue
Currently 1,639 permanent employees: 17% fewer than in 1992
65% of Staff eligible for retirement in next 5 years
FY 2016 Advertisement Schedule & Construction Program
2016 Advertisement Schedule

99 Projects Advertised for Bids in FFY16 Totaling $366M

- $100M Federal ($17.4M in Federal Redistribution Funds Rec’d in September)
- $77M Turnpike
- $19M Betterment
- $20M SB367
- $146M TIFIA
- $4M Other


FFY16 - Highest Contract Value Advertised in Department’s History
2016 Paving Program

CY2016 Statewide Paving Program

- 194 locations, 693 miles totaling $70.4M
- Federal, Betterment, Turnpike & SB367 Funding

- Non-Turnpike Resurfacing 544
- Reconstruction/Rehabilitation 18
- Turnpike Resurfacing 18
  Sub-Total 580 miles
- Crack Sealing 113 miles
  Total 693 miles

2016 Bridge Program

CY2016 Statewide Bridge Program

- 2159 State Bridges, 154 Red List Bridges
- 11 Red List Bridge Projects Advertised in FY16 - $26M
- 16 Red List Bridges are under Construction - $132M
- 11 Red List Bridges were rehabilitated by Bridge Maintenance - $2.3M
- By end of CY2016, expect 17 Red List Bridges to be added and 20 Red List Bridges will be removed.
- In addition, 22 Projects were advertised in CY2016 to undertake bridge preservation and rehabilitation work on 56 bridges totaling $34M
## SB 367 Funding

### Table: SB 367 Funding

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<thead>
<tr>
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<tbody>
<tr>
<td></td>
<td>Revenue</td>
<td>Expenditure/Committed</td>
<td>Balance Forward</td>
<td>Revenue</td>
<td>Expenditure/Committed</td>
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<td>State Aid Bridge</td>
<td>$9.02</td>
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<td>Pavement Resurfacing and Rehabilitation</td>
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<tr>
<td>I-93 Construction</td>
<td>0.10</td>
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<td>0.37</td>
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<tr>
<td>Block Grant Aid</td>
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<td>-</td>
<td>4.12</td>
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<tr>
<td>Highway Maintenance</td>
<td>-</td>
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<td>8.30</td>
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<td><strong>Total</strong></td>
<td><strong>$34.32</strong></td>
<td><strong>$30.34</strong></td>
<td><strong>3.98</strong></td>
<td><strong>$34.69</strong></td>
<td><strong>$31.73</strong></td>
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### Notes:
1. In FY17 $4,000,000 appropriated from the Highway Fund Surplus per CH 324:15 L16.
2. Available Balance is based on full year appropriations and assumes all budgeted revenue will be collected by fiscal year end.
SB367 Paving Locations

CY2014, 2015, 2016

- 228 SB367 locations totaling more than 700 miles & $49.2M*
- Includes 14 rehabilitation locations totaling 21 miles

* Total $ includes Betterment projects supplemented with SB367 funding.
STATUS OF MAJOR PROJECTS
Sarah Long Bridge

Funding:
- Tiger Grant: $25,000,000
- NH share: $74,200,000
- Maine share: $74,200,000
- Total Construction Cost: $173,400,000

Construction Schedule:
- Construction began - Nov. 2014
- New bridge open - Sept. 2017
- Demo/Project Complete - Summer 2018
- Construction Cost - $173,400,000
Newington-Dover Spaulding Turnpike Improvements & Little Bay Bridge

- Overall N-D construction consists of five (5) major contracts & new Newington Maintenance Facility
- N-D construction started in Sept 2010
- Overall construction completion targeted in 2022
- Overall Project Improves Safety & Alleviates Congestion
- Estimated Construction Cost $229M ($31.4M federal earmarks & $198M Turnpike funds)

- New LBB construction completed
- Newington construction completed
- Existing LBB Rehabilitation underway – completion anticipated September 2017
- Exit 6 Reconstruction Contract underway (advertised in May 2016 - $67M )
- GSB Rehabilitation in study phase (Est. $31M)
- Newington Maintenance Facility in conceptual engineering phase (Est. $6M)
- Remaining two construction contracts – Estimated cost - $37M
Manchester Exit 4 Millyard Bridges Project

Construction addressed 5 red-listed bridges on I-293/FEET in Manchester

Major Components

• Original Bridges built in late 1950’s (all 5 bridges nearly 60 years old)
• 4 Red-list Bridges replaced, one Red-list bridge rehabilitated
• Additional SB lane constructed to improve safety & access onto and off the FEET

Project entirely funded w/ Turnpike Funds (no federal funds) under Turnpike Capital Program

• Construction Cost: $26.2 M
• Construction Start Date: September 2013
• Construction Completed: November 2016
I-93 Construction

Exit 2

• 5 construction projects - $160M
• Reconstruct 5 miles & two exits
• Construction began 2008
• Construction completed in 2016

Exit 3
I-93 Capacity Improvements

• 4 construction contracts $192M
  o 14633B $49.4M – under const.
  o 14633H $45.9M – under const.
  o 14633D $62.3M – under const.
  o 14633I $34.2M – Adv. Nov 2016

• Construction Funded with $200M TIFIA Loan & CE funded with federal funds

• TIFIA Debt Service paid from SB367 revenue – 4.2 cent gas tax increase

• Construction Start in 2016
• Construction Complete in 2020
I-93 Fourth Lane

- 2 construction contracts
  - 14633J $10.8M – Adv. 2019
  - 13933A $14.7M – Adv. 2019
- Construction Funded with Remnant TIFIA Loan Proceeds & with conventional federal aid
- Funding Included in TYP (FY19 & FY20)
- Chloride Issue will need to be resolved prior to advancing to construction
I-93 Exit 4A

Derry–Londonderry 13065 I-93 Exit 4A easterly to NH 102

- $56.8M in approved TYP (2017-2022)
  - $18.6M PE & ROW
  - $38.25M Construction (FY19-FY22)
- Supplemental DEIS – June 2016 thru June 2017
- Public Hearing – Targeted for July 2017
- Final EIS & Record of Decision – August 2017 thru December 2017
- Final design, ROW Acquisition & Permitting – 2018 thru 2019
- Construction – 2019 thru 2022

Towns’ Participation Capped at $10M
FY 2017 Advertisement Schedule
2017 Advertisement Schedule

63 Projects Scheduled to Advertise for Bids in FFY17 Totaling $208M

- $125M Federal
- $15M Turnpike
- $12M Betterment
- $12M SB367
- $34M TIFIA
- $10M Other - Additional 10 Projects On-shelf in FFY17 Totaling $25M
2017 Paving Program

CY2017 Statewide Paving Program

- 199 locations, 677 miles totaling $101.3M
- Federal, Betterment, Turnpike & SB367 Funding

- Non-Turnpike Resurfacing 531
- Reconstruction/Rehabilitation 49
- Turnpike Resurfacing 16
  Sub-Total 596 miles
- Crack Sealing 81 miles
  Total 677 miles
2017-2019 Paving Program

CY2017 – CY2019 Statewide Paving Program

- Crack Sealing, Preservation, Roughness, Light Capital Paving & Rehabilitation
- 559 locations, 1,949 miles totaling $242.2M
- Federal, Betterment, Turnpike & SB367 Funding

<table>
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<tr>
<th>YEAR</th>
<th>SECTIONS</th>
<th>LENGTH</th>
<th>BUDGET</th>
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<td>2017</td>
<td>199</td>
<td>677</td>
<td>$101,300,000</td>
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<tr>
<td>2018</td>
<td>159</td>
<td>633</td>
<td>$62,695,000</td>
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<td>2019</td>
<td>201</td>
<td>639</td>
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<td>Total</td>
<td>559</td>
<td>1,949</td>
<td>$246,867,212</td>
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Note: CY 2019 assumes funding as shown in the Ten-Year Plan plus an additional $16M of on-shelf work (depending on future funding availability).
A Look Ahead – Road Condition

Based on current level of investment in the TYP

- Overall Pavement condition is expected to remain unchanged
- Past years backlog of deficit paving has reduced the state’s overall pavement condition from a high of 81.6% of roads in good or fair condition to a current and projected level of 67.9%

Projected values do not include crack seal mileage
A Look Ahead – State Bridge Condition

Based on current level of investment in draft TYP

- Number of State Red List Bridges (SRL) - which is representative of bridges in poor condition (rating of 4 or lower) is expected to increase
- Higher number of “pink list” bridges (rating of 5) today than 5 years ago

- Current SRL bridge total - 153
- Bridges added to SRL by 2026 - 276
  - 23 Bridges added annually over last five years – extrapolated to 2026 projects to 276 bridges
- Bridges expected to be removed from SRL by 2026 - 244
  - 132 removed by Bridge Maintenance forces
  - 112 removed under TYP
A Look Ahead – Municipal Bridge Condition

Based on current level of investment in draft TYP

- Number of Municipal Red List Bridges (MRL) - which is representative of bridges in poor condition (rating of 4 or lower) is likely to increase w/out additional funding
- Higher number of “pink list” bridges (rating of 5) today than 5 years ago
- Removal rate of 28/yr heavily influenced by $42M influx of funding (2008-2015 thru Bonding, ARRA & SB367)
- $17M annual municipal and/or additional state funds needed to maintain MRL level

- Current MRL bridge total - 344
- Bridges added to MRL by 2026 - 276
  - 23 Bridges added annually over last five years – extrapolated to 2026 projects to 276 bridges
- Bridges expected to be removed from MRL by 2026 - ??? (Dependent on additional municipal funding)
  - 90 removed under TYP
  - ?? removed by Municipalities
Of the 3,846 State & Municipal Bridges, 1,208 are 75 years or older
  – 2,159 State Bridges – 650 are 75 years or older
  – 1,687 Municipal Bridges – 558 are 75 years or older

Major Looming Liability if we do not invest in bridge maintenance and preservation efforts.
Questions / Comments