

Portland –  
Lewiston-Auburn

Commuter Bus  
Service Study

Capital Investment  
Grant Rating  
Assessment



# Agenda

**This presentation covers two distinct tasks completed for Lewiston Auburn.**

## Commuter Bus Service

- Overview
- Existing Conditions
- Bus Connection Alternatives
- Performance Metrics
- Key Takeaways

## Capital Investment Grant (CIG)

- Overview
- CIG Criteria Rating Process
- Project Justification
- Local Financial Commitment
- Key Takeaways

# Commuter Bus Service Study

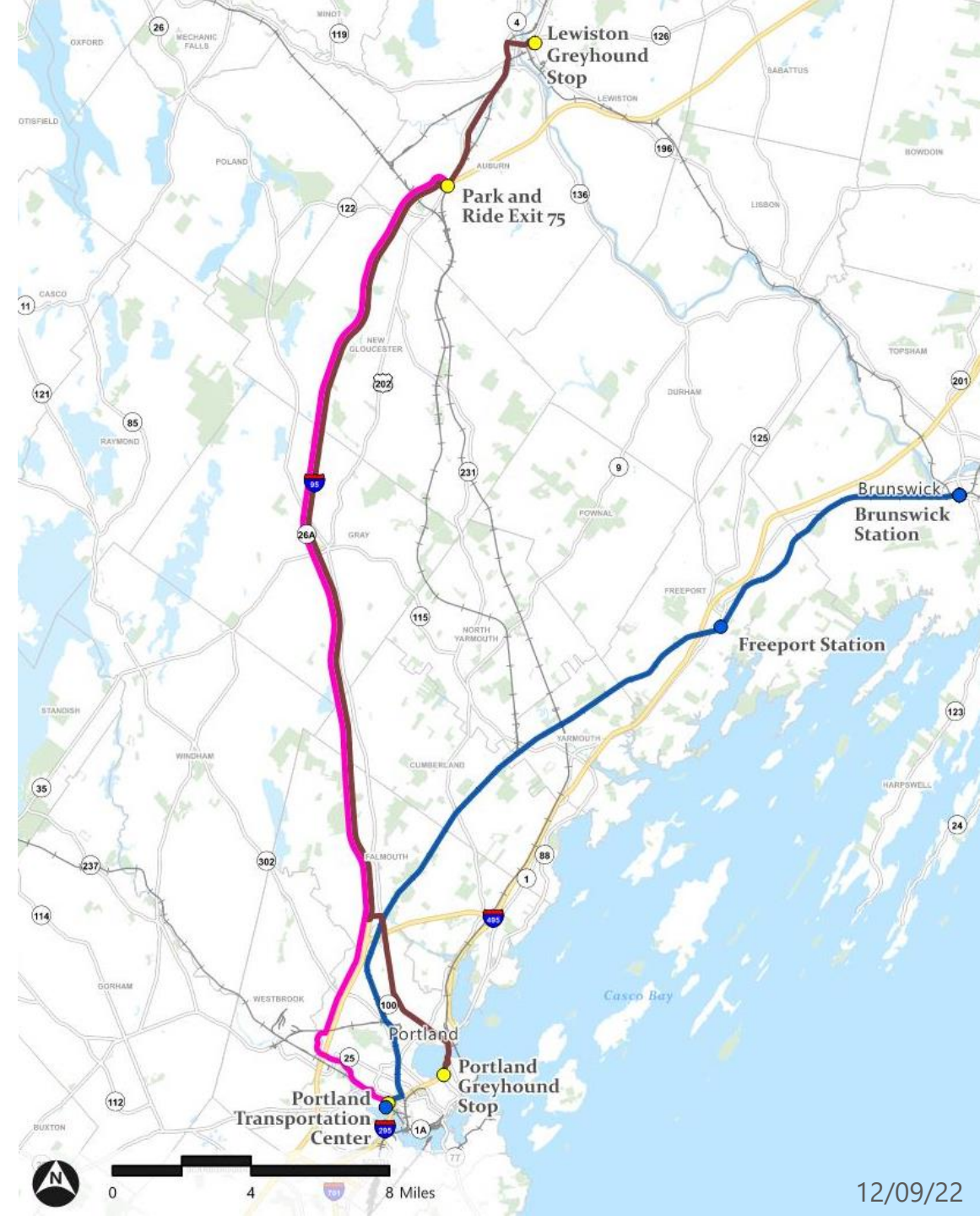
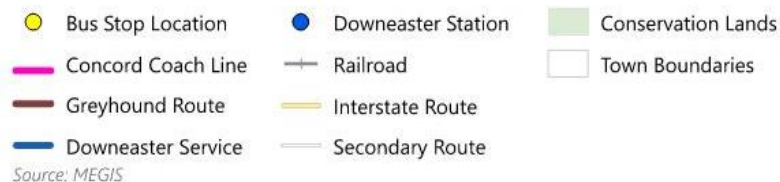


# Commuter Bus Service Study Overview

- The 2019 Lewiston-Auburn Passenger Rail Service Plan states that bus service could be considered as a standalone alignment operating on a highway or interstate
- A bus service plan has been developed to identify:
  - Three potential commuter bus service routes serving Lewiston-Auburn to Portland
  - Estimated operational costs for each bus route
  - Performance metrics for each bus route

# Existing Conditions

- Two existing commuter 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
    - 4 trips a day
  - Greyhound Bus (Brown)
    - Service starts in Lewiston at the Lewiston Greyhound Stop and ends at the Portland Greyhound Stop
    - Ticket prices range from \$15 to \$20 one way
    - 2 trips a day



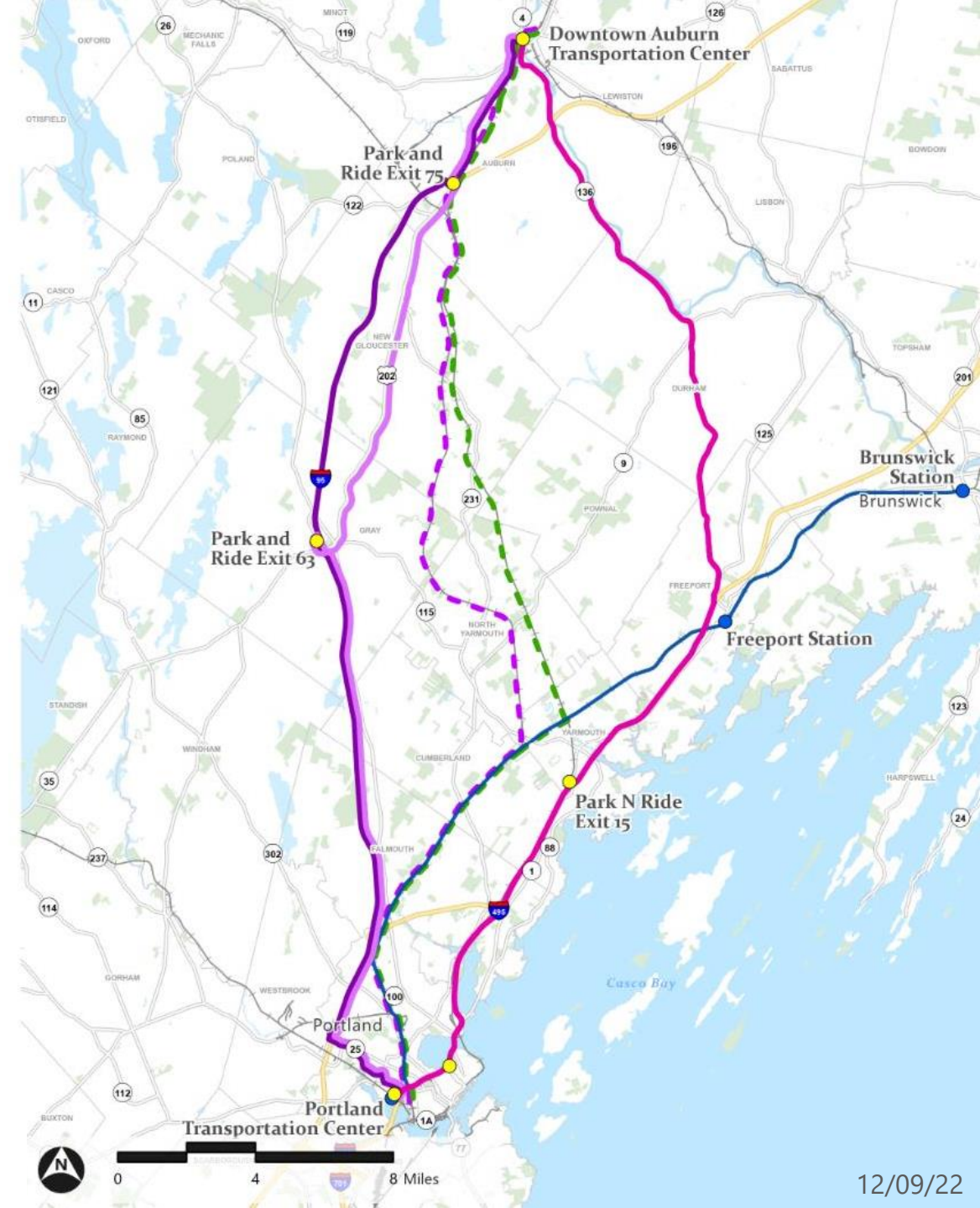
# Bus Alternatives

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

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



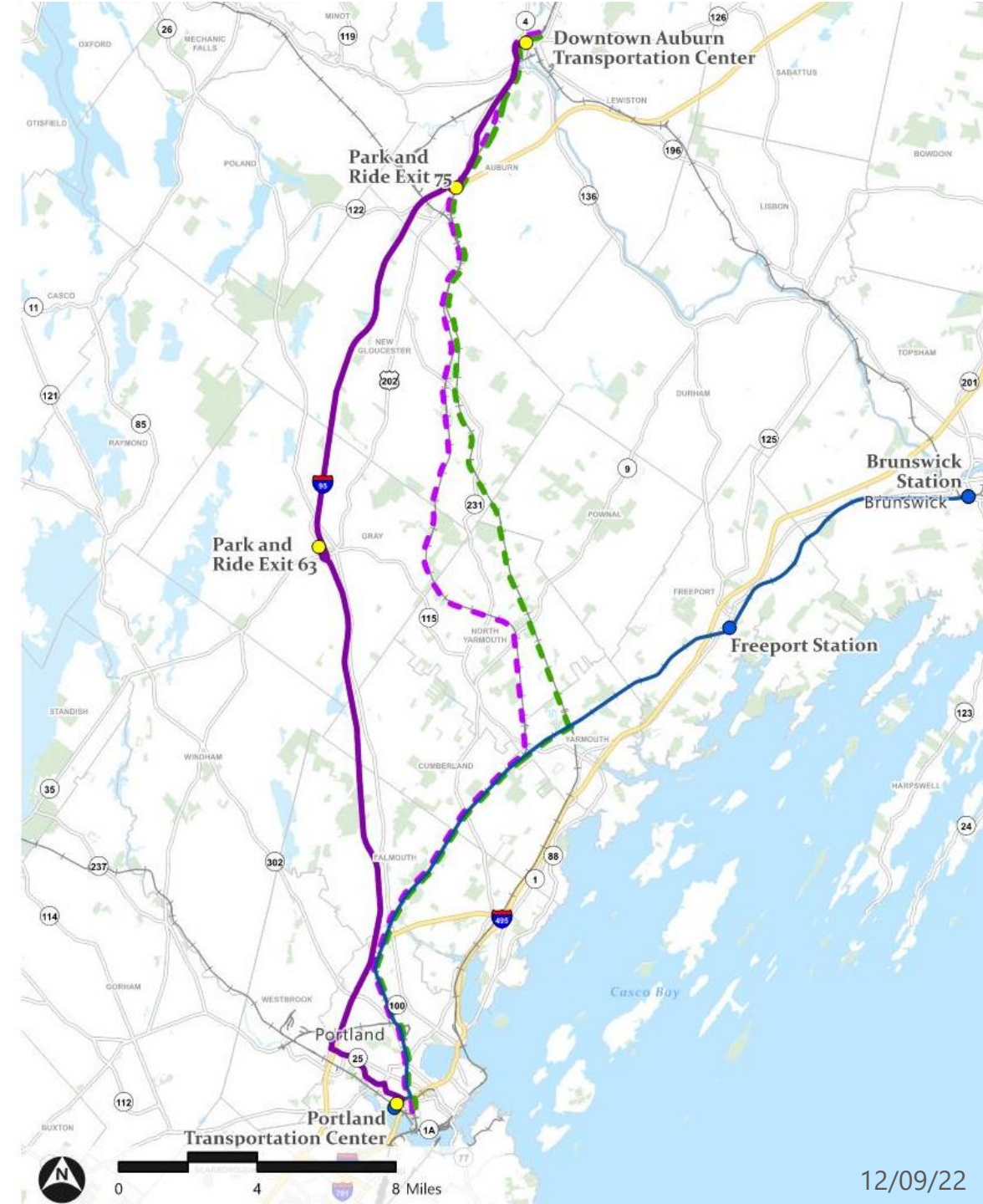
Source: MEGIS



# Route B.1

- Route Miles: 73.6 miles roundtrip
- Potential Stops:
  - Downtown Auburn Transportation Center
  - Exit 75 Park and Ride
  - Exit 63 Park and Ride
  - Portland Transportation Center
- Total Travel Time: 2.0 hours roundtrip

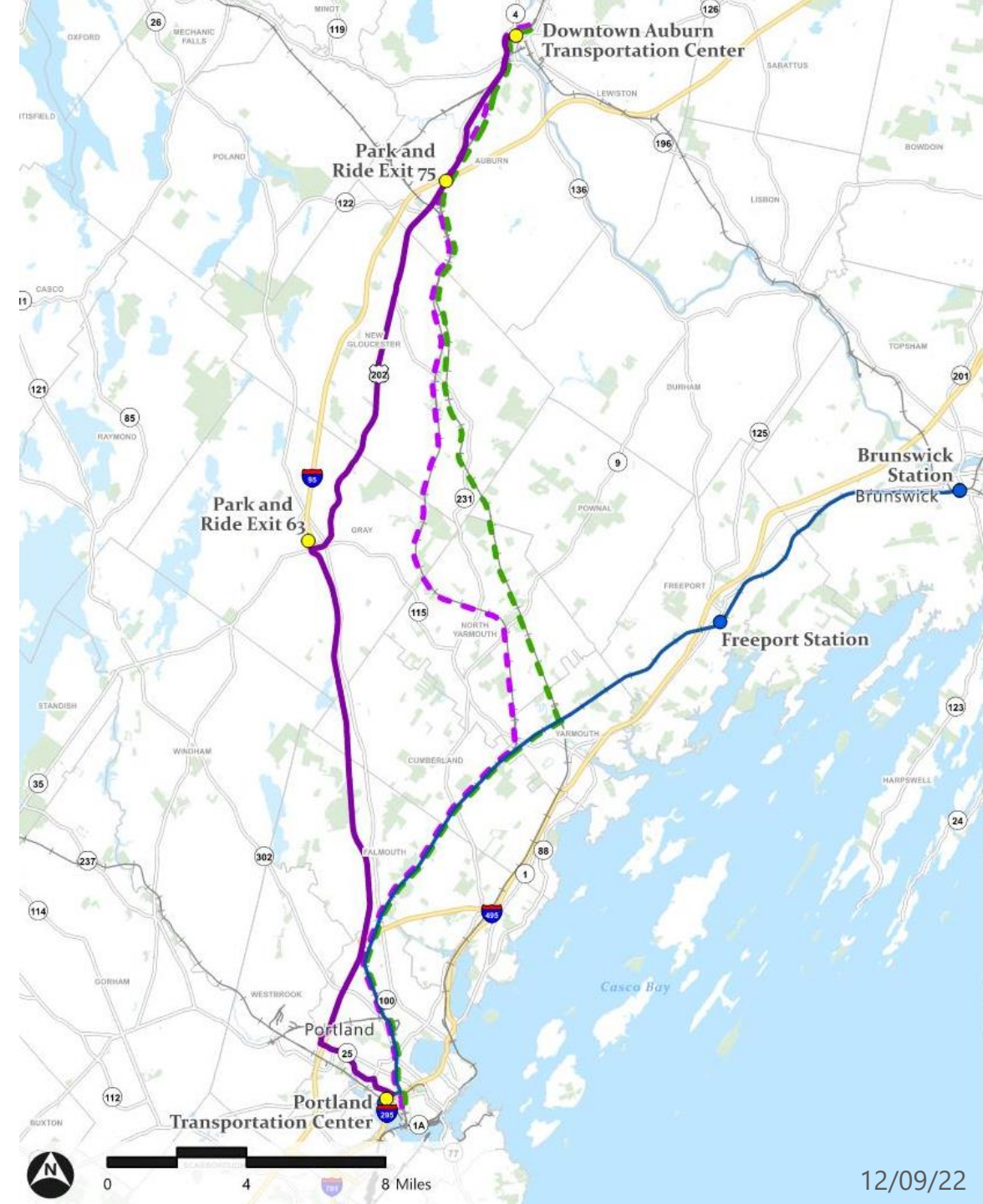
Service Level	Operating Expense (low to high)
4 round trips	\$308,000-\$400,000
12 round trips	\$926,000-\$1,199,000
20 round trips	\$1541,00-\$1,988,000



# Route B.2

- Route Miles: 72.0 miles roundtrip
- Potential Stops:
  - Downtown Auburn Transportation Center
  - Exit 75 Park and Ride
  - Exit 63 Park and Ride
  - Portland Transportation Center
- Total Travel Time: 2.2 hours roundtrip

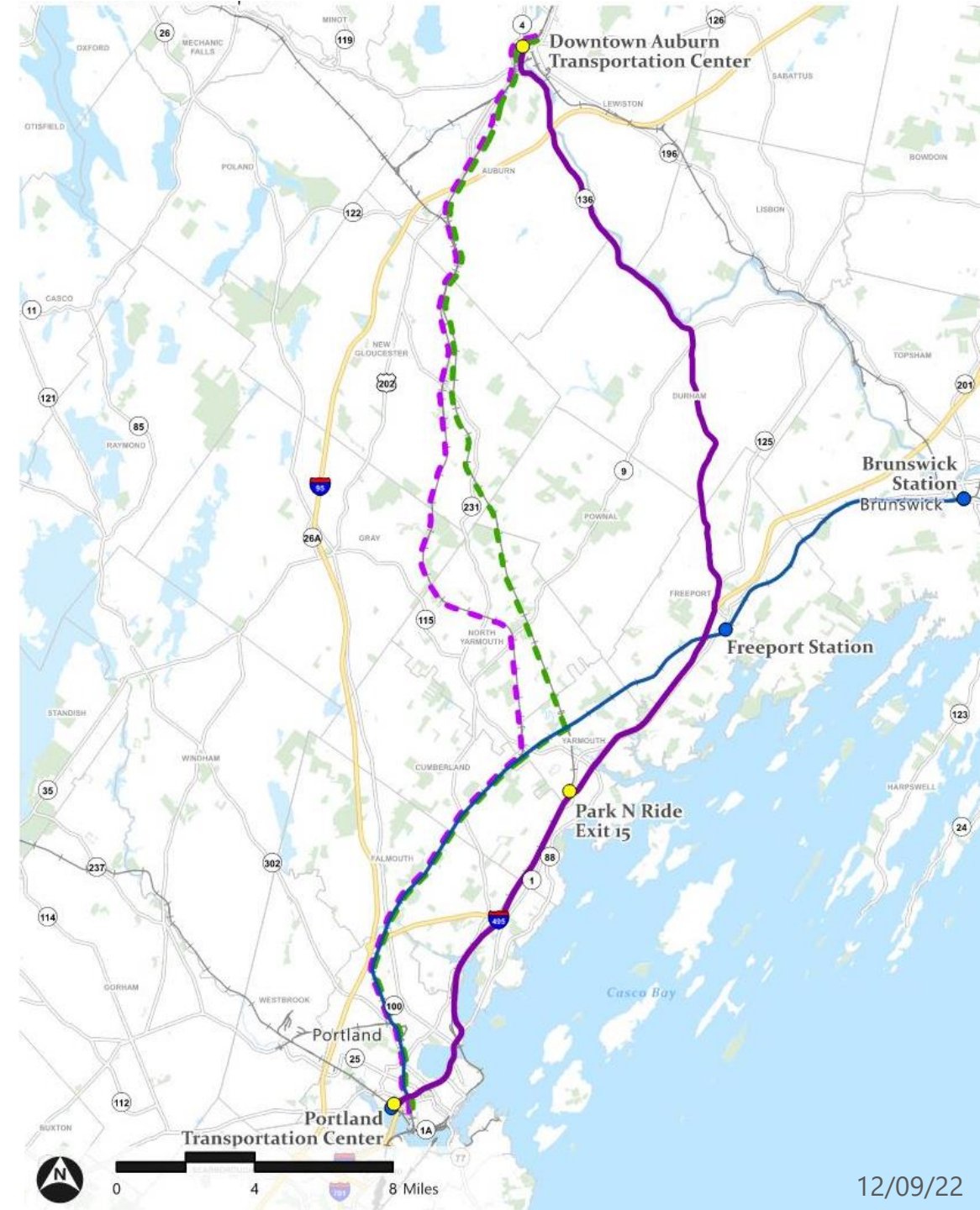
Service Level	Operating Expense (low to high)
4 round trips	\$335,000-\$391,000
12 round trips	\$1,002,000-\$1,173,000
20 round trips	\$1,670,000-\$1,955,000



# Route B.3

- Route Miles: 75.0 miles roundtrip
- Potential Stops:
  - Downtown Auburn Transportation Center
  - Exit 15 Park and Ride
  - Portland Transportation Center
- Total Travel Time: 1.8 hours roundtrip

Service Level	Operating Expense (low to high)
4 round trips	\$283,000-\$407,000
12 round trips	\$848,000-\$1,222,000
20 round trips	\$1,413,000-\$2,036,000



# Mobility Metrics

Evaluation Criteria	Route B.1	Route B.2	Route B.3
<b>Metric 1.1:</b> Estimated end-to-end travel time from Lewiston to Portland	1.0 hour	1.1 hour	0.9 hour
<b>Metric 1.2:</b> Number of transfers required for end-to-end trips (Portland to L-A)	None	None	None
<b>Metric 1.3:</b> Peak frequency (time between successive transit vehicles)	30 minutes	30 minutes	30 minutes
<b>Metric 1.4:</b> Off-peak frequency	120 minutes	132 minutes	108 minutes
<b>Metric 1.5:</b> Estimated reliability	Moderate	Moderate	Moderate
<b>Metric 1.6:</b> Ridership potential*	Lower Ridership Potential than Rail	Lower Ridership Potential than Rail	Lower Ridership Potential than Rail
<b>Metric 1.7:</b> Transfer location to connect to the Downeaster to continue to Boston	Transfer can be completed at the Portland Transportation Center	Transfer can be completed at the Portland Transportation Center	Transfer can be completed at the Portland Transportation Center

Legend:

High Ranking

Medium Ranking

Low Ranking

\*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 potential transit-oriented development.

# Environmental Metrics

Evaluation Criteria	Route B.1	Route B.2	Route B.3
<b>Metric 2.1:</b> Potential for increased air emissions	Negligible potential impacts	Negligible potential impacts	Negligible potential impacts
<b>Metric 2.2:</b> Potential impact to impaired water bodies	No anticipated impacts	No anticipated impacts	No anticipated impacts
<b>Metric 2.3:</b> Potential impact to non-impaired water bodies	Potential impact to less than 5 water bodies	Potential impact to less than 5 water bodies	Potential impact to less than 5 water bodies
<b>Metric 2.4:</b> Potential environmental justice impact	No anticipated impacts	No anticipated impacts	No anticipated impacts
<b>Metric 2.5:</b> Anticipated consultation and permitting effort	NEPA and Section 106 review is required if federal funding is used	NEPA and Section 106 review is required if federal funding is used	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
<b>Metric 3.1:</b> Construction Cost	None	None	None
<b>Metric 3.2:</b> Vehicle Cost (assuming 4 vehicles)	\$346,900	\$346,900	\$346,900
<b>Metric 3.3:</b> Operations and maintenance (O&M) cost (assuming 12 roundtrips)	\$925,000-\$1,199,000	\$1,002,000-\$1,173,000	\$848,000-\$1,222,000

Legend:

High Ranking
Medium Ranking
Low Ranking

# Implementation Timeframe Metrics

Evaluation Criteria	Route B.1	Route B.2	Route B.3
<b>Metric 4.1:</b> Ability to implement relative to other alternatives	Could open faster relative to other modes	Could open faster relative to other modes	Could open faster relative to other modes

Legend:

High Ranking

Medium Ranking

Low Ranking

# Key Takeaways

All three-bus route alternatives metrics **do not** differ significantly.

Commuter bus service has:

- Considerably lower capital and operation costs
- A much shorter implementation timeframe
- Service is potentially less reliable, and there are existing competing private bus services
- Likely a lower ridership potential than Commuter Rail

# Capital Investment Grant (CIG) Assessment for Commuter Rail

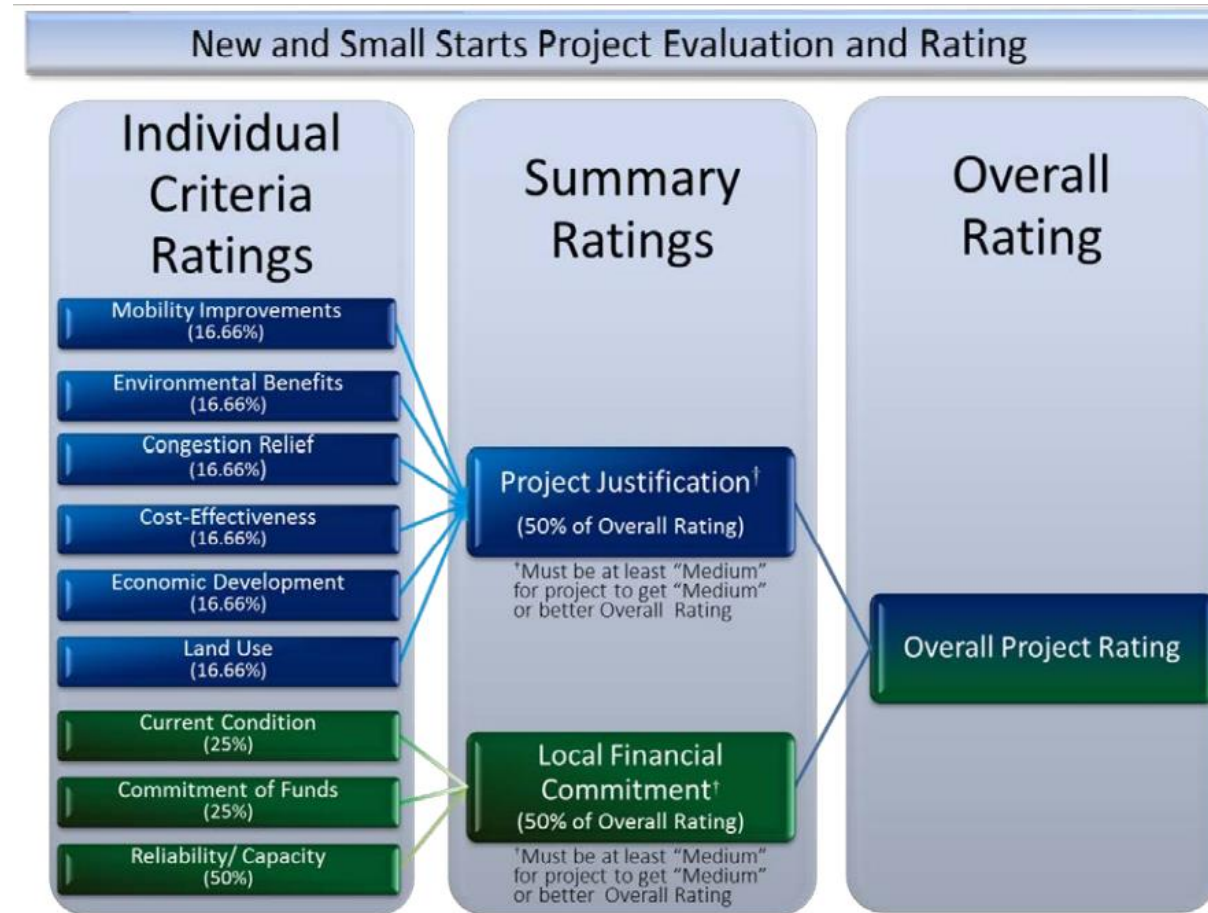


# Capital Investment Grant (CIG) Overview

- Capital Investment Grant (CIG)
  - A discretionary & competitive federal grant program
  - New Start: Capital cost is > \$300 million
  - Small Start: Capital cost is < \$300 million
- Preliminary CIG ratings assessment developed for Lewiston-Auburn 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



# Project Justification - *Cost Effectiveness*

- Based on the cost per trip
- Annualized Capital Cost is calculated using an FTA worksheet
- Data was unavailable to calculate the worksheet, this assessment assumed a 4.46% annualization factor for Capital Cost

**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 ½ mile around station

**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

# 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 has no Local Financial Commitment currently

**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 competitiveness:

- Improve project justification categories where it is feasible – mobility improvements, land use
- Keep Project within the Small Start category for timeline flexibility

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Auburn

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Capital Investment Grant  
Rating Assessment

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