10/19/2018

DRAFT TYP (2021-2030) – PRIORITIES, CHALLENGES, OPPORTUNITIES

DRAFT TYP PRIORITIES

FEDERAL PROGRAM

USE OF TOLL CREDITS – PROS & CONS

ISSUES & CHALLENGES

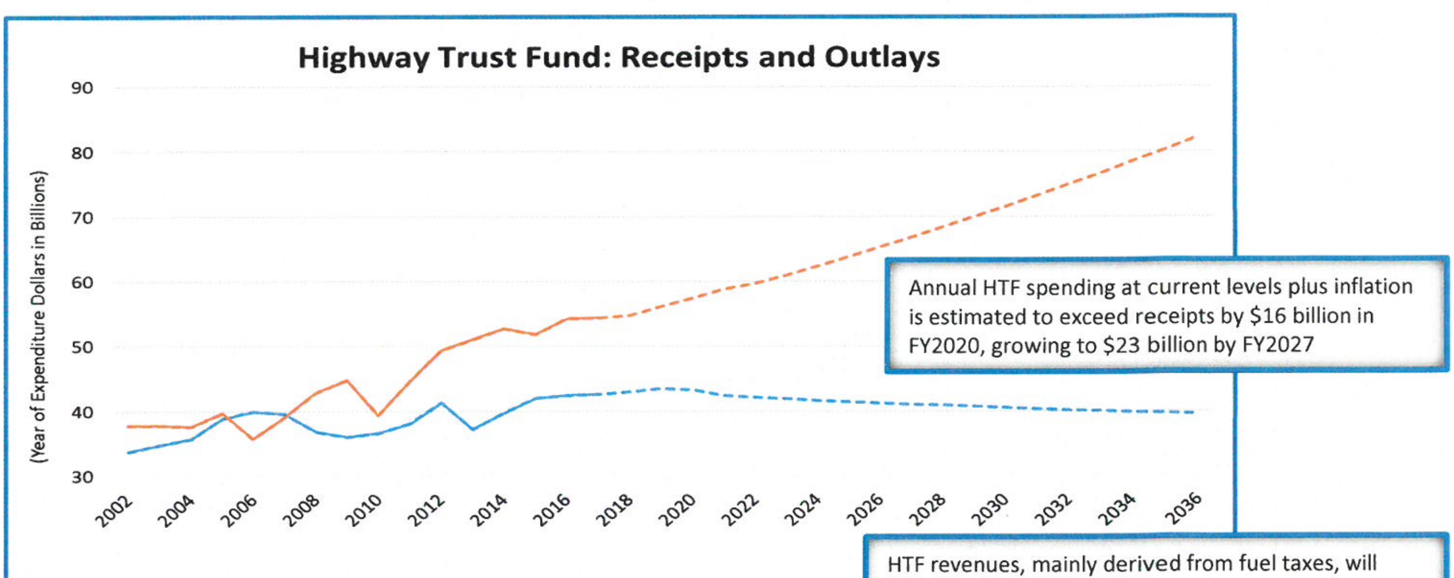
TURNPIKE SYSTEM - BENEFITS OF TOLL INCREASE & ACCELERATION OF MAJOR TURNPIKE CAPITAL PROJECTS

UNFUNDED NEEDS – CASE FOR ADDITIONAL REVENUE

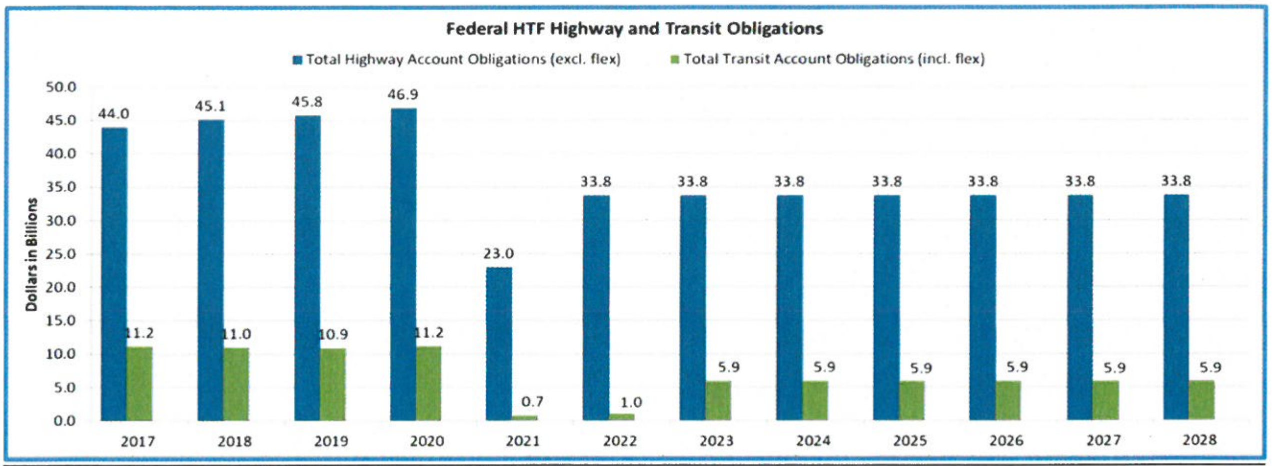
DRAFT TYP (2021 -2030) PRIORITIES - Priorities for this upcoming draft TYP as similar to the last two TYPs.

- Focus on Pavement Preservation – keeping the "good roads good" and exercising pavement maintenance (light capital paving) and roughness pavement strategies on the rest of the system.
- Focus on Bridge Preservation & Red List Bridges – funding for bridge preservation work to keep bridges off the red list and funding to address the state's red list bridge backlog (at end of CY2017, 133 state RL bridges)
- Dedicated SB367 Funds for TIFIA loan pledged rural roads & red list bridges - $200M TIFIA for I-93 was structured with interest only payments through 2025 paid with 4.2 cents gas tax increase (SB367). In 2026, principal and interest payments are due which will supplant the paving and bridge program on rural roads ($22M/yr). (See Attachment A for financing schedule)
- Completion of I-93 Salem to Manchester and funding for Exit 4A – Construction of I-93 should be completed in the 2020/2021 timeframe and funding for completion of $57M Exit 4A project extends to 2022. (GARVEE Debt Service extends thru 2025)
- $50M total in 2029 & 2030 for RPC priorities – should fund the top 1 to 2 projects that are RPC priorities and continues level of funding dedicated to the RPCs over the last 3 TYP cycles.
- Fully Constrained TYP – FAST Act ends in 2020. Federal Program funding beyond 2020 is uncertain at this time. Federal funding provides nearly 75% of the Highway Funded projects in the approved TYP (2019-2028)

FEDERAL PROGRAM The charts below list the estimated Highway Trust Fund Receipts and Outlays.



Source: AASHTO FAST ACT REAUTHORIZATION WHITE PAPER (Draft September 7, 2018)



Source: AASHTO FAST ACT REAUTHORIZATION WHITE PAPER (Draft September 7, 2018)

If Congress determines to no longer supplement the Highway Trust Fund with General Funds and only fund the HTF to be self-sufficient at the level of incoming receipts, then a 50% drop in federal funds is projected for 2021 and 30% drop for 2022 and beyond. This will have a tremendous negative impact on New Hampshire's program, as well as the nation's highway infrastructure. In the previous TYPs, level funding beyond the FAST Act has been assumed, but this is not a given. (See Appendix B for AASHTO's draft FAST Act Reauthorization White Paper on Funding and Finance)

NH Federal Funding (FFY18)

- FAST Act Apportionment - $173,915,712 (FHWA Notice dated 10/6/17, classification code N4510.819)
- Obligational Limit (Initial) - $158,218,839 (91.0% of Apportionment)
- Obligational Limit (Final) - $169,383,090 (includes transfers and redistribution)
- Transfers related to SPR Program and to FTA - $11,290,131
- August Redistribution - $22,454,382 (largest in history and primarily due to unspent balances nationally in TIFIA & INFRA (formerly FASTLANE) Programs)
- FY19 August Redistribution will likely decrease significantly due to obligation of FY19 INFRA grants awards made in late FY18.

Federal Major Buckets FFY18 Apportionment, Obligations & Balances

Funding in Categories at FFY 2018 - 09/28/2018

	R-HCP*	HSIP	NHPP	CMAQ*	Metro	STBG	NFP	Apportioned	
Apportioned	1,175,000	9,489,360	97,178,733	10,686,775	1,632,076	48,763,642	4,990,126	173,915,712	
Set Asides	-	(189,787)	(4,612,867)	(213,736)	-	(4,936,612)	(99,803)	(10,052,805)	
Net Apportioned	1,175,000	9,299,573	92,565,866	10,473,039	1,632,076	43,827,030	4,890,323	163,862,907	
Carry Over from FFY 2017 (includes RR Lapse)	4,115,867	2,172,876	3,946,958	15,697,919	422,538	13,899,500	-	40,255,658	
Available Balance	5,290,867	11,472,449	96,512,824	26,170,958	2,054,614	57,726,530	4,890,323	204,118,565	
Obligations/De-Obligations -/+ (include CMAQ Lapse)	(1,420,175)	(7,460,761)	(96,497,266)	(13,960,729)	(265,051)	(50,800,014)	(1,789,536)	(172,193,532)	
Fiscal Year Ending Balance	3,870,692	4,011,688	15,558	12,210,229	1,789,563	6,926,516	3,100,787	31,925,032	Excluding Set Asides
								46,669,542	Including Set Asides

*Carry Over includes RR Lapse taken in FFY 2017 of $1,993,020

*Obligation/De-Obligation includes CMAQ Lapse taken in FFY 2019 of $2,070,053

Pending FFY20 Rescission

- Fast Act includes a $7.569 billion rescission of apportioned contract authority.
- By Law the rescission will take effect on July 1, 2020 but be calculated on unobligated balances as of September 30, 2019.
- Rescission applies to all programs, except for direct allocated funding (i.e. earmarks), Safety Programs (i.e. HSIP), and funding sub-allocated by population under the STBG Program (i.e. set asides)
- States do not have flexibility to determine from which programs the rescission would come from.
- Based on STATE-BY-STATE Illustrative Impact of Highway Trust Fund Contract Authority Rescissions dated 5/30/2018 (see Attachment C), NH will be required to rescind 0.5372% of the national total or

$40.7M of contract authority leaving an unobligated balance of $3.5M in contract authority on 7/1/2020. This would have a crippling effect on any flexibility in executing the federal program in FY20, as it significantly reduces the contract authority in key programs. If projects are not aligned in the various buckets and ready to obligate funds (i.e. advertise for construction), federal funds will be lost.

USE OF TOLL CREDITS – PROS & CONS

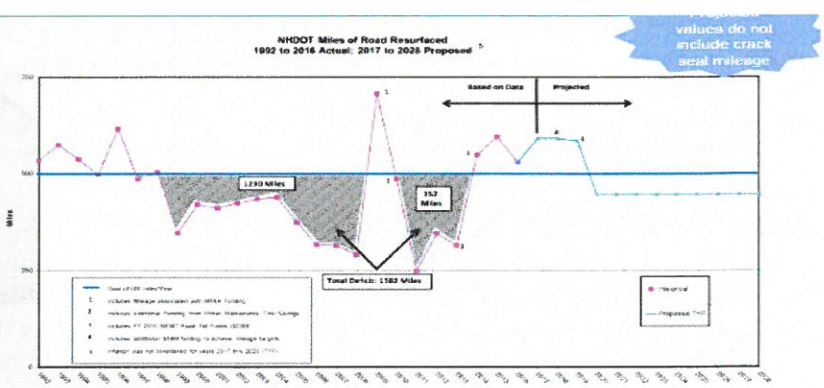
- Earned when Turnpike toll revenue is used to construct, reconstruct, rehabilitate, and/or maintain facilities that serve interstate commerce (entire Turnpike System is eligible). Essentially all of Turnpike Capital Program and Turnpike RR Program expenditures qualify.
- In essence "toll credits" are the "soft match" that allow 100% federal funds to be used on federally funded projects.
    - All federal projects in the approved TYP that typically require a state match are proposed to use toll credits.
    - At end of FY17, the toll credit balance (surplus) was $268M and projected to grow to $500M in 2028 based on the projects and Turnpike capital & RR work in the approved TYP.
- Pros – Provides the ability to fully utilize federal funds when no state cash match is available. Otherwise federal funds could not be used on projects and would need to be turned back.
- Cons – Use of toll credits to match the federal program reduces the overall program by 25% as the typical match requirement is 80/20 for federal projects (i.e. $183M of federal funds matched with 20% state funds would amount to a $229M program in total).
- Continued full reliance on the use of toll credits as a match to federal projects results in a smaller federal program and significantly less investment in NH's transportation system than our neighboring states, which directly has a bearing on the State's road and bridge conditions. (Additionally, NH receives the least amount of federal aid for highways than any other state in the nation).

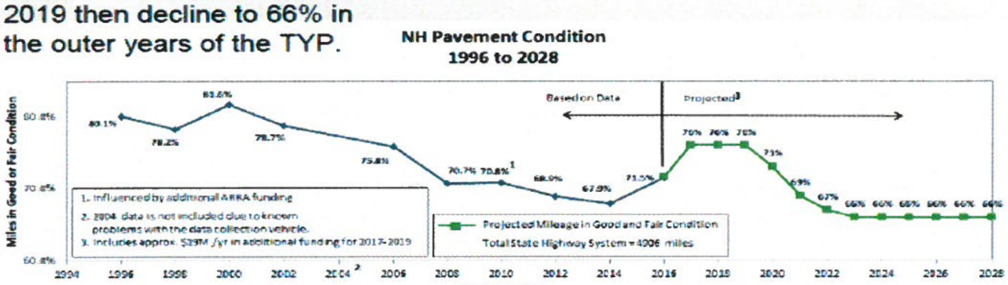
ISSUES & CHALLENGES

A LOOK AHEAD – ROAD CONDITION

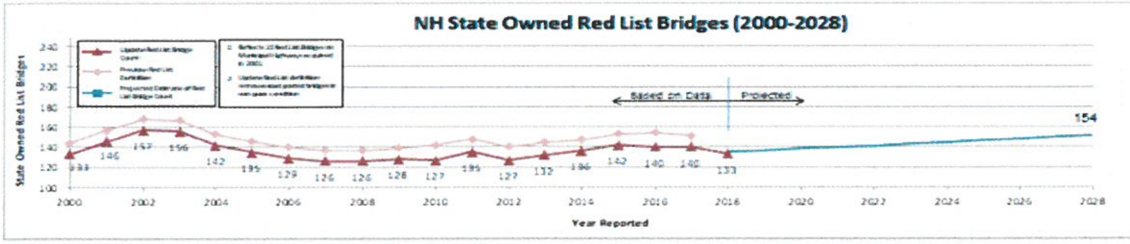
Based on current level of investment in the TYP

- **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 – BRIDGE CONDITION



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

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**

FEDERAL ELIGIBLE & INELIGIBLE STATE ROADS – Of the 4,600 miles of state roads, 1,142 miles or 25% of the system is not eligible for federal funding. Therefore, only limited state funds such as Betterment or SB367 may be used on these facilities. These facilities have the highest percentage of poor and very poor condition roads. No funding exists to reconstruct or perform major rehabilitation on these state roads.

Tier 1-4 Federal Aid Eligible Highways (3,460 Miles)

Tier 1-4 Non-Federal Aid Eligible Highways (1,142 Miles)

Fed Aid Eligibility	Tier				
	1	2	3	4	5
Fed Aid Eligible Miles	844	1426	1,062	128	692
Non Fed Aid Eligible Miles	0	0	376	766	11,327
Total Miles	844	1,426	1,438	894	12,019
Fed Aid Eligible Percentage	100%	100%	74%	14%	6%
Non-Fed Aid Eligible Percentage	0%	0%	26%	86%	94%

BRIDGE & PAVEMENT PROGRAMMATICS IN TEN YEAR PLAN ARE LEVEL FUNDED – All the Programmatics in the approved TYP are essentially level funded for the entire 10-year period. Although an annual inflation rate of 2.55% is included for individual projects in the TYP, the programmatics do not include inflation. This will result in less paving and bridge preservation work being completed unless the programmatics are incrementally increased in the latter part of the TYP.

MAJOR CORRIDOR IMPROVEMENT PROJECTS – Other than the Turnpike System (which is an enterprise fund and user based system), there is limited funding available for any future major corridor improvement project or expansion project.

STATE'S HIGHWAY FUND IS STRUCTURALLY INSOLVENT – State's Highway Fund is in a deficient spending condition where expenditures are higher than incoming revenue. Due to increase in fuel efficiency of automobiles, gas tax revenue into the Highway Fund is flat and projected to decline, while costs for materials, equipment, and personnel continue to rise. Amount of gasoline and diesel sold in NH peaked in 2008 at 848 million gallons and has not reached that level in the subsequent 10-year period.

TURNPIKE SYSTEM - BENEFITS OF TOLL INCREASE & ACCELERATION OF MAJOR TURNPIKE CAPITAL PROJECTS

The Nashua to Bedford FEET widening project involves widening three segments of the Turnpike from 2-lanes in each direction to 3-lanes in each direction to provide a consistent 6-lane facility from Nashua to NH101 in Bedford. The project is in the preliminary engineering phase with a selected alternative identified and Public Hearing held on October 3rd, 2018. The estimated construction cost is $127M. Based on the current toll structure, construction cannot begin until 2021 and cannot be completed until 2025.

The Manchester Exit 6 & 7 Interchange Reconstruction and FEET widening project involves addressing the serious safety, capacity and access related deficiencies along a 3.5-mile segment of the FEET (I-293) between Exit 5 and north of Exit 7 in Manchester. The project is in the preliminary engineering phase with a selected alternative identified and Public Hearing targeted for Nov/Dec of 2018. The estimated construction cost is $151M. Based on the current toll structure, construction cannot begin until 2024 and cannot be completed until 2028. The consultant for this project has completed an assessment of the existing conditions noting many deficiencies and has compiled crash data for the study area. In total 549 crashes were reported for the 7-year period of 2009-2015 with high crash locations noted at the ramp junctions, major intersections and along the FEET between Exits 5 and 6 and at Exit 7. Two fatal crashes were reported in 2009, one just north of the Exit 5 on-ramp merge and the other between the Exit 6 off and on-ramps. Also concerning is that the crash rate is increasing with 35% more crashes in the 3-year period from 2013-2015 as compared with the 3-year period from 2009-2011.

The Bow-Concord I-93 Improvements project involves widening I-93 from I-89 to north of Exit 15 (I-393) to add an additional lane in each direction and collector/distributor roads, as well as reconstruct/modify five interchanges (I-89/I-93 including Exit 1, Exit 12, Exit 13 NB off-ramp, Exit 14, and Exit 15). Presently, the physical limit of the Turnpike ends on I-93 at the northern end of the Exit 14 Bridge, which results in this project being funded with federal and turnpike funds. The project is in the preliminary engineering phase with a selected alternative identified and Public Hearing targeted for November of 2018. The estimated construction cost of the project is $290M. Based on the current toll structure, construction cannot start until 2026 with the Turnpike portion (south of Exit 14) not completed until 2031 and federal portion not completed until 2033 (under the presumption that an average of $27M per year of federal funds are committed to the project's construction in 2029 thru 2033).

ACCELERATION & EXPANSION OF TURNPIKE CAPITAL PROJECTS - The above major Turnpike capital projects could be accelerated (from 2 to 5 years) and additional projects/programs (Hampton ORT Expansion, Type II Soundwall Program, TDM Program, etc.) added with a toll increase and increased bonding. (Refer to Toll Increase Proposal dated 11/22/2017 located on NHDOT's Ten Year Plan webpage).

BENEFITS OF TOLL INCREASE & ACCELERATION OF MAJOR TURNPIKE CAPITAL PROJECTS

1. All of the increased toll revenue would be directed towards capital work on the Turnpike System.
2. Toll increase of 25 cents (Dover, Rochester, Hampton Side & Hooksett Ramp) & 50 cents (Hampton, Hooksett & Bedford) would be paid by users of the system and generate additional $36M per year.
3. Users directly benefit from the capital investments made to the system.
4. Nearly $20M per year or 54% of the toll increase would be paid by the out-of-state travelers.
5. Travel time, reliability of travel, and safety would significantly improve on those segments of the Turnpike System.
6. The construction industry would see a significant increase in Turnpike Capital spending resulting in increased job creation.
7. Funding for a much needed Type II Soundwall program at $4M per year ($36M in TYP period would address nearly 14 miles or roughly 15 priority locations along the Turnpike System)

8. Funding for feasibility studies to identify potential problems and conceptual solutions to the next wave of Turnpike needs such as potential improvements to the FEET in Manchester from NH101 to Exit 5 that is currently at capacity during peak hours of the weekday; potential expansion possibilities for the I-95 High Level Bridge that is at capacity during summer weekends; potential improvements to the Spaulding Turnpike in Dover between Exits 6 and 9.
9. Funding for a transportation demand management program at $3M per year for projects that reduce future travel demand on the Turnpike System (i.e. funding for alternative modes of travel such as transit, bike, rail).
10. Extension of the Turnpike System to the northern end of the Merrimack River Bridges in Concord to encompass the northern end of the Bow-Concord project would complete the entire Bow-Concord project by 2028 and free up nearly $180M in future federal funds to be used elsewhere across the state. Also will allow federal funds in the amount of $32M presently dedicated to Merrimack River Bridges project in Concord (project #41468) to be used elsewhere across the state to address an additional 11 Red List bridges and effectively reduce the state's red list bridge total. Lastly, it would provide an immediate infusion of $18M into the Highway Fund for the transfer of Highway ROW north of Exit 14 to Exit 16 to the Turnpike System.

UNFUNDED NEEDS – CASE FOR ADDITIONAL REVENUE

OPERATIONS - As part of the Department's Efficiency Budget submission to the Governor, the Department identified $20M of additional highway funded revenue needed for operations:

- Winter Maintenance – Additional $8M per year is necessary to fund an average winter (3-year Average)
- Fleet Equipment – Additional $7.4M per year is needed for sustainable fleet replacement program
- Bridge Preservation/Maintenance – Additional $3.6M per year is needed for state Bridge Maintenance forces to wash each state bridge once per year and perform minor bridge preservation work on state's small bridges and culverts
- Guard Rail Repair – Additional $1M per year is needed to repair damaged and deficient guard rail.

STATE'S RED LIST BRIDGES

- Additional investment of $16M per year is needed to reduce the backlog of red list bridges. This would effectively reduce the red list backlog by 50 bridges over a 10-year period.

MUNICIPAL RED LIST BRIDGES

- Additional investment of $8M per year is needed to reduce the backlog of municipal red list bridges. This would effectively reduce the red list backlog by 90 bridges over a 10-year period.

REHABILITATION / RECONSTRUCTION OF NON-FED AID ELIGIBLE STATE ROADS

- Additional investment of $12M per year would fund the annual reconstruction / major rehabilitation of 1% of the state's poor and very roads of roughly 12 miles per year.

REPLACEMENT OF TIFIA PLEDGED PAVING ON RURAL ROADS (Primarily Tier 3 & 4) in 2026

- Additional investment of $12M per year beginning in 2026 would replace the annual funding of TIFIA Pledged paving and fund roughly 150 miles of light capital paving on Tier 3 & 4 rural roads.

FUNDING FOR SOUNDWALL PROGRAM

- Additional investment of $4M per year towards a highway noise mitigation program would fund the 23 soundwall locations (identified as part of the Statewide Type II Noise Barrier Screening Analysis dated 3/29/17) on the Highway Funded system (excluding Turnpikes) over a 12-year period.

FUNDING FOR CULVERT REPLACEMENT PROGRAM

- Additional investment of $2M per year would address 10 to 15 deficient culverts annually. Based on initial culvert inventory collection efforts, there are an estimated 13% of culverts in poor condition (based on data collected in D5, D6 & Turnpikes).

FUNDING FOR STATE RAIL TRAILS PROGRAM

- Additional investment of $2M per year for ROW purchases and construction of recreational trails on rail corridors would improve connectivity and expansion of the existing trail system.

RESTORATION OF STATE FUNDING FOR RURAL TRANSIT

- Restoration of state general fund match of $200k per year to help close the gap in the 50% local match requirement for the federal transit program.

FUNDING FOR CORRIDOR IMPROVEMENTS

- In the last TYP, annual funding of $700k was included for corridor studies statewide to help identify future projects in future Ten Year Plans. Based on the improvements identified in the corridor studies, funding for this program will need to be identified.

10/10/2018

ATTACHMENT A

TIFIA FINANCING SCHEDULE

DOT
10/12/17

STATE OF NEW HAMPSHIRE

SB 367 - AMENDMENT #2015-1810s BY THE SENATE AND HOUSE PASSED 2016-2017 BUDGET

BUDGETARY ESTIMATES WITH TIFIA FINANCING

Fiscal Year	$0.042 Dedicated Road Toll Increase[1]	Municipal Block Grant Aid (12% PY Revenue)	Debt Service & Cost of Issuing Bonds Due on $200M TIFIA Financing[2] for I-93	Additional State Aid for Municipal Bridges	DOT Operating Budget	Transfer from FY 16 savings in Operating[4]	TIFIA Pledged Paving and Bridge Repair[3]
2015 Actual	$34,317,587	-	100,000.00	$9,117,587	-		$25,100,000
2016 Actual	$34,686,888	$4,118,110	$284,354	$6,800,000	$8,300,000		$15,184,423
2017 Actual	$34,974,610	$4,162,427	$473,303	$6,800,000	$8,300,000	$4,000,000	$19,238,880
2018 Budget	$34,479,900	$4,144,140	$830,987	$6,800,000	-		$22,704,773
2019 Budget	$34,479,900	$4,137,588	$1,396,683	$6,800,000	-		$22,145,629
2020	$34,479,797	$4,137,588	$1,864,483	$6,800,000	-		$21,677,726
2021	$34,479,693	$4,137,576	$2,147,107	$6,800,000	-		$21,395,011
2022	$34,479,590	$4,137,563	$2,195,000	$6,800,000	-		$21,347,027
2023	$34,479,486	$4,137,551	$2,195,000	$6,800,000	-		$21,346,935
2024	$34,479,383	$4,137,538	$2,197,986	$6,800,000	-		$21,343,858
2025	$34,479,279	$4,137,526	$2,192,014	$6,800,000	-		$21,349,739
2026	$34,479,176	$4,137,514	$23,405,706	$6,800,000	-		$135,956
2027	$34,479,072	$4,137,501	$23,405,706	$6,800,000	-		$135,865
2028	$34,478,969	$4,137,489	$23,405,706	$6,800,000	-		$135,774
2029	$34,478,866	$4,137,476	$23,405,706	$6,800,000	-		$135,683
2030	$34,478,762	$4,137,464	$23,405,706	$6,800,000	-		$135,592
2031	$34,478,659	$4,137,451	$23,405,706	$6,800,000	-		$135,501
2032	$34,478,555	$4,137,439	$23,405,706	$6,800,000	-		$135,410
2033	$34,478,452	$4,137,427	$23,405,706	$6,800,000	-		$135,319
2034	$34,478,348	$4,137,414	$23,405,706	$6,800,000	-		$135,228
TOTAL	**$690,124,972**	**$78,624,782**	**$226,528,271**	**$138,317,587**	**$16,600,000**	**4,000,000.00**	**$234,054,333**

[1] - For FY 2018 - FY 2019, Approved Budget as passed HB144 Chapter 155 Laws of 2017; FY 2020-2034 provided by the Department of Safety, assumes a 0.0003% decrease each year thereafter.

[2] - Actual/Projected debt service based on loan closing 5/24/2016.

- $200M TIFIA Financing; 9 year deferral period for principal payments
- All-In True Interest Cost = 1.09%
- Includes $15,000 annual TIFIA Adminstrative Fee.

Account.

[4] - Savings realized in Highway Maintenance in FY2016 transferred to TIFIA Pledged Paving and Bridge Repair pursuant to CH 0324:10

AASHTO FAST ACT REAUTHORIZATION
3: Funding and Finance

INTRODUCTION AND BACKGROUND

The Fixing America's Surface Transportation (FAST) Act was signed into law on December 4, 2015. The FAST Act authorizes Federal highway, highway safety, transit, and rail programs for five years from Federal fiscal years (FY) 2016 through 2020. The FAST Act authorized $305 billion from both the Highway Trust Fund (HTF) and the General Fund (GF) of the United States Treasury. The bill preserved HTF solvency with general fund transfers totaling $70 billion through 2020.

The nation needs a significant increase in federal transportation formula funding, beyond FAST Act funding levels, along with timely, sustainable, long-term funding to meet national needs for economic competitiveness, connectivity, safety and security. New transportation revenue options should be considered to supplement or replace the deteriorating federal revenue stream. As investment needs grow, HTF revenues derived from fuel taxes will continue to decline due mainly to increased vehicle fuel efficiency.

Additionally, the FAST Act includes a $7.6 billion rescission of unobligated contract authority scheduled for July 2020. Congress should avoid using rescissions of highway contract authority because they impede state DOT flexibility in programming Federal dollars and can result in cuts to highway funding and services, reducing transportation system performance.

The Committee on Funding and Finance is charged with identifying specific policy issues and recommendations related to funding and finance. This white paper presents recommended policies for consideration by AASHTO and the Transportation Policy Forum.

SPECIFIC POLICY ISSUES AND RECOMMENDATIONS

ISSUE #1: Increase Federal Funding

- *Current Federal Policy*: The FAST Act authorized $305 billion from both the Highway Trust Fund (HTF) and the General Fund (GF) of the United States Treasury. It provided $225 billion in HTF contract authority over five years for the Federal-Aid Highway Program and $61 billion over five years for Federal transit programs. It also includes funding for highway safety, authorized general funding for rail, and increased emphasis on freight investments through new highway program elements supported by the HTF.
- *Issue*: Our nation is currently faced with aging infrastructure, a growing national population, and a major transportation funding shortfall. The American Society of Civil engineers has identified a $1.1 trillion funding gap for surface transportation between 2016 and 2025. It is essential to increase federal funding for surface transportation to sustain national and regional connectivity and mobility for people and business. The federal government must connect the nation. Reducing that role or proposing turnback of the system is not appropriate. The states cannot fund a dynamic and efficient national transportation system alone.
- *Recommendation:* Congress is urged to increase federal surface transportation funding significantly above the current FAST Act funding levels. Enhanced federal funding is required for both rural and

urban areas of the country to improve the quality of life and to increase the Nation's economic vitality, well-being, and competitiveness.

ISSUE #2: Fix the Federal Highway Trust Fund (HTF) and Strengthen Federal Transportation Funding

- *Current Federal Policy*: The HTF serves as the backbone of Federal highway and transit programs and was once supported solely by user fees. Since 2008, the HTF has been sustained by supplementing user fees through a series of General Fund transfers now amounting to $140 billion. According to the Congressional Budget Office, annual HTF spending at current levels plus inflation is estimated to exceed receipts by $16 billion in FY 2020, growing to $23 billion by FY 2027.
- *Issue*: HTF revenues, mainly derived from fuel taxes, will continue to decline due to increased vehicle fuel efficiency and growing use of alternative fuel vehicles. Absent legislation, in FY 2021, the HTF is expected to experience a significant cash shortfall leading to an estimated 40 percent drop in highway obligations from the year before, or from $46.2 billion to $27.7 billion, and a near zeroing out of the Mass Transit Account.
- *Recommendation*: Congress must provide sustainable, certain, long-term funding to the HTF to support multi-year legislation. There is no shortage of technically feasible tax and user fee options that Congress and the Administration can consider. See the "Matrix of Illustrative Surface Transportation Revenue Options" appendix for a menu of options to fix the HTF and strengthen Federal surface transportation funding, including funding from the General Fund. Congress should continue to fund the development and implementation of revenue alternatives to the motor fuel tax, such as the Surface Transportation System Funding Alternatives Program, which was established under the FAST Act and provides $95 million over five years to states to demonstrate alternative revenue methods that incorporate a user fee structure to maintain the long-term solvency of the HTF.

ISSUE #3: Prioritize Formula-based Federal Funding

- *Current Federal Policy*: The Federal-aid Highway Program is a Federally-assisted state program that is rooted in Article 1, Section 8 of the United State Constitution and confirmed by 23 U.S.C 145. Currently, approximately 90 percent of the Federal highway program funds are distributed to the states by formula. This approach of emphasizing formula funds has a decades long track record of success in supporting long-term capital improvements across the United States. This enables funds to be distributed to states in a stable and predictable manner and allows the Federal program to efficiently deliver projects that have been identified and prioritized through the statewide and metropolitan planning processes.
- *Issue*: Recently proposals have been advanced that would greatly increase the discretionary funding programs, with projects chosen by the Federal Government. These proposals combine the discretionary programs with requirements that states and others greatly increase their contributions or greatly leverage Federal dollars. For a variety of reasons, many states cannot leverage funding beyond the current matching requirements. This makes it critical that Congress continue to recognize the importance of continuing the current prioritization of formula funding over discretionary funding. Using discretionary programs, the Federal government must solicit applications and review them before awarding funds which delays the deployment of funds. In addition, not only are grant applications costly in both time and dollars, such grant dollars are uncertain by nature preventing states from properly planning. This results in lost efficiency and added complexity to processes and project delivery. More funding for discretionary programs will likely result in an even lengthier processing timeframe making them an inefficient way to increase investments in transportation infrastructure.

- *Recommendation*: Congress should continue to prioritize formula funding over discretionary funding. State and local governments have existing plans and processes in place and can put new Federal formula funds to work promptly.

ISSUE #4: Eliminate Rescissions of Contract Authority

- *Current Federal Policy*: Congress has used rescissions of highway contract authority as budgetary offsets. An $856 million rescission in unobligated contract authority was enacted in June 2017 and a $7.6 billion rescission is scheduled for July 2020 under the FAST Act. The $7.6 billion rescission would be derived from Federal-aid Highway Program categories other than those that are exempt including: Highway Safety Improvement Program, Railway-Highway Crossing Program, and sub-allocated portions of the STBGP. Non-exempt program dollars are required to be rescinded from unobligated balances remaining on that date on a proportional basis.
- *Issue*: Rescinding previously-authorized highway contract authority greatly impedes the flexibility of state departments of transportation to program Federal dollars and could result in hard cuts to highway funding.
- *Recommendation:* Congress is urged to repeal the scheduled FY 2020 rescission and avoid using rescissions of highway contract authority. However, if a rescission is imposed, no funding categories should be exempt. States should have the flexibility to choose among all the funding categories to rescind so they can reduce the negative impact of the rescission on transportation service and performance.

ISSUE #5: Preserve the Current Federal/State Matching Ratio Requirements

- *Current Federal Policy*: While there are exceptions, 23 U.S.C. 120 generally requires most federal-aid transportation projects to have an 80 percent federal share and a 20 percent state matching share. This 80/20 Federal/Non-Federal funding share means Federal support is focused on larger capital projects and leverages state and local dollars to be used for a much broader array of projects.
- *Issue*: This 80/20 Federal/Non-Federal funding match has a proven track record of success. Many states have recently raised revenues, however, some states remain challenged to meet the 20 percent non-Federal match requirements. States and local governments already provide approximately 75 percent of transportation funding for highways and transit. Achieving national goals require our federal partners to contribute an equitable share. There are significant needs for state and other non-federal transportation funding to operate and maintain the federal system as well as provide capital, operating, and maintenance funding for non-federal, state and local transportation systems. The current matching requirements allow state and local dollars to be used to match federal funds and also to be used for non-federal transportation.
- *Recommendation:* Maintain the current federal/state matching ratio requirements for projects and explore innovative match strategies (e.g., the sale of toll credits).

ISSUE #6: Increase flexibility and transferability of funding

- *Current Federal Policy*: The total amount of Federal highway funding apportioned to a state is divided among the individual apportioned programs. Each program has rules that are not always flexible regarding how the funds may be used. Each program is governed by transferability provisions that are established in statute.
- *Issue*: AASHTO supports increased flexibility in programs and in transferring funding among the programs. Such reform would enable states to direct funding to better meet their needs, whether for preservation, capacity, safety or other needs. This flexibility in directing funds is especially important when overall funding is insufficient.

- *Recommendation:* AASHTO recommends increased transferability/flexibility of highway program funds.

ISSUE #7: Maintain the current balance of funding among highways, transit, and highway safety

- *Current Federal Policy*: The Highway Trust Fund supports highway, transit, and highway safety programs. The FAST Act also added a new National Highway Freight Program (NHFP) and a new discretionary program entitled the Nationally Significant Freight and Highway Programs (now known as Infrastructure for Rebuilding America or INFRA) within the highway program. Additionally, the general fund supports rail programs.
- *Issue*: The current funding balance along with transferability and flexibility allows states to direct available funding to meet highway, safety, and transit needs. The most recent FHWA Conditions and Performance report estimated the highway backlog at $836 billion and a transit backlog of $90 billion. States need all the tools to address such a high level of need.
- *Recommendation*: Maintain the current balance of funding among highways, transit and highway safety from the HTF and continue General Fund support for rail programs.

ISSUE #8: Support for Financing Tools

- *Current Federal Policy*: Title 23 authorizes a number of beneficial transportation financing tools, including the Transportation Infrastructure Finance and Innovation Act (TIFIA), Grant Anticipation Revenue Vehicles (GARVEEs), State Infrastructure Banks (SIBs), and Private Activity Bonds (PABs).
- *Issue*: While not a substitute for adequate funding, states need access to financing tools to help maximize the value of existing resources, particularly when federal funding is insufficient.
- *Recommendation:* While most projects require Federal support in the form of direct funding rather than financing incentives, Congress should continue to support the financing tools currently provided and support new innovative financing tools.

ISSUE #9: Provide Flexibility to Toll Federal-aid Highways

- *Current Federal Policy*: In most cases, federal law (23 USC 301) restricts states from tolling Federal-aid Highways, which eliminates a potential source of revenue. The Interstate System Reconstruction and Rehabilitation Pilot Program (ISRRPP) was authorized under Section 1216(b) of TEA-21 to permit up to three existing Interstate facilities to be tolled to fund needed reconstruction on Interstate corridors that could not otherwise be adequately maintained or functionally improved without the collection of tolls.
- *Issue*: In some states, a portion of the transportation facilities cannot be adequately maintained or functionally improved without toll collection; however, federal law imposes restrictions on states from tolling Interstate routes.
- *Recommendation:* Provide increased tolling flexibility to states.

ISSUE #10: Reduce and Simplify Regulations, Requirements, Data Collections, and Process to Expedite the Process

- *Current Federal Policy:* Preserve useful program and policy reforms and support additional opportunities to streamline and simplify the federal surface transportation programs.
- *Issue:* Notwithstanding efforts by AASHTO, current Federal surface transportation programs are subject to significant requirements and processes. Appropriate reduction of such requirements will save money, increase efficiency, and allow more funding to be used to improve transportation services. Some requirements are particularly tied to finance and funding. Under the current uncertain federal funding conditions, performance management, asset management, and financial

planning requirements have far less value for decision making and risk is multiplied. If federal transportation appropriations are not known at the beginning of the federal fiscal year, financial planning, financial forecasting, programming, performance, and asset management are adversely affected. This is further accentuated if these decision systems use financial optimization methods over long-time frames. Many of the financial planning and forecasting requirements are associated with the statutory language "reasonably expected to be available." For such purposes it is critical to know both 'how much funding and when the funding will reasonably be available.'

- *Recommendation*: There are financial process difficulties caused by federal funding uncertainty in the fiscal constraint and financial planning provisions related to the State Long Range Plan, the Statewide Transportation Improvement Program, the Asset Management Plan, and Performance Management. Defining "reasonably expected to be available" is important. Fiscal constraint and other financial requirements in planning and programming are excessive and should be reduced. At most, they should be imposed for no more than the STIP timeframe. States should have the option to do financial estimates for longer periods if desired.

Other AASHTO committees' white papers will identify additional Title 23 statutory and regulatory recommendations to improve project delivery to supplement these financial and funding recommendations. Because any inefficient process requirements reduce funding available to improve transportation services, other inefficiencies need to be addressed. They directly affect the ultimate result we all seek---a better transportation system.

Exhibit 1: Estimated Highway Trust Fund Receipts and Outlays

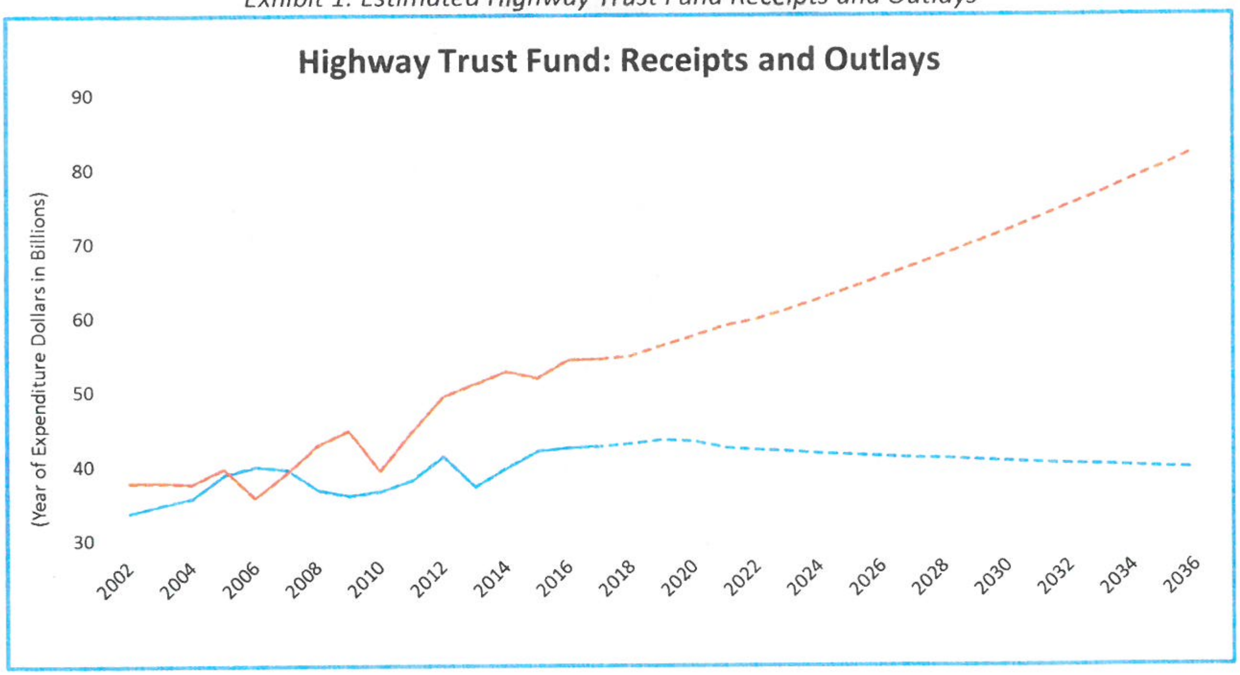


Exhibit 2: Estimated Highway Trust Fund and General Fund Obligations

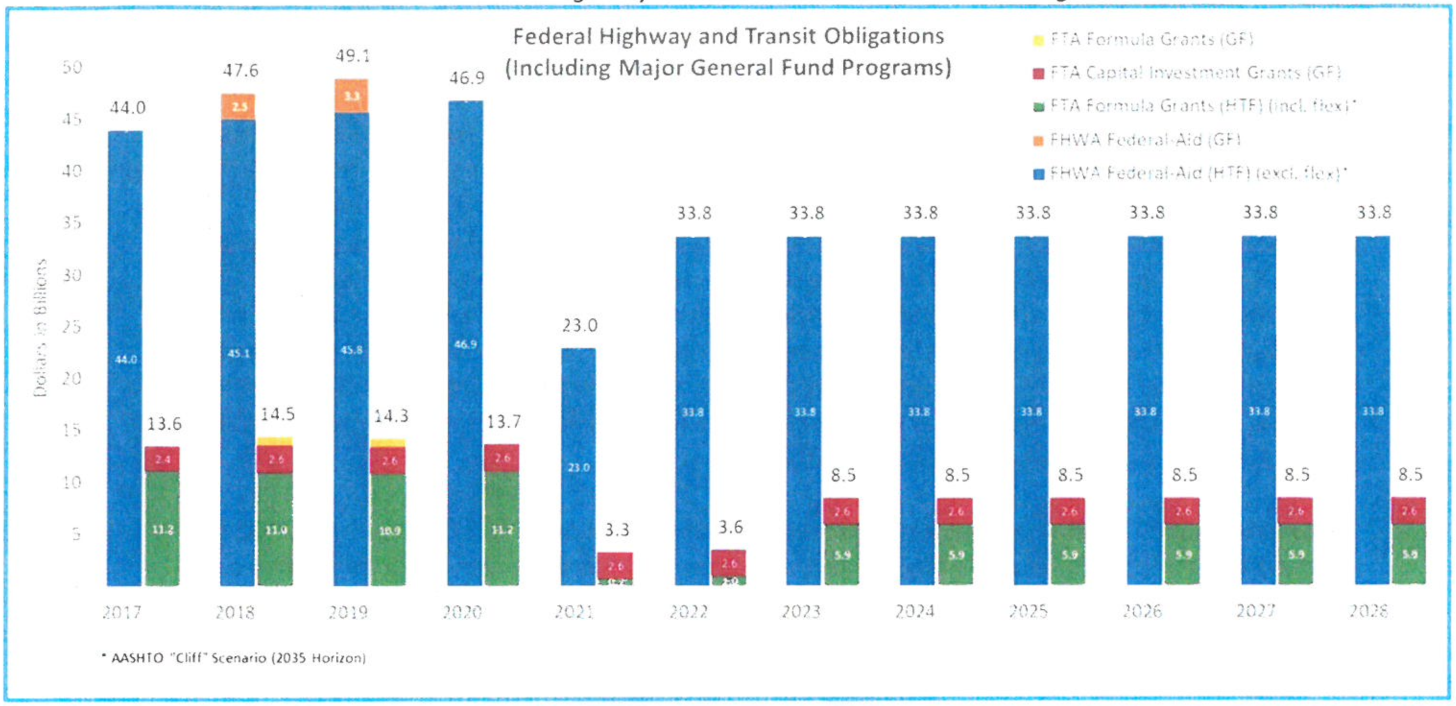
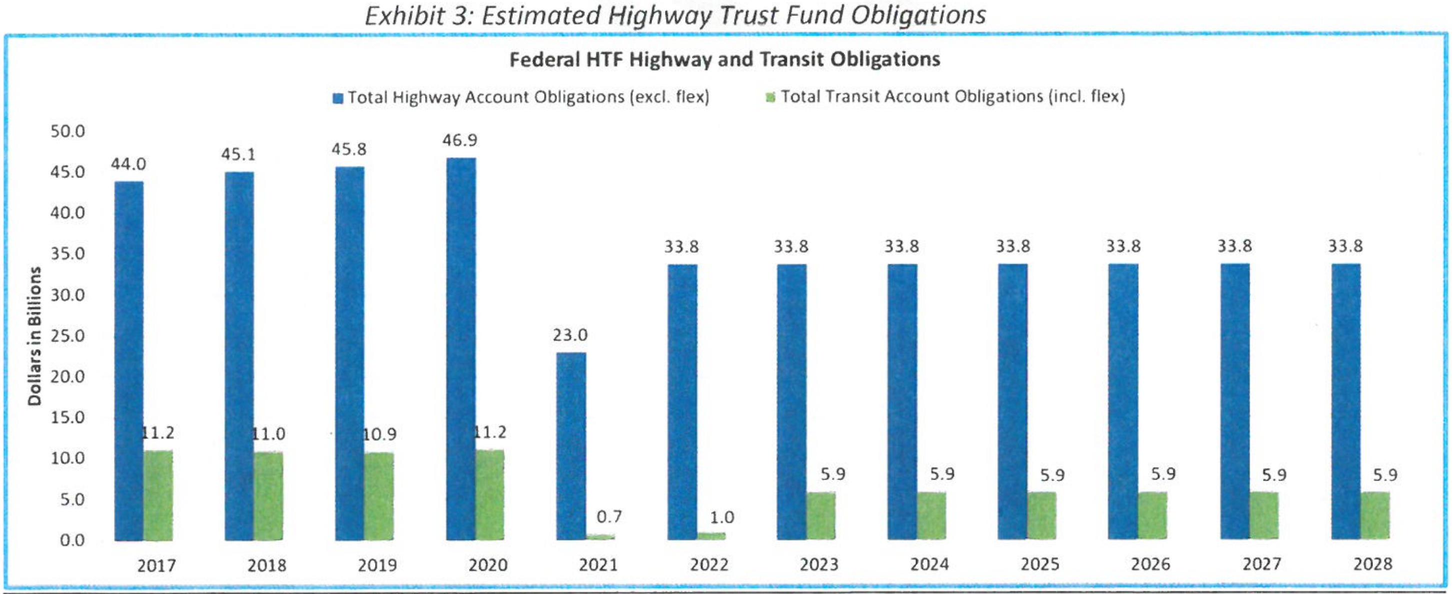


Exhibit 3: Estimated Highway Trust Fund Obligations



STATE-BY-STATE ILLUSTRATIVE IMPACT OF HIGHWAY TRUST FUND CONTRACT AUTHORITY RESCISSIONS

Updated 5/30/2018

Based on highway contract authority rescissions in Division K of HR 244 (Consolidated Appropriations Act, 2017) and Section 1438 of Fixing America's Surface Transportation Act (FAST Act).

State	ENACTED $857M FY 17 Rescission on 6/30/17	ACTUAL Unobligated CA Balance Subject to FAST Act as of 9/30/2017	Percent of National Total	SCHEDULED $7.569B FAST Act Rescission on 7/1/2020*	Estimated Unobligated CA Balance Subject to FAST Act after 7/1/20
ALABAMA	14,538,255	**76,737,001**	0.9333%	70,641,066	**6,095,935**
ALASKA	9,696,039	**94,678,276**	1.1515%	87,157,097	**7,521,178**
ARIZONA	12,671,005	**120,846,334**	1.4698%	111,246,383	**9,599,951**
ARKANSAS	9,861,740	**91,247,173**	1.1098%	83,998,559	**7,248,614**
CALIFORNIA	88,746,125	**611,499,721**	7.4372%	562,922,597	**48,577,124**
COLORADO	5,865,392	**121,397,055**	1.4765%	111,753,355	**9,643,700**
CONNECTICUT	12,599,674	**116,546,835**	1.4175%	107,288,433	**9,258,402**
DELAWARE	5,088,172	**54,627,034**	0.6644%	50,287,500	**4,339,535**
DIST. OF COL.	4,357,126	**50,576,159**	0.6151%	46,558,423	**4,017,736**
FLORIDA	26,956,326	**354,753,767**	4.3146%	326,572,368	**28,181,399**
GEORGIA	23,831,780	**198,122,987**	2.4096%	182,384,231	**15,738,756**
HAWAII	6,989,775	**102,620,128**	1.2481%	94,468,055	**8,152,074**
IDAHO	2,242,573	**33,318,043**	0.4052%	30,671,280	**2,646,763**
ILLINOIS	17,711,746	**343,073,160**	4.1725%	315,819,660	**27,253,500**
INDIANA	21,618,184	**174,791,674**	2.1259%	160,906,341	**13,885,332**
IOWA	11,400,559	**85,657,564**	1.0418%	78,852,985	**6,804,579**
KANSAS	12,270,431	**108,523,806**	1.3199%	99,902,748	**8,621,058**
KENTUCKY	12,069,024	**112,360,687**	1.3666%	103,434,830	**8,925,857**
LOUISIANA	14,040,120	**101,092,946**	1.2295%	93,062,191	**8,030,755**
MAINE	5,669,495	**61,501,279**	0.7480%	56,615,659	**4,885,620**
MARYLAND	15,168,116	**162,004,170**	1.9703%	149,134,668	**12,869,502**
MASSACHUSETTS	19,304,977	**144,126,243**	1.7529%	132,676,951	**11,449,291**
MICHIGAN	31,083,449	**270,440,300**	3.2892%	248,956,705	**21,483,594**
MINNESOTA	14,287,721	**123,785,911**	1.5055%	113,952,442	**9,833,469**
MISSISSIPPI	11,427,765	**74,296,810**	0.9036%	68,394,722	**5,902,088**
MISSOURI	19,375,389	**250,369,748**	3.0451%	230,480,545	**19,889,203**
MONTANA	7,961,755	**97,196,760**	1.1821%	89,475,515	**7,721,245**
NEBRASKA	6,638,775	**34,800,564**	0.4233%	32,036,031	**2,764,533**
NEVADA	11,008,676	**54,216,868**	0.6594%	49,909,917	**4,306,951**
NEW HAMPSHIRE	4,715,423	**44,167,927**	0.5372%	40,659,256	**3,508,670**
NEW JERSEY	24,603,778	**445,041,925**	5.4127%	409,688,096	**35,353,829**
NEW MEXICO	7,170,824	**45,622,417**	0.5549%	41,998,203	**3,624,214**
NEW YORK	29,643,643	**350,537,976**	4.2633%	322,691,477	**27,846,500**
NORTH CAROLINA	24,109,065	**179,904,881**	2.1880%	165,613,359	**14,291,522**
NORTH DAKOTA	4,791,518	**71,242,606**	0.8665%	65,583,142	**5,659,464**
OHIO	41,420,856	**275,588,727**	3.3518%	253,696,145	**21,892,582**
OKLAHOMA	11,515,103	**72,306,586**	0.8794%	66,562,600	**5,743,986**
OREGON	9,137,210	**87,342,087**	1.0623%	80,403,690	**6,938,396**
PENNSYLVANIA	39,945,097	**476,305,506**	5.7929%	438,468,119	**37,837,387**
RHODE ISLAND	5,752,771	**48,141,676**	0.5855%	44,317,334	**3,824,342**
SOUTH CAROLINA	17,811,801	**173,220,575**	2.1068%	159,460,050	**13,760,525**
SOUTH DAKOTA	2,723,324	**26,698,532**	0.3247%	24,577,619	**2,120,913**
TENNESSEE	18,525,970	**188,136,955**	2.2882%	173,191,483	**14,945,472**
TEXAS	85,264,571	**789,552,260**	9.6027%	726,830,763	**62,721,497**
UTAH	7,030,783	**68,750,386**	0.8362%	63,288,902	**5,461,484**
VERMONT	5,735,357	**55,920,259**	0.6801%	51,477,992	**4,442,268**
VIRGINIA	19,722,524	**165,561,621**	2.0136%	152,409,518	**13,152,103**
WASHINGTON	10,464,165	**143,106,247**	1.7405%	131,737,984	**11,368,263**
WEST VIRGINIA	10,351,050	**110,791,485**	1.3475%	101,990,285	**8,801,201**
WISCONSIN	16,443,734	**152,051,952**	1.8493%	139,973,048	**12,078,904**
WYOMING	5,641,269	**26,961,479**	0.3279%	24,819,677	**2,141,802**
TOTAL	**857,000,000**	**8,222,163,071**	**100.0000%**	**7,569,000,000**	**653,163,071**

* FAST Act rescission will be based on balances as of September 30, 2019.

List of Highway Contract Authority Rescissions

Enactment Date	Amount	Legislation
9/24/2002	$320,000,000	FY 2002 Supplemental Appropriations Act (P.L. 107-206)
6/10/2003	$250,000,000	Consolidated Appropriations Resolution, 2003 (P.L. 108-7)
2/20/2004	$207,000,000	Consolidated Appropriations Act, 2004, Public Law (P.L.) 108-199
1/25/2005	$1,261,277,000	Consolidated Appropriations Act, 2005, Public Law (P.L.) 108-447
12/28/2005	$1,999,999,000	Department of Transportation Appropriations Act, 2006, Public Law (Pub. L. No.) 109-115
3/21/2006	$1,143,000,000	Division B, Chapter 7 of the Department of Defense Appropriations Act, 2006, Public Law (Pub. L. No.) 109-148
7/5/2006	$702,362,500	Chapter 9 of the Emergency Supplemental Appropriations Act, 2006, Public Law (Pub. L. No.) 109-234
3/19/2007	$3,471,582,000	Division B, Title 1, Chapter 10 of the Continuing Appropriations Resolution, 2007, Public Law (Pub. L. No.) 110-5
6/20/2007	$871,022,000	Title IV, Chapter 8 of the U.S. Troop Readiness, Veterans' Care, Katrina Recovery, and Iraq Accountability Appropriations Act, 2007, Public Law (Pub. L. No.) 110-28
3/4/2008	$3,150,000,000	Division K, Title I of the Consolidated Appropriations Act, 2008, Public Law (Pub. L. No.) 110-161
4/13/2009	$3,150,000,000	Division I, Title I of the Omnibus Appropriations Act, 2009, Public Law (Pub. L. No.) 111-8
9/30/2009	$8,708,000,000	Section 10212 of the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU), Public Law (Pub. L.) 109-59, as amended by section 1302(b) of the Pension Protection Act of 2006, Pub. L. 109-280 and section 112 of the SAFETEA-LU Technical Corrections Act of 2008, Pub. L. 110-244, as affected by title XI, subtitle D, section 1132(a) of the Energy Independence and Security Act of 2007 (EISA), Pub. L. 110-140
4/20/2010	-$8,708,000,000	Restoration of Rescinded Contract Authority Pursuant to Section 413 of the Surface Transportation Extension Act of 2010, Title IV of Public Law 111-147
8/13/2010	$2,200,000,000	Section 330 of Public Law (Pub. L.) 111-226 (FAA Air Transportation Modernization and Safety Improvement Act / HR 1586)
6/30/2011	$2,500,000,000	Section 2207 of the Full-Year Continuing Appropriations Act, 2011, division B of Public Law (Pub. L) 112-10
6/30/2017	$857,000,000	Division K, Title I, Consolidated Appropriations Act, 2017
7/1/2020	*$7,569,000,000*	*Section 1438 of the Fixing America's Surface Transportation Act*
TOTAL	**$29,652,242,500**	

Federal Aid Eligible Roads

New Hampshire DOT Department of Transportation

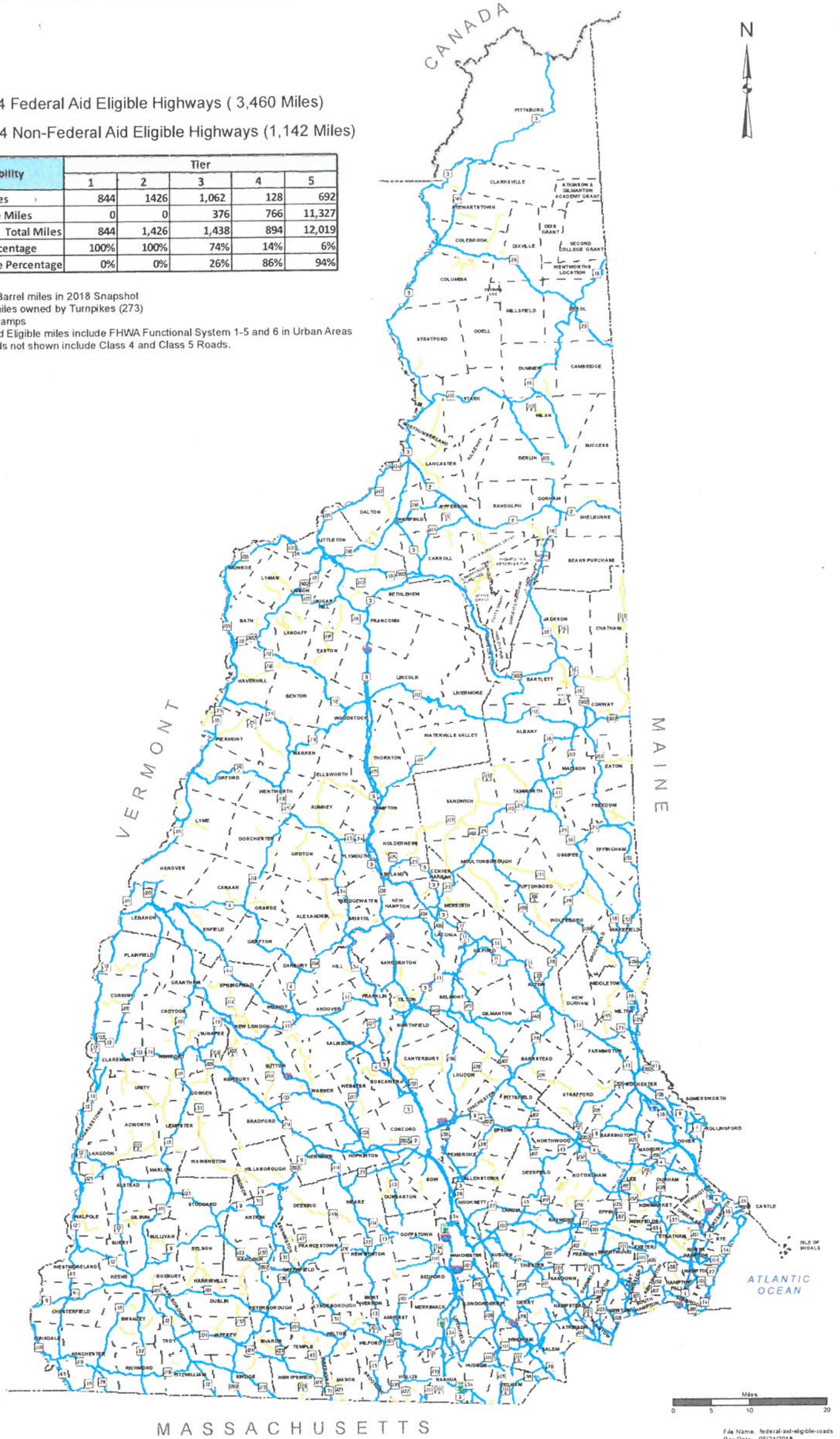
Legend

Tier 1-4 Federal Aid Eligible Highways (3,460 Miles)

Tier 1-4 Non-Federal Aid Eligible Highways (1,142 Miles)

Fed Aid Eligibility	Tier 1	2	3	4	5
Fed Aid Eligible Miles	844	1426	1,062	128	692
Non Fed Aid Eligible Miles	0	0	376	766	11,327
Total Miles	844	1,426	1,438	894	12,019
Fed Aid Eligible Percentage	100%	100%	74%	14%	6%
Non-Fed Aid Eligible Percentage	0%	0%	26%	86%	94%

Notes:
1. Based on Barrel miles in 2018 Snapshot
2. Includes miles owned by Turnpikes (273)
3. Includes Ramps
4. Federal Aid Eligible miles include FHWA Functional System 1-5 and 6 in Urban Areas
5. Tier 5 Roads not shown include Class 4 and Class 5 Roads.



File Name: federal-aid-eligible-roads
Rev Date: 05/21/2018