

Lewiston-Auburn to Portland Commuter Bus Implementation Study

prepared for

MaineDOT

prepared by

Cambridge Systematics, Inc.

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date

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Executive Summary

The Lewiston/Auburn and Portland regions comprise the largest urban centers in southern Maine. Both regions have experienced population growth in recent decades, owing to an increase in jobs and tourism, as well as immigrants and refugees (New Mainers) calling these cities their home. In recent years, Portland's cost of living has increased significantly, pushing more of the city's workforce north to Lewiston/Auburn. Despite this demonstrated and growing demand for transportation between the two urban centers, existing intercity public transportation schedules do not match up with typical work schedules and make round-trip travel challenging. The potential for additional intercity transportation between Lewiston/Auburn and Portland has been identified in multiple previous studies.

The Maine Department of Transportation (MaineDOT) has recommended advancing a two-year pilot commuter bus service providing a level of frequency and service to test demand, with a goal of piloting the service beginning in 2024. The primary goal of this service would be to better serve daily round-trip work-style commutes, as well as connections to the Downeaster rail service and intercity bus routes in Portland. This would serve a variety of trip purposes, such as school, medical, and/or leisure.

This study examines and proposes a comprehensive routing, schedule, and implementation for Lewiston/Auburn to Portland intercity commuter bus service. The structuring of this service was guided by stakeholder outreach and a transit propensity analysis, providing both qualitative and quantitative foundations for the findings in this report. The stakeholder outreach included individual meetings with 18 public- and private-sector organizations and a virtual public meeting followed by a public comment period. Utilizing location-based services data from StreetLight to analyze trip volumes, a market analysis was also conducted to establish and identify locations within the two urban centers with the highest projected demand for the intercity bus service (i.e., high "transit propensity").

Based on these inputs, three draft alternatives were proposed for a service between Lewiston/Auburn and Portland:

- A. Service between Portland and Lewiston/Auburn via the Falmouth Spur/Interstate 295, including stops at the Portland Transportation Center, Maine Medical Center, Monument Square, Maine Turnpike—Exit 63 Park and Ride (Gray), Maine Turnpike—Exit 75 Park and Ride, Downtown Auburn Transportation Center, Lewiston—Oak Street Bus Station, and Bates College.
- B. Service between Portland and Lewiston/Auburn via Brighton Avenue and Rock Row/Maine Turnpike Exit 48, including stops at Monument Square, Maine Medical Center, Portland Transportation Center, Rock Row (Market Basket), Maine Turnpike—Exit 63 Park and Ride (Gray), Maine Turnpike—Exit 75 Park and Ride, Downtown Auburn Transportation Center, Lewiston—Oak Street Bus Station, and Bates College.
- C. Service between Portland and Lewiston/Auburn via Interstate 295, including stops at Monument Square, Maine Medical Center, Portland Transportation Center, Downtown Auburn Transportation Center, Lewiston—Oak Street Bus Station, and Bates College.

Once the three alternatives were identified, additional analysis was conducted to examine the routing structure and to assess if any considerations or changes were needed to account for peak-hour travel conditions.

Figure ES.1 Preferred Alternative
Overview



The preferred alternative was a combination of elements from the draft alternatives and utilizes a northern approach into and out of Portland via Auburn Street and Washington Avenue, and making stops at Portland Transportation Center, Monument Square, Maine Turnpike—Exit 75 Park and Ride, Downtown Auburn Transportation Center, Lewiston—Oak Street Bus Station, and Bates College. See Figure ES.1 on the previous page for a map of the preferred route alignment.

Operating costs for this preferred alternative are expected to range from \$1.9 million to \$2.1 million per year in total. A baseline one-way fare in the \$6.00 to \$12.00 range would be in line with peer services around Maine and the rest of New England, and would offset a small portion of operating costs. MaineDOT plans to fund this pilot directly using state funds, while exploring options for permanent funding sources should the pilot prove successful.

Considerations for implementation should include a procurement strategy that contains reasonable terms, provides information for bidders on a route schedule, and specifies service provisions and details related to fare collection, customer service, and performance reporting and monitoring. MaineDOT should clearly define its oversight role in this pilot project, including designating a project manager with an established role and responsibilities.

MaineDOT has a number of next steps to start service in 2024. A Request for Proposals will need to be developed and advertised based on the considerations in this report. MaineDOT will also need to identify internal resources to support and administer the program in addition to a project manager, such as marketing support. Some capital improvements are also needed, such as bus stop signs, and may need to be coordinated with right-of-way owners. The communications/marketing effort will need to take place concurrently to setting up the service, raising awareness about the new bus connection and providing ongoing communication to stakeholders and the public.

1.0 Introduction

The need for a commuter-style connection between the Lewiston/Auburn (L/A) area and the Portland area has been a point of study for several years. MaineDOT is moving forward with the design and implementation of a commuter bus service connecting the two regions, with a goal of piloting the service beginning in 2024. This pilot service will serve as an indicator of the latent demand and potential market for enhanced public transportation between these two regions.

1.1 Previous Studies

MaineDOT, working with the Northern New England Passenger Rail Authority (NNEPRA), has previously studied the development of a rail connection between L/A and Portland. A high-level overview of three recent studies is presented below.

1.1.1 *Lewiston-Auburn Passenger Rail Service Plan—Transit Propensity Report*

Published in August of 2018, the Transit Propensity Analysis estimated potential ridership on a rail link between Lewiston/Auburn and Portland. This study considered demographic trends, public input, employment and population distributions, and population growth trajectories to understand the potential ridership demand for this proposed rail link. The study found that transit-style service could result in up to nearly 2,000 daily trips in 2040, and less-frequent intercity-style service would be just over 300 by that year. Projections are presented in Table 1.1.

Table 1.1 Rail Ridership Propensity

Service	Rail Service Daily Round Trips	2025 Ridership Range Daily Rail Trips		2040 Ridership Range Daily Rail Trips	
		Low	High	Low	High
Transit-Style Service	12–20	600	800	700	1900
Intercity-Style Service	4	210	240	250	330

1.1.2 *Lewiston-Auburn Passenger Rail Service Plan—Operating Plans and Corridor Assessments*

Published in 2019, this report is an operational assessment of potential rail alignments between the Lewiston/Auburn and Portland areas. Five potential alignments were identified as most promising to meet MaineDOT's goals. The assessment considered multiple potential travel modes between the two markets, potential rail alignments, existing conditions of the rail infrastructure, capital and operating costs, and selection of preferred alignments. An example capital cost estimate is provided for one of the alignments in Table 1.2.

Table 1.2 Conceptual Capital Cost Estimate for Alignment 1B**(High-Frequency Service between Lewiston-Auburn and CPF 197
in Portland using SLR to Yarmouth Junction)**

Work Element	Conceptual Cost Estimate
Pan Am FML Segment—Lewiston to Danville Jct.	\$63M to \$77M
SLR Segment 1—Danville Jct. to Yarmouth Jct.	\$87M to \$107M
Pan Am Brunswick Branch—Yarmouth Jct. to Royal Jct.	\$11M to \$14M
Pan Am FML Segment 3—Royal Jct. to CPF 197	\$46M to \$56M
Total Conceptual Cost Estimate	\$207M to \$254M (2019 Dollars)

The study also laid out an implementation plan, including a schedule, environmental review, and public outreach.

1.1.3 Lewiston and Auburn Passenger Rail Economic Evaluation

Completed in January 2023, this report considers the costs and potential benefits from the rail service proposed in the previous two studies. It notes:

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.

A bus connection is given high-level consideration in chapter 4 of the report, with estimated costs of up to \$2 million per year for weekday service only. It is noted that bus service is significantly less expensive than rail service (see Table 1.3). This is largely because bus service utilizes the existing road infrastructure, while rail service would involve track improvements and other large capital investments.

Table 1.3 Comparison of Cost 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	\$0.9M to \$1.2M	\$1 to \$1.2M	\$0.85 to \$1.2M

The report recommends advancing a two-year pilot commuter bus service between Portland and the Lewiston/Auburn area comparable to the level of service envisioned by the recent rail studies.

2.0 Data Inputs

The primary inputs to the development and evaluation of the alternative service scenarios were stakeholder and public outreach and a transit propensity analysis utilizing location-based services data. These inputs are described in further detail within this section.

2.1 Stakeholder and Public Outreach

The project team conducted a series of one-on-one interviews with a variety of public- and private-sector stakeholders to understand various dimensions related to service design. The interview question list can be found in Appendix A. Organizations consulted as a part of this outreach process include:

- Central Maine Medical Center
- Maine Medical Center
- St. Mary's Medical Center
- Portland Downtown
- Portland Resettlement Program
- Catholic Charities of Maine
- Lewiston-Auburn Metropolitan Chamber of Commerce
- Portland Regional Chamber of Commerce
- City of Lewiston
- City of Auburn
- City of Portland
- Greater Portland Transit District (Metro)
- Western Maine Transportation Services
- Androscoggin Valley Council of Governments
- Greater Portland Council of Governments
- Maine Department of Labor
- Maine Turnpike Authority
- University of Southern Maine

Areas of consensus that emerged from the interviews include:

- **Duration:** The one-way trip should take roughly one hour.
- **Local Transit Transfers:** The number of stops in the L/A and Portland regions, and any intermediate stops, should be kept to a minimum. The local transit systems will provide connections to specific locations within the local regions. Potential users are likely to feel comfortable making necessary transfers to local transit.
- **Intercity Transit Transfers:** There was some discussion of the opportunity to provide connections to intercity bus (e.g., Concord Coach Lines) and rail (Downeaster) services for longer-distance trips.
- **Frequency:** Frequencies of one hour or better are needed during peak times.
- **Service Days:** Demand is expected to be relatively even across weekends and weekdays, although desired hours of service and frequencies may vary.

- **Span of Service:** Effectively serving shift work would require the first drop off to be as early as 6:00 AM and the last pick up to be after 10:00 PM.
- **Locations Served:** The focus should be on the L/A and Portland end points, less so on intermediate stops.
- **Ease of Use:** Customer access is critical—language access, clarity of schedule, fare integration.

A potential coastal route via Route 136 through Freeport and along Interstate 295 was noted by some interviewees. Some interviewees supported this option as an opportunity to serve larger population and job centers, while others felt that this would lead to unacceptably long travel times and would compromise the usefulness of the service as a commuter connection. This option is discussed further in Section 3.

Interviewees identified several potential user groups, including workers at industrial employers near Turnpike Exit 75 in Auburn; hospitality workers, including restaurant and hotel employees; medical employees; students; day-trippers; and long-distance travelers accessing services connecting to points south of Portland. However, each user group has distinct origins and destinations that, if they are all served, may result in unacceptably long travel times.

MaineDOT also held a virtual public meeting on this topic on August 1, with the presentation and recording available online after the meeting and a public comment period through August 22. In addition to comments about specific stops, public input largely reflected the general themes heard in the stakeholder outreach.

The comments can be found in Appendix D, and generally focused on the following topics:

- **Communities Served:** Some comments encouraged MaineDOT to focus the service on Lewiston/Auburn and Portland areas, and not serve intermediate communities such as Gray or Falmouth.
- **Alignment:** Two comments noted that use of the Falmouth Spur would add considerable time and may not be as reliable as other route alternatives into the Portland peninsula.
- **Stop Locations:** Several comments encouraged MaineDOT to serve Bates College, and others encouraged MaineDOT to serve the University of Southern Maine Portland and Lewiston-Auburn campuses. Several comments also noted that PTC is owned and operated by Concord Coach, and so would require coordination or negotiation to use.
- **Last-Mile Transportation:** Several comments noted that last-mile options are necessary for a successful service, such as bicycle and pedestrian infrastructure and coordination with local transit schedules.

2.2 Transit Propensity Analysis

Since the 2018 transit propensity study, travel and housing patterns have shifted due to the impacts of the COVID-19 pandemic. To better understand the existing travel market between the Lewiston/Auburn and Portland areas, an updated transit propensity analysis was conducted. The process follows the same general

steps used in the latest [Maine State Transit Plan](#), with analysis at the census Block Group level and considering different times of day including AM peak (defined as 6:00–10:00 AM) and PM peak (defined as 3:00–7:00 PM).

The analysis relies on location-based services data from StreetLight to provide trip volumes. StreetLight data draws on proprietary machine learning algorithms to measure and aggregate travel patterns by geography and time based on location-based services data, primarily from cell phones. The data are anonymized so that no trip information can be linked to an individual person and is aggregated so that only general origins and destinations can be determined. Nonetheless, it provides important insights into actual travel behavior that can be used to estimate potential demand between two areas—in this case, Lewiston/Auburn and the Portland area. This analysis uses trip volumes from a combination of September to October 2021 and March to April 2022.

The trip volumes are combined with weighted demographic data from the American Community Survey (ACS) on factors which affect the likelihood of using transit, including population density, zero vehicle households, low-income households, population with a disability, percent female population, population not “white, non-Hispanic,” and travelers 65 years or older. These combined values create a Transit Propensity Score, which indicates origin-destination pairs that have a higher-than-average likelihood of transit usage. The results are summarized here and described in further detail in Appendix C.

Table 2.1 shows the trips between the Lewiston/Auburn area and the Portland area in the weekday AM peak and PM peak periods, along with the total trips for Block Group pairs that have greater-than-average transit propensity.

Table 2.1 Peak-Period Daily Trips Between Lewiston/Auburn Area and Portland Area

Trip Type	Number of Southbound Trips	Number of Northbound Trips	Number of Higher Transit Propensity Southbound Trips	Number of Higher Propensity Northbound Trips
Weekday AM Peak	1,140 ¹	339 ²	662 ¹	172 ²
Weekday PM Peak	496 ²	1,198 ¹	162 ²	418 ¹
Total AM+PM Peak	1,606	1,537	824	590

- ¹ AM southbound trips from L/A to Portland are linked to PM northbound trips from Portland to L/A (i.e., the return afternoon trips), assuming same-day round trips.
- ² AM northbound trips from Portland to L/A are linked to PM southbound trips from L/A to Portland (i.e., the return afternoon trips), assuming same-day round trips.

There is stronger directional flow toward the Portland region for work commute trips, with about one-third the number of trips going in the reverse direction toward the L/A area. The trips from higher-transit-propensity areas suggest that a commuter bus service, if well designed, easy to use, and appropriately marketed, could capture some existing demand for improved transportation service between these two areas.

3.0 Service Alternatives

Based on findings from the stakeholder outreach, public input, and transit propensity analysis, the project team developed three routing alternatives for intercity bus service between Lewiston/Auburn and Portland. These alternatives consider connections with existing transit services and additional physical factors including feasibility of bus access, driver wait times, and roadway/travel time reliability characteristics. These alternatives include sample timed runs of each route which consider a dwell time of between one and three minutes depending on the stop, as well as available transit connections at each stop. Maps for the three alternatives also include proximity to employment centers as identified through stakeholder outreach and public input, which are numbered on the map sets as follows:

- | | |
|--|---|
| 1. Central Maine Medical Center—Lewiston | 11. Tyson Foods—Portland (North) |
| 2. St. Mary's Regional Medical Center—Lewiston | 12. WEX Inc. / The Roux Institute—Portland |
| 3. Lepage Bakery—Lewiston (Lisbon Street) | 13. Maine Medical Center—Portland |
| 4. Lepage Bakery—Lewiston (Cedar Street) | 14. Tyson Foods—Portland (West End) |
| 5. Boston Brands—Lewiston | 15. Rock Row—Westbrook |
| 6. Panolam Surface Systems—Auburn | 16. Abbot Laboratories—Westbrook |
| 7. Procter & Gamble Tambrands—Auburn | 17. Bates College—Lewiston |
| 8. World Harbors/The Strainrite Companies—Auburn | 18. University of Southern Maine—Portland |
| 9. International Paper—Auburn | 19. Maine Mall—South Portland |
| 10. Paradigm Windows—Portland | 20. Central Maine Community College—Auburn |
| | 21. Southern Maine Community College—South Portland |

The three routing alternatives are described in the following sections.

3.1 Alternative A

The Alternative A route would operate between the Portland Transportation Center in Portland and Bates College in Lewiston, via I-295, the Falmouth Spur, and the Maine Turnpike. Alternative A spans 46 miles and would be traversed in approximately 80 minutes, based on estimates from Google Maps and a timed trial run of the route. The end points consist of locations that may be appropriate for driver breaks (e.g., access to restrooms), though a more thorough vetting of layover points for driver breaks will be undertaken during the implementation phase of this project.

In total, the route consists of eight stops, including three stops in Portland, two in Lewiston, two in Auburn, and one in Gray. A timed run of Alternative A, corresponding to distance along the route, is shown in Table 3.1, while transit connections at each stop are shown in Table 3.2. Figure 3.1 and Figure 3.2 provide a

map of Alternative A, including in relation to key employers identified through stakeholder and public outreach.

Table 3.1 Timed Run of Alternative A

Stop Name	Timed Run	Distance (Miles)
Portland Transportation Center	12:00 PM	–
Maine Medical Center	12:05 PM	1
Monument Square	12:10 PM	2
Maine Turnpike—Exit 63 Park and Ride (Gray)	12:40 PM	25
Maine Turnpike—Exit 75 Park and Ride	12:55 PM	38
Downtown Auburn Transportation Center	1:06 PM	43
Lewiston—Oak Street Bus Station	1:13 PM	44
Bates College	1:20 PM	46

Table 3.2 Alternative A Transit Connections

Stop Name	Transit Connections
Portland Transportation Center	GP METRO Routes: 1, B METRO BREEZ Amtrak Downeaster Concord Coach Lines
Maine Medical Center	GP METRO Routes: 1, 9A, 9B, B METRO BREEZ
Monument Square	GP METRO Routes: 1, 2, 4, 5, 7, 8, 9A, 9B, B METRO BREEZ, H South Portland Bus Service Routes: 21, 24A, 24B Biddeford—Saco—Old Orchard Beach Transit: ZOOM Turnpike Express RTP: Lakes Region Explorer
Interstate 95 Exit 63 Park and Ride (Gray)	Maine Turnpike Authority Park and Ride
Interstate 95 Exit 75 Park and Ride	MaineDOT Park and Ride Concord Coach Lines
Downtown Auburn Transportation Center	Citylink Routes: 4, 5, 7, 9
Lewiston—Oak Street Bus Station	Citylink Routes: 1, 2, 3, 6, 9
Bates College	Concord Coach Lines

Figure 3.1 Alternative A Overview

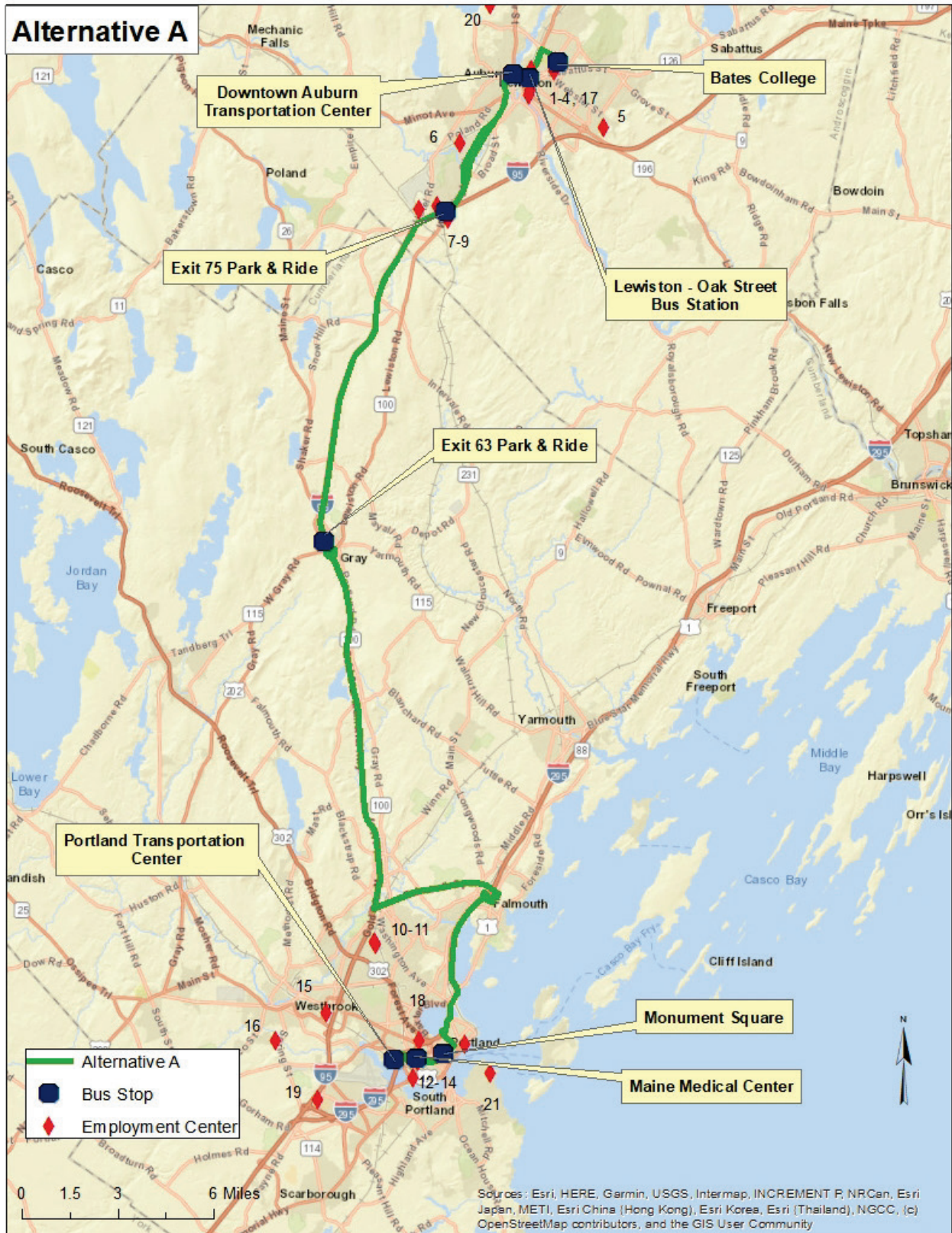
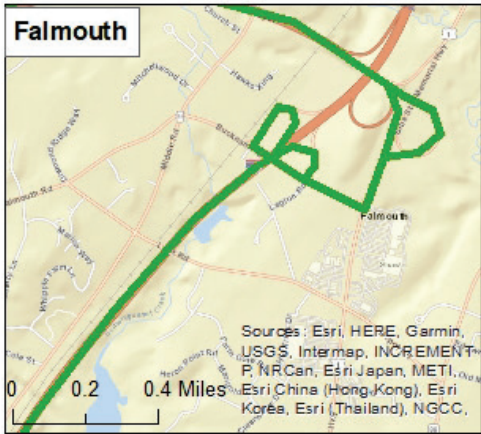
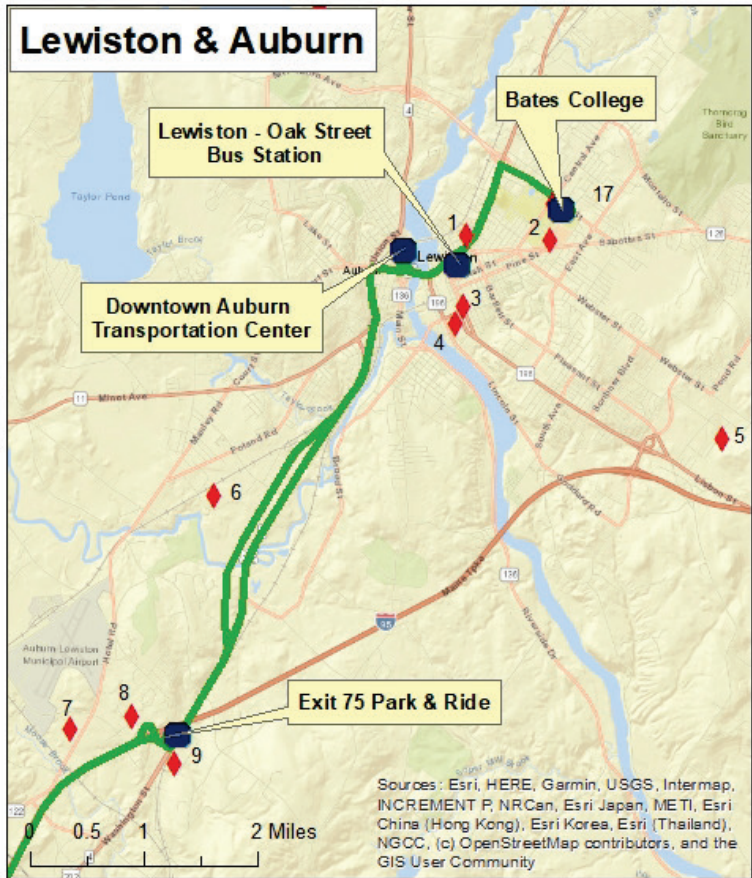


Figure 3.2 Alternative A
Detailed



3.1.1 Tradeoffs

The intent of Alternative A is to efficiently serve the three major transit stops, based on factors of urban density, connectivity to other transit services, and proximity to Maine Medical Center, as identified during the stakeholder and public outreach. Tradeoffs with that route are presented in Table 3.3.

Table 3.3 Alternative A Tradeoffs

Benefits	Drawbacks
<ul style="list-style-type: none"> Portland Transportation Center provides an effective layover point for drivers given that the facility is staffed and has ample bus infrastructure. Achieves an approximately 60-minute travel time between Downtown Portland (Monument Square) and Downtown Auburn/Downtown Lewiston Falmouth Spur as the primary link into and out of Portland should increase on-time reliability. 80-minute run-time of the route could allow for simple 45-minute headways with a 10-minute buffer, assuming four buses were to be used for the service. Includes service to Gray, which is currently without any public transportation service. 	<ul style="list-style-type: none"> Lack of service to the western portion of the Portland Metropolitan Area, including the Rock Row area around Maine Turnpike Exit 48, where there is strong potential transit propensity. Access to major employers west of Portland would require a transfer and potentially substantial added travel time. Transit propensity analysis revealed comparatively lower transit demand to Downtown Portland from Lewiston and Auburn. Portland Transportation Center’s bus station and infrastructure are owned by Concord Coach Lines and use of the facility would need to be negotiated.

3.2 Alternative B

The Alternative B route would operate between Monument Square in Portland and Bates College in Lewiston. The Alternative B route spans 43 miles and would be traversed in approximately 85 minutes, based on estimates from Google Maps and timed runs for portions of the route. In total, the route consists of nine stops, including three stops in Portland, two in Lewiston, two in Auburn, one in Gray, and one in Westbrook. An estimated timed run of Alternative B, corresponding to distance along the route, is shown in Table 3.4, while transit connections at each stop are shown in Table 3.5. Figure 3.3 and Figure 3.4 provide a map of Alternative B, including in relation to key employers identified through stakeholder and public input.

Table 3.4 Timed Run of Alternative B

Stop Name	Timed Run (Estimated)	Distance (Miles)
Monument Square	12:00 PM	–
Maine Medical Center	12:05 PM	1
Portland Transportation Center	12:10 PM	2
Rock Row (Market Basket)	12:25 PM	6
Maine Turnpike—Exit 63 Park and Ride (Gray)	12:45 PM	22
Maine Turnpike—Exit 75 Park and Ride	1:00 PM	35
Downtown Auburn Transportation Center	1:11 PM	40
Lewiston—Oak Street Bus Station	1:18 PM	41
Bates College	1:25 PM	43

Table 3.5 Alternative B Transit Connections

Stop Name	Transit Connections
Monument Square	GP METRO Routes: 1, 2, 4, 5, 7, 8, 9A, 9B, B METRO BREEZ, H South Portland Bus Service Routes: 21, 24A, 24B Biddeford—Saco—Old Orchard Beach Transit: ZOOM Turnpike Express RTP Rides: Lakes Region Explorer
Maine Medical Center	GP METRO Routes: 1, 9A, 9B, B METRO BREEZ
Portland Transportation Center	GP METRO Routes: 1, B METRO BREEZ Amtrak Downeaster Concord Coach Lines
Rock Row (Market Basket)	GP METRO Route: H
Interstate 95 Exit 63 Park and Ride (Gray)	Maine Turnpike Authority Park and Ride
Interstate 95 Exit 75 Park and Ride	MaineDOT Park and Ride Concord Coach Lines
Downtown Auburn Transportation Center	Citylink Routes: 4, 5, 7, 9
Lewiston—Oak Street Bus Station	Citylink Routes: 1, 2, 3, 6, 9
Bates College	Concord Coach Lines

Figure 3.3 Alternative B
Overview

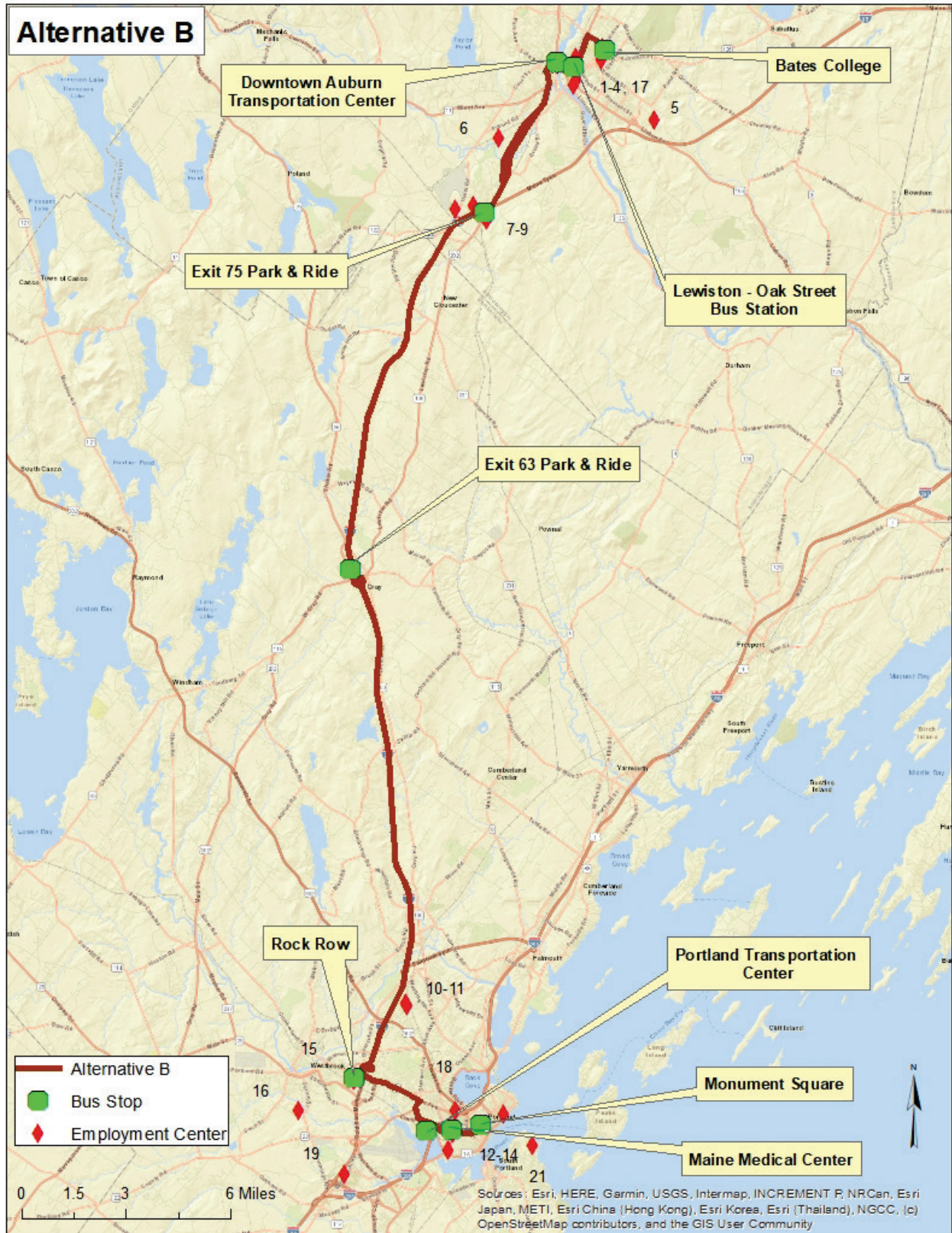
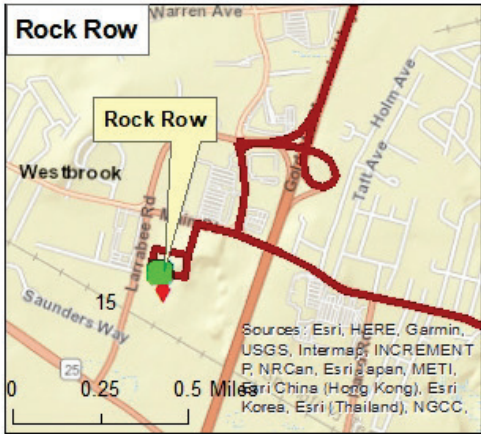
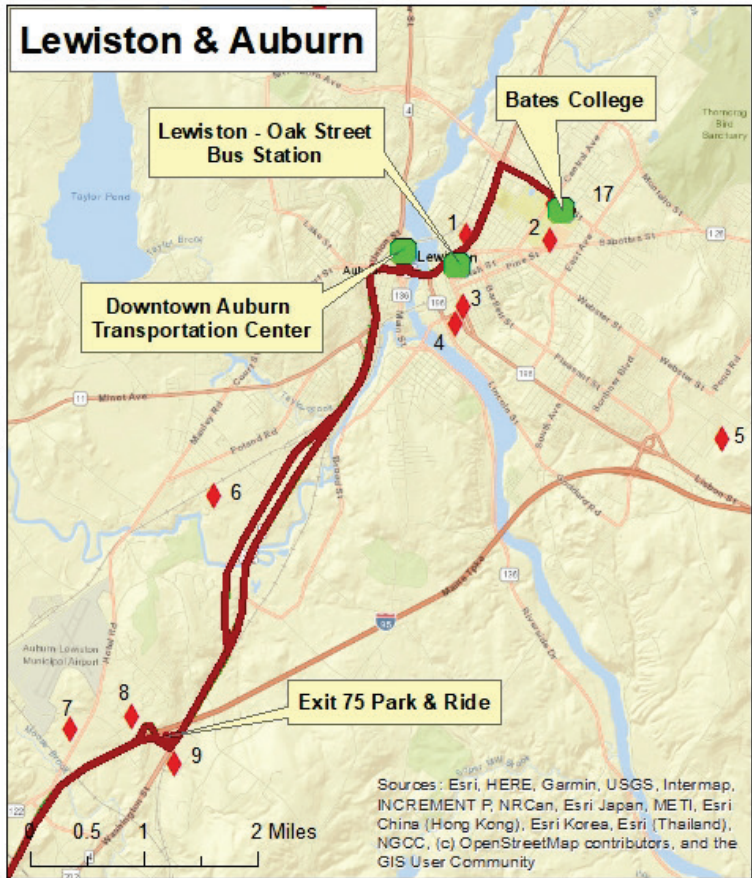


Figure 3.4 Alternative B
Detailed



3.2.1 Tradeoffs

The intent of Alternative B is to provide service to the three major transit stops in Portland, while also providing a stop at Turnpike Exit 48/Rock Row, within closer proximity to many of the major businesses identified in the Portland area. While there is an ongoing rapid transit study along the Brighton Avenue corridor that would serve the Rock Row area, the implementation of that service is unlikely to change short-term considerations on whether to directly serve that activity hub or rely on existing transit connections. The tradeoffs to this route are shown in Table 3.6.

Table 3.6 Alternative B Tradeoffs

Benefits	Drawbacks
<ul style="list-style-type: none"> Serves the highest-transit-propensity areas according to the quantitative analysis. Least reliant on local transit connections for potentially lengthy connections. Serves the Rock Row area, a growing mixed-use area with significant temporary housing for New Mainers. Includes service to Gray, which is currently without any public transportation service. 	<ul style="list-style-type: none"> Has the longest end-to-end travel time at 85 minutes. A travel time of 85 minutes may make it difficult to do clock-face departures once break time and buffer is added to the schedule. The use of Brighton Avenue to enter and exit Portland could affect on-time reliability and perceptions as an express route. With Monument Square as the last stop, curb access during layovers could prove to be a challenge.

3.3 Alternative C

The Alternative C route would operate between Monument Square in Portland and Bates College in Lewiston. Alternative C spans 42 miles and would be traversed in approximately 67 minutes, based on estimates from Google Maps and timed runs for portions of the route. In total, the route consists of six stops, including three stops in Portland, two in Lewiston, and one in Auburn. An estimated timed run of this route, corresponding to distance along the route, is shown in Table 3.7, while transit connections at each stop are shown in Table 3.8. Figure 3.5 and Figure 3.6 provide a map of Alternative C, including in relation to key employers identified through stakeholder and public input.

Table 3.7 Timed Run of Alternative C

Stop Name	Timed Run (Estimated)	Distance (Miles)
Monument Square	12:00 PM	–
Maine Medical Center	12:05 PM	1
Portland Transportation Center	12:10 PM	2
Downtown Auburn Transportation Center	12:53 PM	39
Lewiston—Oak Street Bus Station	1:00 PM	40
Bates College	1:07 PM	42

Table 3.8 Alternative C Transit Connections

Stop Name	Transit Connections
Monument Square	GP METRO Routes: 1, 2, 4, 5, 7, 8, 9A, 9B, B METRO BREEZ, H South Portland Bus Service Routes: 21, 24A, 24B Biddeford—Saco—Old Orchard Beach Transit: ZOOM Turnpike Express RTP Rides: Lakes Region Explorer
Maine Medical Center	GP METRO Routes: 1, 9A, 9B, B METRO BREEZ
Portland Transportation Center	GP METRO Routes: 1, B METRO BREEZ Amtrak Downeaster Concord Coach Lines
Downtown Auburn Transportation Center	Citylink Routes: 4, 5, 7, 9
Lewiston—Oak Street Bus Station	Citylink Routes: 1, 2, 3, 6, 9
Bates College	Concord Coach Lines

Figure 3.5 Alternative C Overview

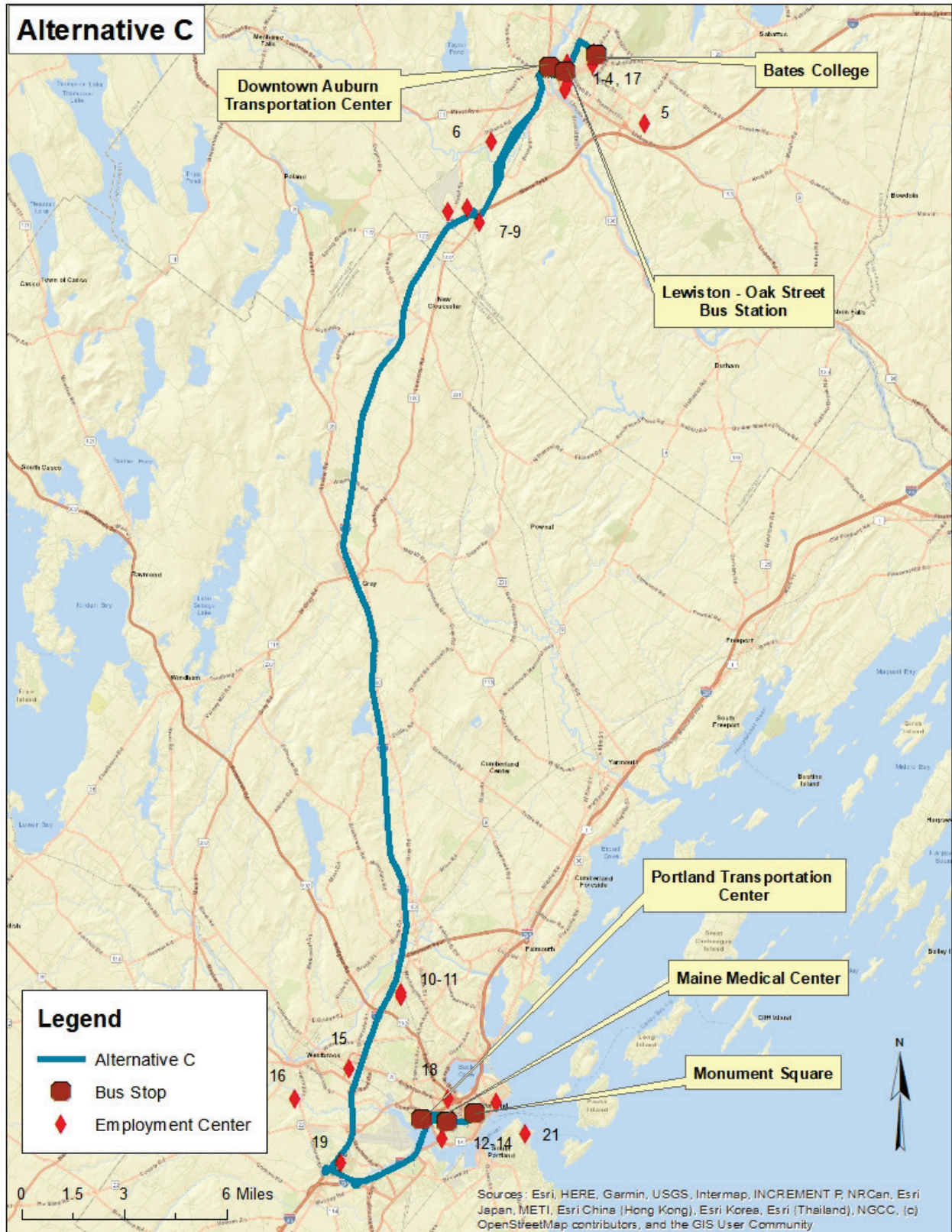
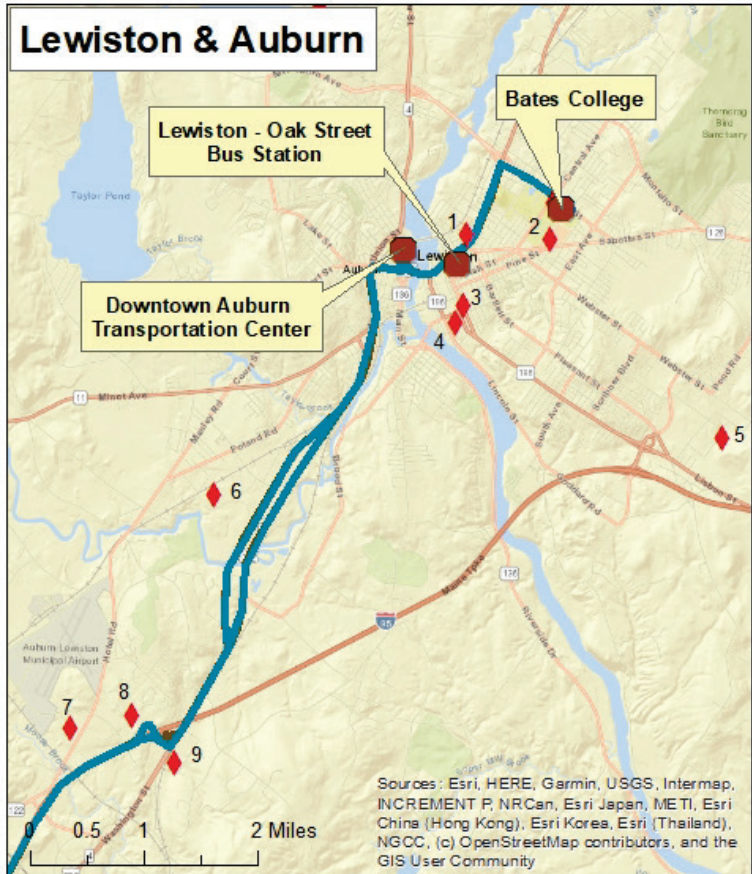
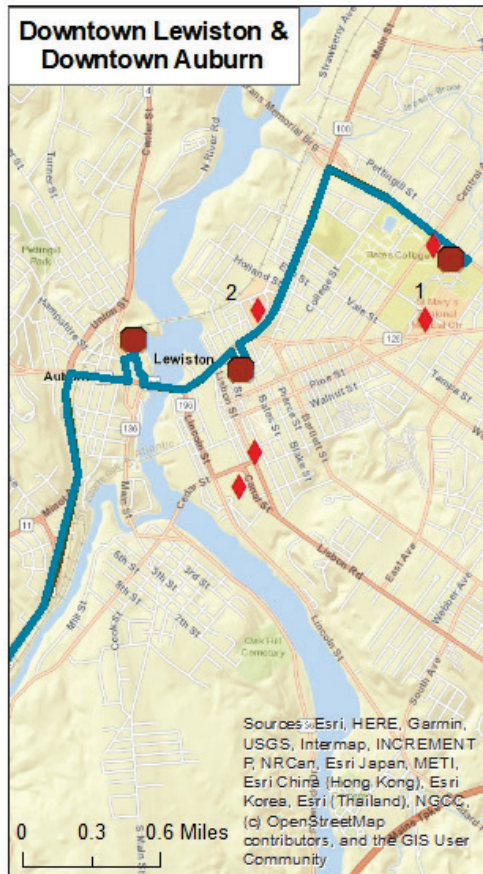
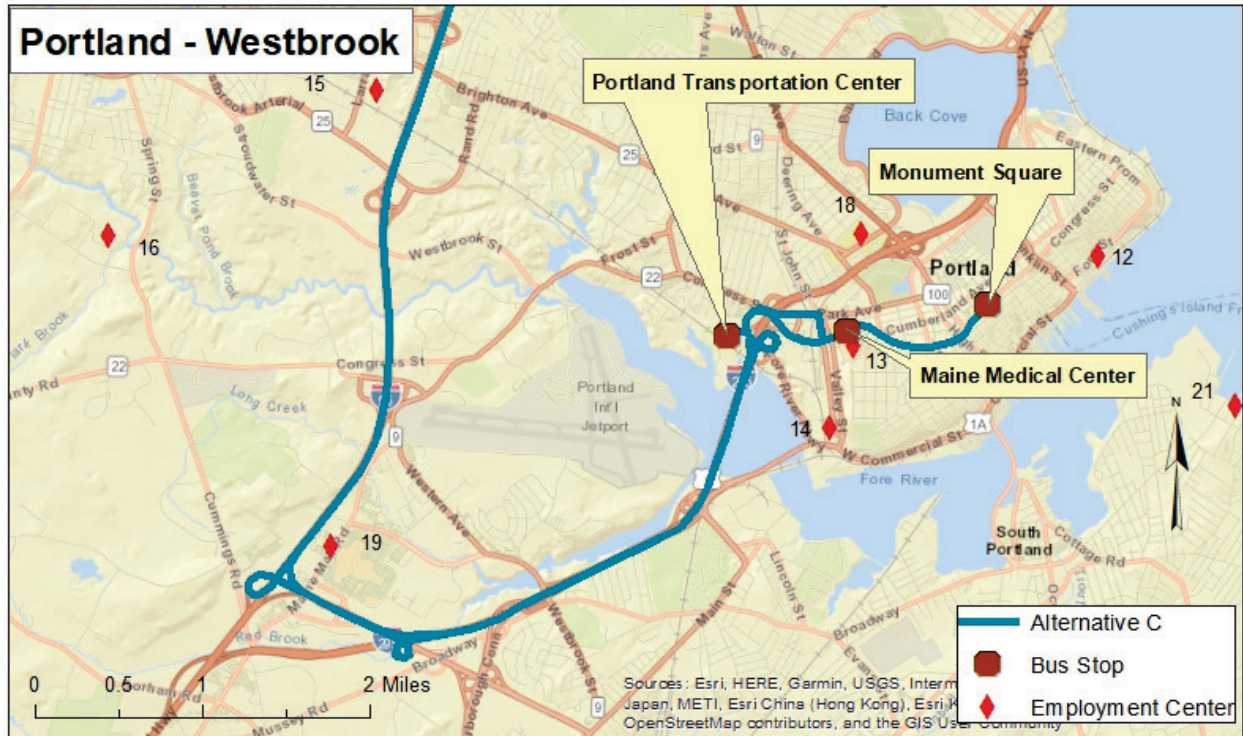


Figure 3.6 Alternative C
Detailed



3.3.1 Tradeoffs

The intent of Alternative C is to provide a true intercity bus service. Unlike Alternatives A and B, Alternative C skips the park and ride lots located along the Maine Turnpike/Interstate 95, solely serving those stops located in the urban center portions of Portland, Auburn, and Lewiston. Tradeoffs for this route alternative are found in Table 3.9.

Table 3.9 Alternative C Tradeoffs

Benefits	Drawbacks
<ul style="list-style-type: none"> • Quickest end-to-end travel time of the route alternatives. • Four buses could reduce headway to approximately 40 minutes, including break and schedule padding. • Provides a high level of service for residents and workers primarily traveling downtown-to-downtown. 	<ul style="list-style-type: none"> • Omits convenient service to many large employers identified in the stakeholder and public outreach, including those near Turnpike Exit 48/Rock Row and Turnpike Exit 75. • Excludes service to Gray, a potential market for households with limited vehicle access. • Relies on local transit connections which may be substantial depending on commuters' final destinations. • Does not provide good service to areas identified as having a high transit propensity.

3.4 Route Alternatives Summary

The route alternatives developed in this memorandum should be considered conceptual and are not necessarily mutually exclusive—elements from the three alternatives could be combined into the eventual preferred alternative. Nonetheless, they offer distinct benefits and tradeoffs with origins and destinations served, need for transfers, and travel time. A side-by-side summary table is shown in Table 3.10.

Table 3.10 Route Summary Table

Summary	Alternative A	Alternative B	Alternative C
Stops Served	<ul style="list-style-type: none"> Portland Transportation Center Maine Medical Center Monument Square I-95 Exit 63 I-95 Exit 75 Auburn Transportation Center Lewiston Bus Station Bates College 	<ul style="list-style-type: none"> Monument Square Maine Medical Center Portland Transportation Center Rock Row I-95 Exit 63 I-95 Exit 75 Auburn Transportation Center Lewiston Bus Station Bates College 	<ul style="list-style-type: none"> Monument Square Maine Medical Center Portland Transportation Center Auburn Transportation Center Lewiston Bus Station Bates College
End-to-End Travel Time	80 Minutes	85 minutes	67 minutes
Benefits	<ul style="list-style-type: none"> Portland Transportation Center provides an effective layover point for drivers given that the facility is staffed and has ample bus infrastructure. Achieves an approximately 60-minute travel time between Downtown Portland (Monument Square) and Downtown Auburn/Downtown Lewiston Falmouth Spur as the primary link into and out of Portland should increase on-time reliability. 80-minute run-time of Alternative A could allow for simple 45-minute headways with a 10-minute buffer, assuming four buses were to be used for the service. Includes service to Gray, which is currently without any public transportation service. 	<ul style="list-style-type: none"> Serves the highest-transit-propensity areas according to the quantitative analysis. Least reliant on local transit connections for potentially lengthy connections. Serves the Rock Row area, a growing mixed-use area with significant temporary housing for New Mainers. Includes service to Gray, which is currently without any public transportation service. \ 	<ul style="list-style-type: none"> Quickest end-to-end travel time of the route alternatives. Four buses could reduce headway to approximately 40 minutes, including break and schedule padding. Provides a high level of service for residents and workers primarily traveling downtown-to-downtown.

Summary

Drawbacks

Alternative A

- Lack of service to the western portion of the Portland Metropolitan Area, including the Rock Row area around I-95 Exit 48, where there is strong potential transit propensity.
- Access to major employers west of Portland would require a transfer and potentially substantial added travel time.
- Transit propensity analysis revealed comparatively lower transit demand to Downtown Portland from Lewiston and Auburn.
- Portland Transportation Center's bus station and infrastructure are owned by Concord Coach Lines and use of the facility would need to be negotiated.

Alternative B

- Has the longest end-to-end travel time at 85 minutes.
- A travel time of 85 minutes may make it difficult to do clock-face departures once break time and buffer is added to the schedule.
- The use of Brighton Avenue to enter and exit Portland could affect on-time reliability and perceptions as an express route.
- With Monument Square as the last stop, curb access during layovers could prove to be a challenge.

Alternative C

- Omits convenient service to many large employers identified in the stakeholder and public outreach, including those near Turnpike Exit 48/Rock Row and Turnpike Exit 75.
- Excludes service to Gray, a potential market for households with limited vehicle access.
- Relies on local transit connections which may be substantial depending on commuters' final destinations.
- Does not provide good service to areas identified as having a high transit propensity.

3.4.1 Other Alternative Routing Considerations

Other route elements were considered but not incorporated into the alternatives presented above.

Extension of Alternative A to Serve Falmouth: Given that access to the Falmouth Spur from Interstate 295 requires use of Bucknam Road and U.S. Highway 1 through Falmouth, the addition of a stop within the municipality may be considered as part of Alternative A. In this case, a potential stop could be located along U.S. Highway 1 in front of Shaw's supermarket and Falmouth Village. This stop also provides access to GP METRO and South Portland Bus Service routes. The stop would add 5 additional minutes of travel time to the entire route given the presence of multiple traffic lights along U.S. Highway 1.

Extension of Alternative C to Serve the Maine Mall: Given that Exit 1 of Interstate 295 provides immediate access to the Maine Mall area, the addition of a stop here could also be considered. In this case, a potential stop could be located at the intersection of John Roberts Road and Philbrook Ave, near the entrance to JC Penney. This stop also provides access to GP METRO and South Portland Bus Service routes. The stop would add 10 additional minutes of travel time to a route approaching from the west given the slower speed limits around the Maine Mall, as well as the presence of multiple traffic lights.

Coastal Route: A fourth routing option to connect Lewiston/Auburn and Portland via Freeport and Interstate 295/Route 136 was considered. Freeport and its numerous retail shops, including L.L. Bean's flagship store, could be a potential employment hub for Lewiston/Auburn transit users. This route would entail longer travel times and logistical challenges such as narrow lane widths along single-lane roadways, winter maintenance, and a lack of facilities on the rural roadways connecting the coast with L/A. The Coastal Route may be considered further in the future.

Service to University of Southern Maine: The University of Southern Maine (USM) Portland and L/A campuses were considered for service. Ultimately, direct service was not incorporated into the service alternatives or preferred alternative. In Portland, there are numerous connecting local transit routes to USM, with three GP METRO routes providing half-hour or better headways on weekdays. In L/A, the campus is served by CityLink from the Oak Street Bus Station at hourly headways with a 30-minute ride time. Adding the L/A campus onto the commuter bus route would add approximately ten minutes of one-way run time, significantly lengthening the overall trip and impacting the potential frequency of the commuter bus service. Furthermore, its location on the urban periphery of Lewiston means that it is unclear what level of ridership would be generated by serving that potential stop location.

4.0 Preferred Alternative

The three alternatives described in Section 3.0 were subsequently presented to MaineDOT and the public for discussion and feedback. As previously stated, the three alternatives were not necessarily presented as finalized and structured routes, but rather to generate discussion and identify strengths and weaknesses associated with various routing formats. This included factors such as total number of stops, locations of stops, travel times, approaches into Portland, and identification of the best local streets to accommodate bus service.

The number of stops served directly had to be balanced with the overall ride time for customers; each additional stop extended the ride time, making the service less competitive with driving and less appealing for potential users.

Many stakeholders and members of the public felt that the intercity bus service, particularly as a pilot service, should make use of existing bus services in both Portland and Lewiston/Auburn. To maintain modal competitiveness, the total number of stops should be limited where possible to reduce total travel time. Based on this rationale, Maine Medical Center, which is already served by five GP METRO bus routes, was removed as a separate stop. Similar considerations and subsequent decisions were made for the USM Portland and Lewiston Campuses, Maine Mall, Turnpike Exit 48/Rock Row, and the Eastern Waterfront. Although each of these locations were identified as current or future employment centers, they are also served by one or more local bus routes providing service to Monument Square, and in some instances the Portland Transportation Center as well.

Regarding service in Gray at Exit 63, feedback from the stakeholder and public input reflected that the most important objective of the service would be to transport users between the urban centers of Portland and Lewiston/Auburn. Although a stop at the Exit 63 Park and Ride could attract additional riders, the stop is located in a lower density area, further away from both urban centers, and could add up to ten minutes of additional travel time to the service. As a bus service pilot project, routes, stops, and schedules can be adjusted going forward as circumstances warrant based on ridership and traveler and employer needs.

4.1 Second Site Visit

Following these decisions, the project team conducted a second site visit in early September 2023. The objectives and findings of this visit were the following:

1. **Conduct a drive through and timing of the route without stops at the Exit 63 Park and Ride or Maine Medical Center:** This could not be conducted due to construction on Congress Street in Portland.
2. **Determine the best routing for the approach into and out of Portland:** Although the approach into and out of Lewiston/Auburn (via U.S. Highway 202 and Exit 75 of the Maine Turnpike) was finalized, there are multiple options for approaching Portland from the Maine Turnpike, including:
 - a. Exit 53: Route 100/Route 26 (Auburn Street/Washington Avenue)
 - b. Exit 52: Falmouth Spur to Interstate 295 South

- c. Exit 48: Route 25 (Brighton Avenue)—via Rock Row
- d. Exit 46: Congress Street
- e. Exit 45: Interstate 295 North

There is no single most direct option for entering Portland from the north along the Maine Turnpike. Exit 52 and Exit 45 connect to limited access highways which bring traffic directly into Downtown Portland, but are also indirect and involve travel in the opposite direction before entering Portland. Neither option yielded savings in travel time and in fact are prone to further congestion and increased travel times. Other approaches, including Exits 48 and 46, involve local streets which are also indirect and prone to delay.

With the narrow width of Interstate 295 and heavy traffic approaching Monument Square from I-295, Congress Street emerged as the preferred option for connecting the Portland Transportation Center and Monument Square.

- 3. **Determine if peak-hour traffic conditions during the afternoon rush hour warrant adjustments to routing and scheduling:** The site visit indicated that, although traffic levels were higher between 3:00 and 7:00 PM, and especially during the 4:30 to 5:30 PM rush hour, they were not high enough to warrant any changes to the routing or timing during peak hour runs.
- 4. **Further assess bicycle and pedestrian amenities at each proposed bus stop:** Conditions of the proposed bus stops and recommended capital improvements are discussed in Section 5.2.4.

4.2 Route Selection

Based on these factors, MaineDOT selected a preferred alignment for the Lewiston/Auburn-to-Portland commuter bus service serving the following stops:

- Portland Transportation Center
- Monument Square
- Maine Turnpike Exit 75 Park and Ride
- Auburn Transportation Center
- Lewiston Oak Street Bus Station
- Bates College

The preferred alternative is shown in Figure 4.1 and Figure 4.2. The route terminates at the Portland Transportation Center at the southern end of the route, and Bates College at the northern end of the route. The preferred route also considers the following:

- Between the Portland Transportation Center and Monument Square, the preferred alternative utilizes the Congress Street corridor as opposed to Interstate 295.

- The preferred alternative utilizes Auburn Street/Washington Avenue (Exit 53 on the Maine Turnpike) as the approach into and out of Portland. Traffic along this corridor moved smoothly, including during peak hours, and the routing is one of the more direct approaches into and out of Portland. This choice was also consistently identified through Google Maps and Apple Maps as the best route between Portland and Lewiston/Auburn. Additionally, the entire corridor is wide enough to accommodate intercity buses.
- Aside from skipping the Exit 63 Park and Ride, the preferred alternative utilizes the same routing identified from Alternatives A, B, and C through Auburn and Lewiston to terminate at Bates College.

4.3 Local Transit Connections

The proposed route alignment does not directly serve several major employment areas in the Portland area. In weighing the duration of end-to-end trip times against direct service to a variety of potential stops, it was determined that the local transit network in the Portland area warranted more limited stops as compared to service in the Lewiston/Auburn area.

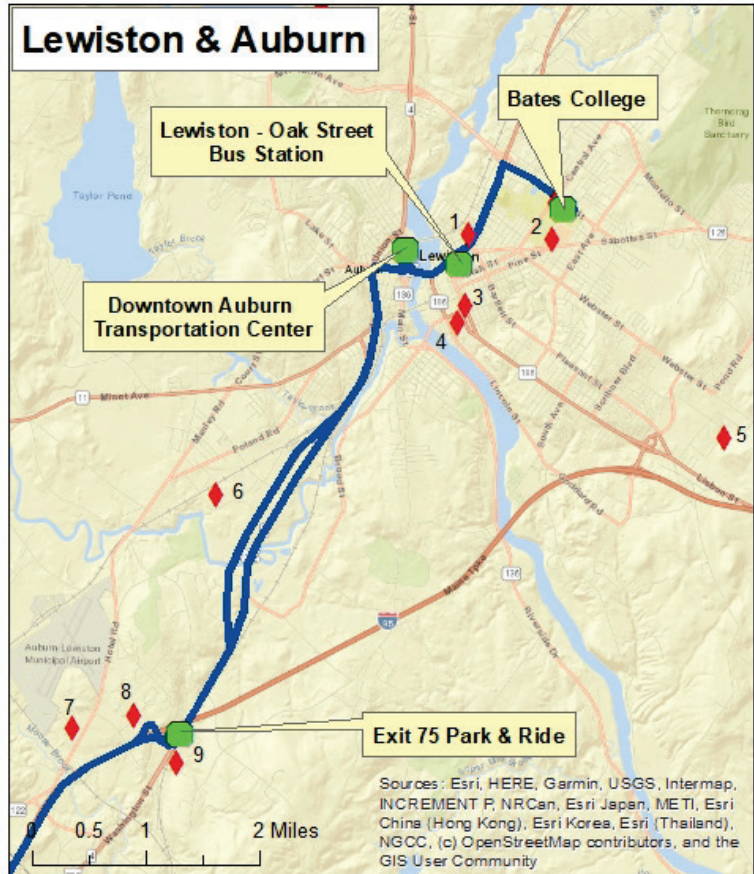
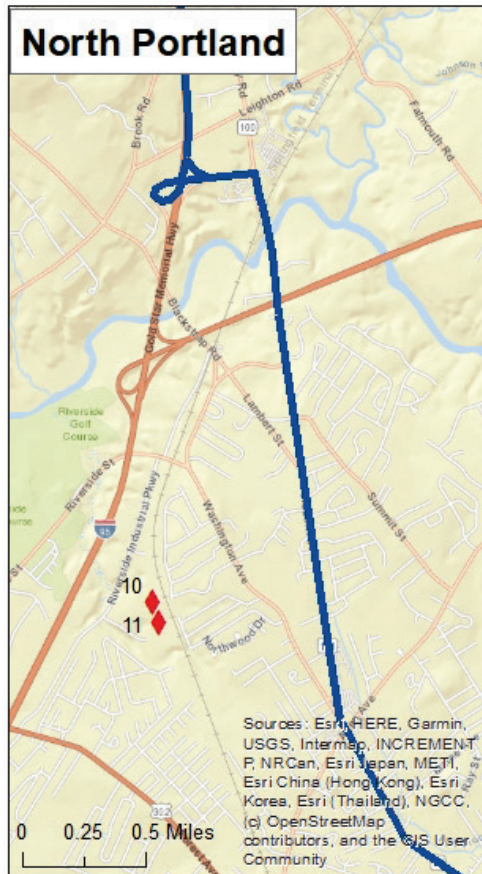
Example local transit service between proposed Portland-area stops and major employment areas include:

- **University of Southern Maine (Portland Campus):** The Greater Portland Metro (Metro) Routes 2 and 4 both serve the University of Southern Maine Portland campus from the Metro Pulse location (approximately half a block from Monument Square). Route 2 service runs from 5:45 AM to 10:00 PM every half hour with a 14-minute trip. Route 4 service runs from 5:45 to 10:40 PM between the same locations with approximately 50-minute headways. The Metro Husky Line also serves the campus from 5:15 AM to 10:40 PM on weekdays only with a three-minute ride time and half-hourly headways.
- **University of Southern Maine (Lewiston-Auburn Campus):** CityLink service runs from 6:00 AM to 6:05 PM on weekdays only between the Lewiston Oak Street Bus Station and the USM Lewiston-Auburn Campus. The ride time is approximately 30 minutes, with express service in the early morning that is approximately 15 minutes.
- **Maine Medical Center:** Multiple Metro routes run between Monument Square and Maine Medical Center. Route 1 runs from 5:08 AM to 10:50 PM on weekdays with half-hourly headways. Route 5 runs from 5:20 AM to 10:10 PM from the Metro Pulse with approximately half-hourly headways on weekdays. The Route 9A/9B runs from Monument Square to Maine Medical Center from 5:35 AM to 9:30 PM with approximately half-hourly service on weekdays. Altogether, the frequency between Maine Medical Center and Monument Square is roughly every 7 minutes.
- **Maine Mall:** Metro and South Portland Bus Service (SPBS) both serve the Maine Mall. Metro Route 5 serves Monument Square to Maine Mall from 5:20 AM to 10:10 PM on weekdays with an approximately 30-minute ride time and half-hour headways. The Route 5 also stops at the Portland Transportation Center en route to Maine Mall. SPBS Routes 24A and 24B serve the Maine Mall from Monument Square from 5:45 AM to 11:05 PM on weekdays, with an approximately 35-minute ride time and two-hour headways.
- **Turnpike Exit 48/Rock Row:** Metro Route 4 serves the Rock Row area from 5:15 AM to 10:40 PM on weekdays with a roughly 15-minute ride time and half-hour headways. The Husky Line also serves Rock Row on weekdays only from 6:35 AM to 10:35 PM with approximately half-hourly headways and a similar ride time.

Figure 4.1 Preferred Alternative Overview



Figure 4.2 Preferred Alternative
Detailed



4.4 Schedule

Estimated times and distances for the preferred alternative are found in Table 4.1. When taking board/alight times into account, each trip (Bates College to PTC to Bates College) takes 130 minutes. Driver breaks are calculated so that for each trip, there are 10-minute breaks assumed at the end points of the run (PTC and Bates College). It is assumed that after three breaks the fourth break will be a half-hour lunch (lunch breaks are not included in vehicle revenue hour, or VRH, calculations). Based on these assumptions, three example schedule sets were developed: peak/off-peak, consistent, and zipper.

Example schedules were developed assuming a Lewiston/Auburn start. In the case of a Portland-based garage, a deadhead trip from the Portland area would be needed or a satellite staging area in L/A could be utilized. It is expected that potential bidders may propose an alternative schedule that better fits the specifics of their operations setup, assuming that it still meets MaineDOT's requirements and objectives.

Table 4.1 Time and Distance Assumptions

Stop	Time (H:MM)	Distance (miles)	Cumulative Time	Cumulative Distance	Board/Alight Time (H:MM:SS)
Bates College	0:00	0.0	0:00	0.0	Break/Buffer
Lewiston—Oak Street Bus Station	0:04	1.4	0:04	1.4	0:01:30
Downtown Auburn Transportation Center	0:05	0.9	0:09	2.3	0:01:30
Exit 75 Park & Ride	0:10	5.0	0:19	7.3	0:01:30
Monument Square	0:36	34.3	0:55	41.6	0:03:00
Portland Transportation Center	0:07	2.4	1:02	44.0	Break/Buffer

Table 4.2 Peak/Off-Peak Weekday Schedule

Headway	Bates College	Lewiston	Auburn	Exit 75	Monument Square	PTC	PTC	Monument Square	Exit 75	Auburn	Lewiston	Bates College
–	5:00 AM	5:05 AM	5:12 AM	5:23 AM	6:02 AM	6:09 AM	6:20 AM	6:30 AM	7:07 AM	7:19 AM	7:25 AM	7:29 AM
1:00	6:00 AM	6:05 AM	6:12 AM	6:23 AM	7:02 AM	7:09 AM	7:20 AM	7:30 AM	8:07 AM	8:19 AM	8:25 AM	8:29 AM
1:00	7:00 AM	7:05 AM	7:12 AM	7:23 AM	8:02 AM	8:09 AM	8:20 AM	8:30 AM	9:07 AM	9:19 AM	9:25 AM	9:29 AM
0:40	7:40 AM	7:45 AM	7:52 AM	8:03 AM	8:42 AM	8:49 AM	9:20 AM	9:30 AM	10:07 AM	10:19 AM	10:25 AM	10:29 AM
1:00	8:40 AM	8:45 AM	8:52 AM	9:03 AM	9:42 AM	9:49 AM	10:20 AM	10:30 AM	11:07 AM	11:19 AM	11:25 AM	11:29 AM
1:00	9:40 AM	9:45 AM	9:52 AM	10:03 AM	10:42 AM	10:49 AM	11:20 AM	11:30 AM	12:07 PM	12:19 PM	12:25 PM	12:29 PM
3:00	12:40 PM	12:45 PM	12:52 PM	1:03 PM	1:42 PM	1:49 PM	2:00 PM	2:10 PM	2:47 PM	2:59 PM	3:05 PM	3:09 PM
2:50	3:30 PM	3:35 PM	3:42 PM	3:53 PM	4:32 PM	4:39 PM	4:50 PM	5:00 PM	5:37 PM	5:49 PM	5:55 PM	5:59 PM
1:00	4:30 PM	4:35 PM	4:42 PM	4:53 PM	5:32 PM	5:39 PM	5:50 PM	6:00 PM	6:37 PM	6:49 PM	6:55 PM	6:59 PM
1:00	5:30 PM	5:35 PM	5:42 PM	5:53 PM	6:32 PM	6:39 PM	6:50 PM	7:00 PM	7:37 PM	7:49 PM	7:55 PM	7:59 PM
0:40	6:10 PM	6:15 PM	6:22 PM	6:33 PM	7:12 PM	7:19 PM	7:50 PM	8:00 PM	8:37 PM	8:49 PM	8:55 PM	8:59 PM
1:00	7:10 PM	7:15 PM	7:22 PM	7:33 PM	8:12 PM	8:19 PM	8:50 PM	9:00 PM	9:37 PM	9:49 PM	9:55 PM	9:59 PM
1:00	8:10 PM	8:15 PM	8:22 PM	8:33 PM	9:12 PM	9:19 PM	9:50 PM	10:00 PM	10:37 PM	10:49 PM	10:55 PM	10:59 PM

Table 4.3 Peak/Off-Peak Weekend Schedule

Headway	Bates College	Lewiston	Auburn	Exit 75	Monument Square	PTC	PTC	Monument Square	Exit 75	Auburn	Lewiston	Bates College
–	6:00 AM	6:05 AM	6:12 AM	6:23 AM	7:02 AM	7:09 AM	7:20 AM	7:30 AM	8:07 AM	8:19 AM	8:25 AM	8:29 AM
1:00	7:00 AM	7:05 AM	7:12 AM	7:23 AM	8:02 AM	8:09 AM	8:20 AM	8:30 AM	9:07 AM	9:19 AM	9:25 AM	9:29 AM
1:40	8:40 AM	8:45 AM	8:52 AM	9:03 AM	9:42 AM	9:49 AM	10:20 AM	10:30 AM	11:07 AM	11:19 AM	11:25 AM	11:29 AM
1:00	9:40 AM	9:45 AM	9:52 AM	10:03 AM	10:42 AM	10:49 AM	11:20 AM	11:30 AM	12:07 PM	12:19 PM	12:25 PM	12:29 PM
3:00	12:40 PM	12:45 PM	12:52 PM	1:03 PM	1:42 PM	1:49 PM	2:00 PM	2:10 PM	2:47 PM	2:59 PM	3:05 PM	3:09 PM
2:50	3:30 PM	3:35 PM	3:42 PM	3:53 PM	4:32 PM	4:39 PM	4:50 PM	5:00 PM	5:37 PM	5:49 PM	5:55 PM	5:59 PM
1:00	4:30 PM	4:35 PM	4:42 PM	4:53 PM	5:32 PM	5:39 PM	5:50 PM	6:00 PM	6:37 PM	6:49 PM	6:55 PM	6:59 PM
1:40	6:10 PM	6:15 PM	6:22 PM	6:33 PM	7:12 PM	7:19 PM	7:50 PM	8:00 PM	8:37 PM	8:49 PM	8:55 PM	8:59 PM
1:00	7:10 PM	7:15 PM	7:22 PM	7:33 PM	8:12 PM	8:19 PM	8:50 PM	9:00 PM	9:37 PM	9:49 PM	9:55 PM	9:59 PM

Table 4.4 Consistent Weekday Schedule

Headway	Bates College	Lewiston	Auburn	Exit 75	Monument Square	PTC	PTC	Monument Square	Exit 75	Auburn	Lewiston	Bates College
–	5:00 AM	5:05 AM	5:12 AM	5:23 AM	6:02 AM	6:09 AM	6:20 AM	6:30 AM	7:07 AM	7:19 AM	7:25 AM	7:29 AM
1:30	6:30 AM	6:35 AM	6:42 AM	6:53 AM	7:32 AM	7:39 AM	7:50 AM	8:00 AM	8:37 AM	8:49 AM	8:55 AM	8:59 AM
1:10	7:40 AM	7:45 AM	7:52 AM	8:03 AM	8:42 AM	8:49 AM	9:20 AM	9:30 AM	10:07 AM	10:19 AM	10:25 AM	10:29 AM
1:30	9:10 AM	9:15 AM	9:22 AM	9:33 AM	10:12 AM	10:19 AM	10:50 AM	11:00 AM	11:37 AM	11:49 AM	11:55 AM	11:59 AM
1:30	10:40 AM	10:45 AM	10:52 AM	11:03 AM	11:42 AM	11:49 AM	12:00 PM	12:10 PM	12:47 PM	12:59 PM	1:05 PM	1:09 PM
1:30	12:10 PM	12:15 PM	12:22 PM	12:33 PM	1:12 PM	1:19 PM	1:30 PM	1:40 PM	2:17 PM	2:29 PM	2:35 PM	2:39 PM
1:10	1:20 PM	1:25 PM	1:32 PM	1:43 PM	2:22 PM	2:29 PM	3:00 PM	3:10 PM	3:47 PM	3:59 PM	4:05 PM	4:09 PM
1:30	2:50 PM	2:55 PM	3:02 PM	3:13 PM	3:52 PM	3:59 PM	4:30 PM	4:40 PM	5:17 PM	5:29 PM	5:35 PM	5:39 PM
1:30	4:20 PM	4:25 PM	4:32 PM	4:43 PM	5:22 PM	5:29 PM	5:40 PM	5:50 PM	6:27 PM	6:39 PM	6:45 PM	6:49 PM
1:30	5:50 PM	5:55 PM	6:02 PM	6:13 PM	6:52 PM	6:59 PM	7:10 PM	7:20 PM	7:57 PM	8:09 PM	8:15 PM	8:19 PM
1:10	7:00 PM	7:05 PM	7:12 PM	7:23 PM	8:02 PM	8:09 PM	8:40 PM	8:50 PM	9:27 PM	9:39 PM	9:45 PM	9:49 PM
1:30	8:30 PM	8:35 PM	8:42 PM	8:53 PM	9:32 PM	9:39 PM	10:10 PM	10:20 PM	10:57 PM	11:09 PM	11:15 PM	11:19 PM

Table 4.5 Consistent Weekend Schedule

Headway	Bates College	Lewiston	Auburn	Exit 75	Monument Square	PTC	PTC	Monument Square	Exit 75	Auburn	Lewiston	Bates College
–	6:30 AM	6:35 AM	6:42 AM	6:53 AM	7:32 AM	7:39 AM	7:50 AM	8:00 AM	8:37 AM	8:49 AM	8:55 AM	8:59 AM
1:30	8:00 AM	8:05 AM	8:12 AM	8:23 AM	9:02 AM	9:09 AM	9:20 AM	9:30 AM	10:07 AM	10:19 AM	10:25 AM	10:29 AM
1:10	9:10 AM	9:15 AM	9:22 AM	9:33 AM	10:12 AM	10:19 AM	10:50 AM	11:00 AM	11:37 AM	11:49 AM	11:55 AM	11:59 AM
1:30	10:40 AM	10:45 AM	10:52 AM	11:03 AM	11:42 AM	11:49 AM	12:20 PM	12:30 PM	1:07 PM	1:19 PM	1:25 PM	1:29 PM
1:30	12:10 PM	12:15 PM	12:22 PM	12:33 PM	1:12 PM	1:19 PM	1:30 PM	1:40 PM	2:17 PM	2:29 PM	2:35 PM	2:39 PM
1:30	1:40 PM	1:45 PM	1:52 PM	2:03 PM	2:42 PM	2:49 PM	3:00 PM	3:10 PM	3:47 PM	3:59 PM	4:05 PM	4:09 PM
1:10	2:50 PM	2:55 PM	3:02 PM	3:13 PM	3:52 PM	3:59 PM	4:30 PM	4:40 PM	5:17 PM	5:29 PM	5:35 PM	5:39 PM
1:30	4:20 PM	4:25 PM	4:32 PM	4:43 PM	5:22 PM	5:29 PM	6:00 PM	6:10 PM	6:47 PM	6:59 PM	7:05 PM	7:09 PM
1:30	5:50 PM	5:55 PM	6:02 PM	6:13 PM	6:52 PM	6:59 PM	7:10 PM	7:20 PM	7:57 PM	8:09 PM	8:15 PM	8:19 PM
1:30	7:20 PM	7:25 PM	7:32 PM	7:43 PM	8:22 PM	8:29 PM	8:40 PM	8:50 PM	9:27 PM	9:39 PM	9:45 PM	9:49 PM

Table 4.6 Zipper Weekday Schedule

Headway	Bates College	Lewiston	Auburn	Exit 75	Monument Square	PTC	PTC	Monument Square	Exit 75	Auburn	Lewiston	Bates College
–	–	–	–	–	–	–	5:00 AM	5:10 AM	5:47 AM	5:59 AM	6:05 AM	6:09 AM
–	5:00 AM	5:05 AM	5:12 AM	5:23 AM	6:02 AM	6:09 AM	6:20 AM	6:30 AM	7:07 AM	7:19 AM	7:25 AM	7:29 AM
1:20	6:20 AM	6:25 AM	6:32 AM	6:43 AM	7:22 AM	7:29 AM	7:40 AM	7:50 AM	8:27 AM	8:39 AM	8:45 AM	8:49 AM
1:20	7:40 AM	7:45 AM	7:52 AM	8:03 AM	8:42 AM	8:49 AM	9:20 AM	9:30 AM	10:07 AM	10:19 AM	10:25 AM	10:29 AM
1:40	9:20 AM	9:25 AM	9:32 AM	9:43 AM	10:22 AM	10:29 AM	10:40 AM	10:50 AM	11:27 AM	11:39 AM	11:45 AM	11:49 AM
1:20	10:40 AM	10:45 AM	10:52 AM	11:03 AM	11:42 AM	11:49 AM	12:00 PM	12:10 PM	12:47 PM	12:59 PM	1:05 PM	1:09 PM
1:20	12:00 PM	12:05 PM	12:12 PM	12:23 PM	1:02 PM	1:09 PM	1:20 PM	1:30 PM	2:07 PM	2:19 PM	2:25 PM	2:29 PM
1:20	1:20 PM	1:25 PM	1:32 PM	1:43 PM	2:22 PM	2:29 PM	3:00 PM	3:10 PM	3:47 PM	3:59 PM	4:05 PM	4:09 PM
1:40	3:00 PM	3:05 PM	3:12 PM	3:23 PM	4:02 PM	4:09 PM	4:20 PM	4:30 PM	5:07 PM	5:19 PM	5:25 PM	5:29 PM
1:20	4:20 PM	4:25 PM	4:32 PM	4:43 PM	5:22 PM	5:29 PM	5:40 PM	5:50 PM	6:27 PM	6:39 PM	6:45 PM	6:49 PM
1:20	5:40 PM	5:45 PM	5:52 PM	6:03 PM	6:42 PM	6:49 PM	7:00 PM	7:10 PM	7:47 PM	7:59 PM	8:05 PM	8:09 PM
1:20	7:00 PM	7:05 PM	7:12 PM	7:23 PM	8:02 PM	8:09 PM	8:40 PM	8:50 PM	9:27 PM	9:39 PM	9:45 PM	9:49 PM
1:40	8:40 PM	8:45 PM	8:52 PM	9:03 PM	9:42 PM	9:49 PM	10:00 PM	10:10 PM	10:47 PM	10:59 PM	11:05 PM	11:09 PM
1:20	10:00 PM	10:05 PM	10:12 PM	10:23 PM	11:02 PM	11:09 PM	–	–	–	–	–	–

Table 4.7 Zipper Weekend Schedule

Headway	Bates College	Lewiston	Auburn	Exit 75	Monument Square	PTC	PTC	Monument Square	Exit 75	Auburn	Lewiston	Bates College
–	–	–	–	–	–	–	6:00 AM	6:10 AM	6:47 AM	6:59 AM	7:05 AM	7:09 AM
–	6:00 AM	6:05 AM	6:12 AM	6:23 AM	7:02 AM	7:09 AM	7:20 AM	7:30 AM	8:07 AM	8:19 AM	8:25 AM	8:29 AM
1:20	7:20 AM	7:25 AM	7:32 AM	7:43 AM	8:22 AM	8:29 AM	8:40 AM	8:50 AM	9:27 AM	9:39 AM	9:45 AM	9:49 AM
1:20	8:40 AM	8:45 AM	8:52 AM	9:03 AM	9:42 AM	9:49 AM	10:20 AM	10:30 AM	11:07 AM	11:19 AM	11:25 AM	11:29 AM
1:40	10:20 AM	10:25 AM	10:32 AM	10:43 AM	11:22 AM	11:29 AM	–	–	–	–	–	–
1:20	11:40 AM	11:45 AM	11:52 AM	12:03 PM	12:42 PM	12:49 PM	1:00 PM	1:10 PM	1:47 PM	1:59 PM	2:05 PM	2:09 PM
2:40	2:20 PM	2:25 PM	2:32 PM	2:43 PM	3:22 PM	3:29 PM	4:00 PM	4:10 PM	4:47 PM	4:59 PM	5:05 PM	5:09 PM
1:40	4:00 PM	4:05 PM	4:12 PM	4:23 PM	5:02 PM	5:09 PM	5:20 PM	5:30 PM	6:07 PM	6:19 PM	6:25 PM	6:29 PM
1:20	5:20 PM	5:25 PM	5:32 PM	5:43 PM	6:22 PM	6:29 PM	6:40 PM	6:50 PM	7:27 PM	7:39 PM	7:45 PM	7:49 PM
1:20	6:40 PM	6:45 PM	6:52 PM	7:03 PM	7:42 PM	7:49 PM	8:20 PM	8:30 PM	9:07 PM	9:19 PM	9:25 PM	9:29 PM

Each of these example schedules can be used as a starting place for the operator to validate and confirm the final schedule. The zipper schedule offers a symmetry of service between L/A and Portland that the peak/off-peak and consistent schedules do not. However, a satellite parking area may be needed for the operator to start service in the morning at one of the locations, since the operator's garage is likely to be located closer to either Portland or Lewiston/Auburn.

The benefits of having a satellite staging area (e.g., a municipal garage where a motorcoach can be parked overnight) are that it provides greater flexibility in operations and can also add a backup operations location in case of some problem with the primary garage (such as a fire or flood). Drawbacks of using a satellite location include:

- **Deadhead:** The motorcoaches will need to get to the primary garage for servicing and fueling, and travel between the primary garage and satellite facility will add non-revenue miles to the vehicle.
- **Driver Transportation:** Drivers will likely be based out of the primary garage, and there may need to be shuttle service for the drivers between the satellite and the primary garage. This may not only make the service less cost effective, but also be a burden for the drivers who spend more time in transit.
- **Rental Fees and/or Coordination:** A satellite staging area may require use fees from the operator, increasing overall cost. If a municipal garage were provided free of charge, there would still be some level of coordination necessary for its use, increasing the administrative burden on the operator.

Further considerations around implementation are considered in the following section.

5.0 Funding and Implementation

Funding and implementation are important considerations in piloting the preferred alternative. This section describes the expected costs of the service, potential revenue, and discusses a variety of implementation and operational considerations.

5.1 Funding Needs

MaineDOT has committed to funding this service for a pilot period of two years using state funding. Costs and revenues are critical not only for running the initial pilot service, but also sustaining a successful pilot service into the future. The section below lays out estimates of potential costs for running the level of service in the preferred alternative as well as potential fare revenue to defray those costs.

5.1.1 Estimated Costs

To estimate the costs of providing this service, an operations and maintenance (O&M) cost model was developed. The model utilizes cost and service-level data from the National Transit Database (NTD) of agencies nationally that provide commuter bus service. Forty-five agencies providing commuter bus service were selected as peers based on using between 3 and 20 peak commuter bus vehicles, as well as being classified as “full reporters.”¹ A three-variable cost model using inputs of vehicle revenue hours, vehicle revenue miles, and peak vehicles was created and calibrated to these peer agencies. The model also incorporates an inflation factor to escalate costs from the 2021 base data to expected 2024 nominal dollars.

The preferred alternative requires approximately 10,000 to 11,000 annual vehicle revenue hours, 350,000 to 375,000 vehicle revenue miles, and two to three peak vehicles. It is expected that the total O&M cost of the preferred alternative would be \$1.9 to \$2.1 million per year, as summarized in Table 5.1.²

Table 5.1 Cost Estimate for the Preferred Alternative

Service Scenario	Vehicle Revenue Hours ¹	Vehicle Revenue Miles	Vehicles Operating in Maximum Service	Cost Estimate
Peak/Off-Peak	10,671	371,112	3	\$2,028,000
Consistent	10,483	357,930	2	\$1,904,000
Zipper	10,868	371,112	2	\$1,968,000

¹ Although Vehicle Revenue Miles are the same for two scheduling approaches, Vehicle Revenue Hours vary based on overall vehicle run schedules and layover assumptions.

¹ NTD Full Reporters report costs separately for the categories of vehicle operations, vehicle maintenance, facility maintenance, and general administration.

² In the case of a turnkey service where the motorcoaches are provided by the operator, total annual costs could increase by \$50,000 to \$200,000 per year depending on the age and condition of the vehicles used.

5.1.2 Fares and Revenue

Consideration of fares is important in service design; fares will impact ridership, while higher farebox recovery will enable additional service to be provided within the same level of subsidy. A review of 17 peer services across New England revealed a range of fare policies in use:

- A handful of peers, primarily in Vermont, are currently running similar routes fare-free.
- A few agencies, including several comparable routes in greater Hartford, CT, the Western Maine Transportation Service Green Line, and Downeast Transportation's Commute to Bar Harbor services, are in the \$5.00 to \$6.00 per one-way trip range. This is equivalent to \$0.10-\$0.15 per route mile.
- Concord Coach and Greyhound provide existing service between Lewiston/Auburn and Portland, with fares of \$12 to \$14 one-way. This is \$0.27 to \$0.32 per mile. In northern Maine, Cyr Bus Lines provides intercity service at roughly \$0.20 per mile.
- Services to Boston are about \$15 from Portsmouth or Nashua, and both are slightly longer than the Lewiston/Auburn to Portland route. Springfield to Boston is about twice as far and \$31 one-way. These services are \$0.25 to \$0.35 per mile, reflecting a premium to serve a large market with significant parking costs on frequently congested corridors.
- Local services include \$2.00 fares for local routes in the greater Portland area, \$4.00 fares for BREEZ express service, and \$5.00 fares for the Zoom express route.³ The express route fares are \$0.15 to \$0.26 per mile. Local CityLink service in Lewiston/Auburn is \$1.50 per ride.

Based on this review, a baseline one-way fare in the \$6.00 to \$12.00 range (\$0.14 to \$0.27 per mile) would be in line with peer services.

Discounted Fares

Discounted fares were a topic brought up during the outreach process. Discounts for bulk purchases (such as round-trip discounts, 10-ride pass bundles, 5-day or 30-day passes, etc.) are common among comparable services, providing incentive for frequent ridership. In addition, discounts should be considered for various population groups such as older adults, people with disabilities, students, New Mainers, and/or low-income passengers.

As a rule of thumb, depending on the extent of the discounts and the demographics of actual ridership, fare discounts may reduce the overall average fare per rider by up to 50 percent from the baseline fare. Thus, the benefits of fare discounts should be balanced with expectations and capacity regarding overall ridership and service subsidy.

Farebox Revenue Potential

While a ridership forecast is not within the scope of this study, three calculations are presented to provide context on the revenue potential for this service:

³ Normal fares reported here. These fares are temporarily half-price from March 1 through September 30, 2023.

- To achieve \$500,000 in fare revenue per year (approximately 25 percent of the total estimated cost), a \$6 to \$12 baseline fare would require roughly 85,000 to 167,000 riders per year (or 260 to 780 per weekday).
- A \$6 to \$12 baseline one-way fare that captured 5 percent of the total trips between the Lewiston/Auburn and Portland regions based on the transit propensity analysis (47,500 annual riders, or 150 daily riders) could result in \$140,000 to \$285,000 in annual fare revenue (up to approximately 14 percent of the total cost).
- If every trip in the preferred alternative had 20 riders on board in each direction (170,000 annual riders, or 520 per weekday), a \$6 to \$12 fare would result in \$500,000 to \$1,000,000 in annual fare revenue (up to approximately half the total cost).

Fares on Connecting Services

As discussed further in the Implementation Section, it is recommended that fares for this service be treated independently of local connecting services during the pilot period to facilitate implementation. In the future, integration with connecting local bus services in terms of either fare collection technology (i.e., the DiriGO platform currently used by BSOOB Transit, Greater Portland Metro, and South Portland Bus Service) or fare policy (i.e., discounted or free transfers) can be explored.

National Transit Database Reporting

As this pilot program will be supported by state funds, MaineDOT is not obligated to provide operating statistics to the National Transit Database (NTD). However, MaineDOT may pursue reporting those statistics so that the Portland UZA is able to gain a larger share of the Federal Section 5307 apportionment.⁴ The formula for the 5307 apportionments can be found in Appendix B.

There are several considerations for whether or not to report the service into NTD:

- **Level of effort:** Reporting into NTD will require dedicated staff time on the part of MaineDOT to not only provide basic monthly statistics, but also a larger annual report that includes financial breakdowns. In general, this function cannot be delegated to the operator.
- **Designating MaineDOT as a recipient:** The Governor would need to designate MaineDOT as a recipient of 5307 funding in the Portland UZA and MaineDOT would need to receive some Federal funding—even a nominal amount—in order to be eligible as an urban reporter. The Portland UZA already has multiple recipients of Federal funds, and adding another recipient may require considerable discussion. However, if a current NTD reporter were operating the service, they could include the miles from this commuter service in their required NTD reports.
- **Delay in impact:** Additional funding resulting from reporting these statistics typically has a two-year time lag. This is because final accounting of the fiscal year must take place before financial reports are submitted in the annual NTD report, and then FTA must validate the statistics before using them in the

⁴ Formula Federal Section 5307 funding apportionments for small urban areas such as the Lewiston/Auburn UZA are calculated using population and population density, and so would not be directly impacted by the additional miles and ridership generated by the proposed service. See Appendix B for the formula for 5307 apportionments.

apportionment formula. It is possible that the pilot service will no longer be operating by the time additional revenue is apportioned.

- **Allocation of funding within UZAs:** For the Portland UZA, ridership and miles are incorporated into the Federal apportionment. It is not always clear what impact an additional service has on apportionment, as the total funding allocated across the country varies by year and the formula takes many factors into account. The split between operators within a UZA typically requires extensive negotiations, and adding an additional reporter into the process may require additional coordination.

MaineDOT may want to consult with the Metropolitan Planning Organization for Portland (Portland Area Comprehensive Transportation System, or PACTS) and/or operators in the region to better understand whether to report operating statistics for the service to NTD.

5.2 Implementation Plan

MaineDOT is committed to implementing this pilot service in 2024. This section describes several steps which must occur in order to begin running the service. This report puts a particular focus on procurement, as many of the service details and expectations must be clearly stated in order for vendors to propose and run service that meets the needs of MaineDOT and the traveling public.

5.2.1 Division of Responsibilities

Since MaineDOT plans to enter a purchased transit contract to deliver the service, separation of management and operating roles must be considered and may be influenced by laws and regulations. Role separation considerations often include:

- **Right-of-way:** Which entity is best suited to enter into agreements for the use of private property to deliver the service? As this is a MaineDOT-run service, it may be preferred for that entity to enter into the agreements so that they are valid regardless of the operator.
- **Federal Program Plans:** Which entity will be responsible for program plans (Title VI, ADA, Safety, Security, Vehicle Maintenance)? MaineDOT has begun conferring internally to confirm applicability of these plans to this state-funded pilot service.
- **Incident Response:** Which entity will be responsible for responding to incidents/accidents/safety calls at park and rides or bus stops? Most likely, the operator is best suited to respond to these incidents, but there may be specific instances where MaineDOT wants to manage the response.
- **Service Changes:** Which entity will have the authority to cease the service in times of inclement weather or emergency events? Regular service changes will likely need to be developed and/or approved by MaineDOT, but emergency events may be more appropriately delegated to the contractor. When a contractor has the responsibility of determining service closure, it is best practice for the buyer (MaineDOT) to request a Service Closure and Continuing Service Plan as part of the RFP. The Service Closure and Continuing Service Plan should at a minimum include: under what circumstances the contractor may cease total or partial service (e.g., wind speeds over 32 miles per hour, imminent threat to the public), how the public will be notified that the service has been suspended, actions to take for immediate return to service after the emergency event (e.g., asset condition or safety assessments at bus stops and on vehicles, all clear from Government officials), how the public will be notified that service

has resumed, and a statement that contractor's staff and bus operators cannot evacuate during emergency events.

- **Customer Complaints:** Which entity should handle customer complaints (about the service/drivers, condition of stops and amenities, garbage removal, etc.)? Depending on the level of ridership, MaineDOT may need to have a dedicated staff person if they choose to manage customer complaints.
- **Advertising and Marketing:** Which entity should handle advertising and marketing of the service? MaineDOT has indicated an interest in dividing the responsibility of advertising and marketing with the operator, but that division should be clearly spelled out in the RFP.

Interlocal and/or right-of-way agreements and program plans should be in place prior to the start of service. If MaineDOT does not take on these roles, then provisions for the Contractor to engage in these activities prior to start of service should be allowed and stated in the RFP.

Answers to these questions above should be incorporated into the RFP, as these are important factors that influence if or how a bidder will respond and ensure that operational components which impact the customer's experience are addressed prior to the start of service. Additionally, the answers to these questions set clear responsibilities between MaineDOT and its Contractor. Where MaineDOT decides that the Contractor is best suited to handle an activity, they should devise an oversight/monitoring procedure to ensure the contractor is adequately addressing these areas throughout the contract term.

5.2.2 *MaineDOT Oversight Role*

As a buyer of public transit services, MaineDOT will have the ultimate responsibility of service delivery oversight and contract management. Service delivery oversight consists of several activities that MaineDOT should expect to undertake during the contract term, such as performance monitoring, as this information will guide future decisions and actions related to the service. Contract management entails activities that involve compliance, contractor reimbursement, and other administration functions. Often, the results of service delivery oversight activities will inform updates or changes to future contract provisions.

MaineDOT will be accountable for ensuring that obligations outlined in the contract are adhered to. This includes an annual review and update of all referenced plan documents required by both the buyer and seller. As a best practice, plan reviews should be done jointly to ensure updates are understood and agreed to by both parties.

Amendments to the contract during the contact period may need to be approved due to changes in Federal or state legislation that directly affect the delivery of service and/or cost to adhere to new regulations.

Staffing Considerations

Service delivery oversight and contract management is often carried out by a dedicated project manager. The project manager functions as the key contact person to the contractor. Activities that a project manager may engage in include, but are not limited to:

- Reviewing monthly invoices and supporting documentation.
- Questioning activities or data that is a variance from previous reporting.

- Preparing contract amendments.
- Performing random site audits (on the bus or at stops).
- Informing on new state and Federal rulings that involve public transit services.
- Handling customer service complaints.
- Replacing or organizing the replacement of bus stop amenities (poles/signs, benches, bike racks etc.).
- Devising marketing materials/social media content.
- Conducting surveys.

MaineDOT should confirm whether a dedicated staff member for oversight and administration of this service is needed and/or feasible and act accordingly. It is also possible to contract with a third party to provide oversight functions if dedicating a full-time staff person for a pilot service is not preferred.

5.2.3 Procurement Strategy

Procurement is critical to a transit service's success. This is because it plays a role in planning, expectations, and execution. Public transit services are influenced by customer needs and expectations, local, state, and Federal laws, and—often—grant compliance; therefore, it is important to identify operational and administrative requirements in the procurement to ensure a bidder understands the project in its totality and can submit a cost based on the deliverables, avoiding potential contract disputes after the fact. Additionally, when details of the program to be carried out are provided in the request for proposal, transit providers are less likely to feel the need to include contingency costs for the unknown.

Terms

As a best practice, payment terms should be set as a per vehicle revenue hour rate. Contractors should be reimbursed for actual services performed and typically within 45 days of a completed calendar month's service and/or when complete and accurate reports are received from the contractor. Reports should inform on key metrics and activities, such as vehicle revenue hours, vehicle revenue miles, ridership count, fare collection, service interruptions, etc. (performance metrics are discussed further below).

Route Schedule and Alignment

MaineDOT has indicated a desire to provide flexibility to the bidders to adjust the example route alignment and schedules provided in this report. Using that approach, the RFP should define the service schedule constraints that a bidder must propose in order to devise an acceptable route plan. For example:

Provided in this RFP as Exhibit "[x]" is a preferred timetable and route alignment for the commuter service route. Bidders have the flexibility to propose a timetable that is most advantageous given their operational set-up and policies. However, at a minimum the schedule and timetable must consider the following:

- *All indicated stops must be served on every end-to-end bus trip*
- *A minimum of [x] revenue vehicles in maximum service will be required*

- *First run must begin/first stop must be reached no later than [0:00am] from [x]*
- *A minimum of [x] trips must be completed daily (a trip is the time from the first scheduled stop to the last scheduled stop in one direction—approximately 70 minutes / PTC to Bates College)*
- *A maximum of [x] vehicle revenue hours per day per bus*
- *A revenue vehicle may not leave a stop prior to its published scheduled time*

Service Provisions

To ensure services are operating at an optimal level and avoid stranding passengers, MaineDOT should include criteria for the contractor to adhere to when vehicles become delayed or inoperable. For example:

In case of vehicle delay of more than [xx] minutes, an additional vehicle must be staged (at first stop) to begin next trip (at the scheduled time) to maintain on-time performance and avoid vehicle bunching. A delayed vehicle can be taken out of service when it completes full run and alights all passengers.

In case of a vehicle breakdown, immediate deployment of replacement vehicle must take place unless the following conditions are all present:

- *A revenue service vehicle is already en route traveling in the same direction of the inoperable vehicle and will arrive to the location of the inoperable vehicle before a replacement vehicle can arrive*
- *Both vehicles will be stopped at a location where passengers can safely transfer from the inoperable vehicle onto the arriving vehicle*
- *All passengers can be accommodated on the arriving vehicle*

When all these conditions above are present, and the next arriving revenue vehicle is going to board all passengers, then a replacement vehicle must be staged (at first stop) to begin next run, in place of the inoperable vehicle, to maintain on time performance.

Fare Collection

Information regarding the method(s) of collecting fares from passengers should be included in the RFP. For example:

Drivers are required to collect applicable fare from all customers. Fares will be collected in the following forms: cash, ticket, mobile app, etc.

As a customer convenience, a prepaid fare option is the industry best practice. A prepaid option can be in the form of purchasing from a website and printing out a ticket for driver inspection at the time of boarding. Alternately, tickets can be sent to an individual's cell phone and the passenger shows proof of payment from their phone (mobile ticketing).

If MaineDOT does not provide a prepaid ticketing service, the RFP should consider prepaid fare options as a value-added criterion when ranking proposals. Additionally, if the contractor will be responsible for creating bus passes, MaineDOT should inform on the overall design of the passes, including if the bus pass "look"

should change at recommended intervals (to reduce counterfeit passes) and if there will be an expiration period from the time of purchase.

Cash, unlike other forms of fare mechanisms, involves a set of protocols to follow after its collection and a contractor should be aware of these responsibilities in the RFP. Clear protocols regarding how and who should be handling cash may include:

- Cash must be inserted into a farebox or safe mechanism that cannot be opened by any non-authorized personnel.
- Authorized personnel must remove cash from farebox daily (or another interval as deemed necessary by MaineDOT). Recommended daily if buses are not parked in a secured location overnight. List authorized personnel.
- Contractor will deposit cash/fare collected into a MaineDOT bank account daily (or other interval as deemed necessary by MaineDOT) or Contractor will deposit cash/fare into Contractor's bank account and deduct the fare from its monthly invoice.

Typically, when a seller retains the cash and makes deposits into its own bank account, copies of the bank receipts are included in the monthly or quarterly report package as back-up to their reimbursement request.

Customer Service

Establishing how a customer will find or ask for information regarding the service should be included in the RFP as this will be an added expense to the seller if MaineDOT does not provide these services. It should be noted that in purchased transit operations, the buyer will often assume responsibility of a dedicated complaint line or website as part of their oversight program. Examples of customer service provisions could include:

- A physical customer service center which customers can visit in person (typically to get information about the service, purchase bus passes, or pick up lost and found items).
- A customer call center where customers call directly to speak to a live agent to get information about the service (usually manned during all operating hours and not open to the public).
- A static website that includes all pertinent information about the service:
 - Route map, schedule, and timetable
 - Fare structure
 - Customer service phone number
 - Customer complaint phone number (if different from customer service line)
 - List of amenities located at each bus stop, if any (daily parking, overnight parking, seating, shelter, bike racks, restrooms, security etc.)
 - List of other connecting transit services at each bus stop and contact information or website links to other transit services

- An interactive website that includes all pertinent information plus other features:
 - Tool for customers to send in requests for information about the service and response capability (email)
 - Trip planner tool (useful if connecting transit services use similar tool)
 - Delay/Detour/Closure notification
- An app that offers all the features of a website plus text notifications regarding service delays and/or mobile ticketing

Both customer service centers and call centers should provide language line assistance (a bridge) to handle customer service needs in languages other than English. Websites, and all content, should meet all accessibility requirements. If the bus service offers a real-time bus location app, often call centers are only open during administrative hours.

Performance Reporting and Monitoring

In addition to collecting traditional metrics and information such as VRH, VRM, ridership count, fare collection, and service interruptions from the Contractor, MaineDOT may want to collect other performance data. This can be used to contribute to other regional programs and plans or support route realignment, stop adjustments, and mode shift at a later date.

The RFP should include an outline of all performance metrics a buyer wants to collect to ensure that a Contractor has a mechanism in place to record the requested information from the start of the service. Some examples of information that may be requested are:

- **Ridership levels by stop and time (boards and alights):** Data reported on ridership levels by stop and time should be used to determine effectiveness of a stop location. The buyer will determine a level of service requirement at each stop to be considered viable when considering adjustments to the service.
- **Lift/ramp deployment requests by stop and time:** Collecting lift/ramp deployment data is useful when considering route changes or mode shifts. Lift/ramp data is an indicator of how many individuals at each stop may have a disability, may be over the age of 65, or may be traveling with young children (strollers).
- **Significant delays in service (delays over [xx] minutes):** Tracking significant delays in service could be an indicator that a route needs reoptimizing or external factors are contributing to the unreliability of the service. MaineDOT should determine an acceptability rate of significant delays within a timeframe (monthly/quarterly) before making changes to the service. Route reoptimizing would include expanding the run time of the route (scheduling additional time between stops). When determined that external factors are contributing to delays, the route(s) taken between stops may be changed.
- **Route deviations and reason:** Route deviations are performed when a driver is unable to maneuver through an area due to temporary or longer-term road closures. Sometimes, route deviations can contribute to missed stops as a bus stop location may be between stop “A” and stop “C” with no way to perform stop “B.” Collecting route deviation information (including missed stops) is useful in addressing customer experience issues and future route and stop updates.

- Service interruptions due to mechanical failures:** Service interruptions due to mechanical failures provides valuable information regarding the vehicles used in revenue service. Mechanical failures could be caused by an aging fleet or preventative maintenance (PM) services not being performed in compliance with the Vehicle Maintenance Plan. A buyer of transit services may wish to develop their own Vehicle Maintenance Plan which the seller must accept, or a buyer may wish to include a contract provision that the buyer must approve the seller's Vehicle Maintenance Plan. In either scenario, the buyer should include a contract provision to review the seller's vehicle maintenance records upon request, if not requesting PM data in monthly/quarterly reports.
- On time performance information (requires AVL device and reporting software):** On-time performance (OTP) data is an indicator of how well the service is doing by informing on the reliability of the service at every stop on the route. OTP should use an automated collection of data using an AVL/GPS system. Tracking the time of arrival and time of departure at each stop can be invaluable for the customer experience because it holds the operator accountable for delivering services as contractually agreed upon. When OTP is required of the seller, often the buyer will request access to the seller's software to pull OTP reports as needed (to assist with customer complaints) or request the seller provide monthly/quarterly reports with invoices. When this data is available, contract provisions may include disincentives for failure to perform the services agreed to, including late arrivals to the first run of the day or early departures at stops.

MaineDOT may want to consider creating a template that outlines all performance measures that need to be collected to ensure the information is received in its desired format.

Successful transit performance measurement programs are linked to agency goals and objectives. For instance, if an agency has a safety goal, it may collect, evaluate, and set targets involving total crashes, preventable crashes, passenger injuries, employee injuries, fatalities, etc. An agency that places an emphasis on integration and connectivity will often collect and analyze data regarding the number of locations where transfers can be made to other modes/transit operators and percent of stops meeting ADA accessibility standards.

As a best practice, transit programs will often use historical data to update performance benchmarks over time. Table 5.2 outlines an example of this.

Table 5.2 Example Performance Measures Target

Performance Measure	Year 1—Actual	Year 2—Target
Average Weekday Ridership Count	70	80
Average Saturday Ridership Count	30	35
Average Sunday Ridership Count	27	32
Number of Delays (over 20 minutes)	15	<10
Number of Route Deviations (contributing to missed stops)	20	<12
Miles Between Service Interruptions	26,000	32,500

5.2.4 Capital Improvements/Right-of-Way Coordination

The site visit identified that the overall conditions of the bus stops of the preferred alternative are in 'Good' to 'Very Good' condition. The condition of each bus stop is elaborated on below.

Portland Transportation Center

As an existing multimodal transportation hub, infrastructure at the Portland Transportation Center is in very good condition. The facility is staffed and includes multiple amenities such as restrooms, seating areas, vending machines, and bus parking. Recommendations for capital improvements include signage for the planned service and additional bicycle infrastructure, including options for secure storage.

Figure 5.1 Portland Transportation Center



Source: Cambridge Systematics, Inc. (first photo)/Miles in Transit (second photo).

Monument Square

Monument Square serves as the hub for GP Metro service, including the majority of routes, as well as multiple connecting services. The bus stop, located along Congress Street, consists of a very large bus shelter with seating. Overall, the bus stop is in good condition, but could use a refurbishment. Although the bus stop includes available bicycles as part of Portland's bike share program, there do not appear to be adequate locations to park bicycles. Recommendations for capital improvements include signage for the planned service and additional bicycle infrastructure, including options for secure storage.

Figure 5.2 Monument Square



Source: Cambridge Systematics, Inc.

Exit 75 Park and Ride

The bus stop is located at the south end of Auburn, adjacent to the Exit 75 Park and Ride lot. The bus stop includes a staffed facility, which is not currently open to the public. As a result, passengers are required to wait outside of the facility for buses. The facility is owned and operated by Concord Coach Lines, indicating that MaineDOT would need to coordinate with the owner and operator to open the facility to passengers.

Figure 5.3 Exit 75 Park and Ride



Source: Cambridge Systematics, Inc.

Auburn Transportation Center

Auburn Transportation Center is located at the north end of Great Falls Plaza and adjacent to the Auburn Esplanade of the Auburn Housing Authority. The Auburn Transportation Center consists of an unstaffed facility which includes restrooms and seating and is clean and well-maintained. The facility does not include bicycle infrastructure. Furthermore, despite being located in Downtown Auburn and adjacent to restricted income and older adult housing, the facility is surrounded by surface parking lot, and could benefit from improved pedestrian amenities, as well as the addition of bicycle infrastructure. The facility will also need additional signage to highlight the new service.

Figure 5.4 Auburn Transportation Center



Source: Cambridge Systematics, Inc.

Lewiston Bus Station

The Lewiston Bus Station is located on Oak Street in Downtown Lewiston, and includes an unstaffed facility in fair condition. Recommended capital improvements include the modernization of the facility, signage for the new service, and implementation of bicycle infrastructure.

Figure 5.5 Lewiston Bus Station



Source: Cambridge Systematics, Inc.

Bates College

The bus stop for Bates College is located at the entrance to the Underhill Arena within the college campus. The bus stop does not include any amenities or specific features and functions as a simple curb bus stop. Recommendations for capital improvement upgrades include signage for the new bus service as well as bicycle infrastructure. Additional infrastructure upgrades, such as a bus shelter, could be coordinated with Bates College.

Figure 5.6 Bates College Bus Stop



Source: Cambridge Systematics, Inc.

5.2.5 Branding and Communications

Branding should focus on establishing the service as the most affordable, reliable, and convenient method of transportation in the region, not only to foster trust among current users of public transit, but to engage new customers as well. Branding considerations include:

- Name of the service/route should be simple and regionally neutral.
- Logo/bus wrap design should be unique to differentiate it from other transit services.
- The logo should be added to bus stop signs and/or amenities at designated stops along the route.
- The service should have a stand-alone webpage with a dedicated URL.

The above-listed activities are to be executed prior to the service start date. It should be noted that when a buyer (MaineDOT) does not own the vehicles, has a restrictive budget, and/or is working under a short-term contract (pilot program), it may not be worth the investment to wrap vehicles as a seller will likely require MaineDOT to pay for the unwrapping and repainting of their rolling stock at the end of the contract period. MaineDOT can specify in the RFP that all vehicles to be used under the terms of the contract be one color and uniform throughout the fleet and free of any advertising, or color schematic. In lieu of bus wraps, MaineDOT may provide the contractor with “peel and stick” or magnetic logo/graphics to adhere to the vehicles.

Examples of commuter service logo and designs are shown in Figure 5.7 and Figure 5.8.

Figure 5.7 South Florida Commuter Services Example Branding
An Extension of the Florida DOT—Districts Four and Six



Figure 5.8 Loudoun County, VA—Commuter Bus Example Branding



Communications should consist of pre-rollout activities that prime the public for the new service kickoff, highlight the new service once it has begun operating, and keep the public apprised of any modifications to the service. Engagement should take multiple forms and can include, but are not limited to, the activities listed below.

- Onboard engagement occurs on the vehicles for the purpose of providing current customers information about the service, new services, or upcoming changes to the services. This type of engagement includes:
 - In-vehicle advertisements.
 - Information distribution by the drivers (recommended quarter page or business card size).
 - Onboard ambassadors distributing information and answering any questions.

Figure 5.9 Example Transit Advertisement—City of Macomb, IL

macomb illinois
Smalltown living. Community driven.

City Routes

Macomb, Illinois | As of August 1, 2023

Going SHOPPING? Take an EAST Bus!		City Center Times :10 :40 <table border="1"> <tr> <td>Route 15 Brown East</td> <td>Route 15 Brown West</td> </tr> <tr> <td>Route 16 Maroon West</td> <td>Route 16 Maroon East</td> </tr> <tr> <td>Route 18 Central</td> <td>Route 18 South</td> </tr> </table>	Route 15 Brown East	Route 15 Brown West	Route 16 Maroon West	Route 16 Maroon East	Route 18 Central	Route 18 South	Going to CAMPUS? Take a WEST Bus!	
Route 15 Brown East	Route 15 Brown West									
Route 16 Maroon West	Route 16 Maroon East									
Route 18 Central	Route 18 South									
Route 15 Brown East	Route 16 Maroon East	Route 16 Maroon West	Route 15 Brown West							
Going to the HOSPITAL? Take Route 18		River Run? DMV? Bridgeway?								
Route 18 South										

Also check us out on Google Maps!

Scan the QR Code to visit our site.
See live routes, links to our mobile app,
maps, policies, and more!
cityofmacomb.com/public-transportation/

Go WEST

MCPT
McDonough County Public
Transportation

- Site-specific engagement (in-person outreach) can be performed by employees, volunteers, or transit ambassadors. The purpose is to inform current and future customers what the new service has to offer and its connectivity to other transit services. Engagement occurs in the following ways:
 - At bus stops
 - With large employers
 - With educational institutions
 - At local Governmental offices
 - With community groups
 - With social service organizations
- Media advertisements are used to market the new service to large groups of people at the same time. The marketing approach should include ways in which the service could potentially fulfill their needs or solve their problems. Engagement occurs through the following:
 - Targeted social media ads
 - Social media posts
 - Press releases

Figure 5.10 Example Social Media Post—City of Madison Redesign Twitter Post



Language access should be a consideration in all communication activities and is required under Title VI. The ability of individuals to access and understand information in their native language removes barriers from participating in programs and services. Assessing the demographics of potential customers, providing materials in languages spoken by those customers, and including multilingual support on websites will improve communication and increase customer engagement and satisfaction.

6.0 Next Steps

With completion of this study, MaineDOT intends to issue a Request for Proposals for qualified bidders to run the service. There are several remaining decision points and actions to undertake before service can be piloted as listed in this section.

6.1 Schedule

While the detailed schedule itself does not need to be finalized, key parameters for inclusion in the RFP should be. These include:

- **Span of Service:** How many hours per day by day type the service must operate.
- **Frequency:** How frequently the bus should depart the end points.
- **Level of Service for Weekend versus Weekday:** The ratio of service hours between weekend and weekday service.
- **Day Type:** If Saturday and Sunday are both treated as “weekend” days, or if there are different levels of service for the two days.
- **Coordination with Local Service:** The schedule should be coordinated with local connecting transportation service to the greatest extent possible so that transfers are feasible to major origins/destinations not directly served by this pilot service.

6.2 Bus Stops

While likely stops have been identified, some work must be done to confirm their availability for inclusion into the proposed service:

- **Right-of-Way:** The owners of the stops should be consulted to confirm the use of the area by this prospective service. This is particularly important where other bus service uses a stop and there is the potential for conflict.
- **Stop Amenities:** At the very least, signage should be installed to designate the area for the new service. MaineDOT may also consider installing benches, shelters, heaters, and garbage cans if they are not already present.
- **Connecting Active Transportation Infrastructure:** Many of the stops are already well served by the surrounding sidewalk and bicycle network. However, bike racks, connecting sidewalks or bike lanes, or wayfinding signage should be considered at stops where the existing facilities are insufficient.

6.3 Branding and Communications

MaineDOT intends to give most communications responsibilities to the operator of the service. However, several marketing and communications activities can take place while the service is being procured:

- **Brand Development:** A logo and brand concept can be developed for the service. This should be applied not only to the buses, but also to signage at stops in addition to all communications materials.
- **Social Media Accounts:** While MaineDOT may expect the operator to manage social media accounts, they may want to set up the accounts so that they have continuing control over them should the operator ever change.
- **Preliminary Stakeholder Outreach:** MaineDOT may want to undertake preliminary outreach activities to targeted stakeholders alerting them to the service and identifying any special activities that they or the operator will need to do to effectively market the service (such as table a job fair for New Mainers).

6.4 Fares

Fare levels will need to be confirmed and the approach to fare media considered.

- **Fare Levels:** This report recommends \$6 to \$12 per one-way fare based on other similar services. MaineDOT should identify what a preferred fare is and include in the RFP.
- **Fare Discounts:** There are multiple potential discounts that MaineDOT could offer listed in this report. These discounts should be finalized and included in the RFP to inform the bidder of expected levels of cash handling and complexity of collection.
- **Fare Media:** MaineDOT should determine how to handle fare collection within the RFP. For instance, extra points may be assigned to bidders with electronic fare collection options.

6.5 Staffing

Given the oversight and coordination required for a new service, MaineDOT may choose to assign an operations manager for the service. This role would review performance reports, investigate customer complaints, confirm adherence to contract terms, and work with the operator on ongoing adjustments to the service based on operational considerations and performance.

Appendix A. Stakeholder Interview Guide

Origins & Destinations

1. Where along the Lewiston/Auburn—Portland corridor would the highest demand for ridership be?
2. What key employers or employment clusters should we be sure to consult with?
3. Which locations within Lewiston/Auburn and Portland should be served by a new intercity bus service?
4. Should the intercity bus service be an express route between the two urban centers of Portland and Lewiston/Auburn, or should there be any intermediate stops?

Span of Service

5. Which hours of the day is demand for this service highest?
6. Is weekend service needed?
7. How early should an intercity bus service start and how late should it run?
8. On what frequencies should the intercity bus service operate?

Expected Demand

9. How often would a new intercity bus service be used?
10. Is there any expected seasonality to bus service demand?
11. How many workers do you have with challenges getting to work? (e.g., reliance on a family member or some other means of getting to work due to being unable to drive).
12. If access to transportation is a barrier to employment, how many potential workers do you think would utilize this service?
13. Are there any other specific considerations we should know about in relation to routing, service structure, or points of interest?
14. Are there any organizations that are working specifically with New Mainers/immigrants?

Appendix B. Federal Section 5307 Apportionment Formula

50,000–199,999 in population: (Apportioned to Governors)	9.32% of available Section 5307 funds 50% apportioned based on population 50% apportioned based on population x population density
200,000 and greater in population: (Apportioned to UZAs)	90.68% of available Section 5307 funds 33.29% (Fixed Guideway Tier*) 95.61% (Non-incentive Portion of Tier) – at least 0.75% to each UZA with commuter rail and pop. 750,000 or greater 60%—fixed guideway revenue vehicle miles 40%—fixed guideway route miles 4.39% ("Incentive" Portion of Tier) – at least 0.75% to each UZA with commuter rail and pop. 750,000 or greater – fixed guideway passenger miles x fixed guideway passenger miles/operating cost 66.71% ("Bus" Tier) 90.8% (Non-incentive Portion of Tier) 73.39% for UZAs with population 1,000,000 or greater 50%—bus revenue vehicle miles 25%—population 25%—population x population density 26.61% for UZAs population < 1,000,000 50%—bus revenue vehicle miles 25%—population 25%—population x density 9.2% ("Incentive" Portion of Tier) – bus passenger miles x bus passenger miles/operating cost

Appendix C. Transit Propensity Analysis

For the Lewiston/Auburn to Portland Bus Study, Cambridge Systematics (CS) conducted a transit propensity analysis to better understand the existing travel market between the Lewiston/Auburn and Portland areas. The process follows the same general steps used in the latest [Maine Transit Plan](#), with two primary differences:

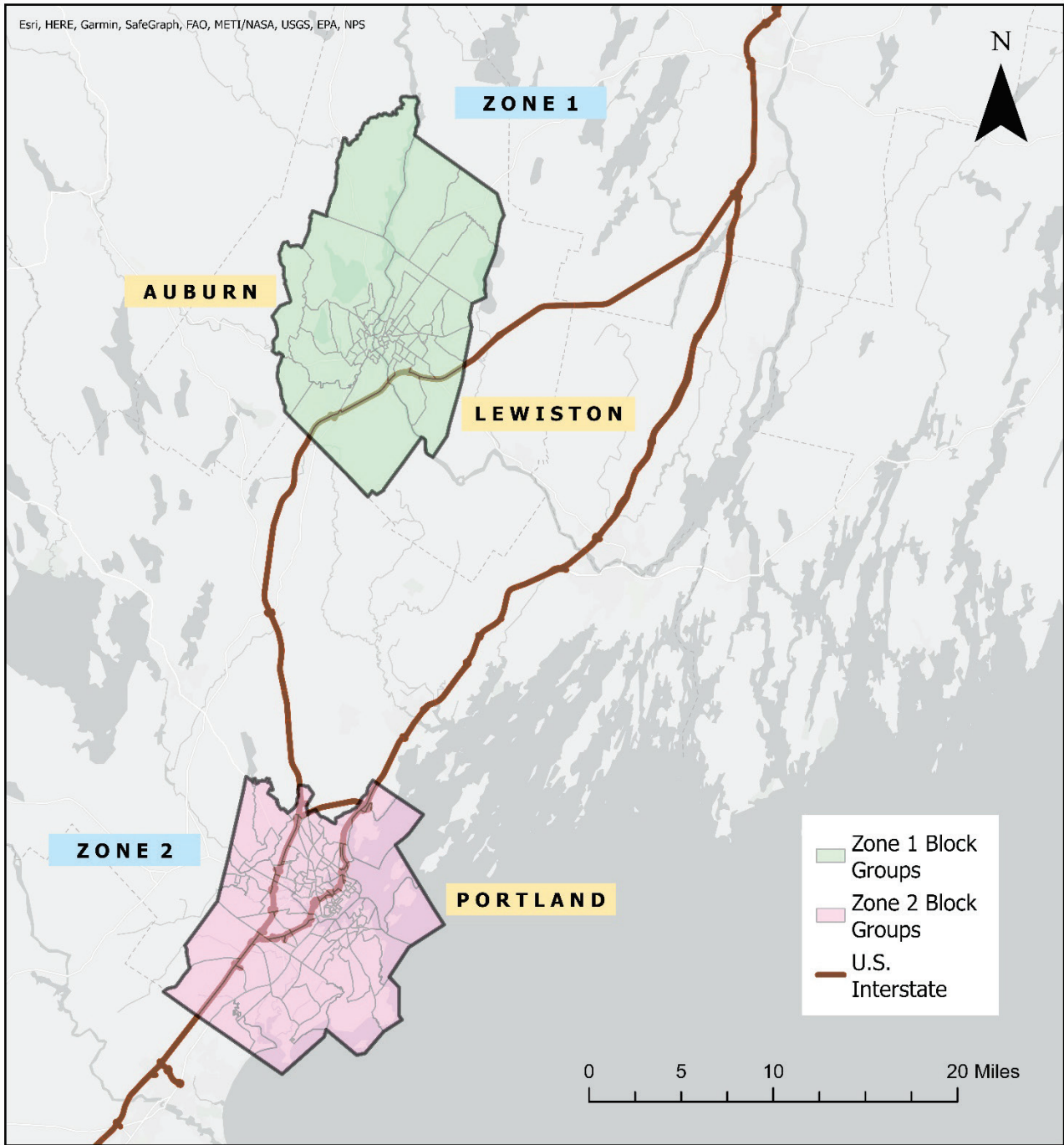
- Analysis at the census Block Group (BG) geography rather than the Census Tract level, providing more geographic resolution.
- More detail of time-of-day and day-of week, specifically regarding weekday AM peak, PM peak, and all-day trips; and weekend AM peak, PM peak, and all-day trips (AM peak was defined as 6:00-10:00 AM; PM peak was defined as 3:00-7:00 PM).

The analysis relies on location-based services data from StreetLight to provide trip volumes. This analysis uses trip volumes from a combination of September to October 2021 and March to April 2022. The transit propensity score combines trip volumes with weighted data from the American Community Survey (ACS) on population density, zero vehicle households, low-income households, population with a disability, percent female population, population not “white, non-Hispanic,” and travelers 65 years or older, which are indicators of how likely people are to use transit service. The ACS data is weighted using the methodology in the Maine Transit Plan and applied from BGs on both ends of a trip (origin and destination). The result is a transit propensity score scaled such that a score of zero has average propensity, while positive scores indicate origin-destination pairs with higher transit propensity.

For conceptual simplicity, the analysis in this section treats morning and evening trips as part of a daily commute “tour”—trips in the morning between L/A and Portland are considered a morning commute, and trips in the evening the return commute. Due to the anonymization of travel data used for this analysis, it is impossible to link morning and evening trips to a true tour—some trips could be one-way (e.g., an overnight trip) or include a return trip outside of the peak travel times. However, typical travel patterns suggest the majority of trips in this analysis are a commute-based tour, with travel in the morning one direction and return travel in the evening.

The propensity analysis included all of the greater Portland and Lewiston/Auburn areas, along with significant areas surrounding those regions. The results presented here focus on travel between two zones defined for this study: Zone 1 in the Lewiston/Auburn area and Zone 2 in the Portland area. These geographic zones are presented in Figure C.1.

Figure C.1 Zones Defined for Transit Propensity Analysis

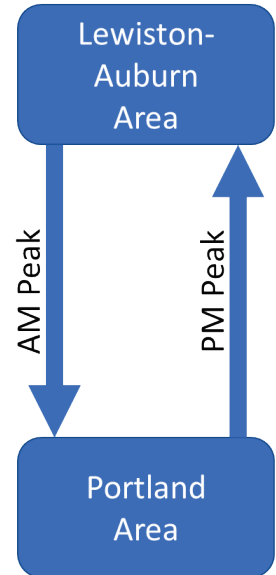


C.1 Results: L/A-to-Portland Commute

The first part of the analysis focuses on travel from the Lewiston/Auburn area (zone 1) to the Portland area (zone 2) in the weekday AM peak period, combined with the reverse direction in the weekday PM peak period. Table C.1 presents the total trips in each direction during these time periods, along with the total trips for BG pairs that have greater-than-average transit propensity.

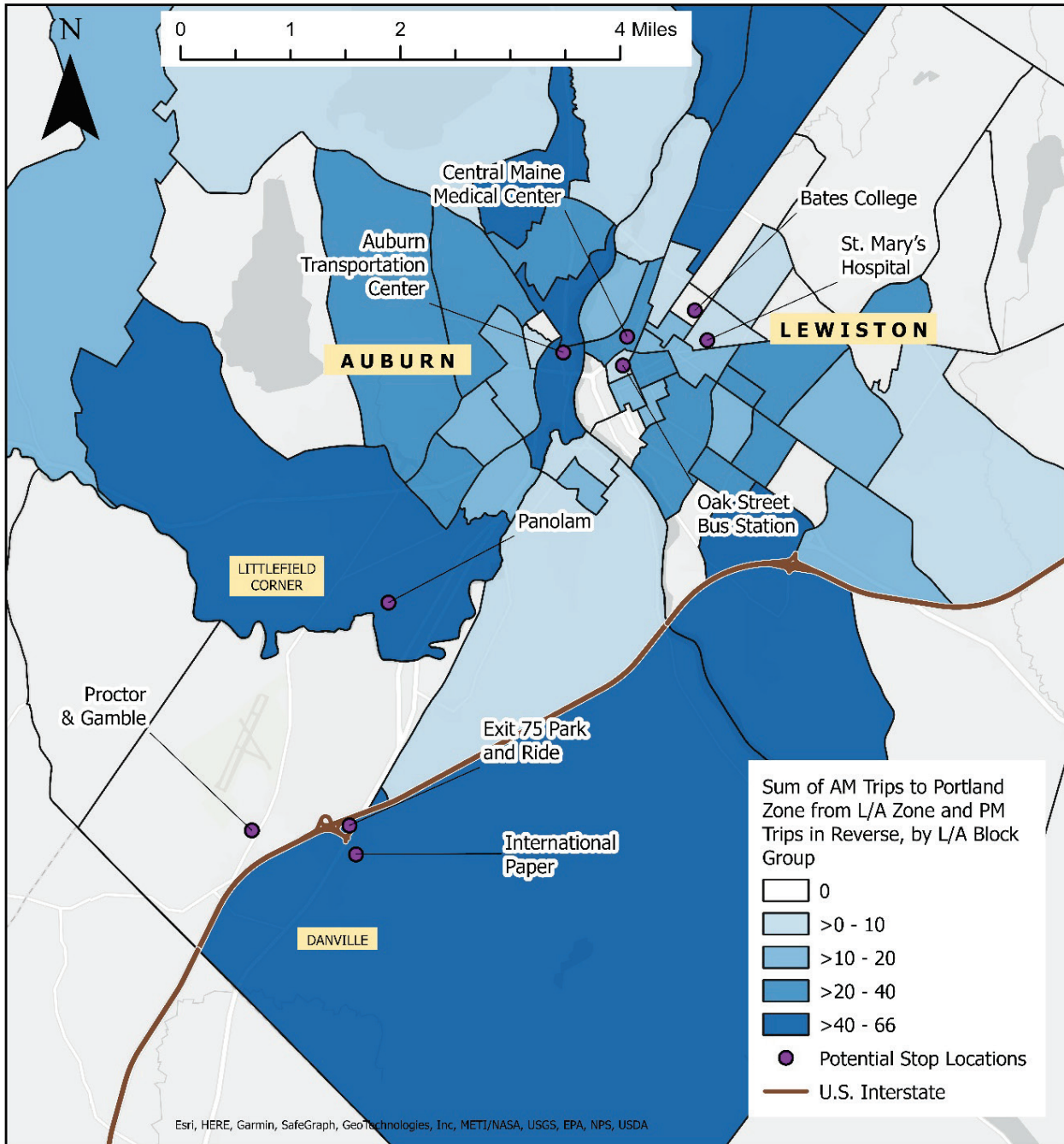
Table C.1 Commute Trips from Lewiston/Auburn Area to Portland Area

Item	Number of Trips
Zone 1 to Zone 2, weekday AM peak, total	1,140
Zone 2 to Zone 1, weekday PM peak, total	1,198
Total trips in AM and PM peak periods	2,338
Higher Transit Propensity Score Trips	
Zone 1 to Zone 2, weekday AM peak	662
Zone 2 to Zone 1, weekday PM peak	418
Total trips in AM and PM peak periods	1,080



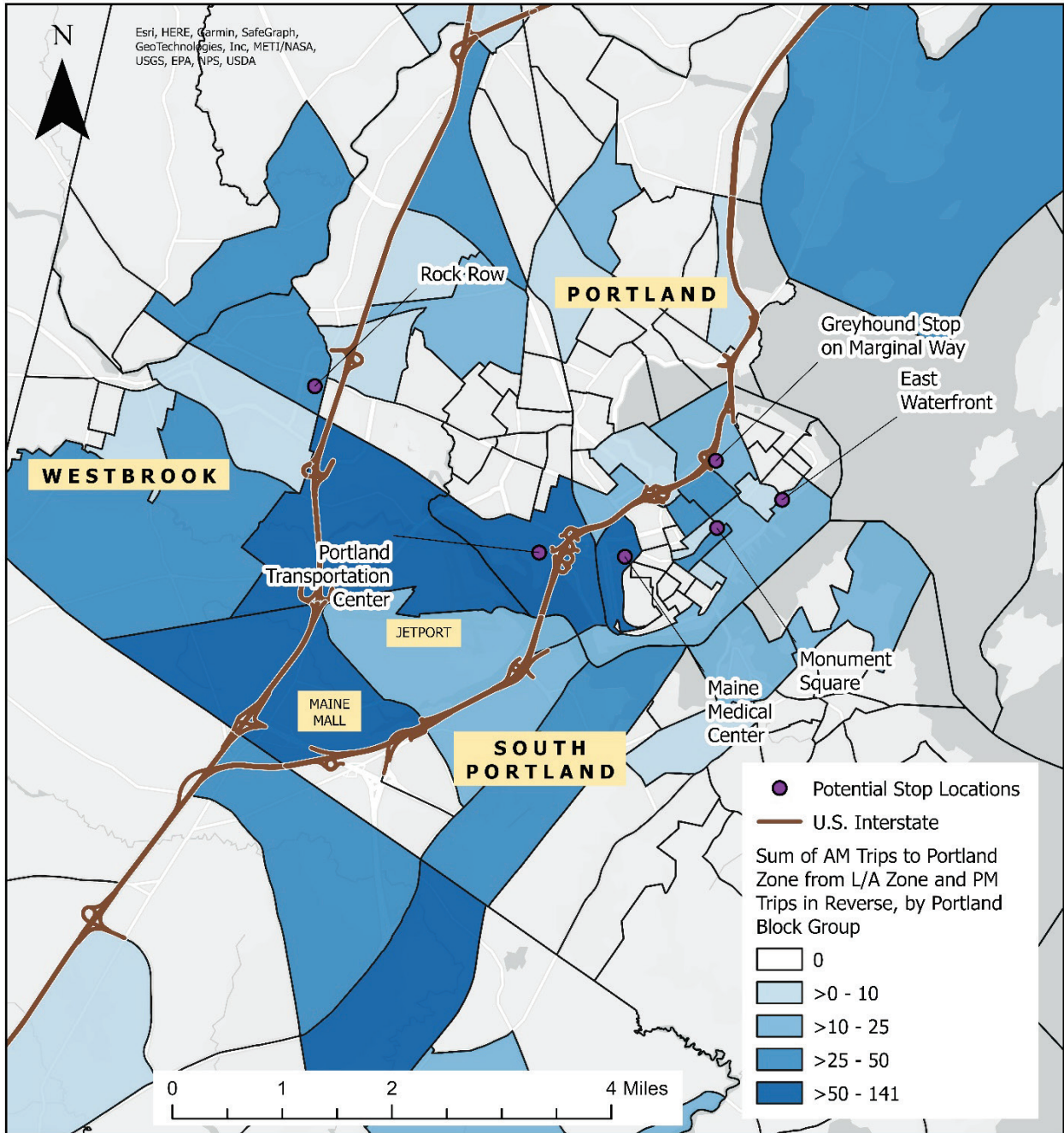
The geographic distribution of these southbound commute trips with above-average transit propensity score is shown in Figure C.2 and Figure C.3. If one assumes these trips are a part of a daily commute, the first shows the origin—the Lewiston/Auburn area—of those trips. The highest trip volumes are the downtown Auburn area, along with BGs just south of the Lewiston/Auburn urban core near Littlefield Corner and Danville. Many areas do not have any BGs with trips that have above-average transit propensity scores.

Figure C.2 Weekday Peak L/A-Based Trips by L/A Block Groups
Origin



The second map shows the distribution of trips with above-average transit propensity scores from Portland to the Lewiston/Auburn area in the PM Peak period; these trips are considered return trips to the L/A area if they are part of a daily commute. The areas around the Portland Transportation Center, the Maine Mall, Maine Medical Center, Westbrook, and just west of the Portland International Jetport see the highest concentration of trips. Block groups in the downtown Portland area near Monument Square and the East Waterfront show up but with somewhat lower trip volumes.

Figure C.3 Weekday Peak L/A Zone-Based Trips by Portland Block Groups
Destination

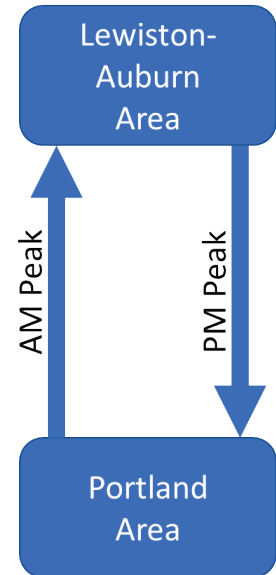


C.2 Results: Portland-to-L/A Commute

The second part of the analysis focuses on the reverse direction: travel from the Portland area (zone 2) to the Lewiston/Auburn area (zone 1) in the weekday AM peak period, combined with the reverse direction in the weekday PM peak period. Table C.2 presents the total trips in each direction during these time periods, along with the total trips for BG pairs that have greater-than-average transit propensity.

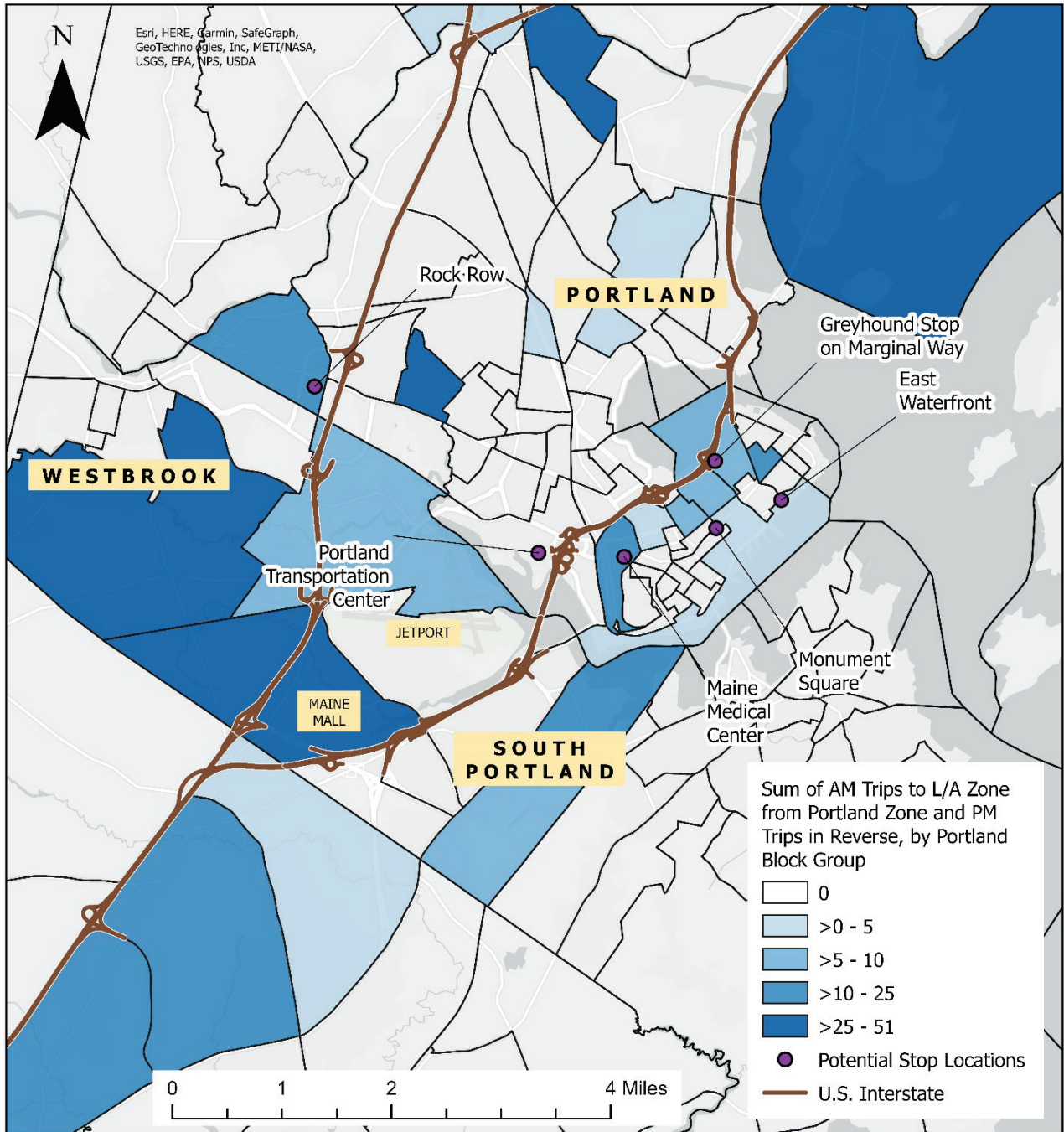
Table C.2 Commute Trips from Portland Area to Lewiston/Auburn Area

Item	Number of Trips
Zone 2 to Zone 1, weekday AM peak, total	339
Zone 1 to Zone 2, weekday PM peak, total	496
Total trips in AM and PM peak periods	835
Higher Transit Propensity Score Trips	
Zone 2 to Zone 1, weekday AM peak	172
Zone 1 to Zone 2, weekday PM peak	162
Total trips in AM and PM peak periods	334



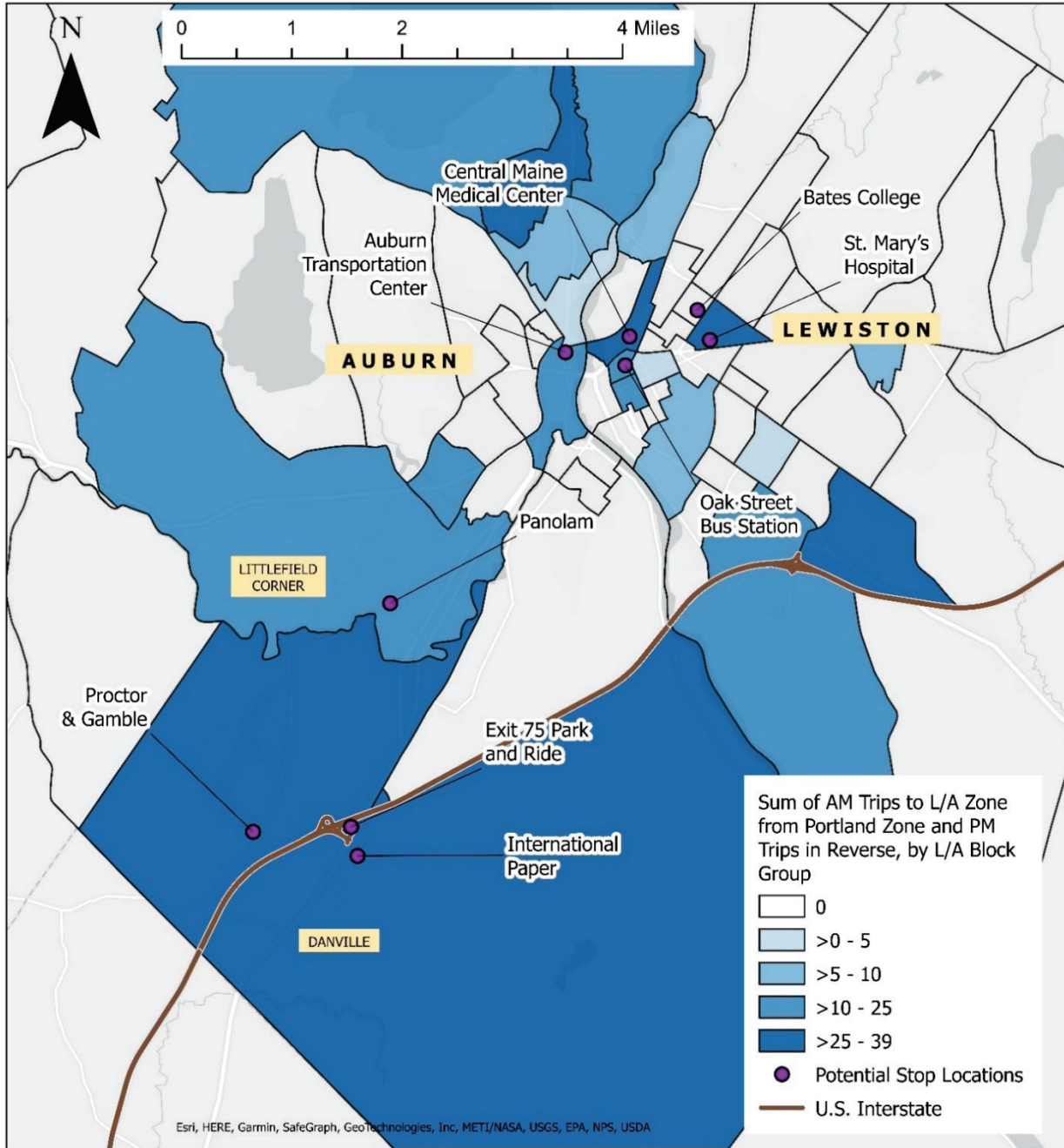
The geographic distribution of these trips is shown in Figure C.4 and Figure C.5. The first shows the distribution of these trips with above-average transit propensity score in the Portland area commuting to the L/A area. The areas around the Maine Mall, Westbrook, and areas west of the Portland International Jetport see the highest quantity of trips. Block groups in the Portland Transportation Center and downtown Portland area have very light trip volumes in this direction.

Figure C.4 Weekday Peak Portland Zone-Based Trips by Portland Block Groups
Origin



The second map shows the Lewiston/Auburn area end of those same trips. The highest trip volumes are south of Lewiston/Auburn near Littlefield Corner and Danville, along with downtown Auburn (near the Auburn Transportation Center), downtown Lewiston (Central Maine Medical Center and the Oak Street Bus Station), and St. Mary's Hospital.

Figure C.5 Weekday Peak Portland-Based Trips by L/A Block Groups
Destination



C.3 Analysis Summary

The transit propensity analysis identified areas with better potential commute flows between the L/A region and the Portland region. There is stronger directional flow toward the Portland region for what are considered to be work commute trips, with about one-third the number of trips going in the reverse direction toward the L/A area. The trips from higher-transit-propensity areas suggest that a commuter bus service, if well designed, easy to use, and appropriately marketed, could capture some existing demand for improved transportation service between these two areas.

Appendix D. Public Comments⁵

Comment

C looks promising.

Comment on peak vs off peak: I find it much more usable to have a consistent schedule so I don't need to check schedules all the time.

Exit 63 and Exit 75 need coverage

Was a route from the PTC to 95 via Congress considered? A stop near the mall or jetport could provide valuable connections to local routes that service Westbrook.

I don't believe PTC / Concord will support a competitive transit operation out of their station. Have any of those conversations had with them? Any luck?

Only three communities have formally requested a high-quality transit connection via Council actions on these routes—Lewiston, Auburn and Portland. I don't believe Gray, Westbrook, or Falmouth have, for example. A core transit service is likely most effective by being efficient and leveraging local transit options, ideally increasing demand for them.

If commuters are going to connect to last mile service via local transit, it's best if the commuter bus does touch both CityLink stations

I notice that the USM campus is not included as a Portland stop. We have several years of data from transportation surveys of students, faculty, and staff indicating that there is ample interest in/need for transportation from L/A to USM Portland, and, anecdotally, we're getting monthly (or more frequent) requests for this. Are you considering a USM stop?

I will note that the Husky now goes to the Portland peninsula and could provide a link from a downtown service to USM Portland and Westbrook.

The Falmouth Spur at peak commuter times gets congested.

Serving Bates College is less important than serving University of Southern Maine

The jetport could have some demand, as well as Bates and USM

Comments from the Greater Portland Council of Governments:

- I agree with [the] point about municipal support. Perhaps an easy way to weed out stops is to focus on the municipalities that have taken formal action to request the service. If after a successful pilot Gray (for example) wants in, we can evaluate at that time.
- I favor a route most directly connecting the city centers as possible and leaning on connections to local service from there. It's tempting to try and do a little bit of everything—hit the park-and-rides, hit USM, etc.—but I think the better strategy is to have this service stay focused on the intercity goal, and to also strengthen local service in other ways (for example, as GPCOG is doing through Transit Together implementation, or as MTA is doing through seeking operating support from the state).
- I'd hesitate to put too much focus on employment centers outside of a walkable urban core, for example near Exit 75. These areas are pretty hostile to bike-ped, so I doubt you'd get many people choosing transit. Do we know whether these employers want the service? Again, if after a successful pilot they want in, perhaps we have a conversation about what they could bring to the table.

Comments from the Androscoggin Valley Council of Governments:

I suggest we somehow identify “commuter” service vs “general transit” service demand. It may inform where the bus stop locations are located. General transit should piggyback off, on our end, the Lewiston and Auburn Transportation centers. Commuter transit might best be served and the park n' ride lots at Exit 80 Lewiston and Exit 75 Auburn ... maybe a stop in Gray as well. I suppose, through marketing efforts, we could direct BRT riders, regardless of trip purpose to use the L/A Transit Hubs as origin/destination points. There is ample parking at both for regional participants to get to the BRT service points. This would allow regional transit riders via WMTS to feed into the BRT system. There is definitely a sharing of workforce between the two areas as called out in the ATRC Transit Study.

⁵ This appendix lists comments received during the public comment period. Comments received outside of this comment period were considered in the analysis but are not listed here.

Comments from Western Maine Transportation Services:

First, I would suggest that the bus only go to Bates on Saturdays and Sundays and before or after hours that CityLink is currently operating unless you can get CityLink to expand their schedule. Before making that decision, you might want to consider the question, "Are there workers at Bates that would use this service or is it just for students?" Of course, this route may make WMTS reconsider what to offer for students going to UMF and using the GreenLine at some point as well.

Second point is where are you hiding the buses you are going to use for this pilot? I think I recall this pilot is slated to begin in the first half of 2024 and rolling stock could be challenging.

As a resident of Lewiston who often travels beyond Portland (via both bus and plane), I am thrilled and grateful at the prospect of more public transportation services between Lewiston and Portland. I have tried to time every trip from Lewiston to Portland via Concord Trailways bus to coincide with their pickup/drop off schedule at Bates College, but this has been difficult with the very few times on offer. I would absolutely use this service in future, as much as possible. The planned access to Bates and the Portland Transportation Center are VITAL to many Bates students and faculty members.

I would appreciate a service to and from Bates College from September to May. Many students do not own a vehicle and they can use the bus to Portland if there is one originating at the college but not if they have to go to Lewiston downtown on their own (with the CityLink service being hourly). As a L/A resident who works in town, I would love to have the service to visit Portland in the weekday evenings and on the weekend. Not having to drive to Portland will increase shopping and leisure options for those in L/A. I do not mind less frequent service during the day to match the demand. Eliminating Downtown Auburn may be an okay idea. Lewiston Oak Street connects to CityLink services.

I am in favor of the second route plan proposed. I also think keeping Bates College as a stop is an important part of this route. This would be heavily used by students during the academic year and staff (of which Bates is a large employer in the L/A area) who would be commuting typically work 12 months (not just academic year).

Since Concord Coach and Greyhound have severely cut their services from the downtowns of Auburn and Lewiston and from Bates, there has been a great need to supply transportation between L/A to Portland. Exit 75 is no longer attended; it is isolated and a cumbersome or complex site to access. But both the downtown Auburn stop near the Hilton and the downtown Lewiston stops are more convenient for patrons who don't have cars. Occasional Bates stops would be greatly appreciated for those of us living on the other side of Russell. I hope you go through with this plan.

Any of these routes would be an incredible boon to transit options. I appreciate the early and late commute times especially. Please add Bates College as a stake holder. To the query about Bates as seasonal, that misses many of its contingent groups. A good portion of staff and faculty commute to campus year-round. Bates further hosts summertime programs on campus, including the International Dance Festival annually.

Great project but why stop in Lewiston at Bates college that is just a seasonal employer, it would be much better to stop at Central Maine medical center that employs many people commuting from Portland. A stop at Bates is really a stop at St Mary's and that was probably chosen because St Mary's has an affiliation with Maine Med, but CMMC Would benefit more than St Mary's from this service.

I strongly support the pilot program for a bus from Portland to Lewiston. In my time living in Maine, my husband and I have frequently shared one car, and thus required alternative transit through buses. We've both commuted using the Portland METRO bus and the bus between Portland and OOB. Developing a bus route between Portland and Lewiston is a cost-effective way to connect two of Maine's largest metropolitan areas. I would also encourage Maine DOT to consider how investment in trails and a continued focus on the "Complete Streets" vision could support the last-mile problem associated with public transit. Additionally, the proposed interim trail on the Berlin Subdivision from Portland to Auburn would provide a parallel active transportation thoroughfare that would complement the availability of bus service between Portland and Lewiston.

If the goal is to get cars off the turnpike, go with route C, and consider adding the Exit 80 park and ride. If the goal is to open up more job opportunities to residents who may be carless, go with option B, since Rock Row is not yet built out which improves the likelihood these residents will not become car commuters in the first place. Do NOT use A. Use of the Falmouth Spur may increase on time performance but it's a significantly longer route, and commuters will not trade the additional 20-25 minutes of commute time to take it.

I understand that your focus in this presentation is the pilot program—routes, etc. Without having plans for secure, covered bicycle parking, you are going to lose those who are too far away to walk and not so far to drive a car. This applies to both ends of one's commute. Have secure, covered bicycle parking is essential to connecting transit with active transportation. It is also one more way to cut emissions.

Public transportation is a vital component of modern green infrastructure. However, I am concerned that the stigma against public transportation may result in a lack of usage by those who are used to car-centrism. In order for this project to be a success, it needs to be considered a viable means of transportation by those who can afford other options. Ideally, Portland and Lewiston should prioritize buses by giving them their own lane. Buses will only be appealing to car owners if they avoid getting stuck in the same traffic cars do. It also should not cost more than true amount of gas to get there.

Comments from Bates College:

Thank you for the webinar and the great work in creating a regular bus service between Lewiston and Portland. We've been excited by this project, and by the proposed stop at Bates College. We believe that this would benefit Bates and the surrounding community greatly.

1. Bates employs roughly 700 faculty and staff, over 80 of which live in Portland and commute to Lewiston regularly.
2. We have about 1800 students, many of which travel into Portland on the weekends and fly out of the Jetport for breaks.

Having a dedicated bus route from Portland to Bates would help us encourage our workers and students to reduce their carbon footprint by swapping their personal vehicles for public transportation. It also would help us recruit a broader range of faculty, staff, and students that may not have their own vehicle.

In short, we're very much in favor of your efforts to bring this bus route into existence, and are excited about the possibility of having a stop at Bates.

Comments from the City of Auburn:

- Travel Propensity
 - Commuter service design models remain exclusively focused on “chasing” current automobile commuters and assuming some level of mode shift to bus. Auburn believes that the differential in housing costs between the two metros will lead to transit riders that would not otherwise relocate and drive by car.
- Route Alternatives
 - With a goal for nearly a decade of making direct urban to urban connections between Auburn-Lewiston and Portland (backed by City Council resolves from all three cities), Auburn recommends this service focus on connecting the largest urban areas. If small cities and towns wish to have transit services, they can initiate that effort. Keeping travel times to 45 min or less downtown to downtown service is essential to sell this to riders. Falmouth, Gray and the Maine Mall would be secondary. Retaining Bates College connections would be valuable due to the employment and academic nature.
 - Serving downtown Auburn (where developer interest in significant infill housing exists) and Exit 75 (a major employment center) are both of interest. Knowing that last mile connections are important to success, Auburn would like to explore the status of the Falmouth-trial for microtransit and how that might be modeled here (as a potential future for the local fixed route)
 - The use of the Maine Turnpike/I-95 is essential to efficient and predictable service times.
- Pilot Period
 - MaineDOT suggested a two-year pilot. Auburn is concerned that a two-year pilot is not sufficient time to develop a culture of urban to urban transit that would influence lifestyle decision. Maine Will not Wait is explicit in its statements about bold investments tied to land use reforms. Auburn has stepped up significantly to suppose thousands of new units in southern Maine, at least a five-year window will allow us to gauge response and adjust locally and regional as needed for these services.
- Total investment and source
 - Auburn is mindful that DOT has not provided full funding details. This service needs to be sustainable over a long period of time, and we would request open dialogue about funding for a five-year pilot, and then planning now for how to sustain into the future. This would include local funding strategies, MaineDOT investment, and Maine Turnpike investment as well.

Comments from Greater Portland Transit District:

A balance will need to be struck between coverage and speed, particularly on the Lewiston-Auburn end of the route. There will be a lot of demand for direct, access to transit from several stakeholders in the L/A area. And there's an argument that may be made that, if the route is being funded in the first place, it should go directly where people want it to go. But the route will be most cost-effective if it can make a small handful of key stops in Lewiston and in Auburn, including one park and ride to serve those who aren't within walking distance of the final alignment.

The Lewiston-Auburn area is currently served by CityLink, which is operated by the Lewiston-Auburn Transportation Committee, and staffed by the Androscoggin Valley Council of Governments. I'd recommend that all efforts be made to convert that system to the DiriGo Pass system to facilitate transfers between Metro and CityLink. If Metro (or another DiriGo agency) running service to L/A is a possibility, it would be prudent to start that conversation soon.

Per the points above, it would be best if the existing local bus service continue to do the legwork of providing coverage area in L/A, and allow the express service to Portland to spend more of its time en route between the two metro areas.

The areas along either alignment (along I-95, or between Freeport and Lewiston) are relatively rural. The BREEZ offshoot allows for the possibility of intermediate stops along the route, but I would recommend making any deviations off of Route 136. The possible exception being Lisbon, which is a bigger possible ridership generator than running riverside along Route 136 in Durham and Auburn, which looks like it has almost zero ridership potential. Running through Lisbon may not add a whole lot of time, and could potentially add some minor amount of ridership and possibly funding.

Per the above point, if the I-95 alignment is chosen, I wouldn't bother exiting I-95 with the exception of perhaps the Exit 63 Park and Ride in Gray. This is a decent halfway point along the I-95 run and could potentially get folks in the Lakes region into play.

I show the I-95 option stopping at both park and rides in L/A, but it's probably not necessary to serve both.

I think the ideal route would include stops at the following locations: Downtown Portland, Maine Medical Center / Portland Expo / Hadlock Field area, Maine Mall area, Rock Row in Westbrook, Downtown Auburn, Downtown Lewiston, Bates College, Auburn Mall area. Thank you for considering this idea. I know it's still got a lot of work and planning to do, but I think some sort of consistent public transportation between L/A and Portland is desperately needed.

It would be nice to have an option to arrive in the L/A area sometime in the late afternoon/ early evening. Also, a route that returns to Portland and leaves after 9pm would be helpful.

I think this is a wonderful idea that I would definitely take advantage of. With a bus service to Portland, I would probably visit more often.

PLEASE! L/A needs a public transportation option to Portland. Rail still feels out of reach, but a bus would be a game changer. Especially if it ran multiple times each day.

What were the 17 stakeholder organizations?

Was a route from the PTC to 95 via Congress considered? A stop near the mall or jetport could provide valuable connections to local routes that service Westbrook.

Where are the projected costs and investment time window for this pilot project? Is there an equity comparison for this pilot to, say, the Rockland Passenger Rail Service costs for a pilot?

Were there any considerations made for local connection via bike?

The transit propensity considers only whether existing commuters by car would hop on a bus. Are there no models for individual decision-making to change residential location based on transportation choices available? (i.e., would having transit available encourage some to shift to a lower cost housing option in another city)

Equity—How much is the state going to spend in Rockland for rail vs. L/A to Portland for bus.

Are you still targeting an October 1st start date for the service?