#### Transportation

#### Conditions & Trend

(1) The community's Comprehensive Planning Transportation Data Set prepared and provided to the community by the Department of Transportation, and the Office, or their designees.

See the map titled Bowdoinham Traffic Volume Counts for factored annual average daily traffic volumes, noted as (AADT) at key points on roadways in 2019. Maine DOT estimated these figures, which are based upon actual traffic counts. I-295 had the highest estimated volume 12,620 (southbound) and 12,610 (northbound) south of the Route 125 entrance and exit ramps. Main Street at the intersection of Route 125 (at the center of town) had a count of 1,870. Route 24 had an estimated 1,730 vehicles daily near the Topsham town line, while Route 24 at the Richmond town line had 740 trips in 2017.

The next table shows traffic volumes as recorded by Maine DOT for select roadways within Bowdoinham.

Ann	Annual Average Daily Traffic Counts							
Location	1980	1990	2000	2007	2009	2010	2017	2019
I-295 (NB) N/O Off Ramp To SR	3,334	7,800	9,840		10,940	11,340		13,570
125/138	5,554	7,000	9,040		10,940	11,540		15,570
I-295 (NB) S/O Off Ramp To SR	3,492	8,270	11,840		12,100	12,610		14,560
125/138	3,772	0,270	11,040		12,100	12,010		17,500
I-295 (SB) S/O Off Ramp To SR		7,810	10,340		11,340	11,360		14,230
125/138		7,010	10,540		11,540	11,500		17,230
I-295 (SB) S/O On Ramp From SR		8,320	12,180		12,400	12,620		14,750
125/138		0,520	12,100		12,400	12,020		17,750
Dingley Rd S/O IR 1143							20	
Browns Pt Rd E/O SR 24 (S JCT)	342		660	500			540	
Pork Point Rd S/O SR 24 (N JCT)	135		130					
Ridge Rd NE/O Cemetery Rd	293			400			480	
White Rd N/O SR 24 (River Rd)	343		700	700			580	
Center St SE/O SR 138 (Post Rd)				720				
Millay Rd NW/O SR 138 (Post Rd)	185		380	460				
Fisher Rd SW/O SR 125 (Main St)	385		660	750			640	
S Pleasant St NW/O SR 24 (River Rd)	160			210			240	
SR 125 (Main St) NW/O SR 24 (River				2,150			1,870	
Rd)				2,130			1,070	
SR 125 (Main St) SE/O SR 138 (Post	1,072		2,120	2,010				
Rd)	1,072		2,120	2,010				
SR 125 (Pond Rd) N/O SR 138	420			1,870		1,770	1,700	
SR 125/138 (Main St) E/O I-95	1,283			3,370			3,010	
Ramps	1,203			3,370			5,010	
SR 125/138 (Main St) E/O SR 125	851			2,780		2,590		
(Pond Rd)	0.01			2,700		2,390		
SR 138 (Post Rd) NE/O Millay Rd	420	660	1,050	910				
SR 138 (Post Rd) NE/O SR 125 (Main				1,240			1,100	
Page 101 of 219								

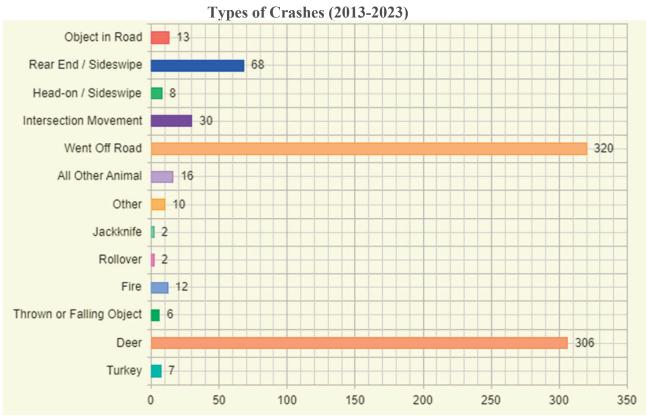
St)							
SR 138 W/O SR 125	422						
SR 24 (River Rd) at Richmond TL		590	730	750		740	
SR 24 (River Rd) E/O SR 125 (Main St)	1,393		3,400	2,740		2,510	
SR 24 (River Rd) SW/O SR 125 (Main St)				1,660		1,780	
SR 24 (River) SW/O S Pleasant St	477	720	840	730		750	
SR 24 NE/O Browns Pt Rd (S JCT)	834	1,160	1,950			1,560	
SR 24 NE/O Pork Point Rd (N JCT)	440		920	810			
SR 24 SW/O Pork Point Rd (N JCT)	400		850	760		690	
SR 24(River Rd) NW/O Wallentine	941		2,040				
Rd							
SR 24 (River Rd) S/O Wallentine Rd		1,630		1,660		1,730	
SR 24 (River) SW/O Browns Pt Rd (S JCT)	1,152		2,540	2,170			

Source: Maine DOT

Note: SR = State Route, NE/O = northeast of, NW/O = northwest of, and so forth.

Level of service (LOS) is a measure of congestion shown on the map titled LOS Map. Route 24, Interstate 295, Mailly Road, and most of Route 25 in Bowdoinham are LOS A with congestion and road/bridge postings being the major factors. Portions of Routes 125, all of Route 138 and White Road and are LOS C with the major factors being road posting. These ratings indicate that roadways within Bowdoinham have not reached their maximum capacities and that delays in which the travel speed is lower than the posted speed are infrequent. LOS D is usually considered an indication of the maximum acceptable volume/capacity if current posted speeds and travel lane configurations are to be maintained.

Maine DOT records of crash locations and have identified the segment of Rt. 24 from the Topsham Line north to its intersection with Wallentine Rd. and between the intersection of Pork Point Rd. and River Rd. and the intersection of River Rd. and Pleasant St. Most crashes in Bowdoinham were the result of vehicles running off the road. See the bar graph below. Other principal causes included crashes with deer, sideswipes with other vehicles and with objects in the road.



Source: Maine DOT

The majority of Bowdoinham residents who commute to work drive alone. About 7.3% carpooled and 0.7% used public transportation. For the county, those figures were 6.6% and 0.2% respectively. It should be noted that because of the pandemic working from home jumped from 52 individual in 2009 to 139 in Bowdoinham, an increase of 167%. County and state figures also increased 110% and 118%, respectively.

Commuting Characteristics of Bowdoinham 2021				
Workers	1,474			
MEANS OF TRANSPORTATION TO WORK				
Car, truck, or van				
Drove alone	82.6%			
Carpooled	7.3%			
Public transportation (excluding taxicab)	0.7%			
Worked from home	9.4%			

Source: U.S. Census 2021 Commuting Characteristics

<b>Transportation - Means of Travel to Work, 2021</b>							
Method Bowdoinham Sagadahoc Main							
		County					
Number of Workers	1,474	18,330	667,845				
Car, truck, or van – Drove alone	1,218	14,453	501,398				
Car, truck, or van – Carpooled	107	1,204	59,799				

Public transportation	10	48	3,285
Motorcycle, Bicycle, Taxi, or other	0	251	8,800
Worked at home	139	1,795	69,896

Source: Census, American Community Survey

About 61% of Bowdoinham residents who commuted took on average 20-34 minutes to travel (one-way). For the county, 31.5% took that same amount of time, while 31.6% did statewide.

<b>Commuting Characteristics of Bowdoinham 2021</b>					
Workers over 16 who did not work at home	1,335				
Less than 5 minutes	0.0%				
5 to 9 minutes	2.2%				
10 to 14 minutes	0.9%				
15 to 19 minutes	10.7%				
20 to 24 minutes	39.6%				
25 to 29 minutes	7.9%				
30 to 34 minutes	13.3%				
40 to 44 minutes	1.9%				
45 to 59 minutes	5.2%				
60 to 89 minutes	2.9%				
90 or more minutes	13.4%				

Source: U.S. Census 2021 Commuting Characteristics

Transportation - Travel Time to Work, 2021							
Travel Time	Bowdoinham	Sagadahoc	Maine				
		County					
Workers over 16 who did not							
work at home	1,335	16,535	597,949				
Less than 5 minutes	0	649	28,501				
5 to 9 minutes	29	2,104	75,845				
10 to 14 minutes	12	2,620	89,506				
15 to 19 minutes	143	2,577	87,775				
20 to 24 minutes	528	2,379	80,762				
25 to 29 minutes	106	971	40,212				
30 to 34 minutes	178	1,865	68,310				
35 to 39 minutes	26	448	20,765				
40 to 44 minutes	25	597	21,763				
45 to 59 minutes	70	1,454	45,129				
60 to 89 minutes	39	492	26,255				
90 or more minutes	179	379	13,126				

Source: U.S. Census 2021 Commuting Characteristics

(2) Location and overall condition of roads, bridges, sidewalks, and bicycle facilities, including any identified deficiencies or concerns.

The Bowdoinham Federal Functional Classification of Roads map shows the locations of roads and the Bowdoinham Bridges and Culverts map shows the bridges and culverts. According to

Maine DOT, Bowdoinham has 60.78 miles of public roads, of which 7.39 miles are interstate (I-295), 7.74 miles are State highway, 15.79 miles are State Aid highway, and 29.86 miles are Town roads.

Public roads are vitally important as they allow residents to commute to work, school, stores, and around Bowdoinham. The overall condition (poor, fair, or good) of each roadway as judged by the Town is noted in the next table.

Bowdoinham Public Roadway Inventory							
Roadway Name	Owner	Length (mi)	Surface	<b>Overall</b> <b>Condition</b>			
Abagadasset Rd	Town	1.00	paved	good			
Backhill Rd	Town	0.10	paved	good			
Batchelder Dr	Town	0.14	gravel	fair			
Blanchard Rd	Town	0.60	gravel	fair			
Browns Point Rd (dirt 0.63 mi)	Town	2.63	paved/gravel	Good/(fair)			
Carding Machine Rd (1.4 mi)	Town	3.81	paved/gravel	Good/(poor)			
Carlson Cross	Town	0.33	gravel	fair			
Cemetery St	Town	0.40	paved	good			
Center St	Town	0.40	paved	good			
Center's Point Rd	Town	0.76	gravel	Fair			
Church St	Town	0.05	paved	good			
Curtis Farm Rd	Town	0.10	gravel	fair			
Dingley Rd (0.4 gravel)	Town	1.80	gravel	good/(fair)			
Dinsmore Cross Rd	Town	0.30	paved	good			
Fisher Rd	Town	1.82	paved	fair			
Hornbeck Cross Rd	Town	0.15	gravel	fair			
I-295	State	7.39	paved	good			
Lucas Ln	Town	0.12	paved	good			
Main St Ext	Town	0.10	paved	good			
Mallard Ln	Town	0.10	gravel	fair			
Millay Rd	Town	3.00	paved	fair			
Pioneer Rd	Town	0.10	gravel	fair			
Pork Point Rd	Town	2.32	paved	good			
Pratt Rd	Town	0.78	gravel	good			
Preble Rd	Town	0.40	paved	good			
Ridge Rd (2 mi)	Town	6.00	paved	good/(fair)			
State Route 125 – Pond Rd portion	State	0.71	paved	good			
State Route 125- Main St portion	State	1.40	paved	good			
State Route 138 – Post Rd portion	State	7.90	paved	good			
Bowdoinham Public Roadway Inventory (cont'd)							
Roadway Name	Owner	Length (mi)	Surface	<b>Overall</b> <b>Condition</b>			

State Route 24 – Bay Rd portion	State	2.50	paved	good
State Route 24 – River Rd portion	State	7.90	paved	good
S Pleasant St	Town	0.76	paved	poor
School St	Town	0.10	paved	good
Spear Dr	Town	0.18	paved	good
Spring St	Town	0.10	paved	good
Stevens Rd	State	0.15	gravel	unkn
U.S. Route 201 – Augusta Rd/ Brunswick Rd	State	unkn	paved	poor
Vine St	Town	0.07	gravel	good
Wallentine Rd	Town	0.38	gravel	fair
White Rd	State	3.98	paved	fair
Wildes Rd	Town	0.82	paved	good

Sources: Maine DOT and Town

Note: These road names may differ from local sources.

The next table shows bridge ownership, length, year built, most recent inspection date and federal sufficiency rating (overall condition) as assessed by Maine DOT. The Abagadasset Bridge, located on Route 24 was identified for improvement in 2014-2015.

	Bowdoinl	nam Brid	ge Inv	entory			
Bridge Name	Location	Owner	Year	MDOT	Length	Inspection	Sufficiency
			Built	ID #	(feet)	Date	Rating
Abagadasset	Route 24	State	1936	5493	75	07/09/2019	50
Brooklyn	Route 24	State	1953	5190	156	09/18/2019	47
Card Machine	Carding Machine Rd	Town	1920	0977	18	10/29/2018	78
Carr	Route 138	State	1918	3990	33	10/25/2019	72
Creek	Route 24	State	2006	5397	11	07/25/2019	96
I-295 NB / Rte 125 & 138	I-295 NB	State	1976	6311	93	05/20/2020	94
I-295 SB / Rte 125 & 138	I-295 SB	State	1976	1552	93	05/20/2020	94
I-95 NB / Curtis Farm Rd	I 95 NB	Town	1975	6334	19	07/03/2019	92
I-95 SB / Curtis Farm Rd	I 95 SB	Town	1975	1538	16	04/10/2019	88
I-95 SB / Sedgely Bk	I 95 SB	State	1974	1537	23	07/03/2019	92
I-95NB / Sedgely Bk	I 95 NB	State	1974	6333	22	08/06/2019	92
Leavitt	Ridge Rd	State	2000	3632	13	04/05/2018	97
Lower Abagadasset	Browns Point Rd	State	1949	3432	94	05/26/2020	25
Mallon Brook	Dingley Rd (North)	Town	1991	6366	20	11/20/2019	41
Millay Road / I-295 NB	Millay Rd	State	1976	6312	146	04/04/2019	96
Millay Road / I-295 SB	Millay Rd	State	1976	1553	146	04/04/2019	96
Randall	Route 138	State	1939	3991	33	07/30/2019	69
Route 138 / I-295	Route 138	State	1976	6313	288	07/09/2019	82
Stone	Ridge Rd	State	1955	5469	19	06/06/2018	84
Two Bridges East	Route 24	State	1934	2974	25	07/09/2019	64
Two Bridges West	Route 24	State	1934	0972	30	07/16/2020	61
Upper Abagadasset	Batchelder Rd.	Town	2009	1685	24	10/31/2018	72

Source: Maine DOT

Notes: NB = northbound, SB = southbound

(3) Identify potential on and off-road connections that would provide bicycle and pedestrian connections to neighborhoods, schools, waterfronts, and other activity centers.

The Town has created a Walkable Village Plan and Transportation Vision Statement which addresses these connections. The Merrymeeting Trail would also provide off-road connections as well if created.

(4) Identify major traffic (including pedestrian) generators, such as schools, large businesses, public gathering areas/activities, etc. and related hours of their operations.

The next two tables list major traffic generators and events that can draw considerable traffic to Bowdoinham.

Major Traffic Generators	Location	<b>Hours of Operation</b>
Bowdoinham Community School	23 Cemetery Rd	School year: 8 a.m. & 3 p.m.

Source: Town

Major Events/Activities	Location	Dates
Farmers' Market	Philip Mailly	Saturday mornings June -
ranners warket	Waterfront Park	October
Summer Concert Series	Philip Mailly	Sunday evenings during
Summer Concert Series	Waterfront Park	the summer months
Open Farm & Studio Day	Town Wide	Fourth Sunday in July
Tour de Bowdoinham Bike Ride	Philip Mailly	Third Saturday in August
	Waterfront Park	Third Saturday in August
Celebrate Bowdoinham	Philip Mailly	Mid September
	Waterfront Park	ivita September
Holiday Festival	Village	Early December
~ _		

Source: Town

(5) Identify policies and standards for the design, construction, and maintenance of public and private roads.

The Town is concerned that all roadways and bridges be well engineered and built to last so that potential damage will be minimized from flooding and adverse weather and vehicular use. Substandard design or construction will result in higher costs to taxpayers and/or subdivision associations for repair and remediation. Road damage from flooding, adverse weather conditions and from use, especially heavy trucking activity, requires that roads be built to appropriate standards, including sufficient sub-bases, drainage systems and grading. While this may result in higher development costs upfront, in the long-term it will reduce costs for the taxpayers, residents, and business owners, all of whom depend on the road network.

The Land Use Ordinance has road design provisions. The purposes of these provisions are to provide for safe access to and from public and private roads. See the responses in the Analyses section, questions 13 and 14 for examples of these provisions as well as the Ordinance itself for specific standards.

(6) List and locate municipal parking areas including capacity, and usage.

Municipal Parking Lots		
Spaces	<b>Overall</b> Condition	Usage
20	fair	daily
29	good	summer
	Spaces 20	SpacesOverall Condition20fair

Municipal parking lots are shown in the next table.

Source: Town

There is one commuter Park-and-Ride lot in Bowdoinham, located off I-295 at Exit 37. This lot has 24 parking spaces, and is served by GO MAINE, a statewide commuter service.

(7) Identify airports within or adjacent to the community and describe applicable airport zoning and airspace protection ordinances your community has in place.

The Merrymeeting Field Airport is privately owned and located approximately one mile Page 108 of 219

southeast of the village, with a runway of 1,935 feet. There are no published instrument procedures for this airport. It is open to the public and averaged 42 aircraft operations per month in 2023, of which 80% were local general aviation and 20% were transient general aviation.

Some land around the airport is conserved (Wallentine Parcel). The Land Use Ordinance does not include specific protections for the airport, like limitations on incompatible uses around the airfield. The general performance standards in site plan review limit building height to 40 feet, with lower maximum heights for storage facilities and for buildings in certain shoreland zones. There is no height limit for telecommunications and related towers but the provisions state, "The tower should be located so that the distance it is setback from the property line is equal to or greater than its height."

The closest airports to Bowdoinham with instrument procedures:

- Brunswick Executive Airport (7 nm S)
- Wiscasset Airport (8 nm E)
- Auburn/Lewiston Municipal Airport (17 nm W)
- Augusta State Airport (20 nm N)

#### (8) Identify bus or van services.

Midcoast Connector is the State of Maine designated Regional Transportation Provider operating transportation services for residents of Knox, Lincoln, and Sagadahoc Counties and the Towns of Brunswick and Harpswell. Their public transportation program provides flex route and demand response services throughout the region as well as the DASH city route services in Belfast and Rockland. Fares depend on service and distance travelled. In addition to general public transportation services and MaineCare non-emergency transportation, their transportation support program provides specialized and discounted services for the elderly, individuals traveling to dialysis services, cancer care services and individuals with disabilities. Reduced fares are available for seniors, children under 17, and people with disabilities for DASH bus services and seniors traveling to medical appointments. Mid-Coast Connector & Mid-Coast Public Transportation are operated by non-profit Waldo Community Action Partners. Within Brunswick Western Maine Transit operates the Brunswick Explorer, a deviated fixed route transit system that operates Monday through Friday from 6:45 a.m. to 6:30 p.m. with an additional morning and evening commuter express.

Age Friendly Bowdoinham members advocated for the Rides in Neighbors Cars program which began offering rides to residents aged 60 and older or who have a disability. There are no charges for rides as this is a volunteer-based program.

Concord Coach (Trailways) offers daily service on their Maine Coastal Route between Orono and Boston's Logan Airport. Stops include Orono, Bangor, Searsport, Belfast, Lincolnville, Camden/Rockport, Rockland, Waldoboro, Damariscotta, Wiscasset, Bath, Bowdoin College, Brunswick, and Portland.

(9) Identify existing and proposed marine and rail terminals within your community including potential expansions.

There are no existing or proposed marine or rail terminals within Bowdoinham.

The railroad line from Brunswick to Waterville runs through Bowdoinham. It is owned by the State of Maine and is currently unused. Ideas for possible future use of the rail line include restoring passenger service and creating a recreational multi-use trail from Topsham to Augusta along the rail corridor. See the Recreation Chapter for more information.

(10)If coastal communities identify public ferry service and private boat transportation support facilities (may be covered under Marine Resources with cross reference) including related waterside (docks/piers/wharves) and land-side (parking) facilities.

There are no public ferries serving Bowdoinham waterways. Private ferry services or water taxis are not available.

## <u>Analysis</u>

(1) What are the transportation system concerns in the community and region? What, if any, plans exist to address these concerns?

The Town is concerned with maintaining and improving the condition of its roadways because they provide the primary source of transportation for Bowdoinham residents. Poor road conditions reduce safety and impede the local economy upon which citizens depend. To address this concern the Town continues to implement and update its Road Maintenance Plan.

Maine DOT records of crash locations and have identified the segment of Rt. 24 from the Topsham Line north to its intersection with Wallentine Rd. and between the intersection of Pork Point Rd. and River Rd. and the intersection of River Rd. and Pleasant St. Local concern has also been expressed for these intersections: Route 24/Main Street, Route 24/Ridge Road, Rt 24/White Road and Rt 24/Carding Machine Road. To address this concern the Town has a scoping process with MDOT, reviewing the condition of the road along with the proposed upgrades.

In 2023 the Town received DOT approval to install a demonstration crosswalk across Route 24 at its intersection with Main Street. As part of the project a survey was conducted, and which lead to the support to apply for a Village Partnership Initiative to design pedestrian safety improvements at the Route 24 and Main Street intersection which will begin in 2024.

Pedestrian and bicyclist safety along Route 24 to the Topsham Line is also a concern. This is a State road which was paved in 2023, however shoulders are not scheduled to be paved until 2023. Further, there is pedestrian concern along Main Street from its intersection with School Street to Preble Road. The Town is continuing to make progress on its Walkable Village Plan and has applied for a Maine DOT grant to extend the sidewalks along Main Street <sup>1</sup>/<sub>2</sub> mile to its intersection with Post Road. The Town also received approval of the location of several share signs to be painted on Route 24 and Main street to improve bicycle safety which will be installed in 2024.

(2) Are conflicts caused by multiple road uses, such as a major state or U.S. route that passes through the community or its downtown and serves as a local service road as well?

Route 125 functions both as a collector road, serving regional traffic, and as the Main St, serving local traffic. Route 24 also passes through the village. Both roadways raise safety concerns due to the often-excessive speed of through-traffic and because of the overall high traffic volumes.

Where the speed limit is not posted, the following limits apply:

- 15 mph in a school zone during recess or during opening or closing hours
- 25 mph in a business or residential area or built up portion
- 45 mph on all other public ways

As a controlled access highway, I-295, an arterial serving long distance and regional traffic at high speeds, does not conflict with local traffic.

(3) To what extent do sidewalks connect residential areas with schools, neighborhood shopping areas, and other daily destinations?

In 2009, Bowdoinham approved the use of up to \$133,750 from the Undesignated Fund Balance as the local match for a grant of \$535,000 in Federal Enhancement Funds distributed through the Maine DOT Quality Community Program for the engineering and construction of sidewalks in the village area. Sidewalks have been construction on the following:

- Main Street from River Road to School Street
- School Street from Main Street to the John C. Coombs Municipal Building & Town Hall
- Center Street
- Cemetery Road
- River Road from the Cathance River bridge to Ridge Road
- Bay Road about 500-ft from the Cathance River bridge
- Ridge Road from River Road to Cemetery Road

These sidewalks serve to connect the Town Office, Bowdoinham Public Library, Town Hall, Fire Station, Bowdoinham Community School, Mailly Waterfront Park, Bowdoinham Recreation Fields, and local businesses.

Additional sidewalks are needed to connect neighborhoods to the village area. In the summer of 2023, the Town has applied for a Maine DOT grant to extend the sidewalk  $\frac{1}{2}$  mile down Main Street from its intersection with School Street to Post Road.

(4) How are walking and bicycling integrated into the community's Bowdoinham Traffic Volume Counts (including access to schools, parks, and other community destinations)?

Vehicular volumes and speeding threaten the safety of pedestrians and bicyclists. Most roads have narrow and inadequate shoulders. Increased bicycle use of roadways in summer impedes motor vehicle mobility. The addition of sidewalks and multi-use paths in certain areas as noted in the strategies section of this chapter could improve both of these issues, but would require the expenditure of public funds and the cooperation of private landowners.

The Town's Transportation Vision Statement calls for several improvements for walking and bicycling.

(5) How do state and regional transportation plans relate to your community?

The Working to Move Maine: Maine DOT's Long Range Transportation Plan, is an overarching plan which communicates the vision for the transportation system and the strategies that Maine DOT and their partners plan to deliver throughout the next 20+ years (2023-2032). This policy document shapes investments that appear in Maine DOT's Work Plan. The 20-year plan's goals agree generally with this Comprehensive Plan.

The Maine DOT Work Plan for 2023-2024-2025, included these Bowdoinham projects:

- Ultra-thin bonded wearing course on the Interstate beginning at Brunswick town line and extending north 21.51 miles through Bowdoin, Bowdoinham, Brunswick, Gardiner, Richmond, Topsham, and West Gardiner. Scheduled for 2024/25, WIN#026342.00.
- Ultra-thin bonded wearing course on the Interstate beginning 1.19 miles north of Gardiner town line extending south 21.63 miles through Bowdoin, Bowdoinham, Gardiner, Richmond, Topsham, and West Gardiner. Scheduled for 2024/25, WIN#026340.00.
- Light capital paving beginning at Route 201 and extending 9.48 miles in Bowdoin, Bowdoinham and Richmond. Scheduled for 2024, WIN#026772.00
- Bridge Improvements on Abagadasset Bridge (#5493) over the Abagadasset River, located 0.15 mile east of Carding Machine Road. Scheduled for 2024/25, WIN#025099.00)
- New construction of piers, floats, and fenders located on Railroad Avenue off River Road, completed in 2023, WIN#025203.00.
- Bridge rehabilitation on Brooklyn Bridge (#5190) over Cathance River. Located 0.24 of a mile south of Route 125. Scheduled for 2024/25 WIN#027256.00.
- Bridge joint replacement on Region 2 Interstate 295 bridges in Bowdoinham, Brunswick, Gardiner, Richmond, Topsham, and West Gardiner. Scheduled for 2023, WIN#026884.00.
- Feasibility studies on the railroad, including a public advisory process for future use of the rail corridor between Bowdoinham, Gardiner, Richmond, and Topsham. Completed in 2023, WIN#024759.00.
- Light capital paving beginning at the Topsham town line extending north 10.44 miles from Bowdoinham to Richmond. Completed in 2023, WIN#05863.00.

## (6) What is the community's current and approximate future budget for road maintenance and improvement?

Road maintenance is an ongoing effort and municipal budgets are often stretched as the cost of such upkeep increases faster than the costs of other goods and services, due principally to the costs of petroleum-based products like asphalt. The State and federal match for such work has always been important and has become even more crucial to maintain safe roadways.

The Town has a road maintenance plan that covers ten years and is updated annually. The plan references Road Surface Management Systems (RSMS) for the maintenance, resurfacing, reconstruction and planning of municipal roadways.

(7) Are there parking issues in the community? If so, what are they?

The Town created ten new parallel parking spaces on Main Street with its sidewalk project. There is limited parking on Main Street for businesses and their customers. If the Town were to move forward with a permanent crosswalk at the intersection between Route 24 and Main Street the required adjoining sidewalk which would follow lower main street may have the potential to reduce parking which will be discussed with the community through public forums.

(8) If there are parking standards, do they discourage development in village or downtown areas?

Off-street parking requirements in the Land Use Ordinance, including in village and shoreland areas, have not discouraged development in the village or pushed development out of the village. The lack of vacant lots in the village though does limit new development with the exception of redevelopment. Existing lots in the village tend to be small, which therefore would require the consolidation of lots or cooperative agreements with neighbors to provide for more off-street parking opportunities.

(9) Do available transit services meet the current and foreseeable needs of community residents? *If transit services are not adequate, how will the community address the needs?* 

The frequency of scheduled bus service is insufficient for most individuals to be able to use on a regular basis for travel outside of Brunswick. The dispersed location of residents and of workplaces inhibits public transportation to some extent in the region as a whole.

Midcoast Connector is the State of Maine designated Regional Transportation Provider operating transportation services for residents of Knox, Lincoln, and Sagadahoc Counties and the Towns of Brunswick and Harpswell. Their public transportation program provides flex route and demand response services throughout the region as well as the DASH city route services in Belfast and Rockland. Fares depend on service and distance travelled. In addition to general public transportation services and MaineCare non-emergency transportation, their transportation support program provides specialized and discounted services for the elderly, individuals traveling to dialysis services, cancer care services and individuals with disabilities. Reduced fares are available for seniors, children under 17, and people with disabilities for DASH bus services and seniors traveling to medical appointments. Mid-Coast Connector & Mid-Coast Public Transportation are operated by non-profit Waldo Community Action Partners. Within Brunswick Western Maine Transit operates the Brunswick Explorer, a deviated fixed route transit system that operates Monday through Friday from 6:45 a.m. to 6:30 p.m. with an additional morning and evening commuter express.

Age Friendly Bowdoinham members advocated for the Rides in Neighbors Cars program which began offering rides to residents aged 60 and older or who have a disability. There are no charges for rides as this is a volunteer-based program.

Concord Coach (Trailways) offers daily service on their Maine Coastal Route between Orono and Boston's Logan Airport. Nearby stops include Bath, Bowdoin College, and Brunswick.

(10) If the community hosts a transportation terminal, such as an airport, passenger rail station, or ferry terminal, how does it connect to other transportation modes (e.g. automobile, pedestrian, bicycle, transit)?

The Town hosts no passenger rail station or ferry terminal.

(11) If the community hosts or abuts any public airports, what coordination has been undertaken to ensure that required airspace is protected now and in the future? How does the community

#### coordinate with the owner(s) of private airports?

The Merrymeeting Field Airport is privately owned and located approximately one mile southeast of the village. No rental vehicles or public transportation serves the airport. Currently, the Town does not coordinate with the Airport owner(s).

# (12) If you are a coastal community are land-side or water-side transportation facilities needed? How will the community address these needs?

Within Bowdoinham, public access to the shorefront is found at these locations:

- Mailly Waterfront Park (Town Landing Boat Launch) on the Cathance River
- CMP Carry-in (CMP property) on the Lower Abagadasset River
- Gallant Carry-in (State Inland Fisheries and Wildlife property) on the Upper Abagadasset River
- Unnamed off Porkpoint Rd (State agricultural property) on the Kennebec River, below Swan Island

This Town Landing Boat Launch was recently upgraded to include a pump house and bathroom facility what to meet current and anticipated needs. Further, there was a need for a separate hand-carry launch for non-motorized boats which was completed in 2023 at the new waterfront park. For more information, see the Public Facilities and Service Chapter, and Recreation Chapter.

### (13) Does the community have local access management or traffic permitting measures in place?

The Land Use Ordinance has access management performance standards that regulate new driveways, streets, and commercial entrances onto Town roads with minimum site distance requirements, based upon posted speeds, as well as standards for geometry, drainage, construction, curbs and sidewalks. Access management related provisions are included in subdivision provisions as well:

- "The layout of the lots and streets within the subdivision shall minimize the number of points of vehicular access onto existing public streets."
- "If lots are created that have direct vehicle access to or from an existing public street, the number of access points shall be minimized through the use of shared driveways or common access ways."
- "Where a lot has frontage on two (2) or more streets, the access to the lot shall be provided across the frontage and to the street where there is lesser potential for traffic congestion and for hazards to traffic and pedestrians."

#### (14) Do the local road design standards support the community's desired land use pattern?

The local road design standards have generally supported the type of development favored by residents: low density residential. However, much development occurs on a piecemeal basis outside of the subdivision or the site plan review process. See the Future Land Use Plan of this Comprehensive Plan for discussion of the community's desired land use pattern.

The road standards of the Land Use Ordinance differentiate road design based upon two categories: roads serving less than 10 dwelling units and roads serving 10 or more dwelling

units. The subdivision standards differentiate road design based upon two categories: minor subdivisions and major subdivisions (serving 6 or more dwelling units).

In addition to local regulations, State access management rules apply to State and State Aid roads.

## (15) Do the local road design standards support bicycle and pedestrian transportation?

Subdivision provisions do encourage street connectivity and sidewalk installation, which support bicycle and pedestrian use by creating multiple (and shorter) linkages to existing roadways and safe spaces for people to walk along roads. Such provisions include:

- "Any subdivision containing more than fifteen (15) dwelling units or lots, shall have at least two (2) street connections with existing public streets, streets shown on an Official Map, or streets on an approved subdivision plan for which performance guarantees have been filed and accepted.",
- "Where street lengths exceed one thousand (1,000) feet between intersections with other streets, the Board may require a utility/pedestrian easement, at least twenty (20) feet in width, to provide for underground utility crossings and/or a pedestrian pathway of at least five (5) feet in width..."
- "Sidewalks are required if connection to an existing sidewalk is feasible."
- "Sidewalks are required for streets carrying more than one hundred fifty (150) trips a day or to a distance within the subdivision as deemed appropriate by the Planning Board."

Site plan approval criteria provisions include, "Pedestrian Circulation – The proposed site layout will provide for safe pedestrian circulation both on-site and off-site." General performance standards in the Land Use Ordinance also address pedestrian and cyclist safety for internal roadways and parking lot design.

(16) Do planned or recently built subdivision roads (residential or commercial) simply dead-end or do they allow for expansion to adjacent land and encourage the creation of a network of local streets? Where dead-ends are unavoidable, are mechanisms in place to encourage shorter dead-ends resulting in compact and efficient subdivision designs?

Since 2000, there have been 4 approved and built subdivisions in which new roads were constructed. Of these, 4 included dead-end roads (i.e., having just one access).

The subdivision provisions state, "A dead-end street shall be limited to a maximum of fifteen (15) dwelling units (not including corner lots that gain their access from another street). The length of a dead-end shall not exceed one thousand five hundred (1,500) feet."

The Land Use Ordinance allows for cluster (conservation) subdivision developments that conserve a portion of the parent parcel. Since 2000, there have been 4 subdivisions that included the permanent dedication of open space for conservation, recreation, agriculture or wood lot use.

The Town can allow and encourage housing development in areas close to existing public and private services, so that residents can choose to walk rather than drive, and so that public transportation with fixed-routes becomes more practical at sufficient development (housing)

densities to provide adequate ridership levels. In less developed portions of the Town, the use of cluster (conservation) subdivisions can preserve habitat by setting aside ecologically sensitive but developable land into permanent conservation. See the Housing Chapter, Natural Resources Chapter and Existing Land Use Chapter of this Comprehensive Plan for more information.