

8.0 CIRCULATION

Circulation is our community's streets, bicycle and pedestrian facilities and available public transit services that are essential for Tiverton to remain a desirable place to live, work, and visit. Planning for and making investments in our transportation system will be necessary to meet the future needs of the community and goals established in this Comprehensive Plan. In considering transportation policies and strategies, it is essential to provide safe and efficient circulation while maintaining the Tiverton's small town and rural qualities and scenic values.

Census data shows Tiverton's work force reliance on the automobile, with nearly 86.4% of all commuters driving to work alone and 8.8% carpooling (See Table 8-1). Less than one-percent of residents use public transportation and other non-motorized modes of travel. The mean average commute time to work is estimated at 25.6 minutes. About 2,300 (30%) work outside Rhode Island, a number influenced by Tiverton's proximity to Massachusetts.

TABLE 8-1: Means of Transportation to Work (workers 16 years and over)

| | Number | Percent |
|--------------------------|---------------|----------------|
| Total: | 8,001 | 100% |
| Cars, Truck or Van | 7,615 | 95.2% |
| -Drove alone | 6,913 | 86.4% |
| -Carpooled | 702 | 8.8% |
| Public Transportation | 70 | 0.9% |
| Motorcycle | 10 | 0.1% |
| Bicycle | 10 | 0.1% |
| Walked | 27 | 0.3% |
| Other Means | 17 | 0.2% |
| Worked at Home | 252 | 3.2% |
| Mean Travel Time to Work | 25.6 | |

Source: 2010-2014 American Community Survey (ACS) data

8.1 Roadway Systems

The roadway system classifies a road or street according to the function it serves or is intended to serve. A roadway can serve two separate functions: provide for through traffic and travel mobility, the principal function of expressways and arterials; and provide access to adjacent land, the major function of local or residential streets and to some degree collector routes.

The State of Rhode Island Highway Function Classification defines state and local roads as freeways and expressways, principal arterial, minor arterial, major and minor collector or local. This system of classification is used by the state and referenced in "State of Rhode Island Highway Functional Classification 2014, Statewide Planning Technical Paper #165". During the development of this report, three Tiverton state roadways; Bridgeport Road, Highland Road and

Souza Road were changed from local maintenance to “proposed for federal aid eligible” See Figure 8-1 for Tiverton State Roadways.

Tiverton has approximately 43 miles of State and Town-maintained roadways (See Table 8-2). Tiverton’s major artery is Route 24, running north-south from the Massachusetts State-line to the Sakonnet River Bridge. Route 24 provides alternative routing from Interstate 195 and services Routes 81 and 77 as routes to beaches and local destinations including to alternative transportation modes.

Route 77, Main Road is a major arterial roadway running north-south from the Massachusetts State-line to Little Compton Town line. Main Road north section is the main commercial corridor in town and provides a secondary connection to Fall River. Main Road to the south is scenic road and the travel corridor to Tiverton Four Corners and Little Compton.

TABLE 8-2: Classification of Tiverton Roads

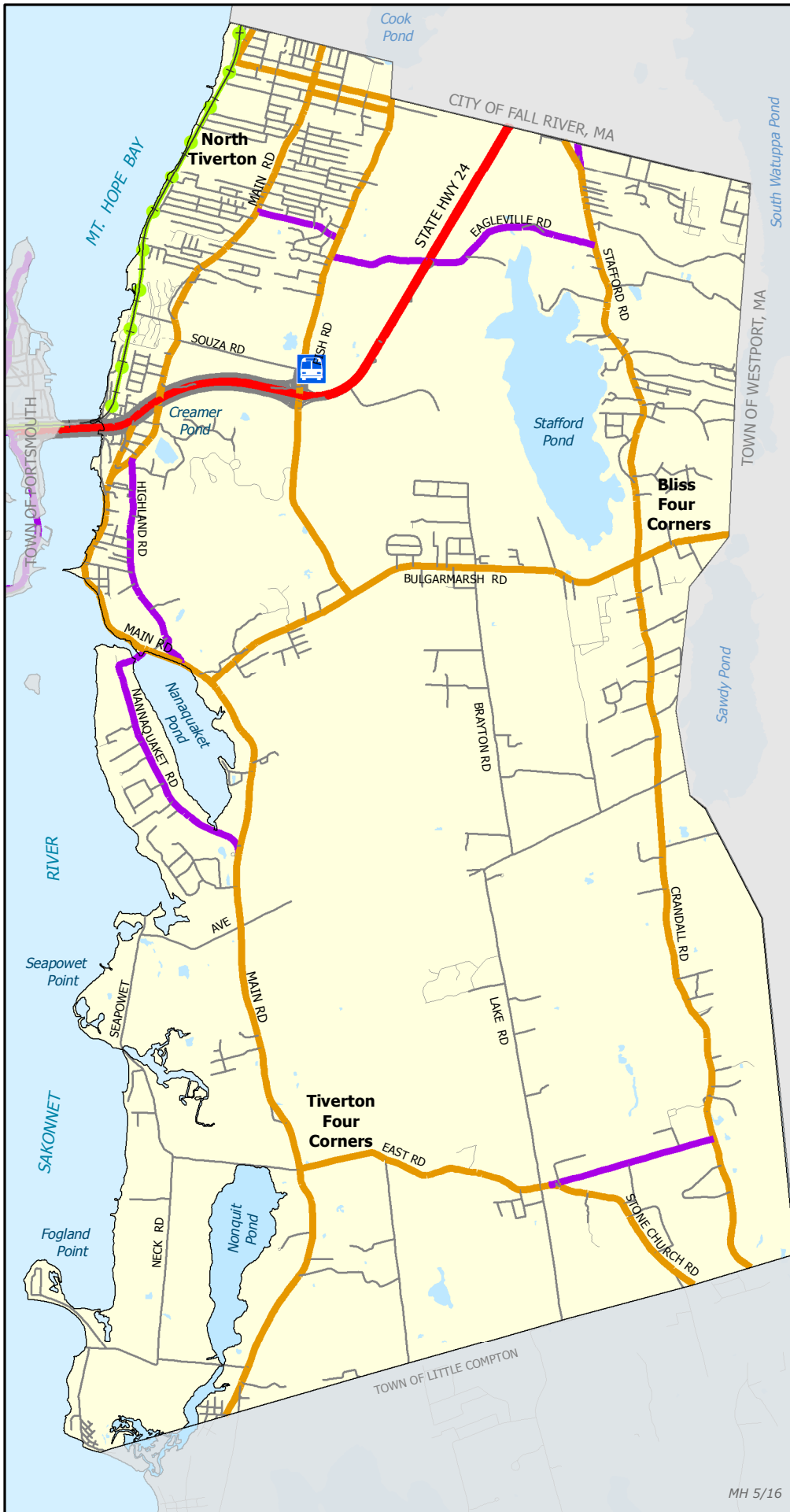
| Type | Miles | % of Total |
|------------------------------|--------|------------|
| Other Freeway/Expressway | 3.89 | 2.93% |
| Principal Arterial | 1.92 | 1.44% |
| Minor Arterial | 30.27 | 22.79% |
| Major Arterial | 6.80 | 5.11% |
| Local* | 80.00 | 60.20% |
| Local (Unacceptable streets) | 10.00 | 7.53% |
| Total | 132.88 | 100 |

*Estimated based on GIS data & DPW

Sources: RIDOT, Town GIS data & DPW (for local roads total)

Other State-owned and maintained roads in town include: Stafford Road, Eagleville Road, Evans Avenue, Bulgarmarsh Road, Warren Road, Bay Street, Canonicus Street, Hooper Street, East Road, Stone Church Road and Nanaquaket Road. The State also owns and maintains eleven bridges in town: Nanaquaket, Nanaquaket Pond, Seapowet, Nonquit Pond, Main Road, Eight Rod Way-Fish Road, Eagleville Road, Evans Avenue and Schooner Drive.

The majority of other roadways are owned and maintained by the town, with a small number of remaining streets privately owned. Tiverton has been historically plagued by the ambiguous legal status of many streets which have never been formally accepted as town streets, yet received varying degrees of town services. In other cases, private streets have been petitioned for takeover by the town but have not been built or maintained to town standards. A policy has been put in place that created a Street Advisory Committee appointed by the Tiverton Town Council. The Street Advisory Committee is reviewing the status of various roadways to make an effort to resolve these issues.



- RIPTA PARK-N-RIDE STOP
 - RIPTA PARK-N-RIDE ROUTE (Route 61X)
 - BICYCLE ROUTES & PATHS
- 2005-2015 FUNCTIONAL CLASSIFICATION**
- URBAN PRINCIPAL ARTERIAL - OTHER
 - URBAN MINOR ARTERIAL
 - URBAN COLLECTOR
 - URBAN NON CLASSIFIED
- PONDS, OPEN WATER
 - MINOR ROAD
 - RAILWAY

Source: RIDOT and RIPTA, courtesy of RIGIS.



Disclaimer: This map is not the product of a Professional Land Survey. It was created by Mapping and Planning Services for general reference, informational, planning and guidance use, and is not a legally authoritative source as to the location of natural or manmade features. Proper interpretation of this map may require the assistance of appropriate professional services. The Town of Tiverton or MPS makes no warranty, express or implied, related to the spatial accuracy, reliability, completeness, or currentness of this map.

TIVERTON COMPREHENSIVE COMMUNITY PLAN
Figure 8-1
ROAD FUNCTIONAL CLASSIFICATION

MH 5/16

8.1.1 Traffic Data

In general, traffic volumes have held steady or grown slightly since the late 1990s, with some minor declines in recent traffic levels assumed to be attributed to the recent recession. Annual average daily traffic (AADT) for Main Road in the northern commercial district increased slightly between counts taken in 2004 to 2014, when the AADT of Main Road totaled 9,000. Counts taken at other locations in Tiverton are shown in Table 8-3.

TABLE 8-3: Traffic Counts-Annual Average Daily Traffic (AADT)-2014

| Road | Segment | AADT |
|------------------|-----------------------------|--------|
| Route 24 | Sakonnet River Bridge | 40,000 |
| Main Road | North of Route 24 | 9,500 |
| Main Road | South of Bulgarmarsh Road | 9,000 |
| Fish Road | North of Souza Road | 4,600 |
| Fish Road | At Route 24 interchange | 7,500 |
| Stafford Road | At Mass State Line | 15,100 |
| Stafford Road | North of Bliss Four Corners | 12,400 |
| Bulgarmarsh Road | at Roosevelt Avenue | 8,500 |
| Crandall Road | Near Stone Church | 3,700 |
| Souza Road | Near Main Road | 2,000 |
| East Road | Near Main Road | 3,000 |

8.1.2 Traffic Safety

The Tiverton Police Department maintains accident records for roadways and streets in the Town. Those streets reporting ten or more accidents in 2014 are shown in Table 8-4.

TABLE 8-4: Traffic Accidents by Roadway, 2014

| Roadway | # Accidents |
|------------------|-------------|
| Main Road | 110 |
| Bulgarmarsh Road | 53 |
| Route 24 | 44 |
| Fish Road | 43 |
| Stafford Road | 41 |
| Crandall Road | 25 |

Source: Tiverton Police Department 01/01/2014-12/31/2014

According to the Police Department, the majority of these accidents were due to speeding and roadway alignment difficulties, although the relatively high number of accidents on Main Road resulted from the number of intersections, driveways and other obstacles. Main Road is a 10-mile stretch of roadway transcending from the Fall River City line to Little Compton. This roadway is the main thoroughfare through Tiverton, with the highest accident location at the

Route 24 interchange. A breakdown of the locations of accidents along Main Road for the year 2014 is shown in Table 8-5.

TABLE 8-5: Traffic Accidents along Main Road, 2014

| Main Road Section | # Accident |
|--------------------------------------|------------|
| State Line to Judson Street | 12 |
| Judson Street to Warren Ave | 14 |
| Warren Ave to Route 24 (includes 24) | 32 |
| Route 24 to Central Ave | 5 |
| Central Ave to Bridgeport | 17 |
| Bridgeport to Lafayette Road | 11 |
| Lafayette Road to Pond Road | 14 |
| Pond Bridge Road to Little Compton | 5 |
| TOTAL | 110 |

8.1.3 Form-Based Code Zoning

On June 30, 2014, the Town Council adopted Commercial Form-Based Code zoning that includes design standards and design guidelines. This zoning was designated to replace the General Commercial districts on the northern portion of Main Road and Bliss Four Corners. As a Form-Based Code, the standards and guidelines apply to both site development and associated roadway infrastructure. Consequently, the design standards and design guidelines in the Commercial Form-Based Code include a section on Rights of Way Design Guidelines. These sections of the Design Guidelines describe improvements to Main Road (a state-owned right of way) and the state roads in Bliss Four Corners, as well as recommended standards for pedestrian, bicycle, and vehicular travel improvements on any road in or outside the districts. These standards could be used as street improvement criteria for similar roads in Tiverton. This could include improvements to State-owned roads when the town coordinates design criteria with the state.



Main Road

8.1.4 Recent and Planned Roadway Improvements

The Sakonnet River Bridge project including Main Road Bridge, Evans Avenue Bridge and Central Avenue project was complete by RIDOT in 2013, and dramatically improved the appearance of Main Road, Central Avenue and Riverside Drive. The project included the complete replacement of the Sakonnet River Bridge on a new alignment with an exclusive share-use path on the north side of the bridge, boat ramp and parking facility along Riverside Drive, elimination of the Central Avenue ramps, reconstruction of Central Avenue including a bike lane, replacement of Main Road Bridge, signalization and striping.



Sakonnet River Bridge

In 2009 RIDOT also resurfaced Main Road/Route 138, including curbing, sidewalk drainage and guardrail improvements, from John Street to the Massachusetts State Line (2.3 miles). Future desired improvements on state-owned roadways must be programmed in the statewide Transportation Improvement Plan (TIP). Today, Tiverton roadway projects are programmed into the TIP:

- Fish Road Pavement Management Program from Route 177 Bulgarmarsh Road to the Massachusetts State Line.
- Intersection Safety Improvements; roundabout at William S. Canning Blvd. and Stafford Road.
- Transportation Alternative Project; Old Stone Bridge, project to stabilize abutment to former bridge destroyed in 1954 hurricane will serve as breakwater to marina/boat basin in Tiverton.

Future project:

- Intersection Safety Improvements; roundabout at Bliss Four Corners.

8.2 Bikeway Systems

The new Sakonnet River Bridge shared use path brought bike access to Evans Avenue and Central Avenue where both roadways have been reconstructed to include a signed and striped bicycle lane on both sides of the road. This Sakonnet River Bikeway begins at the shared use path and continues down Central Avenue to the intersection of Main Road.

The RIDOT Tiverton Bike Path, a 2.6-mile bicycle path from the Sakonnet River Bridge to the Massachusetts State Line via the Newport Railroad Line is currently cited as under study and development. This project is listed as low priority for the Bicycle Facilitates Coalition and is not listed in the 10-year Transportation Improvement Plan (TIP).

A 1997 study funded by the RIDOT focused on the feasibility of an on-road bike route through southern Tiverton. The so-named Sakonnet River Bikeway would connect the Town Hall with the waterfront at Stone Bridge and follow along scenic roadways including Nanaquaket Road, Seapowet Avenue and Puncatest Neck Road to the border with Little Compton. While this bikeway was not pursued further by the town due to safety concerns and narrow roads, many of the roadways remain very suitable for bicycling.



Bike lane along Central Avenue

8.3 Sidewalk Systems

There are limited sidewalks throughout the Town of Tiverton. The 2.3-mile Main Road improvement project completed sidewalks from the Massachusetts State Line to Central Avenue in 2009 and the completion of the new Sakonnet River Bridge continued the sidewalks from the Main Road Bridge to Central Avenue, including Central Avenue, Evans Avenue and Tucker Avenue. There are other isolated areas within Tiverton that include sidewalks, such as Main Road near Stone Bridge and Bliss Four Corners.

The Bliss Four Corners intersection, future location of around-about will include sidewalks and pedestrian access for safety. The sidewalk continued down Bulgarmarsh Road in front of the Bay Coast Bank. As part of the new Tiverton Public Library and the Stafford View Farm Subdivision, sidewalks are planned along Bulgarmarsh Road as an effort to connect this activity area to the middle and high schools.



New sidewalk along Bulgarmarsh Road

The Town requires sidewalks to be included in new projects within all new subdivisions and commercial areas.

8.4 Public Transportation

The only present means of public transit serving Tiverton is the RI Public Transit Authority (RIPTA) bus service. Unfortunately, Tiverton isn't well integrated into the network, as RIPTA operates commuter buses in the morning and evening that link Tiverton to Newport and Providence through Bristol, Warren and Barrington through one park and ride facility in town.

The Rhode Island Department of Transportation operates the Tiverton East Bay Park & Ride at the intersection of Route 24 and Fish Road that has a design capacity of 92 cars.

RIPTA does not operate either its "Flex Service" minivan service or its Ride paratransit bus service in Tiverton. This leaves Tiverton without any access to public transportation for local transport to medical facilities, senior centers and retail establishments. Efforts should be made to bring this or similar type of public transportation service to Town.

A commuter rail system is not an immediately foreseeable means of public transit serving Tiverton. The Sakonnet River swing bridge, once linking Tiverton to Portsmouth was removed by the Rhode Island Department of Transportation with the reconstruction of the new Sakonnet River Bridge. The current rail line from the Sakonnet River Bridge to the Massachusetts State

Line, a right-of-way owned by the RI Department of Transportation, is under study and development for a bicycle facility as stated above. The use of this rail line for a bicycle facility is a desirable use for this corridor in keeping with the small town and rural qualities of this Comprehensive Community Plan.

Long-term plans by the Metropolitan Boston Transit Authority (MBTA) include the New Bedford-Fall River Commuter Rail Extension, referred to as the South Coast Rail (SCR). This project, now in the final design environmental study and permitting stages, will extend the existing Stoughton Line from Boston to New Bedford and Fall River and will include construction of new track, bridges, grade crossings and ten new commuter rail stations. It will serve an estimated 5,670 new daily inbound riders. When the project is complete, the ability to commute to Boston from nearby Fall River will have an impact on growth potential for Tiverton and job opportunities for its residents.

8.5 Future Traffic Impacts of Larger-Scale Development Projects

Growth and development in the northern portions of Tiverton along Main Road, Souza Road, Fish Road and the Tiverton Business Park, as well as in communities to our south have the potential to further increase congestion along the roadways. The town owns the 172-acre site off Fish Road that it purchased in 1988 to develop as a business park. Tiverton Power, an electrical power plant, is the park's only tenant to date. At the end of 2013, the Tiverton Business Park Request for Proposals (RFP) was finalized with a preliminary plan designed. Recently, the town has agreed to sell 17-acres to a development of an indoor sports complex, which would be the second tenant in the park. The town should consider evaluating the potential roadway impacts on Industrial Way, Fish Road and the Route 24 interchange with the planned used for the park.

8.6 Goals, Objectives and Actions

It is our goal to provide for the safe and efficient management of automobile, bicycle and pedestrian traffic while encouraging alternative forms of circulation that complement the community’s special character and quality of place. Based on the critical issues described in the Circulation Chapter and the overarching goal stated above, this section presents the goals and policies developed by the Town of Tiverton to guide its circulation planning.

Goal 1. Provide a safe and well-maintained transportation system throughout town.

Objective: Tiverton’s safe and efficient transportation system can be maintained and enhanced without sacrificing the community’s attractive appearance. Roadways should be both functional and aesthetically pleasing to maintain quality of place.

Action 1a: All roads should be built only in accordance with the standards of a public road.

Action 1b: Consider adoption of the Rights of Way Design Guidelines in the Commercial Form-Based Code Zoning as additional design standards for all roadway improvements, including RIDOT project.

Action 1c: Continue with an annual pavement management program as recently adopted.

Action 1d: Utilize the Tiverton Police Department accident data statistics, monitor areas where accident frequency is high and increasing. Consider design changes or improvements to mitigate accidents and improve safety.

Goal 2. Provide a balanced multi-modal transportation system throughout the town to help reduce automobile dependency, enhance our community’s character and improve the health and well-being of our citizens.

Objective: Encourage safe alternative forms of transportation, including bicycle, pedestrian and water transportation, provided it can be accomplished in a safe manner.

Action 2a: Develop a Complete Streets Plan.

Action 2b: Maintain and install sidewalks in high priority areas, defined as those areas within schools on major roads, within commercial districts, and in other areas where pedestrian activity is to be encouraged.

Action 2c: Utilize the railroad corridor as a bicycling/walking greenway as an off-road, multi-use path for safe intermodal transportation and recreation.

Goal 3. Support economic development through a well-planned and high quality transportation system without losing key elements of the Town's rural character.

Objective: Implement design guidelines that assure safe and efficient access and egress to commercial establishments and housing subdivisions.

Action 3a: Apply access management tools to site plan reviews for commercial development and residential subdivision to reduce congestion and improve safety.

Action 3b: Continue to set high standards for design of parking facilities including landscaping, buffering, handicapped accessibility, pedestrian walkways and lighting.

Action 3c: Coordinate with the State and Economic Development to develop a design plan for infrastructure improvements needed to sustain the increase in traffic generated by the development of the Business Park.

Goal 4: Transportation Improvement Program

Objective: The Statewide Transportation Improvement Program (TIP) is a biennial document developed by the Transportation Advisory Committee and adopted by the State Planning Council. It directs federal transportation dollars to individual project and programs that are implemented chiefly through RIDOT. Local pedestrian, bicycle and roadway improvements are intended to be coordinated with this program.

Action 4a: Work to secure funding for ongoing maintenance and safety projects on State roads through the Transportation Improvement Program (TIP).

Action 4b: Maintain and update local priorities for local pedestrian, bicycle and roadway improvements based on the adopted TIP. These priorities should be submitted for consideration in the state's biennial TIP.

Action 4c: Develop zoning and land development standards requiring Rights of Way Design Guidelines in the Commercial Form-Based Code Zoning as additional design standards for all roadway improvements.