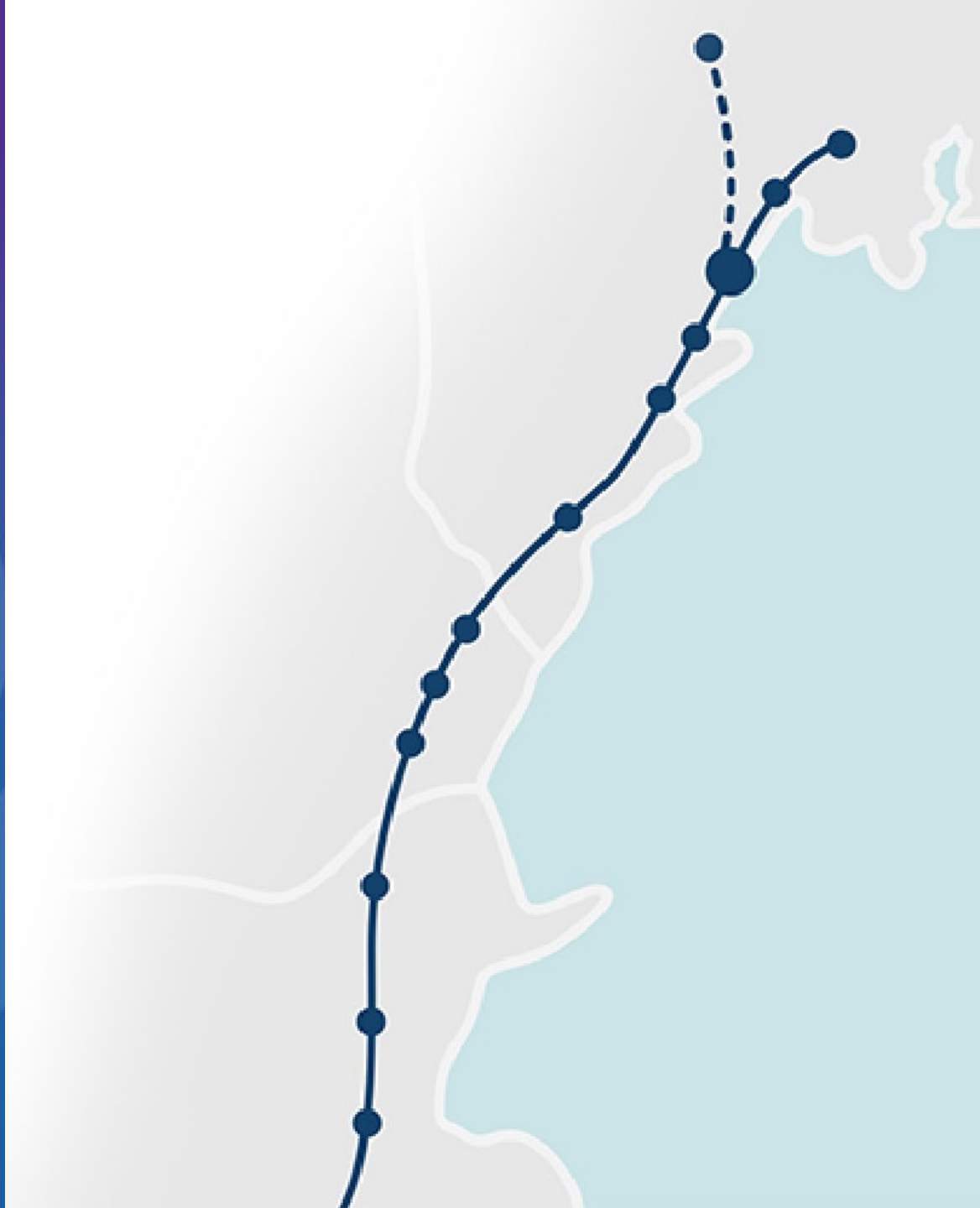


Portland – Lewiston- Auburn

Economic Evaluation Study

January 25th, 2023



Agenda

- Previous Public Meeting - Recap
- Commuter Bus Service Study
- Capital Investment Grant (CIG) Rating Assessment
- Next Steps

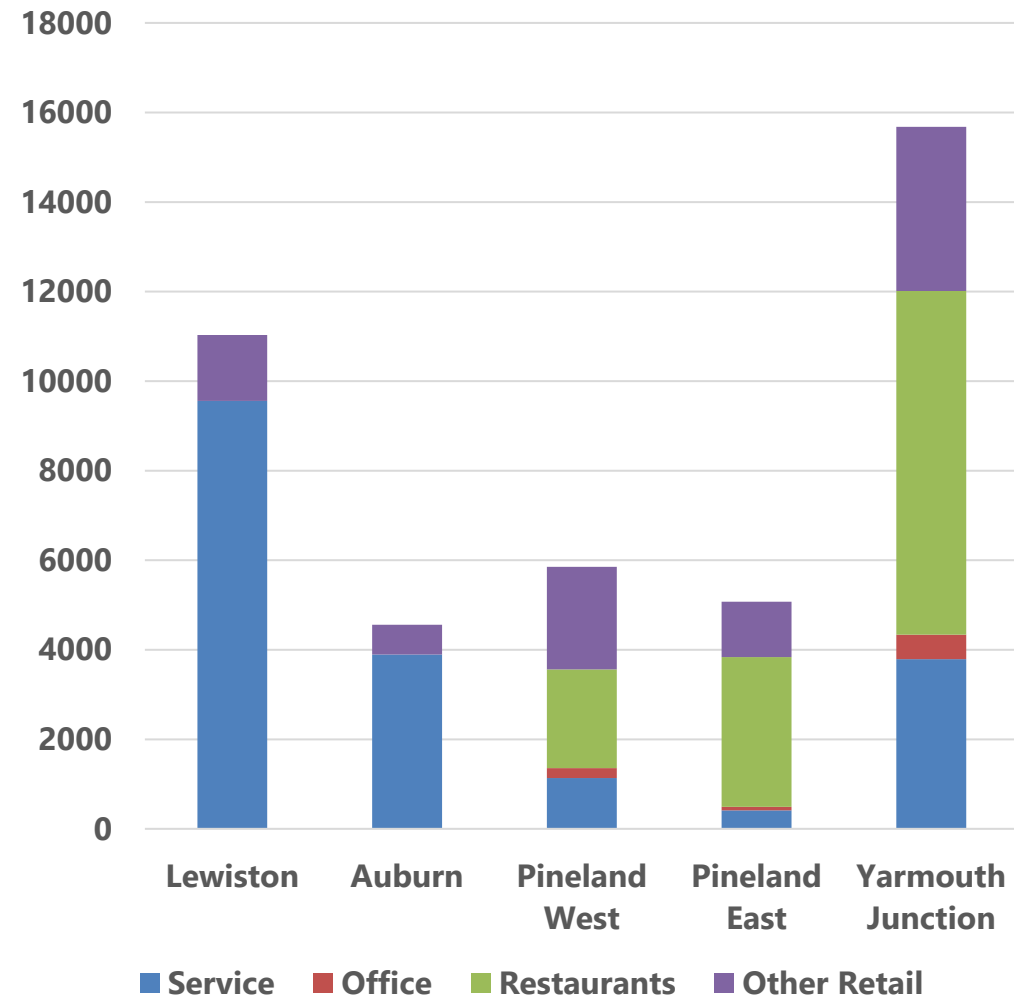
Previous Public Meeting - Recap

- Project Purpose and Outcomes – Continued Planning Efforts
 - Evaluated potential development demand around general station areas for Alternatives 1A/1B
 - Compared findings for Alternatives 1A/1B
 - Developed Project Purpose and Need
- Market Analysis Results
 - Residential development opportunity is present for each potential station area
 - Retail and non-retail opportunity is present for each potential station area
 - Retail development opportunities are strongest for restaurants and other specialty retailers
- Development Potential Examples
 - Analysis of potential demand and development
 - Examples around new/revitalized stations throughout New England were provided

Market Analysis – Key Takeaways

- Residential development opportunity is present
 - Lewiston highest for renter units
 - Potential for owner occupied at other stations
 - Smaller, higher density may be more cost effective to build
 - May be opportunity to target the 65+ population
- Retail and non-retail opportunity is present
 - Service sector highest in Lewiston, similar in Auburn, Yarmouth Junction
 - Potential space could integrate as a ground floor use of a mixed-use project.
- Retail development opportunities are strongest for restaurants and other specialty retailers
 - Commuter rail ridership demand may translate into additional spending or larger space for existing/planned retailers

Estimates of Supportable Retail & Non-Retail SF of Development

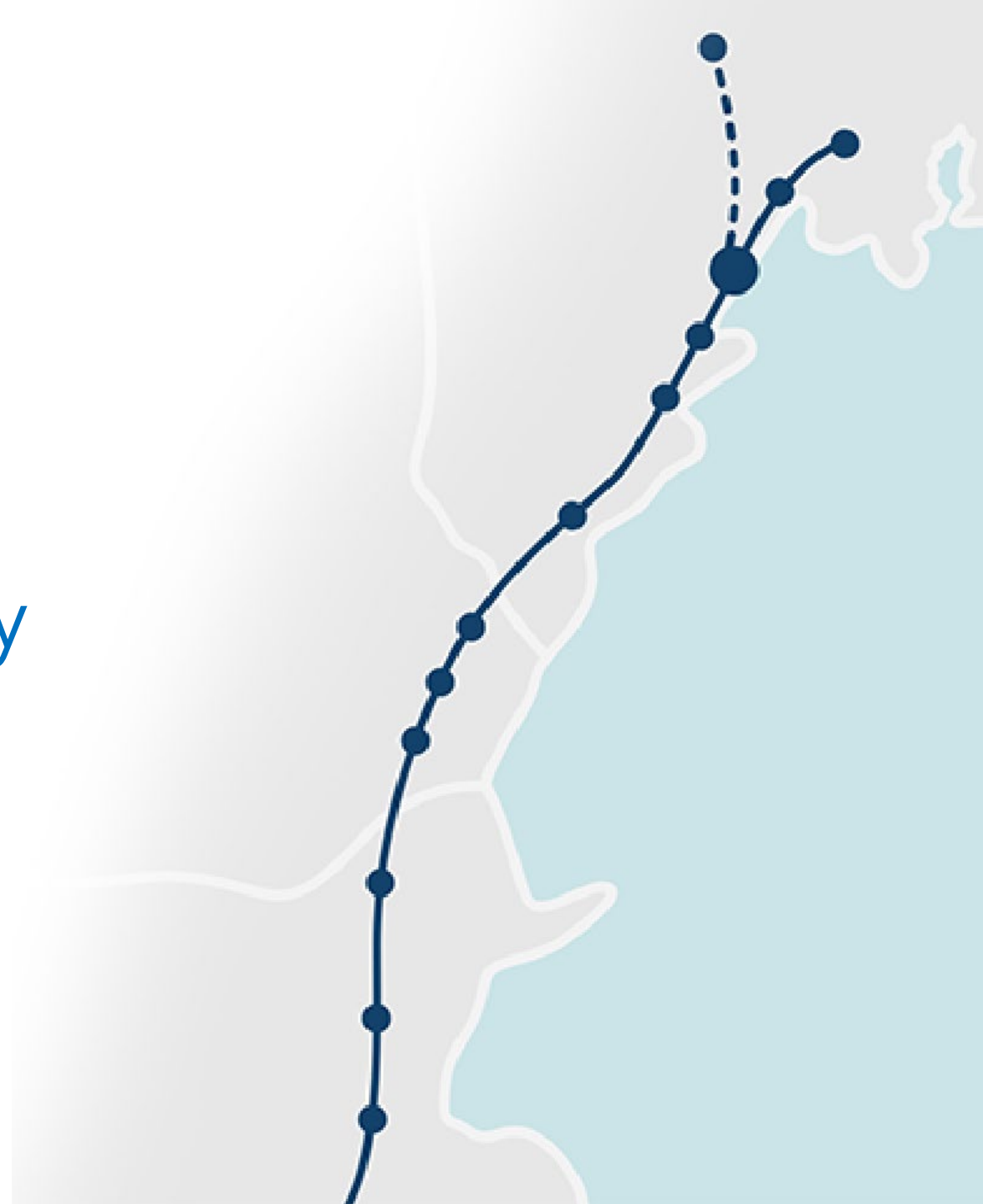


Summary - Options Evaluated

- Alignments evaluated included the following station stops:
 - Option 1: Lewiston/Auburn, Park & Ride, Portland
 - Option 2: Lewiston/Auburn, Park & Ride, Pineland 1A, Portland
 - Option 3: Lewiston/Auburn, Park & Ride, Yarmouth Junction, Portland
 - Option 4: Lewiston/Auburn, Park & Ride, Pineland 1B, Yarmouth Junction, Portland
- Key Takeaway
 - Development potential ranges around stations
 - Option 4 had the highest potential for development:
 - Other Retail - 7,510 SF
 - Service - 17,700 SF
 - Office - 630 SF
 - Restaurant - 11,820 SF



Commuter Bus Service Study



Commuter Bus Service Study Overview

- The 2019 Lewiston-Auburn Passenger Rail Service Plan states that bus service could be considered as a standalone alternative or interim service during construction.
- A bus service plan has been developed to identify:



Three potential commuter bus service route alternatives connecting Lewiston-Auburn to Portland



Estimated operating costs for each bus alternative



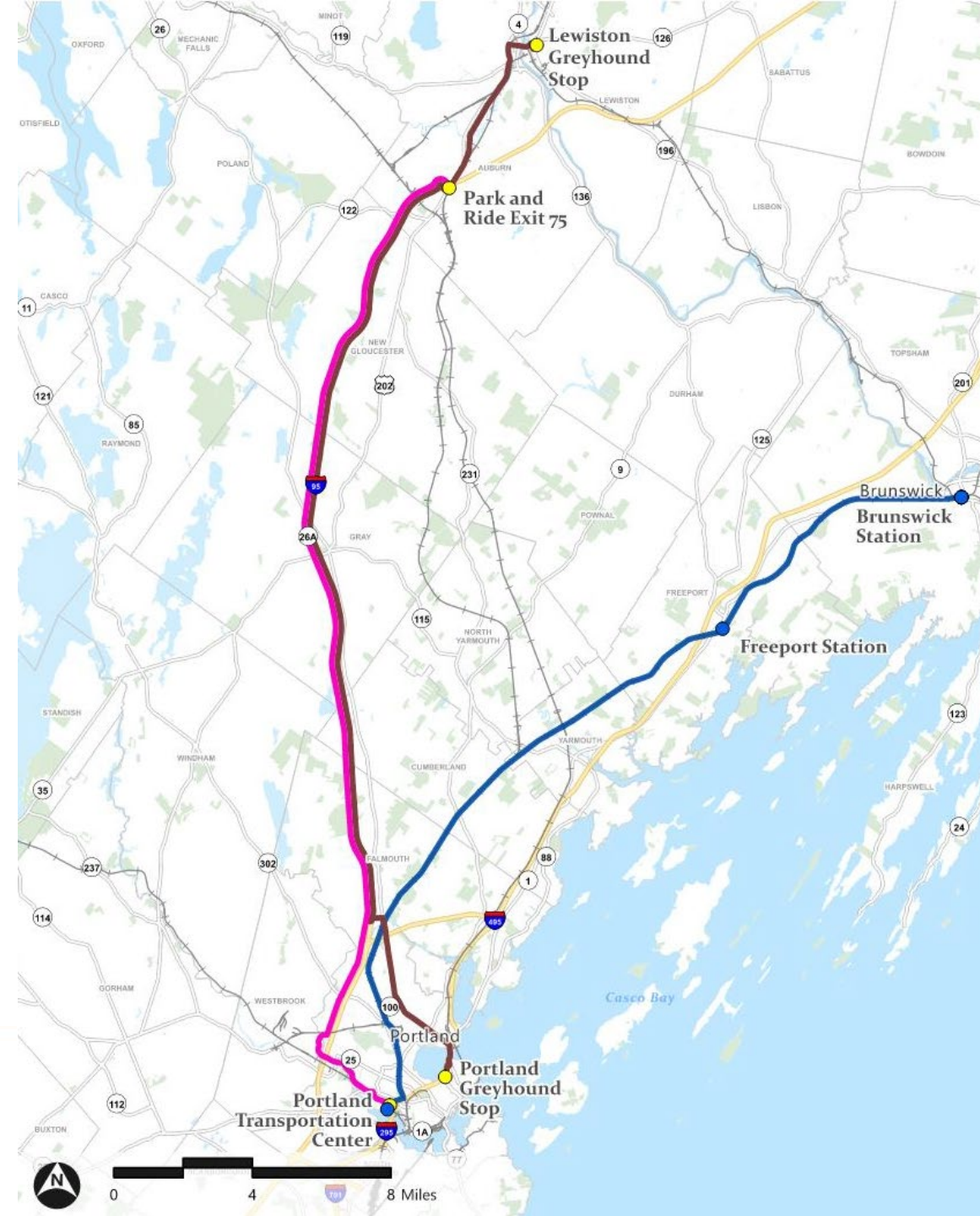
Performance metrics for each bus alternative

Existing Bus Service

- Two existing intercity bus services from Lewiston-Auburn to Portland:
 - Concord Coach Line (Pink)
 - Service starts in Auburn at the Exit 75 Park and Ride and ends in Portland at the Portland Transportation Center
 - Ticket prices average \$11 one way
 - 3 trips per day
 - Greyhound Bus (Brown)
 - Service connects from Lewiston at the Lewiston Greyhound Stop to Portland at the Greyhound Stop
 - Ticket prices range from \$15 to \$20 one way
 - 1 trip per day



Source: MEGIS



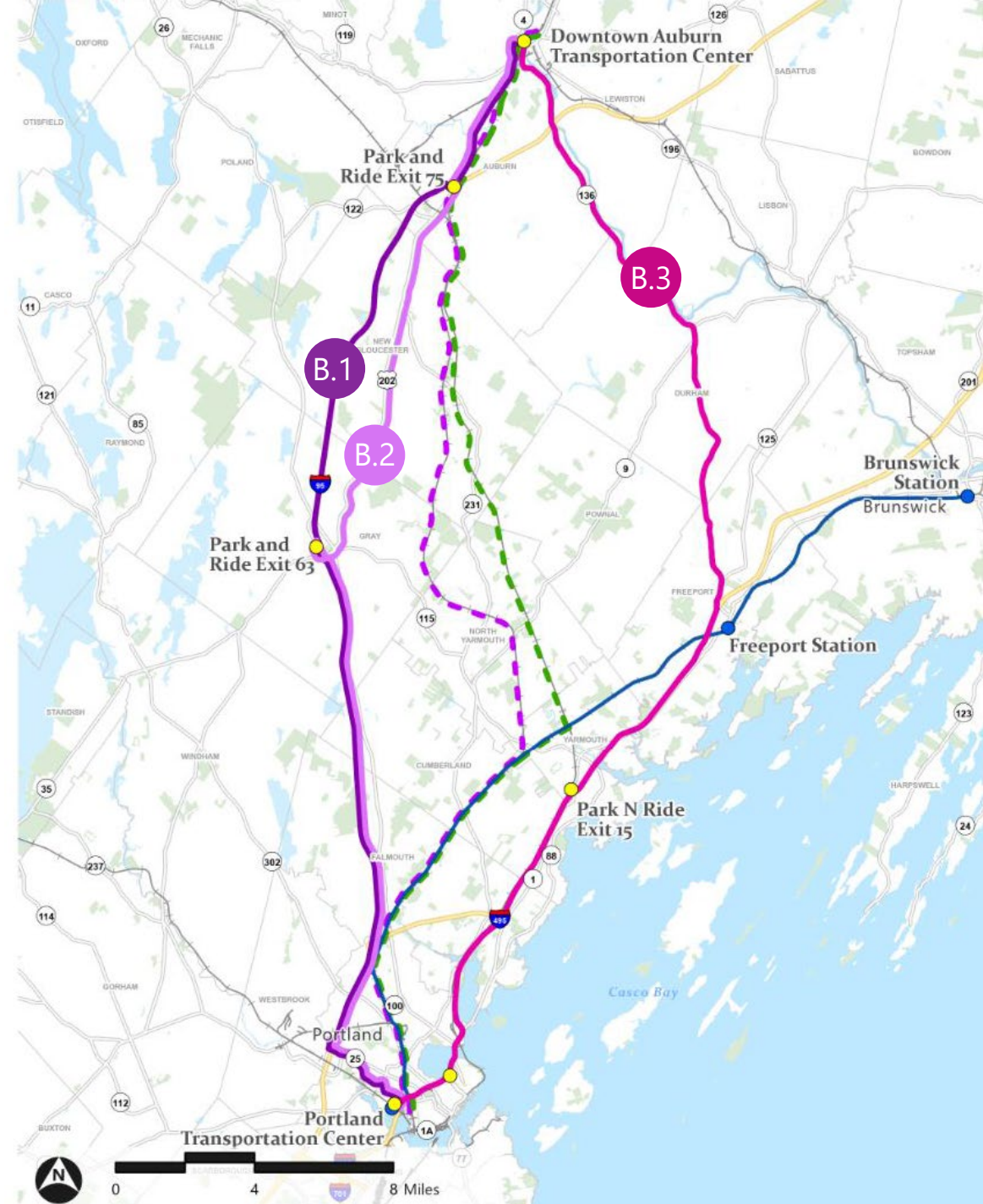
Bus Alternatives

All routes start at the Downtown Auburn Transportation Center and end at the Portland Transportation Center

- B.1** Route B.1 (Purple)
 - Follows I-95
- B.2** Route B.2 (Light Pink)
 - Follows SR 202 then I-95
- B.3** Route B.3 (Dark Pink)
 - Follows SR 136 to I-295














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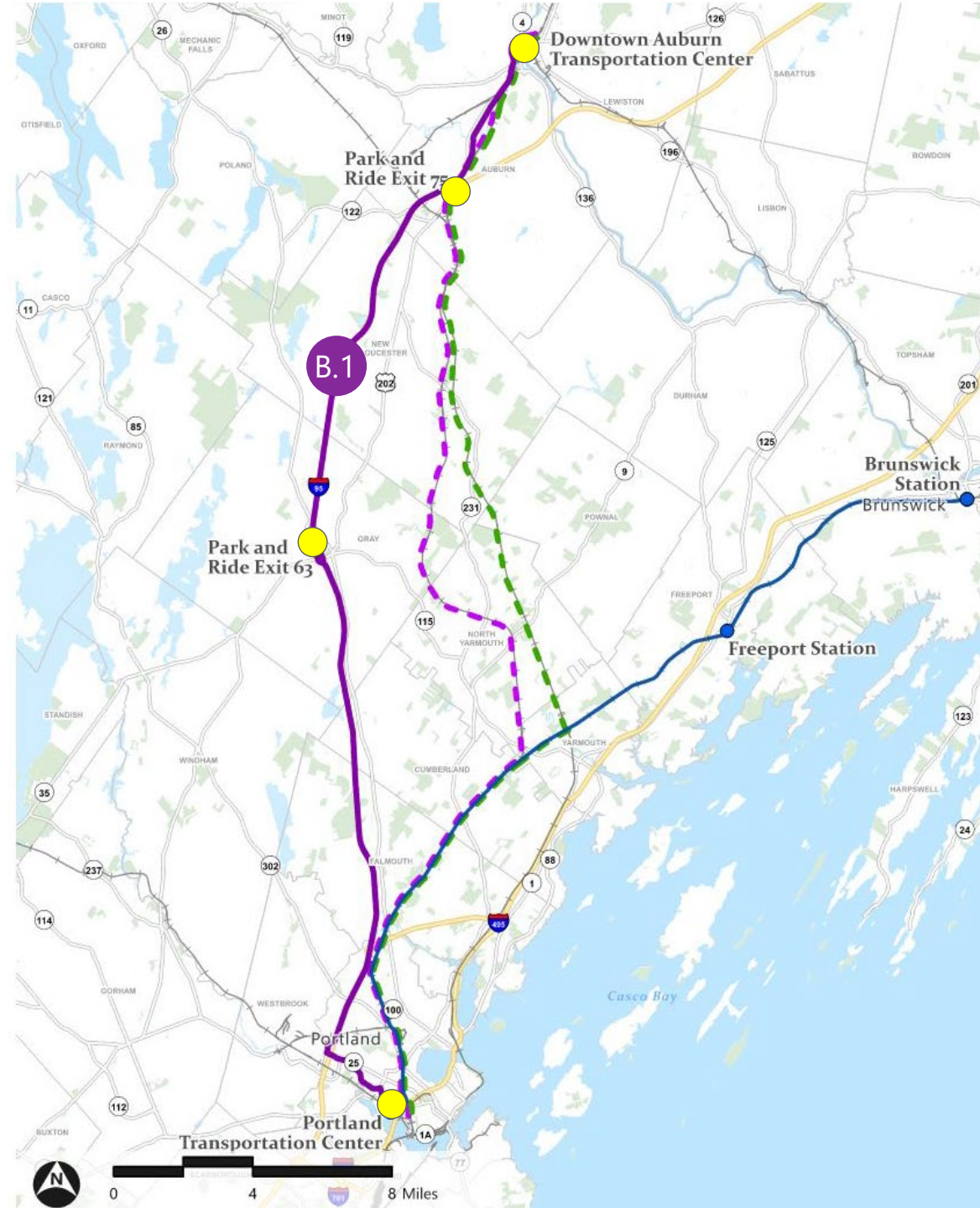


Route B.1

- 74 miles roundtrip
- 1 hour trip (2 hours roundtrip)
- Potential Stops:
 1. Downtown Auburn Transportation Center
 2. Exit 75 Park and Ride
 3. Exit 63 Park and Ride
 4. Portland Transportation Center

Service Level	Operating Expense (low to high)
4 round trips	\$310,000 - \$400,000
12 round trips	\$925,000 - \$1,200,000
20 round trips	\$1,540,000 - \$1,990,000





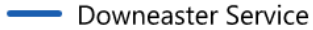






 Potential Bus Stop Location	 Downeaster Station	 Conservation Lands
 Route B.1	 Downeaster Service	 Town Boundaries
 Rail Alternative 1B	 Railroad	 NHD Waterbody
 Rail Alternative 1A	 Interstate Route	

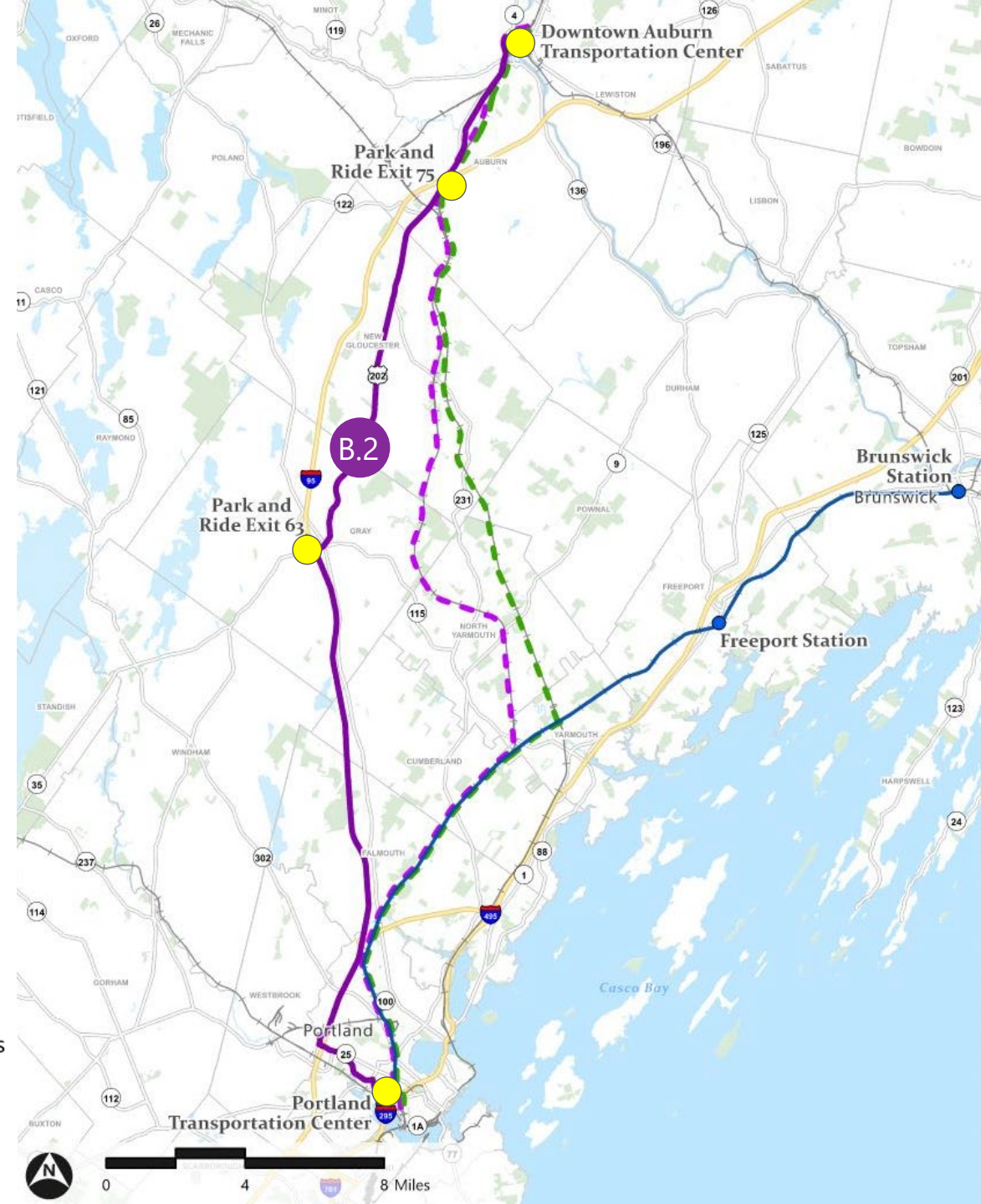


Route B.2

- 72 miles roundtrip
- 1 hour 10 min. trip (2 hours 15 min. roundtrip)
- Potential Stops:
 1. Downtown Auburn Transportation Center
 2. Exit 75 Park and Ride
 3. Exit 63 Park and Ride
 4. Portland Transportation Center

Service Level	Operating Expense (low to high)
4 round trips	\$335,000-\$390,000
12 round trips	\$1,000,000-\$1,175,000
20 round trips	\$1,670,000-\$1,955,000




 Potential Bus Stop Location	 Downeaster Station	 Conservation Lands
 Route B.2	 Downeaster Service	 Town Boundaries
 Rail Alternative 1B	 Railroad	 NHD Waterbody
 Rail Alternative 1A	 Interstate Route	

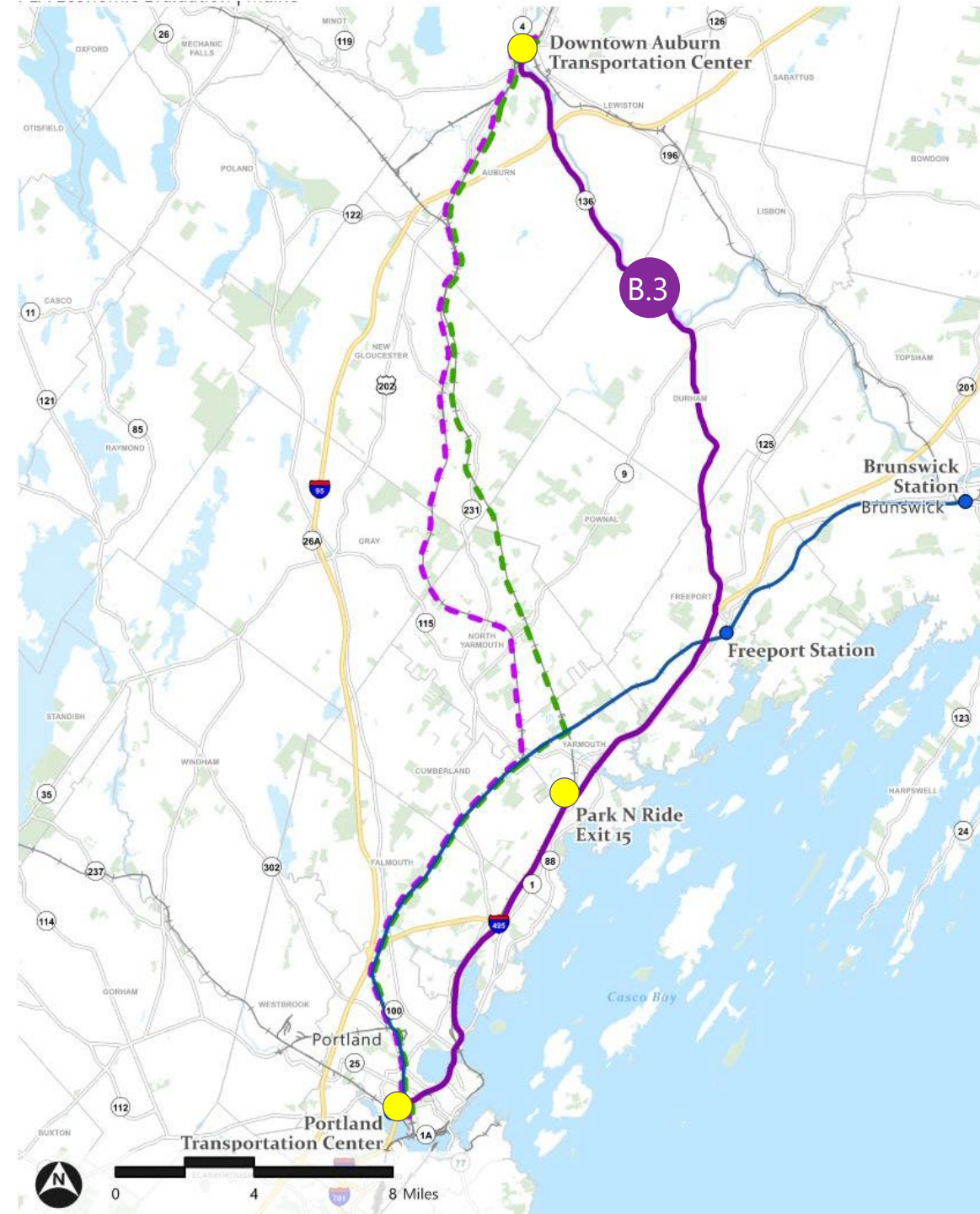


Route B.3

- 75 miles roundtrip
- 55 min. trip (1 hour 45 min. roundtrip)
- Potential Stops:
 1. Downtown Auburn Transportation Center
 2. Exit 15 Park and Ride
 3. Portland Transportation Center

Service Level	Operating Expense (low to high)
4 round trips	\$285,000-\$405,000
12 round trips	\$850,000-\$1,220,000
20 round trips	\$1,415,000-\$2,035,000

 Potential Bus Stop Location	 Downeaster Station	 Conservation Lands
 Route B.3	 Downeaster Service	 Town Boundaries
 Rail Alternative 1B	 Railroad	 NHD Waterbody
 Rail Alternative 1A	 Interstate Route	



Mobility Metrics

Evaluation Criteria	Route B.1	Route B.2	Route B.3
1.1: Estimated end-to-end travel time from Lewiston to Portland	1 hour	1 hour 10 min.	55 min.
1.2: Number of transfers required for end-to-end trips (Portland to Lewiston-Auburn)	None		
1.3: Peak headway (time between successive transit vehicles)	30 minutes		
1.4: Off-peak headway	120 minutes	132 minutes	108 minutes
1.5: Estimated reliability	Moderate		
1.6: Ridership potential*	Lower ridership potential than rail		
1.7: Transfer location to connect to the Downeaster to continue to Boston	Transfer can be completed at the Portland Transportation Center		

*Commuter rail service ridership is estimated to be between 600-800 daily riders. Ridership potential for Commuter Bus is likely lower than 600 daily riders today due to differences in mode choice and limited transit-oriented development.

Legend:

High Ranking

Medium Ranking

Low Ranking

Environmental Metrics

Evaluation Criteria	All Routes - B.1, B.2, B.3
2.1: Potential for increased air emissions	Negligible potential impacts
2.2: Potential impact to impaired water bodies	No anticipated impacts
2.3: Potential impact to non-impaired water bodies	Potential impact to less than 5 water bodies
2.4: Potential environmental justice impact	No anticipated impacts
2.5: Anticipated consultation and permitting effort	NEPA and Section 106 review is required if federal funding is used

Legend:

High Ranking
Medium Ranking
Low Ranking

Cost Metrics

Evaluation Criteria	Route B.1	Route B.2	Route B.3
3.1: Construction Cost	None		
3.2: Vehicle Cost (assuming 4 vehicles)	(\$1,415,000 - \$1,800,000)		
3.3: Operations and Maintenance Cost (O&M) (assuming 12 roundtrips)	\$925,000- \$1,200,000	\$1,000,000- \$1,175,000	\$850,000- \$1,220,000

Legend:

High Ranking
Medium Ranking
Low Ranking

Implementation Timeframe Metrics

Evaluation Criteria	All Routes - B.1, B.2, B.3
4.1: Ability to implement, relative to other alternatives	Could open faster relative to other modes

Legend:

- High Ranking
- Medium Ranking
- Low Ranking

Key Takeaways

In comparison to each other, metrics of all three bus route alternatives **do not differ significantly**.

In comparison to rail, bus service **differs significantly**:



Considerably lower capital and operation costs



A much shorter implementation timeframe



Potentially less reliable travel times due to traffic

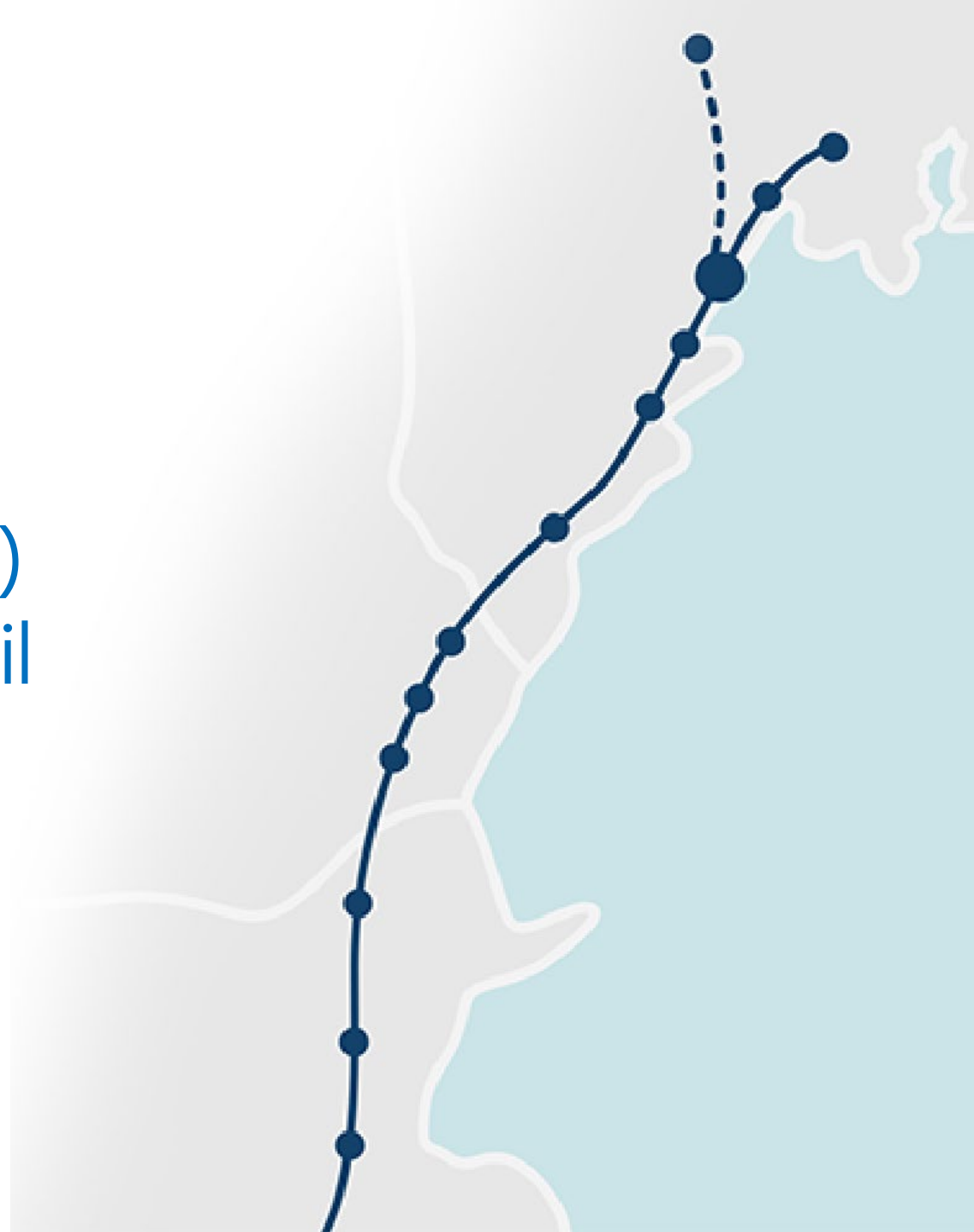


Competing private bus services exist, depending on schedule and ticket prices



Lower passenger capacity than commuter rail

Capital Investment Grant (CIG) Assessment for Commuter Rail



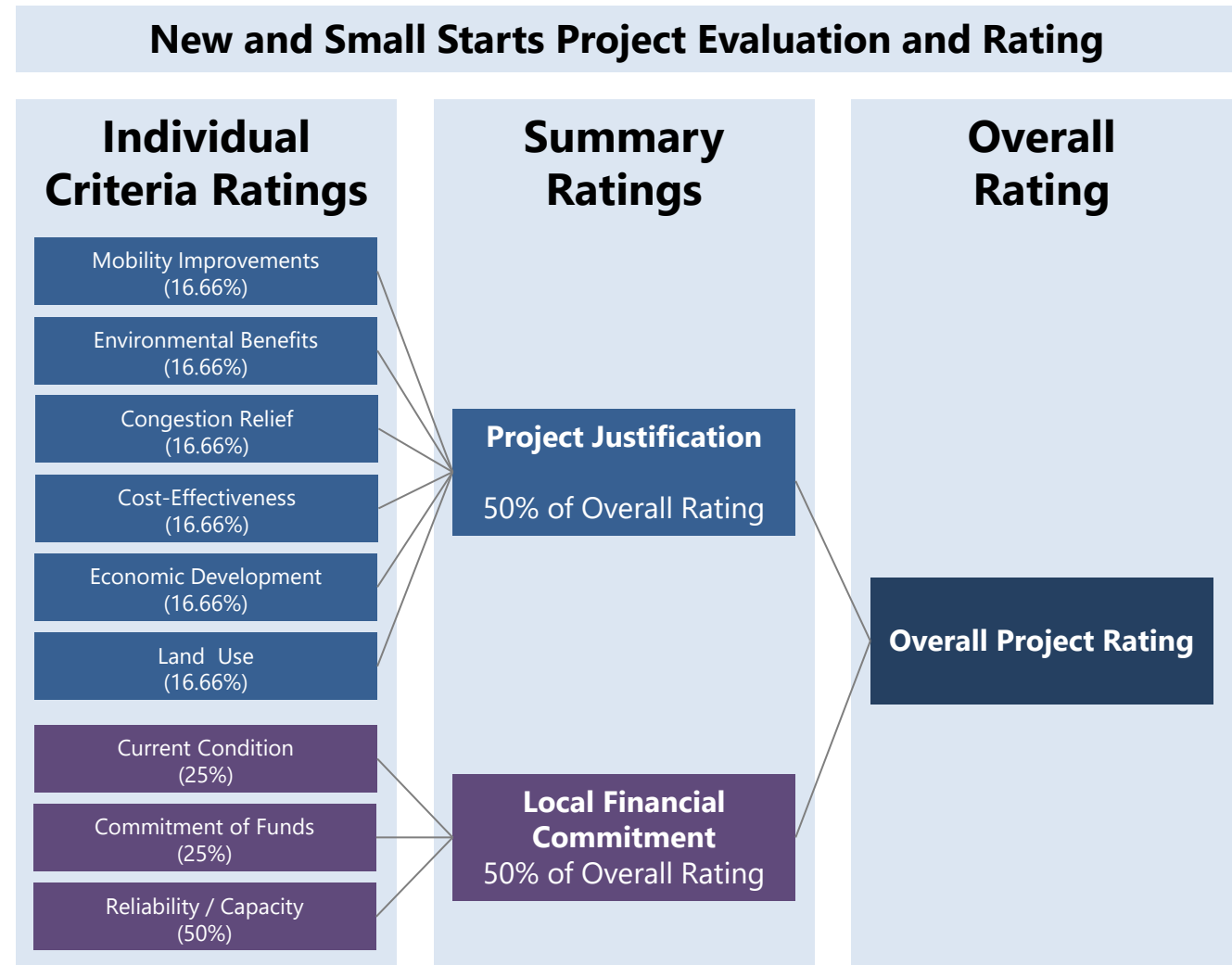
Capital Investment Grant (CIG) Overview

- Capital Investment Grant (CIG)
 - A discretionary and competitive federal grant program
 - Projects are categorized as a New Start or Small Start (based on capital cost greater or less than \$300 million)
- Preliminary CIG ratings estimate developed for Lewiston-Auburn Rail Project
 - Evaluate competitiveness of the Project to qualify for CIG funding
 - Identify additional data needs
 - Highlight opportunities to improve CIG criteria ratings and competitiveness of the Project



CIG Criteria Rating Process

- Project evaluation is a summary of:
 - Project Justification (50%)
 - Local Financial Commitment (50%)
- Summary ratings must be at least a **medium** for the Project to be considered



Project Justification - *Mobility*

- Mobility is the total number of linked trips
- Transit dependent trips are weighted double
- Transit dependent data was unavailable, this assessment weighed each rider equally



Table 1. Mobility Breakpoints

Rating	Mobility Improvements: Estimated Annual Trips (Trips by Non-Transit Dependent Persons plus Trips by Transit Dependent Persons multiplied by 2)
High	>= 30 Million
Medium-High	15 Million – 29.9 Million
Medium	5 Million – 14.9 Million
Medium-Low	2.5 Million – 4.9 Million
Low	<2.5 Million

*Ridership is estimated to be 480,000 annual trips

Project Justification - *Cost Effectiveness*

- Based on the cost per trip
- Annualized Capital Cost is calculated using an FTA worksheet
- Based on cost per trip 1A (\$78.30) and 1B (\$83.14). Assumed a 4.46% annualization factor for Capital Cost 1A (\$360,000,000) and Capital Cost 1B (\$390,000,000)



Table 2. Cost Effectiveness Breakpoints

Rating	Range
High	<\$4.00
Medium-High	Between \$4.00 and \$5.99
Medium	Between \$6.00 and \$9.99
Medium-Low	Between \$10.00 and \$14.99
Low	>\$15.00



Note: Capital and O&M Costs have been inflated for 2022

Project Justification - *Congestion Relief*

- Congestion Relief is the number of new weekday linked trips
- FTA assigns all projects an automatic Medium rating



Table 3. Congestion Relief Breakpoints

Rating	New Weekday Linked Transit Trips
High	18,000 and above
Medium-High	10,00 to 17,999
Medium	2,500 to 9,999
Medium-Low	500 to 2,499
Low	0 to 49



Project Justification - *Environmental Benefits*

- Based on the dollar value of benefits to human health, safety, energy, and air quality
- Conversion rates are provided by FTA



Table 4. Environmental Benefits Breakpoints

Rating	Range
High	> 10%
Medium-High	5 to 10%
Medium	0 to 5%
Low-Medium	0 to -10%
Low	< -10%



Project Justification - *Land Use*

- Analyzes existing corridor conditions
 - Necessary data is currently unavailable*
- Measured through:
 - Station area population density
 - Total employment served by the project
 - Proportion of affordable housing 1/2 mile around station



*Metric is assumed low because the rail corridor travels through an area with low population density and necessary data to compute is unavailable

Table 5. Affordable Housing Breakpoints

Rating	Proportion of legally binding affordability restricted housing in the project corridor compared to the proportion in the counties through which the project travels
High	>= 2.50
Medium-High	2.25 – 2.49
Medium	1.50 – 2.24
Medium-Low	1.10 – 1.49
Low	<1.10



Table 6. Land Use Breakpoints

Rating	Station Area Development		Parking Supply	
	Employment served by system	Avg. Population density (persons/sq. mi.)	CBD typical cost per day	CBD spaces per employee
High	> 220,000	>15,000	>\$16	<0.2
Medium-High	140,000 – 219,999	9,600 – 15,000	\$12 - \$16	0.2 – 0.3
Medium	70,000 – 139,999	5,760 – 9,599	\$8 - \$12	0.3 – 0.4
Medium-Low	40,000 – 69,999	2,561 – 5,759	\$4 - \$8	0.4 – 0.5
Low	<40,000	<2,560	<\$4	>0.5



Project Justification - *Economic Development*

- Measures likelihood that the project induces transit-supportive development
- Uses transit supportive plans and policies
 - 2022 *Lewiston Auburn Study for Economic Evaluation Study* discusses high-level potential economic development that may result in Medium-Low, or Medium score if fully realized
 - Assumed a Low score for this evaluation because there are no development commitments or land use plans



Wilmington, MA



Littleton, MA

Local Financial Commitment

- 50% min. local financial commitment required
- Rating based on 3 criteria categories
- Additional considerations:
 - Whether it qualifies for simplified financial evaluation
 - Estimated CIG funding request
 - Project development estimated cost
 - CIG and Federal shares of capital cost
- Project currently has no local financial commitment

- Project Costs (Source: 2019 Study)
 - Capital Costs: Alignment 1A: \$360,000,00, Alignment 1B: \$390,000,000
 - Operating Costs: Alignment 1A: \$21,000,000, Alignment 1B: \$22,000,000

Table 7. Local Financial Commitment Rating Criteria

Criteria Category	Weighted
Current Condition (Capital and Operating)	25%
Commitment of Funds (Capital and Operating)	25%
Reasonableness of Assumptions and Financial Capacity (Capital and Operating)	50%

Key Takeaways

Lewiston-Auburn Project is **currently not eligible** for CIG funding due to:

- No *Local Financial Commitment*
- Low *Project Justification* ratings

Opportunities to enhance CIG funding competitiveness:

- Improve *Project Justification* categories where it is feasible: mobility improvements, land use
- Keep Project within the *Small Start* category for timeline flexibility



Next Steps



What comes next for the Lewiston-Auburn project?

- As part of this study:
 - Publish draft reports for public commenting:
 - Economic Evaluation Study - summarizing potential economic benefits, impacts for rail Alternatives 1A/1B
 - Bus Alternatives Analysis Memo
 - Capital Investment Grant (CIG) Rating Assessment Memo
 - Purpose & Need Memo
- For the Lewiston-Auburn Passenger Rail Study Overall:
 - Provide findings to the Maine legislature

Portland – Lewiston- Auburn

Economic Evaluation Study

Public Meeting #2

How to provide comments:

<https://www.maine.gov/mdot/ofps/larailplan/contact/>

Nate Howard

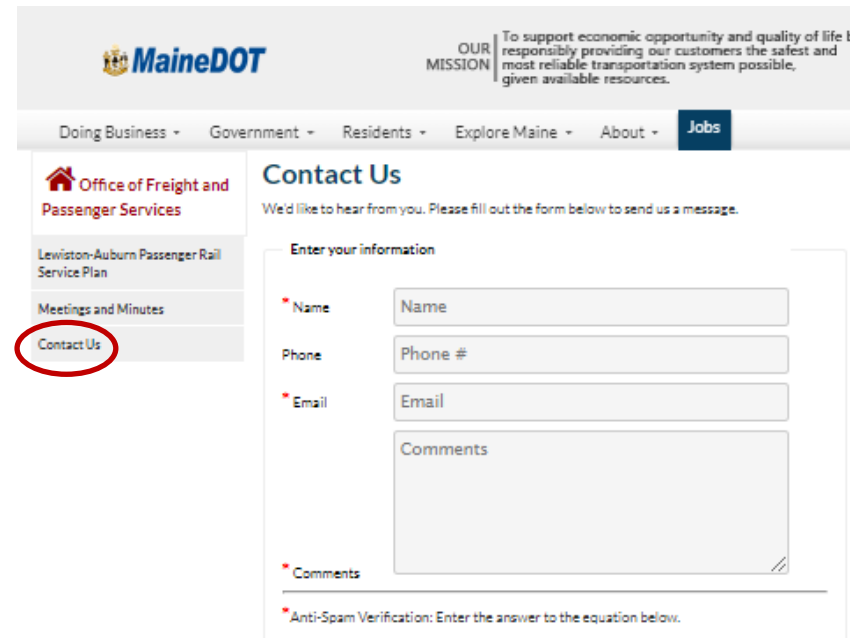
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Lewiston-Auburn Passenger Rail Service Plan

Meetings and Minutes

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Enter your information

* Name

Phone

* Email

Comments

* Comments

* Anti-Spam Verification: Enter the answer to the equation below.

