

Chapter D

Transportation and Mobility

1. Purpose

The transportation system and mobility are some of the most important factors that influence a community's economic well being, and support (or negatively impact) the health and cohesion of its population. The transportation system, including parking, is also one of the most expensive infrastructure elements a town must maintain. This section will discuss and analyze the major transportation issues facing Brooksville. Specifically, this chapter:

- a) discusses the extent, use, condition and capacity of Brooksville's transportation system;
- b) assesses the adequacy of this system to handle current and projected demands; and
- c) accounts for areas where sustainable transportation alternatives and long-term cost savings in infrastructure management may exist.

2. Key Findings & Issues

In 2018 Brooksville had approximately 50-57 miles of public roadways, with 15 State miles, and the remainder town roadways. The pressing issues are motorists driving at unsafe speeds for the existing road conditions, lack of enforcement, and accidents in certain areas, particularly the Herrick Road between Robin Hood Camp and route 15, and Coastal Road between Timothy's Lane and Route 15. The public opinion survey favored improvements to pedestrian and bicycle infrastructure. This showed no change from 2006.

3. Key Findings & Issues from the 2006 Plan

In 2006 the conditions were substantially the same as in 2018, described above, but the private road mileage was lower in 2006.

4. 2018 Public Opinion Survey Results

Results from the 2018 public opinion survey showed general satisfaction with the Town's maintenance of roads and snow removal and sanding, with nearly 80% and 70% respectively, saying it was adequate or better. A transportation topic that respondents expressed concern about was Bicycle Paths/Lanes, with 68% supporting either improvement/attention now, or further study. Pedestrian infrastructure, while not of as much concern as bicycle, still received 57% support for paths and trails, while sidewalks did not generate strong interest with only 42% either in support of immediate attention, future attention, or further study. Respondents' opinion of Public Transportation was divided with 51% saying it needs attention now, soon, or further study and 31% not thinking it an issue and 18% unsure. 50% think Senior Citizen Service is an issue with 35% unsure. A large majority, 63%, did not think summer traffic is an issue in Brooksville.

4. Brooksville's Roads

Classification of Roads:

Roads are classified into two major categories, administrative and functional. "Administrative" defines a road in terms of what party or entity is responsible for maintenance. For example, a state highway is defined as a State Road; a residential street that is not part of a state route is a Town Way; and a Private Lane or road is maintained by either the property owner or a homeowner association.

The functional classification of roads divides roads into three classifications based on geometric design parameters such as width, speed, and traffic volume capability. The three functional classifications are:

Arterials – Roads that connect major settlements and are designed for high-speed travel with limited access points. Routes 1 and Route 95 are examples of arterial roads. Brooksville has no arterial roads.

Collectors – Roads that support traffic within a town or group of small towns or disconnected neighborhoods. They are designed to accommodate moderate speeds, 35 – 45 mph and a moderate traffic volume. Routes 175 and 176 are examples of collectors.

Local – Roads that are lightly traveled and comprise the network between residential areas and residential areas and downtowns. They are often narrower than the previous two road types and accommodate speeds under 35 mph. Most roads in Brooksville are classified as local roads.

Development considerations are often influenced by the road classification, especially when considering where to locate new development and what types.

Road Inventory and Conditions:

Brooksville maintains on the order of 40 miles of public, local roads that are not classified as collectors. The Town does not maintain private roads. Heavy industry and shipping would not be well suited to the travel patterns and character of the town on any of the existing local public roads, except possibly for the very short stretch (0.31 miles) of Route 15 that crosses part of Brooksville known as "the porch". Table D – 1 provides further details on road mileage and classifications as provided by the Maine Department of Transportation (DOT).

**Table D-1
Brooksville's Public Road Inventory (per Maine DOT)**

Maine DOT #	Name and Condition	Collector	Local	Total
0015X	Route 15	B	0.31	0.31
0175X	Route 175 (Bagaduce)	B	5.02	5.02
0176X	Route 176 (Coastal)	B	10.09	10.09
00420	(off Bagaduce Rd)	B	0	0.06
01748	Back Rd	C	0	0.85
01807	Bakeman Rd	B	0	0.3
01810	Black Bear Rd	C	0	0.2
00419	Blake Rd	na	0	1.91
01280	Breezemere Rd	C	0	1.19
01276	Buck's Harbor Marina	na	0	0.12
00416	Cape Rosier Rd	B	0	4.05
01278	Condon Point Rd	B	0	0.2
00423	Cornfield Hill Rd	B	0	0.32
01281	Dog Island Rd	B	0	0.8
00410-11	Ferry Rd	B	0	1.11
01748	Goose Falls Rd	B	0	1.47
00419	Harborside Rd	B	0	1.03
01748	Harborside Rd	B	0	3.21
03137	Hay Landing Rd	B	0	0.16
00413	Henry Point Rd	B	0	0.69
00427	Herrick Rd	B	0	2.96
01279	Horseshoe Cove Rd	B	0	0.73
00429	Indian Bar Rd	C	0	0.93
00411	Jones Point Rd	B	0	0.86
01290	Mills Point Rd	B	0	0.86
00426	Norumbega Rd	C	0	1.1
00436	Old County Rd	C	0	0.46
01284	Old Mine Rd	C	0	0.15
01808	Old Mine Rd	B	0	0.1
01277	Otis Gray Rd	B	0	0.25
01288	Poor Farm Rd	B	0	0.24
01283	Red Point Rd	C	0	0.7
00843	Reynolds Rd	B	0	0.26
00412	South Wharf Rd	A	0	0.97
00421	Timothy's Lane	A	0	0.17
01286	Town House Rd	B	0	0.39
01809	Town Landing Rd.	B	0	0.41
00414	Varnumville Rd	B	0	2.64
00419	Weir Cove Rd	B	0	1.22
00415	Wharf Rd	A	0	0.61
TOTAL MILEAGE		15.42	33.68	49.1
This list does not include all E911 roads, or any private roads or long driveways				
<i>Source: Maine Department of Transportation</i>				

There are several discrepancies between the information on Table D-1, provided by the Maine DOT, and the E-911 database kept by the Town. E-911 roads include all public roads, but also private roads, long driveways and other non-town roads (any road the town is not responsible for) that are catalogued for emergency response purposes. Towns are required to have up-to-date catalogues of all roads, both public and private, for both maintenance planning and first responder access. The following roads on Table D-1 are classified as private roads by the E-911 database: Blake Rd, Buck's Harbor Marina, and Mills Point Rd. Also, the E-911 database shows several roads as public, which do not appear in the Maine DOT data of Table D-1. These are Bridge Rd, Dodges Point Rd, Hawes Farm Rd, Prentice Point Rd, Red Trail, Steamboat Wharf Rd, Undercliff Rd, Young's Point Rd, and a portion of Jarvis Gray Rd. Of these, only Bridge Road is probably included in the DOT's Collector Road category.

The E-911 database also shows different mileages for some of the roads listed in Table D-1. (For example, Table D-1 shows 10.09 miles for the collector Route 176, whereas the Town E-911 database shows 10.44 miles for Coastal Road.) The Town's E-911 database tallies up a grand total of 57 miles of public roads in Brooksville, including the collectors. These discrepancies with the DOT data should be ironed out at some point.

Table D-1 also gives an assessment of road conditions as evaluated by the Town Road Commissioner. The key is as follows:

- A = Excellent
- B = Acceptable
- C = Needs Work
- D = Needs Redesign

Traffic Volumes:

Traffic volumes in Brooksville have not significantly changed since 2011, and the amount of daily traffic remains stable. Some roads, such as State Routes 15, 176 (Coastal Road) and parts of Cape Rosier had a slight increase in traffic volumes, while other roads had slight declines in daily traffic. Table D-2 has the details.

**Table D-2
Traffic Volumes as Average Annual Daily Traffic (AADT)**

Location	2011	2014	2017
35006: IR414(Varnumville Rd) SW/O SR 176	NA	440	430
59908: ST 176 NW/O IR414 (Varnumville Rd)	NA	350	280
65208: ST176 NW/O IR1289 (Young's Point Rd)	530	470	470
44405: IR 427(Herrick Rd) S/O SR 176	NA	350	NA
32704: IR436 (Old County Rd) SE/O SR 15/175	NA	230	NA
32705: ST 15/175 S/O SR175	NA	2750	3040
32708: SR 175 NW/O SR 15	1210	1130	1150
34307: SR176 (Coastal Rd) W/O SR 175	910	920	1020
34301: SR 175 (Walkers Corner) N/O SR 176	340	360	370
34401: SR 176 N/O IR 416 (Cape Rosier Rd)	560	610	620
34407: IR 416 (Cape Rosier Rd) W/O SR 176	550	560	620
34405: SR 176 S/O IR 416 (Cape Rosier Rd)	680	730	710
39773: IR 1748 (Goose Falls Rd) NE/O IR 1808 (Old Mine Rd)	NA	NA	60
34704: IR 419 (Weir CV) SE/O IR 416 (Cape Rosier Rd)	NA	260	NA
<i>Source: Maine Department of Transportation</i>			

Definition of terms: SW =South West, SE = South East, SW/O = South West of, SE/O = South East of, NW =North West, N/O = North of, S/O = South of, W/O = West of.

It is important to note that factored Annual Average Daily Traffic counts (AADT) do not show seasonal fluctuations in traffic volumes, such as peak tourism season. Therefore, road Level of Service ratings (LOS), or the amount of congestion, is an average based on the AADT and road width. Many of these roads had increased daily traffic volume and a lower LOS in peak tourist seasons as well as an increased use by cyclists and pedestrians. Many residents in Brooksville

are seasonal, and the population increase with summer residents also impacts these figures. Traffic counts will also invariably change as Brooksville’s population increases. It will be important to work with Maine DOT to have accurate and timely AADT updates for road maintenance planning and the location of new private roads or roads constructed in future subdivisions, to avoid conflict and decreased LOS in all seasons. The Town does have an ordinance governing the technical aspects of how driveways intersect with public ways.

High Crash Locations:

High crash locations (HCL’s) both by intersection (node) and section (link) are another way to identify traffic problems. HCL’s are ranked by their critical rate factor (CRF), which measures the extent to which a given road segment has more accidents than comparable road segments, and the severity of those accidents. Brooksville has no HCLs, either current or historic. However, there are several locally identified areas of concern, listed on table D – 3.

**Table D – 3
Areas of Local Traffic Safety Concern**

Road Name & Location	Begin Node	End Node	Total Crashes	Percent Injury	Fatalities	Injuries	CRF [Critical Rate Factor]
Coastal & Condon Point Rd	22738	23396	0	0	0	0	N/A
Coastal & Timothy Lane	23396	22737	2	0	0	0	N/A
Coastal Road east of Buck’s Harbor to SR 15	22706	22698	6	0	0	0	N/A
Stover Corner	22758	N/A	0	0	0	0	N/A
Herrick Rd east of Robin Hood Rd to Sedgwick Town line	22683	22684	3	33%	0	1	N/A
<i>Source: Maine Department of Transportation</i>							

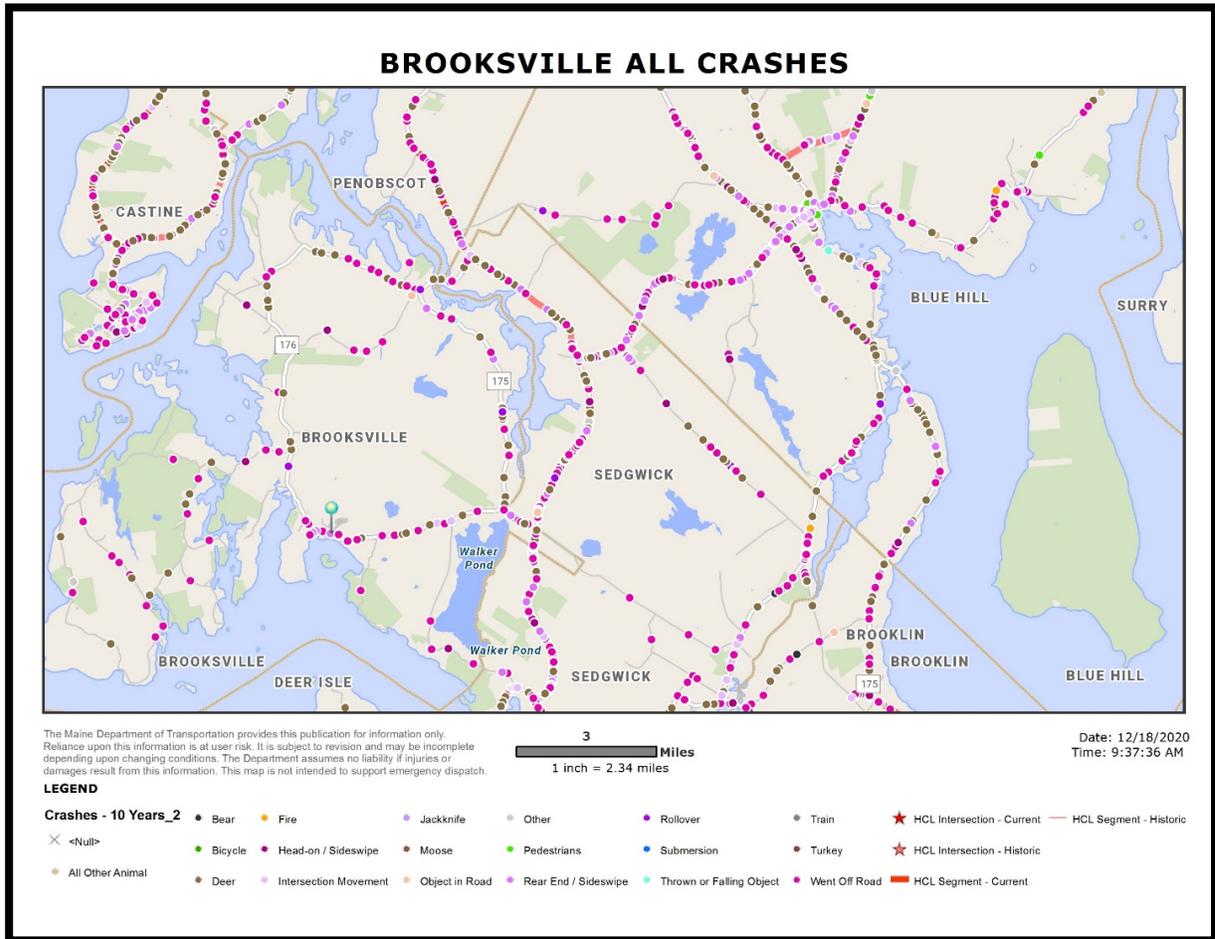
The road link between nodes 22738 to 23396, intersections of Breezemere Road and Coastal Road (SR 176) to Timothy Lane and Coastal Road (SR 176) does not have any recorded accidents between the years 2010 to 2020. While there are no recorded crashes, this site is documented due to local concerns of visibility due to the curves, hills blocking views and many accessing driveways and other roads. These factors, combined with speed, could all

contribute to a future traffic conflict and the Town seeks to further address this issue. Stover Corner, Node 22758, also represents a location with to date, no crashes/conflicts. However, due to the posted speed and sharp right turn, and proximity to the local school, the town also is concerned about potential future safety issues even though the location does have good sight lines and lacks many obstructions due to the pastoral landscape and wide ditches along the roadway. Furthermore, Herrick Road, east of Robin Hood Road to the Sedgwick Town Line has many curves and hills that obstruct views and narrow shoulders. This section of road presents challenges not only to drivers but also pedestrians and cyclists.

The other locations were all sites of crashes between 2010 - 2020, though not enough to require being designated as High Crash Locations. In these locations contributing factors range from Deer Hit, Road/Weather Conditions and Speed-Too-Fast for Road Conditions, all with no personal injury and only property damage recorded.

While Brooksville currently does not have any HCLs and benefits from a comparatively lower crash frequency and injury rate than neighboring towns, this could change as more residents and tourists use the roads in Brooksville. Map D-1 documents all crashes in Brooksville and surrounding towns between 2010 and 2020. Most crashes in town and the region are classified as Went-Off-Road, followed by Deer/Animal Hits. However, Pedestrian/Bicycle Hits, represented by the green dots, do occur in Sedgwick, Blue Hill, and Castine. Though rare, these accidents mostly occur on the collector roads, such as SR 176, 175 and 15. The comprehensive planning committee has identified potential future pedestrian conflicts occurring as more residents report walking and bicycling for recreational and transportation purposes in Brooksville. Many walkers and runners do not seem to realize that it is for their own protection that Maine law states “Where sidewalks are not provided, a pedestrian shall walk facing approaching traffic on the left side of the public way or the way’s shoulder when practicable.” (MRSA 29-A Ch 19 sec 2056).

**Map D-1
Brooksville & Surrounding Towns - All Crashes 2010 - 2020**



Parking:

The Town of Brooksville maintains the following municipal parking areas:

- The Town office with 33 spaces
- The Community Center with 37 spaces
- Betsy’s Cove Town Landing with 7 spaces
- Elementary School with 30 spaces
- Sedgwick-Brooksville Landing at Walker’s Pond with 30 car and 5 trailer spaces
- Bagaduce Town Landing in North Brooksville with 6 spaces
- Dodge’s Point Town Landing with 10 spaces
- South Wharf Road Access with 5 spaces
- Bakeman’s Beach with 7 spaces

The Betsy’s Cove Town Landing, near the “Golden Stairs” off Route 176, presents a particular challenge for parking. Vehicles may only enter from one direction along Route 176, and

vehicles with trailers cannot park at the parking lot. This presents a major challenge to visiting boaters who have nowhere to park their vehicle and trailer after unloading their boat. Adequate parking is often unavailable for large public events, such as gatherings at the school, the Community Center or, during peak tourism season, for the Farmer's Market.

5. Pedestrian & Bicycle Infrastructure

Brooksville has no dedicated pedestrian and bicycle infrastructure connecting major locations, such as the school, store, parks, and waterfront access areas. Creating such connections is a challenge because many of the roads where dedicated lanes would be desirable are narrow and have no shoulders. These conditions impact residents' ability to safely walk and cycle, particularly in the winter months and at night. Despite the infrastructural limitations, many residents engage in walking and bicycling for recreation. In seasonal months Brooksville's roads are popular for bicycle tourists, and in fact are recommended routes on several public websites that serve bicycling enthusiasts.

Increased access by non-motorized users to the transportation system can lead to higher chances of motorist-pedestrian and motorist-cyclist conflict (crashes) without proper planning and adjustments to the current infrastructure. The Bicycle Coalition of Maine (BCM) has several potential options that may be applicable in Brooksville. These range from temporary installations that do not impact road geometry (for example re-positionable solar powered radar speed indicator signs, especially in summer) to educational programming for the local schools and community groups. The Town could provide all residents as well as lodgings with copies of the Maine Bicycling and Pedestrian Laws document published by the Maine Department of Transportation. Addressing pedestrian and cyclist safety will be an important topic for the town to consider as the number of such users increases. Improving the opportunities for residents and visitors to walk and bike safely will be an investment in the health of all.

6. Public Transportation and Mobility Issues

Brooksville does not have regular public transportation or mass transit available. Downeast Community Partners provides limited services for eligible clients referred by Maine Department of Health and Human Services. Bangor offers year-round bus connections to Portland and Boston via Greyhound Bus lines and Concord Coach lines, but there is no public transportation to connect to either of these carriers. Although the Island Explorer provides regular bus service within Hancock County, this service does not stop in Brooksville. Brooksville residents must drive or be driven to transit locations.

As the average age of Brooksville's residents increases, many residents will require transportation to important medical appointments, shops and general social activities. The only organization that currently provides rides for seniors is At Home, a program of Downeast Community Partners that serves Blue Hill Peninsula towns. Recent developments in mobile software applications may enable Mobility as a Service (MaaS) options for Brooksville's residents. Such services include on-demand and peak travel time ride shares such as are to be found with ITNAmerica, a nonprofit ride-sharing service for seniors and the visually impaired founded in 1995 in Portland ME. There is grant funding available to explore MaaS options.

The closest airports are in Bangor and Trenton. Bangor International Airport has an 11,500 ft. runway with regularly connecting flights to Boston and New York City, along with chartered flights to Florida. The airport is also staffed with Customs and Border Protection Officers and Agents to clear passengers arriving from foreign points of entry. Bar Harbor – Trenton Airport in Trenton offers regular service to Boston and other regional cities on the east coast of the United States. Local airports for private use are located in Blue Hill and Stonington.

Since the closing of the Verso Mill in Bucksport, freight rail service has discontinued to much of Hancock County. There is no passenger rail service in Hancock County, although there is a short-distance scenic railroad ride in Ellsworth that operates from May to October.

Local Transportation & Mobility Issues:

Parking remains an important local issue along with road maintenance and repair. As mentioned before access to MaaS is a current and future necessity for many Brooksville residents. This need will only increase as Brooksville’s population continues to advance in age. Accomplishing Brooksville’s age-in-place goals will require alternative means of mobility for elderly and impaired residents, especially to reach healthcare and other services. Alternative mobility support is also complemented by a popular understanding of, and demand for, improved pedestrian and bicycle access, connectivity and, more importantly, safety.

Regional Transportation & Mobility Issues:

Hancock County and the surrounding region will face capacity issues with electric vehicle infrastructure. As more and more motorists are switching to fully electric vehicles (EVs) and plug-in hybrid electric vehicles (PHEV), demand will increase for charging opportunities. Towns and regions that are poised to provide this service early may have a competitive advantage over others for tourism revenue and attraction of potential future residents. Along with fiber Internet, EV infrastructure will be an important component for future development in the region. Improving access to MaaS is also not just a local issue for Brooksville, but for surrounding towns that have similar demographic profiles.

7. Climate Change Impacts and Emerging Trends

Climate change is increasingly at the forefront of transportation planning concerns, particularly where sea level rise and extreme weather events are projected to damage and undermine many roads in coastal Maine. MaineDOT is interested in working with towns to make the transportation system resilient to future climate change. The Sea Level Rise and Climate Change Committee is currently evaluating the potential scenarios and flood risks to town maintained roads. Planning for increased road safety, aging in place, and climate resilience at the same time can help integrate multiple objectives into projects when funding is sought.

Various technological advances also offer new opportunities to complement existing transportation systems. These include vehicle automation and electrification, consolidation of vehicle ownership and the proliferation of ride-sharing services, all of which are facilitated by improved rural broadband internet (see Chapter L). All these factors will influence future transportation needs and possibilities, and therefore planning.

8. Goals & Objectives

Goals & Objectives	Strategy(ies)	Responsible Party(ies)	Timeline
Improve Pedestrian & Bicycle Access Throughout Brooksville	Work with Bicycle Coalition of Maine (BCM) on Bicycle & Pedestrian Safety programming at local schools & youth groups. Provide residents and visitors with easy access to Maine Bicycling Laws and BCM Biking Basics.	Select Board or their designee(s) to work with Bicycle Coalition of Maine, Hancock County Planning Commission & Maine Department of Transportation	Immediate and on-going
	Source appropriate funding and grants to support non-motorized transportation in Brooksville.		
	Work with local land-trusts, conservation groups and property owners to identify potential trail networks and connectives through Brooksville and region.		
Increase options for public transportation, transit and mobility services to all Brooksville residents and work towards supporting age-in-place goals with MaaS	Work with MaineDOT and HCPC to integrate the town in the Region's expanding transit hub	Select Board or their designee(s) to work with DCP, other providers and Hancock County Planning Commission & Maine Department of Transportation	Immediate and on-going
	Work with Downeast Community Partners (DCP), Maine DOT/Moving Maine Working Group to identify potential mobility options and MaaS providers, and develop public/private partnerships.		
Address issues of poor sight lines and narrow roads	Prioritize problem areas, such as roads experiencing increased traffic due to new developments and attractions (e.g. Bakeman Beach): devise strategies to slow traffic and create better signage	Select Board or their designee(s); town road commissioner	Immediate and on-going
Integrate road safety, aging in place and climate resilience goals when scoping projects and seeking funding.	Assess town road maintenance needs and priorities against upcoming planned MaineDOT projects	Select Board or their designee(s) to work with HCPC, MaineDOT.	Immediate and on-going
Anticipate and plan for the introduction of electric vehicles	Create convenient EV charging stations (see Chapters E and M)		