# Chapter 11 Transportation

# Introduction

The Transportation Chapter includes the following:

- Inventory of transportation infrastructure, including roads, bridges, culverts, parking, bicycle routes, and other amenities such as airports and railway
- Description of roadway and bridge condition rating from MaineDOT
- Information on recent projects and improvements and capital budget for projects
- Revenue and expenses associated with parking
- Summary of transit and rideshare services
- Summary of traffic count data and discussion of commuter information and traffic concerns
- Discussion of connectivity and accessibility and opportunities to improve connectivity to conservation lands, waterfront access points, and other destinations
- Overview of regulations and design standards pertaining to transportation
- Potential impacts of climate change on roadways.

Maine DOT anticipates the following eight trends will influence transportation in the coming years:

- Maine's Aging Population
- Labor Market/Industry
- Global Trade/Freight Movement
- Urbanization/Shifting Population
- Tourism
- Technology
- Safety
- Climate.

Source: Maine Long Range Plan

### Public Input on Transportation from <u>Budget Ideas For Budget Focus Areas in 2018 and Beyond</u>

- I really like that we've widened some of the roads to include extra space for walking or biking.
- Pedestrian Village: reconfigure the first block of Ocean Ave to become a Pedestrian only area? Huge long-term economic benefits to Pedestrian Villages (Faneuil Hall, Burlington TV, Boulder Co, Baltimore to name just a few).
- Bike Friendly: What if Kennebunkport set a goal to become the most Bicycle Friendly town in Maine with Bike Lanes, Bike Signage and Bike Racks...
- Bike Lanes: narrow vehicular travel lanes and widen bike lanes. Install bike signage "share the road", "bikes use full lane" and "respect bicycles", "bike love".
- Bike Racks in Dock Square, Beaches, Etc. would be a welcome addition to town.

# Transportation Infrastructure

### Roads

There are a total of 84.26 miles of roadways in Kennebunkport. Roadways are classified by Federal Functional Classification (FFC) and by the State Highway System. FCC describes the functionality and geographical characteristics of public streets and highways based on the character of service they are intended to provide. This classification reflects how the highway provides land access versus mobility. The State Highway System describes

the type of service as well as the responsibility for maintenance. Table 11-1 provides characteristics of FCC classes (arterial, collector, and local roads) as well as the number of miles of each class in Kennebunkport. Similarly, Table 11-2 displays State Highway System characteristics and roadway miles under this classification. Private roads are not classified in the FCC or State Highway System.

Table 11-1. Federal Functional Classification (FFC) characteristics and roadway miles by class (Source: MaineDOT)

Federal Functional Classification	Subclassification	Type of Service	Speed	Traffic Volume (vehicles/day)	Miles in Kennebunkport	Percent of Total Road Miles in Town <sup>1</sup>
Arterial	Principal and Minor Arterial Roads	Countywide, statewide or interstate travel that links cities and large towns to an integrated highway network	Relatively high	Thousands to tens of thousands	0	0%
Collector	Urban Collectors and Major Rural Collectors and Minor Rural Collectors	Link smaller towns, villages, neighborhoods, and major facilities to the arterial network, connecting traffic from local residential road to nearest arterial	Moderate	Thousands	9.07 (Major Urban Collector)	10%
Local Roads		Provide direct access to residential neighborhoods, local businesses, agricultural properties, and timberlands	Slow to moderate	Less than one hundred to thousands	55.11	65%

<sup>&</sup>lt;sup>1</sup> Private roads account for 25% (20.76 miles) of all roadways and are not included in the FFC.

Table 11-2. State Highway System characteristics and roadway miles by class (Source: MaineDOT)

State Highway Category	Type of Service	Maintenance	Relation to FCC	Miles in Kennebunkport	Percent of Total Road Miles in Town <sup>1</sup>
State Highway	Connected routes that serve intra- and interstate traffic	MaineDOT maintains year-round, except in urban compact areas	Generally corresponds with arterial classification	0.07	0%
State Aid Highway	Connects local roads to the highway system and generally serves intracounty rather than intrastate traffic movement	MaineDOT maintains in summer and municipalities maintain in winter, except in urban compact areas	Generally corresponds with the collector classification	7.99	9%
Town Ways	Local service roads providing access to adjacent land, includes all other highways that are not State Highway or State Aid Highways	Municipalities or counties	Federal local roads	55-33	66%

<sup>&</sup>lt;sup>1</sup> Private roads account for 25% (20.76 miles) of all roadways and are not included in the state highway classification.

Figure 11-1 displays the State Highway System road class of roads in Kennebunkport. Private roads, railway segments, airports, and bridges and culverts on public roads are also shown.

MaineDOT ranks several attributes of roadways. Figure 11-2 displays the overall score for service, safety, and condition on a scale of A though F. The total miles of roadway in each class is included in Figure 11-2. Portions of Route 9 between Beechwood Avenue and the Dyke Road/Goose Rocks Road and Route 9 intersection received either a D or F safety score, indicating the prevalence of pavement rutting, crash history, and/or insufficient pavement width.

One particularly hazardous location is at the Consolidated School, which lacks sidewalks on both sides of Route 9.

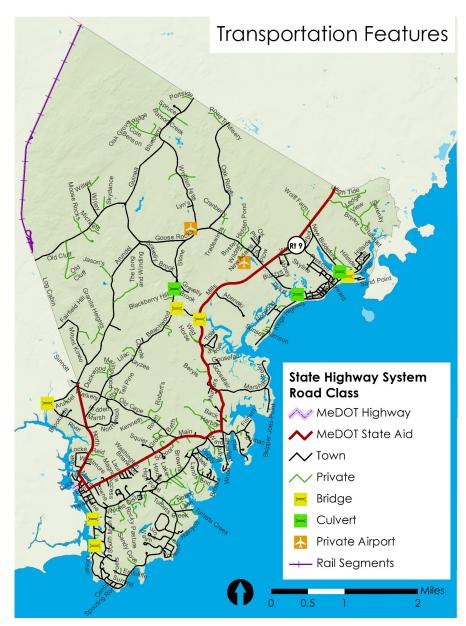
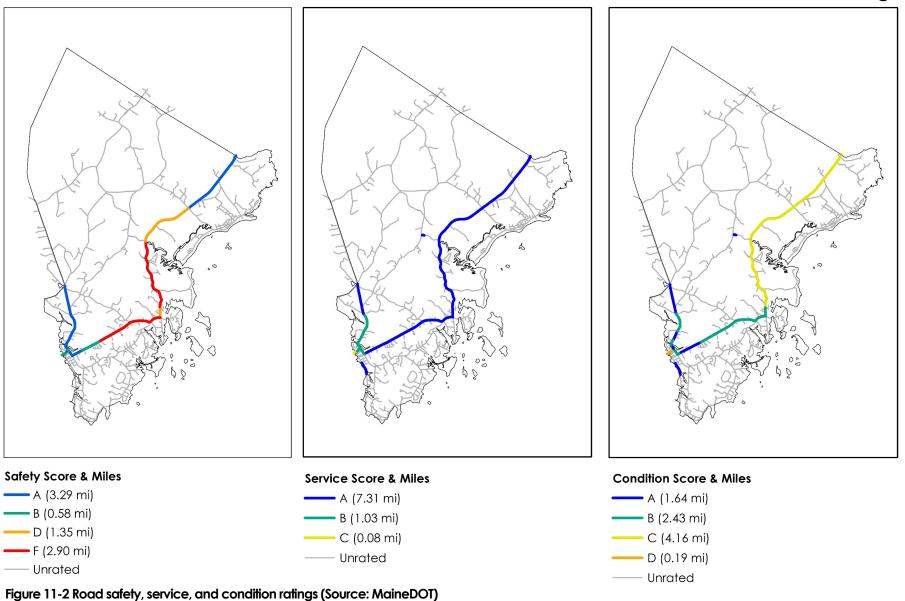


Figure 11-1 Transportation Features (Source: CAI Technologies)

# Road Rating



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### Parking

Kennebunkport has a number of public parking lots that serve residents and visitors. The largest lots in town include the Dock Square and the North Street lot, which is adjacent to the Fire Station (Figure 11-3). Limited parking is also available at Colony Beach and Cape Porpoise. Table 11-4 includes the approximate number of parking spaces at four public parking lots in Kennebunkport. Aerial images of these lots is included in Figure 11-4.

Table 11-4 Number of spaces, fee, and usage of parking areas in Kennebunkport

Lot	Number of Spaces <sup>2,3</sup>	Fee	Usage
Dock Square	Approx. 80	Yes	100% capacity in summer
North Street	Approx. 105	No	100% capacity in summer
Cape Porpoise	Approx. 15	No	100% capacity in summer
Colony Beach <sup>1</sup>	Approx. 25	No	100% capacity in summer

- 1. Capacity at this lot was reduced due to jetty repair
- 2. SMRPC parking map
- 3. Google maps

The Town has the authority to designate Town land for parking for certain events. Areas surrounding the ball field, for example, have been used for parking. Occasionally, the parking lot at the Consolidated School is used by residents for overflow parking during events like Christmas Prelude when the North Street Lot is full. However, this is SAU property.

Other off-street parking for the public is available in a small privately owned lot located at the intersection of Ocean Avenue and Union Street.

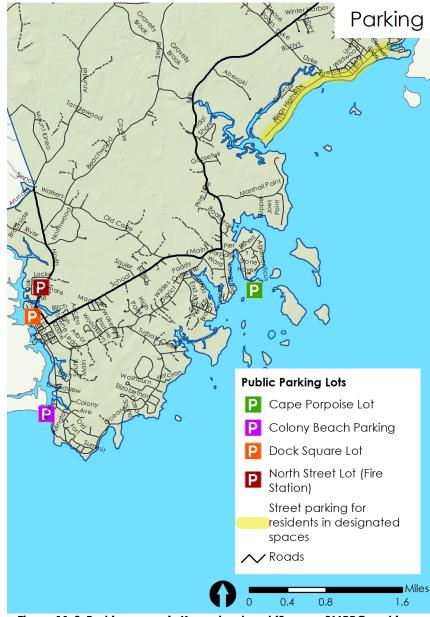


Figure 11-3. Parking areas in Kennebunkport (Source: SMRPC parking map, Annual Report)



North Street Parking Lot



Colony Beach Parking Area



**Dock Square Parking Lot** 



Cape Porpoise Parking Lot

Figure 11-4. Aerial view of parking areas in Kennebunkport (Source: Google Maps)

Parking is permitted in designated spots on public streets near Goose Rocks Beach between Route 9, the Batson River, and the Little River with a parking sticker. Figure 11-5 displays the number of resident, daily, weekly, and seasonal parking stickers issued over the last six years. From 2015 through 2019, the number of each category of parking sticker increased by 20% (resident) to as much as 60 and 65% (weekly and daily, respectively).2 The number of daily stickers issued was particularly high in 2019. While the number of resident stickers declined slightly from 2019 to 2020, weekly and daily stickers decline by 85 and 54%, respectively, during this period. This likely reflects the decline in tourists and seasonal visitors during the summer 2020 season due to the COVID-19 pandemic.

Parking tickets generated \$58,597 in revenue in 2019.<sup>3</sup> The Dock Square parking lot generated a total of \$320,529 in operating income in 2019.<sup>4</sup> Table 11-5 summarizes the revenues and expenses associated with the Dock Square Lot for the last five years. The 2020 budget (non-property tax revenues) for parking violations was set at \$45,000. The 2021 budget for parking violations is \$25,000. The anticipated revenues from Goose Rocks Beach stickers were set at \$180,000 for 2020 and \$112,500 for 2021.<sup>5</sup> These figures were identified pre-pandemic.



Figure 11-5. Goose Rocks Beach Parking Stickers (Source: Town of Kennebunkport)

During the winter, the North Street Lot may be a suitable location for a food truck(s). Below is a screenshot of the Kittery Food Truck Pod website showing a number of food trucks set up in a parking lot off the US Route 1 Bypass. A web and social media presence helps increase awareness of the food trucks and provides information for visitors and vendors. (Source: kitteryfoodtruckpod.com)



Table 11-5. Revenues, Expenses, and Changes in Net Position Dock Square Lot (Source: Annual Reports for years 2015-2019)

	2015	2016	2017	2018	2019
Total operating revenues	\$338,488	\$355,945	\$418,523	\$431,347	\$395,156
Total operating expenses	\$60,580	\$64,297	\$52,976	\$69 <b>,</b> 062	\$75,209
Operating income	\$277,908	\$291,648	\$365,547	\$362,285	\$320,529
Total Nonoperating revenue (expenses)	-\$9,960)	-\$12,611)	-	-	-\$46,378)
Net income before transfers	\$267,948	\$279,037	\$365,547	\$362,285	\$274,151
Total transfers	-\$236,000)	-\$230,000)	-\$307,500)	-\$230,000)	-\$310,000)
Total net position, beginning of year	\$314,950	\$346,898	\$395,935	\$453,982	\$586,267
Total net position, end of year	\$346,898	\$395,935	\$435,982	\$586 <b>,</b> 267	\$550,418

## **Bridges**

There are six bridges in Kennebunkport (Figure 11-6). The condition of these bridges ranges from *fair* to *very good*. Scour, or undermining caused by stream flow, is the most common cause of bridge failure in the U.S. Table 11-6 includes a list of bridges and culverts located on state and local roads. While the percentage of structurally deficient bridges in the U.S. and New England has declined, Maine has seen the opposite trend in recent years (Figure 11-7). A GIS dataset with information for culverts on private roads was not available to display.

Table 11-6 Bridges and culverts on state and local roads (Source: MaineDOT)

Bridge Name	Bridge Number	Year Built	Stream/ River Crossing	Street Name	Rating
Hutchins School	1286	1994	Batson River	Beachwood Ave	8 - Very Good Condition (no problems noted)
Goosefare Bay	1301	2000	Perkins Brook	Sand Point Rd	8 - Very Good Condition (no problems noted)
Glen Creek	6329	1975	Glen Creek	Ocean Ave	7 - Good Condition (some minor problems)
Lords Bridge No. 1	5899	1962	Tributary of Kennebunk River	Ocean Ave	6 - Satisfactory Condition (minor deterioration)
Mill Pond	3852	1963	Batson River	Mills Rd	5 - Fair Condition (minor section loss)
Goffs Creek/Eleanors (located between Kennebunkport and Arundel)	5840	1959	Goffs Creek	River Rd	5 - Fair Condition (minor section loss)
Seavey	1288	1997	Batson River	Stone Rd	N - Not Applicable (culvert)
Beaver Pond Creek	6107	2004	Beaver Pond Creek	New Biddeford Rd	N - Not Applicable (culvert)
Dyke	5981	2004	East Branch Batson River	Dyke Rd	N - Not Applicable (culvert)

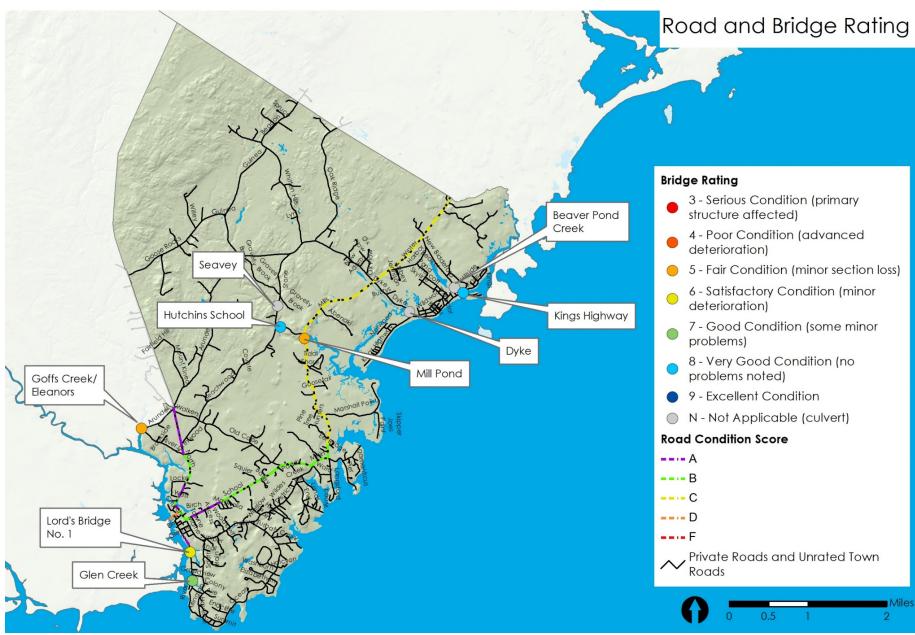


Figure 11-6. Bridges and culverts with bridge and roadway condition (Source: MaineDOT)

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Bridge maintenance responsibility is determined by the MaineDOT's Local Bridge Program under the Maine Bridge Law 23 MRSA, Ch 9 Subchapter 4-A, amended in 2001. Bridges of at least 20 feet in length on town or state-aid roadways are the responsibility of MaineDOT. Minor spans, which are bridges that are at least 10 feet but less than 20 feet in length and located on town roadways, are the responsibility of the municipality. Culverts are defined as having a span of less than 10 feet or multiple pipes or other structures with a combined opening of less than 80 square feet. MaineDOT inspects minor spans and bridges on public ways every two years and notifies the Town of any substantial deficiencies. 10

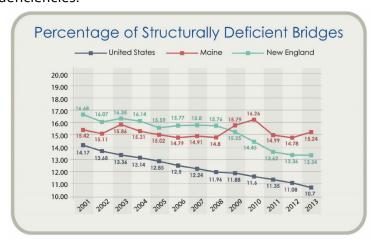


Figure 11-7. Percentage of structurally deficient bridges in the US, New England, and Maine (Source: 2014 KOBS)

### Pedestrian Ways

Within Kennebunkport, there are approximately 6.6 miles of sidewalks and 57 crosswalks according to the Town's GIS dataset. These pedestrian amenities, along with paved road shoulders, are shown in Figure 11-9. Most sidewalks and crosswalks are located in Dock Square, Cape Porpoise, and Goose Rocks Beach.

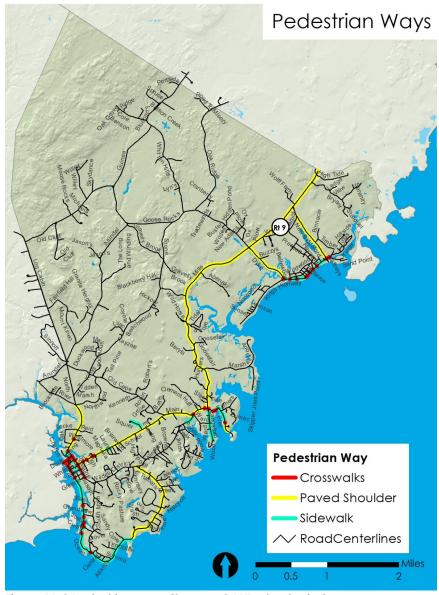


Figure 11-8 Pedestrian ways (Source: CAI Technologies)

### Bicycle Routes

The Town has made a commitment to biking and a goal of establishing routes and amenities. While there are no official bike routes in town, many cyclists utilize the community's scenic rural roads. As shown in Figure 11-8, there are approximately 16.3 miles of paved road shoulders. The Eastern Trail, a 65-plus-mile bike route from the Piscataqua River in Kittery to South Portland, Maine, runs through the adjacent communities of Kennebunk, Arundel, and Biddeford (Figure 11-9). Cyclists could access this route from Log Cabin Road in Kennebunkport. The Eastern Trail is part of the East Coast Greenway. The <u>US Route 1</u> bike trail,

which runs through Maine connecting New Brunswick, Canada to Portsmouth, is also accessible from Log Cabin Road. Portions of this route follow the East Coast Greenway.<sup>11</sup>

MaineDOT's Explore Maine Tour 7 of the Southern Coast includes three tour loops of 21, 34, and 29 miles in Kennebunkport and Kennebunk. The tour originates at the Wells Intermodal Transportation Center located at the intersection of Exit 19 off the Maine Turnpike and ME Route 109.<sup>12</sup>

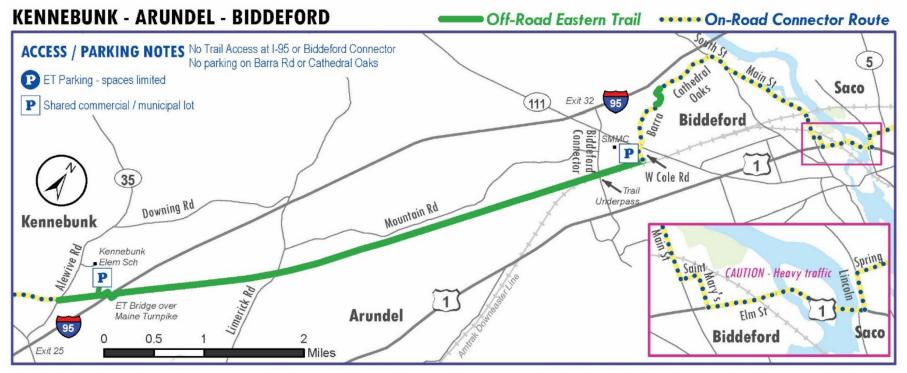


Figure 11-9. Map of Eastern Trail in the vicinity of Kennebunkport (Source: Eastern Trail.org)

#### **Complete Streets**

Adopting a complete streets policy is one strategy to improve transportation and recreation experience for all users of roadways, including cyclists and pedestrians.

Complete streets are streets design for all users, including pedestrians, bicyclists, motorists and transit riders of all ages and abilities.<sup>13</sup> Complete streets contribute to quality of life in a community and are increasingly recognized a critical component of the transportation network. A complete street is context specific and may look different in an urban than rural area. Features of a complete street may include sidewalks, bike lanes or wide paved shoulders, special bus lanes, comfortable and accessible public transportation stops, frequent and safe crossing opportunities, median islands, accessible pedestrian signals, curb extensions, narrower travel lanes, or roundabouts.14

As of spring 2021, the Town does not have a complete streets policy. Elements of local land use regulations contain provisions commonly found in a complete streets policy. For example, Kennebunkport's Subdivision Regulations require that sidewalks be developed at subdivisions in growth areas as well as in non-growth areas that are adjacent to existing sidewalk networks.

#### **Benefits of Complete Streets**

- Wide, attractive sidewalks and well-defined bike routes, where appropriate to community context, encourage healthy and active lifestyles among residents of all ages.
- Complete Streets can provide children with opportunities to reach nearby destinations in a safe and supportive environment.
- A variety of transportation options allow everyone particularly people with disabilities and older adults to get out and stay connected to the community.
- Multi-modal transportation networks help communities provide alternatives to sitting in traffic.
- A better integration of land use and transportation through a Complete Streets process creates an attractive combination of buildings houses, offices, shops and street designs.
- Designing a street with pedestrians in mind sidewalks, raised medians, better bus stop placement, traffic-calming measures, and treatments for travelers with disabilities may reduce pedestrian risk by as much as 28%.
- A livable community is one that preserves resources for the next generation: Complete Streets help reduce carbon emissions and are an important part of a climate change strategy.

### Complete Streets Policies & Resources

The State of Maine adopted a complete streets policy in June 2019:

 $\underline{https://www.maine.gov/mdot/completestreets/docs/MaineDOTCompleteStreetsPolicyFinal.\underline{pdf}}$ 

Communities that have a complete streets policy include Portland, Lewiston, Auburn, Windham, Fort Kent, Bath, Yarmouth, Scarborough, Brunswick, and Cape Elizabeth (Source: Maine Bicycle Coalition).

The Natural Resources Council of Maine has developed a toolkit to assist communities with developing a complete streets policy:

https://www.nrcm.org/programs/sustainability/sustainable-maine-community-toolkits/complete-streets-toolkit/

### Other Transportation Assets

There are two private airports located in Kennebunkport: Back Acres, which is located off Whitten Hills and Gooserocks Road and Goosefair, which is located off Mills Road (Figure 11-1). The Town does not have airport zoning and airspace protection ordinances. Aircraft operations that are subject to federal noise regulations are exempt from sound pressure level regulation under section 6.16(C)(1) of the Land Use Ordinance (LUO).

There are approximately three miles of abandoned railway and 1.4 miles of railroad at the Seashore Trolley Museum. The closest Amtrak station is in Wells, ME.

Within Kennebunkport, there are no MaineDOT park and rides or state rest areas. The closest park and ride locations are in Biddeford, Wells, and York. There are also no designated Scenic Byways in Kennebunkport.

While there are several waterfront access points (see Table 10-11), there is no public ferry service or private water taxi service in Kennebunkport. Information and insights from Harbormaster on marine transportation needs and concerns are pending and will be included.

### **Electric Vehicle Charging Infrastructure**

As noted in the Energy and Economy Chapters, electric vehicle (EV) charging stations will become an increasingly important component of the Town's transportation system. EV stations will help curb local greenhouse gas emissions while also meeting the growing demand for access to power for electric vehicles. As of 2020, there are eight resorts and inns that provide Level 1 or 2 EV charging facilities for their guests. There is also a Level 2 charging station at the Fire Station at 32 North Street.

Facilitating the transition from fossil fuels in the transportation sector is an important strategy for reducing greenhouse gas emissions. Local residents as well as tourists will be more likely to utilize electric powered vehicles when EV charging stations are convenient and numerous.

# Connectivity & Accessibility

Figure 11-10 displays a selection of assets and destinations in Kennebunkport with potential on and off-road connections that would provide bicycle and pedestrian connectivity to neighborhoods, schools, waterfronts, and other activity centers [Note: this is a working draft map that will be completed following public input and discussions with the GPC]. This map includes features such as conservation land and open space as well as the Consolidated School and the primary commercial areas in Town.

As discussed in Natural Resources, Land Use, and Recreation Chapters, Kennebunkport has numerous conserved lands and preserves. The Kennebunkport Conservation Trust Trail and Properties Map describes several hiking trail systems that are accessible from roadway trailheads in Kennebunkport. The trail system at Smith Preserve is accessible via Guinea Road and connects to the old trolley line and extends to the Biddeford and Arundel municipal boundaries. The trail systems at Emmons Preserve, Tyler Brook Preserve, Rotary Park, and the Cape Porpoise Greenbelt properties are all interconnected, providing an extensive network of hiking opportunities in Town (Figure 11-11). This system could be further extended by connecting the trails at Emmons preserve to Smith Preserve via Gravely Brook Road and Goose Rocks Road.

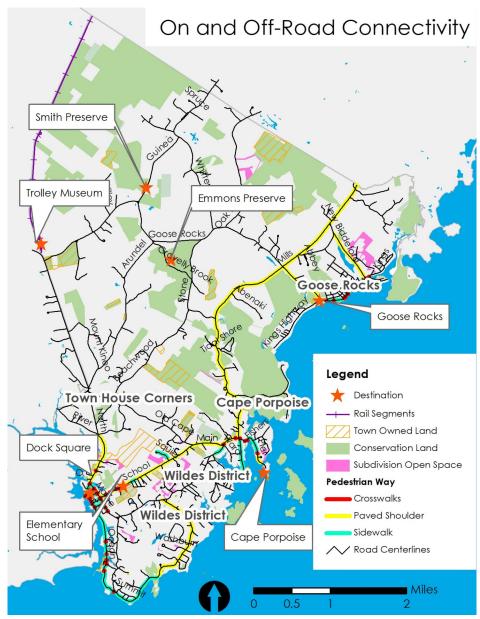


Figure 11-10 Potential bike-ped on and off-road connectivity

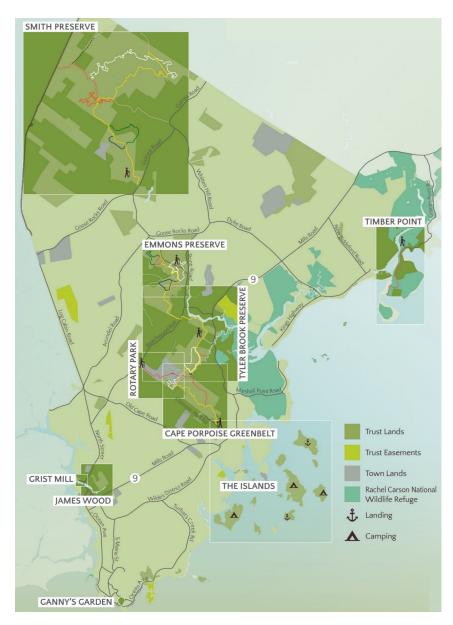


Figure 11-11 Preserves and trail map (Source: Kennebunkport Conservation Trust)

#### Access to Water Resources

Table 11-10 lists each water access point shown in Figure 11-12 based on MaineDOT's database of waster access locations. These access points include public wharfs, public rights of way, public boat launches, private marinas, and private facilities such motels and restaurants. With the exception of the Cape Porpoise Pier, which has some access restrictions, all points are open to the public. Road access to these sites is considered *good* for 23 out of 28 sites and *fair* for the remaining five locations. Parking is available at Cape Porpoise Pier as well as the four privately owned access points. Limited parking is available at 15 sites.



Figure 11-12 Waterfront access points identified in MEDOT's database (Source: MEDOT)

Table 11-10 Water access points (Source: MaineDOT)

Map # (Fig. 11-9)	Facility Name	Type	Ownership	Privileges	Primary Use	Road Access	Parking
1	Cape Porpoise Pier	Public Wharf	Municipal	Restricted	Commercial Fishing	Good	Yes
2	Government Wharf Fish Pier	Public Wharf	Municipal	Public	Commercial Fishing	Good	Limited
3	Government Wharf Floats	Public Wharf	Municipal	Public	Commercial Fishing	Good	Limited
4	Turbats Creek Road right of way access	Public Rights of Way	Municipal	Public	Recreation	Good	-
5	Breakwater Beach Ocean Access	Public Rights of Way	Municipal	Public	Recreation	Good	Limited
6	Kings Highway West End R/W	Public Rights of Way	Municipal	Public	Recreation	Good	Limited
7	Dyke Road R/W	Public Rights of Way	Municipal	Public	Recreation	Fair	-
8	Norwook Lane R/W	Public Rights of Way	Municipal	Public	Recreation	Fair	-
9	Edgewood Ave. R/W	Public Rights of Way	Municipal	Public	Recreation	Good	-
10	Jeffery's Rd. R/W	Public Rights of Way	Municipal	Public	Recreation	Good	-
11	King's Land R/W	Public Rights of Way	Municipal	Public	Recreation	Fair	-
12	Dock Square R/W	Public Rights of Way	Municipal	Public	Recreation	Good	Limited
13	Parson's Way Park	Public Rights of Way	Municipal	Public	Recreation	Good	Limited
14	Parson's Way Park	Public Rights of Way	Municipal	Public	Recreation	Good	Limited
15	Parson's Way Town Park	Public Rights of Way	Municipal	Public	Recreation	Good	Limited
16	Parson's Way Park	Public Rights of Way	Municipal	Public	Recreation	Good	Limited
17	Wandby Beach	Public Rights of Way	Municipal	Public	Recreation	Good	Limited
18	Small town beach	Public Rights of Way	Municipal	Public	Recreation	Good	-
19	Halcyon Way	Public Rights of Way	Municipal	Public	Recreation	Fair	Limited
20	Fishhouse Way	Public Rights of Way	Municipal	Public	Recreation	Good	Limited
21	Bartlett Ave. R/W	Public Rights of Way	Municipal	Public	Recreation	Good	Limited
22	Lands End Road	Public Rights of Way	Municipal	Public	Recreation	Fair	-
23	Cape Porpoise Pier walk-in launch area	Public Boat Launch	Municipal	Public	Recreation	Good	Limited
24	Causeway Launching area	Public Boat Launch	Municipal	Public	Recreation	Good	Limited
25	Schooner's Motel	Private Recreational	Private	Public	Recreation	Good	Yes
26	Kennebunkport Marina	Private Marina	Private	Public	Commercial Boating	Good	Yes
27	Arundel Wharf, Restaurant and Marina	Private Marina	Private	Public	Commercial Boating	Good	Yes
28	The Landing Restaurant	Private Commercial General Non-Fishing	Private	Public	Commercial Boating	Good	Yes

KENNEBUNKPORT COMPREHENSIVE PLAN

# Transit & Rideshare

The Shoreline Explorer Network operates the Intown Trolley (Route 6) in Kennebunkport (Figure 11-13). The Shoreline Explorer is a privately owned and operated service that offers a narrated sightseeing tour of the Kennebunks and allows riders to get on and off at any stop throughout the day in spring, summer, and fall. The trolley connects to the Blue 4b route, which provides service to Kennebunk and beyond.

Other transit options include b & d Pedicab, offering human powered taxi service on a carriage-like tricycle, the Mermaid Transportation Company, which provides service to airports and Amtrak Maine, New Hampshire, and Massachusetts, and York County Community Action Corp, which includes the Shoreline Trolley, the Shore Road Shuttle, the Kennebunk Shuttle, and the Sanford Ocean Shuttle. Uber and Lyft provide rideshare services in Kennebunkport and the surrounding region.



Image of Intown Trolley (Credit: <a href="http://www.intowntrolley.com/2010/11/">http://www.intowntrolley.com/2010/11/</a>) (placeholder)

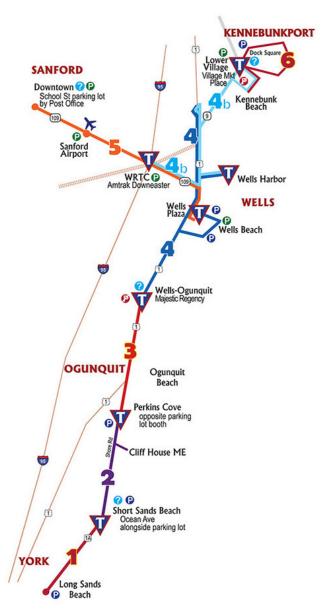


Figure 11-13. Shoreline Explorer routes (Source: Shoreline Explorer)

Maine's locally coordinated plan for regional transit identifies transportation needs of the public and integrates non-emergency medical transportation, urban and rural transit, intercity bus, seasonal transportation, ferry service, and passenger rail. There are eight transit regions within the state. <sup>15</sup> The regional transit provider in York County is the York Community Action Program. The percentage of public transportation need being met in rural York County is just 16%. Maine's Strategic Plan 2025 indicates that in York County, 3,535,800 trips were needed annually (in 2012) and 607,019 were provided. <sup>16</sup> The baseline goal for the state is to meet 20% of the need for rural services. <sup>17</sup>

# Projects & Improvements

There are no specific projects in Kennebunkport listed in the MaineDOT Work Plan for Calendar Years 2020-2022. However, MaineDOT typically invests time and money in every community each year. MaineDOT made \$43,376 in Local Road Assistance Payments to Kennebunkport in FY20. Pecent maintenance activity completed in Kennebunkport is presented in Table 11-7. This summary of work does not include activities such as snow and ice control that are managed on a larger scale. It also excludes contract work. On the summary of work does not include activities such as snow and ice control that are managed on a larger scale. It also excludes contract work.

Table 11-7. MaineDOT Maintenance Accomplishments In Kennebunkport in 2019 (Source: MaineDOT Work Plan Calendar Years 2020-2021-2022)

Number	Units
50.00	Linear feet of shoulder rebuilt
4.00	Shoulder miles of litter and debris removal
6.00	Shoulder miles of sweeping
2.00	Emergency event responses
2.00	Bridge(s) washed
8.40	Miles of striping applies
13,000	Linear feet of backhoe ditching

Local road projects included in the FY21 budget are included in Table 11-8. Recent projects include North Street sidewalk construction, Turbats Creek Road culvert work, and Goose Rocks Beach roadside improvements.<sup>21</sup>

Two roads in Kennebunkport are rated on <u>MEDOT's Highway Priorities Map</u>: Route 9, a Priority 3 Highway, and North Street/Log Cabin Road, which is a Priority 4 Highway.<sup>22</sup> Table 11-9 provides a general description of the type of roadways that fall in each priority class.

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Table 11-8. Proposed FY21 Sidewalk, Shoulder, Drainage, and Road Rehabilitation Needs (Source: Kennebunkport FY21 Budget)

Road	Start Date	Reconstruction/OL	Roads Cost	Sidewalks Cost	Comments
Wildes District Road (Maine St to Turbats Creek Rd)	Summer 2021	Reconstruct	\$150,000	\$70,000	4" paved shoulders each side for sidewalk
Walkers Lane	Fall 2021	Shim and Overlay	\$33,000	-	-
School Street	Summer 2021	Drainage	\$20,000	-	-
River Road	Fall 2021	Shim and Overlay	\$60,000	-	-
Ocean Avenue (Kings Highway to Chicks Creek)	Spring 2022	Shim and Overlay	\$80,100	-	-
Fairfield Hill Road	Summer 2021	Gravel	\$1,000	-	-

Table 11-9. Highway priority class and priority highways in Kennebunkport (Source: MaineDOT)

	Highway (s) in	
Priority	Kennebunkport	Description of Class
Priority 1 Highway	None	These roads include the Maine Turnpike, the interstate system and key principle arterials like Route 1 in Aroostook County, the "Airline" (Route 9, Bangor to Calais), Route 2 west of Newport, and Route 302. The 1,760 miles of Priority 1 roads represent only 8% of the miles, but carry fully 42% of all vehicle miles traveled in Maine. The Maine Turnpike accounts for 249 miles and 9.2% of the traffic in the above totals.
Priority 2 Highway	None	These roads include high-value arterials like Route 201 from Fairfield to Canada, Route 1 Downeast (Ellsworth to Calais), Route 11 Sherman to Fort Kent and Route 25 from Gorham to NH. All National Highway System (NHS) roads must be HCP 2 or better. The HCP 2 roads total about 1,355 miles. They represent about 6% of the total miles of road but carry 17% of overall traffic.
Priority 3 Highway	Route 9	These roads generally are the remaining arterials and significant major collector highways.  They include Route 1A from Mars Hill to Van Buren, Route 27 north of Eustis and Route 114 from Gorham around Sebago Lake to Naples. These 2,211 miles represent 9% of miles and carry 16% of the traffic.
Priority 4 Highway	North St/Log Cabin Road	These roads generally are the remainder of the major collector highways, minor collector highways and often also part of Maine's unique state aid system, in which road responsibilities are shared between the state and municipalities. These 3,731 miles represent about 16% of total miles, and carry 12% of the traffic. This does not include 76 Marine Highway miles.

Recently, Kennebunkport Public Works completed the Mills Road shoulder widening for bike lanes from Marshall Point Road to Cape Square. This included replacement of all cross culverts and hand-built catch basins with new precast concrete catch basins. Additionally, MaineDOT installed a structural overlay on Mills Road from the Biddeford town line to paving work in 2018 approximately 2,000 feet west of the Goose Rocks Road intersection. This project was part of a three-year reconstruction of Mills Road by the Town and MaineDOT. Work in 2019 also included paving overlay of the following streets: Winter Harbor Road, Willey Road, Towne Street, Mast Cove Lane, Chestnut Street, and the Town Hall Parking Lot. 4

The proposed FY 21 budget for transportation projects is \$819,100. The capital budget for road improvements and sidewalks has declined, while highway and pier funds have increased in recent years (Figure 11-14) The estimated future budget for transportation projects is not expected to change significantly in the next five years and the Department of Public Works anticipates it will reflect the municipal tax rate.

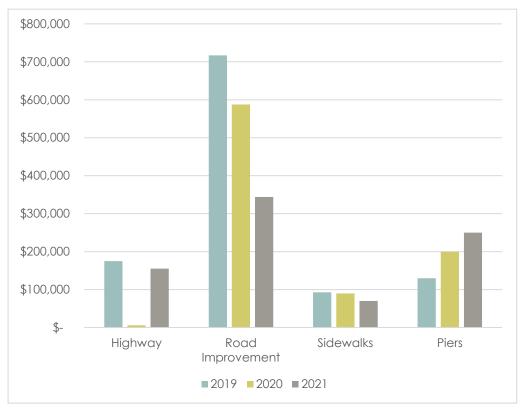


Figure 11-14. Capital budget for highways, road improvements, sidewalks, and piers (Source: Kennebunkport FY21 Budget)

# Regulations & Design Standards

# Local Road Design Standards

Section 6.14 of the Land Use Ordinance (LUO) contains standards for road construction, filling, and grading. Site plan review is required for construction of a road, grading, or filling of land on lots greater than five acres unless the proposed development will serve no more than two residential units, an accessory, or an existing single-family home. For these developments, a permit from the Code Enforcement Officer (CEO) is needed. There are several provisions for roadway and right of way width. These are summarized in Table 11-11.

Table 11-11 Driveway and private road width and right of way regulations (Source: Kennebunkport LUO)

	Width / Right of way
Driveway/Private Road 5oft+ for	12 feet with 5-foot setback
single- or two-family dwelling	from lot line
Driveway/Private Road for 3- unit multiples or 3 detached dwellings	33 feet (2 rods), 16-foot travel lane, centerline of roadway not more than 3 feet off the centerline of the ROW
Driveway/Private Road or 4 or more detached dwellings	50 feet, 20 foot traveled way, centerline of roadway not more than 3 feet off the centerline of the ROW

Within the Shoreland Zone, standards for roads and driveways include a require setback of 75 feet from the protected water body. The Planning Board may approve a reduced 50-foot setback if there is no reasonable alternative provided that mitigation techniques be employed to reduce potential impacts to water resources. The LUO prohibits new roads and driveways

from the Resource Protection Zone, however the Planning Board may grant a permit to construct a road or driveway to provide access to permitted uses within this zone. Road and driveway standards also include minimizing the number of road crossings of watercourses; minimizing road and driveway banks and grades and utilizing erosion and sedimentation controls; constructing drainage features; and proper sizing, design, and installation of culverts and bridges.<sup>25</sup> Parking areas within the Shoreland and Resource Protection Zone (Section 5.10) must meet the shoreline and tributary stream setback requirements for structures for the zone they are located in, with the exception of parking areas for commercial or public piers in conjunction with adjoining commercial areas. Stormwater management is required for parking areas and runoff is not be permitted to flow directly into a body of water, tributary stream, or wetland area. Lastly, the dimensional requirement for parking spaces in the Shoreland and Resource Protection Zone is 10 feet by 20 feet, except for spaces for a vehicle and boat trailer, which shall be 40 feet long.26

Kennebunkport's Subdivision Regulations include standards for roadways, access, sidewalks, and other design elements related to road construction. A summary of selected regulations are included in this chapter; however, this section does not provide a comprehensive review of all pertinent standards. Subdivision applicants must demonstrate compliance with the street design and construction standards contained in Article 12 Section 12.1(B) to be considered for approval by the Planning Board. The Street Design Guidelines are summarized in Table 11-12.

Table 11-12. Street Design Guidelines (Source: Kennebunkport Subdivision Regulations, Revised Feb. 1, 2017)

				Private	Industrial/
Type of Street	Arterial	Collector	Minor	Rights-of-Way	Commercial
Min. ROW Width	80′	50′	50′	50′	60'
Min. Traveled Way Width	44'	24′	20′	18′	30'
Min. Width of Shoulders (each side)	5′	3'	3′	3'	9'
Sidewalk Width	8′	5′	5′	3'	8′
Min. Grade	0.5%	0.5%	0.5%	0.5%	0.5%
Max. Grade <sup>1</sup>	5%	6%	8%	8%	5%
Min. Centerline Radius					
Without super elevation	500′	280′	280′	175′	400′
With super elevation	350′	175′	175′	110′	300′
Roadway Crown <sup>2</sup>	1/4" per ft	1/4" per ft	1/4" per ft	1/4" per ft	1/4" per ft
Min. Angle of Street Intersections <sup>3</sup>	90°	90°	75°	75°	90°
Max. Grade within 75ft of intersection	3%	3%	3%	N/A	3%
Min. Curb Radii at Intersections	30′	25′	20′	20′	30 <sup>′</sup> <sup>4</sup>
Min. ROW Radii at intersections	20′	10′	10′	10′	20′

<sup>&</sup>lt;sup>1</sup> Max. grade may be exceeded for a length of 100' or less

Sidewalks are required in all subdivisions within or partially within areas that are designated as growth and transitional areas. In areas outside of growth areas, sidewalks are required to be installed and connected to the existing sidewalk network if adjacent sidewalks are present. Article 12 of the subdivision regulations contains sidewalk standards.

Subdividers must provide an estimate of the amount and type of vehicular traffic that is anticipated to be generated on a daily basis and at peak hours with their application to the Planning Board. For subdivisions involving 40 or more parking spaces or projects that are projected to generate more than 200 vehicle trips per day, a traffic impact analysis is required. Section 11.5 includes provisions for vehicular access to the subdivision and circulation within the subdivision. Following development, the subdivider is required to maintain all improvements and remove snow on streets and sidewalks until either the municipality accepts the improvements or a lot owners' association assumes control of the street (Subdivision Regulations Section 10.1(G)). A street must be considered and accepted at town meeting to become a public way. In 2018, the Town adopted a new street acceptance policy in 2018 that requires sufficient public benefit

<sup>&</sup>lt;sup>2</sup> Roadway crown is per foot of land width. Gravel surfaces shall have a minimum crown of 3/4" per foot of lane width.

<sup>&</sup>lt;sup>3</sup> Street intersection angles shall be as close to 90° as feasible but not less than the listed angle.

<sup>&</sup>lt;sup>4</sup> Should be based on turning radii of expected commercial vehicles, but no less than 30'.

to justify perpetual maintenance in order for the street to be considered for acceptance as a public way. A street that meets or exceeds the public service need, pedestrian accommodation, and connectivity requirements is considered to provide this sufficient public benefit. When making this determination, the Selectmen classify roads that are proposed for acceptance in the following categories: a) the street leads to a public facility, b) the road connects to other streets or is a thoroughfare, and c) the street provides other public benefit(s).<sup>27</sup>

### Access Management

Section 6.15 of the LUO requires a permit for development of an entry to a public way. Local regulations require the CEO, in cooperation with other agencies of the Town, to review criteria for residential and commercial or industrial uses. For residential uses, the width of entries much be between 10 and 20 feet and located over 20 feet from any intersection. Vehicular and pedestrian traffic volume and conditions much be evaluated. The CEO must also determine that there is no obstruction to the view of any person using the proposed driveway or curb cut. The width of entries to commercial or industrial properties is restricted to 10 to 26 feet, except for parking for libraries in the Village Residential Zone. Driveways shall be located a minimum of 200 feet of any intersection or entry or exit whenever possible. Additional local access management criteria include minimum sight distance requirements of 10 feet for every mile per hour of posted speed limit.28

The Subdivision Regulations include provisions for access management in order to safeguard against hazards to traffic and pedestrians, avoid traffic congestion, provide safe and convenient circulation, and provide adequate access for emergency vehicles and personnel (Section 11.5). If a lot has frontage on more than one street, access must be provided via the street with less potential for traffic congestion and hazards to traffic and pedestrians. Access design requirements are based on estimated traffic volume, ranging from low volume access of 50 or fewer vehicle trips per day to high volume access of 200 vehicle trips or greater per hour. Sight distances based on posted speed limit, vertical alignment, and the maximum number of accesses onto a street are also regulated.

State law requires a that all installations of driveways or entrances on a state or state-aid highway obtain a permit from MaineDOT. A permit from MaineDOT is required prior to issuing a local building permit or subdivision approval on a state highway. North Street, Log Cabin Road, Route 9, and a portion of Main Street are subject to MaineDOT's Access Management Rules. The rules include Basic Safety Standards, which regulate sight distance, driveway width, corner clearance, turnaround area/parking, drainage, intersection angle, and double frontage access. Mobility Arterial Standards, including mobility sight distance, spacing between driveways, corner clearance, off-ramp setbacks, and shared driveway access, apply to roads that are Non-Compact Arterials that (1) have a posted speed limit of 40 mph or more and is part of an arterial corridor located between Urban Compact Areas or Service Centers that carries an average annual daily traffic of at least 5,000 vehicles per day for at least 50% of its length or (2) are part of a Retrograde Arterial Corridor located between Mobility Arterials. There are currently no Mobility Arterials in Kennebunkport. Additional standards apply to driveways onto Retrograde Arterials, which are Mobility Arterials where the access related crash-per-mile rate exceeds the 1999 statewide average for arterials of the same-posted speed limit.29

### Land Use Implications

The Subdivision Regulations require that in situations where future subdivision of abutting parcels is possible, reservation of a 50-foot-wide easement in line with the street to provide continuation of the road and appropriate utilities is required. If future subdivision is not possible, a 20-foot-wide easement for continuation of pedestrian traffic or utilities is required. Dead end streets or cul-de-sacs are limited to 1,000 feet in length.<sup>30</sup>

Furthermore, the Regulations also require that provisions such as rights of way or street stubs be made for street connections to adjoining lots of similar existing or potential use within designated growth areas. Except in situations where connections would encourage substantial through traffic, minor collector and

local streets are required to connect with surrounding streets to permit convenient movement of traffic between residential neighborhoods or facilitate emergency access and evacuation. In non-residential subdivisions, access to adjoining lots or similar existing or potential uses is required if it will facilitate fire protection services or enable the public to travel between the uses without needing to travel on a public street.<sup>31</sup>

Several zoning and land use strategies to reduce vehicle miles traveled and greenhouse gas emissions are presented in the Energy Chapter. These include, for example, permitting greater residential density and mixed uses in certain areas of town to reduce the need to travel for certain goods and services, and amending the site plan review regulations to require installation of EV stations for commercial development of a certain scale.

# Transportation System Concerns and Conflicts

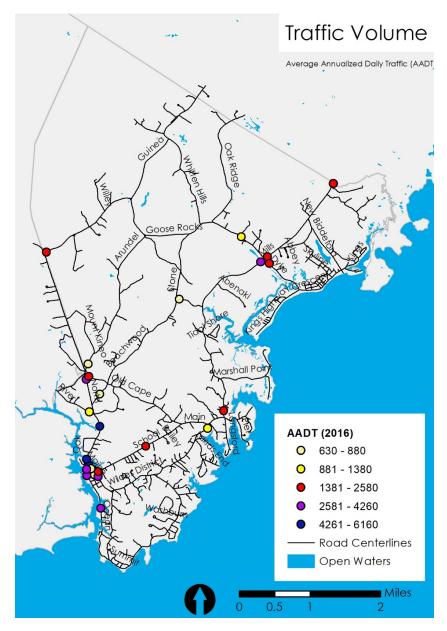
### Traffic

MaineDOT monitors traffic volumes throughout the state and produces Average Annualized Daily Traffic (AADT) volume data. Table 11-15 provides a summary of recent traffic count data (2007-2016) as well as data from 2000 for comparison. Data was available for this comparison at 24 locations. The AADT increased at half of these locations by between 4% and 79%. A map of the locations surveyed in 2016 and the AADT of these locations is shown in Figure 11-14.

Table 11-13 Traffic Count Locations and Average Annualized Daily Traffic Volume (Source: MaineDOT)

Location	2000	2007	2010	2013	2016	% Change from 2000 to most recent count
GOOSE ROCKS RD NW/O SR 9	770	2007	1,170	1,340	1,380	79%
GOOSE ROCKS RD SW/O WHITTEN HILL RD	860	1,060	1/1/0	1,350	1/300	57%
S MAIN ST S/O WILDES DISTRICT RD	540		810	770		43%
WHITTEN HILL RD NW/O GUINEA RD	600			840		40%
WALKER LN SE/O NORTH ST	1,630	2,230	2,070	2,050	2,150	32%
DYKE RD SE/O SR 9	1,720		1,990	2,060	2,020	17%
ARUNDEL RD NE/O LOG CABIN RD	670	920	840	910	760	13%
MAINE ST SE/O SOUTH ST	2,480	2,770				12%
OLD SR 9 SE/O SR 9 (MILLS RD)	580			640		10%
OCEAN AVE SE/O WILDES DISTRICT RD	1,490		1,640			10%
NORTH ST S/O WALKER LN	2,970	3,070	3,030	2,960	3,170	7%
SR 9 (POOL RD) SW/O OAK RIDGE RD @ TL	2,270		2,450	2,140	2,370	4%
NORTH ST S/O RIVER RD	5,020			4,860	5,000	0%
OCEAN AVE SW/O SUMMIT AVE	1,810	2,000		1,800		-1%
SR <sub>9</sub> NE/O GOOSE ROCKS RD	2,450		2,420	2,130	2,370	-3%
NORTH ST NE/O TEMPLE ST @ BR	5,530	6,070	5,110	5,200	5,330	-4%
SR 9 SW/O DYKE RD	3,090		3,040	2,850	2,960	-4%
WILDES DISTRICT RD SW/O SR 9	1,320		1,320		1,260	-5%
WILDES DISTRICT RD E/O MAINE ST	1,970		2,010	1,880		-5%
SR <sub>9</sub> W/O DISTRICT RD	3,250		3,210	3,050		-6%
MAINE ST NW/O SR 9 (SPRING ST)	6,320		5,700	5,660		-10%
SR <sub>9</sub> N/O PIER RD	2,820		2,790	2,550	2,380	-16%

Location	2000	2007	2010	2013	2016	% Change from 2000 to most recent count
SR 9 (SPRING ST) SW/O SR 9 (MAINE ST)	8,610	,	6,680	6,090	6,160	-28%
SR 9 (MAINE ST) SE/O SR 9 (SPRING ST)	8,510		5,980	, 3		-30%
ARLINGTON ST SW/O KINGS HIGHWAY	,3		3,3	410		NA
BEACHWOOD AVE E/O STONE RD @ BR				770	780	NA
BEACHWOOD AVE NE/O NORTH ST		770		740	730	NA
CROSS ST S/O SR 9 (SPRING ST)				170	, ,	NA
ELM ST SW/O MAINE ST			870	760	880	NA
FOX FARM RD NE/O GOOSE ROCKS RD			,	160		NA
GOOSE ROCKS RD NE/O LOG CABIN RD		1,720	1,920	1,910	2,230	NA
KINGS HIGHWAY E/O OCEAN AVE		,,	73	790		NA
KINGS HWY NE/O DYKE RD				1,590		NA
LANGSFORD RD S/O PIER RD			450	570		NA
OCEAN AVE .17 MI NE/O SUMMIT AVE			13	1,700		NA
OCEAN AVE N/O EAST AVE @ BR #5899				3,650	3,470	NA
OCEAN AVE NW/O CHESTNUT ST			4,070	3,880	4,000	NA
OCEAN AVE S/O KINGS HIGHWAY			, ,	2,510		NA
OCEAN AVE S/O SR 9 (DOCK SQ)				3,700	4,260	NA
OCEAN AVE SE/O GREEN ST		4,270		3,930		NA
PIER RD E/O LANGSFORD RD			1,690	1,520		NA
RIVER RD NW/O NORTH ST		1,300	1,280	1,360	1,340	NA
SR 9 (MAINE ST) NW/O SR 9 (SCHOOL ST)		6,380	5,850	5,430	5,530	NA
SR 9 (SCHOOL ST) NE/O ACADIA RD		75	3, 3	1,940	3133	NA
SR 9 (SCHOOL ST) NE/O MAINE ST		3,120	2,830	2,670	2,580	NA
SR 9 (SPRING ST) SW/O TEMPLE ST		7,510	, 3		13	NA
SR 9 NE/O WASHINGTON CT		773		2,210	2,130	NA
TEMPLE ST (OW) NW/O SR 9 (SPRING ST)				930	, 3	NA
UNION ST SW/O SR 9 (MAINE ST)					630	NA
WHITTEN HILL RD SE/O GUINEA RD				300	3	NA
WILDES DISTRICT RD E/O OCEAN AVE	1,340					NA
MAINE ST SE/O ELM ST	75 1		3,180	3,170	3,160	



Major vehicular traffic generators include:

- School
- Summer tourists (pedestrian and vehicular), tour buses (interstate coaches, cruise ship passengers)
- Dock Square
- Beaches
- Christmas Prelude in early December

Pedestrian congestion occurs during the summer in Dock Square.

Figure 11-15 2016 traffic count locations and average annualized daily traffic volume (Source: MaineDOT)

#### Commuter Trends

Data from the American Community Survey (ACS) shows that the average commute time for Kennebunkport workers ages 16 and over is 30 minutes. Figure 11-16 displays time traveled and mode of transportation to work for this population. Nearly 25% of workers leave home at 9:00 a.m. or later. Roughly 20% leave home between 7:30 a.m. and 7:59 a.m. (Figure 11-17). Approximately 1,570 vehicles are used for commuting by residents.<sup>32</sup>

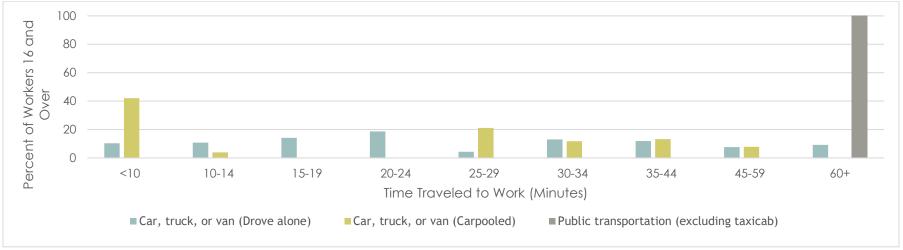


Figure 11-16 Time traveled to work (Source: ACS 2014-2018 5-year estimates)



Figure 11-17 Time workers leave home to travel to work (Source: ACS 2014-2018 5-year estimates)

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#### Crashes

From 2000 to 2020 there were 530 crashes that are on record in Kennebunkport. The greatest number of crashes occurred during the months of May through October with the highest number occurring in July (76 crashes or 14% of all crashes). Crashes peaked from 11am to 4pm. A majority of crashes (43%) involved a vehicle going off the road. Between 2000 to 2020, four crashes involved a pedestrian and 11 involved a bicyclist.<sup>33</sup> Over 70% of crashes in the last decade occurred during clear weather conditions. Most crashes occurred on roads with a posted speed

limit of 25 miles per hour (220 crashes) or 30 miles per hour (118 crashes). A vast majority of crashes involved passenger cars, followed by sport utility vehicles and pickup trucks. Transit busses were involved in two crashes while school busses, motor coaches, and other busses were involved in four, one, and three crashes, respectively.<sup>34</sup> Figures 11-18 and 11-19 show a snapshot of crash data in Kennebunkport. A map of crash locations in 2014-2018 is included in Figure 11-20.



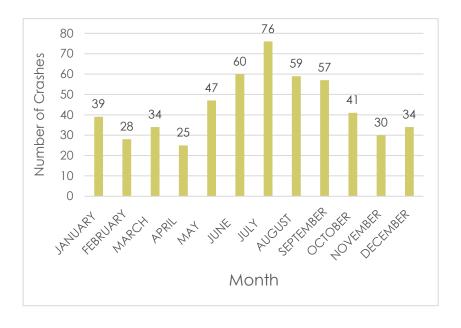
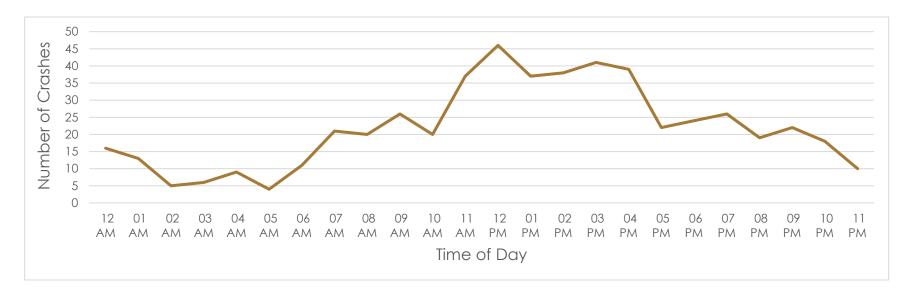


Figure 11-18. Maine Public Crash Data Snapshot: posted speed limit and month crash occurred (2000-2020) (Source: Maine DOT)

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	Number of Crashes
Traffic Control	(2014-2018)
None	203
Stop Signs - Other	40
Curve Warning Sign	9
Stop Signs - All Approaches	6
Other	3
Advisory/Warning Sign	2
Officer, Flagman, School Patrol	2
Yield Sign	2
No Passing Zone	1
Traffic Signals (Stop & Go)	1

Light Condition	Number of Crashes (2014-2018)
Total	269
Daylight	189
Dark - Not Lighted	41
Dark - Lighted	29
Dusk	7
Unknown	2
Dawn	1

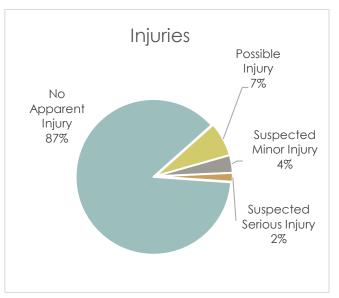


Figure 11-19 Maine Public Crash Data Snapshot: time of day, traffic control. Light conditions, and injuries associated with crashes (2000-2020) (Source: Maine DOT)

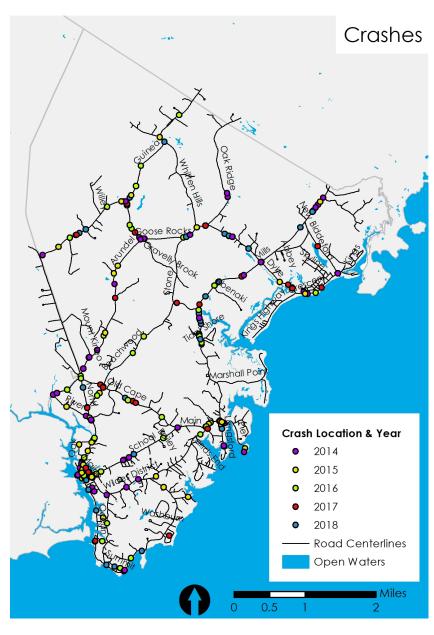


Figure 11-20 Location of crashes in 2014 – 2018 (Source: MaineDOT)



## Climate Impacts

As little as 1.2 feet of sea level rise above the highest astronomical tide is projected to impact a total of 6,860 feet (1.3 miles) of roadways in Kennebunkport (Table 11-14). Under the highest sea level rise scenario of 10.9 feet, nearly 99,500 feet (18.8 miles) of roadway could be inundated. Town roads account for over 80% of road segment feet inundated under each sea level rise scenario. The feet of impacted roadways show in Table 11-14 represents the total length of roadways that fall within the extent of projected sea level rise scenarios. This value does not reflect the full magnitude of impacts to roadways associated with sea level rise, such as portions of roads that become inaccessible or reduced connectivity of the street network. Figure 11-21 displays the location of vulnerable road segments under each scenario.

Table 11-14	Feet of Roadway	Inundated by	/ Projected Sed	r level Rise

Sea Level Rise Scenario	Length of Inundated Road Segments by Road Class (Feet)				
	Town	MaineDOT	Private	Total	
HAT + 1.2 ft	5,856	273	731	6,860	
HAT + 1.6 ft	8,959	383	821	10,163	
HAT + 3.9 ft	38,744	1,062	3,222	43,028	
HAT + 6.1 ft	56,437	2,508	4,485	63,430	
HAT + 8.8 ft	71,415	6,849	6,786	85,050	
HAT + 10.9 ft	80,572	9,012	9,880	99,464	

Floods have impacted transportation infrastructure in the past. One instance was occurred in January 2018, when the municipal parking lot in Dock Square flooded during a storm event.<sup>35</sup> Ocean Ave near the River Club and the Cape Porpoise Causeway have also flooded. The intersection of Kings Highway and Dyke Road was reconstructed recently due to flooding.





Flooding in the Dock Square parking lot, January 2018 (Photos provided by Craig Sanford)

Over 72% of respondents to Comprehensive Plan Mini Survey #3 in April 2021 indicated that they "had to drive an alternate route due to a flooded roadway." One respondent indicated that when the road floods there is no alternative way to get in or out from their home.

In addition to flooding associated with sea level rise, roadways may be vulnerable to other impacts of climate change including sea level rise induced groundwater rise and increased temperatures. Both of these pose a risk to the integrity of pavement and longevity of the roadway. The implications of damage to roadways range from impacts to mobility to impairment of emergency responder access, to increased cost of maintenance and repair costs.

Increased precipitation associated with climate change will likely have widespread impacts on transportation infrastructure, including the need to upsize culverts and stormwater management systems. Greater flow rates in streams will also likely result in increased scour and bridge repair needs and costs. Since 2001, the Town has required that replacement stream crossing structures have longer span lengths that previous spans. The Town may find it is necessary to further increase the required span length in the future to accommodate changes in precipitation and intense storm events.



Figure 11-21. Road segments inundated by Sea Level Rise (SLR) under six SLR scenarios. The color displayed represents the highest scenario that the road is vulnerable under. A segment that is vulnerable under a 6.1 ft scenario is also vulnerable under the lower scenarios of the 1.2 ft, 1.6 ft, and 3.9 ft scenarios, for example. (Source: ME Geological Survey)

https://www1.maine.gov/mdot/publications/docs/plansreports/MEFinalStrategicPlan2025.pdf <sup>17</sup> lbid.

 $https://www.maine.gov/mdot/projects/workplan/docs/2020/WorkPlan2020\_2021\_2022\%20Jan\_14\_2020.pdf$ 

<sup>19</sup> Maine Department of Transportation. Work Plan for Calendar Years 2020-2021-2022. Kennebunkport.

https://www.maine.gov/mdot/projects/workplan/data/workplan/town/Kennebunkport.pdf <sup>20</sup> lbid.

https://www.maine.gov/mdot/projects/workplan/docs/2018/Highway\_Corridor\_Priorities%20\_Nov2017\_opt.pdf

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<sup>&</sup>lt;sup>1</sup> Maine Road Classification. https://www.maine.gov/mdot/csd/docs/roadwayinfo/chpt3o4.pdf and https://www.maine.gov/mdot/csd/docs/roadwayinfo/RoadClassification.pdf

<sup>&</sup>lt;sup>2</sup> Provided by Nicole Evangelista, Deputy Treasurer & Public Works Administrative Assistant, Town of Kennebunkport via email December 23, 2020.

<sup>&</sup>lt;sup>3</sup> Town of Kennebunkport 2019 Annual Report. https://www.kennebunkportme.gov/sites/g/files/vyhlif3306/f/uploads/2019\_kennebunkport\_annual\_report\_6-15-2020\_good\_one\_for\_website.pdf

<sup>&</sup>lt;sup>4</sup> Ibid.

<sup>&</sup>lt;sup>5</sup> Ibid.

<sup>&</sup>lt;sup>6</sup> Maine Department of Transportation GIS data. Municipal Planning Assistance Program. Planning Data. Fall 2019.

<sup>&</sup>lt;sup>7</sup> MaineDOT. Keeping our Bridges Safe 2014 Report. https://www.maine.gov/mdot/pdf/kobs2014.pdf

<sup>8</sup> Ibid.

<sup>&</sup>lt;sup>9</sup> MaineDOT Fact Sheet. Polices and Laws Related to Bridges in Maine. https://www.maine.gov/mdot/publications/docs/brochures/bridge-upgrade-fact-sheet-o92019.pdf

<sup>10</sup> Ibid.

<sup>&</sup>lt;sup>11</sup> Unites States Bicycle Route 1 USBR 1. Map Book Maine. 2013.https://www.maine.gov/mdot/bikeped/docs/USBR%201%20Mapbook%20DRAFT.pdf

<sup>&</sup>lt;sup>12</sup> Explore Maine. Explore Maine by Bike. Tour 7 Southern Coast. http://www.exploremaine.org/bike/beaches/southerncoast.shtml

<sup>&</sup>lt;sup>13</sup> Smart Growth America. What are Complete Streets? https://smartgrowthamerica.org/program/national-complete-streets-coalition/publications/what-are-complete-streets/

<sup>14</sup> Ibid.

<sup>&</sup>lt;sup>15</sup> Maine Department of Transportation. Locally Coordinated Plan for United States Department of Transportation Federal Transit Administration. Public Transportation Programs. March 2019. https://www.maine.gov/mdot/transit/docs/lcp/2019/Final9\_16\_19\_LCP.pdf

<sup>&</sup>lt;sup>16</sup> Maine Department of Transportation. Maine Strategic Transit Plan 20205.

<sup>&</sup>lt;sup>18</sup> Maine Department of Transportation Three Year Work Plan. 2020 Edition.

<sup>&</sup>lt;sup>21</sup> Town of Kennebunkport Department of Public Works. https://www.kennebunkportme.gov/public-works-department

<sup>&</sup>lt;sup>22</sup> Maine Department of Transportation. Highway Corridor Priorities.

<sup>&</sup>lt;sup>23</sup> Town of Kennebunkport 2019 Annual Report. https://www.kennebunkportme.gov/sites/g/files/vyhlif3306/f/uploads/2019\_kennebunkport\_annual\_report\_6-15-2020\_good\_one\_for\_website.pdf

<sup>&</sup>lt;sup>24</sup> Town of Kennebunkport 2019 Annual Report. https://www.kennebunkportme.gov/sites/g/files/vyhlif3306/f/uploads/2019\_kennebunkport\_annual\_report\_6-15-2020\_good\_one\_for\_website.pdf

<sup>&</sup>lt;sup>25</sup> Town of Kennebunkport Code. Chapter 240 Land Use Ordinance. https://www.ecode36o.com/33969379

<sup>&</sup>lt;sup>26</sup> Ibid.

https://www.maine.gov/mdot/traffic/docs/accessmgmt/229c299dec2013.pdf

<sup>30</sup> Kennebunkport Subdivision Regulations, Revised Reb.1, 2017.

https://www.kennebunkportme.gov/sites/g/files/vyhlif3306/f/uploads/kpt\_sub\_regs\_february\_1\_2017\_approved.pdf  $^{31}$  lbid.

- <sup>32</sup> 2014-2018 American Community Survey 5-year estimates.
- <sup>33</sup> Maine Public Crash Data Query Tool, available at Maine Public Crash Query Tool <a href="https://mdotapps.maine.gov/MaineCrashPublic/PublicQueryStats">https://mdotapps.maine.gov/MaineCrashPublic/PublicQueryStats</a>, accessed 11/12/20.
- 34 Ibid.
- <sup>35</sup> Town of Kennebunkport 2019 Annual Report. https://www.kennebunkportme.gov/sites/g/files/vyhlif3306/f/uploads/2019\_kennebunkport\_annual\_report\_6-15-2020\_good\_one\_for\_website.pdf

<sup>&</sup>lt;sup>27</sup> Town of Kennebunkport 2019 Annual Report. https://www.kennebunkportme.gov/sites/g/files/vyhlif3306/f/uploads/2019\_kennebunkport\_annual\_report\_6-15-2020\_qood\_one\_for\_website.pdf

<sup>&</sup>lt;sup>28</sup> Town of Kennebunkport Code. Chapter 240 Land Use Ordinance. https://www.ecode36o.com/33969379

<sup>&</sup>lt;sup>29</sup> Maine Department of Transportation. Chapter 299: Highway Driveway and Entrance Rules.