

Transportation

Introduction

The purpose of the Transportation Chapter is to identify highway and other transportation issues of concern to Plaistow officials and residents and to recommend proposed actions.

Transportation planning is a local, regional and state responsibility and much of the long range transportation planning occurs at the regional and state levels based on input from local officials.

Although Plaistow is not one of the largest communities in the region in terms of population, its proximity to the Massachusetts border and the presence of NH Route 125 have combined to give the town an urban aspect often found in communities with twice the population. In addition, many local residents commute to northern Massachusetts for employment. This situation presents the town with both opportunities and challenges with respect to transportation issues. This higher level of urbanization is accompanied by concerns such as traffic congestion and loss of rural character. However, there is also increased opportunity for public transportation and infrastructure improvements such as sidewalks and bike paths. Finding an appropriate balance between these opportunities and challenges is one of the goals of this master plan and a long-term goal for Plaistow.

The continued maintenance and expansion of the local road network, parking, sidewalks, pedestrian amenities, and public transportation services play an important role in Plaistow's effort to maintain a quality of life and to plan for future growth. This Chapter provides a focus and direction regarding these concerns and issues.

Existing Roadway System

The Town of Plaistow is served by three major highways: NH Route 125, running roughly north to south through the central section of town; NH Route 121-A, also known as Main Street, running roughly diagonally from the northwest corner of town to the south central section of town; and NH Route 108, which runs north to south along the very eastern boundary of the town. A small section of NH Route 121 also serves the southern section of town at the Atkinson border.

In addition to these state roads, Plaistow has an extensive network of town-maintained roads as shown on the **Street Map**.

Roadway Classifications

The New Hampshire Department of Transportation (NHDOT) divides all roads in the state into certain classifications. There are two methods of classification commonly used to identify roadways. The Administrative Classification System, also referred to as Systems Class, determines which governmental agency is responsible for maintenance of each road. **See Systems Class Map**. The Functional Classification System identifies the intended function of the roadway. **See Functional Class Map**.

The Administrative Classification System is broken down into the following classes:

Class I Trunk Line Highways

All existing or proposed highways that are part of the primary state highway system. The NHDOT is responsible for the maintenance and construction costs of these highways except for those portions which lie within compact sections of towns and cities.

Class II State Aid Highways

All existing or proposed highways that are part of the secondary state highway system. Maintenance and construction costs are controlled by the NHDOT.

Class III Recreational Roads

All roads leading to and within state reservations designated by the legislature.

Class IV Town and City Streets

All highways located within state designated compact sections of cities and towns. Maintenance and construction costs of these highways are controlled by town and cities.

Class V Rural Highways

All other traveled highways, which the town has the duty to maintain regularly, and shall be known as town roads.

Class VI Unmaintained Highways

All other existing public ways, and shall include all highways discontinued as open highways and made subject to bars and gates, and also highways that have not been suitably maintained for travel for five years or more.

Scenic Roads

These roads (excluding Class I or II highways) are designated by the town or city such that maintenance and construction of these roads is strictly regulated.

There is a total of 51.68 miles of roads in Plaistow, most of which are in two classes of roads. Over 66% or 34.50 miles are classified as Class V Rural Highways and almost 30% or 14.77 miles are classified as Class II State Aid Highways. These include Route 121A and Route 125. **Table T-1** provides a list of each administrative class and the number of miles of each for Plaistow.

Table T-1
Plaistow Road Classifications – Administrative Class

Administrative Class	Miles	Percent
Class I Trunk Line Highways	2.04	3.94
Class II State Aid Highways	14.77	28.58
Class III Recreational Roads	0	0
Class IV Town and City Streets	0	0
Class V Rural Highways	34.50	66.76
Class VI Unmaintained Highways	0.37	0.72
Total	51.68	100.00

Source: NHDOT, June 1999

The Functional Classification System defines the expected role that each road plays in overall traffic flow and land access. The following is a description of each category:

Arterials

Roadway systems which provide intercity and interstate traffic service. Traffic speeds typically are relatively high and there is a minimal amount of interference to through traffic. The arterials in Plaistow are Route 125, Main Street, and Newton Road (Route 108).

Connectors

Roads which connect arterials with minimal interference.

Collectors

Roads which provide traffic service between arterials and local roads. Collectors in Plaistow tend to be the major east-west roadways that connect the major north-south arterials such as Old County Road, Forrest Street, Kingston Road, and East Road.

Locals

Access roads from local destination points to collector roads. Typically these roads provide direct access to land, but little or no connection between locations. Examples of local roads in Plaistow are Cottonwood Road, Pollard Road, Harriman Road, and Witch Lane.

Special Purpose Roads

Roads which service recreational areas or some other area of public need. There are no such roads in Plaistow.

Of the 51.68 miles of roads in Plaistow, 26.99 miles (52.22 percent) are considered locals, 12.06 miles (23.34 percent) are considered collectors, and 11.74 miles (22.72 percent) are considered arterials. **Table T-2** is a list of each functional class and the number of miles of each for

Plaistow. See the Functional Class Map.

**Table T-2
Plaistow Road Classifications – Functional Class**

Functional Class	Miles	Percent
Arterials	11.74	22.72
Connectors	0.89	1.72
Collectors	12.06	23.34
Locals	26.99	52.22
Special Purpose Roads	0	0
Total	51.68	100.00

Source: NHDOT, June 1999

Both classification systems are useful for town planning purposes. Careful review of this information with traffic volume data can indicate which roads may need reclassifying and/or upgrading to ensure that the system can accommodate additional volumes.

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, ten 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 town 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 for the repair, maintenance, reconstruction, or paving work which 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. At present there are no designated scenic roads in Plaistow. Based on the results of the Community Forum in May, the Town would like to protect its rural character and open space. The designation of specific roads with scenic quality as scenic would be one way to achieve this desire.

Traffic Volumes

Traffic volume data is one of the major components in evaluating traffic characteristics within Plaistow. This information is an important part of the process of establishing priorities for future roadway improvements. Design and safety standards for roadways typically incorporate traffic count data. The generally accepted standard for capacity for a two-lane road to maintain a relatively high level of service is generally about 10,000 vehicles per day. Once this figure is exceeded, there is also deterioration in a road's capacity for handling traffic efficiently.

The NHDOT's Bureau of Transportation Planning monitors traffic throughout the state and publishes monthly reports. The volume of traffic on the major roads of Plaistow has only slightly increased in the past five years (1996-2000) as indicated by the NHDOT/Rockingham Planning Commission traffic volume counts presented in **Table T-3**. Although there are total of fifty-five counting stations in Plaistow, not all stations are counted at a given time. The most recent comprehensive counts were taken in 1998. There have been limited counts since that time--three stations in 1999 and ten in 2000. As a result it is difficult to comprehensively analyze trends from one year to the next or over a five-year period for a large number of stations. **See the Roads and Traffic Counts Map**. The map contains traffic counts for selected stations for 1998. At some stations two figures are noted to show change from one year to another. For example, at the station on Crane Crossing Road near the Kingston Road near the Kingston Border there was an increase of 1660 vehicles per day from 1998 to 1999.

The most heavily traveled road in Plaistow is Route 125 (also called the Plaistow Road) which recorded daily volumes in 1998 of 23,000 at the Little River, 14,000 just south of 121A, and 13,000 south of the Old Country Road. These figures not only show the levels of traffic on Route 125 during this period, they also show that the higher counts tend to be in the southern portion of the town. Not all of these stations were counted in 2000, but the one near Old Country Road had daily volumes of 15,352, an 18% increase at that location. Other roadways show similar trends. Main Street (also known as Route 121A) recorded daily volumes in 1998 of 8,500 at the Massachusetts line, 14,000 just south of 121A, and 11,000 at the Hampstead line. Unlike Route 125 this road appears to carry less through traffic from Massachusetts northward, but has a generally heavy volume for its full length within Plaistow.

Table T-3: Traffic Counts in the Town of Plaistow 1994-2000

Site Number	1994	1995	1996	1997	1998	1999	2000	Location
375014	N/A	N/A	N/A	10874	N/A	N/A	N/A	
375021	N/A	N/A	N/A	20000	N/A	N/A	N/A	
375022	N/A	N/A	N/A	5400	N/A	N/A	N/A	
375023	N/A	N/A	13000	14000	N/A	N/A	N/A	
375024	N/A	N/A	N/A	N/A	N/A	2800	2986	KINGSTON RD SB-NB AT KINGSTON TL(81375083-375084)
375026	4300	N/A	N/A	N/A	4800	N/A	N/A	NH 108 AT NEWTON TL
375031	N/A	5100	N/A	5700	N/A	N/A	6293	NH 108 SB-NB AT MASS SL(81375085-375086)
375032	N/A	N/A	N/A	1200	N/A	N/A	N/A	
375033	N/A	N/A	N/A	N/A	13000	N/A	N/A	NORTH AVE SOUTH OF SOUTH MAIN ST AT MASS SL(SB-NB)
375034	N/A	N/A	1900	N/A	DOT	N/A	N/A	HAYNES BOULEVARD AT MASS SL
375035	11000	10000	N/A	N/A	11000	N/A	N/A	NH 121 AT ATKINSON TL
375036	N/A	N/A	N/A	N/A	5700	N/A	N/A	EAST ROAD AT ATKINSON TL
375037	N/A	N/A	N/A	N/A	3100	N/A	N/A	GREENOUGH ROAD AT ATKINSON TL
375038	9400	N/A	N/A	10000	11000	N/A	N/A	NH 121A AT HAMPSTEAD TL
375039	15000	N/A	N/A	N/A	23000	N/A	N/A	NH 125 AT LITTLE RIVER
375040	11000	N/A	N/A	N/A	11000	N/A	N/A	NH 121A SOUTH OF DAVIS PARK ROAD
375041	N/A	N/A	N/A	N/A	N/A	N/A	9870	DANVILLE RD SB-NB NORTH OF GREENOUGH RD (81375087-375088)
375042	13000	N/A	N/A	N/A	14000	N/A	N/A	NH 125 SOUTH OF NH 121A
375043	4100	3900	N/A	4300	4500	N/A	5120	NH 121A EAST OF DANVILLE ROAD (EB-WB) (81375012-375013)
375044	N/A	N/A	N/A	N/A	4600	N/A	N/A	KINGSTON ROAD EAST OF OLD COUNTY ROAD
375045	N/A	N/A	6200	7100	N/A	N/A	N/A	NH 121 N OF PARK AVE
375046	N/A	N/A	N/A	N/A	6600	N/A	N/A	ELM STREET WEST OF SWEET HILL AVENUE
375047	N/A	N/A	N/A	N/A	1200	N/A	N/A	FORREST STREET EAST OF NH 121A
375048	N/A	N/A	N/A	N/A	2700	N/A	N/A	POLLARD ROAD EAST OF CONGRESSIONAL AVENUE
375049	N/A	N/A	N/A	N/A	3700	N/A	N/A	POLLARD ROAD WEST OF NH 108
375050	8600	N/A	N/A	N/A	9100	N/A	N/A	NH 121A NORTH OF HASELTINE STREET
375051	N/A	8000	8000	8300	8500	N/A	N/A	NH 121 AT MASS SL
375052	N/A	N/A	N/A	N/A	4400	N/A	5333	NH 121A AT MASS SL
375053	N/A	N/A	22000	N/A	N/A	N/A	N/A	NH 125 SB-NB AT MASS SL (81375091-375092)

Site Number	1994	1995	1996	1997	1998	1999	2000	Location
375055	N/A	N/A	N/A	N/A	4500	N/A	N/A	WENTWORTH AVE WEST OF NH 125
375056	N/A	N/A	N/A	21000	N/A	N/A	N/A	
375057	N/A	N/A	N/A	N/A	2800	N/A	N/A	CHANDLER AVENUE NORTH OF NH 121A(MAIN STREET)
375058	N/A	N/A	N/A	N/A	DOT	N/A	N/A	WEST PINE STREET WEST OF NH 121A(MAIN STREET)
375059	N/A	N/A	N/A	N/A	N/A	N/A	2075	FORREST ST EB-WB AT FISHING RIVER(81375093-375094)
375060	N/A	N/A	N/A	N/A	5300	N/A	N/A	HASELTINE STREET EAST OF NH 125
375061	N/A	N/A	N/A	N/A	210	N/A	N/A	RUSTIC LANE NORTH OF SECLUDED CIRCLE
375062	N/A	N/A	N/A	N/A	840	N/A	N/A	AUBURN STREET EAST OF LOWER ROAD
375063	N/A	N/A	N/A	100	N/A	N/A	N/A	
375064	N/A	N/A	N/A	N/A	130	N/A	N/A	SHADY LANE MIDWAY ALONG LENGTH
375065	N/A	N/A	N/A	N/A	90	N/A	N/A	WILD BROOK DRIVE NORTH OF POLLARD ROAD
375066	N/A	N/A	N/A	N/A	1100	2700	N/A	CRANE CROSSING ROAD EAST OF KINGSTON ROAD
375067	N/A	N/A	850	N/A	N/A	1100	N/A	SMITH CORNER RD EB-WB AT NEWTON TL(81375095-3750
375068	N/A	N/A	N/A	N/A	13000	N/A	15352	NH 125 SOUTH OF OLD COUNTRY ROAD
375069	N/A	N/A	N/A	N/A	3700	5900	N/A	WESTVILLE RD EB-WB AT LITTLE RIVER(81375097-3750
375070	N/A	N/A	N/A	967	N/A	N/A	1220	OLD ROAD EAST OF NH 125(EB-WB)(81375010-375011)
375071	N/A	N/A	370	N/A	N/A	N/A	444	KELLEY RD SB-NB AT KELLEY BROOK(81375099-375100)
375072	N/A	1000	N/A	N/A	1300	N/A	N/A	OLD COUNTRY ROAD WEST OF NH 125
375074	N/A	N/A	N/A	N/A	DOT	N/A	N/A	NH 121A SOUTH MAIN STREET WEST OF NORTH AVENUE
375075	N/A	N/A	N/A	520	N/A	N/A	407	HARRIMAN ROAD NORTH OF FORREST STREET(SB-NB)
375076	N/A	N/A	N/A	N/A	2300	2300	N/A	OLD DANVILLE ROAD OVER LITTLE RIVER
375101	710	N/A	N/A	N/A	1300	N/A	N/A	JESSE GEORGE ROAD EAST OF NH 125
375102	5400	N/A	N/A	N/A	6600	N/A	N/A	OLD WESTVILLE ROAD EAST OF EAST ROAD
375503	N/A	N/A	N/A	N/A	3667 AWC	N/A	N/A	POLLARD ROAD NEAR MAIN ST.
375506	N/A	N/A	N/A	N/A	11846 AWC	N/A	N/A	MAIN ST. WEST OF POLLARD
375509	N/A	N/A	N/A	N/A	12492 AWC	N/A	N/A	MAIN ST. EAST OF POLLARD

1. Counts by NH Department of Transportation and Rockingham Planning Commission
2. 1994 to 1999 Counts are AADT (Average ANNUAL Daily Total)
3. 2000 Counts are ADT (Average Daily Total, not corrected for seasonal fluctuation)

Level of Service

Traffic engineers use a rating system referred to as Level of Service (LOS) to determine the functional capabilities of intersections. This ranking system is a “quantitative measure of the effect of a number of factors including roadway geometrics, travel speed, travel delay, freedom to maneuver, and safety” (*Feasibility Study: NH 125 Plaistow and Kingston, New Hampshire, September 1999*). The possible levels are ranked from A through F with an LOS of A indicating free flowing traffic, no safety concerns, or proper roadway geometry and a LOS of F being characterized as having severe time delays, or poor roadway geometry.

Transportation studies have been completed in the Town of Plaistow and included in these were Level of Service rankings as listed in **Table T-4** and **Table T-5**. The studies include the “Route 125 Corridor Study” prepared by Vanasse & Associates, Inc. which was funded by the Town of Plaistow, and the “Feasibility Study: NH 125 Plaistow & Kingston, NH” prepared by Vanasse Hangen Brustlin, Inc. which was funded by the state.

The LOS analysis for signalized and unsignalized intersections was based on different criteria. With signalized intersections, the analysis considers the operation of all traffic entering the intersection and the LOS designation is for the overall conditions present at the specified site. For unsignalized intersections, the analysis was based upon the expected average delay to side street movement.

As shown in the tables, unsignalized intersections received much lower level of service rankings than signalized intersections. The three worst intersections were Route 125 at Chandler Avenue, Route 125 at Stateline Plaza South Drive & Haseltine Street, and Route 125 at Cushing Avenue and South Main Street. Based on the volumes of traffic on Route 125 noted in the previous section such levels of service could be expected.

Table T-4
Level of Service for Signalized Intersections in Plaistow, NH

Signalized Intersections	LOS - weekday evening peak
RT 125 at Bradlees and Great Elm Plaza	B
RT 125 at Wentworth Avenue and Shaw's Plaza	B
RT 125 at Walmart	C

Source: Capacity Analysis 1995 (from the Route 125 Corridor Study)

**Table T-5
Level of Service for Unsignalized Intersections in Plaistow, NH**

Unsignalized Intersections	LOS - weekday evening peak
RT 125 at Chandler Avenue	F
RT 125 at Stateline Plaza North Drive	C
RT 125 at Stateline Plaza South Drive & Haseltine Street	F
RT 125 at Cushing Avenue and South Main Street	F
Main Street at Haseltine Street	C

Source: Capacity Analysis 1995 (from the Route 125 Corridor Study)

Unsignalized Intersections	LOS - AM*	LOS - PM*
NH 125 between Kingston townline and Kingston Road	D	E
NH 125 between Main Street and Jesse George Road	D	E
NH 125 between Danville Road and East Road/Joanne Drive	E	E

Source: NH 125 Plaistow and Kingston, NH Feasibility Study 1999

* 1996 data

Commuting Patterns

Table T-6 details the commuting patterns of Plaistow residents. Based upon 1990 census data, approximately 58 percent of Plaistow residents work in Massachusetts while the remaining 42 percent work in New Hampshire. Of the 58 percent who work in Massachusetts, the largest number work in Haverhill (506 Plaistow residents or 22 percent). Of those that both live in Plaistow and work in New Hampshire, the overwhelming majority work in Plaistow (59.63 percent). At present the 2000 Census data for the commuting pattern analysis is not available. When it is available, Plaistow should compare the 1990 and 2000 results. Given the increase in traffic volumes since 1990, one could expect that there still would be heavy commutation into Massachusetts.

**Table T-6
Place of Work for Residents of Plaistow, NH**

Work Place in New Hampshire	# of Plaistow Residents	% of total	Work Place in Massachusetts	# of Plaistow Residents	% of total
Exeter/Hampton	44	2.68	Andover	245	10.65
Salem/Windham	194	11.83	Haverhill	506	22.00
Plaistow	978	59.63	Lawrence	216	9.39
Derry/Londonderry	23	1.40	Methuen	146	6.35
Other Rockingham County	254	15.49	North Andover	361	15.70
Hillsborough County	118	7.20	Other Essex County	231	10.04
Merrimack County	22	1.34	Middlesex County	440	19.13
Other NH	7	0.43	City of Boston	129	5.61
			Other Massachusetts	26	1.13
Total	1640	100	Total	2,300	100

Source: 1990 US Census

Accidents

One of the key items in determining a roadway's sufficiency rating is its safety. In an effort to assess roadway safety, it is useful to determine accident data. Accident data is collected by local and state police and then provided to the NHDOT.

At present, the DOT only maintains the database and uses the information in its roadway planning projects. However, the data is not analyzed on a more general basis for local planning purposes to determine high accident areas. A portion of roadway becomes a safety concern if there are a high number of accidents over a given period of time.

The majority of traffic accidents in Plaistow have occurred on Plaistow Road/Route 125 in the southern portion of town near the Massachusetts state border (see **High Accident Locations Map**). At the

intersection of Chandler Avenue and Plaistow Road/Route 125, there were 104 accidents between 1997 and 2001. During the same time period there were 99 accidents at the intersection of the old Bradlees store and Plaistow Road/Route 125, 86 accidents at the intersection of Shaw's and Plaistow Road/Route 125, 83 accidents at the intersection of Wal-Mart and Plaistow Road/Route 125, and 82 accidents along Plaistow Road/Route 125. Other high accident locations occur on Route 121A (Main Street), especially at the intersection of Route 125 and North Avenue. **Table T-7** is a list of accident locations and the number of accidents that have occurred for each year between 1997 and 2001.

**Table T-7
Accident Locations***

location	# of accidents 1997	# of accidents 1998	# of accidents 1999	# of accidents 2000	# of accidents 2001	Total
Atkinson Depot Road by Wentworth Ave.		3		5	3	11
Atkinson Depot Road by Stateline Tack	4		6			10
Chandler Ave & Plaistow Road	15	23	25	26	15	104
Crane Crossing Road by Kingston Road				4		4
Crane Crossing Road				3		3
Danville Road				6		6
Danville Road & Main Street		3				3
Danville Road & Greenough Road	3	4	8	2	4	21
Danville Road & Plaistow Road	3	4	6	6		19
Danville Road & Cumberland			11			11
Danville Road & Jesse George Road			4			4
Elm Street			3			3
Elm Street & Palmer				5		5
East Road & Plaistow Road			9			9
Elm Street & Main Street	3					3
Forrest Street	4			4		8
Forrest Street & Newton Road			3			3
Forrest Street & Autumn Circle				3		3
Greenough Road by TRMS	3	3				6
Greenough Road by TRHS	6	4		4		14
Garden Road & Plaistow Road			12	8		20
Hazeltine Ave. & Plaistow Road	9		6			15
Hale Spring Road & Kingston Road				3		3
Kingston Road	3		3			6
Kingston Road by Plaistow Road				4		4

location	# of accidents 1997	# of accidents 1998	# of accidents 1999	# of accidents 2000	# of accidents 2001	Total
Main Street	16	11	6	25	8	66
Main Street by North Ave.	7	8	14	20	3	52
Main Street by Plaistow Road	12	15	18	16	10	71
Main Street by West Pine Street					3	3
Main Street & Chandler Ave				6		6
Main Street & Jesse George	3					3
Main Street & Old County Road	5	6	7	6	15	39
Main Street & Walton Road	3					3
Main Street & Spinney Avenue				5		5
Main Street & Culver Street			3			3
Main Street & Deer Hollow Road			4			4
Main Street & Westville Road			8	3		11
Main Street & East Pine		3				3
Main Street & Hazeltine Street		6				6
Main Street & Pollard Road		3				3
Main Street & Westville Road		5			3	8
Newton Road				3		3
Newton Road & Sweethill Road		3		3		6
Newton Road by Northland Mall	3					3
Old County Road		4				4
Old County Road & Plaistow Road	5	6	3	9	3	26
Old Road & Plaistow Road	4			6		10
Plaistow Road	26	12	15	22	7	82
Plaistow Road & Wal-Mart	18	14	11	30	10	83
Plaistow Road & Shaws	13	7	35	22	9	86
Plaistow Road & Jesse George Road	3	3	4	7		17
Plaistow Road & Westville Road	3	5	9	9	3	29

location	# of accidents 1997	# of accidents 1998	# of accidents 1999	# of accidents 2000	# of accidents 2001	Total
Plaistow Road & Bradlees	23	24	17	26	9	99
Plaistow Road & Brickyard				5		5
Plaistow Road & Wentworth Ave.	7	9		18	10	44
Plaistow Road & Garden Road	3	7				10
Plaistow Road & Stateline Plaza	8	12	13	22	5	60
Plaistow Road & Primo Pasta	4					4
Plaistow Road & Red Shoe Barn			4			4
Plaistow Road & Old Road			5		3	8
Plaistow Road & Kingston state line			3			3
Plaistow Road & Westville Road				9	3	12
Pollard Road	3					3
Westville Road						

Source: Plaistow Police Department, November 2001

* Only the intersections that had three or more accidents in any given year were included in this table

Bridges

The NHDOT and the Plaistow's Highway Department are responsible for bridge maintenance and construction. If the bridge is on a state-aid roadway, it is the responsibility of the state and if on a locally maintained roadway, it is the responsibility of the town. There are nine bridges in Plaistow. Two of the bridges are under the jurisdiction of the town and the remaining seven are under the jurisdiction of the NHDOT. **Table T-8** lists all of the bridges in the Town of Plaistow along with the year built, their location, last inspection date, sufficiency rating, and condition.

The NHDOT has a statewide bridge inspection program that is based on the National Bridge Inspection Standards System. All bridges are inspected every two to three years and depending upon location, use, and condition, they may be inspected on a less formal basis more frequently. Bridge condition is rated on a numerical system from 1-100 where the higher number rating the better the condition of the bridge. From this inspection rating program, priorities are established for maintenance, repair, and replacement of bridges.

- Structurally Deficient (SD) are those bridges that due to aging and deterioration no longer meet the road standard for which it serves;
- Functionally Obsolete (FO) are those bridges that due to the changing nature of the roadway and the service it provides no longer meets road standards;
- Redlist (RL) are those bridges that due to their current conditions require inspection twice a year.

If a bridge is red listed, it receives the highest priority for repair and/or replacement. Currently, there are three bridges in Plaistow that are red listed but are scheduled for repair (**see Table T-8**). These include a bridge on Route 121 (Bridge ID# 105/028), a bridge on Old Danville Road (Bridge ID# 118/053), and a bridge on Kingston Road (Bridge ID# 137/115).

**Table T-8
Bridge Inventory**

Bridge ID	Year Built	Route	Over	Owner	Last Inspection	Sufficiency Rating	Condition
Plaistow 105/028	1940	NH 121	BMRR, Little River, Road	NHDOT	3/2/00	30.1	State Redlist
Plaistow 106/027	1930	Road	Little River	NHDOT	5/1/00	73.5	Not on Redlist
Plaistow 111/062	1992	NH 125	BMRR	NHDOT	5/1/00	91.9	Not on Redlist
Plaistow 111/106	1900	NH 121A	Little River	NHDOT	5/1/00	76.2	Not on Redlist
Plaistow 117/051	1954	NH 125	Little River	NHDOT	5/1/00	72.9	Not on Redlist
Plaistow 118/053	1930	Old Danville Road	Little River	Municipality	12/17/98	29.0	Municipal Redlist
Plaistow 122/072	1940	Westville Road	Little River	Municipality	9/1/97	47.1	Not on Redlist
Plaistow 126/133	1930	Kingston Road	Little River	NHDOT	5/1/00	87.7	Not on Redlist
Plaistow 137/115	1936	Kingston Road	BMRR	NHDOT	3/2/00	40.0	State Redlist

Source: NHDOT

Road Surface Management System (RSMS)

The Plaistow Highway Department manages the maintenance and reconstruction of the roadway system that is under local jurisdiction. In 1998, the department worked with the University of New Hampshire Technology Transfer Center (UNHT²) to conduct a road condition survey and use the Road Surface Management System (RSMS) to categorize each street in the town based upon pavement condition and drainage. Each street was then rated on pavement condition, drainage, traffic volume, and importance. The highway department is currently in the process of updating the information that was obtained in 1998. Reports based on the roads and also the methods and costs of road maintenance have been generated and linked to the Geographic Information System (GIS).

Public Transportation

Bus and Rail Service

Plaistow is served by intercity bus service. The Coach Company along the NH Route 125 corridor provides this service. Two AM southbound trips and three PM northbound trips are provided daily. This intercity bus service uses the park and ride lot on Westville Road which is accessible to Route 125. According to the 1990 US Census, eight persons used the bus as a means of transportation to work.

Currently Plaistow is not served by any rail service but the town has recently secured funding through the Congestion Mitigation/Air Quality (CMAQ) program for commuter rail service (see **Table T-9**). The CMAQ program is part of the federal highway TEA-21 grant program. Recently, there have been several attempts to expand commuter rail service into Plaistow from Haverhill. Currently, the Plaistow Area Transportation Advisory Committee (PATAC) is in discussion with the Merrimack Valley Regional Transportation Authority (MVRTA) to discuss the particulars regarding how this service extension from the Haverhill MBTA station will occur.

Pedestrian Facilities

The Town of Plaistow has taken a very proactive approach over the last several years to create a network of sidewalks in the central part of town. Successfully leveraging town funds with federal transportation enhancement grants, the town has established a multi-year program of linking important town facilities with sidewalk infrastructure.

At the Plaistow Community Forum held in May of 2001, residents expressed that they would like to see more sidewalks in town. Residents are interested in pedestrian safety as well as more pedestrian-based activities. According to the 1990 US Census, there were ninety-five workers who walked to work in Plaistow.

Bicycle Travel

The town has limited facilities for bicycle transportation. There are many benefits of using a bicycle as a means of transportation. Bicycles are a non-polluting transportation mode with the potential of alleviating traffic congestion while at the same time improving air quality. It is also an alternative to the automobile. The 1990 US Census reported that no one used a bicycle as a means of transportation.

The State has categorized all state roads into one of three groups for the purposes of discussing bicycle transportation. The categories are as follows:

- Roadways with four foot shoulders or greater;
- Roadways with shoulders less than four feet; and
- Roadways lacking shoulders altogether.

The northern section of Route 125 in Plaistow has shoulders four feet in width or greater and although these shoulders are large, the speeds associated with this section of road increases safety concerns for bicyclists. Along NH 121 and NH 121A there are significant sections of roadway with no shoulders at all making these routes less than preferred for bicycle traffic. The safest travelways in town are the local roads. Although the shoulder widths are often narrow, the lower speeds pose a reduced threat of auto-bicycle conflict.

Regional Bicycle Route Maps have been created by the New Hampshire Bicycle and Pedestrian Transportation Advisory Board. Routes on these maps are considered to be the best available roads

for bicycling to major destinations. They are not necessarily considered the best roads for local recreational roads. The map routes are currently in draft form and are expected to be finalized at the end of this summer. There is a Statewide Bicycle route map that is available through the NHDOT but it does not contain any routes which go through the Town of Plaistow.

Park and Ride Lots

Plaistow is served by one NHDOT maintained park and ride lot. Located just off NH Route 125 on Westville Road, the lot serves predominantly as a connection between private automobiles and carpools or intercity bus service. The lot has a capacity of 275 parking spaces and attendant amenities include telephones, lights, a bicycle locker, and a shelter. In the future, this facility may serve as a connector facility between private autos, buses, and the possible commuter rail extension.

Long Range Transportation

Plaistow is part of the Salem-Plaistow-Windham Metropolitan Planning Organization (MPO) that encompasses nine communities in Rockingham County. This organization was established through a joint agreement among the NH Department of Transportation (DOT) and the Rockingham Planning Commission. The MPO prepares regional transportation plans on a biennial basis that guide development of the transportation system for 20 years. The most recent plan was completed in August 2001 and includes projects that are to be fully or partially funded by the state through 2010. In addition to the long-range plan, a three-year Transportation Improvement Plan (TIP) was also completed in August of 2001. This plan identifies specific projects for implementation in each of the MPO communities through 2003. The Long Range Plan and TIP are prepared in compliance with the federal Transportation Equity Act for the 21st Century (TEA21) and the Clean Air Act Amendments of 1990 (CAAA).

The projects in the TIP and Long Rang Plan were adopted through a cooperative process between the NH DOT, the regional planning commissions and the local communities. The local communities have representation on a Technical Advisory Committee and a Policy Advisory Committee. The plan must address specific issues that are defined in TEA21 that include: supporting the economic vitality of the region, increasing safety and security, increasing access and mobility options, protecting and enhancing the environment, integrating transportation modes, and emphasizing the maintenance of the existing transportation system. The plan also includes regional transportation goals and strategies for implementation. **See Appendix A.**

The Metropolitan Planning Organization (MPO) has compiled a list of TIP projects and Long Range Transportation projects that are included on the state ten-year program of projects that includes projects for Plaistow that are identified in **Table T-9 and Table T-10**. In order for transportation recommendations to become actual programmed projects in the TIP, the Town of Plaistow must submit project proposals to the MPO for inclusion in the Regional Transportation Improvement Program (TIP). The MPO evaluates and ranks all project proposals in the region and forwards its TIP to the NHDOT. The TIP projects range from replacing the bridge over the B&M railroad on Kingston Road to constructing a rail platform and providing three years operating subsidy for the MBTA.

Table T-9: Transportation Improvement Plan for the Town of Plaistow, NH

Name/#	Rte/Street:	Overall Project Cost \$(M)	Location/Scope of Work	Phase **	Fiscal Year	\$(M)	Funding Category*	Comments
Plaistow 10005	Kingston Road	2.44	Replace bridge over B&M RR 137/115	P	2001	0.11	Bridge	Proposed for 2004
				R	2001	0.24		
				C	2003	1.85		
Plaistow 13110	NH 121A & Elm Street	0.242	Construction of curbed, elevated sidewalk with drainage to connect town hall, Pollard Elementary School & public library	C	2002	0.216	STP-TE	20% funded by Plaistow
Plaistow 13118	NH 125	0.425	Install closed loop coordinated traffic signal system along heavily congested area (1.5 mile) beginning at East Road running south	C	2001	0.35	CMAQ	20% funded by Plaistow
Plaistow - Atkinson 12359	NH 121	5.2	Replace bridge over Little River & B&M RR - 105/028	P	2001	0.05	Bridge	Proposed for 2004
				R	2001	0.24		
				C	2003	4.5		
Plaistow - Kingston 10044B	NH 125	11.281	Reconstruction from East Road in Plaistow northerly approximately 6.0+/- miles to NH 125 & Main Street intersection in Kingston including the intersection of NH 125 with Newton Junction/Hunt Road	P	2001	0.25	STP	Newton Junction/Hunt Road intersection split off into Project 10044C Construction in 2005
				R	2002	0.5		
				R	2001	0.141		
				C	2002	0.3		
				C	2003	1.7		
Plaistow to Haverhill, MA 13515		0.976	Construct rail platform & provide three years of operating subsidy for MBTA (00-02CM)	P	2002	0.01	CMAQ	20% funded by Plaistow & PATAC
				C	2004	0.966		

Source: Rockingham Planning Commission

* NHS: National Highway System; Bridge: Municipal Bridge Program; STP-TE: Surface Transportation Program - Transportation Enhancements, CMAQ: Congestion Mitigation & Air Quality; STP: Surface Transportation Program

**P: Preliminary Engineering; R: Right-of-Way; C: Construction

The following projects are part of the MPO Long Range Plan but the dates for these tasks are not as specific as for the tasks in the Transportation Improvement Plan (TIP).

Table T-10: Long Range Projects for the Town of Plaistow, NH

Name	Rte/Street:	Location/Scope of Work	\$ (M)	Comments
PLAISTOW	Rte. 125	Widening for the center turn lane from the Massachusetts state line to Westville Bridge	\$0.6	Construction set for 2010
PLAISTOW	121A/125/ Haseltine Ave	Project would reconfigure the NH 125/ NH 121A/ Haseltine Avenue intersection to alleviate confusing traffic flow due to its odd configuration	1.75	Proposed to be added to 2003-2012 State Ten Year Plan - Source of project is Plaistow/Haverhill 125 Committee
PLAISTOW	NH 121A/ North Avenue	Project would signalize and widen the intersection of NH 121A and North Avenue	1.1	Source of project is Plaistow/Haverhill 125 Committee
PLAISTOW	BRIDGE	Project would replace/rehab bridge on Old Danville Road over Little River	0.5	Bridge is on municipal red list
PLAISTOW	COMMUTER RAIL	Commuter Rail Service to Boston - Capital and 3 years operating cost	4	Source of project is from MPO Public Involvement meeting
PLAISTOW	BUS	New bus route on NH 125 corridor with connections to MVRTA	0.417	Operating Costs - from SPW-MPO 1999-2009 Long Range Plan
KINGSTON- PLAISTOW	BUS	Increased frequency of Boston commuter bus service	0.18	Operating Costs - From MPO Public Involvement Meeting
KINGSTON- PLAISTOW	BICYCLE	Pavement Marking/ Spot improvements for bikes on NH 125	0.02	Source: SPW-MPO 1999-2009 Long Range Plan
PLAISTOW- HAMPSTEAD	BICYCLE	Shoulder Bike Lanes on NH 121 North of NH 125	0.5	Source: SPW-MPO 1999-2009 Long Range Plan

NH Route 125 and Access Management

NH Route 125 is the most prominent transportation entity in Plaistow. Consequently, Route 125 has a strong influence on transportation patterns for the entire town. Arbitrary and unchecked development along this corridor will likely result in increased travel times for everyone who wishes to utilize the route. One of the objectives of this plan is to ensure that the existing levels of service along the NH Route 125 corridor are improved and to keep the corridor from relying solely on traffic signals to control traffic volume. The tools provided below will allow for the proactive management needed to ensure safe, convenient access to and from NH Route 125.

Access Management

Over the past decade, access management has emerged as an appropriate technique to address the conflicts between through traffic and traffic generated from development. It is a major element of any transportation plan. Access management is the local oversight of all means of vehicular access onto major transportation corridors in order to maintain the safety and efficiency of the throughway. For the Town of Plaistow, the access management tools are best suited for NH Route 125, though the effectiveness of access management extends beyond busy transportation corridors. The goal of access management is to limit the number of conflict points (at driveways, medians, and intersections) along a transportation corridor. Such techniques as controlling setbacks, frontages, curb cut distances, and shared driveways represent ways to better manage access on major thoroughfares

See **Appendix A** for a full description of the various access management techniques.

The Regulatory Aspects of Development Along Major Thoroughfares

No state agency has the authority to regulate development along state roadways, or to prohibit access to land abutting state highways. The NHDOT has jurisdiction over access to state highways, but it is limited. NHRSA §236 regulates driveways and other accesses to state highways including the permitting process, sight distance, numbers of permitted driveways, drainage, and maximum geometric standards for commercial driveways. Specifically, NHRSA §236:13 gives towns and cities full control over how private roads or driveways are connected to highways. Furthermore, driveway permits issued by the NHDOT do not override local regulatory requirements.

Without state regulation of such development, only local government can control and development along state highways. Additionally, through Zoning, Subdivision and Site Plan Review Regulations, local governments can manage development and enact access management controls to regulate the placement and design of driveways. The following represent examples of access management techniques that can be incorporated into local land use regulations:

Zoning

1. Adequate setbacks should be required to allow for flexibility in locating driveways, future frontage road construction and to accommodate for future widening for sidewalks and bicycle paths;
2. Increasing the frontage reduces the potential number of access points on the corridor;
3. Inappropriate signage can create visual confusion and create potential traffic hazards;
4. An Access Management Overlay District can address a number of issues such as encouragement of joint access, interconnecting driveways, spacing of driveways and limitation on new driveways;
5. A Mixed-Use Zoning approach can reduce the number of vehicle trips.

Site Plan Review

1. Minimum distances between driveways;
2. In order to minimize the number of driveways, shared driveways should be encouraged for adjacent sites;
3. In anticipation of future developments, proposed developments under site plan review should incorporate interconnecting driveways in order to promote vehicular and pedestrian access between adjacent lots;
4. On site circulation should be planned to accommodate pedestrians who prefer to park and walk from one shop or business to another;
5. Require extensive landscaping and buffering as an access management tool.

Access Management

The Town of Plaistow adopted an access management ordinance in 2002 as a method for managing access along the Route 125 commercial corridor. The ordinance outlines a special set of requirements in addition to the underlying zoning and its associated requirements. The ordinance requirements address many access management issues including joint access, interconnecting driveways, driveway spacing, as well as limitation on new driveways.

Transportation Financing Options

State/Federal

State Aid Construction Funds

Provide for improvement of uncompleted sections of state secondary, Class II highways. The ratio of state to town matching funds is based on the assessed valuation of the municipality and varies from a 2 to 1 ratio in small towns to a 1 to 1 ratio in the large municipalities. Application must be made to the Administrator, Bureau of Municipal Highways by May 1st of each year, but preliminary discussions about such projects should begin well in advance of this date (NHRSA §235).

State Aid Reconstruction Funds

Available for improvement of completed sections of state secondary, Class II highways when the town or city wishes to advance the priority of construction for special types of work such as improved drainage, riding surface or elimination of sharp curves. The matching ratio is the same as for State Aid Construction Funds and application is made in the same manner (NHRSA §235).

Highway Block Grant Aid Funds

Apportioned to all cities and towns on a yearly basis for the construction, reconstruction, and maintenance of Class IV and V highways on the following basis:

Apportionment A: These funds are allocated from an annual apportionment of not less than twelve percent of the total highway revenues collected the preceding fiscal year. The amount distributed is based on one-half mileage and one-half population as the city/town factors bear to the state total.

Apportionment B: These funds are allocated from an annual apportionment of \$400,000; the amount available to towns is based on a formula using equalized valuation and Class V mileage designed to give the greatest benefit to the low valuation towns with high road mileage.

Block Grant Aid payments are made as follows: 30 percent in July; 30 percent in October; 20 percent in January; and 20 percent in April. Unused balances may be carried over to the following municipal fiscal year (NHRSA §235.) The current balance for the Town of Plaistow's Highway Block Grant Aid Fund is \$148,214.

Federal Aid Bridge Replacement Funds

Available for replacement or rehabilitation of town bridges over 20 feet in length. Bridge Aid

funds may be used for matching these funds. Application is made to the Administrator, Bureau of Municipal Highways in the same manner as aid under the Bridge Aid Program.

Local

Road Impact Fees

Another funding source used by Plaistow for road improvements is road impact fees. These are fees collected from the developer to pay for part of the cost of infrastructure, in particular roads. The recent trend of shifting the burden to the private sector can be attributed to not only reduced federal assistance but also to the realization by municipal officials that new development is not paying its way, resulting in the burden being placed upon the residents of a community instead.

General Fund

The Town's operating budget should provide funds for routine maintenance of the transportation system. Major capital transportation-related expenses should be allocated in the capital budget.

The Capital Improvement Plan

Capital improvement planning is used to classify projects according to the urgency and need for realization. A time sequence for their implementation is included as part of the plan. Plaistow's current CIP is for the years 2000 to 2006. The CIP is based on information submitted by departments and agencies of the municipalities and takes into account public facility needs.

Recommendations

The following recommendations address the Town of Plaistow's transportation needs and meet the transportation objectives expressed in the beginning of this chapter.

1. Establish a local Transportation Advisory Committee (TAC) consisting of elected and appointed officials, transportation users (truckers, walking and bicycling enthusiasts, public transportation advocates etc.) and concerned citizens.

The purpose of the TAC would be to review all past transportation planning work (i.e. Inventory and Assessment of Road Surfaces UNH, 1998, Regional Bicycle Plan, etc.), reports from the Public Works Department and Safety Committee and then begin to establish priorities. A very important role for the TAC is to build community consensus for transportation improvements and to advocate for the funding and implementation of these projects.

2. Identify and explore all existing and potential sources of state, federal, and private funding for transportation projects. Determine which sources of funding offer the most realistic opportunity for success.
3. On an annual basis establish capital projects that should be included in the town's Capital Improvement Program.

Such projects would include: roadway maintenance and improvement that are consistent with the Master Plan and alternative transportation mode projects including facilities for bicycles and transit. The Capital Improvement Plan should identify a methodology for prioritizing projects which emphasizes the importance of maintaining the existing roadway system as well as intersection upgrades.

4. Identify a reasonable amount of local Town funds that could be used as a match for the potential state and federal assistance.

This funding could be in the form of a municipal bond amortized over 20 years. For illustration purposes only, the yearly payments for a \$500,000 bond at 7 ¼% would be approximately \$56,000 per year. These funds would be available “on-call” to be used as a local match when the opportunity arose.

5. Design and construct town road projects in a manner that minimizes impacts on water quality and sensitive environmental areas and considers aesthetics.
6. Ensure that any new development occurs only where existing transportation facilities are adequate or when necessary improvements will be made as part of the development project.

7. Require new development to incorporate the Design Principles, Traffic Calming Measures, and Best Transportation Practices into construction standards.
8. Require new developments to make off-site road improvements in relation to the impacts associated with the development. Costs associated with such improvements should be in proportion to the benefits derived.
9. Actively participate in the regional transportation planning process and in the update of the regional Long Range Transportation Plan and the Transportation Improvement Plan.
10. Ensure that the roadway improvement projects identified in the regional 2001 TIP are implemented as scheduled.
11. Undertake an Access Management plan for Route 125 based on the guidelines and tools in Appendix A of this chapter.
12. Continue to use the Roadway Management System to identify existing traffic hazards and local road conditions in town.
13. Follow the American Association of State Highway and Transportation Officials Minimum Standards to identify and upgrade any major roadways.
14. Establish a system of scenic roads that contribute to the quality of those areas within Plaistow that exemplify its rural character and heritage.
15. Review the Town's zoning ordinance, Subdivision and Site Plan Review Regulations in order to determine if they encourage and promote the best practices of access management. Where appropriate, revise the regulations to be consistent with such practices.
16. When reviewing plans for subdivision or site plan review, encourage the interconnection of the developments through the use of sidewalks and interconnecting roads.
17. Continue to plan for pedestrian amenities such as sidewalks and initiate planning for a trail and pathway network that can accommodate walkers, joggers, hikers, and bicycles. After a preliminary plan is formulated, communicate with private landowners in order to determine if they are willing to provide easements.
18. In meetings with the NHDOT officials, suggest potential bicycle paths along existing state routes such as NH Route 121 and NH Route 121A.
19. Encourage social service transportation providers to coordinate transportation activities and, where possible, to allow non clients to use the service on an as needed basis and for a fee.

Appendix

Access Management Guidelines for Route 125

1. Zoning:

A. Setbacks

- 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 paths/shoulders. It is recommended that building setbacks be no less than 110'. Additionally, undeveloped front yards should be required to be no less than 40' in width (larger where ROW is narrower).

B. Frontage

- Increasing minimum frontage requirements effectively reduces the potential number of access points onto NH 125. It is recommended that lots within zoning districts where the minimum lot size is one (1) acre, the minimum frontage required be 250'. Lots in districts requiring larger minimum lot sizes should be required to have frontage of 400'.

C. Driveway Turn-Around Areas

- A driveway turn-around merely eliminates the necessity to back onto NH 125, creating the potential for collision.

D. Signs

- While sign regulation is not a usual component of an access management regulatory scheme, two very specific tools are offered for consideration. Off-premise signs, not limited to billboards, create visual confusion, which in turn can have the potential of creating traffic hazards.

E. Setbacks for Signs

- Freestanding sign location(s) should be sufficiently regulated so that they provide adequate information without causing confusion for the traveling public. Specific setback requirements must be based upon several factors, including the posted speed of the road, building setback requirements, dimensional standards for size including area and height, and lighting method.

F. Access Management Overlay Districts

- The use of overlay districts as a method for managing access along commercial corridors is rapidly increasing across the United States. The tool is used to overlay a special set of requirements onto an existing district, while retaining the underlying zoning and its associated requirements. Language that specifies standards for the Access Management Overlay District is integrated into the Zoning Ordinance while corridors (overlays) are designated on the zoning map. Overlay District requirements may address a myriad of access management issues including joint access, interconnecting driveways, driveway spacing, as well as limitation on new driveways.

G. Mixed-Use Zoning

- Mixed-use zoning means allowing a broad and diverse range of land uses both within established districts, and throughout town. The purpose of creating a broad mixture of uses is to reduce the number of vehicle trips necessary for work, shopping, recreation, and other purposes, all of which contribute to reduced levels of service. Similarly, allowing mixtures of land uses within zoning districts can have the same effect of reducing the number of trips generated, at least within the district.

2. Site Plan Review:

A. Minimum Distances Between Driveways

- The minimum distance between driveways on the same and opposing side of NH 125 including all road intersections, shall be measured from the centerline of the driveways at the right-of-way line and shall be a function of the posted speed in accordance with the following table:

Table 10: Minimum Distances Between Driveways

Highway Spacing in feet	Minimum Speed
150	35
185	40
230	45
275	50

Source: "Access Management for Streets and Highways," Federal Highway Administration, 1982.

- The centerlines of all new driveways should be aligned with driveways, and road intersections on the opposing side of NH Route 125, if they exist. If such an alignment is not feasible the driveways should be offset in accordance with section A above.

B. Driveway Width

- Commercial driveways should not exceed 36 feet in width, measured perpendicular to the driveway at its narrowest point. The driveway should be flared at the property line with minimum radii of 25 feet. All driveway entrances (regardless of the presence of curbing on Route 125) should be curbed from NH 125 to at least the end of the radii at the driveway throat.

C. Maximum Number of Driveways Per Lot

- Lots which have frontage only on NH Route 125 should be allowed a singular driveway, except that two, one-way driveways may be substituted for a singular driveway, provided that the minimum required distance between driveways can be met.

D. Shared Driveways

- In order to minimize the number of driveways along NH Route 125, shared driveways should be encouraged for adjacent sites. The following (*OPTIONAL*) dimensional requirements may be reduced if shared driveways are provided as follows:
 1. The minimum lot size and the minimum road frontage should be reduced by a total of ten percent if a single shared driveway with an adjacent site accesses the entire site.
 2. The minimum lot size and the minimum road frontage should be reduced by a total of twenty percent if the entire site is accessed by a single shared driveway with an adjacent site on a highway other than NH Route 125, and which is appropriately zoned for the use.

E. Interconnecting Driveways

- All projects subject to Site Plan Review should provide interconnecting driveways or easements for future construction of driveways that will provide and promote vehicular and pedestrian access between adjacent lots, without accessing NH Route 125 to all property lines, and should be designed to provide safe and controlled access to adjacent developments where they exist. Every effort should be made by the Planning Board to require construction of these driveways in anticipation of future developments.

F. Access to Lots with Multiple Frontage

- Lots with frontage on both NH Route 125 and an adjacent or intersecting road should not be permitted to access NH Route 125, except where it can be proven that other potential access points would cause greater environmental or traffic impacts.

G. Driveway Throat Length

- The minimum length of a driveway should be of adequate length to accommodate the queuing of the maximum number of vehicles, as defined by the peak period of operation identified in the traffic study. The design of the driveway should, to the maximum extent possible, cause no vehicles waiting to enter the site, remaining on NH Route 125.

H. Corner Clearances

- Lots with frontage on NH Route 125 and an adjacent or intersecting road, which, due to environmental or traffic impacts, can not access the adjacent or intersecting streets.

I. Adequate On-Site Circulation and Storage

- Adequate number of parking spaces, aisle widths, raised medians, tractor-trailer access, promotes safe and efficient movement into and out-of the site.

J. Landscape Buffering

- Landscaping and buffering is important along road frontages, and within parking lots. Adequate buffers and properly designed landscaping assists in the identification of driveway entrances and necessary signage, in addition to controlling light diffusion onto abutting properties. Landscaping located within raised medians separating aisles of parking spaces controls internal lot circulation and establishes safe and efficient traffic patterns.

3. Subdivision:

A. Interconnecting Driveways

- All projects subject to Subdivision Review should provide interconnecting driveways or easements for future construction of driveways that will provide and promote vehicular and pedestrian access between adjacent lots, without accessing NH Route 125 to all property lines, and should be designed to provide safe and controlled access to adjacent developments where they exist. Every effort should be made by the Planning Board to require construction of these driveways in anticipation of future developments.

B. Access to Lots with Multiple Frontage

- Lots with frontage on both NH Route 125 and an adjacent or intersecting road should not be permitted to access NH Route 125, except where it can be proven that other potential access points would cause greater environmental or traffic impacts.

C. Corner Clearances

- Lots with frontage on NH Route 125 and an adjacent or intersecting road, which, due to environmental or traffic impacts, cannot access the adjacent or intersecting streets.

D. Minimum Distances Between Driveways

- The minimum distances between driveways on the same and opposing side of NH Route 125, including all road intersections should be measured from the centerline of the driveways at the right-of-way line and should be a function of the posted speed.

E. Shared Driveways

- In order to minimize the number of driveways along NH Route 125, shared driveways should be encouraged for adjacent residential sites.

4. Additional Components of Access Management

A. Access Management Plans

- An access Management Plan is a graphic representation of the arterial being managed, for example, NH Route 125, 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 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 the Town. Prospective developers of properties along the corridor should be required to incorporate and construct the appropriate components of the Plan into their development plans.

Proper Access Management Standards are best implemented after Plaistow has determined:

B. Land Patterns

- Where development should be encouraged and where it should be limited. Of paramount importance, 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;

C. Traffic Flow

- The extent to which arterial traffic volumes have increased in recent years and are likely to increase in the future;

D. Plan's Relationship to Access Management

- How Plaistow's transportation and land use policies can be enhanced by sensible access management standards.

For a fuller explanation and illustrations of these access management techniques, please refer to *Route 16 Corridor Protection Study – Access Management*, prepared by the Strafford Regional Planning Commission in April of 1998.