

TRANSPORTATION

This section provides an overview of the status of alternative modes of transportation available to the Tilton residents as well as the Town's role in developing or improving the roadway network. Recommendations include the need for dedicated bus stops and long- and short-term parking for existing public transportation; close coordination with the New Hampshire Department of Transportation in regard to future development of Rt. 3/11 towards Mosquito Bridge, and emphasis on the need to upgrade Rt. 3/11 east of Exit 20 to improve turning safety.

A. INTRODUCTION

Pursuant to RSA 674:2 (IV), a transportation section should include analysis of "facilities for all modes of transportation" and should provide for "the efficient movement of people and goods into, about, and through the municipality." The transportation network provides the linkage between places of residence and places of employment, commerce, service, and recreation. Accessibility to the transportation network is a critical variable in the land use and development plans and policies of a municipality. While substantial and valuable land is devoted to supporting the transportation system, the system itself confers value and utility to adjacent lands.

Beyond the basic issue of accessibility for land development, the transportation system must be of adequate capacity and design to ensure the safe and efficient movement of people and goods. Inadequate capacity has an economic cost in the delays in the delivery of persons and goods, while substandard designs have costs measured in terms of both dollars and injuries.

As required by statute, this section will review the status of alternative modes of transportation available to Tilton, but the main focus will be on travel by private vehicle over the roadway network, the predominant mode of travel in Tilton. The current attributes, existing deficiencies, and future needs of the roadway network within the Town will be addressed as will the Town's role in developing and improving the network.

B. ALTERNATIVE MODES OF TRANSPORTATION

The transition from automobile and truck as a primary mode of transportation must be driven by outside influences, not as a matter of choice, for most travelers continue to favor the automobile. Probably the most important influence of all is convenience. Commuters, in particular, will resist the change unless the convenience of their personal automobile can be replaced by an alternative mode of equal or greater convenience together with equal or greater reliability and reduced cost.

As optional intermodal forms of transportation slowly become available, whether provided by federal, state, or regional governments or commercial entities, it is incumbent upon our community to provide the fundamental infrastructure of facilities and promotional support that will encourage its usage.

Buses

Through a grant from the federal transit administration it was possible for the Greater Laconia Transit Agency (G.L.T.A.) to create a public route system. Broken into three separate schedules, the route now spans from Laconia to Franklin and Plymouth with five stops in downtown Tilton throughout the weekday. Fares range from \$1.00 to a maximum of \$4.00 for all day rides and all routes are free to senior citizens age 55 and older. This is an excellent but little known service that has the potential for increased ridership through promotion and community support.

RECOMMENDATIONS

1. Conduct a town wide survey to determine awareness, potential ridership, desired pick-up points, and destinations. Coordinate with G.L.T.A. and construct covered bus stops with provisions for posting bus schedules. Make bus schedules available at the town offices and other key locations around town.
2. Concord Trailway, an intercity and interstate bus system, provides daily service through Tilton on a route linking the White Mountains and Lakes Region to Concord, Manchester, and Boston. The Trailway's ticket office and bus stop is currently located at the Evans Express Mart on Rt. 3/11, adjacent to Exit 20 at I-93, a central location for all Tilton residents. There is, however, no designated area or provisions for short- or long-term parking.
3. Ridership might be greatly enhanced if a suitable short- or long-term parking area was created and Concord Trailways agreed to relocate their ticket office accordingly.
4. Taxi service is available in the Tilton-Northfield area and regionally available in Franklin and Laconia. Given that current estimates of population growth are relatively low, this service is unlikely to expand much over current levels.
5. In recent years, highway planners have focused on Transportation Demand Management (TDM), which encourages car and van pooling as a means of increasing the capacity of existing roads without actually expanding these roads with new lanes. In areas with strong commuting patterns, "park and ride" lots have been constructed to facilitate a convenient meeting place for car pools. These facilities exist in New Hampshire along the commuting corridor I-93 . There is a park and ride lot located on Rt. 3/11 east of Rt. 132.
6. Another recent trend in transportation planning is the provision of services for the "transportation disadvantaged," those individuals who do not own or operate a vehicle due to cost or inability. There are a number of social service agencies in the Lakes Region that now assist the transportation disadvantaged. As this category of individuals grows, there may be proportional changes in some of the smaller existing services.
7. In concert with the U. S. Department of Transportation, the N.H. Department of Transportation Rail and Transit Division is placing increased emphasis on rail travel as an alternative to the automobile. While their primary focus is on major high-speed (90 mph plus) routes, which can cross multiple state, province, and international borders, the N.H. Railroad Revitalization Association, formed in 1994, is actively engaged in the restoration of the existing in-state infrastructure to recreate intercity rail transportation. In 2001, a high-speed rail line was activated between Boston, MA

- and Portland, ME. Ridership exceeded expectations, which has led N.H. Department of Transportation, under the auspices of U.S. Department of Transportation, to conduct a feasibility study for a second high-speed line from Boston, MA, to Montreal, Canada. Intended stops along this second line include Nashua, Manchester, Concord, Franklin, and Lebanon. If, in coming years, this line becomes a reality and travelers are made aware of its expected presence, the challenge for Tilton leaders and planners will be to satisfy the need for convenience. Assuming the railway system is able to meet the cost and reliability factors, getting travelers to and from the Franklin station in a timely and efficient manner could mean the difference between success and failure in furthering the reduction of automobile usage.
8. Extensive air transportation and airfreight services are available at the Manchester Boston Regional Airport, approximately 45 minutes south of Tilton. These services will expand with the growth of these facilities.

C. THE ROADWAY NETWORK: ADMINISTRATIVE AND FUNCTIONAL CLASSIFICATION

The major component of Tilton's transportation system is the roadway network for which the town shares administrative and maintenance responsibilities with the state of N.H. Interstate 93 and the state's primary and secondary highways comprise 68.6% of the total road mileage in Tilton. The State, through its Department of Transportation (NHDOT), assumes full maintenance responsibilities for I-93 and Rts. 3/11 which are considered Class I, highways pursuant to RSA 229:5. Class II or State Aid Highways are also maintained by the NHDOT, with the exception of snow removal and other winter maintenance activities, which are the responsibility of the Tilton Public Works Department. The town is fully responsible for all aspects of Class V or town roads. There is a relatively minimal length of Class VI roads in Tilton which have been closed or discontinued and for which neither the State nor the Town is responsible.

While not prescribed by statute, components of the road network are generally assigned a functional classification as a transportation system planning mechanism. The functional classification relates to the type of access allowed, number of lanes, speed limits, traffic volumes carried, types of intersections, and adjacent land uses served. The functional classifications of roads in Tilton are listed below.

Limited Access Highways

This category includes four-lane, divided highways to which access is limited to grade-separated interchanges. These roads carry high volumes of through traffic at maximum speed limit. No curb cuts are allowed and parking is prohibited. I-93 is the only highway in Tilton in this classification.

Arterial Highways:

These roads carry high volumes of both local and regional traffic at speed limits of 30 to 50 miles per hour. The roadways are undivided with two to four lanes, and at-grade intersections, which are channelized and may be signalized. Access to adjacent land uses is controlled, and on-street parking is generally not desirable.

Rts. 3/11 fall in this category, although the section in downtown Tilton is clearly serving another function as a local shopping and service destination point where on-street parking is critical to the adjacent land use patterns.

Collector Streets

Moving local traffic from individual developments or subdivisions to and from the arterial highways is the primary function of collector streets. These are two-lane, undivided roads with at-grade intersections controlled by stop signs on the streets or driveways entering the collector street. Speed limits are generally 30 to 40 miles per hour, access is available to adjacent land, and parking is permitted, although often unnecessary due to available off-street parking. Included in this category are Route 140, Route 132 (Sanborn Road), and School Street.

Local Streets

These undivided two lane streets provide access to adjacent land uses. Generally used by low volumes of local traffic at speed limits of 30 miles per hour in urban areas and 40 miles per hour in rural areas, these roads have at-grade intersections controlled by stop signs, and parking is unrestricted. All streets in Tilton not otherwise classified are considered to be local streets.

D. TRAFFIC CHARACTERISTICS

Because the two most heavily used highways (I-93 and Rt. 3/11) in Tilton are under state jurisdiction, detailed analysis of traffic on these roads dates back to the 1950s when I-93 was planned as part of the national system of “Defense Highways.” In early 1960, as I-93 was being extended north from Tilton, the state acquired land northerly of Exit 20 for a future Exit 21 at an interchange with a relocated Rt. 3/11. The relocated Rt. 3/11 was to have been a controlled access road linking Franklin and Laconia. It was intended that Exit 20 would remain available to serve local access needs on the existing Rt. 3/11 in Tilton. Exit 21 has not materialized due to financing problems and to some local opposition.

Traffic Volumes: Trends and Projections

Historical data reveal some very clear trends about traffic flow in Tilton. Traffic, both north and south of Exit 20 on I-93, has increased significantly in the past 10 years. Due to considerable development east of Exit 20, traffic flow on Rt. 3/11 east of Exit 20 has increased about 20%. Rt. 3/11 from Franklin / Tilton town line to Exit 20 has also steadily increased. Although there is insufficient data to give an accurate traffic count, it appears that the increase is in the neighborhood of 20 to 30% over the last 10 years. Traffic on I-93 adjacent to Exit 20 is expected to continue to increase.

Traffic Volumes: Monthly and Daily Variations

Variations in traffic flow occur seasonally, daily, and hourly. Certain days of the week and hours of the day exhibit higher traffic volumes and less desirable travel conditions than other times. Tilton’s location in the Lakes Region makes it a prime candidate for seasonal traffic flow variations. Studies indicate that I-93 and Rt. 3/11 east of I-93 achieve weekly peak flows on Sundays and weekday peak hours are in the late afternoon. For Rt. 3/11 west of I-93, the

seasonal and weekday peaks are not as significant and daily traffic has two peaks encompassing the morning and evening commuter traffic.

Table VI-1: Past And Present Daily Traffic Volumes At Locations In Tilton

LOCATION	1995	1998	2000	2004
I-93 South of US 3/11 Exit 19-20	21,606	24,220	25,142	28,331
Silver Lake Rd. at Belmont T.L.		1,200	1,800	
US 3 EB-WB East of jct. Of I-93	10,000 (1994)		15,000	
US Rte. 3 West of Winding Hill Brook (Lochmere) NB-SB	15,000	14,000	13,000	16,000
I-93 SB-NB at Sanbornton T.L.	14,000	19,000	24,000	25,000
US 3 West of Rte. 132 South	14,000	15,000		16,000
US 3 South of Park and Ride			15,000	18,000 (2003)
I-93 NB on Ramp Exit 20			4,000	4,400
I-93 NB off Ramp Exit 20			3,900	6,100
I-93 SB off Ramp Exit 20			3,200	3,600
I-93 SB on Ramp Exit 20			3,900	5,100

Source: State of New Hampshire Department of Transportation

Safety Characteristics

The frequency of traffic accidents at a given location is often indicates design and capacity problems. Because accidents take a financial and human toll, locations with higher than average accident rates are worthy of further analysis. Table VI-2 lists locations for which data was gathered for this Master Plan.

Table VI-2: Accident Location and Rate of Occurrence on Route 3/11 In Tilton

LOCATION	1988-1990	2000	2004
Park Street	3	2	
School Street	5	3	
Exit 20 Ramps (I-93)	6	2	
Rt. 140	5	1	
Rt. 132	4	5	
Church Street	3	1	

Source: Tilton Police Department, 2007

E. SUMMARY OF FINDINGS

The following are the most significant observations and findings relative to the transportation system in Tilton.

1. While other limited modes of transportation are available in Tilton, travel by private vehicle is predominant. However, opportunities do exist for expansion of the use of other modes.
2. The State of New Hampshire controls the majority of road mileage in Tilton, as well as all of the most heavily used roads.
3. Current analysis confirms past conclusions that traffic growth on Route 3/11 has surpassed the roads current configuration and this situation will continue to deteriorate with future development. Possible solutions to the problems include future development of a full interchange at Exit 19 in Northfield, including a bypass from Franklin to Exit 19 and from Exit 19 to Route 140.
4. The majority of traffic going through downtown Tilton is through traffic. On Rt. 3/11 east of I-93, the percentage of through traffic varies significantly depending on the time of day and the season.
5. The Town should work closely with N.H. Department of Transportation in the planning of proposed future development that takes place along Route 3/11 from Home Depot to Mosquito Bridge.
6. Due to the widening of Rt. 3 east of Exit 20, a median strip should continue east from the Tilton Diner to the Home Depot as left turns, other than those at signalized intersections, present a significant safety problem in addition to interfering with traffic flow.
7. A comprehensive traffic study should be done for Route 3/11 between Exit 20 and Home Depot. The most recent traffic data available is for the sections West and East of this area only, as the the increase in traffic and widening of the roadway have made it difficult to accurately monitor the area.
8. The use of connector roads and driveways to move vehicles between developments should be required along the Route 3/11 corridor. This would help reduce the number of vehicles accessing Route 3/11, thus reducing the volumes on this already heavily congested roadway. They should also be utilized wherever businesses abut in areas where there is a potential for traffic congestion and increased accidents.