

Midcoast Route 1 Corridor Management Plan

Prepared by

Route 1 Corridor Committee

***Stuart Smith
Ben Frey
Mal Carey
Robin Mayer
David Atwater
Wilder Hunt
Bud Lewis
James Bodman
Barbara Boardman
Chuck Campbell
Willa Antczak***

Lincoln County Regional Planning Commission

Bob Faunce Lincoln County Planner

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Midcoast Route 1 Corridor Management Plan

1. OVERVIEW

This corridor management plan summarizes municipal and regional transportation, land use, economy, housing, and natural and scenic resources. Essential transportation-related investments are prioritized to meet the current and anticipated future needs of the corridor communities and the region.

To ensure that community concerns are addressed, municipal officials from each corridor community appointed representatives to the corridor committee that drafted this plan's recommendations of investments. Adopted municipal comprehensive plans and land use ordinances were reviewed in the drafting of this plan. In 2005, the MidCoast Economic Development District Regional Transportation Assessment was prepared for major corridors in the area, including Route 1. That assessment report was also reviewed in the preparation of this corridor management plan, and their objectives form the basis of many of the recommended investments.

The Midcoast Route 1 corridor includes the municipalities of Wiscasset, Edgecomb, Newcastle, Damariscotta, Nobleboro and Waldoboro. Because Wiscasset is in the process of preparing a Master Plan for Bath Road in cooperation with the Department of Transportation (MAINEDOT) and the Lincoln County Regional Planning Commission (LCRPC), that municipality was not included in this corridor planning effort.

That portion of Route 1 in the project area (excluding Wiscasset) is about 20.9 miles in length. It is a 2-lane highway for nearly all of its length in the corridor with exceptions being climbing and turning lanes, which are found in each community. Route 1 formerly traversed the village areas of Newcastle, Damariscotta, Nobleboro and Waldoboro but bypasses constructed within the past 50 years moved the highway away from these historic community centers. Route 1 crosses the Sheepscot, Damariscotta and Medomak Rivers and Sherman Marsh, lies immediately adjacent to the Great Salt Bay and Pemaquid Pond and is close to Duckpuddle and Kalers Ponds.

The highest traffic volumes on Route 1 are in Edgecomb at the Wiscasset town line. In 2010, the average annual daily traffic (AADT) there was 16,920 vehicles compared to 17,600 vehicles in 2007. About 70% of the Route 1 count locations for which comparable data is available showed decreases in traffic volume between 2007 and 2010. Overall, Route 1 traffic volumes appear to have

decreased about 3% during this time period and very likely reflect the depth of the recession in the mid-coast and its effects on tourist, commercial and commuter traffic during this difficult economic period.

All of the corridor communities have adopted comprehensive plans. A summary table of these comprehensive plans and their provisions affecting transportation and the corridor is presented in Section 3. All of the corridor communities except Nobleboro have adopted land use ordinances creating zones or districts beyond state-required shoreland zones. Nobleboro's zoning is limited to a single 2000-foot wide area on both sides of Route 1. A summary of these districts is also presented in Section 3 along with a corridor zoning map.

The highest concentrations of population are found in Damariscotta-Newcastle and Waldoboro. About 35% of the Lincoln County population lived in the corridor municipalities in 2010. All corridor communities gained population between 2000 and 2010 with increases ranging from 14.6% in Edgecomb to 0.2% in Newcastle.

Population

	Population				
	2010	2000	1990	Change	
				2000-2010	1990-2010
Damariscotta	2218	2041	1,836	8.7%	11.2%
Edgecomb	1249	1090	993	14.6%	9.8%
Newcastle	1752	1748	1,509	0.2%	15.8%
Nobleboro	1643	1626	1,457	1.0%	11.6%
Waldoboro	5075	4916	4,601	3.2%	6.8%
Lincoln County	34457	33616	30357	2.5%	10.7%
<i>Maine</i>	<i>1328361</i>	<i>1274923</i>	<i>1227928</i>	<i>4.2%</i>	<i>3.8%</i>

Sources: Census

The largest single employer in the corridor is Lincoln County Healthcare. Health care and social assistance and retail trade employ the greatest number of individuals in the Waldoboro Labor Market Area, which includes Newcastle, Damariscotta, Nobleboro and Waldoboro as well as six non-corridor communities. Average weekly wages, however, are modest at \$546 and \$426, respectively. Higher income jobs, such as those in professional and technical services, finance and insurance, information services and management are not as common in the corridor but they represent a growing segment of the employment base.

Following this overview are sections with more detailed descriptions of corridor transportation, land use, economic development, housing, natural resources, and scenic resources. The corridor investments sought by each community are listed at the end of this plan.

The plan was approved by the Route 1 Corridor Committee at its meeting on February 25, 2014 and by the Edgecomb, Newcastle, Damariscotta, Nobleboro and

Waldoboro Boards of Selectmen at their _____, _____, _____, _____
and _____ meetings, respectively.

2. TRANSPORTATION

Route 1 has the federal functional classification of a major arterial throughout the corridor. The maps titled *Traffic Counts* show the average annual daily traffic (AADT) volumes for 2010 at key points along Route 1 and along selected roadways within the corridor. Also shown are High Crash Locations (HCLs), where eight or more crashes have occurred over a three-year period, and the roadway level of service (LOS), which is a measure of congestion. In addition, the maps include areas of controlled access on Route 1 and the locations of rail and bus stations. Route 1 comes under the State access management law and for its entire length in the corridor it is designated as a mobility corridor and a retrograde arterial, which has the strictest state standards applied due to existing congestion. To learn more about the State's access management regulations and standards, see: <http://www.maine.gov/MaineDOT/planning-process-programs/access-mngmnt.php>.

Traffic Volumes

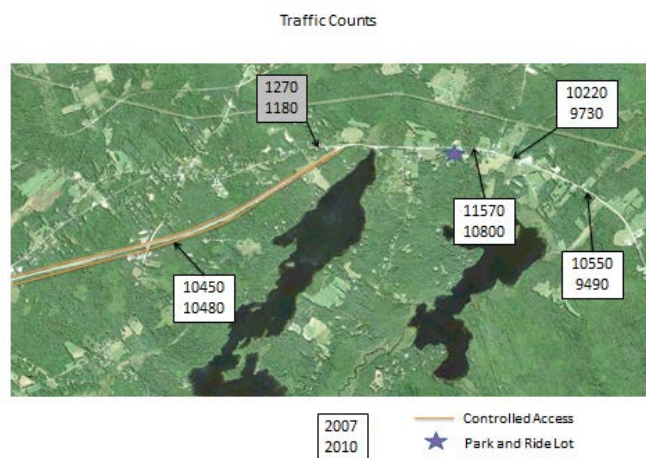
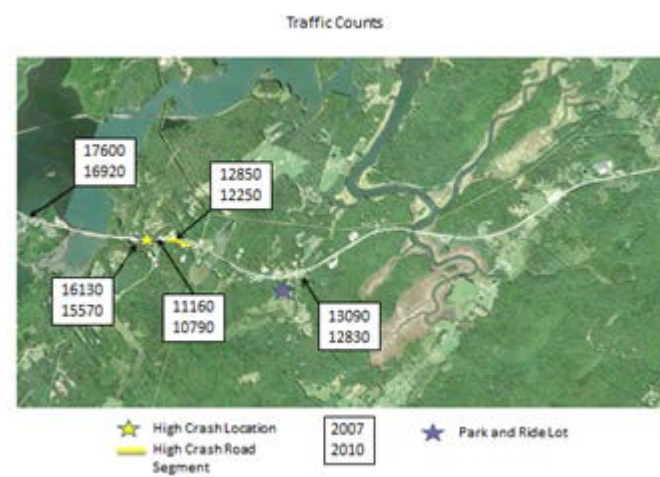
The total vehicle miles traveled (VMT) has been rising faster than the increase in population. Between 1990 and 2008, VMT in Lincoln County increased by 19.8%, while the population increased by 16.8%. Due to the economic downturn, in 2008, VMT was estimated to have dropped to 2001 levels in Lincoln County. Over the past three decades, more people have been driving more often and greater distances. Commute times have generally increased. Most of these increases reflect the greater distances being traveled as residents find work farther from home.

As shown in the Route 1 Traffic Counts table, the highest through traffic volumes on Route 1 are in Edgecomb at the Wiscasset town line. In 2010, the AADT there was 16,920 vehicles. The lowest volume along Route 1, 8,790 AADT, is found south of Belvedere Road. The traffic trips generated by the occupants of housing units are described in Section 4: Economic Development and Housing. From this data general traffic patterns can be observed.

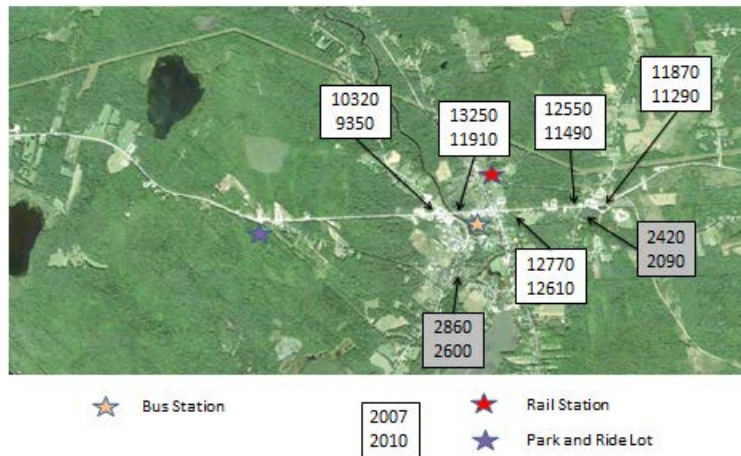
The Gateway 1 US Route 1 Corridor Preservation Strategic Planning Process estimates in the "Riding the Currents" Low Density growth scenario ^A that daily traffic volumes along Route 1 could increase by over 5,000 per day throughout the corridor by 2030.

^A The "Riding the Currents" Low Density growth scenario assumes moderate growth in population, housing, and employment, and further assumes available land for development and similar municipal land use regulations are in place today.

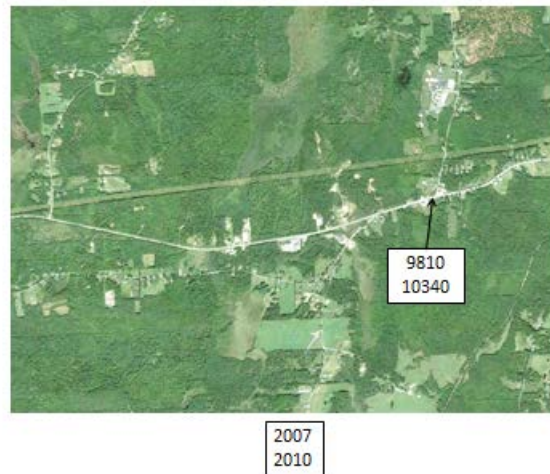
Average Annual Daily Traffic Volumes (AADT)



Traffic Counts



Traffic Counts



Traffic congestion lowers a roadway's level of service (LOS). LOS is a qualitative measure that characterizes operational conditions within a traffic stream and includes speed, travel times, freedom to maneuver, traffic interruptions, and the perceptions of motorists and passengers. There are six levels of service, given letter designations from A to F, with LOS A representing the best operating conditions and LOS F the worst. LOS E is defined as the maximum flow or capacity of a system. For most purposes, however, a level of C or D is usually used as the maximum acceptable volume.

Route 1 experiences congestion in Edgecomb west of Atlantic Highway, at the Route 1B intersection in Damariscotta and in Waldoboro between Routes 32 and

Route 1 Corridor Traffic Counts							Change 2007- 2010
Town	Road	Count Location	2000	2002	2007	2010	
Edgecomb	Route 1	Wiscasset TL	19270	18780	17600	16920	0.96
	Route 1	W of Rte. 27			16130	15750	0.98
	Route 1	W of Cochran Rd.		10790	11160	10790	0.97
	Route 1	E of Cross Rd.		12260	12850	12250	0.95
Newcastle	Route 1	Station Rd.			13090	12830	0.98
	Route 1	Lewis Hill Rd.			12590		
	Route 1	W of Sheepscot Rd.			12530	12660	1.01
	Route 1	E of Sheepscot Rd.	12950		13680	13710	1.00
	Route 1	Hopkins Hill Rd.				13910	
	Route 1	N of Rte. 1B off-ramp		7460	7980	7550	0.95
	Route 1	S of Belvedere Rd.		8700	9370	8790	0.94
	Route 1	S of Rte. 1B	7570		8430	7960	0.94
Damariscotta	Route 1	N of Rte. 1B	12380	12200	12920	13280	1.03
	Route 1	Nobleboro TL			10470		
	Main St.	Newcastle Bridge	14210	13920	10560	10720	1.02
	Main St.	Vine St.	10920	10080	9100	9570	1.05
	Main St.	School St.	12120	12040	12080	12400	1.03
	Route 1	N of Back Meadow Rd.	10030	10490	10450	10480	1.00
	Route 1	W of East Pond Rd.			11570	10800	0.93
	Route 1	E of East Pond Rd.			10220	9730	0.95
	Route 1	Waldoboro TL		9930	10550	9490	0.90
	Center St.	S of Route 1			1270	1180	0.93
	Route 1	W of Rte.32	9450	9400	10320	9350	0.91
	Route 1	E of Rte. 32			13250	11910	0.90
	Route 1	E of Jefferson St.	12730		12770	12610	0.99
	Route 1	W of Rte. 220		11980	12550	11490	0.92
	Route 1	E of Rte. 220		11570	11870	11290	0.95
	Route 1	Warren TL	11790		9810	10340	1.05
	Main St.	E of Route 32		2590	2860	2600	0.91
	Main St.	SW of Route 1		2140	2420	2090	0.86

Source: MaineDOT

220. Based on data presented in the Gateway 1 Corridor Action Plan, most of Route 1 has a LOS of D with the exception of LOS E in Edgecomb, the Route 1B intersection in Newcastle, the easterly Center Street intersection in Nobleboro and in Waldoboro between Routes 32 and 220. Congestion is notably greater in summer months.

MAINEDOT has compiled the following detailed data on Route 1, as part of its Asset Management Program.

MAINEDOT Asset Management Data for Route 1						
Segment		Safety	Crash History	Pavement rutting	Width	Highway Priority
1	Edgecomb TL to Rte. 1B (S) exit	A	A	A	Pass	1
2	Rte. 1B (S) exit to south of Rte. 215 overpass	B	A	A	Fail	1
3	South of Rte. 215 overpass to Belvedere Rd.	A	A	A	Pass	1
4	Belvedere Rd. to Rte. 1B intersection	B	A	A	Fail	1
5	Rte. 1B intersection to north of Center St. (S)	B	B	A	Pass	1
6	North of Center St. (S) to East Pond Rd.	A	A	A	Pass	1
7	East Pond Rd. to Waldoboro TL	A	A	A	Pass	1
8	Waldoboro TL to Main St. (W)	C	C	A	Pass	1
9	Main St. (W) to west of Rte. 32	C	C	B	Pass	1
10	West of Rte. 32 to Medomak River Br.	C	A	B	Fail	1
11	Medomak River Br. to west of Jefferson St.	F	A	A	Pass	1
12	West of Jefferson St. to Rte. 220	A	A	A	Pass	1
13	Rte. 220 to Warren TL	B	B	B	Pass	1

While most of Route 1 is posted for 50 or 55 mph speeds, there are areas with lower speed limits. These are presented in the table below.

Location	Speed Limit
Davey Bridge to MAINEDOT yard	45 mph
MAINEDOT yard to east of westerly Atlantic Highway intersection	50 mph
East of westerly Atlantic Highway intersection to west of Route 1B (Damariscotta)	55 mph
West of Route 1B (Damariscotta) to east of easterly Center Street intersection	45 mph
East of easterly Center Street intersection to west of Route 32	55 mph
West of Route 32 to Medomak River bridge	40 mph
Medomak River bridge to west of Route 220	35 mph
West of Route 220 to MERR underpass	40 mph
East of MERR underpass to Warren town line	55 mph

Safety

Based on the latest available data from MAINEDOT, there are three HCLs on Route 1 and other parallel roads in the corridor although crash details are not available. The Committee, expressed concern, however, about the safety of several intersections. The following three tables provide safety information for seven intersections of concern and preliminary data on the three HCLs.

With the exception of “failure to yield” driver actions, there appears to be little pattern to the listed crashes, which cover the period 2008-2010. This data is dramatically different, however, from 1996-1998 crash data in the 2000 Comprehensive Plan that is presented below. Some of these intersections have received enhancements since 1998 in the form of realignment, reconstruction and signalization, which may explain the improvements in safety inherent in the crash records.

Route 1 Corridor Crashes at Key Intersections and Road Segments													
	Total Crashes	Injury Crashes	CRF	Driver Action at Time of Crash									
				No Contributing	Ran Off	Failure to Yield	Disregard Traffic Sign	Speeding	Too Fast for	Improper turn	Followed too	Improper Pass	Other
Route 1 @ Route 27 ¹	9		2.47										
Route 1 Cochran Road to Atlantic Highway ¹	9		1.41										
Main Street School Street to Church Street ¹	16		1.05										
Eddy Road @ Route 1	3		0.68	1		1					1		
Sheepscot Road @ Route 1	5	5	1.32	1	1	2							
Route 1B SB Off-Ramp	5	2	1.33	3		1					3		
Newcastle Main St-Route 215-Academy Hill St. Intersection													
* Intersection	6		1.57	5		4							1
* Main St. W of intersection	1	1	0.61			1							
* Main St. S of intersection	0		0.31										
Main St. E of School Street	2		0.52	2		2							
Main St. W of School Street	5	3	1.29	5		3							
Belvedere Road @ Route 1	4		1.37	3		4							1

¹ - classified as HCL based on preliminary 2013 Data - no other crash information available at this time

		Modes Involved						Driver Age				
	Car	Pickup	Motor Home	Other Truck	Other Vehicl	Ped	Bicyclist	15-19	20-29	30-59	60-69	70 and over
Eddy Road @ Route 1	3	1			2				2	1	1	2
Sheepscot Road @ Route 1	3	1			3			1		2	2	2
Route 1B SB Off-Ramp	10							1	4	3	2	
Newcastle Main St-Route 215-Academy Hill St. Intersection												
* Intersection	5	4		1	2			1	1	6	3	1
* Main St. W of intersection												
* Main St. S of intersection	2								1	1		
Main Street E School Street	4							1	2		1	
Main Street W of School Street	7	2			3			2	2	7		1
Belvedere Road @ Route 1	5	2		1				1	1	4	1	1

	Month of Crash												Time of Crash			
	J	F	M	A	M	J	J	A	S	O	N	D	Morn	Aft	Even	Lt Ngt
Eddy Road @ Route 1								2		1			1	2		
Sheepscot Road @ Route 1							2		1			2		2	3	
Route 1B SB Off-Ramp		1		1	1				1		1		1	3	1	
Newcastle Main St-Route 215-Academy Hill St. Intersection																
* Intersection				1			1			2		2	4		2	
* Main St. W of intersection		1												1		
* Main St. S of intersection																
Main Street E School Street							1			1			1	1		
Main Street W of School Street		1				1				1		2	1	2	2	
Belvedere Road @ Route 1					1	1	1	1					2	2		

Even though there are only three high crash locations in the corridor, the listed intersections and road segments still present some safety concerns. The Main Street-Route 215-Academy Hill Road intersection, shown below, has multiple points of entry with little storage within the intersection and several significant conflicts. The south-bound Route 1B ramp in Newcastle has a severely acute angle, making it difficult for entering vehicles to see southbound Route 1 traffic.

Road or intersection	Accidents 1996-1998	CRF
Main Street @ Bridge	11	2.54
Main Street @ Water Street	8	1.98
Main Street @ Church/Vine Streets	16	1.90
Main Street between Vine & School Streets	31	1.41
Main Street @ School Street	11	1.72
Route 1B @ Biscay Road	8	1.38
Route 1 @ Route 1B	12	3.54
School Street between High Street and Route 129	9	1.08



Eddy Road in Edgecomb enters Route 1 very close to the Davey Bridge, reducing sight distance to the west while the westerly approach to the Route 220 intersection in Waldoboro does not have a clear through lane, which is the principal traffic movement.



The Route 1 - Belvedere Road intersection in Damariscotta is confusing to some drivers, especially those entering Route 1. Due to the very straight alignment of Route 1, wide cleared area and high speeds, it is difficult for some to gauge the distance of on-coming vehicles. The Route 1B – Belvedere intersection is poorly lit with low visibility for turning traffic.



Both the Main Street-School Street intersection in Damariscotta and the Route 32 intersection in Waldoboro are offset making turning and crossing vehicle movements difficult.



The highest volume Route 1 intersection in the project area is Route 27 and it presents safety concerns because of the speed of traffic, limited sight distance due to a hill on Route 1 to the east and the acute angle. Sight distance is also a major factor for the Cross Road-Route 1 intersection to the east.



In addition to the intersections and road segments discussed above, the Committee identified other areas within the Route 1 corridor where conditions warrant review by MDOT.

Due to the vertical curve of Route 1 east of Route 235 it can be difficult for drivers to see where the westbound climbing lane ends. The east bound climbing lane on the west side of Waldoboro eliminates the paved shoulder, making it difficult for bicyclists to use the highway.



Route 1 in Waldoboro between the Medomak River Bridge and Jefferson Street consists of two lanes with paved shoulders and provides good access to roadside businesses. That portion of the highway between Jefferson Street and Route 220 serves fewer businesses yet consists of one westbound and two eastbound lanes with no eastbound paved shoulder, significantly affecting bicyclists.



The east bound paved shoulder of Route 1 at the Route 32 intersection is absent, making use by bicyclists difficult. Bicycle access across the Medomak River bridge is also difficult.



The Route 220-Main Street sidewalk in Waldoboro ends at Old Route 1. Many residents and visitors walk to Moody's Diner and Borealis Bread on Route 1, raising safety concerns because of the lack of a safe area to walk.



The Main Street-Route 1B sidewalk in Damariscotta currently ends well west of School Street, where it is replaced by a shoulder that varies between paved and narrow gravel, affecting use by pedestrians.



Road Conditions

With the exception of that portion of Route 1 in Waldoboro, most of the highway has been resurfaced in the recent past. Transportation projects completed in the last four years within the five corridor towns include (Route 1-specific projects are in *italics*):

Edgecomb

- *Davey Bridge Resurfacing*
- *Route 1 Resurfacing*
- Route 27 Overlay

Newcastle

- *Rehabilitation of the Sherman Marsh Bridge on Route 1*
- *Improvements to the Route 1-Sheepscot Road intersection*
- *Route 1 resurfacing*
- Sheepscot Road overlay
- Route 215 overlay
- *Ramp A painting*

Damariscotta

- Main Street sidewalk
- Route 1B-Biscail Road intersection improvements
- Route 129 overlay
- *Route 1-Route 1B intersection improvements*

Nobleboro

- *Route 1 resurfacing*
- Center Street overlay

Waldoboro

- *Jefferson Street intersection improvements*
- Main Street overlay
- Routes 220 and 235 overlays
- Route 32 paving
- *Route 1 resurfacing near Warren TL*

Bicycle and Pedestrian Facilities

Walkways, sidewalks, bike paths, and bike facilities promote health, reduce dependence on automobiles, and provide for increased recreational opportunities. Through the comprehensive planning process, citizens can identify and prioritize their community's pedestrian and bicycle needs. To augment this effort with more detailed inventory, analysis and recommendations, some communities also draft a municipal pedestrian and bicycle plan. The Lincoln County Regional Planning Commission has assisted Waldoboro and Damariscotta in preparing bike-ped plans for their communities. The Waldoboro plan included the following recommendations. Those located on or adjacent to Route 1 or Main Street are in **bold**.

Rank Bike-Ped Project

- 1 **Route 1 crosswalks @ Route 32, Jefferson/Depot Streets and Main Street/Route 220**
- 2 **Extend Main Street sidewalk (Route 220) to Route 1**
- 3 Medomak River walkway for walking/running/biking
- 4 **Extend Bremen Road sidewalk from Miller School to Route 1**
- 5 **Extend Main Street sidewalk to recreation complex entrance**
- 6 Manktown Road sidewalk or paved shoulders to MVHS
- 7 **Route 1 sidewalk from Route 32 to Moody's Diner**
- 8 Cross-country walking path between Route 220 and Manktown Road
- 9 **Route 32 sidewalk or paved shoulders from Route 1 to Winslows Mills**
- 10 Main Street stop signs at Friendship/Jefferson Streets
- 11 Extend Bremen Road sidewalk or paved shoulders to Dutch Neck
- 12 Extend Friendship Road sidewalk south

The Damariscotta plan had the following recommendations. Projects located on or adjacent to Route 1B are in **bold**. Segment 1 has been constructed while segment 4 is being engineered by MaineDOT.

Rank Bike-Ped Project

- 1 **Sidewalk on Route 1B from Downtown to Yellowfront/Rising Tide complex**
- 2 **Sidewalk and paved shoulder on Route 1B from Biscay Road to Great Salt Bay School**
- 3 **Sidewalk on Route 1B from Yellowfront/Rising Tide complex to Biscay Road**
- 4 **Sidewalk on Route 129 from Route 1B to Miles Road**
- 5 **Sidewalk on Church Street between Main Street and Route 1B**
- 6 Sidewalk on High Street between School Street and Route 129
- 7 **Repair existing Water Street sidewalk**

With the exception of the following locations, Route 1 has paved shoulders that vary between 8' and 10' in width.

- Slip lane to Route 27 (5')
- West bound passing lane near Sherman Marsh (3')
- West bound side of Sheepscot Road intersection (2')
- River Road turnoff (2')
- Route 1B Newcastle on-ramp (two-4')
- Route 1B Damariscotta intersection (0'-3')
- East bound at East Pond Road (3')
- Climbing lane near Kalers Pond (2')
- East bound at Main Street (2')
- Climbing lane west of Route 32 (4')
- East bound at Route 32 intersection (0')
- At Medomak River Bridge (0-3')
- Turning lane west of Route 220 (0')
- East bound at Route 235 (3')
- East bound at Manktown Road (3')

Because of the speed of traffic on Route 1, bicyclists tend to use the shoulders much more than the travel lanes but in these locations bicyclists may be forced to enter the travel lane, which can present a safety concern. In addition, while most of Route 1 in the corridor has received recent overlays, the shoulders themselves were not overlaid as evidenced in the following photos of typical locations.



Public Transportation

The lack of regularly scheduled or seasonal local bus service, relatively small community size and dispersed location of residents and of workplaces inhibits public transportation. Coastal Trans, Inc. offers door-to-door demand-response transportation to all towns in Lincoln County and is available for grocery shopping, personal business and medical appointments for low-income families. Until 2013 this service was provided directly by Coastal Trans but for MaineCare members it is now brokered through Coordinated Transportation Solutions, Inc. (CTS). Transportation is provided by bus, van or automobile for MaineCare members to medical appointments for clients who cannot arrange their own medical transportation. Agency and or volunteer drivers provide medical transportation. The Maine Department of Health and Human Services previously identified the lack of adequate transportation (both personal and public) as negatively affecting the health care of many low-income individuals in the Midcoast. Reports of widespread complaints about the service provided by CTS have reportedly further impacted access to alternative transportation for Lincoln County residents.

Concord Coach (Trailways) offers daily service between Bangor and Boston, Massachusetts. The bus route for Maine Coastal Route One includes stops in

Brunswick, Bowdoin College, Bath, Wiscasset, Damariscotta, Waldoboro, Rockland, Camden/Rockport, Lincolnville, Belfast, Searsport, and Bangor.

Nearby Air Service

The Wiscasset Airport (KIWI, FAA IWI) is located near the Route 1/Route 144 intersection at 96 Chewonki Neck Rd, Wiscasset. This airport has a paved runway 3,397 feet long and 75 feet wide and is rated in good condition. Aviation fuel services and tie downs are available. The Fixed Base Operator (FBO) is Ocean Point Aviation, which offers aircraft maintenance, flight training, and aerial tours. According to the FAA, in 2008 there were 47 aircraft based on the field, and average of 129 aircraft operations weekly, of which 64% were local general aviation, 31% transient general aviation, 5% air taxi, and less than 1% military. No scheduled bus service is provided to the airport but taxi service is available.

The Airport is a Level II facility under the Maine Aviation Systems Plan (MASP) and is eligible for both Federal and state aid under the Airport Improvement Program. According to the MASP, the airport's economic benefit to the community has a total output of over \$2,000,000, with a payroll of nearly \$780,000.

Rail Service

There is one rail line in the corridor, which is owned by the state and runs from the extreme northern point of Edgecomb and through the remaining corridor towns. The eastern terminal in Rockland has been renovated and put back into seasonal use as a train station. The rail line is operated by the Maine Eastern Railroad (MERR) and serves freight needs as well as provides seasonal train service between Brunswick and Rockland for the past several years.

For 2014, MERR's Mid-Coast Limited will provide one round trip between Brunswick and Rockland on Fridays, Saturdays and Sundays between July 4 and October 12 with additional service on selected holidays. The schedule for this train has been revised so that it will connect directly with one daily arrival and one departure of the Amtrak Downeaster train in Brunswick, permitting connecting service to Portland and Boston. In addition, a Saturday excursion train, the Wiscasset Flyer, will operate between Wiscasset and Newcastle and Wiscasset and Bath from July 5 to October 4 and on selected holidays.

Depending on the cost-effectiveness, year-round passenger service may become a long-term objective of MaineDOT and the communities through which the rail line passes. Given the short length of rail line within Edgecomb and its remote shoreland location, any service (schedule stop) within the corridor is likely to be accessed from Newcastle or Waldoboro.

MaineDOT and the line operator, MERR, have expressed interest in the past in partnering with businesses that would use the rail facility, which would necessarily involve access to a siding. The only sidings in Lincoln County are in Wiscasset, which is in active use, and at the former Newcastle and Waldoboro depots, which are inactive. The Department and its operator have also expressed interest in growing passenger rail service, which now operates seasonally and for special events as discussed above.

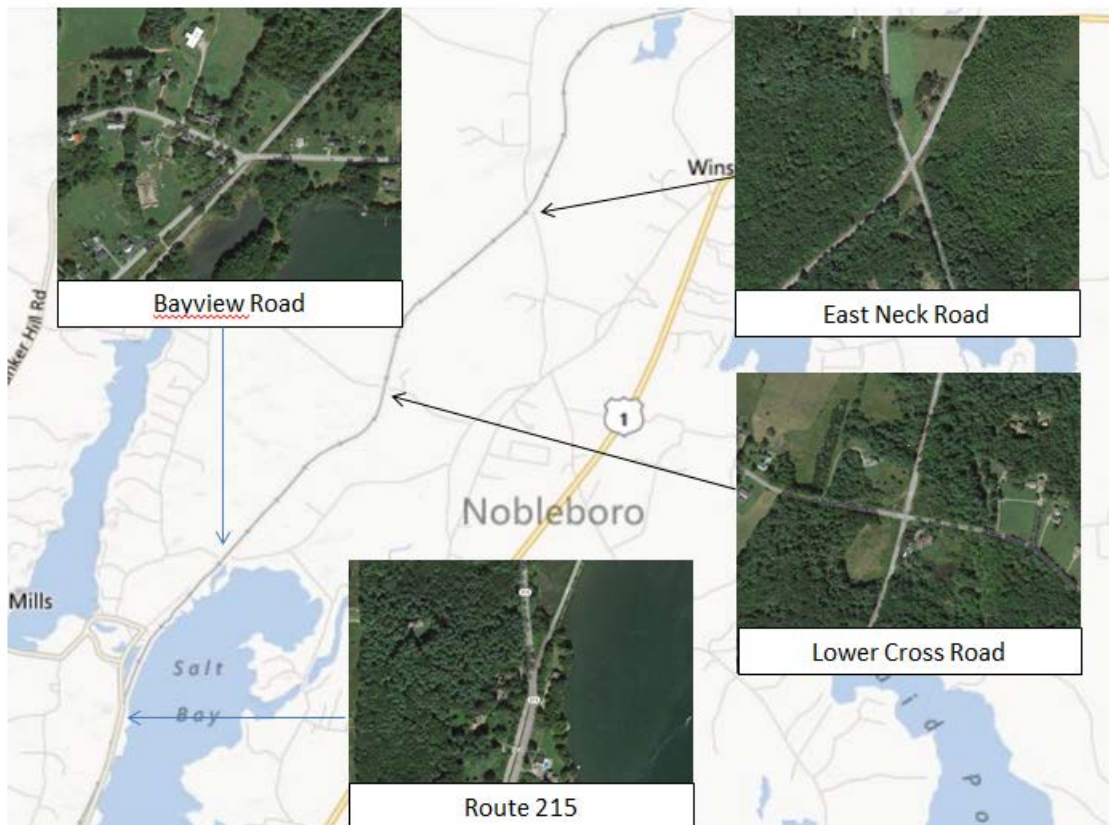
The Route 1 CMP represents an opportunity to consider the condition of the existing rail facility and the potential for future improvements (necessarily limited to locations where the rail crosses existing public roads). The two figures below show the 18 locations in the corridor. None of these crossings is controlled by gates. Academy Road, Sheepscot Road and Depot Street have flashing signals with the balance of the crossings only identified by road striping.

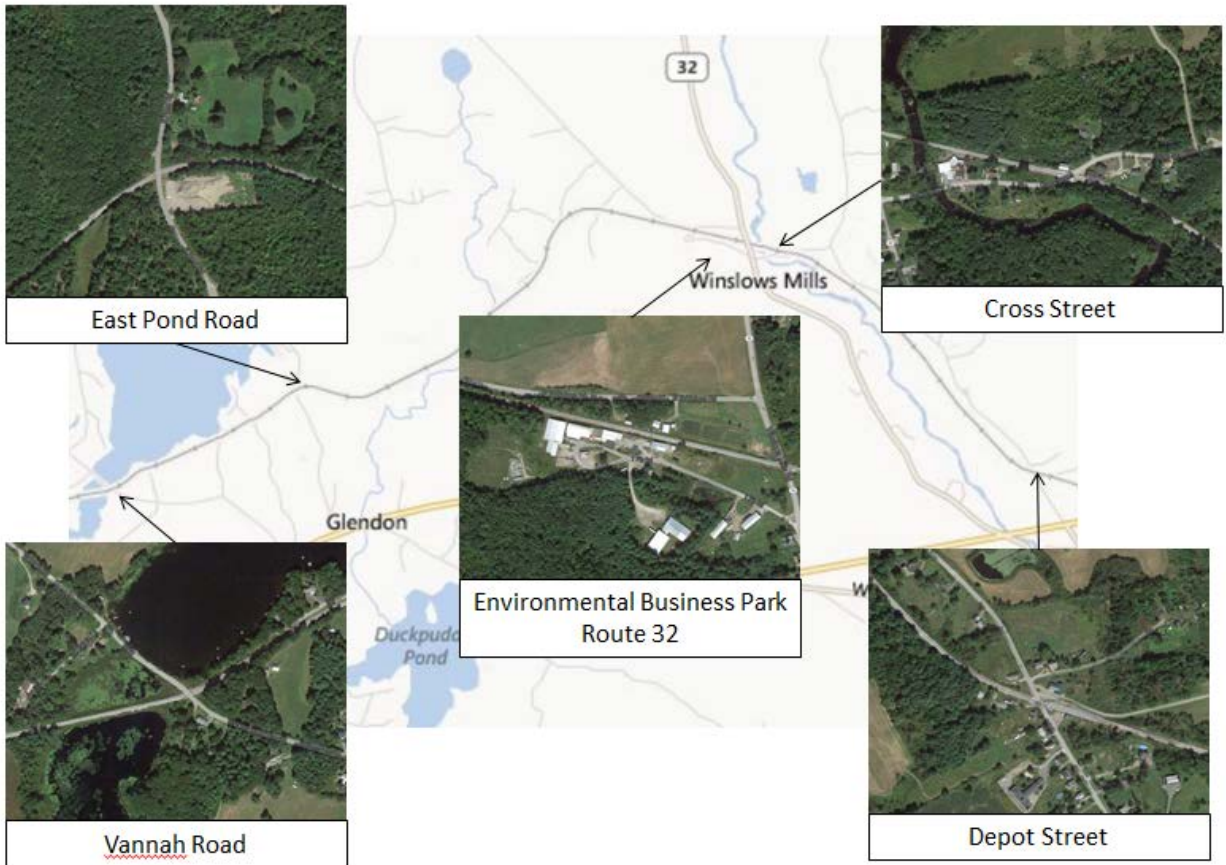
Opportunities for development of new rail sidings appears to be limited. While there are many factors that affect developability of sidings, some of the more important ones are:

- Suitability of adjacent land for commercial development
- Suitability of land adjacent to the track for a siding
- Suitability for truck access
- Distance to major highway
- Topography
- Nearby existing land uses
- ROW geometry (whether the line is straight or curved)

The following table evaluates the 18 rail-public road crossings in the project area for their suitability for development of commercial rail sidings.

Crossing	Suitability of adjacent land for commercial development	Suitability of adjacent land for development of a siding	Suitability for truck access	Distance to a major highway	Nearby land uses	Topography	Rail ROW geometry
Island Road	Low	Limited	Poor	Poor	Low density res	Severe	Fair
Station Road	Limited	Limited	Low	Poor	Low density res	Fair	Good
Lewis Hill Road	Very low	Very low	Very low	Fair	Low density res	Severe	Unknown
Sheepscot Road	Limited	Low	Good	Good	Low density res	Severe	Fair
Academy Hill Road	Good	Good	Good	Fair	Commercial	Good	Good
Route 215	Very low	Very low	Good	Good	Residential	Severe	Good
Bayview Road	Low	Fair	Low	Fair	Residential	Fair	Good
Lower Cross Road	Limited	Low	Poor	Poor	Low density res	Fair	Good
East Neck Road	Very low	Very low	Poor	Poor	Low density res	Severe	Poor
Vannah Road	Very low	Very low	Poor	Poor	Recreational	Severe	Poor
East Pond Road	Fair	Very low	Good	Good	Low density res	Severe	Poor
Route 32 - Waldoboro Environmental Park	Good	Good	Good	Good	Commercial	Good	Good
Cross Street	Good	Poor	Good	Good	Commercial	Severe	Poor
Depot Street	Fair	Good	Good	Good	Residential	Good	Good
Washington Road	Good	Poor	Good	Good	Commercial	Good	Good
Route 1	Fair	Poor	Poor	Good	Commercial	Fair	Fair
Old Route 1	Poor	Fair	Poor	Fair	Low density res	Fair	Good
Goshen Road	Fair	Fair	Poor	Poor	Low density res	Fair	Fair

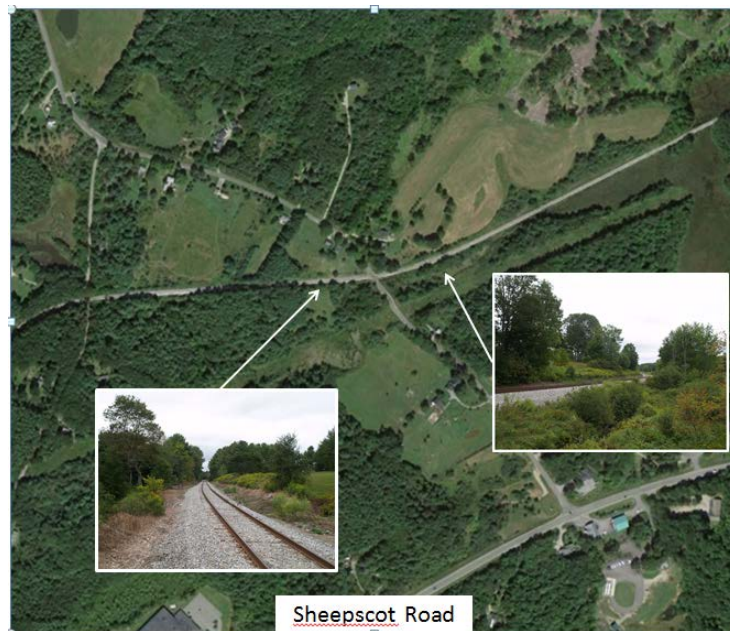




The only locations that appear to be worth some consideration for a commercial rail siding are Sheepscot Road, Academy Hill Road, the Waldoboro Environmental Park near Route 32, Depot Street and Washington Road. They are discussed in some detail below.

Sheepscot Road

The Sheepscot Road crossing is served by a state-aid road and is close to Route 1. As indicated in the photos below, the area south of the tracks is impacted by wetlands and the land to the north is elevated. The rail line also curves east of the crossing. These factors limit commercial siding developability.

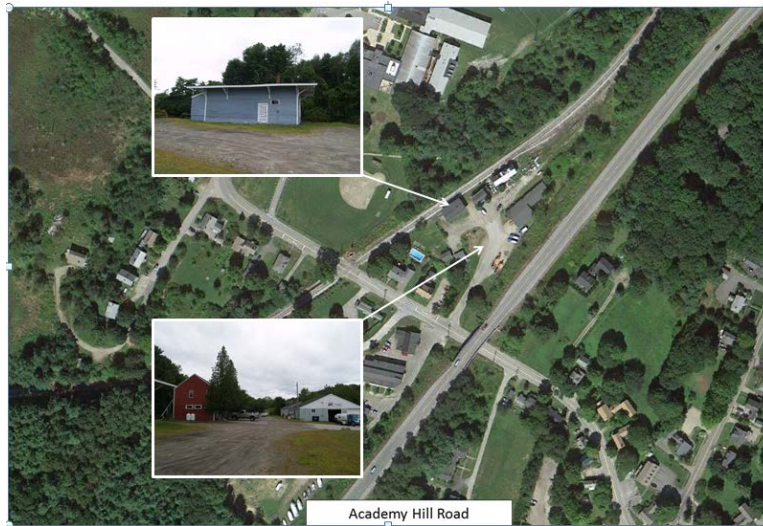


Academy Hill Road

This is the site of the former Newcastle Railroad Station. It has reasonably good truck access and is not too far from Route 1. There is an existing siding and a portion of the property is occupied by Dead River Company. The major limiting factor is the lack of much land that could be developed commercially.

Route 32 Waldoboro Environmental Business Park

It appears there are few limitations to developing a new siding on the southerly side of the tracks. The site is currently a mostly undeveloped industrial park and rail access might spur a new phase of growth. There are no nearby incompatible land uses.



Depot Street

This is the site of the former Waldoboro Railroad Station. Because of rail geometry and environmental limitations, siding development would probably need to be off the east side of Depot Street. A small siding already exists and while there are some topographic limitations, the area on the north side of the tracks may be suitable for some level of commercial development. While the site is close to Route 1, Depot Street is developed residentially so significant truck traffic could be problematic.

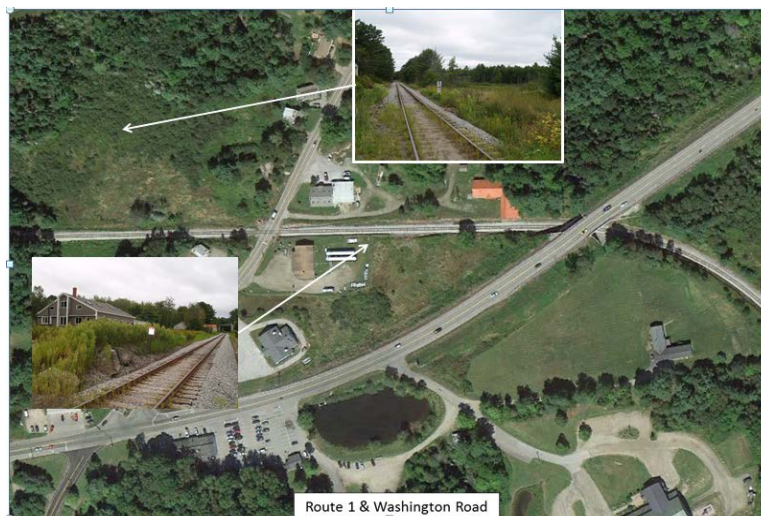
Washington Road

The area west of Washington Road has significant wetlands and is mostly undevelopable. A siding previously existed between Washington Road and the



Route 1 overpass but it was removed when the rail line was upgraded by the Department in the early 2000's. The overall site is relatively small and is mostly developed but the area off the north side of the tracks may be worth some investigation as to its suitability for commercial development.

Opportunities for improving passenger rail facilities are limited to the former Newcastle Railroad Station and either the Depot Road or Washington Road sites in Waldoboro. MaineDOT does not control the entire Academy Hill Road site in Newcastle. The former depot building is privately owned (and for sale) but it is in poor condition and would likely need to be replaced before it could be used. In addition, Dead River leases buildings and land from MaineDOT. While a long-term goal for this site might be to construct a station building, a passenger platform could be a satisfactory alternative for the foreseeable future. A key improvement at this site (if Dead River relocated) would be development of a multi-modal facility with construction of a parking lot and a bus pickup-drop-off facility. Parking is, in fact, a critical need for any new passenger rail facility.



In January 2014, the Newcastle Board of Selectmen voted to pursue with Damariscotta a plan to provide daily (seasonal) trolley service in the Twin Villages area and weekend service from the Newcastle train station on Depot St. (off Academy Hill) in a shuttle loop to the Wiscasset and Boothbay areas. Future plans call for Newcastle to secure ownership of the depot building which is privately owned, but situated on State land.

One of the best known businesses in the mid-coast is Moody's Diner and it could spur some additional seasonal use of the rail line if the train could stop within close walking distance of the restaurant. A new rail facility could also increase tourist visits to the downtown with completion of the Main Street sidewalk to Route 1. Development of a building or platform would require some land acquisition, which is not a problem with the Depot Street site, but Depot Road is too far from Moody's and the village to be attractive to tourists. For these reasons, a train stop in the vicinity of the Washington Road crossing would likely be preferable to Depot Street.

MaineDOT Work Plan Projects

The only projects identified in the MaineDOT 2014-2016 Work Plan within the project area are installation of a new dual flashing beacon at the Manktown Road intersection, paving of Manktown Road from Route 1 to Route 235 and construction of a sidewalk on Route 129 from Route 1B to Miles Street. The Department is considering realignments to the Route 27 and Cross Road intersections but these are in the pre-planning phase and have not yet been funded for design.

Lincoln County Strategic Transportation Investments

In 2007 the Lincoln County Commission recommended to MaineDOT eleven strategic transportation investments. Recommended investments within the project corridor were:

Route 32/1 intersection improvements. Route 32 is the principal access to the easterly side of the Bristol peninsula and, as noted above, is an important connector to Route 17 and Augusta. The intersection of Routes 32 and 1 is skewed, creating safety concerns. In addition, it provides inadequate protection for pedestrians, including schoolchildren walking to the nearby elementary school.

Corridor-wide on- and off-road bicycle facilities. Many tourists bring bicycles with them when they vacation in the mid-coast. In addition, there are numerous schools on or in the immediate vicinity of Routes 27 and 32. In most instances, bicyclists must use 1-2 foot shoulders or share travel lanes with high volumes of passenger vehicles and trucks. New on- and off-road bicycle facilities would not

only improve the safety of bicyclists but also serve as an attraction for tourists while reducing overall vehicle use.

Waldoboro passenger rail station. A rail station in Waldoboro in the general vicinity of Moody's Diner could serve as a destination for tourists and improve potential ridership on the Rockland Branch. With the addition of surface parking, it could also serve commuters and day-trippers.

3. LAND USE

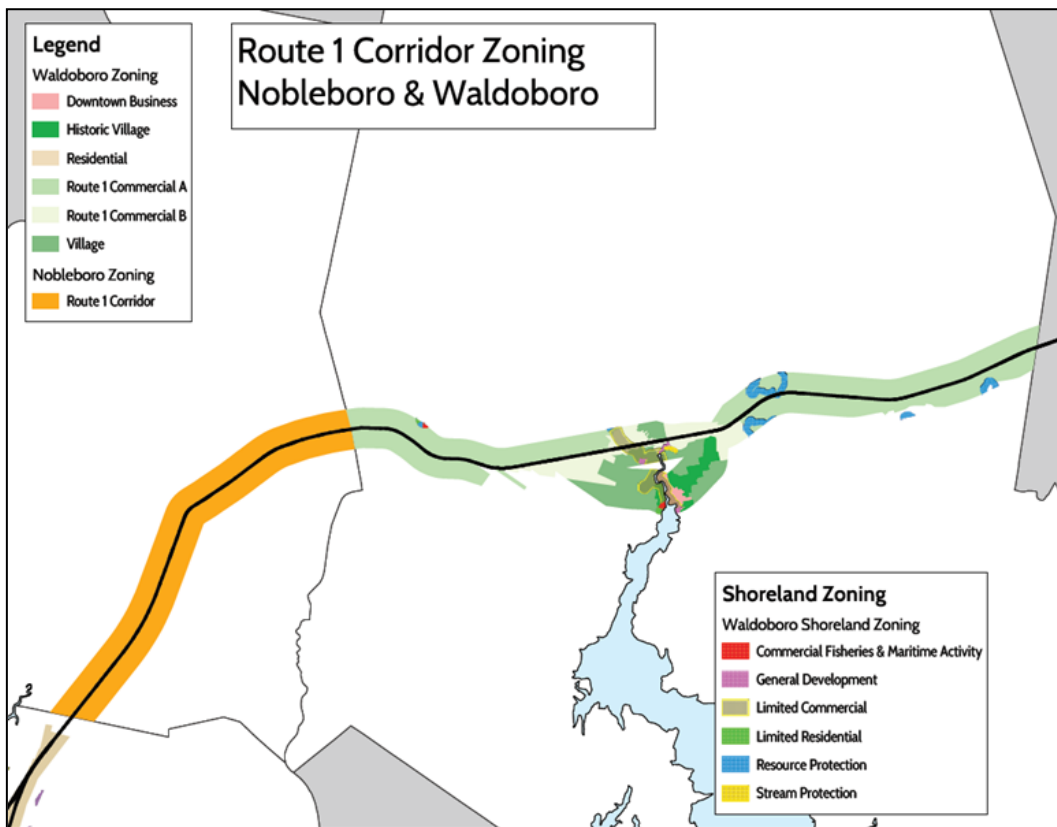
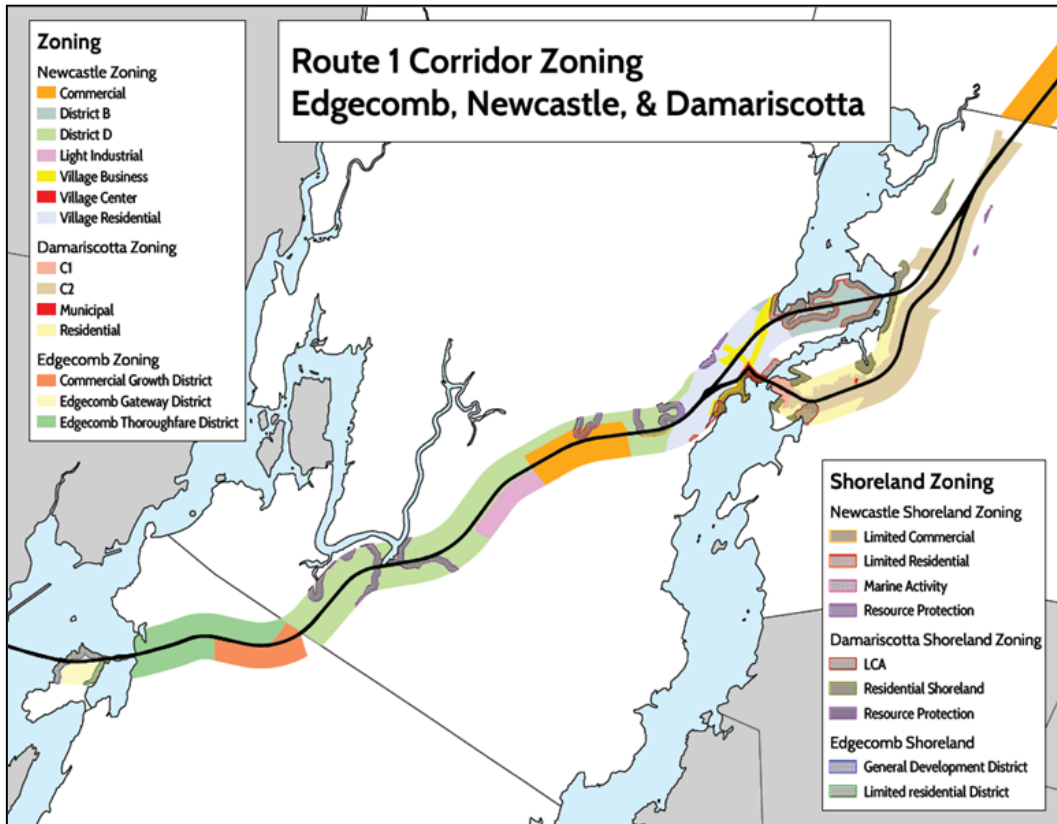
The following figures and tables show municipally defined land use zoning and Shoreland zoning districts and district regulations within a 1,000-foot wide area along both sides of Route 1. For the permitting of driveways and entrances, State access management regulations apply outside of compact urban areas (there are no urban compact areas in the corridor).

Commercial and retail uses are allowed throughout the corridor (District B in Newcastle does not allow commercial and retail uses but this portion of the highway is either access controlled or physically inaccessible). All of the Route 1 frontage in Nobleboro and most of it in Newcastle, Damariscotta and Waldoboro allow industrial uses whereas Edgecomb prohibits them. Governmental and institutional uses are permitted everywhere along the Route 1 frontage. Single- and multi-family residential is permitted in all of the corridor communities along Route 1 except Edgecomb, which limits residential to single-family only.

All of the Edgecomb and Nobleboro Route 1 frontage and most of the Waldoboro frontage requires a minimum of 400 feet of highway frontage. Damariscotta's minimum frontage along Route 1 is effectively 200' due to the absence of sewer. Newcastle's minimum Route 1 frontage varies from 100-200 feet depending on use but the Commercial District near Sheepscot Road represents a significant exception with no required road frontage. Minimum lot sizes along Route 1 vary from 40,000 sf to 2 acres with some very limited exceptions.

Based on the range of uses permitted in the corridor, each community recognizes the attractiveness of this major arterial to business and its potential for contributing future jobs and taxes to the local economies yet with the exception of Waldoboro new single-family homes are allowed throughout the corridor with multi-family housing permitted everywhere except in Edgecomb. Given the corridor's potential as an economic engine for these communities, the highest and best use for land along Route 1 is for commercial and industrial activities. Limiting future residential development along the highway would both reduce the potential for future conflicting land uses and preserve highway frontage for highest and best uses.

Dimensional requirements are to some extent inconsistent through the corridor with some potentially contributing to land development patterns that could adversely affect Route 1's traffic flow and attractiveness for development. Two factors that affect traffic safety and flow are minimum lot frontage and spacing of accesses.



Route 1 Corridor Zoning Districts											
Town	Zoning District	Uses Permitted							Min Lot Size	Min Frontage	Route 1 Setback
		SF Res	MF Res	Comm	Ind	Gov	Inst	Retail			
Edgecomb	Gateway	X		X		X	X	X	1 acre	400'	100' fm centerline
	Thoroughfare	X		X		X	X	X	1 acre	400'	150' fm centerline
	Commercial Growth	X		X		X	X	X	1 acre	400'	150' fm centerline
Newcastle	District B	X	X			X	X		1 acre	100'	30'
	District D	X	X	X	X	X	X	X	1 acre	100'; one access every 500' per lot on R1	30'; ind - 200' fm centerline of R1; comm & retail - 50' fm R1 ROW
	Commercial	X	X	X	X	X	X	X	None	0'	50' fm R1 ROW
	Light Industrial	X	X	X	X	X	X	X	None	200' comm, ind, retail	Ind - 200' fm centerline of R1; comm & retail - 50' fm R1 ROW
	Village Residential	X	X	X		X	X	X	20,000 sf	100'	30'
	Village Business	X	X	X		X	X	X	10,000 sf	0'	30'
	Village Center	X	X	X		X	X	X	7,500 sf	0'	5'
Damariscotta	C1	X	X	X		X	X	X	10,000 sf	0'	avg of SB on adjacent lots
	C2	X	X	X	X	X	X	X	10,000 sf	100'	20'
	Municipal								sewered, 20,000 sf other	200'	20'
	General Residential	X	X						10,000 sf sewered, 20,000 sf other	75' sewered, 100' other	20'
Nobleboro	Route 1 Corridor	X	X	X	X	X	X	X	2 acre	400'	200' fm centerline
Waldoboro	Route 1 Comm A	X	X	X	X	X	X	X	80,000 sf	400'	100' fm travelway
	Route 1 Comm B	X	X	X	X	X	X	X	5,000 sf W&S;	150'	25'
	Village	X	X	X		X	X	X	20,000 sf		
	Historic Village	X	X	X		X	X	X	None	75'	25'

Route 1 Corridor Shoreland Zoning Districts											
Town	Shoreland Zoning District	Uses Permitted							Min Lot Size	Min Frontage	
		SF Res	MF Res	Comm	Ind	Gov	Inst	Retail			
Edgecomb		X		X		X	X	X	1 acre	400'	
	General Development	X	X			X	X		2 acre	100'	
	Limited Residential	X		X		X	X	X	2 acre	100'	
Newcastle		X	X			X	X		1 acre	100'	
	Resources Protection	X	X			X	X		res 30,000 sf tidal, 40,000 sf non-tidal; other 40,000 sf	res 150' tidal, 200' non-tidal; 200' other	
	Limited Commercial	X	X	X		X	X	X			
	Limited Residential	X	X			X	X				
	Marine Activity			X	X	X	X	X	60,000 sf	300'	
Damariscotta		X	X	X		X	X	X	10,000 sf	0'	
	LCA	X	X	X		X			res 30,000 sf tidal, 40,000 sf non-tidal; other 40,000 sf	res 150' tidal, 200' non-tidal; 200' other	
	Residential Shoreland	X	X								
Waldoboro	Resource Protection	X									
		X	X	X	X	X	X	X	80,000 sf	400'	
	Limited Residential	X	X			X	X				
	Limited Commercial	X	X	X		X	X	X			
	General development	X	X	X	X	X	X	X			
	Comm Fisheries/Maritime			X	X	X	X	X			
	Resource Protection	X									
	Stream Protection	X									

In the absence of commercial planned unit development standards, a 400-foot minimum frontage requirement results in adequate spacing commercial activities along a highway corridor. This minimum requirement is employed in all of Edgecomb's and Nobleboro's Route 1 corridor and most of Waldoboro's. The

minimum frontage for Route 1 in Damariscotta is 100 feet while most of the Route 1 corridor in Newcastle has a minimum frontage of 100 to 200 feet. Newcastle's Commercial District, however, which represents a prime future growth area, does not have a minimum frontage requirement, and, therefore, does not allow for minimum spacing between business uses. Given the high speed and high volume nature of the Route 1 corridor, a minimum highway frontage of 400 feet is optimal while a minimum frontage of less than 200 feet should be evaluated for potential modification.

Only Nobleboro limits Route 1 lots to a single access to Route 1. Waldoboro limits medium and high traffic generators to as many as three accesses while Edgecomb and Damariscotta are silent on accesses. Newcastle limits accesses in District D to one per lot unless they are separated by a minimum of 500 feet from other access on the lot.

Another factor affecting development along Route 1 is setback from the highway corridor with larger setbacks often more conducive to safer ingress and egress. Edgecomb's Route 1 setbacks vary from 100 feet from the centerline of Route 1 in the Gateway District to 150 feet in the Thoroughfare and Commercial Growth Districts. With an assumed right-of-way width of 100 feet, this results in effective right-of-way setbacks of 50-75 feet. While a 50-foot setback is compatible with the more developed Gateway District, an increase in setback for the other districts may be advisable.

Newcastle's District D and Industrial District and Nobleboro's Route 1 Corridor require a 200-foot centerline setback or an equivalent 100-foot right-of-way setback, which is compatible with the mostly underdeveloped nature of these districts. Waldoboro's Commercial A District also has a 100-foot Route 1 right-of-way setback. The Newcastle Commercial District only has a 50-foot Route 1 right-of-way setback, which may be too small for this high-speed corridor. At this time, only Waldoboro has enacted access management standards consistent with good traffic engineering practices.

In 2006, Edgecomb, Newcastle, Damariscotta, Nobleboro and Waldoboro established a joint committee to examine the potential for creating uniform large scale, or "big box", development standards. The committee eventually recommended such standards and, to date, all but Waldoboro have enacted customized versions of the standards.

Large scale development is defined as retail uses greater than 2,500 sf (10,000 sf Edgecomb), non-residential uses over 10,000 sf (Damariscotta 7,500 sf, Newcastle 20,000 sf and Edgecomb 25,000 sf), formula restaurants or uses with drive-thrus or gasoline sales. All large scale developments must comply with standards related to building appearance, landscaping, screening, lighting, parking lot design and others. Nobleboro and Damariscotta apply bike and pedestrian standards to all large scale developments while Newcastle and

Edgecomb apply them if they exceed 10,000 sf. Nobleboro, Edgecomb and Newcastle limit parking in front of buildings to no more than 10% of total site parking while Damariscotta prohibits all parking in front of buildings. Exceptions are made for vehicle display areas.

For large scale retail developments exceeding 20,000 sf (Edgecomb and Newcastle), large scale retail or service developments exceeding 10,000 sf (Nobleboro) and any large scale development exceeding 20,000 sf (Damariscotta), the building must be screened from “designated roads”, which include Route 1, with landscaping or other smaller buildings. Such screening is counterbalanced by allowances for enhanced signage.

Through analysis of land use and transportation trends, and public input, the Gateway 1 US Route 1 Corridor Preservation Strategic Planning Process suggested growth cores in all five corridor communities where, if future development takes place, that development would not degrade the capacity or safety of Route 1 or the scenic quality of surrounding rural areas, and could be serviced by public transportation. The suggested core growth areas near Route 1 were:

- Edgecomb – Davis Island
- Newcastle – vicinity of Commercial District
- Damariscotta – west of Route 1B and south of Biscay Road
- Nobleboro – Center Street
- Waldoboro – north of Route 1 between the Medomak River and Route 220 and east of Manktown Road

While the Gateway 1 plan did not recommend prohibiting development elsewhere on Route 1, it found that preventing sprawl by concentrating development in strategic locations would benefit highway functioning and the communities in general.

Comprehensive Plans

Comprehensive plans serve as a guide of recommendations for the future development of communities. These plans provide the legal basis and foundation for municipal ordinances. All corridor communities except Newcastle have adopted comprehensive plans consistent with the Comprehensive Planning Land Use and Regulation Act (Title 30-A) (Newcastle is working on addressing identified inconsistencies). Damariscotta is currently working on an update to its 2000 plan and Waldoboro is planning to begin work on updating its plan in the near future. The status of corridor community comprehensive plans and zoning is presented in the table below.

**Comprehensive Plan and Land Use Ordinance Status
For Route 1 Corridor Municipalities**

Area	Comprehensive Plan		Land Use Ordinance
	Adopted Locally	State Consistent	Zones or Districts*
Edgecomb	Yes 2010	Yes	Yes
Newcastle	Yes 2006	No	Yes
Damariscotta	Yes 2000	Yes	Yes
Nobleboro	Yes 2007	Yes	No
Waldoboro	Yes 1998	Yes	Yes

Note: *beyond shoreland zoning

Excerpts of comprehensive plan observations and recommendations relating to Route 1 transportation issues, including the MERR, are noted in this section. These comprehensive plans were reviewed and considered in the formulation of this corridor management plan.

Edgecomb

- Citizen survey results suggest that water and sewer not be expanded beyond Route 1
- Route 1 is Edgecomb's commercial growth area
- Route 1's intersections with Route 27 and Eddy Road were identified as safety problems
- "The driving determinant in managing ever-increasing traffic on Route 1 is the resolution of the Wiscasset bypass. Traffic and physical/economic growth projections of the DOT, the Gateway One project and Friends of the Mid-Coast suggest growth at the current rate will create dangerous and chaotic conditions."
- View from Route 1 to the river is identified as a visual resource.
- Recommendation to protect and preserve traditional land uses outside of the Route 1 growth areas

Nobleboro

- Public comments
 - o Don't let Route 1 develop like it has in Newcastle and Waldoboro
 - o Require landscaping and construction plan for development on Route 1
 - o Limit driveway access to Route 1
 - o Fear that Route 1 will see unrestricted commercial development

Damariscotta

- View from Route 1 to Harbor
- Many high crash locations at time of plan preparation (2000). The 106 accidents listed below resulted in 25 injuries:

Road or intersection	Accidents 1996-1998	CRF
Main Street @ Bridge	11	2.54
Main Street @ Water Street	8	1.98
Main Street @ Church/Vine Streets	16	1.90
Main Street between Vine & School Streets	31	1.41
Main Street @ School Street	11	1.72
Route 1B @ Biscay Road	8	1.38
Route 1 @ Route 1B	12	3.54
School Street between High Street and Route 129	9	1.08

Waldoboro

- Suggested Park and Ride lot south of town (since constructed)
- Designate on the Future Land Use Map and in any subsequent land use ordinances, specific locations where the Town will encourage retail and service businesses including the downtown and Route 1.
- Recommended Route 1 Commercial District for single-family and two-family dwellings, commercial uses, agricultural and forestry uses.
- Recommended amending the Land Use Terms, Definitions, and Performance Standards Ordinance to include a requirement for a 50-foot landscaped buffer along Route 1 for all new commercial developments and for the redevelopment of existing commercial properties. Prohibit parking within this buffer area.
- Recommended limiting commercial driveways along Route 1 to one per lot of record, provided that a second driveway may be located no less than 500 feet from any other driveway, and implement a maximum driveway opening, in accordance with the Maine Department of Transportation's handbook, "Access Management, Improving the Efficiency of Maine Arterials, 1994."
- Recommended requiring new commercial uses located on Route 1 comply with the sight distance standards contained in MAINEDOT's Access Management Handbook.
- Recommended requiring shared driveways and inter-connected parking lots when properties along Route 1 are developed for multiple commercial uses, and allow the Planning Board to reduce the frontage requirement for commercial developments involving multiple commercial uses situated perpendicular to Route 1.
- Recommends a regional coordination program for the management of the Route One corridor system would provide consistency in transportation planning between the communities of the midcoast
- Found that Route One has been identified in a number of state and regional studies as having serious capacity deficiencies. In particular, the congestion in the stretch of highway in and around the Town of Wiscasset (located 18 miles south), is imposing significant constraints on the economy and travel requirements of Waldoboro
- Found that The Route 1 intersection with Jefferson Street had 10 accidents and a CRF of 2.08 at the time of the 1998 Comp Plan (this

- intersection has since been improved) and the Route 1-Route 220 intersection also had 10 accidents and a 2.08 CRF.
- Found that the lack of any sidewalks on U. S. Route One poses a particular danger to pedestrians and discourages foot traffic between businesses along this corridor
 - Encourage the growth and development of passenger and freight rail facilities.
 - The Rockland Branch, which spans the town of Waldoboro from east to west, has underutilized capacity that can readily accept significant freight shipments without sacrificing efficiency. Freight is already moving on these rails. The cost of adding one or more stops along the route is marginal. Economic development planning could lead to significant growth in railroad freight without a substantial investment in new lines.
 - The role of individual communities and regional planning organizations is to increase the viability of rail through concentrated land-use and development planning.

Newcastle

- Comments at comp plan visioning sessions
 - o Route 1 would have no strip development, no traffic lights, and no “big box” stores and that any commercial development would be buffered from the road.
 - o Commercial development more appropriate to Route 1 should be nonpolluting and would include light manufacturing and office buildings with either perpendicular development, parallel service roads, or long setbacks.
- Plan recommends provisions in existing land use ordinance that discourage sprawl along the Route 1 corridor
- Plan recommends encouraging the construction of frontage roads along Route 1 that will allow commercial development to reach deeper into the Route 1 corridor instead of sprawled along the edges of the highway.
- Plan recommends concentrating the industrial development in the light industry Route 1 District.
- Plan supports provisions in our existing land use ordinance that discourage sprawl along the Route 1 corridor.
- Plan encourages the construction of frontage roads along Route 1 that will allow commercial development to reach deeper into the Route 1 corridor instead of sprawled along the edges of the highway.
- Adjust zoning ordinance to allow light industrial development between Sheepscot Road and Lewis Road, taking advantage of available electrical power and possible rail connections.
- There is an opportunity to preserve the old train station off Academy Hill road, especially with the improvements in the rail line from Portland to Rockland.

- Encourage development of rail service to and from Newcastle, both passenger and freight, including infrastructure such as a terminal and adequate parking.
- Explore opportunities for acquiring and refurbishing the historical railroad station.
- Seek opportunities to provide for parking for potential train service.
- Seek regional intermodal use for train traffic.
- Explore needed infrastructure for freight service.
- Coordinate development of rail service with neighboring towns.

Access Management

Access management is currently addressed by State access management regulations and standards, but these may prove insufficient to preserve the mobility of the roadway. As well, communities with inadequate land use provisions like zoning, subdivision and site plan review may be less able to regulate effectively the scale of new development, in addition to the locations of new entrances and streets accessing Route 1 and on adjoining state highways.

Access management is a shared responsibility between the Department and local communities. Towns are free to enact their own standards with the more restrictive provisions (state vs. community) controlling. As previously noted, only Waldoboro has enacted a comprehensive set of access management standards. However, Waldoboro also uses an incentive-based mechanism for encouraging better access management in its Route 1 Commercial A District, which encompasses most of its Route 1 frontage. In summary, for multiple commercial uses, each use must have 80,000 square feet and 400 feet of road frontage and 100 feet setback. If, however, developments retain at least 50% of the frontage *and* lot area as open space and provide shared driveways no closer than 600 feet apart and/or utilize a frontage road, the lot size is reduced to 80,000 square feet for the first use and 10,000 square feet for each additional use, the frontage is reduced to 400 feet for the first use and 50 feet for each additional use, and all buildings are set back at least 100 feet from the edge of the traveled way, but not within the right-of-way.

Edgecomb also uses an incentive-based approach to improving access management and retaining rural character. While these provisions only apply to a portion of its Route 27 frontage, a variation of these provisions could work equally well along Route 1. The purpose of these provisions is well worth repeating here: "The Route 27 Corridor areas preserve the historic character and rural appearance of Route 27. While recognizing the public's right to develop property, it is also in the public's interest to maintain the historic pattern of development, rural fields and wooded areas that characterize much of Route 27." In summary, the minimum lot size and frontage requirements of 3 acres and 300 feet, respectively, can be reduced to 2 acres and 200 feet if the lot is served by a single access that is shared with an adjacent lot. In addition, the dimensional

requirements can be further reduced to 1.5 acres and 50 feet if the lot is served by a single access that is shared with an adjacent lot and all structures are set back at least 200 feet from the Route 27 right- of-way.

It would be beneficial if the other corridor communities consider adopting access management standards similar to Waldoboro's and/or Edgecomb's for their Route 1 frontages.

4. ECONOMIC DEVELOPMENT AND HOUSING

Employment

Between 2002 and 2012 the five corridor communities have seen a combined net increase of 265 persons or 4.5% in the labor force to a total of 6,086. During the same period, Lincoln County's labor force increased by a net of 696 people to 18,391 or an increase of 3.9%. Despite the influx of retiree-aged residents, employment opportunities have not kept up with the employment needs of residents with the corridor towns as a whole and the county fairing about the same. The following table presents the number of jobs in each community in 2012 with the average weekly wage. While the five corridor communities represent about 35% of the county's total population, they provide about 44% of total jobs, an indication of Damariscotta's importance in the county's overall economic health.

2012 Employment Data				
	Average Employment	Average Weekly Wage	Establishments	Total Wages
Maine	583368	\$742	49713	\$22,521,002,010
Lincoln	11094	\$587	1562	\$338,803,144
Edgecomb	251	\$526	59	\$6,870,706
Damariscotta	2522	\$550	209	\$72,081,425
Newcastle	672	\$566	91	\$19,785,047
Nobleboro	310	\$630	49	\$10,140,304
Waldoboro	1117	\$535	155	\$31,063,175
* Maine Center for Workforce Research and Development				

The number of unemployed persons (and seeking work) increased in the corridor towns and the county between 2002 and 2012 by 211 and 611 individuals, respectively, while the unemployment rates for the five corridor communities collectively and the county increased from 3.3% and 3.6% to 6.6% and 6.8%, respectively, during this same time period. This represents an almost doubling of the unemployment rates during this 10-year period and reflects the depth of the recession that began in the late 2000's.

Labor Force (Annual, Not Seasonally Adjusted)

Area	Civilian Labor Force			Employed			Unemployed			Unemployment Rate		
	1992	2002	2012	1992	2002	2012	1992	2002	2012	1992	2002	2012
Damariscotta	1067	892	971	1016	861	906	51	31	65	4.8	3.5	6.7
Edgecomb	521	677	795	484	655	749	37	22	46	7.1	3.2	5.8
Newcastle	912	975	937	869	943	882	43	32	55	4.7	3.3	5.9
Nobleboro	956	881	888	915	861	826	41	20	62	4.3	2.3	7.0
Waldoboro	2343	2396	2495	2213	2311	2322	130	85	173	5.5	3.5	6.9
Lincoln Cty	16137	17695	18391	15216	17060	17145	921	635	1246	5.7	3.6	6.8
Maine	639622	680569	706097	594082	650943	654501	45540	29626	51596	7.1	4.4	7.3
United States	128105000	144863000	154975000	118492000	136485000	142469000	9613000	8378000	12506000	7.5	5.8	8.1

Source: Maine Department of Labor

Note: Four corridor communities are in the Waldoboro LMA; Edgecomb is in the BBH LMA

As shown in the following table, in 2010 the largest single employer in the County, as well as the corridor, with over 500 employees, was Miles Memorial Hospital. Other large employers in the corridor were the First NA (bank), Hannaford Supermarket, Moody's Diner, Newcastle Marine and Taction.

**Major Employers (with 100+ employees)
Located in Lincoln County**

Company/Organization Name	Partial Address	Municipality	Sector	Employees
First NA	Main St	Damariscotta	Financial	100-249
Fisherman's Wharf Inn	Commercial St	Boothbay Harbor	Hotels/Motels	100-249
Hannaford Supermarket & Phrmcy	Townsend Ave	Boothbay Harbor	Grocers-retail	100-249
Hannaford Supermarket & Phrmcy	Main St	Damariscotta	Grocers-retail	100-249
Miles Memorial Hospital	Miles St	Damariscotta	Hospital	500-999
Moody's Diner	Atlantic Hwy	Waldoboro	Restaurant	100-249
Newcastle Marine	Hall St	Newcastle	Boat Manuf	100-249
Rocktide Inn & Restaurant	Atlantic Ave	Boothbay Harbor	Restaurant	100-249
St Andrews Hosp & Healthcare	Saint Andrews Ln	Boothbay Harbor	Hospital	100-249
St Andrews Village Retirement	Emery Ln	Boothbay Harbor	Nursing Homes	250-499
Taction	Jefferson St	Waldoboro	Call center	100-249
YMCA	Townsend Ave	Boothbay Harbor	Rec Services	100-249

Source: Maine Department of Labor, info USA 2010.

Notes: Education employee statistics by school, not aggregated by RSU. Municipal employment not included.

The table below shows the importance of the health care and social services sector and retail in the corridor (mostly represented by the Waldoboro LMA) in terms of total wages and employment although it should be noted that the average weekly wage in these sections is comparatively low. Medical, social services and education professions have seen growth, while many other sectors have stagnated or decreased. Hospitality occupations provide low wage employment in season. Traditional industries including construction, maritime activities, and related occupations remain important sectors, although they employ fewer people today than they once did.

Similar to the employment and wages data presented above, taxable retail sales in Damariscotta represented the lion's share of taxable retail sales in the corridor communities in 2012. While comparable town-by-town data was not available, Lincoln County's taxable retail sales in 2006 were \$330,981,200, or about 7% more than in 2012, another reflection of the impact of the recent recession. Building supply represents a particularly strong retail sector in the corridor, accounting for 60% of such sales in the county.

Given the current focus of economic activity in the corridor with employment and retail businesses centered in Damariscotta-Newcastle and Waldoboro, similar type development is likely to continue in this area and spread outward, resulting in increasing pressure to develop along Route 1.

Employment by Industry, 2011	Establishments		Average Employment		Total Wages		Average Weekly Wage		Establishments	Average Employment	Total Wages	Average Weekly Wage
Industry Sector	Waldoboro LMA	Boothbay Harbor LMA	Waldoboro LMA	Boothbay Harbor LMA	Waldoboro LMA	Boothbay Harbor LMA	Waldoboro LMA	Boothbay Harbor LMA	Total			
Health Care and Social Assistance	54	17	1201	330	\$34,124,010	\$18,134,501	\$546	\$1,065	71	1531	\$52,258,511	\$801
Retail Trade	129	61	1024	402	\$22,707,182	\$9,309,294	\$426	\$445	190	1426	\$32,016,476	\$436
Accommodation and Food Services	58	71	609	567	\$10,555,850	\$11,743,185	\$333	\$398	129	1176	\$22,299,035	\$366
Educational Services	19	8	632	220	\$19,880,174	\$7,710,820	\$605	\$673	27	852	\$27,590,994	\$639
Manufacturing	41	26	489	217	\$15,020,731	\$10,873,822	\$591	\$963	67	706	\$25,894,553	\$777
Construction	130	81	353	215	\$11,892,160	\$7,474,001	\$648	\$669	211	568	\$19,366,161	\$659
Other Services, Except Public Administration	83	34	239	150	\$6,076,830	\$3,190,353	\$488	\$410	117	389	\$9,267,183	\$449
Administrative and Waste Services	42	29	205	182	\$6,479,469	\$7,220,970	\$607	\$764	71	387	\$13,700,439	\$686
Professional and Technical Services	75	39	127	214	\$5,606,038	\$10,685,520	\$846	\$958	114	341	\$16,291,558	\$902
Finance and Insurance	17	11	231	71	\$9,431,621	\$2,829,516	\$787	\$772	28	302	\$12,261,137	\$780
Public Administration	12	9	165	86	\$3,582,408	\$2,621,994	\$419	\$588	21	251	\$6,204,402	\$503
Transportation and Warehousing	34	15	169	54	\$5,459,487	\$2,235,937	\$621	\$796	49	223	\$7,695,424	\$709
Arts, Entertainment, and Recreation	15	24	54	140	\$1,309,550	\$4,586,856	\$468	\$632	39	194	\$5,896,406	\$550
Information	9	8	116	39	\$4,801,824	\$824,059	\$798	\$407	17	155	\$5,625,882	\$603
Wholesale Trade	38	14	91	57	\$2,898,500	\$1,724,216	\$610	\$587	52	148	\$4,622,716	\$599
Agriculture, Forestry, Fishing and Hunting	69	33	123	23	\$3,940,864	\$406,940	\$615	\$347	102	146	\$4,347,804	\$481
Real Estate and Rental and Leasing	23	17	39	26	\$994,205	\$738,176	\$488	\$546	40	65	\$1,732,381	\$517
Management of Companies and Enterprises	3		51		\$2,823,199		\$1,058		3	51	\$2,823,199	\$1,058
* Maine Department of Labor												
Waldoboro LMA - Waldoboro, Bristol, South Bristol, Damariscotta, Newcastle, Nobleboro, Jefferson, Bremen, Alna, Friendship												
Boothbay Harbor LMA - Edgecomb, Boothbay, Boothbay Harbor, Southport												
Definition of Labor Market Area - labor market area is an economically integrated area within which individuals can reside and find employment within a reasonable distance or can readily change jobs without changing their place of residence.												

2012 Taxable Retail Sales (\$1,000s)							
	Maine	Lincoln County	Waldoboro	Nobleboro	Newcastle	Damariscotta	Edgecomb
Total	\$17,537,528	\$309,770	\$33,394	\$8,356	\$16,301	\$68,846	\$5,395
Personal	\$15,470,260	\$293,311	\$31,885	\$8,294	\$15,287	\$64,919	\$4,120
Business Op	\$2,067,268	\$16,460	\$1,509	\$62	\$1,014	\$3,927	\$1,275
Building	\$2,062,270	\$38,435	\$3,746	\$2,623	\$0	\$16,731	\$0
Food Store	\$1,624,595	\$50,447	\$7,688	\$0	\$0	\$12,299	\$0
General	\$3,086,145	\$22,581	\$911	\$0	\$1,024	\$7,936	\$0
Other	\$2,104,838	\$37,825	\$4,417	\$632	\$1,326	\$8,855	\$1,691
Auto Trans	\$3,665,648	\$62,180	\$6,041	\$0	\$0	\$3,767	\$0
Restaurant	\$2,189,676	\$52,735	\$5,749	\$747	\$755	\$10,328	\$645
Lodging	\$737,089	\$29,106	\$353	\$296	\$307	\$2,019	\$102
Rest/ Lodg	\$2,926,765	\$81,842	\$6,101	\$1,043	\$1,062	\$12,346	\$747
* Maine Revenue Services							

Housing

The largest concentrations of housing in the corridor are found in Damariscotta-Newcastle Village area and downtown Waldoboro with more dispersed residential development elsewhere. Shorefront areas along the rivers and ponds have notable densities due principally to the amount of seasonal homes. Newer housing tends to be placed at lower densities than was built traditionally and is far more dispersed than is represented by historical development patterns as shown on the following History of Growth Maps. Note that a significant amount of more recent development is located along state and state-aid highways.

**Edgecomb to Waldoboro
1893 - 1913 (1527 Buildings)**



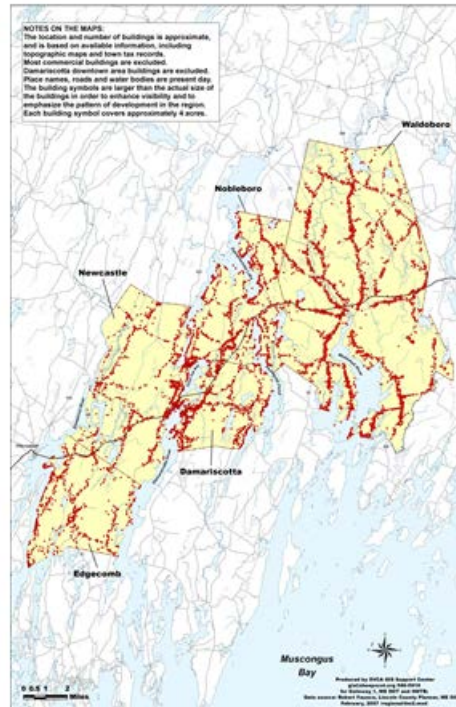
**Edgecomb to Waldoboro
1939 - 1953 (2227 Buildings)**



**Edgecomb to Waldoboro
1965 - 1980 (3133 Buildings)**



**Edgecomb to Waldoboro
2001 - 2005 (5711 Buildings)**



Almost 30% of the County's total housing stock was located in the five corridor communities in 2010. Edgecomb's housing stock has been growing fastest, with

183 units built from 2000 to 2010, and increase of 32% while Nobleboro added only 14 units during this same time period. Overall, 808 units were added in the five corridor communities from 2000 to 2010, or an increase of about 13% in the housing stock, compared to 2,644 units countywide, also an increase of about 13%.

Housing Units in Route 1 Corridor Municipalities

	Total housing units		
	2010	2000	% Change
Maine	721830	651901	11%
Lincoln County	23493	20849	13%
Damariscotta	1359	1151	18%
Edgecomb	755	572	32%
Newcastle	992	880	13%
Nobleboro	1106	1092	1%
Waldoboro	2651	2360	12%

Source: Census, US HUD

Over the period 2000 to 2010, with the exception of Edgecomb, the growth in the number of households has occurred at a faster rate than the growth in population. In fact, Newcastle's number of households increased by 8.7% while its total population increased by only 1%. Increased growth in the number of households beyond the change in total population is due to a decline in average household size resulting from the in-migration of retiree-aged households, empty nesters, more families headed by single parents, and reduced birth rates, among other causes. Note: There has been continued construction of vacation/second homes that are used seasonally, whose residents are not included in the year-round population figures. In 2010 the Census recorded that there were 1,108 seasonal dwellings in the corridor communities or 16% of the housing stock. This is actually less than the county-wide proportion of seasonal residences, which was 29% and which is greatly affected by the very extensive coastal areas on the Bristol and Boothbay peninsulas.

Households of Route 1 Corridor Municipalities

	Population			Households			Persons Per Household		
	2010	2000	Change	2010	2000	Change	2010	2000	Change
			2000-2010			2000-2010			2000-2010
Damariscotta	2218	2041	8.7%	1050	942	11.1%	2.11	2.17	-2.8%
Edgecomb	1249	1090	14.6%	523	466	12.2%	2.39	2.34	2.1%
Newcastle	1752	1748	0.2%	787	724	8.7%	2.23	2.41	-7.1%
Nobleboro	1643	1626	1.0%	714	678	5.3%	2.30	2.40	-4.2%
Waldoboro	5075	4916	3.2%	2171	1983	9.5%	2.34	2.48	-5.6%
Lincoln County	34457	33616	2.5%	15149	14158	7.0%	2.27	2.37	-4.2%
Maine	1328361	1274923	4.2%	557219	518200	7.5%	2.38	2.46	-3.2%

Source: Census

Seasonal Housing Units - 2010

	Total Housing Units - 2010	Seasonal Housing Units - 2010	Percent Seasonal Housing Units
Maine	721830	118310	16%
Lincoln County	23493	6733	29%
Damariscotta	1359	186	14%
Edgecomb	755	189	25%
Newcastle	992	139	14%
Nobleboro	1106	335	30%
Waldoboro	2651	259	10%

Source: Census

Housing Affordability

According to the Maine State Housing Office (MSHA), only home ownership in the corridor communities of Edgecomb and Waldoboro was affordable to median income households in 2009. Housing in the other corridor communities was unaffordable to median income households. For renters, the average rent in the four corridor communities for which data was available was unaffordable to median renter household income, with a renter affordability index ranging from .66 to .91 in 2009. The lack of affordable housing in the corridor means that lower paid workers, for example those in the hospitality, retail or service sectors, often have to commute longer distances to work within the corridor. Many of these workers commute from inland communities where housing prices are more affordable.

Home Ownership Affordability 2009

Area	Affordability Index	Median Home Price	Median Income	Income Needed to Afford Median Home Price	Home Price Affordable at Median Income	Households Unable to Afford Median Home Price
Lincoln County	.87	\$165,000	\$46,921	\$53,929	\$143,558	56.9%
Waldoboro	1.06	\$125,000	\$44,186	\$41,648	\$132,619	46.5%
Damariscotta	.64	\$183,000	\$38,986	\$61,208	\$116,560	71.8%
Newcastle	.58	\$267,500	\$51,789	\$89,643	\$154,541	78.0%
Edgecomb	1.07	\$149,000	\$53,163	\$49,560	\$159,833	46.8%

Source: Maine State Housing Authority

Note: The affordability index is the ratio of Home Price Affordable at Median Income to Median Home Price. An index of less than 1 means the area is generally unaffordable – i.e., a household earning area median income could not cover the payment on a median priced home (30 year mortgage, taxes and insurance) using no more than 28% of gross income.

Note: Nobleboro data unavailable

Commuting

While most employment has remained in service centers large and small like Augusta, Bath, Damariscotta, Boothbay Harbor and Wiscasset, average

Rental Affordability Index 2009

Area	Afford- ability Index	Average 2- BR Rent	Median Income	Income Needed to Afford Average 2-BR Rent	2-BR Rent Affordable at Median Income	Households Unable to Afford Average 2-BR Rent
Nobleboro	.80	\$863	\$27,499	\$34,527	\$687	60.6%
Waldoboro	.83	\$752	\$24,858	\$30,086	\$621	57.7%
Damariscotta	.66	\$880	\$23,174	\$35,205	\$579	69.5%
Newcastle	.91	\$835	\$30,322	\$33,394	\$758	56.8

Source: Maine State Housing Authority

Note: The affordability index is the ratio of 2-Bedroom Rent Affordable at Median Renter Income to Average 2-Bedroom Rent. An index of less than 1 means the area is generally unaffordable – i.e., a renter household earning area median renter income could not cover the cost of an average 2-bedroom apartment (including utilities) using no more than 30% of gross income.

Note: Edgecomb data unavailable

commute times and the total vehicle miles traveled have increased as more people live further away from their workplace in areas that often lack public transportation.

The Institute of Transportation Engineers has estimated that a single-family detached house generates almost ten trips per day on average. An apartment or condominium generates about six trips per day on average. Trips to and from vacation homes are generated in season. Assuming a mix of housing types based upon estimated distributions, the corridor has on average approximately 6,000-7,000 more daily vehicle trips on Route 1 due to the increase in housing units built from 2000 to 2010. A good portion of the traffic on state roads, however, is not generated locally, but is based on through trips by people who live and/or work outside of the corridor so the actual increase in daily traffic is likely higher.

Most commuters in each community continue to drive to work alone, since scheduled, fixed-route public transportation is not readily available. It is likely that a significant portion of the carpooling is for workers traveling to Bath Iron Works. MaineDOT currently maintains commuter parking lots in Waldoboro, Nobleboro and Newcastle with only the Waldoboro in substantial use based on casual observation.

The graphics below show town of destination for commuters from the five corridor communities. The data was provided by the American Association of Highway Transportation Officials (AASHTO). Because it is based on relatively small sample sizes, the margin of error is high but it is indicative of where in general commuters in the five towns are traveling to for work. Edgecomb residents, for example, appear to look to Boothbay, Boothbay Harbor and Newcastle far more than Bath or Brunswick for work, Nobleboro, Nobleboro and

Newcastle workers tend to stay local while Waldoboro workers tend to travel to Rockland

Commuting Methods in 2010

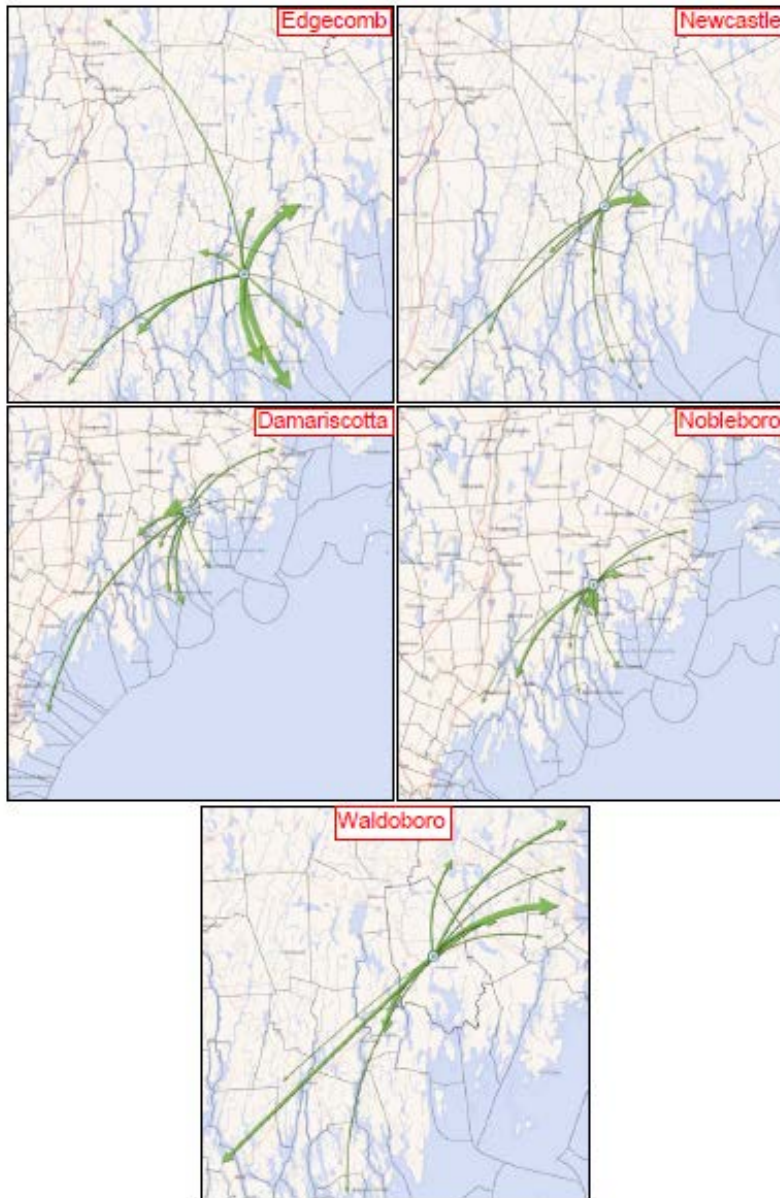
Means of Transportation			
	Drove Alone	Carpooled	Public Transportation
Maine	78.7%	10.0%	0.6%
Lincoln County	80.0%	8.6%	0.2%
Damariscotta	72.0%	7.5%	0.0%
Edgecomb	70.0%	9.4%	0.0%
Newcastle	74.4%	8.1%	0.0%
Nobleboro	81.4%	11.4%	0.0%
Waldoboro	85.7%	8.0%	1.0%

Source: Census (Workers 16 and Older)

Travel Time to Work in 2010

Travel Time to Work					
	less than 15 min	15 to 29 min	30 to 44 min	45 to 59 min	60 min or more
Maine	36%	35%	17%	6%	6%
Lincoln County	41%	30%	18%	5%	6%
Damariscotta	39%	37%	13%	6%	4%
Edgecomb	26%	54%	11%	7%	2%
Newcastle	43%	27%	20%	3%	7%
Nobleboro	33%	31%	27%	6%	3%
Waldoboro	38%	35%	16%	4%	7%

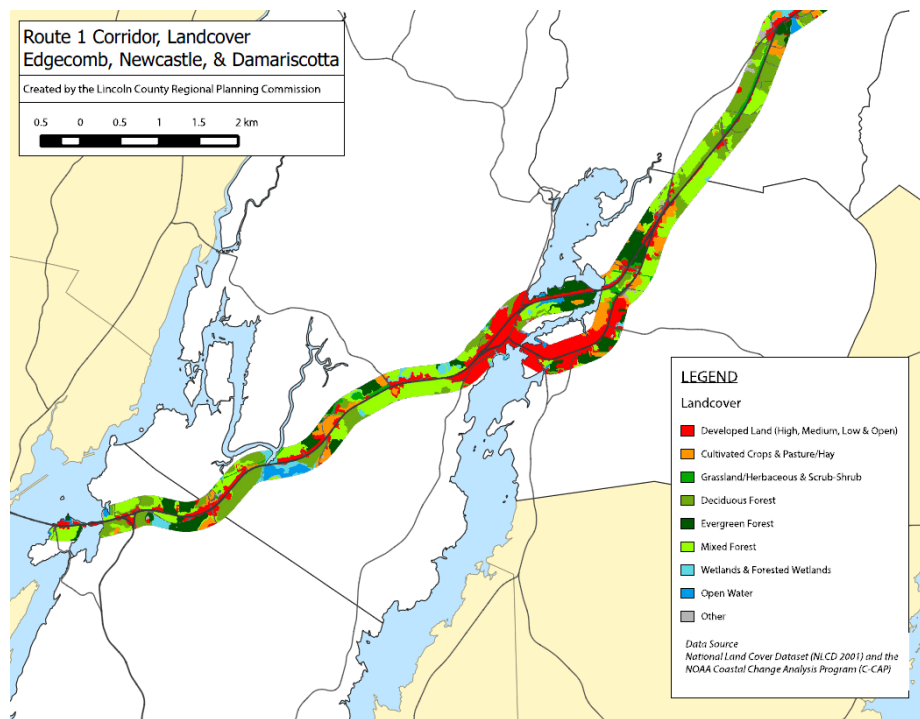
Source: Census

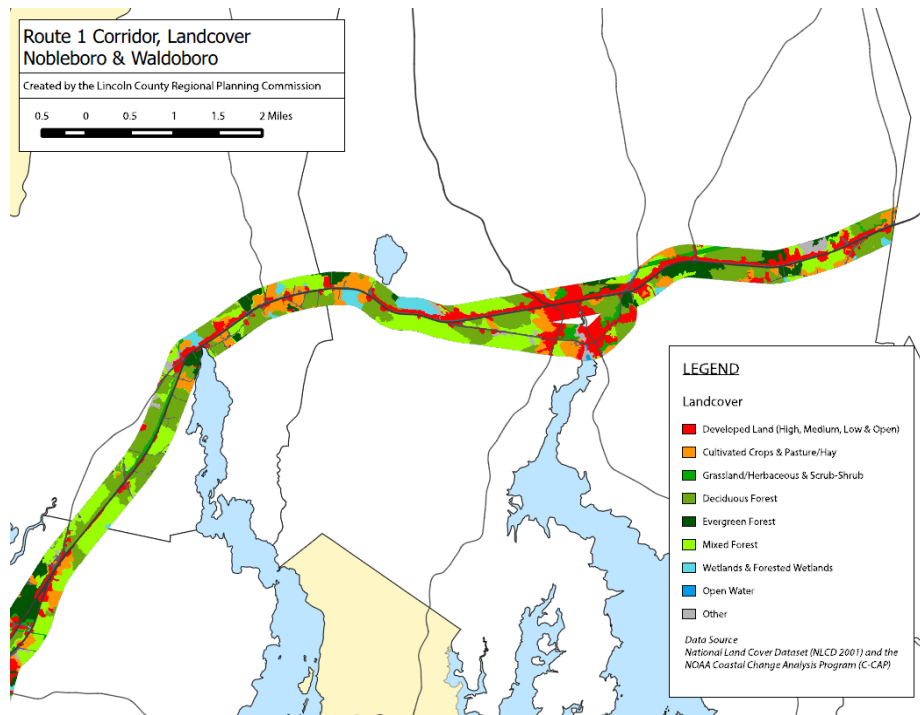


5. NATURAL AND SCENIC RESOURCES

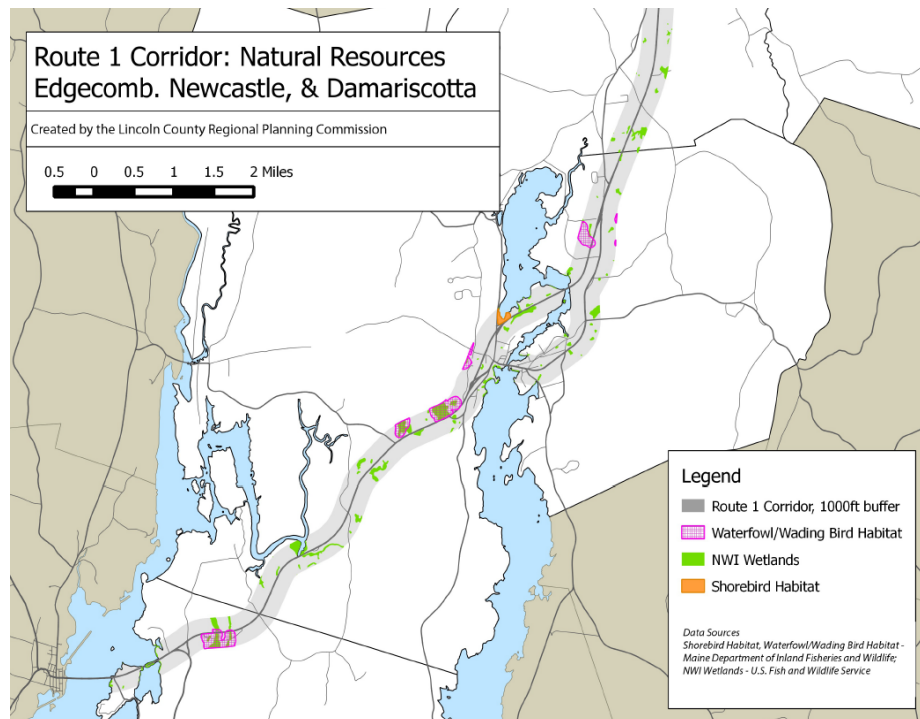
The corridor's natural resources are varied and numerous. Some might be threatened by increased development pressure. Just as with transportation planning, there is value in regional cooperation to protect the quality of the corridor's land, air, and water.

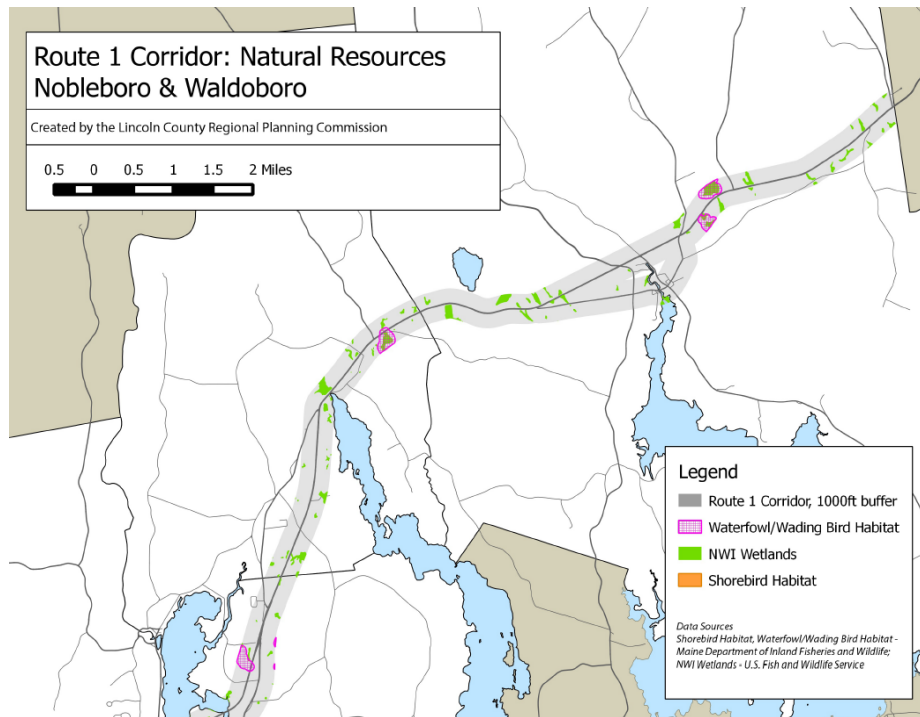
The following two maps show Land Cover within 1,000 feet of the corridor including developed areas, forests, grasslands, fields, water bodies and wetlands. Outside of the developed village areas of Damariscotta, Newcastle and Waldoboro and the Route 1 Bypass in Waldoboro, developed land is limited except for shallow strips along the highway itself. The predominant land cover outside of developed areas consists of mixed and deciduous forests. There are significant fresh and salt water resources throughout the corridor, including the Sheepscot River, the Marsh River-Sherman Marsh complex, Damariscotta River, Great Salt Bay, Pemaquid Pond and the Medomak River. All of these water bodies are within Shoreland zones and are protected by local ordinances and state statute.





The following maps present information on waterfowl and wading bird habitat, National Wetlands Inventory wetlands and shorebird habitat. There are nine distinct waterfowl/wading bird habitats and one shorebird habitat within the corridor. Several of these are in or adjacent to areas zoned for or currently developed as commercial growth areas.





Outside of village and downtown areas served by public/private water lines, many other residents and businesses in the corridor depend on private drilled wells for drinking water. In the past, considerable wetland acreage has been lost or impaired through draining, filling and development. Wetlands are critical to groundwater supplies and the protection of water quality, as well as for storm water management necessary to reduce flooding, and to provide for wildlife habitats.

Visually, the corridor has many attributes. As shown on the Land Cover Maps, a significant amount of the land along Route 1 outside of village and strip development areas is lightly developed, is in agricultural use, is forested or consists of rivers, wetland or lakes. Holly Dominie was retained by the Department of Transportation to complete a visual analysis of the Gateway 1 corridor. Using a points-based system, she classified views on the basis of the quality of the natural setting (four criteria), quality of the built setting (nine criteria), quality of the traveling experience (five criteria) and overall visual effect (two criteria). In her system, the highest quality views were classified as “distinctive” with the next highest classification being “noteworthy”. The following are the results from her analysis of that portion of Route 1 in the project area.

Edgecomb

- Cod Cove north and south – distinctive views
- Edgecomb/Newcastle rural lands – distinctive views

Newcastle

- Sherman Marsh north and south and rest area – noteworthy views
- Newcastle rural lands west of village - noteworthy views
- Damariscotta Harbor and village centers from Route 1 – noteworthy views
- View towards Lincoln Academy
- Looking west on Route 1 towards Great Salt Bay – noteworthy views
- Great Salt Bay north – noteworthy views
- Damariscotta controlled access area north and south – noteworthy views

Nobleboro

- Controlled access area north and south – distinctive views

Waldoboro

- Route 1 west of Old Route 1 – noteworthy views

In addition to viewsheds on either side of the corridor, she evaluated views along the corridor and noted the following significant views:

- Long view down Route 1 Cod Cove east
- Long view down Route 1 along Great Salt Bay
- Long view down Route 1 Center Street to Backmeadow Road

Newcastle is the only corridor community that has formerly identified views worthy of protection. A total of five scenic views are identified in the Land Use Ordinance, three of which are in the Route 1 corridor:

- The view from U.S. Route 1, the main exit ramp and the River Road across the Damariscotta River to the Town of Damariscotta.
- The views from U.S. Route 1 over Sherman Lake and the Marsh River.
- The views from U.S. Route 1 on both sides from the Mills Road overpass to the Damariscotta Town line.

If a proposed project is to be located within a protected scenic view, the planning board may determine if there is unnecessary adverse effect on a scenic view and direct the CEO to deny the permit or approval if there are other practicable alternatives to the proposed structure or use that would minimize or eliminate the adverse effect and, balancing all issues, denial is in the best interests of the Town.

6. CORRIDOR INVESTMENTS SOUGHT

This corridor management plan has described municipal and regional transportation, land use, economic development, housing, and natural and scenic resources, and has identified general objectives of the corridor communities. From this, an informed selection (listed below) has been made of essential transportation-related investments to meet the needs of residents, businesses, and others who use this corridor. Many of these investments will require specific analysis and evaluation by MaineDOT and transportation engineers to determine appropriate solutions, based on accepted transportation and civil engineering principles, before implementation can occur. MaineDOT is requested to review these recommendations and consider them when proposing and making improvements in the corridor. Given increasingly limited transportation budgets, and the rising costs of construction materials, it becomes even more crucial that new transportation investments be based on serving the best interests of the corridor and region as a whole.

Recommendations for Corridor Investments and Improvements (Immediate = within 2 years, Midterm = 2-5 years, Long term = 5 -10 years)				
	Recommendation	Rationale	Responsible Party	Time-frame
Recommendations Corridor-wide				
	Encourage limiting access to one per lot exiting onto Route 1 where possible	Safety - maintain posted speed through controlled development	Towns	Immediate
	Reduce curb cuts where possible	Safety - maintain posted speed through controlled development	MaineDOT /Towns (as appropriate)	Immediate
	Encourage common points of access	Safety - encourage shared entrances to reduce curb openings	Towns	Immediate
	Reduce curb cut widths where practical	Safety - better define access for entering, exiting traffic	Towns	Immediate
	Encourage internal access between adjacent properties	Safety - reduce unnecessary vehicle movements onto highway	Towns	Immediate
	Consider enhancing site development standards for all development on Route 1 including landscaping, parking lot location, buffering, etc., to increase the attractiveness and improve the desirability of property on Route 1.	Environmental - improve visual appearance of corridor	Towns	Mid-term (immediate Damariscotta)
	Each town should be encouraged to include in land use ordinances protection of scenic views recognized in each community as significant	Environmental - improve visual appearance of corridor	Edgecomb, Damariscotta, Nobleboro, Waldoboro	Mid-term
	Conduct feasibility studies for seasonal bus service linking Route 1 communities with the Boothbay and Bristol peninsulas	Safety and economy - evaluate the feasibility of establishing seasonal bus service from Damariscotta to improve the tourist economy	MaineDOT	Immediate
	Conduct traffic study to determine locations for or improvements to turning lanes	Safety - improve safety of exiting and entering vehicles	MaineDOT	Immediate

	Request MaineDOT to advise towns of road work well in advance of onset in order to accommodate municipal utility improvements	Economy - by coordinating state and local work the cost of utility work can be reduced	MaineDOT	Immediate
	Route 1 should be marked as a no passing zone in all commercial areas to reduce the possibility of collision as vehicles turn onto Route 1 from a business.	Safety – avoid conflicts between passing vehicles and those entering Route 1 from access drives in congested areas	MaineDOT	Immediate
Waldoboro Recommendations				
	Improve visibility of Route 235 intersection; improve shoulder and lengthen turning pocket	Safety - improve safety of exiting and entering vehicles	MaineDOT	Immediate
	Widen and pave shoulders on Main Street west of Route 32	Safety - improve safety of bicyclists and pedestrians using corridor	MaineDOT	Long-term
	Improve road surface between Route 220 and the Warren town line	Safety - deteriorated shoulders and travel surface affect driver safety and comfort	MaineDOT	Immediate
	Request safety study of Route 220 intersection and give consideration to creating facing left turn lanes on Route 1 and making right east bound lane the through lane; provide a left turn lead at the light to improve traffic flow	Safety – improve safety of vehicles and bicyclists using intersection	MaineDOT	Immediate
	Request safety study and corrective actions at Route 32 intersection and give consideration to better aligning intersection, using delays in the signal to allow traffic from each leg of Route 32 to enter intersection alternately and address issue of traffic using the Dunkin Donuts lot to bypass the intersection	Safety – improve safety of vehicles and bicyclists using intersection	MaineDOT	Immediate
	Consider expanding or reconfiguring the Waldoboro Park and Ride lot to provide additional capacity	Economy – accommodate additional park and ride users in facility, which is near capacity	MaineDOT	Mid-term
	Install paved shoulders on the south side of Route 1 between the town office and the Route 220 intersection and in west Waldoboro where the passing lane exists west of the lower Main Street intersection	Safety – improve safety for bicyclists	MaineDOT	Mid-term
	Widen Route 1 eastbound at the Route 32 intersection to accommodate bicyclists	Safety – improve safety for bicyclists	MaineDOT	Mid-term
	Widen Medomak River bridge or install adjacent bike-ped bridge to accommodate bicyclists and pedestrians	Safety – improve safety for bicyclists and pedestrians	MaineDOT	Mid-term
	Extend the Main Street (Route 220) sidewalk in Waldoboro from the downtown to Route 1	Safety – (see related rail recommendation)	MaineDOT	Immediate
	Install pedestrian enhancements at the Route 32 intersection and construct sidewalk from Route 32 to Route 220	Safety – improve safety for pedestrians	MaineDOT	Mid-term
Newcastle Recommendations				
	Create bus passenger facility and passenger parking area at Newcastle rail station	Economy - encourage more use of buses to get tourist to destinations on the peninsula	MaineDOT	Mid-term
	Conduct feasibility study for seasonal bus service linking Route 1 communities with the Boothbay and Bristol peninsulas	Safety and economy - evaluate the feasibility of establishing seasonal bus service from Wiscasset or ferry service to Portland, Bath, Rockland or Canadian ports and thereby improve the tourist economy and reduce traffic on Route 27	MaineDOT	Immediate
	Develop shuttle service from Newcastle rail station to Boothbay Harbor	Safety and economy - increase convenience to tourists and reduce unnecessary local trips	MaineDOT	Immediate

	Request safety study of Main Street/Route 215/Academy Hill Road intersection and give consideration to installing roundabout; as a short-term, low-cost fix, add lines to the pavement at all stop signs in the intersection so that vehicles do not extend into the flow of traffic	Safety – improve safety of vehicles and bicyclists using intersection with multiple entering and exiting points	MaineDOT	Immediate
	Route 1B southbound ramp merge lane should be lengthened so vehicles can more safely enter Route 1 traffic flow as well as alert Route 1 traffic of entering vehicles	Safety – improve safety of vehicles entering Route 1	MaineDOT	Long-term
	Consider minimum frontage in Route 1 Districts of 400 feet with automatic reduction to 200 feet if lot share access location with adjacent lot	Safety – encourage shared accesses	Town	Mid-term
	Consider prohibiting new residential construction on Route 1 to preserve the corridor's attractiveness for commercial development	Economy – reduce likelihood of future land use conflicts and preserve frontage for high value uses	Town	Mid-term
	Consider adopting enhanced access standards as part of local development review similar to what has been implemented for Route 1 in Waldoboro and/or Route 27 in Edgecomb	Safety – reduce traffic conflicts	Town	Mid-term
Damariscotta Recommendations				
	Widen and pave shoulders on Route 1B where absent	Safety - improve safety of bicyclists and pedestrians using corridor	MaineDOT	Mid-term
	Improve maintenance at Route1/Route 1B intersection by replacing damaged markers and improve signage including at northbound merge	Safety – improve safety of vehicles and bicyclists using intersection	MaineDOT	Immediate
	Add a white line at the stop sign on Belvedere Road and Route 1-B so that vehicles don't "creep" into the intersection, obstructing vehicles on Route 1-B from left turns onto Belvedere.	Safety – improve safety of motorists exiting Belvedere Road and motorists turning into Belvedere Road	MaineDOT	Immediate
	Address distance perception issues of oncoming Route 1 traffic for vehicles waiting to enter Route 1 from Belvedere Road	Safety – improve safety of motorists turning into Belvedere Road	MaineDOT	Mid-term
	Consider installing roundabout at Route 1B-Biscay Road intersection	Safety - develop plan to reduce traffic conflicts and hazards to pedestrians, bicyclists and motorists	MaineDOT	Long-term
	Improvement alignment of School Street at Route 1B or install traffic signal	Safety - develop plan to reduce traffic conflicts and hazards to pedestrians, bicyclists and motorists	MaineDOT	Mid-term
	Reconfigure and increase illumination of existing fixture of Route 1B/Belvedere Road intersection and install "intersection ahead" signage	Safety – improve safety of motorists turning entering and exiting Belvedere Road	MaineDOT	Immediate
	Reduce the Route 1 speed limit between Belvedere Road and Route 1B to 45 mph	Safety – improve safety of motorists turning into and exiting Belvedere Road	MaineDOT	Immediate
	Extend Route 1B sidewalk from Yellowfront to Biscay Road and school	Safety – improve safety of pedestrians	MaineDOT	Mid-term
	Construct bikeway between from the Whalesback State Historic Site to Great Salt Bay Farm including a Route 1 underpass	Economy – provide an off-road path between two important cultural sites that avoids Route 1	MaineDOT	Long-term
	Consider minimum frontage in Route 1 Districts of 400 feet with automatic reduction to 200 feet if lot share access location with adjacent lot	Safety – encourage shared accesses	Town	Mid-term

	Consider prohibiting new residential construction on Route 1 to preserve the corridor's attractiveness for commercial development	Economy – reduce likelihood of future land use conflicts	Town	Mid-term
	Consider adopting enhanced access standards as part of local development review similar to what has been implemented for Route 1 in Waldoboro and/or Route 27 in Edgecomb	Safety – reduce traffic conflicts	Town	Mid-term
Nobleboro Recommendations				
	Widen and pave shoulders on Center Street	Safety - improve safety of bicyclists and pedestrians using corridor	MaineDOT	Long-term
	Consider prohibiting new residential construction on Route 1 to preserve the corridor's attractiveness for commercial development	Economy – reduce likelihood of future land use conflicts	Town	Mid-term
	Consider adopting enhanced access standards as part of local development review similar to what has been implemented for Route 1 in Waldoboro and/or Route 27 in Edgecomb	Safety – reduce traffic conflicts	Town	Mid-term
Edgecomb Recommendations				
	Install a traffic signal at the intersection of Route 1 with Cross/Cochran Roads; cut the hill on Cross Road (too steep); add a right turn lane on Cross Road and reconfigure the intersection of Cross Road at Route 27.	Safety – improve sight distance, safety and views of Route 27 northbound traffic entering Route 1	MaineDOT	Mid-term
	Divert northbound Route 27 traffic to the Cross Road intersection and close off the Route 27 northbound ramp	Safety – reduce conflicts at existing Route 27 intersection	MaineDOT	Mid-term
	Relocate the Eddy Road intersection further east to improve sight distance	Safety – improve safety of westbound vehicles exiting Eddy Road	MaineDOT	Immediate
	Consider allowing light industrial uses in the Thoroughfare and/or Commercial Growth Districts with adequate buffering	Economy – expand areas suitable for light industry	Town	Mid-term
	Consider adopting enhanced access standards as part of local development review similar to what has been implemented for Route 1 in Waldoboro or what the town has implemented for Route 27	Safety – reduce traffic conflicts	Town	Mid-term
Rail Recommendations				
	Recommend that the Department review the feasibility of re-installing rail sidings east of Route 32 at the Waldoboro Environmental Park and between Route 220 and the Route 1 overpass in Waldoboro	Economy – improve access to rail for industrial sector	MaineDOT	Immediate
	Utilize a portable passenger platform at the former Depot Street rail station to accommodate seasonal passenger rail use and consider redeveloping the site as a multi-modal facility by constructing a parking lot, relocating the Main Street bus stop to the site and renovating the former depot.	Economy – improve passenger rail ridership and convenience and reduce congestion in downtown Damariscotta	Town, MaineDOT	Immediate
	Consider creating a passenger rail facility near Route 220 and completing the Main Street sidewalk between Route 1 and old Route 1 to provide visitors with access to Moody businesses on Route 1 and in the downtown	Safety – provide alternative transportation choice for residents and visitors and improve access to the downtown for pedestrians	MaineDOT	Long-term