



STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION  
16 STATE HOUSE STATION  
AUGUSTA, MAINE 04333-0016

Janet T. Mills  
GOVERNOR

Bruce A. Van Note  
COMMISSIONER

**March 6, 2025**

**Testimony of Nate Moulton  
Maine Department of Transportation  
Before the 132<sup>nd</sup> Legislature, Joint Standing Committee on Transportation**

**In Opposition**

*LD 487, Resolve, Directing NNEPRA to Apply for Funding for the Purpose of Identifying the Rail Corridor Connecting Portland and Orono as an Intercity Passenger Rail Corridor*

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Senator Nangle, Representative Crafts and distinguished members of the Joint Standing Committee on Transportation, I am Nate Moulton, Director of Freight and Business Logistics at MaineDOT. MaineDOT is in opposition to LD 487.

LD 487 directs the Northern New England Passenger Rail Authority (NNEPRA) to apply for funding through the Corridor Identification and Development (Corridor ID) Program for the purpose of identifying the rail corridor that extends from Portland through Auburn to Bangor and Orono as an intercity passenger rail corridor.

During the 130th legislative session this committee passed legislation that directed MaineDOT to conduct a transit propensity study to assess the demand and viability for new or enhanced transit service, including passenger rail, between the communities of Portland and Bangor. The resolve called for a review of relevant traffic counts, population, and employment data, all reasonably feasible corridors of service, and primary trip generators that could significantly affect demand.

A Project Advisory Group was established to help oversee and guide the study. The Advisory Group consisted of representatives from the Cities of Augusta, Waterville, and Bangor as well as a representative of the Bangor Area Comprehensive Transportation Study (BACTS), the Northern New England Passenger Rail Authority (NNEPRA), AMTRAK, and Concord Coach Lines.

Results of the transit propensity study show that passenger rail expansion to Bangor would involve a very high initial capital cost. Estimated capital costs were between \$375 million to \$538 million for this route. Further, there would be an ongoing annual need to subsidize the operation of a new passenger rail service. The proposed service would add approximately 70 percent more track miles to the Downeaster route for significantly fewer riders. By way of example, the current Downeaster service, which has a farebox recovery of around 50 percent,

requires an annual public subsidy of approximately \$16 million per year. Assuming a similar fare structure, the lower ridership and significant length of such an extension would mean farebox recovery in this segment would be significantly lower, requiring more subsidy.

The corridor between Portland and Bangor has effective parallel highway routes that are uncongested, predictable, have traffic speeds of up to 70 mph and provide for efficient travel times for personal vehicles and existing bus services in the corridor. The corridor is served by existing private intercity bus services that continue to the Boston market and connect with intercity bus and AMTRAK Downeaster passenger rail service in Portland.

As a result of the 2023 Lewiston and Auburn Passenger Rail Economic Evaluation, MaineDOT began a pilot bus service providing commuter bus service between Lewiston, Auburn, and Portland. The LAP began in July of 2024 and features 14 round trips daily on weekdays with service from 4:30AM to 11:00 PM and 11 round trips on weekends from 6:00 AM to 8:46 PM. Ridership has averaged about 1900/month since the service began.

In addition, MaineDOT worked with Concord Coach lines to add two round trips per day between Portland and Bangor with a stop in Augusta to bring a total of 6 round trips a day for Concord Coach Lines (CCL). Some of these runs also include stops at UMO and Colby in Waterville. This service provides connections at the Portland Transportation Center with the Downeaster and CCL service to Boston. CCL has carried an average of 1815 passengers monthly on the two additional round trips.

The Corridor ID program is a competitive discretionary grant program. To be successful in the program an applicant must show where the required state or local capital matching funds will come from should a rail expansion project move forward. A 20% match is required for the Corridor ID program. Based on the 2023 Transit Propensity Study, these matching funds would range anywhere from \$75 million to \$108 million if an application was successful and a future project was developed. To date the state has not identified how this required state capital match would be funded. In addition, the application needs to identify a source for the operational subsidy to operate the service on an ongoing basis. This is estimated to be \$6.7 million to \$16.2 million annually depending on ticket price. It is important to note that the Corridor ID program provides only capital funds, there are no operational funds available through the program. A third requirement of the program and a successful application is proof of an agreement with the host railroad. At this time we are unaware of any such agreement with CSX.

It is for these reasons that MaineDOT is opposed to LD 487, and we urge the committee to vote ought not to pass. Thank you.



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## Memorandum

**Date:** April 11, 2023

**To:** Senator Ben Chipman, Chair  
Rep. Lynne Williams, Chair  
Joint Standing Committee on Transportation

**From:** Bruce A. Van Note, Commissioner  
Dale Doughty, Director of Planning  
Nate Moulton, Transportation Planning Division Director  
Nate Howard, Rail Program Director

**Re:** Bangor Transit Propensity Study

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Pursuant to 2021 Resolve Chapter 53, formerly LD 227 (the Resolve), the Maine Legislature directed the Maine Department of Transportation (MaineDOT) to conduct a transit propensity study to assess the demand and viability for new or enhanced transit service, including passenger rail, between the communities of Portland and Bangor. The Resolve called for a review of relevant traffic counts, most recent data from the United States Census Bureau, population, and employment data, all reasonably feasible corridors of service, and primary trip generators that could significantly affect demand. It also required that MaineDOT submit a report of the findings to the 131<sup>st</sup> Maine Legislature, Joint Standing Committee on Transportation. This memo with the supporting study entitled *Transit Propensity Study* by VHB, the prequalified consultant working for MaineDOT, dated March 2023 (the Study) constitutes that report.

A Project Advisory Group was established to help oversee and guide the Study. The Advisory Group consisted of representatives from the Cities of Augusta, Waterville, and Bangor as well as a representative of the Bangor Area Comprehensive Transportation System (BACTS), the Northern New England Passenger Rail Authority (NNEPRA), AMTRAK, and Concord Coach Lines.

This memo summarizes estimated transit ridership demand, existing transportation options along the corridor, passenger rail consideration including benefits, capital costs, ongoing operating costs, and estimated per passenger cost and ticket prices, enhancement of existing bus services, climate and equity considerations, conclusions and MaineDOT's recommended path forward.

## Estimate of Transit Ridership Demand

The Study estimated that a new or improved transit service could serve between 56,000 - 80,000 trips per year, or about 153 to 219 trips per day in 2023, and between 62,250 - 87,650 trips per year, or about 171 to 240 trips per day, by 2040. (See section 4 of the Study for details and methodology, which is consistent with normal industry standards). The trips represent a potential shift from personal vehicles to transit however, some of these existing trips are already using existing transit services. A trip is defined as any one-way travel anywhere within the corridor, meaning a single rider making a round trip on transit would count as two trips. For comparison, adjoining interstate highways carry a range of about 3.7 to 8.9 million vehicles per year, or about 10,220 to 24,260 per day depending on location. In 2019, Concord Coach and Greyhound buses accounted for 149,000 trips in the study area.

*Table 1. Concord Coach Lines Trip Summary*

<b>Concord Coach Lines Bus</b>	
<b>Trip</b>	Bangor to Portland to Boston
<b>2019 Round Trips Per Day</b>	5
<b>2022 Round Trips Per Day</b>	4
<b>2022 Ticket Price</b>	\$30 (to Portland) \$47-\$50 (to Boston)
<b>2019 Ridership</b>	130,000

Table 2. Greyhound Trip Summary

<b>Greyhound Bus</b>	
<b>Trip</b>	<b>Bangor to Portland to Boston</b>
<b>2019 Round Trips Per Day</b>	1
<b>2022 Round Trips Per Day</b>	1
<b>2022 Ticket Price</b>	\$15-\$21 (to Portland) \$32-\$43 (to Boston)
<b>2019 Ridership</b>	19,000

This relatively modest amount of transit demand is consistent with population densities, employers, and other transportation options along the corridor. As would be expected, transit services are generally successful in areas of higher population densities, generally urban areas, where there are large employers or attractions that draw large numbers of recurring travelers and where highways and existing transit services are congested and reaching capacity. The corollary is also true. Transit services are generally unsuccessful or require large ongoing operational subsidies when population densities in a corridor are relatively low, there are few large urban areas with significant employers or attractions drawing large numbers of recurring travelers, and the existing transportation options are relatively uncongested and therefore effective.

## Existing Transportation Options Along the Corridor

The corridor between Portland and Bangor has effective parallel highway route(s) (I-95 and I-295) that are uncongested, predictable, have traffic speeds of up to 70 mph and provide for efficient travel times for personal vehicles and existing bus services in the corridor. The corridor is served by existing private intercity bus services, totaling five (5) round trips a day that continue to the Boston market and connect with intercity bus and AMTRAK Downeaster passenger rail service in Portland. The Concord Coach Lines service (4 round trips daily) provides AMTRAK thruway bus service between Portland and Bangor today allowing travel with a ticket purchased from AMTRAK. See <https://www.amtrak.com/thruway-connecting-services-multiply-your-travel-destinations>.

These bus services in the study corridor had a total annual ridership of 51,737 trips in 2021, or 138 per day on average. At 152,073 trips in 2019, pre-pandemic ridership was around three

times higher than in 2021. Ridership and service levels of existing intercity bus services continue to rebound.

#### Passenger Rail Consideration

The Resolve specifically identified passenger rail for analysis, which has been the focus of passenger rail supporters including the proponents of LD 227. Accordingly, the Study extensively considered this option.

To compete successfully for federal funding, an expansion project must meet specific criteria and application requirements. Ridership demand and other benefits need to be weighed against the cost of meeting it, and a positive and competitive benefit/cost ratio is needed. Also, compared to expanding current bus services the time to make necessary improvements, secure equipment, and recruit the necessary workforce is much greater.

Benefits. As noted above, given the nature of the corridor and relatively low demand, the transportation benefits of an extension of a higher capacity transit alternative such as passenger rail to Bangor are relatively low. A new rail service will not meet minimum thresholds for ridership or corridor density needed to qualify and successfully compete for Federal Transit Administration commuter rail funding at this time. Further, from a Federal Rail Administration (FRA) intercity rail perspective, the Bangor rail concepts do not provide a time competitive alternative to highway travel and do not address any significant highway congestion in a corridor nor does it connect major urban areas. These are all important criteria used by FRA when ranking discretionary intercity rail projects.

Capital Costs. On the cost side of the ledger, as seen on page 42 of the Study, the cost to extend passenger rail to Bangor is high – many hundreds of millions of dollars regardless of alignment chosen.

*Table 3. Estimate Capital Costs Summary*

ALIGNMENT	APPROXIMATE LENGTH	LOW ESTIMATE	HIGH ESTIMATE
Brunswick to Bangor via State-Owned Lower Road to CSX mainline	100 miles +/-	\$628M	\$902M
Yarmouth to Bangor via CSX mainline	120 miles +/-	\$375M	\$538M

These are huge amounts for Maine. By way of comparison, they rival the amount of capital funding from all sources both federal and state that MaineDOT expends on highway and bridges statewide in a year, a system that supports an estimated 15 billion vehicle miles traveled statewide per year. These capital costs are also many multiples of the average annual amount of capital funding from all sources both federal and state that Maine expends on the multimodal transportation systems statewide including transit, aviation, rail, ports, ferries, and active transportation. Further, even if federal funding was available, state, or local matching funds would be required, which would range from \$75 to \$180 million. Simply stated, passenger rail to Bangor would involve a very high initial capital cost.

Ongoing Operational Costs. Further, there would be an ongoing annual need to subsidize for the operation of the new passenger rail service. The proposed service would add approximately 70% more track miles to the Downeaster route for significantly fewer riders. By way of example, the current Downeaster service which has a farebox recovery of around 50% requires an annual public subsidy over \$17 million per year. Assuming a similar fare structure, the lower ridership and significant length of such an extension would mean farebox recovery in this segment would be significantly lower, requiring more subsidy.

Estimated Per Passenger Costs and Ticket Prices. To get a conceptual “order of magnitude” estimate of costs and ticket prices at the per passenger level, estimates of the cost of passage and potential ticket prices for a trip between Bangor and Brunswick are provided in Table 4. Ticket prices in Scenarios 1 and 2 were extrapolated on a mileage basis from existing (2022) and budgeted (2023) Downeaster operating expenses minus administrative expenses. Further, although unrealistic, this estimate assumes that 100% of the upper end of estimated range of annual transit ridership demand (being 80,000) will use passenger rail. Based upon this extrapolation and assumption, an “order of magnitude” estimate of cost providing one-way passage from Brunswick to Bangor ranges from \$168 and \$232 per passenger. Assuming a subsidy of 50%, which is consistent with the existing Downeaster service, a single one-way ticket price would range from \$84 to \$116. Similar estimates for round-trip passage costs and ticket prices would be roughly double the one-way figures.

*Table 4. Estimated One-way Ticket Pricing*

Scenario 1. Estimated Ticket Price based on Downeaster FY23 Budgeted Costs

Operating Expenses (Estimated)	Trips per year	Projected Revenue	Additional Funding Required	Subsidy Required	Projected Ticket Price
\$18,630,729	80,000	\$9,315,365	\$9,315,365	50%	\$116

## Scenario 2. Estimated Ticket Price based Downeaster FY22 Operating Costs

Total Operating Expenses (Estimated)	Trips per year	Projected Revenue	Additional Funding Required	Subsidy Required	Projected Ticket Price
\$13,493,523	80,000	\$6,746,762	\$6,746,762	50%	\$84

### Scenario 3. Estimated One-way Competitive Ticket Price

Operating Expenses (Estimated)	Trips per year	Projected Revenue	Additional Funding Required	Subsidy Required	Ticket Price
\$18,630,729	80,000	\$2,400,000	\$16,230,729	87%	\$30

Quantification of subsidy requires assumptions on routes, stops, and frequency, but given relatively low ridership demand and low farebox recovery, it is reasonable to estimate that the ongoing operational subsidy needed to extend passenger rail operations to Bangor could be in the range of \$6.7 to \$16.2 million dollars per year as noted in table 4.

MaineDOT understands that rail ticket prices as high as in Scenario's 1 and 2 would not attract many riders and would likely need to be set to be competitive with existing bus service. As noted in Table 1, a one-way bus ticket from Portland to Bangor currently costs \$30. As shown in Scenario 3 of Table 4 above, if the one-way rail ticket price was set to match this price (\$30), the cost of each one-way rail trip (\$168 and \$232) would need to be subsidized between 83 and 87%, or about \$138 to \$202 per ticket.

## Enhancement of Existing Bus Services

Given the challenges of the high costs and subsidies related to this passenger rail expansion and given the existence of uncongested parallel highway route(s) (I-95 and I-295) that provide predictable traffic speeds of up to 70 mph in the corridor, MaineDOT looked for other transportation alternatives that can meet the relatively low transit ridership demand in a more cost-effective and tailored manner. As noted above, the corridor today is served by existing private intercity bus services, totaling five (5) round trips a day that continue to the Boston market and connect with intercity bus and AMTRAK Downeaster passenger rail service in Portland.

If it is felt that more transit options and service is needed in the corridor, these existing intercity bus services can be readily enhanced to provide additional round trips within the corridor and/or adding additional stops or route deviations. This could provide more service to intermediate municipalities in the corridor. Better connections to the existing local bus services

within the corridor could also be accomplished by working with local transit operators to provide more frequent and well-timed connections to existing intercity bus stops.

The initial capital cost of such enhancements and any operating subsidy needed would need to be defined, but it is clear they would be a small fraction of the costs related to passenger rail as it leverages the existing capacity of the existing highway system, as opposed to building additional capacity.

## Climate and Equity Considerations

Public transportation decisions need to consider factors beyond numerical unmet demand and costs. In accordance with Maine’s climate action plan, Maine Won’t Wait, reducing greenhouse gas emissions is a primary transportation goal in Maine. Additionally, in accordance with its Statement on Equity, MaineDOT is committed to meeting customers where they are and ensuring that all Maine people have access to safe and reliable transportation options that support economic opportunity and quality of life regardless of a person’s economic, social, ethnic, racial, age, sexual orientation, physical, mental, or geographic circumstance. A key component of equity is acknowledgement that transportation needs, and solutions differ depending on geography, demographics, and individual circumstances. MaineDOT is committed to equitable delivery of our programs and services to meet the mobility equity needs of all Maine people in both rural and urban areas.

Applying these considerations to this matter, greenhouse gas reductions from increased public transportation would be relatively small given relatively low ridership demand. Further, such reductions could be better addressed through additional bus service, especially as those buses electrify. In terms of equity, lower income, or elderly customers without access to vehicles are more typically users of intercity bus services in a state like Maine, as opposed to passenger rail services. Thus, it appears that enhanced bus service in the corridor will provide as good and perhaps better equity than rail service.

## Conclusions and a Recommended Path Forward

Based upon the information above, MaineDOT has determined that the cost-effective, timely, equitable, and climate-friendly way to improve public transportation in the study area is to work with the current intercity bus operators in the corridor to advance a 2-year pilot to provide additional round trips and/or adding additional stops or route deviations. This will provide more service to more customers in intermediate municipalities in the corridor. Further,

better connections to the existing local bus services within the corridor could also be accomplished by working with local transit operators to meet workforce and other equitable needs by providing more frequent and well-timed connections to existing intercity bus stops.

This solution best fits the needs and the corridor at this time. It has a low barrier to entry, in terms of cost and time, provides the flexibility to adjust to changing needs, can be implemented quickly, and can be used to gauge the need for additional transit service in the future.

This approach was recently supported by the Bangor Area Comprehensive Transportation System (BACTS), the federally designated Metropolitan Planning Organization (MPO) for the region. This is chaired by civic leaders in the Bangor metropolitan area. See attached letter from BACTS dated February 24, 2023.

Even this cost-effective bus solution may need help to materialize, as it may require some limited on-going operational subsidy. The amount and source of funding of this operational subsidy needs to be further evaluated but likely can be funded through the Federal Transit Administrations intercity bus program. MaineDOT is committed to engaging in this evaluation with providers and stakeholders to seek a cost-effective and sustainable approach.

Given the relatively low transit demand, low population densities, high capital and operating costs, low climate and equity benefits, and extensive transportation needs statewide, MaineDOT has determined that it would be imprudent to continue the study of extending passenger rail to Bangor at this time.

MaineDOT is aware that this conclusion and path forward will not be accepted by some passenger rail project supporters, and that there could be calls for further studies, perhaps by different entities. That is all part of advocacy and the political process, and we respect the results of such processes.

In the end, MaineDOT is statutorily charged to consider all transportation needs statewide in a balanced, comprehensive, and objective manner and seek reasoned, cost-effective solutions to demonstrated needs. In accordance with this statutory charge, MaineDOT's guiding principles call for being responsible stewards of the public funds by seeking the most cost-effective solutions to demonstrated transportation needs, making reasoned, fact-based decisions that consider long-term benefits and costs, and pragmatically using pilot programs in implementation when feasible. A pilot program to enhance existing intercity bus service and local connections between Portland and Bangor meets this statutory charge and guiding principles.



February 24th, 2023

Maine Department of Transportation  
16 State House Station  
Augusta, Maine 04333

Dear Mr. Moulton,

I am writing on behalf of the Bangor Area Comprehensive Transportation System (BACTS) Policy Committee to provide feedback on the draft Bangor Transit Propensity Study, dated January 2023. As the Metropolitan Planning Organization for the greater Bangor region, we are committed to the safe and efficient movement of people, both within our region as well as to and from our region.

The purpose of this study was to evaluate the viability of new or enhanced transit service, including passenger rail, between Bangor and Portland, considering ridership, trip times, cost, along with other factors. As a member of the Project Advisory Group, BACTS has been involved in the study process, including a review of the study results.

BACTS recognizes the appeal of extending passenger rail service to Bangor, however, the significant capital costs associated with the rail alternative appears to outweigh the benefits and conflicts with our goal of maintaining fiscal responsibility for transportation investments in the greater Bangor region. Alternatively, BACTS would support MaineDOT investing in enhancements to the existing intercity bus services and local services in the study area.

BACTS appreciates the opportunity to weigh in on these discussions and is committed to enhancing our transportation system, both locally and statewide. We look forward to future MaineDOT partnerships on projects that further this goal.

Sincerely,

John Theriault, PE, Bangor City Engineer  
Chair of the BACTS Policy Committee



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## Memorandum

**Date:** April 11, 2023

**To:** Senator Ben Chipman, Chair  
Rep. Lynne Williams, Chair  
Joint Standing Committee on Transportation

**From:** Bruce A. Van Note, Commissioner  
Dale Doughty, Director of Planning  
Nate Moulton, Transportation Planning Division Director  
Nate Howard, Rail Program Director

**Re:** Lewiston and Auburn Passenger Rail Economic Evaluation

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The 130<sup>th</sup> Maine Legislature directed the Maine Department of Transportation (MaineDOT) to conduct an economic evaluation study for commuter and passenger train service between Portland and the Lewiston and Auburn area (this Study). See 2021 Resolve Chapter 56, formerly LD 991 (the Resolve). This Study builds upon data included in the 2018 Transit Propensity Analysis and the Lewiston-Auburn Passenger Rail Service Plan published in May 2019. The Resolve required that a high-level alternatives analysis be conducted of two defined rail corridors as well as a comparison of other potential transportation connections, and that MaineDOT submit a report of the findings and recommendations to the Legislature's Joint Standing Committee in Transportation Committee.

A Project Advisory Group was established to help guide the Study. The Advisory Group consisted of Lincoln Jeffers, Director of Economic and Community Development in Lewiston, Michael Murray, Asst. Director of Public Works in Portland and Jack Clifford of the Lewiston and Auburn RR Company.

The results of this Study are contained in three documents by VHB dated March 2023 that accompany this memorandum: (1) the *Economic Evaluation* and alternatives analysis of the two rail corridors identified, (2) a *Preliminary Capital Investment Grant Rating Assessment* to assess the likelihood of funding, and (3) a *Bus Alternatives Analysis* as part of a high-level alternatives

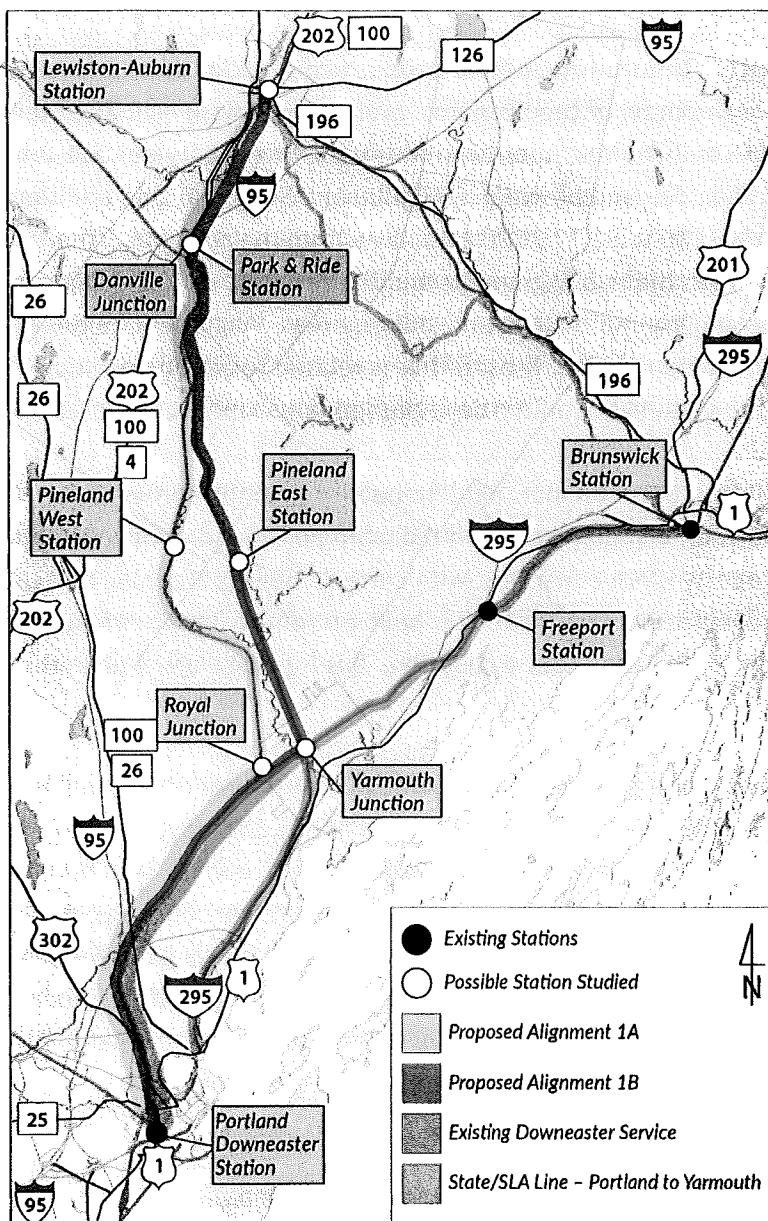
analysis. This memorandum summarizes each of these three components of this Study, and then sets forth MaineDOT's current conclusions and proposed near-term actions to improve public transportation connections between Portland and the Lewiston and Auburn area.

### Economic Evaluation Study

The *Economic Evaluation Study* assessed potential development demand around general station areas, estimating high-level economic impacts and comparing findings for the two alternative rail alignments described below. The Study continues the planning process for the *Lewiston-Auburn Passenger Rail Service Plan* dated May 2019 by evaluating potential development demand around general station areas, estimating economic impacts for two alignment alternatives, and comparing findings.

**Two Corridors Analyzed.** The Resolve defined two potential rail corridors to evaluate:

- **Alignment 1A.** The western route -shown in yellow below - follows the active mainline of CSX (formerly Pan Am) from the Portland Transportation Center to the Lewiston and Auburn area.
- **Alignment 1B.** The eastern route – shown in blue below - also starts at the Portland Transportation Center and follows the CSX mainline and a short section of the CSX Brunswick branch line to Yarmouth Junction. From there, Alignment 1B heads north on the State-owned St. Lawrence and Atlantic corridor and reconnects with CSX mainline at Danville Junction, following the CSX mainline into Lewiston.



There are two noteworthy observations on the alignments identified by the Resolve. First, both alignments pass over the active mainline now owned by CSX, meaning that coordination with CSX will be required regardless of the alignment analyzed. Passenger rail service other than Amtrak – such as commuter rail operated by others – require the consent of the railroad. Second, neither of these alignments identified by the Resolve and prior studies include the section of the State-owned St. Lawrence and Atlantic corridor from Portland to Yarmouth Junction – shown as gray in the map above - which has been the subject of interest by certain commuter rail project advocates.

**Economic Impacts.** The study identified various economic impacts as summarized on Table ES-1 of the Executive Summary of the Economic Evaluation. These include potential new housing ranging from 166 to 397 units, potential new employment between 238 and 298, potential additional spending demand between \$380,000 and \$476,000, and additional property taxes ranging from \$646,000 to \$1,776,000 annually within the corridors. There are minimal distinctions between the two alignments and the resulting economic activity related to development in and around the line and station areas. Alignment 1B does provide higher economic value-added metrics. Most of this is related to added development in and around Yarmouth Junction and higher initial development and capital costs of this alignment.

Although significant, these impacts need to be placed in the context of the broader economy of these areas. Further, it should be noted that some of the potential development in housing and commercial property is not consistent with current municipal zoning and codes. Accordingly, local zoning ordinances may not allow for build out of the development identified and predicted as part of the economic evaluation. This is particularly true in the Yarmouth Junction area.

Estimate of Transit Ridership Demand. The 2018 Transit Propensity Analysis developed a range of ridership estimates by evaluating the demographics and travel patterns in the area, by considering the potential development opportunities of a rail connection, and by examining similar corridors across the country. The analysis (summarized in Table 1) indicated that there is latent demand (i.e., demand for transit service that is currently unmet and either accommodated on another mode or a trip not taken) for a transit connection between Lewiston or Auburn and Portland. The lower and upper limits of the ridership demand would depend largely on the level-of service and connections that would be made.

Table 1. Transit Propensity

	Near-Term Ridership Potential [projected to 2040]		Long-Term Ridership Potential [projected to 2040]	
	Daily Rail Trips		Daily Rail Trips	
	Low	High	Low	High
12-20 Transit-Style Service Trips	600	800	700	1900
Up to 4 Intercity-Style Service Trips	210	240	250	330

Existing Transit Service Along the Corridor. Lewiston and Auburn currently have two existing, privately operated bus services to Portland: Concord Coach Line and a Greyhound Bus Line.

Both bus services have approximately forty-five minutes to one hour ride times. There is also a local bus system called Citylink serving Lewiston and Auburn that provides connections to the express service.

The Concord Coach Line has three existing bus stops in Lewiston and Auburn. Ticket prices for Concord Coach Line cost on average \$11 one way. The Greyhound Bus Line has one stop in downtown Lewiston at the Oak Street Station. This route travels to Portland via I-95. Ticket prices on the Greyhound Line range from \$15 to \$20 one way.

## Preliminary Federal CIG Ratings Assessment

The Preliminary Capital Investment Grant Ratings Assessment accompanying this memorandum analyzed the likelihood for qualifying for funding for passenger rail alternatives from the Federal Transit Administration (FTA) New Starts and Small Starts discretionary grant programs. Capital Investment Grant (CIG) program is competitive and provide capital funding for transit capital investments, including heavy rail, commuter rail, light rail, streetcars, and bus rapid transit. The estimated Capital Cost (in 2022-year dollars) for Alignment 1A is \$230 million and for Alignment 1B is \$254 million. Half of these amounts would need to come from state or local funds.

Fifty percent of the rating of a project is based on 6 justification criteria and the remaining 50% of the rating is based on local financial commitment of matching capital funding and subsidy of ongoing operations. FTA typically requires a minimum of 50% commitment of the project cost to be local (non-federal) funding on selected projects. Based upon these criteria, this Assessment shows that its current form, the extension of passenger rail to the Lewiston and Auburn area passenger does not appear eligible for competitive federal CIG funding. For more detail, see the full assessment accompanying this memorandum.

## Bus Alternatives Analysis

The *Bus Alternatives Analysis* was completed as part of the high-level alternatives analysis required by the Resolve. Three different bus routes were reviewed as alternatives that parallel the rail corridors. Key takeaways are that a frequent and reliable commuter bus alternative:

- Can be implemented quickly, as opposed to the many years required to further study, design, fund and construct a passenger rail extension.
- Has travel times competitive with passenger rail, although such times may be slightly longer and may be impacted by highway traffic depending on the bus route chosen.
- Has dramatically lower initial capital costs because it utilizes existing highway capacity (4 buses estimated at \$1.6 million).

- Avoids the need to upgrade and maintain rail corridors, which in the case of Alignment 1B includes a parallel rail corridor in close proximity.
- Has significantly lower operating costs than passenger rail
- Likely will not provide as much of the economic development potential at stops as the passenger rail stations considered in the Economic Analysis.
- Often serves as an initial step towards new passenger rail service by demonstrating ridership demand between communities.
- Offers the flexibility to provide multiple stops within Lewiston and Auburn and Portland on a one seat transit ride (no connections), not just along on the rail corridor as required by passenger rail.
- Can be more easily tailored to meet and change with the workforce, equity needs of passengers and provide connecting services to existing passenger rail options.

**Comparison of Costs Across Alternatives.** The 2019 Lewiston-Auburn Passenger Rail Service Plan examined what kind of service should be provided to meet the travel demand/patterns observed in Transit Propensity Analysis (i.e., route alignment, service frequency), as well as the costs to build and operate service. Cost estimates for initial capital investment and ongoing operations for both the rail and bus alternatives are summarized in Table 2 below.

The capital cost to extend passenger rail to the Lewiston and Auburn area ranges from \$264 to \$349 million depending on the alignment chosen. By way of comparison, these projected costs rival the amount of capital funding from all sources, both federal and state that MaineDOT expends on the multimodal transportation systems statewide including transit, aviation, rail, ports, ferries, and active transportation. Further, even if the project was eligible and competitive for federal funding, state or local matching funds would be required, which would range from \$132 to \$174 million for a commuter rail service and \$53 to \$70 million or an Intercity-type rail service. Simply stated, passenger rail to the Lewiston and Auburn area would require a very high initial capital cost.

Table 2. Comparison of Costs Across Alternatives

Category:	Rail		Bus		
	Alignment 1A	Alignment 1B	Route B1	Route B2	Route B3
Infrastructure Costs	\$189 to \$230M	\$207 to \$254M	0	0	0
Vehicle Costs	\$75 to \$95M	\$75 to \$95M	\$1.6M	\$1.6M	\$1.6M
Capital Cost Total	\$264 to \$325M	\$282 to \$349M	\$1.6M	\$1.6M	\$1.6M
Annual O&M Cost	\$15 to \$19M	\$16 to \$20M	\$0.9 to \$1.2M	\$1 to \$1.2M	\$0.85 to \$1.2M

Further, there would be an ongoing annual need to subsidize the operation and maintenance of the new passenger rail service. By way of example, the current Downeaster service which

has a farebox recovery of around 50%, requires an annual public subsidy over \$17 million per year. Quantification of subsidy requires assumptions on routes, stops, and frequency, but assuming a similar farebox recovery as the Downeaster, it is reasonable to estimate that the ongoing operational subsidy needed to extend passenger rail to Lewiston and Auburn could be in the range of \$7.5 to \$9.5 million dollars per year.

As noted above, the bus alternatives require lower capital and operational subsidy costs as these services rely on existing highway capacity. Again, the initial capital costs are for equipment acquisition (4 buses estimated at \$ 1,600,000). The annual operation cost for bus services ranges from \$850,000 to \$1,200,000. Similar to the rail alternatives, it is assumed that a significant portion of this amount would be covered by an operating subsidy.

**Climate and Equity Considerations.** Public transportation decisions need to consider factors beyond numerical unmet demand and costs. In accordance with Maine's climate action plan, *Maine Won't Wait*, reducing greenhouse gas emissions is a primary transportation goal in Maine. Additionally, in accordance with its *Statement on Equity*, MaineDOT is committed to meeting customers where they are and ensuring that all Maine people have access to safe and reliable transportation options that support economic opportunity and quality of life regardless of a person's economic, social, ethnic, racial, age, sexual orientation, physical, mental, or geographic circumstance. A key component of equity is acknowledgement that transportation needs, and solutions differ depending on geography, demographics, and individual circumstances. MaineDOT is committed to equitable delivery of our programs and services to meet the mobility equity needs of all Maine people in both rural and urban areas.

Applying these considerations to this matter, greenhouse gas reductions from increased public transportation would be modest given relatively low ridership demand. Further, such reductions could be well addressed through additional bus service, especially as those buses electrify. In terms of equity, lower income, or elderly customers without access to vehicles are more typically users of commuter and intercity bus services in a state like Maine, as there can be flexibility designed to meet more customers where they are. Thus, it appears that enhanced bus service between Lewiston and Auburn and Portland will provide as good and perhaps better solution in terms of equity.

## Conclusions and The Recommended Path Forward

Based on information from the various Lewiston and Auburn passenger rail studies, including the 2018 Transit Propensity Analysis, the 2019 Lewiston-Auburn Passenger Rail Service Plan, and the current Study, MaineDOT has concluded that passenger rail service to Lewiston and Auburn is currently not eligible or competitive for federal discretionary funding. Considering

the limitations of other sources of funding, including State and local capital funding and the need for significant ongoing operational support, the MaineDOT does not support designing or constructing a passenger rail alternative between Portland and the Lewiston and Auburn area at this time.

Instead, MaineDOT plans to pursue the achievable alternative of improved bus service serving intercity and commuter needs. This alternative involves much lower capital and operational costs in the near and long-term, can be started quickly as a pilot, is more flexible in terms of defining and revising workforce and equity needs, is climate friendly, and can serve to assess ridership demand for future consideration of passenger rail. There will be continued collaboration to improve connectivity to intercity rail.

MaineDOT recommends advancing a 2-year pilot commuter bus service between Portland and the Lewiston and Auburn area that provides a level of frequency and service that was envisioned by the recent rail studies in this corridor. This service will provide transit access to the Lewiston and Auburn area to not only connecting rail and bus going south of Portland but single seat transit access to centralized transit and employers in Portland. The pilot service will initially focus on both commuter and intercity customers. This is a cost-effective way to start a public transportation connection. It will provide real world data on transit need and demand in the corridor and with success can help justify and build towards future consideration of rail service and better justification for Federal funding. MaineDOT intends to start such a commuter bus service pilot in the first half of 2024.

MaineDOT is aware that this conclusion and path forward likely will be rejected by some passenger rail project supporters, and that there could be calls for further study. That is all part of advocacy and the political process, and MaineDOT will respectfully engage in that debate and implement the results of any such processes.

In the end, MaineDOT is statutorily charged to consider all transportation needs statewide in a balanced, comprehensive, and objective manner and seek reasoned, cost-effective solutions to demonstrated needs. In accordance with this statutory charge, MaineDOT's guiding principles call for being responsible stewards of the public funds by seeking the most cost-effective solutions to demonstrated transportation needs, making reasoned, fact-based decisions that consider long-term benefits and costs, and pragmatically using pilot programs in implementation when feasible. We believe improvement of bus service between Portland and the Lewiston and Auburn area meets this statutory charge.