

I – THE PORT OF EASTPORT AND NEED FOR RAIL FREIGHT SERVICE

Eastport has the greatest natural depth of water of any port on the east coast of the United States and as the easternmost port in the United States, is significantly closer to Europe. With 100 feet of water on approach channels, 64 feet of water at the pier at low tide and more than sufficient space to turn the largest ships afloat, Eastport is uniquely positioned and naturally endowed to accommodate any size vessel existing or planned. However, the lack of rail service is increasingly limiting Eastport's ability to market itself as a serious contender to capture a broad range of marine commerce that demands a solid, direct rail connection to the North American rail system and ability to economically move freight to inland markets.

The Port of Eastport commenced small scale operations in 1977 as an import/export facility in addition to a fishing oriented port just months before rail service to Eastport ended when the Maine Central Railroad abandoned the 15 ½ mile long Eastport Branch in 1978.

The primary industry that had supported the Eastport Branch and a major employer in the region was the sardine canning industry centered within Eastport and nearby Lubec, Maine. That industry collapsed during the 1960's and 70's forcing the Maine Central to abandon rail service on the entire branch between Ayers Junction in Pembroke through Perry to Eastport. At Ayers Junction the Eastport Branch connected to the Maine Central's 134 mile long "County Line" between Bangor and Calais. Most of that line was abandoned in 1985 further isolating Eastport from rail service. These abandonments left only a short segment of railroad in Washington County to serve the pulp and paper mill in Woodland (Baileyville), Maine about 30 miles north of Eastport and a single outlet to the North American rail system by way of a connection to the Canadian Pacific Railroad into New Brunswick, Canada at St. Stephen, across the international border from Calais.

Despite the lack of rail service for all 30 years of its existence and spurred on by steady growth in annual tonnage, significant port expansion occurred in 1998 with construction of a deep water pier at Estes Head on the west side of Eastport. This pier (shown on the cover photograph) provides a 900 foot berth with 64 feet of water at low tide and a second 550 foot long berth on the shore side of the pier.

The primary commodity handled at Eastport has been the export of northern bleached hardwood kraft pulp from the Domtar (formerly Georgia Pacific) pulp mill at Woodland (Baileyville). Pulp is drayed by truck to Eastport where several warehouses store the pulp between ship calls. The Domtar mill can produce about 1,200 tons of pulp per day and Eastport has been exporting most of that production, over 400,000 short tons per year in recent times. The recent closure of this mill for most of May and June and subsequent reopening due to the rise in the price of pulp coupled with tax credits for the mill burning for energy the black liquor recovered from the pulping process, has served to emphasize the tenuous nature of the Ports current traffic base.

Continued growth of the Port of Eastport and efforts to diversify from mostly one source of traffic has been severely hampered by the lack of rail freight service. This deficiency is a major impediment to Port officials as they diligently market the physical benefits of Eastport to a shipping community increasingly focused on cost control and management of a just-in-time supply chain. Rail freight access is a necessity if the Port of Eastport is to continue to grow and provide increased economic vitality to Washington County.

The purpose of this preliminary report is to estimate the cost of restoring rail freight service to the port of Eastport and to determine a feasible location, layout and cost for a rail to truck trans-load facility within reasonable distance to the port of Eastport. The results of this report will be incorporated in an application for an ARRA TIGER Grant for Federal Stimulus funds that will be used to solicit funding to restore vital rail freight access to the port of Eastport.

II. - CONTENTS OF REPORT

Chapter 1 goes on to describe the historic background of railroads serving the project area, the current track layout and limitations, as well as current rail operations.

Chapter 2 is a summary of the overall report that also includes additional discussion of rail operations and the proposed infrastructure improvements and assessments as well as a discussion of future infrastructure improvements, primarily in Canada, if the volume of rail served commerce at Eastport were to grow significantly. Currently, the overall layout of rail infrastructure in Washington County, Maine and adjacent New Brunswick is sufficient for relatively small volumes and short trains. Chapter 2 also provides a summary of cost estimates for various alternatives considered.

Chapter 3 details the site evaluation considerations and layout of the proposed trans-load facility at Perry, reviewing four potential sites and defining several various sized footprints for a facility that could be expanded in a logical sequence as necessary.

Chapter 4 provides a summary of permitting that would be required and a project schedule including design, procurement, land acquisitions and construction. The schedule indicates that construction could be completed by February, 2012, a requirement of the Grant selection criteria.

Chapters 5, 6 and 7 are supporting documentation for the report.

- Chapter 5 details the condition of the present track structure and right-of-way.
- Chapter 6 details the condition of bridge structures.
- Chapter 7 provides more detailed cost estimates for the various upgrade alternatives and the trans-load facility at Perry.

III. - HISTORICAL BACKGROUND OF RAILROADS IN THE PROJECT AREA

Prior to 1981, the railroads in Washington County, Maine were part of the Maine Central Railroad. The Maine Central trackage within and leading to Washington County consisted of a 134 mile branch from Bangor to Calais, an 8 mile branch to Woodland¹, diverging from the Bangor to Calais line at St. Croix Junction in Baring, and a 15.5 mile branch to Eastport diverging from the Bangor to Calais Branch at Ayers Junction in Pembroke. Across the St. Croix River from Calais in St. Stephen, New Brunswick, the Canadian Pacific Railroad operated a 34 mile branch north to McAdam, New Brunswick, connecting with their east-west main line between St. John and Montreal. At St. Stephen, a 4.7 mile spur circled around St. Stephen and connected to the Maine Central via a bridge over the St. Croix River at Milltown Junction, about 2.4 miles from the end of the Maine Central track at Calais.

As indicated on the 1923 Maine Central map (Figure 1-1 opposite), Maine Central also owned a 56 mile segment of the Canadian Pacific "short line" between Montreal and St. John out of 201 miles between the New Brunswick Border at Vanceboro and the Quebec Border at Boundary, Maine, west of Jackman. The Canadian Pacific ran many more trains over this railroad than the Maine Central. The reason for this ownership division goes back to 1871 when the line from Vanceboro to Mattawamkeag and then south to Bangor had been constructed as part of the European and North American Railroad before the Canadian Pacific built their line across Maine, completed in 1889. The Maine Central had acquired the E&NA in 1882 before the CP "short line" across Maine. Rather than build a second line through eastern Maine, the CP agreed to a long term lease with the Maine Central to use their line from Mattawamkeag to Vanceboro. This arrangement lasted until 1974 when Maine Central sold the 56 miles to CP for \$5 million in cash and \$1 million in bonds and made arrangements with CP to retain rights to operate to Vanceboro, thus reversing the roles of the 92 year arrangement.

The Eastport Branch of the Maine Central Railroad terminated at Eastport, passing along the shore line and causeways between Perry and Eastport. The primary rail traffic on the Eastport Branch was related to the numerous sardine canneries at Eastport and Lubec and other locations around Passamaquoddy Bay. This industry collapsed during the late 1960's and early 1970's and the Maine Central received permission to abandon the branch to Eastport by 1978.

Canadian Pacific began their exit from eastern Canada in the 1980's, first forming a short line holding company called the Canadian Atlantic Railway in September, 1988. Despite efforts to enhance profits, this venture was unsuccessful. In 1995 the CP sold the 189 mile portion of the CP main line between St. John, NB and Brownville Junction, Maine as well as the 34 mile branch from McAdam to St. Stephen and the 4.7 mile spur to Milltown to the J. D. Irving Company of New Brunswick. Irving chose the name New Brunswick Southern for the railroad in New Brunswick and the Eastern Maine for the segment in the United States. (See Figure 1-2 on the following page)

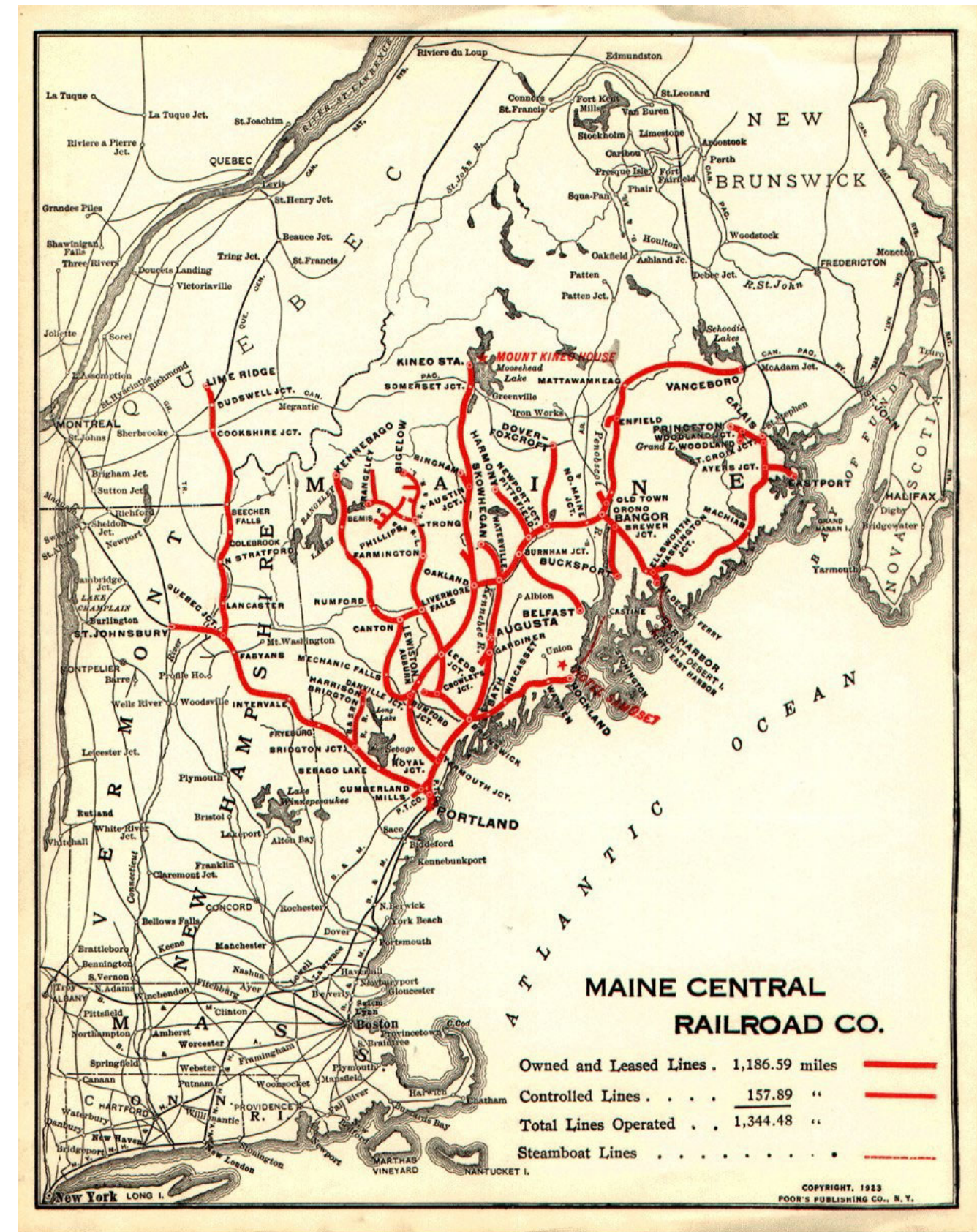


FIGURE 1-1 Maine Central Railroad System in 1923

¹ Originally, the line to Woodland went to Princeton, but was cut back to Woodland in the 1930's.

Irving's primary motive in acquiring the former CP lines in New Brunswick and connections to two rail carriers in Maine was a defensive move. Their various business units in New Brunswick would have been captive to Canadian National Railroad, the only other rail carrier serving eastern Canada with the exception of a few smaller regional railroads that were captive to Canadian National. The acquisition of the CP from St. John west assured a competing rail line for Irving in and out of New Brunswick.

At the same time, the Canadian Pacific main line west of Brownville Junction, Maine west towards Montreal, along with the north-south Bangor Aroostook Railroad, were acquired by the Iron Road Railways, Inc. and operated as the Canadian American Railroad. Despite strong efforts to become viable, this operation started bankruptcy proceedings in 2002. In 2003, a new group, Rail World, Inc. acquired the Iron Road Railways and began operations as the Montreal, Maine & Atlantic Railway. (See Figure 1-3 opposite).

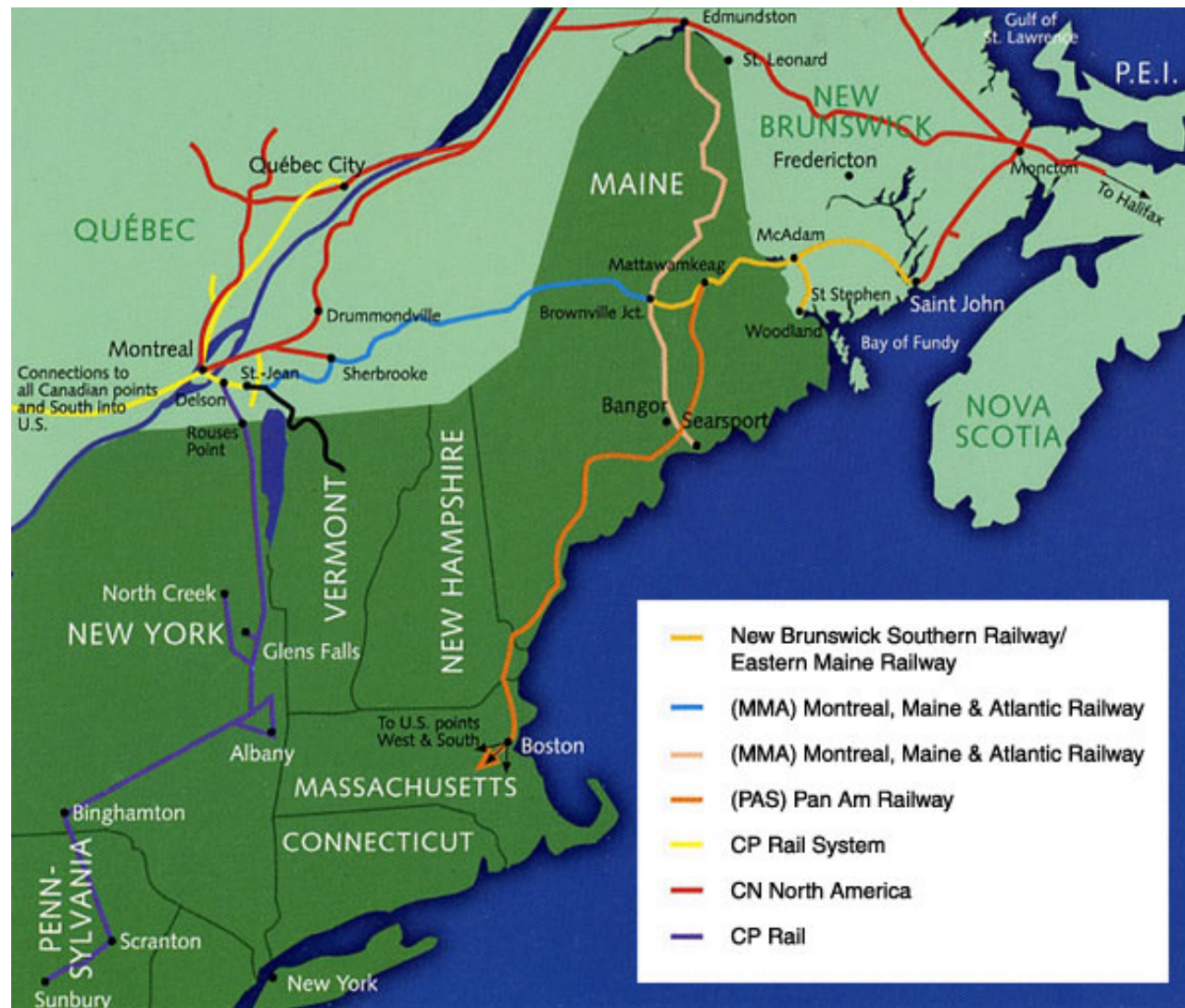


FIGURE 1-2 New Brunswick Southern Railway and Connections
(From company website)

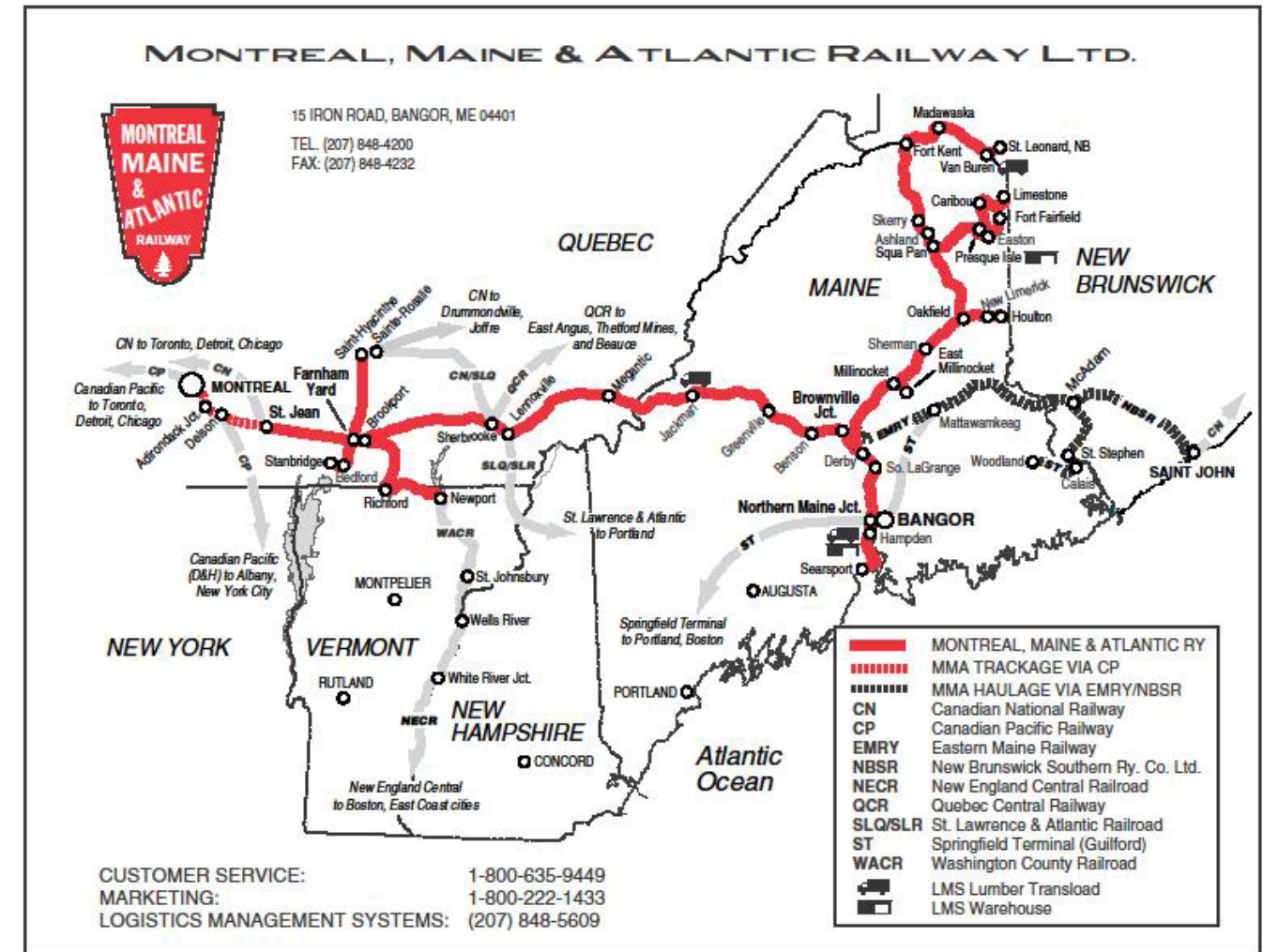


FIGURE 1-3 Maine, Montreal & Atlantic Railway and Connections
From Company Website

In 1981 the Maine Central was acquired by Guilford Transportation Industries. Soon thereafter a number of marginal, former Maine Central branch lines were either abandoned or ceased operations. The 134 mile Calais Branch (also known as the "County Line") was one of the casualties of the pruning process and was officially abandoned by May of 1985 between Brewer Junction just across the Penobscot River from Bangor, to St. Croix Junction in Baring. The Georgia Pacific pulp and paper mill at Woodland had been the largest user of rail freight service in the Washington County area. With the abandonment of the line from Bangor, Guilford retained the line to Woodland and a small piece of the line from Bangor where the Woodland Branch connected at St. Croix Junction up to Calais and made arrangements for this rail traffic to move over the former Canadian Pacific lines via the connection at Milltown, up to McAdam and then back to Guilford Rails at Mattawamkeag, Maine via Irving's New Brunswick Southern/Southern Maine Railway. Now called Pan Am Railway, a map of their current rail system is shown in, Figure 1-4 on the following page.

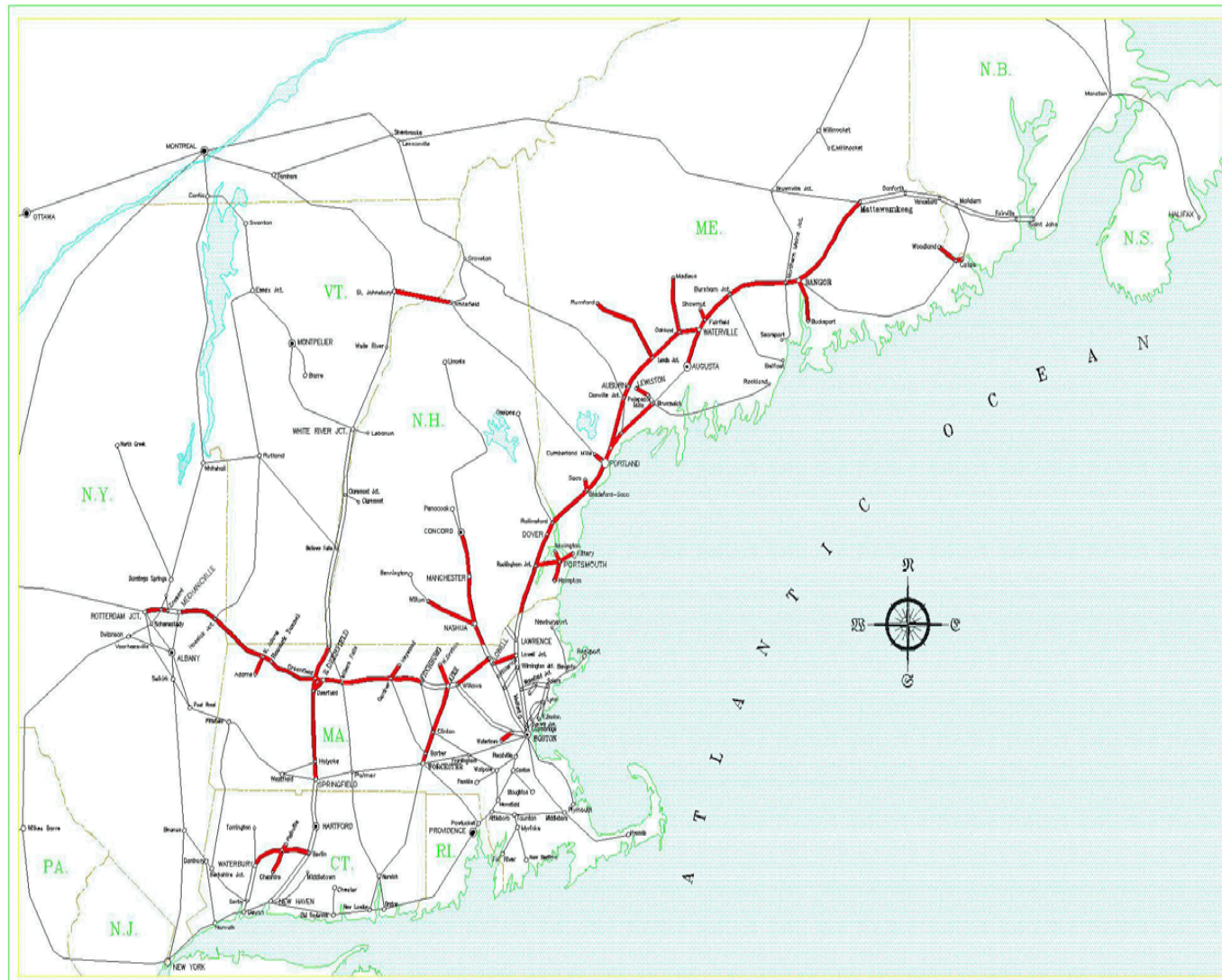


FIGURE 1-4 Pan Am Railway System Map – Note isolated Woodland - Calais Operation Most of light line between Bangor to Calais owned by Maine DOT and rails are removed between Ellsworth and Ayers Junction in Pembroke (From Company Website). Lines in Red are routes owned. Open, double lines are lines operated under a lease or haulage agreement. In the Boston area, these routes are owned by the MBTA, the Boston area public transit agency with Pan Am having trackage rights to operate the freight service.

This is the track arrangement that exists today so that the route north from St. Stephen to McAdam, New Brunswick and then west to Vanceboro and on to Mattawamkeag remains the only route for rail traffic to and from Washington County. The total length of this route from Milltown Junction in Calais to Mattawamkeag over the New Brunswick Southern and Eastern Maine Railroads is 99.75 miles. At Mattawamkeag rail traffic can either be routed to Pan Am Railway south towards Bangor and the rest of the US rail system, or continue west on the Eastern Maine Railway (formerly Canadian Pacific) to Brownville Junction. At that location traffic is interchanged to the Montreal, Maine and Atlantic Railroad and their line west, crossing into Quebec west of Jackman, Maine and then through Lac Megantic, Sherbrooke and Farnham, Quebec to Montreal. (See Figures 1-2 & 1-3). Several connections south, back into the United States, are available along that segment of railroad. One is to

Newport, Vermont and south along the Connecticut River into southern New England and a second is south to Rouses Point, New York and then south to the Albany area where connections exist in all directions. From Montreal west, rail traffic can access all of Canada and may also come back into the US at a number of locations including Detroit.

IV – CURRENT TRACK LAYOUT AND LIMITATIONS

The current track layout in the subject area is depicted on Figure 1-5 on the following page. As noted in the discussions above, the only rail connection to the rest of the rail system is via the New Brunswick Southern Railway connection at Milltown Junction in Calais. The 4.7 mile loop of track around St. Stephen, New Brunswick and the direction in which it connects to the Pan Am Railway line in Calais and the line north to McAdam within St. Stephen, both pose significant restrictions to making a head on or progressive, continuous train operation to and from Washington County. This 4.7 mile loop simply connects in the wrong direction at both ends. Although not a major obstacle for the relatively short trains entering and leaving Washington County over the last 20 years, this unfortunate track layout will have major consequences if trains over about 1,200 feet long are operated on a regular basis. As rail traffic increases, the track arrangement at both ends of the loop will need to be addressed to allow a straight on progressive train movement from Perry (or Woodland), north to McAdam, NB and then west.

Focusing on the connection between Pan Am Railway and the New Brunswick Southern at Milltown Junction in Calais, the current end of Pan Am track terminates prior to Todd Street. Due to the spur around St. Stephen connecting in the wrong direction on both ends, the New Brunswick Southern trains both entering and leaving Maine have to shove the train backwards along the entire 4.7 miles spur around St. Stephen. The tail track between the connection at Milltown Junction and end of track provides about 2,000 feet of track and the maximum length of train that will fit between those points. However, the train now has to exchange the inbound cars for the outbound cars and move the locomotive to the opposite end of the train. If less than about 750 feet in length the exchange of cars can occur on the short double ended siding at Milltown. If longer, the train needs to pull down over a mile to the longer sidings at Campbells. A train of about 1,500 feet can be exchanged at Campbells as the double ended siding there is approximately that length. Currently the south end of a second double ended siding on the west side of the running track at Campbells is out of service due to tie and subgrade conditions. This track is recommended to be placed back in service over its entire length as part of this project.

At St. Croix Junction the line to Woodland diverges from the line towards Ayers Junction and Bangor. A direct route from Woodland back towards Ayers Junction does not exist. Completing this connection would require constructing a wye track that would be almost completely through a wetland within the Moosehorn National Wildlife Refuge. This connection would not be possible to permit within the time frame of this project and is **not** absolutely essential to rail operations to and from Woodland. The two sidings just to the north at Campbells are however essential to retain and support rail operations to and from Woodland.

The line to Woodland crosses the St. Croix River into Canada about 1 ½ miles south of St. Croix Jct., and runs for 5.12 miles in Canada, again crossing into Maine at Woodland (See Figure 1-6 on following page). Woodland Junction, a wye, is immediately encountered. Straight ahead is a short spur to the inactive Louisiana Pacific Oriented Strand Board (OSB) mill and chip-n-saw mill. Taking

the left leg of the wye, the track curves almost 180 degrees to access the Domtar (formerly Georgia Pacific) pulp & paper mill at Woodland (officially Baileyville). At Woodland there is a four track yard and various private trackage within the mill complex. This mill is currently the only active rail account for the Pan Am rail operations in Washington County. Over the last three years, the single paper machine at the mill has been idle with only the pulp mill in operation, producing market pulp, much of which is exported by truck via the port of Eastport.

Returning to St. Croix Junction, the line towards Bangor and Ayers Junction swings away to cross US Route 1 just 1,800 feet from St. Croix Junction. Pan Am Railway ownership ends just short of the Route 1 grade crossing. From and including the grade crossing south to Ayers Junction the rail line/ROW is owned by Maine DOT. The track is still in place for 12.56 miles between St. Croix Junction and Ayers Junction but not continuous across grade crossings and there are some minor washouts. Ayers Junction was a railroad wye, with one leg going north towards Calais, one leg south and then west towards Ellsworth and Bangor and the third leg to the east towards Eastport. The line towards Eastport has no rail in place and is owned by Maine DOT to the town of Perry.

IV. – CURRENT RAIL OPERATIONS

Currently, the only rail movements in and out of Washington County consist of inbound chemicals for the pulping and bleaching processes at the Domtar mill in Woodland. Occasionally, some outbound market pulp is handled. Up until 4 or 5 years ago, significantly greater volumes were handled with outbound paper from the paper machine (now idled) as well as outbound oriented strand board and inbound adhesives supplemented by some finished lumber from the Louisiana Pacific operation (formerly Georgia Pacific) northwest of the pulp mill. The rail traffic from Woodland amounted to 4,500 to 6,000 carloads per year. Current volumes are less than 1,000 carloads per year.

To move this relatively low volume of rail cars, Pan Am maintains a locomotive at the mill in Woodland. About 2 days per week, an operating crew comes on duty at Woodland, collects the outbound cars from the mill and makes the 10 mile run to Milltown Jct. or Campbells sidings. Here the outbound cars are exchanged for inbound cars delivered by the New Brunswick Southern. The crew then runs back to Woodland, sets the inbound cars at the mill and ties up the locomotive.

Similarly, the New Brunswick Southern Railway runs a local freight south from McAdam, New Brunswick as required. This train runs 33.5 miles south to St. Stephen. The train has to clear the switch to the 4.7 mile long Milltown spur that circles around St. Stephen and connects to Pan Am Railway at Milltown Junction. The track layout requires the train to back up around the entire 4.7 miles across numerous grade crossings. To facilitate that movement, the train normally carries a caboose equipped with a horn and brake valve with

a crewman stationed at the back of the caboose (now front of the train). The train then backs up for the full 4.7 miles around St. Stephen, across a dozen grade crossings. The train then comes onto the Pan Am tail track at Milltown Junction, caboose first. The outbound cars left by the Pam Am crew are picked up either off the siding at Milltown Junction or from the sidings at Campbells. The locomotive now has to be placed on the opposite end of the train for trip back into Canada. This “runaround move” can be done either at the siding at Milltown Junction, or at Campbells. The train pulls up the tail track to clear the switch back to Canada. The outbound train then shoves back out around the 4.7

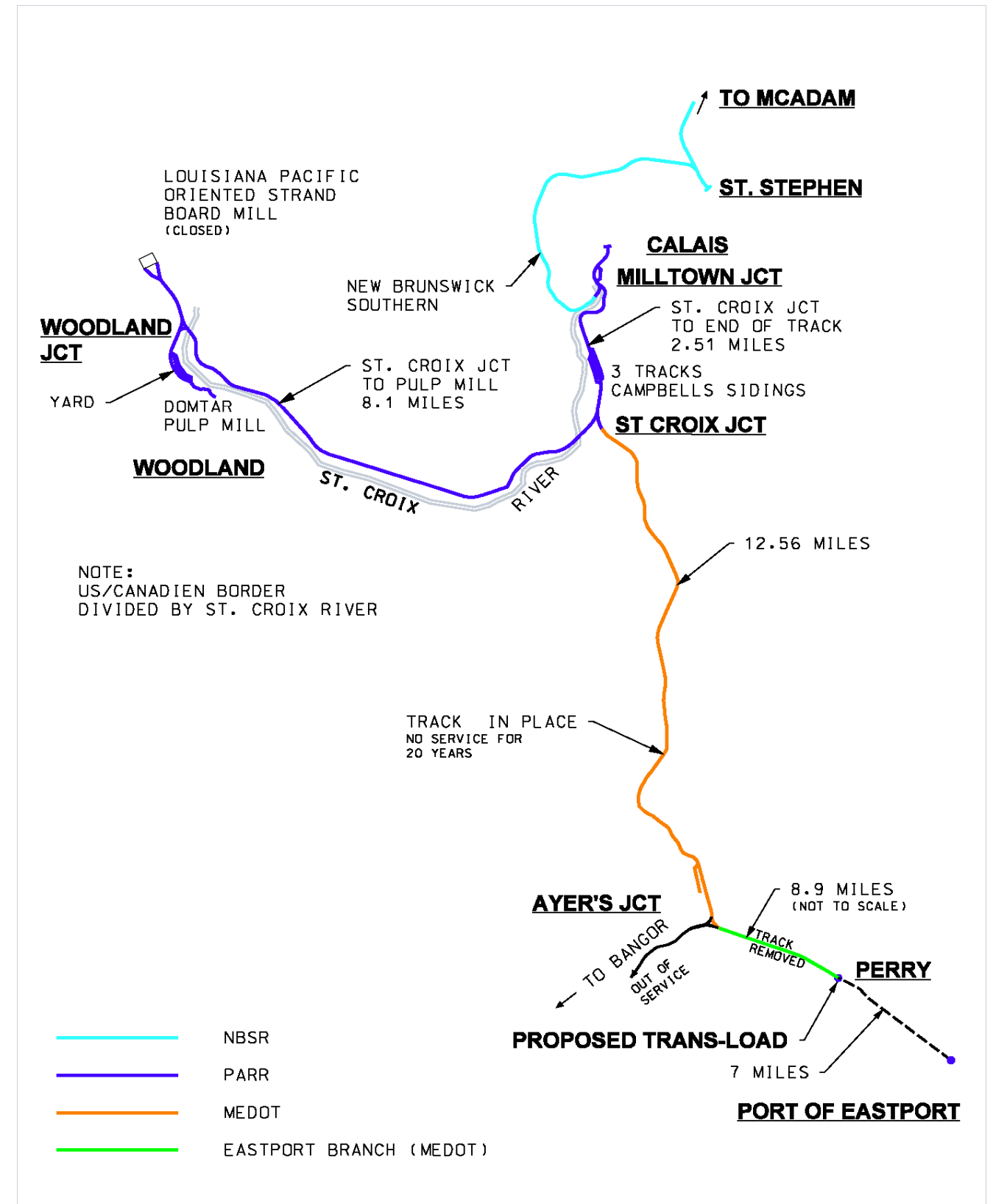


Figure 1-5 Railroad Layout in Project Area

long to the line heading back to McAdam. The locomotive is then on the front of the train to head back north to McAdam.



Figure 1-6 Aerial Photo of Woodland - Domtar Pulp & Paper Mill at Bottom Center. Unused OSB and Chip-N-Saw Mill at Upper Left. Woodland Jct. wye at Left Center. International Border is Yellow Line (From Google Earth)

In addition, there are several freight consignees in St. Stephen that may be switched as the train traverses the loop of track in Milltown and St. Stephen.

This overall operation would need to be improved if longer trains were regularly operated beyond what is proposed in the infrastructure improvements estimated in this report. These improvements are discussed in the FUTURE INFRASTRUCTURE IMPROVEMENTS section of Chapter 2.