

GACIT Meeting - GACIT Hearing Summary
Fall 2017
Project & Program Updates

12/06/17

GACIT Hearing Comments with Recommendations to GACIT	Recommendations	Impact
Conway 40638 NH16, NH 113 and NH 153 Project - Revise scope of Roundabout Project to intersection improvements for NH 16/NH 153 and NH 16/NH 113. Align schedule with Conway project 40018.	Project 40638 - Reduce scope to intersection improvements (\$3M) advance Project from 2025 to 2019 Move Const to FY19 (\$3M), ROW (\$200k) to FY19 & PE (\$400k) to FY18	\$ (1,548,097)
Epping 29608 - NH125 improvements from NH 27 to NH 87- Congestion and safety issues north from the junction of NH101 interchange - Extend the study area south to NH101 interchange	Extend limits south - no funding increase	\$ -
Epping 40643 - Signal coordination in same area as 29608 - Projects should be coordinated (Need to adjust \$ and remove 40643)	Combine projects and advance funding 3 years from 2025 to FY 2022	\$ -
Hampton Project 26485 - Hampton Branch rail corridor -Request to retain funding in Draft Ten Year Plan to continue negotiations with Pan AM	Roll CMAQ forward from FY18 to FY19	\$ 990,000
Hampton Project 40797 - Increase funding for Ocean Blvd. project extend limits	Cash Flow PE 2021-2022 over 4 yrs 2019 - 2022 Combine project 29609 (Eng Study) add FY 18 funds	\$ (22,692)
Henniker-Hopkington 40633 - Rte 9 Intersection improvements	Advance Funding 1 year from 2026 to 2025 Add PE \$330,000 FY18	\$ (24,893)
Lebanon 40794 - Reconstruct Mechanic St/High St/Mascoma - \$2.8M set aside for improvement based on recommendations from the corridor study to be completed this Fall.	Add ROW \$113,580 FY19 & Add Const \$2.635M based on approved TYP - delay Const 1 year from 2019 to 2020	\$ 287,320
Laconia 40656 Court St and Project 26706 Academy St (SAB program) - swap years	Swap years - \$ adjusted in SAB Program	\$ -
Laconia 24181 - Centenary Ave - Adjust estimate to better match description of work	Timber Bridge removal - reduction in 2025	\$ (1,223,923)
Londonderry Project -Intersection safety improvement NH28/Stonehenge Road. The Town of Londonderry will approximately fund this project with 50% State/50% Town	Town is willing to earmark Gov. BGA to fund 50% of project or \$870k total. Federal PE-\$150k (FY19), ROW-\$5k(FY19), CON-\$700k(FY20)	\$ 855,000
Nashua to Manchester - Capitol Corridor Study (Preliminary Engineering, Environmental Requirements, Financial Plan) Program (Statewide Programmatic) FTA5307	Funding source: Boston UZA - Not Fed Formula Reduce Boston UZA (FTA5307) Programmatic	\$ 4,000,000 \$ (4,000,000)
Milford 41587 - Rehabilitation of Swing Bridge	Advance Const 3 years from 2028 to FY25, PE & ROW to FY20 Town needs to provide local match	\$ (66,581)
Plymouth - Highland St Project - Intersection improvements - Town to make match (Local road -Fed-Aid eligible)	Advance Const 2 years from 2027 to FY25, ROW to FY24, & PE to FY 22 Town needs to provide local match	\$ (90,687)
Portsmouth 27690 - Advance Red List Bridge US1 over Hodgson Brook	Advance Const from FY19 to FY18	\$ (1,466,465)
Rockingham Regional Priority Projects - Replace Hampton (41584) \$7.6M with 3 projects totaling \$6.5 M and a request by Rockingham RPC New Castle/Rye \$2.8M Stratham (Bunker Hill/RtK 108) \$1.3M Hampstead \$ 2.4M Seabrook \$2.8M (4-Lane Proposal) Local match by town \$1.4 M	Recommendation to replace Hampton 41584 @ \$7.6M with 3 projects totaling \$6.5M in 2028 1) New Castle/Rye \$2.8M 2) Stratham (Bunker Hill/RtK 108) \$1.3M 3) Hampstead \$ 2.4M And Add Seabrook with 50% Match from Town or \$1.4M total. Federal PE-\$150k(FY19), ROW- \$100k(FY20), CON-\$1.15M(FY21)	\$ 300,000
Total Impact		\$ (2,011,018)

Proposed Corridor Study & Sound Wall Programs	Recommendations	Impact
Funding Source: Flexing 25% (\$2.7M/year) CMAQ to STBG-Flexible		\$ (21,600,000)
Statewide Corridor study Program (New)	\$700,000 per year to fund 2 studies Flexed CMAQ Funds (FY 21 to FY 28)	\$ 5,600,000
Statewide Sound Wall Program (Type 2 noise policy) (New)	\$2,000,000 per year Flexed CMAQ funds(FY 21 to FY 28) TPK funds (See proposal for Expansion of Turnpike Model)	\$ 16,000,000
Total Impact		\$ -
**Potential Corridor Studies		
Bedford - NH 114/New Boston Rd corridor study - priority #2 for SNHRPC	Recommend for corridor study Program	\$ -
Epping - Rochester - Route 125	Recommend for corridor study Program	\$ -
Epsom - Lee Route 4	Recommend for corridor study Program	\$ -
Hillsborough - Hopkinton - Route 9	Recommend for corridor study Program	\$ -
Keene Project - Swanzey Factory Road-Route 101 project	Recommend for corridor study Program	\$ -
Kingston-Epping - Route 125 - Corridor study (South of 101 interchange)	Recommend for corridor study Program	\$ -
Madbury - route 155	Recommend for corridor study Program	\$ -
Newfields - Newmarket - Route 108	Recommend for corridor study Program	\$ -
Northwood -Route 4 Corridor study (business district)	Recommend for corridor study Program	\$ -
Swanzey - Peterborough - Route 101	Recommend for corridor study Program	\$ -
Milton - Errol - Route 16	Recommend for corridor study Program	\$ -

**The Department, in consultation with the Regional Planning Commissions, will identify and prioritize the corridor studies utilizing a structured process approved by GACIT.

GACIT Hearing Comments without Recommendations to GACIT	Recommendations	Impact
Bedford New Boston Road Project - Advance paving project from 2019 to 2018	No Recommendation	\$ -
Bristol 41579 -Bike, ped, drainage, and safety improvement on lake st - Advance project	No Recommendation	\$ -
Concord - Whitney Rd - Ranked #4 CNHRPC - Request to funded \$2.25	No Recommendation	\$ -
Dover 108 - Bellamy river bridge - SRPC #1 priority (Muni owned 7-8-7) widening the bridge will involve turnpike assets Bridges	No Recommendation	\$ -
Somersworth - Intersection improvements at West High St/Hamilton/Washington - SRPC priority #4 not funded - Also referenced in Sen. Watters written comments.	No Recommendation	\$ -
Walpole, NH - Rockingham, VT 12905 - Request to fully fund the Vilas Bridge to support the economic link between the states and utility connection (Sewer)	No recommendation	\$ -
Total Impact		\$ -

DOT Recommendations for Project & Program Updates	Recommendations	IMPACT
Connecticut River Bridges - GARVEE Debt Service (Updated)	Recommended - DS in FY 2020 reduced by \$6M, 2021 2028 increased by \$.5-\$.9/yr	\$ (210,107)
Turnpike Program (Based on proposed Toll Increase)	Recommended	\$ 243,950,000
Total Impact		\$ 243,739,893

DOT Recommendations for Administrative Updates	Recommendations	IMPACT
Charlestown projects - Combine (Project 40667 & 41591) to fully fund construction phase of the project	Recommended	\$ -
Dover-Rochester 29440 - Change Scope Summary to "Toll Plaza improvements"	Recommended	\$ -
Moultonborough 41581 - Added NH25 to the Road/Route Description	Recommended	\$ -
Newmarket 28393 - Added bridge numbers to scope 127/081 & 125/054	Recommended	\$ -
Portsmouth 40644 - Revise description from Maplewood to Market St	Recommended	\$ -
Program Project Name updates to Department guidelines	Recommended	\$ -
SAB - Adjust (Correct) SAB revenue from \$307M to \$319M (+\$12M) Changes TYP over programmed from \$14M to \$2M	Recommended	\$ -
Somersworth 40646 - Changed NH108 to NH9 in Route Road Description	Recommended	\$ -
Total Impact		\$ -

2017 CMAQ SCORING SUMMARY

APP-ID	Sponsor	Executive Council District	Category	Project Description	Total \$ Requested	Federal \$ Requested	Running Sum	5-1 Project Readiness (20 pts max)	5-2 Financial Readiness (20 pts max)	5-3 Stewardship and Sustainability (25 pts max)	5-4 AQ Cost Benefit (35 pts max)	Total Score (100 pts)
17-04CMAQ	Town of Somersworth	2	Road/Intersection Projects that mitigate congestion and air pollution	Purpose: The City of Somersworth is proposing a signal system optimization of the High Street/Rte. 108 Corridor in order to improve traffic flow and streamline intersections, as well as provide for pedestrian improvements that provide a reduction in single-occupant vehicle travel.	\$698,750.00	\$559,000.00	\$559,000.00	19.5	19	21.3	31.4	91.2
17-16CMAQ	City of Nashua	5	Bike and Pedestrian Projects	The purpose of this application is to complete the construction of the Heritage Rail Trail East. This project would extend the bike and pedestrian trail from the Heritage Rail Trail West's terminus at Main Street in downtown Nashua and continue the trail to East Hollis Street/Denton Street intersection.	\$1,099,700.00	\$879,760.00	\$1,438,760.00	19.5	19.75	16.3	35	90.55
17-22CMAQ	Northern NE Passenger Rail Author.	3	Rail improvements	The Rockingham Siding Project (Project) seeks to rehabilitate the Rockingham Control Siding, an existing signal controlled two-mile long passing siding adjacent to the mainline track located between CPF 256 in Newfields, NH and CPF 258 in Exeter, NH. The siding is currently used daily as a regularly scheduled meet location for Downeaster trains to pass and by freight trains accessing the Pan Am Portsmouth Branch serving regular customers in Newington, NH and Portsmouth, NH.	\$1,600,000.00	\$1,200,000.00	\$2,638,760.00	17.25	19.5	18.3	35	90.05
17-21CMAQ	Coop Alliance for Seacoast Trans.	2	Transit Capital Purchase	COAST is submitting this application for a CMAQ funds award to replace three (3) pre-2009 heavy duty buses with three new heavy duty buses. With the passage of the FAST Act the CMAQ program is one of the only remaining Federal funding programs available for COAST to continue to keep our fleet in a state of good repair. As identified in our initial Transit Asset Management Targets and Methodology report, 30% of our fleet in this asset class was currently beyond its Useful Life Benchmark (ULB) as of January 1, 2017.	\$1,425,000.00	\$1,140,000.00	\$3,778,760.00	17.25	13	22.5	35	87.75
17-17CMAQ	City of Nashua	5	New or expanded transit service	The purpose of this CMAQ project is for Nashua Transit System (NTS) to expand service west along Amherst Street, (NH 101 A), to Walmart in Amherst.	\$472,646.00	\$378,117.00	\$4,156,877.00	19.25	19.75	13.5	35	87.5
17-03CMAQ	City of Dover	2	Road/Intersection Projects that mitigate congestion and air pollution	This project is for traffic signal improvements to NH Route 108 in the area of Week's Crossing. These improvements will occur along Central Avenue and New Rochester Road at 4 intersections from Week's Lane to Long Hill Road and will include installation of a camera system to monitor traffic flow.	\$150,000.00	\$120,000.00	\$4,276,877.00	19.25	12.25	20.5	35	87
17-06CMAQ	City of Manchester	4	Road/Intersection Projects that mitigate congestion and air pollution	The proposed plan is to implement a fully Adaptive Signal Control (ASC) system on Granite Street where cycle lengths, phasing, offsets and splits are continuously monitored and updated to provide optimized timing for current traffic conditions. On South Willow Street communication between signals will be upgraded and where effective, Signal Performance Measures (SPM) will be utilized to maintain fixed cycle lengths but continually adjust splits and offsets.	\$1,500,000.00	\$1,200,000.00	\$5,476,877.00	19	19	23.8	24.2	86

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17-19CMAQ	City of Claremont	1	Road/Intersection Projects that mitigate congestion and air pollution	The project plans to link ten traffic signals on a two mile stretch of Washington Street which is Claremont's busiest commercial roadway. Washington Street is a major east/west route through the region and a designated State highway Route 11 and 103. Traffic volume on this segment of roadway is 20,000 seasonally adjusted average annual daily traffic (AADT). The existing signals operate at both collector side streets and major retail big box and strip plaza locations.	\$652,600.00	\$522,080.00	\$5,998,957.00	12	18	20.8	27.8	78.6
17-11CMAQ	University of New Hampshire	2	Transit Capital Purchase	UNH requests \$1.2M federal CMAQ funds to retire four MY 2006 35' biodiesel full-size transit buses with accumulated mileage of approximately 225,000 miles per vehicle and purchase four with similar size compressed natural gas (CNG) 32+ passenger vehicles. This request represents half of the FTA recommended capital fleet replacement needs of the system as of July 2018 (see capital replacement program in supplemental material). The four selected vehicles represent the oldest full size transit buses in the fleet.	\$2,164,800.00	\$1,190,640.00	\$7,189,597.00	17.75	19	22.8	19	78.55
17-07CMAQ	Town of Salem	3	Bike and Pedestrian Projects	The goal of this project is to provide a safe alternative transportation opportunity for Salem residents, as well as to decrease motor vehicle usage and congestion on Route 28 in Salem. To accomplish this goal, our proposed project will add 0.3 miles to the Salem Bike-Ped Corridor, which runs along the abandoned Manchester & Lawrence rail line parallel and adjacent to Route 28.	\$850,000.00	\$680,000.00	\$7,869,597.00	19.75	14.75	18.3	22.2	75
17-23CMAQ	NH Dept of Transportation	2	Road/Intersection Projects that mitigate congestion and air pollution	The project for which we are applying will evaluate current operational parameters such as timing, phasing, and overall performance of 61 selected traffic control signals and develop and implement optimized signal timings to improve traffic flow through the intersections. By improving traffic flow, a reduction in delay will be achieved, reducing congestion and the associated vehicle idle time and therefore improving air quality	\$300,000.00	\$240,000.00	\$8,109,597.00	19.75	19.75	21.5	13.4	74.4
17-09CMAQ	Mt. Washington Valley Trails Assoc.	1	Bike and Pedestrian Projects	The Mt. Washington Valley Trails Association (MWVTA) is seeking \$1.2 million in funding for a 2.8 mile non-motorized transportation pathway that would be located in a heavily-trafficked section of North Conway, NH. The pathway would run parallel to North-South Road, just west of Route 16.	\$1,500,000.00	\$1,200,000.00	\$9,309,597.00	18.75	10.5	12	28.6	69.85
17-10CMAQ	Town of Pelham	3	Road/Intersection Projects that mitigate congestion and air pollution	The need for the proposed intersection improvements (roundabouts) at the intersection of Mammoth (NH 128) and Sherburne Road and at the nearby intersection of Mammoth and Marsh Road (NH 111A) are well known and documented. The installation of a roundabout at each of the two intersections will greatly reduce congestion and improve air quality by eliminating the long queue of cars that currently stack on the intersection approaches.	\$2,000,000.00	\$1,200,000.00	\$10,509,597.00	19	12.5	18.8	17	67.3
17-15CMAQ	City of Portsmouth	3	Bike and Pedestrian Projects	This project is to add a multi-use side path for bicycles and pedestrians along Elwyn Road extending from Route 1 to Harding Road. This project will include improvements for bicycle and pedestrian travel to encourage a reduction in single-occupant vehicle travel which is a CMAQ eligible activity.	\$1,000,000.00	\$800,000.00	\$11,309,597.00	17.5	14.5	14	15.8	61.8
17-13CMAQ	University of New Hampshire	2	Rail improvements	UNH requests \$779,200 of CMAQ funds for transit facility improvement at the UNH-Durham rail station to accommodate increased passenger ridership; facilitate enhanced intermodal bus accomodation and improve site safety and capacity.	\$974,000.00	\$779,200.00	\$12,088,797.00	17	19	19.3	3	58.3

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17-01CMAQ	Town of Hudson	5	Road/Intersection Projects that mitigate congestion and air pollution	The proposed project consists of constructing a third southbound right-turn lane on Lowell Road/NH 3A from Wason Road/Flagstone Drive to the westbound ramp to the Sagamore Bridge (Circumferential Highway)	\$1,500,000.00	\$1,200,000.00	\$13,288,797.00	16.25	14.75	4.5	20.6	56.1
17-02CMAQ	City of Dover	2	Road/Intersection Projects that mitigate congestion and air pollution	The project includes pedestrian and vehicular improvements to Chestnut Street between Central Avenue and Washington Street in downtown Dover. The principle improvement is the installation of a roundabout at the intersection of Third Street and Chestnut to improve safety and connectivity to the multi-modal Transportation Center.	\$1,500,000.00	\$1,200,000.00	\$14,488,797.00	18.75	12.25	22	3	56
17-08CMAQ	Town of Milford	5	Road/Intersection Projects that mitigate congestion and air pollution	Nashua Street and Ponemah Hill Road Signalization: This project is for the installation of a traffic signal at the intersection of Nashua Street and Ponemah Hill Road with associated intersection improvements Nashua Street and Ponemah Hill Road Sidewalk Improvements: The project is for the construction of approximately 2,600 linear feet of new sidewalk between 504 Nashua Street (Medlyn Monument) and Walgreen's to provide a completed pedestrian connection from The Oval to the Lorden and Richmond Plaza commercial area	\$825,227.00	\$660,182.00	\$15,148,979.00	19	10.25	15.3	9.8	54.35
17-14CMAQ	City of Portsmouth	3	Road/Intersection Projects that mitigate congestion and air pollution	The purpose of this project is to improve the traffic flow and multimodal accommodations at the Russell Street / Market Street intersection. This project will improve traffic flow by improving the capacity of the intersection. The project also will include improvements for bicycle and pedestrian travel to encourage a reduction in single-occupant vehicle travel.	\$1,325,000.00	\$1,000,000.00	\$16,148,979.00	17.75	14.5	14.5	6.2	52.95
17-05CMAQ	Town of Franconia	1	Bike and Pedestrian Projects	Project funds will be used to construct a 102 ft. bicycle-pedestrian bridge across the Gale River south of the Garnet Hill parking lot and constructing an approximately 1 mile long trail from the bridge following the Ham Branch southwards ending with a trailhead on Bickford Hill Road opposite to Ridge Rd	\$1,200,000.00	\$960,000.00	\$17,108,979.00	17.25	12.25	11.8	9.4	50.7
17-20CMAQ	City of Claremont	1	Transit Capital Purchase	Replace a 1994 vac/jetta truck- Cummins diesel, engine model 359- 5.9 L- 6cyl hours 3,077. This truck is used for the maintenance of sewer manholes, catch basins, and cleaning all pipes. Replace a 2005 Bombardier sidewalk machine (Perkins diesel) model SW48HY- hours 1,217. This machine is used to plow snow and ice and for treating the city's (35) miles of sidewalk	\$450,000.00	\$360,000.00	\$17,468,979.00	12.75	18	16.3	3	50.05
17-18CMAQ	Town of Hinsdale	2	Bike and Pedestrian Projects	The purpose of the project is to reduce congestion and air quality issues associated with School Street in Hinsdale, one of the most congested areas of the community.	\$992,753.00	\$794,202.00	\$18,263,181.00	18.25	10.25	17.8	3	49.3

Available CMAQ funds = \$13.5M

PROPOSAL FOR ACCELERATION AND EXPANSION OF TURNPIKE CAPITAL PROGRAM

EXISTING TURNPIKE SYSTEM

EXISTING TOLL STRUCTURE

CURRENT MAJOR TURNPIKE CAPITAL PROJECTS

ACCELERATION & EXPANSION OF TURNPIKE CAPITAL PROJECTS

NEW TOLL STRUCTURE (TOLL INCREASE)

BENEFITS OF TOLL INCREASE & ACCELERATION OF MAJOR TURNPIKE CAPITAL PROJECTS

STEPS TO ENACT TOLL INCREASE & ASSOCIATED LEGISLATIVE AUTHORIZATIONS NEEDED TO ACCELERATE MAJOR PROJECTS

EXISTING TURNPIKE SYSTEM The existing Turnpike System is 89 miles long and consists of 3 segments: Blue Star Turnpike (I-95), Spaulding Turnpike (NH 16) and F.E. Everett Turnpike (US3, I-293 & I-93). The system is comprised of 656 lane miles, 49 interchanges, 170 bridges, 9 toll plazas, 3 rest areas, 5 maintenance facilities, 6 park'n'rides, and a recreational park. In accordance with state statutes and bond covenants, the Turnpike Fund is an enterprise fund, where all Turnpike revenue generated on or by the system must be used on the Turnpike System.

Turnpike revenue pays for the operation and maintenance costs (i.e. toll operation, E-ZPass, bridge and highway maintenance, winter maintenance, state police enforcement, welcome center operation, etc.), debt service on the \$401M of outstanding bonds (secured to finance construction of various segments of the Turnpike over the last 25 years), Renewal & Rehabilitation (TRR) program to ensure the system is generally in good working order, and for capital improvements undertaken on the system.

In FY17, there were 120.2M toll transactions generated on the Turnpike System that resulted in the collection of \$128.1M in toll revenue. It is interesting and important to note that 55% or \$70.1M of the total toll revenue collected in FY17 is from out-of-state travelers.

EXISTING TOLL STRUCTURE The table below lists the current toll structure for Class 1 passenger vehicles and class 5 commercial vehicles.

	Class 1 Toll Rates		Class 5 Toll Rates	
	Current Rates		Current Rates	
	*Effective Oct 22, 2007		*Effective Oct 22, 2007	
	Cash Toll Rate	**NH E-ZPass	Cash Toll Rate	**NH E-ZPass
Hooksett Main Line	\$1.00	\$0.70	\$2.00	\$1.80
Hooksett Ramp	\$0.50	\$0.35	\$1.00	\$0.90
Bedford Main Line	\$1.00	\$0.70	\$2.00	\$1.80
Merrimack - Exit 10 Ramp	\$0.50	\$0.35	\$1.00	\$0.90
Merrimack - Exit 11 Ramp	\$0.50	\$0.35	\$1.00	\$0.90
*Hampton Main Line	\$2.00	\$1.40	\$4.00	\$3.60
Hampton Side	\$0.75	\$0.53	\$1.50	\$1.35
Dover Main Line	\$0.75	\$0.53	\$1.50	\$1.35
Rochester Main Line	\$0.75	\$0.53	\$1.50	\$1.35
* Hampton Main Line toll rates were increased on July 1, 2009 from \$1.50 to \$2.00 (class 1 toll)				
** Passenger Vehicles (Class 1 -4) receive a 30% toll discount with NHE-ZPass transponder				
** Commercial Vehicles (Class 5 -12) receive a 10% toll discount with NHE-ZPass transponder				

A system wide toll increase was passed by the Executive Council effective October 22, 2007 to support the then \$420M capital program, which focused on red list bridges and safety and congestion improvements on the Turnpike System. A toll increase focused solely at the Hampton Mainline Plaza was passed by the Executive Council effective July 1, 2009 to fund the acquisition of the 1.6-mile segment of I-95 from the Portsmouth Circle to the State line, Open Road Tolling at the Hampton Mainline Plaza, capacity improvements on NH107 bridge in Seabrook and construction of noise barrier along I-95 in Portsmouth as part of HB 391 (2009 session).

CURRENT MAJOR TURNPIKE CAPITAL PROJECTS The current draft TYP (dated August 23, 2017) contains the following major Turnpike capital projects with construction timeframes that can be progressed under the current toll structure.

- Construction Dover End & GSB Rehabilitation (\$79M): **2019 - 2022**
- Nashua-Bedford FEET Widening (\$127M): **2022 - 2026**
- Manchester Exit 7 Reconstruction (\$52M): **2024 - 2026**
- Manchester Exit 6 Improvements & FEET Widening (\$99M): **2026 - 2029**
- Bow-Concord: I-93 Widening (I-89 to I-393) (\$132M)*: **2027 – 2033**

***Only includes Tpk. portion (south of Exit 14), does not include Federal portion, which has an estimated cost of \$178M with construction completion in 2033 contingent on average \$27M per year in federal funds being committed to the project's construction in years 2029 – 2033.**

The Dover end (or Exit 6) construction is the second to last construction contract underway as part of the overall 3.6-mile Newington-Dover Spaulding Turnpike improvements and Little Bay Bridge widening project. This construction contract will complete the Spaulding Turnpike and Little Bay Bridge work, which expands the Turnpike from 2-lanes in each direction to 4 lanes over the Little Bay Bridges and between Exits 3 and 6. Construction completion for the Dover contact is Fall 2020.

The last Newington-Dover construction contract involves the rehabilitation of the General Sullivan Bridge to provide a bicycle, pedestrian and alternative modes connection across Little Bay. Due to the condition of the historic General Sullivan Bridge and increased cost of rehabilitation, the Department is reviewing rehabilitation options, taking into consideration the cultural significance of the bridge, as well as its functionality, durability, and maintenance requirements to ensure a cost-effective solution is advanced to final design and construction. Presently, the estimated cost of the rehabilitation is \$31.5M and involves major truss rehabilitation/replacement atop the existing substructure with construction from 2019 through 2022.

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 nearly identified and Public Hearing targeted for spring of 2018. The estimated construction cost is \$127M. Based on the current toll structure, construction cannot begin until 2022 and cannot be completed until 2026.

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 nearly identified and Public Hearing targeted for summer of 2018. The estimated construction cost is \$151M. Based on the current toll structure, construction cannot begin until 2024 and cannot be completed until 2029. 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 nearly identified and Public Hearing targeted for spring 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).

Travel time data is being collected for the 10-mile segment of I-93 from the Hooksett toll plaza to Exit 15 in Concord. Probe data shows travelers experience an average 15-minute peak delay on Fridays in the late afternoon to early evening during the weeks from Memorial Day to Columbus Day. This delay is expected to grow significantly by the completion date of 2033. This corresponds to a cost of \$5.36 to the individual driver experiencing the average peak delay of 15 minutes. In total, delays alone on Fridays cost users of the corridor \$1.6M annually. This has a negative effect on the state's economy and tourism, where travelers may decide to shorten their travel route or pick another area to visit, should delay and congestion continue to grow and become intolerable.

ACCELERATION & EXPANSION OF TURNPIKE CAPITAL PROJECTS The following major Turnpike capital projects can be accelerated and additional projects/programs added under the timeframes listed below with a toll increase and \$50M Bond (FY22), where the users of the facilities would benefit from and pay for the improvements to the system. Total capital investment of \$754M over Ten Year Plan period.

➤ Construction Dover End & GSB Rehabilitation (\$79M):	2019 - 2022
➤ Construction of FEET Widening , Nashua-Bedford (\$122M):	2020 – 2023 (completed <u>3 yrs</u> sooner)
➤ Manchester Exit 7 Reconstruction (\$49M):	2021 – 2023 (completed <u>3 yrs</u> sooner)
➤ Manchester Exit 6 Improvements & FEET Widening (\$90M):	2023 – 2025 (completed <u>4 yrs</u> sooner)
➤ *Bow-Concord: I-93 Widening (I-89 to I-393) (\$261M):	2022 – 2027 (completed <u>6 yrs</u> sooner)
➤ Dover-Rochester-Somersworth Feasibility Study (\$2M):	2020 (advanced 2 years)
➤ **Dover & Rochester AET mainline plazas (\$12M):	2020-2023 (advanced 1 year)
➤ **Bedford AET mainline plaza (\$7.3M):	2020-2023 (advanced 1 year)
➤ Type II Soundwall Program (\$4M/year, total \$36M):	2020-2028 (new program)
➤ Hampton ORT expansion to 6 lanes (\$7.3M):	2021 (new project)
➤ **Hooksett Ramp AET project (\$2M):	2020 (new project)
➤ Merrimack Exit 10 & Exit 11 Toll Removal (\$1.2M):	2021 (new project)
➤ Manchester I-293 Widening Feasibility Study (\$2.0M):	2021 (new project)
➤ Portsmouth I-95 HL Bridge Widening Feasibility Study (\$2.0M):	2021 (new project)
➤ Dover Spaulding Turnpike Exit 6 to 9 Feasibility Study (\$2.0M):	2021 (new project)
➤ Concord I-93 Merrimack River Bridges Rehabilitation (\$32M):	2027-2028 (new project)
➤ Transportation Demand Management (\$3M/year, total \$27M):	2020-2028 (new program)

***Legislative authorization (similar to authorization for the I-95 extension completed in 2009) is needed to extend the Turnpike from Exit 14 to the northern end of the I-93 Merrimack River Bridge to encompass the Bow-Concord project and convert the Merrimack River Bridges to be turnpike funded.**

****Legislative authorization required to install All Electronic Tolling (AET) plaza.**

NEW TOLL STRUCTURE (TOLL INCREASE) The table below lists the current toll rates and proposed toll rates effective March 1, 2018 to provide the additional revenue needed to accelerate the major Turnpike capital projects and fund the additional capital investments listed in the previous section.

<u>Class 1 Toll Rates</u>						
	Current Rates		Proposed Rate Increase	Proposed Toll Increase		Estimated Additional Annual Toll Revenue (millions)
	*Effective Oct 22, 2007			Effective March 1, 2018		
	Cash Toll Rate	NH E-ZPass	Cash Toll Rate	NH E-ZPass		
Hooksett Main Line	\$1.00	\$0.70	\$0.50	\$1.50	\$1.05	\$11.1
Hooksett Ramp	\$0.50	\$0.35	\$0.25	\$0.75	\$0.53	\$0.6
Bedford Main Line	\$1.00	\$0.70	\$0.50	\$1.50	\$1.05	\$6.9
Merrimack - Exit 10 Ramp	\$0.50	\$0.35		\$0.50	\$0.35	
Merrimack - Exit 11 Ramp	\$0.50	\$0.35		\$0.50	\$0.35	
Hampton Main Line	\$2.00	\$1.40	\$0.50	\$2.50	\$1.75	\$11.7
Hampton Side	\$0.75	\$0.53	\$0.25	\$1.00	\$0.70	\$3.0
Dover Main Line	\$0.75	\$0.53	\$0.25	\$1.00	\$0.70	\$2.9
Rochester Main Line	\$0.75	\$0.53	\$0.25	\$1.00	\$0.70	\$2.0

* Hampton Main Line toll rates were increased on July 1, 2009 from \$1.50 to \$2.00

** Class 5 commercial toll rate is twice class 1 passenger rate. Commercial NHE-ZPass discount is 10%.

Additionally, a frequent user/commuter plan (effective July 1, 2018) would be implemented with the intent to soften the impact of the toll increase on commuters that travel through multiple plazas and pay relatively high monthly tolls. The plan would be NH transponder based and require a valid NH E-ZPass account for the entire month to qualify. Ten additional free trips (transactions) would be provided monthly to commuters that make 40 trips (transactions) monthly. (For example, a NH E-ZPass customer would pay for E-ZPass toll transactions 1 through 40 at the E-ZPass discount toll rate, receive subsequent transactions 41 through 50 free, and pay for subsequent transactions 51 and higher at the E-ZPass discount toll rate based on a calendar month). Transactions do not roll over into subsequent month.

This new toll rate structure with frequent user/commuter plan represents an approximate 27% increase in toll revenue and would generate an estimated \$36M in additional toll revenue per year. \$50M of additional bonding (10-year duration) would be required in FY22 to advance the projects on the schedule shown on the preceding page (this additional \$50M of bonding would utilize the remaining authorized and un-issued bonding authority, which is statutorily set at \$766,050,000). All of the increased revenue would be directed towards capital work on the Turnpike System. Toll increase would be paid by the users of the system with an estimated \$19.6M per year or 54% of the toll increase paid by the out-of-state users of the system.

BENEFITS OF TOLL INCREASE & ACCELERATION OF MAJOR TURNPIKE CAPITAL PROJECTS

- All of the increased revenue would be directed towards capital work on the Turnpike System.
- Toll increase would be paid by the users of the system.
- Users directly benefit from the capital investments made of the system.
- \$19.6M per year or 54% of the toll increase would be paid by the out-of-state users of the system.
- Travel time, reliability of travel, and safety would significantly improve on those segments of the Turnpike System
- The construction industry would see a significant increase in Turnpike Capital spending resulting in increased job creation.
- Funding for a much needed Type II Soundwall program at \$4M per year (\$36M in this TYP period would address nearly 14 miles or roughly 15 priority locations along the Turnpike System)
- 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.

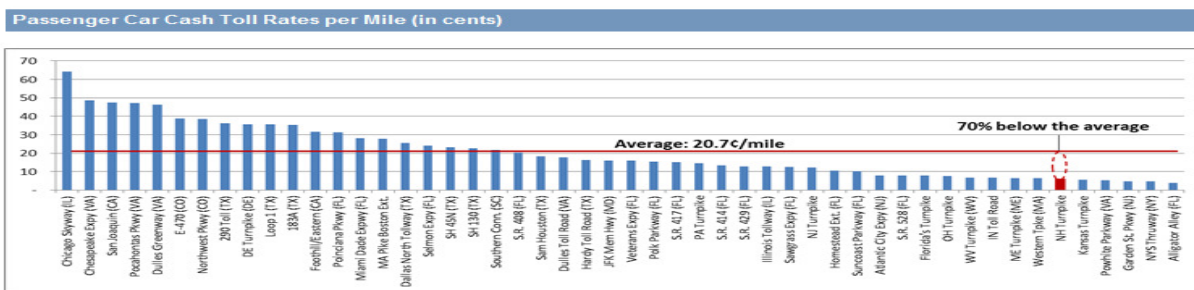
- Funding for a transportation demand management program at \$3M per year for projects that reduce future travel demand on the Turnpike System (i.e. alternative modes of travel such as transit, bike, rail).
- Extension of the Turnpike System to the northern end of the Merrimack River Bridges in Concord to encompass the northern end of the Bow-Concord project would complete the entire Bow-Concord project by 2027 and free up nearly \$180M in future federal funds to be used elsewhere across the state. Also 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.

STEPS TO ENACT TOLL INCREASE & ASSOCIATED LEGISLATIVE AUTHORIZATIONS NEEDED TO ACCELERATE MAJOR PROJECTS

- Resolution from the Department to the Executive Council to increase tolls (effective March 1, 2018) for council approval in early December to fund accelerated projects and the new projects and programs that will be shown in the draft Ten Year Plan submitted from GACIT to Governor.
- Transmittal of the draft Ten Year Plan submitted from GACIT to Governor at the December 20th GACIT meeting. Accelerated projects and new projects and programs shown in the revised draft TYP.
- Legislative authorization as part of TYP bill for:
 - Extension of Turnpike limits on the FEET (I-93) from Exit 14 bridge to southern limit of I-93 Bridges over the Merrimack River in Concord. Sale of the 1.4-mile segment at the presently estimated value of \$18.5M to the Turnpike System would be consummated in FY19 with funds deposited into the Highway Fund.
 - Implementation of a frequent user / commuter plan (40-trip plan providing additional 10 free trips per month)
 - AET at Dover, Rochester, Bedford and Hooksett ramp
 - Appropriations for advanced construction projects and new projects
 - Appropriations for Type II Soundwall Program and TDM Program

NEW HAMPSHIRE TOLL RATES ARE ECONOMICAL and a great value when compared to toll rates across the country. NH toll rates (6.2 cents per mile overall cash rate) are well below the national average and lower than rates in the neighboring states.

Compared to its peers, NH Turnpike toll rates are below the national average



New Hampshire Toll Plaza	Current Car Cash / NH E-ZPass Rates
Hooksett Ramp, Merrimack Exit 10, Exit 11	\$0.50 / \$0.35
Dover, Rochester, Hampton Side	\$0.75 / \$0.53
Hooksett Main, Bedford Main	\$1.00 / \$0.70
Hampton Main	\$2.00 / \$1.40

Cash rates shown. NH E-ZPass account holders receive a 30% discount on the passenger rate at NH Turnpike plazas. Toll Rate Source: Jacobs Engineering, October 30, 2017.

APPENDIX

Out-of-State Revenue at each Toll Plaza (FY 2017)

RANKING OF TRAFFIC & REVENUE REPORT							
Fiscal Year 2017							
Plaza	Traffic	Revenue	%	*Out-of-State Revenue	%		
Hampton Main	25,314,562	\$ 54,061,236	42.2%	\$ 41,943,990	77.6%		
Hooksett Main	27,923,121	\$ 26,118,578	20.4%	\$ 10,716,522	41.0%		
Bedford	17,544,243	\$ 16,021,316	12.5%	\$ 5,725,476	35.7%		
Hampton Side	15,097,099	\$ 10,924,831	8.5%	\$ 4,644,833	42.5%		
Dover Plaza	15,001,042	\$ 10,033,682	7.8%	\$ 3,084,260	30.7%		
Rochester	10,293,994	\$ 6,850,613	5.3%	\$ 2,705,318	39.5%		
Merrimack Exit 11	3,254,343	\$ 1,329,542	1.0%	\$ 287,665	21.6%		
Merrimack Exit 12 (Bedford)	0	\$ 98	0.0%	\$ -	0.0%		
Hooksett Ramp	2,983,301	\$ 1,498,005	1.2%	\$ 313,328	20.9%		
Merrimack Exit 10	2,761,679	\$ 1,302,525	1.0%	\$ 706,223	54.2%		
	120,173,384	\$128,140,427		\$ 70,127,614	55%		
*Estimated cash revenue for NH and out-of-state customers is based on the percentage of E-ZPass NH and out-of-state transactions, which correlate well with the license plate survey information contained in the Technical Memorandum completed by Vollmer Associates dated 9/25/03.							
**Bedford Road closed July 18, 2014							

Historic Toll Rates (1989 – Current)

NH BUREAU OF TURNPIKES									
TOLL RATES - PASSENGER VEHICLES (1989 - CURRENT)									
	1989	1990	2005	2007	2009	Current	Turnpike Length (Miles)	*CPI Adjusted Toll Rate from 1989 (1.99 Factor)	Potential New Toll Rate
Central Turnpike							39.5		
Hooksett Mainline Plaza	\$0.75	\$0.75	\$0.75	\$1.00	\$1.00	\$1.00		\$1.49	\$1.50
Hooksett Ramp Plaza	\$0.50	\$0.50	\$0.50	\$0.50	\$0.50	\$0.50		\$1.00	\$0.75
Bedford Mainline Plaza	\$0.75	\$0.75	\$0.75	\$1.00	\$1.00	\$1.00		\$1.49	\$1.50
Merrimack Exit 10 Ramp Plazas	-	\$0.50	\$0.50	\$0.50	\$0.50	\$0.50		\$1.00	\$0.50
Merrimack Exit 11 Ramp Plazas	\$0.50	\$0.50	\$0.50	\$0.50	\$0.50	\$0.50		\$1.00	\$0.50
Merrimack Exit 12 Ramp Plazas	-	\$0.50	\$0.50	\$0.50	\$0.50	\$0.50		\$1.00	\$0.00
Blue Star Turnpike							16.2		
Hampton Mainline Plaza	\$1.00	\$1.00	\$1.00	\$1.50	\$2.00	\$2.00		\$1.99	\$2.50
Hampton Side Plaza	\$0.50	\$0.50	\$0.50	\$0.75	\$0.75	\$0.75		\$1.00	\$1.00
Spaulding Turnpike							33.2		
Dover Mainline Plaza	\$0.50	\$0.50	\$0.50	\$0.75	\$0.75	\$0.75		\$1.00	\$1.00
Rochester Mainline Plaza	\$0.50	\$0.50	\$0.50	\$0.75	\$0.75	\$0.75		\$1.00	\$1.00
Average Toll Rate per Mile	\$0.039	\$0.039	\$0.039	\$0.056	\$0.062	\$0.062	88.9	\$0.078	\$0.084
	50%	50%	30%	30%	30%	30%			
	Discount on Tokens	Discount on Tokens	E-ZPass Discount	E-ZPass Discount	E-ZPass Discount	E-ZPass Discount			

*Consumer Price Index (CPI-U) data is provided by the U.S. Department of Labor Bureau of Labor Statistic. CPI calculated from consumer price index data from 1989 to 2017 located at <http://www.usinflationcalculator.com/inflation/consumer-price-index-and-annual-percent-changes-from-1913-to-2008/>

Commuter / Frequent User Plan

40 Transactions per Month Program (10 free trips/month after 40)

- Transponder based, passenger vehicles (Class 1)
 - Image tolls (based on a license plate reads will not count)
 - Class mismatches will not count (i.e. vehicle pulling a trailer)
- 40 transactions per month systemwide, 41st thru 50th will be free
- Revenue impact is 1.0% of total revenue or **\$1.7M**
- **30% Discount equates to roughly 12% of total revenue (or \$15.6M based on current toll rate structure)**

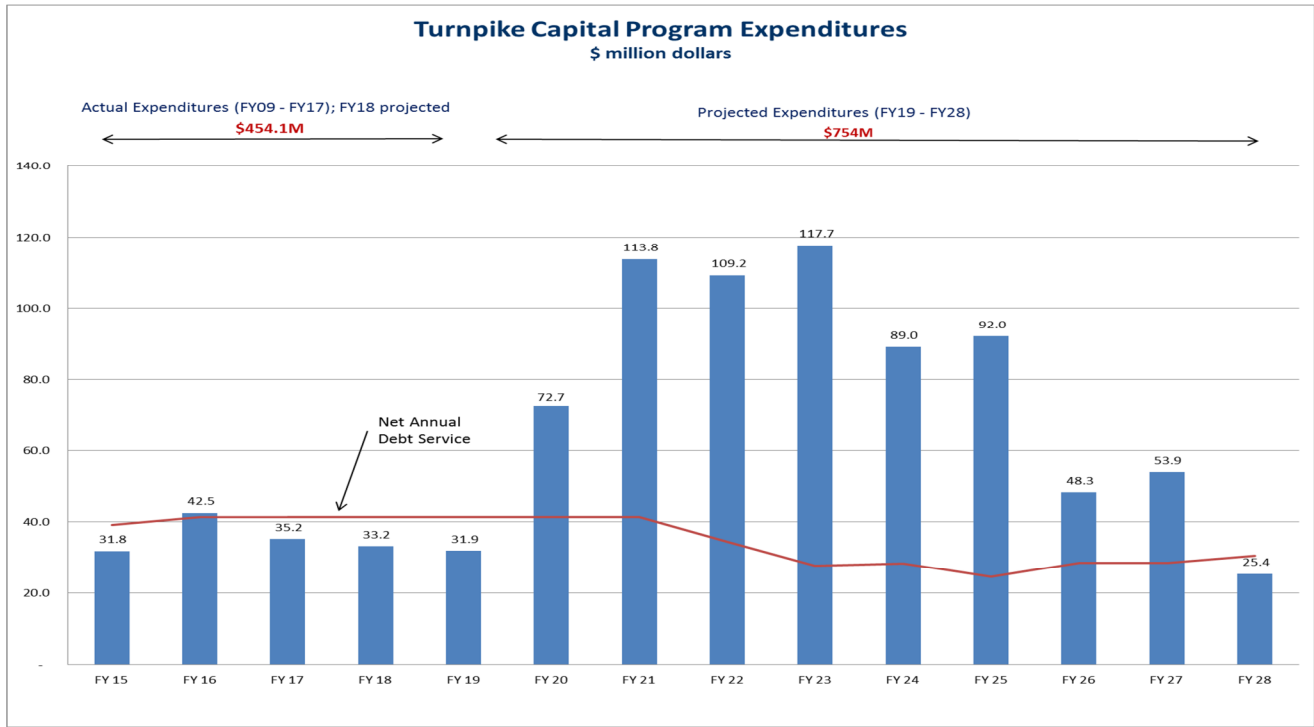
Implement Commuter / Frequent User Program subsequent to toll increase (eff. 7/1/18)

- Commuter/Frequent User Program would soften the impact of the toll increase on everyday commuters, and those that travel through multiple plazas
- Based on Jacobs Study
 - 680,000 transponders (April 2016)
 - 61% or 415,000 are used less than 2x/month
 - **3.5% or 24,000 passenger tags are used more than 40x/month**

Commuter Chart Thru Multiple Plazas (based on 20 days per month of commuting with no other trips on the Turnpike)

	Current E-Zpass Toll Rate	Current E-Zpass Monthly Cost	Proposed E-Zpass Toll Rate	Proposed E-Zpass Monthly Cost	
Two ML Plazas (i.e. Hooksett & Bedford)	\$1.40	\$56.00	\$2.10	\$73.50	31% ↑
Two ML Plazas (i.e. Dover & Rochester)	\$1.05	\$42.00	\$1.40	\$49.00	17% ↑

Accelerated & Expanded Capital Program Expenditures Under Toll Increase Proposal



Capital Program annual expenditures more than double in FY20 over previous years and exceed \$100M per year in FY21 through FY23 when all three major Turnpike capital projects (i.e Nashua-Bedford FEET Widening Manchester Exit 6/7, Bow-Concord I-93 Widening & Improvements). Total projected capital expenditures over Ten Year Plan period (2019-2028) is \$754M.