



Governor's Advisory Commission on Intermodal Transportation



Transportation excellence enhancing the quality of life in New Hampshire

2017 - 2026 Ten Year Plan Kickoff Meeting

July 22, 2015

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House Public Works Changes to 2015-2024 Ten Year Plan

March 24, 2014

Summary of House Public Works & Highways changes to Ten Year Transportation Plan:

(Page numbers reference the revised book, Yellow cover)

1. Eliminate Betterment guard rail replacement and reallocate to secondary roadway rehabilitation to six DOT districts according to Betterment formula

- remove project Statewide BGRR (former pg. 70), \$1.2m/yr
- increase funding on project Statewide BRSR (pg. 67) by \$1.2m/yr from \$2.4 to \$3.6m/yr

2. Eliminate Exit renumbering and reallocate to paving on rural collector/arterials

- remove project Statewide Traffic [9010] (former pg. 74), \$1.1m
- increase funding on project Statewide PRRCS (pg. 65) by \$1.1m

3. Utilize GARVEE bonds for Sarah Long Bridge replacement project and transfer the federal funds in years 2015 – 2018 to fund I-93 widening project and the remaining cost in the Bedford Route 101 widening

- modify funding on project Portsmouth-Kittery 15731 (pg. 42) to show use of GARVEE (2015-2017) add debt service project 15731D (pg. 43) \$8m/yr debt service (2015-2017), \$10m/yr debt service (2018-2024)
- add project Salem-Manchester, I-93 reconstruction 14633# (pg. 46), \$51m: \$40m federal funds (2015- 17), \$11m GARVEE bonds, add debt service project 14800J (pg. 51)\$2m/yr debt service (2018-24)
- Reduce unfunded I-93 total from \$250m to \$200m, project Salem-Manchester 10418C# (pg. 115)
- increase funding on the approximate 2 miles in Bedford 13953 (pg. 12) by approx. \$8m

4. Potential additional revenue from SB 367 if enacted:

- \$12m in FY 2015 to rehabilitate/reconstruct very poor condition roadways (approx. 36 miles)
 - increase funding on Betterment Roadway Rehabilitation, project Statewide BRSR (pg. 67) by \$12m in FY 2015 (SEE PAVING MAP and ATTACHMENT “A”)
- \$13m in FY 2015 to pave roads in fair to poor condition (approx. 190 miles)
 - increase funding on Betterment Resurfacing, project Statewide Districts BRES (pg. 66) by \$13m in FY 2015 (SEE PAVING MAP and ATTACHMENT “B”)
- \$7m to State Aid Bridge Program (approximately 10 additional Municipal Bridges)
 - increase funding on project Statewide SAB (pg. 62) by \$7m in 2015

5. Turnpike Improvements:

- increase Preliminary Engineering on project Bow-Concord 13742 (pg 87) by \$2m in 2017
- remove Turnpike Administration Building project, Concord [8279] (former pg 86), \$4.9m
- remove All Electronic Tolling (AET) at Exit 11 I-93 ramp project Hooksett [9015]; show as an unfunded priority pilot project Statewide AET pilot, (pg 120), \$1.3m
- add as unfunded priority w/ contingencies* removal of the Exit 11 and Exit 12 ramp tolls, projects Merrimack [9023 and 9014 respectively] (pg 120) \$1.6m each

*contingent upon the new location of the ORT/AET Bedford mainline toll plaza being to the south of its present location and the transfer of Continental Blvd. to the Town of Merrimack in “as is” condition.

Meeting Goals

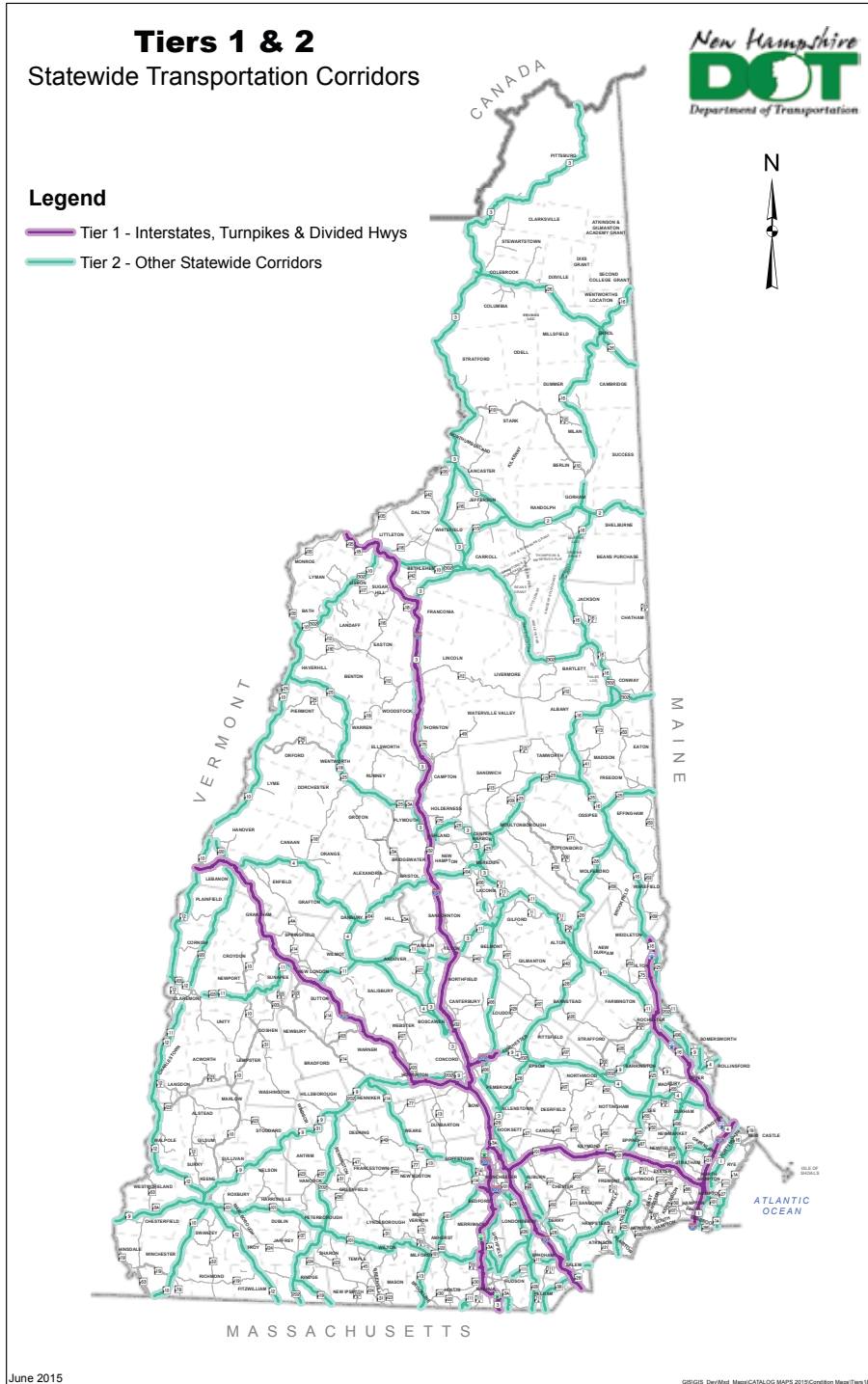
- Overview
- Ten Year Plan process
- Current state of the Infrastructure (Tiers, Roads, & Bridges)
- Proposed TYP Synopsis
- Items for Considerations
- TIFIA
- Ten Year Plan Schedule

Ten Year Plan Process Pursuant to RSA 228:99 and RSA 240

- April 2015 - Community outreach and regional prioritization by RPC's
- July 22nd - Initial GACIT meeting
- August 2015 - Meetings with RPCs Executive Directors
- August 26, 2015 - NHDOT Draft TYP (2017-2026) Release
- September - October 2015 - Public Hearings
- November 2015 - GACIT meetings and revisions
- December 2015 - Governor's review and revisions
- January 15, 2016 - Governor's Draft TYP transmittal to Legislature
- January - May 2016 - Legislative review & revisions
- June 2016 - Final TYP (2017-2026) Adopted into Law

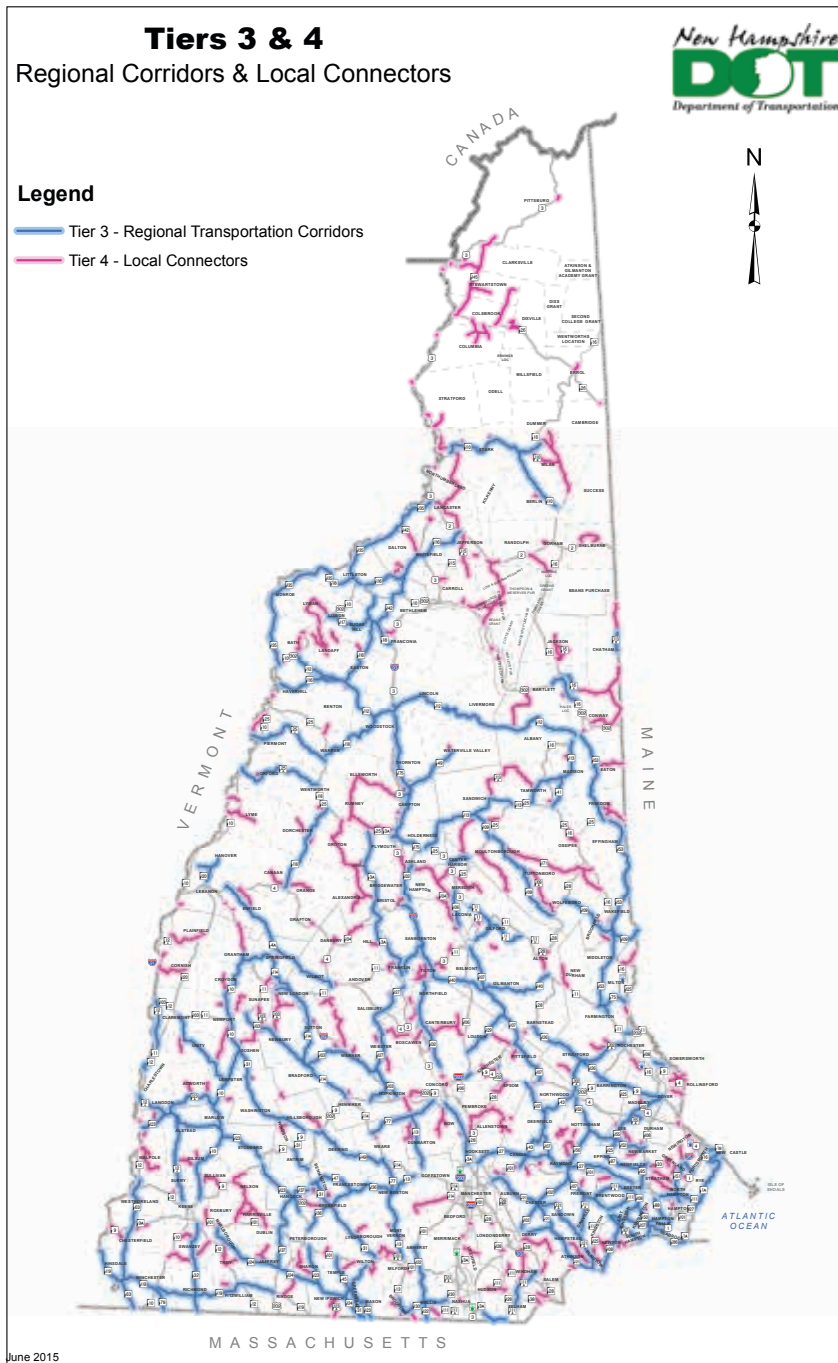
Current State of Infrastructure (Tiers)

- Tiers 1 & 2 (Statewide Transportation Corridors)
 - Tier 1 – Interstates, Turnpikes & Divided Hwys
 - Tier 2 – Major Statewide Corridors (US 4, US 3, NH 10, NH 25)
 - These are typically higher volume, higher speed facilities. Important for commuter, tourist, and freight movement of goods



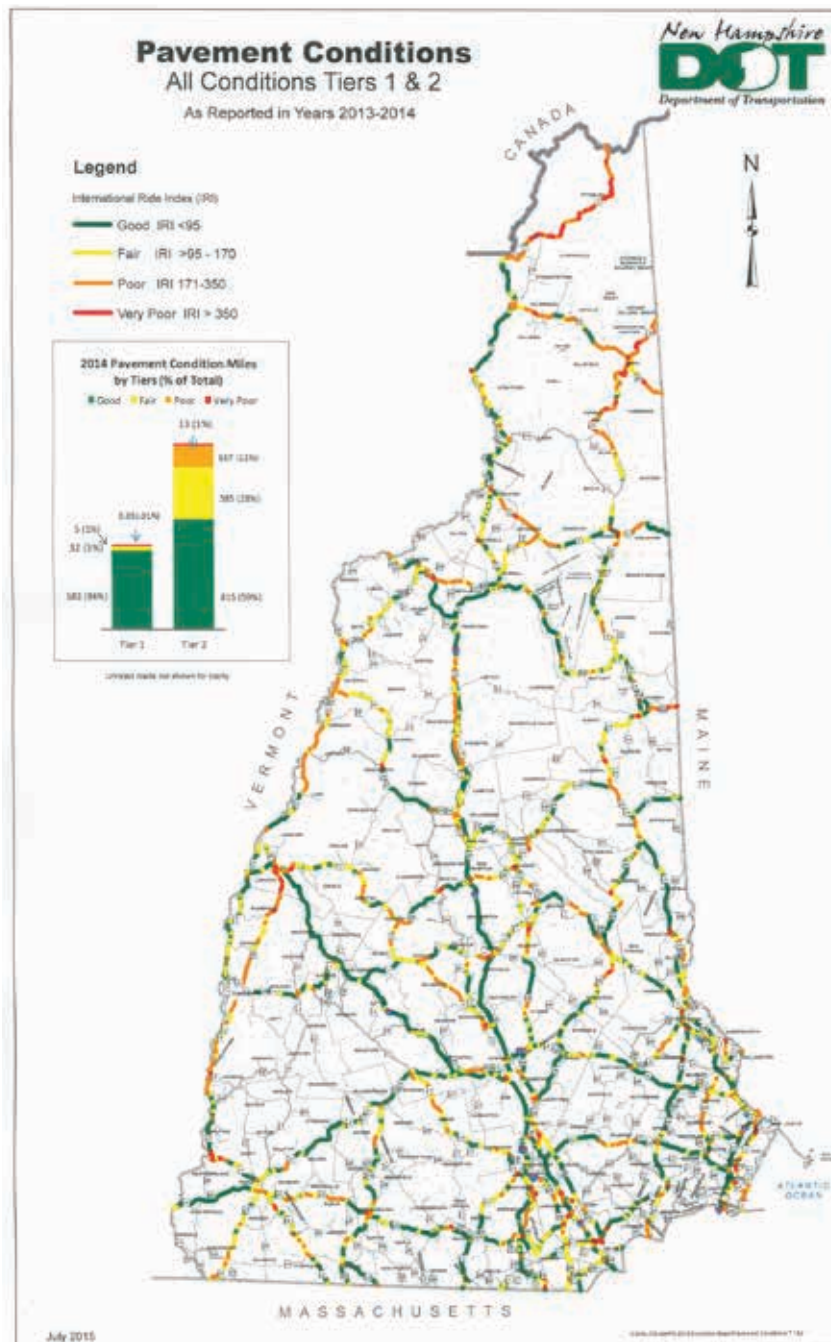
Current State of Infrastructure (Tiers)

- Tiers 3 & 4 (Regional Corridors & Local Connectors)
 - Tier 3 – Regional Corridors (Rte 4A, Rte 135, Rte 112, Rte 108). Moderate speeds, moderate traffic volumes, provide connectivity within regions
 - Tier 4 – Secondary Highways & Unnumbered state roads (Route 103A in Sunapee or Stinson Lake Rd in Rumney). Usually low speed, low traffic volumes, provide local connections within or between communities



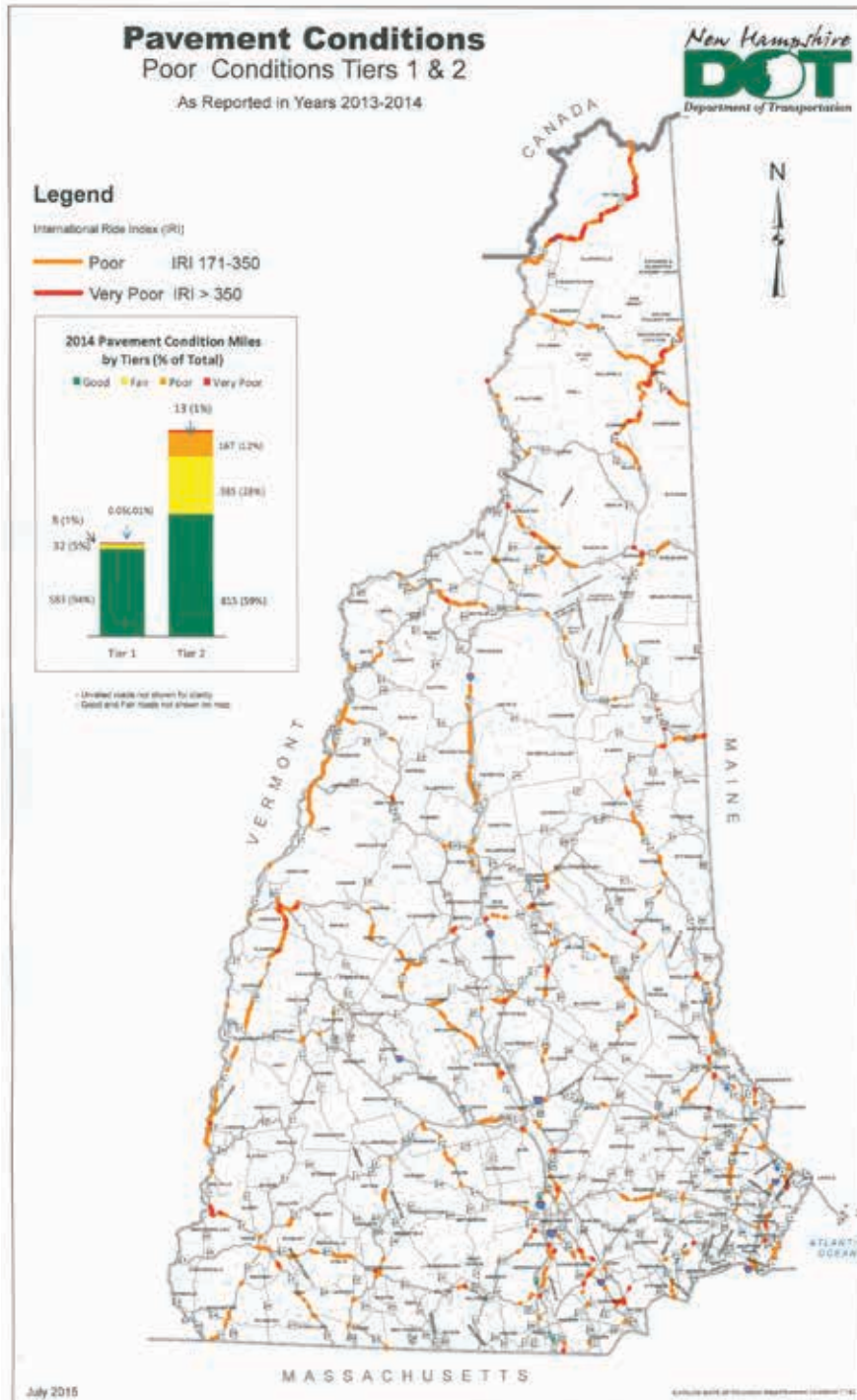
Current State of Infrastructure

- Tier 1
 - 99 % of pavement in good or fair condition
 - 1% of pavement in poor or very poor condition
- Tier 2
 - 87% of pavement in good or fair condition
 - 13% of pavement in poor or very poor condition



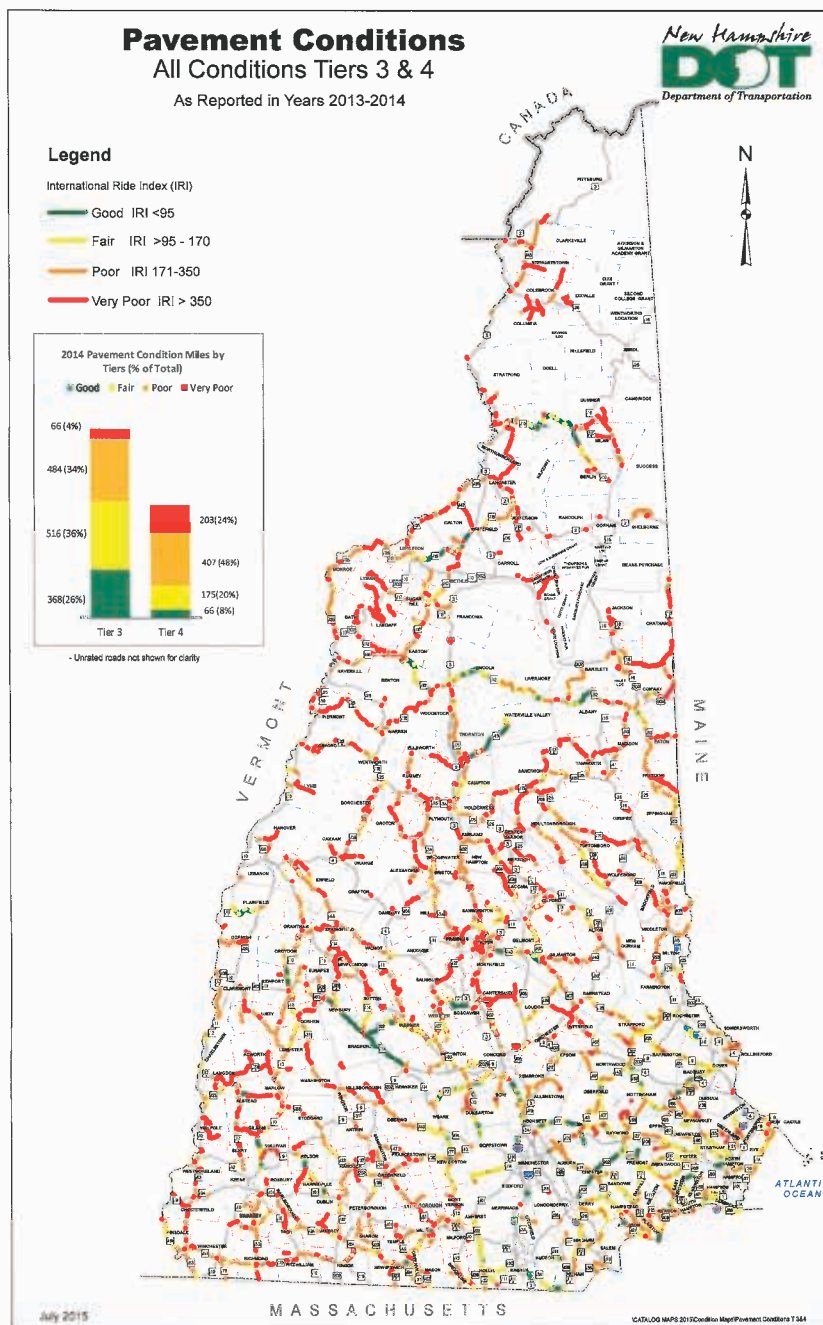
Current State of Infrastructure

- Tier 1
 - 5.4 miles of pavement in poor or very poor condition
- Tier 2
 - 180 miles of pavement in poor or very poor condition



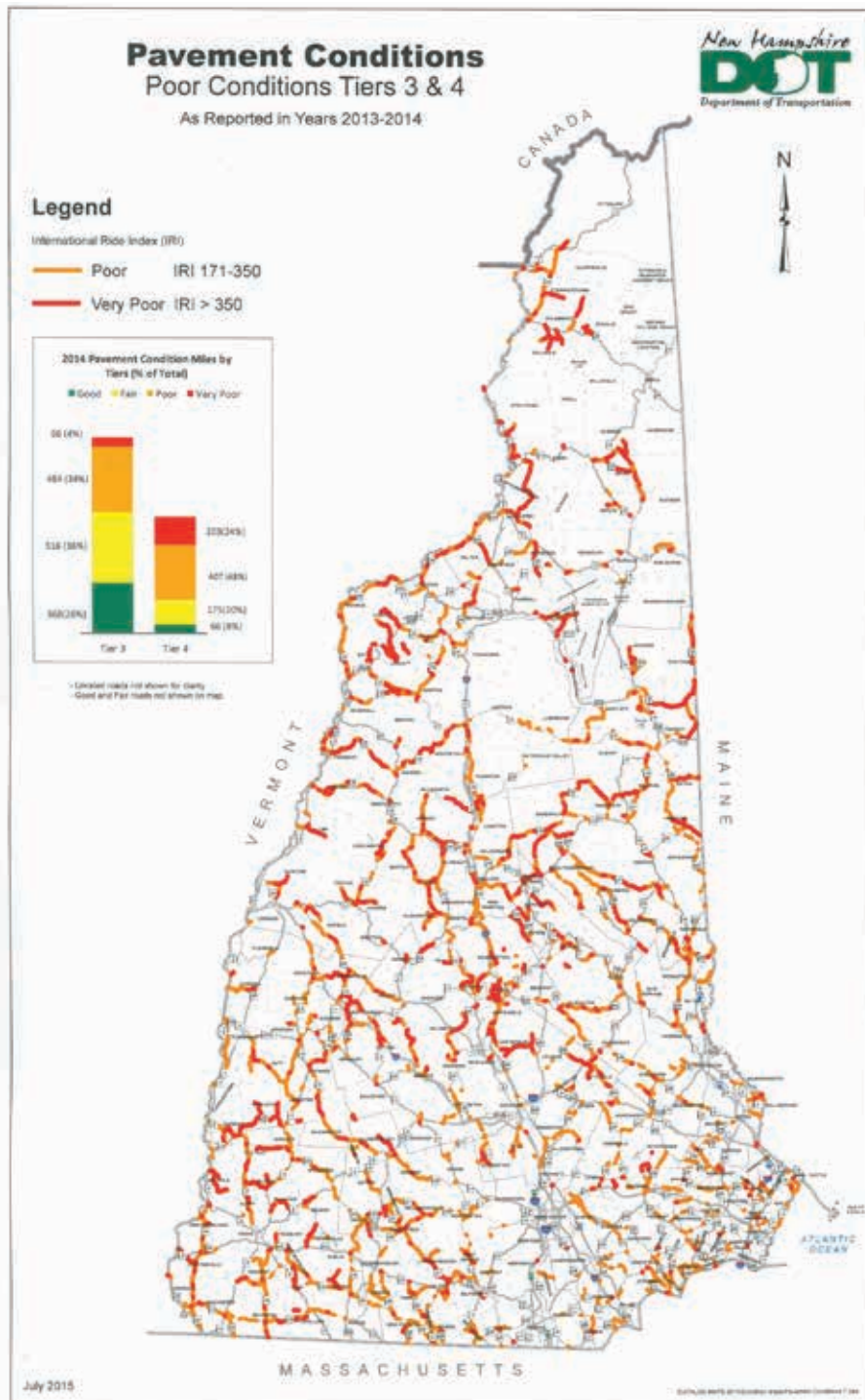
Current State of Infrastructure

- Tier 3
 - 62% of pavement in good or fair condition
 - 38% of pavement in poor or very poor condition
- Tier 4
 - 28% of pavement in good or fair condition
 - 72% of pavement in poor or very poor condition

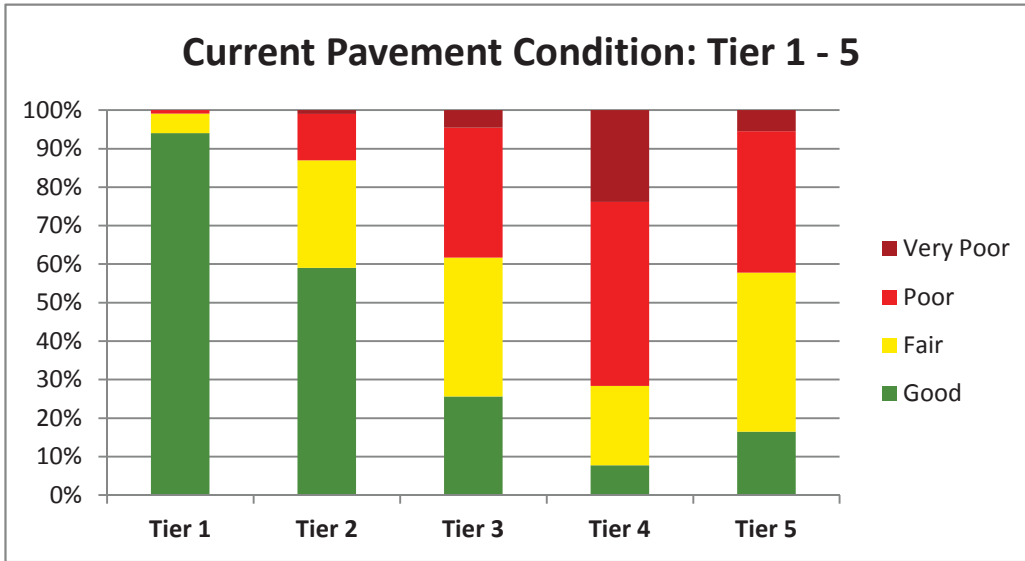


Current State of Infrastructure

- Tier 3
 - 550 miles of pavement in poor or very poor condition
- Tier 4
 - 610 miles of pavement in poor or very poor condition

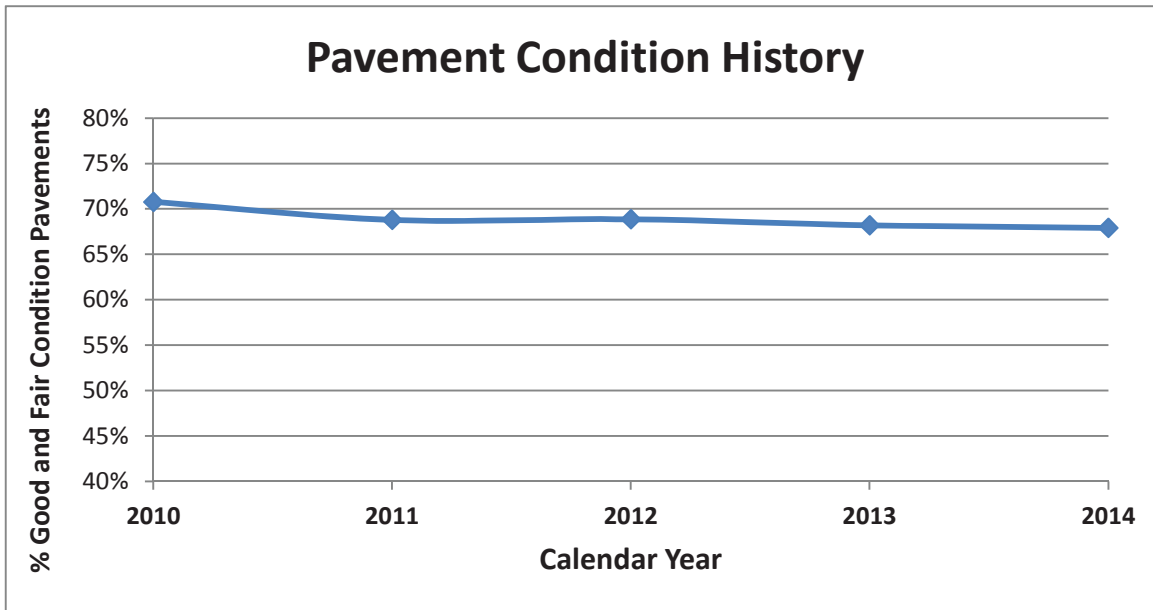


Current State of Infrastructure



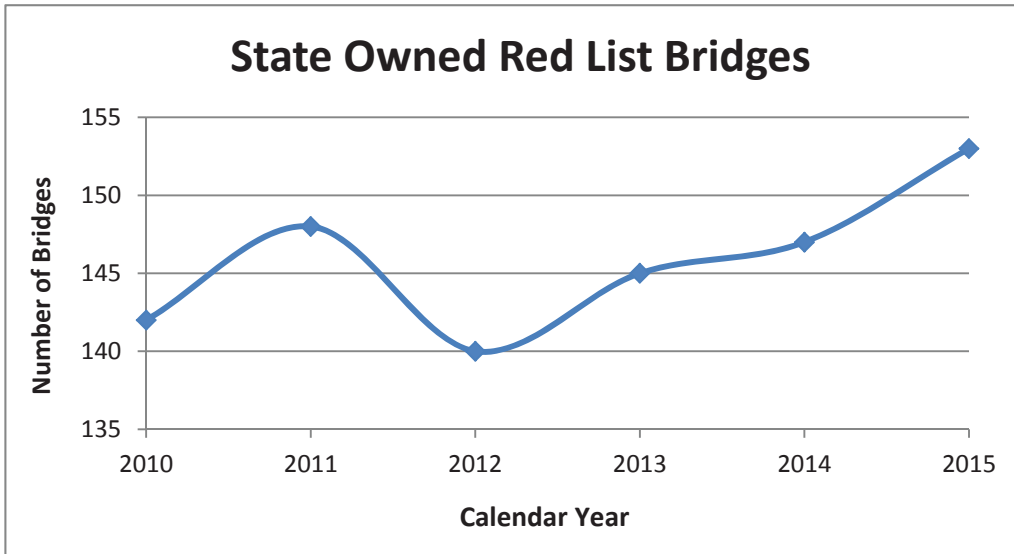
- Tiers 1 & 2 – 91% of roads are in good or fair condition
- Tiers 3 & 4 – 49% of roads are in good or fair condition
- Overall, 68% of NH’s roads (state & municipal) are good/fair
 Conversely, 32% (1,345 miles) are poor/very poor condition

Current State of Infrastructure



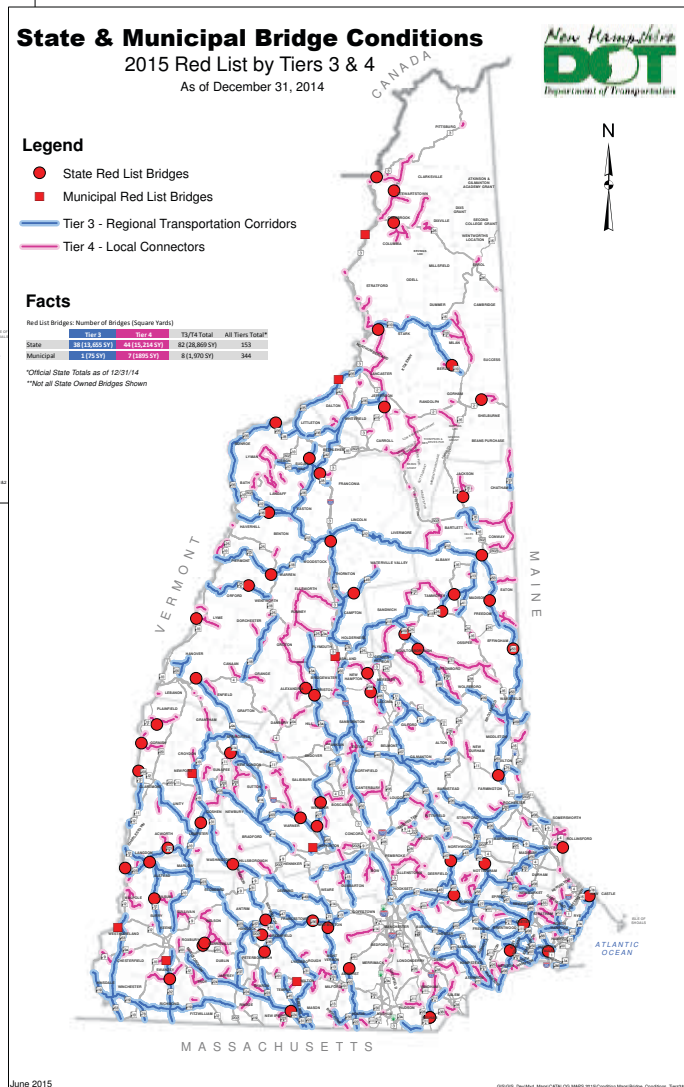
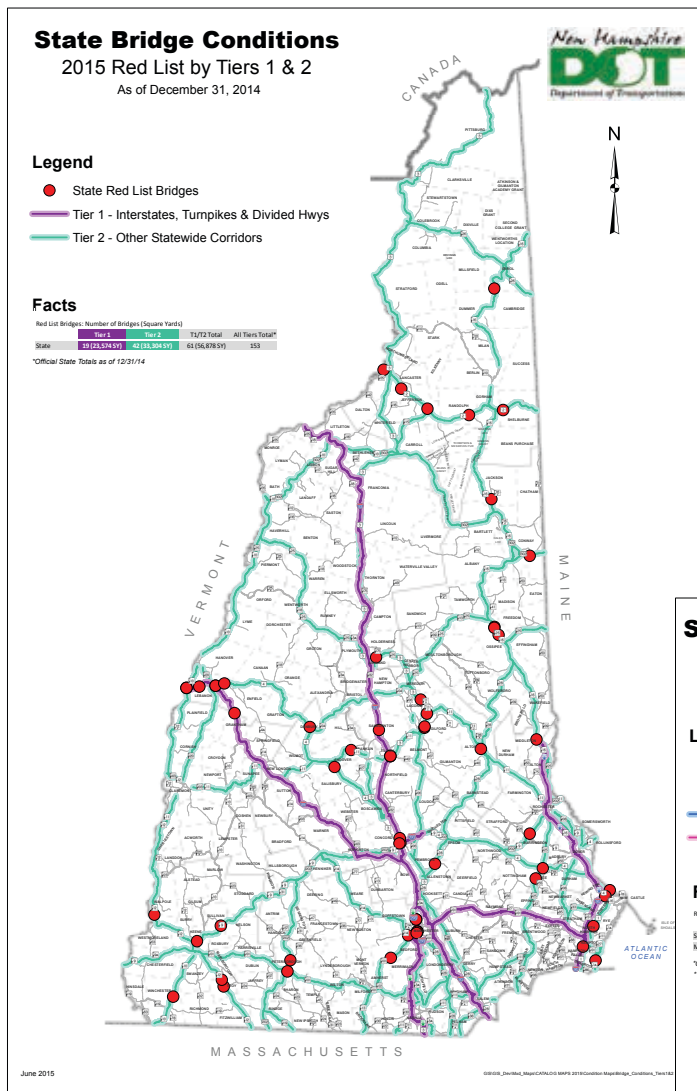
- Overall % of Good & Fair Roads has dropped over last five years (2010 – 2014)
- Level of investment has not kept pace with level of pavement deterioration

Current State of Infrastructure

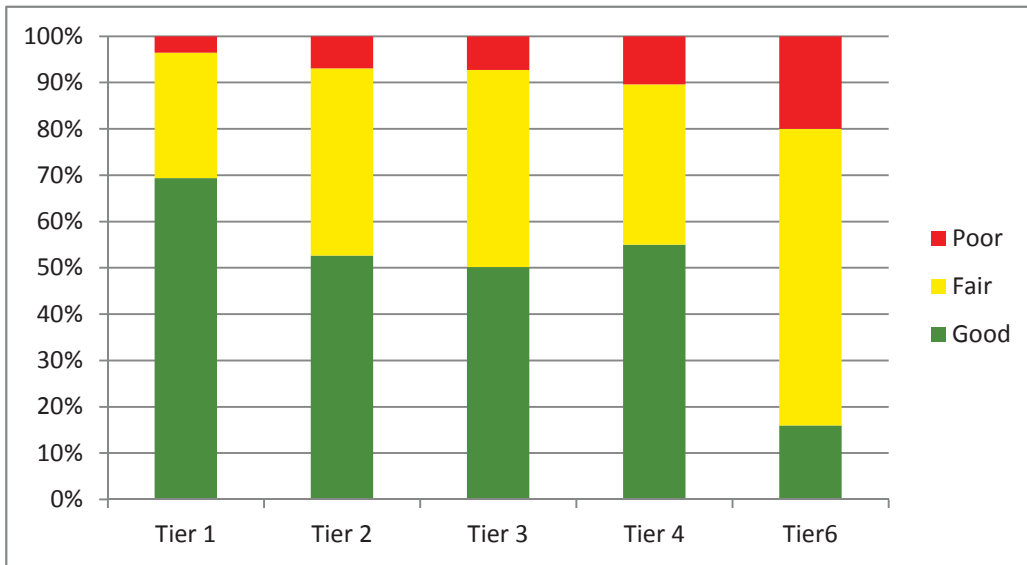


- The number state owned redlist bridges (poor condition) has trended upward over the last 3 years.
- Over the last 5 years, on average 23 bridges per year added to redlist with 21 bridges per year removed from the redlist
- Today (2015), 7% of the State’s bridge or 153 are in poor condition.

Current State of Infrastructure



Current State of Infrastructure



Red List Bridges: Tier 1 (19), Tier 2 (42), Tier 3 (38), Tier 4 (44), Tier 6 (10)

- Presently (2015) - 153 State Red-List Bridges
- Tiers 1 & 2 – 5.3% (61 bridges) in poor condition (red list)
- Tiers 3 & 4 – 8.7% (82 bridges) in poor condition (red list)
- Additionally 344 Municipal Red-List Bridges (2015)

Approved TYP (2015-2024) Funding

2015-2024 Ten Year Plan
Total Program Dollars by FY - Includes Revenue from SB 367

FY	Highway and Bridge							Other Modes			TYP FY Total	% of Total Program		
	Highway Funded							Turnpike Improvements ⁶	Turnpike Renewal & Replacement	Rail ⁵			Transit ⁶	Airport ⁷
	FHWA ^{1,4,5}	Betterment ²	State Aid Bridge ²	State Aid Highway ²	SB367 Road Toll ¹⁰	Other Matching Funds ³	Subtotal							
2015	171.4	22.0	7.5	2.9	35.5	24.5	263.9	54.8	7.7	0.8	24.6	25.7	377.5	11.0%
2016	167.3	22.0	3.5	3.4	31.1	26.4	253.7	37.7	11.6	0.4	23.9	35.9	363.3	10.6%
2017	187.7	22.0	7.5	4.3	31.0	24.2	276.7	27.0	11.5	0.4	23.3	46.3	385.2	11.2%
2018	186.7	22.0	8.7	2.5	30.9	9.9	260.7	19.1	13.7	0.4	25.5	42.3	361.6	10.5%
2019	187.4	22.0	10.8	2.5	30.9	5.9	259.6	30.1	13.8	0.4	23.8	44.3	372.0	10.8%
2020	191.6	22.0	13.5	2.5	30.8	1.1	261.5	41.8	12.0	0.4	23.3	0.0	339.0	9.9%
2021	189.7	22.0	8.4	2.5	30.7	0.0	253.4	18.9	12.0	0.4	23.7	0.0	308.4	9.0%
2022	191.9	22.0	13.1	2.5	30.6	9.0	269.0	22.9	12.0	0.4	24.1	0.0	328.4	9.5%
2023	181.3	22.0	8.2	2.5	30.5	0.0	244.5	24.0	12.0	0.4	22.6	0.0	303.5	8.8%
2024	179.8	22.0	9.6	2.5	30.4	0.0	244.4	21.0	12.0	0.4	23.9	0.0	301.7	8.8%
Program Total	1,834.7	220.0	90.9	28.4	312.1	101.2	2,587.3	297.3	118.2	4.4	238.6	194.6	3,440.5	100.0%
% of Total Program	53.3%	6.4%	2.6%	0.8%	9.1%	2.9%		8.6%	3.4%	0.1%	6.9%	5.7%	100.0%	
Revenue^{7,9}	1,539.6	220.0	110.0		312.1	101.2		297.3	118.2	4.4	238.6	200.0	3,141.5	
	(295.1)	0.0	(9.3)		(0.0)	0.0								
Surplus/Deficit			(304.4)					0.0	0.0	0.0	0.0	5.4	(299.0)	

- Approved TYP (2015 -2024) contained \$3.44B in programmed projects against estimated revenue of \$3.14B. The Plan was over-programmed by \$300M.
- Primarily the Plan was over-programmed on the federal side (FHWA) using an average of \$183M/year against anticipated revenue of \$154M/year.

Approved TYP (2015-2024) Status

- Nearly all projects from the current approved TYP (2015-2024) are being carried forward or have been executed
 - 14 projects were advanced to 2015/2016 and have been executed or will be executed
 - 4 projects have been replaced with new projects
 - 9 projects have been withdrawn or canceled and are not carried forward
- Status of FY2015 & FY2016 Projects (Construction) in approved TYP (2015-2024)
 - Of the 45 Projects, 36 have construction underway or planned in 2016.
 - Of remaining 9 Projects, 6 are in the draft TYP in the near term (2017-2018) and 3 have either been withdrawn or converted to another phase (ROW).

Proposed TYP Funding Synopsis

Typical Annual Funding Utilization

Federal Funding typically \$155M/yr - \$160M/yr

- Preservation & Maintenance (Roads & Bridges): \$65M - \$75M
- Mandated Federal (CMAQ, TA, SPR, HSIP, LTAP, etc): \$21M
- I-93 GARVEE Debt Service: \$16M - \$18M

Annual Dedicated Funding \$100M - \$110M

- Individual Projects (remainder of federal funding): \$40M - \$60M

Betterment Funding typically \$22M/yr

- Preservation & Maintenance (Roads & Bridges): \$22M

Turnpike Funding for Capital & TRR ranges \$30M - \$60M/yr

- TRR- Preservation & Maintenance (Roads & Bridges): \$10M - \$12M
- Turnpike Capital Improvements: \$20M - \$45M

Proposed TYP Funding Synopsis

SB367 Funding for I-93 Expansion, SAB, Potential TIFIA

- \$30M per year net of Municipal Block Grant Aid
- State Aid Bridge: \$6.8M/year
- I-93 Debt Service: Averages \$2.0M/year (first 8 yrs)
- TIFIA Pledged Paving & Bridge Work: \$12M/year (paving)
\$ 8M/year (bridges)

Transit Funding (FTA) averages \$30M/yr - \$32M/yr

Airport Funding (FAA) averages \$35M/yr - \$37M/yr

**General Financial Constraint Considerations for First Draft TYP
(2017 – 2026)****• Formula Federal Funds Programmed at average \$168M/year**

- CMAQ and HSIP programs are funded at 50% level, with balance transferred to 'flexible' categories for other projects/programs to help address pavement and bridge priorities (\$9M/yr)
- Other mandated federal programs remain 100% funded (TA, Off-system bridge, etc.)
- Some existing projects will need to be delayed/advanced/cash-flowed to help achieve constraint by year
- Includes approximately \$40-42M for additional Individual RPC projects in 2025/2026
- Includes approximately \$50M for additional Bridge projects in 2026
- Increases bridge maintenance & preservation in 2024-2026 from \$8M to \$15M

General Financial Constraint Considerations for First Draft TYP (2017 – 2026)

- **Turnpike Capital and R&R Programs**

- Turnpike Capital Work averages \$35M/year with 3 Unfunded Priority Projects starting construction in 2024.
- Turnpike Renewal & Rehabilitation (TRR) program averages \$10.7M/year for paving, bridge, & other preservation/maintenance work

- **Other Programs**

- Betterment Funded at Traditional Levels
- Aeronautics Funded at Traditional Levels
- Transit Funded at a slightly higher level due to anticipated increase in FTA grants

First Draft TYP (2017 – 2026) Funding

**Ten Year Plan
Total Program Dollar Comparison**

Average Year (10 years)	Highway and Bridge								Other Modes					TYP FY Total
	Highway Funded							Non-Highway Funded						
	FHWA	BET	SB367			SAH	Other Matching Funds	Sub Total	Turnpike Imprmt	Turnpike R&R	Rail	Transit	Airport	
			SAB	I-93 Debt Service	TIFIA Pledged Paving & Bridge									
15-24 TYP	183.4	22.0	16.0	24.4	2.8	10.1	258.7	29.7	11.8	0.4	23.9	19.5	344.0	
17-26 TYP	169.7	21.5	7.7	5.8	15.4	2.1	5.4	227.6	35.4	11.3	0.4	32.4	37.3	344.4

~ Dollars include indirect costs and inflation (3.2%) Dollars in Millions

• FY17-FY26 Estimated Program Expenditures

- Highway Funded (state & federal) - \$230M +/- per year
- Turnpike Funded – Averages \$45M per year for TRR & Tpk Capital
- Other Modes - Averages \$70M per year

First Draft TYP (2017 – 2026) Funding

Draft 2017-2026 Ten Year Plan Total Program - All Funding									
	PAVEMENT	BRIDGES	I-93 EXPANSION	MANDATED FEDERAL	INDIVIDUAL PROJECTS	ROADSIDE	TRANSIT	AIRPORTS	GRAND TOTAL
2017-2026 TYP	70.1	82.5	23.9	20.9	69.4	8.0	32.0	37.3	344.4
<small>~ Dollars include indirect costs and inflation (3.2%) Dollars in Millions</small>									

• FY17-FY26 Estimated Program Expenditures

- Pavement (state & federal) – \$70M per year
- Bridges (state & federal) – \$82M per year (SLB early impact)
- I-93 Expansion - \$24M per year
- Mandate Federal – \$21M per year
- Individual Projects- \$695M over ten-year period
- Transit & Airports - \$695M over ten-year period
- Total Program - \$3.44B

General Projected Outputs of Draft TYP (2017-2026)

• Pavement Resurfacing 460 mi/year (estimated)

- Preservation 106 mi/year
- Rehabilitate 9 mi/year
- Maintenance 329 mi/year
- Roughness 16 mi/year

TIFIA Pledged Pavement Resurfacing

- Additional 200 mi/year (estimated)
- Maintenance & Roughness Paving on Poor & V. Poor Roads

• State-Owned Bridges

- Rehabilitate / Replace: 139 bridges (74 Red list Bridges)
- Bridge Maintenance (38 Red list Bridges over 4-year period)

• TIFIA Pledged Bridge Work

- Rehabilitates / Replaces Additional 17-20 red list bridges

Items for Consideration

• Proposed DRIVE Act Effects

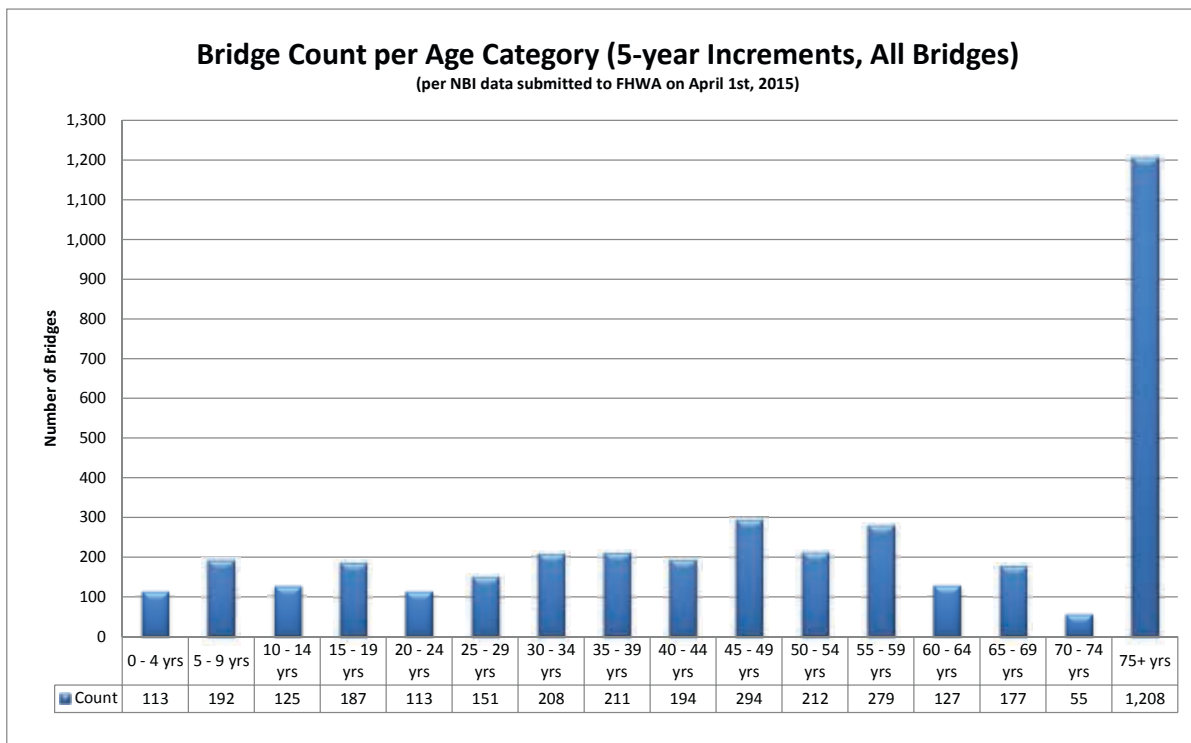
- Federal Aid Portion of the Long-Term Federal Transportation Bill (6-years of funding offers stability)
- Average Funding Limit is 13.3% higher than FY15 – Average increase to NH is \$20M/ year over 6 years
- Additional \$92B in revenues necessary over current receipt estimates

• Pavement Condition

- Based on Proposed Investment Level - Tier 1 Pavement Condition Projected to improve with all roads rated good and fair
- Based on Proposed Investment Level - Tier 2 Pavement Condition Projected to remain in similar overall condition
- Based on Proposed Investment Level - Tier 3 & 4 Pavement Condition Projected to incrementally improve with TIFIA pledged paving funds dedicated to poor and very poor roads

• Red List Bridge Backlog

- Currently 153 state red list bridges
- Based on Proposed Investment Level – Estimated to address 135 Bridges



Items for Consideration

- **Turnpike Capital Program**

- 325M in Unfunded Turnpike Capital Improvement Priorities Identified in approved TYP (2015-2024)
- \$125M in Construction Funding for three unfunded priorities proposed in 2024-2026
- \$210M in Unfunded Capital Improvement Priorities remains Unfunded
- \$2.5M annual program for Type II Noise Wall Program is needed & not funded

- **Priorities submitted by Regional Planning Commissions**

- Nine Regional Planning Commissions submitted their priorities for their regions
- \$41M of the estimated \$225M (RPCs top ten priorities) is proposed to be included in the proposed first draft of Ten Year Plan

TIFIA Program, Status & Impact

- “Transportation Infrastructure Finance and Innovation Act”
- NHDOT submitted a Letter of Interest to USDOT/FHWA in January 2015
- Awarded Rural Rate of Finance May 2015
- Enables NH to finance \$200M remainder of I-93; pave 40 percent of NH rural roads and fix 20-25 red list bridges while costing NH \$20M less than financing \$200M for I-93 alone through capital markets
- Financial close anticipated Fall 2015

TIFIA Program, Status & Impact

SB 367			
Fiscal Year	State Aid for Municipal Bridges	Debt Service & Cost of Issuing Bonds Due on \$200M TIFIA Financing² for I-93	TIFIA Pledged Paving and Bridge Repair
2017	\$6,800,000	\$888,337	\$14,306,350
2018	\$6,800,000	\$1,439,465	\$20,816,999
2019	\$6,800,000	\$2,004,465	\$20,304,342
2020	\$6,800,000	\$2,267,639	\$19,956,752
2021	\$6,800,000	\$2,261,401	\$19,878,820
2022	\$6,800,000	\$2,264,520	\$19,791,774
2023	\$6,800,000	\$2,264,520	\$19,708,091
2024	\$6,800,000	\$2,267,639	\$19,621,531
2025	\$6,800,000	\$21,250,275	-
2026	\$6,800,000	\$21,250,275	-

Upcoming Schedule of Events

- NHDOT Release Draft TYP (2017-2026) – Aug 26th
- GACIT Meeting on Aug 26th ??
- Public Hearings – September thru October
- GACIT Meeting – Nov 18th
- Public Hearings Summary
- GACIT Meeting – Dec 2nd
- Revised Draft TYP Presentation

“Status Quo” Draft Ten-Year Plan (2017-2026) - Recap

Summary Existing TYP (2015-2024)

- **Nearly all projects from the current approved TYP (2015-2024) are being carried forward or have been executed**
 - 14 projects were advanced to 2015/2016 and have been executed or will be executed
 - 4 projects have been replaced with new projects
 - 9 projects have been withdrawn or canceled and are not carried forward
- **Status of FY2015 & FY2016 Projects (Construction) in approved TYP (2015-2024)**
 - Of the 45 Projects, 36 have construction underway of planned in 2016.
 - Of remaining 9 Projects, 6 are in the draft TYP in the near term (2017-2018) and 3 have either been withdrawn or converted to another phase (ROW).

General Financial Constraint Considerations for Draft TYP (2017-2026)

- **Formula Federal Funds to be programmed at average \$168M/year**
 - CMAQ and HSIP programs to be funded at 50% level, with balance transferred to ‘flexible’ categories for other projects/programs to help address pavement and bridge priorities
 - Other mandated federal programs remain 100% funded (TA, Off-system bridge, etc.)
 - Some existing projects to be delayed/advanced/ cash-flowed to help achieve constraint by year
 - Includes approximately \$42M for additional Individual RPC projects in 2025/2026
 - Includes approximately \$50M for additional Bridge projects in 2026
 - Increases bridge maintenance & preservation in 2024-2026 from \$8M to \$15M
- **SB 367 Funds average \$30M/year (less ‘Block Grant Aid’)**
 - \$6.8M/year dedicated to State Aid Bridge (SAB) program
 - Approximately \$2.0M/year for the first 8 years is dedicated to debt service for TIFIA loans
 - Approximately \$12.0M/year for the first 8 years is dedicated to Betterment type paving
 - Approximately \$8.0M/year for the first 8 years is dedicated to Betterment type bridge work
- **Turnpike Program**
 - Turnpike Capital Work averages \$35M/year with 3 Unfunded Priority Projects starting construction in 2024.
 - Turnpike Renewal & Rehabilitation (TRR) program averages \$10.7M/year for paving, bridge, & other preservation/maintenance work
- **Other programs are funded at traditional levels**
 - Includes information from aeronautics, transit, Betterment
 - Includes \$1.5M/year increase for bridge betterment work, corresponding resurfacing decrease

“Status Quo” Draft Ten-Year Plan (2017-2026) - Recap**General Outputs**

- **Pavement Resurfacing 460 mi/year (estimated)**
 - Preservation 106 mi/year
 - Maintenance 329 mi/year
 - Rehabilitate 9 mi/year
 - Roughness 16 mi/year

- **TIFIA Pledged Paving: Additional 200 mi/year (estimated) Maintenance & Roughness Resurfacing**

- **State-owned bridges**
 - Rehabilitate / Replace 139 bridges (74 Red list bridges)
 - Bridge Maintenance Forces Rehabilitate Additional 38 Red list Bridges (4-year program)

- **TIFIA Pledged Bridge Work: Additional 25 Red list bridges**

Status of 2015-2016 Construction Projects

Name	Number	Ad Date	Current Con Year	2015-2024 TYP CON	Advertised
Statewide	25988	4/30/2013	2015	2015	Yes
Lebanon	14957	7/2/2013	2014	2015	Yes
Lincoln	15755	10/29/2013	2014	2015	Yes
Lebanon	13951	4/8/2014	2014	2015	Yes
New Ipswich	14465	5/13/2014	2014	2015	Yes
Pembroke	14477A	11/4/2014	2015	2015	Yes
Franklin	13928A	5/12/2015	2015	2015-2016	Yes
Concord	12004	5/26/2015	2015-2016	2015-2016	Yes
Lebanon	10034A	10/4/2015	Cancelled	2016	Cancelled
Plaistow	10044G	10/6/2015	2016-2017	2016	Planned
Rochester	14350	10/15/2015	2016	2015	Planned
Berlin	12958H	10/20/2015	2016	2016	Planned
Stewartstown	16312	1/5/2016	2016	2016	Planned
Stewartstown	15838	42374	2016-2017	2016	Planned
Bow	20965	1/10/2016	2017	2016	Planned
Durham	13080B	1/12/2016	2016-2017	2015	Planned
Milford	13692B	1/19/2016	2017-2018	2015-2016	Planned
Salem-Manchester	10418H	8/30/2016	2016-2017	2015-2016	Planned
Claremont	13248	1/15/2017	2017	2015	Planned
Hampton-Portsmouth	26485	No Ad Date	2015	2015	Converted to ROW
Peterborough	14772A	3/28/2018	2018	2016	Planned
Enfield	12967B	9/17/2017?	2017	2016	Planned
Nashua	16314	1/9/2018	2018-2019	2015	Planned
Farmington	16146	6/21/2016	2016	2016	Planned
Auburn	15657	SAB/Municipal	2015	2015	Completed AC
Belmont	14285	SAB/Municipal	2016	2016	Completed FA
Berlin	15793	SAB/Municipal	2016	2016	Completed AC
Dublin	15684	SAB/Municipal	2015	2015	Yes, bidding
Epsom	15766	SAB/Municipal	2016	2016	Planned, under design
Exeter	15399	SAB/Municipal	2015	2015	Planned, under design
Francestown	15762	SAB/Municipal	2015	2016	Yes, under construction
Francestown	15763	SAB/Municipal	Cancelled	2015	No, cancelled, town built
Francestown	15764	SAB/Municipal	2015	2015	Yes, under construction
Francestown	22892	SAB/Municipal	2015-FV	2015	Yes, completed
Hudson	13353	SAB/Municipal	2017	2016	No, Town changed to 2017
Hudson	13354	SAB/Municipal	2018	2016	No, Town changed to 2018
Lebanon	14552	SAB/Municipal	2016	2015	Planned, under design
Milford	22372	SAB/Municipal	2015	2016	Yes, under construction
Newport	14969	SAB/Municipal	Cancelled	2015	No, Town cancelled
Nottingham	15720	SAB/Municipal	2016	2016	Yes, completed AC
Salem	15592	SAB/Municipal	2015-FV	2015	Yes, completed AC
Salem	15596	SAB/Municipal	2015-FV	2015	Yes, completed AC
Salem	15772	SAB/Municipal	2015-FV	2015	Yes, completed AC
Wilton	15768	SAB/Municipal	Cancelled	2016	No, canceled, town built
Sanbornton	16104	SAB/Municipal	2013, 5, 6	2015-2016	Yes, completed AC

Total Projects w/Construction Funding in 2015 & 2016: 45
 Projects w/Construction Underway: 20
 Projects Advertised or Planned in 2016: 16
 Projects Included in Draft TYP (2017- 2026): 6
 Projects Cancelled or Converted: 3

AC = Advanced Construction
 FA = Force Account

Anticipated Changes - 2015-2024 Projects in Draft 2017-2026 Ten Year Plan

Name	Number	Reason	2015-2024 TYP CON
Amherst	20242	Advanced - SAB	2018
Ashland	16237	Advanced	2021
Bedford	20000	Advanced - SAB	2017
Berlin	12958H	Advanced	2016
Bradford	15857	Advanced - SAB	2018
Canaan	26664	Withdrawn	2020
Canaan	26702	Withdrawn	2021
Enfield	UVLS	Replaced by 40526	2024
Franconia	16305	Replaced by 40514	2018-2023
Gilford	15903	Advanced	2022
Harrisville	16114	Advanced - SAB	2019
Jefferson	16153	Advanced	2021
Jefferson	13602B	Withdrawn	2019-2023
Keene	16152	Advanced	2021
Loudon	CNH	Replaced by 29613	2021
Merrimack	13923	Advanced - SAB	2016-2017
Peterborough	24500	Withdrawn	2020
Salem	15988	Advanced - SAB	2019
Salem	20229	Advanced - SAB	2020
Salem	26486	Advanced - SAB	2021
Salem-Manchester	14633#	Replaced by 146333 B,D,H,I	2015-2017
Sanbornton	16081	Advanced - SAB	2020
Statewide	14899	Withdrawn	2015-2024
SMRLN	SMRLN	Withdrawn	2015-2024
Washington	20300	Withdrawn	2020

Projects Withdrawn: 7
 Projects Advanced & Will be Completed in 2015-2016: 14
 Projects Replaced by New Projects: 4

Regional Planning Commission and the Ten Year Plan

Each Regional Planning Commission (RPC) works with their member communities in developing recommendations for changes (including a list of regional priorities) they would like to see added or continued to be part of the States Ten Year Plan. As part of the process, the RPC recommendations are transmitted to NHDOT for consideration. NHDOT reviews the recommendations submitted as well as other input from other NHDOT sources and creates the draft TYP for consideration by GACIT.

In the update of the 2015-2024 Ten Year Plan, the RPCs and the Department significantly improved the process they are both involved in. Improvements allowed for RPCs to submit recommendations for inclusion in the TYP in a similar format and using the same rating criteria to be prioritized. The NHDOT solicited input from the RPCs on potential project additions/modifications. The outcome is that the RPCs have an understanding of the process and the ability to explain how the TYP was developed and how recommendations were made to their communities.

In this update, the Department and the RPCs recognize that there is still room for improvement. There was discussion and consensus achieved between all of the parties that criteria should be simplified further and that all RPCs should also utilize the same criteria weights that were developed by staff of each RPC in coordination with NHDOT.

The current update efforts included:

- Updated guidance issued in writing from Department to all RPCs at the beginning of Ten Year Plan update process
- Continued use of Decision Lens software to keep all efforts documented and accountable
- Updated project information forms to be used by RPCs to collect common information for all project recommendations
- Communication of theoretical revenue projections if funding were distributed by same methodology as Block Grant Aid
- Refinement of criteria used by RPCs and NHDOT:
 - State of Repair
 - Safety
 - Network Significance
 - Mobility and Accessibility
 - Support
- Single priority listing from each RPC
- DOT staff evaluated top regional projects using RPC submitted information
- Currently scheduling to meet with each RPC one on one to review priorities

Both the Department and the RPCs are hopeful that these changes, and others as the process is continually reviewed in the future, will result in clearer communications and expectations, and a more understandable Ten Year Plan process, with documented support for the priorities put forward.

NHDOT Highway Tiers – Definitions

System Strategies

The New Hampshire Department of Transportation (NHDOT) is focused on managing the state's road network as efficiently and effectively as possible. While every road is critical to the people and businesses that rely upon it, each road also serves a different number of users and provides different levels of mobility. Grouping based on similarities such as connectivity, regional significance, and winter maintenance requirements provides a common framework for analysis of condition and performance, investment levels, and operation and maintenance levels. To strategize the investment of scarce resources, the Department has categorized New Hampshire's road system into the following Tiers.

Tier 1 – Interstates, Turnpikes, and Divided Highways

Interstates, Turnpikes, and NH Route 101 between Bedford and Hampton support the highest traffic volumes and speeds in the entire state. These multi-lane, divided highways convey the majority of commuter, tourist, and freight traffic throughout the state.

Tier 2 – Statewide Corridors

Statewide Corridors, like US 202 or NH 16, carry passengers and freight between regions of the state as well as to and from neighboring states. These roads can have moderate to high traffic volumes, particularly during morning and afternoon commutes. While functionally similar, condition and features of these corridors vary the most out of any Tier. Some of these roads are formally constructed higher-speed facilities while others are more rural roads that became high use roads as surrounding neighborhoods and communities developed.

Tier 3 – Regional Transportation Corridors

Regional Transportation Corridors provide travel within regions, access statewide corridors, and support moderate traffic volumes at moderate speeds. Good examples include NH 112 and NH 155.

NHDOT Highway Tiers – Definitions

Tier 4 – Local Connectors

Secondary highways and unnumbered routes as well as the bridges along them are local connectors and they provide travel between and within communities. Traffic on local connectors, such as NH 141 or Bean Rd in Moultonborough, is usually low volume and low speed.

Tier 5 – Local Roads

Locally owned roads and bridges or State owned roads within compact limits provide varying travel functions and are maintained by communities. Traffic volumes and speeds can vary on local roads. Good examples include North State St in Concord or Elm St in Manchester. Though, the Department does not maintain local road and bridges, it does provide assistance to communities.

Tier 6 – Off Network

The Department needs to track work accomplished on off network assets such as park 'n' rides, patrol shed, or rest stop parking lots

Supplemental Information

NHDOT Bridge Strategy - Summary

The New Hampshire Department of Transportation (NHDOT) is focused on managing the state's transportation network as efficiently and effectively as possible. With that goal in mind, the Bridge Strategy is based on the following concepts:

1. Bridge Priorities (Tiers)
2. Making Sustainable Investments
3. Redundant Bridges

Bridge Priorities (Tiers) - Not all bridges are equal

While every bridge is critical to the people and businesses that rely upon it, each bridge also serves a different number of users and provides different levels of connectivity between homes, businesses, and other destinations. The Department has categorized the state managed road system and the bridges along each road into the following priorities (tiers):

- High Investment Bridges (HIB) – Largest & most costly bridges (Memorial, I-95, Amoskeag)
- Tier 1 – Interstates, Turnpikes & the divided section of Route 101
- Tier 2 – Major corridors (like US 3, US 4, US 202, and Route 16)
- Tier 3 – Collectors (like Route 112, Route 31, and Route 155)
- Tier 4 – Secondary highways and unnumbered routes

Making Sustainable Investments

New Hampshire's inventory of more than 3,800 bridges (2,155 state-owned and 1,688 locally-owned) required a massive initial investment of public funds over many decades. To maximize the return on that investment, bridges require a thorough preservation and maintenance strategy. For recently constructed bridges, our goal is to extend the expected service life up to and beyond 120 years. This strategy relies on recurring investments in preservation and maintenance which reduces the frequency of higher-cost reconstruction and replacement projects.

Maintenance & Preservation – Keeping good bridges good

Bridges are made up of many different parts working together and each of those parts requires upkeep to stay in good working order. Upkeep includes everything from washing to repairing damage to replacing certain parts that wear out over time. This type of upkeep is generally **low-cost**, but can vary based on how large and busy a bridge is. The impact to travelers would normally be between a few hours and several months. Routine maintenance and preservation performed on-schedule will keep bridges operating for as long as possible before more substantial work is required.

Supplemental Information

Rehabilitation – Restoring poor bridges

Because certain parts of a bridge cannot be maintained or repaired forever, every bridge will require rehabilitation at some point in its lifecycle. The result of rehabilitation is a bridge that can be maintained and preserved for many years to come. These activities are generally **moderate-cost** and usually take several months or up to a year to complete.

Reconstruction – Making a good bridge

Most bridges will need to be reconstructed at some point because certain parts that are difficult to rehabilitate wear out over time. The result of reconstruction is a brand new bridge that is very similar in function to the prior bridge. Reconstruction is high-cost and requires 1 to 3 years to complete. Because of the **high cost**, each bridge must be carefully evaluated to determine when or if it should be reconstructed, down-posted, or closed.

Table 1 - Bridge Strategy Investment Priority

Bridge Strategies	HIB	Tier 1	Tier 2	Tier 3	Tier 4
Maintenance	High	High	High	High	High
Preservation	High	High	High	High	High
Rehabilitation	High	High	High	Moderate	Low
Reconstruction	High	High	Moderate	Low	Low

Redundant Bridges – Should all bridges be kept open

Each bridge required a substantial initial investment made by the people of New Hampshire and our goal is to protect that investment for as long as possible. In addition, each bridge also requires a recurring investment for routine maintenance, preservation, rehabilitation, and, ultimately, reconstruction. Over the years, new roads and bridges have been built that may make certain bridges somewhat redundant. With limited resources we must evaluate whether or not continued long-term investment is justified on redundant bridges.

NHDOT Bridge Strategy - Definitions

Maintenance & Preservation Bridge Strategy – Getting the most for your investment

Definition – A long term strategy that uses a variety of small- to mid- sized efforts to extend the life of a bridge. Maintenance includes activities like washing and sealing a bridge, cleaning drainage ways, and keeping vegetation controlled. Preservation includes activities like replacing expansion joints, sealing cracks, and replacing the membrane protecting the bridge deck.

Department’s Perspective – Like most things, bridges last longer when proper maintenance and preservation work is performed. For each type of bridge, there is a recommended preservation and maintenance schedule that should be followed to get the maximum benefit. Unfortunately, there is not enough money to follow the recommended schedule for all bridges because the NHDOT has a backlog of Red List bridges. Though costing more in the near term, performing regular preservation and maintenance will cost the state less money in the long term.

Rehabilitation Project – Restoring bridges in poor condition

Definition – A one-time project that significantly improves the condition of the major parts of a bridge while keeping the underlying structure in place.

Department’s Perspective – A bridge rehabilitation project requires more work than scheduled preservation and maintenance, but does not require a brand new bridge (reconstruction). This work is used when major parts of the bridge need to be replaced, but there is some service life remaining in other parts of the bridge. Because this strategy involves replacing major parts of the bridge, it should only be used when those parts have been used for as long as safely possible. These projects are included in the Department’s Ten Year Transportation Improvement Plan.

Reconstruction Project – A new bridge is needed.

Definition – A one-time project that replaces an entire bridge with a brand new bridge.

Department’s Perspective – Reconstruction happens when the entire bridge is too deteriorated for a cost effective rehabilitation. This high-cost work has a significant impact on traffic and often requires closures, detours, and / or temporary bridges. While this work cannot be completely avoided, it can be significantly postponed by applying effective maintenance and preservation strategies. Bridge reconstruction should be planned well in advance of when the effort will be needed.

NHDOT Bridge Strategy - Definitions

Priority List – Which bridges should we fix?

Definition – A list of bridges, updated annually, that ranks rehabilitation and reconstruction investment priorities based on various bridge characteristics.

Department’s Perspective – Each year, NHDOT updates a prioritized list of bridges so that limited funding is put to the best use. NHDOT uses a variety of factors to determine how a bridge is prioritized, including roadway tier, detour length, bridge condition, and the amount of traffic. This list helps determine which bridges are included and when they are scheduled in the Ten Year Transportation Improvement Plan.

Red List – Bridges requiring more attention

Definition – A list of bridges requiring additional inspections and more frequent repairs due to known deficiencies, poor condition, or load restrictions, usually the result of structural deterioration.

Department’s Perspective – Over time, the condition of every bridge will deteriorate so that at some point it will be on the Red List due to one or more structural deficiencies. A bridge on the Red List requires additional effort by NHDOT, including two inspections per year, as well as plans to address the deficiency in a timely fashion before the bridge is down posted, closed, or requires special/emergency interim attention. When funding levels are insufficient, this list can grow at a rapid pace.

Structurally Deficient – A backlog of poor condition bridges.

Definition – Any bridge that has deteriorated such that at least one major element (deck, superstructure, substructure) is classified as being in “poor” condition, and thus fails to meet the needs of the highway it carries because of its deteriorated condition.

Department’s Perspective – Structurally deficient bridges comprise most of the Red List. Depending on the severity of the deficiency, the bridge’s condition may be improved through rehabilitation or reconstruction. When funding levels are insufficient, the number of structurally deficient bridges can grow at a rapid pace, potentially compromising public safety.

Supplemental Information

NHDOT Bridge Strategy - Definitions

High Investment Bridges – The most expensive bridges in the State

Definition – Any bridge, regardless of ownership, that has a deck area (the surface that vehicles drive on) greater than 30,000 square feet or has a lift mechanism.

Department’s Perspective – The state has made significant investments in High Investment Bridges (HIBs). In order to get the most out of this investment, NHDOT is developing a separate bridge strategy for HIBs. This strategy will include a detailed maintenance plan and a high priority rating for preservation and maintenance activities. Unlike tiers, HIBs are not based on ownership. While most HIBs are owned by the state, some HIBs are municipally owned such as the Loudon Road Bridge over the Merrimack in Concord.

Costs

All bridge costs are approximate and evolving as data is further analyzed for bridge treatment life cycles and costs. As such, these costs and treatments will change over time and are based on the best available information as of 2014. The associated costs for preservation and maintenance efforts are shown in Table 1 and represent the yearly costs to preserve and maintain state and turnpike owned bridges.

Table 1: Yearly Cost for Bridge Preservation and Maintenance Strategies

Strategy	HIB*	Tier 1	Tier 2	Tier 3	Tier 4	Tier 5
Preservation and Maintenance Cost	\$4,300,000	\$7,720,000	\$6,990,000	\$3,700,000	\$1,870,000	\$2,070,000
Bridge area (millions sq ft)	1.9	3.4	2.0	1.1	1.9	0.7

* HIB cost is only for state and turnpike owned structures, not the 9 municipally owned HIB’s.

Supplemental Information

NHDOT Bridge Strategy - Definitions

The associated costs for rehabilitation and reconstruction are shown in Table 2. These are approximate one-time project costs. The costs for rehabilitation and reconstruction are highly variable and are dependent on a number of factors such as the width and length of the bridge, property impacts, traffic control alternatives, and environmental impacts.

Table 2: Average Cost per 2000 ft².

Strategy	HIB	Tier 1	Tier 2	Tier 3	Tier 4	Tier 5
Rehabilitation	\$200,000	\$200,000	\$300,000	\$300,000	\$300,000	\$300,000
Reconstruction	\$1,300,000	\$1,300,000	\$1,820,000	\$1,820,000	\$1,820,000	\$1,690,000

Typical Bridge Work Schedule

To get the most out of the initial investment, the state should follow a routine work schedule. While schedules for individual bridges vary depending on geography and type of bridge, Table 3 lists scheduled work efforts for a typical bridge.

Table 3: Typical Bridge Schedule Work Effort.

Category	Work Effort
Preservation/Maintenance	Wash and Oil Every Year
	Crack Seal the Pavement (every 10 years starting in year 5)
	Replace the Bridge Pavement (every 10 years starting in year 10)
	Replace Membrane and Expansion Joints (every 20 years)
	Paint exposed steel, if any (every 20 years)
Rehabilitation	Replace Worn Out Components (year 60)
Reconstruction	Completely Replace Bridge (year 120)

Note: Many existing bridges have not had the recommended maintenance to this point; therefore, they will likely require rehabilitation and reconstruction before 120 years.

NHDOT Pavement Strategy - Summary

The New Hampshire Department of Transportation (NHDOT) is focused on managing the state's road network as efficiently and effectively as possible. With that goal in mind the Pavement Strategy is based on the following concepts:

1. Highway Priorities (Tiers)
2. Making Sustainable Investments
3. Maintenance Paving

Highway Priorities (Tiers) - Not all roads are equal

While every road is critical to the people and businesses that rely upon it each road also serves a different number of users and provides different levels of connectivity. The Department has categorized the state managed road system into the following priorities (tiers):

- Tier 1 – Interstates, Turnpikes & the divided section of Route 101
- Tier 2 – Major corridors (like US 3, US 4, US 202, and Route 16)
- Tier 3 – Collectors (like Route 112, Route 31, and Route 155)
- Tier 4 – Secondary highways and unnumbered routes

Making Sustainable Investments

The road network in New Hampshire required a massive investment of public funds over many decades. In order to maximize that prior investment along with current and future investments, strategies are developed for different types of roads to get the most useful life.

Preservation – Keeping good roads good

Pavement, like just about everything else that endures wear and tear, needs some attention every now and then to stay in good working condition. A variety of **low-cost** pavement treatments are used to maintain roads in good working condition for as long as possible. The low-impact nature of these treatments means that the disruption from construction may only last a few weeks, however, these treatments can only be used on roads that are already in good shape.

Rehabilitation – Restoring poor pavements

The result of this activity is a new pavement that can be preserved for many years. Rehabilitation is not suitable for every road that needs attention although particular site conditions can significantly affect the cost and how long the rehabilitated road will last. These activities are generally **moderate-cost** and may take a couple months to complete. Rehabilitation will be evaluated for cost effectiveness on a case by case basis.

Supplemental Information

NHDOT Pavement Strategy - Summary

Reconstruction – Making a good road

Because the road network in New Hampshire has developed organically over many decades, many roads were not built on a good foundation. These roads present a challenge for sustainability because no investment in them, short of reconstruction, will last for very long. Reconstruction has a **high-cost** and may take more than a year to complete. This activity is not a priority of the Pavement Strategy because we are seeking to maximize the effectiveness of limited paving budgets and reconstruction can be **cost prohibitive**.

Maintenance Paving - Keeping roads in working order

Many roads in NH have never been formally constructed to support today’s heavy truck loads and traffic volumes. As a result, these roads are susceptible to frost action, pavement rutting, cracking and potholes. These roads are not suitable for preservation treatments and rehabilitation is not always practical or affordable.

For these types of roads maintenance paving will be performed based on a condition assessment and traffic volume. The condition assessment essentially measures how bumpy the road is and how severe those bumps are. This type of paving is **low-cost**, will only take a few days to complete, and will become routine to keep the road in working order.

Table 1 - Pavement Strategy Priority

Pavement Strategies	Tier 1	Tier 2	Tier 3	Tier 4
Preservation	High	High	Moderate	Moderate
Rehabilitation	High	Low	Low	Low
Reconstruction	-	-	-	-
Maintenance Paving	-	Moderate	Moderate	Moderate

NHDOT Pavement Strategy - Definitions

Maintenance Paving Strategy – Keeping roads in working order

Definition – A long term strategy that uses low cost paving treatments applied before the road surface becomes too rough. Roughness is measured on a regular basis for every state managed road. From a practical standpoint, a road is too rough when it becomes difficult to maintain in the winter, causes drivers to drive below the speed limit or to drive outside the normal travel lanes.

Department’s Perspective – When a preservation strategy is not well suited for a road, the Department uses a maintenance paving strategy. The purpose of maintenance paving is to keep roads serviceable. Because maintenance paving is triggered by poor road surface conditions, the Department may receive complaints prior to paving. Unlike roads in preservation, the road surface will not always be in good or fair condition. Due to economic impacts and road surface conditions, this strategy is not recommended for high use roads.

Preservation Strategy – Keeping good roads good

Definition – A long term strategy that uses low cost paving treatments at a higher frequency (approximately every 5 years) in order to sustain a good driving surface.

Department’s Perspective – Keeping good roads good should be applied where possible. For a low-cost investment, preservation keeps the road surface in good condition which maximizes value. Unfortunately, not all roads can be preserved due to how they were initially constructed.

Reconstruction Project – Making a good road

Definition – A one time project applied to a section of road where the Department improves the condition of deteriorated asphalt as well as the underlying material.

Department’s Perspective – This is not a recommended Department strategy to remedy pavement condition. Reconstruction is very expensive and is not justified on a life cycle basis. Reconstruction projects are proposed only when there is some other issue with the road, beyond pavement condition, such as congestion or safety concerns.

Supplemental Information

NHDOT Pavement Strategy - Definitions

Rehabilitation Project – Restoring poor pavements

Definition – A one time project applied to a section of road where the Department improves the condition of the deteriorated asphalt but does not disturb the underlying material.

Department’s Perspective – This strategy is used to move a road from a maintenance strategy to a preservation strategy. Due to the high costs of rehabilitation, in many cases, it is more cost effective on a life cycle basis just to maintenance pave. Due to the costs involved, rehabilitation should primarily focus on Tier 1 roads.

Costs

All costs are approximate and are evolving as data is further analyzed for pavement treatment life cycles and cost. As such, these costs and treatments will change over time and are based on information as of 2014. The associated costs for preservation and maintenance are shown in Table 1. Costs in Table 1 are the annual average cost per mile for the strategy. This cost is not the amount to construct the project; rather, it is the amount of money that should be saved each year to implement the strategy per mile of road. A simple analogy would be a roof which costs \$20,000 to replace every 20 years. The annual average cost of the roof would be \$1,000 per year (\$20,000 / 20 years).

Table 1: Annual Average Cost per Mile for Preservation and Maintenance Strategies

Strategy	Tier 1	Tier 2	Tier 3	Tier 4
Preservation	\$26,000	\$11,000	\$8,000	\$6,000
Maintenance Paving	N/A*	\$11,000	\$8,000	\$7,000

All costs are annual average cost per mile of road.

* All Tier 1 roads will be in preservation within 10 years as such there is no maintenance paving.

Supplemental Information

NHDOT Pavement Strategy - Definitions

The associated costs for rehabilitation and reconstruction are shown in Table 2. These are the approximate one time costs to construct the project. The costs do not include any preservation costs incurred after the project. The costs for rehabilitation and reconstruction are highly variable and are dependent on a number of factors such as property, utility, drainage, and environmental impacts.



Table 2: Range of One Time Project Costs per Mile

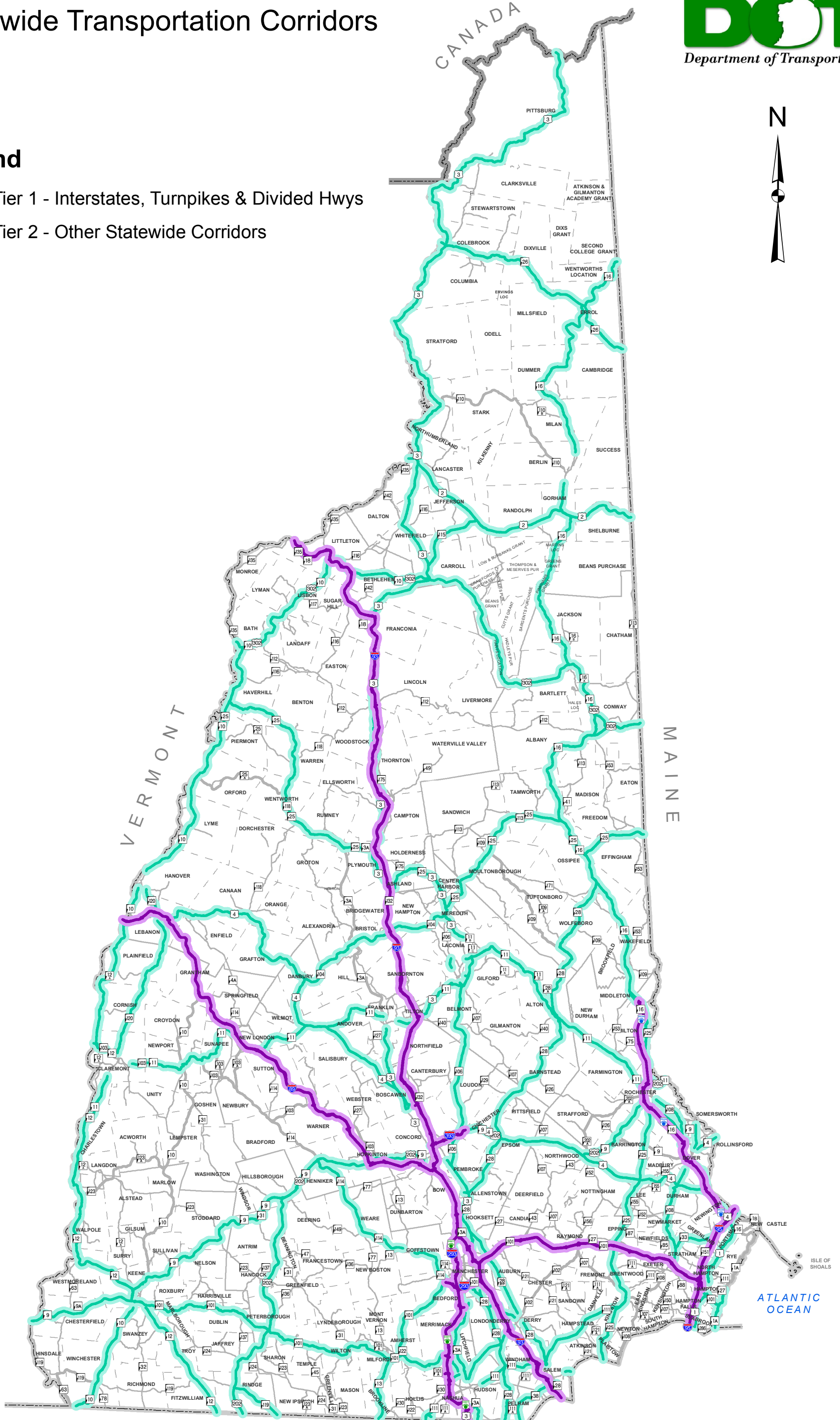
Strategy	Tier 1	Tier 2	Tier 3	Tier 4
Rehabilitation	\$700,000	\$250,000 to \$700,000	\$250,000 to \$700,000	\$250,000 to \$700,000
Reconstruction	\$1,000,000 to \$5,000,000 ⁺	\$1,000,000 to \$5,000,000 ⁺	\$1,000,000 to \$5,000,000 ⁺	\$1,000,000 to \$5,000,000 ⁺

Tiers 1 & 2

Statewide Transportation Corridors

Legend

-  Tier 1 - Interstates, Turnpikes & Divided Hwys
-  Tier 2 - Other Statewide Corridors



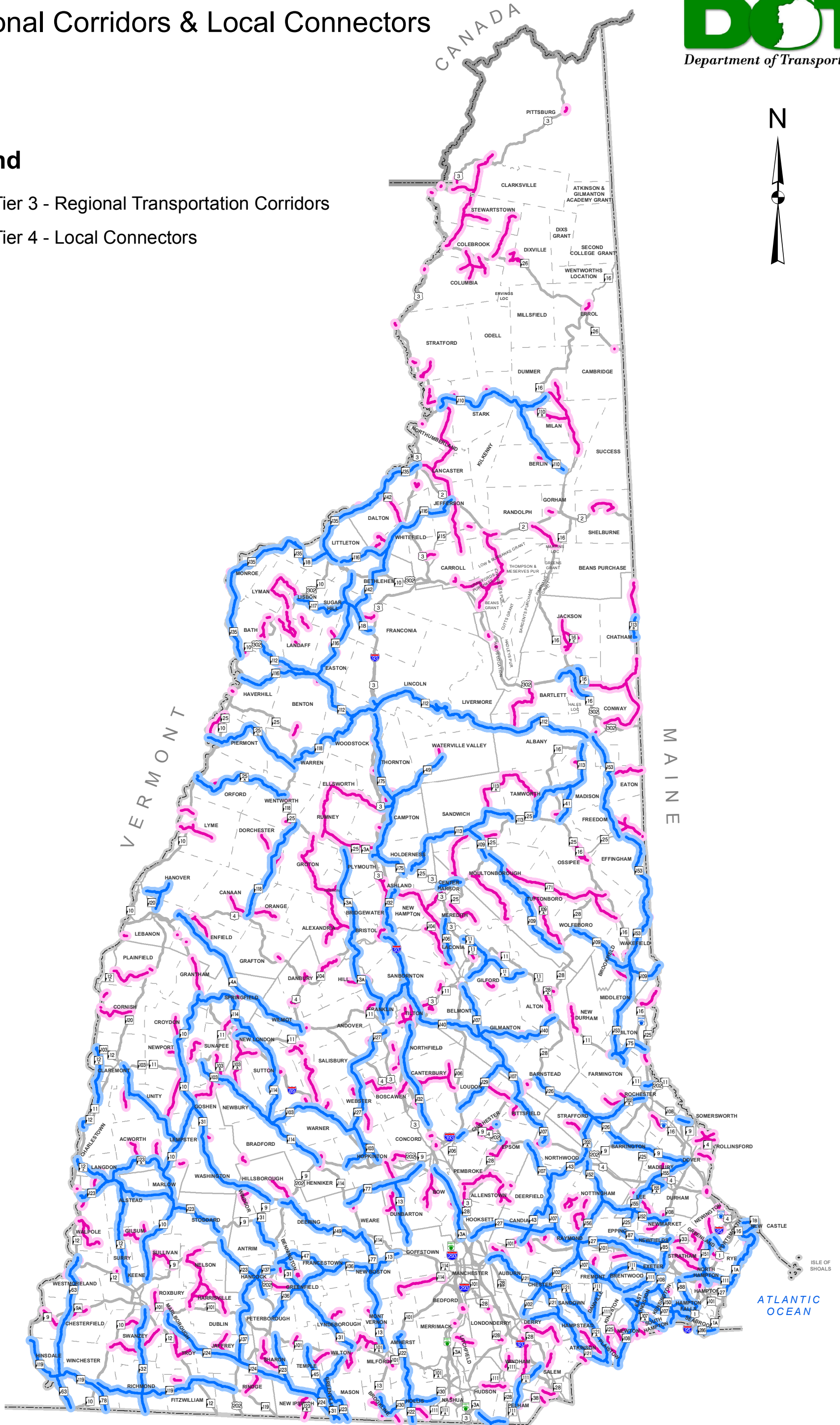
MASSACHUSETTS

Tiers 3 & 4

Regional Corridors & Local Connectors

Legend

- Tier 3 - Regional Transportation Corridors
- Tier 4 - Local Connectors



MASSACHUSETTS

State Bridge Conditions

2015 Red List by Tiers 1 & 2

As of December 31, 2014

Legend

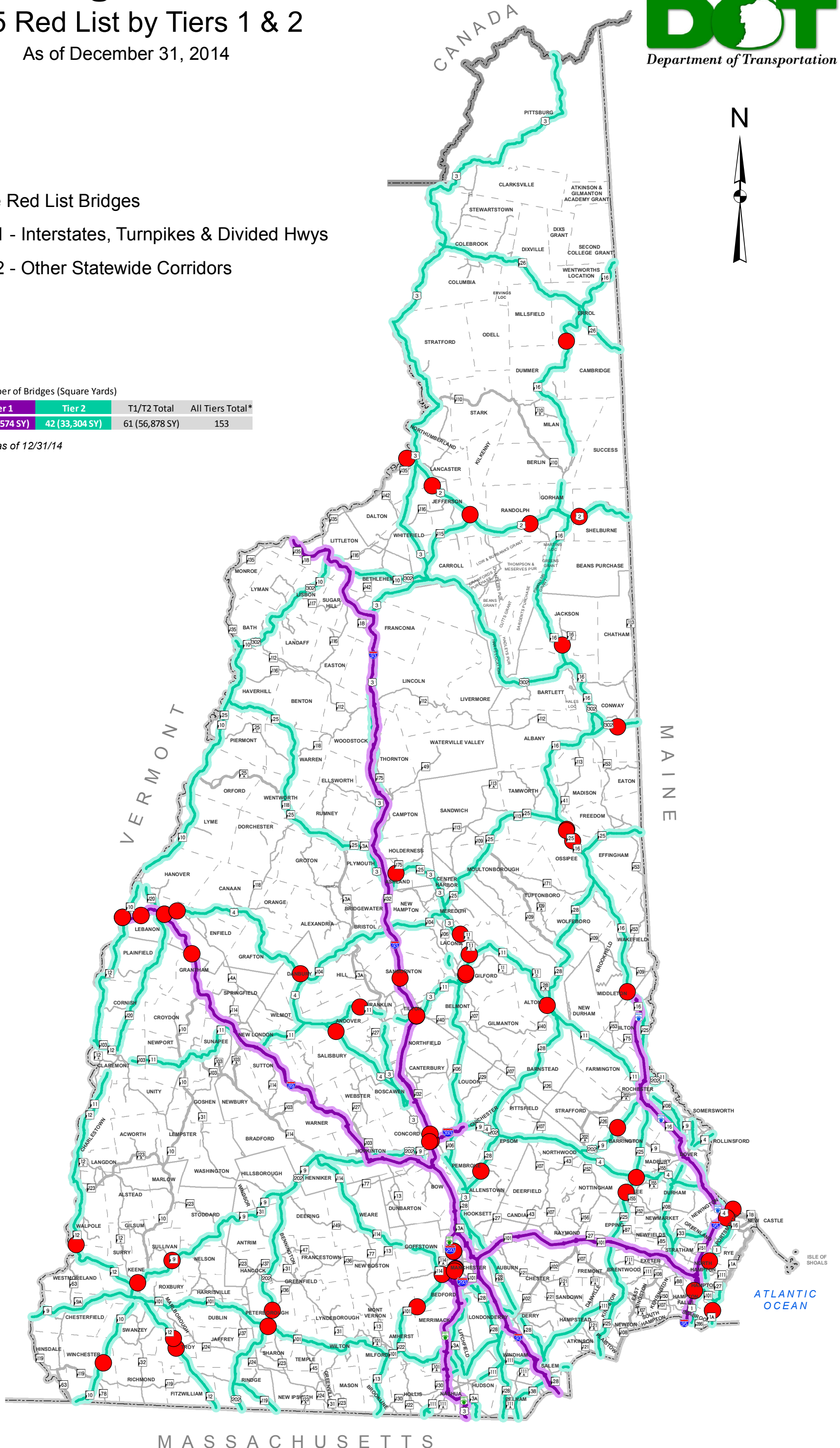
- State Red List Bridges
- Tier 1 - Interstates, Turnpikes & Divided Hwys
- Tier 2 - Other Statewide Corridors

Facts

Red List Bridges: Number of Bridges (Square Yards)

	Tier 1	Tier 2	T1/T2 Total	All Tiers Total*
State	19 (23,574 SY)	42 (33,304 SY)	61 (56,878 SY)	153

*Official State Totals as of 12/31/14



State & Municipal Bridge Conditions

2015 Red List by Tiers 3 & 4

As of December 31, 2014

Legend

- State Red List Bridges
- Municipal Red List Bridges
- Tier 3 - Regional Transportation Corridors
- Tier 4 - Local Connectors

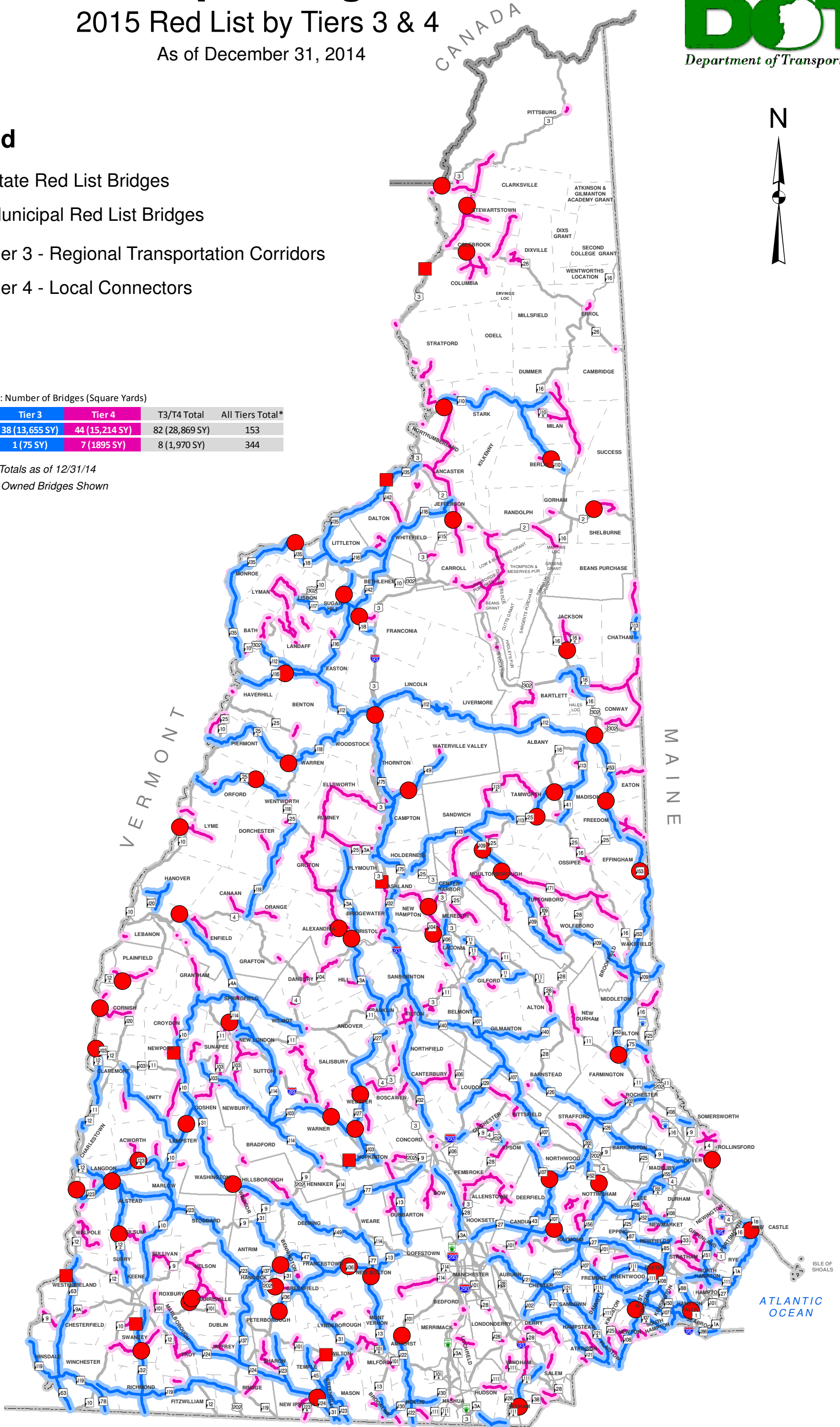
Facts

Red List Bridges: Number of Bridges (Square Yards)

	Tier 3	Tier 4	T3/T4 Total	All Tiers Total*
State	38 (13,655 SY)	44 (15,214 SY)	82 (28,869 SY)	153
Municipal	1 (75 SY)	7 (1,895 SY)	8 (1,970 SY)	344

*Official State Totals as of 12/31/14

**Not all State Owned Bridges Shown



MASSACHUSETTS

State & Municipal Bridge Conditions

2015 Red List Tier 5 & 6

As of December 31, 2014



Legend

- Municipal Red List Bridges
- Tier 5 - Local Roads
- Tier 6 - Off Network

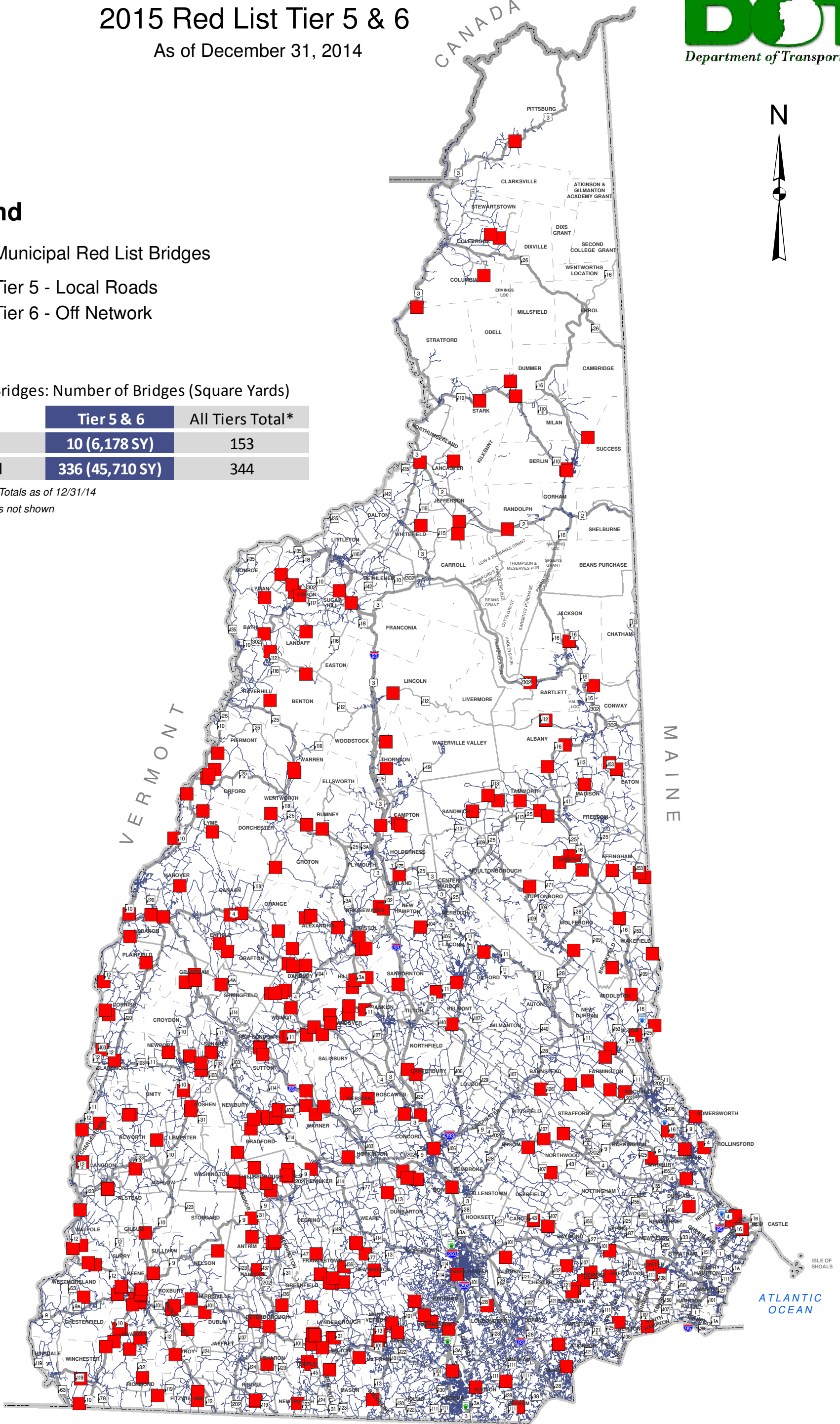
Facts

Red List Bridges: Number of Bridges (Square Yards)

	Tier 5 & 6	All Tiers Total*
State**	10 (6,178 SY)	153
Municipal	336 (45,710 SY)	344

*Official State Totals as of 12/31/14

**State bridges not shown



MASSACHUSETTS

Pavement Conditions

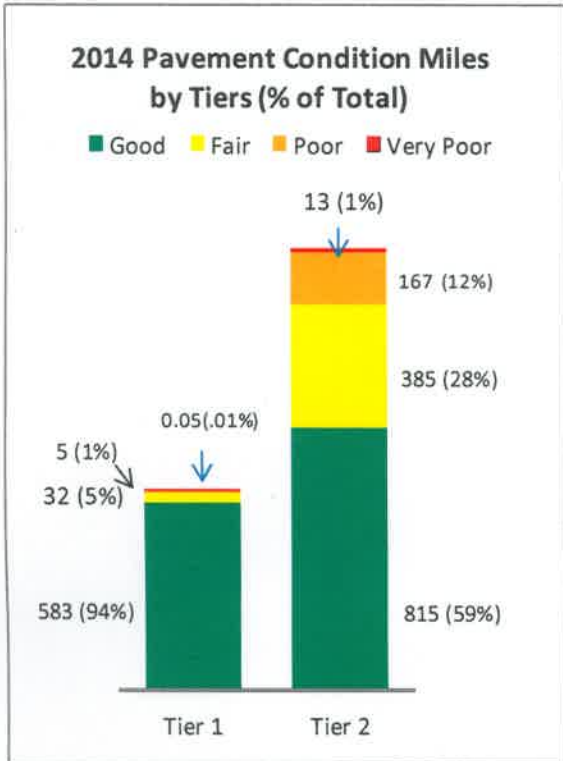
All Conditions Tiers 1 & 2

As Reported in Years 2013-2014

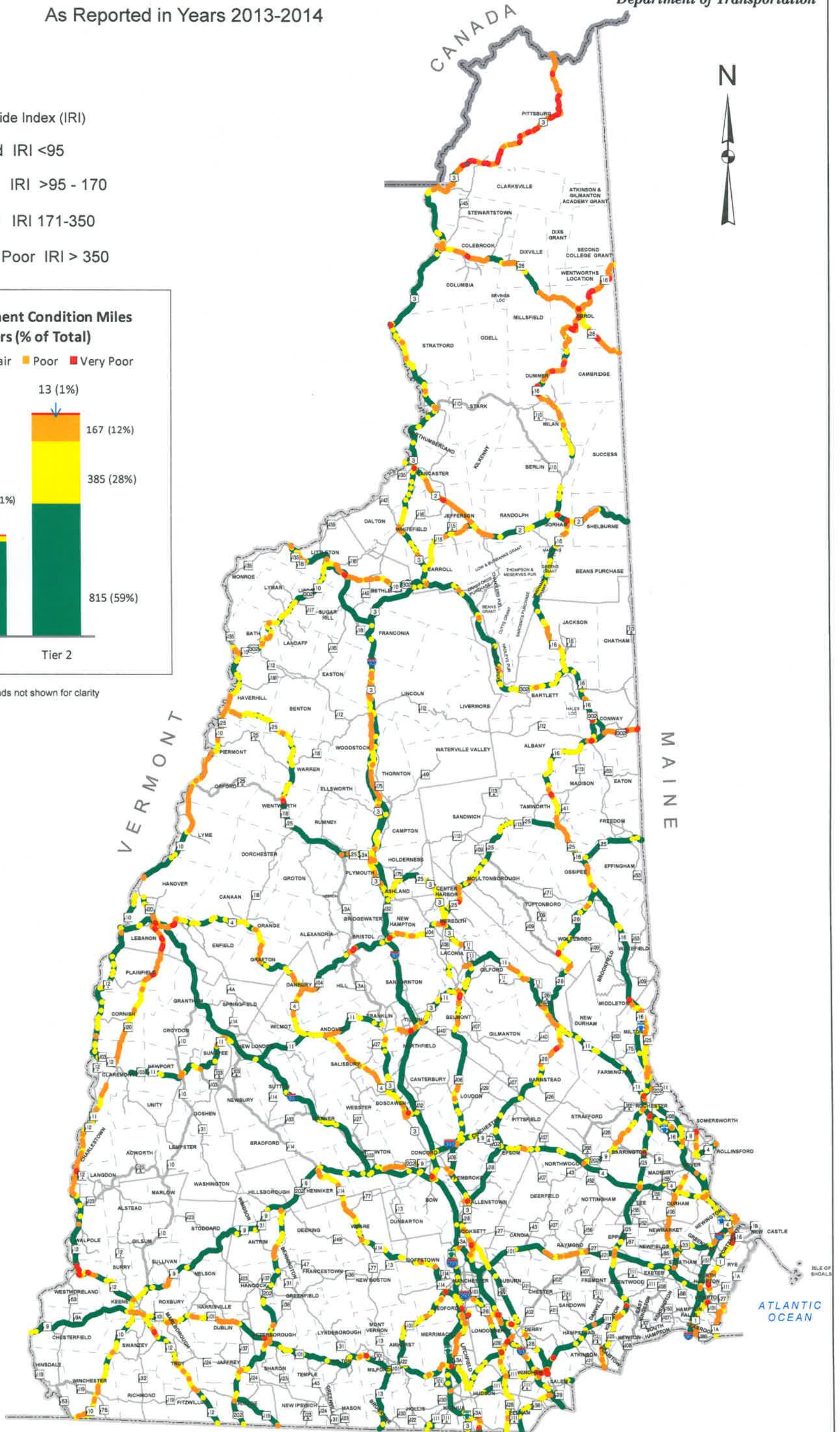
Legend

International Ride Index (IRI)

- █ Good IRI < 95
- █ Fair IRI > 95 - 170
- █ Poor IRI 171-350
- █ Very Poor IRI > 350



Unrated roads not shown for clarity



Pavement Conditions

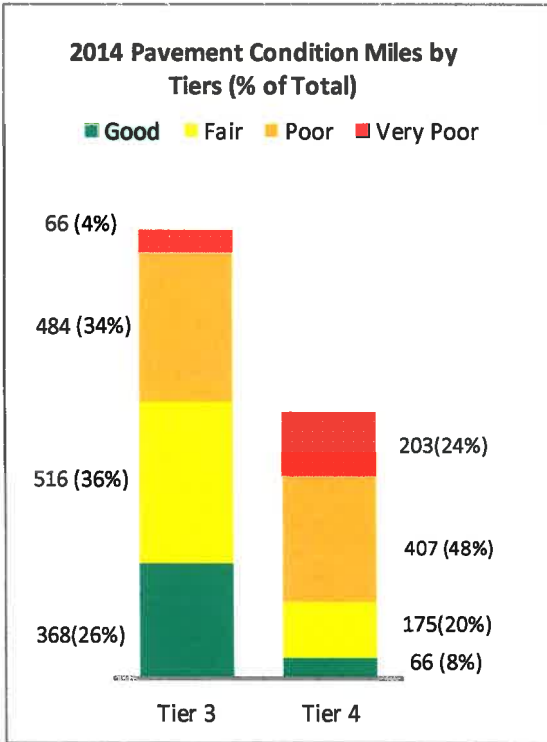
All Conditions Tiers 3 & 4

As Reported in Years 2013-2014

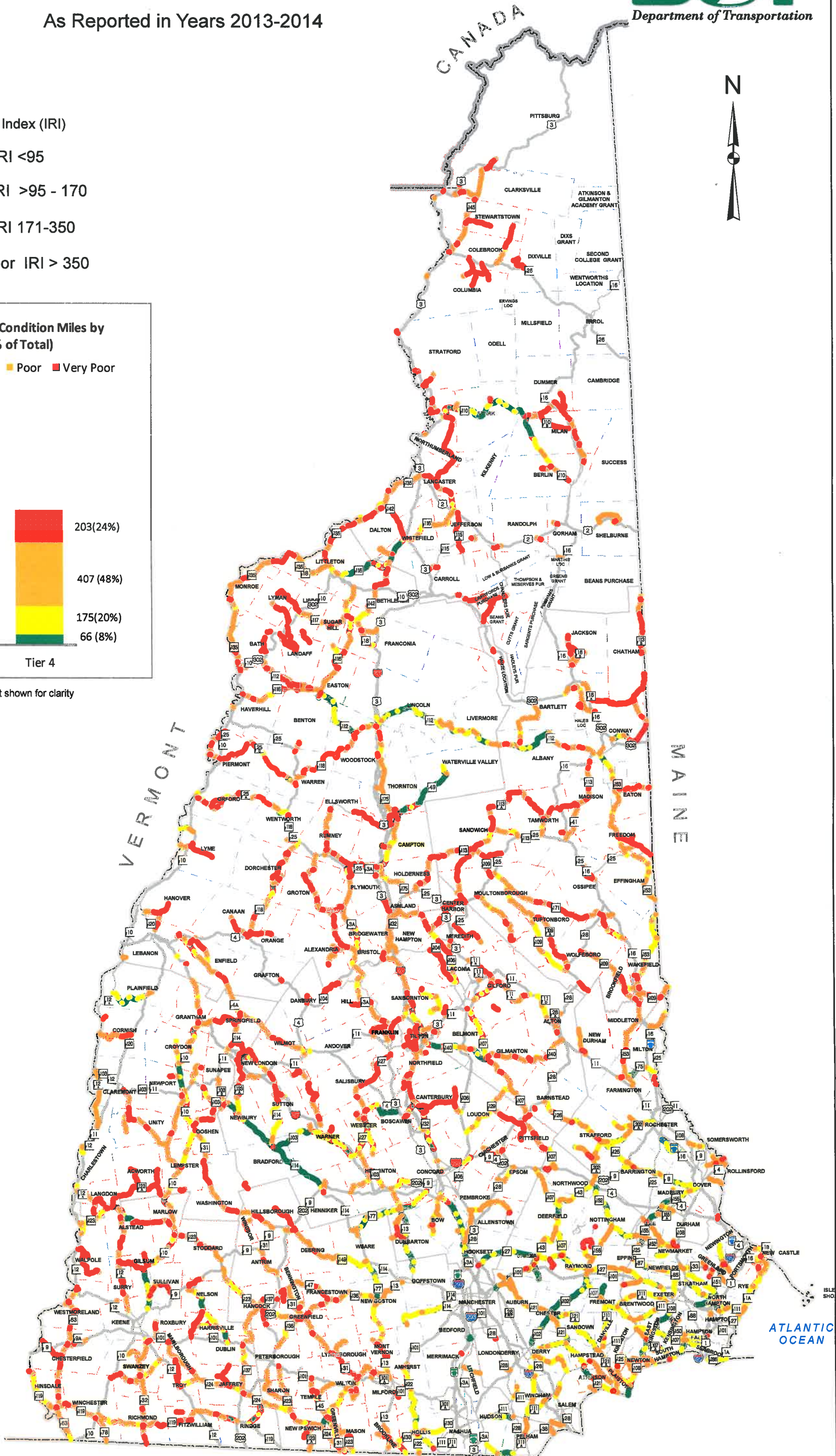
Legend

International Ride Index (IRI)

- █ Good IRI <95
- █ Fair IRI >95 - 170
- █ Poor IRI 171-350
- █ Very Poor IRI > 350



- Unrated roads not shown for clarity



Pavement Conditions

Poor Conditions Tiers 1 & 2

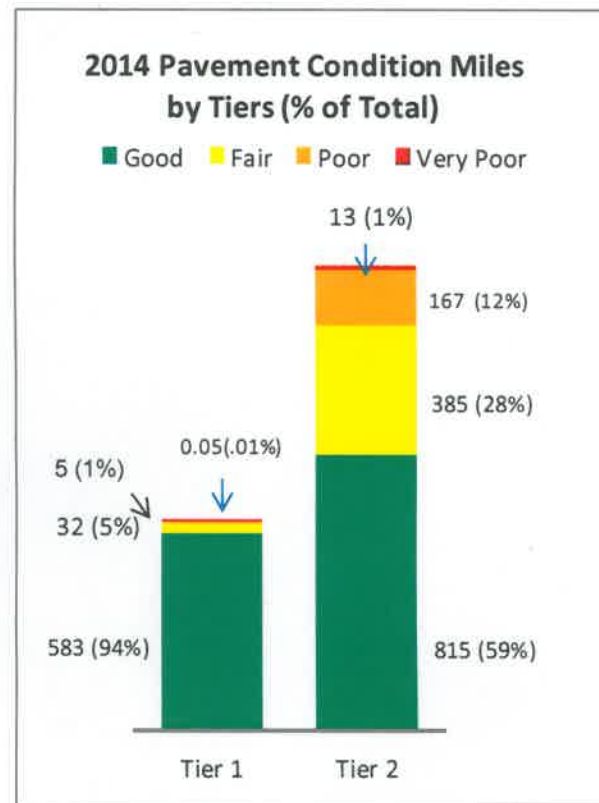
As Reported in Years 2013-2014

Legend

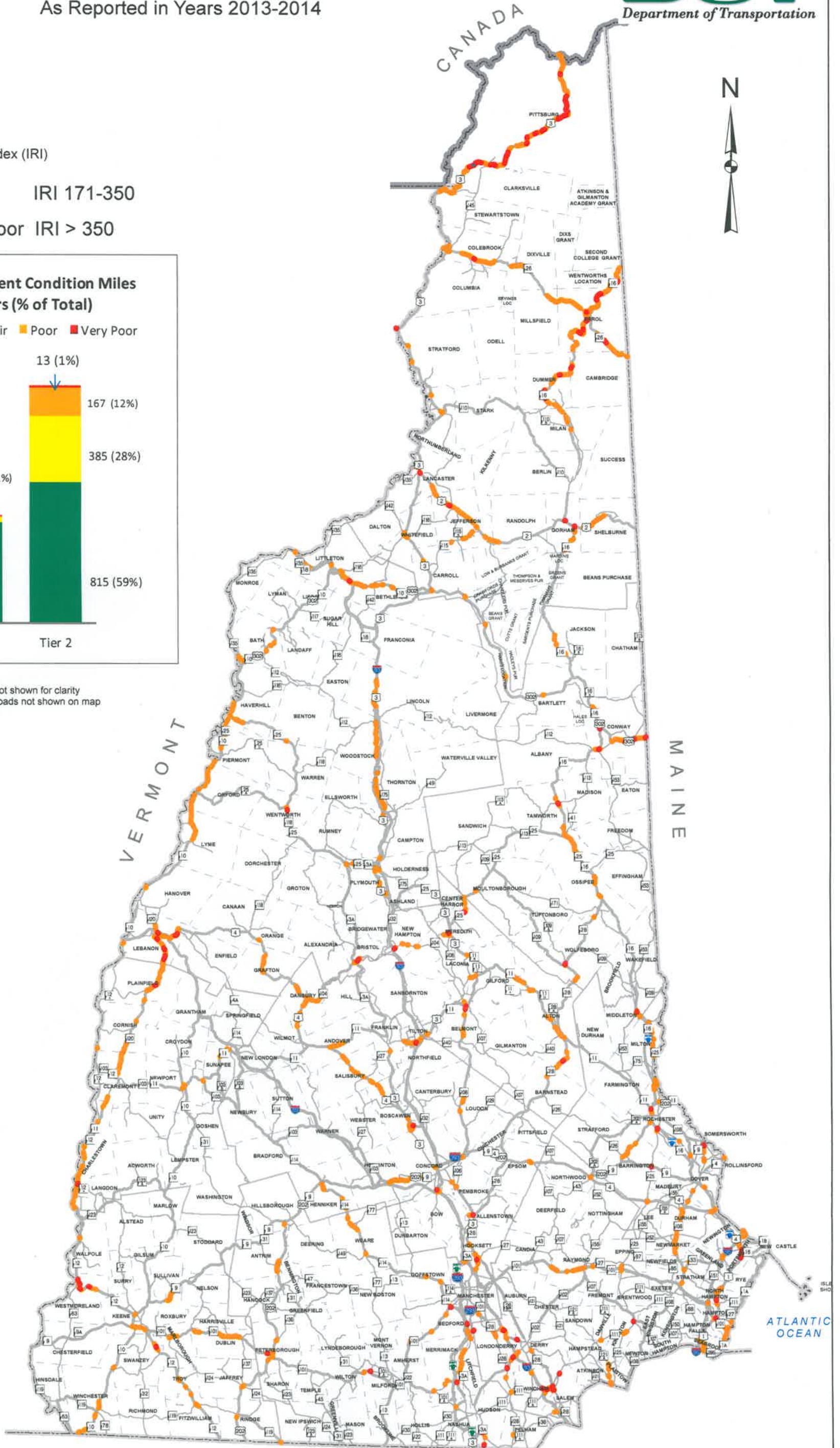
International Ride Index (IRI)

— Poor IRI 171-350

— Very Poor IRI > 350



- Unrated roads not shown for clarity
- Good and Fair roads not shown on map



Pavement Conditions

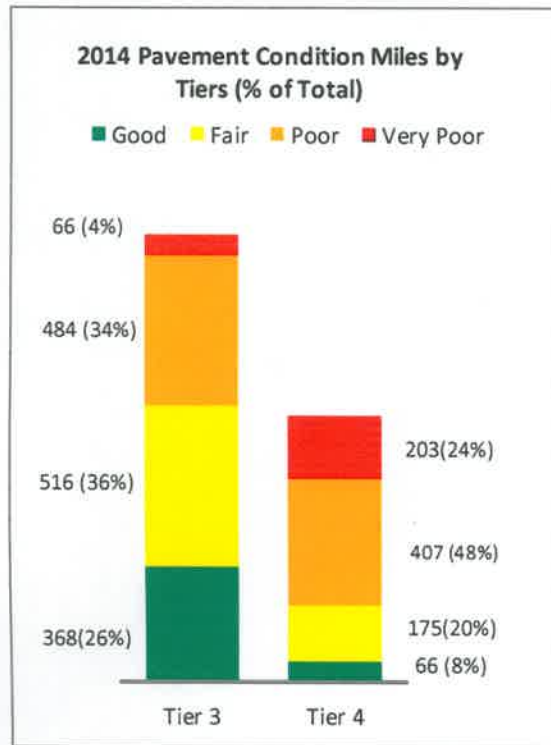
Poor Conditions Tiers 3 & 4

As Reported in Years 2013-2014

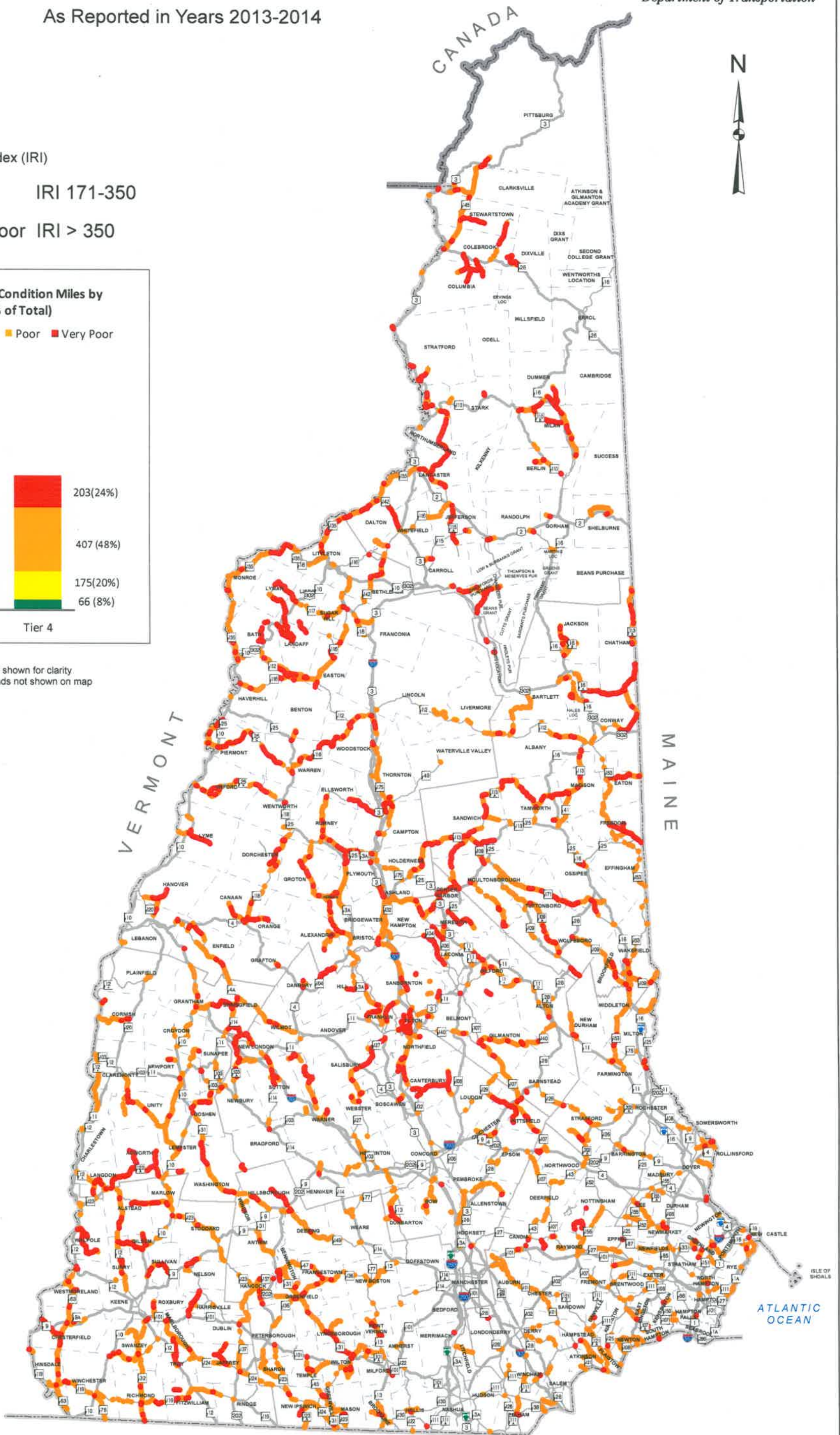
Legend

International Ride Index (IRI)

- Poor IRI 171-350
- Very Poor IRI > 350



- Unrated roads not shown for clarity
- Good and Fair roads not shown on map



Mission:

Transportation excellence enhancing the quality of life in New Hampshire.

Purpose:

Transportation excellence in New Hampshire is fundamental to the state's sustainable economic development and land use, enhancing the environment, and preserving the unique character and quality of life. The Department will provide safe and secure mobility and travel options for all of the state's residents, visitors, and goods movement, through a transportation system and services that are well maintained, efficient, reliable, and provide seamless interstate and intrastate connectivity.

Vision:

Transportation in New Hampshire is provided by an accessible, multimodal system connecting rural and urban communities. Expanded transit and rail services, and a well-maintained highway network and airport system provide mobility that promotes smart growth and sustainable economic development, while reducing transportation impacts on New Hampshire's environmental, cultural, and social resources. Safe bikeways and sidewalks bring together neighborhoods parks, schools, and downtowns. Creative and stable revenue streams fund an organization that uses its diverse human and financial resources efficiently and effectively.

Maggie Hassan, Governor**Executive Councilors:**

Joseph D. Kenney - District 1

Colin Van Ostern - District 2

Christopher T. Sununu - District 3

Christopher C. Pappas - District 4

David K. Wheeler - District 5

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