

8. Circulation and Transportation

Introduction

Bristol's location on a peninsula strongly defines the Town's circulation pattern. The only routes into Bristol from the north are Routes 136 and 114. From the south, only Route 136/114 via the Mount Hope Bridge serves the Town. There are no east–west transportation routes with the exception of the Prudence Island Ferry that docks at Bristol Harbor.

The Town has a strongly defined street configuration due to the historic pattern of settlement established during colonization and the degree of development that has already occurred.

There are approximately 120 miles of Town-maintained streets in Bristol. The state is responsible for maintenance of Metacom Avenue, Hope Street, Gooding Avenue, Franklin Street and Griswold Street.

The major opportunities for redefining the circulation pattern, as articulated in the 2008 Comprehensive Plan, are still relevant. They include connecting street networks allowing north-south movement that avoids constant entering and exiting Metacom Avenue and Hope Street; a service road along the west side of Metacom Avenue to connect the commercial areas; and a new street following the National Grid line easement to the north through Warren.

The State has designated Route 114 (Hope Street and Ferry Road) and High Street as Scenic Roadways under the State's Scenic Roadway Program. As a Scenic Roadway, the Scenic Roadways Board reviews all changes to the roads and controls tree trimming and other work. The Scenic Roadways Board completed a Scenic Highway Corridor Management Plan. This Plan recommends strategies for the preservation and enhancement of the roadways. In addition the town should look to extend the state scenic roadway north of Mount Hope Bridge along Route 136 to Mount Hope Avenue to help preserve the character of this area.

Although the widening of Metacom Avenue is not presently feasible it is imperative that Metacom Avenue be evaluated as to restructuring to accommodate north-south traveling lanes, turning lanes and pedestrian path. In 2007 at a joint Town Council and Planning Board meeting, the Metacom Corridor Management plan was presented. This Plan put forth recommendations for improvements that need to be explored and implemented.



They include, but not limited to the following short-term recommendations:

- Left turn lanes at high hazard intersections
- Speed limit reduction
- Signal timing
- Sidewalks
- Crosswalks and pedestrian signals
- Bus stops
- Neighborhood interconnections

Longer term recommendations include the use of roundabouts and improvements to certain intersections.

The Plan addresses aesthetics issues, landscaping guidelines, scale, architecture, site design and layout, sustainability, and lighting and signage.

The Metacom Corridor Management Plan needs to be used as a guideline by the Planning Board in addressing future Metacom Avenue development.

A long term goal of the Town, as articulated in the Comprehensive Plan, has been the construction of a service road from Gooding Avenue to Tupelo Street. This road would allow drivers to move from place to place along the west side of Metacom Avenue without the need to keep going back onto Metacom. Town Council approval of a zone change for the property at the northwest corner of Gooding and Metacom Avenue for the Walgreens Pharmacy required a key link in this service road. This link connected Gooding



Avenue to the Stop and Shop Plaza which had been built with a stub road connection. The result of this was very positive to traffic flow in that area. The duplication of this is strongly urged in other areas where it makes sense.

Projects that are currently in the Rhode Island Transportation Improvement Program for Bristol include:

- Poppasquash Road Bike and Pedestrian Path (preliminary evaluation – no commitment to funding);
- Colt State Park Street lighting restoration (2015 anticipated year of implementation)
- Hope Street sidewalks (partially completed; on-going)
- Stormwater enhancements (Bristol/Warren –Pending state funding)
- Route 114 pavement (Downtown Bristol completed)



The Town should work directly with the Rhode Island Public Transit Authority (RIPTA) in the promotion of public transportation through the improvement of the commuter experience in Bristol. Suggested improvements include a designated Park and Ride facilities at the corner of Gooding Avenue and Hope Street and at Metacom Avenue, and protected bus stops that match the surrounding environment and provide safe access for boarding at bus stops. The ability for a bus to pull closer to the curb allows better access to the bus and does not impede the flow of traffic especially in downtown. The Town needs to take advantage of financial incentives promoted by RIPTA to achieve the above.



The 2004 and 2006 voter approved bond referendums included improvements to sidewalks and streets. The Town has recently completed the sidewalk program throughout Town with a focus on the downtown area and neighborhoods to improve existing sidewalks. The sidewalks along Thames Street were installed with the street, which will further enhance the walkability of the downtown area.

RIDOT completed upgrades to high hazard intersections along Metacom Avenue which included installation of a left turn lane and pedestrian crossing signal and crosswalk at Fatima and installation of a pedestrian crosswalk and pedestrian crossing signal at Tupelo and Bayview. Safety improvement work is planned to continue on the intersections at Chestnut/Annawamscutt and Bayview.

The Town worked closely with RIPTA on improvements to the bus service through Town. With the coordinated effort, the Town was able to assure that bus service continued on Metacom Avenue with an added route.

Bristol and the Town of Warren partnered on the submission of a RI Statewide Planning Challenge Grant for exploring the feasibility of creating a pedestrian path along the National Grid Easement from Tupelo Street in Bristol to Child Street in Warren. This study is currently underway.

Accomplishments

As a result of damage suffered to the wall along Poppasquash Road from Superstorm Sandy, RIDOT was able to repair the walls along a portion of the road, repair the culverts, and resurface the roadway. More work is needed, however, as these repairs did not take into consideration the effects of sea level rise which will impact this causeway.

The Town has been recognized nationally for its planning efforts and in 2009 it received the Distinctive Destination award from the National Register of Historic Places as one of 12 distinctive destinations in the country. Family Circle magazine also recognized the Town as one of the 10 best places to raise a family.

Statement of Goals and Policies

Increase the ability to travel about town with ease, alleviate congestion and air pollution caused by local and regional traffic patterns, adopt a “Complete Streets” policy, and take into consideration the effects arising from natural hazards, climate change, and sea level rise in the transportation decision-making process. Support economic development through a well-planned and high quality transportation system, provide adequate parking facilities, and provide an effective wayfinding system while maintaining key elements of the Town’s character.

Based on the critical issues described in the Introduction to the Circulation Element and the overarching goal stated above, this section presents the goals and policies developed by the Town of Bristol to guide its circulation planning. These broad goals encompass goals expressed in the other elements of this plan.

Goal 1. Increase the ability to travel about town with ease.

Policies to achieve Goal 1

- A. Provide more alternatives for residents to move about within Bristol without using Metacom Avenue or Hope Street.
- Improve links between neighborhood streets so that short cut use by regional traffic is discouraged.

- Integrate neighborhoods, services, and recreation areas with bikeways and walkways. (See the Path System described in the Open Space, Conservation and Recreation Element)
 - Continue linkage of Town’s nature trails.
 - Reference the Poppasquash Road Pedestrian and Bicycle Facility report for guidance on connecting Hope Street to the East Bay Bike Path and the Colt State Park Bike Path.
- B.** Provide sidewalks or paths in areas where none exist. Encourage sidewalks in new developments that will connect with other sidewalks and trails. Greater focus on sidewalks should be directed to Hope Street, Ferry Road, and Metacom Avenue.
- C.** Manage parking, permitted land uses, signs, and traffic speed so as to protect the rights and safety of pedestrians and to encourage more walking.

Require future subdivision roads to link with the overall street system and provide interconnecting links to avoid cul-de-sacs.

Goal 2. Alleviate congestion caused by regional traffic patterns.

Policies to achieve Goal 2

- A.** Encourage modes of transportation that are alternatives to the automobile.
- Keep options open for rapid and water transit from Bristol to Providence to Newport and light rail from Bristol to Providence to Newport.
 - Consider how commuter bus service or van pools might serve Bristol residents.
 - Work with RIPTA in identifying, establishing and promoting a designated park and ride lot on both Hope St (Route 114) and Metacom (Route 136)
 - Provide safer access to boarding buses at bus stops.
- B.** The recommendations from the Metacom Avenue Corridor Management Plan should be required by the Planning Board in addressing development on or near Metacom Avenue.
- C.** Reduce and/or eliminate the curb cuts along regional street systems. Only consider new curb cuts if there is no other way to access a property.
- D.** Examine the feasibility of providing for most neighborhoods the option of accessing Route 114 or Route 136 via an existing signalized intersection.
- E.** Avoid regional traffic solutions, such as a bypass, that would benefit only regional travelers while hurting impacted neighborhoods and local businesses.
- F.** Minimize air pollution and surface water runoff pollution by encouraging alternative forms of transit to the gas powered automobile.

- G. Collaborate with other towns (Warren and Barrington) to examine more efficient alternatives for transportation between the towns.

Goal 3. Support economic development through a well-planned transportation system.

Policies to achieve Goal 3

- A. Maintain adequate traffic flows through commercial areas so as to support the local economic base. Include wayfinding to encourage people to park their vehicles and walk to destinations.
- B. Improve the quality of roads and/or transit systems to commercial and industrial areas.
- C. The installation of bicycle racks strategically placed throughout the Town will promote alternative transportation and create an invitation for visitors from the bike path to stay longer in town, therefore promoting area businesses.
- D. Explore means to provide additional parking in the downtown to support economic development while protecting the areas character.
- E. Study the possibility to expand alternate trolley service that could include an agreement with Roger Williams University to utilize their shuttle service.

Goal 4. Maintain a high quality transportation system.

Policies to achieve Goal 4

- A. Continue with an annual pavement management program as recently adopted.
- B. All roads should be built only in accordance with the standards of a public road.
- C. Maintain and improve the Town's roadways and drainage.
- D. Work with RIPTA in identifying placement of bus shelters along the RIPTA bus route. Utilize to the fullest the financial incentives provided by RIPTA to construct shelters, as needed.

Goal 5. Provide adequate parking facilities for auto users without losing key elements of the town's character

Policies to achieve Goal 5

- A. Discourage demolition of historic and other buildings important to Town's character for the purposes of providing parking lots.
- B. Work with the private sector to provide parking facilities.
- C. Explore the creation of parking areas for regional transit facilities.

- D. Continue to set high standards for design of parking facilities including landscaping, buffering, handicapped accessibility, pedestrian walkways, and lighting.
- E. Protect the environment from parking area stormwater runoff.
- F. Improve signage to direct the public to designated public parking areas, in addition to providing clear and concise signage as to rules governing regulations related to a given parking area.

Implementation Actions

The following circulation implementation strategy is organized by four areas of action: regulatory, service improvements, capital improvements, and areas requiring future study. **Figure Q presents the Circulation Concepts.** (See end of document)

#	ACTION	TIME FRAME ¹				RESPONSIBLE AGENT
		S	M	L	O	
C-1	Because of the forecasted impacts to certain areas in Bristol due to climate change resulting in projected sea level rise and greater rainfall amounts, alternate roads including causeways need to be planned. Areas affected include low lying areas in the Silver Creek watershed, Poppasquash Road to Coggeshall Farm Road, Poppasquash Road at Hope Street to Oliver Street, and low lying points on Chestnut Street and Gooding Avenue.	√	√			RIDOT, Department of Public Works, Community Development Department, Planning Board, Town Administrator, and Town Council.
C-2	Implement the Metacom Corridor Management Plan: <ul style="list-style-type: none"> a) Short- and long-term traffic recommendations are proposed to improve traffic safety and capacity on Metacom Avenue while retaining the two-lane roadway. As Metacom Avenue (Route 136) is a state road, recommendations are presented to the Town of Bristol for proposed traffic improvements by the Rhode Island Department of Transportation (RIDOT). Emphasis is on providing residents with an opportunity to walk or bicycle to local destinations as options to the use of private vehicles for local trips. b) Short-term recommendations include left turn lanes, , a speed study to reduce speed limits to reflect adjacent land use and actual travel speeds, institute coordinated traffic signals to enhance traffic flow, sidewalk and crosswalk installation between Tupelo Street 	√	√	√	√	Planning Board and Town Council.

¹ S: short-term; M: medium-term; L: long-term; O: ongoing

#	ACTION	TIME FRAME ¹				RESPONSIBLE AGENT
		S	M	L	O	
	<p>and Bay View Avenue, an additional RIPTA bus stop at the Veterans Home, and designation of a “share the road” bicycle facility. These improvements may generally be conducted within the existing (approximate) 60-foot right of way.</p> <p>c) Neighborhood interconnections are strongly recommended between plats east of Metacom Avenue to reduce traffic volumes on Metacom Avenue and to facilitate access to signalized intersections. Longer term improvements, including those which require right-of-way acquisition, include construction of roundabouts at Tupelo Street, Gooding Avenue, Chestnut Street and on Bristol Ferry Road in lieu of the current east-bound left turn signal, and at the intersection of Bristol Ferry Road and Metacom Avenue to improve traffic flow and to provide a gateway to Bristol). Other improved intersections are proposed at Franklin Street and Minturn Farm Road.</p> <p>d) A center turn lane the entire length between the Bristol/Warren town line to the north and Woodlawn Avenue to the south, as well as coordinated traffic signals with longer times for green lights for north and south bound traffic during peak times.</p>					
C-3	Explore the feasibility of a regional parking facility to serve as parking for a regional rapid transit van or bus line system that would run along the power line easement.			√		Planning Board and Community Development Department.
C-4	Continue the town policy prohibiting new private roads.	√			√	Planning Board
C-5	Continue to allow on-street parking on all non-arterial roadways.	√			√	Town Administrator, Police Department,

#	ACTION	TIME FRAME ¹				RESPONSIBLE AGENT
		S	M	L	O	
						and Town Council.
C-6	<p>As noted on the Bristol Comprehensive Plan 2009 Circulation Map #9, in an effort to have sustainable development that is less reliant on the automobile, encourage a land development pattern that supports the use of alternative modes of transportation. Provide linkage between neighborhoods and to other land uses (schools, commercial areas, recreation areas) through roadway connections, pedestrian walkways (can be via off-street trails) and bicycle paths.</p> <p>Enable easy access from residential areas to commercial and employment area through the use of alternate modes of transportation (i.e. shuttle bus, pedestrian walkways and bicycle paths. For example, create a pedestrian walkway from the east side of the Robin Rug parking lot to Hope Street between Church and Constitution.</p> <p>Where any access would utilize power line easements, investigate all health, safety, and security issues and mitigate all such issues before implementation.</p>	√	√			, Planning Board, Town Council, and Community Development Department.
C-7	<p>Consider, and require when appropriate, alternative modes of transportation (i.e. bus stops, parking for car pools, electric recharge stations, and appropriate shelters) as part of new and revitalized developments. See also Metacom Avenue Corridor Management Plan for reduction in parking and alternative transportation credits.</p>	√	√		√	Planning Board and Community Development Department.
C-8	<p>Adopt and implement recommendations from the Scenic Roadway Corridor Management Study with RIDOT for Hope Street, Ferry Road and High Street.</p>	√	√			RIDOT, Planning Board, Town Council and Community Development Department.
C-9	<p>Continue to review traffic control device (e.g. stop signs, traffic calming devices, and pavement</p>	√				Department of Public Works

#	ACTION	TIME FRAME ¹				RESPONSIBLE AGENT
		S	M	L	O	
	markings) placement and design policies to determine whether the Town is in compliance with state and federal standards.					and Police Department.
C-10	Examine the feasibility of using a trolley system, or shuttle buses, as a local transit system and to conduct tours of Bristol which may be a way for “sightseers” to enjoy the Town while helping to reduce traffic on the Town’s roads. Examine the feasibility and need for a Franklin/State Street loop bus system connecting with the waterfront. This system would provide parking for future mass transit use of the Bristol waterfront as well as provide transportation for elderly housing located along the route. Explore an arrangement with Roger Williams University or Benjamin Church Manor to use their shuttle buses for service within Bristol.		√			Town Council, Town Administrator, and Community Development Department.
C-11	Examine the potential for connecting neighborhoods to each other and to signalized intersections via a system of minor connecting streets and prepare a “Neighborhood Circulation Study” for the different neighborhoods where this could be accomplished, including along Hope Street and along Metacom Avenue as set forth in the Metacom Avenue Corridor Management Plan, especially in the neighborhoods along the east side of Metacom Avenue. This would assist the Planning Board and developers during the design and review process. The purposes of these connections would be to provide alternate emergency access to cul-de-sac streets; provide routes for local service vehicles such as police, school buses, fuel delivery and plowing; allow inter-neighborhood traffic for residents; and provide a signalized access to Metacom Avenue and Hope Street where such an access would be advantageous to local residents. These connections should not encourage non-local traffic flow nor should they provide means for future development to access collector streets solely through established neighborhoods. All such	√				Planning Board and Community Development Department.

#	ACTION	TIME FRAME ¹				RESPONSIBLE AGENT
		S	M	L	O	
	connections should seek to be narrow in width and staggered in location so as to discourage high speeds and drivers seeking alternate routes to collector streets. A general review of traffic patterns in neighborhoods in the East and West Shore Corridors should be performed in order to identify neighborhoods where such connections would be appropriate. Participation of neighborhood groups will be an important part of the process.					
C-12	Seek to connect the Narrows Planning Area with the Hopeworth Planning Area by a connection through the State-owned Veteran's Home property. This could be accomplished by a north-south connection from Roosevelt to Annamamscutt at the intersection with Monterey, or as proposed in the Metacom Avenue Corridor Management Plan. There is a proposed future connection from the end of Viking Drive to Annawanscutt Drive; however, this would be a better pedestrian and bike trail connection due to the stream crossing and associated wetlands.	√				Planning Board, Community Development Department, and Town Council.
C-13	Work with RIDOT to implement the Metacom Avenue Corridor Management Plan.		√			RIDOT, Town Council, Town Administrator, and Community Development Department.
C-14	Work with the RIDOT to include a dedicated bicycle lane as part of any upgrade to the state's roads in Town.		√			RIDOT, Town Council, Town Administrator, and Community Development Department.
C-15	Examine options to upgrade Franklin Street so as to provide better access to the Bristol Industrial Park.		√			Town Council, Town Administrator, and

#	ACTION	TIME FRAME ¹				RESPONSIBLE AGENT
		S	M	L	O	
						Community Development Department.
C-16	Implement the Marine Transport Route Study which includes relocation or raising of utility lines and adjustments to turning radii within designated streets to facilitate the movement of large trailers and boats through town from the marine trades industries to the waterfront		√			Town Administrator, Community Development Department, and Town Council.
C-17	Provide bicycle parking facilities at each bus and van stop along the East Shore, West Shore and Central Corridor Street system. Provide designated bicycle corridors on key roadways linking the East Bay Bike Path with other areas of Town.	√				Recreation Department, Town Administrator and Department of Public Works.
C-18	Budget Town monies each year, and solicit state and federal grants when available, to extend and upgrade the Town's sidewalk system, with priority given to the Downtown area, the parade route along Hope Street, Ferry Road, and along collector streets such as Narrows Road, Annawamscutt Drive, and Hopeworth Ave.	√			√	Town Administrator, Community Development Department, and Department of Public Works.
C-19	Require that granite curbs be utilized for the sidewalks along the Scenic Roadways. These not only add to scenic value but to durability as well. Require underground utilities for all new developments.	√				√
C-20	The Town is currently working jointly with the Town of Warren to study and develop a plan for the use of the National Grid easement for a pedestrian/bicycle path from Tupelo Street in Bristol to Child Street in Warren. Given the wetland constraints and the National Grid easement limitations, it is unlikely that the easement will be able to be used for vehicular access and the path is a	√				Community Development Department, Town Administrator, and Town Council.

#	ACTION	TIME FRAME ¹				RESPONSIBLE AGENT
		S	M	L	O	
	good alternative. Upon completion of the study, the Town should consider moving forward to implement the recommendations, revising this plan as needed.					
C-21	Maintain the tree island at the intersection of Routes 114 and 136 near Roger Williams University during any road improvement programs for that area.	√			√	RIDOT
C-22	Improve pedestrian safety in the Downtown by traffic calming techniques, and better delineation of the crosswalks with signage indicating that the law requires drivers to stop. Implement the Wayfinding Plan to improve the signage identifying public parking areas in the Downtown.	√				Town Administrator and Town Council.
C-23	Improve the drainage on existing roadways, especially in older neighborhoods. Provide for improved stormwater systems and utilities, including water quality measures, when upgrading or reconstructing roads.	√				Town Administrator and Department of Public Works.
C-24	Explore the feasibility of small parking garages to serve areas with insufficient accessible parking. Identify key parcels that should be publicly controlled so as to have maximum public control over redevelopment efforts.	√				Community Development Department.
C-25	Continue to work with RIPTA to determine how its transit program might be altered to better support this plan. Study options including ferry service.		√			RIPTA, Community Development Department.
C-26	Identify existing paper streets and assess their potentials as roads, pedestrian walkways and/or bicycle paths.		√			Community Development Department and Planning Board.
C-27	Study and implement techniques for traffic calming along busy arterial streets to protect residents and pedestrians.	√			√	Community Development Department

#	ACTION	TIME FRAME ¹				RESPONSIBLE AGENT
		S	M	L	O	
C-28	Identify sites that could be used for additional park and rides for either RIPTA or a local “town loop” system.	√			√	Community Development Department
C-29	Continue to implement the Corridor Management Plan for the Metacom Avenue Arterial roadway, including standards for landscaping, reduced signage, design and site guidelines for new development, coordinated curb cuts and layout for the service road along the west side between Tupelo and Gooding.	√				Community Development Department, Planning Board, and Town Council.
C-30	Coordinate all circulation plans with RIDOT on state roads.				√	RIDOT, Community Development Department and Department of Public Works.
C-31	Working with the Town of Warren, continue to push the RIDOT for upgrades on Metacom Avenue for improved safety and circulation.	√				RIDOT, Town Council and Town Administrator.
C-32	Work with RIDOT to expedite improvement projects within Bristol.	√			√	RIDOT, Town Council and Town Administrator.
C-33	Require underground utilities as part of any major road upgrade by RIDOT.	√				RIDOT, Town Council and Town Administrator.

#	ACTION	TIME FRAME ¹				RESPONSIBLE AGENT
		S	M	L	O	
C-34	To aid in economic development and alleviate traffic, evaluate the economic feasibility of establishing rapid water transit to/from Bristol and Providence, and to/from Bristol and Newport. Considerations should include the number of projected commuters during the workday, the number of projected tourists during the tourist season, and everyday non-commuter and non-tourist use.		√	√		Community Development Department and Planning Board.
C-35	Plan for locations of electric vehicle charging stations. Consider supermarket parking lots, downtown public parking lots.	√				Department of Community Development
C-36	Work with the RIDOT and the other East Bay Towns to develop a regional, multi-modal transportation corridor study to improve the safety of the transportation network with low cost, quick solutions. The projects that would come out of a corridor study plan would make future funding requests to the RIDOT more competitive.	√	√			Department of Community Development, Planning board, Town Council