



DRAFT For Public Comment

TRANSPORTATION IMPROVEMENT PROGRAM

Fiscal Years 2023-2032

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Central New Hampshire
Regional Planning Commission



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**Central NH Regional Planning
Commission**

**DRAFT Transportation Improvement
Program**

FY 2023 - 2032



Central NH Regional Planning Commission
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Introduction

The Regional Transportation Improvement Program (TIP) for Fiscal Years (FY) 2023-2032 consists of a list of transportation projects for the Central New Hampshire Regional Planning Commission (CNHRPC) Region that is consistent with the goals and vision established in the comprehensive CNHRPC Regional Plan, adopted in February 2015.

The vision of the Transportation Chapter of the Regional Plan is to have *“A balanced, well-connected, sustainable and diverse transportation system that is operated and maintained to ensure residents have safe, reliable choices for travel needs. The system will be flexible with a focus on safety, provide recreation access, preserve the environment and encourage innovation”*

The guiding principles for transportation in the Regional Plan are:

- An integrated approach to transportation throughout the Central New Hampshire (NH) Region with particular attention given to transportation efficiency, safety, competitiveness, social inclusion, and environmental sustainability.
- The region’s principal transportation assets and strategically important travel corridors should be maintained, preserved, and enhanced.
- Investment in the region’s transportation infrastructure should be made in a sustainable and efficient manner in order to promote the economic well-being of the region and its populations.
- Future provisions for transportation and infrastructure should involve regional coordination and be firmly integrated with multi-modal connections as well as the region’s overall land use strategies.

CNHRPC prepares a Regional TIP every two years based on input from local municipalities, New Hampshire Department of Transportation (NHDOT) and the Transportation Advisory Committee (TAC). This is concurrent with the update of the NHDOT Statewide Ten Year Transportation Improvement Plan or Ten Year Plan (TYP).

New Hampshire **RSA 228:99** and **RSA 240** require that NHDOT propose a plan for improvements to the state’s transportation system. The purpose of this legislation is to develop and implement a plan allowing New Hampshire to fully participate in federally supported transportation improvement projects.

CNHRPC TIP Update Process

The current TIP update process formally began in the Central NH Region on August 19, 2020 when the CNHRPC distributed notification to each of its member communities soliciting projects to be evaluated for potential inclusion the NHDOT FY 2023-2032 TYP.

Accompanying this formal communication was a comprehensive Project Proposal Form which requested detailed information on potential new projects as well as continued local support for projects contained in the FY 2021-2030 TYP.

In response to the request for new projects, member communities submitted a number of locally prioritized projects ranging from complete streets projects to intersection improvements based on safety concerns. In addition, support for each of the projects identified in the FY 2021-2030 TYP remains strong. The Regional TIP update process gives a clear indication of the wide-ranging transportation needs in the Central NH Region.

The Regional TIP serves as an opportunity to fully understand the current transportation needs in the region. Just as the Ten Year Plan is established as the transportation project guide for New Hampshire, CNHRPC will utilize this regional TIP to plan for current and future transportation needs in the Central NH Region.

Project Selection and Evaluation

Project selection begins with the initial screening of all projects submitted to CNHRPC. Projects are evaluated for which eligible funding source is best suited. Some regionally significant projects are not eligible for federal funding in the TYP or are better suited for other programmatic funding sources. CNHRPC provides engineering assistance, funded through the Unified Planning Work Program agreement with NHDOT, to develop conceptual plans and estimates for

new projects that are Federal Aid Eligible and to be evaluated for the TYP.

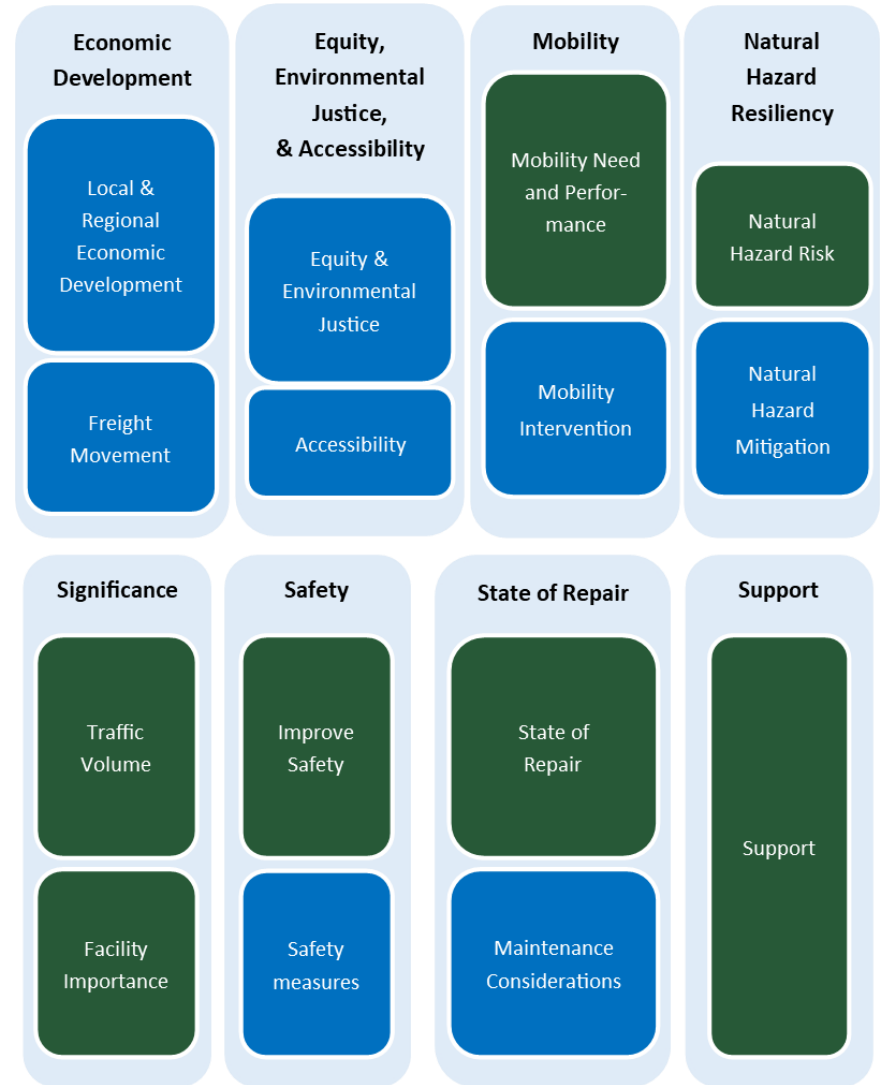
CNHRPC staff and the TAC evaluate the proposed projects that are Federal Aid Eligible based on evaluation criteria that are universally used by New Hampshire’s nine regional planning commissions. Each region assigns criteria weights to better emphasis the needs in their region. The figure to the right displays the universal criteria and Appendix III includes criteria scoring considerations and the weights that were developed by the CNHRPC TAC and applied to project scores.

The CNHRPC TAC established criteria weights prior to the project solicitation. Staff assembled plans and available data for each of the 15 criteria to evaluate project proposals. The TAC’s Project Scoring Subcommittee met on October 30, 2020 to evaluate each project and develop preliminary scores. The weighted scores were presented to the CNHRPC TAC to review on November 5, 2020 and used to develop a preliminary project ranking. The preliminary rankings were sent along with project proposal forms, conceptual plans, cost estimates and supporting documentation to NHDOT for their review. Project criteria used for evaluation are displayed to the right. Criteria definitions and weights are in Appendix III.

The CNHRPC TAC met on February 5, 2021 to review NHDOT’s comments and recommended project priorities to be included in the Draft FY 2023-2032 CNHRPC TIP.

- The CNHRPC FY 2023-2032 Regional TIP update is presented in a stratified format that better reflects the distinct types of projects. The different categories considered during the TIP update consist of the following: **Existing Ten Year Plan FY 21-30 Projects - Considered Funded**
- **Regional Projects Evaluated for Inclusion in the FY 2023-2032 Ten Year Plan**
- **City of Concord Urban Compact Projects**

Universal Project Scoring Criteria



Regional Project Types

This section describes the types of projects listed within this document. Appendix I displays project tables, and Appendix II includes project maps.

Existing State Ten Year Plan FY 2021-2030 Regional Projects – Considered Funded

The FY 2021-2032 State of NH Ten Year Transportation Improvement Plan (TYP) was signed into law on July 24th, 2020. A summary of state and federally funded projects in the CNHRPC region that are programmed in the TYP, are listed in this document with scoping and funding information. Projects within NH’s Statewide Transportation Improvement Plan covering fiscal years FY 2021-2024 have been updated to reflect any changes. Additional statewide programmatic projects, such as pavement resurfacing or transit funding, may be located in the CNHRPC region but are not listed.

Regional Projects Evaluated for Inclusion in the FY 2023-2032 Ten Year Plan

The functional classification system identifies roads by the type of service provided and by the role of each highway within the state system based on standards developed by the US Department of Transportation. Roads that are classified as Arterials and Collectors are all eligible for federal funding. As part of the NHDOT FY 2023-2032 TYP update, NHDOT proposed using \$50 million of federal funds across NH for RPC priority projects on roads eligible for federal funds. NHDOT calculates regional allocations of the \$50 million in funding based on each RPC’s eligible lane mileage and population. The CNHRPC area has approximately 764 Federal Aid Eligible lane miles and a population estimate of 113,248 which equates to 18% of the states total or \$4,419,996 of the \$50 Million in funding.

CNHRPC received six project proposals as part of the solicitation process. Projects costs were calculated based on current construction costs totaling approximately \$8.4 million. NHDOT developed updated estimates, including inflation and administrative costs, to reflect project costs in the out years of the TYP, based on the anticipated project delivery schedule. The total future cost for all six projects was estimated at \$15.9 million. The projects, descriptions, cost estimates and the DRAFT ranks based on the TAC’s evaluation, are listed in Appendix I.

City of Concord – Urban Compact

Sections of certain roads within the City of Concord are designated as “urban compact” roads by the NHDOT. NH RSA 229:5 V lists twenty-seven communities within the state where the NHDOT Commissioner may establish compacts; within the CNHRPC region, only the City of Concord has an Urban Compact. Road’s within the Urban Compact are designated as Class IV highways. The Urban Compact agreements usually delegate responsibilities for the highway between the community and NHDOT, wherein the community is often responsible for capital improvements, ordinary maintenance, and the issuance of curb cuts for new driveways.

Currently, the City of Concord is responsible for maintenance and improvement of the following components of the State Highway System within the compact area:

US Route 3	US Route 3A	NH Route 13
US Route 202	NH Route 9	NH Route 132

Projects within urban compacts are typically funded through the City of Concord’s Capital Improvement Program but may also be funded through other sources as best fits the project, such as Congestion Mitigation Air Quality improvement program (CMAQ), the Transportation Alternatives Program (TAP) and the Highway Safety Improvement Program (HSIP).

The City of Concord is an active partner with the CNHRPC and actively supports projects in its neighboring and regional communities. Many of the Class IV highways in the City of Concord are important local, regional, and sub-regional connections which are also a major component of the National Highway System in New Hampshire.

Projects within the Urban Compact in Concord are listed separately in the Regional TIP. Even though the projects are eligible for Federal Aid funding through the State’s TYP, the City of Concord lists these projects in their Capital Improvement Program identifying the projects to be built without federal aid funding.

Appendix I – Project Tables

Existing State Ten Year Plan FY 21- 30 Projects – Considered Funded

PROJECT NAME	STATE #	PROJECT LOCATION	PROJECT SCOPE	CONSTRUCTION YEAR	TOTAL COST
Allenstown	40362	NH Route 28	Bridge Rehabilitation, Redlist, Bridge - NH 28 over Suncook River	2021	\$ 2,661,600
Boscawen	411579	US 3 & 4 (King Street)	Multimodal and safety improvements to King Street	2027	\$ 5,000,407
Bow	24223	Page Rd over Bela Brook	Bridge replacement – Page Rd over Bela Brook	2026-2027	\$ 875,791
Bow	24224	River Road over Bow Bog Brook	Bridge replacement – River Rd over Bow Bog Brook	2024-2025	\$ 1,258,477
Bow	29641	NH 3A	NH 3A corridor safety improvements	2022	\$ 4,282,897
Bow	40346	Dunklee Rd	Bridge rehabilitation - Dunklee Rd over Bow Bog Brook	2021	\$ 992,990
Chichester	40631	NH 28 and Main Street	Intersection Improvements	2025	\$ 1,633,376
Concord	15877	Hooksett Turnpike	Bridge Replacement – Hooksett Turnpike over Bela Brook	2021	\$ 913,898
Concord	15878	Birchdale Rd	Bridge Replacement – Birchdale Rd over Bela Brook	2021	\$ 913,898
Concord	29601	NH 13 (Clinton St)	Improvements at I-89 Exit 2 NB and SB Ramps	2023	\$ 3,056,726
Concord	42574	US 202 and NH 9	Address red list bridge carrying US 202 & NH 9 over Ash Brook in City of Concord	2029	\$ 1,965,082
Concord	42614	US 3 (Manchester St)	US 3 (Manchester St) widening between Garvins Falls Rd and Airport Rd	2029	\$ 5,816,759

Existing State Ten Year Plan FY 21- 30 Projects – Considered Funded

PROJECT NAME	STATE #	PROJECT LOCATION	PROJECT SCOPE	CONSTRUCTION YEAR	TOTAL COST
Concord	41214	NH 9 (Loudon Rd)	Bridge Rehabilitation, Redlist, Loudon Rd over Merrimack River	2023-2024	\$ 8,493,127
Concord	41468	I-93 NB & SB	Address Priority Bridges carrying I-93 NB & SB over Merrimack River	2027-28	\$ 39,891,152
Concord-Pembroke	14841A	North Pembroke Rd	Replace North Pembroke Rd Bridge over Soucook River	2021	\$ 2,089,321
Henniker - Hopkinton	40633	US 202, NH 9, NH 127	Intersection improvements	2025-2026	\$ 2,718,666
Loudon	40632	NH 106 and South Village Rd	Intersection Improvements	2025	\$ 2,182,514
Loudon-Canterbury	29613A	NH 106 from Suncook Rd to Ames Rd	Roadway Widening (Phase 1)	2021	\$ 8,212,600
Loudon-Canterbury	29613C	NH 106	Roadway Widening (Phase 3)	2026-2027	\$ 22,000,000
Pittsfield	14972	Shaw Road	Bridge Replacement over Kelly Brook	2027-2028	\$ 719,687
Sutton	40633	I-89 NB	Bridge rehabilitation of the bridge carrying I-89 NB over NH 114 in Sutton	2023	\$ 2,026,200
Warner	40622	NH 103	Deck Replacement for the red list bridge carrying NH 103 over I-89 NB	2023	\$ 1,445,011
Warner	15907	NH 127	NH 127 over Warner River – Bridge replacement	2021	\$ 2,416,480
Webster	40810	Clothespin Bridge Road over Blackwater River	Bridge Replacement	2024-2025	\$ 2,035,744
Webster	41429	NH 127	Address Redlist bridge carrying NH 127 over Blackwater River	2022	\$ 4,070,000

Regional Projects Evaluated for Inclusion in the FY 2023-2032 Ten Year Plan

Project Name	Location	Current Situation	Scope of Work	Cost (millions)	Category Ranking
Pages Corner NH Route 77 (Concord Stage Rd) and NH Route 13 (Clinton St and Stark Highway North)	Dunbarton	This intersection is unique in that it requires a three-way stop and gives the right-of-way to westbound traffic, causing driver confusion and risky driving behaviors, such as failing-to-yield, speeding, and stop sign violations. High traffic volume at this intersection combined with the three-way stop configuration contributes to a dangerous and confusing traffic pattern.	The proposed scope of work is to construct a roundabout to address safety concerns and traffic flow.	\$ 1.21 (\$1.72 - future)	1
Allenstown Main Street Complete Streets	Allenstown	Main Street in Allenstown is a state owned highway that is the artery for the densely populated area known as Suncook. Main Street provides access to the Town's schools, library, town hall, senior center, fire station, and surrounding neighborhoods. The poor condition of the road surface, drainage and sidewalks combined with the existing safety concerns has empathized the need for upgrades. New development in the area has also raised concerns about added traffic and conflicts between pedestrians, bikes, passenger vehicles, and trucks.	The proposed project would take a complete streets approach constructing new sidewalks, bike lanes, turn lanes, and parking. Outdated drainage would be replaced, and street trees/landscaping will be added.	\$ 1.695 (\$3.69 - future)	2
NH Route 9 and NH 31 intersection improvements	Hillsborough	NH 9 is a major east west corridor across the southern part of the State. NH 31 serves as north south corridor connecting central western parts of the state and cities like Claremont and Newport to Hillsborough. Long queues have been observed at this intersection as vehicles attempt to turn onto NH 9. As a result, safety concerns have also grown.	The proposed scope is to develop a roundabout about to improve traffic flow for turning and crossing vehicles while also improving the safety of the intersection.	\$ 1.308 (\$2.8 - future)	3
US 202 and Exit 4 intersection improvements	Hopkinton	The current intersection is just east of Hopkinton Village's Main Street and the intersection of US 202 and NH 103. The existing configuration of the Exit 4 southbound off ramp sends traffic abruptly to a stop where it intersects US 202 eastbound traffic and then on to a yield controlled merge where it intersections US 202 westbound traffic. Not only is this confusing to drivers but it also allows drivers traveling east on US 202 to enter the Main Street corridor at high speeds.	The proposal will address the safety concerns with driver confusion and high speeds by constructing a roundabout. The project scope of work includes engineering, right of way and construction of a three legged roundabout at the intersection of US 202 and Exit 4.	\$ 2.32 (\$4.99 - future)	4

Regional Projects Evaluated for Inclusion in the FY 2023-2032 Ten Year Plan

Project Name	Location	Current Situation	Scope of Work	Cost (millions)	Category Ranking
Salisbury Crossroads (US 4 and NH 127)	Salisbury	The Salisbury Crossroads is locally viewed as the center of Salisbury where US 4 is intersected by NH 127. US Route 4 is a major east west corridor and the majority of through traffic pass through at high speeds. Site distances for turning and through traffic on NH 127, which is stop controlled, also make the intersection more difficult to navigate.	The proposed project involves sidewalks, medians and improving site distances to calm traffic and help implement the village center vision that Salisbury developed through a Plan NH Charette.	\$ 1.44 (\$2.07 - future)	5
NH 28 and Kelleys Corner Turn Lanes	Chichester	Traffic turning on and off NH 28 at the intersection of Kelleys Corner and Webster Mills Rd has created safety concerns. Specifically, vehicles stopping and waiting for gaps to make a left turn cause other vehicles to stop or go off the pavement to get around. Accident data shows a history of accidents, many involving turning traffic.	Add turn lanes to NH 28 to provide a safer place for left turning vehicles and to allow through traffic to pass safely.	\$ 0.439 (\$0.68 - future)	6

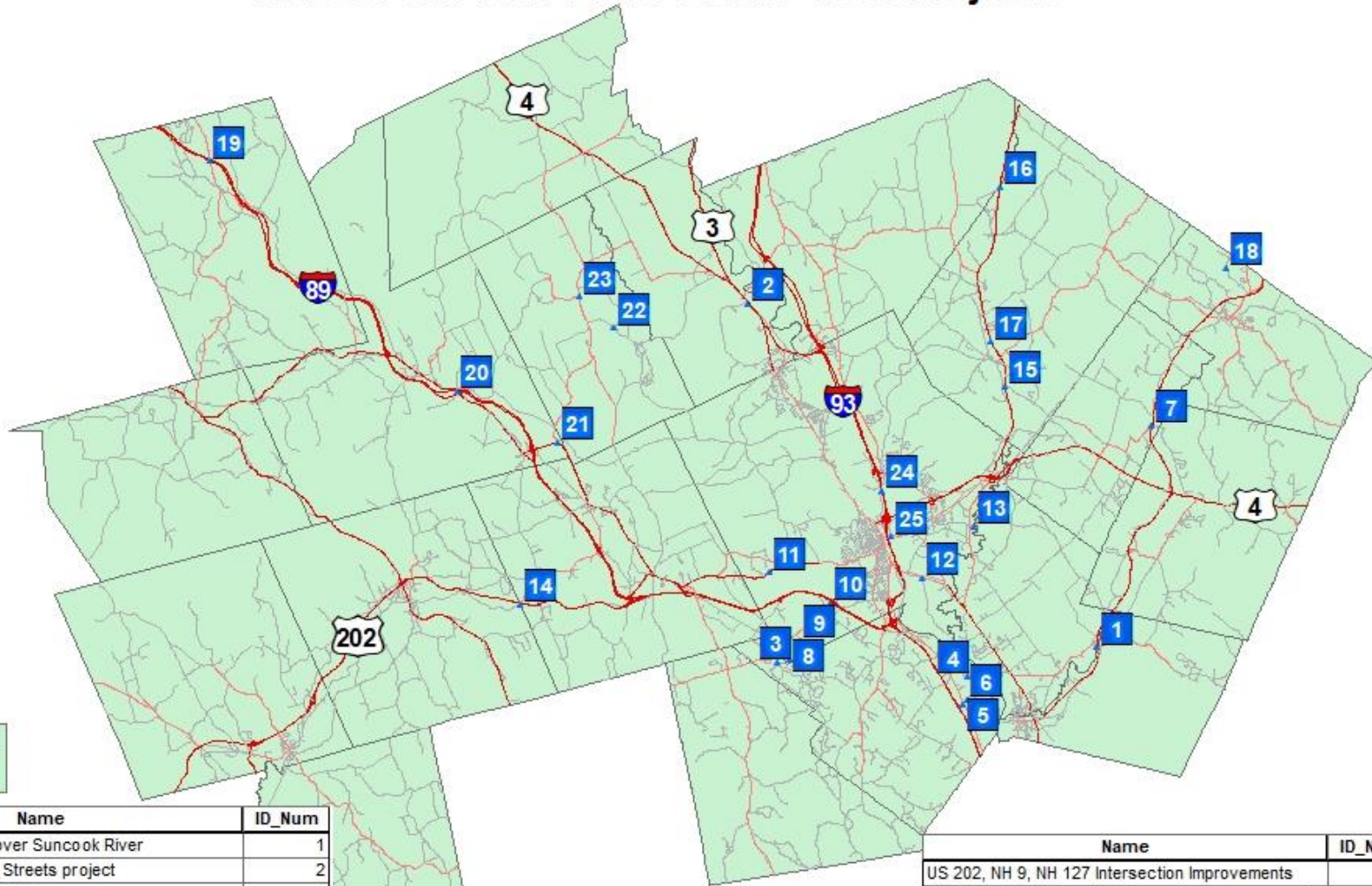
City of Concord – Urban Compact				
Project Name	CIP Number And Construction Year	Current Situation	Scope of Work	Cost (millions)
Storrs St. Extension, North and South	CIP #18 2021	The purpose of this project is to provide municipal infrastructure in accordance with the 2006 “Opportunity Corridor Master Plan” in order to promote and encourage economic redevelopment in the corridor.	Completed in stages, the project aims to extend Storrs Street from the current north end at the Holiday Inn to Constitution Avenue. The second stage of the project schedules construction southerly from Theatre Street beneath the Water Street Bridge to Langdon Avenue.	\$ 14.8
(NH 13) Broadway St./West St. (McKee Square) Intersection Improvements	CIP #31 2023	Currently this intersection experiences significant congestions and delays, especially during peak hours. Pedestrian facilities are also in need of improvement.	Minimize congestion and improve safety by adding lane capacity at the intersection, providing orderly turning and through traffic movement capability along with pedestrian access and crosswalk improvements at the McKee Square intersection.	\$ 2.0
(US 3) North Main St. & Storrs St. Intersection Signalization	CIP #34 2021	Currently this intersection experiences significant congestions and delays, especially during peak hours.	Construct potential improvements at the North Main Street and Storrs Street intersection, as might be warranted in conjunction with Storrs Street Extension North.	\$ 0.37
Langley Parkway Phase 3 Extension	CIP #40 Phase III-A 2024 Phase III-B 2026	Traffic congestion and through traffic in residential areas north and south of Pleasant Street and along Pleasant Street east of the regional health care complex is an ongoing issue. The need for secondary access to the complex is also a priority in the terms of life-safety and regional accessibility.	Phase I and II of the project were completed in 1995 and 2008 respectively. The City of Concord has completed a conceptual design study on Phase III of the project from Pleasant Street to Rumford and Penacook Streets. These improvements will further reduce traffic congestion and through traffic in residential areas north and south of Pleasant Street and along US Route 202 and NH Route 9.	\$ 12.5
Whitney Rd. Extension	CIP #502 2025	The purpose of this project is to expand the existing municipal infrastructure in an effort to promote and encourage future development within the Whitney Road Industrial Park and abutting lands located between Whitney Road and Sewalls Falls Road.	Extend Whitney Road from its current terminus near the waste to energy facility southerly to the Monitor Drive and Sewalls Falls Road.	\$ 3.6
(NH 3A) South Main St. Improvements	CIP #505 2030	Limited roadway capacity impacts the area’s ability to be redeveloped.	Corridor improvements, additional lane designations, as well as installation of traffic signals improvements between Water Street and the Bow Town line	\$ 1.3

City of Concord – Urban Compact				
Project Name	CIP Number And Construction Year	Current Situation	Scope of Work	Cost (millions)
(US 3) Manchester St./Old Turnpike Intersection Improvements	CIP #519 2025	Following the completion of Regional Drive in 2005, traffic within the Manchester Street/Old Turnpike Road/Regional Drive corridor has continued to grow. As a result, recent changes to signal timing at the Manchester Street and Old Turnpike Road have improved levels of service. However, with traffic growth expected in the near term, intersection geometry improvements will be required.	This project includes traffic signal design and expansion of the Old Turnpike Road approach to two (2) right turn lanes onto Manchester Street. This project will be coordinated with the ongoing design efforts at Terrill Park.	\$ 0.5
Regional Dr./Chenell Dr. Intersection Improvements	CIP #541 2026	Following the completion of Regional Drive in 2005, traffic along the Regional Drive corridor continues to grow. As a result of continued development along Chenell Drive as well as development along the Regional Drive corridor, the Traffic Operations Committee has been monitoring traffic volumes, accident data and the frequency of pedestrian activities at critical intersections along the arterial corridor. To maintain acceptable levels of service and traffic safety, intersection improvements will be required.	A single lane roundabout is recommended to improve vehicle safety and increase capacity at this intersection.	\$ 1.0
(US 202) Pleasant St./Warren St./Fruit St. Roundabout	CIP #570 2030	Congestion, limited levels of service, frequent traffic accidents, unresolved pedestrian and vehicular safety concerns	The project proposes a roundabout to replace the existing signalized intersection.	\$ 1.5



Appendix II - Project Maps

NHDOT Ten Year Plan FY 2021- 2030 Projects



Legend
ID_Number #

Name	ID_Num
NH Route 28 Bridge over Suncook River	1
King Street Complete Streets project	2
Page Rd over Bela Brook	3
River Rd over Bow Bog Brook	4
NH 3A Corridor Safety Improvements	5
Dunklee Rd over Bow Bog Brook	6
NH 28 and Main St Intersection Improvements	7
Hooksett Turnpike over Bela Brook	8
Birchdale Rd over Bela Brook	9
Improvements at I-89 Exit 2 NB and SB Ramps	10
US 202/9 over Ash Brook	11
US 3 (Manchester Street) Improvements	12
North Pembroke Rd over Soucook River	13

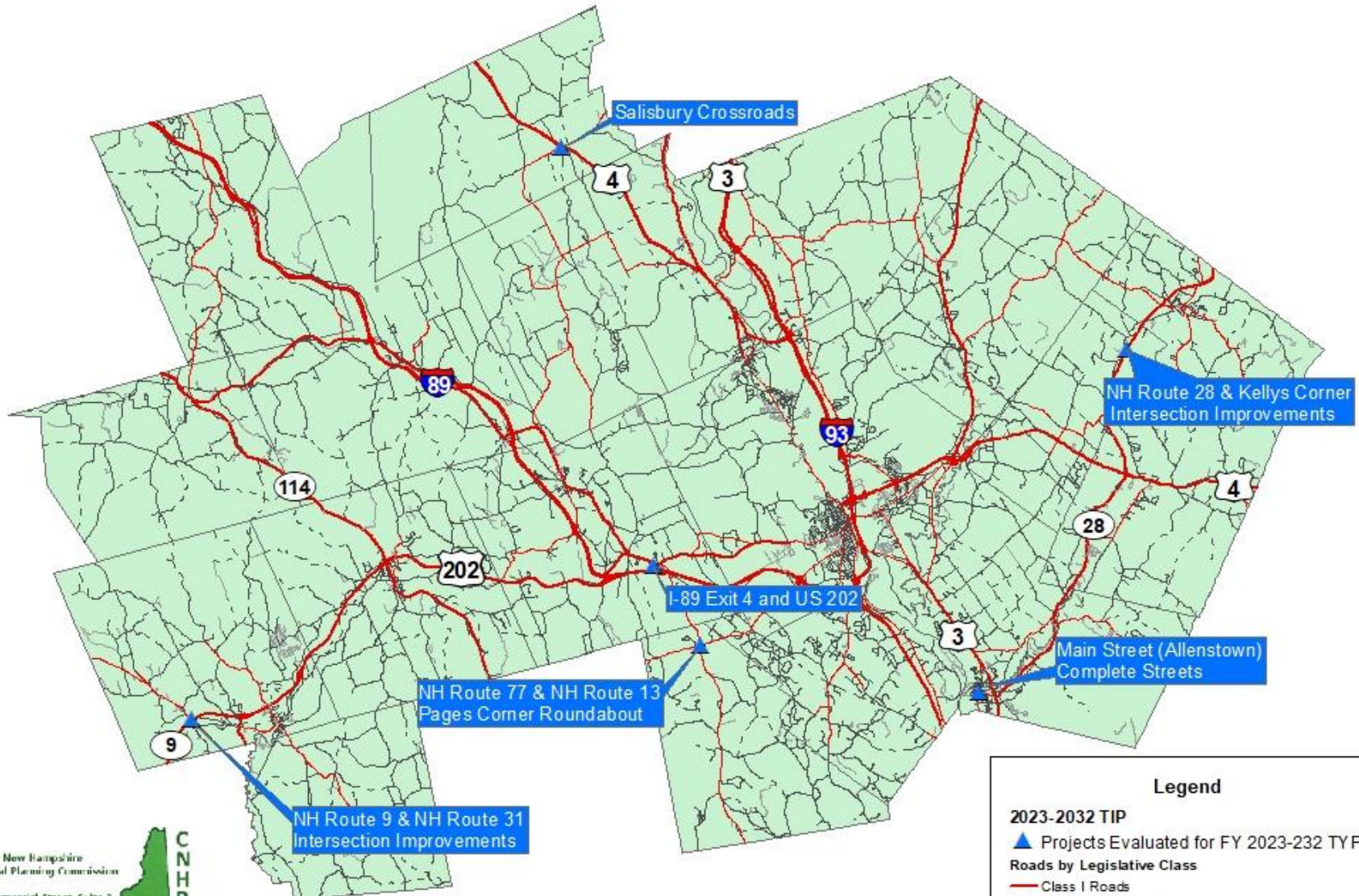
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Name	ID_Num
US 202, NH 9, NH 127 Intersection Improvements	14
NH 106 and S Village Rd Intersection Improvements	15
NH 106 widening - Phase 1	16
NH 106 widening - Phase 3	17
Shaw Rd over Kelly Brook	18
I-89 over NH 114	19
NH 103 over I-89 NB	20
NH 127 over Warner River	21
Clothspin Bridge over Blackwater River	22
NH Route 127 over Blackwater River	23
I-93 NB & SB over Merrimack River	24
Loudon Rd over Merrimack River	25

Source: NHDOT TYP FY 2021-2030

Regional Projects Evaluated for Inclusion in the FY 2023-2032 Ten Year Plan



Legend

2023-2032 TIP

- ▲ Projects Evaluated for FY 2023-232 TYP

Roads by Legislative Class

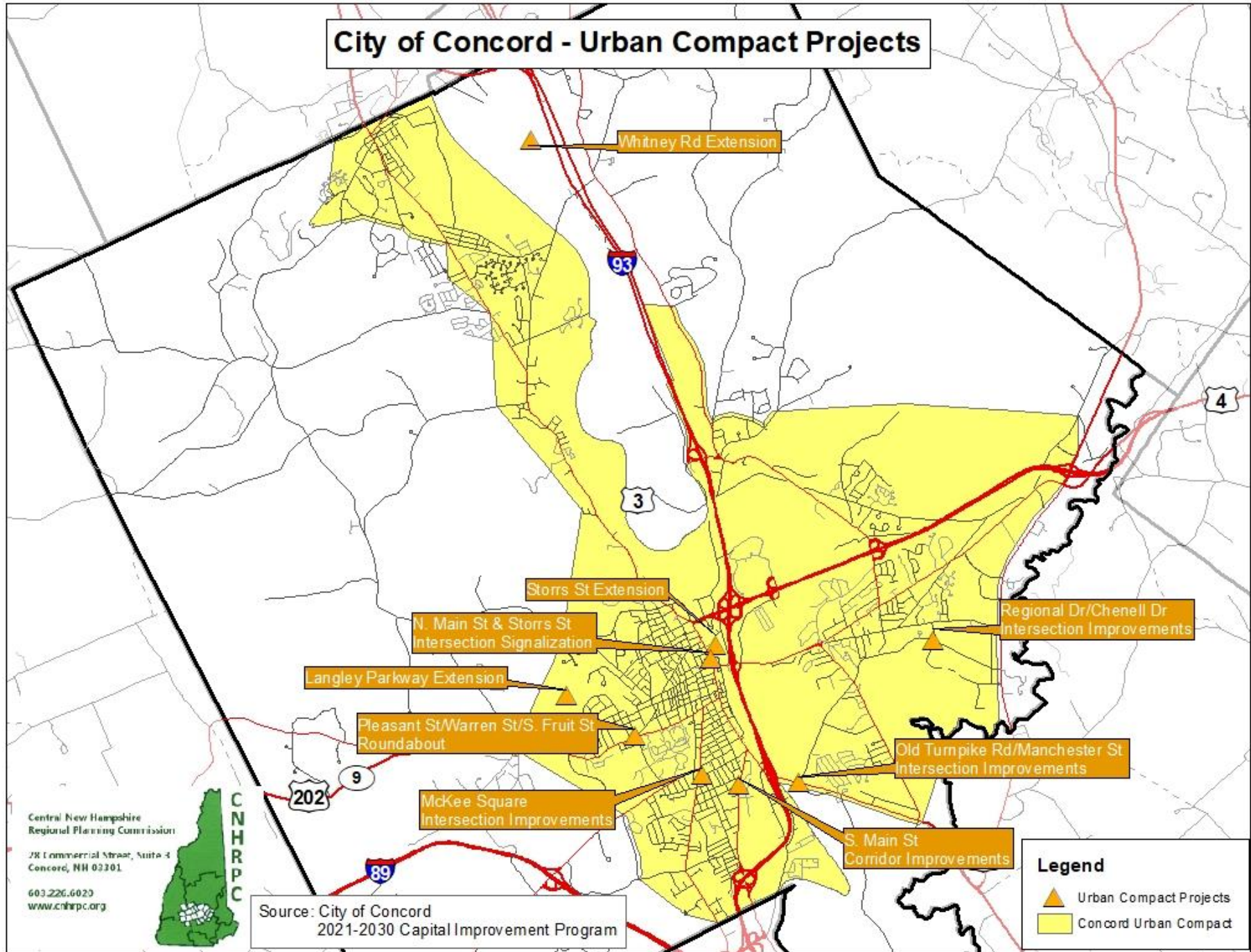
- Class I Roads
- Class II & IV Roads
- Class V Roads
- - Class VI Roads
- Class 0 Roads

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Appendix III – Project Scoring Criteria and Weights

Criteria	Need or Impact	Scoring Considerations	Weight
Local and regional Econ. Dev.	Impact	Local, regional and statewide economic development plans and documents	7.8%
Safety measures	Impact	Crash Modification Factors, level of stress data and project scope	7.6%
Mobility Intervention	Impact	Project reduces congestion, incorporates bike/ped infrastructure, access management, removes conflicts	7.5%
Accessibility	Impact	ADA project features, universal design, populations with mobility impairments, access to essential services	7.5%
Facility Importance	Need	Origin-Destination, regional network, alternative routes, connectivity	7.4%
Mobility Need and Performance	Need	Federal Functional Classification, NHDOT Tiers, Travel Time Reliability, Level of Traffic Stress	7.3%
Support	Need	Master Plans, Long Range Plans, Road Safety Audits, Corridor studies, and Local, Regional and State support	7.2%
Equity, Environmental Justice	Impact	Demographic Analyses, Title VI documents	6.7%
Safety Performance	Need	5 Year Crash Data - frequency and severity	6.6%
Traffic Volume	Need	Traffic Count Data, Strava Data, Estimated Bike/Ped data	6.3%
State of Repair	Need	Pavement Conditon, Asset Condition	6.3%
Hazard Mitigation	Impact	Project Scope reduces risk from known natural hazards	5.9%
Freight Movement	Impact	State Freight Plan, existing nearby industrial and commercial development	5.6%
Maintenance Condition	Impact	Improvements to utilities, reduced long term maintenance costs	5.4%
Hazard Risk	Need	Hazard Mitigation Plans, vulnerability assessments, FEMA Flood Maps	4.8%