Governor’s Advisory Commission on Intermodal Transportation

2021-2030 Draft Ten Year Plan Overview
Kickoff Meeting #1
June 19, 2019

DOT Room 114 –Concord NH
Presentation Outline

- GACIT Process Overview
- Current State of Infrastructure
- CMAQ Program Review
- Corridor Study Program Review
- Design-Build Project Delivery Concept Review
- July 31st Meeting Agenda
Ten Year Plan Process Pursuant to RSA 228:99 and RSA 240

• Fall 2018 – NHDOT and RPC staff work together to develop common project evaluation criteria
• January 2019 – RPC’s submit initial draft of prioritized projects to NHDOT for review
• March 2019 – comments provided to RPC’s
• April 2019 - Community outreach and regional prioritization by RPC’s complete
• June 19th & July 31st - Initial GACIT meetings
• July-August 2019 – Meetings with RPC Executive Directors
• August 14, 2019 – GACIT Hearing - NHDOT Draft TYP (2021-2030) Release
Ten Year Plan Process Pursuant to RSA 228:99 and RSA 240

- **June 19th & July 31st** - Initial GACIT meetings
- **July-August 2019** – Meetings with RPC Executive Directors
- **August 14, 2019** – GACIT Meeting #3 - NHDOT Draft TYP (2021-2030) Release
- **September - October 2019** - Public Hearings
- **November 2019** - GACIT meetings and revisions
- **December 2019** - Governor’s review and revisions
- **January 2020** - Governor’s Draft TYP transmittal to Legislature
- **January - May 2020** - Legislative review & revisions
- **June 2020** - Final TYP (2021-2030) Adopted into Law
Current State of Infrastructure (Tiers)

- **Tiers 1 & 2 (Statewide Transportation Corridors)**
  - Tier 1 – Interstates, Turnpikes & Divided Hwys
    - 845 miles
  - Tier 2 – Major Statewide Corridors (US 4, US 3, NH 10, NH 25)
    - 1429 miles
  - These are typically higher volume, higher speed facilities. Important for commuters, tourism, and freight movement of goods
Current State of Infrastructure (Tiers)

• Tiers 3 & 4 (Regional Corridors & Local Connectors)
  – Tier 3 – Regional Corridors (Rte. 140, Rte. 135, Rte. 112, Rte. 108). Moderate speeds, moderate traffic volumes, provide connectivity within regions – 1438 miles
  – Tier 4 – Secondary Highways & Unnumbered state roads (Route 103A in Sunapee or Lowell Rd in Windham). Usually low speed, low traffic volumes, provide local connections within or between communities – 896 miles
Current State of Infrastructure (Roads)

- Tier 1 – 96% in good condition - Target 95%
- Tier 2 – 87% in good or fair condition – Target 90%
- Tier 3 – 76% in good or fair condition – Target 80%
- Tier 4 – 64% in good or fair condition – Target 65%
- Overall, 79% of NH’s roads (state) in good or fair condition
- Conversely, 21% (950 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.
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 plateau at 81% with the current level of investment through 2021 then decline to a low of 47% in 2030
Current State of Infrastructure (Bridges)

Presently (2019) - 129 State Red-List Bridges
- Tiers 1 & 2 – 2.6% (56 bridges) in poor condition (red list)
- Tiers 3, 4, 6 – 3.4% (73 bridges) in poor condition (red list)
- Tier 5 - Additionally 241 Municipal Red-List Bridges (2019)
Photos depict a bridge in Lyme, NH – Thetford, VT on Tier 4 Roadway – listed as Priority #7 on State’s Red-List Bridges

- East Thetford Rd over Connecticut River
- First placed on Red List in 2013
- Adv. Date Jan 2020 (Surplus General Funding (HB1817) & VT Funding)
Photos depict a bridge in Swanzey on Tier 3 Roadway – listed as Priority #33 on State’s Red-List Bridges

- NH 32 over Martin Brook
- First placed on Red List in 2000
- In TYP for replacement in 2022 (SB367 TIFIA Pledged Revenue)
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
- 124 of 129 red list bridges listed in 2019 will be addressed

- Current SRL bridge total – 129 (2019)
- Bridges added to SRL by 2030 - 192
  - Approx. 60% of bridges rated “5” are expected to come on SRL
- Bridges expected to be removed from SRL by 2030 - 163
  - 72 removed by Bridge Maintenance forces
  - 91 removed by TYP projects
State & Municipal Bridge Age

- Of the 3,849 State & Municipal Bridges, 1,212 are 75 years or older
  - 2,161 State Bridges – 674 are 75 years or older
  - 1,688 Municipal Bridges – 538 are 75 years or older
- Major Looming Liability if we do not invest in bridge maintenance and preservation efforts.
Trend: State-Owned Bridge Postings

Note: Includes E-1, E-2, C-1, C-2, C-3, Tonnage, and Closed Bridge Postings.
*71 bridges removed in 2017 to comply with Senate Bill 38
State Bridge Aid Program

- Provides state funds to municipalities for bridges
- $8.5M total per year, 20% match req’d by municipality
- 120 bridges enrolled currently through 2029 (64 Red Listed)
- 84 bridges on the waiting list (53 Red Listed)
  - 20 years of projects at current funding level (2049)
- New Ranking Criteria developed to add projects to TYP
  - Condition 70% (of total score)
  - Importance 15%
  - Risk 6%
  - Weight posting 4%
  - Bridge Type 3%
  - Bridge/Capita 2%
- Annual report on active projects provided to G & C
Congestion Mitigation & Air Quality (CMAQ) Program

- Provides federal funds for transportation projects with emissions reductions
  - Signal optimization
  - Alternative fuel projects (charging stations)
  - ITS technology
  - Transit capital & operating assistance
  - Bike/Ped improvements providing reduction in single occupant vehicle travel
  - Rail network improvements
- $16.9 M Total Funds (20% match required)
  - 2021 & 2022 funding years
- $1.5 M max funding per project
CMAQ Program

– Letters of Interest due 6/14/19
– Applications due 9/6/19
– Air Quality Analysis – completed by DOT & RPC’s
– State Team will score the applications
  • Project readiness & community support
  • Financial readiness
  • Stewardship & Sustainability
  • Air quality benefits – cost benefit by category
– DOT will submit recommendations to GACIT for final decision on projects – November 2019
Corridor Study Program

- Program created 2019-2028 TYP
  - Will inform future TYP’s – project identification
- $700,000/year – 2 studies/year
- Funding begins in FFY 2021

Corridors

- Bedford - NH 114/New Boston Rd (EC District 4)
- Epping to Rochester - Route 125 (3/4)
- Epsom to Lee Route 4 (4)
- Hillsborough to Hopkinton-Route 9 (2/5)
- Keene - Swanzey Factory Road-Route 101 project (2)
- Kingston to Epping - Route 125 - South of Route 101 (3)
- Madbury - Route 155 (4)
- Milton to Errol - Route 16 (1)
- Newfields to Newmarket - Route 108 (3)
- Northwood - Route 4 (business district) (4)
- Swanzey to Peterborough-Route 101 (2/5)
Corridor Study Prioritization

- DOT & RPC’s will identify ranking criteria & prioritize corridors
- GACIT will review and approve process & prioritization
- Potential Criteria
  - Safety/Accident History
  - Mobility/Congestion
  - Traffic Volume
  - Economic Development
- Timeline
  - Program initiation (October 2020, FFY 2021)
  - Establish draft criteria & prioritization approach for approval by GACIT during 2023-2032 TYP update (July 2021)
  - Issue first assignment (August 2021)
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
Project Delivery

• Design-Bid-Build – Typical Delivery
  – DOT designs the project, advertises for construction bids, awards construction contract to low bidder

• Design-Build – Limited Use
  – DOT completes preliminary design, issues RFP to complete the design & construct, D-B Teams respond & Contract is awarded to Best Valued proposal determined by pre-established ranking process by DOT Team

• Why Design-Build?
  – Innovation - solution drives means & methods of construction
  – Construction Sequencing - Constructability drives sequencing
  – Accelerate Delivery & Completion
  – Time Savings & Potential Cost Savings
Project Delivery

• 2018 – 84 projects, $150M* Construction
  – 1 Design-Build Contract – Durham Bunker Creek Br., $7.1M
• 2019 – 82 Projects, $260M** Construction
  – 1 Design-Build Contract planned, I-93 Exit 4A, $63M

Other Projects under consideration
• New Castle-Rye $ 10 M 2021
• Nashua-Bedford FEET $125 M 2021
• General Sullivan Bridge $ 32 M 2021
• Seabrook-Hampton $ 33 M 2023
• Bow-Concord $235 M 2025
• Manchester I-293 Exit 6 & 7 $151 M 2025

*2018 Final Ad Schedule
**May 2019 Ad Schedule
Next GACIT Meeting

Wednesday July 31\textsuperscript{st} – Kingston Library – 2pm start

Agenda

• 2019 & 2020 Program Summary
• Color of Money – Funding Review
• Establish Financial Constraint for Draft TYP
• Confirm Strategic Priorities

Hearing #1 - August 14\textsuperscript{th} – Present Draft TYP