

Chapter VI Transportation

Introduction

A safe and efficient transportation network is an essential component for the development of a prosperous community. Over the past several years, development trends in Hopkinton have been largely influenced by I-89, US202/NH9, and the growth and development occurring in Concord. It is likely that these will continue to play a major role in the future development of Hopkinton and the central New Hampshire region.

This Transportation Chapter reaffirms a commitment to the preservation of the rural and open space character of Hopkinton and seeks to provide an integrated system of transportation for the 21st Century that will minimize traffic congestion, reduce related vehicle-generated air pollution, and promote an attractive entry corridor and a vibrant, viable downtown business core. This chapter promotes the concept of a safe, pedestrian-friendly Town and considerations for commuters, as well as those with special needs.

Rural character and sense of place are important components to a high quality of life in Hopkinton. Hopkinton's rural atmosphere is defined by its recreational trails, rustic gravel roads, historic stone walls, and distinct Villages. Hopkinton residents enjoy and treasure the ability to walk throughout the Villages and cross-country ski on the quiet back roads. These features are equally important in the fabric of the identity of the community and need to be protected and preserved. This Chapter hopes to identify these important resources and propose strategies to preserve them.

This chapter favors alternative transportation modes and routes where appropriate, and supports the continued development of an intermodal transportation strategy for the integration of pedestrians, bicycles, buses, car-pools, and park-and-ride facilities. These will help reduce the number of single occupancy vehicles, while remaining sensitive to the needs of vehicular access to the downtown business district.

This Chapter favors adding traffic calming devices on some Town roads, both in the Village areas and outside the Villages, as necessary. Traffic calming devices are techniques in road design that encourage cars to slow down. To retain the residential character of existing neighborhoods, traffic calming measures, plus signage for "residential traffic," may be an appropriate solution to some of the safety concerns of residents.

The purpose of this Chapter is to provide an inventory and assessment of Hopkinton's transportation network, detail sources of funding for projects, identify new alternative modes of transport for the Town's population, and provide policy recommendations to improve the existing transportation network and achieve overall community transportation goals.

In this Chapter, the following topics will be explored:

Key Findings	
Community Survey and Visioning Session Results	State Aid Highway Classification
Traffic Count Data	Commuting Patterns
Access Management	Pedestrian Infrastructure
Accident Data and Analysis	Town Road Construction Standard
Private Roads	Scenic and Gravel Roads
Class VI Roads	Parking and Public Transportation
Local Bicycle Infrastructure	Bridge Network
Contoocook Village	Hopkinton Village
Projects in the State Transportation Improvement Program	
Town Road Management Plan	
Strategies to Meet Transportation Needs	Summary

Key Findings

- Utilize traffic count data to identify corridors that may become threatened in the future by development trends. In locations where traffic has increased significantly, land use trends, and access management policies should be closely examined and modified to best maintain and promote an efficient transportation network.
- Identify local residential roads, that are not suited for heavy commuter traffic, and work to minimize “through-traffic” wherever viable alternatives can be provided.
- Review and consider the adoption of access management techniques into the Site Plan and Subdivision regulations
- Identify and prioritize areas with existing pedestrian facilities for regular maintenance. Propose new areas for facilities that will extend and connect the existing infrastructure. Use innovative methods to increase pedestrian safety, which could include such things as raised cross-walks, striped or colored cross-walks, increased signage, or walking paths separated from the road by landscaping. Education of drivers to alert them to the location of sidewalks and cross-walks would also be beneficial.
- Investigate the use of traffic calming measures to discourage high speeds and to direct traffic around neighborhoods
- Review and evaluate the Town’s current road standards and develop new road construction standards that allow for and encourage a variety of road types that enhance the uniqueness of Hopkinton’s current and future transportation infrastructure.
- The design and planning of residential streets should follow natural contours and preserve natural features whenever practical; minimize traffic speed, volume, noise, congestion, and hazards to pedestrians; and minimize the amount of paved area to reduce stormwater runoff, and thereby protecting water resources and reducing construction costs.
- Research the possibility of developing flexible length requirements for cul-de-sacs, in consultation with the Fire Chief and Superintendent of Public Works.
- Identify, with the help of the Conservation Commission, Class VI roads, railroad beds, existing paths, and areas along the various water bodies in Town that connect open space, forest, conservation, and/or agricultural land and would help create a greenway trail network.

- Continue to research the available options for increasing transportation access to industrial land while reducing vehicle traffic through Contoocook Village. Environmental impacts, economic benefits, and efficiency should be kept in mind.
- Continue working with NHDOT to improve the control of traffic at the intersection of Routes US202/NH9 and Route NH 103 in Hopkinton Village.
- Work with regional, State, and Federal agencies and programs to prepare a comprehensive transportation plan that includes funding availability for projects and programs.
- Investigate the need for alternatives to single occupancy vehicles, such as Concord Area Transit (CAT) and Park & Ride facilities.
- Class V gravel roads and Scenic Roads are important historic assets, provide excellent recreational opportunities, and foster a sense of community. Changes to these roads should not be made without considering their historic importance, recreational opportunities, and sense of community.
- In coordination with other groups and municipalities, encourage the planning and development of an efficient regional and local bicycle route system and increase public awareness of bicycling as a viable mode of transportation.

Community Survey and Visioning Session Results

At the beginning of the Master Plan process, a survey was sent out to every household and non-resident property owner in the Town of Hopkinton. Of the 2,700 surveys sent out, there were 973 surveys returned, for a 36% response rate. The following four community survey questions directly relate to the topics covered in this Chapter.

According to the survey question “Where do you work?”, only 21.2% of respondents work full-time and 39.9% work part-time in Hopkinton or Contoocook. A vast majority of residents commute out of Town every day for work, placing a strain on the transportation infrastructure at peak times during the day. The two most popular employment destinations, other than Hopkinton/Contoocook, are Concord (41.4% full-time and 39.9% part-time) and Manchester (10.4% full-time and 3.8% part-time).

In your opinion, what is the general condition of the roads in Hopkinton?

<u>Answer</u>	<u># of Responses</u>	<u>Percentage</u>
Good	410	42.1
Fair	419	43.1
Poor	48	4.9
No Opinion	6	.6
No Answer	90	10.2

85.2% of respondents feel that the road conditions are "fair" or "good" in Town.

Please indicate which community services and facilities you would like the Town to develop and/or improve in the future

<u>Answer</u>	<u># of Responses</u>
Extension of Concord Area Transit (CAT)	211

Currently, CAT services only the City of Concord and the Town of Penacook on a regular schedule. However, if service were expanded to include Hopkinton, a potential 41.4% of full-time and 39.9% of part-time workers, living in Hopkinton, could take advantage of the transportation to and from Concord.

In order to help Town officials better direct their effort to meet the needs of the community, we need your opinion on the relative importance rating on the following issues and Town services.

<u>Town Services/Issues</u>	<u>Good</u>	<u>Fair</u>	<u>No Opinion</u>	<u>Poor</u>	<u>No Answer</u>
Road Maintenance	482 (49.5%)	318 (32.7%)	32 (3.3%)	58 (6%)	83 (8.5%)

Almost half of the respondents rated road maintenance services as "good", as can be seen in the results listed above.

In May 2000, a community Visioning Session was held, in which all community members were asked to participate. Several questions were asked and the following list contains individual participant responses from the visioning session that relate to transportation.

"What would you like Hopkinton to look like 75 years from now?"

- Focus on developing walking areas
- Preservation of currently unpaved roads
- Reasonable transportation network
- Find a way to decrease the dependency on automobiles
- Transit should be available for all people
- Furthering transportation networks/options
- Better road signage, clearer road signage, and less of it
- Roads should be convenient for pedestrians and cars
- Develop pedestrian pathways, taking into account the elderly
- Work with the New Hampshire Department of Transportation to preserve open space
- Roads should connect houses and commercial areas in a coordinated fashion
- Develop a system for commercial transportation that does not negatively impact residential areas

What are the Town's strengths and opportunities?

- Large number of scenic, unpaved roads
- Lack of pedestrian access to the Community Center

What are the Town's weaknesses or areas of concern?

- Elimination of Class VI roads
- Pedestrian access along the River bank

When looking at the responses gathered from the participants at the Visioning Session, two main themes that are repeated throughout are the desire to retain Hopkinton's rural character and the desire to create a transportation network that does not focus solely on the automobile.

State Aid Highway Classification

Another system used to classify roadways in New Hampshire is the State Aid Highway Classification System. This system was created under the requirement set forth by RSA 229-231, to determine the responsibility for the reconstruction and maintenance of roadways located in the State. This system is also used to determine the eligibility of roads for State funding. This classification system is broken into six categories (Class I through Class VI highways), four of which are in Hopkinton. See the **Highway Classification Map** for more detail.

Class I, Trunk Line Highways

This classification consists of all existing and proposed highways on the primary state system, except all portions of such highways within the compact sections of communities, providing said sections are Class I highways. I-89 is a Class I Highway.

Class II, State Aid Highways

This classification consists of all existing and proposed highways on the secondary state systems, except those in compact sections of cities and towns. All sections of these roadways must be improved to the satisfaction of the NHDOT and are maintained and reconstructed by the State. The Town must maintain all unimproved sections of these roadways, where no state or federal moneys have been expended, until they are improved to NHDOT satisfaction. All bridges maintained with state or federal funds shall be maintained by the State, while all other bridges shall be the responsibility of the municipality. NH 103 and US202/NH9 are Class II Highways.

Class V, Rural Highways

This classification consists of all traveled highways that the town or city has the duty to maintain regularly. Briar Hill Road, South Road, and Gould Hill Road are examples of Class V Highways.

Class VI, Unmaintained Highways

Roads under this category consist of all other public ways, including highways subject to gates and bars, and highways not maintained by the Town for more than 5 years. Buzzwell Corner Road and New Road are examples of Class VI Highways.

The following table shows the breakdown of the six different classes of roads, by mileage, in the Town of Hopkinton.

Roadway Mileage by Classification

Road Classification	Description	Miles 1980	Miles 1986	Miles 1992	Miles 1998	% of Total 1998 Miles
Class I	Trunk Line Highway	26.79	26.79	26.87	27.245	21.76%
Class II	State Aid Highway	8.05	7.91	8.14	8.17	6.52%
Class III	Recreational Roads	0	0	0	0	0%
Class IV	Urban Highways	0	0	0	0	0%
Class V	Rural Highways	75.64	76.76	77.46	78.066	62.35%
Class VI	Unmaintained Highway	8.99	9.09	12.79	11.73	9.37%
Total		119.47	120.55	125.26	125.211	100%

Source: NHDOT January 1, 1998 Report

Traffic Count Data

Since the 1980s, the New Hampshire Department of Transportation (NHDOT) has conducted annual or semi-annual traffic counts on State roadways in an effort to gauge the use of roadways by hourly, daily, weekly, and monthly increments. Most major roads in the community are monitored on a staggered basis, generally in 3-year increments.

In 2001, NHDOT and the Central New Hampshire Regional Planning Commission (CNHRPC) monitored traffic at 7 locations in Hopkinton. See **Appendix D** traffic count data for 1981-2001. For roads that have had traffic counts done more than once, by either CNHRPC or NHDOT, the percentage change was calculated from the earliest to the most recent traffic count figures. As can be seen below, the locations with the largest percentage increase in traffic are Kearsarge Avenue, Exit 5 on I-89, and Briar Hill Road. The three locations with the largest decrease in traffic include Stumpfield Road, Broad Cove Road, and Hatfield Road.

Street Name	Location	Earliest Yr./Latest Yr.	Percent Change
Briar Hill Road	North of US202/NH9	1993/1997	+ 69.6
Broad Cove Road	East of Briar Hill Road	1991/1993	- 45.9
Clement Hill Road	South of Pine Street	1992/1996	- 16.2
East Penacook Road	Over Blackwater River	1992/1997	0
Hatfield Road	South of US202/NH9	1992/1998	- 29.8
I-89	South of NH 127, exit 5-6	1991/1998	+ 33.7
I-89	South of US202/NH9, exit 4-5	1991/1997	+ 27.3
I-89	Ramp over US202/NH9, exit 5	1994/1998	+ 92.0
Jewett Road	South of US202/NH9 and NH103	1990/1998	+ 24.6
Kearsarge Avenue	North of Spring Street	1995/1997	+ 28.2
Kearsarge Avenue	Browns Brook	1982/1998	+ 98.0
NH 103	North of US202/NH9	1994/1998	- 7.9
NH103	Over Contoocook River	1994/1998	+ 15.9
NH103	West of Putney Hill Road	1982/1997	+ 29.2
NH127	North of Dolly Road	1990/1998	+ 33.4
NH 127	West of I-89	1991/1998	+ 25.8
Pine Street	West of Bound Tree Road	1990/1999	+ 1.7
Stickney Hill Road	Over Boutwell Mill Brook	1992/1997	+ 32.1
Stumpfield Road	Over Hopkinton Lake	1992/1997	- 48.8
Town Road	Over Contoocook River	1992/1996	- 23.3
US202/NH9	East of Hawthorn Hill Road	1994/1998	0
US202/NH9	East of NH103	1982/1998	+ 80.6
US202/NH9	Under I-89 Underpass	1994/1998	+ 8.7
US202/NH9	West of Currier Road	1994/1998	- 15.9
US202/NH9	West of NH103	1993/1997	+ 7.4
US202/NH9	Henniker Town Line	1981/1997	+ 60.0

Source : NHDOT and CNHRPC Traffic Counts 1981-1999

The **Road Count Location Map** gives a better understanding of where these counts were conducted in the community.

Recommendations:

- Traffic count data should be utilized to identify corridors that may become threatened in the future by development trends.
- In locations where traffic has increased significantly, land use trends and access management policies should be closely examined and modified to best maintain and promote an efficient transportation network.
- The Town should work with the NHDOT and CNHRPC to identify and conduct traffic counts on roads of concern in the community.

Commuting Patterns

The 1990 Census is the most current source of information on commuting patterns in the central New Hampshire region. As can be seen below, in 1990, 74.3% of Hopkinton residents were commuting out of the Town to work, while 406 people were commuting into Hopkinton for work (based on 2,397 people reporting).

The 1990 data can be compared to the 1980 commuting patterns, which were reported in the 1990 Census as well. Of those reporting in 1980, 60% commuted out of Hopkinton to work. From 1980 to 1990, there has been an almost 15% increase in residents commuting out of Hopkinton for employment opportunities.

Understanding the commuting patterns of the labor force can assist community leaders in planning roadway improvements that will make important travel routes more efficient, safe, and promote sound economic growth.

Commuting Patterns in Hopkinton and Neighboring Communities 1980-1990

1990 Data	Hopkinton	Concord	Bow	Henniker	Warner	Webster
# Reporting	2,397	17,775	2,948	1,991	1,192	755
# Working in Town of Residence	615	12,159	364	903	309	93
#Commuting Out of Town	1,782	5,616	2,584	1,088	883	662
1980 Data	Hopkinton	Concord	Bow	Henniker	Warner	Webster
# Reporting	1,648	13,490	1,868	1,221	825	486
# Working in Town of Residence	660	11,160	323	636	232	53
#Commuting Out of Town	988	2,330	1,545	585	593	433

Source: 1990 Census

**1990 Commuting Patterns
Hopkinton and Neighboring Communities**

Commuting To	Hopkinton 1990
Hopkinton	615
Bedford	42
Boston	22
Bow	89
Concord	1,033
Hanover	24
Henniker	38
Hillsborough	35
Hooksett	24
Laconia	27
Manchester	201
Nashua	27
Warner	6
Webster	13

Source: 1990 Census

When comparing this 1980 and 1990 Census data to the Master Plan survey data collected in 2000, the percentage has increased to 21.2% of full-time and 39.9% of part-time employees working in Hopkinton and/or Contoocook, while 78.8% of full-time and 60.1% of part-time residents are traveling out of Hopkinton and/or Contoocook for employment. (Compare 2000 Census Data when available)

Recommendations:

- Identify local residential roads, that are not suited for heavy commuter traffic, and work to minimize "through-traffic" wherever viable alternatives can be provided.
- Continue to monitor major commuter roads used to enter and exit the community and work to make them more efficient and safe.
- Encourage alternative modes of transportation, that are not single occupancy vehicles, to move people to and from their place of employment.
- The Town, in conjunction with NHDOT, should investigate the need for a Park and Ride facility to help reduce congestion on Town roads.
- The Town should encourage and promote the local, state and regional bicycle and pedestrian networks.
- The Town, in conjunction with CNHRPC and Concord Area Transit (CAT), should assess the interest in expanding CAT bus service into Hopkinton.
- Encourage communication and cooperation with neighboring Towns to identify regional traffic impacts from proposed development.

Access Management

Access management works to reduce traffic congestion by:

- Limiting the number of places vehicles are turning and entering the roadway
- Reducing deceleration in travel lanes, thus promoting efficiency
- Removing turning vehicles from travel lanes

Areas along Maple Street (near exit 6 off I-89), Burnham Interval Road, and sections of Pine Street are considered to be prime commercial and industrial land. Currently, the land within those important road corridors are zoned for commercial development. As Hopkinton continues to be developed, pressure along these routes will continue to increase. Therefore, a balance needs to be established through access management to help meet both the economic and transportation needs of the community regarding these important transportation corridors.

The Hopkinton Site Plan Regulations contain very few requirements pertaining to access management of commercial sites. Access management techniques could be employed to alleviate traffic congestion and inefficient systems. Amending the Site Plan and Subdivision Regulations will allow a more efficient, safe, and cohesive system to be developed.

Recommendation:

- The Planning Board should review and consider the adoption of access management techniques into their Site Plan and Subdivision regulations.

Pedestrian Infrastructure

Residents of Hopkinton value the rural and country atmosphere of the Town, yet there is a threat to that atmosphere from the increasing numbers of cars on the road and their associated speed, especially in the residential neighborhoods. Pedestrian facilities, such as paved sidewalks and gravel walking paths, are critical features for roadways with high volumes of traffic or high speeds. The primary purpose of sidewalks is to improve safety for pedestrians by separating them from the travel lanes of roadways. Sidewalks can also serve as a source of recreation for residents, a non-motorized mode of travel, serve to beautify an area, or stimulate economic activity in village settings.

Speed limits and cross-walks have been the usual method for improving pedestrian safety and other non-motorized modes of travel. In both rural and urban areas, the minimum speed limit a town can impose is 25 miles per hour. Limits can be made lower at intersections and in school zones. There are currently only 5 cross-walks in Town, located near the schools and in the Village centers. Cross-walks located on State roads must be approved and installed by NHDOT, while the Town is responsible for those located on Town-owned and Town-maintained roads.

Traffic calming suggests road design techniques using active or physical controls (bumps, barriers, curves, rumble strips, etc.) and passive controls, such as signs and traffic regulations, to reduce speeds. Traffic calming measures foster safer and quieter streets that are more hospitable to cyclists, pedestrians, and joggers and enhance neighborhoods and downtown environments. The potential benefits of traffic calming include reduced traffic speeds, reduced traffic volumes (by discouraging "cut-through" traffic on residential streets), and often an improved aesthetic quality of streets.

Hopkinton does have some existing pedestrian infrastructure within Town. **The Pedestrian Infrastructure Map** shows the existing sidewalks and cross-walks, recommended areas for sidewalks and cross-walks, and areas of Town that may benefit from various types of traffic calming measures.

Recommendations:

- Identify and prioritize areas with existing pedestrian facilities for regular maintenance. Propose new areas for facilities that will extend and connect the existing infrastructure. Work with NHDOT regarding the placement and maintenance of cross-walks on State roads within Town.
- Use innovative methods to increase pedestrian safety, which could include such things as raised cross-walks, striped or colored cross-walks, increased signage, or walking paths separated from the road by landscaping. Education of drivers to alert them to the location of sidewalks and cross-walks would also be beneficial.
- Investigate the use of appropriate traffic calming measures to discourage high speeds and to direct traffic around neighborhoods.
- Before approving upgrades to residential roads, the Town should consider what impact such upgrades will have on traffic, speed, pedestrian safety, and sense of community.
- The Town could consider lowering the speed limit in areas that have seen a large increase in traffic or numerous motor vehicle accidents that may be due to excessive speed.

Accident Data and Analysis

One of the most obvious methods to identify where transportation improvements are needed is to analyze the location, frequency, and type of accidents that occur at various locations in the community. There were 495 reported accidents in Hopkinton in the last 5 years. The list below, as well as the **Accident Location Map**, provides a quick picture of known automobile accident locations, which may be due, in part, to the conditions of the road. The list below contains the names of roads where accidents were reported and the number of accidents reported for the time period of January 1995 to June 2000.

Accident Data for Hopkinton, January, 1995-June, 2000

<u>Name of Road</u>	<u># Accidents</u>	<u>Name of Road</u>	<u># Accidents</u>
Beech Hill Road	1	Kast Hill Road	3
Bound Tree Road	5	Kearsarge Avenue	9
Briar Hill Road	18	Kimball Lake	1
Broad Cove Road	6	Little Tooky Road	2
Brockway Road	3	Main Street	51
Carriage Lane	1	Maple Street	46
Cedar Street	1	NH103	15
Clement Road	16	NH127	2
College Hill Road	5	Old Henniker Road	14
Crowell Road	2	Park Avenue	27
Dolly Road	1	Penacook Road	11
Dustin Road	2	Pine Street	12
E. Kast Hill Road	1	Pinewood Drive	2
E. Penacook Road	7	Pleasant Pond Road	3
Elm Brook Park Road	1	Rollins Road	2
Exit 4	3	South Road	7
Exit 6	3	Spring Street	2
Farrington Corner Road	3	Stagecoach Road	1
Georges Park	1	Stumpfield Road	2
Gould Hill Road	5	Sugar Hill Road	11
Hatfield Road	6	Tamarack	2
Hopkinton Road	45	Tyler Road	3
Houston Drive	2	US202/NH9	69
I-89	39	Warner Road	1
Jewett Road	4		

Recommendations:

- Identify and prioritize intersections that need improvement because of safety issues.
- The Police Chief, Fire Chief, and Superintendent of Public Works should annually review accident locations and determine enhancements that could be made to improve safety. This list of enhancements should be submitted to the Town Road Committee, Planning Board, and Board of Selectmen for review and comment.
- The Police Department and Public Works Department should establish a system for the public filing of complaints/comments on the condition of roads, snow removal, icy conditions, intersections, and signage to better prioritize roads within Town that may require safety enhancements.

Town Road Construction Standards

How streets are designed and built is a key part of well-planned, orderly growth. The design and construction of roads affect the visual quality of communities, public safety, and quality of life for years to come.

Different streets have different functions, thus requiring different designs. Road design standards should have built-in flexibility that fits with natural contours, that preserve natural features, and

meets other community objectives. Rigid design standards can lead to over-designed roads, which encourage excessive vehicle speeds and present a less attractive neighborhood streetscape. Sound road design considers topographic features, to assure proper road functions and to minimize impacts to vegetative and other natural features. Flexible street alignment and design standards allow new roads to fit well with the land, and preserve the natural features to the area as much as possible. See **Appendix E** for examples of flexible road design standards.

Residential street standards provide the basis for safe, efficient, and economical access to these areas. Safe residential streets are attained by specifying street geometrics that discourage excessive speeds and emphasize access. Residential houses are efficiently accessed with lower travel speeds on streets that are safer for bicyclists and pedestrians. The purpose of residential streets is to serve the land that abuts them. In doing so, residential streets should promote the safe and efficient movement of vehicular and pedestrian traffic, take into consideration land use, construction, and future maintenance.

Provisions for flexible design requirements for Town roads will allow the Planning Board and developers the necessary flexibility to design, approve, and build roads that are at the appropriate scale. Keeping pavement and travel lanes to a minimum width, relative to a streets function, helps keep speed down, preserves a more appealing streetscape, reduces costs to the developer and Town, allows the Town to retain its rural look and feel while accommodating growth. The current Town Road Construction Standards are a "one-size fits all" approach that does not allow for flexibility in road construction or design.

Recommendations:

- The Superintendent of Public Works and Road Committee should compare the existing Town Road standards to that of other Towns similar to Hopkinton and make recommendations for changes/modifications based on that review to the Planning Board.
- The Planning Board should review and evaluate its current road standards and develop new road construction standards that allow for and encourage a variety of road types that enhance the uniqueness of Hopkinton's current and future transportation infrastructure.
- When reviewing road plans, the Planning Board should look at how the road design relates to the terrain and topographic features present at the site and require, where feasible, that the road follow these features.
- The design and planning of residential streets should follow natural contours and preserve natural features whenever practical; minimize traffic speed, volume, noise, congestion, and hazards to pedestrians; and minimize the amount of paved area to reduce storm water runoff, and thereby protecting water resources and reducing construction costs.
- Aesthetic and landscaping requirements should be researched by the Planning Board, in conjunction with the Superintendent of Public Works, and incorporated into the Town Road Construction standards.
- New roads in rural areas should be consistent in design with the rural collector roads that they serve.
- Research the creation of pedestrian and wildlife underpasses, where appropriate and feasible, when roads are being built or reconstructed.
- The Town should work with NHDOT and the local utility company to explore the idea of burying utility lines or staggering utility poles, when roads are reconstructed or built.

- Research the possibility of developing flexible length requirements for cul-de-sacs, in consultation with the Fire Chief and Superintendent of Public Works.

Private Roads

Private roads are roads that have been constructed but, for various reasons, are not maintained by the Town or considered Town-owned roads. The Town of Hopkinton does not allow the construction of private roads, unless it is within a manufactured housing subdivision. There is currently no Town-adopted policy regarding private roads, their construction, maintenance, or the Town's acceptance of them. The Town does provide maintenance to private roads at the request of the residents living on those roads. The decision to have the Town do such maintenance must be approved each year at Town Meeting.

The Town of Hopkinton has twenty-nine roads that are currently classified as private roads. Because these roads are private, the Town does not have any authority over their construction, maintenance, or quality. However, these roads are still part of the Town's transportation infrastructure. The following is a list of private roads within the Town of Hopkinton. These can also be seen in the **Private Road, Class V Gravel Road, Designated Scenic Road, and Class VI Road Location Map**.

Bass Lane	Pike Lane
Bluebird Lane	Ridge Road*
Clough Lane	River Grant Drive
Deer Path	Robin Lane
Eagle Lane	Rolf Pond*
Edgewood Drive	Salachar Road*
Evergreen Lane	Salmon Lane
Flintlock Road	Southshore Drive*
Hillcrest Road	Sparrow Lane
Josylvia Way	Sunset Drive
Meadows Drive	Trout Way
North Shore Drive	Tucker Drive
Park Lane	Well House Road
Perch Lane*	Winter Drive

* Town currently provides winter maintenance

Recommendations:

- The Police and Fire Departments should work with the residents of the private roads and annually review all private roads to make sure that they meet safety standards.
- Create a Private Roads Policy that outlines construction and safety standards for new private roads to be built.

Scenic and Gravel Roads

A major component of Hopkinton's rural character is its scenic and gravel roads. The diversity of roads in Hopkinton contributes to the Town's unique and historic atmosphere. Preserving a significant number of the gravel and Scenic Roads in Town will further enhance the character of the community. Residents have indicated a strong desire to protect these historic and cultural

resources through the various surveys, visioning sessions, and local actions taken by residents to protect them.

The effect that Scenic Road designation has is to legally require a hearing, review and written permission by the Planning Board before the Town, or a public utility, can remove (or agree to the removal of) stone walls, or can cut and remove trees with a circumference of 15 inches (diameter of 4.8 inches), at 4 feet from the ground. However, this planning board requirement is full of exceptions. The planning board can be bypassed - and only selectmen permission is needed - if the Superintendent of Public Works wishes to cut trees that have been declared a "nuisance" under RSA 231:145-146, or which, in the Superintendent of Public Works, opinion, "pose an imminent threat." Moreover, a public utility can cut the trees for the "prompt restoration of service" without anybody's permission (RSA 231:158, II). The Scenic Road law itself does not prohibit landowners from the tree cutting or removal of walls on their own property.

In recognition of the fact that State law itself is not very stringent, the Legislature, in 1991, added RSA 231:158, V, which gives a town broad power to impose Scenic Road regulations that are different from, or in addition to, those contained in the State law. These additional regulations could include giving protection to smaller trees, requiring landowners along scenic roads to adhere to the same requirements as the Town, or by inserting criteria for the planning board to use in deciding whether to grant permission.

Several roads have been designated as Scenic Roads in Hopkinton by the petition process at Town Meeting. The list below shows what roads have been classified as a Scenic Road, the location of the Scenic Road, and the year designated.

- Barton Corner Road (Hatfield Road to the end) - Class V 1974, Class VI 1999
- Beech Hill Road (Gravel Portion of the road) - 2001
- Branch Londonderry Turnpike (Stickney Hill Road to Bow Town Line) - 1975
- Brockway Road (Farrington Corner Road to Jewett Road) - 1975
- Clement Hill Road (Past Hill Road to Pine Street) - 1975
- Clement Hill Road (Pine Street to Warner Town Line) - 1979
- College Hill Road (Hatfield Road to Henniker Town Line) - 1974
- Dunbarton Road (from Farrington's Corner to Bow Town Line)
- Hatfield Road (Tamarack Road to Weare Town Line) - 1974
- Moran Road (Hatfield Road to Thain Road) - 1974
- Old Putney Hill Road (Old Henniker Road to Putney Hill Road) - 1975
- Patch Road (Entire Class V portion) - 2001
- Pet Dow Road (Hatfield Road westerly to the end) - 1974
- Thain Road (Hatfield Road to Stumpfield Road) - 1974

A special attribute that the Town of Hopkinton has is the mix of paved and gravel roads on which to travel. This diversity allows Hopkinton to retain its historic past while, to some extent, acknowledging growth and infrastructure needs. Hopkinton, unlike many communities, has both Class V and Class VI gravel roads. The preservation of numerous gravel roads will help to ensure that the Town honors its history and original design.

The following list is of Class V roads in Hopkinton that are gravel or are a mix of gravel and paved.

- Beech Hill Road (gravel/paved)
- Broad Cove Road (gravel/paved)
- Burrage Road (gravel)
- Crowell Road (gravel)
- Hatfield Road (gravel/paved)
- Little Tooky Road (gravel/paved)
- Mill Road (gravel/paved)
- New Cemetery Road (gravel/paved)
- Old Stage Coach Rd (gravel/paved)
- Old Stumpfield Road (gravel/paved)
- Pet Dow Road (gravel)
- Robert Gould Road (gravel)
- Thain Road (gravel/paved)
- Basset Mill Road (gravel)
- Brockway Road (gravel)
- Camp Merrimack Road (gravel)
- George Road (gravel)
- Irish Hill Road (gravel/paved)
- Lower Straw Road (gravel)
- Moran Road (gravel)
- Old Homes Road (gravel/paved)
- Old Putney Hill Road (gravel/paved)
- Patch Road (gravel)
- Pleasant Pond Road (gravel)
- South Road (gravel/paved)
- Upper Straw Road (gravel/paved)

The **Private Roads, Class V Gravel Roads, Designated Scenic Roads, and Class VI Road Location Map** will show the currently designated Scenic Roads and the Town's Class V gravel roads.

Recommendations:

- The Town can encourage the rural quality of an area serviced by gravel roads by requiring new development to be consistent with the ability of that road to meet the developments needs.
- Class V gravel roads are important historic assets, provide excellent recreational opportunities, and foster a sense of community. Changes to gravel roads should not be made with out considering their historic importance, recreational opportunities, and sense of community taken into consideration.
- Preserve and protect the list of designated Scenic Roads.
- Place an emphasis on educating the public about the existing Scenic Roads in Town and what such designation means.
- The Town should investigate the possibility of strengthening the protections on Scenic Roads, beyond the minimum statutory protections.
- Consider the idea of limiting the number of new roads that can feed into, or be built off of, Scenic Roads, to ensure that the scenic attributes of such roads stay intact.
- The Planning Board should create a set of criteria with which to evaluate proposals for work to be done along the designated Scenic Roads within Town.

Class VI Roads

Class VI roads are roads that are not maintained by the Town, may be subject to gates and bars, and are almost always gravel. A Class V road can become a Class VI road if the Town has not maintained it for five years or more. The Town defers to RSA 674:41 regarding building on a Class VI road. 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 governing body" (Town Selectmen) who may, after "review and comment" by the Planning Board, vote to authorize building along that particular Class VI road, or portion thereof. Without such a vote, all building is prohibited. Even if the Board of Selectmen does vote to authorize building, the law states that the municipality does not become responsible for road maintenance or for any damages resulting from the road's use.

Class VI roads can be candidates for designation as Class A Trails because they have little or no development associated with them, are scenic, and also serve to connect large areas of open space, conservation, forestry, and/or agricultural lands. Class VI roads are an important component of a Town's transportation infrastructure because they personify the community's rural character and provide vast recreational opportunities. The **Private Road, Class V Gravel Road, Designated Scenic Road, and Class VI Road Location Map** will provide information as to where Class VI Roads are located within the Town Hopkinton.

Recommendations:

- The Town, with the help of the Conservation Commission, should identify Class VI roads, railroad beds, existing paths, and areas along the various water bodies in Town, that connect open space, forest, conservation, and/or agricultural land and would help create a greenway trail network.
- The Town should create a public education campaign that highlights the benefits of a Town greenway system.
- Encourage and support a greenway trail network.
- Create a process to involve the public when a Class VI road is considered for reclassification.
- Discourage scattered and premature development along Class VI roads within Town.
- The Town should adopt building policies for all Class VI roads.
- The Town should maintain their policy prohibiting the subdivision of land whose sole access is a Class VI road, except in the case of conservation uses.

Parking and Public Transportation

Parking and public transportation are two issues that most towns spend the least time planning, studying, or regularly setting aside money for, yet they are the very issues that most residents will identify as areas that need improvement.

In the Master Plan survey, 22% of the respondents said that they would like to see the development of Concord Area Transit (CAT) service in Hopkinton. The support of public transportation expansion into Hopkinton was also discussed at the Master Plan Visioning Session in May 2000. CAT currently services elderly residents of Hopkinton one day a week in requested door-to-door service. There is also a volunteer Dial-A-Ride program in Town. However, these two programs do not meet all of the needs of residents in Town who wish to have public transportation available to them for employment or recreational trips.

Parking in front of the buildings is an issue confronting most of the businesses on Main Street in Contoocook, Hopkinton Village, as well as in other areas of Town. Many of the buildings in Contoocook Village are spaced close together, resulting in little area to build additional parking. Much of the current parking comes at the expense of adequate and safe sidewalks. Cars parked in the downtown have to back out into traffic, causing additional safety issues to those trying to travel through or within the Village. Having adequate and safe parking areas is an element necessary for sound economic development.

The lack of adequate and safe parking facilities, as well as the ability of all residents to get around Town, can inhibit economic growth, reduce the sense of community, and weaken the overall comprehensive transportation infrastructure.

Recommendations:

- Investigate how to address the need and interest in extending regularly scheduled CAT service into Hopkinton.
- Continue to support the limited CAT and Dial-A-Ride public transportation services currently being offered within Town.
- Research the possibility and feasibility of implementing a ride-sharing, carpool, or shuttle program from Hopkinton to Concord. This would be especially beneficial if a Park-and-Ride is built in Hopkinton in the future.
- Consider inventorying all existing parking areas within Town and ranking them as to their safety, adequacy, and usefulness. This inventory could also identify potential new parking spaces that could be created to enhance or replace existing parking areas.
- The Superintendent of Public Works, in conjunction with the Police Department, should create a method for recording resident complaints about unsafe parking areas or those in need of maintenance.
- Make sure that parking facilities throughout Town meet the Americans with Disabilities Act (ADA) requirements.
- Head-in parking in on State Highways should be discouraged to promote public safety.

Local Bicycle Infrastructure

Planning for a bicycle network requires a different approach from that of motorized transportation planning. Bicyclists have different needs from those of motorists, including wider shoulders, better traffic control at intersections, and stricter access management.

Those residents participating in the master plan visioning session expressed a great desire for alternative modes of transportation that could be utilized by all members of the community. Transportation decisions are usually made solely for those who can drive and have access to an automobile. This leaves out transportation options for those can not or choose not to drive, those who choose not to own or can not afford to own reliable automobile transportation, and those who would prefer to combine recreation and exercise with transportation.

By creating a local bicycle infrastructure, members of the community have the ability to travel within Town for employment, shopping, and recreation purposes without driving. As the concern over air quality, traffic congestion, and other environmental issues increases, the need and desire for a well-maintained and safe bicycle route system will continue to grow from a luxury into a necessity. The **Bicycle Infrastructure Map** shows the State and Regional bicycle networks in Hopkinton.

Recommendations:

- A local advisory committee could be developed to see if there is a need and desire for a local bicycle network, as well as where the network could be located.
- The Town should research funding options for creating and maintaining a local bicycle network.
- Encourage the planning and development of a safe, accessible, and efficient regional and local bicycle route system for commuting and recreational purposes.
- Work with other groups and organizations to help promote public awareness, acceptance, and the possibility of bicycling as a viable mode of transportation in Hopkinton.

- Encourage, through Zoning and Subdivision Regulations, the placement of bicycle racks at business and multi-family developments, where appropriate.
- Work with the Police and School Departments to promote and educate on bicycle transportation and safety.

Bridge Network

The NHDOT maintains an inventory of all bridges in New Hampshire using Federal Sufficiency Ratings (FSR), a nationally accepted method for evaluating bridges. A FSR represents the relative overall effectiveness of a bridge as a modern day transportation facility. A FSR greater than 80 means that the bridge is in overall good condition. A bridge having an FSR between 50 and 80 is eligible for federal bridge rehabilitation funding. A bridge with an FSR less than 50 is eligible for either federal bridge replacement or rehabilitation funding.

Functionally Obsolete (FO) refers to a bridge with substandard deck width, under clearance, approach roadway alignment, or inadequate waterway. Structurally Deficient (SD) 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.

Currently, there are a total of 35 bridges in the Town of Hopkinton. The table below, as well as the **Bridge Network Map**, provides more detailed information on the 35 bridges located in Hopkinton.

Hopkinton Bridge Network

Bridge	Feature Crossed	FSR	Obsolete/ Deficient	Year Built	Owner
US202/NH9	Contoocook River	65.4		1961	State
W.Hopkinton Rd.*	Contoocook River	30.4	SD	1853	Town
US202/NH9	Hatfield Road	83.3	FO	1961	State
Stumpfield Rd.	Hopkinton Lake	97.0		1959	Town
US202/NH9	Elm Brook	85.1		1961	State
NH127	Spillway Channel	69.5	FO	1961	State
I-89 SB	Pine Street	86.0	FO	1959	State
I-89 NB	Pine Street	90.0	FO	1967	State
I-89 SB	Contoocook River	90.3		1959	State
I-89 NB	Contoocook River	94.2		1967	State
NH127	I-89	94.0	FO	1964	State
NH127	I-89	N/A		1964	State
NH103/NH127	Contoocook River	45.7	FO	1935	State
I-89 (EB Ramp)	US202/NH9 EB	96.0		1959	State
I-89 (EB Ramp)	US202/NH9 EB	N/A		1959	State
I-89 EB	US202/NH9	89.9		1959	State
I-89 EB	US202/NH9	N/A		1959	State
I-89 WB	US202/NH9	87.2		1959	State
I-89 WB	US202/NH9	N/A		1959	State
I-89 EB	US202/NH WB	89.8		1959	State
I-89 EB	US202/NH9 WB	N/A		1959	State
South Road	I-89	80.1		1959	State
South Road	I-89	N/A		1959	State
Tyler Road	Contoocook River	83.8		1980	Town
East Penacook Rd.	Blackwater River	81.2		1967	Town
I-89 EB	I-89 Ramp	86.3		1959	State
I-89 EB	I-89 Ramp	N/A		1959	State
I-89 WB	I-89 Ramp	82.1		1959	State
I-89 WB	I-89 Ramp	N/A		1959	State
East Penacook Rd.	Deer Meadow Brook	98.6		1986	Town
Jewett Road	I-89	90.0		1959	State
Jewett Road	I-89	N/A		1959	State
Broad Cove Rd.	Dolf Brook	100.0		1990	Town
I-89	Whittier Brook	81.8		1959	State
Stickney Hill Rd.	Boutwell Mill Brook	100.0		1984	Town

Source: NHDOT Mini Bridge List, 1997

* Rowell's Bridge is on the National Register of Historic Places; it has been refurbished

Recommendations:

- Town should work with NHDOT to repair, replace, and/or upgrade bridges that have a FSR of less than 80.
- The Superintendent of Public Works should annually inspect the Town-owned bridges for safety and work in conjunction with NHDOT for the inspection of the State-owned bridges in Hopkinton.
- The Town should support the continuation of the State Bridge Inspection program by the NHDOT.
- In the future repairing, replacing, upgrading, or creation of bridges in Town, consideration should be given to creating pedestrian and wildlife corridors/connectors under the bridges.

Contoocook Village

In the past three years, the Hopkinton community has engaged in a great deal of planning concerning Contoocook Village. In order to foster a greater sense of community central to the Village, the Town worked to enhance the economic vitality of the Village and to balance the reality of faster and greater volumes of traffic.

The roads and intersections in Contoocook Village seem to be wider than what is consistent with a Village scale. Wide roads encourage high speed traffic, which decreases the visibility for businesses, compromises the safety of pedestrians, and acts as a barrier within the streetscapes. An example of these wide roads can be seen by looking at Fountain Square. It has been reduced to a small island due to large road widths, which in turn have reduced the opportunity for pedestrian space and a visually appealing center.

Narrow building set-backs help define the street edge, provide a sense of enclosure within the Village area, and have the potential to add to the pleasant pedestrian atmosphere. However, parking on sidewalks and designated parking spaces in front of the building detract from the attractive architecture of the various structures, create a hazard for on-coming traffic and reduce the safety for pedestrians. Designated areas for vehicles and pedestrians need to be separated and clearly defined. NH103 and NH127, the main roads in Contoocook Village, are maintained by the State and therefore coordination and cooperation will be required by both the Town and State to try to redesign the Village.

The compilation of these planning efforts are in the Contoocook Charrette, which is set forth in more detail in the Contoocook Village Chapter of the Master Plan. The transportation-related findings of the Contoocook Charrette include the following three phases as ways to redefine the Village to accommodate economic, pedestrian, and vehicle use effectively, efficiently, and safely.

Depot Phase

Add 37 spaces of off-street public parking in the vicinity of the Depot

Install sidewalks with curbing from the Town Clerk's Office to the Depot Area

Fire Station Phase

Simplify traffic flow between Pine Street and Park Avenue; make Kearsarge Avenue and Pine Street a "T" intersection

Redesign the war memorial triangle as an edge of a street instead of a traffic island

Add sidewalks along Park Avenue towards the High School; connect existing sidewalk up Pine Street to improve links with the library; add sidewalks up Kearsarge Avenue

Fountain Square Phase

Change the existing alignment of Maple Street and Main Street to a new "T" intersection

Add in direct crosswalks across the new "T" intersection

Relocate on-street parking to a convenient 40 space off-street parking area and add in a pedestrian walkway near the café that will connect the new fountain plaza with new parking area

Improve sidewalks all along Main Street and up Maple Street

Over the years it has been suggested that there should be a better way to get to the Burnhams Intervale area without going through Contoocook Village. There have been many meetings to discuss this issue and a study was conducted in 1998 and 1999 to look at this very topic. The 1999 study, commissioned by the Hopkinton Economic Development Committee, investigated five possible routes. The alternatives discussed in the study include:

1. Road from intersection of NH127 and Kast Hill to Industrial Park
2. Road from NH127 across a new bridge and connecting to #1 listed above
3. Road from NH127 (3,000 feet east of PaperTech) north to the Industrial Area
4. Road from exit 7 along the west side of I-89 to Bound Tree Road
5. Road from west of the Digital Building off NH127, just west of exit 6, north across the Contoocook River, through a corn field and then into the Industrial Area

Recommendations:

- The Town should continue to research options for increasing transportation access to industrial land, while reducing vehicle traffic through the Village. Environmental impacts, economic benefits, and efficiency should be kept in mind.
- Define and separate areas for pedestrians and automobiles through the use of curbing, landscaping, sidewalks, and off-street parking.
- Support the development of additional off-street parking in downtown Contoocook Village.
- Drivers should be discouraged from parking on sidewalks and obstructing other pedestrian pathways by clearly designating areas where on-street parking is appropriate and permitted.
- To encourage pedestrian safety install raised crosswalks where necessary.
- Consider using granite curbing to define the street edge and clearly distinguish the road from the sidewalk.
- The Town, with the support and help of local businesses, should visually define pedestrian pathways through the use of trees, shrubs and fencing along the edges of the sidewalk.

- The Town should continue to implement the goals outlined in the Contoocook Charrette.
- Improve the appearance of the Main Street bridge through landscaping, decorative lighting, and the use of small wooden signs identifying Contoocook Village.
- As a way to slow-down traffic, as well as enhance the Village gateway, Fountain Square could be redesigned to expand the area of the landscaped island.
- To encourage a pedestrian network, the Colonial Village Shopping Center, Dimitri's restaurant, the Houston Park, and MCT Telecom should be connected into the Village Center through landscaping and pedestrian improvements.

Hopkinton Village

The historic Main Street in Hopkinton Village is benefited by 200-year-old maple trees, and the Village still preserves the feel of a New Hampshire town of the late 18th Century. The traffic on Main Street is quite heavy, and it is used widely as a throughway for trucks. The current configuration of the US202/NH9 and NH103 intersection is dangerous to both automobiles and pedestrian traffic. There are many issues that relate to Hopkinton Village and the transportation infrastructure located there. This historic Village is in need of protection so as not to lose its unique character, forethought and long-term planning are also needed to ensure that the various issues confronting it get solved to the satisfaction of those involved.

Recommendations:

- Control and reconfigure parking in the Village center to help foster public safety and a pedestrian-friendly environment.
- Improve the control of traffic at the intersection of Routes US202/NH9 and Route NH 103 at the Village Square.
- The Town should continue its conversation with NHDOT regarding the condition, configuration of the intersection, and the drainage of stormwater on Main Street.
- The Town should look into various traffic calming methods that could be used in this area of Town that would facilitate a pedestrian core and village community, while at the same time encouraging slower travel speeds by motorists.
- The Town should work with NHDOT to reconfigure the intersection.
- The Town should consider creating bike lanes along Main Street and extending the existing sidewalk network throughout the Village.

Projects in the State Transportation Improvement Program

The Transportation Improvement Program (TIP) functions to link the statewide transportation planning process with that of the Central NH Regional Planning Commission (CNHRPC) region and local municipalities. The program enables the needs and desires of both small and large municipalities to be discussed in an open forum and then be brought, in a refined form, to the appropriate State and Federal agencies for consideration. The TIP process provides a vital link between municipalities, the Region, and the State in the transportation planning process.

In the 1993 NHDOT report on the Status of the 10-Year Transportation Improvement Plan, five projects were listed that impacted the Town of Hopkinton. These five projects were, at the time of the report, considered completed or were soon to be completed in the following year. Two projects are in conjunction with I-89: the rehabilitation of four bridges on I-89 and Pine Street, and

pavement repair and bridge rehabilitation at Exit 5 to the Warner Town and Exit 6. Two other projects deal with US 202, which include the construction of an overhead sign at the I-89 split and the relocation of NH 127 and Old Concord Road. The final project in the 1993 TIP was the construction of a drainage system at NH 103 south of the High School.

The current State TIP has two projects listed in it that are located in the Town. The first project consists of replacing substandard guardrail and guardrail terminal units from I-89 to east of Hillsborough Village along US 202/NH 9. This is being conducted under the Statewide Guardrail Program/Hazard Elimination Program and is scheduled to start in 2001 and is estimated to cost \$900,000 to complete. The second project is to restore the covered bridge and railroad depot to create a Transportation Museum in Contoocook Village, at the intersections of NH103 and NH127. This project is schedule to start in 2003 and is estimated to cost \$350,000.

There is only one proposed project in the 2001 TIP and that is for a Park-and-Ride facility off I-89, near exit 6. The nearest Park-and-Ride facilities are in Warner and New London to the north and Concord to the south. The project could create a modestly sized facility off I-89 in Hopkinton with room for expansion, if the need arises. The lot could serve commuters in and around Hopkinton, as well as providing an accessible lot to commuters traveling west.

Recommendation:

- To maximize the opportunities afforded by the State Transportation Improvement Program.

Town Road Management Plan

The Town of Hopkinton has a five-year management plan in place for its roads and transportation infrastructure. The Plan outlines the suitability of development on specific roads in Town, the long-term maintenance of Town roads, and the projected costs associated with such road reconstruction and maintenance. This plan was updated in 1994 and again in 2001 by the Superintendent of Public Works and the Road Committee. The Road Improvement Plan for 2001-2006 can be found in **Appendix F**, which outlines the specific road improvement work and its associated costs.

The Road Committee and Superintendent of Public Works compiled a list of Town Roads with their "condition" as it relates to potential development and increases in traffic occurring on or off such roads. The roads in Town are divided into three categories - good, fair, and poor condition - and recommendations are made as to what level of traffic increases each could handle. The Town Hall has a copy of the most recent report with this listing and breakdown of roads.

A Capital Improvement Plan (CIP) created and updated each year, outlines road projects that will be undertaken, the amount of money required for such projects, and the funding source. The projects outlined in the CIP should be based on the Town Road Management Plan, as well as other long-term planning that the Town has undertaken. The two transportation projects that are consistently in the CIP include shim and paving, budgeted at approximately \$75,000, and road construction, budgeted at \$125,000.

Recommendations:

- Research and implement available funding options for maintenance and improvements to the transportation infrastructure.
- Work with regional, State, and Federal Departments and programs to prepare a comprehensive transportation plan that includes funding availability for the desired projects and programs.
- The Superintendent of Public Works, in conjunction with the Road Committee, should review and amend the 5-year plan on an annual basis.
- The Road Committee should hold a public hearing on the road management plan before it is finalized, as well having the Planning Board and Selectmen review the Plan.

Strategies to Meet Transportation Needs**Transportation Equity Act for the 21st Century (TEA 21)**

Enacted in June of 1998, this multi-billion dollar federal legislation authorizes the Federal Surface Transportation Programs for highways, highway safety, and transit for the 6-year period 1998-2003. Essentially, this act served to reauthorize and expand ISTEA, which expired in 1997. TEA-21 is the parent legislation that funds a variety of transportation programs including the Congestion Mitigation and Air Quality (CMAQ) Improvement Program and the Transportation Enhancement (TE) Program.

Transportation Enhancement Funds (TE)

Transportation Enhancements Program (TE) is another viable source for improving roads in communities. Funding for the TE program is slightly more than \$3 million dollars annually. Like CMAQ, these funds are provided in an 80/20 match, with the State paying for the majority of the project cost. Typical examples of projects eligible for TE funds include:

Facilities for bicyclists and pedestrians	Scenic or historic highway programs
Control and removal of outdoor advertising	Archaeological planning and research
Landscaping and other scenic beautification	Historic preservation
Rehabilitation and operation of historic transportation buildings, structures, and facilities	
Safety and education activities for bicyclists and pedestrians	
Acquisition of scenic easements and scenic or historic sites	
Some types of environmental mitigation	
Establishment of transportation museums	
Preservation of abandoned railway corridors	

Federal Aid Bridge Replacement Funds

These funds are available for the replacement or rehabilitation of town owned bridges over 20 feet in length. Matching funds are required and applications for funding are processed through the NHDOT municipal highways engineer.

Highway Block Grants

Annually, the State apportions funds to all cities and towns for the construction and maintenance of Class IV and V roadways. Apportionment "A" funds comprise not less than 12% of the State Highway budget and are allocated based upon one-half the total road mileage and one-half the total population as the municipality bears to the state total. Apportionment "B" funds are allocated in the sum of \$117 per mile of Class V road in the community. Block grant payment schedules

are as follows: 30% in July, 30% in October, 20% in January, and 20% in April. Any unused funds may be carried over to the next fiscal year. Hopkinton currently receives \$125,000 per year of highway block grant money.

State Bridge Aid

This program helps to supplement the cost to communities of bridge construction on Class II and V roads in the State. Funds are allocated by NHDOT in the order in which applications for assistance are received. The amount of aid a community may receive is based upon equalized assessed valuation and varies from two-thirds to seven-eighths of the total cost of the project.

Town Bridge Aid

Like the State Bridge Aid program, this program also helps communities construct or reconstruct bridges on Class V roads. The amount of aid is also based upon equalized assessed valuation and ranges from one-half to seven-eighths of the total cost of the project. All bridges constructed with these funds must be designed to support a load of at least 15 tons. As mandated by State Law, all bridges constructed with these funds on Class II roads must be maintained by the State, while all bridges constructed on Class V roads must be maintained by the Town. Any community that fails to maintain bridges installed under this program shall be forced to pay the entire cost of maintenance plus 10% to the State Treasurer under RSA 85.

Local Option Fee for Transportation Improvements

NH RSA 261:153 VI (a) grants municipalities the ability to institute a surcharge on all motor vehicle registrations for the purpose of funding the construction or reconstruction of roads, bridges, public parking areas, sidewalks, and bicycle paths. Funds generated under this law may also be used as matching funds for state projects. The maximum amount of the surcharge permitted by law is \$5, with \$0.50 allowed to pay for administrative costs of the program. Based upon the number of motor vehicles registered in Hopkinton in 2000, this could yield a maximum of \$32,275 annually in additional funding without increasing property taxes.

Development Exaction's

Exaction's are contributions of money or construction of infrastructure by a developer to improve roadways and other transportation needs, as directly related to a proposed development. Common exaction's include the widening of roads, installation of drainage structures, paving, gifts of rights-of-ways, and the installation of traffic signals. Often confused with impact fees, exaction's are collected by the Planning Board at the time of site plan or subdivision approval.

Impact Fees

Authorized by RSA 674:21, communities can adopt impact fee programs to offset the costs of expanding services and facilities communities must absorb when a new home or commercial unit is constructed in town. Unlike exaction's, impact fees are uniform fees administered by the building inspector and are collected for general impacts of the development, as opposed to exaction, which are administered by the planning board and are collected for specific impacts unique to new site plans or subdivisions on Town roads. The amount of an impact fee is developed through a series of calculations. Impact fees are charged to new homes or commercial structures at the time a building permit is issued. When considering implementing an impact fee ordinance, it is important to understand that the impact fee system is adopted by amending the zoning ordinance. The law also requires that communities adopting impact fees must have a Capital Improvements Program (CIP). Lastly, State law also stipulates that all impact fees collected by a community must be used within 6 years from the date they were collected, or else they must be refunded to the current property owners of the structure for which the fee was initially collected.

Capital Reserve Funds

A popular method to set money aside for future road improvements, RSA 35V mandates that such accounts must be created by a warrant article at town meeting. The same warrant article should also stipulate how much money will be appropriated to open the fund, as well as identify what Town entity will be the agent to expend the funds. Once established, communities typically appropriate more funds annually to replenish the fund or be saved and thus earn interest that will be put towards large projects or expenditures in the future.

Summary

In order to remain a vital community in the future, Hopkinton will require a transportation system that supports the needs of its citizens and its businesses, while at the same time fostering its residential and rural character. The Transportation Chapter is an attempt to articulate this vision and a means by which that vision can be achieved for the Town of Hopkinton. This Chapter includes analysis of available data and conditions and includes recommendations for the future.

