



COASTAL CANADIAN CORRIDOR MANAGEMENT PLAN



*Produced for the Maine Department of Transportation by
Washington County Council of Governments and GreenLight Solutions, LLC*

June 2011

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1.0 INTRODUCTION

The Coastal Canadian Corridor (CCC) is one of 38 Corridors of Regional Economic Significance for Transportation (CREST) that has been identified by the Maine Department of Transportation (MaineDOT). The CREST system allows MaineDOT to focus its planning efforts and limited financial resources on statewide multimodal transportation corridors that have the strongest and broadest economic significance for each region of the state. The corridor management plan for each CREST, developed and supported by regional stakeholders, will provide an advisory roadmap for MaineDOT decisionmakers as they plan and budget for maintenance and improvement of the corridors over future biennial funding cycles. CREST corridor management plans will also allow MaineDOT to do more with less despite a growing uncertainty about federal funding allocations for future budgeting cycles, as they will direct all available federal and state money into transportation projects that are expected to provide the greatest return on investment in terms of regional economic development benefits.

The Washington County Council of Governments (WCCOG) solicited extensive public input from a broad spectrum of residents, business owners, and stakeholders within the corridor to develop major goals, strategies, and policy recommendations for the CCC management plan. A regional advisory committee, facilitated by a WCCOG consultant, developed a series of transportation, land use and economic goals for the corridor, based on identified current and future needs under three alternate development scenarios. A series of short-term, medium-term, and long-term strategies were then proposed to meet these goals, along with policy recommendations that may help MaineDOT manage the corridor more efficiently. The committee's recommendations align with the regional objectives outlined in the 2009 MaineDOT document Strategic Investment Plans for Corridors of Regional and Economic Significance (SIPCRES). However, the goals and strategies in this report are more specific and focus exclusively on the CCC study area and its projected development over the next two decades.

This corridor management plan also serves as a regional supplement to the MaineDOT publication **Connecting Maine**, the state's long-range transportation plan. **Connecting Maine** identifies statewide and regional challenges and opportunities through the year 2030, establishes goals and performance-based strategies to address these issues, and identifies funding shortfalls that must be overcome in order to keep Maine economically competitive with a high quality of life that attracts and retains residents, businesses, and visitors. The CCC advisory committee was fortunate to have three MaineDOT officials among its membership: Policy Development Specialist Fred Michaud, Eastern Region Engineer John Devin, PE, and Northern Region Engineer Brent Bubar, PE. All three have an excellent first-hand working knowledge regarding the transportation assets and challenges within the CCC study area, and they all shared valuable professional insights with fellow committee members that were instrumental in reaching some of the recommendations contained in this report.

1.1 Purpose and Needs Statement

The CCC advisory committee adopted the following statement to serve as the foundation for its decision-making processes in the selection and prioritization of goals and strategies within the CCC Management Plan:

The Coastal Canadian Corridor Management Plan seeks to preserve the existing regional transportation system in good working condition, while making targeted upgrades and investments in new multimodal transportation opportunities that are expected to stimulate economic growth. Plan stakeholders support the establishment of adequate annual funding streams to maintain all sectors of the regional transportation system, in addition to US Route 1 and other high-volume highways.

1.2 Definition of the Corridor Study Area

The Coastal Canadian Corridor focuses primarily on north-south multimodal transportation movements along Maine's international border with New Brunswick, in an area broadly defined as extending from Eastport north to Houlton. Phase 1, covered in this report, addresses the portion of the corridor that is located in eastern Washington County, from Eastport to the Aroostook County line in Danforth. Phase 2 will address the Aroostook County portion of the corridor as identified in the SIPCRE report, from the Washington County border in Weston north to the international border crossing in Houlton. The spine of the Coastal Canadian Corridor is centered along US Route 1 (US-1) which runs the length of Washington County and serves as its primary coastal highway, but the study area also includes smaller state highways that carry people and products to and from US-1 and serve as alternate north-south routes through eastern Washington County. These include State Routes 190, 214, and portions of State Routes 6, 9, 169, and 191; Charlotte Road, South Princeton Road, North Union Road (named Cooper Road on its Alexander end), Grand Lake Stream Road, and Forest City Road. The Stud Mill Road and the network of privately owned logging roads and local roads in interior Washington County were included in the study area for purposes of economic analysis, although these roads are acknowledged to fall beyond the scope of any MaineDOT planning activities. The advisory committee also opted to include all of Washington County north of the Stud Mill Road and west of US-1 west to the Penobscot County line and north to the Aroostook County line in the study area, as well as all of the area north of State Route 214 and east of US-1 to the Canadian border (both sea and land). This is because tourism and outdoor recreation, natural resource-based industries, and power generation projects in the sparsely developed interior and along the coastline of eastern Washington County are all major contributors to the regional economy, and they are expected to continue as significant economic sectors within the CCC for the foreseeable future. A map of the CCC study area is shown in Figure 1.

Coastal Canadian Corridor Map

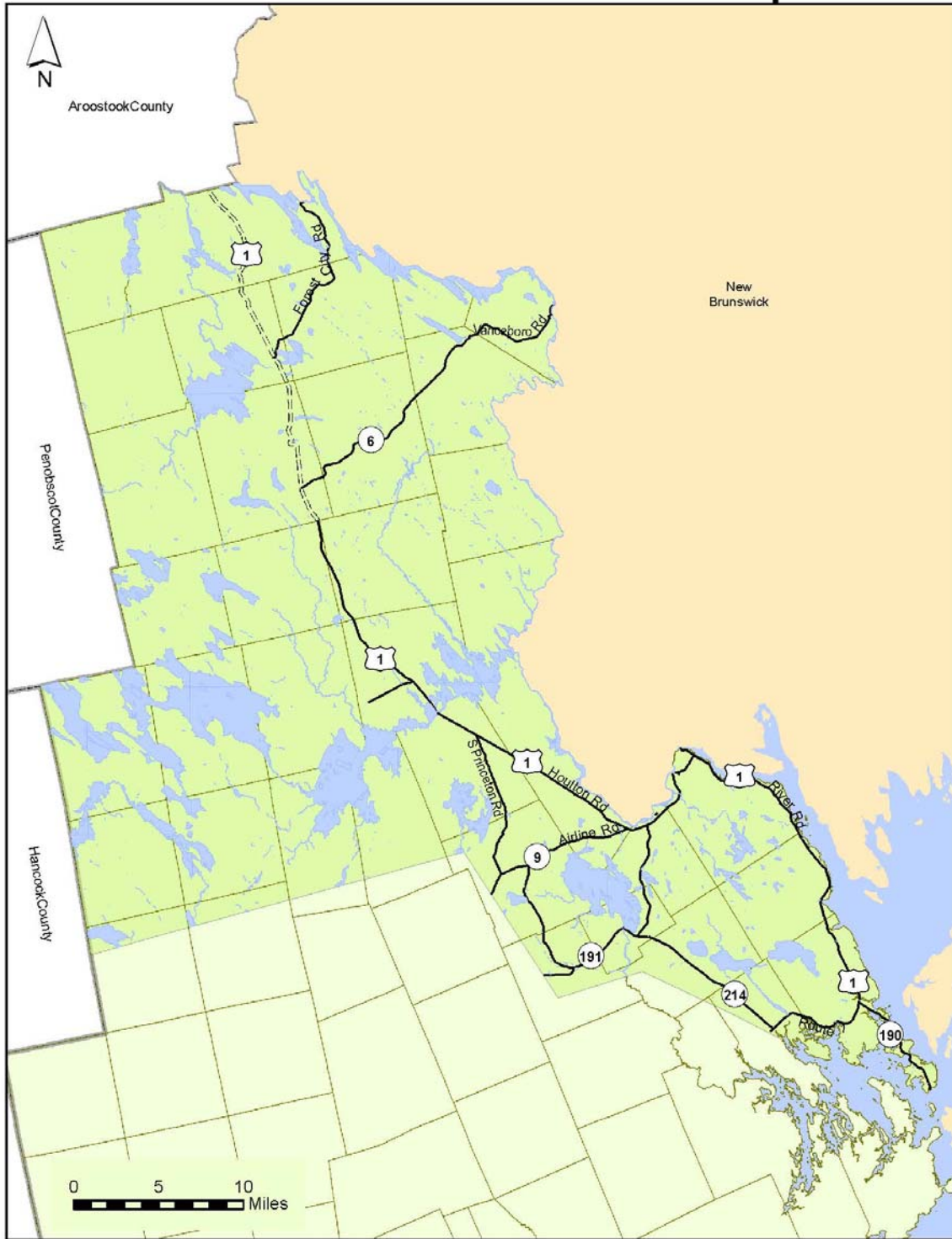


Figure 1: Coastal Canadian Corridor Study Area

East-west transportation priorities for Washington County and Hancock County, including US-1 from Ellsworth to Calais, all of State Route 9 from Calais to Bangor, and roads such as State Routes 193, 192, and 191 that transfer traffic to and from State Route 9 and US-1, have already been addressed in the Downeast Coastal Corridor Management Plan, completed by WCCOG and the Hancock County Planning Commission in June 2009 and available for review on the WCCOG website, www.wccog.net. The remaining CREST in Washington County is the Route 6 Corridor (also known as the Northern Washington County Corridor, although nearly half of the general area described by the corridor is actually contained in Penobscot County). This corridor describes east-west transportation priorities in the region centered around State Route 6 between I-95 in Lincoln and the Canadian border crossing at Vanceboro. This corridor is expected to be studied in a future management plan.

1.3 Identification of Economic Development Scenarios and Driving Forces

The advisory committee considered three likely economic development scenarios for the study area over the next two decades, then identified the driving forces that would come into play under each scenario. Driving forces are defined as currently observable trends that have the potential to influence future outcomes. The three economic development scenarios selected for analysis were:

1. Natural resources-based industries (including fisheries, forestry, pulp and paper manufacturing, value-added wood products manufacturing, farming, commercial-scale agriculture, wreath-making, and mining, among others)
2. Tourism (including outdoor recreational activities on land and water, ecotourism, and culturally based or themed tourism events such as the Grand Lake Stream Folk Art Festival)
3. Energy Development (including onshore and offshore windpower, tidepower, LNG, biomass, and the construction and maintenance of powerlines and pipelines)

Driving forces were evaluated through a series of rating sheets that committee members and stakeholders evaluated both individually and as a group. Tables 1-5 provide a summary of the committee members' responses, within the five categories of Economy, Social & Demographic Trends, Infrastructure, Built & Natural Environment, and Political Actions. For each item, committee members assessed the anticipated growth rate (High, Medium, or Low) in that sector over the next 20 years; the likely impact on the transportation system of growth in that sector (High, Medium or Low); and the expected impact on economic development, if transportation funds were invested to promote growth within that sector (rated on a 1-5 scale, with 1=a very strong impact, and 5=a waste of money to invest in this). Items that a majority of the group rated as having either a High or Medium future growth rate, AND either a 1 or a 2 (very strong or strong) rating for benefits to economic development in the corridor, have been **highlighted in yellow** on each rating sheet. These responses were used, in conjunction with the Purpose and Needs Statement and the data analysis presented in Section 2, to help the committee select its highest priorities from among the many worthwhile ideas that were submitted and discussed to address existing and anticipated system deficiencies within the CCC.

DRIVING FORCE: Economy	<u>Likelihood of Growth</u> Is future growth likely to be <u>high, medium, or low</u> over the next 10-20 years? Give your honest opinion, whether or not you personally support continued development of the force being evaluated.	<u>Impact on Transportation</u> What effect, if any, do you think growth in this driving force will have on the multimodal transportation system (highway, rail, bike-ped, air, marine) in the Coastal Canadian Corridor? <u>High, medium, or low?</u>	<u>Overall Investment Impact</u> What impact will result from targeted efforts and transp. investments to benefit this force, in terms of regional economic development and quality of life in the study area? <u>Scale of 1 to 5</u> (1=very strong positive impact, 5=a waste of money to invest in this)
Natural resources & manufacturing (includes farming and fishing related industries)	M (range: L-H)	H (range: M-H)	2 (range: 1-3)
Energy development	H (unanimous)	M (range: ML-H)	2 (range: 1-5)
Wholesale and retail trade	M (range: L-M)	L (range: L-M)	4 (range: 3-5)
Tourism, hospitality, & local culture	M (range: L-H)	M (range: L-H)	2 (range: 1-5)
Science, technology, education, high-tech home-based business	M (range: L-MH)	L (range: L-M)	3 (range: 1-5)
Health care & related community services	M (range: L-H)	M (range: L-H)	4 (range: 1-4)
Size of workforce	L (range: L-M)	L (Range: L-M)	4 (range: 1-4)
Wealthy retirees & second home purchasers	M (range: L-M)	L (Range: L-M)	4 (range: 3-5)

Table 1: Economy Driving Forces Matrix

DRIVING FORCE: Social and Demographic Trends	<u>Likelihood of Growth</u> Is future growth likely to be <u>high, medium, or low</u> over the next 10-20 years? Give your honest opinion, whether or not you personally support continued development of the force being evaluated.	<u>Impact on Transportation</u> What effect, if any, do you think growth in this driving force will have on the multimodal transportation system (highway, rail, bike-ped, air, marine) in the Coastal Canadian Corridor? <u>High, medium, or low?</u>	<u>Overall Investment Impact</u> What impact will result from targeted efforts and transp. investments to benefit this force, in terms of regional economic development and quality of life in the study area? <u>Scale of 1 to 5</u> (1=very strong positive impact, 5=a waste of money to invest in this)
Youths and Teens	L (range: L-M)	L (range: L-M)	3 (range: 3-4)
Working adults, 18-60+ (includes people actively seeking paid employment, whether or not they are currently employed)	L (range: L-M)	M (range: L-H)	2 (range: 1-4)
Retirees, both traditional (60+) and younger (40-60)	H (range: L-H)	M (range: L-M)	3 (range: 2-4)
Enrolled in educational or vocational programs to qualify for a new or better career	M (unanimous)	M (range: L-H)	2 (range: 1-3)
Unemployed or underemployed (includes stay-at-home parents)	M (range: L-H)	L (range: L-M)	3 (range: 2-5)
Non-driving adults in rural areas (includes elderly former drivers)	M (range: L-M)	M (range: L-H)	4 (range: 1-5)

Table 2: Social & Demographic Driving Forces Matrix

DRIVING FORCE: Infrastructure	<u>Likelihood of Growth</u> Is future growth likely to be <u>high, medium, or low</u> over the next 10-20 years? Give your honest opinion, whether or not you personally support continued development of the force being evaluated.	<u>Impact on Transportation</u> What effect, if any, do you think growth in this driving force will have on the multimodal transportation system (highway, rail, bike-ped, air, marine) in the Coastal Canadian Corridor? <u>High, medium, or low</u> ?	<u>Overall Investment Impact</u> What impact will result from targeted efforts and transp. investments to benefit this force, in terms of regional economic development and quality of life in the study area? <u>Scale of 1 to 5</u> (1=very strong positive impact, 5=a waste of money to invest in this)
New state highways	L (range: L-M)	M (range: L-H)	2 (range: 1-5)
New local (municipal or tribal) roads	L (range: L-M)	L (range: L-H)	3 (range: 1-5)
Deterioration of existing roads and bridges	H (unanimous)	H (unanimous)	1 (unanimous)
New bicycle & pedestrian facilities (sidewalks, paths, bike lanes, widened shoulders)	M (range: L-M)	M (range: L-H)	2 (range: 1-5)
Rural public transit and private passenger service (bus, taxi, etc.)	M (range: L-M)	M (range: L-M)	2 (range: 1-5)
Urban services (3-phase power, public water, public sewer)	L (range: L-M)	L (range: L-M)	3 (range: 2-5)
Widely available broadband or other high-speed Internet	H (range: M-H)	M (range: L-H)	1 (range: 1-3)

Table 3: Infrastructure Driving Forces Matrix

DRIVING FORCE: Built and Natural Environment	<u>Likelihood of Growth</u> Is future growth likely to be <u>high, medium, or low</u> over the next 10-20 years? Give your honest opinion, whether or not you personally support continued development of the force being evaluated.	<u>Impact on Transportation</u> What effect, if any, do you think growth in this driving force will have on the multimodal transportation system (highway, rail, bike-ped, air, marine) in the Coastal Canadian Corridor? <u>High, medium, or low?</u>	<u>Overall Investment Impact</u> What impact will result from targeted efforts and transp. investments to benefit this force, in terms of regional economic development and quality of life in the study area? <u>Scale of 1 to 5 (1=very strong positive impact, 5=a waste of money to invest in this)</u>
New residential development	L (range: L-M)	L (range: L-H)	3 (range: 2-4)
New commercial development	L (range: L-M)	M (range: L-H)	2 (range: 1-3)
Downtown infill and redevelopment of existing developed properties	M (range: L-H)	M (range: L-H)	2 (range: 1-3)
Sales of large tracts of undeveloped land (formerly working forestland) to private real estate investment trusts (REITs) and individuals	M (range: L-H)	L (range: L-M)	5 (range: 3-5)
Public, private, and non-profit open space, parks, preserves, and conservation lands	L (range: L-M)	L (range: L-M)	3 (range: 2-5)

Table 4: Built & Natural Environment Driving Forces Matrix

DRIVING FORCE: Political Actions	<u>Likelihood of Growth</u> Is future growth likely to be <u>high, medium, or low</u> over the next 10-20 years? Give your honest opinion, whether or not you personally support continued development of the force being evaluated.	<u>Impact on Transportation</u> What effect, if any, do you think growth in this driving force will have on the multimodal transportation system (highway, rail, bike-ped, air, marine) in the Coastal Canadian Corridor? <u>High, medium, or low?</u>	<u>Overall Investment Impact</u> What impact will result from targeted efforts and transp. investments to benefit this force, in terms of regional economic development and quality of life in the study area? <u>Scale of 1 to 5 (1=very strong positive impact, 5=a waste of money to invest in this)</u>
New tax (or increases to the gas tax) levied to pay for transportation improvements	M (range: L-H)	H (range: L-H)	2 (range: 1-3)
Alternative (non-tax) funding sources identified to pay for transportation improvements	M (range: L-M)	M (range: L-H)	2 (range: 1-3)
Enactment and enforcement of local zoning codes	L (range: L-M)	M (range: L-H)	3 (range: 1-4)
School funding cuts and further consolidation of public school districts	M (range: L-H)	M (range: L-M)	3 (range: 1-4)
Demand from bicyclists, pedestrians, elderly, disabled, and non-drivers for investment in transportation alternatives and “complete streets”	M (range: L-H)	M (range: L-M)	2 (range: 1-5)

Table 5: Political Actions Driving Forces Matrix

1.4. Public Participation Plan

WCCOG organized a series of public outreach meetings, press releases, and web site postings to solicit input for this plan. The primary outreach method took the form of electronic mailings; the decision was made early on to eliminate hard-copy mailings as a means of saving money, due to the project's limited budget. A broad cross-section of residents, business owners, and organizational representatives within the corridor study area were personally invited to serve on the advisory committee, and others requested to join after learning about the project via the e-mail announcements, public notices, and several feature articles in local media outlets. The committee also included two MaineDOT regional engineers, a MaineDOT planner, and a Department of Conservation (DOC) planner with experience working with state land parcels, public landings, and recreational trails in the corridor study area. Individuals who were unable to attend advisory committee meetings or who declined the invitation to serve as active participants were invited to become "stakeholders"; they received all advisory committee mailings, and were invited to review materials and submit comments to the facilitator as the study progressed. The commercial software product **Constant Contact** was used to maintain contact with all advisory committee members and stakeholders. By the time the final draft plan was presented at a formal public meeting on June 22, 2011, nearly 60 people had been added to the project mailing list. A list of advisory committee members and stakeholders is provided in Appendix A.

2.0 DATA SUMMARY AND ANALYSIS

This section of the report presents a summary of the existing conditions within the CCC. In the interests of brevity, information from previous studies has been summarized with a reference to the reports where the data was obtained. Readers interested in more detail may refer to those reports. Topics covered in this section include the existing transportation, land use, and economic elements that were analyzed to develop the CCC Management Plan, including identified deficiencies in each area.

The study team was fortunate to receive the pro-bono services of Tora Johnson at the University of Maine-Machias and three of her Geographic Information Systems (GIS) students. The students developed a series of GIS-based maps showing many of the corridor characteristics. All of the map figures included in this report were developed by the students as part of their final class project. A user-friendly, web-based GIS display containing all of the mapped data features for the corridor is expected to be available via a link on the WCCOG website, www.wccog.net, by September 2011 to assist with future planning efforts in the corridor. The contributions of Tora Johnson and her students (Angela Brady, Rosalie Kell, and Dean Preston) to the success of this project are gratefully acknowledged.

2.1 Transportation Elements

2.1.1. Vehicle Miles Traveled (VMT)

Washington County, along with the rest of Maine and the entire nation, experienced a leveling off (and in some areas, even a slight decline) in the number of annual Vehicle Miles Traveled (VMT) during the last few years of the period from 2000-2010, after experiencing very rapid growth in VMT (nearly 15% in Washington County) over the previous decade. The declining rate of growth in VMT is most likely attributable to the rising price of gasoline and the continuing slow recovery from a nationwide recession over the past three years. In a county with a median income less than 70% of the national average, in which over 20% of all households live below the national poverty line, the expense of owning and operating a privately-owned vehicle (or multiple vehicles) may be moving out of reach for many people. Quality of life surveys conducted in Washington County in 2007 and 2009 identified access to reliable transportation as a significant problem in many respondents' lives. If this trend continues over the next two decades, it is likely to have both negative and positive repercussions. Economic growth in Washington County requires both people and goods to traverse large distances to reach service center communities and markets, and MaineDOT programs are funded primarily through a federal and state gasoline tax that provides decreasing revenues as vehicles become more fuel-efficient and people choose to drive less – even as highway and bridge construction costs have continued to rise exponentially. On the positive side, if vehicular traffic volumes grow at a slower rate over the next 20 years than the long-term models have predicted, it should be possible to maintain adequate carrying capacity and road surface quality for even longer periods, so that less maintenance and improvement work will be required to maintain safe driving conditions and adequate levels of service for motorists.

Figure 2 is a map showing the Annual Average Daily Traffic (AADT) for state highways in the study area, the most recent of which were taken in 2009. As shown in the legend, wider lines indicate higher volumes while thinner lines indicate smaller volumes.

The CCC advisory committee requested updated traffic counts from MaineDOT for the new International Avenue border crossing in Calais, to determine how the third crossing point may have changed traffic volumes and travel patterns for local residents and visitors crossing the border and traveling in and out of the City of Calais. Traffic congestion from commercial truck traffic in downtown Calais has been greatly reduced, since all commercial trucks traveling to and from Canada are now required to use the new border crossing. The last set of MaineDOT traffic counts in Washington County were taken in 2009, before the new crossing opened for business, so neither the border crossing nor the new roundabout on US-1 could be assessed using the available data. Unfortunately, the updated counts for the new crossing and roundabout were not collected in time to be published in this report. The data and analysis from the new counts will be included as an update to Phase 1 when Phase 2 of the CCC Management Plan is published.

Coastal Canadian Corridor Traffic Counts

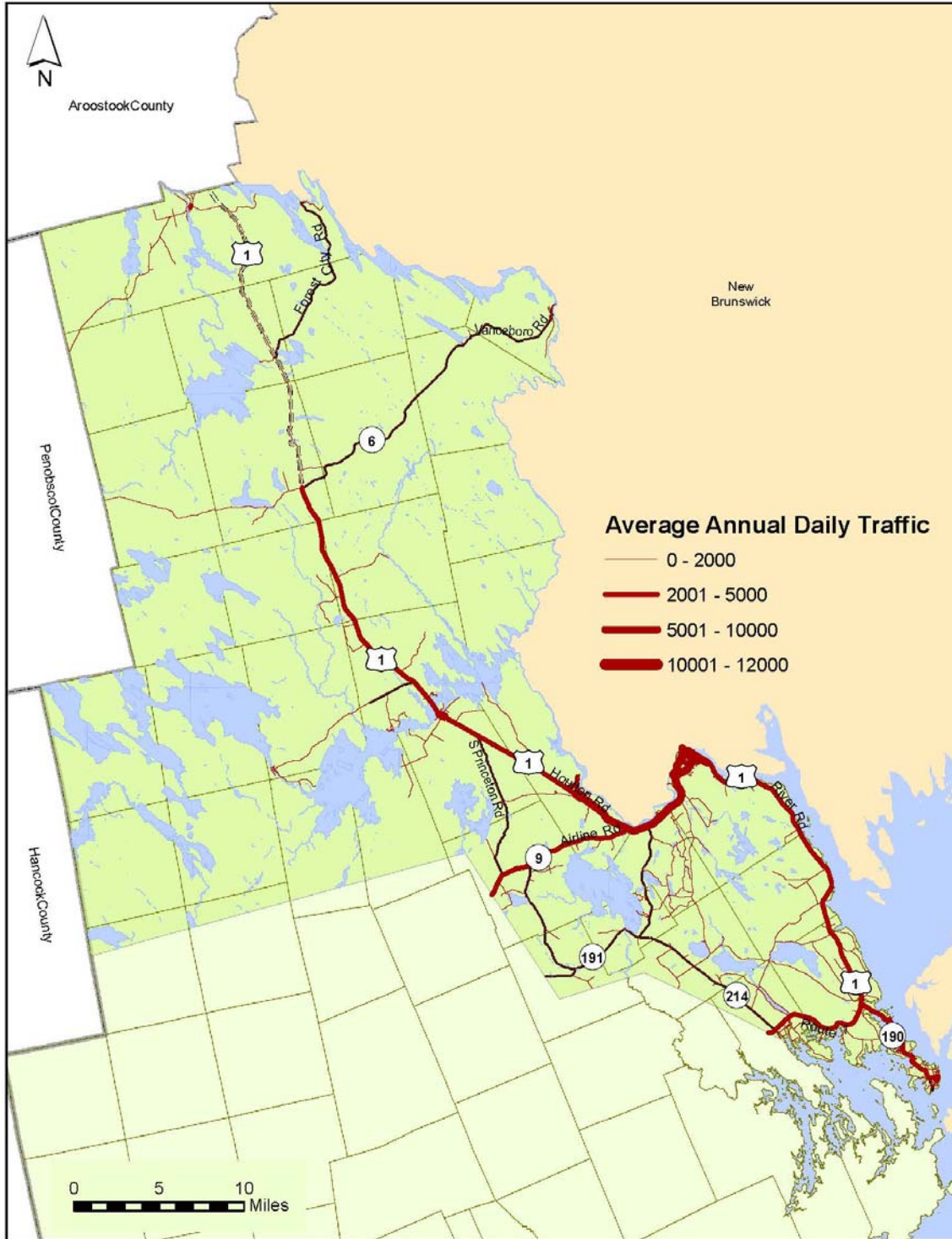


Figure 2: Coastal Canadian Corridor Traffic Counts

2.1.2 Traffic Safety

MaineDOT uses a statistical formula to assess the relative safety of “links” (road segments) and “nodes” (intersections) on the state highway system. This formula helps MaineDOT prioritize the most dangerous sites for further analysis and apply countermeasures to reduce crash rates. High Crash Locations (HCLs) by definition must have a calculated crash rate factor higher than 1.0, indicating a higher-than-average crash rate as compared to other Maine roads with similar volumes and functionality, AND a minimum of eight crashes at that location during the latest three-year analysis window. Using this standard, the CCC does not have any designated HCLs within the study area. Safety concerns expressed by advisory committee members included a request for a reduced speed limit and improved law enforcement on US-1 in front of the combined post office and general store in Waite where there is a high volume of slowing and turning local traffic, and an alarmingly large number of “near-misses” (though few actual crashes) at the intersections of US-1 with Grand Lake Stream Road in Indian Township and US-1 with State Route 169 in Danforth.

2.1.3 Border Crossings

There are numerous large and small border crossings within the CCC study area, serving every available transportation mode. Calais is by far the busiest international port of entry in the study area. It features three 24-hour border crossings: Ferry Point, Milltown, and the new crossing at International Avenue that all commercial traffic is now required to use. Calais border patrol agents also process incoming train passengers (i.e., crew) and freight on lines entering Calais, Baring Plantation, and the Woodland Pulp, LLC mill. Any private or commercial vessels crossing the international border in the Calais area are required to check in at the closest border station immediately after docking.

Eastport does not have a land-based border crossing, but it has a Customs and Border Patrol office to process international visitors and freight arriving via the port facility and the seasonal ferry. Vanceboro has a low-volume 24-hour border crossing station that processes incoming traffic on the rail line, as well as vehicles. (The railroad bridge spanning the St. Croix River in Vanceboro has the distinction of being the only US-Canada border crossing that has ever been attacked by foreign forces; it was bombed by the Germans in 1915, while the US was still a neutral nation, due to fears that the British-allied Japanese would use US railroads to funnel Japanese troops and supplies into Canada for deployment against Germany in Europe.) Forest City Township has a very small border crossing that is currently open from 8:00 a.m. to 7:00 p.m. daily. It is gated to prevent the passage of vehicular traffic when closed, and individuals who cross the border during off-hours by foot or by boat are required to check in the next morning with the border patrol officer on duty.

Airplanes arriving from outside US airspace are permitted to land at Eastport Municipal Airport, Princeton Municipal Airport, and Vanceboro Seaplane Base, provided that they have filed both a flight plan for that airport and a passenger manifest via the Automated Passenger Information System (APIS)

prior to arrival. Except in the case of emergency or forced landings, pilots crossing the international border who have not filed the appropriate documents will be refused permission to land at these airports. Private-use and public limited-use airfields located in Perry, Charlotte, and Meddybemps are not allowed to receive any international flights, other than emergency or forced landings. US Customs and Border Protection agents are available during posted working hours to process incoming flights at Eastport, Princeton, and Vanceboro, and it is the pilot's responsibility to phone in advance and coordinate his or her arrival time so that the plane and passengers can be inspected and cleared following touchdown at the airport.

Attempts to obtain multimodal border crossing statistics directly from the US Department of Homeland Security were unsuccessful. However, Table 6 shows the statistics observed at the largest ports of entry in the CCC, as published on the United States Department of Transportation's Bureau of Traffic Statistics (BTS) interactive website for 2010:

Crossing Point	Trucks	Loaded Truck Containers	Unloaded Truck Containers	Trains	Loaded Rail Containers	Unloaded Rail Containers	Train Passengers
Calais	72,712	52,374	18,630	69	163	159	138
Eastport	2,461	1,576	725	0	0	0	0
Vanceboro	2,118	1,857	300	228	6,015	4,079	424

Crossing Point	Buses	Bus Passengers	Personal Vehicles	Personal Vehicle Passengers	Pedestrians (includes bicyclists)
Calais	799	19,442	1,054,681	1,557,357	8,469
Eastport	85	2,243	156,334	243,027	310
Vanceboro	3	44	48,684	73,291	798

Table 6: Passengers and Freight Entering the US via Major CCC Ports of Entry, 2010

Unfortunately, the data on the BTS website shows aggregate totals from all three ports of entry in Calais, without a breakdown of entering traffic at each crossing location. All that can be said with certainty is that the 72,712 commercial trucks and most if not all of the 799 buses entered via the new International Avenue crossing, as larger classes of vehicles are redirected to the International Avenue station if they try to cross the border at Ferry Landing or Milltown. It is hoped that updated traffic counts at the newly opened crossing at International Avenue will provide better insights about how cross-border traffic is distributed between the three border crossing stations in Calais.

Statistics for border crossings via air and sea were not available from the Bureau of Transportation Statistics or any other publicly available source. However, since all commercial shipments made to and from Eastport are classified as "foreign" since they enter from Canadian waters, the annual border crossing statistics for commercial ships arriving in Eastport can be derived from the records for Eastport shipments on the US Army Corps of Engineers Navigation Data Center website. According to the US Army Corps, the number of foreign commercial vessels arriving at the Eastport Port Authority have

fluctuated from 76 to 116 annually over the most recent five years of publicly available data, as shown in Table 7 on the next page.

Year	2009	2008	2007	2006	2005
Number of incoming vessels	76	116	83	76	113

Table 7: Annual Arrivals of Foreign Vessels at the Port of Eastport

2.1.4 Commercial and Passenger Vehicle Rest Areas and Scenic Pull-offs

Official public rest areas and pull-offs within the CCC are limited. Public rest areas with bathrooms or portable toilets are non-existent. Indeed, MaineDOT has closed down many of its public rest areas with toilet facilities (even on I-95) in the past few years due to budget constraints. However, the lack of rest and sanitary facilities must be treated as a significant corridor deficiency in a county and state that are heavily dependent on commercial trucking and an international tourist economy. Commercial truckers are limited by federal law to no more than 11 hours of cumulative driving time within any 14-hour period, after which they must pull off the road and rest for a minimum of 10 consecutive hours before getting back behind the wheel. Tired motorists, especially those making long-distance trips, are likely to try to push beyond their limits if there are no safe and convenient places for them to pull off and rest.

WCCOG completed a [Route 1 Safety and Mobility Analysis](#) for MaineDOT in 2007, covering a study area that overlaps slightly at its northern end with the southern end of the CCC study area. Please refer to this study at www.wccog.net for its recommendations regarding existing and potential scenic pulloffs in Robbinston and Calais. A scenic pulloff area can serve at least three purposes for three different user groups:

- Showcase the natural beauty of the CCC to visitors;
- Provide a free, enjoyable, and easily accessible picnic spot for both locals and visitors, perhaps with a kiosk offering information about the view, the region, and other local attractions that may merit a side trip off the main road; and
- Provide a convenient mandatory resting spot for commercial truckers.

2.1.5 Transportation Modes

This section provides details about existing conditions, including identified existing deficiencies, for each transportation mode within the study area.

2.1.5.1 Surface Transportation

US-1 is the primary north-south transportation route for private and commercial vehicles in the CCC. For most of its length it is a two-lane road, with a few truck-climbing lanes added to steep inclines. Paved shoulder widths vary between 0 and 8+ feet wide. Traffic volumes along US-1, measured at selected points within the study area from south to north in 2009 (calculated as Annual Average Daily Traffic, AADT), were estimated to be 2580 just north of the intersection with State Route 214; 2910 north of State Route 190, which carries traffic to and from Eastport; 4800 in downtown Calais (near the intersection of Main and North Streets); 6550 to the south of the turn onto State Route 9 toward Bangor in Baring Plantation, and 4230 just north of this intersection; 3420 at the bridge that forms the boundary between Princeton and Indian Township; 1920 south of the intersection with Route 6 in Topsfield; and 1610 at the Aroostook County line in Danforth. The largest volumes along the road occur in the area between the three Calais border crossings and the split with State Route 9 in Baring Plantation, since this is a zone where commercial and non-commercial traffic traveling between Canada and Interstate I-95 in Bangor via State Route 9 overlaps with local and regional motorists making shorter trips to and from downtown Calais, the largest population center and service center in Washington County. The portion of US-1 from Topsfield to Danforth remains “unbuilt,” meaning that it is one of many state highways in Maine’s backlog inventory that have not yet been fully constructed according to modern highway design standards, due to budget constraints and higher construction priorities in each biennial budget. State Route 190 is also included in Maine’s unbuilt backlog inventory, as is most of the rural collector road system. Unbuilt roads tend to be older horse-and-buggy roads that were simply paved over as needed to allow for higher and heavier vehicular traffic volumes, rather than being excavated and constructed for heavier use with well-draining subgrade material, drainage facilities to remove water from the pavement and subgrade, and an engineered pavement design. Without such features, unbuilt roads tend to experience more and worse frost heaves, potholes, sinking, tilting, and cracking, therefore requiring more and costlier maintenance on an annual basis than properly constructed roads. But full-reconstruction projects are very expensive – often on the order of \$2 to 3 million dollars or more per mile of highway – so MaineDOT has been limited to doing spot improvements on the very worst sections of the unbuilt inventory, and then doing whatever they can with repairs and maintenance on the rest. Until a consistent new funding source can be identified to once again start chipping away at the backlog, it is highly unlikely that either US-1 or State Route 190 can be fully reconstructed to modern standards within the next two decades.

Other state highways within the study area include State Routes 190 and 214, portions of State Routes 6, 9, 191 and 169, Charlotte Road, South Princeton Road, North Union Road (named Cooper Road in Alexander), Grand Lake Stream Road, and Forest City Road. All of these roads transport regional commuters, freight traffic, and tourists to and from US-1. Just as importantly, nearly all of these roads provide viable (although slower) alternative and backup routes for north-south travel with over-the-road access to the Canadian border. Washington County’s natural resource-based industries rely on the ability to move freight safely and efficiently within and beyond the CCC, and because rail service in the CCC is so limited, it is critical to maintain this secondary north-south cross-border road network in case a

portion of US-1 must be closed due to an unforeseen emergency. Needless to say, the availability of alternate north-south routes benefits non-commercial users as well, and may be preferable for bicyclists who are uncomfortable with the high speeds and volumes, dust, and noise levels found on US-1.

There are two signal-controlled intersections in the study area, one at the junction of US-1 (Main Street) with US-1/State Route 9 (North Street) in downtown Calais, and the other located at the McDonald's Restaurant entrance on North Street. Under normal conditions, both signals have plenty of remaining capacity; however, seasonal tourist traffic occasionally results in a traffic control capacity problem at the Main Street-North Street intersection (sometimes resulting in queues that extend well beyond the upstream McDonald's signal) during periods of peak summer demand at the Ferry Point border crossing station. The seasonal capacity problem has been greatly alleviated since the new border crossing opened at International Avenue in 2009, since all commercial truck traffic is now routed via this crossing. In addition, many international travelers now have GPS units and cell phone applications that alert users to congested travel conditions in near-real time, and advise them to divert to the crossings at International Avenue or Milltown. Therefore this issue is currently considered to be an occasional annoyance, rather than a significant system deficiency that needs to be addressed.

The two largest deficiencies in the existing highway transportation network, as identified by CCC advisory committee members, were:

- Lack of sufficient passing lanes and paved shoulders to permit faster-moving freight and commuter traffic to safely and conveniently pass slower-moving tourist traffic and bicycles on US-1. WCCOG's Route 1 Safety and Mobility Analysis (2007) offered recommendations for adding turning lanes and passing lanes in Pembroke, Perry, Robbinston, and Calais; please refer to this study at the WCCOG website, www.wccog.net, for more details.
- Need for more intensive maintenance and targeted improvements for ALL state-owned roads in the study area. Many of the rural collector roads are approaching a critical state of disrepair, because they have been passed over during the transportation project nomination process for decades. The reasons for this are many, including dwindling funding resources and higher priorities in the MaineDOT statewide biennial budget, increasing construction costs, and a candidate project rating system that awards higher points to roads in the arterial network. MaineDOT's maintenance crews have done everything they can to keep these roads safe and drivable, but continued reapplications of "skinny mix" and pothole patching in the worst areas are equivalent to using a band-aid to try to heal a bullet wound.

Advisory committee members concurred that if MaineDOT could address these two major deficiencies, it would have a significant positive effect on both tourism and economic development along the entire length of the corridor.

2.1.5.2 Non-Motorized Transportation: Bicycles, Pedestrians, and Equestrians

Pedestrian facilities (sidewalks and crosswalks) are primarily concentrated in the downtown business districts of the largest service center communities of the CCC, Eastport and Calais. Baileyville also has downtown sidewalks that extend into some of its older residential neighborhoods, recalling the pre-automotive days when workers typically walked from their homes to their jobs in the mills, railroad yards, or downtown shops (and their children walked to school). The Passamaquoddy Indian Tribes at Sipayik (Pleasant Point) and Indian Township have developed off-road multi-user trails that offer pedestrians and bicyclists a pleasant alternative to the busy state highways that bisect their reservations. A few other communities in the CCC provide sidewalk areas within their downtown villages, school zones, and other developed areas where pedestrian crossings are higher than average, but many of the smaller towns and unorganized townships in the study area simply lack the population density to justify the costs (both initial and ongoing) for new sidewalks and crosswalks. The condition of existing pedestrian facilities can vary greatly between communities within the corridor, and even between neighborhoods within each community. Some communities do not provide for municipal maintenance of sidewalks and crosswalk markings during winter months due to budget and manpower constraints; in a few communities, individual homeowners are expected to clear the portion of the sidewalk that runs in front of their homes. When sidewalks are not cleared of snow, pedestrians are forced to walk in or near the travel lane on the adjacent roadway, creating potential safety conflicts with vehicles that are intensified during low-visibility and icy conditions.

Bicycles provide an important transportation option for one-way trips of 20 miles or less, particularly for non-drivers and others without easy access to a personal vehicle. In recent years, MaineDOT has maintained a policy to widen shoulders during its rural highway reconstruction projects, to the greatest feasible extent. This policy and rising gasoline prices have contributed to a slight increase in on-road bicycling in rural communities, both within the corridor and statewide. However, an interrupted patchwork of poorly paved and unpaved shoulders continues to inhibit all but the most experienced and confident bicyclists from using state highways in the CCC for long-distance bicycle commuting or touring.

Few people still use horses as their primary means of transportation, but equestrians are legal on all Maine roads unless specifically prohibited (typically on limited-access highways). Motor vehicles and bicycles are required to slow and yield to equestrians in the roadway, since horses can be skittish and unpredictable when startled. Equestrians are slightly better equipped to deal with changing shoulder widths and conditions in the CCC, however, since horses can travel as well off-pavement as they can on a paved surface.

In rural areas where population density is too low for sidewalks to be a cost-effective option, paved shoulders provide additional safety and comfort for pedestrians and equestrians as well as bicyclists. Paved shoulders also provide a convenient area for slower-moving vehicles to move over and allow faster traffic to pass, and allow all motorists to pull out of the stream of moving traffic if they need to

make a roadside stop. A paved shoulder width of 5 feet is recommended as a minimum design standard for safe and comfortable use by bicyclists, pedestrians, and equestrians on high-speed rural roads, although less than 5 feet is still better than no paved shoulder at all. In order to also function effectively as a pull-off for vehicles while maintaining a sufficient lateral passing distance between stopped and moving traffic for safety, a minimum of 8 feet of paved shoulder is the current national highway design standard. If this standard cannot be met along the full length of a highway due to right of way or paving cost considerations, it may be possible to construct occasional “pull-off pockets” with appropriate advance signage. However, bicyclists and pedestrians do not benefit from pull-off pockets, whereas motorists (both fast and slow) do benefit from widened shoulders, so if widened paved shoulders are a feasible option, they are also the best option for serving the broadest range of motorized and non-motorized road users. Figure 3 provides a GIS-based inventory of roads in the study area with their existing paved shoulder widths.

The East Coast Greenway and the Downeast Sunrise Trail add to the mix of facilities for non-motorized transportation within the study area. The East Coast Greenway is the designated 2500-mile route for a so-called “Urban Appalachian Trail,” offering bicyclists, pedestrians, and equestrians (plus cross-country skiers and snowshoers during the winter months) a long-distance touring corridor connecting most of the major East Coast cities for use by people of all ages, abilities, and skill levels. It starts at the international border in Calais, and terminates at the end of US-1 in Key West, Florida. The ultimate goal is for 85 percent of the East Coast Greenway route to be carried via a network of off-road trails along the length of the entire East Coast, connected by limited mileage over low-volume roads in areas where construction of an off-road trail is clearly infeasible. The Downeast Sunrise Trail is an 87-mile multi-use rail-trail that was opened to the public in 2010, and it forms the bulk of the East Coast Greenway route through Washington County. Although the East Coast Greenway maintains a general policy of not permitting motorized travel on its off-road segments, a compromise was forged that allows all-terrain vehicles (ATVs) and snowmobiles to share designated sections of the Downeast Sunrise Trail. The Downeast Sunrise Trail starts at Washington Junction in Ellsworth and passes through the communities of Hancock, Franklin, Sullivan, Gouldsboro, Steuben, Milbridge, Harrington, Cherryfield, Columbia, Columbia Falls, Jonesboro, Whitneyville, Machias, East Machias, Dennysville, Pembroke and Charlotte, where it terminates at Ayers Junction. The East Coast Greenway continues from Ayers Junction north to Calais via Route 214, Charlotte Road, US-1, South Street, and the Calais Waterfront Trail to its terminus at the International Bridge (Ferry Point). Tourism-based businesses located near the East Coast Greenway route have already seen their profits increase as a result of the opening of the Downeast Sunrise Trail, and this new market is expected to expand over time as more US and international bicyclists plan multi-day cycling vacations that traverse eastern Washington County.

Coastal Canadian Corridor Paved Shoulder Widths

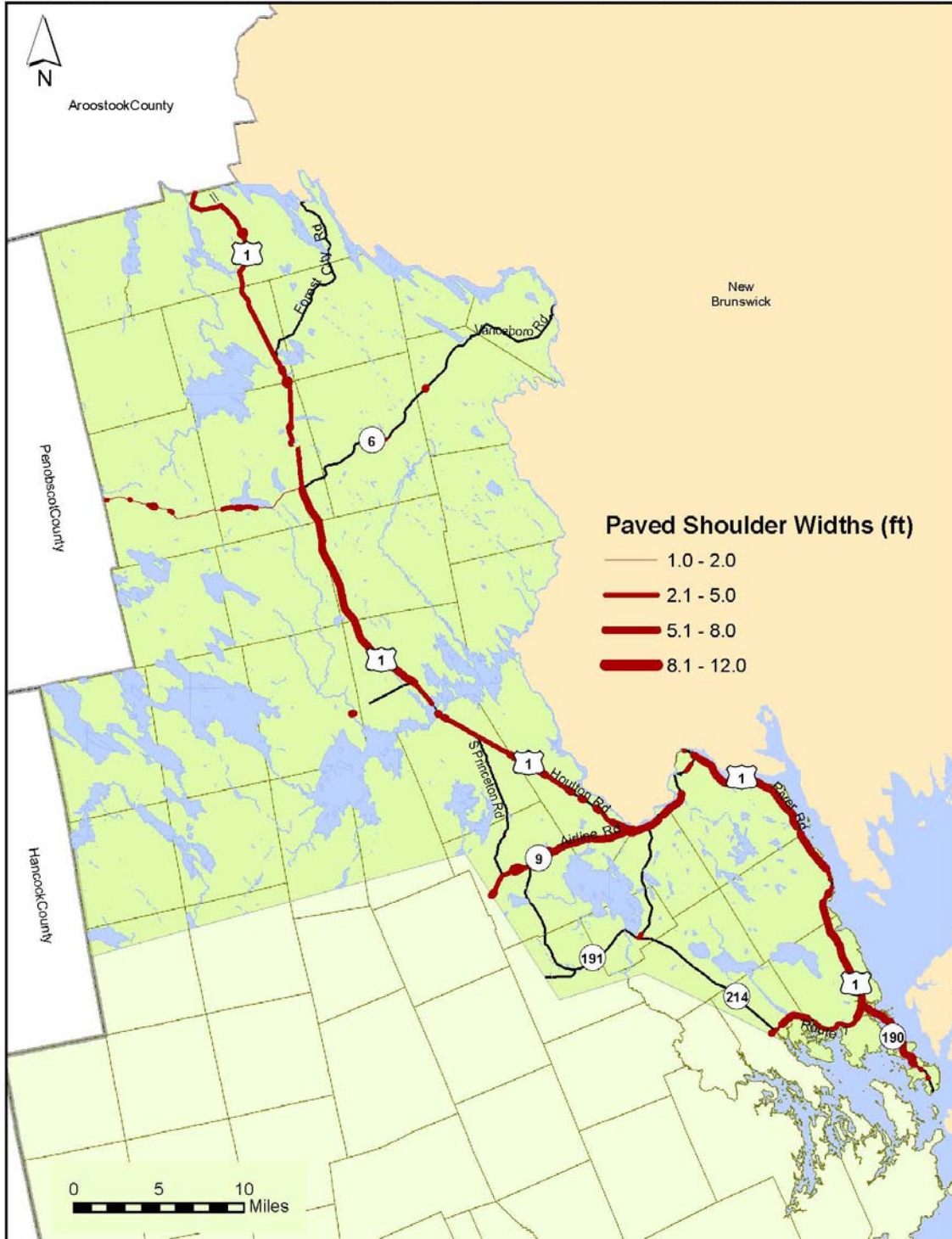


Figure 3: Coastal Canadian Corridor Paved Shoulder Widths

2.1.5.3 Transit Service

Limited public transit service within the study area is provided by the Washington-Hancock Community Agency (WHCA), in partnership with the two Passamaquoddy Tribal Governments. WHCA operates fixed-route bus service each weekday from Indian Township to Calais and back, and from Eastport and Sipayik (Pleasant Point) to Calais and back, with intermediate stops upon request. One trip into Calais and two trips out are offered each day on each route, with a one-way ticket cost that can range from \$2 to \$8 depending on the length of the trip. In-town bus service is provided on weekdays in Calais from 9:30 a.m. to 1:00 p.m., and in Eastport on Wednesdays only from 10:30 a.m. to 1:30 p.m., for \$2 per one-way ticket. WHCA also operates contracted on-demand paratransit services for MaineCare and disabled populations, and coordinates a volunteer driving service to transport seniors and social service recipients to and from appointments and other errands (using the driver's personal vehicle); if space is available on board the vehicle, WHCA will accommodate other passengers and other destinations. Finally, WHCA coordinates the statewide GoMaine ridesharing service for all of Washington County and Hancock County.

West's Transportation is a privately owned transit service based in Steuben that makes one bus run daily throughout the year from Calais to Bangor and back via US-1 and US-1A, with local stops in many Washington and Hancock County communities en route. The one-way fare from Calais to Bangor is \$22 and round-trip fare is \$37, with lower fares for intermediate stops depending on the length of the trip. West's also provides contracted services to WHCA and other social service agencies, to school districts, and to major regional employers for commuter services.

Taxi service is available from Calais and Eastport to serve the southern end of the CCC study area, but there are no taxi companies that routinely operate within the more sparsely populated northern portion of the CCC. This has been noted as one of the major deterrents to identifying new customers and services for the Princeton Municipal Airport: visitors arriving via plane have no ground transportation options for leaving the airport, unless they either know a local resident who can drive out to pick them up, or make special arrangements for a cab or a delivered rental car to be waiting for them at the airport (and pay a premium price for this service).

The First Light Transit System Steering Committee published a comprehensive report on the state of transit in Washington County with recommendations for future improvements and better coordination of public transit and passenger services, entitled ***Developing Community Access to Transit in Washington County*** (December 2010). Please refer to this study for additional background information and specific recommendations for transit improvements within and beyond the corridor.

The aging population base is likely to increase demand for improved transit service over the next two decades. Eastern Washington County has become a popular retirement destination, and most of the population growth in the county has been occurring in older age groups; in fact, the median age in Washington County has risen to 42.7, compared to 41.1 for all of Maine and 36.4 nationally (2010 US Census). In addition to retirees coming into the CCC "from away," current residents riding the lead

wave of the baby boom generation are now aged 65+, while the tail end of the wave is already 50-something. Seniors are living longer and healthier lives than in past generations, but degenerative eye diseases, slowed reflexes, and various cognitive dysfunctions of advanced age are not yet stoppable or reversible, so many seniors will have to eventually give up driving despite the many good years of living still ahead of them. As increasing numbers of otherwise healthy and independent retirees are forced to limit or stop their driving (either voluntarily or involuntarily), the demand for rural transit service is likely to skyrocket, as is the trend for seniors to sell their rural residences and move into apartments or condominiums in the major service centers, where they can walk or use existing transit service to meet their daily needs.

2.1.5.4 Rail Service

There is no passenger rail service in the CCC study area, and existing freight rail service is extremely limited and logistically challenging. Most of the Maine Central Railroad's former Calais Branch (a line that once ran from Bangor to Calais via Ellsworth) has not been operational since 1985. The rails and ties have been removed from the state-owned sections from Ellsworth to Ayers Junction and along the Eastport Branch (abandoned in 1978). Both of these sections now function as multi-user rail-trails, and additional land use changes have occurred farther down the peninsula along the former Eastport Branch. The Woodland Spur and a short segment of the easternmost section of the former Calais Branch between the Salmon Falls yard in Calais and St. Croix Junction remain operational, and a cross-border interchange at Milltown Junction provides a connection to the rest of the North American long-haul rail system on the Canadian side via St. Stephen, New Brunswick.

Unfortunately, because the 4.7 mile Milltown Spur around St. Stephen connects in the wrong direction at both ends, Canadian trains entering and leaving the US via St. Stephen have to "push" the rail cars backwards for the entire length of the trip down to Milltown Junction and back up to St. Stephen. Once the train arrives caboose-first in Milltown Junction, the inbound and outbound cars must be exchanged and the engines moved around and recoupled; because of space limitations at the Milltown Junction double-ended siding, trains longer than about 750 feet (about 12-13 cars) must be backed an additional mile or so down the track on the US side to the Campbells Yard double-ended siding, where train lengths of up to 1500 feet (25-26 cars) can be switched. Only after all of this switching can the incoming cars be coupled to another engine and hauled – facing forward at last – for an additional 11 miles to Woodland. (The same process must be followed in reverse on the outbound trip back to Canada.) The last five miles of the rail line to Woodland cross back onto the Canadian side of the border in Baring south of St. Croix Junction, then cross back again to the US side at Woodland Junction to enter the Woodland yard. The complicated backing and switching operation and the siding-limited train lengths are inconvenient but not insurmountable obstacles at present, since the current owner, Woodland Pulp, LLC, has been shipping most of its outgoing product and incoming supplies and raw materials by truck; according to Roger McIver of Woodland Pulp, approximately 177 inbound carloads and 160 outbound carloads were shipped by rail in 2010. However, if volumes were to rebound to historical levels when all three mill facilities on the site were operating at full capacity (approximately 4500 to 6000 carloads per year),

significant infrastructure upgrades will be required to accommodate larger trains and reduce turnaround times, in order to maintain reasonable delivery schedules and remain economically competitive with commercial trucking. The feasibility study described below (HNTB, 2009) includes recommendations for infrastructure upgrades and a new cross-border connection to St. Stephen that would help to mitigate or eliminate these problems.

An informal study by Ed Renaud, an advisory committee member who volunteered to investigate the conceptual-level feasibility of hauling harvested wood directly to the Woodland mill via rail from the Lambert Lake-Vanceboro area rather than over the road in trucks (an idea proposed at our first advisory committee meeting by Ron LaPlant, owner of a commercial trucking firm in the corridor), concluded that while a new freight rail line was topographically feasible and might eventually reduce the direct shipping costs to Woodland from Vanceboro (compared to trucks hauling wood from the same general area) if sufficiently high volumes of rail freight could be maintained, there was little evidence to support the idea that a sufficient volume of raw material would come in via rail to justify the very high construction and operational costs. Ed noted that an operational rail line runs through Vanceboro and down the Canadian side of the border that could easily deliver harvested wood to the mill today, yet there is no evidence that it is being used for this purpose.

The state-owned Calais Branch segment from Ayers Junction to Calais and the abandoned spur from Ayers Junction to Eastport were the subject of a recent feasibility study funded by MaineDOT and Federal Marine Terminals, Inc., the Eastport Freight Rail Restoration Study (HNTB, 2009). Even the most passionate railroad advocates have acknowledged that it is not practical to consider the restoration of rail service through the Passamaquoddy Tribe's Sipayik Reservation en route to Eastport, so instead the study examined the potential for siting a rail-to-truck transloading facility in Perry with full rehabilitation and improvement of the rail corridor from the transloading facility north to Calais via Ayers Junction and St. Croix Junction. Trains would offload all cargo destined for the port and return to Woodland or Milltown with incoming freight cars awaiting rail shipment at the transloading facility, and trucks would transfer cargo to and from the transloading facility and the port facility, either via the existing State Route 190 or via a proposed alternative route that would bypass the Sipayik Reservation. The recommended alternative for a transloading site is located west of US-1 and south of South Meadow Road in Perry. The feasibility study and cost estimates to improve the rail lines and build the facility provided the justification and proposed budget for a Transportation Investment Generating Economic Recovery (TIGER) Discretionary Grant application submitted by the Eastport Port Authority to the Federal Government in 2010, but this application was denied.

A revived freight rail industry within the CCC would undoubtedly help to increase import and export activity at the port facility in Eastport. It would also reduce travel demand on area highways by moving a portion of the corridor's existing freight traffic onto rail, thus decreasing point-to-point travel times for commercial truckers and prolonging the lifespan of area roads and bridges. However, the major challenge facing the railroad industry is a classic chicken-and-egg dilemma: the railroad companies need more heavy commodity shippers in order to survive and thrive, especially manufacturing industries with roughly equivalent demands for incoming supplies and raw materials vs. outgoing finished products;

but manufacturers who can benefit from freight rail's advantages over commercial trucking are unlikely to start up or relocate their businesses in an area that does not already offer excellent rail service with direct connections to intercontinental markets and seaports. The most optimistic forecasts for the future of freight rail in eastern Maine rely on the likelihood of increasing gasoline prices over time, which could allow freight rail to become more economically competitive with commercial trucking even over relatively short distances (rail has always been the most cost-effective mode for long trips under heavy loads). At a certain tipping point that will depend on each industry's product market and supply chain, gasoline prices are likely to trigger a shift in the cost-benefit ratio for some regional businesses that currently ship their supplies and products via truck.

Across the international border, officials from the Canadian federal and New Brunswick provincial governments have announced that they plan to invest \$18 million (to be matched by an additional \$18 million from the Irving Transportation Group, owner of the rail line) in infrastructure investments throughout the New Brunswick Southern Railway (NBSR) corridor. Proposed improvements include replacing and upgrading ties, steel rails, and bridges along the portion of the NBSR rail line that connects to the Calais Branch at Milltown Junction on the US side of the border.

2.1.5.5 Marine Transportation

The Port of Eastport is the deepest natural port on the eastern seaboard, and also the easternmost port in the US. It has sufficient space and capacity to accommodate even the largest oceangoing vessels, and recently started construction work on a new bi-directional conveyor system that will automate the loading of bulk wood chips and similar cargoes. The port has even started shipping live dairy cows from the Midwest to overseas markets in Turkey and Russia. In 2010, Eastport passed a significant milestone by shipping over 400,000 metric tons of dry cargo, an all-time high during its 33-year history as an import-export facility. Woodland Pulp, LLC, is currently shipping 100% of its products via Eastport.

Despite focused MaineDOT biennial investments in infrastructure and operations under Maine's "Three Port Strategy" and increasing diversification of its client base in recent years, Eastport has struggled throughout its existence to establish its own identity and compete successfully with the seaports of Canada's Maritime Provinces as well as other ports in Maine and the eastern US. The Eastport Branch of the Maine Central Railroad was abandoned in 1978, just a few months after the port began its import-export operations. Thus the port has never had the advantage of dockside rail service to encourage more freight rail clients to use the port facility, and the Eastport Branch rail line never had the advantage of a thriving seaport that could open up new rail markets. From 1978 to the present, all cargo shipped through Eastport has had to be transported to and from the docks via truck. The lack of a direct rail connection has contributed to traffic congestion and pedestrian safety concerns along State Route 190, the primary highway access between Eastport and US-1. The lack of rail service is also believed to have limited the port's growth rate and diversification into other North American markets, and has made it more difficult for Eastport to remain competitive with other East Coast ports in the global marketplace. For all of these reasons, the Port Authority remains eager to identify a viable

funding source that will facilitate construction of the truck-to-rail transloading facility and infrastructure investments to improve rail service to the transloading facility, perhaps in conjunction with a rerouting of State Route 190 to bypass the Sipayik Reservation, as described in Section 2.1.5.4 above.

The Eastport Port Authority also manages harbor operations for the working waterfront at its Breakwater Facility, located in the heart of downtown Eastport. In addition to annual and seasonal berth rentals for smaller fishing vessels and pleasure craft, the facility provides transient berths for visiting vessels up to several hundred feet in length and a full-service marine fuel depot. Eastport is the homeport for several tall-masted schooners and fishing boats that offer scheduled harbor cruises, plus charter services for groups and special events during summer months. A seasonal international ferry service operates between Eastport, Deer Island, and Campobello during the summer months, and there is a US Customs House on the pier to process passengers and merchandise entering the US via ferry. A new water taxi service between Lubec and Eastport opened for its first season of business in June 2011. The United States Coast Guard maintains a small manned station in Eastport that maintains 24-hour maritime surveillance for an area of responsibility (AOR) that extends from Calais down to Cutler.

Other waterfront communities within the CCC maintain working waterfronts, harbors, and public boat launches, although none are as large or diverse as Eastport. Figure 4 shows known locations of ferry routes and public boat launches, both saltwater and freshwater.

Coastal Canadian Corridor Boat Launches & Ferry

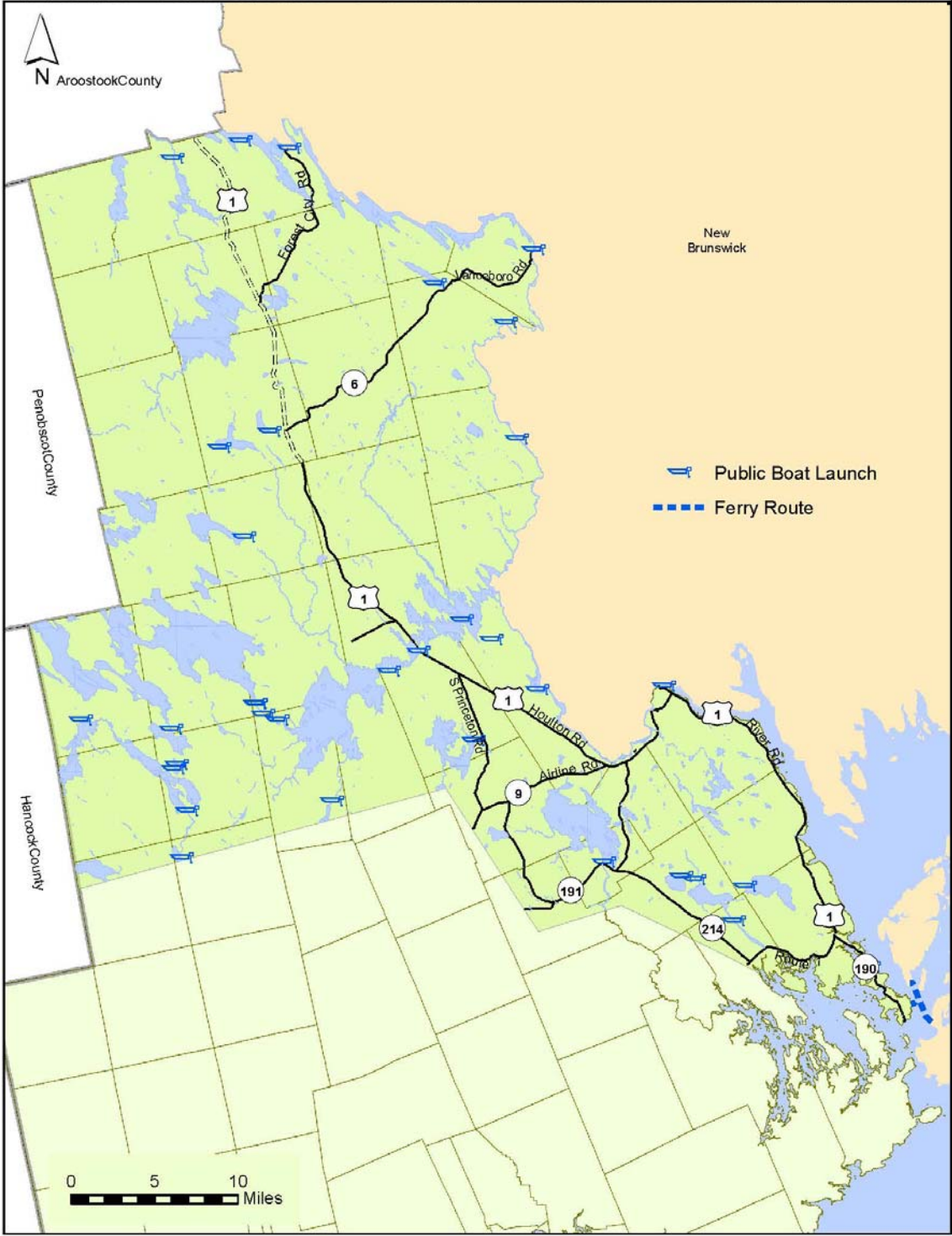


Figure 4: Coastal Canadian Corridor Public Boat Launches and Ferry Routes

2.1.5.6 Airports

Five small airports currently serve the study area. Princeton Municipal and Eastport Municipal are public-use, general aviation (GA) airports. Gillespie Field in Meddybemps is also public, but is classified as a limited use airport. Morrison’s Airport in Perry and Flying Ed Airport in Meddybemps are both classified as private use airports. Characteristics of these airports are provided in Table 8 below, and they are mapped in Figure 5 on the next page.

FACILITY	LOCATION	MAX. RUNWAY LENGTH	SURFACE	ELEVATION	CLASSIFICATION
Princeton Muni	Princeton	4004 ft (1220 m)	Asphalt	266 ft (81 m)	General Aviation
Eastport Muni	Eastport	4000 ft (1219 m)	Asphalt	45 ft (14 m)	General Aviation
Gillespie Field	Meddybemps	1635 ft (498 m)	Turf	200 ft (61 m)	Limited Use
Morrison’s	Perry	2000 ft (610 m)	Turf	200 ft (61 m)	Private Use
Flying Ed	Charlotte	1900 ft (579 m)	Turf	440 ft (134 m)	Private Use

Table 8: Airports in CCC Study Area

Scheduled passenger and freight air services are not available within the CCC, so air travel must be specially arranged via charters or private aircraft. David Herrick, one of the advisory committee members who is very familiar with Princeton Municipal Airport’s operations, notes that the logistics and additional expenses can be discouraging for anyone “from away” who plans a trip into Princeton via air; although you shorten your point-to-point travel time by flying, you must make special arrangements prior to your trip for ground transportation, since the closest taxi and car rental services are located 20 miles away in Calais. The other challenge facing small rural airports is a Catch-22 in current federal funding policy: federal grant money is available to make improvements to runways and airport support facilities at GA airports, but the reviewers like to see robust annual usage and growth statistics as the economic justification for awarding these funds. However, commercial and amateur pilots are less motivated to plan trips in and out of a small airport if its facilities are not already up to date and in good condition. The denial of federal funds for needed upgrades causes further deterioration of the airport, making it less attractive to pilots, which in turn makes it less likely that the airport will qualify for federal funding in the next cycle, and so on.

Coastal Canadian Corridor Airports

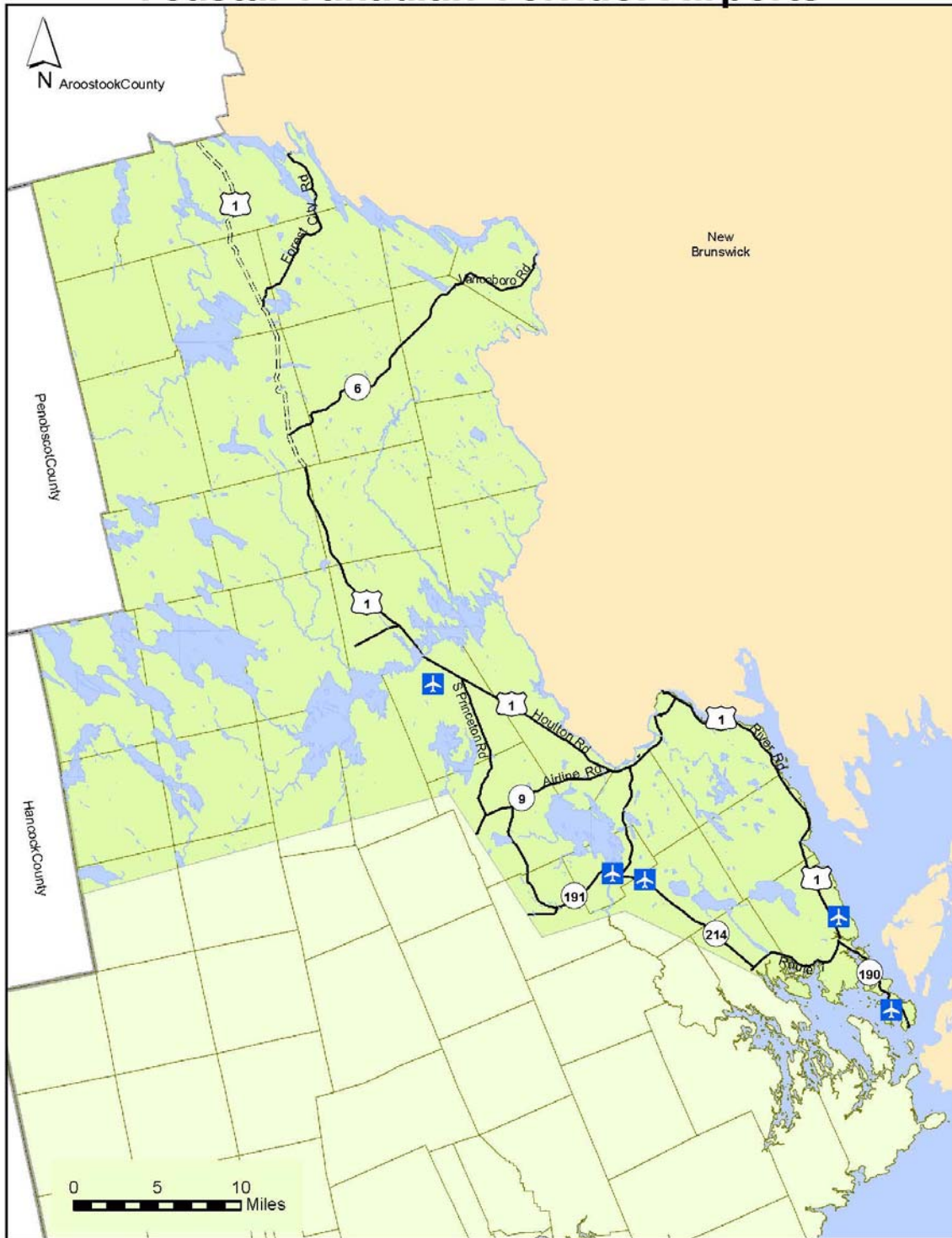


Figure 5: Coastal Canadian Corridor Airports

2.1.5.7 Telecommunications

Telecommunication is not traditionally viewed as a transportation mode. However, in the modern globalized and computer-based economy, telecommuting has become an extremely viable and attractive work model that lets qualified individuals live and work in any environment they choose, and still expect to advance professionally and earn good incomes within their chosen field. Under these circumstances, the challenges of a year-round commute from a remote rural community to a service center can be transformed into the advantages of living and working in a beautiful natural setting (with real estate prices that are still amazingly low to those who hail from elsewhere in the US) while still maintaining a comfortable standard of living. Work can be submitted electronically, and payment can be received electronically. Telecommuting has the potential to transform eastern Washington County into a mecca for urban and suburban professionals seeking a less stressful yet still profitable lifestyle in a rural setting, either as a permanent relocation or as a seasonal vacation retreat. Investments in telecommunications can also reduce the potential future travel demand on major highways within the CCC, since telecommuting allows significant economic activity to occur without placing any additional burden on the road system. This will help to preserve the working lifespans and capacity of CCC roads and bridges.

However, before telecommuting Nirvana can be achieved, there are major hurdles to overcome. Large portions of the CCC are currently classified as “dead zones” where cell phone coverage and broadband Internet capability are not available. It is practically impossible to telecommute and manage large online files using a telephone-line modem, and people who live and work outside these dead zones have become increasingly dependent on the convenience and constant availability of their cell phones and smart phones to conduct business, nurture personal relationships, and enhance their lives. We all probably know people who get touchy and anxious if they go too long without getting a good signal! Business owners in the hospitality industry acknowledge that if their facility does not offer free wireless Internet, a certain percentage of their customers will be unhappy enough that they will seek out a competitor who does offer this service. Students in many parts of Washington County are shortchanged because many of them cannot perform online computer research to complete their class assignments unless they go to a public library or remain inside their school building, and they can never randomly surf the Internet at home to learn more about subjects that interest them. Susan Corbett, a telecommunications business owner who has set professional and personal goals to expand access to broadband Internet throughout all of Washington County and then throughout all of Maine, maintains that visitors would make longer and more frequent overnight visits to Maine state parks if the park system offered free wireless Internet for those who feel the need to use it. She also advocates providing free wireless Internet at all public facilities and rest areas operated by the State of Maine. This is already the official policy in many other states.

The Three-Ring Binder Project is a statewide initiative to improve access to broadband Internet service so that Maine can remain economically competitive in the global marketplace. The initiative is also

expected to stimulate small business growth and cottage-industry start-ups by entrepreneurs who can take advantage of high-speed Internet service to develop, market and sell their products. State officials have targeted Aroostook and Washington Counties as the regions where improved access to high-speed Internet service can create the largest economic impact, so improvements are already underway in portions of the CCC. Cable and fiber-optic systems are being constructed primarily in and around the denser population centers, while more remote rural service is typically provided via fixed wireless transmitters that are placed on cell phone towers. Additional towers and tower spaces will be needed to complete the project, and these will help address the cell phone dead zones as well as the broadband deficiencies.

Maps showing rough approximations of existing cell phone and broadband coverage zones within the study area are provided in Figures 6 and 7. Note that the cell phone “footprints” as shown on the map are maximum theoretical coverage distances from the tower only; there are typically scattered dead and minimal-coverage spots within each footprint due to topography, line-of-sight obstructions, and current weather conditions.

Coastal Canadian Corridor Cellular Phone Coverage

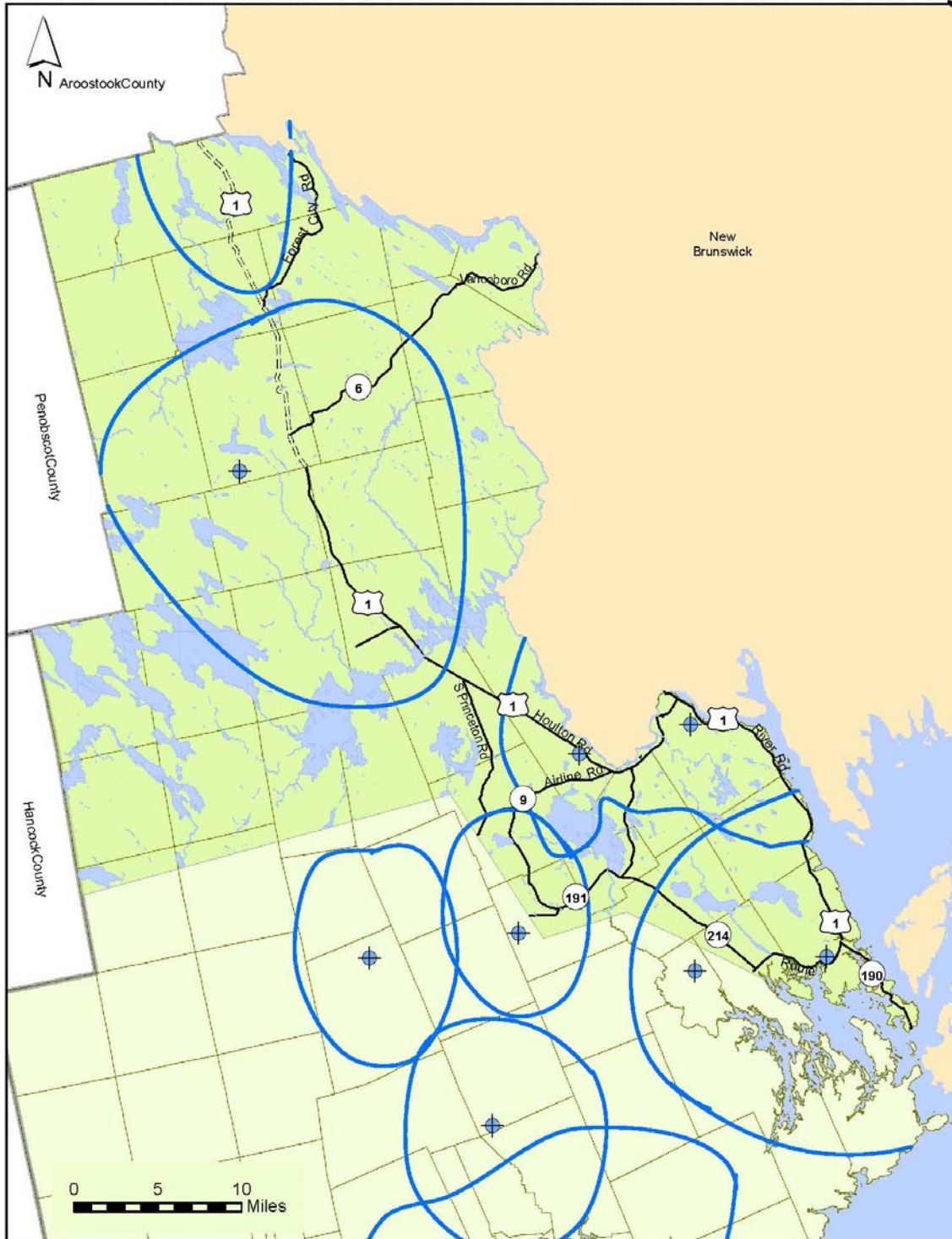


Figure 6: Coastal Canadian Corridor Cellular Phone Coverage

Coastal Canadian Corridor Broadband Coverage



Figure 7: Coastal Canadian Corridor Broadband Coverage

2.1.5.8 Snowmobiles and ATVs

Snowmobiles and ATVs are classified as recreational equipment rather than vehicles, and therefore fall under the jurisdiction of Maine’s DOC rather than its DOT. However, it is easy to make a case that in rural Maine areas like the CCC, they serve a valid transportation purpose. (As recently as two decades ago, the same “recreational vs. transportation” debate was focused on bicycles, which today are recognized components of an integrated multimodal transportation system.) Eastern Maine’s glaciated landscape, high water table, and limited road network all contribute to the reality that many interior destinations are easier to reach – and in some cases, are only *possible* to reach – via snowmobile when the ground and surface water are frozen. ATVs have transformed many components of Maine’s well-developed snowmobile trail system and the privately owned gravel roads through the industrial forestlands into a four-season wilderness highway network, and specially equipped ATVs have made it possible for many hunters, fishermen, and campers to maintain access to the remote spots they love despite physical disabilities that prevent them from walking long distances in rough terrain. The opening of the Downeast Sunrise Trail to snowmobiles and ATV users has created the off-road equivalent to US-1 as a coastal transportation route, and there is evidence that this and other components in eastern Maine’s motorized trail system are being routinely used in the CCC for transportation as well as recreation (e.g., going over to Grandma’s for Sunday dinner via ATV, rather than driving there in the family car).

MaineDOT’s budget does not cover the building and maintenance of snowmobile and ATV trails, but these trails certainly do contribute to regional economic development through four-season tourism, equipment and fuel purchases, primary and vacation residence purchases, and free word of mouth advertising to fellow enthusiasts that helps to grow the ATV and snowmobile tourism market share annually in Maine. MaineDOT also has a vested interest in maintaining safe highway-trail crossings with good stopping sight distances, and therefore should take the needs of recreational trail users into account when upgrading a road section that contains a major trail crossing. For these reasons, a map of major snowmobile and ATV trails (particularly those that cross major roads in the study area) has been provided in Figure 8. Please note that this is NOT a reliable map for trip planning purposes, as many trails are routed over private lands with the landowners’ permission and are subject to change yearly or even monthly. Please contact DOC to obtain the most up-to-date map if you are planning a future snowmobile or ATV trip.

Coastal Canadian Corridor Snowmobile & ATV Trails

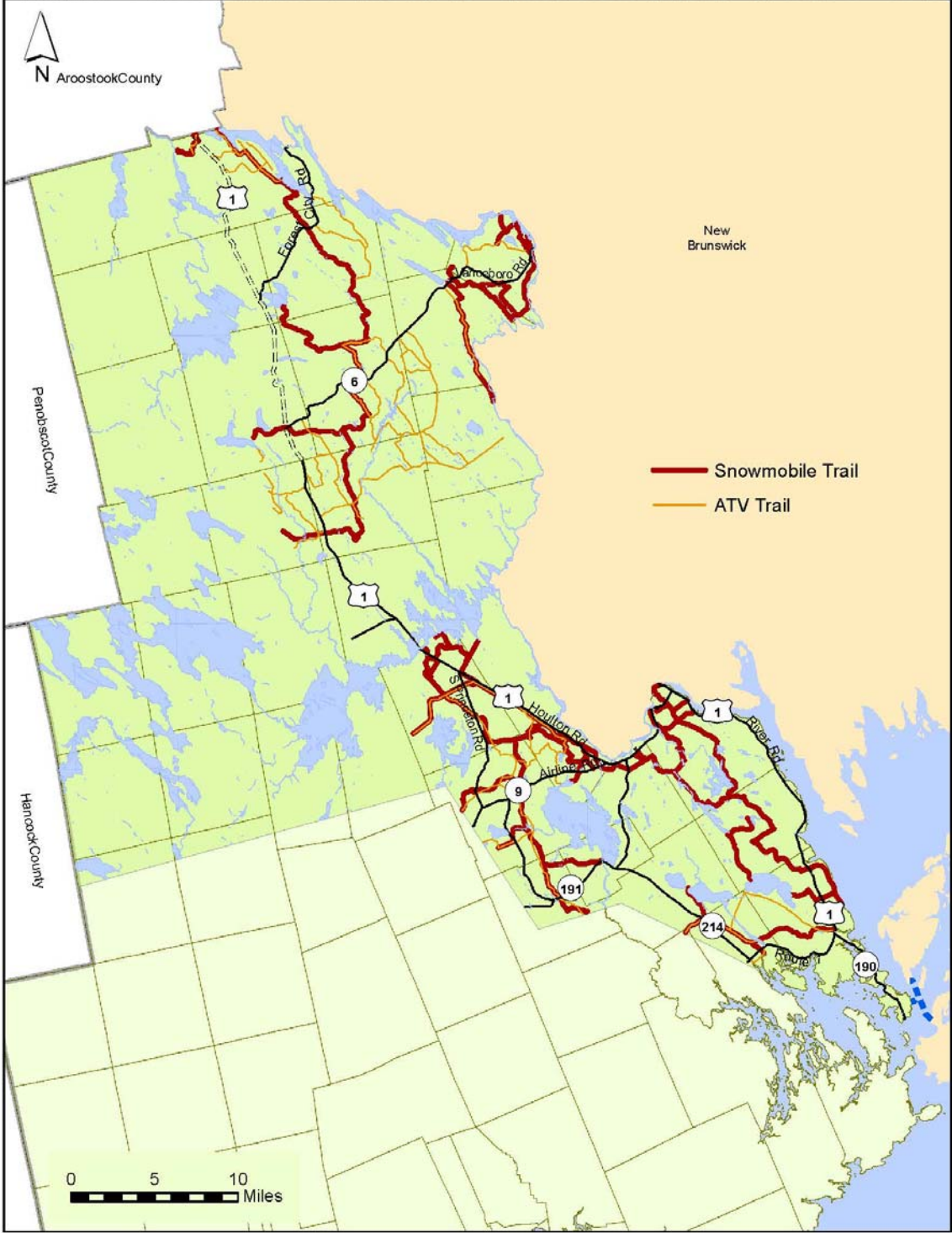


Figure 8: Coastal Canadian Corridor Snowmobile and ATV Trails

2.2. Land Use Elements

Washington County is a rural county in a rural state, with an average density of just 12.8 persons per square mile (2010 census) compared to 43.0 persons per square mile statewide. Historical development patterns in the CCC have been characterized by widely dispersed land uses that make use of available natural resources, such as natural harbors, working forests and farmlands, interspersed with a few developed population centers near major highway crossroads and waterbodies. Calais is the largest city in Washington County, with a population of 3180 as of 2010. It serves as the major service center for most of the CCC region, although Lincoln and Houlton are the preferred service center destinations for communities north and east of Topsfield. Calais also draws in significant business from neighboring New Brunswick. Land uses include a community college and hospital, professional and personal service providers, restaurants and lodgings, groceries, retail and discount retail shops, and a country club with a public 9-hole golf course. Baileyville is the largest town and the second largest population center in the CCC with 1557 residents. It has long been a regional commuting destination as it hosts one of the region's largest and oldest employers, the Woodland pulp mill currently owned and operated by Woodland Pulp, LLC. Eastport claims the title of the smallest city in Maine as well as the easternmost city in the US, with a population of 1545. Eastport's downtown waterfront, which was almost completely boarded up for a decade following the closing of the last sardine cannery in the 1980s, has revitalized in recent years with an emerging new identity as a seaside artistic colony. There are several other towns in the study area with traditional downtown population centers surrounded by more rural land uses outside the village area, but many of the smaller incorporated communities and unorganized territories in the CCC are completely dispersed with no defined center.

There are two Passamaquoddy reservations within the CCC study area, one coastal (Sipayik, also known as Pleasant Point) and one inland (Indian Township). Each reservation maintains its own elected governor, lieutenant governor, and tribal council, employs its own tribal government administrative staff, and establishes its own priorities for community and economic development, although they share a common tribal identity, language, and culture. Sipayik is much smaller and more densely developed, whereas Indian Township is comprised of two relatively compact village areas surrounded by large tracts of water, wetlands, and undeveloped or lightly developed forestlands. The two Passamaquoddy tribal governments jointly hold additional trust lands outside their reservations, most of which remain undeveloped or very lightly developed.

Land ownership patterns across the study area generally reflect the population distribution. In areas with relatively high population densities, land ownership patterns are characterized by small (less than one acre) residential lots with larger commercial lots. Lots also tend to be small in areas on and near waterfronts, both saltwater and freshwater, where demand is high and acreage commands a higher price. Outside of the downtowns and village centers, lot sizes can range from an acre to several hundred acres or more. Many of the larger tracts are used for agriculture and forestry, including blueberry barrens, private woodlots, and industrial (large-scale) working forests. Vast swaths of undeveloped land in the CCC study area are not feasible for residential or commercial development, because of

topography constraints (waterbodies and adjacent wetlands, steep slopes) and poorly-drained soils that are unsuitable for septic systems.

A relatively recent land use pattern in the CCC is a shift of new development away from the coastal communities to more inland locations. Higher prices and declining availability of land along the coast has made acreage in inland communities look more attractive to potential buyers, particularly for new residential development. However, much of the job market remains concentrated in the Calais-Baileyville area. Therefore this trend may generate additional vehicular traffic in the CCC, particularly during morning and evening peak hours, unless purchasers can find or create opportunities to generate income closer to their own communities. A related pattern is the liquidation and sale of large parcels of former working forest lands, although many of the purchasers of such tracts (or the subdivision lots created from them) are expected to use them as vacation or retirement homes and therefore are not as likely to generate daily commuter trips.

Socioeconomic projections suggest that the historical pattern of low-density, piecemeal, and hopscotching residential and commercial development will continue within the CCC, creating a patchwork pattern of exurban residences, roadside small businesses and convenience stores, and undeveloped parcels along major highways in the corridor. Limited sewer treatment capacity and municipal water (in the village centers that currently provide these services) is likely to discourage the construction of new residential subdivisions with lot sizes of less than one acre, as well as any other intensive land uses in or near developed areas. This means that most development, both commercial and residential, will continue to disperse to lots in undeveloped or lightly developed areas with sufficient acreage to provide on-site well water and septic systems, and that driveways and curb cuts will continue to proliferate along state highways.

Many communities in eastern Washington County are less than enthusiastic about the idea of using zoning restrictions to help shape their future development patterns; apart from the state-mandated shoreline zoning regulations, only a few communities in the CCC have enacted comprehensive municipal zoning codes. While regulatory controls are not likely to significantly influence the interaction between land use and transportation in most CCC communities, non-regulatory solutions may play a more significant role. It can be argued that a combination of public and private land conservation efforts have already influenced the character of land use and limited the extent of exurban sprawl between Calais and Baileyville, and it may have similar impacts on other areas within the CCC over the next two decades. Although transportation access management is never the primary reason for putting large tracts of land into conservation, there is no doubt that public preserves such as the Baring Division of the Moosehorn National Wildlife Refuge have helped to reduce sprawl and maintain mobility along high-speed arterial highways in the corridor. While the focus of regional land conservation projects may be on outdoor recreation, wildlife habitat, preserving agricultural lands and working forests, or all of the above, public land purchases and conservation easements may prove to be some of the most useful and enduring tools for ensuring transportation mobility in a rural landscape.

2.3. Social and Economic Elements

Washington County is one of the poorest counties in Maine. Census data (2010) indicated that 20.6% of all households are living below the federal poverty line, with a median income in 2009 that was less than 70% of the national average. Unemployment in Washington County for April 2011 (not seasonally adjusted) was 12.2%, compared to the Maine average of 7.9% and the national average of 8.7%. These numbers are actually on the low side of estimating the true employment profile in Washington County, as they fail to reflect large numbers of underemployed (people who should be earning more than they currently do, based on their education or training, professional credentials, and prior work experience) and those who have given up on ever finding a job, who therefore are no longer tracked by the Maine Department of Labor (DOL). The largest industries in Washington County (as of 2009) in terms of annual employment figures were:

- service providers (6039 employees),
- federal, state, and local government (2684, of which 1850 were in local government positions),
- trade, transportation, and utilities (2195),
- education and health services (2202),
- health care and social assistance (2050),
- retail trade (1707), and
- manufacturing (1098).

Sorting the same list in terms of total annual wages paid to employees yields the same top employment sectors, but in a slightly different order, indicating the higher minimum educational attainment levels and correspondingly higher average wages paid to workers in education, health care, and social services:

- service providers (\$158 million),
- federal, state, and local government (\$89 million),
- education and health services (\$69 million),
- health care and social assistance (\$65 million),
- trade, transportation, and utilities (\$50 million),
- manufacturing (\$38 million), and
- retail trade (\$35 million).

This represents a significant shift in the Washington County labor market since 2000, when manufacturing and retail trade ranked higher in the listings and service providers were not even listed among the top employment sectors. The shift toward a more service-oriented economy may be indicative of an increasingly entrepreneurial and community-centered attitude among working-age adults in Washington County (although also attributable to a decline in the availability of manufacturing and retail employment opportunities), and also may be the reason why the mean travel-to-work time for the county (as of 2010, from US Census figures) is now 18.8 minutes, below the Maine state average of 22.7 minutes and well below the national average of 25.2 minutes.

Economic activity within the study area is primarily oriented around the regional service center community of Calais, with secondary spheres of activity concentrated in Baileyville and Eastport. The remaining economic activity is dispersed throughout the study area, with tourism, forestry, fisheries, and agriculture predominating. A new industry (part of that “trade, transportation, and utilities” category) that has entered the study area within the last decade is industrial-scale windpower at high elevations. Windpower development can be expected to benefit the regional transportation system over the long term, since it contributes a relatively large share of taxes and multiplier revenues to the regional economy despite a very small transportation footprint (typically only one or two permanent access points are needed to connect a large-scale wind farm to a state highway, and the site generates very few annual trips following the initial construction and operational start-up period). Washington County has created a Tax-Increment Financing (TIF) District with windpower developer First Wind for its Stetson I and Stetson II windpower projects, with the revenues to be reinvested in projects that stimulate regional economic development and provide start-up grants for nature-based tourism initiatives in the unorganized territories. Studies for additional industrial and smaller-scale windpower developments are already underway within the corridor, and Washington County also hopes to benefit from offshore windpower development through port shipments and manufacturing facilities that can produce engineered windpower components closer to the power generation sites than existing facilities overseas and in the western US.

3.0 SCENARIO BUILDING

Scenario building provides a way to conceptualize and plan for alternate versions of what the future may bring, if certain observable trends and driving forces play a predominant role in shaping long-term regional economic development in the region. Three different scenarios were developed to consider how transportation, land use, and economic development may interact over the next two decades.

These scenarios acknowledge the ways in which transportation and land use policy decisions can have multiple, cross-cutting effects on the region. They are presented to allow state, county and local decision-makers to consider the potential impact of policy decisions that will affect the multimodal transportation system within the CCC, as well as to consider targeted investments that will produce the greatest economic benefits for the region under each scenario.

These economic development scenarios describe three alternative visions for development of the CCC that could play out over the next 20 years. Consideration of one scenario does not necessarily exclude all of the elements and driving forces described in the other two; in fact, the overlap and synergy between multiple parallel development scenarios over time is considered both likely and desirable.

3.1 Development Scenario A: Natural Resource-Based Industries

***Circa 2020:** The successful turnaround of the Woodland mill by Woodland Pulp, LLC, has led other firms to re-examine their business models and tap new and expanding overseas markets for Maine products from the forest, sea, and land. More natural resource-based products are now being shipped through Eastport than ever before. Meanwhile, the Woodland firm continues to expand and consolidate its operations; it has developed a worldwide reputation as a producer of top-quality hardwood pulp, resulting in inquiries from other markets wishing to purchase this product. Because it has contracted to ship 100% of all production from the current facility to China, the firm decides to reopen and refit one of the two mothballed mills on the Woodland site and expand its workforce accordingly to meet the growing demand for hardwood pulp in other export markets. This results in stepped-up shipments both by rail and by truck between the working forests, the two mills, and the port at Eastport.*

In order to meet the increased demand for export pulp as well as expanded markets for wood chips, board lumber, and value-added products such as wood-composite bridge sections and windmill blades, forests once slated for liquidation and sale to real estate development trusts (REITs) for redevelopment are now being reassessed as renewable and profitable revenue generators. A hiring boom for additional loggers, haulers, and forestry crews ensues, and the competitive hiring environment results in higher wages and improved working conditions for most forestry workers and better contract rates for trucking companies.

On the agricultural side, wild blueberries continue to be the predominant crop and demand continues to increase, with the help of a savvy and successful worldwide marketing program. The local food movement is picking up momentum in eastern Washington County, with weekly farmers' markets offered in Calais and Eastport. Community Supported Agriculture (CSA) programs provide a new shipment of fresh vegetables (and in some cases, meat or poultry) to subscribing individuals and families each week through the growing season. Increasing numbers of area residents are willing to make cuts elsewhere in their budgets in order to pay higher unit prices for organic and locally grown products, and major grocery chains are responding to consumer demand by featuring a wide selection of local products on their shelves. Agricultural processing capacity in the corridor has also increased to keep pace with a growing statewide, national and international demand for Maine-made products. These trends are helping to support and stabilize the livelihoods of local fishermen, livestock and vegetable farmers, homemade jam and jelly producers, beekeepers, bakers, and manufacturers of organic animal-based products such as soap, woolens, cheese, sausage, and yogurt. A growing number of younger adults are starting new farms or apprenticing on existing farms in Washington County in order to maintain a lifestyle that is more healthy, balanced, beneficial to society, and suited to raising young families than the traditional five-day workweek, and the Washington County Community College has added an agricultural business major to its curriculum. The farming lifestyle also continues to attract newcomers in the 40+ age range, many of them refugees from more urbanized and stressful careers in the corporate world. These older first-time farmers tend to view their agricultural activities as a lifetime

early-retirement project, often regarding the necessary daily chores as a time-consuming but rewarding hobby rather than a profit-making enterprise (although ideally, they hope it will be both).

The growth in the natural resource-based economy has corresponded with a steady increase in the volume of commercial trucking throughout the corridor. This in turn has exacerbated the need for significant repairs and at least some full-depth reconstruction of unbuilt portions of US-1, State Route 190, and the collector road network, which are crumbling even more rapidly under the additional loads. There is increasing congestion during summer months and increased friction between fast-moving freight trucks and slower-moving tourist traffic, including bicycle tourists, resulting in the nearly universal demand for widened shoulders, passing lanes, and truck climbing lanes on steep hills.

There have also been increases in the number of annual rail shipments to and from Woodland, offering a ray of hope for the eventual restoration of rail service from Woodland to a transloading facility in Perry. However, there is still not sufficient market demand to justify the restoration of rail service over such a short distance. Future prospects appear dim unless favorable exchange rates and lower shipping costs make it more cost-effective for a number of Canadian firms to ship their goods via rail-plus-truck to Eastport, rather than directly shipping them by rail to the docks at St. John, New Brunswick.

Comment: Freight trucking prices will have to rise far beyond current levels before a rail-to-truck transloading operation over such a short distance would start to make financial sense for the Woodland mill, even if it expands its operations. On the plus side, the port facility can expect to see increased trucking shipments under this scenario with or without the construction of a new transloading facility. However, the increased numbers of commercial freight trucks using State Route 190 to reach the port facility will also increase the political demand for an alternate route that does not funnel heavy trucks through the densely developed Sipayik Reservation.

3.2 Development Scenario B: Tourism

Circa 2020: *Tourism continues to develop as a major economic activity for eastern Washington County, and exciting new themed events are attracting additional visitors from the US, Canada, and abroad. Most visitors spend anywhere from \$100 to \$500 per day in direct expenditures for food, lodging, goods, and services during their stay in the CCC region. Those engaging in multi-day guided tours, eco-adventures, and cultural seminars are often willing to pay additional fees of \$2500 or more for peak vacation experiences that will enrich their lives long after they return home, so they consider the money well-spent. Some tourists fall in love with the area and decide to move here, either permanently or seasonally. A few of the emerging trends in regional tourism include:*

- **Ecotourism and natural resource-based recreation:** *Traditional outdoor sporting camps, offering guided or unguided hunting and fishing trips punctuated by three (sometimes four) hearty home-cooked meals a day, continue to be popular in the CCC study area. Other visitors prefer to experience the natural world through wildlife-watching and photography, geocaching, journaling or blogging, and even outdoor spiritual practices such as yoga, meditation, and Tai Chi. A windpower-funded*

tax-increment financing (TIF) program to provide start-up grants for nature-based tourism initiatives in the unorganized territories has fostered a number of entrepreneurial businesses that attract different clienteles, ranging from birding tours and moose safaris, to spiritual retreat houses, to upscale all-inclusive wilderness resorts featuring a menu of educational and recreational activities to pursue over the course of a week-long visit, to Survivor-style back-country camping and rock-climbing expeditions aimed primarily at young and adventurous extreme-sports enthusiasts. A number of short, medium, and long regional hiking trail loops throughout the region, suitable for all ages and abilities, provide opportunities for parents to introduce their overly urbanized children to the joys of being surrounded by nature. Water-based recreation is more popular than ever, and the parking lots at popular boat landings are often filled by 8:00 a.m. For those who did not bring their own watercraft, numerous kayaking, canoeing, sailing, harbor cruising, and other saltwater and freshwater boating opportunities are available through local rental shops, guide services, and charter companies. The Baring Unit of Moosehorn National Wildlife Refuge remains a popular hiking and wildlife watching destination for many locals as well as visitors, and continues to develop its involvement as one of the partners in the annual Downeast Birding Festival that draws in avid birders from all parts of the country and overseas each May. Brochures available at state and regional visitor centers also highlight and describe a diverse array of state parks, public reserve lands, and privately operated land trust properties within the corridor, and invite visitors to enjoy an authentic wilderness experience that is simply not available elsewhere in the eastern US.

- **Cultural tourism:** *Many first-time and repeat visitors take a special interest in learning more about the area's history and culture. Lobstermen supplement their fishing incomes by taking visitors (equipped in the traditional foul-weather gear) out on short demonstration trips along their trap lines, where they demonstrate how to bait, set, and retrieve a trap, followed by an old-fashioned lobster bake back on shore with all the fixings. The Passamaquoddy Tribe offers guided canoe and hiking day trips, overnight canoe-camping trips, and artisan-led seminars and workshops that allow visitors to experience, practice, and gain insights into its rich tribal culture and traditions, passed down through centuries of living in harmony with the land and sea. Many historic homes have converted to operate as bed-and-breakfast inns, and if the story is compelling enough, the historical intrigue draws visitors just so they can brag that they stayed there. The Downeast Heritage Museum has been reopened in downtown Calais for the summer and fall tourist season as it has for the past five years, supported by nominal admission fees, a full-time seasonal executive director with a hands-on board of directors overseeing all operations, grant funding to cover annual special projects and a portion of the director's seasonal salary, and a successfully concluded capital campaign that has raised an endowment fund to pay for the remainder of the director's seasonal salary plus the operational and maintenance costs of running the facility. Designated scenic byways in the corridor highlight the history and culture of the region with interpretive signage at frequent pull-offs, and refer visitors back to the museum in Calais if they are interested in learning more.*
- **Multimodal tourism:** *Transportation impacts of tourism are no longer manifested through the demand for more and wider roads, but rather through increasing demand for "complete streets" (roads with shoulders, plus sidewalks in downtown areas with high pedestrian volumes, to provide adequate space for bicyclists and pedestrians) and transit service. Low-emissions, on-demand jitney service (funded by a public-private collaboration between MaineDOT and the local chambers of*

commerce, using volunteer drivers from the local community) transports individuals and small groups to and from their desired destinations; small airports and the Eastport pier are among the most popular pick-up and drop-off spots, with a zone-based fare schedule depending on the point-to-point distances. Increasing numbers of US and international bicyclists are embarking on inn-to-inn, long-distance tours along the East Coast Greenway, as well as road bicycling tours across the Canadian border to points north and south on US-1. Several outdoor adventure companies have branched out into offering shuttle rides for bicycle tourists who do not have the time or inclination to cycle back to their starting points, just as they have done for years with canoers; one firm also offers “sag wagon” services for bicycle trips on the East Coast Greenway (carrying bicycle tourists’ bags and personal items forward from one inn to the next, so they do not have to be carried on the bicycle each day). A recent demonstration project using a low-emissions, fare-free, hop-on hop-off shuttle bus, similar to the Island Explorer in Acadia National Park, turned out to be wildly popular with local residents as well as with the tourist market it was designed to serve; plans are being developed to secure grants and public-private funding to start up permanent seasonal fixed-route shuttle services in the near future. While most visitors still tour the CCC in their personally owned vehicles or RVs, a growing number of tourists are now arriving via air, ferry, water taxi, cruise ships, or bicycle, and are then taking advantage of the various available public and private transit services when and if needed. The car-free vacation is starting to become a real possibility in eastern Washington County.

- **Shoulder season tourism:** (Note: “shoulder season” is the term traditionally used by innkeepers to describe the spring and fall periods between their peak season (summer, in most parts of Maine) and the low-demand, low-rate off-season. Promotions that extend the shoulder season allow innkeepers and related tourist industries to increase their annual profits.) *The largely seasonal flow of tourist traffic continues to present challenges for all hospitality industry and tourism service providers, but snowmobile traffic from the Downeast Sunrise Trail and ITS network provide significant winter and early spring revenue to restaurants and year-round lodging facilities located close enough to the trail system to attract their business. Many hospitality businesses still prefer to close their doors for the winter, and some operators make an annual commute south to open their other seasonal business, one that stays busy all winter but drops off come April or May, when they return to Maine. Retired baby boomer vacationers have helped to push the fall shoulder season back to the end of October, but tourism still falls off dramatically between November and April with the exception of the snowmobile clientele and a small number of cross-country skiers and snowshoers. May is still considered a shoulder-season month, but wildlife watchers and nature photographers, bicyclists, and boaters now keep the year-round lodging facilities and restaurants much busier than they used to be from about May 15 to the end of the month. Transportation demands have followed suit, with occasional congestion in downtown areas and at major intersections during peak summer and fall travel periods, followed by underutilization of the road network during the winter and early spring. Most of the private transit service operators and the jitney service close down around Columbus Day, and reopen around mid-June. However, the overwhelming success of the tourist shuttle demonstration project has stimulated WHCA and MaineDOT transit planners to consider expanding the existing public transit routes and services for local residents and adjusting fares, perhaps by offering the same one-way base fare but a more affordable flat-rate unlimited monthly fare for those who must rely on the transit system for daily transportation needs.*

3.3 Development Scenario C: Energy Development

***Circa 2020:** Eastern Washington County has adapted to the decline of fossil fuel availability and increased fuel costs with a variety of large and small energy initiatives that have boosted the region's economy by stabilizing (and in some cases, even reducing) energy costs, and by making Washington County a more significant contributor to the state and regional energy grids. Tidal power generation has moved from experimentation to full implementation, with several cutting-edge tidal generators operating off the coastline. Power generation from these facilities is highly predictable and reliable, but it produces far less energy in the periods around peak high and peak low tides.*

Large-scale windpower projects are now located in a number of high-elevation areas, and several small off-shore wind farm prototype projects are in their final testing and evaluation stages. Windpower is not as predictable as other power sources, so its varying output is balanced as needed by other power generation infrastructure in the region. Surplus energy from wind turbines is used to charge electrical vehicles and to split water into oxygen and hydrogen, supporting a growing demand for clean, quiet hydrogen fuel cell technology that is used to heat area homes and businesses, as well as providing fuel at designated fill-up stations for the new hydrogen-powered vehicles.

The University of Maine is collaborating with Washington County Community College (WCCC) and a consortium of private investors to start up a new state-of-the-art manufacturing facility in one of the unorganized territories. It will produce engineered windpower components for both on-shore and off-shore wind farms, including composite-material vanes that will be manufactured from wood harvested in the working forest lands of Washington County. Workers will be trained at WCCC to assist engineers and scientists with highly complex and technical tasks involved in the design, manufacture, quality control, and preparation for final shipment of the windpower components. Their initial training program will count for six credit hours toward an associate's degree in industrial engineering technology at WCCC, and they can continue to take one or two employer-paid courses per semester (some of which will be offered via distance learning from the Orono campus, while others are delivered locally at WCCC) until they complete the 2-year degree program. This will provide a stepping stone for higher academic and career aspirations, since credits from the associate's degree can be transferred into any of the University of Maine's engineering technology bachelor's degree programs.

Biomass generators, primarily burning scrap wood and solid waste, are good balancing systems for wind and solar systems that operate better in some weather conditions than in others. State-of-the-art closed-system technology produces clean and efficient heat to power the generators, with virtually no remaining ash to landfill and no contaminating emissions. The biomass generators have also offered many CCC communities an economically attractive and environmentally friendly alternative to shipping their solid waste to more distant landfills or waste-to-energy incinerators.

A liquid natural gas (LNG) facility is currently under construction on the coastline, after a long and politically controversial site selection and permitting process that took over a decade from start to finish, but did in the end resolve most of the opponents' environmental and safety concerns before the permit was approved. The LNG facility will transfer supercooled LNG from tanker ships to a regional gas pipeline for distribution to homes and businesses. Some of the LNG is proposed to be used, along with biomass energy, to balance out the peaks and troughs in power production from windpower and tidal power.

Several new transmission lines have been installed to carry electricity from power generation sites to the regional New England Pool power grid. Land clearing for these transmission lines has created new corridors and access for traditional outdoor recreational activities. Surplus energy not used within the region will be marketed to the New England Pool. This will reap additional revenues for the utility's owner, and under its operating contract a designated percentage of revenues from outside power sales must be used to reduce the utility's direct pass-through costs to consumers. This policy (in addition to the supply of reliable, affordable, multimodal power) has already resulted in reduced or stabilized local energy prices, making the CCC region more competitive for energy-intensive manufacturing businesses such as paper and wood products, granite mining and manufacturing, high-tech greenhouse food production, and more.

Geothermal heating systems, now standard design features in most new housing units and commercial buildings, have reduced the demand for fossil fuels to meet household and commercial heating needs. Home weatherization grants for low-income households and a popular zero-interest energy efficiency loan program open to all Mainers have enabled many households and businesses to retrofit and upgrade their existing buildings for increased energy efficiency. More efficient technology for small-scale wind, solar, and in-stream hydroelectric applications, along with improvements to power transmission and delivery systems, have created more opportunities to develop small-scale local electrical generation plants that will allow municipalities and businesses to invest in distributed generation from local renewable energy sources. Residents in the CCC study area, even many who initially had qualms about industrial-scale energy development so close to their own backyards, now feel a sense of pride and patriotism about the fact that they are able to meet nearly all their energy needs with Maine-produced energy, rather than depending on foreign oil and indirectly supporting unfriendly and undemocratic regimes in the Mideast.

Comment: The major transportation impacts under this scenario are increases in the number of transmission wires and the construction of gas pipelines. Spot improvements will probably be required on some area roads and intersections to allow flatbed trailers containing oversized windpower generation components to maneuver between the port facility (or local manufacturing plant) and their final destinations. An accelerated program of pavement management (and possibly the need for full road reconstruction in unbuilt sections) may be needed, if volumes of heavy and overweight freight shipments (for example, granite) increase between the raw material extraction site, the manufacturing facility, and the final over-the-road destination. Depending on the location of possible mining operations and the cost of fossil fuels under this scenario, rail service might be a more cost-effective option compared to trucking for moving the material over most of the distance from the mine to the

plant and then down to the port, which might help to build the case for a rail-to-truck transloading facility in Perry. As in the previous scenario, however, the port is likely to benefit from an improved manufacturing base whether or not the transloading facility is constructed. However, it is possible that the port facility would need to plan for more covered storage space on its Estes Head site if energy development predominates, since large-scale wind farm project managers often request that the components be kept in covered long-term storage buildings on the pier over the winter months. This allows the project manager to stockpile all of his or her components as multiple cargo ship deliveries are made, and protect them from the winter weather. Once all the frost is out of the roads, typically mid-May, all the stockpiled components are shipped to the site on flatbed trucks. If multiple large-scale windpower projects are scheduled for installation during the same upcoming construction season, the demand for covered winter dockside storage to stockpile components could be very high and could make it difficult to find storage for other cargos.

3.4 Final Comments regarding the Scenarios

Some readers are likely to be uncomfortable with the substance and magnitude of some of the radical changes proposed under each of the development scenarios, but assuming that the status quo will prevail is simply not a realistic option. Even if we made a formal recommendation for MaineDOT to take no further actions and make absolutely no transportation investments in the CCC over the next 20 years, powerful driving forces (as outlined in Section 1.3) and the total lack of government involvement would still transform the region in significant ways, probably not for the better. Local and state policies and planned development programs can and do make a difference. To this end, the final section of this corridor management plan provides the advisory committee's prioritized goals and strategies for targeted transportation investment that will lead to regional economic prosperity. There are also several policy recommendations in the areas of transportation, land use, and economic development that are intended to streamline local and state implementation of the plan and reduce unnecessary costs.

4.0 GOALS, STRATEGIES, AND RECOMMENDATIONS

The final step in the advisory committee's analysis was to examine the three scenarios, identify the potential demands that each scenario would place on the system, develop goals to satisfy those demands, and then develop strategies to achieve each goal.

4.1 Development Scenario A: Natural Resource-Based Development

The major demands on the transportation system under this scenario are:

- Increased volumes of loaded freight trucks traveling over deficient sections of area roads, including unbuilt sections of US-1, State Route 190, and the collector road system which is already in a critical state of disrepair
- Increased use of the port at Eastport
- Potential conflicts with bicyclists, pedestrians, equestrians, slower-moving tourist traffic
- Increased turning traffic movements by large trucks at warehouses and collection points for manufactured goods and agricultural products

Transportation investment goals proposed by the committee to promote this scenario are:

1. Minimize friction between transportation modes.
2. Minimize friction between vehicles traveling at different speeds.
3. Maintain good pavement on major roads.
4. Upgrade deficient secondary roads so they can stand up to heavier trucking use.
5. Improve connectivity between all regional freight modes (rail, truck, port).

Finally, the committee developed strategies to meet these goals, and evaluated them by expected timeline (short, medium, or long), and by expected cost (low, medium, or high). The criteria for establishing timelines were as follows:

- **Ongoing program (i.e., MaineDOT is already doing this),**
- **Short term (can be implemented immediately or within the next 5 years),**
- **Medium term (likely to take 6-10 years to implement),**
- **Long term (Will take 10+ years to implement).**

The investment strategies proposed to promote natural resource-based development, and any amplifying additional comments offered by the committee, were as follows:

1. Widen shoulders during road improvement projects whenever possible. **Ongoing program, low to medium cost**
2. Focus on maintaining good pavement management of existing roads. **Ongoing program, low cost – good bang for the buck!**
3. Continue to work on funding and construction of an intermodal truck-to-rail transloading facility to improve freight shipping capability to and from Eastport. **Long term, high cost**
4. Practice good access management to support greater traffic mobility on arterial highways, even within urban compact areas. **Ongoing program, low cost – practically free, except for political difficulties in securing shared entrance agreements between business owners**

4.2 Development Scenario B: Tourism

The major demands on the transportation system under this scenario are:

- Slower-moving, less predictable traffic
- Increased numbers of bicyclists and pedestrians (and possibly more equestrians)
- Increased demand for boat landings, harbor facilities, and access to public parks and lands

Transportation investment goals proposed by the committee to promote this scenario are:

1. Showcase Maine’s natural beauty and tourist attractions, while maintaining mobility for commuters and commercial traffic (e.g., scenic byways program).
2. Maintain good pavement on major roads.
3. Improve safety and connectivity of designated routes and trails for bicycles, pedestrians, and equestrians.
4. Increase the number of public access points and parking areas adjacent to trail systems, boat landings and shoreline on coastal waters, and boat landings and shoreline on inland waterways.

The investment strategies proposed to promote tourism development, and any amplifying additional comments offered by the committee, were as follows:

1. Widen shoulders during road improvement projects whenever possible. **Ongoing program, low to medium cost**
2. Focus on maintaining good pavement management of existing roads. **Ongoing program, low cost – good bang for the buck!**
3. Provide additional scenic pull-offs, picnic areas, rest areas, and public toilet facilities for corridor users. **Medium-term, low-to-medium cost; may be an opportunity for siting and maintenance of toilet-equipped rest areas on private lots that want to attract business to site, as with toilet facility adjacent to Airline Diner on State Route 9. Also, need to test demand for toilet service: are there really not enough existing private toilet facilities open to the public (i.e., gas stations, restaurants, convenience stores) within the corridor?**
4. Increase funding for scenic byways, multi-user trails, and working harbors; designate bike routes and tours over corridor roads, e.g., a “Quoddy Loop” through Calais, Eastport, ferry to Deer Island and then back to New Brunswick mainland, and back up to Calais. **Short to medium term, medium cost**
5. Coordinate with DOC to improve access to public lands, boat landings, parking lots for trails, and safety at road-trail crossings; build these into the design for road improvement projects wherever appropriate. **Short term, low cost**
6. Improve wayfinding signage to tourist destinations, perhaps as public-private partnerships with regional businesses or Chambers of Commerce. **Short term, low cost**
7. Improve infrastructure at GA airports, and promote GA airports and private air services as the quickest way in & out of eastern Washington County. **Medium term, high cost**

4.3 Development Scenario C: Energy Development

The major demands on the transportation system under this scenario are:

- Oversize/overweight components must travel via road to reach windpower sites; may require spot improvements on area roads to enable wide turning movements
- Increased demand for covered storage and handling infrastructure at seaport, to stockpile windpower generator components over winter shipping season
- Increased volumes of tankers passing through Passamaquoddy Bay

Transportation investment goals proposed by the committee to promote this scenario are:

1. Support new development while maintaining mobility for existing highway users.
2. Maintain good pavement on major roads.

The investment strategies proposed to promote energy development, and any amplifying additional comments offered by the committee, were as follows:

1. Widen shoulders during road improvement projects whenever possible. **Ongoing program, low to medium cost**
2. Focus on maintaining good pavement management of existing roads. **Ongoing program, low cost – good bang for the buck!**
3. Increase funding for seaport infrastructure investments to handle and stockpile large volumes of oversized windpower components. **Long term, high cost**

It should be noted that widening shoulders and observing good pavement management practices were listed as the top two investment strategies to meet the challenges of all three economic development challenges, and that both programs are already being implemented by MaineDOT for a relatively low to medium cost. Where finances and right of way considerations permit, the construction of passing lanes (particularly on steep hills) and two-way left-hand turning lanes (TWLTLs) in areas of heavy turning traffic could also help to minimize friction between faster-moving and slower-moving traffic under all three economic development scenarios. However, the focus of this study has been on the long-term management of existing transportation assets, rather than on capacity-building and new construction. Please refer to WCCOG's [Route 1 Safety and Mobility Analysis \(2007\)](#) for previous recommendations on passing lanes for the portion of US-1 between Pembroke and Calais.

4.4 Policy Recommendations

The advisory committee also offered some general policy recommendations that should be observed regardless of which economic scenario turns out to be closest to becoming reality over the next two decades. These were also evaluated, using the same timelines and cost estimates as were used to evaluate investment strategies. The policy recommendations are as follows:

1. Ensure adequate and predictable annual funding streams for all regional transportation projects; seek out opportunities for public-private, tribal-state, and interagency funding partnerships. **Short to long term, variable cost depending on project mix and available partnerships**
2. Reconstruct “unbuilt” portion of US-1 from Topsfield to Danforth. **Long term, high cost**
3. Expand rural public transit options to assist non-drivers (including an aging population base) and reduce travel demand. **Long term, high cost**
4. Build “complete streets” (i.e., provide shoulders for bicyclists and pedestrians, or shoulders plus sidewalk in densely populated areas with high pedestrian volumes) wherever possible; study feasibility of extending the Downeast Sunrise Trail beyond Calais. **Ongoing, medium cost**
5. Lengthen existing double-ended sidings at Milltown Junction and/or Campbells Siding to extend existing 25-car “push” limit from St. Stephen; pursue long-term recommendations for a completely reconfigured cross-border connection between Milltown and St. Stephen, as proposed and illustrated in Eastport Freight Rail Restoration Study, Chapter 2 (HNTB, 2009). **Long term, high cost; may be easier to accomplish as a public-private investment partnership**
6. Include regional telecommunications services and activities of the 3-Ring Binder Project in utility coordination for major bridge projects; provide wireless service at roadside rest areas. **Short term, low cost to install conduit, in fact virtually free, as broadband company pays the extra cost for materials; medium cost to provide wireless service, unless donated by service provider**
7. Continue work toward construction of an intermodal rail-to-truck facility to bridge the gap between working rail lines and Eastport. **Long term, high cost**
8. Study feasibility of diverting trucks (and possibly all through traffic) from Eastport to Perry via the Toll Road (Old Eastport Road), in order to bypass the Passamaquoddy Sipayik Reservation located on existing Route 190; will require new bridge, but tribe may be able to help with funding **Medium term, high cost; local company, Tidewalker, LLC, may be able to help as well; wants to install tidal dam across former toll bridge span, could just as easily design bridge-over-dam with significant savings passed on to MaineDOT; preferred date range for project construction, 2013-2014; probably does not make sense for MaineDOT to do major reconstruction work on existing State Route 190 if there is a possibility of moving to this route within 5-10 years. Short term for study, short term to decide whether to partner in bridge-over-dam project, remainder of road work could be postponed to medium term; high (but shared public-private-tribal) cost**
9. Continue existing MaineDOT policy of purchasing abandoned railroad rights of way, in order to preserve the option of restoring rail service at a later date. **Ongoing, high cost**
10. For municipal officials: Help close the wireless broadband and cell phone gaps in Washington County by supporting new cell phone tower construction where needed, and by agreeing to requests to attach fixed-wireless broadband repeaters on the existing cell phone towers within your jurisdiction. **Short to long term, low cost other than political fallout from people who are opposed to cell phone towers.**
11. City officials and planning staff should consider developing or redeveloping moderate-to-upscale apartment or condominiums as senior housing, located close to the core of a traditional village-style downtown, as a land use that makes sense for transportation demand management. These centrally located units could provide multiple advantages for the residents, local municipalities, and regional transportation system, including the following:

- ▶ Give seniors an attractive alternative to maintaining a single-family home outside of town, particularly for those who can no longer drive themselves to appointments, shopping, or social outlets;
- ▶ Free up existing rural housing stock for new owners, reducing the need for new rural lot development leading to exurban sprawl;
- ▶ Provide work for local construction workers who have been idled during the real estate bust over the past three years;
- ▶ Help aging baby boomers transition easily and gracefully to a car-free lifestyle, without any feelings of embarrassment or loss of independence;
- ▶ Help to revitalize downtown areas with new pedestrian traffic and a sense of neighborhood pride and camaraderie among residents;
- ▶ Attract and retain seniors who want to live in a small community within walking distance or taxi distance of services;
- ▶ Encourage area natives who have moved out of state to return home after they retire, thus adding to the local and state tax base.

**APPENDIX A: COASTAL CANADIAN CORRIDOR MANAGEMENT PLAN, PHASE
1 - LIST OF COMMUNITY ADVISORY COMMITTEE MEMBERS, STAKEHOLDERS,
AND OTHER INTERESTED PARTIES**

<u>Name</u>	<u>Affiliation or Organization</u>
Dana Altvater	Dana Altvater, Inc., and Passamaquoddy Tribe at Sipayik
Randall Amero	Resident of Danforth
Diane Barnes	City of Calais
Marion Bates	Resident of Topsfield; long-distance commuter to Machias
Linda Belfiore	Washington-Hancock Community Agency
Mark Berry	Downeast Lakes Land Trust
Denis Berube	Northern Maine Development Commission
Angela Brady	GIS student, University of Maine-Machias
Carol Bryan	East Coast Greenway and Downeast Sunrise Trail
Brent Bubar	MaineDOT Maintenance Region 5
Jo-Anne Cannell	VP, Grand Lake Stream Chamber of Commerce; sporting camp proprietor, Indian Rock Camps
Katherine Cassidy	Freelance journalist
Peter Chase	Buildings Etcetera, Houlton
Harold Clossey	Sunrise County Economic Council
Susan Corbett	Axiom Technologies, LLC
Michael Day	Maine Dept. of Labor Career Centers, Calais Region
John Devin	MaineDOT Maintenance Region 4
Judy East	Washington County COG
Marie Emerson	Wild Blueberry Land; long-distance commuter to Calais
Fred Fitch	Resident of Eastport
Betsy Fitzgerald	Washington County Government
Steve and Tessa Ftorek	Cobscook Hikes and Paddles
Jeremy Gabrielson	Washington County COG
Chris Gardner	Eastport Port Authority
Scott Harriman	Downeast EMS
David Herrick	Town of Princeton
Brian Higgs	Baskahegan Company
Michael Hinerman	Washington County Emergency Management Agency
Roger Holst	PCT Communications
Billy Howard	Due East Real Estate; Princeton Airport Authority
Jay Kamm	Northern Maine Development Commission
Rosalie Kell	GIS student, University of Maine-Machias
<u>Name</u>	<u>Affiliation or Organization</u>

Neil Lane	St. Croix Valley Chamber of Commerce
Normand Laberge	Tidewalker Engineering
Ron LaPlant	Murray LaPlant, Inc.
John Leighton	Town of Princeton
Brian Longstaff	Northern Maine Development Commission
Sharon Kiley Mack	Washington County Reporter, Bangor Daily News
John Marchese	Calais Motor Inn and Sunrise Snowmobilers
Phil McDonnell	Town of Princeton
Roger McIver	Woodland Pulp, LLC
Fred Michaud	Maine Dept. of Transportation, Bureau of Planning
Cynthia & Michael Morse	Eastport Breakwater Gallery
Misha Mytar	Maine Bureau of Parks and Lands (Dept. of Conservation)
Tony OBERst	Town of Princeton and Princeton Municipal Airport
BMC Austin Olmstead, USCG	US Coast Guard Station Eastport, Maine
Alain Ouellette	J.D. Irving (rail and commercial trucking divisions)
Linda Pagels-Wentworth	Town of Baileyville
Jim Porter	City of Calais
Brad Prout	Bluebird Ranch Trucking
Dean Preston	Washington County Unorganized Territories
Ed Renaud	Town of Waite
Charlie Robbins	Resident of Columbia Falls
Diane Smith-Halkett	Sunrise County Economic Council
M. Todd Smith	U.S. Border Patrol, Ports of Entry from Vanceboro to Bucksport
Sandra Smith	President, Grand Lake Stream Chamber of Commerce; Innkeeper, Bellmard Inn
Lee Sochasky	St. Croix International Waterway Commission
Jon Southern	City of Eastport
Nan Sprague	Grand Lake Stream Chamber of Commerce; Hazelwood's Properties (serving private campowners and renters)
TBD	Town of Topsfield
Bob Tyler	Passamaquoddy Tribe at Indian Township
Gail Wahl	St. Croix Valley Healthy Communities
Chad Walton	SnapSpace Solutions
Emory West	West's Transportation

APPENDIX B: COASTAL CANADIAN CORRIDOR MANAGEMENT PLAN, PHASE 1 - WRITTEN AND ORAL COMMENTS ON THE DRAFT FINAL REPORT

Note: comments pointing out typos and spelling errors have been omitted from this summary, although the requested changes have been made to the final report.

List of attendees at the June 22, 2011 public meeting to present the draft final report:

Name	Affiliation
Judy East	Washington County Council of Governments
Ed Renaud	Town of Waite
Donna Renaud	Resident of Waite
Betsy Fitzgerald	Washington County Government
Roger Holst	PCT Communications
George Fennell	Omega Development Group (Perry)
Nancy Fennell	Omega Development Group (Perry)
Diane Smith-Halkett	Sunrise County Economic Council

1. Salt water boat launches on the Bay are missing, Robbinston, Perry, Pembroke, Sipayik, and 2 in Eastport.

Response: Noted. These features will be added to the interactive map when fall GIS classes resume at the University of Maine-Machias.

2. The two maps – Figure 1 Study Area and Figure 2 Roads Inventory – both display only the eastern 1/3rd of the 10 mile Grand Lake Stream Road (officially Milford Road). The entire road should be displayed. The traffic count map does show the traffic extending to Grand Lake Stream, and down to Big Lake.

Response: Noted. These features will be added to the interactive map when fall GIS classes resume at the University of Maine-Machias.

3. I don't know the history, but were the Japanese even a player in WWI -- possibly it was 1945, not 1915?

Response: WW1 and 1915 are correct. Japan entered WW1 on the side of the British in 1914; the US did not declare war until 1917. Germany was worried that Japan would send troops and supplies via the US and Canada to assist their British allies in the war in Europe, hence the rail bridge bombing.

4. What is “shoulder season tourism”?

Response: Shoulder season is the period on either side of the high tourism season (summer, in most of Maine) when room rentals drop below their annual peak-season rates, but remain high enough to generate reasonably good income from tourism-related activities. Extending the shoulder season allows hospitality businesses to increase their annual profits. The text of the report has been changed to clarify this term for those who are unfamiliar with it.

5. There is no mention of horses or equestrian travel in the CCC Management Plan. Horses are still used for personal transportation by some Mainers as well as tourists, and draft horse teams are used commercially for haying and for skidding harvested lumber out of small woodlots in Washington County.

Response: Noted. Equestrians have been added to discussions of non-motorized transportation options within the corridor. However, the number of equestrians in the CCC study area is expected to remain very low over the next two decades.

6. The report mentions widened shoulders several times, but fails to mention the construction of passing lanes as a recommended strategy.

Response: The focus of this report is on the long-term management of existing transportation facilities, rather than the construction of new facilities. Passing lanes have been studied previously in WCCOG’s Route 1 Safety and Mobility Analysis (2007), in an area that overlaps with the southern half of the CCC study area, and this work has been cited within the final report. A sentence has been added to Section 4.3 to clarify that passing lanes would be highly desirable to meet the challenges of all three development scenarios, even though new highway capacity is not the focus of this study.

7. There should be a recommendation to add two-way left-hand turn lanes (TWLTLs) in areas with heavy turning traffic.

Response: The focus of this report is on the long-term management of existing transportation facilities, rather than the construction of new facilities. A sentence has been added to Section 4.3 to clarify that TWLTLs would be highly desirable to meet the challenges of all three development scenarios, even though new highway capacity is not the focus of this study.

8. Excursion rail should be mentioned under the tourism scenario.

Response: The development scenarios are intended to paint a realistic picture of what the next 20 years of economic development in the CCC might look like. Given the existing condition of the rail lines in the corridor study area, it is very difficult to imagine the establishment of a viable excursion rail service in eastern Washington County within the next two decades.

9. What about State Route 6?

Response: The primarily east-west transportation corridor between the Canadian border in Vanceboro and I-95 in Lincoln has also been identified as a CREST by MaineDOT. It is sometimes referred to as the Route 6 Corridor, and sometimes as the Northern Washington County Corridor. MaineDOT has not yet commissioned a management plan for this corridor.

10. Is so-called “soft tourism” still being promoted in Maine? Was it considered as part of the tourism scenario?

Response: Yes, in fact all of the tourism trends included in the scenario describe outdoor travel and learning opportunities that are part of the soft-adventure tourism market. Washington County already has a TIF program in place (funded by the Stetson I and II windpower projects) to encourage nature-based tourism initiatives in the Unorganized Territories, including soft-adventure packages. For those who are unfamiliar, “soft-adventure” typically refers to outdoor recreational activities that offer some degree of physical challenge to participants, but present minimal risks of bodily harm even if one has little or no previous training or experience (e.g., hiking, kayaking, bicycle touring). High-end meals and comfortable accommodations are features of the typical packaged soft-adventure tour. This type of travel package caters to upscale, middle-aged (40-65), relatively fit vacationers who want time and space to relax and recuperate after their exhilarating daytime adventures.