

Update on FY 2023-2032 Ten-Year Transportation Improvement Plan

SNHPC MPO Meeting
October 27, 2020

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Deputy Executive Director





Ten-Year Plan Overview

- Pursuant to RSA 228:99 and RSA 240, the SNHPC works collaboratively with the NHDOT to develop the Ten-Year Transportation Improvement Plan (TYP).
- The TYP is updated biennially.
- The SNHPC has just completed its solicitation for projects for the **FY 2023-2032 TYP**.

TEN YEAR TRANSPORTATION IMPROVEMENT PLAN

2021 - 2030

Projects Only

APPROVED BY THE NH LEGISLATURE
AND SIGNED INTO LAW BY THE GOVERNOR
UNDER HB1182, AS AMENDED

PURSUANT TO
RSA 228:99 AND RSA 240 OF THE LAWS OF NEW HAMPSHIRE



PROJECTS LISTED ALPHABETICALLY



PREPARED BY THE NEW HAMPSHIRE
DEPARTMENT OF TRANSPORTATION

July 24, 2020



Regional Ten-Year Plan Allocations for this Update Cycle

- NHDOT has allocated \$50 Million for regional projects in this Ten-Year Plan update cycle.
- New projects would (generally) be programmed for construction in FY 2031 or FY 2032.
- **The SNHPC's estimated allocation is \$8.554 Million.**

RPC	FAE Lane Miles	%	Population	%	50% By FAE Lane Miles	50% Population	Total available for 2031-2032 Projects
NCC	1,536	18%	82,350	6%	\$ 4,530,229.37	\$ 1,575,857	\$ 6,106,086
UVLSRPC	721	9%	85,867	7%	\$ 2,127,026.04	\$ 1,643,159	\$ 3,770,185
LRPC	956	11%	119,725	9%	\$ 2,818,612.00	\$ 2,291,068	\$ 5,109,680
SWRPC	808	10%	99,566	8%	\$ 2,383,931.58	\$ 1,905,304	\$ 4,289,235
CNHRPC	764	9%	113,248	9%	\$ 2,252,871.89	\$ 2,167,124	\$ 4,419,996
SNHPC	1,173	14%	266,278	20%	\$ 3,458,115.57	\$ 5,095,520	\$ 8,553,635
NRPC	759	9%	205,765	16%	\$ 2,238,359.83	\$ 3,937,538	\$ 6,175,897
RPC	1,040	12%	188,521	14%	\$ 3,066,281.25	\$ 3,607,555	\$ 6,673,836
SRPC	720	8%	145,112	11%	\$ 2,124,572.47	\$ 2,776,876	\$ 4,901,449
Totals	8,477	100%	1,306,432	100%	\$ 25,000,000	\$ 25,000,000	\$ 50,000,000



Ten-Year Plan Regional Schedule

- **Week of July 27, 2020** – TYP solicitation correspondence sent to SNHPC communities.
- **Tuesday, September 15, 2020** – TYP project submissions due to the SNHPC.
- **September to November 2020** – Candidate projects undergo review by SNHPC on-call engineering consultant and “shortlisting” by the SNHPC TAC and MPO.
- **November 2020** – “Shortlist” of candidate projects due to NHDOT.
- **December 2020 to February 2021** – NHDOT review of candidate projects.
- **March 31, 2021** – Final regional priorities due to NHDOT.



Ten-Year Plan Project Solicitation

The SNHPC received the following responses from the FY 2023-2032 TYP project solicitation, which closed on September 15, 2020.

- **One** (1) existing TYP project was identified as requiring additional funding.
- **One** (1) existing TYP project has been proposed for advancement to an earlier year of construction.
- **Five** (5) new projects were proposed for consideration in this TYP update.



Potential FY 2023-2032 Ten-Year Plan Projects

TOWN OF BEDFORD

Supplemental Funding for U.S. Route 3 (South River Road) Widening/Complete Streets Improvements from Hawthorne Dr. to Manchester Airport Access Rd.

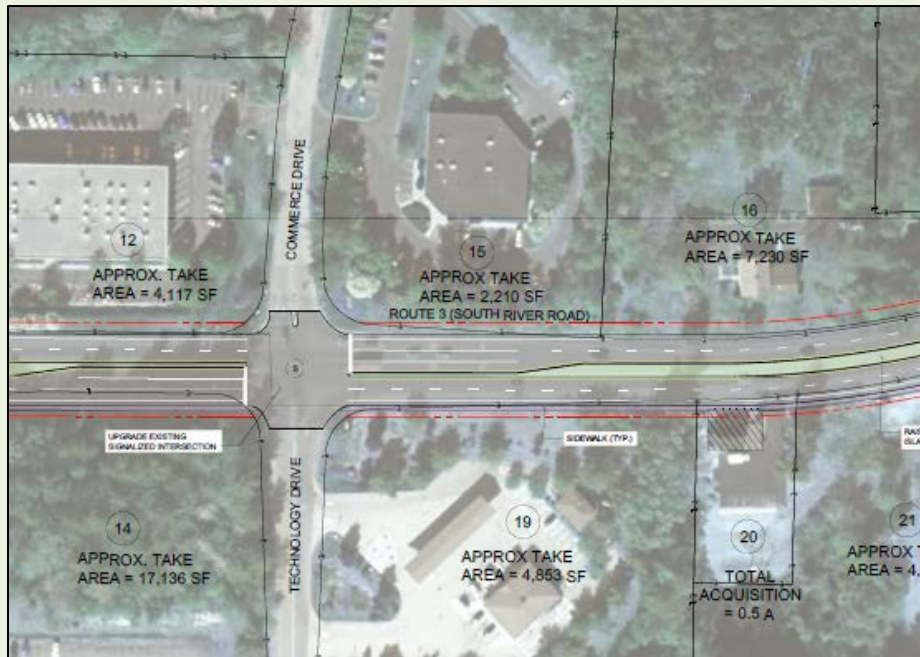
- SNHPC added the project in the FY 2017-2026 Ten-Year Plan update.
- SNHPC added supplemental funding of \$7.29 Million during the FY 2021-2030 Ten-Year Plan update.
- Project is currently programmed for \$13.27 Million (in year of expenditure dollars) with construction beginning in FY 2026.
- Project is estimated to cost \$16.40 Million (in 2019 dollars).



Potential FY 2023-2032 Ten-Year Plan Projects

TOWN OF BEDFORD

Supplemental Funding for U.S. Route 3 (South River Road) Widening/Complete Streets Improvements from Hawthorne Dr. to Manchester Airport Access Rd.



Improves a bottleneck on the National Highway System (NHS) and includes complete streets elements.

Proposed Typical Section

- 4 – 12' travel lanes with 14' raised median
- 5' shoulders on outside with 2' along median
- 5' paved sidewalk on east side with 7' grass panel on west side



Potential FY 2023-2032 Ten-Year Plan Projects

TOWN OF DEERFIELD

Convert Intersection of NH Route 107/Candia Road/Church Street to a Roundabout



Photo Source: Google



Photo Source: Google



Potential FY 2023-2032 Ten-Year Plan Projects

TOWN OF DEERFIELD

Convert Intersection of NH Route 107/Candia Road/Church Street to a Roundabout

- This project is included in the current SNHPC Metropolitan Transportation Plan as a Deerfield Town Center improvement project but has not previously been submitted for Ten-Year Plan consideration.
- **The project will be assigned to the SNHPC's on-call engineering firm for project scoping and cost estimating.**
 - Similar roundabout conversions in New Hampshire generally cost between \$1.0-\$1.5 Million.



Potential FY 2023-2032 Ten-Year Plan Projects

TOWN OF DERRY

Extension of Derry Rail Trail from Madden Road (i.e. Exit 4A Connector Road) to the Londonderry Town Line

- This 1,900' extension of the Derry Rail Trail is the final section to be completed within the Town.
- There has been extensive local and regional planning justification for the completion of this trail as part of the larger "Granite State Rail Trail" effort.
- **The project will be assigned to the SNHPC's on-call engineering firm for project scoping and cost estimating.**



Potential FY 2023-2032 Ten-Year Plan Projects

TOWN OF DERRY

Extension of Derry Rail Trail from Madden Road (i.e. Exit 4A Connector Road) to the Londonderry Town Line



- A portion of this trail gap is privately-owned and may require ROW acquisition.
- Depending on the cost estimate, the project may also qualify for Transportation Alternatives Program (TAP) consideration.



Potential FY 2023-2032 Ten-Year Plan Projects

TOWN OF LONDONDERRY

Advance the NH Route 28/128 Intersection Improvement Project



Photo Source: Google



Photo Source: Google



Potential FY 2023-2032 Ten-Year Plan Projects

TOWN OF LONDONDERRY

Advance the NH Route 28/128 Intersection Improvement Project

- SNHPC added the project in the FY 2019-2028 Ten-Year Plan update.
- Project is currently programmed for \$1.67 Million (in year of expenditure dollars) with construction in FY 2027.
- Project advancements are difficult to accomplish without offsetting concessions (e.g. delaying another project or adding local funding).
- **The project will be assigned to the SNHPC's on-call engineering firm for updated scoping to confirm the current cost estimate.**



Potential FY 2023-2032 Ten-Year Plan Projects

TOWN OF LONDONDERRY

NH Route 28/128 Intersection Improvement Project

- Based on initial review, we expect that the existing TYP project in Londonderry (**NH Route 28/128 Intersection Improvements**) will require supplemental funding.
 - The project is currently programmed for \$1.67 Million with construction in FY 2027.
 - The realignment and signalization concept envisioned may be more challenging to implement due to development that has occurred adjacent to the intersection.



Potential FY 2023-2032 Ten-Year Plan Projects

CITY OF MANCHESTER

I-293/Second Street Engineering Study

- Following the completion of the Exit 6 and 7 reconstruction project, the SNHPC's regional travel demand model shows that Second Street and I-293 between Exit 5 and the NH Route 101 interchange will continue to be a bottleneck with substantial capacity issues.
- The operations of I-293 and Second Street are inextricably linked in this area, with Exit 4 being a primary concern.
- Enhancing alternatives for bicycle and pedestrian mobility is also a concern in this corridor.



Potential FY 2023-2032 Ten-Year Plan Projects

CITY OF MANCHESTER

I-293/Second Street Engineering Study

- The NHDOT has also noted the need for an engineering study in this area to identify *“the next wave of Turnpike needs such as potential improvements to the FEET in Manchester from NH101 to Exit 5 that is at capacity during peak hours of the weekday.”*
- The NHDOT has previously estimated the cost of such a study to be approximately \$2.0 Million, and SNHPC is working with NHDOT to verify whether that figure is still accurate.



Potential FY 2023-2032 Ten-Year Plan Projects

CITY OF MANCHESTER

I-93 Exit 8 Interchange Improvements



This project entails operational and capacity improvements at three (3) intersections in the vicinity of I-93 Exit 8 in Manchester.

- I-93 Northbound Ramps
- I-93 Southbound Ramps
- Bridge Street/NH Route 28A (Mammoth Road)

Map Source: City of Manchester



Potential FY 2023-2032 Ten-Year Plan Projects

CITY OF MANCHESTER

I-93 Exit 8 Interchange Improvements

- Based on a recent traffic impact analysis, the intersections are projected to exceed a volume/capacity ratio of 1.0 in the coming years.
- A combination of operational improvements (e.g. adaptive signal control) and capacity improvements are envisioned at the intersections.
- **The project will be assigned to the SNHPC's on-call engineering firm for project scoping and cost estimating.**



Potential FY 2023-2032 Ten-Year Plan Projects

CITY OF MANCHESTER

Improvements at the Intersections of Hooksett Road/Campbell Street and Campbell Street/Hamel Drive



This project includes the following two elements:

- Capacity improvements at the intersection of Hooksett Rd. (U.S. Route 3) and Campbell St.
- Reconfiguration (roundabout conversion) at the intersection of Campbell St./Hamel Dr.

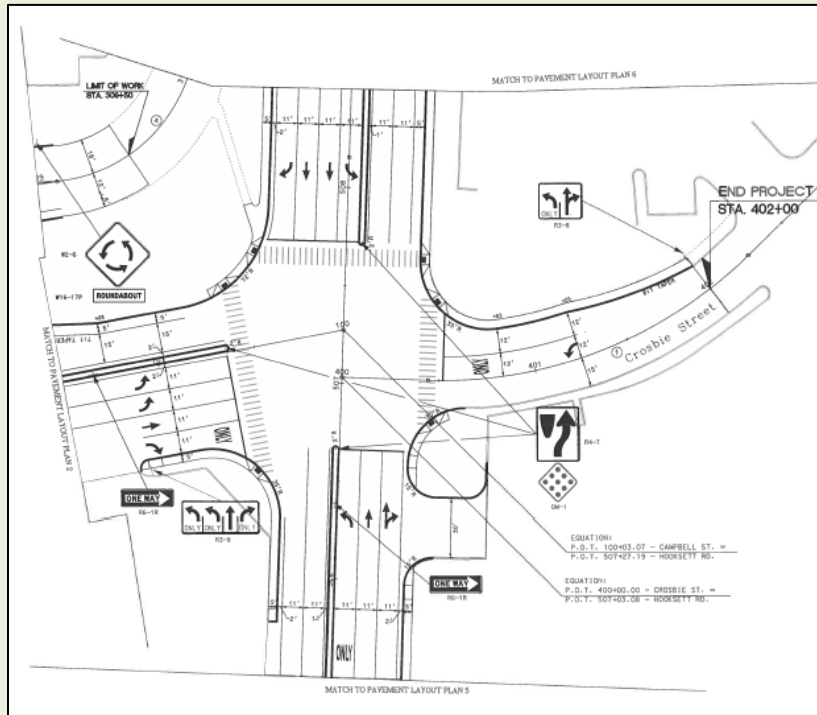
Map Source: City of Manchester



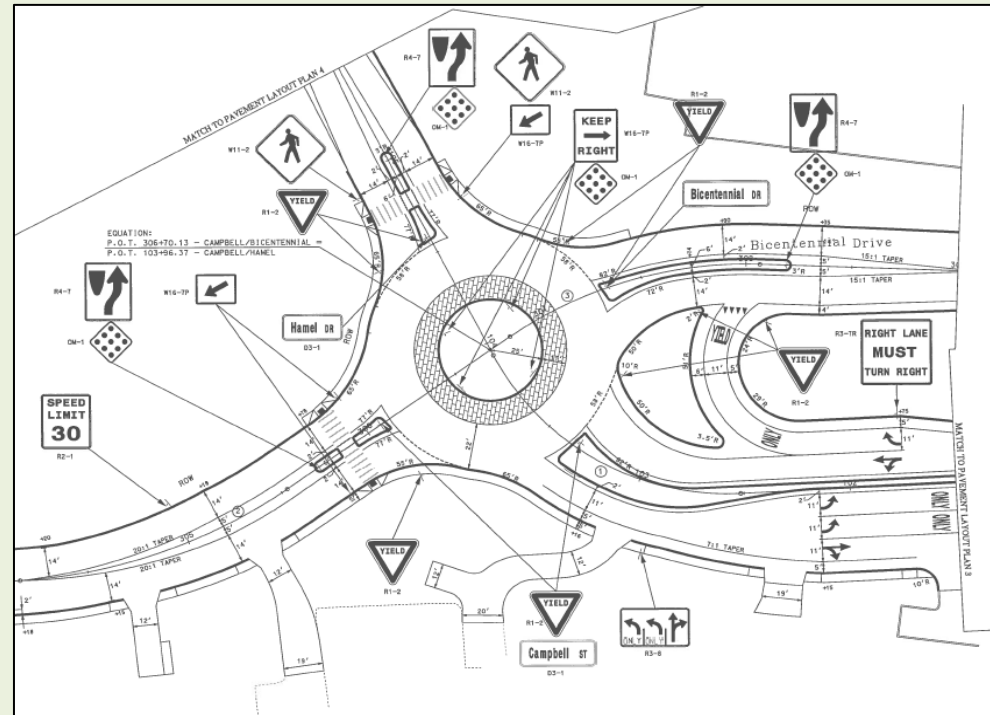
Potential FY 2023-2032 Ten-Year Plan Projects

CITY OF MANCHESTER

Improvements at the Intersections of Hooksett Road/Campbell Street and Campbell Street/Hamel Drive



Proposed Improvements to Hooksett Rd./Campbell St.



Proposed Improvements to Campbell St./Hamel Dr.



Potential FY 2023-2032 Ten-Year Plan Projects

CITY OF MANCHESTER

Improvements at the Intersections of Hooksett Road/Campbell Street and Campbell Street/Hamel Drive

- Substantial preliminary engineering work has previously been completed for this project by Hoyle, Tanner & Associates.
- Depending on the cost estimate, the project may also qualify for Congestion Mitigation and Air Quality (CMAQ) program consideration.
- **The project will be assigned to the SNHPC's on-call engineer to peer review the previously developed plans and provide a current cost estimate based on those plans.**



On-call Engineering

- The SNHPC has entered into a contract with VHB, Inc. for on-call engineering needed for TYP project scoping and cost estimating work.
- The SNHPC is currently developing a Task Order with VHB for project scoping/cost estimating including:
 - **Deerfield** - NH Route 107/Candia Rd./Church St. Roundabout
 - **Derry** – Rail Trail Expansion from Madden Road to Londonderry T/L
 - **Londonderry** – NH Route 28/128 Intersection Improvements
 - **Manchester** – I-93 Exit 8 Interchange Improvements
 - **Manchester** – Hooksett Rd./Campbell St. and Campbell St./Hamel Dr. Intersection Improvements
- Existing cost estimates will be utilized for the **Bedford** (U.S. Route 3) and **Manchester** (I-293/Second Street Engineering Study) projects.



“Shortlisting” of Projects

- NHDOT requires that a “shortlist” of projects be submitted by early November 2020.
 - The shortlist is not a final set of priorities, but rather an early notification to NHDOT about the projects our region is considering for this TYP update.
- **In order to develop such a “shortlist” of projects, the SNHPC TAC appointed a Subcommittee to do an initial review/evaluation of projects.**



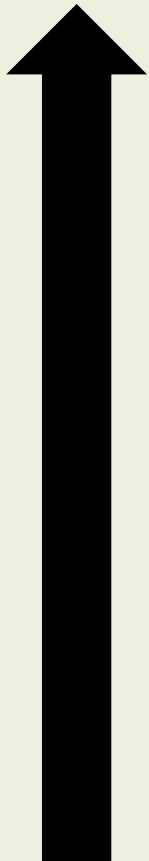
Project Evaluation

- The TAC Project Evaluation Subcommittee comprised of Dick Snow (Candia), Linda Kunhardt (Francestown), and Laurie Makarawicz (MTA) recently met to do an initial review/evaluation of projects.
 - The initial evaluation may change as scoping and cost estimates come into focus and more information is learned about each of the projects.
 - **Final regional priorities are not due until March 31st.**



Initial Project Evaluation Results

Higher Priority



Manchester – I-293/Second Street Engineering Study

Turnpike
Project

Bedford – Supplemental Funding for U.S. Route 3 Widening from Hawthorne Dr. to Raymond Wieczorek Dr.

Londonderry – Supplemental Funding for NH Route 28/128 Intersection Improvements

Existing TYP
Projects

Derry – Rail Trail Expansion from Madden Road to Londonderry T/L

Manchester – I-93 Exit 8 Interchange Improvements

Manchester – Hooksett Rd./Campbell St. and Campbell St./Hamel Dr. Intersection Improvements

Deerfield - NH Route 107/Candia Rd./Church St. Roundabout

Newly
Proposed
Projects

Lower Priority



One of these projects is not like the others...

- **While the proposed I-293/Second Street Engineering Study in Manchester is emerging as both a local and regional priority, it would be a Turnpike project and the decision of whether or not to fund the project ultimately lies with the NHDOT.**
 - The SNHPC's allocation of \$8.55 Million for this TYP update cycle is federal funding.
 - The NHDOT has a policy that the Turnpike system should be self-sustaining with Turnpike funds (i.e. toll revenue). As such, the NHDOT generally avoids using federal funding on the Turnpike system.
 - The NHDOT has expressed a willingness to discuss this study, but Turnpike funds may be fully subscribed and toll revenues are under pressure from reduced travel due to the COVID pandemic.



Where are we at right now?

- We have a sense of initial regional priorities, but work continues on due diligence for these projects, including engineering scoping and cost estimating.
 - The initial regional priorities are subject to change as more is learned about the projects. Final priorities are due March 31st.
 - All proposed projects are “still on the table” and are still being evaluated.
- The proposed I-293/Second Street Engineering Study will require further discussions with NHDOT, and the path forward for that project is not yet clear.
- The amount of supplemental funding needed for the existing Londonderry (NH Route 28/128 Intersection Improvement) project may be a key factor in determining how many newly proposed projects can be funded in this TYP update.



Questions?