

ATTACHMENT #3**Memorandum**

DATE: February 18, 2021
TO: MPO Transportation Advisory Committee
FROM: David Walker
RE: Ten Year Plan Project Priorities

The MPO has received NHDOT's reviews of the priority Ten Year Plan project proposals that were recommended by the TAC at the September, 2020 meeting and approved by the MPO Policy Committee at the October, 2020 meeting. The next step in the project prioritization process is for the MPO TAC and Policy Committees to make final Ten Year Plan recommendations based on the candidate projects list and revised cost estimates. NHDOT has indicated that MPO recommendations will be incorporated into the draft 2023-2032 Ten Year Plan as presented provided that the regional funding target is not exceeded.

NHDOT reviewed the five priority projects submitted by the MPO and suggested revised estimates for three of those. One project was not able to be reviewed as there was not enough information available for NHDOT to make a recommendation. The summaries detail the cost assumptions, note recommended changes, as well as identify recommended timing and cost distribution for the Ten Year Plan and any other recommendations. A memo detailing NHDOT's process and recommendations for each project is attached and their comments can be summarized as follows:

1. Phase III NH Seacoast Greenway (Hampton/Hampton Falls) – Cost estimate (\$5,429,165) deemed adequate. Concerns regarding environmental & historic resource impacts related to the marsh crossing, as well as the crossing of Brimmer Lane.
2. NH 125/NH 155 Intersection (Epping) – Cost estimate increased to \$1,255,000 (\$1,791,128 inflated to year of construction). Concerns regarding signal warrants.
3. Bartlett Street Bridge (Portsmouth) – Not able to assess due to limited information on scope. Recommended to apply for State Aid Bridge Program.
4. NH 27/NH 156 Intersection (Raymond) – Concerns about cost given density of land use at site. Limited data available to justify need for improvement. Cost estimate increased to \$1,300,000 (\$1,854,502 inflated to year of construction).
5. US 1/NH 111 Intersection (North Hampton) – Concerns about property impacts due to narrow right-of-way. Cost increased to \$3,550,000 (\$5,060,497 inflated to year of construction).

Based on the revised costs and estimated programming timeframes, the total estimated costs of the five priority projects is \$14,135,292, not including the Bartlett Street project for which no assessment was provided. If selected, each of the remaining the four proposals would be

expected to be 100% federally funded and no local match required. This is well over the regional allocation (by roughly \$7.5 million). **Table 1** (attached) shows each of the 5 projects, the original RPC estimate, the revised NHDOT estimate (except Bartlett Street), anticipated programming timeframes, inflated costs, and the cumulative cost of adding each additional priority.

Staff recommendation is that the RPC move forward with the top priority project for the region. The East Coast Greenway project is well defined and NHDOT was comfortable with the estimate that was provided. Funding Phase III of the Greenway would complete the goal of providing a safe off-road route for most of the length in New Hampshire and expanding walking/biking infrastructure substantially in the Seacoast. Additional benefits include improvements to the health and quality of the Seabrook-Hampton Estuary by opening sections of the current causeway to improve tidal flow; and the potential to function as an economic catalyst based on anticipated heavy use of the rail trail by residents and tourists.

The cost of this project is currently approximately \$1.2 million below the regional budget target for the region which would not permit the inclusion of a second project. Instead, it is recommended that additional funding be provided to the PE, ROW, and CON of East Coast Greenway Phase III project to enhance the design and better account for any unexpected environmental or historic resource requirements.

Recommended Action: TAC review and discuss the proposed projects, and endorse a project or set of projects for the Ten Year Plan that is fully contained within the regional funding allocation. The recommendations approved by TAC will be presented to the MPO Policy Committee at the March 10, 2021 meeting and submitted to NHDOT prior to April 1, 2021.

Table 1: RPC MPO Project Recommendations for the State Ten Year Plan

Priority	RPC Project Number	City/Town	Roads	Scope	Phase	Revised Cost		Year	Inflated Cost	Federal Share	Cumulative Regional Share
						Original Estimate (RPC)	Estimate (NHDOT)				
1	6001019	Hampton/ Hampton Falls	East Coast Greenway	Construct rail trail on 2.3 miles of the abandoned Hampton Branch rail corridor, elevatiing the causeway through the marsh 2'-3' for resiliency purposes and span washouts with sections of boardwalk.	PE	\$422,118	\$422,118	2027	\$533,080	\$533,080	
					ROW	\$0	\$0	2030	\$0	\$0	
					CON	\$3,376,954	\$3,376,954	2032	\$4,896,085	\$4,896,085	
					\$3,799,072		\$3,799,072		\$5,429,165	\$5,429,165	\$5,429,165
2	6147006	Epping	NH 125 and NH 155 (Lee Hill Road)	Signalize the intersection of NH 125 with Lee Hill Road (NH 155)	PE	\$50,000	\$150,000	2027	\$189,430	\$189,430	
					ROW	\$0	\$5,000	2030	\$6,860	\$6,860	
					CON	\$250,000	\$1,100,000	2032	\$1,594,838	\$1,594,838	
					\$300,000		\$1,255,000		\$1,791,128	\$1,791,128	\$7,220,293
3	6379013	Portsmouth	Bartlett Street	Bridge upgrde/replacement on Bartlett Street over Hodgson Brook	PE	\$57,000			\$0	\$0	
					ROW	\$0	\$0		\$0	\$0	
					CON	\$285,000			\$0	\$0	
					\$342,000		\$0		\$0	\$0	\$7,220,293
4	6383004	Raymond	NH 27/ NH 156	Address safety and capacity issues at the intersection of NH 27 and NH 156	PE	\$60,000	\$135,000	2027	\$170,487	\$170,487	
					ROW	\$60,000	\$65,000	2030	\$89,177	\$89,177	
					CON	\$600,000	\$1,100,000	2032	\$1,594,838	\$1,594,838	
					\$720,000		\$1,300,000		\$1,854,502	\$1,854,502	\$9,074,795
5	6345011	North Hampton	US 1/ NH 111	Capacity improvements at Intersection of US 1 and Atlantic Avenue (NH 111) including safety improvements for bicycle and pedestrian access	PE	\$65,000	\$400,000	2027	\$505,148	\$505,148	
					ROW	\$62,000	\$150,000	2030	\$205,792	\$205,792	
					CON	\$620,000	\$3,000,000	2032	\$4,349,558	\$4,349,558	
					\$747,000		\$3,550,000		\$5,060,497	\$5,060,497	\$14,135,292
Totals						\$5,908,072	\$9,904,072		\$14,135,292	\$14,135,292	\$14,135,292
Regional Target Allocation											\$6,673,836
Net Remaining											-\$7,461,456

**NHDOT PROJECT SCOPE AND SCHEDULE REVIEW TASK FORCE
SUMMARY RECOMMENDATIONS FOR PROJECTS PROPOSED BY
ROCKINGHAM PLANNING COMMISSION
FOR THE 2023-2032 NH TEN YEAR TRANSPORTATION PLAN**

Initial Priority #1: Phase III NH Seacoast Greenway (Hampton)

Project summary: Construct a rail trail on 2.3 miles of the abandoned Hampton Branch rail corridor, elevating the causeway through the marsh 2'-3' for resiliency purposes and span washouts with sections of boardwalk.

Review Comments

- Full engineering assessment required for the 4 bridges. Rail line at Drakeside Road, Hampton River, Creek River and Hampton Falls River.
- The three rail bridges in the marsh have been determined eligible for the National Register of Historic Places. Based on consultation with the NH Division of Historic Resources (DHR) the heavily deteriorated steel spans would be replaced with newly fabricated spans. The historic stone abutments will be rehabilitated and concrete pads added atop to support the new spans at a height consistent with the elevated causeway.
- The crossing of Brimmer Lane will also need to be addressed. The original bridge carrying Brimmer Lane over the rail corridor was dismantled and replaced prior to 2000 with a rubble embankment. The most economical design to restore trail passage under Brimmer Lane will likely be a concrete box culvert. These have been used on other rail trails in New Hampshire.
- Brimmer Lane crossing is private and is an issue. Brimmer Lane appears to have been filled over the RR making an at grade trail crossing more complicated. May require an easement from the property owner.
- Assume the work will stay within ROW limits and no widening will occur – no public hearing (for acquisition purposes). Exception may be at the Brimmer Lane crossing.
- Aerial utilities including power, telephone and cable will require relocation.

Review Summary

- The project is recommended to commence with PE in 2027, ROW planned in 2030 and CON beginning in 2032. The proposed project would use **\$5,429,165** of the regional allocation for the 2023-2032 Ten Year Transportation Plan.
- NHDOT Year-of-Expenditure (YoE) estimates include 2.80%/year to account for inflation and 10% to account for indirect costs.
- The project will be funded at 100% federal funds.

Funding

Phase	2021 RPC Estimate	2021 NHDOT Estimate	YoE
PE	\$ 422,118	\$ 422,118 (2027)	\$ 533,080 (2027)
ROW	\$0	\$ 0 (2030)	\$ 0 (2030)
CON	\$ 3,376,954	\$ 3,376,954 (2032)	\$ 4,896,085 (2032)
Totals	\$ 3,779,072	\$ 3,779,072	\$ 5,429,165

Initial Priority #2: Signalization of NH 125/NH 155 Intersection (Epping)

Project summary: Installation of signals at the intersection.

Review Comments

- Difficult to assess based on supplied data.
- Corridor study assumes a 5 lane typical throughout corridor, including through this intersection.
- Intersection proposes a signal and 5 lane section on NH125 with a 4 lane approach on NH155.
- Questions were raised re: would the proposed project meet signal warrants?
- Does not appear to need any ROW from concept sketch.
- Design will focus extensively on the geometric layout in to tie the signalized intersection (assume 5 lanes) back into the 2 lane section that exists today.
- RPC estimated cost appears to be low if a 5-lane approach and signals are warranted to be constructed.
- NHDOT cost estimates based on historical project information NHDOT estimates (Barnstead NH28/NH126/ Pittsfield NH28/Leavitt Rd.). NH 106/Staniels Rd. intersection example used for 5 lane costs.
- Traffic control options include phased construction (long term work) using alternating one-way traffic or short term road closure (using side streets as alternate routes)
- Aerial utilities including power, telephone and cable will require relocation.

Review Summary

- The project is recommended to commence with PE in 2027; ROW in 2030 and CON in 2032.
- The proposed project would use **\$1,791,128** of the regional allocation for the 2023-2032 Ten Year Transportation Plan.
- Project would be 100% federal funds.
- The Year-of-Expenditure (YoE) values include inflation of 2.80%/year and indirect cost rate of 10%.

Funding

Phase	2021 RPC Estimate	2021 NHDOT Estimate	YoE
PE	\$ 50,000	\$ 150,000 (2027)	\$ 189,430 (2027)
ROW	\$ 0	\$ 5,000 (2030)	\$ 6,860 (2030)
CON	\$ 250,000	\$ 1,100,000 (2032)	\$ 1,594,838 (2032)
Totals	\$300,000	\$ 1,255,000	\$ 1,791,128

Initial Priority #3 Bartlett St. Bridge replacement (Portsmouth):

Project summary: The project seeks to replace the existing bridge over Hodgson Brook.

Review Comments

- There was not enough information provided to NHDOT to effectively estimate the replacement costs for this bridge.
- Significant questions raised in information that was supplied – including:
 - Total bridge length is over 470’ but City is only responsible for the 32’ over Bartlett Street. City needs to verify this. The remaining 440’+/- is under a private parking lot and business.
 - The portion of the bridge located outside of the City right-of-way is a concrete box structure and is potentially Federally-owned; the original design drawings for that portion of the structure were prepared for the U.S. Army Corps of Engineers in 1956 as part of a project along Hodgson Brook to improve drainage from the Portsmouth Air Force Base to North Mill Pond.
- The current 10-year planning period of the Bridge Capital Improvement Plan does not include recommendations for the Bartlett Street Bridge. However, the City applied to have a rehabilitation project for

this structure added to the NHDOT Municipal SAB program in September 2000. NHDOT processed this application and provided the City with a total project cost estimate of \$285,000.

- Though a specific project is not identified for this bridge, it is recommended that the City contact NHDOT to express interest in moving forward with SAB funding for this municipally owned bridge, and to request an updated estimate. Depending on the findings of the tasks completed under the Short- and Intermediate-Term Recommendations, a repair, rehabilitation, or replacement project requiring capital planning or SAB funding may be necessary, and the process for obtaining SAB funding should be started as early as possible based on the current status of the program.

Review Summary

- Project recommended to apply for SAB program.

Funding			
Phase	2021 RPC Estimate	2021 NHDOT Estimate	YoE
PE	\$ 57,000	\$	\$
ROW	\$0	\$	\$
CON	\$ 285,000	\$	\$
Totals	\$ 342,000	\$	\$

Initial Priority #4: Intersection improvements to NH 27/NH 156 (Raymond)

Project summary: The purpose of the project is to improve safety and capacity concerns at the subject intersection

Review Comments

- The application materials supplied did not provide information on the issues/concerns, or possible solutions to the safety and capacity issues at the intersection. More information would be required to effectively estimate project costs – what was the basis of the initial RPC cost estimate? What are the underlying assumptions re: improvements?
- Estimate for similar typical at NH27/Freetown Road and signals tied together. NHDOT considered the intersection improvements at the Loudon NH106/Staniels Road as an example.
- Traffic control options include phased construction (long term work) using alternating one-way traffic or short term road closure (using side streets as alternate routes)
- Aerial utilities including power, telephone and cable will require relocation.

Review Summary

- Values presented below represent the project commencing with PE in 2027; ROW in 2030 and CON in 2032.
- The Year-of-Expenditure (YoE) values include inflation of 2.80%/year and indirect costs of 10%.
- Project would be 100% federal funds.
- The project would utilize **\$1,854,502** of RPC’s 2023-2032 Ten Year Transportation Plan funding allocation.

Funding			
Phase	2021 RPC Estimate	2021 NHDOT Estimate	YoE
PE	\$ 60,000	\$ 135,000 (2027)	\$170,487 (2027)
ROW	\$ 60,000	\$ 65,000 (2030)	\$ 89,177 (2030)
CON	\$ 600,000	\$ 1,100,000 (2032)	\$ 1,594,838(2032)
Total	\$ 720,000	\$ 1,300,000	\$ 1,854,502

Initial Priority #5: Intersection improvements to the US1/NH 111 (Atlantic Ave) (North Hampton)

Project summary: The proposed project involves construction of capacity improvements at the Intersection of US 1 and Atlantic Avenue (NH 111) including safety improvements for bicycle and pedestrian access.

Review Comments

- No project specific information was submitted. The reports included are for the entire US1 corridor and not this specific intersection. NHDOT review considered the RPC letter as an indication that this project is for the US1/NH111 intersection only.
- NHDOT assumed that the project only proposed to add a southbound lane.
- ROW appears to be very tight at the proposed location, which will make widening difficult and costly.
- NHDOT understands that the project location will be subject to MS4 requirements. Potential/proposed treatment areas are unclear.
- Traffic control options would utilize phased construction (long term work) using alternating one-way traffic.
- Aerial utilities including power, telephone and cable will require relocation.
- Sidewalks/bike lanes will require Municipal Agreement be executed regarding maintenance.

Review Summary

- Values presented below represent the project commencing with PE in 2027; ROW in 2030 and CON in 2032.
- The Year-of-Expenditure (YoE) values include inflation of 2.80%/year and indirect costs of 10%.
- Project would be 100% federal funds.
- The project would utilize **\$5,060,497** of RPC's 2023-2032 Ten Year Transportation Plan funding allocation.

Funding

Phase	2021 RPC Estimate	2021 NHDOT Estimate	YoE
PE	\$ 65,000	\$ 400,000 (2027)	\$ 505,148 (2027)
ROW	\$ 62,000	\$ 150,000 (2030)	\$ 205,792 (2030)
CON	\$ 620,000	\$ 3,000,000 (2032)	\$ 4,349,558 (2032)
Total	\$ 747,000	\$ 3,550,000	\$ 5,060,497