TRANSPORTATION

For the Town of Allenstown

Vision and Mission Statement of the Chapter

Promote the improvement of public roads in Allenstown; encourage a system of transportation that will meet the mobility needs of all local residents by providing for the efficient movement of people, goods, and services within Allenstown and throughout the region; maintain a commitment to the rural and historic character of the community; and provide a well-maintained and safe transportation system that meets the functional and aesthetic needs of the community, in a cost-effective manner.

A safe and efficient transportation network is an essential component for the development of a well-functioning and accessible community. Land-use and transportation are inextricably linked. Informed and thoughtful transportation planning is an essential part of guiding development in order to preserve valued features of the community while achieving and enhancing community goals. Allenstown's transportation system and its connections to the regional and state network provide access to the goods and services that residents and commerce require. It plays a large role in the development of the town, and in defining the town's character. With all future development, balancing the desires of residents to maintain Allenstown's rural character with the increasing demand on the transportation system will be vital to the Town's future.

The existing transportation network has a profound influence on the location and development of land use throughout the town. Development trends in Allenstown have traditionally been influenced by NH Route 3 and NH Route 28. Suncook Village shared with the Town of Pembroke has long been the heart of the community. The strip commercial located along NH 3 and along a portion on NH 28 has provided services to residents of Allenstown and residents of portions of Pembroke, Hooksett an Epsom. In addition, a number of small scale industrial and construction related businesses are located on NH 28 in close proximity to NH 3. Moderate to high density residential development is found in Suncook Village and in the mobile home parks near the intersection of NH 28 and on Deerfield Road. The remainder of the community

consists of Bear Brook State Park and low density residential areas north along NH 28 and along Deerfield Road.

All land use activities, regardless of scale or type require access to adequate transportation routes and are most likely to locate where access is the easiest and least costly. Due to the financial commitment required for the improvement and maintenance of an adequate transportation system and the direct relationship between land use patterns and traffic circulation, the identification and analysis of current transportation needs is crucial to the orderly accommodation of growth and development. This section of the master plan is intended to provide such an analysis, while also enabling the Town of Allenstown to fully participate in all levels of transportation planning – local, regional, state and federal.

Community Visioning Sessions

Visioning sessions were held in Allenstown in regard to the update of the Master Plan on May 14, 2015 and November 3, 2015. Transportation specific concerns raised pertain to the need for better access control on NH 28 and the need for additional sidewalks in the community. The community is supportive of additional commercial and industrial development in the community along with redevelopment of existing underutilized or low value non-residential properties.

Chapter Principles

This chapter identifies planning policies in relation to transportation patterns and infrastructure based on the following important principles:

Principle 1

An integrated approach to transportation throughout the Town of Allenstown is required with particular attention given to transportation efficiency, safety, competitiveness, social inclusion and environmental sustainability;

Principle 2

Allenstown's principal transportation assets including highways, bridges, sports venues and strategically important travel corridors should be protected and developed;

Principle 3

Investment in the Town of Allenstown's transportation infrastructure should be made in a sustainable and efficient manner in order to promote the social and economic well-being of the Town and its populations;

Principle 4

Future provision for transportation and infrastructure should be firmly integrated with the Town's overall land use strategies;

Principle 5

Enhanced quality of life for all, based on high quality residential, working and recreational environments and sustainable transportation patterns.

EXISTING TRANSPORTATION NETWORK

A key component in planning for future transportation improvements in a community is to carry out a complete inventory of the existing transportation infrastructure serving the town. As previously mentioned, Allenstown's transportation network is dominated by US 3 and NH 28; however, there are a number of different types of roads existent in the town which are equally important to the overall transportation network.

HIGHWAY CLASSIFICATION

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

Of the seven possible state classifications, Allenstown's roads fall into five of these: Class I, Class II, Class III, Class VI and private roads. Figure 1 displays roadway mileage by classification. Allenstown's road system is atypical when compared to most New Hampshire towns, where most mileage is accounted for by Class V roads.

4.06 miles of Class III state maintained roadway is located in Bear Brook State Park, while most of Deerfield Road, School Street, and Main Street/S. Main Street are state maintained Class II roads.

The state provides funding to towns for road maintenance on Class IV and V roads in the form of Highway Block Grant Aid. Table 1 shows the Block Grant Aid Allenstown has received over the last five fiscal cycles.

Table 1: Highway Block Grant Aid Payments for Allenstown

FY	Highway Block Grant Aid Payments
FY 2012	$98,000.50
FY 2013	$76,842.83
FY 2014	$77,185.42
FY 2015	$77,754.91
FY 2016	$82,070.88*

**Estimated*

Figure 1: State Legislative Class of Roads in Allenstown

Class I: Trunk Line Highways *(4.13 miles)*
Consists of all existing or proposed highways on the primary state highway system, excepting all portions of the highways within the compact sections of cities and towns. The state assumes full control and pays costs of construction, reconstruction and maintenance of its sections with the assistance of federal aid.
Class II: State Aid Highways *(4.31 miles)*
All existing or proposed highways on the secondary state highway system, excepting portions of the highways within the compact sections of cities and towns, which are classified as Class IV highways. All sections improved to the state standards are maintained and reconstructed by the state. All other sections must be maintained by the city or town in which they are located until brought up to state standards. The same applies to bridges on Class II highways.
Class III: Recreational Roads *(4.06 miles)*
All roads leading to, and within, state reservations designated by the Legislature. NHDOT assumes full control of reconstruction and maintenance.
Class III-a: New Boating Access Highways *(0.0 miles)*
Defined as new boating access highways from any existing highway to any public water in the state. All Class III-a highways are limited access facilities defined in RSA 230:44. Allenstown does not have any Class III-a roads.
Class IV: Town and City Streets *(0.0 miles)*
Consist of all highways within the compact sections of cities and towns listed in RSA 229:5. Extensions of Class I (excluding turnpikes and interstate portions) and Class II highways through these areas are included in this classification. Allenstown is not included in the designated towns for this classification.
Class V: Rural Highways *(22.91 miles)*
This classification consists of all traveled highways that the town or city has the duty to maintain regularly.
Class VI: Unmaintained Highways *(6.90 miles)*
Unmaintained Highways: This class consists of all other existing public ways, including highways discontinued as open highways and made subject to gates and bars, and highways not maintained and repaired in suitable condition for travel thereon by the town for five (5) or more successive years.
Private Roads *(17.61 miles)*
Private Roads are not part of the town network but many be open to travel.

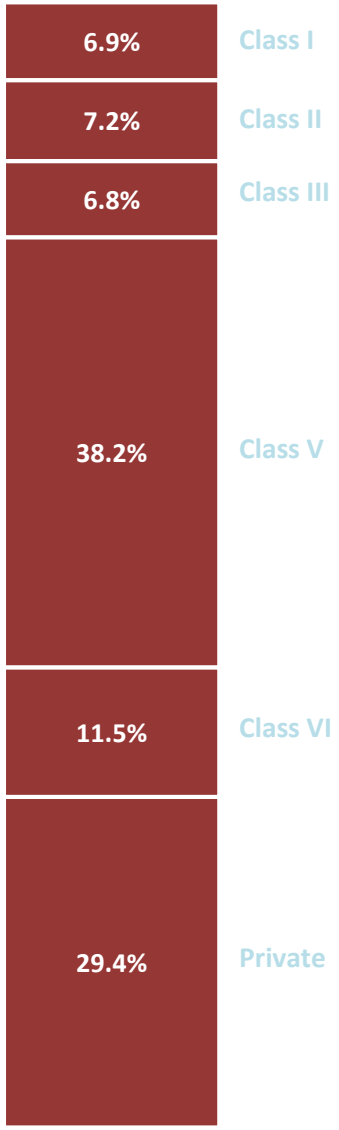
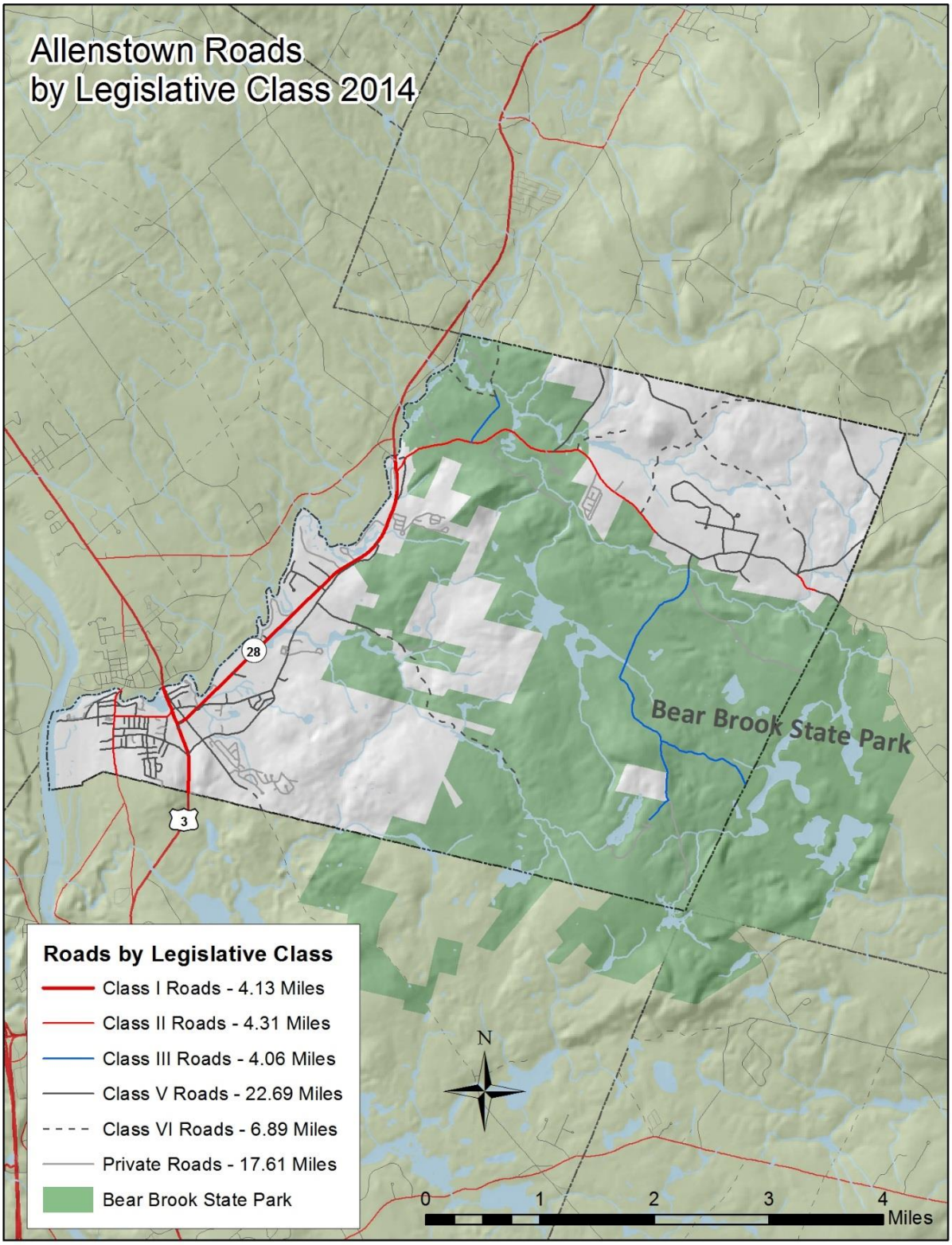


Figure 2: Map of Legislative Roads in Allenstown



Source: NHGRANIT

FUNCTIONAL CLASSIFICATION SYSTEM

The functional classification system identifies roads by the type of service provided and by the role of each highway within the state system based on standards developed by the US Department of Transportation. While the state aid classification system outlined above is the primary basis for determining jurisdiction, the following system is important for determining eligibility for federal funds.

Recognition of the principal function that a highway, road, or street is intended to serve can reduce potential conflicts between land use activities and traffic movements. For example, from a theoretical standpoint, residential development should never be permitted or encouraged to locate along major highways due to the opportunity for direct land use/traffic conflicts. The need for direct access to residential properties causes numerous left turn and crossover movements as well as ingress/egress movements, all of which slow and/or interrupt the smooth flow of traffic, while substantially increasing the potential for accidents to both pedestrians and vehicles. The five basic functional classifications are described below.

Generally, future development in Allenstown should only be permitted to take place at locations where the primary road function is appropriate for the type of development proposed. As part of its Subdivision and Site Plan Review Regulations, the Planning Board should consider the functional classification of any road on which development is proposed to ensure that the proposed development is appropriate for the existing roadway function.

US 3 is classified as a principal arterial while NH 28 is classified as a minor arterial. Atypically in Allenstown, all arterial and collector roads are maintained by the NH DOT, with the exception of a 0.7 mile section of Granite Street from NH 3 to South Main Street. 4.06 miles of functionally classified local roadways are maintained by the NH DOT as Class III.

Figure 3: Functional Class of Roads in Allenstown

Principal Arterial/Controlled Access *(1.04 miles)*
These highways consist of interstates and some primary state routes that 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. Controlled Access is a designation adopted by NHDOT, the effect of which is to minimize the frequency of curb cuts, thereby controlling the amount of traffic crossing lanes and stopping on the road. NH 3 is a good example of a principle arterial roadway that serves the Town of Allenstown.
Minor Arterials *(3.69 miles)*
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.
Major Collectors *(1.46 miles)*
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.
Minor Collector *(4.62 miles)*
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. Deerfield Road serves as a minor collector in Allenstown.
Local Roads *(24.62 miles)*
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.
Scenic Roads *(0.0 miles)*
A major component of a town's rural character can be its unpaved and scenic roads. These roads help to retain a sense of history and rural quality that Allenstown's residents have indicated a strong desire to maintain. The purpose of a designation as a scenic road is to protect the intrinsic qualities of that stretch of road which add to the aesthetic and environmental qualities of an area.
Class VI or Private: *(24.51 miles)*
Not part of town network but may be open to travel.

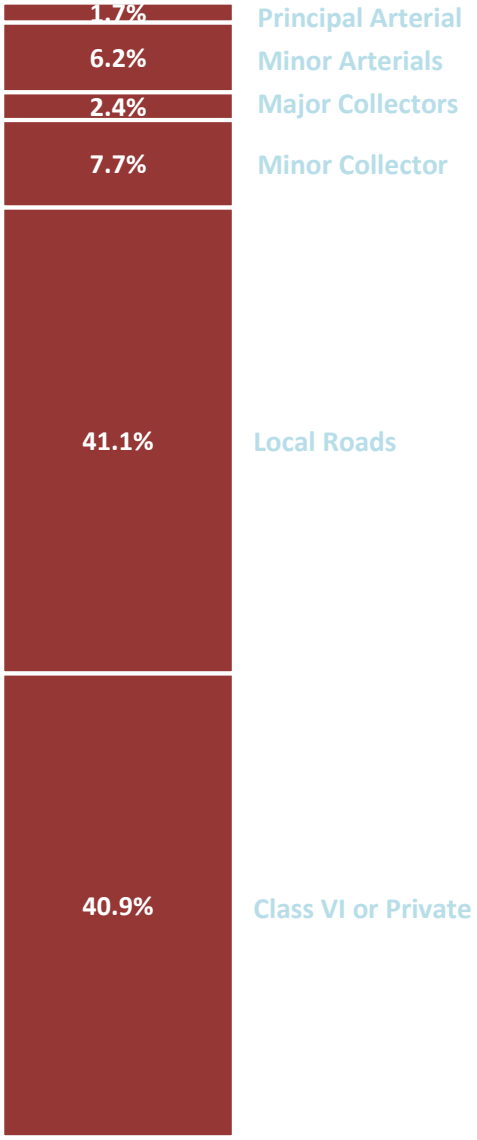
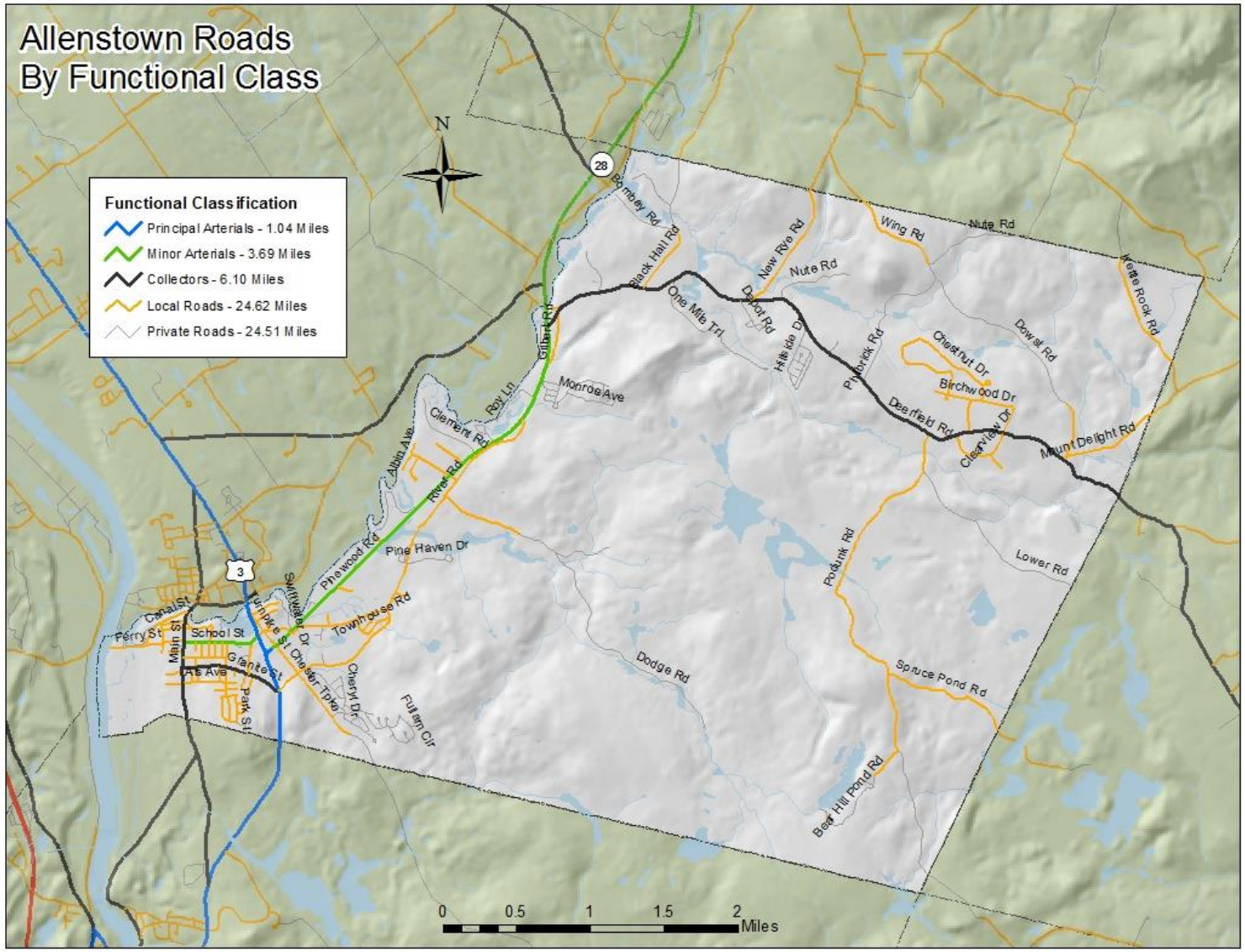


Figure 4: Federal Functional Class of Roads in Allenstown



Source: NHGRANIT

BRIDGE NETWORK

Bridges are a key component of the highway system. Bridges are the most expensive sections of roads, and a lack of adequate bridges can create transportation bottlenecks, which are often difficult to remedy.

The New Hampshire Department of Transportation (NHDOT) maintains an inventory of all bridges in New Hampshire using Federal Sufficiency Ratings (FSR), a nationally accepted method for evaluating bridges. An FSR represents the relative overall effectiveness of a bridge as a modern day transportation facility. With an FSR greater than 80 a bridge is generally accepted to be in good condition overall. 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. These ratings are based on modern, federally accepted standards, and often historic bridges do not meet these standards.

Table TR-3 shows the bridges in Allenstown as listed on the NHDOT Bridge Summary. The classification of Structurally Deficient or Functionally Obsolete does not mean that the bridge is necessarily unsafe for use. Rather, it indicates that the bridge does not meet a particular standard, for example it is a one lane bridge or has a particular feature that is outdated.

The Bridge over the Suncook River on NH 28 is the only bridge listed as deficient in Allenstown. Improvements to this bridge are included in NH State Ten Year Transportation Plan 2017-2026 (draft dated August 26, 2015). "Bridge Rehabilitation to probably include deck replacement and painting of steel girders" is currently programmed for preliminary engineering in 2018-2020 and construction in 2021.

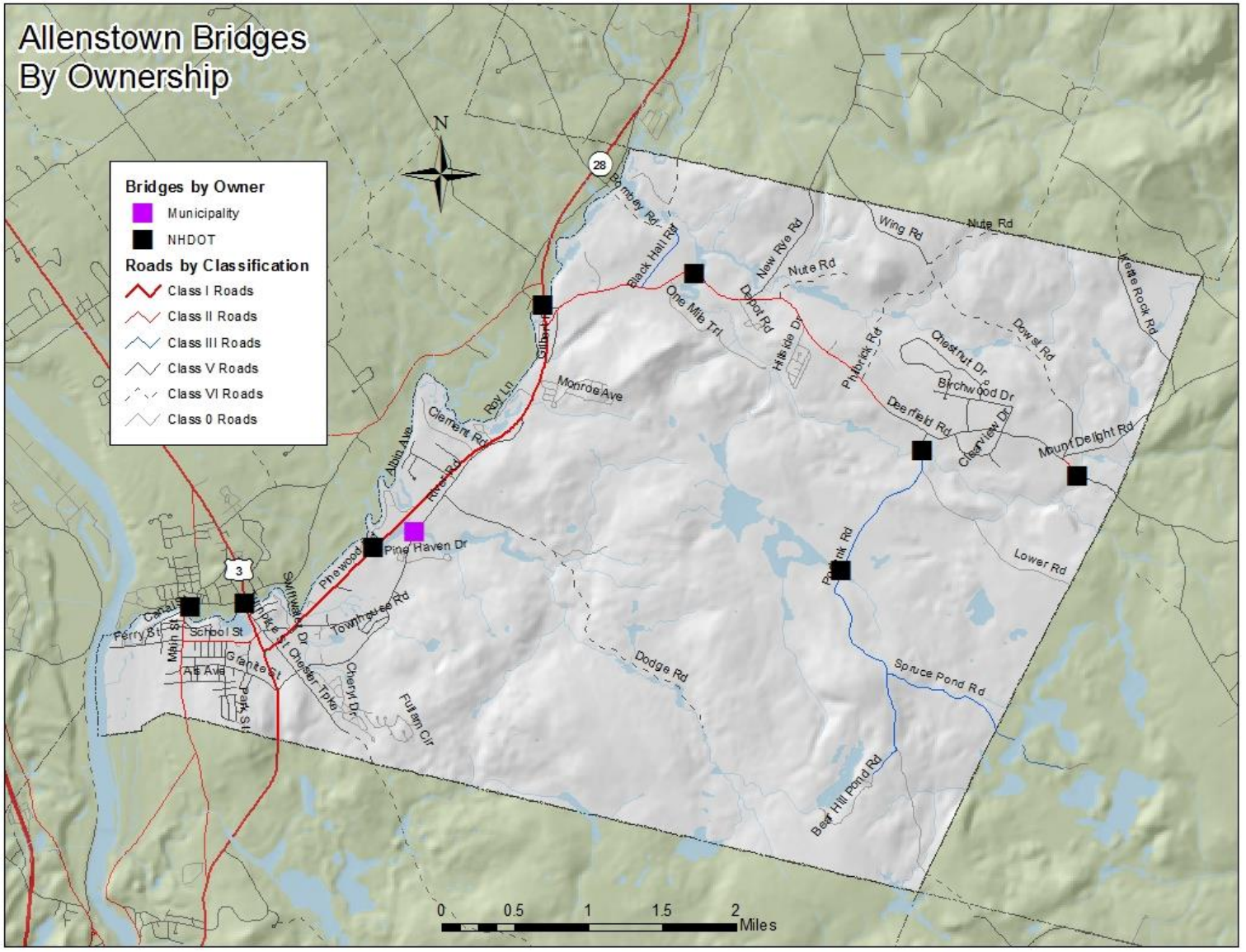
Boat Meadow Brook on River Road is the only listed a town owned bridge and has a FSR of 100.

Table 2: Structurally Deficient or Functionally Obsolete Bridges in Allenstown

Bridge	Location	FSR	Deficiency	Owner	ADT/ Year	Inspection Year
NH 28	Boat Meadow Brook	98.2	NA	NHDOT	8000 / 11	Apr 2013
Main Street	Over Suncook River	93.7	ND	NHDOT	3800 / 11	Jul 2014
US 3	Suncook River	84.9	ND	NHDOT	9100 / 11	Apr 2013
River Road	Boat Meadow Brook	100.0	NA	Town	580 / 11	Jul 2013
NH 28	Suncook River	65.7	SD	NHDOT	6000 / 11	Nov 2014
Deerfield Road	Bear Brook	99.7	ND	NHDOT	2300 / 11	Apr 2013
Podunk Road	Catamount Brook	74.8	NA	NHDOT	20 / 03	Apr 2013
Podunk Road	Bear Brook	95.9	NA	NHDOT	190 / 11	Apr 2013
Deerfield Road	Pease Brook	96.0	NA	NHDOT	850 / 11	Apr 2013

FO= Functionally Obsolete SD= Structurally Deficient ND=Not Deficient
NA=Not Available ADT= Average Daily Traffic

Figure 5: Allenstown Bridges and Culverts



Source: NHGRANIT/NHDOT

TRAFFIC VOLUMES

The Central New Hampshire Regional Planning Commission (CNHRPC) collects traffic count data for the New Hampshire Department of Transportation (NHDOT) in accordance with federal guidelines under the Federal Highway Performance Monitoring System (HPMS).

Figure TR-4 displays the Average Annual Daily Traffic (AADT) volumes for 2008 – 2014, which are published on the NHDOT website at http://www.nh.gov/dot/org/operations/traffic/documents.htm . AADT is a basic measure of traffic demand for a roadway and represents the volume of traffic travelling in both directions. As stated above, CNHRPC provides traffic count data to the NHDOT, who then calculates the AADT by applying correction factors to raw data to account for weekday and seasonal variations in traffic volumes.

Of the sites routinely counted only NH 28 east of NH 3 has shown any increase in the traffic when compared to 2008. The remainder of the locations counted in the community have either shown a small decrease or no change in AADT.

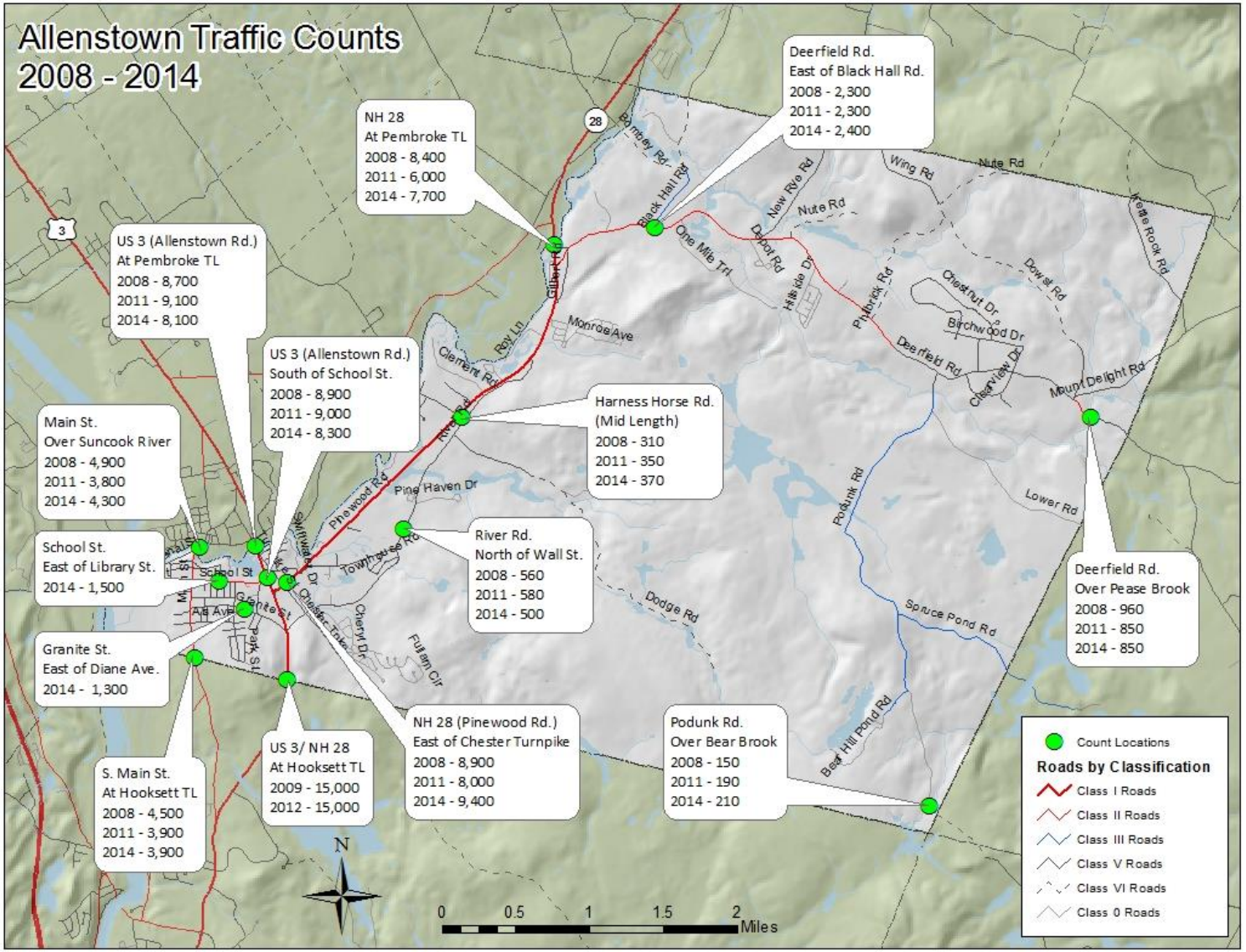
ROADWAY CONDITIONS

Pavement condition data from 2014 was obtained from the NHDOT's Pavement Management Section for state-maintained (Class I and II) roads and is displayed in Figure TR-5. The pavement condition is rated based on its Ride Comfort Index (RCI), which is calculated directly from the average pavement roughness measured in the left and right wheel paths of roadways. With the work recently completed on NH 3, both NH 3 and NH 28 are in good condition in Allenstown with the exception of the Suncook River Bridge on NH 28. Fourth and fifth tier state roads, those last on the list for highway maintenance and repair, are in generally poor condition in Allenstown including Deerfield Road, School Street, and Main Street/South Main Street.

On local, town maintained roads surface conditions vary by location. Naturally, there are issues to be addressed in the Town's road network, particularly due to the increasing costs of maintenance. The Town's Capital Improvement Program should regularly include funding to support a regular repaving and maintenance schedule.

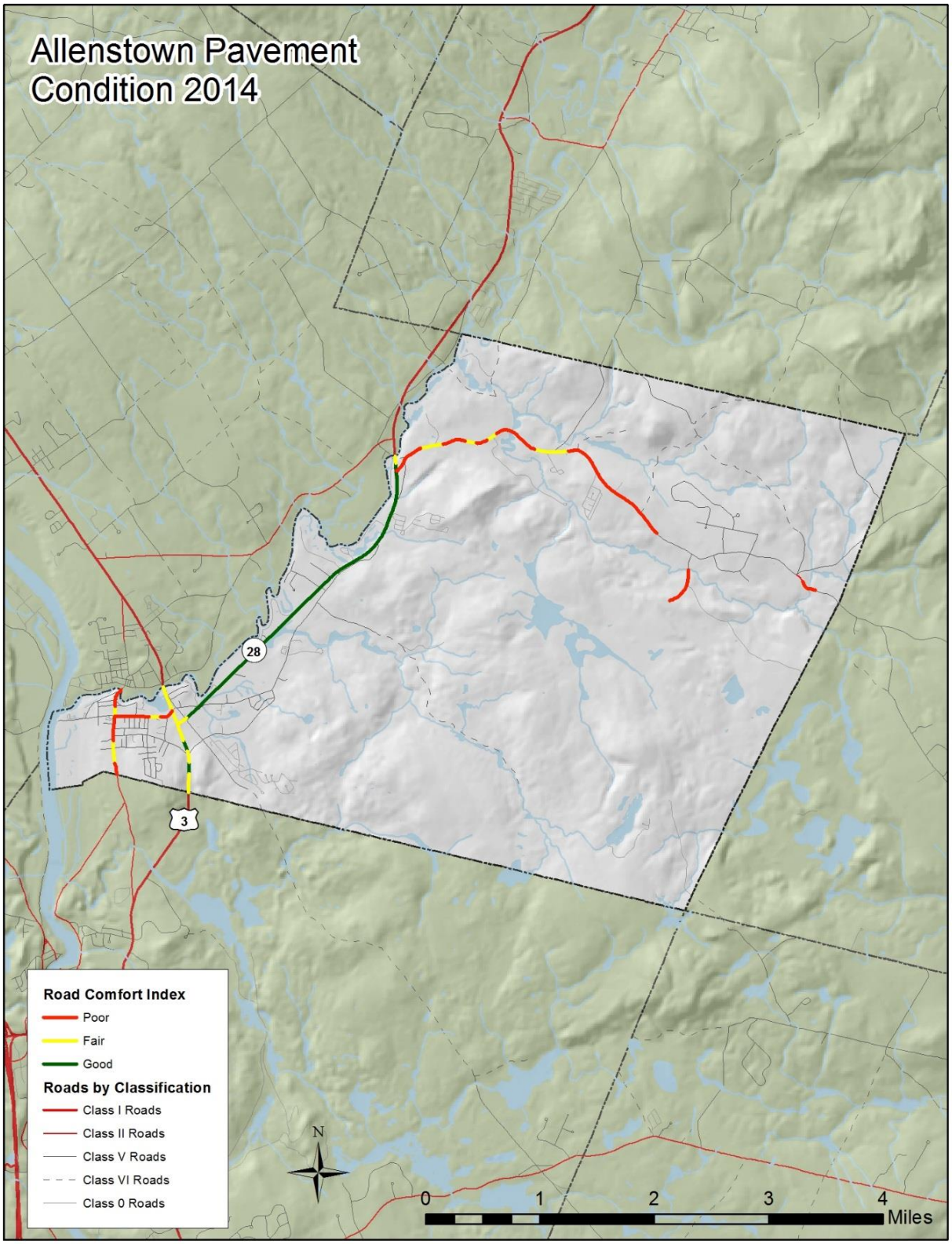
Many communities in New Hampshire have begun to establish Road Advisory Committees and implement Road Surface Management Systems (RSMS) to help prioritize road improvements and develop a transparent system for short, medium and long term improvements. The Central New Hampshire Regional Planning Commission offers a RSMS at no cost to its member communities. RSMS is basically a methodology intended to provide an overview and estimate of a road system's condition and the approximate costs for future improvements. RSMS provides a systematic approach for local officials to answer basic questions about their road system, to gauge current network conditions and to guide future improvement and investment in line with municipal Capital Improvement Programs.

Figure 6: Average Annual Daily Traffic Counts in Allenstown



Source: NHDOT, 2014

Figure 7: NHDOT Pavement Condition 2014



Source: NHDOT, 2014

MOTOR VEHICLE CRASHES

Motor vehicle crash data from 2010 – 2014 was obtained from NHDOT, who receives the data from the Department of Safety for crashes with over $1,000 in damage. The data represents roughly 80% of all crashes with over $1,000 in damage that took place during this time period; the remaining 20% of crashes are not locatable based on the information contained in the accident reports. Locatable crashes that occurred in Allenstown were reviewed and are summarized graphically on Figure TR-6 and in summary tabular form for the most frequent locations in Tables TR-4 and TR-5.

During this five year time period, the highest proportion of accidents occurred along the most heavily travelled routes in Allenstown, NH Route 3 and NH Route 28. NH Route 3 and NH Route 28 are both state maintained highways. NH 28 has a limited access plan in place with a total of 15 allowable driveways and 10 street intersections in this 3.17 mile segment of highway. NH 3 in Allenstown is characterized by suburban scale strip commercial/industrial/service uses with sections of limited access highway. Access to the existing, older commercial development should be better controlled to reduce the number of accidents long this corridor. The relatively high number of accidents on this corridor is partially due to uncontrolled access from several of the existing business along the corridor. The lane drops in this section of highway may also be a contributing factor.

Only 28% of the accidents along the NH 28 corridor are associated with intersections and just over 55% involve collisions with other vehicles. This is a relatively low number for the traffic volume on this street.

Deerfield Road has had a total of 16 accidents over the four year period with a traffic volume of between 2400 AADT and 900 ADT. In addition, 3 additional accidents occurred at the intersection of Deerfield Road and NH 28. This is a relatively large number of accidents on a rural road with relatively little development. Visitors to Bear Brook, who may be unfamiliar with the area, might be considered a contributing factor along with the poor condition of the road surface, and the roadway geometry. A road safety study should be undertaken along this corridor and recommendations implemented with the attention to improve the safety of this corridor.

Main Street/South Main Street was the third highest accident street in town. Given the moderate level of traffic on this street, and the relatively dense development on the northern portion of this corridor, may at least partially explain the 13 identified accidents enumerated by NH Department of Safety. A road safety study may be warranted on this corridor as well.

The accident counts at the intersections are also included in the roadway totals. It is reasonable to assume that a number of smaller accidents may also have occurred during this time period which did not require the intervention of the police department.

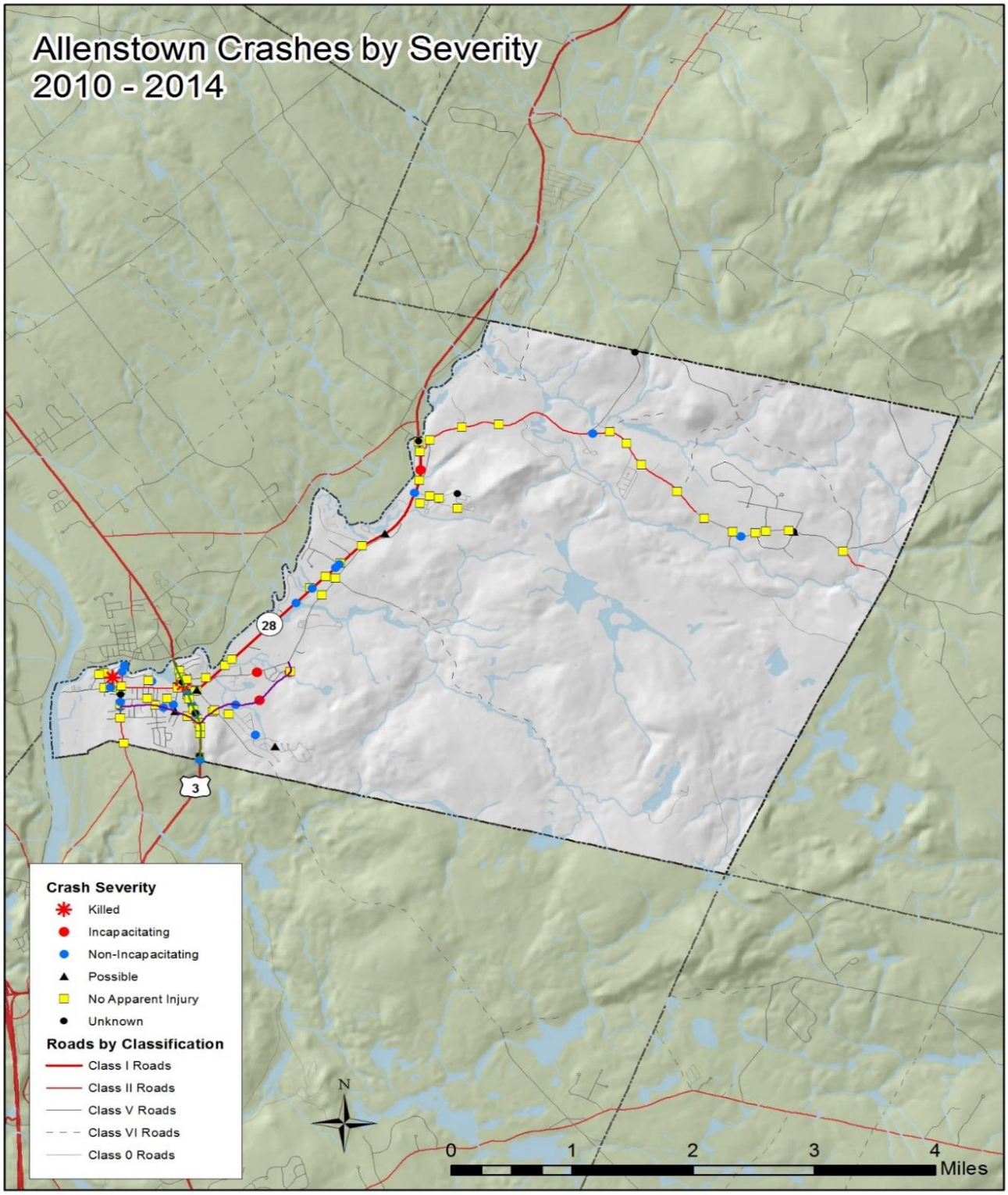
Table 3: Cumulative Accident Data

Road or Intersection (Length 0.96 miles)	Accident Type				Accident Severity						Conditions	
	Type	Description	Type Total	Intersection Related	Fatality	Incapacitating	Non-Incapacitating	Possible	Unknown	No Apparent Injury	At night	During snow, rain, or sleet
Route 3 Allenstown Pembroke TL to Hooksett TL (0.96 miles)	Collision	Other Motor Vehicle	26	7	1		7	3		15	1	7
	Collision	Bicyclist	1	1								
	Collision	Fixed Object	2	1	1							
		Other/Unknown	1								1	
Location Totals			**30**	**9**	**2**	**0**	**7**	**3**	**0**	**15**	**2**	**7**

Road or Intersection (Length 3.17 miles)	Accident Type				Accident Severity						Conditions	
	Type	Description	Type Total	Intersection Related	Fatality	Incapacitating	Non-Incapacitating	Possible	Unknown	No Apparent Injury	At night	During snow, rain, or sleet
NH 28 Intersection of Route 3 to Pembroke TL (3.17 miles)	Collision	Other Motor Vehicle	16	7			4	2	1	9	2	3
	Collision	Animal	5				1			4	4	
	Collision	Fixed Object	4			1	1			2	1	1
	Non-Collision	Spill (2 Wheel Vehicle)	1				1					
		Other/Unknown	2					1		1		1
	Collision	Bicyclist	1	1					1			
Location Totals			**29**	**8**	**0**	**1**	**7**	**3**	**2**	**16**	**7**	**5**

Source: NHDOT/NH Department of Safety

Figure 8: Reportable and Locatable Vehicle Crashes 2009 – 2013



Source: NHDOT/NH Department of Safety

Table 4: Accident Hot Spots 2010-2014

State Maintained Highways	Number of Accidents 2010-2014
US 3	24
NH 28	20
Main St/S Main St	13
School St	5
Deerfield Road	10
Town Maintained Roads	**Number of Accidents 2010-2014**
River Road	8
Granite St	3
Deerfield Road (town maintained section)	6
Intersection Locations	**Number of Accidents 2010-2014**
US 3/NH 28	8
US 3/School St/River Rd	5
NH 3/Granite Street	4
NH 28/River Rd	4
NH 28/Deerfield Rd	3

Source: NHDOT/NH Department of Safety

COMMUTING PATTERNS

The US Census Bureau's American Community Survey (ACS) is an ongoing survey that provides data every year in the form of 1-, 3- and 5-year period estimates representing the population and housing characteristics over a specific data collection period. The ACS differs from the decennial Census in that the Census shows the number of people who live in an area by surveying the total population every 10 years. The ACS shows how people live by surveying a sample of the population every year. ACS collects and releases data by the calendar year for geographic areas that meet specific population thresholds; for areas with populations under 20,000, such as Allenstown, 5-year estimates are generated. The most recent release represents data collected between January 1, 2009 and December 31, 2013.

Journey to Work Commuting data from the 2009-2013 5-year estimates for Allenstown were reviewed and are displayed graphically in the charts below. Most of the working population residing in Allenstown works outside of the community (96%), the majority work within New Hampshire, drives to work alone (91%), and 42 percent of residents commute more than 30 minutes to work commutes an average of about 27 minutes to work.

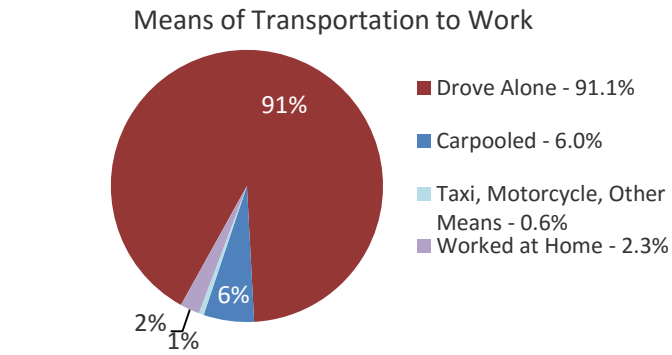
Fifty (50) percent of all commuters travel to either Concord, Manchester or Hooksett, will 28.3 percent of all commuters fall into the "All other Locations" category. In reviewing the raw data, the "All Other Locations" are widely distributed to many communities in New Hampshire, Massachusetts, Maine, and even further afield. None of these destinations attract more than 2% of the total resident workers.

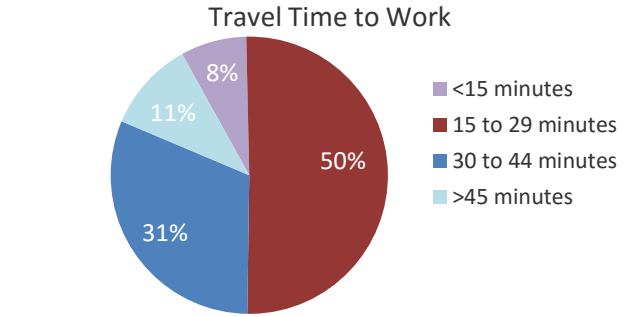
It should be noted that the category "public transportation," is an option under "Means of Transportation to Work," however, 0.6 percent of the population used "Taxi, Motorcycle, or Other Means" to commute. Only 2.3% worked at home which is the lowest percentage in the region.

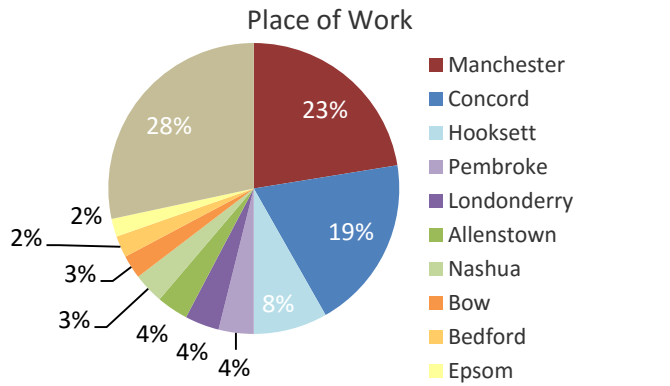
As is typical in most New Hampshire towns, the most popular transportation option for Allenstown residents is the private automobile. Carpooling, where one or more passengers accompany the vehicle driver to a shared destination point represents only six percent of commuters in Allenstown. This percentage could be increased if a park and ride facility was created in the town.

Understanding the commuting patterns of the labor force in the community can assist in planning roadway improvements that will make important travel routes more efficient, safe, and promote economic growth in a sound and coordinated fashion. Similarly, local residential roads that are not suited for heavy commuter traffic should be identified and this "through traffic" should be minimized wherever viable alternatives can be provided. Traffic counts should be reviewed and analyzed to identify roads that have shown an increase in traffic over the years. Finally, yearly traffic counts should be carried out on roads that the Town sees as a concern in order for reliable usage patterns to be analyzed.

Figure 9: Commuting Data







Source: ACS 2009-2013

DEVELOPMENT AND TRANSPORTATION

NEW DEVELOPMENT

New development is often phased over extended periods of time and the ultimate, as well as the immediate, impacts of development on traffic volumes and transportation systems should always be considered. The magnitude of new development obviously determines the traffic impacts that the development will have. Depending on existing roadway traffic volume, distribution patterns, and the physical condition of local roadways, small scale as well as large-scale development can often have significant impacts on the surrounding roadway network. By requiring transportation/traffic impact studies for new developments of a certain size or for developments located in areas where significant transportation problems are known to exist, the Town of Allenstown's Planning Board can effectively evaluate the scope of impacts associated with any new development. Through this kind of scrutiny, recommendations for project phasing, and developer participation in necessary improvements can be developed and problems of safety, congestion, and expensive upgrading of poorly planned roads can be avoided.

As federal and state assistance for local road construction has decreased (in most cases), in recent years, and will likely continue to decrease in future years, the construction, improvement, and maintenance of local roads has increasingly become the responsibility of municipalities and developers. The fact that a developer accepts the responsibility for performing all necessary "on-site" infrastructure improvements is now considered standard practice. However, where developments will have significant impact on the transportation infrastructure in Allenstown, developers should also be responsible for addressing these issues.

The two basic methods for securing developer participation in roadway and other infrastructure improvements necessitated by new development are through negotiated development agreements and through the assessment of formula based development impact fees.

CONNECTIVITY

The functional roadway classification system provides an organized hierarchy to the Town's roadway system. However, for the roadway system to be effective, efficient, and to serve to maintain a sense of community, the roadway system needs to exhibit a sense of connectivity. Roadway connectivity refers to a street system that provides multiple routes and connections to the same origins and destinations.

One of the difficulties that the Town of Allenstown, like other municipalities, faces is development projects that come before the Planning Board exhibiting poor connectivity. This can often be seen with residential subdivisions, where the subdivisions are designed as a series of cul-de-sacs. Although the residents who live on these types of streets generally prefer this type of disconnected street system because of the resulting low volume of traffic, the impact to the community as a whole can be detrimental.

A well connected street system provides motorists, pedestrians and bicyclists better, more direct and shorter travel routes to schools, shopping and other neighborhoods. A well connected street system not only provides shorter and more efficient connections but also serves to reduce traffic congestion along the major arterial

roadways. The result is a more efficient roadway system with less need to be continually adding capacity to the Town's major roadways. A well connected street system also improves emergency response times for firefighters, police, and ambulance services. In addition to the traffic operational benefits, a well-connected street system also serves to create a sense of community as opposed to a sense of isolation that cul-de-sacs can at times create. Cul-de-sacs are an important part of communities throughout the state and where appropriate should be encouraged. However, a well-planned and connected street system should be a key element in Allenstown's transportation planning policy and accurately represented in the decisions of the Planning Board.

Access Management

Access management involves providing (or managing) access to land development while simultaneously preserving the flow of traffic on the surrounding road system in terms of safety, capacity, and speed. It is the practice of coordinating the location, number, spacing, and design of access points to minimize site access conflicts and maximize the traffic capacity of a roadway. Current planning efforts focus on all modes of transportation including vehicles, public transit, bicycles, and pedestrians. In general, there are a number of techniques that the Town of Allenstown can use to take a proactive approach to access management.

1. Think land use AND transportation.

Before approving a subdivision or rezoning, consider what road design and improvements will be needed to support the development and link it to the surrounding area.

2. Link access regulations to roadway function.

Access requirements in your zoning and subdivision regulations should fit each roadway's functional classification. Recognize that the greatest access control is needed for those roads intended to serve longer, higher speed trips.

3. Connect local streets between subdivisions.

Give your residents convenient options for travel from one neighborhood to another by connecting local streets from one subdivision to the next.

4. Design subdivisions with access onto local streets.

Avoid lot designs with driveways that enter onto major state or county highways. Orientate business and residential driveways to local streets that feed onto the highway at a few carefully designed and spaced intersections.

8. Practice good site planning principles.

Locate entrances away from intersection corners and turn lanes. Provide adequate space on the site for trucks to maneuver and for vehicles to queue at drive-through windows without backing or stacking on the roadway. Adjacent businesses should provide shared driveways and cross access so customers can make multiple stops without entering the arterial.

9. Correct existing problems as opportunities arise.

Adopt a long range vision for improving access along older, developed corridors. Correct unsafe accesses as individual parcels expand or redevelop. Work with affected property owners to consolidate driveways and provide internal access between parcels. Fill in the supporting roadway network with local access roads as part of the redevelopment process.

10. Coordinate local development plans with NHDOT.

Share plans for subdivisions, rezonings, and site plans with affected road authorities early in the development process.

The NH DOT in 1956 created an access management plan for NH 28 and portions of NH 3 in Allenstown. The "Commissioners' Return of Limited Access Highway Layout, Allenstown Pembroke, F-023-1(1) - P-2416" was dated May 11, 1956. Along the entire 3.62 mile stretch of NH 28 in Allenstown, private driveways were restricted to a total of 15. In addition, to the private driveways a number of public streets intersect with NH 28 including Deerfield Road, River Road (2) locations, Chester Turnpike/Turnpike Street, Harness Horse Road, Lavoie Lane, Pine Acres Road, Martinson Lane, and Gilbert Road. Private roads utilizing some of the allowable curb cuts include including Brookside Terrace, Bourque Road, Clement Road, Riverside Drive (2) locations, Fanny Drive, Roy Lane, and Jefferson Avenue. In the northern portion of NH 28 southerly of Deerfield Road the design and placement of the existing driveways and street intersections not ideal with a number of access points on both sides of the highway being insufficiently offset.

In the Commissioners' layout a portion of US 3 was created as a limited access highway where no driveways are permitted from School Street southerly passed the intersection with NH 28 a distance of about 670 feet where no access is allowed. Older commercial development on Route 3 north of School Street and between the end of the controlled access Highway and Granite Street have driveways where access management would improve the functionality and safety along US 3.

TRAFFIC CALMING

Traffic calming is a significant challenge for most communities in the United States. This is particularly true for small, rural communities in New Hampshire where the main roadway through the town serves a dual role. Outside the town, the roadway provides high-speed travel over long distances; within the built-up area, however, the same roadway accommodates local access, pedestrians of all ages, on-street parking, bicycles, and the many other features unique to the character of a community. This convergence of roadway purposes presents both an enforcement challenge for the community and a potential safety problem for the public.

Addressing the issue through law enforcement alone often leads to temporary compliance at a significant cost. A more permanent way to reinforce the need to reduce speed is to change the look and feel of the road by installing traffic calming treatments that communicate to drivers that the function of the roadway is changing. Traffic calming has been evaluated and used extensively within low-speed urban areas in the United States but less so in rural areas where driver expectations and traffic characteristics are different.

Lowering speed limits is a well-established method of improving pedestrian safety and other non-motorized modes of travel. The minimum speed limit a town can impose on town maintained roadways is 25 miles per hour based on an engineering study. Limits can be made lower at intersections (RSA 265:63) and in school zones (RSA 265:60). Traffic calming involves 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 vehicle speeds. Traffic calming measures

foster safer and quieter streets that are more accommodating to pedestrians and cyclists 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 improved aesthetic quality of streets. An example of some effective and applicable 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.

Chicanes or Medians: These devices effectively narrow road width and slow down traffic by placing a physical impediment either in the middle of the road (median) or on the side of the road (chicane). These traffic-calming devices lend themselves to landscaping and improve the visual experience for all users of the road, as well as reducing speeds. Both techniques can provide additional safety for crossing pedestrians. Medians may serve as a refuge by allowing pedestrians to cross one lane of travel at a time, while chicanes provided at crosswalks reduce the overall distance from one side of the road to another and slow down traffic at those crossings.

Narrow Lane Widths: Many residential streets have been constructed to such a width that getting motorists to obey a 25 or 30 mph posting is extremely difficult. In addition, it can be costly to physically narrow the roadway or install various physical traffic calming measures. A low-cost way of reducing speeds is to narrow the roadway lane through the use of edge lines and centerlines. A number of jurisdictions across the country have installed this type of pavement marking application to create 9 to 10-foot-wide lanes. Narrow lanes force drivers to operate their vehicles laterally closer to each other than they would normally be accustomed to. Slower speeds are a natural result.

Modern Roundabout: Not to be confused with a traditional high-speed rotary or traffic circle, this is an intersection treatment that forces motorized traffic to slow down to speeds under 25mph in order to negotiate a center island that can be landscaped. Such speeds allow pedestrians to safely cross around the perimeter of the roundabout and cyclists to safely become a part of the circulating traffic.

Downtown Parking

Of concern to the community is access to parking in the downtown. Adequate parking is available in the downtown area and Suncook Village in both Pembroke and Allenstown. Improvements to the streetscape in the village, combined with aesthetic improvements by property owners, can create an atmosphere which will encourage visitors and residents to visit the downtown.

Scenic Roads

A major component of a town's rural character can be its scenic roads. These roads help to retain a sense of history and rural quality that Allenstown's residents have indicated a strong desire to maintain. RSA 231:157 allows towns by a vote at town meeting to designate any road other than a Class I or II highway as a Scenic Road. A municipality may rescind its designation of a scenic road using the same procedure.

The effect of designation as a scenic road is that, except in emergency situations, there shall be no cutting of trees with a circumference of 15 inches at 4 feet from the ground or alteration of stone walls by the town or a public utility within the right-of-way without a hearing, review, and the written approval of the Planning Board. This law does not affect the rights of individual property owners; nor does it affect land uses as permitted by local zoning.

In recognition of the fact that the state law is not very stringent, the statute was amended in 1991 to allow towns to adopt provisions other than what is spelled out in the 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. RSA 231:157 is an important piece of legislation for the preservation of culturally important and scenic roads in Allenstown. Its residents cherish the historic and aesthetic qualities of the Town. The Town of Allenstown should therefore consider identifying and cataloguing roads with scenic vistas and aesthetic qualities to protect and preserve the intrinsic qualities of the Town.

BICYCLE & PEDESTRIAN INFRASTRUCTURE

Residents of Allenstown value the Suncook Village as well as the rural and historic character of the town. In the community vision sessions the need for additional sidewalks was identified in the community. The recent Safe Routes to School project to add sidewalks from Parkwood Drive to the Elementary School on S. Main Street was considered a success. However, the federal requirements associated with this program made it difficult for a small community such as Allenstown to complete this process. Pedestrian facilities, such as paved sidewalks and gravel walking paths are essential 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 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 village settings.

Similar to the provision of pedestrian 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.

As the concern over air quality, traffic congestion, and other issues increases, the need and desire for a well-maintained and safe bicycle & pedestrian route system will continue to grow from a luxury into a necessity. By creating adequate local bicycle & pedestrian infrastructure, members of the community will have the ability to travel within Town for employment, shopping, and recreational purposes without driving. Areas identified in the Master Plan survey for potential bicycle & pedestrian improvements include Allenstown village with a specific focus on Allenstown Elementary School, Main Street, and the Allenstown Recreational Fields.

Deerfield Road, Main Street/South Main Street/Pleasant Street, and a portion NH 28 from Buck Street in Pembroke to Deerfield Road are also designated NH Bike Routes.

The NH Regional Trails Plan 2012 proposes a Concord to Manchester trail on the abandoned railroad right of way through Allenstown.

PUBLIC TRANSPORTATION

There is a need for more public transportation options in Allenstown especially service to and from Concord and Manchester. This is representative of the high number of Allenstown's residents who work in both locations. Important demographics to consider in discussing public transit enhancements in Allenstown are that 12.1% of the population in Allenstown is over the age of 65 (2010 US Census). Increase in demand for public transit has been established as a defined need for aging populations throughout the United States.

The Mid-State Regional Coordinating Council for Community Transportation operates a volunteer driver program that serves the region's elderly and disabled populations. The primary purpose or these trips are for essential social services and medical appointments (including long distance medical). Currently, there is no charge for both of these systems although donations are accepted.

CLASS VI ROADS & TRAILS

Class VI roads are roads that are not maintained by the Town, may be subject to gates and bars, and normally consist of a gravel or dirt surface. A Class V road can become a Class VI road if the Town has not maintained it for five years or more. Under RSA 674:41, I(c), for any lot whose street access (frontage) is on a Class VI road, the issue of whether any building can be erected on that lot is left up to the "local 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. The purpose of RSA 674:41, I(c) is to prevent scattered and premature development. It seems that the residents of Town are in agreement with this law, as a strong view was represented during the community survey and visioning sessions that future development should be limited in remote areas of town and on Class VI roads.

The Town of Allenstown does allow the subdivision of land along a Class VI road, if the road is brought up to Class V Town road standards. The community has extensive mileage of private roads and allows additional subdivisions on existing and proposed private roads. In many communities across the nation residents on private roads have petitioned their governing bodies to convert their streets to public ways. This practice continues to increase the communities optional for fiscal impacts on the tax base as these private roads become more developed and/or need significant repair and maintenance. The Town does not currently perform maintenance on private roads and the responsibility falls onto the individual property owners.

Across the State, many communities are beginning to look at Class VI roads as candidates for designation as Class A Trails. These roads have little or no development associated with them, are scenic, have no inherent liability concerns, public access is already allowed, and also serve to connect large areas of open space, conservation, and/or agricultural lands. By reclassifying certain roadways that meet these criteria to Class A Trails, the community could be taking a step in creating a community-wide system of greenway trails.

Unlike Class VI roads that the Town does not maintain, Towns, at their option, may conduct maintenance on Class A Trails.

The Town of Allenstown has an extensive system of snowmobile trails on both public and private properties. Class A trail designation can act to preserve and protect portions of these trails.

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

Class VI roads are an important component of a Town's transportation infrastructure due to their rural character and potential recreational opportunities.

OBJECTIVES AND RECOMMENDATIONS

OBJECTIVE 1

Work within the New Hampshire Department of Transportation to ensure that the state maintained roadways within the Town of Allenstown are adequately maintained and achieve a reasonable service life.

→ Actively engage with the Central New Hampshire Regional Planning Commission and the New Hampshire Department of Transportation to ensure that Allenstown's transportation needs and priorities are adequately represented in the both the Regional and the Statewide Transportation Improvement Program.

→ Actively pursue State Highway Aid grant opportunities to maintain and improve the Town of Allenstown's transportation network. Examples include State Highway Aid and State Bridge Aid programs.

OBJECTIVE 2

Future development in Allenstown should be permitted to take place at locations where the primary road function is appropriate for the type of development proposed.

→ As part of its Subdivision and Site Plan Review Regulations, the Planning Board should consider the functional classification of any road on which development is proposed to ensure that the proposed development is appropriate for the existing roadway function.

OBJECTIVE 3

To ensure a safe, reliable, and efficient system of bridges that will meet the transportation needs and goals of the town of Allenstown.

→ The Town of Allenstown should actively support NHDOT in its effort to repair, replace, and/or upgrade bridges in the community.

OBJECTIVE 4

Utilize available traffic count data from NHDOT & CNHRPC to

identify corridors and routes that may become impacted by future development trends.

→ In locations where traffic may increase, land use trends and access management policies should be closely examined, adopted, and modified to best maintain and promote an efficient transportation network.

→ The Town of Allenstown should continue to work with NHDOT and CNHRPC to identify and conduct traffic counts on roads of concern in the community on an annual basis.

→ NHDOT and the Town of Allenstown should work together to ensure that effective and appropriate emergency management procedures are in place for redirecting traffic through the Town.

→ A regular traffic count program should be developed with the assistance of the CNHRPC to monitor changes in traffic on roads within the community over time.

→ Traffic count data should be published by the Town annually and be available on the Town website.

OBJECTIVE 5

Regularly monitor road conditions in the town to ensure that road improvement projects that are strategically important to Allenstown's transportation network are adequately addressed.

→ Implement a Road Surface Management System to guide the selection and prioritization of infrastructure improvements and maintenance activities, including road widening, improvements to horizontal and vertical alignments (grading and curves), drainage system improvements, and paving/resurfacing.

→ Incorporate and fund a regular resurfacing and road maintenance schedule in the Capital Budget.

→ Work with the Central New Hampshire Regional Planning Commission and the New Hampshire Department of Transportation to ensure that transportation projects that are eligible for Federal-Aid funding in Allenstown are adequately represented in the Regional Transportation Improvement Program and considered for inclusion in the State Ten-Year Plan for Transportation Improvements.

OBJECTIVE 6

Reduce the number of accidents in Allenstown that may be caused by unsafe road conditions or poor transportation infrastructure.

→ The Town of Allenstown and NH DOT should undertake a traffic safety study along Deerfield Road and implement measures to reduce accidents along this corridor with specific attention focused on road conditions, roadway geometry, driveway sight distance, and warning signage.

→ The Town of Allenstown and NH DOT should undertake a traffic safety study along Main Street/S. Main Street and Pleasant Street in Hooksett.

→ The Police Chief, Fire Chief, Town Road Agent and associated staff/committees should annually review accident locations and determine enhancements that could be made to improve safety. Town Police Reports should be collected and analyzed as part of this annual review.

OBJECTIVE 7

Work with the NHDOT to improve the safety of State maintained

highways with serve commuting traffic in Allenstown including US 3, NH 28 and Main Street/South Main Street/Pleasant Street.

→ Yearly traffic counts should be carried out on roads that the Town sees as a concern in order for reliable usage patterns to be analyzed.

→ Request NH DOT consider developing a park and ride in Allenstown or nearby in either Pembroke or Hooksett.

OBJECTIVE 8

The Planning Board should require developer sponsored off-site improvements as part of any development that has an impact on Allenstown's transportation network.

→ As a condition of the Final Approval of a Subdivision or Site Plan Application, the Planning Board, where appropriate, should require the developer to pay a proportionate share of the costs of municipal transportation related improvements, which are necessitated in whole or in part by the development. Such fees shall be limited to capital costs and shall be expended only on new or additional capital facilities. At its discretion, the Board may require the developer to construct capital improvements, as an alternative.

OBJECTIVE 9

Promote connectivity through the requirement of local street connections between existing, new and future developments.

→ Where applicable, the Planning Board should require developers to provide rights-of-way and/or direct access to connect both new and existing developments thus creating parallel access routes which will help to reduce congestion and slow the need to expand highway capacity.

OBJECTIVE 10

Establish a set of access management guidelines in order to properly plan for the traffic impacts of new developments in Allenstown.

→ The Town of Allenstown should build upon the requirements of its current Land Development Regulations, and establish a set of access management guidelines in order to better plan for future development in Allenstown. These guidelines should be utilized by the Planning Board in considering proposals for new development.

→ Enter into a Memorandum of Understanding with NHDOT District Engineer to coordinate permitting for access to new and redeveloped development along State maintained highways in Allenstown.

OBJECTIVE 11

To take a context sensitive approach to traffic calming techniques to make Allenstown more accessible and safer for all road users.

→ Promote a "share the road" campaign to alert drivers to the possibility of pedestrians and bike users at certain locations in Allenstown.

→ Investigate the use of innovative methods to increase safety, such as raised crosswalks, stripped of colored crosswalks, increased signage, and clear and defined walking paths.

→ Investigate the use of appropriate traffic calming measures to discourage high speeds where the potential for conflict with other roadway users exists.

OBJECTIVE 12

Prepare a downtown improvement plan for the streetscape in the Suncook portion of Allenstown in cooperation with the Town of Pembroke to both expand the existing side walk system and enhance the overall aesthetics of Suncook Village to improve the economic vitality of the village and the quality of life of the residents.

→ Research and apply for grants to improve the character of downtown and extend the existing sidewalk system.

→ Implement the downtown improvement plan in phases as funding is available.

→ Include funding for regular streetscape and sidewalk maintenance in the Town's operating and capital budgets. Implement the downtown improvement plan in phases as funding is available.

→ Promote "Suncook Village" as a destination.

OBJECTIVE 13

Identifying potential scenic routes and roads in Allenstown to ensure that the intrinsic aesthetic and historic qualities of the Town are protected and preserved.

→ The Town should work with its residents to provide outreach and education about the State Scenic Road Law and its potential for preserving the historic and rural qualities of Allenstown.

→ The Town should identify roads with scenic vistas and aesthetic qualities, such as traditional New England stone walls, historic buildings, natural aesthetically important fauna, and farms.

→ The Town should consider designating Scenic Roads for protection.

OBJECTIVE 14

Facilitate the creation of a bicycle and pedestrian infrastructure network that allows safe, efficient and reliable transportation options in certain locations in Allenstown.

→ Develop an inventory and map of sidewalks and bicycle routes in Allenstown.

→ A sidewalk master plan should be developed and adopted by the Planning Board.

→ New development should install sidewalks along their frontages where sidewalks are planned and construct connections linking their projects to the existing sidewalk network.

→ A regular program of resurfacing and maintenance for sidewalks should be included in the Capital Improvement Plan.

→ The Town of Allenstown should adopt and support the statewide and regional bicycle networks and take all available steps to help implement them within Town.

→ The Town of Allenstown should research funding opportunities for creating and maintaining a local bicycle & pedestrian network.

→ The Town should establish a trails group to promote the development of the Concord to Manchester trail along the east side of the Merrimack River.

→ Where applicable, the Highway Department should consider widening, striping, and paving the shoulders of Town roads to accommodate bike lanes.

→ The Town of Allenstown should work with the Police Department, the Elementary School to promote and educate the public on bicycle safety and transportation.

OBJECTIVE 15

Ensure that transportation options are available to all residents of Allenstown regardless of socio-economic status.

→ Coordinate with neighboring towns and communities to investigate the feasibility of having Allenstown as a stop in a larger movement corridor leading to Concord.

→ The Town should continue to support and promote the volunteer driver programs currently serving Allenstown.

OBJECTIVE 16

Discourage inappropriate, scattered and premature development along Class VI roads in Allenstown.

OBJECTIVE 17

Encourage, support and facilitate an expanded Town Trail network in Allenstown.

→ The Town should identify Class VI roads, as well as existing paths, and areas along the various water bodies in Town, that connect open space, forest, conservation, and/or agricultural land, that would help create a greenway trail network.

→ Identify for designation, as Class A Trails, some of the Class VI roads within Town by working with abutting landowners.