2019-2028
Draft Ten Year Transportation Improvement Plan Overview

Senate Transportation Committee
April 10, 2018
Ten Year Plan Process

- April 2017 - Community outreach and regional prioritization by RPCs
- July 19th – Initial GACIT meeting
- August 2017 – Meetings with RPCs Executive Directors
- September – October 2017 – 19 Public Hearings
- November 2017 – GACIT meetings & revisions
- December 2017 - Governor’s review & revisions
- January 15, 2018 - Governor’s Draft TYP transmittal to Legislature
- **January - May 2018 - Legislative review & revisions**
- June 2018 – Final TYP (2019-2028) Adopted into Law

TYP Process - Pursuant to RSA 228:99 & RSA 240
Current State of Infrastructure (con’t)

- Tiers 1 & 2 – 91% of roads are in good or fair condition
- Tiers 3 & 4 – 57% of roads are in good or fair condition
- Overall, 72% of NH’s roads (state) are good/fair
  Conversely, 28% (1,172 miles) are poor/very poor condition
Current State of Infrastructure (Roads)

Above photos depict representative conditions on poor and very poor Tier 3 & 4 roads
Current State of Infrastructure

- Overall % of Good & Fair Roads was on a downward trend over a 14 year period (2000 – 2014)
- That trend is now showing an upswing in condition due to the increased level of investment in pavement
- 72% of State Roads are in Good or Fair condition which is up 4% from conditions in 2014
The number of state owned red list bridges (poor condition) has trended upward over the last 10 years.

Over the last 10 years, on average 20 bridges per year added to the red list with 19 bridges per year removed from the red list.

Today (2018), 6% of State owned bridges or 133 are in poor condition.

This total reflects recent change in the red list definition as only bridges in poor condition are included (11 less).
Current State of Infrastructure (con’t)

- Presently (2018) - 133 State Red-List Bridges (new definition)
- Tiers 1 & 2 – 3% (59 bridges) in poor condition (red list)
- Tiers 3,4,6 – 4% (74 bridges) in poor condition (red list)
- Tier 5 - Additionally 252 Municipal Red-List Bridges (2018)
Current State of Infrastructure (Bridges)

Above photos depict a bridge in Lancaster on Tier 2 Roadway – listed as Priority #4 on State’s Red-List Bridges

- US 2 over Connecticut River
- First placed on Red List in 2013
- In TYP for replacement in 2019 (SB367 TIFIA Pledged Revenue)
Proposed Draft Ten Year Plan Strategies

1. Focus on Pavement Preservation
   - “Keeping good roads good”
   - Maintenance and Preservation strategies on existing system

2. Focus on Red List Bridges & Bridge Preservation
   - Funding to address State’s Red List Bridge backlog
   - Funding for bridge preservation work to extend bridge life

3. Dedicated SB367 funds for TIFIA loan pledged rural roads & bridges

4. Completion of I-93 & Funding for Exit 4A

5. Heightened Financial Constraint
   - FAST Act federal funding thru FY20
   - Fully financially constrained TYP
   - Increased level of accountability, predictability & ability to deliver
**Federal Funding Status**

- FAST Act federal funding 2016-2020 ($167.6M-$183M)
- $183M Federal funding assumed 2021-2026
- Approximately $42M rescission possible in 2020
  - will reduce the flexibility in how the apportionment is used on projects
- Approximately 40% reduction possible ($73M) based on federal gas tax receipts - could result in a $110 M federal program per year
- Recently (3/21/18) Congress passed & President signed Omnibus package that included funding at Fast Act apportioned levels for FFY-18 ($174.7M)
General Financial Constraint Considerations for first draft TYP (2019 – 2028)

• **Assume Level Formula Federal Funds – Projects programmed at average of $183 M/year**
  - Maintain & extend all existing programs by 2 years
  - Include $12M/yr. (federal funds) in 2026-2028 for paving
    - to replace SB367 funding directed to debt service in 2026
  - Include approximately $60M (total) for additional individual Bridge projects in 2027-2028
    - Include Vilas Bridge funded at 50%
  - Include $6M/yr. in 2025-2028 for future Red List Bridges
    - Extends existing program and increases by 20% ($5M to $6M)
  - Include additional $2M/yr. in 2026-2028 for culvert program
  - Include $50M for RPC projects in 2027/2028 ($25M/yr.)
Draft TYP Funding Synopsis

Typical Annual Funding Utilization

FAST Act Federal Funding approximately $183M/year

- Paving & Bridge Projects (avg.): $84M
- Mandated Federal (CMAQ, TA, SPR, HSIP, LTAP, etc): $34M
- GARVEE Debt Service through 2025 ($7.3M 2026-28): $24M

Annual Dedicated Funding: $142M/year

- Individual Roadway Projects (remainder funding): avg. - $41M/year

Transit Funding (FTA): averages $32 M/year

Airport Funding (FAA): averages $26 M/year
Airport Funding

• Total of $256M programmed in draft TYP (avg. $25.6M/yr)
• Funding primarily Federal Aviation Administration (FAA)
  – Grants Based (Discretionary, Entitlement & State Apportionment)
  – Formula Apportionment
  – Based on FAA Designated Priorities Nationally & Regionally
• Funding restricted for planning studies, preservation, modernization, or expansion of eligible airport facilities. Funding cannot be transferred to other transportation modes.
• NH eligible public-use airports, typically 90% FAA funds, 5% State funds & 5% local funds
• 12 Project Locations in draft TYP
Airport Locations

• Federally Eligible Airports
  – 3 Commercial Airports
    (Portsmouth, Manchester & Lebanon)
  – 9 Publicly-Owned Airports
    (Berlin, Mt Washington, Dean Memorial, Laconia, Claremont, Skyhaven, Concord, Dillant-Hopkins & Boire Field)

• Non-Fed. Eligible Airports
  – 12 General Aviation (public & privately owned) Airports are not federally eligible
Transit Funding

- Total of $324M programmed in draft TYP (average $32M/yr)
- Funding primarily Federal Transit Administration (FTA)
- Funding restricted for transit services (i.e., capital, operating, & planning). Funding cannot be transferred to other uses.
Draft TYP Funding Synopsis (con’t)

Betterment Funding $22M/year
- Preservation & Maintenance (Roads & Bridges)

Turnpike Funding for Capital & TRR averages $63M/year

SB367 Funding for I-93 Expansion, SAB, TIFIA DS
- $30M per year net of Municipal Block Grant Aid
- State Aid Bridge: $6.8M/year
- I-93 Debt Service: Averages $2.0M/year (thru 2025)
- TIFIA Pledged Paving & Bridge Work: $12M/year (paving)
  $ 9M/year (bridges)
- I-93 Debt Service 2026-2034 increases to $23.4M/year
### FY19-FY28 Estimated Program Expenditures

- **Highway Funded (state & federal)** – Average $252M per year
- **Turnpike Funded** – Average $63M per year for TRR & Tpk Capital
- **Other Modes** - Average $60M per year
- Constrained over 10-year period
Draft TYP (2019 – 2028) Funding

- Draft TYP total shows an overall $8M reduction from the current plan
- Highway Funded (state & federal) – Average $252M per year for current draft compared to average $270M in the current plan ($178M decrease)
- Turnpike Funded – Average $63M per year for TRR & Tpk Capital for current draft compared to $46M in the current plan ($170M increase)
  - $17M/year reduction in debt service payments ➔ increase in capital program
Draft TYP (2019 – 2028) Funding

### FY17-FY26 Estimated Program Expenditures
- Pavement (state & federal) – averages $78M per year
- Bridges (state & federal) – averages $76M per year
- I-93 Expansion - $80M through 2022
- Mandate Federal – averages $32M per year
- Individual Projects- $843M over ten-year period
- Transit & Airports - $592M over ten-year period
- Total Program - $3.74 Billion
Turnpike System Capital Program

Under Current Toll Structure

TIMETABLE FOR MAJOR TURNPIKE PROJECTS’ CONSTRUCTION

- Construction Dover End & GSB Rehabilitation ($79M): 2019 - 2022
- Construction of FEET Widening, Nashua-Bedford ($127M): 2021 - 2025
- Manchester Exit 7 Reconstruction ($52M): 2024 - 2026
- Manchester Exit 6 Improvements & FEET Widening ($99M): 2025 - 2028

*Only includes Tpk. portion (south of Exit 14), Does not include Federal portion - Est. cost $178M, completion 2033

$498M Projected Capital Spending (FY19-FY28)
Projected Outputs of Draft TYP (2019-2028) with Level Federal Funding

- **Pavement Resurfacing** 450 mi/year (estimated 2020-2028)
  - Preservation 133 mi/year
  - Light Capital 116 mi/year
  - Rehabilitation 12 mi/year
  - Additional Crack Seal 165 mi/year

- **State-Owned Bridges**
  - Rehabilitate / Replace: 79 bridges (61 Red list Bridges)
  - Bridge Maintenance (39 Red list Bridges over 4-year period)
  - 135 of 140 red list bridges addressed through 2028 including previous TYP projects

TIFIA Pledged Pavement Resurfacing
- 185 mi/year (estimated)
- Light Capital & Roughness Paving on Poor & Very Poor Roads

TIFIA Pledged Bridge Work
- Rehabilitates/Replaces 23 bridges
A Look Ahead – Road Condition

Based on current level of investment in the TYP

- Past years backlog of deficit paving reduced the state’s overall pavement condition from a high of 82% of roads in good or fair condition to a low of 68%

- Current and projected pavement in good or fair condition is expected to rise to 76% with the current level of investment through 2019 then decline to 66% in the outer years of the TYP.
A Look Ahead – State Bridge Condition 2018

Based on recommended 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 fair condition bridges w/ rating of 5 today than 8 years ago
- 135 of 140 red list bridges listed in 2017 will be addressed

- Current SRL bridge total – **133** (2018)
- Bridges added to SRL by 2028 - **244**
  - Approx. 80% of bridges rated “5” are expected to come on SRL over 10 Year period
- Bridges expected to be removed from SRL by 2028 - **223**
  - 121 removed by Bridge Maintenance forces
  - 102 removed by TYP projects
Unfunded Needs

• Bridge Investment
  – Additional investment of $6M/year needed for bridge preservation work (to keep bridges off red-list)
  – Additional investment of $24M/year needed to address additional 8 red-list bridges per year (bridges that are anticipated to be added to red list but not addressed during the TYP period – effectively reduce the red-list by 80 bridges over ten-year period)

• Pavement Investment
  – Additional investment of $12M/year needed to rehabilitate 1% of poor and very poor Tier 2, 3 & 4 roads each year
  – Additional investment of $12M/year needed for the pavement preservation & maintenance program, to maintain overall pavement condition of state roads at 76% good and fair.

• Total Additional Investment of $54M per year for State Roads & Bridges
GACIT Hearings
Comments/General Themes

• Transportation Alternatives
  – Increase funding for transit & support for commuter rail
  – Better connectivity for bikes/peds & invest in rail-trails

• Infrastructure – Individual Projects
  – Increase funding for roads and bridges
  – Intersection and safety improvements
  – Accelerate Turnpike projects, Tpk extension, AET

• Soundwalls – Noise Abatement

• Transportation Planning Efforts
  – Support for corridor studies
  – Utilize Complete Streets approach
# Project Change Summary

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<tr>
<th>Project Change</th>
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<th>Impacts</th>
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<tr>
<td><strong>Bedford 41859</strong> Corridor study of NH 114 from NH114/NH101 intersection in Bedford to NH114/NH114A in Goffstown</td>
<td>Add corridor study to TYP (Funding from Corridor study programmatic $350,000)</td>
<td>$</td>
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<tr>
<td><strong>Bedford - Merrimack Project 16100</strong> Improvement to Bedford Mainline Toll Plaza to Institute Open Road Tolling (TPK Capital Program)</td>
<td>Change scope: to include Institute Open Road Tolling or All Electronic Tolling Push funding from FY19-FY20</td>
<td>$</td>
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<tr>
<td><strong>Connecticut River Bridges - GARVEE Debt Service (Updated)</strong></td>
<td>Recommended - Reduce Debt Service in FY20 by $6M, FY21-FY28 increased by $0.5-$0.9/yr</td>
<td>$(210,107)</td>
</tr>
<tr>
<td><strong>Conway 40018</strong> Reconstruct NH 16 from Olympic Lane East to Village lane</td>
<td>Replace SAH funds with Federal Aid ($702,211)</td>
<td>$</td>
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<tr>
<td><strong>Conway 40638 NH16, NH 113 and NH 153 Project</strong> Revise scope of Roundabout Project to intersection improvements for NH 16/NH 153 and NH 16/NH 113. Align schedule with Conway project 40018.</td>
<td>Project 40638 - Reduce scope to intersection improvements ($3M) advance Project from FY25 to FY19 Move Const to FY19 ($3M), ROW ($200k) to FY19 &amp; PE ($400k)to FY18</td>
<td>$(1,548,097)</td>
</tr>
<tr>
<td><strong>Dover Rochester 29440</strong> Improvements to Dover &amp; Rochester Toll Plazas</td>
<td>Change scope to construct AET. Reduce construction funding from $37.4M to $11.0M</td>
<td>$(26,400,000)</td>
</tr>
<tr>
<td><strong>Epping 29608</strong> NH125 improvements from NH 27 to NH 87 Congestion and safety issues north from the junction of NH101 interchange - Extend the study area south to NH101 interchange</td>
<td>Extend limits south to NH101 - no funding increase</td>
<td>$</td>
</tr>
<tr>
<td><strong>Epping 40643</strong> Signal coordination are in same area as Project 29608 - Projects should be coordinated.</td>
<td>Combine project 40643 into 29608 and advance funding 3 years from FY25 to FY22</td>
<td>$</td>
</tr>
<tr>
<td><strong>Hampton Project 26485</strong> Hampton Branch rail corridor - Request to retain funding in Draft Ten Year Plan to continue negotiations with Pan AM</td>
<td>Roll CMAQ forward from FY18 to FY19</td>
<td>$990,000</td>
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| **Hampton Project 40797** - Increase funding for Ocean Blvd, project extend limits | Cash Flow PE 2021-2022 over 4 yrs FY19 - FY22
Combine project 29609 (Eng Study) add FY 18 funds                            | $(22,692) |
| **Henniker-Hopkinton 40633** - Rte 9 Intersection improvements               | Advance Funding 1 year from FY26 to FY25                                                                                                         | $(24,893) |
| **Hookert Project 24862** - Reconstruct and widen NH 3A from Commerce Road to Goonan Road | Remove - No available funding in SAH                                                                                                               | $(1,261,980) |
| **Laconia 24181** - Centenary Ave - Adjust estimate to better match description of work | Timber Bridge removal - reduction in FY25                                                                                                         | $(1,223,923) |
| **Laconia 40656** Court St and Project 26706 Academy St (SAB program) - swap years | Swap years - $adjusted in SAB Program                                                                                                             | -         |
| **Lebanon 40794** - Reconstruct Mechanic St/High St/Mascoma - $2.8M set aside for improvement based on recommendations from the corridor study to be completed this Fall. | Add PE $330,000 FY18
Add ROW $113,580 FY19 & Add Const $2.635M based on approved TYP - delay Const 1 year from FY19 to FY20 | $(287,320) |
| **Londonderry Project** - Intersection safety improvement NH28/Stonehenge Road. The Town of Londonderry will approximately fund this project with 50% State/50% Town | Town is willing to fund 50% of project or $670k total. Federal PE-$150k (FY19), ROW-$5k(FY19), CON-$700k(FY20) | $(855,000) |
| **Madison-Conway 11339J** - Conway Bypass, Southern Section (Earth work)    | Fund project with $1 in FY28 as a placeholder & show future year dollars                                                                         | $1        |
| **Madison-Conway 11339T** - Conway Bypass, Southern Section (Construct Bridge over Pequwket Brook and NH113) | Fund project with $1 in FY28 as a placeholder & show future year dollars                                                                         | $1        |
| **Madison-Conway 11339U** - Conway Bypass, Southern Section (Final Construction) | Fund project with $1 in FY28 as a placeholder & show future year dollars                                                                         | $1        |
| **Manchester 16099A** - Reconstruct and widen of Exit 6 on the Turnpike      | Advance construction funding one year from FY26 to FY25 including future years                                                                   | $(30,000,000) |
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<td><strong>Milford 41587 - Rehabilitation of Swing Bridge</strong></td>
<td>Advance Const 3 years from FY28 to FY25, PE &amp; ROW to FY20</td>
<td>$ (66,581)</td>
</tr>
<tr>
<td><strong>Nashua-Merrimack-Bedford-Manchester Project 13761 - F.E.E.</strong> Turnpike widening</td>
<td>Advance construction funding one year from FY22-FY26 to FY21-FY25</td>
<td>$ -</td>
</tr>
<tr>
<td><strong>Nashua 40818 - Design and Financial Plan for rail expansion from Nashua to Concord. Concord Capitol Study</strong></td>
<td>Change Project name to Nashua-Manchester-Concord Change Scope to - Design, Env Review, and financial Plan for rail and bus service with parking facilities Reduce Boston UZA (FTA5307) Programmatic</td>
<td>$ 4,000,000</td>
</tr>
<tr>
<td>Program (Statewide Programmatic) FTA5307</td>
<td></td>
<td>(4,000,000)</td>
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<tr>
<td><strong>Newington-Dover 112385 - General Sullivan Bridge Rehabilitation</strong></td>
<td>Scope Change to remove superstructure and provide the most cost effective bicycle/pedestrian connection</td>
<td>$ -</td>
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<tr>
<td><strong>Plymouth - Highland St Project - Intersection improvements - Town to make match (Local road - Fed-Aid eligible)</strong></td>
<td>Advance Const 2 years from FY27 to FY25, ROW to FY24, &amp; PE to FY 22 Town needs to provide local match</td>
<td>$ (90,687)</td>
</tr>
<tr>
<td><strong>Portsmouth 27690 - Advance Red List Bridge US1 over Hodgson Brook</strong></td>
<td>Advance Const from FY19 to FY18</td>
<td>$ (1,466,465)</td>
</tr>
<tr>
<td><strong>Public Private Partnership (P3) - Consultant services for evaluation of P3 Requests for Information (Rfi) to support development of ranking criteria</strong></td>
<td>Add to Ten Year Plan FY19 &amp; FY20 Statewide 4183</td>
<td>$ 100,000</td>
</tr>
<tr>
<td><strong>Rockingham Regional Priority Projects</strong> - Replace Hampton (41584) $7.6M with 3 projects totaling $6.5 M and a request by Rockingham RPC**</td>
<td>Recommendation to replace Hampton 41584 @ $7.6M with 3 projects totaling $6.5M in 2028 1) New Castle/Rye $2.8M 2) Stratham (Bunker Hill/Rtk 108) $1.3M 3) Hampstead $ 2.4M And Add Seabrook with 50% Match from Town or $1.4M total. Federal PE-$150k(FY19), ROW- $100k(FY20), CON-$1.15M(FY21)</td>
<td>$ 300,000</td>
</tr>
<tr>
<td><strong>New Castle/Rye 41713</strong> $2.8M</td>
<td></td>
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<tr>
<td><strong>Stratham 41711 (Bunker Hill/Rtk 108)</strong> $1.3M</td>
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<tr>
<td><strong>Hampstead 41717</strong> $2.4M</td>
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<tr>
<td><strong>Seabrook 41712</strong> $2.8M (4-Lane Proposal) Local match by town $1.4 M</td>
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<td>Statewide Corridor study Program (New)</td>
<td>$700,000 per year to fund 2 studies (FY 21 to FY 28)</td>
<td>$5,600,000</td>
</tr>
<tr>
<td>Funding Source: Flexing CMAQ to STBG-Flexible ($700,000/year)</td>
<td>Flexed CMAQ Funds (FY 21 to FY 28)</td>
<td>($5,600,000)</td>
</tr>
<tr>
<td>Tilton Project 29753 - Reconstruct intersection of US-302 (Meadow St), Bridge Street, and Saranac St - safety improvement</td>
<td>Remove - No available funding in SAH</td>
<td>($2,593,170)</td>
</tr>
<tr>
<td>Walpole-Charlestown 14747 - From North Walpole reconstr. to NH 12A in Charlestown, add Shoulders, Improve drainage, Relocate RR</td>
<td>Remove &quot;Relocate RR&quot; from scope</td>
<td>$-</td>
</tr>
<tr>
<td>Windham 40563 - NH 111 Corridor Engineering Study from Wall St intersection to Lowell Rd / Hardwood Rd intersection</td>
<td>Change scope &quot;to Ledge Road/London Bridge Road intersection&quot; to extend project limits</td>
<td>$-</td>
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<tr>
<td><strong>Total Impact</strong></td>
<td></td>
<td>($2,376,272)</td>
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THANK YOU

QUESTIONS & COMMENTS