

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

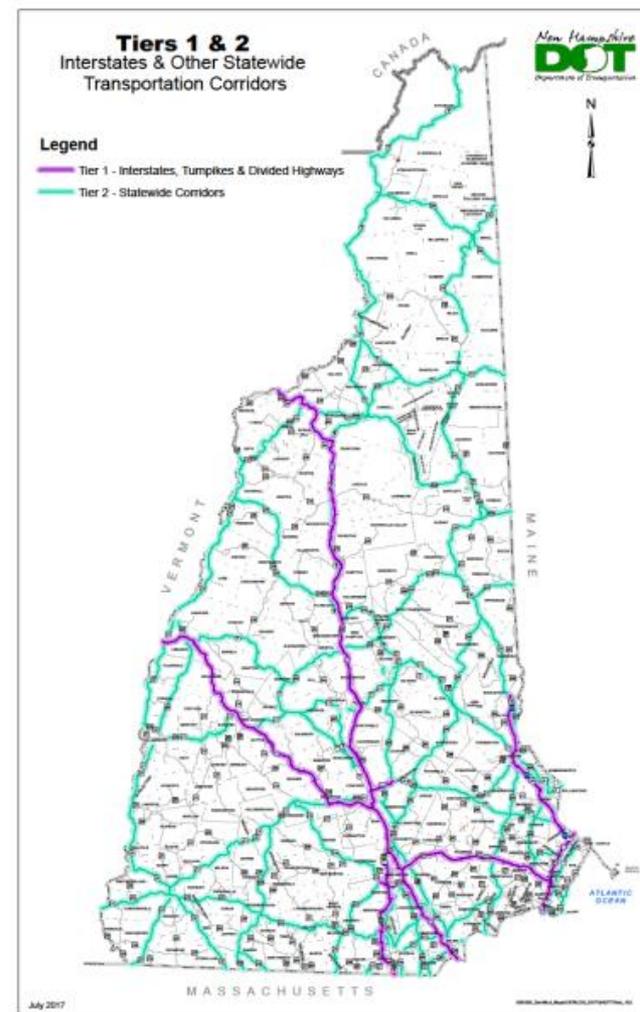
- **Fall 2018 – NHDOT and RPC staff work together to develop common project evaluation criteria**
- **January 2019 – RPC's submit initial draft of prioritized projects to NHDOT for review**
- **March 2019 – comments provided to RPC's**
- **April 2019 - Community outreach and regional prioritization by 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

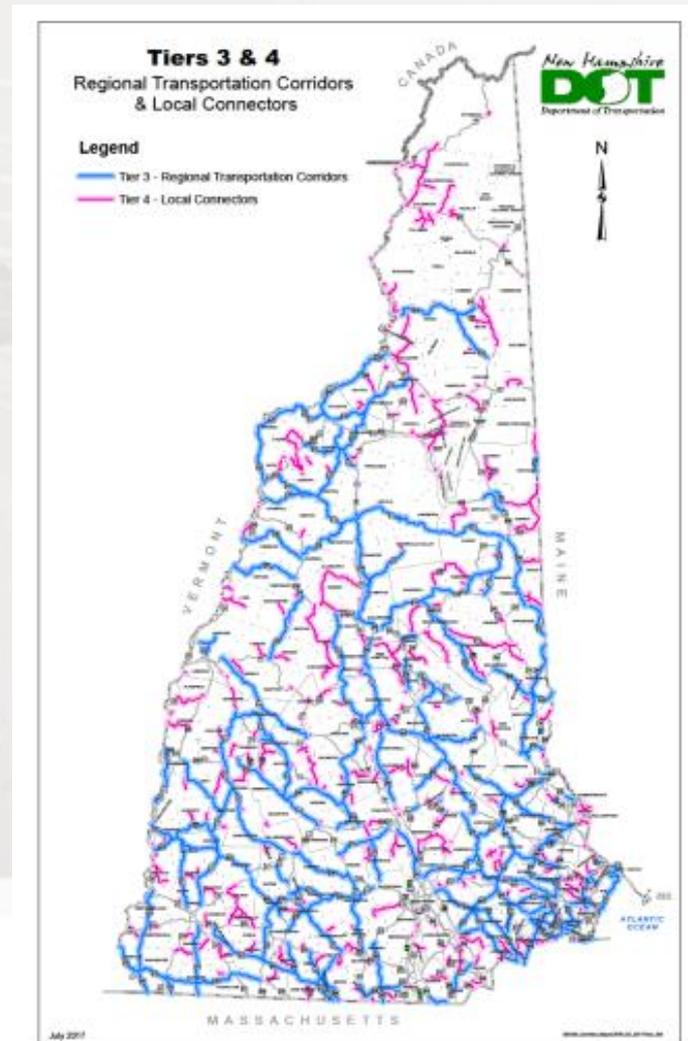
Current State of Infrastructure (Tiers)

- 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

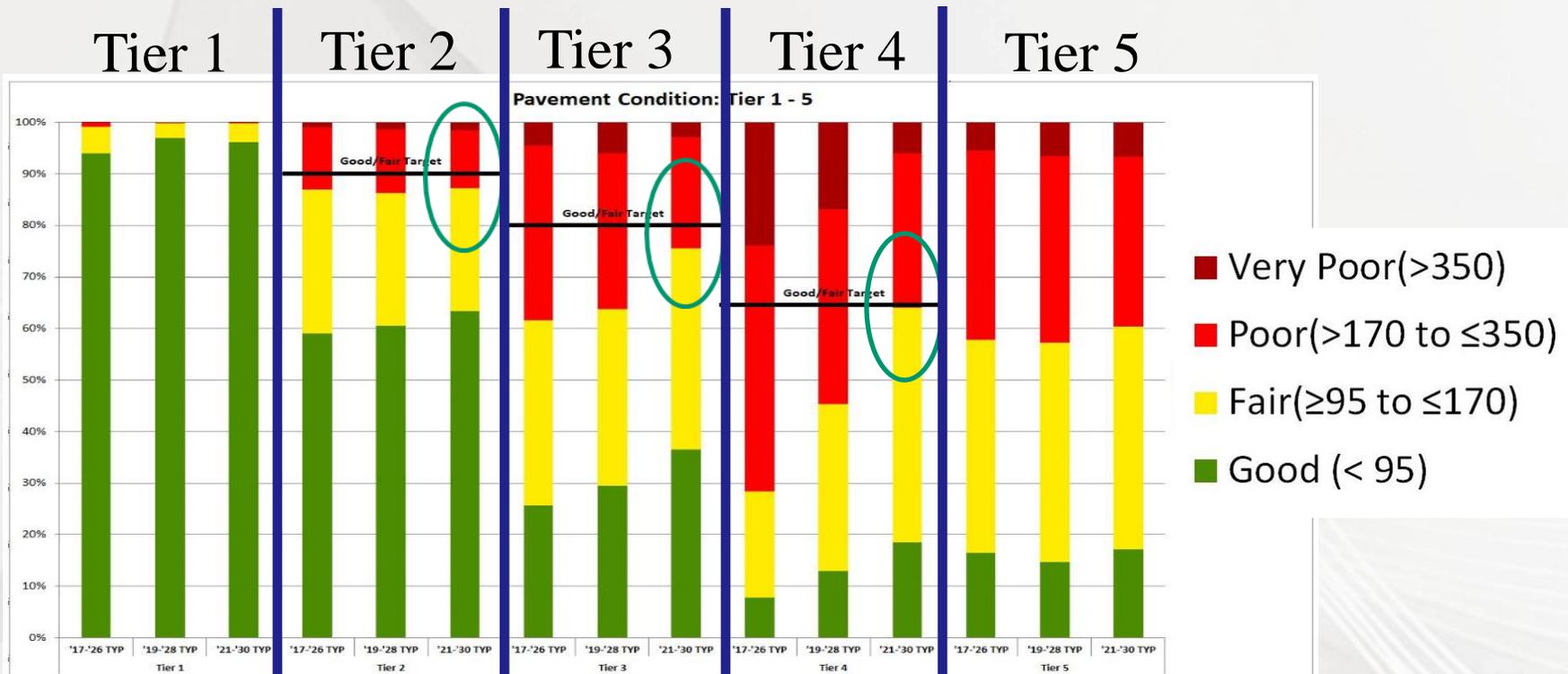


Current State of Infrastructure (Tiers)

- 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)



Tier 3: NH 129 (Loudon)



Tier 3: NH 12A (Alstead)



Tier 4: Rhododendron Road (Fitzwilliam)

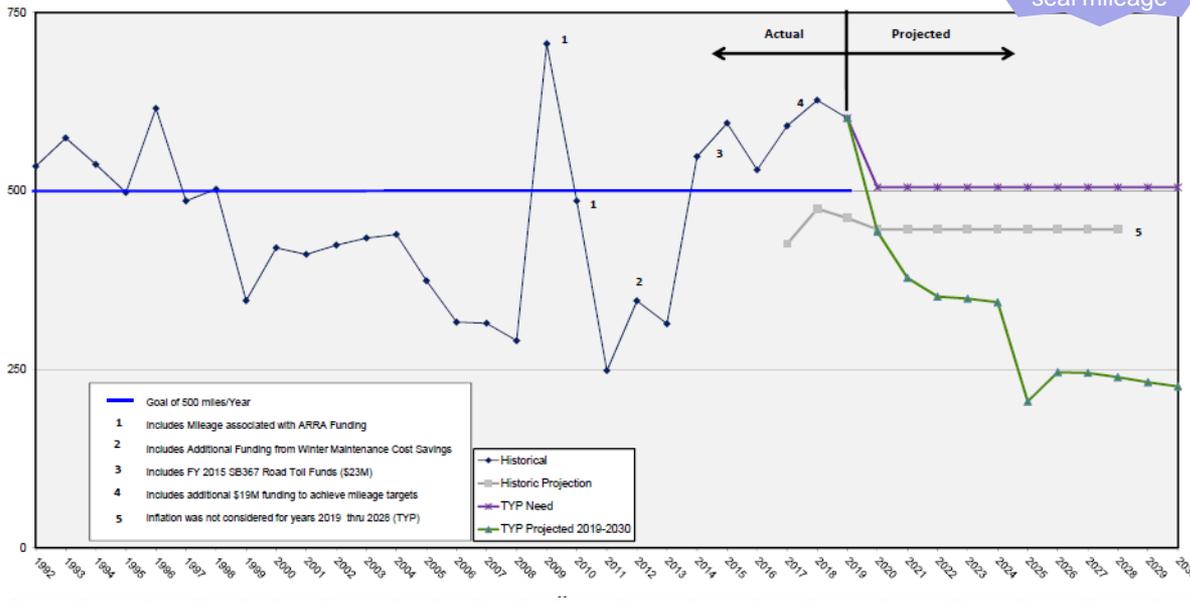


Tier 4: Village Road (Surry)

Above photos depict representative conditions on poor and very poor Tier 3 & 4 roads

A Look Ahead – Road Condition

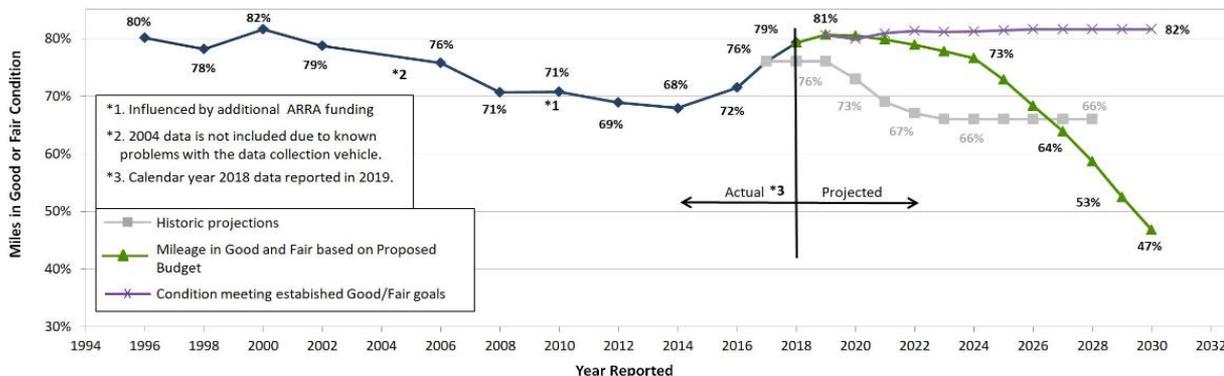
NHDOT Miles of Road Resurfaced
1992 to 2018 Actual; 2019 to 2030 Proposed ⁵



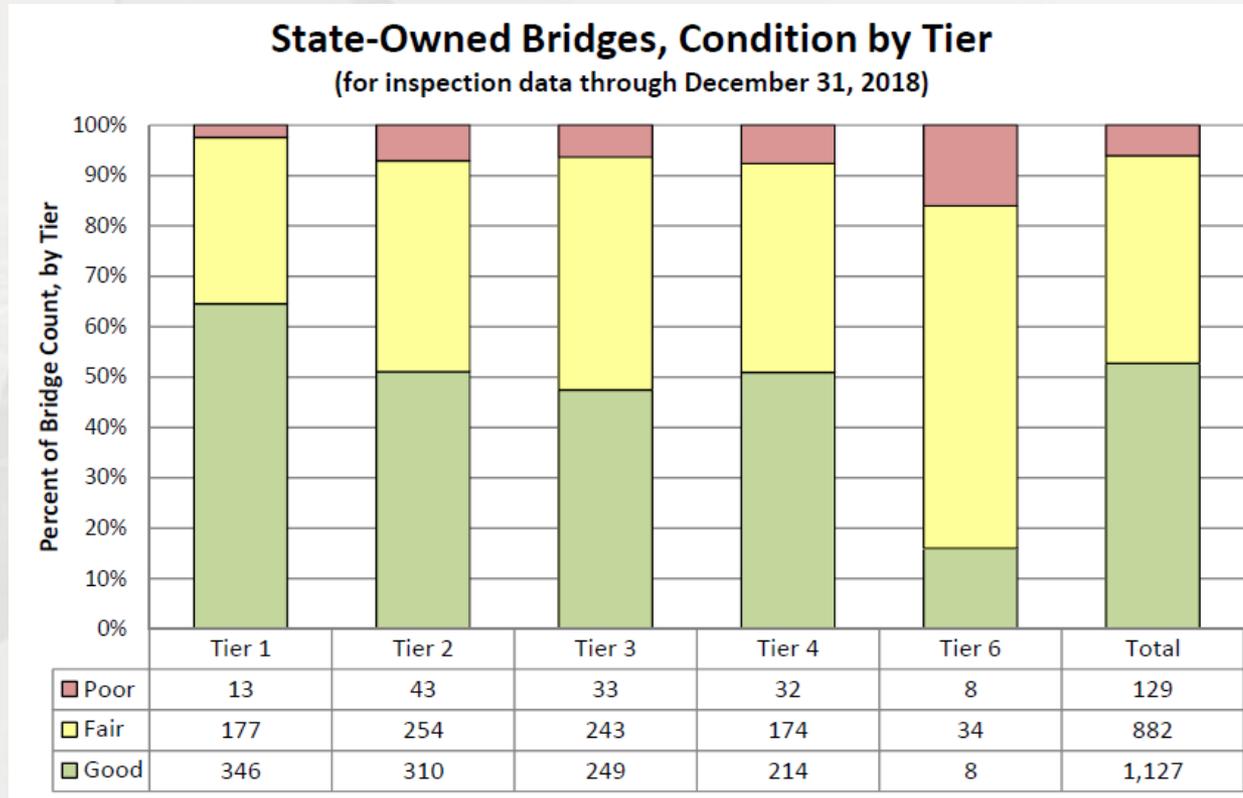
Based on current level of investment in the TYP

- 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

NH Pavement Condition
1996 to 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)

Current State of Infrastructure (Bridges)



- 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)

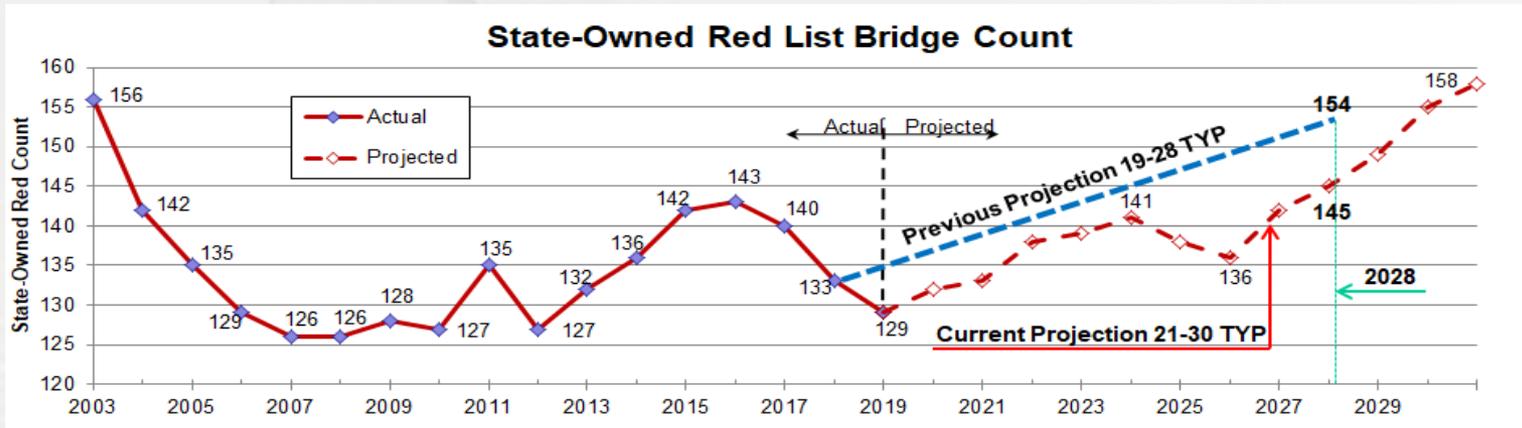
Current State of Infrastructure (Bridges)



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)**

RED LIST PROJECTION



State-Owned Counts	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Poor Count ("4" or less)	127	135	127	132	136	142	140	140	133	129
Fair Count ("5")	254	261	267	271	286	295	295	300	305	310
Fair Count ("6")	527	522	517	508	517	506	535	544	561	572
Good Count ("7" or greater)	1189	1191	1206	1216	1193	1194	1163	1150	1137	1127
Black (non-hwy/closed)	30	27	26	26	23	23	23	24	25	24
Total State-Owned Count	2127	2136	2143	2153	2155	2160	2156	2158	2161	2162

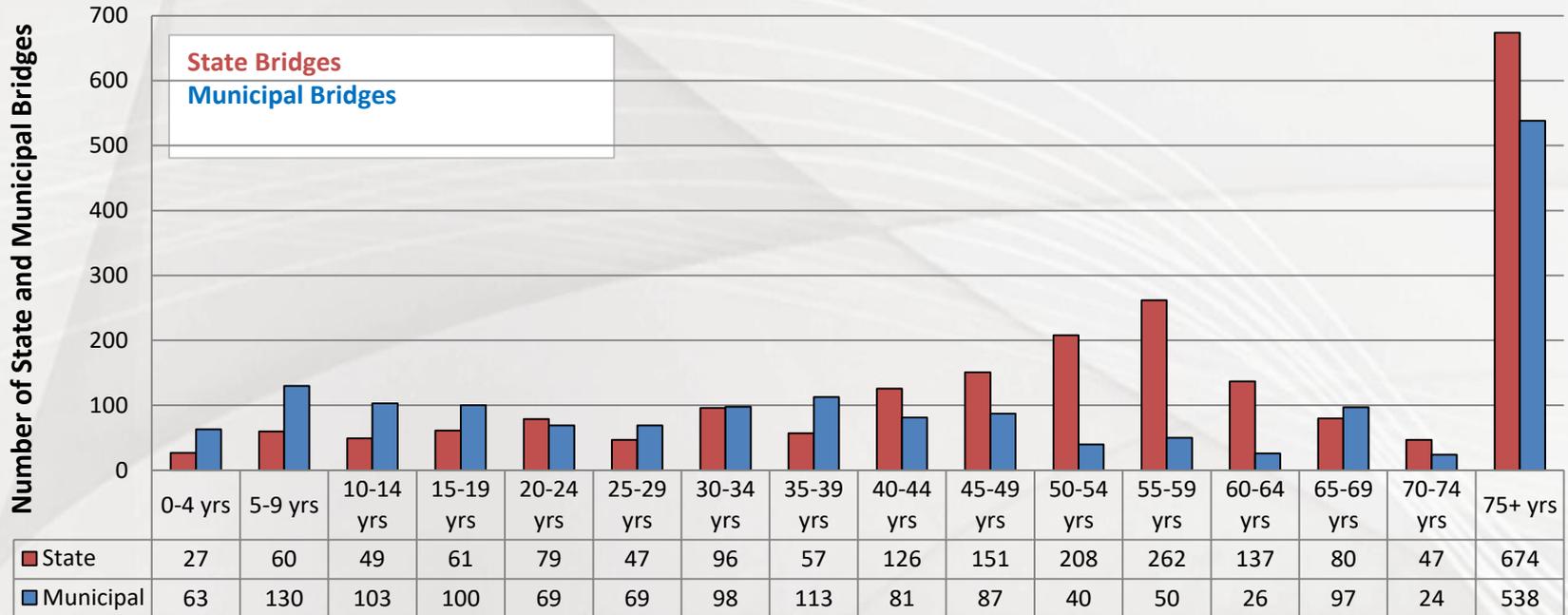
Based on recommended level of investment in draft TYP

- 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

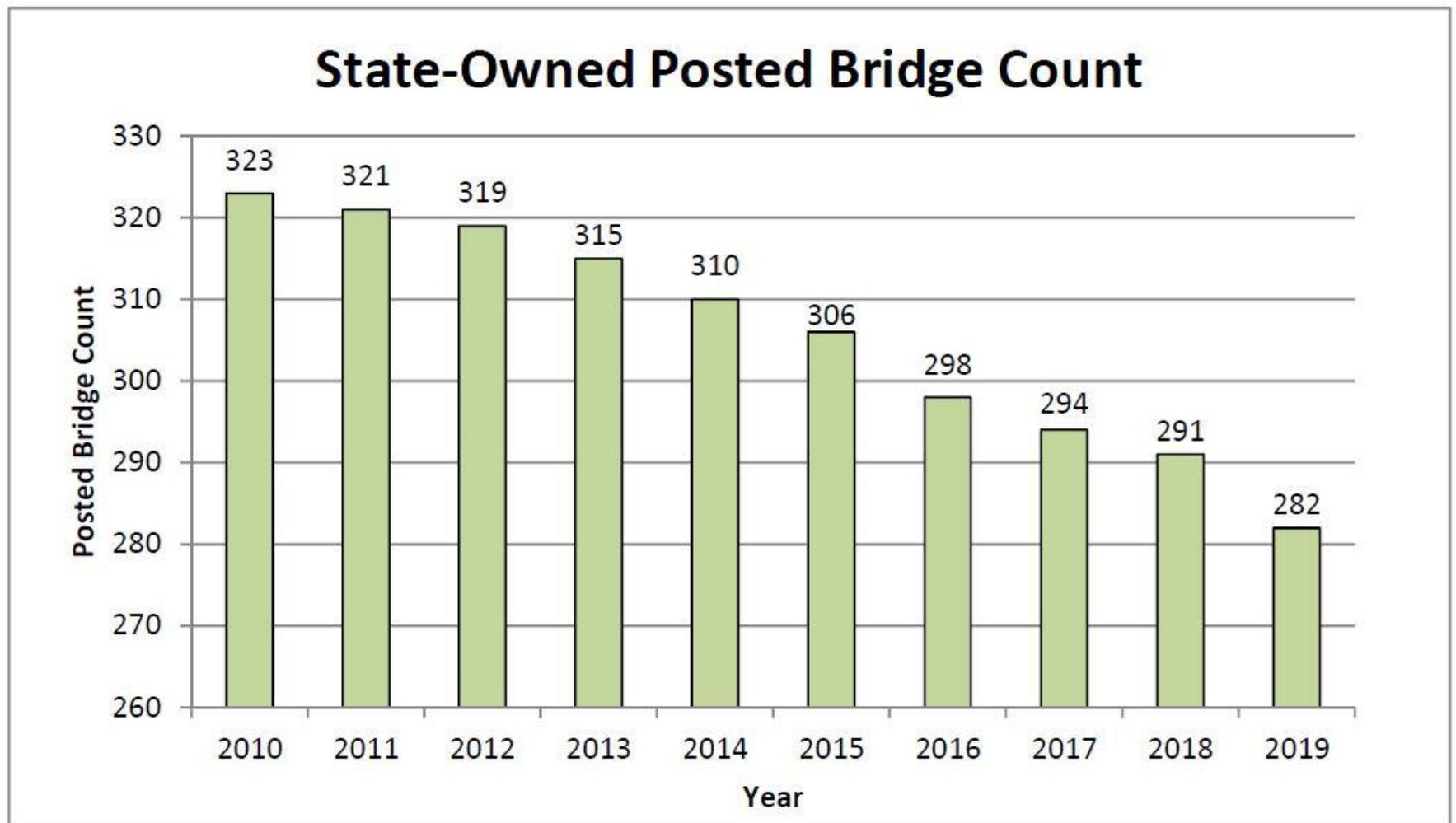
State & Municipal Bridge Age

Bridge Count per Age Category (5-year Increments, All Bridges)
(per NBI data submitted to FHWA on March 15, 2018)



- **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.**

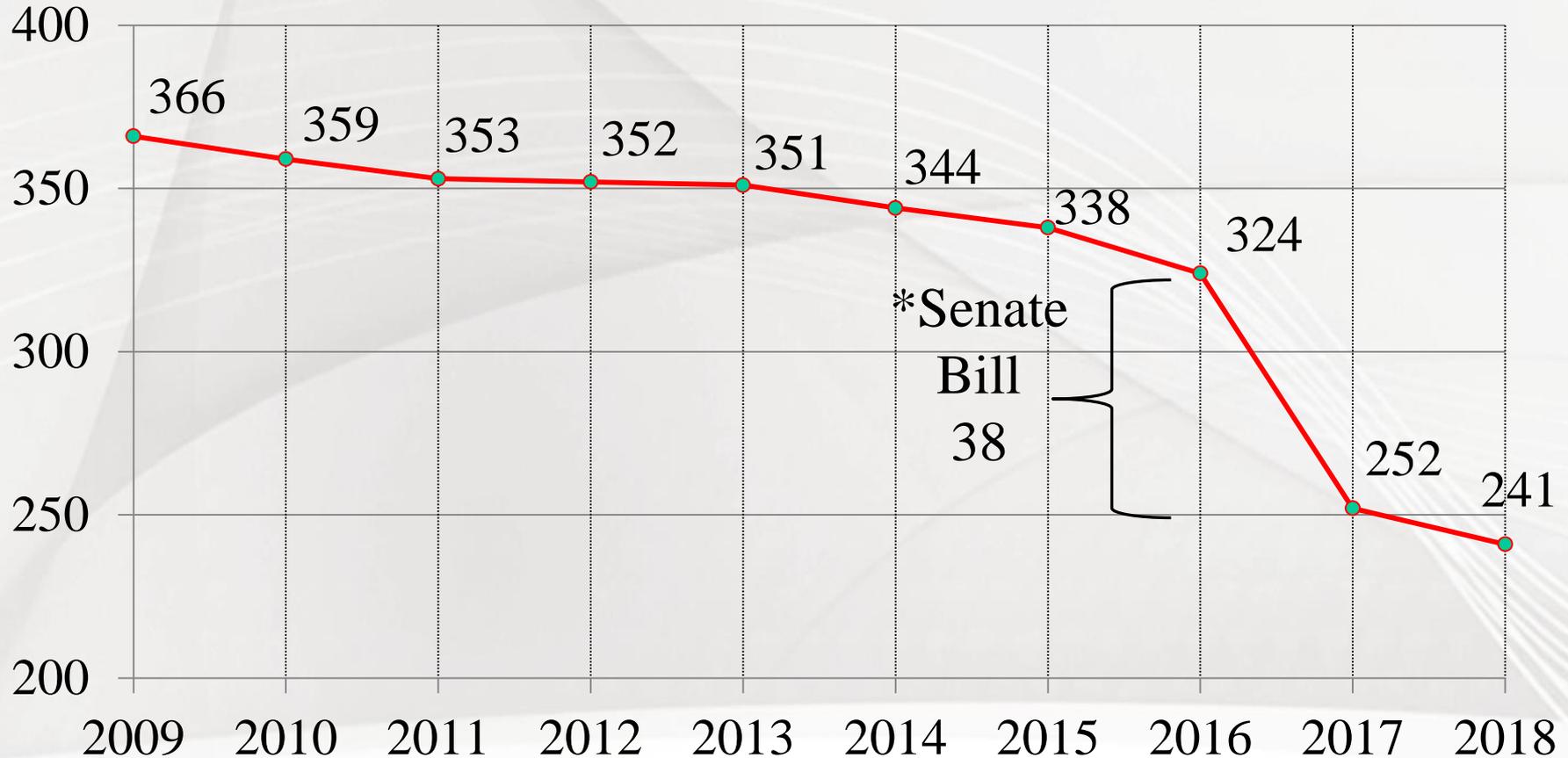
Trend: State-Owned Bridge Postings



Note: Includes E-1, E-2, C-1, C-2, C-3, Tonnage, and Closed Bridge Postings.

State Bridge Aid Program

Municipal Red List Bridges by Year



*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 31st – 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 14th – Present Draft TYP



Questions / Comments