

Circulation Element Inventory

I.	Introduction	1
II.	Overview of System	1
III.	Traffic Volume and Operations	4
IV.	Crash Data - High Crash Locations	5
V.	Public Transit Service	6
VI.	Transportation Improvement Program (TIP) - Roadway Projects	8
VII.	Blackstone Valley	
	Bikeway	9
VIII.	Traffic Calming and Pedestrian Movement	10
IX.	Summary	10
	Circulation Element Strategy Summary	12
	Circulation Element Actions	16

I. Introduction

The Town of Lincoln, Rhode Island is a small town that carries high traffic volumes on the limited access highways of Interstate 295 and Route 146, but otherwise moves lesser amounts of traffic on the state numbered arterial route system and smaller collector and local roads. The collector and local road system in town is becoming burdened in some locations as cut through traffic finds ways to avoid congestion on the major arterial roads. This traffic comes not only from the town itself, but also from all the communities that surround Lincoln. Traffic from seven adjacent communities use the local Lincoln road system as a cut-through to their homes and places of work. As the arterial road network becomes more congested during peak periods, commuters find alternative routes that often times include collector and local roads to avoid traffic congestion on the arterials. This circulation element gives an overview of transportation infrastructure and circulation in the Town of Lincoln.

II. Overview of System

Regional Access

Three limited access highways in town provide major intercity connections north and south of the Town of Lincoln. Interstate 295 and Route 146 are both limited access highways with grade separated access points. Route 99 is an extension of Route 146 that also is limited access in design. A Townwide Road Map (1) is available on the following page. The following is a brief description of each facility.

Interstate 295 provides connections to West Warwick and I-95 to the south and North Attleboro, Massachusetts to the north. The highway is limited access with three lanes in each direction. This highway bypasses the city of Providence highway network and forms a ring around the city to the west of the Providence Metropolitan Area. The highway is designated as a north south interstate, but actually travels east west from Smithfield, Rhode Island to North Attleboro, Massachusetts in the Lincoln vicinity. The highway connects to Interstate 95 in West Warwick, Rhode Island and continues north and then east to another connection to Interstate 95 in Attleboro, Massachusetts. This highway provides convenient access for residents to TF Green Airport and South County designations in Rhode Island and to the Boston metropolitan area in the north.

Route 146 is a north south highway that begins in downtown Providence and continues north passing through the Town of Lincoln and continuing northwest into Massachusetts. This freeway provides easy, convenient access for residents bound for Providence and also provides an alternative to busy Interstate 95 for many Rhode Island and Massachusetts drivers that are destined for northern sections of Rhode Island and Central and Western Massachusetts.

Route 99 is a short limited access highway that connects Route 146 to Route 120 in the northern end of town. This highway provides access for those located in the Manville section of town to Route 146, and provides traffic a more direct connection to Woonsocket through Manville.

Other arterial roads that provide full access connections for commuter and local traffic into and out of town include Route 116, Route 122, Route 123, Route 126, and Route 246.

Route 116, also known as George Washington Highway, is a four lane divided east-west arterial road providing access across town. This arterial provides access to the Lincoln Mall area and the Industrial Corridor. The road crosses the entire town and begins on the west at the Smithfield line, crosses the town, and continues eastbound into Cumberland.

Route 122, also known as Lonsdale Avenue, is a two-lane north south arterial road that begins at the Pawtucket line and travels for a short distance through Lincoln, travels eastbound, before exiting into Cumberland at the Whipple Bridge.

Route 123, also known as Jenckes Hill Road, Breakneck Hill Road, and Front Street is a two-lane arterial that travels both north south and east west. This arterial crosses the entire town and begins at Route 116 to the west, travels through a small portion of Smithfield, comes back into Lincoln and exits at the Cumberland line in the Lonsdale neighborhood.

Route 126, also known as Old River Road and Smithfield Avenue, is a two lane north south arterial road that begins at the Central Falls line and continues north through town and exits in Manville, continuing northbound into Woonsocket.

Route 246 is a north-south two-lane arterial road running parallel to Route 146, from Route 116 southbound to the Pawtucket City line. This road is adjacent to Route 146, but is not a limited access facility.

These arterial roads serve the major commercial and development centers in town. Route 116 provides access to the Lincoln Mall and the Industrial Corridor. Route 123 provides access to the Lincoln Industrial Park. Route 99 was designed as a truck bypass of Route 146 and provides efficient access and egress for major commercial vehicles destined for the Route 146 corridor. Route 246 runs parallel to Route 146 and provides north south travel for local traffic as an alternative to the limited access highway of Route 146. Route 120 in the north end of town provides east west access around the Manville neighborhood and provides direct access to Route 99 and Route 146.

Smaller collector roads provide a connection between arterials and the local road system. The major collector roads include Angell Road, Cobble Hill Road, Higginson Avenue, Martin Street, Moshassuck Valley Industrial Highway, Great Road, Wilbur Road, Whipple Road, and School Street. These collector roads also provide intercity connections to the communities surrounding Lincoln. These roads are further described below to indicate connections to the local road system.

- Angell Road connects to North Providence, south of Twin River Road.
- Cobble Hill Road connects to Pawtucket, east of Route 246.
- Higginson Avenue connects to Central Falls, east of Smithfield Avenue.
- Martin Street connects to Cumberland via Cullen Hill Road, east of Old River Road.
- Moshassuck Valley Industrial Road is located in the southeast corner of town, and connects southbound into Pawtucket.
- Wilbur Road connects to Smithfield, west of Jencks Hill Road.
- Whipple Road connects to Smithfield, west of Angell Road.
- School Street connects to Cumberland via the Albion Bridge.

Local roads connect to residential neighborhoods and provide access primarily for single and multi-family homes to connect to the collector and arterial road system. Overall, roads appear in good condition with minor maintenance and rehabilitation needed on some facilities.

Roadway Infrastructure

Several bridges provide access across the Blackstone River into the adjacent community of Cumberland. Crookfall Brook in the northwest corner of town also has several bridges. Traffic signals are located throughout the town at major intersections, along Route 116 in front of the Lincoln Mall, and at other major developments and major street intersections.

Major bridges in town include the St. John Street Bridge into Cumberland, Whipple Bridge on Route 122, Martin Street Bridge into Cumberland, George Washington Highway (Route 116) Bridge into Cumberland, I-295 Overpass Bridge at the town line to Cumberland, the Albion

Bridge on School Street, Route 120 Bridge over the Crookfall Brook, Route 146 over Crookfall Brook, and Reservoir Road over Crookfall Brook.

III. Traffic Volume and Operations

Traffic volumes were collected from the Rhode Island Department of Transportation (RIDOT) for the Town of Lincoln in April 2002. Historic data indicates that traffic is increasing on the arterial and freeway road network. Traffic volumes increase significantly during the morning and evening peak hours, when commuter traffic is at its highest level.

Table A depicts the latest traffic volume on various roads throughout town.

Table A
Average Annual Daily Traffic: Lincoln Freeways, Arterials, and Collector Roads

LOCATION	CROSS STREET	DATE	AADT
FREEWAYS			
I-295	0.5 miles north of Route 116	1997	37,800
I-295	At rest area to Route 122	2000	43,100
Route 146	Between Sayles Hill and Route 99	1993	38,400
Route 99	East of Route 146	1995	17,400
ARTERIALS			
Route 116	Between Albion and Wake Robin	2002	14500
Route 122	Between John Street and Cumberland Town Line	2000	15300
Route 123	Between Route 146 and Great Road	2000	13200
Route 126	Between Albion and Kirkbrae Drive	1999	8700
Route 246	Between N. Providence Line and Cobble Hill Road	2000	6600
COLLECTORS			
Cobble Hill Road	Route 246 to Pawtucket line	2000	6500
Higginson Avenue	Between Smithfield Avenue and Central Falls City Line	2000	5400
New River Road	Between Ledge and Kennedy Boulevard	2000	2700
Great Road	Between Sherman Avenue and Simon Sayles	2000	1900

Traffic operations in town are good overall with peak hour congestion along arterial roads including Route 116, Route 123, Route 126 and Route 122. Major development projects also generate peaks in traffic volume including the Lincoln Mall and Lincoln Park. A full determination of operating conditions has not been completed for this plan. In order to get a full sense of traffic operations, arterial and intersection capacity analysis is necessary to determine level of service.

IV. Crash Data - High Crash Locations

The Town of Lincoln has had over 400 crashes per year for the last three years. Table B lists the high crash locations throughout town for the last three available years. The locations with higher traffic volumes tend to have a higher incidence of crashes. These crashes involve other vehicles and sustained multiple injuries in some cases. Two fatalities occurred in Lincoln during this three-year period. One fatality occurred in 1997 and one in 1999.

The causes of these traffic crashes are not examined under this element. Further crash analysis and study is needed to pinpoint exact locations of the crashes and causes for these incidents. The top two crash locations are under state jurisdiction and require state action for potential improvements. These crashes are likely due to high-speed merges between I-295 and Route 146, and high turning volumes at Route 146 and Route 116. Table B lists intersections with 10 or more crashes in the last three years.

Table B
Town of Lincoln Crash Statistics
Intersection Locations with 10 or More Crashes

LOCATION	1997	1998	1999	TOTAL 1997-1999
I-295 at Route 146	23	24	28	75
Route 116 at Route 146	32	26	16	74
Route 116 at Route 126	8	11	11	30
Route 122 at John Street	10	6	11	27
Route 146 at Route 123	13	13	5	31
Route 99 at Sayles Hill Road	13	6	7	26
Route 99 at Route 146	3	7	11	21
Total Accidents	405	423	420	1248
Total Fatalities	1	0	1	2

Source: RIDOT Program Development, 1997-1999 data

Table C distinguishes the crash type that is occurring at the two highest crash locations in Lincoln. As shown, rear end collisions at 116 and 146 are the prevalent crash type whereas angle type collisions are the prevalent crash type at the I-295 and Route 146 interchange. The rear end crashes at Route 116 and Route 146 are likely due to the merging traffic onto Route 116 from the Route 146 off ramp. It is assumed some vehicles yield before entering Route 116 and others merge without yielding creating driver confusion at the off ramp and rear end collisions due to driver indecision to stop or yield. The I-295 and Route 146 interchange has a significant number of crashes that strike objects. These crashes include striking guardrail, poles, and animals. The guardrail crashes are most likely caused by excess speed on the on and

off ramps to each freeway; and it is assumed the vehicles strike the guardrail during turning maneuvers.

**Table C
Crash Type by Location**

LOCATION / YEAR	STRUCK OBJECT*	HEAD-ON	ANGLE	REAR END	SIDE SWIPE
Route 116 at Route 146					
1997	7	1	14	16	1
1998	2	0	3	20	3
1999	2	0	3	11	2
I-295 at Route 146					
1997	10	3	16	2	2
1998	10	2	16	4	2
1999	11	2	18	5	3

Source: RIDOT Traffic

*These totals are included in the crash type totals. Objects struck were poles, guardrails, or animals.

V. Public Transit Service

Transit service in town is provided via the Rhode Island Public Transit Authority (RIPTA). This service is provided via fixed route bus service and minimal demand response service. No rapid transit or commuter rail service is provided in town. RIPTA bus service includes fixed route bus service around town to major commercial and industrial centers. The bus routes are identified as Route 15, Route 53, Route 54, Route 71, and Route 75. Each route serves a distinct sector of town. All routes begin and return to Kennedy Plaza in Downtown Providence, except for Broad Street #71 and Dexter #75. These two routes begin and end in Pawtucket.

Bus Routes with Providence Terminus

Route 53 (Smithfield Avenue) travels via Canal Street to Charles Street to Silver Spring, to Smithfield Avenue. There is no Sunday service on this route. The route expands from downtown Providence to Chapel & Walker along Smithfield Avenue. The route only serves Walker Street for a short distance in the town

Route 54 (Lincoln Woonsocket) travels via Canal Street to Charles Street to Ashburton Street to Route 246 to Route 146 to Smithfield Avenue. Major stops on the route in Lincoln include the Lincoln Mall, Landmark Medical Center, CCRI Lincoln Campus, Davies Vocational Tech and Lincoln Park.

Bus Routes with Pawtucket Terminus

Route 71 (Broad Street) travels via Main Street to Broad Street to Front Street to Smithfield Avenue. This route also travels via Route 116 to Mendon Road and then to Albion Road. Major stops on this route include the Lincoln Mall and North Central Industrial Park.

Route 75 (Dexter Street) travels via Roosevelt Street to Goff Street to Dexter Street to Lonsdale Avenue to Walker Street. This route serves a small section of Lincoln with the main stop at Chapel Street and Walker Street.

Route 90/Lincoln Park - Park & Ride: Includes A.M. inbound trips to Providence and P.M. outbound trips to Lincoln only.

The fare structure for fixed route bus service is as follows:

1. Base Fare \$1.25 for Number of Zones 1- Transfer \$0.10 Short Zone \$0.50
2. Student Token \$1.06 – 10pk (\$10.60)
3. Monthly Pass \$45.00
4. RIPTIKS (10 pk) \$11.25
5. Low Income Senior/Disabled No Charge
6. Senior/Disabled (Off-Peak) \$0.60
7. Senior/Disabled Transfer \$0.05
8. Express Park N’ Ride \$1.25
9. ADA Fare \$2.50

Fixed Route Ridership

RIPTA ridership for the Town of Lincoln is included in total ridership numbers as indicated in Table D. The numbers have not been split to account for Lincoln ridership only. Route 90 provides the Park n Ride service at the Lincoln Mall. Ridership numbers are currently unavailable for this route for 2002. A comparison of ridership with the 1992 Comprehensive Plan ridership statistics is shown below. As indicated, ridership has grown significantly on all routes. The Lincoln Mall route carries the most passengers per day with 1531 trips per day.

**Table D
Total Daily Ridership by Route**

ROUTE NUMBER	TOTAL DAILY RIDERSHIP (PPD)	
	1992	2002
53 – Smithfield Avenue	100	495
54 – Woonsocket / Lincoln Mall / Lincoln Park	365	1531
71 – Broad / Prospect Hill	300	916

75 – Dexter	34	329
90 – Lincoln Park - Park and Ride	118	TBA

RIPTA also offers demand response service for the elderly and handicapped. Demand response ridership in February 2002 was 453 trips per day in Lincoln. Paratransit service (door-to-door demand-response transit service) is provided to the Town of Lincoln via the RIDE Program, Rhode Island's statewide-brokered paratransit system. The system is administered by RIPTA, but is operated by RIPTA and nine other carriers that operate throughout the state. Residents may be eligible for RIDE service under several programs administered by the state Departments of Elderly Affairs (DEA), Human Services (DHS), or Mental Health, Retardation, and Hospitals (MHRH) or under the federal Americans with Disabilities Act (ADA). Individuals qualify for service under specific programs, each of which has varying parameters in terms of allowable trip purposes, service hours, need for advanced reservation, etc. RIDE serves transportation needs associated with trips to medical appointments, adult day care sites, senior meal sites, workshops for the developmentally disabled and vocational training/rehabilitation programs. RIDE service also meets the federal requirement for RIPTA to provide paratransit service complementary to its fixed-route system for disabled individuals that qualify under the ADA program. This component of the overall RIDE program provides paratransit service to and from origins and destinations within 3/4 mile of a RIPTA bus route.

RIPTA does not provide other demand-response service (e.g. Flex Service) to the Town of Lincoln.

VI. Transportation Improvement Program (TIP) - Roadway Projects

Rhode Island transportation projects are programmed in the Transportation Improvement Program maintained by the state of Rhode Island. Projects are separated by funding category and project type. Rhode Island receives a federal funding apportionment every year to fund transportation projects. The following are projects listed for the Town of Lincoln in the 2001-2006 Transportation Improvement Program.

Route 116 / Route 146 Interchange

Upgrades on the northeast quadrant of the Interchange Bridge and ramp are programmed for 2001 and 2002. The project is federally funded under the National Highway System category. The project is in construction phase for both years.

Route 123, Breakneck Hill Road

Reconstruction of Route 123 from Route 246 to Great Road is programmed for 2001. The project is federally funded under the surface transportation program (STP). The project is in the construction phase for 2001.

Great Road Historic Project

This project involves Enhancements to the transportation infrastructure along the road. The project received an award from the RI Historic Preservation and Heritage Commission. The project was federally funded under the STP program, Enhancements element.

Berkely Bridge

This project involves the upgrade and reconstruction of the bridge. The project was first designed in 1985, but has gone through several redesigns to meet public comments in 1991, and to provide for a grade-separated bikeway crossing in 1997 for the Blackstone River Bikeway. The project was programmed for 2001 and funded under the federal bridge program. The project is in the design phase and has an estimated construction cost of \$8 million. It is anticipated that final design and permitting will be completed by the fall of 2003. It is expected that construction will begin in spring 2004, pending funding availability.

Wilbur Road

Rehabilitation and reconstruction of the bridge. The project is programmed for 2004 and funded under the federal bridge program. The project will begin construction in 2004.

Ashton Viaduct

This project is to continue the final reconstruction and rehabilitation to the bridge on the Lincoln portion of the viaduct. The project is programmed for 2002 under the Advanced Construction Projects category.

In addition to these projects, the Rhode Island Department of Transportation has a pavement management program to maintain road surfaces throughout the state in good to excellent condition. Pavement condition surveys are conducted annually to determine the road conditions throughout the state on state maintained roads. As part of this program, twenty million dollars annually is placed into this program to maintain road surfaces throughout the state. The Town of Lincoln will benefit from this program in the next few years, with several state maintained town roads scheduled for resurfacing including:

- Old Louisquissett Pike
- Albion Road, from Main Street to Route 126
- Smithfield Avenue, Higginson Avenue to Reservoir Avenue
- Great Road, Breakneck Hill Road to just south of Simon Sayles Road
- Route 116, Route 126 to Ashton Viaduct

VII. Blackstone Valley Bikeway

The Blackstone Valley Bikeway operates as a multi-use shared path that provides recreational opportunities for both bikers and walkers. Walking paths are also present in Lincoln Woods Park and many open public spaces. There are many streets with sidewalks in town, but also a significant number of streets without sidewalks. For example, Great Road does not have sidewalks because the road is historic in nature and alterations may impact the design of a historic landmark. This road would benefit from sidewalks by moving pedestrians off the main road and using the sidewalks as a traffic calming device by narrowing the right of way and designing landscape features, and curb extensions, to discourage high travel speeds.

VIII. Traffic Calming and Pedestrian Movement

Increasing traffic on neighborhood streets creates a perception of increases in traffic speed by residents. This is not always the case, but requires further study to corroborate this perception. Cut through traffic has been identified by residents as a concern to neighborhood safety due to increased volume and speeds on certain roads. The straight smooth surface of some local roads allows drivers to travel at higher speeds. The consequence of growth in intercity traffic and congestion is that more traffic attempts to find alternate routes through local streets to avoid the peak hour traffic congestion. As a result of this new traffic, neighborhood groups and pedestrians are observing speed violations and unsafe walking conditions due to the increased traffic volume. These locations are ideal for traffic calming treatments to reduce the impacts to the neighborhoods. Cut through traffic can be discouraged through use of various traffic calming techniques including speed humps, one way street systems, street narrowing, raised crosswalks or intersections, sidewalk installation, traffic circles, and /or many other road calming techniques.

IX. Summary

The Town of Lincoln has experienced significant growth in population and development since the last comprehensive plan update in 1992. From 1990 to 2000, population has increased by 15.8% in town. The surrounding communities have also seen an increase in population that is contributing to increases in cut through traffic in the town. Cumberland has grown by 9.6%, Smithfield by 7.6%, and Central Falls by 7.3%. This added growth contributes to the increase in traffic along the streets of Lincoln.

The town should address some of these concerns with the formation of a traffic calming study committee, which would include affected residents, police and fire department representatives, and local town officials. Specific locations identified as problem locations could be checked by police for speed violations, and certain measures could be developed to reduce speeds through these neighborhoods. Cut through traffic could also be identified through origin / destination

surveys in the project area. In order to reduce traffic volumes, traffic would need to be diverted to other roads, or discouraged from using the cut through roads with traffic calming treatments. The pavement conditions on Lincoln streets are good overall with some streets requiring overlays and maintenance to extend pavement life. The town should implement a system to track information on pavement installation and condition and develop a pavement management system to track the ages of paved roads. This will determine how long a road will actually be in good to excellent condition before wear begins to show and a maintenance program is necessary. New roads should be treated from inception as town infrastructure and a maintenance program established to deal with impending erosion of pavement.

A review of traffic operations was beyond the scope of this update, but would identify locations that are operating poorly and provide potential improvements to reduce congestion and peak hour delay. These locations are generally on the collector and arterial road network at traffic signals or stop signs. A townwide transportation master plan is recommended to identify problem locations and set up a capital improvement plan to address congestion and safety problem areas in town. This transportation master plan could be an addendum to a completed comprehensive plan update.

Circulation Element Strategy Summary

Status of Circulation Planning in Lincoln

Lincoln has an important network of interstate, arterial, and local roads that provide access and egress for the town and region as a whole. Interstate 295 bisects the town from east to west, while Route 146 bisects the town from north to south. Both of these roads are major high-speed limited access roads connecting states and major urban centers. The regional highway system provides excellent access for both businesses and residents. The Rhode Island Public Transit Authority (RIPTA) offers public transit service with six different bus routes to various locations throughout town. Paratransit service or demand response for the elderly and handicapped is also available from the state sponsored RIDE Program, administered by RIPTA. The town is not currently served by rail service, but would be open to discussions on future service. Park-n-Ride commuter parking facilities are available in Lincoln and will be supported in the future to help reduce demand on the regional highway network and local roads.

The Blackstone River Bikeway has been under phased implementation for the last several years and currently has been open on Segment 5 in Lincoln, from Front Street to Route 116 is open. This segment extends 3.3 miles from Route 116 to Route 123. Completion of the bikeway is a major component of the overall townwide circulation plan. Other segments of the bikeway are under various stages of design. There is demand for improved pedestrian circulation in town with safer road crossings along busy arterial roads and sidewalk installation at locations with high pedestrian activity.

Goals

To maintain and enhance the town's major and minor circulation systems providing for the efficient flow of multimodal through traffic and local traffic within the Town and to adequately serve existing and planned land uses and the regional highway system.

Policies

1. Maintain sufficient financial funds to keep Lincoln's roads well maintained.
2. Maintain road development policies that discourage regional traffic through local neighborhoods.
3. Maintain road development policies that provide for neighborhood safety while also ensuring adequate emergency access to all neighborhoods and reasonable circulation options for residents.
4. Explore the feasibility of providing increased public transit services to all of Lincoln's villages.
5. Work with the Blackstone Heritage Corridor and state agencies to improve the bicycle path system in Lincoln.
6. Monitor plans for the airport to ensure that future uses do not negatively impact Lincoln.
7. Consider the historic value of bridges and other roadway structures when designing roadway improvement plans

Policy Statement on Circulation in the Villages:

Lonsdale: The town will work with the RI Department of Transportation to develop the Blackstone bikeway and to explore options for connections between the historic mill village and the Great Road Historic District. Lincoln will work with the town of Cumberland to design a traffic and parking scheme to manage tourism traffic in the Blackstone Heritage Corridor. The town will also consider how traffic flow and roads can be improved within the Lonsdale Industrial Park. Signage will be explored to direct visitors to the various bicycle and pedestrian walks within the village of Lonsdale and to welcome those entering the village of Lonsdale. Key challenges include:

- Circulation plans should be developed in and around the Lonsdale Mill Village and Lonsdale Industrial Park to provide truck access and access for employees. This plan should assure good access for tourists who will visit this village as part of the Blackstone Heritage Corridor. Multimodal circulation strategies should include cars, trucks, bicycles, pedestrians' tour buses and RIPTA bus service. Access connections should be found between the river/canal and the open space and historic resources of West Lonsdale. Long-term strategies should be developed to manage truck traffic between Route 146 and the Lonsdale Industrial Park. This traffic is currently routed through residential and historic areas.
- Pedestrian access between the Gateway Park site and Chase Farms and Lincoln Woods State Park should also be improved.

Saylesville: The basic pattern of circulation within this village will be maintained. Road widening along any streets should be discouraged.

Fairlawn: The basic pattern of circulation within this village will be maintained. Key issues include:

- Smithfield Avenue should be carefully monitored and any effort to widen this collector should be discouraged.

Quinnville: Circulation patterns in Quinnville will be developed to protect the quality of life of residents while improving tourism access to Kelly House, the canal, and bikeway. The reconstruction of the Berkley Bridge will improve access to Quinnville from Cumberland. Key challenges include:

- The movement and impact of tourists on Quinnville should be managed carefully.
- A direct access from Route 116 to the Kelley House should be considered, however, neighborhood quality of life should not be damaged by this connection.

Limerock: Roadway improvements will seek to protect the public safety while also protecting the rural character of the roadways. It will be the policy of Lincoln to control the number of curb cuts to Great Road and other collectors including Old Louisquisset Turnpike, Jenckes Hill Road and Twin River Road in order to protect character and minimize the impact of additional

development on traffic congestion. Since these are state roads, it will be important to work with the state to implement this policy. Twin River Road is a prime example. Key issues include:

- Roadways through new developments should connect the Lindsey/Heritage/Marks Drive neighborhood with the Lincoln road system (it is currently inaccessible from Lincoln).
- The Town of Lincoln should encourage the Town of Smithfield to provide access through its town to development on the town line to avoid impacting the Lantern Road neighborhood in Lincoln.
- Curb cuts should be discouraged along collector streets.
- Future development and road connections should be carefully planned to protect the historic rural character of this area.
- Future road improvements including removal of roadside vegetation and potential widening should be designed to protect the rural character of the village.

Industrial Corridor and Parks: It is the town's primary policy to direct all commuters and shoppers directly to the corridor and industrial park areas without bringing traffic through residential neighborhoods. The town will support major circulation improvements in these planning areas, as needed. Through the use of I-295, Route 99, Route 116 and Route 146, the Industrial Corridor and Industrial Park areas should be self-contained and accessed primarily by these roadways.

The town encourages the continued operation of the North Central Airport.

Key challenges include:

- Continue to work with RIDOT regarding the design of Route 146 and Route 116 to best facilitate traffic circulation and safety and to mitigate negative impacts on residential areas.

Albion: It is the policy of the town of Lincoln to keep all through traffic on the collectors of Old River Road and School Street. In particular, increasing tourist traffic should be directed along these roadways and discouraged from traveling through adjoining residential areas.

Additionally, there is future potential for rail service along the Providence-Worcester. Space for a small station near the Albion Mill should be planned. Key challenges include:

- Through traffic should be limited in residential neighborhoods.
- Plans should be made to deal proactively with bicyclists from the DEM bike path that will pass through the village.
- On-street parking should be preserved with an intersection upgrade at School Street and Main Street.

Manville: Manville will continue to be a pedestrian-oriented village. Ongoing maintenance of Manville sidewalks is critical. Traffic speeds should be kept low within the village. The Corridor bike path will pass through Manville, and provisions should be made to handle these riders. Key challenges include:

- One of the most critical policies for the future will be to minimize the impacts of truck traffic traveling between Cumberland and Route 99.
- Improved access to the Blackstone River is needed. Recreational and tourism uses should be encouraged.

Circulation Element Actions

C1-Guidepost Actions

- a. **The town will continue to be supportive of the operation of the North Central Airport and require that any expansion of use shall come before the Town.** Maintain ongoing communications and monitor operations with the Rhode Island Airport Corporation.

- b. **Lincoln will remain open to any potential rail service along the Providence/Worcester rail line.** Although no passenger service is provided, Lincoln recognizes the potential value to Lincoln residents from future service between Worcester and Providence. Potential stops would include Manville, Albion and near Lonsdale in Cumberland. Work with regional organizations and the railroad if this type of service becomes more feasible.

- c. **Lincoln supports future discussions of increased inter-suburban transport along the I-295 and the RT 146 corridors and possible development of an intermodal transportation center.** The town's central location at the Routes 146 and 99 intersections along with its industrial, office and retail areas and the nearby airport indicate the potential for the development of an intermodal transportation center linking all modes of transportation. This center could be located in the North Central Industrial Park to facilitate the movement of commuters to separate offices in the park and surrounding area and along Route 116 to the Lincoln Mall retail area. Lincoln will remain open to these concepts. One potential area for transit switching could include the land around the Lincoln Mall. Currently, RIPTA provides fixed route bus service to the Lincoln Mall. North Central Airport provides businesses access to commercial flights. I-295 and Route 146 are limited access arterial roads that provide interstate access between Rhode Island and Massachusetts. All these transportation links may be well served by a transportation intermodal center.

Action Agent: Town Council and Town Administrator's Office

Cost: Ongoing policy decisions. Cost is low.

C1-Townwide. Road improvement standards should be developed by the town to guide future roadwork in Lincoln, especially the rural parts of town. These standards should identify approaches to road improvement that will increase safety without losing rural charm. A formal pavement management program should be implemented if not already done to track pavement condition; roadwork completed, and consolidate maintenance records.

Action Agent: Planning Department and Public Works Department
Cost: Staff time

C2-Townwide. Curb cut regulations should be adopted for the town's collector streets and where appropriate, state highways. Although many of the town's collectors are state owned, consideration should be given to how local policies set by the comprehensive plan can be brought to bear on the Department of Transportation and their physical alteration permit process.

Action Agent: Planning Board/ Planning Department
Cost: Part of zoning revision process

C3-Townwide. Public transit through the town should be increased to allow elderly and non-car owning residents to travel between villages in Lincoln and to reach the Lincoln Mall and Saylesville for out of town connections. Demand response service is available in town via the RIdE Program, the state sponsored paratransit service. This service provides rides for the elderly, handicapped, mentally retarded, and other groups covered under the Americans with Disabilities Act. Certain criteria must be met to be eligible for the service.

Action Agent: Senior Center, Town Administrator's Office, RIDOT
Cost: None for increased communications. Increased RIPTA service would be state funded. Increased Senior Center service would be funded by the town.

C4- Lonsdale. Convene a meeting of the owners of the Lonsdale Industrial Park, the National Park Service, the town of Lincoln and other relevant groups to discuss plans for building improvements, reuse strategies, parking and roadway improvements within and near the Lonsdale Industrial Park. Determine if federal funds could be made available to improve the roadways within the industrial park if those roadways were donated to and then maintained by the town of Lincoln. Explore the feasibility of including the site in a Blackstone Valley Enterprise Zone to encourage use of older buildings. Explore alternative zoning strategies that would create appropriate flexibility for owners to use their properties to the maximum while also enhancing the health of the heritage corridor. Examine the costs for improving sidewalks from Lonsdale Avenue to Cook Street to Carrington to Front Street. Consider how to improve traffic patterns in and around Cook Street.

Action Agent: Town Administrators Office
Cost: Meeting: Staff and volunteer time, Roadway improvement costs: Unknown

C5- Lonsdale. A detailed traffic/pedestrian/bicycle strategy should be considered for the Lower Road/Carrington/Front Street intersection. The confluence of the bike path,

commercial traffic and industrial traffic makes this intersection dangerous. A pedestrian crossing should be developed or the pedestrian traffic signal timing should be reviewed to determine that adequate crossing time is available to pedestrians and bikers, without causing undue delay to commuting traffic.

Action Agent: State Department of Transportation, Department of Public Works
Cost: Staff Time.

C6-Saylesville. The width of Smithfield Avenue should be maintained at its current size. Increased width would reduce buffer space between the roadway and the abutting houses and encourage a faster deterioration of the residential quality of Smithfield Avenue.

Action Agent: State DOT, Town Administrator's Office and Public Works Department.
Cost: No up front costs to establish the local policy. Engineering or legal costs might be involved if the state insists on widening the highway.

C7-Saylesville. Maintain the natural alignment of Smithfield Avenue from Walker Street north to Grandview Avenue. This area is a natural buffer and gateway along Barney Pond and Saylesville Pond and should be maintained in its current alignment.

Action Agent: Department of Public Works and Planning Department.
Cost: Staff Time.

C8-Fairlawn. Higginson Avenue should be considered for roadway and roadside improvements in order to increase the likelihood of reinvestment in this area.

Action Agent: Town Council, Department of Public Works
Cost: Unknown.

C9-Limerock. The Lindsey/Heritage/Marks Drive neighborhood must be connected with the Lincoln road system when future development proposals come before the Planning Board.

Action Agent: Planning Board/ Planning Department
Cost: No cost to town

C10-Limerock. The rural character of roads such as Angell Road should be protected; however, road improvements will be needed in this area. Rural road improvement standards and model layouts should be considered by the Town.

Action Agent: Department of Public Works and Planning Board/ Planning Department
Cost: Staff time.

C11-Industrial Corridor. Monitor all state DOT plans for road improvements in Lincoln. Encourage speedy completion of all planned projects.

Action Agent: Department of Public Works

Cost: Staff time.

C12-Albion. Examine the impacts of the state’s proposed intersection improvement at Main and School streets. Of particular importance is ensuring that any improvements do not result in a loss of on street parking for local businesses.

Action Agent: Planning Board/Planning Department and Public Works Department

Cost: Part of zoning revision process

C13-Manville. Work with the Town of Cumberland to encourage operations in the Forte Brothers Quarry to use few trucks as these trucks will pass directly through Manville.

Action Agent: Department of Public Works and Planning Board/ Planning Department

Cost: Staff time.

C14-Industrial Corridor/Townwide. Develop a Transit Needs Assessment to serve two purposes: to increase town residents’ ability to access employment in the industrial corridor and to reduce dependency on single-occupancy vehicles. An Assessment would identify commuter nodes that would be best served by transportation solutions such as ridesharing, transit stops and HOV (high occupancy vehicle) ridership. The formation of a TMA (Transportation Management Association) would encourage cooperation of industrial corridor businesses to join together in providing transit opportunities for area residents. These methods would reduce traffic problems and environmental pollution while improving Lincoln’s quality of life.

Action Agent: Planning Board/Planning Department

Cost: Hire a transportation consultant. \$50,000-\$100,000.

C15-Townwide. Implement pavement management system.

Action Agent: Department of Public Works

Cost: Staff time, consultant

C-16. Townwide. Develop traffic calming study committee to address cut through traffic.

Action Agent: Planning Department/Department of Public Works

Cost: Staff time

C-17. Townwide. Prepare transportation master plan.

Action Agent: Planning Department/Department of Public Works

Cost: Staff time, consultant