

5.6 Circulation

5.6.1 Introduction

This element of the Comprehensive Plan provides information on the roadway system including functional classification of roads, traffic volumes, and accident locations. The element also contains information on bicycle/pedestrian circulation, rail transportation, and bridges.

5.6.2 Existing Conditions

One of the most vital elements of a rural community, such as Exeter, is its transportation system. Adequate streets, highways and roadways are essential to the orderly functioning of a community. Highways provide for mobility throughout the community as well as access to local and regional markets. Planning for these facilities involves a "Comprehensive Analysis" of the ability of the transportation network to accommodate future changes in demand while minimizing the negative impacts on the community. The development of future circulation plans is based upon the way Exeter presently functions as a community and the role of transportation in its future.

Functional Classification System

For planning purposes, it is important to classify each roadway in the existing highway system into its functional classification. Highway function classifications are used in developing long-range transportation plans and in determining federal-aid funding categories. This process involves grouping streets and highways into classes or systems according to the character of service they provide. The major notion behind the functional classification system is the relationship between roads and the purposes they serve. In general, there are two basic functions of a road: access to property and travel mobility. Some roadways will not fit a category perfectly, but it nevertheless is a useful guide.

A determination of the road's principal use will determine which of the three major Functional Classifications the road belongs in. By designating the role that each existing or future roadway will play in the overall highway network, it is then possible to determine if it meets a certain standard. The three major classifications are:

1. Local - Emphasizes the land access function.
2. Collector - Offers a balanced service for both functions (access and travel).
3. Arterial - Emphasizes a high level of mobility for through movement.

In addition to the access/mobility relationship, two major area types, urban and rural, must also be considered. Exeter is classified as a rural community. In rural areas the functional system is broken down into the following major subclasses:

1. Principal Arterial Street
2. Minor Arterial Street

3. Major Collector Street
4. Minor Collector Street

Map 5.6.A represents the functional classification of highways in Exeter for the time frame of 1995 to 2005. This data appears in Technical Paper Number 130, Division of Planning, Highway Functional Classification System for the State of Rhode Island 1995-2005, adopted May 1988 (RI Division of Planning). Also included is the Functional Classification mileage for the existing roadway system (Table 5.6.A).

Table 5.6.A Town of Exeter -1995-2005 Functional Classification Mileage			
Segment Name	From	To	Miles
<i>Interstate - Rural</i>			
I-95	Richmond TL	West Greenwich TL	2.75
<i>Principal Arterial (Rural)</i>			
Proposed R.I. - 138	South Kingstown TL	North Kingstown TL	1.80
<i>Minor Arterials (Rural)</i>			
Nooseneck Hill Rd.	Ten Rod Rd.	Victory Hwy.	1.25
Proposed URI Connector Rd.	South Kingstown TL	RI-138	.90
South County TR (RI-2)	South Kingstown TL	North Kingstown TL	3.95
Ten Rod Rd (RI-165)	Connecticut SL	Nooseneck Hill Rd.	7.00
Victory Hwy. (RI-102)	N. Kingston TL	RI-3	7.00
Victory Hwy.	West Greenwich TL	RI-3	.40
		TOTAL	20.50
<i>Major Collectors (Rural)</i>			
Bridge Road	Connector Street	Slocum Road	.30
Mill Pond Road	North Kingstown TL	Bridge Rd.	.45
Exeter Rd.	South County Tr.	North Kingstown TL	.75
RI 138	Conn. SL	Hopkinton TL	.50
RI 3	Richmond TL	Ten Rod Road	1.30
RI 3	RI-102	West Greenwich TL	.55
South Road	South County Trail	Victory Highway	2.15
		TOTAL	6.00
<i>Minor Collectors (Rural)</i>			
Arcadia Rd.	Richmond TL	Ten Rod Road	1.5
<i>Source: Transportation Improvement Program, Div. of Planning</i>			

Transportation Improvement Program (TIP)

The Division of Planning of the Rhode Island Department of Administration in conjunction with Rhode Island Department of Transportation, the Rhode Island Public Transit Authority and cities and towns in Rhode Island recently prepared the twelfth in a

series of Transportation Improvement Programs (TIP). This document presents a program of transportation projects and funding schedules which is updated every two years. In order to qualify for this program, a proposed item or project must meet the criteria established by the RIDOT and be defined as a capital improvement project, to be included in the Capital Budget - Capital Improvement Program. The TIP includes one project in the Town of Exeter, which is listed in Table 5.6.B. The improvements will respond too many of the existing roadway inadequacies for intra-town traffic as well as intertown travel.

Table 5.6.B
Transportation Improvement Program for Exeter

<u>PROJECT DESCRIPTION</u>	<u>ESTIMATED COST</u>
Storm Water Retrofits	\$140,000

Source: Transportation Improvement Program, Division of Planning

Traffic Volumes

Average daily traffic volume data (ADT) for Exeter was obtained from the Planning Division of Rhode Island Department of Transportation Map 5.6.B depicts 1989 average twenty-four hour volumes. As can be seen, the highest volumes occur along Route 2 (South County Trail) between the South Kingstown line and Exeter Road. This is due to South County Trail being a major north/south thoroughfare between Route 138 and the Route 4 interchange, utilized to access I-95, URI, and other southern destinations. Route 2 also serves as an alternate route to South County beaches. Ten Rod Road, between Slocumville Road and the North Kingstown town line, has the next heaviest volumes. This is primarily due to traffic from eastern Exeter and North Kingstown heading west to Route 3 and/or I-95. Other roadways with higher volumes include Route 3 (Nooseneck Hill Road), Slocum Road and Route 165. The following table shows the most recent volumes (1989) and 1987 volumes by location.

Table 5.6.C
Exeter Average Daily Traffic

<u>Location</u>	<u>1987</u>	<u>1989</u>	<u>% Change</u>
S. County Trail north of Wolf Rock Rd.	6100	9300	52.5%
Ten Rod Rd. east of Tripps Corner Rd.	6000	5100	-15.0%
Ten Rod Rd. east of South Rd.	-	6500	N/A
Nooseneck Hill Rd. south of Rt. 165	3400	3800	11.8%
Ten Rod Rd. east of Summit Rd.	1600	2400	50.0%
Slocum Rd. S of Yawgoo Valley Rd.	2200	2300	4.5%
South Rd. south of Rt. 102	1600	1900	18.8%
Ten Rod Rd. west of Woody Hill Rd.	1200	1700	41.7%

As indicated in Table 5.6.C, South County Trail north of Wolf Rock Road has experienced a tremendous increase in traffic over a three year period (1987-1989). This 52.5% increase in traffic of more than 3,000 vehicles, could be due to South County Trail being in close proximity to Route 4 via Route 102. Recent improvements to South County Trail (Route 2) may have also contributed to increased traffic along this roadway. The remaining locations did not exhibit any substantial increase in traffic. However, Ten Rod Road showed decreases in volumes at two locations along its system.

Accident History

Traffic Accident Data for the Town of Exeter was acquired from the Rhode Island Department of Transportation (RIDOT) for the three year period from 1986 to 1988 (the most recent available data). These records were analyzed to determine high accident locations in the Town. A summary of these findings is included in Table 5.6.D. This table lists those locations that had twenty or more accidents during the three-year period. Map 5.6.C displays the same information in graphic form.

Table 5.6.D

High Accident Locations (5+) -1986-1988

<u>Locations</u>	<u># of Accidents</u>
Victory Highway and Nooseneck Hill Road	17
S. County Trail south of Exeter Road	10
Exeter Road east of S. County Trail	8
Ten Rod Road and Sunderland Road	7
S. County Trail south of Wolf Rock Road	6
Ten Rod Road	

Exeter had 99 injury accidents, 170 property damage accidents, and nine fatal accidents for 1986-1988. The following table displays this data for 1986 - 1988:

Table 5.6.E

<u>Type of Accidents</u>	<u>1986</u>	<u>1987</u>	<u>1988</u>
Personal Injury	31	31	37
Property Damage	49	64	57
Fatal	4	1	4
Total	84	96	98

Based on a review of all of the existing accident data for the Town of Exeter, a total of 70 or 25% of all accidents have occurred along or in conjunction with Route 102 and Route 165. The majority of these accidents were rear end, broadside, or sideswipe in nature. These accident types indicate a potential problem with site distance, which is usually related to poor roadway geometry. Victory Highway and Nooseneck Hill Road, recorded 12 of 17 accidents being rear ends. In order to mitigate this problem, further investigation of its present function and design should be made in order to promote safe traffic. Another problem area in Town is along South County Trail, south of Exeter Road. This segment of road has the second highest accident count to Route 102.

Two other problem areas include the intersection of Route 102 and Sunderland Road and Route 165 east of Arcadia Road. Both of these locations had two fatal accidents during the three-year period from 1986 - 1988. This is a relatively high figure considering Exeter had a total of nine fatal accidents during the study period.

Official Road Map

The Exeter Town Council adopted the Official Road Map for the Town of Exeter in September 1988, which indicates accepted Town roads that are classified as being maintained and/or unmaintained by the Town. Other accepted roads do exist which have not been indicated on the map. These roads can be identified in the Town Hall records. The Town Council on the recommendations issued by the Highway Supervisor and the Planning Board approves new subdivision roads. The report indicates whether roads are built to Town specifics. All subdivision roads must be developed off of Town accepted roads.

Bicycle/Pedestrian Circulation

A review of Exeter's Open Space and Recreation Plan indicated that there are no existing bike paths within the Town. However it did indicate that walking and biking is a form of exercise with a very high priority for the people of the Town. Ten Rod Road is a popular route for these activities and consideration might be given to establishing a bike route along this thoroughfare. Ten Rod Road, as its name indicates, could have a right of way width approaching 165 feet. This could potentially allow easy assimilation for bike/jogging paths. The path could possibly serve as a natural buffer between the roadway and adjacent commercial/residential uses.

Rail Transportation

Exeter contains approximately 1.7 miles of the Northeast Corridor Amtrak Railroad line. Amtrak is a transcontinental passenger/mail system, which provides service in this corridor from New York to Boston. The nearest stop along this line relative to Exeter is located in the Village of Kingston in South Kingstown.

Eastbound trains provide service to Providence and Boston with some trains providing service to a few intermediate stops (Kingston). Westbound trains provide service to

Westerly, New London, New Haven, New York, Philadelphia and Washington, D.C., with some trains providing service to intermediate stops (Kingston). The Northeast Corridor line has been electrified to allow faster trains to use the system and to provide faster service between Boston and New York.

Bridges

- State Numbered Bridges

The Rhode Island Department of Transportation, for the purposes of inspection, assigns a number to all Rhode Island bridges that are greater than twenty feet in length. Currently, Exeter contains 29 state numbered bridges, of which twenty are maintained by the state. Some of these bridges may not be state owned, but are inspected by the state. The possibility also exists that the local municipality may maintain a bridge constructed and owned by the state. Also, a bridge, which is located within the state highway system, is state maintained. The following table indicates all state numbered bridges in Exeter.

No.	Name	Street/Route	Crossing
590	Austin Farm Road	Interstate Route 95	Under Austin Farm Rd.
342	Beach Pond	Ten Rod Road	Beach Pond
786*	Breakheart Brook	Austin Farm Road	Breakheart Brook
68	Brown Brook	Ten Rod Road	Brown Brook
38	Brownings Mill	Old Nooseneck Hill Rd.	Roaring Brook
39	Brownings Mill Culvert	Old Nooseneck Hill Rd.	Mill Canal
835	Chipuxet R Culvert	Wolf Rocks Rd.	Over Chipuxet River
825	Culvert	Liberty Road	Chipuxet River
826	Culvert	Mill Access Road	Chipuxet River
53	Escoheag	Escoheag Hill Road	Parris Brook
67	Exeter Hollow	Ten Rod Road	Queens River
379*	Exeter School	Dawley Road	Queens River
784*	Falls River	Austin Farm Road	Falls River
787*	Frosty Hollow Road	Frosty Hollow Road	Breakheart Brook
210	Lawton Mill	Ten Rod Road	Branch of Queen River
785*	Lewis City	Austin Farm Road	Flat River
458*	Liberty Road	Liberty Road	Sodom Brook
788*	Midway	Midway Trail	Falls River
789*	Midway Trail	Midway Trail	Flat River
37*	Millville	Old Nooseneck Hill Rd.	Roaring Brook
340	Mount Tom	Ten Rod Road	Wood River
341	Parris Epcok	Ten Rod Road	Parris Brook
66	Queens River	South Road	Brown Brook
339	Roaring Brook	Ten Rod Road	Roaring Brook

Table 5.6 F Cont

No.	Name	Street/Route	Crossing
268	Sweet Farm	South County Trail	Brook
592	Teft Hill Trail	Interstate Route 95	Over Teft Hill Trail
591	Ten Rod Road	Interstate Route 95	Over Ten Rod Road
823	Wolf Rock Road	Wolf Rock Road	under Amtrak RR
824	Yawgoo Mill Pd.	Bridge Road	over Amtrak RR & Pond

* Not maintained by State

Bridge Improvement Plan

In March of 1990 The Rhode Island Department of Transportation developed a Comprehensive Bridge Improvement Plan. The purpose of the plan was to develop a prioritized list of the State's 705 bridges that require maintenance, rehabilitation or replacement based upon a well-defined and organized procedure. In order to prioritize these bridges, the following five parameters were utilized.

1. Structural Adequacy (50%)
2. Roadway Classification (10%)
3. Average Daily Traffic (ADT) (15%)
4. Type of Bridge (15%)
5. Bridge Posting Status (10%)

Each of the five parameters listed above were assigned a percentage that represents the weighed percentage that was considered in developing an overall rank for each bridge project.

The Comprehensive Bridge Improvement Plan indicates 7 of the 29 bridges listed in Table 5.6.F are scheduled for improvements for the calendar years 1990 to 1995. A list of these bridges, in addition to bridges not scheduled for improvements but assigned a rank, can be seen in Table 5.6.F. The list indicates that Exeter has three bridges ranked in the top 100 that are scheduled for preliminary engineering/environment studies in 1990. Exeter does not have any bridges listed in both the Transportation Improvement Program and Bridge Improvement Plan.

Motor Vehicle Registrations

There are a total of 5,196 registered motor vehicles in the Town of Exeter as of July 1990. From 1985 to 1990 the number of registrations have increased by 31 percent, a relatively high increase considering the Town's population has increased less than eight percent since 1980. The following table profiles the community's vehicle totals for the years 1985 to 1990. Motor vehicle classifications for 1990, the only year available, are also

represented in the table. Exeter represents less than one percent of total number of vehicles registered in the State.

Table 5.6.G
Town of Exeter
Registered Vehicles -1985-1990

Type	1985	1986	1987	1988	1989	1990
Private Passenger	2,400	2,591	2,792	2,920	2,997	3,097
Commercial	978	1,094	1,192	1,357	1,355	1,226
Trailer	278	301	328	369	386	416
Motorcycle	159	166	190	216	209	227
Camper	39	43	55	71	81	86
Town	8	8	9	7	7	7
Fire Apparat.	10	10	10	10	10	10
Farm	69	77	77	66	59	57
Others	28	33	30	39	66	70
TOTALS	3,969	4,323	4,683	5,055	5,170	5,196

The following table indicates that there are a total of 3,191 conventional automobiles or 61% of the total registered vehicle population in Exeter. Class Two (gasoline trucks weighing less 6001 pounds) had the next highest percentage representing 16% of the total number of vehicles registered. Exeter has a total of 241 gasoline and diesel automated trucks over 8,500 lbs. These class four and seven vehicles represent 8% of all registered vehicles, a significant percentage. With twenty-nine bridges (state and local) it is important to evaluate the structural condition of these bridges with respect to their loading capacity. This would also relate to school buses, which can weigh 10,000 lbs. when at full capacity.

Table 5.6.H
Motor Vehicle Registration by Vehicle Classification
Model Years 1971-1990

Year	Class:	1	2	3	4	5	6	7	8
1999		3,191	825	173	200	4	5	41	227

Class Key:

- Class One - Gasoline Automobile
- Class Two - Gasoline Truck <6001 lbs.
- Class Three - Gasoline Truck 6001 - 8500 lbs.
- Class Four - Gasoline Truck >8500 lbs.
- Class Five - Diesel Automobile

Table 5.6 H Cont

Class Six - Diesel Truck <8501 lbs.
 Class Seven - Diesel Truck >8500 lbs.
 Class Eight - Motorcycles (including mopeds)

Source: R.I. Registry of Motor Vehicles

Special Needs Transportation

The State’s Paratransit Brokerage Project (RIDE) services the Town of Exeter. South County Integrated Rural Transit Service (SCIRTS) is a contractor to RIDE which provides demand-response or paratransit service for the purpose of providing shopping trips, medical trips to local doctor offices and trips for the elderly to Day Care and Nutrition Centers. There is no charge for riders over sixty years of age or for riders under sixty who receive State assistance. Riders under sixty years of age are asked for a fee of \$1.50 for a trip seven miles or less and \$3.00 for a trip over seven miles. SCIRTS also provide free service for the handicapped.

SCIRTS provides service to over 2,000 clients and averages approximately 15,000 one-way trips per year in the service area.

Service Area By Town

Foster	West Greenwich	Charlestown
Scituate	Exeter	Richmond
Coventry	North Kingstown	South Kingstown
West Warwick	Hopkinton	Narragansett
East Greenwich	Westerly	Jamestown
	New Shoreham	

The Town has two regular riders who average less than ten one-way trips per month. SCIRTS has not received any handicapped requests from Exeter.

Subdivision Street Design

Just as land use decisions depend on the extent and effectiveness of the road network, the creation of new roads can have a profound effect on the Town’s character. The design and construction of many of the Town’s new roads are approved by Town agencies, particularly by the Planning Board through its review of new subdivisions and land development projects. The standards for construction of new streets should reflect anticipated traffic volumes and public safety concerns, but should not promote the over-design of streets where it is not needed. The standards should reflect future neighborhood character as well as the movement of vehicles. The Land Development and Subdivision Regulations should be periodically reviewed to determine if engineering standards are balanced with the natural, cultural and scenic objectives of this Plan.

5.6.3 Findings, Issues, Goals, Policies

5.6.3.1 Findings:

- a) There are no roadway improvements planned by the RIDOT on any of the major
- b) State highways in the town
- c) The heaviest traffic volumes in Town are on South County Trail (Rt. 2), north of Wolf Rock Road, and Ten Rod Road (Rt. 102) east of South Road.
- d) The two highest accident locations in Town are at the intersection of Victory Highway and Nooseneck Hill Road, and at South County Trail south of Exeter Road.
- e) There are several State and local roads whose intersections require redesign to improve safety.
- f) The Town does not have a formal "Roadway Management Program." It budgets \$60,000 per year for road repair, including grading of gravel roads and oil sealing.
- g) The Town has twenty-nine state numbered bridges of which twenty are maintained by the State.
- h) Seven of these bridges are identified in the Comprehensive Bridge Improvement Plan for improvement. Three of these bridges were scheduled for preliminary engineering/environmental studies in 1990.
- i) There are a total of 5,196 registered vehicles in the Town as of July 1990. Registrations have increased by 31% since 1985.
- j) Exeter has a total of 241 gasoline and diesel automated trucks over 8,500 pounds. These class four and seven vehicles represent 8% of all registered vehicles.
- k) Several local roads may not be adequately designed for current traffic loads (i.e., width of pavement and site distance).
- l) Subdivision road widths could be decreased to reduce drainage volumes while more closely reflecting the rural character of the town.
- m) Bicycle riding is a popular activity in Exeter, particularly along scenic Rt. 102.

n) Opportunity exists to create a system of pedestrian and bicycle trails in the development of new subdivisions and other land development projects. As new residential developments are proposed for review by the Planning Board, an analysis of the need for pedestrian and bicycle paths should be undertaken. The Planning Board should require the construction of these facilities to interconnect residential areas within the same subdivision as well as to link with abutting subdivisions or major public or private facilities, such as schools or playgrounds. Especially in conservation developments where dwellings will be grouped together on relatively small lots, sidewalks or footpaths can add to the character of a neighborhood as well as provide social and recreational opportunities within a neighborhood and an alternative to the use of automobiles.

5.6.3.2 Issues

- a) The Town does not have any major arterial improvement projects scheduled in the state Transportation Improvement Program.
- b) Road conditions and maintenance on local roads is an apparent problem.
- c) Dead ends, roadway widths, and the number of cul-de-sacs create a problem with respect to school bus service delivery.
- d) Development of major projects on Exeter's roads will require that frontage, signalization and private streets be well designed.
- e) Increased traffic on local roads exceeds current design capacities.

5.6.3.3 Goals

- a) Provide adequate traffic circulation within the community;
- b) Integrate new development areas into the existing circulation patterns;
- c) Coordinate all road design, construction, maintenance, and drainage in a systematic, environmentally appropriate, and cost-effective manner.

5.6.3.4 Policies

- a) Develop evaluation criteria and implement a systemized "roadway management program" utilizing a mappable database (computer or other) to classify roadway condition and drainage problem areas in order to develop townwide priorities for maintenance and repair.

- b) Subdivision, local street, collector and highway designs should be in accordance with reasonable standards with respect to pavement widths and other design considerations. The design widths chosen should reflect the rural character of the Town (22 ft. wide pavement suggested). Subdivision entrances should reflect the rural character of the Town.
- c) Petition the RIDOT to have needed road and bridge maintenance scheduled through the Transportation Improvement Program (TIP) and the Comprehensive Bridge Improvement Plan.
- d) The Highway Dept. shall evaluate all locally maintained bridges and determine physical condition and carrying capacity.
- e) Identify an individual or group to be responsible for continued interaction with RIDOT.
- f) Prioritize specific roads, bridges, and intersections for improvement.
- g) Ask the State to evaluate the establishment of Park and Ride areas, for example, at Rt. 3 and 102 (south/west side).
- h) Work with RIDOT, RIPTA, and adjacent communities to increase public transit options and to expand public transit service.
- i) The Town Council should implement an "Impact Fee" study to assist the Town financially to create and upgrade public infrastructure commensurate with new growth.
- j) Consider the establishment of a bicycle path system in Exeter.
- k) Develop a master plan for a bikeway/nature trail system for the Town to connect local and regional recreational facilities parks, and unique natural areas, utilizing existing right-of-ways where possible while coordinating these designs with appropriate State agencies and adjacent communities.
- l) Walking paths should be encouraged in all subdivisions where appropriate and should be located in such a way that they become paths as opposed to a structural sidewalk system. The use of open space areas for such uses is encouraged. The connection to other open space areas or subdivisions should be encouraged.
- m) The Conservation Commission should establish greenbelt areas as connections between open space lands to form a continuous path or nature trail system.

- n) Inventory and analyze all roads in Exeter for designation and protection as scenic highways.
- o) All new subdivision roads should work with the natural characteristics and contours of the land within reasonable safety constraints.
- p) Improve transportation efficiency and public safety by requiring residential subdivisions of land to have two points of access and egress onto a collector or minor arterial street with interconnections with adjacent subdivisions, or vacant land that could be developed in the future, whenever possible.
- q) Develop a circulation priority plan determined practical by the Planning Board to link adjacent subdivisions and identify areas that will be improved. Incorporate specific criteria into Subdivision Regulations.
- r) Roadways that are not currently accepted by the Town must be improved to Town standards, prior to their acceptance for use as access to further residential development.
- s) A Comprehensive Circulation Plan should be developed in order to identify problem areas. These areas should be consistent throughout the plan. (Refer to section 9.2.4 for more specific recommendations.)
- t) The Town should petition RIPTA to conduct a Ridership Study at the two lots presently utilized for car-pooling in Exeter and North Kingstown to determine the potential for expanded or new service to these facilities.
- u) Investigate cooperating with North Kingstown for the potential re- opening of Wickford Junction.
- v) Future roadway designs should follow function, rather than a broad standard.

5.6.4 Future Circulation Plan

5.6.4a Overview

The recommendations to be presented in this element of the Comprehensive Plan provide a program of circulation improvements for all modes of transportation and pedestrians that is based upon the goals and policies outlined. Like all of the other plan elements that have preceded this segment of the report, there are shared objectives that exist between those sections of the plan and that which will be outlined here. Program

recommendations for state and local roadways, pedestrian and bicycle circulation, mass transit and special needs transportation are presented.

Particular attention has been given to circulation improvements in areas where the public has expressed an elevated level of concern. This relates to the preservation of the Town's rural character and the need for improved traffic safety. Other suggestions have been incorporated as well with respect to the stated need for the general improvement of town roads, in addition to a review of current subdivision design standards.

The major focus of the future circulation plan is to increase pedestrian and vehicular safety on a townwide basis, while improving local roads in a systematic manner. The program recognizes the need for close coordination with the State of Rhode Island to not only improve state roads, but to ensure that the town's objectives are met and supported by the state whenever possible. The plan also envisions the establishment of a circulation system using existing and potential new roadway corridors to provide Exeter residents with a system that meets the future needs of the town with respect to an overall circulation pattern.

The establishment of a Roadway Management Program is the cornerstone of a proposed townwide road improvement program. This program sets priorities for roadway improvements based upon roadway condition, existing and potential demand (buildout) and the special function of a roadway. Specific recommendations are presented for the reconstruction of existing roads or the development of new roads based on nationally accepted standards.

Other major considerations include the establishment of a townwide path or trail system and bike paths, while recognizing the historical value of certain local roadways in Town. Finally, specific recommendations are made with respect to Mass Transit on a local and regional level.

Local Roadway Improvements

5.6.5 Introduction

The Town of Exeter's local roadway network is characterized by a variety of roadway types and widths that are both paved and unpaved. Over the last ten years an extensive amount of development has occurred along these rural roadways that has, in fact, changed their character and function. These roads are no longer functioning as rural lanes but as collectors for the hundreds of trips per day being generated by residential developments. Also, as development pressures increase, these rural lanes and unpaved roads will be further identified as accessways to new developments, which they cannot adequately serve in a safe and efficient manner. Furthermore, the local roadway system is deteriorating from the change in function forced upon these roads. Increased use has

resulted in the need for continuous maintenance, placing a burden on local financial, and human resources. To adequately address the impacts of growth, a variety of planning strategies must be followed to set priorities for the future, while establishing town policies with respect to the development of a safe and functional roadway system. The major elements of this plan are:

- Roadway Management Program
- Local Roadway Improvement Policies
- Improvements Relative to Buildout
- Subdivision Design Standards

5.6.5a Roadway Management Program

The main ingredient in any well-managed roadway improvement program is a comprehensive Roadway Management Program. Programs of this nature are used to establish and prioritize an improvement schedule based upon the consideration of many factors, which can include:

- a. General roadway conditions and anticipated life
- b. Traffic volumes (existing and anticipated)
- c. Pedestrian usage
- d. Accident history and frequency
- e. Adequacy of roadway width
- f. Inadequate drainage
- g. Relationship to other town priorities
(i.e., economic development, recreational use)

A weighted scoring system is established which ranks each town roadway using the above mentioned factors. Improvements are scheduled based upon the ranking developed. Budgeting priorities are developed to systematically improve roadway, sidewalks (if applicable) and drainage, based upon a linear cost factor. Programs of this type can be done manually or by using computer software programs specifically designed to develop pavement management systems.

Increase funding to improve local roads and drainage was rated number one as a recommended item to spend Town funds. This program provides the basis for this action and is recommended for implementation.

Cost Factor/Time Element - The implementation of a Roadway Management Program begins with the development of a physical inventory of all local streets and infrastructure. It is estimated that one-year will be required to develop such a program. Consultants typically charge \$100 - \$200 per mile for such an inventory. The funding required to purchase a Pavement Management Software package is approximately \$5,000 assuming the town has adequate hardware for such a system.

The cost to implement such a program can vary widely, depending on the nature of the improvements to be made. Costs escalate dramatically if drainage lines need to be installed, repaired or replaced, or a roadway requires widening or complete rehabilitation.

The following provides a guide for anticipated costs for such improvements:

Table 5.6.I
Town of Exeter
Roadway Cost Estimates
Roadway Management Program

<u>Work Item</u>	<u>*Cost/Linear Foot</u>
Pavement Overlay (2" assumed)	\$20-30
Road Reconstruction w/ Curbing	\$90-100
Road Reconstruction w/ Drainage Replacement	\$130-150

* A 30-foot wide roadway is assumed.

One Mile - Typical Cost Profiles

1 mile overlay = \$105,600 - \$158,400

1 mile reconstruction = \$475,200 - \$528,000

1 mile reconstruction w/Drainage = \$686,400 - \$792,000

***Administrative Responsibility** - The development of this program is generally the responsibility of the Director of the Department of Public Works or Highway Supervisor, who is charged with the maintenance of local roadways, drainage system and other municipal facilities. The Director, either themselves or in coordination with a consultant, would be charged with the development of such a program.*

5.6.5b Local Road Policy

To adequately address the need for improvements to the local roadway system, the Town of Exeter must establish policies to ensure that its existing roadway system is improved to provide an adequate level of service for its present and future residential populations. There are two methods to implement such a strategy: (1) the establishment of specific policies on roadway acceptance for public use; and (2), the requirement of private support for improving roads impacted by new development.

1. Roadway Acceptance Policy

Roadways that are not currently accepted by the Town must be improved to meet Town standards prior to their acceptance for use as access to further residential development. The level of improvement will be dependent upon the ultimate function of the roadway, based upon a review of its ultimate use which can be determined from the "Buildout Analysis" developed as part of the Comprehensive Planning Process. Specific procedures for acceptance must be established to ensure that the roadway will serve its potential future function. Consideration must be given to protecting the rural character of Exeter, which will be reflected in the design standards imposed. Reference should be made to the American Association of State Highway and Transportation Officials, "A Policy on Geometric Design of Highways and Streets, 1990," with particular emphasis on roadway standards for rural roads, which provides guidance with respect to roadway width and geometry.

Administrative Responsibility: Town Council, Planning Board, Highway Supervisor, Public Safety Officials, and School Officials

2. Circulation Requirements

Many of the recent subdivisions developed in the community have numerous roads ending in cul-de-sacs. While such roadways do provide for increased privacy and seclusion, their continued use and the subsequent isolation of one subdivision from another makes the delivery of services, primarily that associated with school busing, public safety, and snow plowing, extremely expensive. Subdivisions in the future must be linked, where environmental conditions permit, to allow the efficient delivering of public services, while promoting increased public safety. Also, the use of stub end streets is recommended to afford the future extension of streets into adjacent undeveloped land, to extend and develop a system of integrated roadways. Also, two points of access to such developments, where feasible, should be encouraged to provide for improved access and safety.

Administrative Responsibility: Planning Board

5.6.5c Improvements Relative to Buildout

1) Residential Build-out

Future residential development can have a dramatic impact on the ability of local roads to assimilate anticipated increases in traffic demand. Roadways may require improvements to handle such impacts as their original design and width may become increasingly inadequate as the town approaches "buildout." The following provides a summary of the impacts of "buildout" on local roads by Planning District. The total number of new trips (one way destinations) anticipated to be generated by district to the year 2000 is provided. The base number of trips per unit is the nationally accepted average of 10 trips/unit/day. The year 2000 is being used as our planning milestone. Map 5.6.D shows the sub-areas described below. The information included below provides detailed "Buildout" impacts

for each subarea, a description of existing roadway circulation, and subsequent recommendations as required. Refer also to Map 5.6.A – Future Land Use/Zoning Map

Planning District I

Sub-area 5A

Zoning District RE-2

Potential New Units - 11.8

Additional Vehicle Trips per Day - 118

Evaluation:

- Majority of development anticipated occurs north of Austin Farm Road.
- Potential traffic will affect the following roads.
 - Austin Farm Road
 - Black Plain Road
- Area has potential for future industrial land use due to its location adjacent to Route 3 and I-95.

Recommendation:

None at this time

Sub-area 5B

Zoning District RE-2

Potential New Units - 9.1

Additional Vehicle Trips per day - 91

Evaluation:

No significant impact

Recommendation:

None at this time

Sub-area 5C

Zoning District RE-2

Potential New Units - 17.7

Additional Vehicle Trips per Day - 177

Evaluation:

- Only one, unmaintained east-west connector currently exists.
- Arcadia and Bates School House Road link this remote area to Ten Rod Road.

Recommendation:

Investigate improvement corridor between Summit Road and Arcadia Road.

Sub-area 6A

Zoning District RU-4

Potential New Units - 97.0

Additional Vehicle Trips per Day - 970

Evaluation:

- This area accounts for the highest amount of potential traffic in Planning District 1.
- Victory Highway is the only road connecting Ten Rod Road and Route 3.
- Only one non-maintained road currently connects Victory Highway with Ten Rod Road.
- There are no roads traversing this area south of Rt. 102.
- The New London Turnpike provides the only north-south road on the eastern side of the sub-area.

Recommendations:

- North of Victory Highway are several unmaintained roads that may require upgrades with changes in geometry.
 - Increase north/south connections using one or two potential corridors.
-

Sub-area 7A

Zoning District CR-5

Potential New Units - 47.4

Additional Vehicle Trips per Day - 474

Evaluation:

- The majority of anticipated development in this sub-area occurs north of Austin Farm Pond.
- Austin Farm serves as the only east to west route, north of RT. 165.
- Currently, no Town maintained north to south roadways traverse this area, north of Rt. 165.
- Route 165 will be impacted by anticipated growth to the north.
- Arcadia Road provides the only north to south connector within this sub-area, South of Rt. 165.

Recommendation:

Investigate the potential for a north/south corridor on either side of Boone Lake.

Sub-area 7B
Zoning District CR-5
Potential New Units - 85.4
Additional Vehicle Trips per Day - 854

Evaluation:

- Escoheag Hill Road bisects the south portion of this sub-area, running north to south.
- Old Voluntown Road provides the only east to west route.
- Several non-maintained roads exist in the southeast corner of this subarea.
- There are no existing roads traversing in any direction west of Parris Brook.
- This area could account for the second highest growth rate in Planning District I.
- Woody Hill Road serves as a prime north to south collector.
- Skunk Hill Road and Mt. Tom Road meander north, south, east and west in the eastern section of this sub-area.

Recommendation:

Evaluate potential to connect Woody Hill Road to Skunk Hill Road

Sub-area 7C
Zoning District CR-5
Potential New Units - 23.7
Additional Vehicle Trips per Day - 237

Evaluation:

- Several non-maintained roads traverse through the area.
- A small section of Route 138 runs through the southwest corner.
- Remote area is "locked" in by Arcadia and Town border.

Recommendation:

None at this time

Sub-area 7D
Zoning District CR-5
Potential New Units - 3.7
Additional Vehicle Trips per Day - 37

Evaluation:

- Summit Road bisects this area and connects with Route 165.
- Environmental constraints are severe in this area as the Wood River runs through the eastern portion of this subdistrict.

Recommendation:
None at this time

Planning District II

Sub-area 1A
Zoning District RE-2
Potential New Units - 81.9
Additional Vehicle Trips per Day - 819

Evaluation:

- Hog House Hill Road bisects this sub-area, running east to west. This road will be greatly affected by new development.
- Tripps Corner Road, Mail Road, and Glenrock Road the eastern border and the only north to south route.
- No roads traverse through the body of this sub-area.

Recommendation:
None at this time

Sub-area 1B
Zoning District RE-2
Potential New Units - 18
Additional Vehicle Trips per Day - 180

Evaluation:

- Slocum Road and Stony Fort Road border this sub-area and will receive an increase in overall traffic.
- The following subdivision roads may require connecting to nearby streets:
 - Top Hill Drive
 - Tupelo Drive
 - Plantation Drive
 - Colony Court
- The only north-south connector within the sub-area is an unmaintained road.
- The Penn Central Railroad runs through this sub-area.

Recommendation:
None at this time

Sub-area 1C

Zoning District RE-2
Potential New Units - 37.7
Additional Vehicle Trips per Day - 377

Evaluation:

- This sub-area contains several cul-de-sacs, which may require connections.
- South County Trail and Mill Pond Road provide north-south travel and connect the two major east-west roads in the sub-area, namely Valley and Liberty.

Recommendation:

Investigate a new east/west corridor between Liberty and Yawgoo Valley Road.

Sub-area 1D
Zoning District RE-2
Potential New Units - 4.6
Additional Vehicle Trips per Day - 46

Evaluation:

- Lantern Lane may be required to connect to Ten Rod Road (Sub-area 2B) as traffic increases from Hiawatha Road, Colony Road and Maryann Drive.
- Hiawatha Road, Colony Road and Maryann Drive may be required to connect to New Road in Sub-area 2B.
- State owned land is located to the east of this sub-area.

Recommendation:

None at this time

Sub-area 2A
Zoning District RU-3
Potential New Units - 104.2
Additional Vehicle Trips per Day - 1042

Evaluation:

- This potential subarea has the capacity to account for the second highest amount of traffic in P.D. II.
- Victory Highway and Widow Sweets Road serve as the only maintained roads, besides those in the Forest Hills development.
- Widow Sweets is unmaintained at its northern leg.
- Falcon Ridge Drive is located in the northwest corner of this area and connects Widow Sweets to the New London Turnpike.

- Town House Road runs north-south between the New London Turnpike and Victory Highway.
- Gardner Road and Tripps Corner Road run perpendicular off of Ten Rod Road to the south.
- Severe environmental constraints characterize the southwest corner of this sub-area.
- No maintained or unmaintained roads run east to west in this area.

Recommendations:

- Forest Hills may serve as a link between Ten Rod Road and Widow Sweets as traffic increases.
 - Connect Gardner Road to unnamed parallel road to west by way of cross connection.
-

Sub-area 2B

Zoning District RU-3

Potential New Units - 102.7

Additional Vehicle Trips per Day - 1027

Evaluation:

- This sub-area serves as the gateway from Route 4.
- Ten Rod Road bisects this area, running east to west.
- South Road and New Road from the western border running south to north.
- A major subdivision, Cedar Grove is located to the south of Ten Rod Road.
- Cedar Grove may be required to connect to surrounding streets.
- Stony Lane provides the east to west route in the northern portion of this sub-area.
- Ten Rod Road divides this area into two equal parts.
- South County Trail and Exeter Road provide travel in southern portion of this subarea.
- Environmental constraints may pose problems for roads traversing in the southern portion of this sub-area.

Recommendation:

Evaluate connection of Eban Slocum Road to Lantern Lane. Environmental constraints are significant.

Sub-area 2C

Zoning District RU-3

Potential New Units - 40.0

Additional Vehicles Trips per Day - 400

Evaluation:

Mail Road is the only roadway that runs through this sub-area, traversing east to west. Severe environmental constraints pose limits to development in this area.

School Lands Wood Road and Kingston Road run north to south creating the western border.

- South County Trail also runs north to south and provides the eastern border.
- Shannon Road (Alicia Gardens) runs perpendicular off of Mail Road.

Recommendation:

None at this time

Sub-area 3A

Zoning District - RU-4

Potential New Units 188.1

Additional Vehicle Trips per Day - 1881

Evaluation:

- This sub-area accounts for the most additional vehicle trips in Planning District I.
- The majority of development in this subarea could occur south of Ten Rod Road.
- Ten Rod Road and Sheffield serve as the two major east-west connectors.
- Widow Sweets Road and Sunderland Road/Hopkins Hill Road run north to south to the north of Ten Rod Road.
- Liberty Church Road, Purgatory Road, Tripps Corner Road and Hallville Road provide the only north-south travel south of Ten Rod Road.
- Environmentally sensitive areas appear in this sub-area in the Queens River Basin as well in the vicinity of Sodom Brook and Fisherville Brook.
- No roads traverse through the area between Tripps Corner Road and Hallville Road.
- Widow Sweets Road lacks connecting streets in its northern leg.

Recommendations:

- Improve Pardon Joslin/Stony Lane Corridor.
 - Connect Locust Valley to Purgatory Road.
 - Provide major north/south corridor between Tripps Corner Road and Hallville Road.
 - Extend Sheffield Hill Road to Tripps Corner and beyond to Town Line.
-

Sub-area 3B

Zoning District - RU-4

Potential New Units - 28.4

Additional Vehicle Trips per Day - 284

Evaluation:

- Yawgoo Valley Road and Wolf Rock Road provide east to west travel in this sub-area.
- South County Trail serves as the only north to south route in its west border.

- No roads traverse through the center of this area or run north to south east of Route 2.
- The Chipuxet River runs through the eastern portion of this sub-area.
- The Penn Central RR serves as this sub-area's eastern border.

Recommendation:

Create north/south corridor between Yawgoo Valley and Wolf Rock Road.

Sub-area 3C

Zoning District - RU-4

Potential New Units - 19.7

Additional Vehicle Trips per Day - 197

Evaluation:

- This area lacks any type of road network within its borders.
- South County Trail provides the western border.
- Exeter Road serves as the northern border, while Liberty Road provides the southern.

Recommendation:

None at this time

Sub-area 3D

Zoning District - RU-4

Potential New Units - 11.3

Additional Vehicle Trips per Day - 113

Evaluation:

- Chickasheen Brook traverses through this area to Yawgoo Pond on its southern border.
- Miskiania Trail runs east to west through the center of this sub-area. Only half of the road is maintained.
- South County Trail provides north to south travel at the eastern bound.
- Kingston Road also runs north to south and provides the western boundary.

Recommendation:

Improve Miskiania Trail to South County Trail

Sub-area 4A

Zoning District - CR-5

Potential New Units - 59.9

Additional Vehicle Trips per Day - 599

Evaluation:

- The Queens River Aquifer runs through the center of this sub-area that poses severe environmental constraints.
- Ladd School is located in the northeast corner of this sub-area.
- William Reynolds Road provides the northern border, running east to west.
- Liberty Church Road runs north to south at the western bound.

Recommendation:

None at this time

5.6.6 Subdivision Street Design

The Town's current subdivision regulations do not base current roadway design standards on the function the road is meant to serve. Rather, a standard is applied to all roadways irrespective of function. Such an approach does not serve to enhance the rural character of the Town, but tends to homogenize it by establishing a series of streets with no diversification or relationship to the rural nature of the community. Future roadway designs should follow function, rather than a broad standard. Streets in new residential developments should be designed to meet anticipated traffic volumes and safety considerations without loss of site amenities and neighborhood character. Street design should be related to housing type and subdivision design. Consideration should be given to preserving site characteristics, and requiring or protecting trees, open spaces and unique or valuable site features. To do so, it is recommended that the subdivision roadway design standards be revised to reflect a standard of function based upon nationally accepted standards for design, geometry and safety. A residential street hierarchy should be established based upon the following functional guidelines outlined in Table 5.6.J.

Table 5.6.J
Street Hierarchy System

The following major categories of street classification are established:

a. Arterial - A major public street that serves as an avenue for the circulation of traffic into, out of, or around the Town and carries high volumes of traffic and provides for high levels of mobility. Parking is not allowed on arterial streets. Access should be strictly limited to intersecting streets or major driveways. Access should not be provided to residential lots.

b. Collector - A public street whose principal function is to carry traffic between local streets and arterial streets but that may also provide direct

access to abutting properties. These streets provide a balance between land access and mobility, and may provide frontage to residential lots. Parking may be allowed on collector streets.

c. Local – Streets whose primary function is to provide access to abutting properties. There are three types of Local Streets:

Table 5.6.J (con't)

- Local Access (Double-Loaded) - Public streets whose primary function is to provide access to abutting properties on both sides of the street. Parking may be allowed on these streets.
- Local Access (Single-Loaded) - Public streets whose primary function is to provide access to abutting properties on one side of the street only. Parking is prohibited on these streets.
- Local Private - Private streets whose primary function is to provide access to abutting properties. Streets within residential compounds serving up to ten (10) residential dwellings on a private street fall within this classification.

The actual design requirements established for roadways, including cartway width, curb or shoulder, sidewalk or graded area and total right of way will be established by a review of available resource materials. One such guide is the *Subdivision and Site Plan Handbook*, David Listoken and Carole Walker, 1989. It is a recognized standard for subdivision street design and other related regulations. The tables present dimensional requirements for a variety of street functions and levels of development intensity. Specific definitions of development intensities are found in this document.

A second potential standard for review is the American Society of State Highway and Transportation Officials (A.S.H.T.O.) document entitled, "A Policy on Geometric Design of Highways and Streets," 1990. It includes recommended roadway widths for local streets and roads based on Average Daily Traffic (ADT) volumes and design speeds. Another publication which can assist the Planning Board in reviewing and developing standards for streets in new subdivisions is *Residential Streets*, third edition, Walter M. Kulash, Principal Author, American Society of Civil Engineers, National Association of Home Builders, Urban Land Institute, Institute of Transportation Engineers, 2001.

In summary, the regulation of new street development in addition to the reconstruction of existing streets are recommended to be based on their function, and follow the guidelines indicated. This is important from a traffic safety standpoint as well as clearly defining the purpose of roadways in a community.

Administrative Responsibility: Planning Board and Highway Supervisor.

5.6.7 State Roadway System

5.6.7a State System Improvements

The State of Rhode Island, through its Rhode Island Department of Transportation, manages an extensive program of highway improvements throughout the state. This program provides funding to improve both state roads and other roads on the State-Aid system. This work is accomplished through a program called the T.I.P. or Transportation Improvement Program. Local communities can petition the state to improve roads on the system, which are then included in a six-year program.

1. T.I.P. Priorities/Local Goals and Objectives

To successfully accomplish the desired improvements to state and other roads on the state-aid system, it is imperative that the town's portion of the T.I.P. accurately reflects the goals of the town. In addition to having the projects listed, it is equally critical that the town negotiate with the RIDOT to develop a scope of work that addresses not only RIDOT's needs but those of the town itself.

There is only one project presently on the T.I.P. for Exeter:

- Wolf Rock RR Crossing Elimination

Scheduled for Right-of-Way Acquisition/Construction for fiscal year 1990-1991, this project has also been delayed. The proposed bridge construction was eliminated due to environmental constraints, resulting in other scenarios being evaluated for the project. The possibility of employing cul-de-sacs was also discussed, but that would present a conflict with delivery of public services and safety. Currently, the possibility of tunneling is being investigated.

- Other Projects in the System

Improvement to Route 102 and Exeter Road are currently within the T.I.P. cycle, but no schedule has yet to be programmed within the six-year timeline. Once again, every effort should be made to protect the rural character of these roads, especially that of scenic Route 102. Beyond these four projects there are presently no other active projects within the Town.

The following is a list of roads in Exeter that are included in the Federal Aid System.

- Nooseneck Hill Road (Route 3)
- South County Trail (Route 2)
- Ten Rod Road (CT SL to Route 3)
- Victory Highway
- Bridge Road

- Exeter Road
- South Road
- Arcadia Road
- Proposed RI 138

The Town must prioritize these federally aided roads in a systematized fashion to determine which to petition the state for improvements.

Exeter's roadway system is an integral element of the Town's rural character. A tremendous increase in population (22.6%) since 1980 has resulted in many of Exeter's roads requiring improvements. Surrounding South County communities have also followed Exeter's population trends, thus adding additional strain upon the roadway network. Planning of these facilities involves a comprehensive analysis of the ability of the transportation network to accommodate future changes in demand with minimal cost and negative impacts for the community.

The following local roads were identified in the Comprehensive Plan Public Opinion Survey, and by the CPAC as requiring the most improvement due to condition or design:

- Liberty Road
- Mail Road
- New Road
- Stony Lane

The Town should petition the State through the Department of Administration, Planning Division, to include these roads on the Federal Aid System.

Administrative Responsibility: Town Council, Planning Board, and Highway Supervisor

2. Intersection Priorities

The following intersections, including both state and local roads, were identified in the Comprehensive Plan Public Opinion Survey, and by the CPAC as needing improvements:

- Nooseneck Hill Road (Rt. 3) and Victory Highway (Rt. 102)
- New Road and Ten Rod Road (Rt. 102)
- Ten Rod Road (Rt. 102) and South County Trail (Rt. 2)
- Ten Rod Road (Rt. 102) and Sunderland Road

Similar to the T.I.P. process, the Town should prioritize these intersections and petition the state through the Statewide Planning office that they be included for improvement. It is important that the Town stresses this fact to the RIDOT in an effort to access federal and state funding to improving these intersections.

Administrative Responsibility: Town Council, Planning Board, and Highway Supervisor

3. Bridge Priorities

The Comprehensive Bridge Improvement Plan indicates that Exeter has seven bridges included on its Implementation Schedule. Table 5.6.K lists these bridges along with the facility carried.

<u>Name</u>	<u>Facility Carried</u>
Breakheart Brook	Austin Farm Road
Midway Trail	Midway Trail
Lewis City	Austin Farm Road
Browning Mill	Old Nooseneck Hill Road
Falls River	Austin Farm Road
Midway	Midway Trail
Frosty Hollow Road	Frosty Hollow Road

The Rhode Island Department of Transportation, through its highway improvement program, has placed additional emphasis upon bridge inspection and maintenance. The Town should coordinate with the Highway Supervisor and School Department to determine which bridges require improvements, repairs or additional capacity. This can be accomplished through the Roadway Management Program. The Town should petition the state just as they would for a road improvement project through the T.I.P. process.

Administrative Responsibility: Highway Supervisor and Superintendent of Schools

5.6.8 Development Plan Review

Major development projects should be subject to Development Plan Review process with respect to their potential impact on the existing roadway system. The Town can establish this process by using state enabling legislation and adopting the Development Plan Review into its zoning ordinance. Then the Planning Board can amend its procedures to establish this review process. Information critical to such an analysis includes:

- _ Type and square footage of development.
- _ Projected peak hour traffic generated by the development.
- _ An analysis of the Level of Service at the entrance point and adjacent intersections.
- _ The existing traffic counts, speed and peak hour counts at the frontage roadway.
- _ The need, or lack of, for a signalized entrance at various levels of buildout.
- _ Accident data in the immediate vicinity of the site (3 yrs. minimum).

Administrative Responsibility: Town Council and Planning Board

5.6.9 Pedestrian/Bicycle Improvements

5.6.9a Overview

An important element of a rural circulation system relates to the development of a non-vehicular transportation system. This system provides recreational alternatives for bicyclists, hikers and horseback riders who wish to exercise, visit recreational sites or areas of natural beauty while being able to access local services by an alternative means of transportation.

Such a system must be integrated and comprehensive and be developed over time as the opportunity for expansion presents itself. It should be an integrated system connecting to other forms of transportation and be funded through public and private contributions.

The system would utilize a combination of local roadways, existing pathways and new facilities dedicated to the Town for such purposes. It would serve to support and promote the Town as a recreational center and support efforts toward that end. Two major elements would serve to form the basis for such a system. They would include hiking and riding trails and bicycle facilities.

5.6.9b Hiking and Riding Trails

The establishment of a hiking and riding system would require an inventory of existing facilities, private and public, while identifying potential connecting links to such facilities. The inventory could include local roads (maintained or unmaintained) existing pathways through public and private properties and key points of interest or destinations to be identified. The pathways could include such historic routes as the New London Turnpike and Ten Rod Road. New connecting links could be gained through acquiring easements through private properties or through the dedications of open space in association with revised land use regulations requiring such dedications.

***Administrative Responsibility:** The establishment of such a system and the means by which it is created would be undertaken by a Task Force to include recreation enthusiasts, historians, interested planning board members, conservationists and private and public recreation officials.*

5.6.9c Bicycle Facilities

Bicycling has become a major recreational activity across the county and is a favored form of exercise to Exeter residents and those who visit the community to experience its natural beauty. The state has undertaken an aggressive bicycle facilities development program to establish such a system throughout the state. To date, the East Bay Bicycle Path has been established which connects the City of Providence to its East Bay neighbors of East Providence, Warren, Bristol and Barrington. Other systems have been planned for the Blackstone River, Route 116 in Lincoln, the South Shore Facility in Charlestown and South Kingstown, in addition to North Kingstown and Narragansett. The Town of Exeter offers

an excellent site for the establishment of a bicycle trail system and should pursue the study for such a system in the Town.

The State of Rhode Island has prepared the Statewide Bicycle System Plan with the aim of linking bicycle-tolerant roadways and independent bike paths in an integrated network. In Exeter, the State Bicycle System Plan includes Route 102, South County Trail (43rd Infantry Division Memorial Highway) and Nooseneck Hill Road as bicycle-tolerant roadways in Exeter.

5.6.9d Scenic Roadways

These roadways contain the significant scenic areas which are included in "A Survey of the State's Scenic Areas" comprised by the RI Department of Environmental Management in the Rhode Island Landscape Inventory, January 1990. The following is a summary of those sites in Exeter by roadway, name and description:

Table 5.6.L

Exeter Scenic Inventory

<u>Route</u>	<u>Name</u>	<u>Description</u>
2 & 102	Ten Rod Road/ So. County Trail	Undulating Topography/ Woodland and Open Farm Fields
2	Turf Farms	Excellent views across open turf farms
102	Ten Rod Road/ Hallville Road New London Turnpike Tug Hollow	Undulating Topography Woodland and Open Farm Fields Distinctive Wetlands & Topography
Rt. 165	Ten Rod Road	Scenic Road through Arcadia Management Area

5.6.9e Scenic and Historic Highway Designations

Exeter residents have expressed a concern that maintaining the rural character of the Town is of primary importance to them. They are particularly concerned with the future development of Rt. 102 and Rt. 165, the Town's scenic east/west connecting route. In addition, they have placed a high priority on preserving the historical character of the Town through the preservation of important elements that link the Town to its past. From a circulation standpoint, two actions are recommended: the designation of a roadway in Exeter as a Scenic Highway through the RIDOT, and the identifying of a Historic Transportation Corridor through local zoning initiatives.

5.6.9f Scenic Highway Designation

To control future development, while maintaining the character of roadways that are important to the history and fabric of the community it is recommended that Route 165 be the subject of a petition to the RIDOT to designate it for inclusion in the State's Scenic Roadway System. Route 102 has already received this designation.

The Scenic Highway designation must be supported by zoning restrictions to ensure that there value as scenic resources are maintained. This can most easily be accomplished through the establishment of an overlay district, which would include specific controls over development along these roadways.

Administrative Responsibility: Planning Board, Town Council, and Conservation Commission.

5.6.9g Historic Highway Zoning

While Route 165 may be eligible for Scenic Highway designation through the RIDOT, another roadway, the New London Turnpike, must also be preserved as an historic link to the Town's past as a major part of a transportation corridor connecting New London, Connecticut, to Providence. Specific standards for development and use of this roadway should also be developed that will serve to preserve its character, while establishing specific preservation restrictions to maintain it as part of the Town's historical development. It has already been identified for inclusion in the Bicycle Path System as a key element that links recreational uses to historical development. Specific design standards should be applied to its use as an accessway that will maintain its historical character.

Administrative Responsibility: Town Council, Planning Board, and Town Council Conservation Commission

5.6.9h Mass Transit

5.6.9h.1 RIDE

It is recommended that the Town meet with representatives from RIDE to potentially expand the services currently provided to area seniors who may wish to access regional Senior Centers. RIDE service should also be expanded to assist disabled residents.

5.6.9h.2 Park & Ride/Car Pooling

It appears that the two vacant lots in the vicinity of the Route 3 and the Victory Highway intersection are presently being used for car-pooling. The Town should determine who is using the lots for this activity and support their efforts at car pooling by providing improved facilities and/or funding through the appropriate State agencies.

5.6.9h.3 RIPTA Service

The Town should petition RIPTA to conduct a Ridership Study at the two lots presently utilized for car-pooling in Exeter and North Kingstown to determine the potential for expanded or new service to these facilities.