

## TRANSPORTATION

### 1.0 INTRODUCTION

An important factor in Kingston's future development will be the impact of additional growth in traffic on the highway network. Kingston, like many other New Hampshire towns, originally developed along trails connecting it to nearby communities. In contemporary times, Kingston has developed with primary reliance on the automobile and the highway network. Other forms of transportation, though represented, are of lesser consequence.

As the community has grown, the roadway network has expanded to serve newly developed areas and land uses. In recent years, Kingston, along with many other neighboring southern New Hampshire communities, saw an increase in residential development. The steady increase in traffic volumes that has accompanied this growth has resulted in a rise in congestion, traffic accidents and traffic circulation problems, particularly on and adjacent to NH Rte. 125. Inevitably, commercial growth has also increased along NH Rte. 125 adding to the traffic problems stated above.

The future reconstruction of NH Rte. 125 will have a major and prolonged impact on the Town. The convergence of other major routes (NH Rtes. 111 and 107) in Kingston continue to generate traffic volumes and congestion.

The recently completed NH Rte. 111 Bypass has helped to divert traffic volume away from local roads and onto NH 125, helping to eliminate truck traffic through the center of Kingston. Several interim improvements should aid in better traffic flow along the NH 125 Corridor. By the year 2000, two improvements along this corridor should be completed. Improvements at the intersection of Old Coach Road include eliminating existing curb cuts at the Pond View Restaurant and adding a designated left-turn lane. Traffic signals at New Boston Road are also scheduled to be installed by Spring of that year. Maintenance and expansion of the roads, improvements in circulation, and wise planning on ways to manage future growth and development through improved access management, zoning controls and site planning will all play an important role in the Town's future.

Many of the transportation challenges facing the Town are associated with NH Rte. 125 and the continued impact of growth along this corridor. The recently completed NH 125 Feasibility Study highlighted a large number of important issues related to transportation. These issues, along with others identified by the Master Plan Committee include the following:

- Operational, safety and access related deficiencies along the NH 125 Corridor including absence of turn lanes, insufficient illumination, poor alignment and sight lines, and the lack of intersection definition.
- Similar deficiencies as those found along NH 125 are evident on NH Rte. 111 (Exeter Road). As alternative commuting proposals and commercial development expand in Exeter and surrounding communities, traffic volumes will inevitably increase creating the same problems currently faced on NH 125.

- Projected traffic volumes indicate the need to consider the widening of NH 125 south of the Hunt Rd./Newton Junction Rd. intersections to a four-lane cross section; without proper access management, this may be necessary along the entire NH 125 corridor.
- Identification of specific primary intersections (Hunt Rd./Newton Junction Rd., New Boston Road, Depot Road, Exeter Road) that will need to be widened to a five-lane cross section to accommodate existing and future traffic patterns;
- Designate compact growth areas and limit the amount of development that can occur along less developed/rural arterials;
- Prohibit strip development along NH 125 (and other arterials where appropriate), including a proliferation of single lot development;
- The adoption of an access management plan to ensure that development along Kingston's highways does not significantly reduce traffic safety and carrying capacity.
- The necessity for planning and development for future frontage/service roads to connect commercial and residential developments along NH Rte. 125 (and other arterials where appropriate) and consolidate existing curb cuts.
- Address alternative modes of transportation such as bicycles, buses and trains. Transportation Demand Management (TDM) options such as vanpools, carpools, as well as the provision of bicycle lanes, pedestrian amenities and bus stops may also be included. Safety concerns about bicycle and pedestrian use of Town roads need to be addressed.
- Multi-tiered zoning districts should be considered along NH Rte. 125 (and other appropriate arterials) to affect greater control over the type and intensity of uses allowed.

This chapter provides an overview of Kingston's transportation system, reviews the recommendations contained in the NH 125 Corridor Feasibility Study and attempts to address the issues listed above. All "figures" mentioned in this section are located at the end of this chapter.

## **2.0 EXISTING TRANSPORTATION SYSTEM**

### **2.1 Highways**

#### **Highway Classification**

Kingston relies primarily on its highways to provide the transportation network for private cars, trucks and buses. Kingston is served exclusively by four classifications of highways by State definition:

Class I (Trunk Line Highways): These consist of all existing or proposed highways on the primary state highway system, excepting all portions of such highways within the compact sections of town and cities of 7,500 inhabitants and over. The state assumes full control and pays cost of construction, reconstruction and maintenance of its sections.

Class II (State Aid Highways): These consist of all existing or proposed highways on the secondary state highway system, excepting portions of such highways within the compact sections of towns and cities of 7,500 inhabitants and over, which are classified as Class IV highways. All sections improved to the satisfaction of the commissioner are maintained and reconstructed by the State.

Class V (Rural Highways): these consist of all other traveled highways which the town or city has the duty to maintain regularly.

Class VI (Unmaintained Highways): These consist of all other existing public ways, including highways discontinued as open highways, highways closed subject to gates and bars, and highways not maintained in suitable condition for travel for five years or more.

As shown in Table T-1 there are presently 3.764 miles of State maintained Class I highways in Kingston. There are 14.285 miles of State maintained Class II highways in Kingston.

Class VI roads, which number at 6.129 miles according to the NHDOT, are maintained by the Town for the sole purpose of providing access by emergency vehicles. All other roads in Town, except for privately owned and maintained roads, are classified as Class V. Class V "Rural Highways" are the responsibility of the Town to maintain. There are 52.315 miles of Class V road and are the only road type that has grown appreciably in the past several decades. New residential subdivision streets that are turned over to the Town become Class V roads once they become public. Main Street was formerly a State maintained road, but was turned over to the Town by agreement in 1995 when the Rte. 111 Bypass was completed.

Since 1982 the number of Class V highways has increased from 30.2 miles to 52.315 miles. This represents a 66% increase. The percentage of town maintained roads in 1982 was 59% whereas the percentage of town maintained roads is now 76%. The actual classification of each road in Kingston is shown on Table T-2. Due to the implementation of "911" emergency services in New Hampshire, certain road name changes were required. A list of these changes is shown in Table T-3.

In 1993 the NHDOT, in cooperation with the Federal Highway Administration and regional planning commissions, established a revised functional classification of all highways in New Hampshire. These classifications, which complement the State classifications, are primarily based on the traffic capacity and volumes attributed to the roads. They are important because they are used to determine where and under what conditions Federal highway funds may be utilized. Roads that have a functional class of Collector or higher are eligible for Federal highway funds. There are four classes, each represented in Kingston:

Principal (Major) Arterial: Serves major centers of activity, the highest traffic volume corridors, and the longest routes. In addition, they generally carry the major portion of traffic entering and exiting the community.

Under this system, all of NH Route 125 is classified as a principal arterial.\*

Minor Arterial: Links and supports the principal arterial system. Minor arterials are roads that place a greater emphasis on land access than the principal arterial and therefore offer a lower level of mobility.

NH Route 111 (from Rte. 125 to the Danville Town Line) is classified as a minor arterial.\*

Collector: Provides both access to land uses along the roadway and circulation within residential neighborhoods, and commercial and industrial areas. It differs from the arterial system in that the facilities on the collector system may penetrate residential neighborhoods. Conversely, the collectors also collect traffic from the local streets in residential neighborhoods and channel it into the arterial system.

NH Route 111 (from Rte. 125 to the Exeter Town Line) is classified as a major collector as is NH 107 (from Fremont to Rte. 125). Minor collectors include NH Rte. 107 to E. Kingston, 107A and Newton Junction Road.\*

Local Roads: Comprise all facilities not on one of the three systems described above. Their function is to primarily provide direct access to the higher order systems. They offer the lowest level of mobility, and service to through traffic movement is usually deliberately discouraged.

The balance of Kingston's highways are classified as local roads that feed traffic into either collectors or arterial roads.\*

*\*Source: The Federal Functional Classification Table – 1998*

<b>TABLE T-1</b>			
<b>Road Mileage in Kingston by State Classification</b>			
STATE CLASS	1982	1995	1999
Class I – Trunk Line (State Maintained)	4.6	3.764	3.764
Class II (State Maintained)	15.8	16.653	14.285
Class V (Town Maintained)	30.2	49.477	52.315
Class VI (Town Maintained for Emergency Vehicles)	N/A	6.129	6.129
<b>TOTAL</b>	50.6	73.023	76.493*
<p>*Great Pond Park and Pillsbury Pasture are not classified as Town accepted road as of 6/15/99 and are not included in the above figures.</p> <p><b>NOTE: There are no Class III (Recreational Roads) or Class IV (Urban Compact) listed for Kingston.</b></p> <p><b>Source: Bureau of Municipal Highways, NHDOT</b></p>			

<b>TABLE T-2A</b>					
<b>ROAD CLASSIFICATION CHART</b>					
<b>TOWN OF KINGSTON</b>					
<b>Road Name</b>	<b>Quadrant</b>	<b>Class</b>	<b>Road Name</b>	<b>Quadrant</b>	<b>Class</b>
Acorn Drive	B-3	5	Crawley Falls Road	C-1	5
Acox Lane	E-1	6	Crest Road	D-4	5
Alma Avenue	D-1	5	Danville Road	B-3	5
Ann Hannagan Lane	B-4	5	Debra Road	B-6	5
Babscott Lane	D-4	5	Deer Run Circle	B-2	5
Back Road	B-1	6-U	Depot Road	C-2,D-3	5
Ball Road	B-2,B-3	5	Dolliver Lane	C-2	5
Bartlett Street	C-2	5	Dorre Road	A-5,B-6	5,6-U
Bass Lane	D-3	5	Drew Lane	C-3	5
Bassett Road	C-2,C-3	5	Dulcie's Point Road	D-4	5
Beach Drive	B-3,C-3	5	Eagle Way	B-4	5
Beaver Pond Road	A-5	5	East Way	C-2	5
Bernaby Lane	C-2	5/N	Eighteenth Street	B-3	P
Birch Street	D-4	N	Eighth Street	B-3	P
Black Alder Drive	C-2	5	Eleventh Street	B-3	P5
Bluebird Lane	B-4	6	Elkins Road	B-2	5,6-U
Bob-White Drive	B-3	5	Exeter Road	D-1,E-1	State
Brookhaven Road	B-1	5	Farm Road	D-1	5,6-U
Bunker Road	C-2	5	Fieldstone Drive	E-1	5
Burke Street	B-5	N	Fifield Brook Road	C-2,C-3	N
Camp Lincoln Road	B-3	P	Fifteenth Street	B-3	P
Cardinal Road	B-4	5	Fifth Street	B-3	P
Cedar Swamp Pond Rd	C-4	6-U	First Street	B-3	P
Cemetery Lane	C-2	5	Folly Brook Terrace	C-4	5
Chase Street	C-2	5	Fourth Street	B-3	P
Cheney Road	B-3	5	Frontage Road	C-4	5
Chisholm Road	C-3	5	Frye Road	A-4,B-5	6-U
Choate Hill Road	C-2,C-3	5	George Road	C-3	5
Church Street	C-2	5	Giles Road	E-1	5
Circuit Drive	D-3	5	Goodwin Way	C-4	5
Clark Road	C-2,C-3	5	Grand View Terrace	E-1	B
Clement Avenue	D-2	5	Granite Road	B-6	5
Clover Circle	C-1,D-1	N	Great Pond Road	B-3	5
Colby Road	A-5	5	Green Road	C-4,C-5	P
Colcord Road	C-2	5	Greystone Road	E-1	B
Colonial Road	B-6	5	Gunstock Drive	B-4	5
Concannon Road	C-5	5	Half Moon Lane	B-3	5
Coopers Grove Road	D-4	5	Happy Hollow Lane	B-6	5
Cottage Street	C-2	5	Hemlock Road	B-5	5
Country Lane	C-2	5	Highland Road	B-6	5
Country Pond Road	D-4	6-U	Hillside Road	B-6	5
County Road	D-1	6-U	Hooke Avenue	B-5	5

TABLE T-2B

**ROAD CLASSIFICATION CHART  
TOWN OF KINGSTON**

Road Name	Quadrant	Class	Road Name	Quadrant	Class
Hunt Road	A-5,B-5	5	Parsons Way	C-2	5
Independence Avenue	D-2	5	Penniman's Grove Rd	D-3	5
Iris Road	B-3	5	Pheasant Run	E-1	5
Jericho Drive	A-5	5	Phoenix Drive	B-3	5
Kasher Drive	B-5	5	Pillsbury Pasture Road	B-5,B-6	B
Kelley Road	B-4	5	Pine Street	D-4	5
Kenlin Lane	D-4	5	Pow Wow River Road	D-3	State
Kimberly Road	B-6	5	Rams Way	A-5	B
King Pine Way	D-1	5	Red Gate Drive	E-1	5
Kingston Pines	C-3	P	Reinfuss Lane	B-5	P
Lake Road	C-4,C-5	P	Ridgewood Drive	B-2	5
Lamprey Road	C-2	P	Riverwood Road	D-1	5
Ledge Road	B-3	P	Robin Lane	B-5	5
Lincoln Circle	D-2	5	Rockrimmon Road	C-2	5,6,6-U
Linden Road	D-4	5	Ronnie Lane	C-2	5
Lions Way	B-5	P	Route 111	B-4,D-1,E-1	State
Little River Road	C-2,D-1	5	Route 125	A-6,B-4,C-1	State
Lone Tree Road	B-5	P	Rowell Road	D-4	6-U
Long Pond Road	B-3	5	Sanborn Road	C-2	Removd
Lucian Avenue	D-2	5	Sands Lane	C-3	P
Mac Millan Road	B-1	5	Sargent Lane	D-4	5
Madison Avenue	D-2	5	Scotland Road	C-3	State
Main Street	C-2,C-3	5	Sean Drive	C-2	5
Maple Street	D-3	5	Second Street	B-3	P
Marshall Road	B-1,E-1	State	Senters Grove Road	C-3	5
Meadow Wood Road	D-1,E-1	N	Seventeenth Street	B-3	P
Meeks Road	B-4	5	Seventh Street	B-3	P
Merrick Road	C-3	5	Shady Lane	C-4	5
Merrill Avenue	B-5,C-5	5	Shendoar Drive	D-4	5
Mill Road	B-4,B-5	5	Shirley Lane	C-3	5
Mockingbird Lane	B-3	5	Shore Road	D-1	5
Morgan Lane	B-3	6	Simes Road	D-3	5
Morning Dove Road	A-5,B-5	5	Sixteenth Street	B-3	P
Nason Lane	B-3	5	Sixth Street	B-3	P
New Boston Road	C-3,D-4	5	Small Pox Road	C-3,C-4	6-U,6-C
Newton Junction Road	B-5,B-6	State	South Road	E-1	5
Ninth Street	B-3	P	Spruce Lane	C-4	5
North Street	B-2,C-2	5	Steer Road	C-2	5
Oak Street	D-4	5	Stevens Drive	E-1	5
Old Coach Road	B-5	5	Stoneybrook Lane	B-4	5
Ox Road	B-6	6-U	Sunshine Drive	B-4,C-4	5
Page Road	B-4	State	Tenth Street	B-3	P

<b>TABLE T-2C</b>					
<b>ROAD CLASSIFICATION CHART</b>					
<b>TOWN OF KINGSTON</b>					
<b>Road Name</b>	<b>Quadrant</b>	<b>Class</b>	<b>Road Name</b>	<b>Quadrant</b>	<b>Class</b>
Thayer Road	C-2	5	Webster Landing Road	C-2,C-3	5
Third Street	B-3	P	West Shore Park Road	B-5	5
Thirteenth Street	B-3	P	Whipple Spring Road	C-2,C-3	5
Thorne Road	B-1	5	White Drive	B-2	5
Timothy Lane	D-1	N	Wilders Grove Road	B-6,C-6	5
Toppan Road	C-2	5	Willow Road	D-2	5
Tower Road	B-2	6-U	Windsong Drive	B-4	5
Towle Road	A-4,B-4	5/6-U	Winslow Park Road	B-2,B-3	5
Travis Cove Road	D-4	5	Woodland Drive	B-2	5
Tucker Road	B-1,B-2	6/6-U	Wright's Road	C-2	5
Twelfth Street	B-3	P			
Valley Lane	A-5	5			
Wadleigh Point Road	C-3,C-4	5			
Washington Way	D-2	5			
Webster Grove Road	C-4,C-5	6-U			
<p>KEY: P – Private                      N – Not Built                      B - Builders</p> <p>6-C – Closed                      6-U – Unpassable</p>					

Source: The Official Town Map – Town of Kingston, 1998

## ROAD NAME CHANGES

***Due to the implementation of "911" emergency services in New Hampshire, certain road name changes were required. The following is a list of those changes that were adopted by the Board of Selectmen on March 27, 1995.***

PREVIOUS ROAD NAME	NEW ROAD NAME
Ann's Terrace	Folly Brook Terrace
Bartlett Beach Drive	Beach Drive
Cheney Lane	Morgan Way
Cheney Mill Road	Cheney Road
Clark Road	Parsons Way
Clement Avenue Extension	Independence Avenue
Clements Lane	Spruce Lane
Country Pond Road North	Lions Way
Dry Mill Road	Tucker Road
Great Hill Terrace	Grand View Terrace
Green Road South	Frontage Road
Green Road West	Lake Road
King's Way	East Way
Little River Road West	Farm Road
Long Pond Access Road	Ledge Road
Long Meadow Drive	Red Gate Drive
Main Street West	Main Street
Mill Brook Road	Colby Road
North Danville Road	North Road
Nason Road	Eagle Road
Oak Hill Road	Hemlock Road
Oak Ridge Lane	Mockingbird Lane
Oakview Road	Linden Road
Old Mill Road	Old Coach Road
Old Haverhill Road	Colonial Road
Pine Road	Granite Road
Pine Valley Lane	Valley Lane
Pinecrest Road	Crest Road
Pinewood Loop	Deer Run Circle
Rte. 125 Access Road	Bluebird Lane
Shore Drive	Bass Lane
Thorne Road (Abandoned Portion)	Back Road
Wadleigh Point Road Extension	Drew Lane
West Shore Park Road East	Snow Road
White Oak Drive	White Drive

**Table T-4B**  
**Existing Traffic Volume Summary**  
**NH Rte. 125 Corridor, Kingston**

Location	Average Weekday Traffic Volume (vpd)	AM Peak Hour (vph)	Percent Of Daily Traffic	PM Peak Hour (vph)	Percent Of Daily Traffic
Route 125 South of Marshall Road	13,800	1,030	7.5	1,070	7.8
Marshall Road North of Route 125	4,000	290	7.3	370	9.3
Route 125 South of Depot Road	13,900	1,070	7.7	1,070	7.7
New Boston Road West of NH 125	1,600	140	8.8	180	11.3
New Boston Road East of NH 125	2,300	170	7.4	220	9.6
Route 125 North of Old Coach Road	13,100	970	7.4	1,020	7.8
Old Coach Road North of Mill Road	100	10	10.0	10	10.0
Old Coach Road South of Mill Road	1,300	90	6.9	120	9.2
Hunt Road West of NH 125	2,000	170	8.5	170	8.5
Newton Junction Road East of NH 125	3,200	280	8.8	270	8.4
Rt. 125 South of Newton Junction Rd.	15,500	1,000	6.6	1,200	7.7

*Source: Existing Traffic Volume Summary, November 1996, RPC, 125 Corridor Study*

**Table T-4C**  
**Secondary Road Traffic Counts**

Road (Location)	ADT	Year	Type	Source
Hunt Road (West of NH 125)	2,005	1996	ADT	RPC
Hunt Road (Hampstead Town Line)	1,495	1997	ADT	NHDOT
Mill Road (Over inlet to Country Pond)	1,326	1997	ADT	NHDOT
Mill Road (At Danville Town Line)	80	1996	ADT	NHDOT
Little River Road (Over Little River)	387	1997	ADT	NHDOT
Scotland Road (East of NH 111)	1,800	1995	AADT	NHDOT
New Boston Road (West of NH 125)	1,556	1996	ADT	RPC
New Boston Road (East of NH 125)	2,634	1997	ADT	NHDOT
New Boston Road (Between NH 125 & NH 111)	1,578	1996	ADT	RPC
Old Coach Road (North Leg – West of NH 125)	134	1996	ADT	RPC
Old Coach Road (South Leg – East of NH 125)	1,301	1996	ADT	RPC
South Road (At Brentwood Town Line)	940	1997	ADT	NHDOT
Shore Road (At Brentwood Town Line)	277	1997	ADT	NHDOT
Church Street (North of North Road)	5,074	1997	ADT	NHDOT
Main Street (South of NH 111)	564	1997	ADT	NHDOT
Main Street (South of New Boston Road)	5,938	1997	ADT	NHDOT

*Source: Existing Traffic Volume Summary, November 1996, RPC, 125 Corridor Study*

## **Circulation**

NH Rte. 125 is the primary route of travel into and out of Kingston. This arterial connects the Town to Plaistow and Rte. 495 (heading to Massachusetts to the south) and Brentwood and Epping to the north. Branching off of NH Rte. 125 are two other important routes of travel, NH 107 leading into Fremont and NH 111 (East and West) connecting to the neighboring communities of Danville, Hampstead, E. Kingston and Exeter. As previously discussed, secondary circulation patterns are developing as an alternative to these routes. Branching off of NH Rte. 125 are local roads such as Newton Junction Road leading to Newton and Plaistow; New Boston Road to access Newton; Hunt Road as a connection to Rte. 111 and neighboring Danville and Hampstead. The Rte. 111 bypass has helped to divert traffic off of Main Street; through truck traffic is now prohibited.

Kingston's road network does not provide good circulation patterns throughout Town without accessing a major route. NH Rte. 125 bisects the Town making it impossible to get from east to west without traveling on this arterial. There are virtually no alternative circulation patterns within the community from south to north. Traveling north to south requires using one of the four arterials or collectors. Several residential developments have no internal connections or through connections. Virtually all trips originating from these areas must access NH Rte. 125 (either directly or via secondary routes such as Hunt Road and Newton Junction Road that feed into NH Rte. 125) regardless of their destination. Recent residential developments include those on Debra Road, Hillside Drive, Happy Hollow Road, Pillsbury Pasture, Jericho Drive, Morning Dove Road, Robin Lane and Meeks Road.

While NH Routes 111 (Exeter Road) and 107 are considered collectors, they are currently being used to carry more and more of the traffic entering and exiting the community looking for commuter alternatives. Due to this trend, they have the potential for the same types of difficulties that currently exist on NH Rte. 125.

Recent residential development along NH Rte. 111 has no other access point other than Exeter Road. Presidential Estates, for example, which consists of several interconnecting local roads (Washington Way, Madison Avenue, Lincoln Circle) has only one common entrance onto Exeter Road. Two recently proposed subdivisions adjacent to Shore Road, while having a through connection into Brentwood, is sure to add traffic volume onto this collector via Little River Road.

**Table T-5  
Traffic Volume Increases in Kingston**

Road Location	1993 ADT	1997 ADT	% Increase
NH 107 – West of NH 125 (two way)	3,600	4,498	25%
NH 111 – Danville Town Line	5,500	6,850	24%
NH 125 – North of NH 107	10,000	12,332	23%
NH 125 – South of NH 107	12,044*	14,214	18%
NH 125 – South of New Boston Road	9,400	15,853	68%
NH 107A- At East Kingston Town Line	2,100	2,462	15%
New Boston Road – East of NH 125	2,200	2,634	19%
Mill Road – Over inlet to Country Pond	1,000	1,326	32%
Little River Road – Over Little River	340	387	14%

\*Represents ADT for 1994-Traffic counts unavailable for 1993

*Source – New Hampshire Department of Transportation*

NH Rte. 111 (Exeter Road) is used as a connecting highway to Routes 1, 27, 33 and 101. Routes 27 and 101 are used not only to travel to the NH Seacoast area but also areas with major commercial/retail development. Route 1 is another alternative to accessing the Seacoast area via the connection with Route 1A. Route 1 is also an alternate route for commuter travel on Route 95 heading north to Maine or south to Massachusetts. Route 33 takes commuters to a major center in the City of Portsmouth.

Another change that will no doubt lead to increased traffic along this corridor will be the implementation of Passenger Rail Service from Portland to Boston that is proposed to begin in the Fall of the year 2000. This service will include a stop in Exeter that will be directly accessed via NH Route 111. These trains are expected to travel at speeds of approximately 80 miles an hour. It is anticipated that this will be a highly viable alternative to commuting to Boston. As such, it will most certainly increase traffic along Rte. 111 (Exeter Road) in Kingston for local and area residents seeking this alternative mode of transportation.

NH Route 107 is a corridor that leads to the western part of the State. It also leads to a major area in that it connects to Route 101 leading to Manchester. It is used to access Route 93, which travels north to Maine and south to Massachusetts.

### **Levels of Service**

The NH Rte. 125 Corridor Feasibility Study included a comprehensive level of service analysis, done in 1996, for the major intersections and roadway segments along NH Rte. 125. The results of this analysis are shown on Tables T-6A and B. Level of service (LOS) is based on a grading system where LOS “A” is the best condition and LOS “F” is the worst condition. The analysis was based on *existing* conditions and traffic volume, not anticipated volume. The results of the signalized intersection analyses conducted for the 1996 base year reveal relatively good operation levels of service in the areas where recent improvement projects have been constructed, such as the intersections of Route 111 (Exeter Road), Route 107 (Depot Road) and the new Route 111 intersection. Each of these three intersections operate at LOS “B” during the morning and evening hours. The results of the unsignalized intersection analysis indicate that the

left-turning exiting movements from most of the corridor side streets operate at poor levels of service, LOS “E” or “F”. Operationally deficient movements include the left-turn exiting movements from Marshall Road (Route 107), New Boston Road, and Newton Junction Road. An evaluation of the roadway segments along NH Rte. 125 revealed that the northern segments of the corridor (north of Old Coach Road) operate at LOS “D” while the central and southern segments (south of Old Coach Road) operate at LOS “E”. (NH 125 Feasibility Study, VHB, August 1999)

Of the intersections showing an LOS of “E” or “F”, one - New Boston Road, is scheduled for signalization by Spring, 2000. Old Coach Road, which is the point that the roadway segment begins to deteriorate from LOS “D” to “E” is scheduled for improvements, including a left turn lane, also by Spring, 2000. Specific recommendations for improvement of those sites with less than adequate LOS can be found in the NH 125 Feasibility Study.

<b>Table T-6A</b> <b>Intersection Capacity Analyses</b> <b>Summary of Existing Conditions – 1996</b>		
KINGSTON	AM Peak Hour (LOS)	PM Peak Hour (LOS)
NH 125 at Rte 111 (Exeter Rd)	B	B
NH 125 at Rte 107 (Depot Rd)	B	B
NH 125 at Rte 111 (“Bypass”)	B	B
NH 125 at Rte 107 (Marshall Rd) (Left from NH 107)	C	F
NH 125 at New Boston Rd -Left/Through/Right from New Boston Road–East Bound -Left/Through/Right from New Boston Road –West Bound	C D	F F
NH 125 at Old Coach Road	B	B
NH 125 at Hunt Road	C	C
NH 125 at Newton Junction Rd (Left/Right from Newton Junction Road)	C	F
NH 125 at Kingston Road (Right from Kingston Road)	A	C
NH 125 at Kingston Road Ext. (Left from K. R. Ext.)	B	C
<b>Table T-6B</b> <b>Roadway Segment Analysis</b> <b>Summary of Existing Conditions</b>		
KINGSTON	AM Peak Hour (LOS)	PM Peak Hour (LOS)
NH 125 between Depot Rd and New Boston Rd	D	D
NH 125 between Rt 111 and Old Coach Rd	D	D
NH 125 between Newton Junction Rd and Plaistow Town Line	D	E
NOTE: LOS = Level of Service; A = free flow, no delay, F = extreme congestion, maximum delays.		
Source: NH 125 Feasibility Study, VHB Inc., 1999		

**Table T-7  
Journey-to-Work Data  
Kingston  
1990 US Census**

Estimated Residents: 5,591 / Estimated Residents Working: 2,920

<b>Residents Commuting FROM Kingston TO:</b>			<b>Residents Commuting TO Kingston FROM:</b>		
<b>New Hampshire</b>			<b>New Hampshire</b>		
<b>Total Workers: 1022</b>			<b>Total Workers: 1022</b>		
Workplace	Workers	% of Total	Residence	Workers	% of Total
Plaistow	203	19.8%	<b>KINGSTON</b>	500	45.4%
Exeter	131	12.8%	Plaistow	104	9.4%
Salem	65	6.3%	Newton	54	4.9%
Hampstead	62	6.0%	Raymond	53	4.8%
Newton	50	4.8%	Hampstead	46	4.1%
Stratham	46	4.5%	Danville	42	3.8%
Seabrook	43	4.2%	Epping	33	3.0%
Portsmouth	42	4.1%	Fremont	31	2.8%
Other	380	37.1%	Exeter	25	2.2%
			Other	212	19.2%
<b>Residents Commuting FROM Kingston TO:</b>			<b>Residents Commuting TO Kingston FROM:</b>		
<b>Out of State</b>			<b>Out of State</b>		
<b>Total Workers: 1398</b>			<b>Total Workers: 215</b>		
Workplace	Workers	% of Total	Residence	Workers	% of Total
Haverhill, MA	264	18.8%	Haverhill, MA	52	24.1%
N. Andover, MA	170	12.1%	W. Newbury, MA	24	11.1%
Andover, MA	162	11.5%	Methuen, MA	23	10.6%
Lawrence, MA	78	5.5%	Amesbury, MA	17	7.9%
Methuen, MA	20	1.4%	Other MA locations	85	39.5%
Other Essex County	279	19.9%	Maine	14	6.5%
Boston	75	5.3%			
Middlesex County	272	19.4%			
Other Mass. Location	31	2.2%			
Maine	36	2.5%			
Other States	11	.78%			
Total Residents Working in Kingston: 500					
Total Residents Commuting FROM Kingston: 2420 (82.9%)					
Total (Residents and Non-Residents) Working in Kingston: 1,315					
Total Non-Residents Commuting TO Kingston: 815 (62%)					

**Commuting Patterns**

According to the 1990 US Census, approximately 2920 of the 5591 residents of Kingston were employed. Of that number, an estimated 2420, or 82.9%, commuted out of Kingston. More than half of that number commuted to Massachusetts. Table T-7 --Journey to Work- is a compilation of the 1990 Census data for residents commuting from Kingston to work in other locations and for workers from other locations commuting to Kingston. In 1990, approximately 56% of Kingston residents worked in New Hampshire, with 32% of that number working in the nearby towns of Plaistow, Exeter, Hampstead, Newton, or Kingston itself. About 46% of working residents commuted to jobs in Massachusetts; 1.25 % commuted to Maine. Of the 1315 people working in Kingston, 500 were residents, leaving 62% to commute to Kingston. The majority of those commuters came from Plaistow, Newton, Raymond and Hampstead. Approximately 25% commuted to Kingston from Massachusetts; 1.75% from Maine.

While this information is limited in its scope, it is useful for identifying commuting patterns as future highway and public transportation plans for this region are developed and proposed.

**Public Safety and Highway Accidents**

There are several locations in Town with a high incidence of traffic accidents. A record of total motor vehicle accidents for the past five (5) years is shown in Table T-8 below.

TABLE T-8 Motor Vehicle Accidents		
Year	# Motor Vehicle Accidents	# Involving Injury
1994*	131	20
1995*	241	73
1996*	370	94
1997**	113	68
1998**	128	70
<i>*Includes Personnel Injury Accidents, Property Damage Accidents and Minor Accidents</i> <i>**As of 1997, Minor Accidents involving costs of less than \$1000 no longer meet the State criteria for reportable accidents</i> <b>Source: KINGSTON TOWN REPORTS</b>		

Many of these locations are characterized by high traffic volume and/or multiple curb cuts. In 1998, traffic accidents happened most frequently at the locations listed in Table T-9 and shown on Figure T-2.

<b>Table T-9 Most Frequent Accident Locations</b>		
<i>Location</i>	<b>No.</b>	<b>% of Total</b>
NH 125 (no other location information available)	17	13.3%
NH 125/New Boston Road	6	4.7%
NH 125/Exeter Road	5	3.9%
NH 125/Hunt/Newton Junction Rd.	4	3.2%
NH 125/NH 107N	4	3.2%
NH 125/Various intersections-3 or less accidents	12	9.4%
Mill Road/Danville Road	4	3.2%
Main St/Various intersections and locations-3 or less accidents	20	15.6%
<p><b>Source: Police Dept. Accident Reports for 1998</b>  <i>*Updated Node Maps that would identify specific locations along State Highways were not available from the NHDOT in 1998. A computer program is expected to be available in 1999 for local police departments to utilize that would make accident statistics more specific to exact location.</i></p>		

The NH 125/New Boston Road intersection, the site of many serious traffic accidents in the past, is being addressed by the installation of traffic signals and turning lanes. The initial public hearings for this improvement were held in the Spring of 1999 with the work being completed in the year 2000. Though accidents along NH Rte. 125 can vary from minor to moderate to serious, the potential for serious accidents remain high due to a variety of factors including absence of turn lanes, insufficient illumination, poor alignment and sight lines, lack of intersection definition and high speed. The trend that is developing regarding the number and location of accidents points to the inability of the highways and intersections to continue to safely handle an increased traffic volume which they were not designed to accommodate.

There is growing concern about pedestrian and bicycle safety due to the lack of adequate shoulders on many of the highly traveled secondary roadways and State highways. As bicycle and pedestrian usage on these roads increases (especially on roads used by school children traveling to Bakie School and the recreational facilities at the “Fairgrounds”), the potential for serious accidents will grow.

**Emergency Vehicle Access**

Three characteristics of the Town’s transportation system have the potential to negatively impact public safety and, in particular, emergency vehicle access.

First is the high degree of peak hour traffic congestion on NH Route 125. Barring the existence of connecting alternate routes, it becomes difficult for Fire and Police vehicles to travel this route during these peak periods.

Secondly, the preponderance of dead end streets that do not connect with one another could prevent emergency vehicle access should the single dead-end roadway become temporarily blocked.

Thirdly, there are roadways in Kingston that are not connected with any other portion of the Town's road system other than through NH Route 125. Should NH Route 125 become blocked, emergency vehicles would be unable to efficiently reach these areas within the confines of the Town's existing road system. Future alternate routes and road connections should be developed to eliminate these potential problems.

## **2.2 Other Highway Issues**

### **Truck Traffic**

As the area grows, additional truck traffic can be expected. In order to ensure that trucks use the proper roads, the town should enforce RSA 47:17, Section VIII "Traffic Devices and Signals" which empowers the Board of Selectmen:

"To make special regulations as to the use of vehicles upon particular highways, except as to speed, and to exclude such vehicles altogether from certain ways; to establish stop intersections, erect and provide for the control of traffic by, stop signs or other traffic devices or signals which shall conform to standards set by the highway commissioner and shall be approved by him as to type, size, installation and method of operation."

This RSA allows Kingston to adopt an ordinance restricting vehicles above certain weights (to be determined by the Road Agent) from designated Town roads during seasonally wet periods.

### **Dead-End Roads**

There are a number of dead-end roads in Kingston. The town currently limits the length of dead-end roads to 800 feet. This policy is in place for several reasons. It is a safety concern due to longer than necessary travel time for emergency vehicles and possible blockages to access. A large number of residences served by only one access increases the risk of emergency vehicles not being able to respond because the one road entrance is blocked for some reason. Long dead-end roads create an inefficient road network that tends to require the use of a small number of major roads for most trips and necessitates that vehicles retrace routes. For these reasons, the Planning Board should discourage dead-end streets, maintain and enforce the limit on the length of dead-end streets and encourage obtaining easements for future connections whenever possible.

## **Scenic Roads**

Roads may be designated within a town as scenic roads, as specified by RSA 231:157. In order to designate any road in a town as scenic, other than a Class I or Class II highway, 10 persons owning land abutting the proposed road can petition the town to do so. In turn, the Town votes on it at any regular or special town meeting. Voters can also rescind the designation of a scenic road at a regular meeting upon petition.

There are two potential benefits for the town in designating scenic roads. First, it establishes a procedure for protecting the rural landscape within a public right-of-way. Secondly, it can demonstrate the public's interest to preserve the rural and historic qualities of a road. Both can help preserve the scenic quality of the road in the event that changes to the road are proposed (i.e. widening, removal of walls and trees, etc.).

The effects of designating a road scenic are detailed in RSA 231:158. Included are restrictions upon the repair, maintenance, reconstruction or paving work that is done to the road. Two important facets of the designation are that it does not affect the eligibility of the Town to receive construction, maintenance, or reconstruction funds, or affect the rights of any landowner. To date, no roads have been designated as “scenic” in Kingston.

## **Trails**

Any Class V or VI highway may be reclassified as a Class A trail by vote of the local legislative body per RSA 231-A:2. A Class A trail, as defined in RSA 231-A:1, shall be a full public right-of-way, of indefinite duration, subject to public trail use restrictions. It shall not have the status of a publicly approved street, and shall not be used as a vehicular access for any new building or structure, or for the expansion, enlargement, or increased intensity of use of any existing building or structure. It may; however, be used by the owners of land abutting on such trail, or land served exclusively by such trail, to provide access for such non-developmental uses as agriculture and forestry. The municipality shall bear no responsibility for maintaining the trail for such uses by abutting owners.

There are potential benefits to the Town in designating a Class A Trail that are similar to those listed above regarding scenic roads. A major component of Kingston's Master Plan and ensuing ordinances deal with the protection and preservation of Kingston's rural qualities and characteristics. Voting to reclassify a Class V or Class VI highway to a Class A Trail allows the public to demonstrate its interest in preserving the rural landscape and qualities of a designated roadway.

In 1998, the Town of Kingston voted to designate the Class VI portion of Rockrimmon Road, beginning at the west end of Tax Map R-24, Lot 12A and continuing along Rockrimmon Road westerly to the Danville town line, as a Class A trail.

## **Gates and Bars**

Per RSA 231:45-a, it is possible to discontinue a class IV, V, or VI highway subject to gates and bars with the vote of the local legislative body. A highway, which is discontinued subject to gates and bars, shall not have the status of a publicly approved street. Currently, the Town of Kingston has voted to discontinue Small Pox Road subject to gates and bars.

### **2.3 Public Transportation**

Despite the area's population base, as well as the employment and shopping opportunities in the region, the area lacks a comprehensive public transportation system. Growing dependence on the private automobile has had a pronounced effect on land use patterns. Much of the development that has taken place is tailored to automobile users at the expense of other modes of transportation. The result is a dramatic increase in pollutants emitted by vehicles and congestion created by the lack of sufficient highway systems to handle the increased traffic volume.

Current public transportation options are limited in Kingston and the surrounding region. Lamprey Health Care provides local area Health and Human Service transportation for the elderly and disabled. There are approximately sixteen other Area Health and Human Service Agencies that provide transportation to their clientele on varying schedules. Specific information and phone numbers are listed in the *Salem-Plaistow-Windham Region Transit Guide* available through the Rockingham Planning Commission.

### **2.4 Bus Service**

Kingston is currently one of only two communities in the region with an intercity bus stop. The Coach Company provides two A.M. southbound trips and three P.M. northbound return trips in their Epping-Kingston-Plaistow service. Bus service is available to several locations in Boston including Haymarket Square, Government Center, Park Street, St. James Avenue, Copley Square and Logan Airport. Residents can access this service either at the bus stop, currently located at Carriage Towne Plaza (Church Street and 107A) in Kingston or the Park and Ride Lot located on Westville Road in Plaistow.

There is currently no public transportation service that operates in an East/West direction in this region.

### **2.5 Park and Ride Lots/ Ridesharing**

Transportation Demand Management (TDM) is an initiative to encourage the use of alternative modes of commuting travel. An existing program being promoted by NHDOT and various Metropolitan Planning Organizations is the Park and Ride Facility. Park and Rides serve the function of providing places where ridesharers can store their vehicles when another member of the carpool or vanpool is doing the driving. Many Park and Rides also serve as intercity bus stop locations.

The NHDOT has constructed 21 Park and Ride lots around the State in support of individual efforts to carpool. There are no such lots in Kingston; however, the NHDOT maintains a Park and Ride lot in Plaistow. There is also a plan to build a Park and Ride lot in Hampstead once a suitable site can be found around the Rte. 121/Rte. 111 area. Another site is planned for Salem near Exit 1. The Michael Weston Memorial Park and Ride lot in Plaistow is located on Westville Road and is well situated to serve Kingston residents who commute via Rte. 495. This lot has the capacity for approximately 250 cars and averages about 10% utilization daily. Bike lockers, public telephones and a shelter are available. There is adequate lighting for safety purposes and appropriate striping of the lot has been done.

Organized Ridesharing is another component of TDM. It is an opportunity for residents who commute distances to their jobs to reduce the number of single occupant vehicle use helping to reduce congestion and the need for further highway expansion and construction. The NHDOT, in cooperation with the Salem-Windham-Plaistow MPO and COAST has initiated ridematching services in order to help commuters find potential rideshares. Individuals may call the NHDOT Rideshare Coordinator at 1-800-462-8707 and have their commute requirements entered into a database that can then be searched for potential rideshares. In addition, the Massachusetts organization *Carivans-for-Commuters* assists groups of commuters to organize vanpools for ridesharing. The Town should assist in promoting such services as a way to reduce overall peak hour traffic congestion on the region's roadways.

## 2.6 Passenger Rail Service

While there are plans to begin passenger rail service, currently none exists in the Southern New Hampshire region. Kingston residents do, however, have access to MBTA commuter rail service. Stations in Haverhill, Bradford and Lawrence provide 12 round trips daily to Boston's North Station.

High speed (approximately 80 mph) passenger rail service on the B&M Mainline will become accessible to Kingston residents when the proposed Amtrak service between Portland, ME and Boston, MA begin, tentatively scheduled for the Fall, 2000. Currently, the plan is to provide three to four round trips daily with station stops in Dover and Exeter. Implementation of this plan would provide a viable commuter alternative from this region to Boston.

Another initiative that is being negotiated is the possibility of extending the MBTA from Haverhill into Plaistow. Kingston residents would then have the option of utilizing the MBTA passenger service to Boston at the Plaistow stop. The Rockingham Planning Commission, in their "Long-Range Transportation Plan" dated August 1998, made this a Project Specific Recommendation with proposed funding with a C-MAQ (Congestion Mitigation/Air Quality Program) grant. While CMAQ funding (approximately \$975,000) was approved, there will still be the issue of determining sources for matching funds to complete and continue the project.

The Town should be cognizant of these plans and work to encourage implementation of these proposals. Any cooperative effort with PATAC (Plaistow Area Transit Advisory Committee), the Rockingham Planning Commission (RPC), Salem-Plaistow-Windham (SPW) Metropolitan

Planning Organization (MPO) and the New Hampshire Department of Transportation (NHDOT) should be encouraged. Both these options would provide Kingston residents the opportunity for passenger service while also helping to eliminate further traffic congestion.

## **2.7 Bike Travel**

Nationally, bicycle transportation represents a possible alternative to motorized transportation. According to the 1990 Census, only 6 Kingston residents utilize bicycles to travel to and from work. However, there is a number of youth (primarily elementary students) that travel to and from school by bicycle. In contrast to the relatively low number of bicycling commuters, a large and growing number of individuals use bicycles for recreational purposes. Many of the roads in Kingston most used by bicyclists have inadequate shoulders to accommodate them safely. This is generally true of all of the main secondary roads in town, as previously identified.

The NHDOT and Salem-Plaistow-Windham MPO have jointly developed a regional bicycle plan that is designed to create a basic network of bike routes statewide. This network is designed to serve non-recreational users, and as such, often follows high volume state routes. Four roads in Kingston are included on the state/regional bicycle routes network: NH Rte. 125, NH Rte. 111, NH Rte. 107, and part of Main Street (included prior to the NH Rte. 111 "Bypass" being constructed). (See Figure T-3) There are currently three categories of existing shoulder width within the existing right-of-way on the NHDOT designated bicycle network. There are roadways with four foot shoulders or greater (NH 125, NH 111, NH 107), those with shoulders less than four feet (Main Street) and those lacking any shoulders. Pavement markings and spot improvements for bicycle travel for NH Rte. 125 in Kingston/Plaistow and NH Rte. 111 in Kingston/Hampstead/Salem/Windham are currently listed as projects BP-4 and BP-5 in the Salem-Plaistow-Windham MPO 2002-2020 Long Range Transportation Project Table. Note that these projects have a timetable with the construction not to begin until 2007. As each functional segment (those connecting with another segment) of the bicycle network is constructed, the shoulders will be striped and signed to invite public use. The town's planning and site review process should be cognizant of these plans and incorporate bicycle facilities in site and subdivision plans wherever appropriate.

While bicycle transportation is not being widely used as an alternative in commuting, it is becoming widely popular as a recreational activity. The Recreational Bike Path Committee (a sub-committee of the Kingston Highway Safety Committee) conducted a survey in September of 1996. This survey questioned the public's concerns regarding local highway conditions and related issues, including the possibility of establishing bike paths (Table 10). A high level of interest in developing future recreational paths and trails was established in this survey. The Planning Board should be aware of the proposed recreational paths (Figure T-4) and encourage connections with the State's plans wherever possible.

## **2.8 Pedestrian Travel**

While not normally considered an alternative mode of transportation, pedestrian movement does, in fact, represent another means of travel and as such merits consideration. While the Town has no sidewalk system, about 21 Kingston residents walk to work (according to the 1990 Census) and many children walk to and from school. In terms of location, pedestrian travel occurs most frequently on paved and unpaved shoulders and road rights-of-way.

Most communities in the Salem-Plaistow-Windham region lack adequate pedestrian infrastructure. Beyond the lack of infrastructure, many barriers exist which prevent safe walking conditions for pedestrians. Such obstacles include:

- No safe places to cross busy arterials;
- Long distances between residential, commercial, or employment areas due to land development patterns;
- Utility poles, low trees or other barriers placed in the right-of-way or shoulders; and
- No consideration given to walking amenities, such as benches, protection from sun or wind, or landscaping.

Currently, the Town does not encourage the construction of sidewalks in new residential subdivision construction. This is because the residential development in Kingston lacks sufficient population density to warrant their construction and maintenance expense. The Highway Department does not have the available workforce or equipment to maintain sidewalks.

Many communities in the United States are now utilizing different techniques beyond traditional sidewalks that place pedestrians and other non-motorized modes of travel on an even level with motorized traffic. These measures are referred to as “traffic calming” which use physical design of the roadway to prevent inappropriate automobile speeds. These techniques are appropriately used in residential areas. They include using a “modern roundabout” which is an intersection treatment designed to slow traffic such that pedestrians can safely cross around the perimeter; speed humps, speed tables; physical impediments either in the middle of the road (medians) or on the side of the road (chicanes).

Since construction of sidewalks is not necessarily the only option, pedestrian concerns should be considered for future planning. The Town should consider adding sidewalks or traffic calming techniques, particularly in areas with high pedestrian and bicycle usage. Examples (not an inclusive list) of possible areas within the community for consideration are:

- Main Street, as it services both Municipal and School District facilities;
- Any development along the arterials and collectors in Kingston (NH Routes 125, 111, 107, 107A and Newton Junction Road);

- The “Fairgrounds”;
- Any other recreational sites developed in Kingston; and
- New commercial developments and subdivisions.

An important first step in providing walking facilities for pedestrians is for public works officials, planners, and local officials to include pedestrian issues in their planning process. As with automobiles and traffic, accommodation of pedestrians should become an automatic and routine part of community planning, zoning and transportation studies.

### **3.0 FUTURE ROAD LAYOUTS**

#### **3.1 Potential Improvements to the Road Network**

The Master Plan Committee has identified internal road circulation problems in several locations in Town, as well as potential solutions to some of those problems. These problems largely result from three different but related conditions. First, misaligned intersections and multiple curb cuts that exist along NH Rte. 125, as well as NH Rte. 111 and NH Rte. 107. The misalignment of several roads intersecting NH Rte. 125 causes unnecessary turning movements onto the highway. Relocations of these roads could form aligned four-way intersections and greatly improve travel in Town. Second are the multiple dead end residential streets. And third are the lengthy residential roadways with several subdivision roads located off them with little or no interconnections (such as Hunt Road, Presidential Estates and Great Pond Park).

Multiple curb cuts on NH Rte. 125 worsen the congestion on the highway. The NH 125 Corridor Feasibility Study addresses these problems. Solutions concentrate on widening primary signalized intersections to accommodate an exclusive left-turn lane in each direction with the directional flow separated by a raised median. The long-range plan calls for the development of connector roadways aimed at reducing the number of uncontrolled left-turn movements by providing access to the primary signalized intersections. The proposal also calls for the realignment or closure of many of the minor side street intersections that currently intersect NH 125 at skewed angles. The specific proposals are shown in the NH 125 Corridor Feasibility Study.

Also included in the proposal is the planning and development for future frontage/service roads which run parallel to the arterial, providing access to existing and future development that now front this road instead of directly accessing the arterial. Such roads would give the opportunity of developing possibly commercially zoned land without allowing direct access to the arterial. Development along the section of NH Rte. 125 that is classified as “limited access” would also then be possible. The creation of a frontage road utilizing existing intersections would eliminate the need for additional curb cuts while still allowing for visibility along the arterial.

The problems associated with dead end streets have already been discussed. The Planning Board should encourage connections, whenever possible, as future developments come before them. It is important to remember, however, that local road connections are intended to encourage the better circulation of local traffic, not to encourage commuter or commercial traffic away from the arterial. Nor is the purpose to encourage direct access from residential areas directly onto the arterial. Doing so would contribute to other safety issues that would not be acceptable. Local road connections are intended to eliminate the risk of emergency vehicles being unable to respond due to a road entrance being blocked and eliminate unnecessary travel time for emergency vehicles. Access management and future road layouts should also be used to improve traffic circulation in all areas of Kingston. Any proposed connections and consolidations would need detailed site evaluations to determine feasibility.

### **3.2 Protecting Future Road Corridors**

The consideration of desired future road layouts raises the question of protecting these corridors from future development.

Under New Hampshire RSA 674:9-13, towns have the ability to establish an “Official Map” which formally established future road layouts as established by the Planning Board. The following steps are required:

1. The Town Meeting must authorize the Planning Board to prepare a “major street plan”.
2. The Planning Board would need to develop the street plan and have the exact location of the recommended street lines surveyed and then adopt it as part of the Master Plan.
3. The Town Meeting may then adopt an ordinance establishing the major street plan as the Official Map.
4. The Map, as certified by the Town Clerk, would then be filed at the Registry of Deeds.

There are several problems with this approach. First it presumes that the Planning Board will know, or can determine, the exact locations and alignments of future roads. Second, it will be very costly to complete the surveys required, and third, once established, the Town may be exposed to “inverse condemnation” liability and be forced to purchase development rights on land adversely impacted by the road layout. Perhaps for all of these reasons, few communities in New Hampshire have used the Official Map provisions of the State’s planning statutes.

An alternative approach is for the Planning Board to develop a general, “non-official map” showing a conceptual plan of future roads and connections, but not specify the exact locations or routes. The specific rights-of-way would be developed by negotiating with individual landowners as they seek approvals from the Planning Board for specific development plans.

#### 4.0 NH ROUTE 125 CORRIDOR PLAN

The most important transportation planning issue for Kingston is NH Rte. 125 as the growth of the corridor continues resulting in increasing traffic and safety problems. The NH 125 Reconstruction Project, described as “Westville Bridge to the Kingston Bypass”, has been listed in the Salem-Plaistow-Windham Metropolitan Planning Organization’s *Transportation Improvement Plan (TIP)* and in the State of New Hampshire’s *Ten Year Program for Transportation Improvements* for nearly ten years. Over the past several years, this project has been delayed due both to the fiscal constraints in the State Ten Year Program and by the decision to allocate Federal transportation dollars to other higher priority projects elsewhere in the region and the state. In the current Ten Year Program and TIP, the preliminary engineering for the project is slated to begin in 1999, with construction not scheduled until 2004-2005. Officials from the Towns of Kingston and Plaistow had expressed the need to understand the nature and extent of likely improvements to the corridor to be able to anticipate these improvements as community planning and site plan review responsibilities are carried out. In response to this need and at the request of the MPO, the NHDOT agreed to fund a *corridor feasibility study* in advance of the Preliminary Engineering phase of the project. (*NH Rte. 125 Corridor Feasibility Study*) The entire corridor from the Westville Bridge in Plaistow to the Kingston-Brentwood town line was the subject of a highly detailed planning study entitled the *NH Route 125 Corridor Feasibility Study*. This study was prepared in 1998 under the direction of the Rockingham Planning Commission by Vanasse Hangen Brustlin, Inc. (VHB). Local assistance was provided by the NH 125 Corridor Study Advisory Committee which consisted of appointed representatives from Plaistow and Kingston. The study included an in-depth analysis of existing traffic conditions, projected traffic growth along the roadway based on a development build-out analysis, and identified both short term improvements that were needed immediately, and longer range improvement that are expected to be needed by the year 2010. The Study is an invaluable planning document in that it provides the Town with a clear picture of the likely future configuration of NH Rte. 125 which they can “plan around”. It also previews the consequences of unchecked development in the corridor: a five-lane typical road cross-section with center turning lane and occasional raised medians, and many new signalized intersections. This is not a vision that most Kingston residents would like to see for the central corridor in our community. Utilizing proper access management techniques would allow the Town to maintain the existing 2-lane cross-section, with the exception of the primary signalized intersections, for much of the northern and central segments of the corridor.

As with any long-range plan, it is likely that the NH 125 Feasibility Study will prove to be incorrect in some respects. Nonetheless it will continue to be the basis for identifying specific roadway improvements to be implemented in the corridor. It is incumbent on the Town to periodically review the recommendations made in the Study, revise them as needed and communicate these changes to the NHDOT. Perhaps even more important, the Town should evaluate all future development proposals on NH 125 to ensure their consistency with the corridor recommendations of the Study that the Town accepted.

As part of their review of transportation issues, the Master Plan Committee has reviewed both the long range and short range highway facility recommendations in the Study to determine their applicability and consistency with the Town's view of the corridor's future. Both the Towns of Plaistow and Kingston have endorsed the implementations proposed in the NH 125 Corridor Study.

The proposed improvement projects were prioritized into three groups. Regarding those projects in Kingston, Group 1 priorities were those improvements to the Hunt Road/Newton Junction Road intersection. Group 2 involved improvements at the Kingston Road intersection. Group 3 involved improvements at the Exeter Road intersection, Depot Road intersection, New Boston Road intersection and the section of NH 125 from Newton Junction Road to Kingston Road. No specific funding is in place to construct the conceptual plans shown in the Study, nor are any included in the current State Ten Year Program. On March 31, 1998 at a joint meeting of the Salem-Plaistow-Windham MPO Policy Committee and Technical Advisory Committee, it was voted to adopt the 2001-2003 Transportation Improvement Program (TIP) for submittal to NHDOT. That TIP ranked the realignment and signalization of NH 125/Newton Junction Road/Hunt Road (along with improvements at Jesse George Road/NH 125/Danville Road in Plaistow that was also listed in Group 1) as priority number two in the list of project proposals in the region. Five projects proposed by the NH 125 Corridor Study were included in the recommendations. It is unlikely, however, that all of the projects that were recommended for inclusion in the State's 2001-2003 TIP can be accommodated within the TIP timeframe due to financial constraints. While the preliminary engineering is scheduled to begin in 1999 and continue into 2001 with right-of-way purchasing to begin in 2000, this project has continually been "pushed back" for decades. Given that some of these improvements are already overdue on the basis of need, it is important that the Town work closely with the Salem-Plaistow-Windham MPO and NHDOT during the transportation project selection process to secure funding support for agreed-upon projects.

## **5.0 ACCESS MANAGEMENT**

While local communities are becoming increasingly concerned about the effects of development on community character, quality of life and the costs of providing services (including transportation improvements) conventional regulatory practices have only perpetuated land development problems. There is a growing trend for strip commercial development along major arterials. Ease of accessibility and expedience are the primary reasons for such development. Commercial developers favor these locations because of the low development costs and ready supply of customers. Problems associated with strip commercial developments along arterials are widespread. As this form of development intensifies, the growing number of curb cuts for driveways and the resultant turning movements conflict with the intended function of the arterial which is to move people safely, quickly and efficiently. The resulting reduced level of service then requires adding more lanes, raised medians, and other expensive retrofitting measures to try to maintain the capacity of the corridor for regional traffic. Heavy traffic, coupled with

undesirable traffic control measures, often cause businesses to relocate from the corridor, increasing vacancies and lowering property value. The initial costs borne by the developers of strip commercial corridors are low, yet the long-term public costs to remedy negative effects on the corridor are substantial. (*Local Access Management Manual*, Rockingham Planning Commission)

The New Hampshire Department of Transportation, while having jurisdiction over access to state highways, currently has no authority to prevent strip development or to prohibit access to land abutting state highways. Absent any future state regulation of strip development, only local government's Master Plans and Zoning Ordinances can guide development patterns and limit or prohibit strip development. Access Management controls regulating the placement and design of driveways can be enacted through proper and appropriate Subdivision and Site Plan Review Regulations.

Access Management, for the purpose of this chapter, refers to local oversight of all means of vehicular access onto public highways in order to maintain the safety and efficiency of the road. Practically, it means appropriately spacing or limiting the number of driveways while also removing the slower turning vehicles from the highway as efficiently as possible. The purpose is not to eliminate future development but to maintain, or increase, the safety and efficiency of the roadways.

While developing the NH Rte. 125 Feasibility Corridor Study, the remedies (and their associated costs) required for existing development, along with the potential problems associated with future development, of this and other local arterials, became all too clear. The cycle and pattern of strip development is widespread, not only in Kingston, but also along this and other corridors in neighboring communities. The spread of this type of development is not, however, inevitable as it directly relates to the lack of adequate regulatory and access controls and inherent problems in current planning and regulatory practice. (*NH Rte. 125 Corridor Feasibility Study*, VHB for Rockingham Planning Commission) Access Management tools such as those proposed in the *NH Rte. 125 Corridor Feasibility Study* and the *Local Access Management Manual* by the Rockingham Planning Commission need to be incorporated into Kingston's zoning, site plan review, and subdivision regulations.

## 5.1 Access Management Tools

Implementing access management requires several components to be added into Kingston's existing regulations.

### Zoning

- Adequate *setbacks* should be required to allow for flexibility in locating driveways, future frontage road construction, adequate driveway throat-length, and to accommodate future right-of-way and/or roadway widening including the addition/extension of sidewalks or bicycle path/shoulders.

- Increasing minimum *frontage* requirements effectively reduces the potential number of access points onto a highway.
- A *driveway turn-around area* may also be adopted as a Selectmen's Ordinance as it will be largely applied to private residential driveways. This merely eliminates the need to back onto a roadway, reducing the potential for collision.
- There are two specific regulations pertaining to *signs*. Off-premise signs, not limited to billboards, create visual confusion, which in turn can have the potential of creating traffic hazards and should therefore not be permitted. Setbacks concerning freestanding sign locations should be based upon several factors such as the posted speed of the road, building setback requirements, dimensional standards and lighting method so as not to cause additional confusion to the traveling public.
- The use of overlay districts as a method for managing access along commercial corridors is rapidly increasing across the United States. An *Access Management Overlay District* would overlay a special set of requirements onto an existing district while retaining the underlying zoning and its associated requirements. Overlay district requirements may address such issues as joint access, interconnecting driveways, driveway spacing as well as limitations on new driveways.

### **Site Plan Review**

There are several components for improved access management that should be amended or added to existing site plan review. These items are better defined in the publications listed above but include:

- Establishing minimum distances between driveways;
- Driveway width;
- Maximum number of driveways per lot;
- Allowing for shared driveways;
- Provisions for interconnecting driveways or easements for future construction of driveways to promote vehicular and pedestrian access between adjacent lots;
- Access to lots with multiple frontage should be prohibited on the arterial highway and directed to the adjacent road unless causing greater environmental or traffic impact;
- Driveway (throat) length should be designed to eliminate vehicles backing onto the arterial;

- Corner Clearances should be established in compliance with the publications listed in the section;
- Adequate On-Site Circulation and Storage to promote safe and efficient movement into and out of the site; and
- Landscaping and Buffering that aid in the identification of driveway entrances, controlling internal lot circulation to establish safe and efficient traffic patterns.

### **Subdivision**

Providing for traffic safety and efficiency should also be a component of subdivision review. For access management these include:

- Interconnecting driveways or easements to promote vehicular access between adjacent lots without accessing the highway and be designed to provide safe and controlled access to existing developments;
- Access to lots with multiple frontage should be prohibited on the arterial highway and directed to the adjacent road unless causing greater environmental or traffic impact;
- Corner Clearances should comply with standards in the publications listed in this section;
- Minimum Distance between Driveways should be established; and
- Shared Driveways should be encouraged for adjacent residential sites along arterial highways.

### **5.2 Frontage/Service Roads**

The planning and development of future frontage/service roads involves the adoption and coordination of several aspects of access management. Frontage roads are roads that run parallel to the arterial, providing access to current and future businesses that now front on this road, instead of directly accessing the arterial. Frontage roads may be constructed within either the State ROW, a newly created Town ROW, or within the front buffer of the subject parcel. Relocate the frontage road away from the arterial and they become service roads. The proper development of frontage roads can be coordinated within the above zoning and site plan review regulations. Additional regulatory tools to consider include:

- Requiring ample front setbacks, free of structures and parking lots; and
- Provide allowances for constructing frontage and/or service roads in the applicable buffer areas.

### 5.3 Access Management Plan/Memorandum of Understanding

An Access Management Plan is a graphic representation of the arterial being managed, developed in cooperation/consultation with abutting and affected landowners. The Plan is an advisory tool of sufficient detail (parcel specific) which delineates present and future driveway locations; joint accesses; intersections, including present and future plans for signalization; and frontage/service roads. The purpose of the Plan is to provide for the orderly development/redevelopment of the corridor in compliance with the access management standards adopted by Kingston. Prospective developers of properties along the corridor should be required to incorporate and construct the appropriate components of the Plan into their development plans. The Planning Board should consider professional review of any proposals before them for compliance with the intent of this Plan.

The Memorandum of Understanding is an agreement between Kingston and the NH Department of Transportation whereby NHDOT agrees to cooperate with the Kingston Board of Selectmen and the Kingston Planning Board in the implementation of the access management plan through the driveway permitting process. (*Local Access Management Manual, RPC*)

### 5.4 Access Management Recommendations

Proper access management standards are best implemented once the following has been determined:

1. Land Patterns. Where development should be encouraged and where it should be limited. Future land use decisions will likely have more of an impact on traffic conditions than access management alone in reducing future traffic problems on arterial highways.
2. Traffic Flow. The extent to which arterial traffic volumes have increased in recent years and are likely to increase in the future.
3. Plan's Relationship to Access Management. How the community's transportation and land use policies can be enhanced by sensible access management standards.

Based on these factors, along with the guidelines established in the *NH Rte. 125 Corridor Feasibility Study* and the *Local Access Management Manual*, the following recommendations are made for establishing an effective access management program:

- Develop an access management plan in conjunction with a future land use map;
- Designate compact growth areas and limit the amount of development that can occur along less developed/rural arterials;
- Prohibit strip development along NH 125 (and other arterials where appropriate), including a proliferation of single lot development;

- Create and incorporate in the Town's Zoning Ordinances, an Access Management Overlay District as a tool for managing access along corridors zoned for commercial use, such as, but not limited to, NH Rte. 125;
- Include standards in the Site Plan Review and Subdivision Regulations to ensure that development along NH 125 does not significantly reduce traffic safety and carrying capacity;
- Require traffic impact analyses for all Site Plan Review and Subdivision applications exceeding a certain threshold;
- Address alternative modes of transportation such as bicycles, buses and trains. Transportation Demand Management (TDM) options such as vanpools, carpools, as well as the provision of bicycle lanes, pedestrian amenities and bus stops may also be included;
- Adopt policies and recommendations of the *Local Access Management Manual* published by the Rockingham Planning Commission; and
- The Board of Selectmen and the Planning Board have endorsed the recommendations and Long Range Plan as proposed in the *NH 125 Corridor Feasibility Study* prepared by VHB, Inc. for the Rockingham Planning Commission. As such, the Planning Board should consider these recommendations as they pertain to all future relevant proposals before them.

### 5.5 Site Specific Access Management

As part of the NH Rte. 125 Corridor Study, a field investigation was conducted in the Spring of 1998 to evaluate specific access management improvements. The potential for the establishment of service roads that could provide alternative access to businesses and residences on NH 125 was also evaluated. While the scope of this study did not permit a detailed, site-level feasibility analysis of the recommendations, they can serve as useful guidelines both to property owners and the Planning Board as they evaluate site development plans and consider traffic mitigation requirements in the future.

#### *Specific recommendations:*

- The area to the west on NH 125 in the vicinity of Dorre Road is Kingston's industrial zone and has the potential to generate a significant volume of traffic in the future. The access management recommendation (ACR) is to develop an interior access road parallel to NH 125 that would connect the access road currently leading to the industrial property at Tax Map R3-18 north to Dorre Road to the industrial property located at Tax Map R1-14, R2-8, R2-9 and R2-11 thus diverting any future industrial traffic away from residential property.

- A connector road is recommended to be constructed parallel to NH 125 from Meeks Road northward to the new NH 111 Bypass intersection with NH 125. This would provide a secondary access road for existing and future land use on the east side of NH 125, including the “Fairgrounds”. Particular attention should be given to good bicycle and pedestrian access along this access road. The existing northern end of Meeks Road as it intersects NH 125 should be closed and traffic redirected to the access road.
- A connector/access road is proposed parallel to NH 125 running from Depot Road, beginning about 700 feet east of NH 125/NH 107 intersection, running north-ward approximately 2,500 feet, and re-entering NH 125 at a new “T-type” intersection. The path of the road is that of an old roadbed that parallels NH 125 back approximately 130 feet for the edge of pavement. The purpose of this road would be to provide access to land along a controlled access portion of NH 125. Any future proposal to develop this land should include provision for the construction of this type of access roadway.
- A future internal access road is proposed to provide single-drive access to vacant land at the southwest corner of the NH 125/NH 111 (Exeter Road) intersection. The purpose is simply to eliminate the potential for multiple driveways being constructed in close proximity to this busy intersection. The actual need and timing of this roadway should be evaluated at the time that this land is proposed for development.
- Substantial developable land exists within an area west of NH 125 and just south of the Sears Logistics Center building. It is recommended that any future development at this location be required to access the site through the existing driveway to the industrial park, with a connection to an internal roadway system to the developable land.

The access management facilities recommended above are conceptual in nature. In most cases, the roads will be constructed with private funds and in a “piecemeal” fashion as part of the on-site and off-site improvements required in the approval process. As such, the Town should also amend its impact fee ordinance to incorporate NH 125 specifically to help implement access management improvements. (*NH 125 Feasibility Study, VHB, August 1999*)

## **6.0 FEDERAL AND STATE TRANSPORTATION PLANNING**

### **6.1 ISTEA/ TEA 21**

The enactment of the national Intermodal Surface Transportation and Efficiency Act of 1991 (ISTEA) and the Clean Air Act Amendments of 1990 (CAAA) have begun to significantly change the way transportation planning and project programming is done in New Hampshire. The basic thrust of ISTEA is to increase and elevate the importance of local decision making in the regional, state, and federal transportation planning process. In 1998, ISTEA was replaced by the Transportation Efficiency Act of the Twenty-first Century (TEA 21). TEA 21 authorizes over \$200 billion to improve the Nation’s transportation infrastructure, enhance economic growth and protect the environment. TEA 21 maintains the spirit of ISTEA, both in its emphasis on the importance of regional metropolitan transportation planning and the need to consider all

transportation modes. Transportation project planning and funding processes are locally and State-driven. As part of its long-term transportation plan, each State and metropolitan area develops three-year transportation improvement programs (TIPS), which prioritize projects and funding. Only projects in an approved TIP are eligible for Federal funding. Through additions to both the Surface Transportation Program (STP) and the National Highway System (NHS), TEA-21 creates flexibility to fund transportation enhancement opportunities. The Salem-Plaistow-Windham Metropolitan Planning

Organization (MPO) is responsible for developing a transportation plan and a prioritized list of capital improvements for transportation for their region. This MPO includes the urbanized communities of Salem, Plaistow, Windham and the non-urbanized communities of Atkinson, Danville, Hampstead, Kingston, Newton and Sandown. The Salem-Plaistow-Windham region forms part of an area ("Southern New Hampshire") which is among those designated as "serious non-attainment" for ground level ozone by the federal Environmental Protection Agency. Proposed transportation plans must incorporate a quantitative air quality analysis that shows that the project recommendations will be in conformity with New Hampshire's State Implementation Plan. As required by the CAAA, not only must the Transportation Plan be found to not increase the frequency or severity of existing air quality problems, it must also contribute to reductions in annual emissions. (*Salem-Plaistow-Windham MPO Transportation Plan - 8/19/98*)

As a member of the Salem-Plaistow-Windham MPO, Kingston has appointed representation on the MPO's Technical Advisory Committee (TAC) and Policy Committee. These committees oversee and approve the transportation planning activities, including specific traffic, corridor and transit studies, that can be carried out in the community. Kingston currently has projects recommended in the FY 1999-2020 Salem-Plaistow-Windham Metropolitan Planning Organization Long Range Transportation Plan, the FY 1999-2001 Transportation Improvement Plan (TIP) and the 2001-2003 TIP. The FY 1999-2001 TIP projects for Kingston (the addition of a left turn lane at Old Coach Road and the traffic signal installation at New Boston Road) are currently in the project bidding process with estimated completion in Spring of 2000. In the FY 2001-2003 TIP is the proposal for the realignment and signalization of the NH 125/Newton Junction/Hunt Road Intersection. This project was rated as second in priority on the Salem-Plaistow-Windham MPO's project recommendations list. This project is also included, along with other NH Rte. 125 improvements) in the MPO Long-Range Project Recommendations (2002-2020) as well as the New Hampshire Department of Transportation (NHDOT) Ten Year (STP funded) Program (12/97). (Table 10)

TABLE T-10

**SALEM-PLAISTOW-WINDHAM METROPOLITAN PLANNING ORGANIZATION  
2002-2020 LONG RANGE TRANSPORTATION PROJECT TABLE**

**Federally Funded Roadway Projects (STP)**

(NH Ten Year Program)

ID#	Applicant/Source	Location	Total Cost Estimate	Title	Construction Start Year
RD-1	NHDOT Ten Year Program (12/97)	Plaistow-Kingston	\$9,411,000	NH125 Reconstruction from Westville Bridge in Plaistow northerly approx. 6.0+/- Miles to NH125 & Main street intersection in Kingston	2003

**125 Plaistow-Kingston Phase I\***

RD-10	Rte 125 Feasibility Study	Plaistow	\$2,470,000	Reconfigure & signalize NH125 & Jesse George/Danville Rd; Close existing Danville Road entrance	2003-2006
RD-11	Rte 125 Feasibility Study	Kingston	\$1,750,000	Align and signalize NH125 & Hunt Rd/Newton Jctn Rd.	2003-2006

**125 Plaistow – Kingston Phase II\***

RD-12	Rte 125 Feasibility Study	Plaistow	\$1,485,000	Signalize & Widen Intersection 125 & Old County Road	2003-2006
RD-13	Rte 125 Feasibility S.	Plaistow	\$1,180,000	Upgrade 125 & Kingston Rd. Intersection	2003-2006
RD-17	Rte 125 Feasibility Study	Plaistow	\$2,257,500	NH 125 Jesse George Rd to East St reconstruction & access management Infrastructure	2003-2006
RD-18	Rte. 125 Feasibility Study	Plaistow	\$967,500	NH 125 Old County Rd to Main St reconstruction & access management Infrastructure	2003-2006

**125 Plaistow – Kingston Phase III\***

RD-14	Rte. 125 Feasibility Study	Kingston	TBD	NH 125 – Improve side road alignment and reduce grade at several locations	2011-2015
RD-19	Rte. 125 Feasibility S.	Kingston	\$1,395,000	Upgrade intersection NH 125 & NH 107 (Depot Road)	2011-2015
RD-20	Rte. 125 Feasibility S.	Kingston	\$1,510,000	Upgrade intersection NH 125 & NH 111 (Exeter Road)	2011-2015
RD-21	Rte. 125 Feasibility S.	Kingston	\$1,485,000	NH 125-Improve New Boston Road Intersection	2011-2015
RD-22	Rte. 125 Feasibility Study	Kingston	\$2,915,000	NH 125 Newton Junction Rd to Kingston Rd reconstruction & access management Infrastructure	2011-2015

\*125 Plaistow Kingston Phases are based upon NH 125 Corridor Study recommendations. It is expected that Phases I and II will be funded by Project RD-1 above. Phase III will be funded through other sources after 2010.

**Source: FY 1999-2000 Salem-Plaistow-Windham MPO Long Range Transportation Plan including FY 1999-2000 Transportation Improvement Program (TIP)**

## 6.2 MPO Project Selection and Planning Process

For compliance with TEA 21 and the CAAA, the Salem-Plaistow-Windham MPO must adopt a transportation plan containing the region's adopted policies, goals and objectives and project recommendations regarding the development of the transportation system through the year 2020. ("S-P-W MPO Transportation Plan, 8/19/98") The MPO Plan will, in the future, draw heavily on the Transportation components of local master plans and will identify conceptual transportation improvements needed in the region. From this plan, the MPO will develop the Transportation Improvement Program (TIP) on an ongoing two year cycle. Procedure requires that each municipality and relevant agency be given the opportunity to propose projects through the Plan and TIP project selection process. The TIP is then developed as a prioritized list of projects for implementation.

Given the importance of both the MPO Plan and TIP in defining the future transportation system in the region, it is important that the Town continue to remain actively involved in all levels of the Salem-Plaistow-Windham Metropolitan Planning Organization.

The Town should continue to develop and submit to the MPO a specific list of needed transportation improvements eligible for federal funding, for consideration during each TIP development cycle.

## 7.0 RECOMMENDATIONS

The following series of policies and recommendations are based on the information and analysis presented in this chapter, and on three other sources: recommendations generated from the *NH Rte. 125 Corridor Feasibility Study*, the *Local Access Management Manual* by the Rockingham Planning Commission and the policies and recommendations from the 1986 Master Plan that continue to be valid.

It is a fundamental goal of the Town of Kingston to achieve and maintain a safe, efficient transportation system that supports the rural character of the community and is adequate to support the transportation needs of the community. To attain this goal both now and in the future, the following policies are established and recommendations made.

### 7.1 GENERAL

**POLICY 1:** It is the policy of the Town of Kingston to work in cooperation with the NH Department of Transportation and the Salem-Plaistow-Windham Metropolitan Planning Organization (RPC) to accomplish the program of improvements and strategies proposed in the *NH 125 Feasibility Study* prepared by VHB/Vanasse Hangen Brustlin, Inc. for the Rockingham Planning Commission.

**Recommendations:**

1. Use the *NH 125 Feasibility Study* as a guide for identifying, planning, and timing for highway facility improvements and communicate with the NHDOT regarding recommended changes to the corridor plan.
2. Work toward early implementation of the following high priority projects for NH 125:
  - realignment and signalization of NH 125/Newton Junction Road/Hunt Road Intersection
  - improve side road alignment and reduce grade at several locations along NH 125 (RD-14)
  - upgrade intersection NH 125 and NH 107 (Depot Road) (RD-19)
  - upgrade intersection NH 125 and NH 111 (Exeter Road) (RD-20)improve New Boston Road intersection (RD- 21)
  - reconstruction and access management infrastructure from NH 125/Newton Junction Road intersection to Kingston Road

Further the Town should continue to monitor project timelines as proposed in the Salem-Plaistow-Windham Metropolitan Planning Organization's transportation improvement program and to the State's Ten-Year Plan.

3. The Town should work in cooperation with the NHDOT and property owners, through the site plan approval process, to consolidate existing curb-cuts and channel access points to signalized intersections using interior service roads.
4. In cooperation with the NHDOT, the Planning Board should develop a "NH Rte. 125 Access Management Plan" which identifies points for curb-cut consolidation, and establishes a driveway access protocol with the NHDOT to ensure consistency of permitting with the management plan. The recommended access management tools in the Long-Range Improvement Plan portion of the NH 125 Corridor Study should be utilized in developing this plan along with the "Access Management Recommendations" in section 5 of this chapter. The Town should request assistance from the Salem-Plaistow-Windham MPO to assist with developing this Plan, as needed.
5. The Town should work in cooperation with property owners, through site plan approval process to plan for the future development of frontage roads and to provide for adequate frontage and access points to adjacent properties. The Planning Board should seek assistance of a professional transportation engineer consultant in the planning and developing of frontage roads and aid in review of those proposals coming before them.
6. The Town should also amend its impact fee ordinance to incorporate NH Rte. 125 specifically to help implement access management improvements.
7. The Town should identify NH Rte. 125 as an Overlay District.

**POLICY 2:** It is the policy of the Town of Kingston to implement improvements on the Town's secondary road system needed to accommodate increased traffic volumes, as well as bicycle and pedestrian use, and to work with the New Hampshire Department of Transportation to implement like improvements on State owned secondary roads.

***Recommendations:***

1. The Town should seek assistance of a professional transportation engineer consultant to prepare a needs analysis of the secondary road system in Kingston.
2. The Town should actively monitor changes in traffic volumes and accidents on the secondary road system and request assistance from the Salem-Plaistow-Windham MPO to accomplish this task.
3. The Town should be aware of commercial/transportation developments in neighboring communities that would require increased utilization of local highways for access. The Planning Board should work in conjunction with a planning transportation engineer consultant and the NHDOT to develop access management guidelines to ensure safe access, egress and travel along these corridors. The Planning Board should adopt such regulations that would accommodate implementation of these guidelines in their review.
4. The Town should adopt proposals and recommendations cited in the *Local Access Management Manual* prepared by the Rockingham Planning Commission for the Town of Kingston's Access Management Plan, in conjunction with the "Access Management Recommendations" ( listed in Section 5 of this chapter), to provide for safe and efficient vehicular access onto public roads. Zoning, site plan review and subdivision regulations need to incorporate these recommendations.
5. The Town should work in conjunction with the NHDOT to include in future construction, paved shoulders for use as bicycle/pedestrian lanes, and appropriate signage and striping on the roads designated on the State bicycle network :
  - NH Rte. 125
  - NH Rte. 111
  - NH Rte. 107
  - NH Rte. 107A
  - Main Street

Other roads that should be included, though not on the State system include Newton Junction Road, Hunt Road, Mill Road and New Boston Road. The Planning Board should require any road improvements required as a consequence of development to include shoulder improvements (widening and paving) to facilitate the bicycle routes.

6. The Planning Board should adopt changes in the review process to include pedestrian concerns. “Traffic Calming” techniques should be considered. Pedestrian issue review should be considered along with automotive and traffic concerns.

**POLICY 3:** It is the policy of the Town of Kingston to create a well connected road system in the community that provides efficient circulation, promotes public safety and channels commercial traffic away from residential neighborhoods.

***Recommendations:***

1. The Planning Board should develop and adopt a conceptual road layout map (the “unofficial map”) showing desired connections between existing streets and general location of any new roads and rights-of-way that may be required. This map should be used as a guide for the evaluation of street layout proposed for new development. The Planning Board should consider assistance of a professional transportation engineer consultant in the development of this map.
2. Kingston should establish a Memorandum of Understanding with the NHDOT to incorporate local site plan approvals for access prior to issuance of state driveway permits.
3. The Planning Board should require review by a professional transportation engineer of all relevant proposals for evaluation of compliance with access management principals and the conceptual road layout map.
4. Heavy truck traffic interferes with the community character and causes maintenance and traffic problems. (Kingston Master Plan, 1986) Necessary steps should be taken to direct truck traffic away from residential zones.
5. In preparation of the road layout map, the Planning Board should evaluate the following connections and proposed streets:
  - Pillsbury Pasture
  - Morning Dove Road
  - Robin Lane
  - Elkins Road
  - Great Pond Park (First through Eighteenth Streets)
  - Presidential Estates (Madison, Washington, etc.)
6. The Town should seek to acquire the easements for critical rights-of-way that will be necessary to complete or accomplish the connections listed above.
7. The Planning Board should discourage the creation of dead-end streets, and should require the reservation of one or more right-of-way parcels at appropriate connection points in all street designs for new subdivisions.

8. The Town should establish a bicycle/pedestrian path connecting the municipal facilities, recreational facilities and the School District facilities along and around Main Street.
9. The Town should establish a bicycle/pedestrian path along any developments adjacent to the “Fairgrounds” recreational site, any other recreational sites developed in Kingston, as well as any development occurring along a “frontage road” or arterial.
10. The Towns of Kingston and Newton, together with the Cooperative School District, should closely monitor and be prepared to act quickly to address adverse impacts on traffic circulation and safety, and on bicycle/pedestrian safety that may occur with any new, or expansion of existing, facility of the School District.
11. The Town should create and distribute an emergency traffic plan highlighting alternative routes when major arterials are blocked due to emergency situations. This should be done in cooperation with the School District.

**POLICY 4:** It is the policy of the Town of Kingston to participate in the regional transportation planning process established under Federal and State law.

***Recommendations:***

1. The Town should continue developing and submitting to the MPO a specific list of needed transportation improvements eligible for federal funding, including highway, pedestrian, bicycle and other facilities, for consideration in all future Transportation Enhancement Projects, CMAQ projects and TIP development cycles.
2. The Town should continue monitoring the State’s Ten-Year-Program and fiscal Transportation Improvement Programs for scheduling compliance.
3. The Town should work with our State Representatives/Senator to aid in securing funding for these proposals.

**POLICY 5:** It is the policy of the Town of Kingston to encourage, support and participate in the development of Transportation Demand Management (TDM).

***Recommendations:***

1. The Town should work in conjunction with the Salem-Plaistow-Windham MPO to publicize the availability of the Coach Company bus service, via stops in Kingston and Plaistow, to various locations in Boston.
2. The Town should work in conjunction with NHDOT to support individual efforts to carpool in publicizing the use of Park and Ride Lots and ride matching services.

3. The Town should monitor any progress on the high speed passenger rail service extension to Exeter and the possible MBTA extension into Plaistow. Any cooperative effort between the Town and PATAAC, RPC, Salem-Plaistow-Windham MPO and NHDOT should be encouraged.

**POLICY 6:** It continues to be the Policy of the Town of Kingston to protect and maintain a clean and healthful environment, promote the conservation of Kingston's natural resources and preserve and enhance the rural, recreational, and historic character of Kingston.

***Recommendations:***

1. The Town of Kingston should continue to support designations of Class A Trails where determined appropriate to provide access and support of non-developmental uses such as agriculture and forestry.
2. The Planning Board, in conjunction with the Historic District Commission, should investigate which (if any) sections of road would be appropriate and beneficial to designate as scenic roads. Their findings should be conveyed to the appropriate landowners. (*Kingston Master Plan, 1986*)

**TABLE T-11**  
**Survey Information re: recreational paths**

*Still obtaining this data for inclusion in this section*

**Figure T-1**  
**Map of Traffic Volume Statistics**

**Figure T-2**  
**Frequent Accident Locations**  
(Map)

**Figure T-3**  
**State Bicycle Network for this region**  
(Map)

**Figure T-4**  
**Kingston Recreational Paths**  
(Map)