

## MEMORANDUM

TO: RPC MPO Policy Committee  
FROM: David Walker & Scott Bogle  
RE: RPC 2021-2024 Transportation Improvement Program and updated 2045 RPC Long Range Transportation Plan  
DATE: February 18, 2021

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This memorandum discusses the short-range and long-range transportation project programming documents for the region. The **2021-2024 Transportation Improvement Program (TIP)** details the near-term implementation plans for any federally funded or otherwise regionally significant transportation improvements. The **2045 Long Range Transportation Plan** is the assembled projects and policies to be implemented over the next 25 years in the MPO region. The TIP and Plan are currently in a 30-day public comment period that will conclude on March 9, 2021 and a public hearing will be held virtually, via Zoom, to discuss and approve them on March 10, 2021 as part of the MPO meeting. Links to the full TIP and Plan as well as the public engagement site for commenting on the documents are listed below.

TIP Document: <http://www.therpc.org/2021TIP>

Plan Document: <http://www.therpc.org/LRTP>

Public Engagement Site: <https://publicinput.com/2021TIP>

### **2021-2024 Transportation Improvement Program (TIP) [Project list and fiscal constraint included as Attachment #2a]**

The Transportation Improvement Program (TIP) is a multi-year program of regional highway, transit, bridge, bicycle, and pedestrian improvement projects scheduled for implementation in the Metropolitan Planning Organization (MPO) area over the next four Federal fiscal years (FY 2021, 2022, 2023, and 2024). It is prepared by the MPO in accordance with joint federal metropolitan planning regulations, 23 CFR 450, issued by the Federal Highway Administration (FHWA) and Federal Transit Administration (FTA). The projects identified are prioritized by year and have been selected for funding as jointly agreed upon by the MPO and the NHDOT. Projects are listed alphabetically by the name of the community or agency and include information on the funding source, project scope, the type of funds used (Federal, State, or Local/other) as well as the fiscal year in which funds are planned for expenditure. The proposed 2021-2024 TIP includes approximately **\$560 million** in projects and these are split into two tables within the TIP and summarized below.

- **Regional Projects:** This table includes all projects that explicitly occur wholly or partially within the MPO region. This table includes approximately \$216 million in projects across 42 projects and 2 transit systems. As with past TIPs, there continues to be funding is dedicated to several ongoing large projects in the region such as the I-93 widening (\$21 million – including Debt Service), the Newington-Dover Spaulding Turnpike improvements (\$14 million), and the last of the work on replacing the Sarah Long Bridge and rehabilitating the I-95 bridge over the Piscataqua River between Portsmouth and Kittery

(\$26 Million total). In addition, there are a few newer projects that will be substantial I cost such as the Seabrook-Hampton NH 1A bridge replacement (\$21 million in the TIP, \$60-\$70 million total) and the rehabilitation of the General Sullivan Bridge between Newington and Dover (\$32 million). The full listing of projects is included in the attached TIP project list.

- Statewide Programs:** There are a variety of projects types that are not required to be listed individually within the TIP collectively known as “Programmatic” projects and are grouped into 34 programs that direct funds to specific purposes, often related to operations, maintenance, and preservation needs or funding that goes to communities for project implementation. For the most part, decisions regarding the specific projects that come from these programs are made utilizing separate processes, such as the Highway Safety Improvement Program, Transportation Alternatives Program, or through DOT programs that identify needs such as the “Red List” of Bridges, or NH DOT District maintenance requirements. While only a portion of this funding will be spent within the MPO Region, statewide they are proposed to be funded at about \$331 million over four years. For financial planning purposes, it is assumed that about 13% of the funding for these projects will be collectively expended within the MPO region.

**Attachment #2a** includes the project list and fiscal constraint documentation, however the full TIP document at the link above includes the NHDOT fiscal constraint documentation, the System Performance Report, the status of projects started during the current TIP, and other additional information that has been updated or re-written for 2021. TAC members are encouraged to review the full text and to provide any comments via the public engagement portal at <https://publicinput.com/2021TIP>.

**Estimated Total Project Costs<sup>1</sup>**

Fiscal Year	Regional Projects	Statewide Programs <sup>2</sup>	Transit	Turnpike Projects <sup>3</sup>	Total Project Costs
2021	\$ 58,320,116	\$ 95,878,943	\$ 7,151,103	\$ 13,067,143	\$ 174,417,305
2022	\$ 62,903,690	\$ 78,089,853	\$ 7,344,692	\$ 6,048,008	\$ 154,386,243
2023	\$ 61,715,138	\$ 82,170,804	\$ 7,373,405	\$ 3,692,705	\$ 154,952,052
2024	\$ 53,866,620	\$ 88,549,642	\$ 7,518,600	\$ 14,388,114	\$ 164,322,976
	\$ 236,805,563	\$ 344,689,241	\$ 29,387,800	\$ 37,195,971	\$ 648,078,576

1 Project costs are inflated at 2.8% per year from the year of the most recent cost estimate

2 13.3% share of Statewide Programmatic funds from STIP. Assumed to be equal to regional share of available funding.

3 Turnpike Expenditures are based on the Ten Year Plan from 2019-2028.

**TIP Projects by Category**

Category	2021	2022	2023	2024	Total
Bridges	\$24,225,000	\$39,092,045	\$29,774,608	\$13,464,819	\$106,556,471
Debt Service	\$6,652,797	\$8,319,138	\$6,950,531	\$6,870,671	\$28,793,136
I-93 Expansion	\$27,149,070	\$4,171,777	\$167,738	\$ 0	\$31,488,586
Individual Projects	\$28,477,446	\$21,867,983	\$12,991,436	\$15,222,670	\$78,559,534
Mandated Federal	\$190,000	\$1,702,330	\$ 0	\$ 0	\$1,892,330
Transit	\$4,555,186	\$4,596,285	\$3,751,252	\$3,825,643	\$16,728,365
Other	\$8,097,143	\$3,396,519	\$3,437,916	\$3,587,402	\$18,518,980
	<b>\$99,346,642</b>	<b>\$83,146,076</b>	<b>\$57,073,480</b>	<b>\$42,971,204</b>	<b>\$282,537,402</b>

**The 2045 Long Range Transportation Plan [view online at <http://www.therpc.org/LRTP>]**

The 2045 Long Range Transportation Plan (Plan) addresses a 20+ year planning horizon for transportation projects and is the second update to the plan adopted in 2017. The changes are largely limited to those necessary to maintain consistency between the TIP and Plan documents. A full update of existing conditions and trends analysis will be incorporated in the next major update to the Plan scheduled for adoption in 2023. Key changes in this update include:

- Updating the fiscal constraint analysis to account current revenue and cost assumptions.
- Assignment of projects by year to accommodate both the projects in the proposed 2021-2024 TIP and the 2021-2030 State Ten Year Plan.
- Inclusion of a complete System Performance Report to fulfill Federal performance-based planning requirements.
- Updating Chapter 2: Planning Framework with changes to the MPO project prioritization process adopted in 2020 and 2021.
- Adding a section to Chapter 1: Introduction summarizing short- and medium-term impacts of the COVID-19 pandemic on the regional transportation system. A full detailed analysis of pandemic impacts is not included here. Staff will be better positioned to assess long-term impacts by the time of the next full update to the Plan scheduled for 2023.
- Minor edits throughout updating references to project progress since 2019.

Chapter 5 from the Long Range Transportation Plan includes the TIP project list, the long range project list, and the fiscal constraint documentation. The full Transportation Plan is available on the MPO website with the link listed at the beginning of this document. In updating the fiscal constraint information for the Plan the following process was used:

1. Revenues available for transportation projects were established based on discussions with NH DOT, FHWA, and the other NH MPOs. Federal and State funding sources mirror what is found in the fiscal analysis of the State Ten Year Plan and Federal Funding is essentially held flat for years beyond 2028. Resources were distributed based on population and lane miles of eligible roadway and result in about 13% of total revenues as the RPC target “share” of funding.
  2. Turnpike funds during the 2021-2030 period are assumed to mirror the funds listed for the region in the draft 2021-2024 STIP and the 2019-2028 State Ten Year Plan. After 2028 the annual share of Turnpike maintenance funding assumed for the region matches the MPO share of Turnpike Lane Miles (28.2%). No large turnpike capital projects are assumed at this time.
  3. The MPO share of FHWA funds between 2021 and 2030 is set to approximate the projects and funding amounts listed in the approved 2021-2030 Ten Year Plan and the draft 2021-2024 STIP. Because NH DOT programs projects statewide as part of the Ten Year Plan process and does not adjust totals to match regional shares, it results in variable amounts of funding in the region each of the first ten years. That process has resulted in several large projects in the MPO region in the early years (2021-2024) with substantially fewer in the last several (2026-2030) and funding levels are set accordingly.
  4. Project costs were estimated and totaled. TIP and Ten Year Plan totals from each fiscal year are listed as shown in those documents. Projects that occur after the Ten Year Plan are inflated to the year of construction cost at 2.8% per year. Engineering and Right-of-Way costs are included as a flat 20% addition (10% of construction total each) to each project were appropriate and are inflated as well.
  5. Costs are subtracted from revenues to provide an annual balance with the requirement that each year be fiscally constrained. This analysis is used as the fiscal constraint for both the TIP and the MTP.
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The resulting analysis shows that it is anticipated that the current list of projects is financially constrained under a scenario that inflates project costs **at 2.8% per year and assumes growth in revenues at about 0.4% per year**. This ensures that each year of the Plan is constrained and leaves approximately 5% of the anticipated long-term funding available for programming of new transportation projects as part of the next Ten Year Plan update.

### **Recommendations**

Staff recommend approval of the 2021-2024 TIP and 2045 Plan Update based on the following:

1. ***Address and incorporate any comments received during the public comment period.*** At the time of the drafting of this memorandum, no public comments have been received. Discussion at the TAC meeting and received during the comment period will be addressed. It is likely that there will also be technical changes to be addressed as well, that will be listed when the document is brought to the Policy Committee for approval.
2. ***The TIP and Plan are financially constrained.*** It is required that the first three years of the TIP have committed funds and that the total committed funds must not exceed the amount of funding available including advanced construction funds. Projects for which operating and construction funds cannot be reasonably expected to be available must be omitted. Based upon information supplied by the NHDOT, the MPO has determined that the FY 2021-2024 TIP as presented is financially constrained. This determination is based upon the following:
  - a. For all projects requiring state or local match, the MPO assumes that the match will be made available in a timely manner;
  - b. For all projects including federal funds and programmed by the NHDOT, the MPO assumes that NHDOT has determined that the required funds by year and category will be available.

The Plan must be also fiscally constrained although it is not as rigorous as the constraint for the TIP given the less-defined nature of many projects and variable timeframes for funding. Some projects are more than 20 years into the future and knowing detailed project costs and scopes is difficult so costs should be considered “order of magnitude” and scopes general. Overall costs in the Plan are constrained to expected revenues, and in addition, each year of the Plan is constrained (see tables in Chapter 5). The analysis of the funds available to the MPO and the projects included in the Plan shows that the MPO can expect to have the funding available to implement the included projects, as well as some resources remaining for additional work.

3. ***The TIP and Plan reflect regional project priorities.*** Many of the projects in the TIP and Plan are long-standing local, regional, and state priorities addressing regional and inter-regional improvement needs (I-93, Newington-Dover, Sarah Long Bridge), and projects from the most recent Ten Year Plan cycles continue to add projects that address regional and local transportation issues such as:
    - Funding for three Transit Services (COAST, MTA/CART, and I-93 Boston Express Bus).
    - Complete Streets projects in Hampton, Portsmouth, and Plaistow
    - Addressing rural intersections in Hampstead and Kensington
    - Addressing capacity and safety issues on urban roadways such as US 1 in Portsmouth
    - Congestion Management through signal coordination and traffic management and control projects on NH 125 in Plaistow and Epping
    - Continued work on addressing deficient bridges in the State (Hampton-Seabrook NH 1A, New Castle-Rye NH1B, Sarah Long, I-95 High Level Bridge)
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- As part of the Plan development process, the MPO solicits project needs from communities and transit agencies in the region.
4. ***The Air Quality Conformity Determination addresses Transportation Conformity as per guidance from EPA and FHWA.*** Section 5 of the TIP discusses the conformity process, requirements, and how the MPO meets these requirements by utilizing Latest Planning Assumptions in planning efforts, participates in the established interagency consultation process, and creates a fiscally constrained TIP and LRTP.
  5. ***The TIP and Plan make progress towards achieving the region's performance targets and the describes the potential for that progress.*** The Performance Report (Appendix B) for the TIP identifies the performance targets approved by the region and provides an assessment as to how the programmed projects will move the region towards achieving those targets.
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