

CIRCULATION PLAN ELEMENT

INTRODUCTION

The Circulation Plan Element provides an inventory of existing circulation and transportation elements, areas of critical concern and recommendations to improve circulation patterns within the Borough. It is the purpose of this Plan to document existing conditions and to provide recommendations to foster their improvement.

One objective of the Circulation Element is to identify key transportation linkages within the Borough. This element is also designed in accordance with the objectives of the Municipal Land Use Law (MLUL), which are to “encourage the location and design of transportation routes that promote the free flow of traffic”. In addition, the Borough developed its own goals and objectives, which can be implemented through the recommendations within this element.

INVENTORY OF CIRCULATION AND TRANSPORTATION ELEMENTS

Highlands' circulation pattern primarily consists of a periphery of local roads, one collector road and one urban principal arterial roadway – Route 36. Figure CP-1 graphically depicts the road inventory of Highlands.

Streets, Roads, and Highways

State Highways

Route 36 is an urban principal arterial roadway which runs in the east-west direction from exit 117 off of the Garden State Parkway and continues through the NJ Highlands area adjacent to the southern Sandy Hook Bay until reaching the Atlantic Ocean. After reaching the Atlantic Ocean, Route 36 turns to the southerly direction bordering the Atlantic Ocean until reaching Long Branch, New Jersey. In Long Branch, Route 36 bends to the southwest, where it terminates in Eatontown near Exit 105 off of the Garden State Parkway. Approximately 2.3 miles of the 39 mile roadway traverses Highlands. The speed limit varies from 30 to 55 miles per hour. In Highlands, the observed speed limit is 40 to 45 miles per hour. Route 36 is locally referred to as Navesink Avenue.

Monmouth County Routes

Smaller collector roads provide a connection between arterial roadways and the local road system. County Route 8 is the only collector (urban) roadway in the Borough. Table CP-2 details the local road names, their approximate lengths, existing and proposed rights-of-ways and roadway classifications.

FIGURE CP-1
ROADWAY INVENTORY MAP

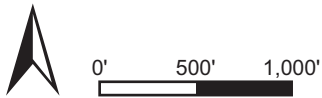
Atlantic
Highlands

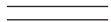


Gateway National
Recreation Area




Middletown

Sea Bright



KEY	
	Local Road
	County Road
	State Road

ROADWAY INVENTORY MAP	
Highlands Borough, Monmouth County, New Jersey	
Figure CP-1	
	
1"=1000'	October 2004

**TABLE CP-2
 COUNTY ROAD INVENTORY
 HIGHLANDS BOROUGH, NEW JERSEY**

Route #	Common Name(s)	Length	Proposed R.O.W.	Speed Limit	Road Classification
8	Linden/Water Witch/Bay Avenues	1.32 miles	60 ft.	25 to 35 m.p.h.	Urban Collector

Source: Monmouth County - County Roads Straight Line Diagrams, February 3, 2003
 Compiled By: T&M Associates, November 2003

Local Roads

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. The Borough's road network consists primarily of either residential access streets or residential neighborhood street classifications. According to the Residential Site Improvement Standards (RSIS) they are defined as follows:

Residential Access:

Lowest order, other than rural street type, of residential streets. Provides frontage for access to lots and carries traffic with destination or origin on the street itself. Designed to carry the least amount of traffic at the lowest speed. All, or the maximum number of housing units, shall front on this class of street.

Residential Neighborhood:

A type of residential access street conforming to traditional subdivision street design, and providing access to building lots fronting on a street, with parking on both sides of street.

With the exception of State Route 36 and County Route 8, all roads within the Borough are classified as local roads. Local roads or residential access streets are designed to carry the least amount of traffic at the lowest speed. Overall roads appear in fair condition with minor maintenance and rehabilitation needed on some facilities.

Passenger and Cargo Rail

1. Passenger Service – The Borough does not have a passenger rail service.
2. Cargo Rail Service - The Borough does not have a cargo rail service.

Air Transportation

There are no air transportation services within the Borough.

New Jersey Transit Bus Service

New Jersey Transit provides passenger bus service to and from Highlands Borough via route 834. Also, there are a number of connecting buses along each route. Schedules are available from New Jersey Transit by calling 1-800-582-5946 or on their web site at www.njtransit.state.nj.us.

The following bus route is currently available:

Route 834

Route 834 provides service between Red Bank and Highlands year round. The bus stops in Highlands at Bay and Water Witch Avenues, Route 36 and Navesink Avenue in Middletown, Center Ave and 1st Avenues in Atlantic Highlands, Route 36 and Leonard Avenue in Leonardo, Campbell's Junction in Middletown, Route 35 and New Monmouth Road in Middletown, Route 35 and Chapel Hill Road in Middletown, Broad and Front Streets in Red Bank and Red Bank Rail Station in Red Bank.

There is connecting bus service from Routes 831, 832, 833 and 835.

Monmouth County is currently investigating extending this route to serve the Sea Streak ferry service location. However, at this time, there are insufficient turning radii for buses to maneuver the ferry parking lot located adjacent to Marie Street and Shore Drive.

Ferry Service

Seastreak America, Inc., provides ferry service from Highlands Borough to Manhattan seven days a week. Schedules are available from Seastreak by calling 1-800-BOATRIDE or on their website at www.seastreak.com.

Currently no local ferry service exists within the Borough. Opportunities exist to provide ferry service on boats carrying a maximum of twenty to thirty passengers to Sandy Hook and to points along the Sandy Hook Bay. The Monmouth County Planning Board has worked with municipalities to establish ferry programs in other Monmouth County communities. The Borough should investigate this as a viable economic development initiative.

Pedestrian and Bicycle Access

During public visioning sessions and municipal stakeholder meetings, a desire was expressed for Highlands to be pedestrian friendly. Fortunately, the Borough has a strong foundation of interconnecting streets with sidewalks to build upon. However, opportunities exist to improve existing conditions and connections with community facilities.

Considerations to Highlands' pedestrian and bicycle circulation system directly relate to anticipated development improvements in the future. For example, this Plan specifically recommends the investigation of redevelopment within the Borough's downtown area. The size, scale, location, type of uses, etc. will greatly affect parking demand as well as vehicular and pedestrian trips within the downtown. Accordingly, plans for pedestrian improvements along Bay Avenue should be tied into any potential redevelopment efforts.

To achieve a pedestrian friendly design in Highlands, the widening of sidewalks along Bay Avenue should be investigated. One constraint to widening sidewalks is the existing narrow cartway width along Bay Avenue. Solutions to this issue require a more thorough analysis of the Bay Avenue/Shore Drive road network. Particular emphasis should be placed upon the concept of a one way circulation loop along Bay and Shore Avenues. Under this scenario, opportunities may exist to widen sidewalks and incorporate angled parking (increase number of on-street parking spaces), providing a more efficient circulation system. Other considerations include an updated streetscape design with attractive pedestrian-scaled lighting, and landscape improvements. Widening of sidewalks along Bay Avenue would build off of the existing residential grid sidewalk network providing convenient and safe pedestrian access between important destinations.

In the short term, an analysis of the current inventory of sidewalks should be conducted to determine where sidewalk connections to community facilities are needed. In the long run, pedestrian friendly design should be considered with any redevelopment efforts. Any plans should improve connections between the downtown and the waterfront. Additionally, the Borough should consider creating a thorough sidewalk/ pedestrian/bicycling circulation plan as a cooperative effort with Atlantic Highlands, Sea Bright and Monmouth County.

Other considerations for pedestrian friendly areas include incorporating:

Comfort

The design of roadway improvements in Highlands should consider the creation of a comfortable environment. Comfort relates to an individual's perceptions and feelings when utilizing the pedestrian network. The following questions illustrate this point. Were you relaxed when you walked to the downtown or the waterfront? Did you feel you might be blown over by the wind of passing cars? Can you find a parking space within walking distance to your destination? Are there places to eat and people watch? All of these questions are factors that relate to a good downtown and pedestrian design.

Textured Crosswalk and Pavement

To make pedestrian crossing movements more predictable for motorists, marked crosswalks with textured pavement of a different color than the street indicate the proper locations to cross. Crosswalk markings should be supplemented with pedestrian warning signs.

Traffic Calming

Traffic calming devices are treatments designed to reduce speed and heighten motorists' awareness of pedestrians and cyclists in the roadway. One example to investigate in Highlands is the creation of bumpouts at Bay Avenue intersections in the downtown. Bumpouts or neckdowns are curb extensions at intersections that reduce the roadway width from curb to curb. They create more pedestrian friendly intersections by shortening the crossing distances for pedestrians. The following graphic illustrates this point. Bumpouts also provide opportunities for outdoor dining and people watching.

A critical issue to achieving a pedestrian friendly design includes pedestrian and bicycle access across the proposed Highlands Bridge. This should be explored through NJ DOT's Context Sensitive Design program. Context Sensitive Design is a new program offered by NJ DOT to work with communities to create transportation improvements that are sensitive to a community's needs. Other pedestrian/bicycle issues that should be evaluated/monitored by the Borough include:

- The nodal point where the Henry Hudson trail and the multi-use trail converge in Highlands near the Route 36 Bridge.
- The Borough of Sea Bright's plans to create a bicycle trail.

Gateways

Gateways can be defined as entrances that define the Borough's boundaries. Just as your home or business should have an identifiable entrance, so should a community. Communities should not ignore the impact that a first impression has on visitors and customers. Through proper design, gateways can be improved to provide a strong sense of identity and arrival to Highlands. Gateway treatments at the locations identified in Table CP-3 can convey the Borough's identity by utilizing characteristic design elements that reflect Highlands' character and vision.

Table CP-3 GATEWAY LOCATIONS, 2003 Borough of Highlands	
<i>Gateway</i>	<i>Location</i>
<i>Primary</i>	
Northwest	Route 36 and Linden Avenue
Central	Water Witch and Bay Avenues
South-central	Route 36 and Valley Avenue
Southeast	Shore Drive and Shrewsbury Avenue

There are numerous methods to enhance gateway locations. These include upgrading informative way-finding signage, landscaping and streetscape improvements and the promotion of desirable land uses. A combination of these methods is recommended for all gateway locations.

Route 36 Bridge

The Highlands Bridge (Route 36 - connects Highlands to Sea Bright to Sandy Hook) is in the final stages of preliminary design. Construction is anticipated in the year 2007 to replace the existing movable bridge with a fixed-span bridge. The replacement bridge will take the place of a designated historic site within the Borough. It is recommended that the final bridge designers place a strong emphasis on designing a bridge that "fits well" within this unique picturesque area.

Furthermore, as mentioned in the Pedestrian and Bicycle Access section within this Circulation Element, there is a need to work with NJ DOT to ensure that pedestrian and bicycle access is incorporated into the final bridge design.

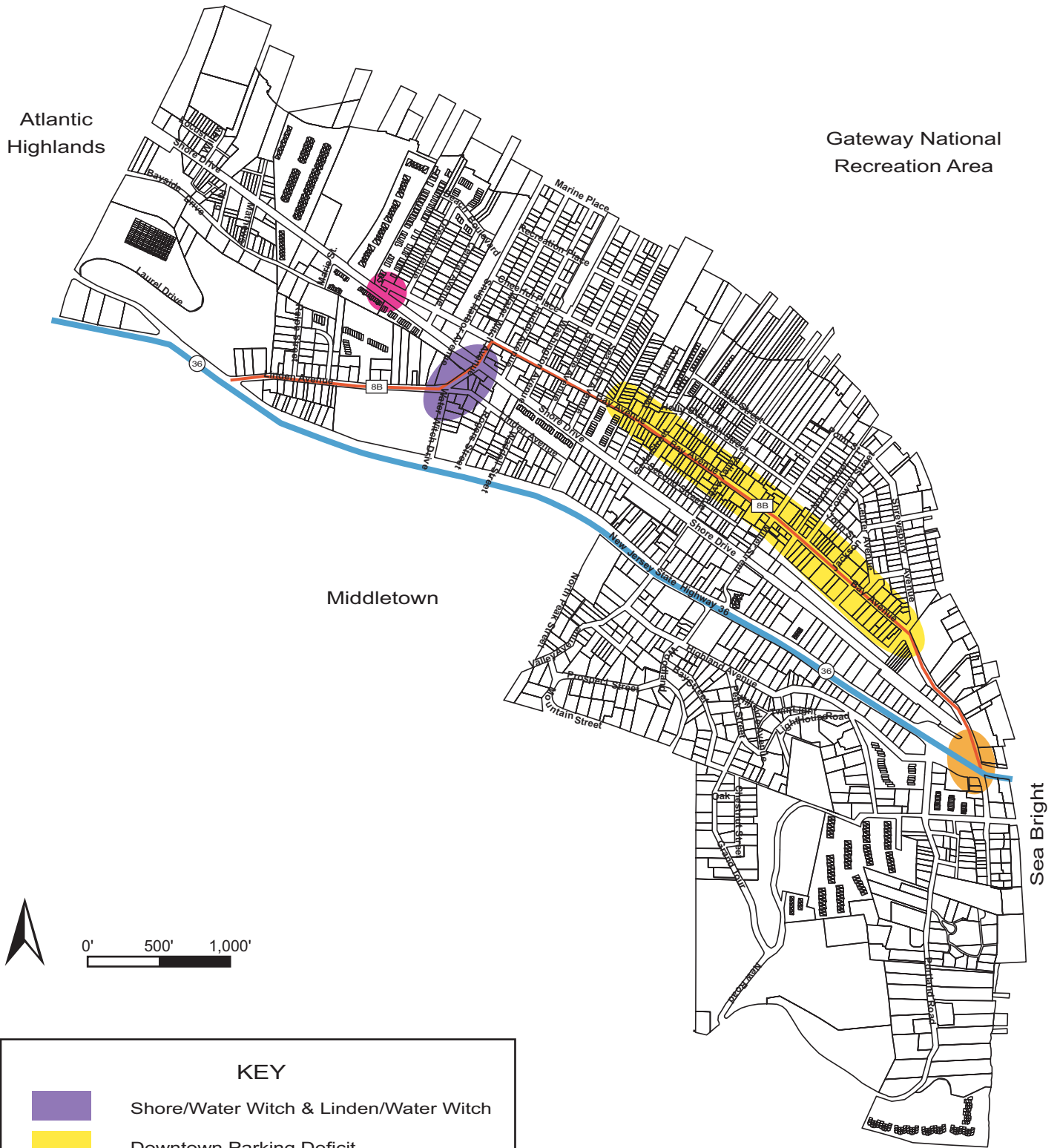
CIRCULATION CONCERNS

The Master Plan identifies critical circulation areas as ways of identifying potential future projects for the Borough to undertake. Realizing that many of these projects may not only be under local jurisdiction, the Borough will need to identify the county and state stakeholders and work with them to solve the particular problems. Figure CP-4, Circulation Concerns, is a map that identifies the locations of circulation concern areas.

Circulation concerns are areas having a high rate of accidents, poor roadway configuration, or general circulation concerns. The following is a listing of circulation problem areas in the Borough identified by Borough stakeholders, questionnaire responses and municipal visioning sessions.

1. Intersection of Shore/Water Witch Avenues
2. Intersection of Linden/Water Witch Avenues
3. Parking deficit in the downtown
4. Improvements at the Route 36 ramps at the south-east access into the Borough
5. The connection from Bay Avenue to Shore Drive in the northern portion of the Borough.
6. The inability for buses to turn around near the ferry terminal adjacent to Marie Street.

FIGURE CP-4
CIRCULATION PROBLEM AREAS MAP



KEY

- Shore/Water Witch & Linden/Water Witch
- Downtown Parking Deficit
- Route 36 Ramps
- Bay Avenue/Shore Drive Connection
- County Road
- State Road

CIRCULATION PROBLEM AREAS MAP
Highlands Borough, Monmouth County, New Jersey
Figure CP-4

T&M
ASSOCIATES

1"=1000'
October 2004

CIRCULATION IMPROVEMENTS

Assistance Available

Due to the varied and expansive transportation needs of the State and region, organizations have been formed which aid local municipalities with data collection, research, carpool and vanpool services, transit information, funding, etc. While this is only a limited list, the organizations listed here can provide additional information to member municipalities, should a specific need arise.

Transportation funding is available at the Federal, Regional, and County divisions of government. However, the major sources of funding come from the Federal government's Transportation Equity Act for the 21st Century (TEA-21) programs. The New Jersey Transportation Authority (NJTPA) is the federally sanctioned Metropolitan Planning Organization (MPO) for the six million people in the thirteen county Northern New Jersey Region. The NJTPA oversees over one (1) billion dollars in transportation investments each year.

The Transportation Improvement Program (TIP) is the program coordinated by the NJTPA that lists the projects in each of the Counties in the planning area that are to receive federal funding. The TIP process gains consensus between state and local officials as to the regional transportation improvements that are to be made.

RECOMMENDATIONS

The following listed items are recommendations (not in any specific order) intended to improve circulation throughout the Borough.

1. Specific traffic improvements recommended by the Borough Police should be coordinated with the County and State for funding and implementation.
2. Conduct a parking study to assess the downtown parking problem.
3. Research alternative funding sources to undertake a sidewalk inventory in the Borough. The inventory should include the location, width, handicap accessibility, and condition of all sidewalks. Recommendations should include areas where sidewalk should be reconstructed, installed for the first time or built to serve as a connection between existing sidewalks.
4. Investigate the feasibility of transforming Bay Avenue and Shore Drive into a one-way direction loop. This investigation and analysis should consider potential impacts to existing and commercial uses in the area.

5. The Borough should work with the County to determine designated bike routes within Highlands. The route should connect many of the public areas, such as parks and schools, which already provide bicycle racks, benches, and other amenities for cyclists. Roadway designations should be based on shoulder width (both existing and proposed), speed limits for motorists, and level of traffic.
6. The Borough should consider implementing traffic calming techniques in areas that have a large number of pedestrian crossings. Rumble strips, different pavement colors and textures and pedestrian crossing signs are types of traffic calming which can be easily implemented in these areas.
7. The Borough should consider joining/working with the Monmouth County Summer Traffic Management Collaborative Group to work on a regional basis to address seasonal transportation issues.
8. Utilize the NJ DOT Context Sensitive Design program to ensure bicycle and pedestrian transportation issues are addressed within the new Route 36 bridge proposal.
9. Partner with the Monmouth County Planning Board to investigate the creation of local ferry service to points on the Sandy Hook Bay and to the Gateway National Recreation Area.
10. Adopt an official local roadway inventory.