

## **Chapter VII Transportation**

### **INTRODUCTION**

A safe and efficient transportation network is an essential component for the development of any community. Over the past several years, development trends in Sutton have been largely influenced by I-89, the town's proximity to vacation and recreation destinations, and the rural atmosphere enjoyed in Sutton. It is likely that these factors will continue to influence the future development of Sutton.

This Transportation Chapter reaffirms a commitment to the preservation of the rural and open space character of Sutton and seeks to provide an integrated system of transportation for the 21<sup>st</sup> Century that will minimize traffic congestion and promote an attractive entry corridor and a vibrant community.

Rural character and sense of place are important components to a high quality of life in Sutton. Sutton's rural atmosphere is defined by its scenic roads, historic stonewalls, and villages. Sutton residents enjoy and treasure the ability to walk, hike, and cross-country ski throughout the villages, quiet back roads, and recreational trails. These features are equally important in the identity of the community and need to be protected and preserved. However, as development continues, many are concerned that Sutton's traditional rural atmosphere and unique sense of place will slowly erode. This chapter hopes to identify these important transportation infrastructure resources and propose strategies to preserve and enhance them.

Planning for future transportation needs should not only accommodate anticipated future growth of the town, but also help insure that development occurs in a responsible manner. Through comprehensive planning and construction of identified transportation improvements, the Town will develop a transportation network that will meet the needs of the community. Sound and thoughtful transportation planning is an essential part of guiding development in order to preserve valued features of the community and achieve and enhance community goals.

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

### **FUNCTIONAL HIGHWAY CLASSIFICATIONS**

One method by which public roadways are classified, relevant to long range planning of roadway improvements, is on the basis of primary function or the roadway's relation to the community transportation system as a whole. These divisions are used to determine roadway design standards. The five basic functional classifications are described below.

### **Principal Arterial**

Principal arterial roadways form the basic framework of the State roadway system. They primarily function as the main routes for interstate commerce and traffic. In addition, they also link major geographic and urban areas to economic districts of the State. Ideally, access to these roads by abutting parcels is not permitted. I-89 is an example of a Principal Arterial Highway.

### **Minor Arterial**

These roadways serve as long distance traffic movements and are secondary to primary arterial roadways in that minor arterial primarily serve as links between major population areas, or between distinct geographic and economic regions. There are no Minor Arterial Highways in Sutton.

### **Major Collectors**

These roadways differ from arterial roadways due to size and general service area. Collectors serve traffic in a specific area, whereas arterials generally serve traffic moving through an area. Thus, average trip lengths on collectors are shorter than trips on arterials. Furthermore, collectors gather traffic from local roads and streets and distribute them to the arterial. There are no Major Collector Highways in Sutton.

### **Minor Collector**

These roads provide access to smaller communities within a geographic area or economic region. They may link locally important trip generators, such as shopping centers, to surrounding rural areas. They also serve as links between two or more major collectors. NH 114 is an example of Minor Collector Highway.

### **Local Roads**

These roads and streets are used primarily to provide access to adjacent properties. These roads have numerous turning movements in and out of abutting driveways and curb cuts. Rowell Hill Road, Old Blaisdell Road, and Birch Hill Road are examples of Local Roads.

## **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). 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 an example of 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 114 is an example of a Class II Highway.

**Class III, Recreational Highways**

This designation is assigned to all roads leading to, and within, state reservations designated by the New Hampshire Legislature. The NHDOT assumes all responsibility for construction and maintenance. The State Park Beach Road is an example of a Recreational Highway.

**Class IV, Urban Highways**

This designation is assigned to all highways within the compact areas of municipalities listed in RSA 229:5, V. The compact section of any city or town shall be the territory within such city or town where the frontage on any highway, in the opinion of the DOT Commissioner, is mainly occupied by dwellings or buildings where business is conducted, throughout the year. No highway reclassification from Class I or II to Class IV shall take effect until all rehabilitation needed to return the highway surface to reputable condition has been completed by the State. Sutton does not have any Class IV Highways.

**Class V, Rural (Town) Highways**

This classification consists of all traveled highways that the town or city has the duty to maintain regularly. Baker Road, Shaker Road, and Gile Pond 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 in suitable condition for travel for more than 5 years. Dodge Hill Road, Eaton Grange Road, and portions of Dodge Hill 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 Sutton.

**Sutton Roadway Mileage by Classification**

<b>Road Classification</b>	<b>Description</b>	<b>Miles 1998</b>
Interstate		9.690
Class I	Trunk Line Highway	0.751
Class II	State Aid Highway	11.374
Class III	Recreational Roads	0.590
Class IV	Urban Highways	0.000
Class V	Rural Highways	63.036
Class VI	Unmaintained	13.571

	Highways	
Total		99.012

Source: New Hampshire Department of Transportation 1/1/98 Report

**TRAFFIC COUNT DATA**

The majority of traffic counts conducted by the NH Department of Transportation (NHDOT) and the Central NH Regional Planning Commission (CNHRPC) are non-permanent counts. These counts are normally collected over a period of three to seven days between the months of May and October. The Towns themselves select the roads to which counts are to be conducted on. The selection process involves the Selectmen, the Road Agent, the Planning Board, and the Police Department. The traffic counters operate by sensing air pulses that are created when vehicles pass over the rubber tubes that have been stretched across the roadway and are connected to the traffic counters.

As with any mechanical counting device, traffic counts are prone to a variety of errors being introduced into the count. The rubber tube may experience a failure, which could end the count prematurely or simply cause the machine to under or over count the vehicles passing over it. Due to the short counting period, there could be a local gathering that we (CNHRPC or NHDOT) were not aware of that could artificially elevate or lower the count. Other factors that can contribute to error include busy roads, vehicles turning near traffic counters, trucks, or slow travel speeds. Some of these errors can be adjusted for using other data, but those adjustments are not made for all counts. In general, traffic counts, particularly older counts, should be used as a general guide for how many vehicles are utilizing a given roadway.

CNHRPC has monitored traffic at 40 locations in Sutton from 1994-2003. **Appendix ?** shows the location of traffic counts done on Sutton roads and what the counts were. The **Traffic Count and Bridge Location Map** gives a better understanding of where these counts were conducted in the community.

Regular monitoring of traffic during peak times is critical in the planning process, as accurate projections are required for transportation and land use planning. The time of year when the traffic counts are conducted are also important for future planning use, especially near the school when it is in session.

**Goal:**

Utilize traffic count data to identify areas that may become impacted in the future by development.

**Recommendations:**

- In locations where traffic has increased significantly, land use regulations should be closely examined and modified to best maintain and promote an efficient transportation network.
- Sutton should work with CNHRPC to identify and conduct traffic counts on roads of concern in the community on an annual basis.

- The annual traffic count data should be included in the town report.
- The Road Agent and the Board of Selectmen should use the traffic count data to help prioritize road maintenance projects

**ACCIDENT LOCATIONS**

One of the most obvious methods of identifying where transportation improvements are needed is to analyze the location and frequency that occur in the community. The data below, as well as the **Accident Location Map**, provides a quick picture of known automobile accident locations, which may be due, in part, to road conditions.

**Accidents in Sutton January 1996 – December 2003**

<b>Year</b>	<b># of Accidents</b>
1996	17
1997	14
1998	18
1999	33
2000	27
2001	21
2002	42
2003	24
Total	196

Source: Sutton Police Department, June 2004  
 XX of the total number of accidents occurred on I-89.

**Goal:**

To reduce the number of accidents in Town that may be caused by unsafe road conditions or the current transportation infrastructure.

**Recommendations:**

- Use the accident location information to identify and prioritize areas that need improvement because of safety concerns.
- The Road Agent and Road Committee should annually review accident locations and determine enhancements that could be made to improve safety. This list of enhancements should be submitted to the Planning Board and Board of Selectmen for review and endorsement.
- The Police Department and Highway 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.

**BRIDGE NETWORK**

Bridges are a key component of the highway system, as they connect road segments across streams, lakes, rivers, and other roads. Bridges are the most expensive sections of roads and the lack of adequate bridges creates transportation bottlenecks. Currently, there are a total of twenty-three bridges in the Town of Sutton.

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.

The table below, as well as the **Traffic Count and Bridge Location Map**, provides more detailed information on the twenty-three bridges located in Sutton.

**Sutton Bridge Network**

<b>Bridge</b>	<b>Feature Crossed</b>	<b>FSR</b>	<b>Functionally Obsolete or Structurally Deficient</b>	<b>Year Built</b>	<b>Owner</b>
King Hill Road	Brook	97.0		1996	Town
I-89 SB	North Hominy Pot Rd.	92.8	FO	1967	State
King Hill Road	Brook	97.0		1996	Town
I-89 NB	North Hominy Pot Rd.	93.5	FO	1967	State
Felch Road	Lion Brook	51.7	FO	1983	Town
Hominy Pot Road	Lion Brook	92.5		1996	Town
Main Street	Kings Brook	58.8	FO	1935	Town
Chalk Pond Road (Main Street)	Lane River	86.0		1990	Town
Wadleigh Hill Road	Lane River	61.0	FO	1985	Town
I-89 SB	NH 114	94.8		1967	State
I-89 NB	NH 114	84.4		1967	State
Penacook Road	Kezar Lake Outlet	77.7		1940	State
NH 114	Lane River	88.4		1932	State
I-89 SB	Gile Pond Road	96.0		1967	State
I-89 NB	Gile Pond Road	94.9		1967	State
Baker Road (culvert)	Cascade Brook	39.9	SD	1997	Town
Cotton Road	Baker Brook	21.7	SD	1945	Town

Roby Road	Lane River	37.8	SD	2002	Town
Stevens Brook (culvert)	Stevens Brook	96.8		1997	Town
Morse Loop	Brook	52.5		1988	Town
I-89 NB	East Sutton Road	90.5	FO	1967	State
East Sutton Road	Stevens Brook	41.0	SD*	1997	Town
I-89 SB	East Sutton Road	90.1	FO	1967	State

Source: NHDOT Mini Bridge List, 1997; NHDOT Municipal Red List Bridge Summary, 2001

\* Has been redone since rating

In the past few years, there have been two local bridge projects – the Penacook Bridge project and the Roby Road Bridge project. The Bridge Network, which encompasses Town-owned and State-owned bridges, is an important and necessary component of the comprehensive transportation infrastructure.

**Goal:**

To ensure a safe, reliable, and efficient system of bridges that will meet the present and future transportation needs of the Town.

**Recommendations:**

- Work with NHDOT to repair, replace, and/or upgrade bridges that have a FSR of less than 80.
- The Town Road Agent should continue to annually inspect the bridges in Town that are Town-owned and provide a status report to the Board of Selectmen and NHDOT for their review.

**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 requires all newly built private roads to be designed and built to town road standards. The residents living along or owning land on a private road are responsible for the roads maintenance

The following is a list of private roads within the Town of Sutton. These can also be seen in the **Private Road, Class V Gravel Road, Scenic Road, and Class VI Road Location Map.**

**Private Roads in Sutton**

Summit Road  
 Morgan Lane  
 Sap House Road  
 Cottage Lane  
 Bailey Road  
 Tillinghast Road

Shaker Heights  
 Southfield Road  
 Saddleback Road  
 Fox Chase Road  
 Twin Oaks Road  
 Mountainside Drive

The Town of Sutton has 12 roads that are currently classified as private roads. Some of the Private Roads in Town are inspected periodically by the Road Agent, as arranged with the developer and/or abutting landowners. These periodic inspections are important to maintain a quality transportation system.

**Goal:**

To ensure the quality of all roads within the Town of Sutton, regardless of whether they are public or private.

**Recommendations:**

- The Road Agent, Police Department, and Fire Department should work with the residents of private roads and annually review all private roads to make sure that they meet safety standards.
- The approval for the development of new Private Roads by the Planning Board should be discouraged.
- The Subdivision Regulations should specify that new Private Roads must be built to Town Road Standards.
- Sutton should create a Private Roads Policy that would outline the conditions under which the Town would consider accepting a pre-existing Private Road as a Town road.
- Before a building permit can be issued for lots along Private Roads, it should be required that a waiver be signed by the applicant acknowledging that the Town has no responsibility to provide municipal services along the road.

**GRAVEL AND SCENIC ROADS**

A major component of a Town's rural character are its gravel and Scenic Roads. These roads help to retain a sense of history and rural quality that residents have indicated a strong desire to maintain in Sutton.

The Town of Sutton has a mix of paved and/or gravel Class V roads on which to travel, most of which follow their original right-of-way that was laid out by the town decades ago. This diversity allows Sutton to retain its historic past while, to some extent, acknowledging growth and infrastructure needs. The preservation of gravel roads will help to ensure that the Town honors its history and original design.

In New Hampshire, communities have the ability to protect the character of specific scenic roads by enacting the provisions of RSA 231:157 at annual Town Meeting. Any Class IV, V, or VI highway can be designated a Scenic Road using the procedure in RSA 231:157. Ten people who are either Town voters, or who own land abutting the road (even though not voters) may petition. The voters of the Town may, at any annual or special town meeting, by vote designate the road as a Scenic Road. A town may rescind its designation of a Scenic Road using the same procedure.

The effect that Scenic Road designation does have 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, 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 Highway Agent wishes to cut trees that have been declared a "nuisance" under RSA 231:145-146, or which, in the Road Agent's 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 does not prohibit landowners from the cutting of trees or removal of stone walls (RSA 231:158, IV) on their property.

In recognition of the fact that State law itself is not very stringent, the New Hampshire Legislature added RSA 231:158, V, in 1991, 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 or by inserting criteria for the planning board to use in deciding whether to grant permission. Though some critics of the law believe it to be too weak, RSA 231:157 remains one of the few techniques available for the preservation of culturally important and scenic roads. The Town of Sutton currently has 10 designated Scenic Roads, which were voted on at the 1986 Town Meeting and are listed below.

**Scenic Roads**

Hominy Pot Road	Keyser Street
Penacook Road	Harvey Road
Corporation Hill Road	Wadleigh Hill Road
Music Hill Road	Shadow Hill Road
North Road	Blaisdell Hill Road

The **Private Road, Class V Gravel Road, Scenic Road, and Class VI Road Location Map** shows the location of the Town's Class V gravel roads and Scenic Roads. The diversity of roads in Sutton contributes to the Town's unique and historic atmosphere. Maintaining the gravel roads and designated Scenic Roads will further enhance the character of the community.

**Goal:**

Protect and preserve the existing Class V gravel roads within Town.

**Recommendations:**

- Sutton should encourage the rural quality of gravel roads by limiting the size and scope of development that can occur on and adjacent to the gravel roads through the Zoning Ordinance.
- Gravel roads should continue to be assessed as to their level of safety and traffic by the Road Agent and Road Committee before decisions are made whether or not to pave them.

**Goal:**

Preserve roads in Town designated as Scenic Roads.

**Recommendations:**

- Sutton should do outreach and education about the State Scenic Road Law and what such designation means.

- Sutton should consider identifying roads with scenic vistas and aesthetic qualities, such as stone walls, historic buildings, and farms for Scenic Road designation at Town Meeting.
- Planning Board should research additional methods of protecting and preserving designated Scenic Roads.

## **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. It is the policy of the Sutton Board of Selectmen that no building permit will be authorized if driveway access to the structure from the Class VI road begins more than six hundred (600) feet from the intersection of the Class VI road and the Class V or better road, which gives access to said Class VI road. The Board of Selectmen can waive the 600 foot requirement if it is not contrary to the spirit and intent of the policy or where the applicant brings the relevant portion of the Class VI road to Class V standards. If the Board of Selectmen does vote to authorize building along a Class VI Road, the Town does not have to do any maintenance on the Class VI Road.

In an effort to expand recreational trail opportunities communities can look at Class VI roads as candidates for designation as Class A Trails. Class VI Roads often make good trails because they have little or no development associated with them, are scenic, have no inherent liability concerns, public access is already allowed, and they serve to connect large areas of open space, conservation, and/or agricultural lands. By reclassifying certain Class VI roadways that meet this criteria to Class A Trails, the community could be taking a step in creating a community-wide system of greenway trails.

In 1993, the State enacted RSA 231-A, which allows municipalities to designate Class V and VI roadways as "Class A" trailways. With such a designation, the roadways are established as municipal trails. This designation will create ownership and responsibility for the trail by the Town. Class A Trails allow abutting landowners continued use of the right-of-way for vehicular use to existing structures, timber, or agricultural operations, but any new building or development is prohibited. Unlike Class VI roads that the Town does not maintain, Towns, at their option, may conduct maintenance on Class A Trails.

Class A trails can be established at the annual Town Meeting by including a warrant article on the specific proposal. In most towns, the proposal needs a simple majority in order to pass. In addition, Class A and B trail status can be rescinded through a vote at the Town Meeting.

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 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.

See the **Private Road, Class V Gravel Road, Scenic Road, and Class VI Road Location Map** for more information about the location of Class VI Roads in Sutton. Class VI roads are an important component of a Towns transportation infrastructure because they personify the community's rural character and provide vast recreational opportunities.

**Goal:**

To encourage, support, and expand the Towns trail network.

**Recommendations:**

- Research Class VI Roads that might be good candidates for Class A Trail designation because they connect open space, forest, conservation, and/or agricultural land, would connect to existing trails, and/or contain scenic attributes.

**Goal:**

Discourage inappropriate development along Class VI roads.

**Recommendations:**

- Sutton should maintain building policies for all Class VI roads. The Class VI road policy Planning Board adopts should distinguish between building on existing lots and creating new lots.
- The subdivision regulations should be clarified to ensure that any subdivision on a Class VI road will be deemed "scattered and premature" unless and until some provision is made, via a decision of the Selectmen, to improve the road.
- The Planning Board should look into the possibility of large-lot zoning (10-50 acres) and/or conservation/open space zoning in areas of town with Class VI road frontage.

**PEDESTRIAN INFRASTRUCTURE**

Pedestrian facilities, such as paved sidewalks and gravel walking paths, are critical features for roadways with high volumes of traffic or high speeds. As Sutton grows, this subject will become more relevant. The primary purpose of sidewalks is to improve safety for pedestrians by separating them from the travel lanes of roadways. In addition to this, 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 rural and village settings.

Speed limits have been the usual method of 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 (RSA 265:63, (a)) and in school zones (265:60, II (a)).

Crosswalks are a form of traffic regulation and therefore, must be approved by the Board of Selectmen. Sutton has one crosswalk on Chalk Pond Road at Main Street. Crosswalks 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.

Many communities in the United States are now exploring ways to safely encourage pedestrians and other non-motorized modes of travel to share roads with motorized traffic. These measures, collectively called Traffic Calming, use the physical design of the roadway to prevent inappropriate automobile speeds. They are not intended for roads where the primary objective is to move traffic quickly through an area. Most often they are used in residential or downtown areas where residents see the road as part of their neighborhood and a place where walking, recreation, and social interaction can safely coexist with motorized traffic.

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 village environments. The potential benefits of Traffic Calming include reduced traffic speeds, reduced traffic volumes - by discouraging "cut-through" traffic on residential streets - and often improved aesthetic quality of streets.

An example of some physical traffic calming techniques include: speed humps, speed tables, and raised crosswalks - All of these techniques involve raising the height of the pavement in a more subtle fashion than with a speed bump, allowing vehicles to pass over them at the intended speed of the road, but preventing excessive speeds and alerting drivers to the existence of non-motorized users. Passive traffic calming techniques include signage warning motorists of pedestrian activity, reduced speed signs, dense development signs, etc. The signs should help to alert motorists that they are not the only users of the roadways.

Residents of Sutton 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.

**Goal:**

To reduce the travel speed, as well as the volume, of motor vehicles on residential neighborhood roads within Town while increasing safety for pedestrians.

**Recommendations:**

- Use innovative methods to increase safety, which could include such things as raised crosswalks, increased signage, or walking paths separated from the road by landscaping, were appropriate.
- Investigate the use of appropriate traffic calming measures to discourage high speeds and to direct traffic around neighborhoods.

- Sutton should investigate establishing a standard of 25 mph or less in densely developed or rural residential neighborhoods that have seen a large increase in traffic and numerous motor vehicle accidents.

## **PARKING AND PUBLIC TRANSPORTATION**

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

Safe and adequate parking facilities, or the lack thereof, is one of the concerns in the Sutton Villages. The key is to not only have a pedestrian infrastructure in place, if needed, but to also have accessible and convenient parking available.

There is currently no regularly scheduled public transportation available to or from Sutton. The only service available is provided by Concord Area Transit and the Kearsarge Area Council on Aging, which provides rides on a as-needed-basis to elderly residents from Sutton to surrounding communities.

The ability for all residents to move freely around Town and immediate area encourages a greater sense of community, as well as fostering economic development and vitality.

### **Goal:**

To have adequate and safe parking areas in key locations in Town to encourage economic activity and ease of use and access to facilities and buildings.

### **Recommendations:**

- Sutton should inventory all existing municipal 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 Road Agent, in conjunction with the Police Department, should create a method for recording resident complaints about unsafe public parking areas or those in need of maintenance.
- Sutton should make sure that its municipal parking facilities throughout Town meet the Americans with Disabilities Act (ADA) requirements.

### **Goal:**

To ensure that transportation options and services are available to all residents of Sutton.

### **Recommendation:**

- Sutton should investigate if there is a need and interest in creating regularly scheduled public transportation service in Sutton.

## **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. Often, roadways are designed only with motor vehicles in mind and Sutton is no exception to this. Transportation decisions are usually made solely for those who can drive and have access to an automobile. This leaves out transportation options for 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 recreational purposes without driving. The **Bicycle Infrastructure Map** shows the Regional bicycle Network, as well a proposed Local Bicycle Network here in Sutton. As the concern over air quality, traffic congestion, and other 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.

### **Goal:**

Encourage the planning and development of a safe, accessible, and efficient regional and local bicycle route system for commuting and recreational purposes.

### **Recommendations:**

- Sutton should adopt and support the Regional Bicycle Network and take all available steps to help implement it within Town.
- A Local Bicycle Network should be developed that connects with the regional network and incorporates key locations within Town, such as the library, State park, Horse Beach, schools, etc.
- Sutton should research funding options for creating, maintaining, and providing signage for a local bicycle network.
- The Highway Department should consider widening, striping, and paving the shoulders of Town roads to accommodate bike lanes when doing regular road maintenance and construction.

## **TOWN ROAD POLICY**

How streets are designed and built is a key part of well-planned, orderly growth. The design and construction of roads affects the visual quality of communities, public safety, and quality of life for years to come. Road design standards can fit with natural contours, that preserves natural features, and meets other community objectives. One-size fits all design standards often leads 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. Sensible 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.

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 and take into consideration land use, construction, and future maintenance.

The Town currently requires a traffic impact analysis, when necessary, of proposed developments allowing the design of the road to match the level of need. It is the Planning Board that requires developers to do an analysis when a project is being considered.

Many of the roads in Sutton have very little traffic on them and would be considered very low-volume local roads. A very low-volume local road is a road that is functionally classified as a local road and has a design average daily traffic volume of 400 vehicles per day or less. The primary function of these roads is to provide access to residences, farms, businesses, or other abutting property, rather than to serve through traffic. Roads that are very low-volume local roads should be between 18-22 feet in width, not including travel and shoulder width. See the AASHTO 2001 publication entitled “Guidelines for Geometric Design of Very Low-Volume Local Roads (ADT ≤ 400)” for more specific design guidelines for these types of roads.

Clear design requirements for Town roads help allow the Planning Board and developer 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, and allows the Town to retain its rural look and feel while accommodating growth.

**Goal:**

To have town road construction standards that enhance the uniqueness of Sutton's current and future transportation infrastructure.

**Recommendations:**

- The Town Road Agent and Road Committee should compare the existing Town Road standards to that of other Towns similar to Sutton and make recommendations for changes/modifications, based on that review, to the Planning Board.
- Aesthetic and landscaping requirements should be researched and incorporated into the Town Road Construction standards.
- Sutton should review road design standards for Low-Volume Roads and see if they should be incorporated into the Roads Design Standards for the Town.
- 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 perhaps minimize the amount of paved area to reduce storm water runoff, and thereby protecting water resources and reducing construction costs.
- Sutton should research the idea of having new roads in rural areas be consistent in design with the rural collector roads that they are being built off of.

- A provision should be added to the Subdivision Regulations that requires all new roads to be inspected by a Town-selected engineer as the road is being built. The cost of these inspections will be paid by the applicant.
- The Road Agent and Road Committee should be consulted on all proposed roads before the Planning Board for feedback as early in the process as possible.

## **ROAD MANAGEMENT PLAN**

The Sutton Highway Department has an informal road management plan that helps guide the activities of the Department and helps plan for future activities. This plan is intended for use as a guide for major roadway improvements. It may become necessary to change or modify the plan for certain projects, as damaging storms, budget restrictions, or unexpected situations can have an impact on the timing of projects.

The financing of and planning for transportation maintenance and improvements can be difficult to accomplish in small communities with limited resources, which is why having a long-range plan will help prioritize and fund such projects.

### **Goal:**

Sutton should consider having a formal, comprehensive, and up-to-date road management plan.

### **Recommendations:**

- The Town Road Agent and the Road Committee should review and amend the Road Management Plan on an annual basis and present the Plan to the Board of Selectmen for review.
- Before the Planning Board considers any subdivisions, they should consult with the Road Management Plan to ensure that the proposed plans are in accord with the Plan.
- Sutton should work with regional, state, and federal agencies and programs to prepare a comprehensive transportation plan that includes funding availability for the desired projects and programs.

## **COMMON TRANSPORTATION MYTHS, MISTAKES, AND ASSUMPTIONS TO AVOID**

As Sutton continues to maintain and expand its roads network, some of the following points should be taken into consideration.

### **Myth: The sole purpose of streets is vehicle traffic.**

If roads are only looked at for moving traffic and vehicle access then we end up designing streets fit only for cars. This is acceptable for the interstate, but not for streets whose main function is as a setting around which residential and business life is built.

### **Myth: Roads must be designed to meet traffic.**

If a Town makes a commitment to upgrade a road to meet traffic projections, the Town is committing to a goal that says present trends are acceptable and should continue.

**Mistake: Failure to recognize that road upgrades cause traffic.**

Road "improvements" can be a vicious circle - upgrades attract development, causing more traffic, thus upping those "traffic trends", thus raising "future traffic projections", creating a push for even more upgrades, and so on. Traffic will eventually expand to fill available road space. If a town truly wants a local village or neighborhood road, build it to the minimum level for meeting the current local need.

**Myth: Wider and straighter equals better.**

Unexpected bad spots in the road that catch a driver off guard should be looked at if safety is in question. But if an entire stretch of road is "upgraded" all that will happen is that drivers on that road will drive faster and take more risks. Speed limit signs have proven the least effective way to slow people down and there is no evidence that accident rates go down due to overall road upgrades.

**Mistake: Failure to include deliberate slow-down features in road design standards.**

Slow-down design techniques could include: reduced road width; reduced straight-a-way length; reduced driver sight lines through curves in the road, both horizontal and vertical, especially those that honor "natural" topography; cul-de-sacs or shared driveways; and landscaped roundabouts.

**Mistake: Uniform and stringent road specifications.**

Success at getting livable neighborhood streets requires not only managing those roads for slower speeds, but also managing other roads for taking through-traffic. Requiring every street to be built like a thoroughfare is a guarantee of failure at creating this livability. A road "hierarchy" should be created that matches roads to their function in order to have appropriate roads built for each level of the hierarchy. Low order in the hierarchy should not be thought of as low quality. On the contrary, if "quality" relates to the roads function within the overall system, narrower and cheaper is often better. Spell out the hierarchy and associated standards in the Towns regulations.

**Mistake: Design standards that ignore road landscaping.**

Most site plan regulations include landscaping for a development itself, why not landscaping standards for roads? Trees clearly add to livability and a sense of neighborhood. But more than that, trees within the right-of-way contribute to a slower "psychological speed" or "feel" to a street, thus reducing speeds. Of course the cheapest and most natural landscaping is to conserve the existing trees when a road is built or altered.

**Assumption: The aim of road design is to serve the interests of travelers.**

The needs of people who want to travel quickly through Town are met well by the State highways. Local roads, on the other hand, are for the people who live in a Town. The more local a street is in the road "hierarchy", the more it should be designed around the rights and needs of the people of live and work along it - their safety and quality of life should come first.

**Mistake: Ignoring the interests of bicyclists and pedestrians.**

Good transportation planning should encourage walking and biking. These activities occur, and will continue to do so, whether or not proper consideration and accommodations have been made for them. Ignoring their use of the road may create safety hazards on the roadways for drivers, walkers, and bicyclists.

**STRATEGIES TO MEET TRANSPORTATION NEEDS**

## TO BE MOVED TO AN APPENDIX

Transportation, which includes bicycle lanes and walking paths, bridges, trails, as well as roads, is a very important part of the communities infrastructure. The creation, maintenance, and improvements of these systems is necessary for Sutton to meet the needs of its residents and provide a reliable transportation network. The following strategies should be reviewed by the Town as potential opportunities to meet the transportation goals set out in this chapter of the Master Plan.

**Capital Reserve Funds**

This is 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.

**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. Sutton received approximately \$94,405 of highway block grant money in 2003.

**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. 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 collect 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.

### **Local Option Fee for Transportation Improvements**

New Hampshire RSA 261:153 VI (a) grants municipalities the ability to institute a surcharge on all motor vehicle registrations for the purpose of a 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 \$.50 allowed to be reserved for administering the program. Based upon the approximate number of motor vehicles registered in Sutton in 2003 (2,173 vehicles), this could yield \$9,778 annually in additional funding without increasing property taxes.

### **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.

### **State Transportation Improvement Program**

The TIP is a comprehensive program that involves municipalities, regional planning commissions, the NHDOT, the Governors Advisory Council on Intermodal Transportation (GACIT), the New Hampshire Governor and Legislature, and the Federal government. The regional TIP culminates in a document that contains proposed transportation projects in the central New Hampshire region that are recommended for inclusion into the New Hampshire 10-Year Statewide Transportation Improvement Program (TIP). The TIP process typically starts at the regional planning commission level, although it is beneficial if the process is first introduced at the municipal level. All regional planning commissions within New Hampshire prepare a TIP every two years based on input from local municipalities, NHDOT, and each planning commissions Transportation Advisory Committee (TAC). The NHDOT then takes the regional TIPs and incorporates the projects with the highest level of support into the 10-Year TIP, adding their own input and special projects. The 10-Year TIP then becomes the transportation project guide for the upcoming years.

### **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.

### **Transportation Enhancement Funds (TE)**

The 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. 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;
- Safety and education activities for bicyclists and pedestrians;
- Scenic or historic highway programs;
- Landscaping and other scenic beautification;
- Establishment of transportation museums.

### **Transportation Equity Act for the 21<sup>st</sup> 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 a six 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.

## **CONCLUSION**

Bearing in mind the commitment to the preservation of the rural character of Sutton and the disruption to the quality of life that comes from increased numbers of vehicles on the roads, this Chapter supports a principle that maximizes incentives to retain this rural atmosphere in Sutton. This commitment takes the form of support for such things as traffic calming, slower speeds, preservation of the character of roads with scenic attributes, development of bike lanes, proper consideration of road networks as part of neighborhoods, and pedestrian paths and passageways, when needed. Movement in Sutton in all of these directions would result in the improvement of the transportation infrastructure and the protection and preservation of the open space and rural aesthetic character valued by the community.

The overall goal of the Chapter is to maintain a convenient and efficient transportation network to allow the safe transfer of goods and people throughout Sutton, while protecting the aesthetic and scenic qualities of roads within Town. The thrust of the work in the Transportation Chapter is an attempt to articulate a vision and a means by which that vision can be achieved for the Town.