# TRANSPORTATION

Hopkinton's existing transportation network has had a profound influence on the location and development of land uses throughout the Town. The Town is served by two limited-access highways, I-89 and US 202/NH 9. Access to the interstate system is provided at interchanges along I-89 at Exit 4 (US 202), Exit 5 (US 202/NH 9), Exit 6 (NH 127), and just over the town line at Exit 7 (NH 103) in Warner. A partial interchange at Exit 2 in Concord also provides service to the southeastern section of Hopkinton from Stickney Avenue. US 202/NH 9 has grade-separated interchanges with I-89 and at Hatfield Road, while conventional intersections offer access to Stumpfield Road, Little Frost Road, and NH 127/Old Concord Road.

Like many of New Hampshire's town centers, the Hopkinton and Contoocook Village centers are located on state-maintained routes. US 202 (Franklin Pierce Hwy) is also Hopkinton's Main Street, where it provides access to the Town Hall and Harold Martin Elementary School and businesses. When the first section of I-89 was built west of Concord, it ended just east of Hopkinton Village at what is now the Exit 4 interchange with US 202. The intersection configuration is unique, and in addition to poor sightlines, it encourages vehicles to travel at high speeds through Hopkinton's Main Street. The "Y" intersection where US 202 and NH 103 meet has also led to an interest in traffic calming in Hopkinton Village. NH 103 serves as the main connection between Hopkinton Village and Contoocook Village. Contoocook Village is the center for commerce in Hopkinton, and NH 127 and NH 103 converge in the historic village center at a "Y" shaped intersection known as Fountain Square. Safety concerns related to the intersection of US 202/NH 9 and NH 127/Old Concord Road have been discussed in both Hopkinton and Henniker for a number of years. The intersection is scheduled for improvement in the NH Ten-Year Plan, with preliminary engineering programmed for 2023 and construction currently scheduled for 2025-2027.

This chapter aims to document the existing conditions and trends of the transportation network, identify how maintenance and improvements are funded, and describe basic principles for planning a transportation network for all modes that meets the needs of residents, visitors, and businesses in Hopkinton.



## **KEY FINDINGS**

A review of the issues in this chapter and through public involvement identifies several key findings, with steps to move forward noted later in the chapter:

- As Hopkinton continues to grow and the use and pressure on major roads intensifies, there needs to be a balance between local access, safety, and maintaining and enhancing the capability of NH 9, US 202, NH 103, NH 127, and the I-89 interchanges. At the same time, preserving and enhancing the historic character of Hopkinton Village and Contoocook Village is important.
- Hopkinton's most valuable assets include highways and bridges. Strategically, important travel corridors should be protected and enhanced, including US 202/NH 9, NH 127, and NH 103.
- Investment in Hopkinton's transportation infrastructure should be made in a sustainable and efficient manner to promote the social and economic well-being of the Town's population. Improvements in the two historic Villages should be designed to reduce travel speeds, discourage cut-through traffic, and promote the walkability of these village centers.
- Future provision for transportation infrastructure should be integrated with the Town's overall land-use strategies.
- Enhanced quality of life centered around high-quality residential areas, quality employment opportunities, recreational and open space amenities, and a sustainable transportation system.

## New Hampshire Ten-Year Transportation Improvement Plan

The long range transportation planning process in New Hampshire follows a two- year cycle, beginning with the preparation of a Regional Transportation Improvement Program (TIP) by each of state's nine regional planning commissions. The most recent CNHRPC TIP covers the period of 2023 to 2032. The TIP identifies a prioritized list of federal aid-eligible transportation projects over the ten-year period and is based on input gathered directly from RPC municipalities and the Transportation Advisory Committees (TACs). Once adopted by the RPC, each regional TIP is submitted to the NH Department of Transportation and the highest ranked regional projects are considered for incorporation into the next state Ten-Year Plan (TYP) update.

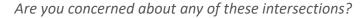
Similar to regional TIPs, the TYP identifies and prioritizes the critical transportation projects across the state. The TYP goes through multiple review processes by the Governor's Advisory Committee on Intermodal Transportation (GACIT), the Governor, and then by the State Legislature, undergoing numerous public hearings to gather public comment. The TYP is then approved by the Legislature until the plan is subsequently reviewed and modified in the next two-year cycle.

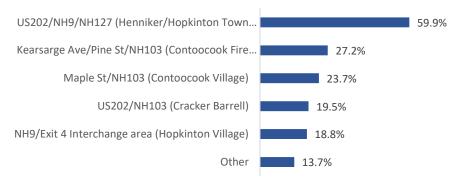
Improvements to the US 202/NH 9/NH 127 intersection were first included in the 2017-2026 TIP and Ten-Year Plan. The potential roundabout at Exit 4 has been included in the last two CNHRPC TIP updates but has not yet been identified as a regional priority to be considered for inclusion in the Ten-Year Plan.

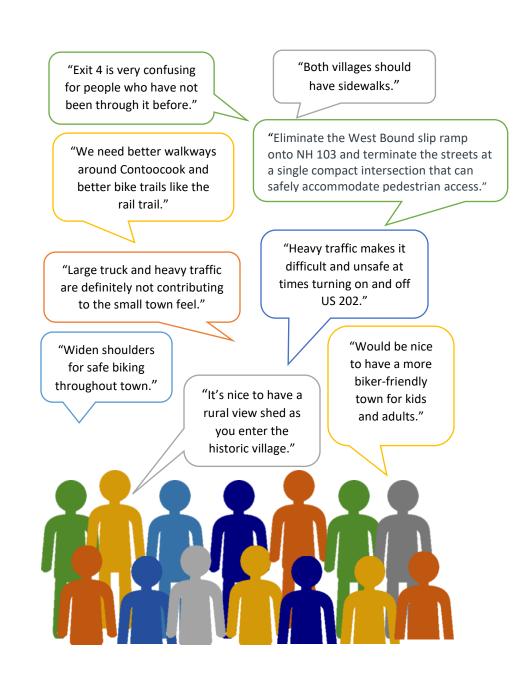
## WHAT THE COMMUNITY SURVEY SAID ...

As part of the community survey, one focus was to learn about residents' concerns related to road segments and intersections. As shown in the graphic, several intersections were rated for their concern. The US 202/NH 9/NH 127 intersection at the Henniker and Hopkinton town line had the greatest concern, with many citing concerns for safety. While the other intersections listed had lower percentages of concern, they are still important areas to be evaluated and addressed in the years to come. Along with these intersections, other road segments of concern to residents include Briar Hill Road, Hatfield Road, Clement Hill Road, and Kearsarge Road.

Responses also showed support for additional sidewalks and pathways in the Hopkinton and Contoocook Village areas. Sidewalks were desired in the areas surrounding the schools and sports fields. Additionally, 55.7% were in support of bike lanes on local roads, and 46.5% were in support of encouraging the development of public transportation to other communities.







## EXISTING TRANSPORTATION NETWORK

A key component in planning for future transportation improvements in a community is to complete an inventory of the existing transportation infrastructure serving the Town. Hopkinton's transportation network is dominated by I-89, US 202/NH 9, NH 127, and NH 103. Other state-maintained roads are also important to the overall transportation network, especially Park Avenue, Jewett Road, and Currier Road. A number of lowervolume local roads connect Hopkinton to surrounding towns, including Kearsarge Avenue, Pine Street, Clement Hill Road, Penacook Road, Briar Hill Road, Broad Cove Road, Dustin Road, East Penacook Road, College Hill Road, and Sugar Hill Road.

## STATE HIGHWAY CLASSIFICATION AND FUNDING

The State Aid classification system, identified by NH RSA 229:5 and 229:231, establishes the responsibility for roadway construction, reconstruction, maintenance, and eligibility for State Aid funds. This classification system also provides a basic hierarchy of roadways.

Hopkinton's roads fall into five classes: Class I, Class II, Class V, Class VI, and private roads. Hopkinton's road system is typical of most New Hampshire towns in that the most mileage is accounted for by local Class V roads. Table 4-1 below displays Hopkinton's roadway mileage by classification.

## Table 4-1: State Legislative Classification

Class	Mileage	Percent of Total
Class I: State Aid Highways	37.5	24.7%
Class II: State Aid Highways	8.2	5.3%
Class V: Rural Highways	80.1	52.8%
Class VI: Unmaintained Highways	10.6	7.0%
Private Roads	15.4	10.2%

## **CLASS I PRIMARY HIGHWAYS**

Class I highways consist of all existing or proposed highways on the primary state highway system, except portions of the highways within the compact sections of cities and towns. The State assumes full control of the reconstruction and maintenance of Class I sections. In Hopkinton, I-89 and US 202/NH 9 are Class I highways.

## **CLASS II SECONDARY HIGHWAYS**

Class II highways include state aid secondary highways and secondary highways owned and maintained by municipalities. NH 127, NH 103, Jewett Rd, and Currier Rd are all Class II highways in Hopkinton.

## CLASS V LOCAL ROADS AND BLOCK GRANT AID

This classification consists of all traveled highways that the Town has the duty to maintain regularly. The State provides funding to towns for road maintenance on Class V roads in the form of Highway Block Grant Aid. Table 4-2 shows the Block Grant Aid Hopkinton has received over the last five State Fiscal Years (SFY). These funds are distributed by the State of New Hampshire on a yearly basis, with partial disbursements made four times a year. The payments are made as follows: 30% in July, 30% in October, 20% in January, and 20% in April, with unused balances carrying over. The funds come from a portion of the total road toll and motor vehicle registration fees collected by the State. The funds can only be used to fund or match funding for constructing, reconstructing, or maintaining Class V (Town maintained) highways as well as equipment for maintaining local roads. The funds are allocated from an annual apportionment (State Fiscal Year) of not less than twelve percent (12%) of the total highway revenues collected from the preceding year. Half of that total apportionment is distributed based on municipal population, and the other half is distributed based on Class IV (none in Hopkinton) and V road mileage. This equals approximately \$1,200 for each Class IV and V highway mile and about \$11 for each person.

Accurate information regarding Class V road mileage must be provided to NHDOT to ensure Hopkinton receives the proper allotment. Highway Block Grant Aid distribution formulas do not take into consideration the condition of, or traffic on, the roads.

Senate Bill (SB) 367 was approved in 2014. SB 367 raised revenue dedicated to increased highway block grant funding to municipalities, increased municipal bridge aid, resurfacing and reconstruction of secondary roads, and completion of the I-93 expansion. Additional funding due to SB 367 is shown in the table below.

## Table 4-2: Highway Block Grant Aid Payments to Hopkinton

Year	SFY 2017	SFY 2018	SFY 2019	SFY 2020	SFY 2021
HBGA	\$ 165,317	\$ 169,634	\$ 172,102	\$ 174,581	\$ 166,139
SB 367	\$ 22,658	\$ 22,787	\$ 23,036	\$ 23,266	\$ 21,445

Source: New Hampshire Department of Transportation

## **CLASS VI UNMAINTAINED HIGHWAYS**

Class VI roads are not maintained by the Town and may be subject to discontinuation and/or gates and bars. A Class V road can become a Class VI road if the Town has not maintained it for five years or more. Under RSA 674:41, I(c), for any lot whose street access (frontage) is on a Class VI road, the issue of whether any building can be erected on that lot is left up to the local legislative body (Town Selectmen) who may, after review and comment by the planning board and after a public hearing, vote to authorize building along that Class VI road, or portion thereof.

Even if the Board of Selectmen votes to authorize building on a Class VI road, the law states the municipality does not become responsible for road maintenance or any damages resulting from the road's use. RSA 674:41, I(c) aims to prevent scattered and premature development.

## FEDERAL FUNCTIONAL CLASSIFICATION SYSTEM

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. While the state aid classification system outlined above is the primary basis for determining jurisdiction, the following system is important for determining eligibility for federal funds. Table 4-3 displays Hopkinton's road mileage by federal functional classification.

Federal Functional Classification	Mileage	% of Total	
Interstate Highways (1-89)	23.4	15.5%	
Principal Arterials (US 202)	4.9	3.2%	
Minor Arterials (US 202)	4.4	2.9%	
Major Collectors (NH 127 & Jewett Rd)	10.7	6.6%	
Minor Collectors (NH 103)	3.0	2.4%	
Local Roads	79.3	52.3%	
Class VI or Private Roads	26.0	17.1%	

## **Table 4-3: Federal Functional Classification**

#### INTERSTATES

Interstates are the highest classification of arterials and were designed and constructed with mobility and long-distance travel in mind. They are divided highways that provide limited access, offering high levels of mobility while linking the major urban areas of the United States.

## **PRINCIPAL ARTERIALS**

Principal arterials consist of high volume and high-speed highways forming the basic framework of the state roadway system. They function as the link between major geographic and urban areas in the State. Controlled access is a designation adopted by NHDOT to minimize the frequency of curb cuts, thereby controlling the amount of traffic crossing lanes and stopping on the road. Principal arterials, like sections of US 202 in Hopkinton, are eligible for federal aid.

## MINOR ARTERIALS

Minor arterials provide service for trips of moderate length moving through an area, serving geographic areas smaller than principal arterials. The minor arterials in Hopkinton, such as sections of US 202, are eligible for federal aid.

## MAJOR COLLECTORS

Major collectors like NH 127 and Jewett Road differ from arterial roadways due to size and general service area. Major collectors serve traffic in a specific area and are eligible for federal aid funding.

## MINOR COLLECTORS

Minor collectors such as NH 103 are not eligible for federal aid funding and typically provide access to smaller communities within a geographic area or economic region. They may link locally important trip generators to surrounding rural areas, such as shopping centers.

## LOCAL ROADS

Local roads and streets are used primarily to provide access to adjacent properties. This includes most streets and roads open for public travel in Hopkinton.

## BRIDGE NETWORK

Bridges are the most expensive part of the transportation network. The NHDOT inspects all of the State's municipal and State-owned bridges. Inspections typically occur biannually, with some bridges known to have deficiencies being inspected more frequently. Inspection reports are shared with towns; in addition, the State maintains its own database where bridges are scored based on National Bridge Inspection Standards (NBIS).

NHDOT manages three bridge aid programs, including State Aid Bridge (State-funded), SB 367 (State-funded), and the Municipal Off-System Bridge Rehabilitation and Replacement Program (federally funded). Projects begin with the Town applying for a preliminary estimate or hiring an approved consultant for an estimate. NHDOT determines a potential program and year of funds for construction in a process that can take several months.

Table 4-4 shows the bridges in Hopkinton as listed on the 2019 NHDOT Bridge Summary. The Federal Sufficiency Rating (FSR) is calculated using NBIS factors and is used by the Federal Highway Administration (FHWA) to determine how to fund bridge replacement and repairs. For instance, a structurally deficient rating does not mean the bridge is necessarily unsafe for use but rather refers to a bridge with one or more deteriorated components whose condition is critical enough to reduce the safe load-carrying capacity of the bridge. NBIS ratings for the major structural elements of the bridge are further simplified into four color-coded categories:

- Red Bridges with one or more major structural elements have an NBIS condition rating of 4 = Poor or less. These bridges comprise the state/municipal red lists.
- Yellow Bridges with their lowest-rated major structural element have an NBIS condition rating of 5 = Fair or 6 = Satisfactory.
- Green Bridges with all major structural elements have an NBIS rating equal to or greater than 7 = Good.
- Closed or N/A Bridges that have been closed due to one or more major structural elements with an NBIS rating equal to or less than 1 = Closed.

Location	FSR	Structural Deficiency	Owner	AADT	Inspection Date	Yr Built/Rebuilt
US 202/NH 9 over Contoocook River	85	Not Deficient	NHDOT	16,276	Aug 2020	1961 / 2020
W Hopkinton Rd over Contoocook River	19.1	Not Deficient	Municipality	493	June 2019	1853 / 1996
US 202/NH 9 over Hatfield Rd	79.2	Not Deficient	NHDOT	16,276	May 2020	1961 / 1981
NH 127 over Penstock (Unit 1)	37.6	Structurally Deficient	Private (not RR)	3,474	June 2014	1980
NH 127 over Tail Race	77.3	Not Deficient	NHDOT	3,474	May 2020	1900
Stumpfield RD over Hopkinton Lake	98	Not Deficient	Municipality	363	June 2019	1959
US 202/NH 9 over Elm Brook	85	Not Deficient	NHDOT	16,276	Aug 2020	1961 / 2020
NH 127 over Spillway Channel	82	Not Deficient	NHDOT	3,474	May 2020	1961 / 2009
I-89 SB over Pine St	88.6	Not Deficient	NHDOT	11,349	May 2020	1959 / 1991
I-89 NB over Pine St	88.6	Not Deficient	NHDOT	11,369	May 2020	1967 / 1991
I-89 SB over Contoocook River	92.9	Not Deficient	NHDOT	11,349	June 2020	1959 / 1991
I-89 NB over Contoocook River	92.9	Not Deficient	NHDOT	11,369	June 2020	1967 / 1991
NH 127 over I-89	93.6	Not Deficient	NHDOT	3,766	May 2020	1994
NH 103/NH 127 over Contoocook River	48.4	Not Deficient	NHDOT	6,009	May 2020	1935
I-89 (SB Ramp) over US 202/NH 9 EB	94	Not Deficient	NHDOT	12,435	May 2020	1959 / 1993
I-89 SB over US 202/NH 9	85.5	Not Deficient	NHDOT	13,299	May 2020	1959 / 1993
I-89 NB over US 202/NH 9	88.1	Not Deficient	NHDOT	12,407	May 2020	1959 / 1993
I-89 SB over US 202/NH 9 WB	87.9	Not Deficient	NHDOT	12,522	May 2020	1959 / 1993
South Rd over I-89	89.6	Not Deficient	NHDOT	34,400	May 2020	1959 / 1991
Penacook Rd over Contoocook River	70.8	Not Deficient	Municipality	1,304	July 2019	1980
East Pennacook Rd over Blackwater River	80	Not Deficient	Municipality	1,533	June 2019	1967
I-89 SB over I-89 Ramp	89.4	Not Deficient	NHDOT	19,453	May 2020	1959 / 1992
I-89 NB over I-89 Ramp	81	Not Deficient	NHDOT	18,767	May 2020	1959 / 1992
East Pennacook Rd over Deer Meadow Brook	87	Not Deficient	Municipality	1,533	June 2019	1986
Jewett Rd over I-89	94.4	Not Deficient	NHDOT	1,591	May 2020	1959 / 1992
Broad Cove Rd over Dolf Brook	73	Structurally Deficient	Municipality	88	Nov 2020	1990
I-89 over Whittier Brook	77.5	Not Deficient	NHDOT	40,630	May 2020	1959
Stickney Hill Rd over Boutwell Mill Brook	NA	Not Deficient	Municipality	515	span > 10' DOT cat. a culvert, not bridge	1984/2020

## Table 4-4: Bridges in Hopkinton

AADT= Average Annual Daily Traffic

## **TRAFFIC VOLUMES**

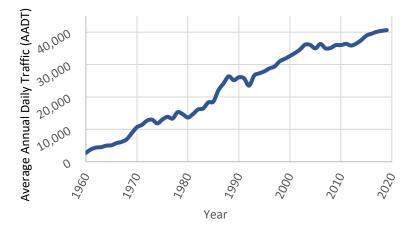
The Central New Hampshire Regional Planning Commission (CNHRPC) maintains an ongoing traffic count program for monitoring the region's transportation network. Each year CNHRPC offers to collect traffic data for up to ten (10) locations for each municipality. CNHRPC also collects traffic count data for the NHDOT on state roadways in accordance with federal guidelines for the Highway Performance Monitoring System (HPMS).

NHDOT uses Average Annual Daily Traffic (AADT) to measure traffic demand for a roadway. NHDOT defines AADT as the total two-way volume of traffic at a given location during a twenty-four (24) hour period representing an average day of the year. When CNHRPC provides data to NHDOT, they calculate AADT by applying the raw data with correction factors to account for weekday and seasonal variations in traffic volumes. NHDOT uses permanent traffic counters installed in the roadways to assist with these calculations. NHDOT monitors one permanent traffic counter in Hopkinton on I-89 between Exits 3 and 4, one southbound and one northbound. Figure 4-1 displays the traffic growth on I-89 between Exits 3 and 4 between 1960 and 2020.

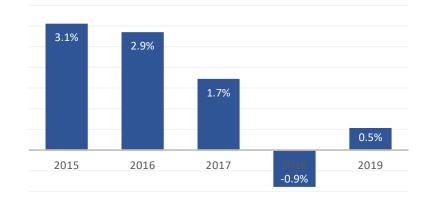
Based on data from 12 locations throughout Hopkinton regularly monitored for traffic, between 2009 and 2019, traffic volumes grew at an average rate of 1.1% per year, in line with growth rates observed throughout the Central New Hampshire region. Figure 4-2 displays AADT data calculated at 36 locations across Hopkinton, from interstates to local roads. Annual traffic growth rates vary over five years, from a negative rate of 0.9% between 2017 and 2018 to a growth of 3.1% from 2014 to 2015. The decline in traffic in 2018 was likely due to construction and rerouting of traffic on NH 127 & US 202/NH 9.



Source: NHDOT Transportation Data Management System



#### Figure 4-2: Annual Traffic Growth Rates Source: NHDOT Transportation Data Management System



## **ROADWAY CONDITIONS**

Pavement condition data from 2019 was obtained from the NHDOT's Pavement Management Section for state-maintained (Class I and II) roads. The pavement condition is rated based on the International Roughness Index (IRI), which is calculated directly from the average pavement roughness measured in the left and right wheel paths of roadways. The IRI is further categorized into good, fair, poor, and very poor conditions. In Hopkinton, data indicates the State maintained roads are well maintained, with 78% of roads in good condition, 20% in fair condition, and less than 1 mile or under 2% of State maintained roads fall into the poor & very poor condition categories. Because the NHDOT data is from 2019, some roads may have been repaired, and some roads may have fallen into worse disrepair.

In 2012, Hopkinton worked with CNHRPC to implement a Road Surface Management System (RSMS) to help prioritize road improvements and develop a transparent system for short, medium, and long-term improvements. RSMS is a methodology intended to provide an overview of road surface conditions to guide future improvements. The process involved a windshield survey of all the local road surfaces where distresses were recorded over segments of roadway. The data was entered into RSMS 11, a software developed by the Maine Department of Transportation. The program uses algorithms factoring in various distresses, traffic levels, and the importance of each roadway to determine whether the road falls into one of five maintenance categories. The program assists towns with limited funding to prioritize road maintenance and resurface, focusing on preservation and "keeping the good roads good." Drainage was also reviewed as part of this program and is a key component in the life and quality of road surfaces. This included a basic inventory of drainage culverts, including GPS locations and basic characteristics.

## Statewide Asset Data Exchange System (SADES)

SADES establishes a primary transportation inventory of assets including a maintainable roadway condition assessment process for many state and local agencies. Its unique approach to statewide asset management efficiently utilizes modern technology and joins state, local and regional efforts for the common good of accurate and sustainable data collection.

In 2015, NHDOT, the University of New Hampshire's (UNH) Technology Transfer Center (T<sup>2</sup>) and all nine of New Hampshire's Regional Planning Commissions (RPCs) initiated a new Road Surface Management System using SADES. The updated RSMS includes many changes to improve the quality, consistency, and efficiency of data collection and the overall value of the product to better guide municipalities with road maintenance.

SADES has developed a separate program for collection of roadside drainage assets known as Closed Culvert and Drainage System (CCDS). This includes collection of data related to inlets, outlets, pipes, and drainage structures. The objective for CCDS is to have universally collected assets based on common standards which are easily accessible online. Hopkinton is eligible for both programs and can work with CNHRPC to implement them.

## **MOTOR VEHICLE CRASHES**

Motor vehicle crash data from 2015-to 2019 was obtained from NHDOT, which receives the data from the NH Department of Safety for crashes with over \$1,000 in damage. Roughly 20% of crashes are not locatable based on the information contained in the crash reports. Of the 756 crashes reported in Hopkinton over the five-year period, over 40% (307) were located on Interstate 89 related to the I-89 interchanges. The second-highest number of crashes (over

100) occurred on or are related to intersections along US 202 and NH 9. Of the crashes along US 202 and NH 9, 25 (five per year on average) were related to the intersection of NH 127 and Old Concord Rd. That intersection is scheduled for improvements in 2026. It is reasonable to assume that a number of smaller crashes may have occurred during this time period that was not reported. All crashes in Hopkinton are a cause for concern and should be monitored to determine locations where infrastructure improvements may mitigate issues leading to crashes or could reduce the severity of crashes.

## Highway Safety Improvement Program (HSIP)

The purpose of NHDOT's Highway Safety Improvement Program (HSIP) is to achieve a significant reduction in fatalities and serious injuries on all public roads through funding the implementation of highway safety improvement projects.

The process for which a project receives funding from HSIP for a roadway segment or intersection is highly dependent on data. Should data, such as the history of crashes resulting in injuries or fatalities, warrant further examination, a Road Safety Audit (RSA) is typically the next step. The RSA is a collaborative approach to review safety issues and make recommendations for improvements. CNHRPC is available to assist towns with applying for HSIP funds and with completing small scale RSAs that can offer a variety of actions to improve safety.

## BICYCLE & PEDESTRIAN INFRASTRUCTURE/TRAILS NETWORK

Pedestrian facilities, such as paved sidewalks and gravel walking paths, are valuable features for roadways with high traffic volumes or high speeds. The primary purpose of sidewalks is to improve safety for pedestrians by separating them from travel lanes. Sidewalks can serve as a source of recreation for residents, facilitate non-motorized modes of travel, beautify an area, and stimulate economic activity in rural and village settings.

Like the Town's road network, the sidewalk networks in Hopkinton Village and Contoocook Village should be preserved, enhanced, and maintained year-round.

## **HOPKINTON'S TRAILS**

Maps that depict Hopkinton's expansive local trail network can be found on the Town's Conservation Land and Trails website at <u>www.hopkintonconservationland.org</u>. Trails are a joint project of the Conservation Commission and Open Space Committee, with 24 town-owned properties plus the Bohanan Farm conservation easement linked by a wide variety of trails for non-motorized uses. Stretches of Class VI roads are included in the trail network. The Town's official trails include the Hopkinton Village Greenway in the vicinity of the Kimball Pond Recreation Area, the Stevens Rail Trail, the Sweatt Preserve Nature Trail, and trails within Mast Yard State Forest and Hawthorne Town Forest. There are many other shorter trails located within the Town's conservation lands.

## **REGIONAL TRAILS**

Hopkinton is an important link in the State's overall bicycle plan. NH 103, the 5.1-mile bike route using NH 127/ Clement Hill Road/ Pine Street, US 202/NH 9, and Currier Road are important regional linkages. Sugar Hill Road, Jewett Road, and Farrington Cove Road/ Stickney Hill Road provide linkages to Weare and Dunbarton to the south and Concord to the east. Penacook Road, Tyler Road, and Dustin Road provide access to both Concord and Warner north and east.

Hopkinton's historic railroad corridors offer the potential to provide important links as part of the regional and statewide rail-trail network. Approximately 1.5 miles of the Concord to Lake Sunapee Rail Trail (CLSRT) have already been built, connecting Kearsarge Ave to Lower Spring Street. The CLRST's vision to build a bike and walking trail along the abandoned Concord-Claremont railroad line will require coordination between Hopkinton and the surrounding communities as well as the support of public and private landowners. Another historic railroad corridor branches off to the southwest part of Town connecting to the Hillsborough Recreational Trail and beyond to the Monadnock region. Sections of this corridor in Hopkinton are currently used formally by snowmobiles and informally as walking and biking paths. The CNHRPC West Central Rails Plan provides more details on the vision for both rail trails.

#### **TRANSPORTATION ALTERNATIVES PROGRAM (TAP)**

NHDOT currently oversees a competitive selection round for pedestrian and bicycling infrastructure projects under the federally funded Transportation Alternatives Program (TAP). Created under federal legislation, TAP combines a number of individual federal programs into a single, more flexible program. The overall purpose of TAP is to foster safe non-motorized transportation infrastructure which is in good physical condition and is accessible to users. TAP requires a minimum of 20% local match, and projects are solicited on a two-year cycle. TAP applications are scored based on the potential for success, safety, and project connectivity. Hopkinton's eligible projects could include rail trails and upgrades to sidewalks or construction of missing sidewalk connections across the Town.

## **CLASS A TRAILS**

Across the State, many communities are beginning to look at Class VI roads as candidates for designation as Class A Trails. These roads have little or no development associated with them, are scenic, have no inherent liability concerns, already allow public access, and serve to connect large areas of open space, conservation, and/or agricultural lands. Unlike Class VI roads which the Town does not maintain, Towns, at their option, may conduct maintenance on Class A Trails.

It is important to stress that reclassification of Class VI roads to Class A Trails will not inhibit the access rights of landowners along the roadways. In the case of a Class A trail, landowners can continue to use the trail for vehicular access for forestry, agriculture, and access to existing buildings. However, under such classification, new building development as well as expansion, enlargement, or increased intensity of the use of any existing building or structure is prohibited by the New Hampshire statute. The Town and owners of properties abutting Class VI roads are not liable for damages or injuries sustained to the users of the road or trail. Class VI roads are an important component of a Town's transportation infrastructure due to their rural character and potential recreational options.

#### **COMPLETE STREETS**

Complete Streets is an approach to building and maintaining the transportation system to meet the needs of all users of the roadway, including cars and trucks, pedestrians, bicycles, and transit. After many decades of car-centric design and operation of transportation systems across the United States, the Complete Streets approach attempts to more equitably designate space and resources to those who do not or choose not to drive.

A Complete Streets approach applied to Hopkinton may look much different from its application in urban areas. Many roadways in

Hopkinton do not require sidewalks or bicycle lanes due to their rural nature, but considerations may still come into play. Details such as shoulders, intersection geometry, and speed limits all impact the safety and comfort of pedestrians and bicyclists. Sidewalks, bike lanes, and shared-use paths may be desirable in the two Villages and near the schools.

These principles, in general, were supported during public outreach for this Master Plan and are consistent with many of the goals and objectives in the Transportation Chapter. The Town will need to continue to define what Complete Streets means for Hopkinton and how it will be applied. The Town has established a Complete Streets Committee to this end, which is developing a Complete Streets Policy for adoption by the Town. The Committee should continue to assist with transportation-related decisions as they relate to Complete Streets.

## **PUBLIC TRANSPORTATION**

The closest public transit service to Hopkinton is the Concord Area Transit (CAT) System in Concord. There are no stops near Hopkinton, and no plans exist to extend transit services to Hopkinton. Regional and interstate bus services are available at the Concord Bus Station on Stickney Avenue between I-93 Exits 14 & 15 and at the New London park and Ride off Exit 11 on I-89.

The Mid-State Regional Coordinating Council (RCC), in coordination with the Community Action Program Belknap-Merrimack Counties Inc. (CAPBMCI), operates rural transit services and a volunteer driver program that serves the region's elderly and disabled populations. The Mid State RCC also coordinates with Hopkinton's Slusser Center and their Dial-A-Ride program, which offers Hopkinton senior residents transportation Monday-Friday for food shopping, hospital, medical, dental, and other appointments.

## LOCAL AND REGIONAL TRANSPORTATION IMPROVEMENT PROJECTS

A number of planned and potential transportation improvement projects have been considered in recent years. Beginning with potential changes to Contoocook Village originally outlined in the 2000 Contoocook Village Design Charrette, possible improvements include the US 202/NH 9/NH 127 intersection, the NH 103/US 202 (Main Street) intersection, and the area of Exit 4. The only currently funded project is the US 202/NH 9/NH 127 intersection.

## US 202/NH 9/NH 127 (OLD CONCORD ROAD) INTERSECTION

The intersection of US 202/NH 9 and NH 127/Old Concord Road has long been of concern to both the Towns of Hopkinton and Henniker. This intersection is scheduled for improvement in the NH Ten Year Transportation Improvement Plan (TYP), with initial engineering and right-of-way programmed for 2023 and construction scheduled for state fiscal years 2025 through 2027.

The increasing volumes and high speeds of traffic traveling along US 202/NH 9, combined with the accident history, are just some of the factors driving the need for improvements. Both minor approaches to the intersection of NH 127 and Old Concord Road will provide access to land likely to be developed, commercial/industrial uses within Henniker, and potential mixed uses in the Community Overlay District (CCOD) in West Hopkinton. This will most likely add more traffic.

## NH 127/NH 103 INTERSECTIONS (CONTOOCOOK VILLAGE IMPROVEMENTS)

The intersection of NH 127 and NH 103 has been a concern for many years. The intersection was studied for pedestrian improvements as part of Hopkinton's Safe Routes to School efforts in 2010. The Contoocook Village Design Charrette completed in 2000 also documented residents' desires to improve the Fountain Square intersection and the intersection of Kearsarge Ave, Pine Street, and NH 103. Many of the concerns from previous studies are still relevant today, including walkability, parking, and the overall function and safety of the intersection.

The addition of wider sidewalks, lower travel speeds through traffic calming measures, and the provision of additional on-street angle parking is one way to enhance both the walkability and commercial viability of Contoocook Village.

## NH 103/US 202 (MAIN STREET) INTERSECTION (HOPKINTON VILLAGE IMPROVEMENTS)

The traffic speeds observed in Hopkinton Village have long been a concern to residents. The "Y" intersection of NH 103 and US 202 lends itself to higher speeds for turning traffic. The speeds and the condition of the existing sidewalks around the intersection adversely affect the walkability in the Town Center and walkability to and from the Harold Martin Elementary School (grades K-3). Improving the sidewalks and converting the "Y" intersection to a "T" by eliminating the slip ramp will help to calm traffic and improve safety. Additional parking and better-defined crosswalks should also be considered part of a future project in the area.

#### Potential Modifications to the NH 103/US 202 (Main Street) Intersection



#### I-89 EXIT 4 AND US 202 ROUNDABOUT

The interchange between I-89 Exit 4 and US 202 is designed as conducive for high speeds and lacks effective traffic calming measures. The unique design can be confusing due to the combination of yield and stop-controlled intersections. The Exit 4 intersection is concerning to bicyclists and offers no pedestrian infrastructure. It may also be to blame for traffic traveling at high speeds westbound into Hopkinton Village. While the intersection does not have a significant crash history, it is uncomfortable to many and often leads to vehicles entering Hopkinton Village at high speed.

An alternative to the existing design would enhance safety for all users and calm traffic entering Hopkinton Village by constructing a roundabout, as shown below. The smaller footprint of a typical roundabout would result in excess land in the vicinity, which could provide some limited development opportunities within a future Gateway Zone.

This potential project has been included in the last two CNHRPC TIP updates but has not yet been identified as a high regional priority project to be considered for inclusion in the State Ten-Year Plan.

## **OBJECTIVES & RECOMMENDATIONS**

The following objectives were developed to capture the overall aims of the Transportation Chapter. Individual recommendations were developed that correlate to the existing conditions and needs of the community.

## **OBJECTIVE 1:**

Address capital improvement projects strategically important to Hopkinton's transportation network.

- $\rightarrow$  Continue to examine options for improvements in Contoocook and Hopkinton Villages that will improve safety and livability.
- $\rightarrow$  Work with the CNHRPC and NHDOT to ensure that Hopkinton's transportation improvement projects that are eligible for federal aid funding in Hopkinton are adequately represented in the Regional Transportation Improvement Program (TIP) and considered for inclusion in the State Ten-Year Plan (TYP).
- $\rightarrow$  Continue to support and expand the existing rail trail network and recreational trail network, with connections to the regional and statewide trails network.

## **OBJECTIVE 2:**

Preserve and maintain the existing conditions of the transportation system.

- $\rightarrow$  Regularly monitor data on existing roads, sidewalks, and paths, including surface conditions and drainage.
- $\rightarrow$  Review NHDOT bridge inspection reports regularly to monitor bridge conditions and ensure that municipal bridges are maintained, repaired and/or replaced when needed.
- → Continue the development of a Complete Streets Policy and consider utilizing the Complete Streets approach when addressing future improvements to Hopkinton's State and

Potential Modifications to the Exit 4/US 202/NH 9 Intersection



locally maintained highways and streets, particularly in the Village areas.

- $\rightarrow$  Work with CNHRPC to implement asset management strategies.
- → Promote and support the coordination between the Slusser Center and the Community Action Program Belknap-Merrimack Counties Inc. to maintain and enhance their transportation programs.
- → Utilize available traffic count data from NHDOT and CNHRPC to evaluate highways and roads that future development trends may adversely impact.

## **OBJECTIVE 3:**

Prioritize safety for all modes of transportation.

- → Encourage the first responders, public works employees, and local committees to annually review crash locations.
- → Work with CNHRPC and NHDOT to determine roadway and drainage enhancements to improve safety.
- → Utilize low-cost methods to improve safety for non-motorized transportation, such as striped crosswalks, adequate road signage, and reduced lane widths to provide larger shoulders for pedestrian and bicycle use.
- → Implement appropriate traffic calming measures to discourage high speeds where the potential for conflict with roadway users exists.
- → Expand the sidewalk networks in Contoocook and Hopkinton Villages and promote pedestrian and bicycle transportation in the community.