

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

SNHPC TAC Meeting
September 17, 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 October 2020** – Candidate projects undergo review by SNHPC on-call engineering consultant and “shortlisting” by the SNHPC TAC and MPO.
- **November 6, 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.

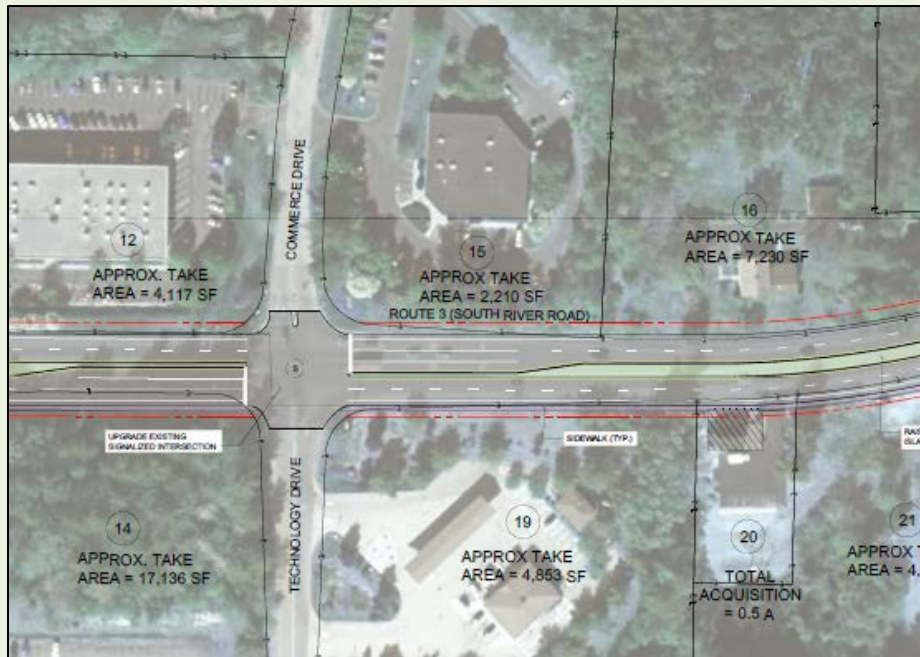
- SNHPC added the project in the FY 2017-2026 Ten-Year Plan update.
- SNHPC added supplemental funding of \$7.29 Million during the FY 2021-2030 Ten-Year Plan update.
- Project is currently programmed for \$13.27 Million (in year of expenditure dollars) with construction beginning in FY 2026.
- Project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

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

- 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.

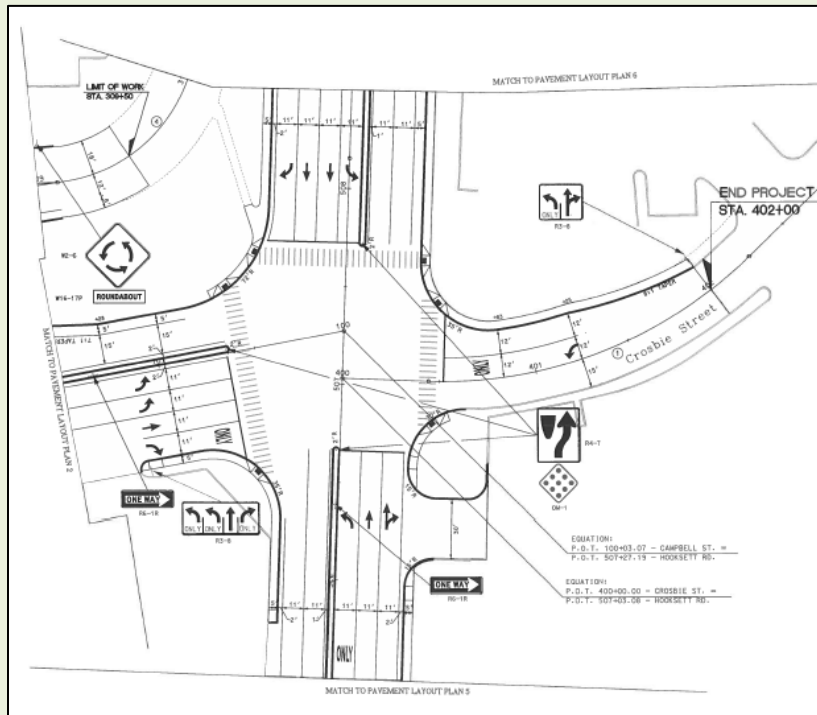
Map Source: City of Manchester



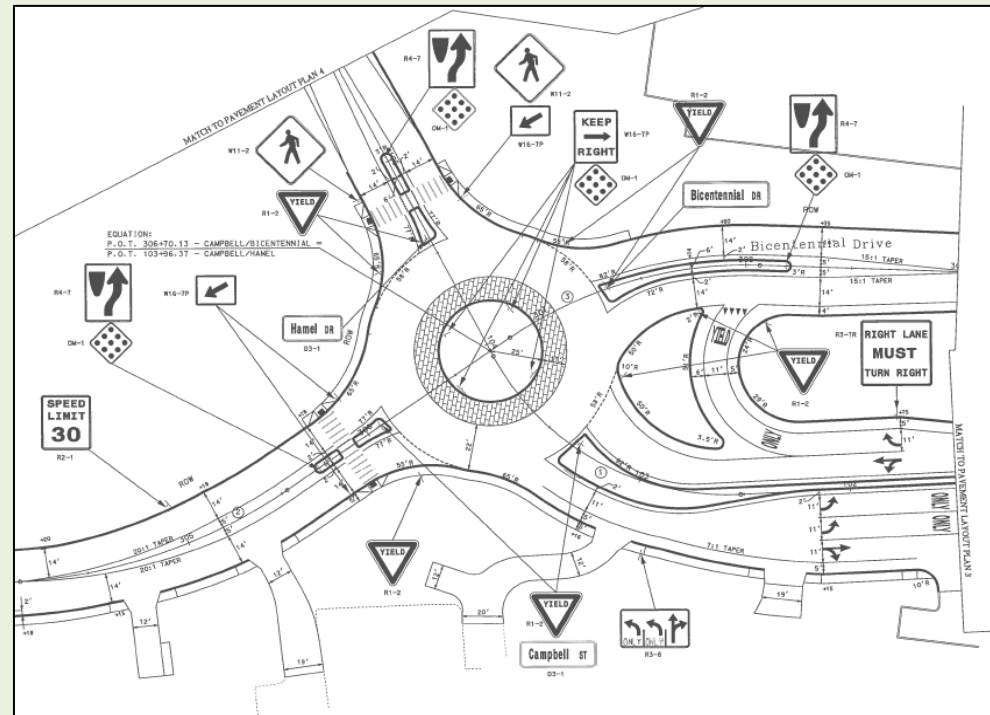
Potential FY 2023-2032 Ten-Year Plan Projects

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.**



Next Step: Engineering Review

- The SNHPC is close to finalizing its selection of an on-call engineering consultant to perform TYP project scoping and cost estimating work.
- Project scoping/cost estimating needed for this cycle includes:
 - **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 (Peer Review and Cost Estimate Only)
- Existing cost estimates will be utilized for the **Bedford** (U.S. Route 3) and **Manchester** (I-293/Second Street Engineering Study) projects.



Next Step: “Shortlisting” of Projects

- NHDOT has requested 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, we will need to begin evaluating projects according to the TYP evaluation criteria previously discussed at the June and July TAC meetings as soon as possible.**



Ten-Year Plan Project Evaluation Criteria

Ten-Year Plan Criteria		Definition	SNHPC Weighting (2023-2032 TYP)
Economic Development	Local and Regional Economic Dev.	The degree to which a project supports economic development needs and opportunities at the local and regional level.	6.29%
	Freight Movement	The degree to which the project impacts the movement of goods.	5.73%
Equity, Environmental Justice, and Accessibility	Equity and Environmental Justice	The degree to which a project benefits traditionally-underserved populations.	4.26%
	Accessibility	The degree to which a project ensures accessibility by all potential users.	7.44%
Mobility	Mobility Need and Performance	A historical analysis of the mobility need and performance (e.g. level of congestion, delay, etc) of a location for all modes.	7.44%
	Mobility Intervention	A forward-looking analysis of how interventions proposed as part of a project would improve the mobility performance for all modes.	6.63%
Natural Hazard Resiliency	Hazard Risk	An analysis of the natural hazard risks (i.e. flood history) to a transportation facility.	5.41%
	Hazard Mitigation	A forward-looking analysis of how the natural hazard mitigation measures proposed as part of a project would reduce hazard risks.	5.82%
Network Significance	Traffic Volume	The extent to which transportation infrastructure is currently utilized by vehicles, bicycles, and pedestrians.	8.79%
	Facility Importance	The importance of the facility to the local and the regional transportation system (e.g. available of alternate routes, etc).	8.05%
Safety	Safety Performance	A historical analysis of the safety performance (i.e. crash history) of a location over the past five (5) year period for all modes.	7.44%
	Safety Measures	A forward-looking analysis of how the countermeasures proposed as part of a project would improve safety performance for all modes.	9.81%
State of Repair	State of Repair	The degree to which the project improves infrastructure condition in the project area (e.g. pavement condition, bridge condition, etc).	8.34%
	Maintenance	The degree to which the project impacts NHDOT and/or municipal maintenance requirements.	4.20%
Support	Support	The degree of documented support for the project at the local, regional, or statewide level.	4.33%



Next Step: TAC Project Evaluation Subcommittee

- To assist in evaluating proposed projects, staff requests that the TAC appoint a Project Evaluation Subcommittee for this purpose.
 - This approach has worked well in previous SNHPC TYP update cycles.
 - The Subcommittee will evaluate the projects according to the criteria and develop recommended priorities for the full TAC's consideration.
 - **The Subcommittee should be comprised of “disinterested” TAC members (i.e. representing communities or agencies that did not submit project proposals).**



Questions?