Moving Southern Maine Forward
*Regional Transit Plan Phase 1: 2018-2023*

Short-Term Ways to Improve the Region’s Public Transit
Prepared by Stantec Consulting Services Inc. for the Portland Area Comprehensive Transportation System (PACTS) and the PACTS Transit Committee. Funding was provided by the Federal Transit Administration (FTA).

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1. What is This Plan?

Southern Maine is a vibrant and inviting place, with scenic routes, seaside views, and tourist attractions. It is home to the Greater Portland Region, the largest urban center in the state with a growing, yet aging, population and rapidly developing landscape.

Recently, Portland Area Comprehensive Transportation System (PACTS), the metropolitan planning organization (MPO) of Southern Maine adopted the regional long-range transportation plan Destination 2040. Destination 2040 sets regional goals and objectives for safe and efficient multimodal transportation, and requires collaboration between MaineDOT, local municipalities, regional transit agencies, and the Greater Portland Council of Governments (GPCOG). Destination 2040 sets a regional focus, and prioritizes the mobility of people and goods throughout the region for financial and environmental sustainability.

Moving Southern Maine Forward is a short-range plan for public transit and mobility, focused on improving the efficiency of public transit operations, while growing the attractiveness and utility of transit in Southern Maine. It follows naturally from Destination 2040, and will set short-term goals for public transit agencies throughout the Southern Maine Region. Indeed, Southern Maine presents many unique challenges and opportunities, especially with seven transit agencies providing services across bus, rail, and ferry networks, as well as on-demand services in rural, suburban, and urban environments. It also offers an important opportunity to collaborate with town and city planning departments and with municipalities from across the region to efficiently develop land use and transportation networks cohesively.

By improving transit operations and allowing greater mobility within municipalities and throughout the region, Southern Maine can provide more travel options to residents and visitors to achieve many of the goals in Destination 2040. The goals include reducing traffic, improving public health and safety, and mitigating the negative environmental impacts related to transportation.

In the preparation of this plan, it was challenging to integrate the ferry and rail systems, which have less operational flexibility compared to rubber-tire-based systems. While the recommendations do impact all seven agencies, much of the short-range action items that were identified impact the rubber tire systems more directly. This should be considered when reviewing competing funding requests across the agencies.

Moving Southern Maine Forward serves as a short-range regional transit plan, focusing on a six-year timeframe. It is a document that is intended to guide the PACTS Transit Committee (PTC), municipalities, GPCOG and PACTS towards feasible short-term actions that will grow ridership, improve customer service, enable connectivity, while establishing a foundation for a long-range transit plan. This plan is not intended as a detailed assessment of all transit operations in Southern Maine, but focuses instead on prevalent themes and findings from background analyses and stakeholder outreach activities.

The broad objectives of Moving Southern Maine Forward include:

1. Increase transit ridership throughout the region by improving the rider experience
2. Improve accountability and transparency of transit operations
3. Improve operational and financial efficiency of transit operations
This document provides a plan and a call to action. It is organized into the following sections: 
(Each section will be hyperlinked)

- **Existing Conditions** describes the Southern Maine region and provides information on the seven transit agencies
- **What Are Southern Mainers Saying?** includes feedback from surveys and stakeholder outreach
- **Setting Outcomes and Measuring Performance** provides a list of measurable criteria to help inform the decisions of the transit agencies and PACTS, as well as to track the progress of this plan
- **What’s Needed?** is a summary of prominent challenges and gaps facing transit in Southern Maine, which will help inform recommendations and the path forward
- **What We Need to Do**, identifies actionable recommendations for achieving the goals of Moving Southern Maine Forward
- **How to Get There**, provides recommendations and also discusses the path forward leading to the long-range transit plan

Moving Southern Maine Forward aligns with many previous plans by recommending ways to improve transit specifically, and mobility in general, in Southern Maine, including (hyperlinked):

- Destination 2040
- Sustain Southern Maine
- Maine Strategic Transit Plan 2025
- 2011 Southern Maine Transit Coordination Study
- SMART Initiative
- 2013 Branding and Marketing Implementation Plan
- Regional Route Study
2. Existing Conditions

Affordable and effective public transit not only provides mobility to residents, but is an economic stimulator. It helps workers access jobs, and helps vacationers visit sites without a car, and reduces the consumption of land needed for parking, freeing it up for more productive uses. In fact, the American Public Transportation Association (APTA) found that for every dollar invested in transit, four dollars of economic spin-off are generated.¹

Cities throughout the United States are increasingly facing the reality that in order to grow labor forces and attract jobs and residents, they need to provide convenient public transit, along with affordable housing.

How is transit performing in Southern Maine? Where are people going? By examining these questions, Section 2 provides a portrait of movement throughout Southern Maine, and transit performance. The following pages aim to set the scene for the recommendations of Moving Southern Maine Forward.

Study Area

Moving Southern Maine Forward is primarily focused on the same study area as Destination 2040, which is the PACTS study area comprised of portions or all of 18 municipalities (with 2015 American Community Survey (ACS) census estimates, Table 1):

<table>
<thead>
<tr>
<th>Town</th>
<th>2015 Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arundel</td>
<td>4,127</td>
</tr>
<tr>
<td>Biddeford</td>
<td>21,289</td>
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<tr>
<td>Cape Elizabeth</td>
<td>9,157</td>
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<td>Cumberland</td>
<td>7,454</td>
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<td>Falmouth</td>
<td>11,587</td>
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<td>Freeport</td>
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<td>Gorham</td>
<td>16,834</td>
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<tr>
<td>North Yarmouth</td>
<td>3,661</td>
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<tr>
<td>Old Orchard Beach</td>
<td>8,697</td>
</tr>
<tr>
<td>Portland</td>
<td>66,490</td>
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<tr>
<td>Raymond</td>
<td>4,482</td>
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<tr>
<td>Saco</td>
<td>18,874</td>
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<td>Scarborough</td>
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<td>South Portland</td>
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<td>Standish</td>
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<td>Westbrook</td>
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<td>Windham</td>
<td>17,459</td>
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<tr>
<td>Yarmouth</td>
<td>8,467</td>
</tr>
</tbody>
</table>

Table 1 Study area town populations, 2014.

The PACTS region covers a total of area of 566 square miles, with a mix of urban, suburban and rural land uses, including island communities, and based on 2015 ACS census estimates, is home to over 279,000 residents. Figure 1 displays the study area boundaries of the PACTS region, as defined in Destination 2040.

Figure 1 Population density map (2010).

It is important to note however, that Casco Bay Lines and the Amtrak Downeaster (NNEPRA) also serve areas not in the PACTS region.

Casco Bay Lines ferries serve Long Island, which is not part of the PACTS region, as well as islands incorporated in the City of Portland and the Town of Chebeague Island. While the Casco Bay Islands have low year-round populations, their summer populations swell. As one of the only means to reach the Islands from the mainland and vice-versa, Casco Bay Lines provide a vital service to the region.

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2 Casco Bay Islands year-round populations according to 2015 ACS and the Official Tourism Site of Greater Portland Maine: Peaks Island (927 people), Little and Great Diamond Islands (118 people), Cliff Island (60 people, 200 people in summer), and Chebeague Island (470 people, 1,600 people in summer); Long Island (229 people) is not part of the PACTS region.
The Amtrak Downeaster, managed by NNEPRA, connects four communities in the PACTS region (Freeport, Portland, Old Orchard Beach and Saco) and seven communities outside the region (Brunswick and Wells, Maine; Dover, Durham and Exeter, New Hampshire; Haverhill and Woburn, Massachusetts) with Boston’s North Station, providing convenient access to New England’s largest city from Southern Maine.

More recently, METRO’s BREEZ service has been extended north of Freeport into Brunswick outside of the PACTS region.

Moving Southern Maine Forward is mainly focused on the PACTS region, but recognizes that connecting towns and the island communities outside of the PACTS study area are important components of the service area.

**Ingredients for successful transit**

Effective transit services need certain ingredients to ensure productivity and efficiency. The chief ingredients are frequency, reliability, density, land use, and transit supportive populations.

The following maps are meant to illustrate current conditions in the region, as well as future conditions found in Destination 2040.3 Based on the 2010 US Census data, the densest areas of the region are located in Portland and its surrounding towns and cities (Figure 2). Likewise, the densest areas of the region forecasted for 2040 are the same towns.

3 In maps using data from Destination 2040, the level of data is from the town level. Because Casco Bay Islands are part of Portland, their data over-represents density, when in fact, the Islands have both low population and job density. In other maps, where noted, census tracts are used as geographical units of analysis.
Figure 2 Population density map (2010).

Figure 3 suggests that while density will increase, the additional population and housing will be absorbed in the densest towns.
While population density drives some transit use, a larger stimulator of transit usage is employment or job density. In fact, transit availability near jobs is one of the chief factors determining transit usage. Similar to population density, employment density (both in 2010 and forecasted for 2040) is highest in the center of the region, tapering off with increasing distance from Portland (Figure 4 and Figure 5).
Figure 4 Employment density (2010).
In terms of land use, Southern Maine has the challenge of providing transit service that is productive, efficient and attractive over a varied landscape. While fixed-route services perform best in urban environments, it becomes difficult to provide cost-effective service in low-density rural and suburban areas, which compose large areas of the region.

When designing recommendations, it is important to keep in mind that transit doesn’t always mean large buses, rather, mobility is meant to ensure that any mode, bus or train or ferry, or maybe even a car-sharing program, is available for the appropriate trip.

Where are people going?

People travel for many reasons—to go to work, visit friends, take in a ball game, or run errands. They travel at different times, in different ways, and to different places. Based on travel patterns in the region, Move Southern Maine Forward developed recommendations to facilitate mobility throughout the region.

Major transit trip generators are mapped in Figure 6. These generators include schools, (elementary, middle and high schools, universities, and colleges), town halls, libraries and hospitals in the region. The highest proportion of these generators is located in the center of the PACTS region. When overlaid with available transit routes (gray lines), many of these generators are spatially connected.
to transit. It is interesting to note that despite growths in population and employment, together with the presence of schools, Cape Elizabeth has no fixed-route transit services.

**Figure 6 Major transit trip generators.**
Figure 7 shows the percentage of commuting trips using public transit (ACS 5-year estimates, 2015 data). Census tracts that have the percentage of public transit trips above the average of the region are redder, while tracts with the average are colored in yellow, and those below the regional average are blue. Not surprisingly, transit use is highest in the center, where transit is most available. The percentage of public transit trips is also very high on the Casco Bay Islands, where the Casco Bay Lines Ferry provides crucial transit service to the mainland. Finally, it is important to note that overall transit mode share in the region is slightly above 1% for commuting.4

Figure 7 Public transit’s share of commuting trips.

An analysis of cell phone data available in the region revealed that travel in the region varies by town. The data indicate that residents living in the center of the region travel equally often between neighboring towns as within their own towns. On the other hand, residents living in towns at the edge of the PACTS region travel within the same more often than between towns. These findings highlight the need to provide adequate mobility not only within towns, but across municipal borders.

4 Destination 2040, p. 3-39.
How is transit provided in Southern Maine?

Seven public transit agencies currently serve the PACTS region. Some serve a particular town(s) or city; others provide service linking different areas of the region. The agencies participate in the PACTS Transit Committee (PTC) along with a variety of other transit stakeholders representing economic development, government, and nonprofit sectors.

The seven agencies participating on the PTC include bus, ferry and rail agencies, adding to the complexity of coordinating transit modes. Given that much of the region is sparsely populated and rural in nature, conventional fixed-route transit is difficult to provide in a financially-sustainable manner. Furthermore, for demand-response services, the PACTS region is split between two different demand-response agencies serving the two counties—Cumberland County is served by RTP, while York County is served by YCCAC.

Below, we provide a brief overview of each of the seven regional agencies. Figure 8 provides a regional map of the transit agencies and their route alignments and networks. The demand response agencies, without fixed-routes, have their service areas denoted by shadings of different colors.
Figure 8 Regional transit network.
METRO (aka Greater Portland Transit District, Greater Portland METRO)

2016 ridership: 1,810,825
2015 ridership: 1,568,136
Number of routes: 9

Greater Portland METRO operates nine bus routes in and around Portland, mainly operating local bus service within the City of Portland. The recent addition of the BREEZ (in 2016), which operates northward from Portland to Yarmouth and Freeport, and into Brunswick starting August 2017, has increased transit ridership and connectivity throughout the Region. Route 9 (9A North Deering via Stevens Av., 9B North Deering via Washington Av.) is the busiest route, carrying over 35,000 trips per month. Aside from the BREEZ with over 1,800 monthly trips,\(^5\) route 7 (Falmouth) has the lowest ridership with an average of approximately 5,700 trips per month.

All METRO routes converge either at Monument Square (Congress and Center Sts., routes 1, 2, 4, 5, 7, 8, 9B and BREEZ) or the METRO Pulse (routes 2, 4, 5, 7, 9A) in downtown Portland providing opportunities to transfer between lines or transit agencies at these locations (or at Forest Av. and Congress St.). Service frequencies vary, with route 2 (Riverton) offering 20 minute headways at peak hours, to hourly headways on other routes on weekdays, and typically hourly or half-hourly headways on weekends.

South Portland Bus Service (SPBS, or South Portland Bus)

2016 ridership: 246,931
2015 ridership: 268,705
Number of routes: 3

South Portland Bus Service operates three bus routes in South Portland, with two of the three routes serving the Maine Mall. Route 21 (Willard Square) is the busiest route, with approximately 11,300 average monthly trips,\(^6\) while route 24B (Maine Mall via Community Center) sees approximately 4,300 average monthly trips and operates only on weekdays. About one-third of riders are students attending the Southern Maine Community College (SMCC) campus (served by route 21).

All routes enter downtown Portland for transfers to and from METRO and ShuttleBus-Zoom services, and converge for transfers in South Portland at the Mill Creek Transit Hub. Service frequencies vary throughout the day. During the day, route 21 has 30-minute headways, while routes 24A and 24B overlap for a significant part of their alignments for combined headways of one hour. Service on evenings and weekends are decreased, with headways of ~40 to 60 minutes on routes 21 and 24A.

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\(^5\) August 2016 to July 2017 ridership.
\(^6\) Based on FY2015 ridership.
ShuttleBus-Zoom (aka Sh-Zoom, Biddeford-Saco-Old Orchard Beach Transit Committee, BSOOB)

2016 ridership: 188,944  
2015 ridership: 178,328

Number of routes: 3 (excluding school year service UNE Nor’easter to the University of New England, both express and regular services, and excluding seasonal trolleys)

Serving the southern towns of Biddeford, Saco, and Old Orchard Beach, ShuttleBus-Zoom is serving a growing ridership. Sh-Zoom provides local service in the ‘tri-towns’ with one-hour weekday frequencies and two-hour frequencies on the weekends and is a flagged-stop service. This route connects major destinations in the tri-towns, and connects to the Turnpike Express Service with service to Portland at the Exit 32 Park-and-Ride along Interstate 95, as well as the Saco Transportation Center (and the Old Orchard Beach station, seasonal), and to the Portland Intercity Sh-Zoom at the Chamber of Commerce in Old Orchard Beach.

The Zoom Turnpike Express travels Interstate 95 stopping at various Park-and-Rides before traveling non-stop to downtown Portland. It is a high-quality service that allows rapid trips for commuters into and out of Portland provided in an over-the-road motor coach; the fare for the service is relatively expensive ($5 one-way compared to $1.25 for the local tri-town service).

A less direct route is the Portland Intercity, meant to connect the tri-towns not only to Portland, but with Scarborough and South Portland as well, and importantly, the Maine Mall. While the frequencies of the Turnpike Express are ~30-minutes and operate on weekday mornings and afternoons only, the Intercity operates daily, with headways of 1 to 3 hours.

Sh-Zoom offers seasonal service to the University of New England campus in Biddeford (UNE Nor’easter) with local and express services. The bulk of Sh-Zoom’s ridership on its regular routes comes from the local tri-town service. Sh-Zoom operates seasonal trolleys, the Old Orchard Beach Trolley and Camp Ellis Trolley; in 2016, ridership on the trolleys was 144,457, nearly 77% of Sh-Zoom’s regular ridership.

Casco Bay Island Transit District (aka Casco Bay Lines, CBITD, or CBL)

2016 ridership: 1,097,561*  (NTD ridership: 1,078,805)  
2015 ridership: 1,017,764* (NTD ridership: 1,001,702)

* Refers to FYs. Ridership numbers provided by CBL and include chartered trips, tours, and other seasonal ridership.

Number of routes: 3 services to different sets of islands, and an additional service to Bailey Island during summer.

Offering ferry service to six islands in Casco Bay (seven islands during the summer season), Casco Bay Lines operates year-round providing trips to the mainland for not only residents of the islands, but for tourists as well. Casco Bay Lines sees its largest ridership in the summer months, as tourists pour into Southern Maine.
In addition to transporting passengers and providing a crucial link to the mainland and surface transit service in Portland (route 8, METRO at the Ferry Terminal), Casco Bay Lines also transports a substantial amount of freight that accounts for nearly 12.4% of its operating revenue (in FY2016). Moreover, Casco Bay Lines transports vehicles to Peaks Island onboard the Machigonne II and Down Bay onboard the Maquoit II; vehicle transport accounted for over 20% of operating revenue in FY2016.

With the massive influx of tourists during the summer months, trip frequency is increased to accommodate increased demand from recreational or leisure trips in Casco Bay. Additionally, CBL operates seasonal cruises and charter vessels, which accounts for a substantial amount of revenue and ridership. Taken together, though Casco Bay Lines is styled as a transit agencies, the fluctuating seasonal ridership, the freight logistics, car transport, and temperamental operating environment present a unique set of challenges not readily applicable to its bus counterparts. Indeed, in addition to reporting to the Federal Transit Administration (FTA), CBL must also report to the United States Coast Guard and Homeland Security.

Ferry runs leave the recently renovated and enlarged Ferry Terminal, depending on the destination, anywhere from once an hour (to Peaks Island), or less frequently for trips to and from Chebeague and Cliff Islands. Round-trip fares are collected at outbound trips in Portland, and fares are regulated by the Maine Public Utilities Commission (PUC), leaving little room for flexibility in adapting to a changing environment through fare revenue.

While routes are not comparable to fixed-route bus alignments, Casco Bay Lines operates different services to the various islands, they can be grouped into 3 ‘main routes’ of sorts: service to Peaks Island, service to Inner Bay Islands (including Little Diamond, Great Diamond (two stops), and Long Islands) and service to Down Bay Islands (including the Inner Bay, Chebeague, and Cliff Islands). And in the summer, there is direct service to Bailey Island.

**Amtrak Downeaster (operated by Northern New England Passenger Rail Authority, NNEPRA)**

2016 ridership: 473,923  
2015 ridership: 438,364

NNEPRA manages the Downeaster, which is operated under a long-term contract with Amtrak and provides service from Brunswick, Maine to Boston’s North Station. Offering five daily round-trips between Portland and Boston, as well as three round-trips to Freeport and Brunswick, the Downeaster sees a diverse ridership of commuters, day travelers, sports fans, and others.

In Maine, the Downeaster operates almost exclusively on tracks owned by Pam Am Railways, and services three year-round stations within the PACTS Region (Freeport, Portland, and Saco) one seasonal station within the PACTS Region (Old Orchard Beach) as well as two stations outside the PACTS Region (Brunswick and Wells). Within the PACTS region, the Downeaster connects to METRO and Sh-Zoom, in addition to Concord Coach Lines intercity bus services.
The Downeaster operates with a high level of customer satisfaction. NNEPRA, unlike the bus agencies, draws revenue through auxiliary sources, such as parking revenue at the PTC.

**Regional Transportation Program (RTP)**

2016 ridership: 119,197
2015 ridership: 113,294
One-fixed route, Lakes Region Explorer

As a United Way agency, RTP provides on-demand door-to-door transportation services for both ambulatory and non-ambulatory riders in Cumberland County. Moreover, RTP provides Americans with Disabilities Act (ADA) compliant paratransit trips for both METRO and SPBS. In addition, in 2013, RTP began operating the Lakes Region Explorer, a bus providing service between downtown Portland and Bridgton along Route 302. Its ridership has more than doubled from approximately 4,000 in 2014 to 8,800 in 2016, and is busiest during the morning in-bound trip with commuters and riders traveling for health care purposes.7

In contrast to the other transit agencies in PACTS, RTP receives funding mainly from MaineDOT. In addition, prior to August 2013, RTP provided trips for MaineCare-eligible recipients; MaineCare transportation benefits are aimed at providing non-emergency medical trips. As such, a large portion of operating revenue (approximately 76%) in FY 2012 came from MaineCare.8 While MaineCare is now brokered in both Cumberland and York Counties by the private broker Logisticare, RTP continues to provide MaineCare trips, and estimates that 20 to 25% of its current door-to-door ridership is from Logisticare, in addition to non-MaineCare covered trips, such as Department of Health and Human Services (DHHS) Child Welfare, ADA, and low-income trips.

**York County Community Action Corporation (YCCAC)**

2016 ridership: 146,178*
2015 ridership: 147,234*

* Ridership figures do not include any data from ridership from non-FTA funded services, such as the volunteer program.

YCCAC operates many different transportation services in its role as a community organization helping residents without the necessary means in York County by providing curb-to-curb service. In addition to providing ADA paratransit trips in York County, YCCAC also provides demand response service that operates on a regular scheduled basis within fifteen towns of York County. Other transportation services available are: the WAVE, with daily services between Wells and Sanford, and Biddeford and Sanford; and the Sanford Transit, servicing the City of Sanford. Both offer connections to Amtrak and Sh-Zoom. YCCAC also operates a seasonal trolley system, called Shoreline Explorer. YCCAC’s drivers are both hired and volunteer. The volunteer programs are not funded by the FTA.

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7 FYs. According to meeting with Jack DeBeradinis, April 5, 2017.
8 Maine Strategic Transit Plan 2025.
Prior to February 2014, YCCAC had a larger ridership (total of nearly 300,000 in 2013) due to its role as MaineCare provider. It no longer contracts with MaineCare. Similar to RTP, in FY2012, nearly 78% of YCCAC’s operating budget came from MaineCare funding, but with its discontinuation as a MaineCare provider, YCCAC relies on FTA and MaineDOT funding. YCCAC is challenged in obtaining sufficient funding, particularly in achieving a 50-50 local match for operating funds. Nevertheless, YCCAC continues to provide rides for non-emergency medical purposes, as well as rides for low-income individuals in York County.

Priority Corridors and Centers

The seven transit agencies served different cities and towns, as shown below.

<table>
<thead>
<tr>
<th>Arundel</th>
<th>Biddeford</th>
<th>Brunswick</th>
<th>Cape Elizabeth</th>
<th>Chebeague Island</th>
<th>Cumberland</th>
<th>Falmouth</th>
<th>Freeport</th>
<th>Gorham</th>
<th>North Yarmouth</th>
<th>Old Orchard Beach</th>
<th>Long Island</th>
<th>Portland</th>
<th>Portland Islands</th>
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<th>Saco</th>
<th>Scarborough</th>
<th>South Portland</th>
<th>Standish</th>
<th>Westbrook</th>
<th>Wells</th>
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</thead>
<tbody>
<tr>
<td>METRO</td>
<td>SPBS</td>
<td>Sh-Zoom</td>
<td>Casco Bay Lines</td>
<td>NNEPRA</td>
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Table 2 Towns served.

Notes: Orange means served, gray means no service.

*Old Orchard Beach train station is operated seasonally.

Looking at the service coverage around transit stops (0.25-mi radius buffer around bus stops and ferry wharfs and terminal, and 0.50-mi radius buffer around train stations) provides a better picture of service provision (Figure 9). Coverage is most intense in the center of the region, specifically in downtown Portland, where many bus routes from different agencies overlap in a transit corridor of sorts along Congress St., as well as at the Maine Mall in South Portland.

Destination 2040 defined Priority Centers and Corridors as emerging corridors and centers where focused growth, including jobs and housing, could yield a larger benefit than dispersed growth. By leveraging state and federal resources and by coordinating transportation and land use planning, the Priority Centers and Corridors can become productive and sustainable areas in Southern Maine.

In Figure 9, by mapping both the transit network (and service coverage around transit stations and stops) together with designated Priority Centers and Corridors, it is evident that many of these Centers and Corridors cover existing transit stop coverage and transit routes Route 302 (served by the Lakes Region Explorer), Bug Light/SMCC (served by South Portland Bus route 21), and areas of Old Orchard Beach, Saco, and Biddeford (served by the tri-town local service of Sh-Zoom and the Amtrak Downeaster).

Nonetheless, many designated areas, including Centers in Standish (Standish Corner), Arundel (Arundel Village), and North Yarmouth and Cumberland are not currently served by public transit. These areas could serve as mobility hubs, focused on providing mobility not through conventional transit buses, but by offering car sharing, ride sharing, and bike sharing services.

Conversely, ferry services to the Casco Bay Islands, supplying not only passenger service but creating vital freight links to the mainland, are not currently designated as Priority Corridors in Destination 2040 and should be considered. Although the population density of the islands is not significant on a regional scale, the islands attract a large number of tourists to the area, and Casco Bay Lines acts as the only public transit option to those living on the islands both in the summer months and year-round. To efficiently leverage the development of these designated Corridors and Centers, it will be essential to supply convenient public transit service, along with dense and well-designed housing and neighborhoods.
Figure 9 Priority Centers and Corridors in the PACTS region.
Ridership Trends

For the transit agencies providing conventional fixed-route services in Southern Maine, overall transit ridership has been increasing since 2012, from nearly 3.35 million trips to nearly 3.8 million trips reported in 2016 (Figure 10). This growth, however, has not been experienced by all agencies.

METRO, CBL, and Sh-Zoom’s ridership have been steadily growing, while SPBS and NNEPRA experienced ridership gains from 2012 to 2015 (for SPBS) and 2012 and 2013 (NNEPRA). The Downeaster experienced ridership loss or stagnation during the period of 2014 through 2016 because of track work and other service interruptions. Ridership has increased on the Amtrak Downeaster in 2017.

Figure 10 Historical ridership for conventional transit services.
Sources: PACTS Transit agencies and NTD. Trolley ridership has not been included here.

On the other hand, ridership on the demand-response services appears to be decreasing since 2013. Some of this ridership may have been diverted from door-to-door to conventional services although there isn’t sufficient data available to make this determination.

The RTP Lakes Region Explorer, a shuttle service, was not included in the ridership numbers here because data were unavailable.
Box 1. Ridership changes in the region.

While the reasons for ridership changes can be complex and related to factors beyond agency control, based on discussions with transit agencies and reviews of documents and reports, the following points are offered as reasons for ridership changes.

- For METRO, service elimination on routes 3 and 6, and the addition of routes 9A and 9B (serving Portland high schools) in 2015 and the BREEZ service implemented in 2016 has spurred ridership growth. Moreover, in 2015, METRO began providing transit passes for students attending high school in Portland Public Schools (following the elimination of yellow school bus service), potentially incentivizing trips other than for traveling to school (this program has estimated generating nearly 305,000 boardings in 2016-2017).

- METRO has, together with SPBS and CBL, implemented the Transit Tracker app, improved service frequency and expanded Sunday service. Together, these reliability improvements have likely helped to grow ridership.

- Similar to METRO, a large proportion of SPBS ridership is student-based, as about one-third of riders are students attending Southern Maine Community College (SMCC), which is served by route 21. Stagnating ridership could be the result of minimal service adjustments. Investigating or revisiting innovations such as providing bus passes for high school students, could help grow ridership.

- Sh-Zoom’s diverse services see different levels of ridership; while the commuter Zoom Turnpike Express’s ridership has been relatively flat from 2014 to 2016; local tri-town service ridership has grown slightly in the same time period.

- Casco Bay Lines’ annual ridership is highly dependent on factors beyond its control, namely summer weather and economic forces impacting tourism in Portland and the region. With growing ridership, Casco Bay Lines has invested in passenger amenities, including a newly expanded Ferry Terminal and Wi-Fi on-board its vessels, all factors that can spur additional ridership, as well as maintaining fares at the same rate since 2009 (except for additional service).

- Ridership on the Downeaster has decreased partially due to construction- and weather-related train cancellations and disruptions; NNEPRA added a departure to Freeport and Brunswick late in 2016 and has introduced new marketing programs and a sales staff position to recover and grow train ridership which increased 37% in FY2017.

- Ridership on both YCCAC and RTP has dipped since 2013 because of YCCAC’s withdrawal as a MaineCare provider, and the resulting reduction of RTP’s MaineCare trip volume. Some ridership may also be using conventional transit, as the regional bus providers aim to make bus stops universally accessible.
Service efficiency

To measure the efficiency of a transit system, we can use performance indicators such as cost per revenue hour, and cost per revenue mile. Cost per revenue mile is the actual cost of operating service per revenue mile and can include such costs as labor, gas, and vehicle maintenance. By understanding operating costs per revenue mile, we can begin to appreciate the relative efficiency of transit services.11

The overall increase in cost per mile, as well as cost per revenue hour (Table 3) largely reflects increased costs in labor, fluctuating fuel costs, aging fleets, as well as the costs of providing ADA trips. Nevertheless, substantial increases above inflation are noted for Sh-Zoom and NNEPRA. The underlying drivers of these increased costs are speculative, and likely include the increased revenue hours operated by Sh-Zoom between 2012 and 2013, and the weather and construction-related service disruptions for the Downeaster experienced in 2015. Also note the large variability in operating expenses per hour when comparing bus services with ferry and train services. Nevertheless, except for Portland METRO, CBL, and YCCAC, all other agencies have reduced their expenses per revenue hour from 2015-2016.

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</thead>
<tbody>
<tr>
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<td>$93.44</td>
<td>$97.24</td>
<td>$96.58</td>
<td>$95.18</td>
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</tr>
<tr>
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</tr>
<tr>
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<td>NA</td>
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<td>$39.37</td>
<td></td>
</tr>
<tr>
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<td>$80.57</td>
<td>$69.82</td>
<td>$54.45</td>
<td>$78.94</td>
</tr>
</tbody>
</table>

Table 3 Operating expense per vehicle revenue hour by service (2012-2016).

To provide some comparisons, the bus service measures presented were averaged and compared to average values from peer bus agencies in New England: City Link, Lewiston-Auburn, ME, Community Connector, Bangor, ME, Chittenden County Transportation Authority, Burlington, VT, and the Manchester Transit Authority, Manchester, NH. These peers were chosen to provide a sample of large and small agencies throughout New England, and are also used for fare peer analysis by METRO.

The average operating expense per revenue mile of the three PACTS-regional bus agencies in 2015 was $7.16, while the average for the four peers was $7.63. The average operating expense per revenue hour of the three bus agencies in the PACTS region was $100.84 in 2015, above the average of the four peers at $93.64. Overall, the agencies in the PACTS region compare favorably for service efficiency (Table 4).

---

11 Data presented in Tables 3-8 was either received from individual agencies or from National Transit Database (NTD) sources, and may include or exclude overhead and other related costs, thereby complicating comparisons related to costs per revenue mile and hour.
PACTS Peers
Avg. expense per rev. mi. $7.16 $7.63
Avg. expense per rev. hr. $100.84 $93.64

Table 4 Peer comparison of efficiency, bus agencies.

Drawing comparisons for the ferry and commuter rail agencies in the region is more difficult. For instance, seasonal ridership from tourists plays a substantial role in Casco Bay Lines’ operations, which also involves not only passengers and vehicles, but freight and mail too. Finding an adequate peer comparison for the Amtrak Downeaster is difficult; its role as a commuter rail and intercity service provider makes it unique among Amtrak operations and commuter rail typical of larger cities, such as MBTA’s commuter rail in Boston. Moreover, like CBL, NNEPRA’s operations are subject to seasonal ridership increases and weather-related service disruptions due to climatic events in the Northeast United States. As such, we refrained from performing a peer analysis for NNEPRA and CBL as it would not be helpful.

Service effectiveness

To determine how effectively transit service is being supplied, typically used measures include operating cost per unlinked trip, as well as the number of unlinked trips per vehicle revenue mile and hour.

As ridership increases, for relatively stable operating expenses, operating cost per trip will decrease. This situation is true for METRO, where cost per trip slightly increased between 2012 and 2014, but has decreased between 2014 and 2016 as ridership has increased (Table 5). Furthermore, Casco Bay Line’s cost per trip is low and has not increased substantially, suggesting that ferry ridership has kept pace with operating costs. Sh-Zoom’s cost per trip has been increasing but has decreased more recently, as has NNEPRA’s. Finally, demand response trips are typically costly to provide, and RTP and YCCAC provide trips below the industry norm of ~$30 per trip.12

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<td>$4.53</td>
<td>$4.40</td>
<td>$4.36</td>
<td>$4.29</td>
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<tr>
<td>SPBS</td>
<td>$4.82</td>
<td>$3.86</td>
<td>$5.10</td>
<td>$4.86</td>
<td>$4.24</td>
</tr>
<tr>
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<td>$13.79</td>
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<td>$11.48</td>
</tr>
<tr>
<td>CBL</td>
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<td>$5.74</td>
<td>$5.86</td>
<td>$5.55</td>
</tr>
<tr>
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<td>$41.71</td>
</tr>
<tr>
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<td>$22.40</td>
<td>$20.82</td>
</tr>
<tr>
<td>YCCAC</td>
<td>$13.39</td>
<td>$19.02</td>
<td>$17.90</td>
<td>$19.69</td>
<td>$20.19</td>
</tr>
</tbody>
</table>

Table 5 Operating cost per unlinked passenger trip by service (2012-2016). Please note, not all of the agencies’ cost per trip contain the same expenses.

Using the peers identified above, the three bus agencies’ average cost per trip (2015) was $7.55, whereas the peers’ average was $4.95 per trip, indicating that while METRO and SPBS are similar to the peer average, Sh-Zoom’s cost per trip is above the peer average ($13.44).

By considering both the service supplied (revenue miles or hour) and demanded (ridership), we can obtain a sense of the intensity of transit use in the region. Analyzing the number of trips carried per revenue mile demonstrates the effectiveness of a route, or an agency.

Table 6 reveals that METRO and SPBS are the heaviest used of the bus agencies, while Casco Bay Lines has the greatest number of passenger trips per revenue mile. These findings are also similar to the passenger trips per revenue hour, a measure of the value of a transit service in terms of attracting customers versus the amount of service provided.

Table 7 shows again that both METRO and SPBS perform well in the region relative to Sh-Zoom, which operates in areas with less density than the other two bus services. NNEPRA, despite growing ridership, has carried fewer passengers per revenue hour as compared to 2012, while Casco Bay Lines has steadily grown its productivity. Finally, RTP and YCCAC carry a low number of passengers per hour, mainly due to the style of most their operations (door-to-door or curb-to-curb) through many rural, and low-density settings.

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</thead>
<tbody>
<tr>
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<td>1.77</td>
<td>1.88</td>
<td>1.93</td>
<td>1.95</td>
</tr>
<tr>
<td>SPBS</td>
<td>1.26</td>
<td>1.32</td>
<td>1.27</td>
<td>1.26</td>
<td>1.23</td>
</tr>
<tr>
<td>Sh-Zoom</td>
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<td>0.46</td>
<td>0.51</td>
<td>0.52</td>
</tr>
<tr>
<td>CBL</td>
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<td>13.17</td>
<td>11.82</td>
<td>12.16</td>
<td>12.95</td>
</tr>
<tr>
<td>NNEPRA</td>
<td>0.28</td>
<td>0.27</td>
<td>0.25</td>
<td>0.25</td>
<td>0.22</td>
</tr>
<tr>
<td>RTP</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>0.11</td>
<td>0.09</td>
</tr>
<tr>
<td>YCCAC</td>
<td>0.45</td>
<td>0.45</td>
<td>0.40</td>
<td>0.31</td>
<td>0.32</td>
</tr>
</tbody>
</table>

Table 6 Unlinked passenger trips per vehicle revenue mile by service (2012-2016).

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<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>SPBS</td>
<td>17.21</td>
<td>19.22</td>
<td>18.51</td>
<td>19.69</td>
<td>19.87</td>
</tr>
<tr>
<td>Sh-Zoom</td>
<td>8.74</td>
<td>6.62</td>
<td>7.54</td>
<td>8.30</td>
<td>8.16</td>
</tr>
<tr>
<td>CBL</td>
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<td>68.00</td>
</tr>
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<td>1.89</td>
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<tr>
<td>YCCAC</td>
<td>5.89</td>
<td>4.24</td>
<td>3.90</td>
<td>2.77</td>
<td>3.91</td>
</tr>
</tbody>
</table>
Table 7 Unlinked passenger trips per vehicle revenue hour by service (2012-2016).

Together, these findings show that while some agencies have improved service efficiency, ridership in the region is only slowly growing, and has room for added growth. In addition, the variety of modes and operating environments underscores that comparing agencies against one another serves little purpose, but shows that designing service standards tailored to each agency’s mode and conditions will help set useful targets for agencies, while providing transparency to the riding and tax-paying public.

Financial performance

A healthy portion of the operating budget should be covered by fares, underscoring prudent financial operations, supplemented by governmental subsidies. By dividing fare revenue by operating expenses, farebox recovery ratio can be calculated to show the portion of fares covering expenses—a ratio closer to 1.00 or 100% is best.

Table 8 shows the farebox recovery ratio over time, and demonstrates some notable trends, namely that METRO and SPBS have seen decreasing recovery ratios since 2013 that have recently stabilized. Sh-Zoom’s recovery ratio has rebounded from 17% in 2015 to near 2012-levels at 20%. Overall, bus agencies in the region hover around recovery ratios of approximately 20-30%, with an average recovery (in 2015) of 21%, greater than the bus peer average of 19%, but still lower than North American industry average of 35-40%.

CBL’s farebox recovery in 2016 based solely on passenger ticket revenue was 44%. By including other fare revenue from cruises, vehicles, freight, and mail (but excluding charters, catering, and miscellaneous) and considering operating expenses less depreciation, CBL’s cost recovery in 2016 was, impressively, 85%. RTP and YCCAC have the lowest recovery ratios, hovering between 1-3%. Amtrak Downeaster’s cost recovery has fluctuated around 50% and more recently dipped below 50% due to construction and weather-related train annulments.

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<tr>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>METRO</td>
<td>28%</td>
<td>28%</td>
<td>29%</td>
<td>25%</td>
<td>25%</td>
</tr>
<tr>
<td>SPBS</td>
<td>25%</td>
<td>32%</td>
<td>26%</td>
<td>22%</td>
<td>24%</td>
</tr>
<tr>
<td>Sh-Zoom</td>
<td>21%</td>
<td>18%</td>
<td>18%</td>
<td>17%</td>
<td>20%</td>
</tr>
<tr>
<td>CBL*</td>
<td>82%</td>
<td>79%</td>
<td>79%</td>
<td>80%</td>
<td>85%</td>
</tr>
<tr>
<td>NNEPRA*</td>
<td>54%</td>
<td>55%</td>
<td>54%</td>
<td>50%</td>
<td>47%</td>
</tr>
<tr>
<td>RTP</td>
<td>1%</td>
<td>1%</td>
<td>1%</td>
<td>2%</td>
<td>3%</td>
</tr>
<tr>
<td>YCCAC</td>
<td>1%</td>
<td>1%</td>
<td>2%</td>
<td>3%</td>
<td>3%</td>
</tr>
</tbody>
</table>

Table 8 Cost recovery ratio by service (2012-2016).

*Revenue for CBL includes revenue from cruises, freight, mail, and vehicles. Revenue for NNEPRA (Amtrak Downeaster) includes café revenue and parking lot revenue at the Portland Transportation Center.

These generally low fare recoveries highlight the reliance of most agencies in the region on government funding, in particular FTA funding administered mainly through PACTS. Unfortunately, uncertainty regarding transit support from the federal government underscores the need for the
regional agencies to work together with municipalities, the State of Maine, and advocacy groups to establish new local transit funding sources.

**Connectivity among transit agencies**

The transit agencies of Southern Maine recognize that for true mobility throughout the region, and for the economic health of the region, residents need and deserve the ability to travel conveniently both within a city or town and throughout the region.

To a large extent, this requires cooperation and connectivity between services. The easier it is for someone to pay a fare on multiple services, or plan a trip across towns, or minimize their waiting time during transfers, the more likely they will choose transit for a trip. This section discusses the connectivity existing in the region.

The ability to transfer easily between transit agencies not only improves rider experience and satisfaction, but supports the notion of a regional transit network that allows residents to travel efficiently throughout the region. The table below (Table 9) shows the level of transfer reciprocity across transit agencies in the region.

Fare integration and transfer honoring is greatest between SPBS and METRO, in that they accept one another’s transfers, and provide similar fare products, particularly a monthly pass valid on both services. Furthermore, SPBS and METRO accept transfers from Sh-Zoom, but riders from SPBS and METRO cannot transfer for free to Sh-Zoom services. While the Turnpike Express service is a premium service and a free transfer would not be financially wise, a reduced fare for riders transferring from METRO or SPBS buses could provide incentive for riders using the Turnpike Express (outbound from Portland). Moreover, free transfers to the Portland downtown from METRO or SPBS could be investigated and instituted depending on demand.

<table>
<thead>
<tr>
<th>From</th>
<th>To</th>
<th>METRO</th>
<th>SPBS</th>
<th>Sh-Zoom</th>
<th>RTP Lakes Region Explorer</th>
<th>CBL</th>
<th>Downeaster</th>
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</thead>
<tbody>
<tr>
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<td>+ $1.50</td>
<td>No</td>
<td>No</td>
<td>No</td>
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<tr>
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<td>NA</td>
<td>No</td>
<td>+ $1.50</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Sh-Zoom</td>
<td>Free</td>
<td>Free</td>
<td>NA</td>
<td>No</td>
<td>NA</td>
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<td>No</td>
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<tr>
<td>RTP Lakes Region Explorer</td>
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<td>Free</td>
<td>No</td>
<td>NA</td>
<td>No</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>CBL</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>NA</td>
<td>No</td>
<td>No</td>
</tr>
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<td>Yes*</td>
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<td>No</td>
<td>No</td>
<td>No</td>
<td>NA</td>
<td>NA</td>
</tr>
</tbody>
</table>

* NNEPRA’s Downeaster provides a free one-ride METRO ticket to riders alighting at the PTC.

An example of an added charge for transfer instead of a full-fare charge is the transfer policy between METRO or SPBS buses with the Lakes Region Explorer (LRE). Riders transferring to the LRE must pay an extra $1.50. Due to this service’s long-distance journey, this is not an exorbitant cost. Depending on travel patterns and demand, it may be worthwhile to offer the same transfer policy to riders transferring from Sh-Zoom services to Lakes Region Explorer or riders alighting from the Turnpike.
Express at Congress Square who walk over to the METRO Pulse to catch an outbound Lakes Region Explorer trip, schedule permitting.

Casco Bay Lines does not provide any transfer reciprocity with any of the other agencies in the region. This is understandable, given the type service offered by the ferry. What could be investigated, however, is the ability to receive a free transfer to a bus service with the purchase of a ferry ticket, or the ability to transfer from a bus service to the ferry, but with a premium, like transferring from METRO to the LRE for example. Note, however, that METRO tickets can be purchased at the Ferry Terminal. Fare regulation by the PUC might make transfer reciprocity difficult to secure approval for currently.

The Downeaster provides a free one-ride METRO ticket for passengers alighting at the PTC in Portland, facilitating a transfer to METRO’s route 1 or BREEZ service at the PTC. Nevertheless, there is no other transfer honoring with the Downeaster. Like CBL, it may be worthwhile to investigate transfers from bus or ferry services for an added premium, depending on a passenger’s final destination on the Downeaster. This may be difficult to address, given Amtrak’s regulation of the Downeaster’s fare structure.

**Regional Fare System and Transfers**

One major limitation to implementing such transferability and fare strategy is the lack of a regional fare structure, as well as a regional fare medium, enabled by an electronic fare management system. Other regions, such as the San Francisco Bay Area, the Seattle Area and the Greater Vancouver Area all have regional smart cards allowing multimodal (including ferry) and multiagency transfers, so that riders can load a card with a certain amount of money that is deducted based on mode used and transfers. Newer technology is providing ways to use open payments, including smartphone and tap credit card purchases. It’s likely a harmonized regional fare strategy would go a long way to improving regional transit.

In addition to fare harmonization and inter-agency transfer honoring, the ability of residents and visitors to travel throughout the PACTS region depends to a large degree on the availability of easy and convenient transfers. Riders need to be able to easily transfer to other services, and for that to occur efficiently the transfer points need to connect at the same stop or station, and meet within a short time period. Otherwise, transit is not a viable option.

Indeed, while downtown Portland offers several locations with shared bus stops between Sh-Zoom, METRO and SPBS services, minimizing the necessary walking distance to transfer between agencies, it is also necessary to ensure that schedules permit efficient transfers, and that passengers are not left waiting for long periods before the arrival of their required bus service. Transfers must be convenient, both spatially and temporally.

Overall, we found that while most transfer locations offer minimal distances between services (see map below), schedules are not sufficiently timed to permit efficient transfers. In particular, schedules lack coordination, whereby departure times for overlapping routes are often scheduled at the exact same time, resulting in missed transfers or buses that must wait for transferring riders, or have large amounts of time between scheduled departures. Discrete operating challenges and characteristics further hamper the ability to time transfers including the variability of the Casco Bay Bridge linking
Portland and South Portland. Having better schedule coordination, especially at transfer points, would provide easier transfers for passengers.

PACTS Region Transfer Hubs
Southern Maine Short-Term Regional Transit Development Plan

![Map of Southern Maine showing transfer hubs and major routes.]

Figure 12 Major transfer hubs across the region.

Legend for the above map: The large dots indicate transfer hubs where riders can switch between agencies which may or may not be multimodal in nature (Figure 12).

Most transfer locations are found on the Peninsula, and offer the opportunity to change between bus services (SPBS, METRO, Sh-Zoom, at the Downtown Corridor along Congress St. and at Elm St. and at the Maine Mall), the train (at the PTC), and the ferry (CBL Ferry Terminal). Also, Downeaster train stations in Freeport and Brunswick offer connection with METRO BREEZ service, and in Saco with Sh-Zoom.

Key Findings

With a geography that is urban, rural, and suburban, and spread over many miles, the PACTS region is a challenging environment for public transportation. As a predominantly rural state with an aging population, fixed-route transit beyond the dense, urban centers of Portland is difficult to operate in a cost-efficient manner in Maine. The state also experiences a large influx of tourists that clog up main arteries such as Route 295, the Maine Turnpike and Route 1 with vehicular traffic. However, public
transit can offer an attractive alternative to vehicle travel for tourists and commuters. The success of various trolley services operated by YCCAC and Shuttlebus are an excellent step forward.

In addition to the tourism, the growing population forecasted in Destination 2040 for the Southern Maine is another opportunity to grow public transit in the region. Residents and tourists may choose to use transit, such as many millennials, or may depend on transit as their primary transportation option, such as seniors who are unable to drive. Therefore, investing in transit and aiming to increase transit ridership are important goals outlined in Destination 2040 which can help alleviate congestion, improve environmental sustainability and enhance the quality of life in Southern Maine.
3. What are Southern Mainers Saying?

This project engaged individuals who live in Southern Maine and asked them to describe their transit options and travel choices. Successful implementation of the outcomes of Moving Southern Maine Forward depend on a thorough understanding of the needs, desires, and capabilities of riders, service agencies, employers and other important stakeholders from across Southern Maine.

Moving Southern Maine Forward used different outreach strategies to gather input. These included group meetings with transit-dependent populations, interviews with large employers to understand the potential for transit support, on-street public engagement and an online survey completed by over 400 respondents (riders and non-riders).

Information gathered while riding different transit services and talking to people on the street resulted in the following observations:

- The public wants to use transit more
- Over 80% of respondents indicated that they are ‘satisfied’ or ‘very satisfied’ with transit in terms of value for money
- Only about 15% of respondents were opposed to a tax dedicated to transit, while most respondents were open to the idea of a transit-dedicated tax
- Transit use is difficult because of the large, rural territory that is conducive to single-occupancy vehicle use
- While parking supply is constrained in downtown Portland, it is otherwise free and abundant
- College and university students could benefit from additional transit services and already form a substantial core of ridership across many transit agencies
- Transit affordability is a concern for some riders, particularly for low-income families and seniors

This section covers the main findings from the online survey.

Flyer used to direct riders to online survey.
Attitudes Towards Transit

Although only 30% of survey respondents listed public transit as their most common mode of transportation, 59% of respondents have used transit in the last 30 days, 73% of all respondents have a positive image of public transit services in Southern Maine, and 92% of respondents believe public transit plays an important role in their community’s quality of life. This suggests that public transit is viewed as a necessary public service and that, if improvements are made, there are opportunities to attract and retain non-riders and to encourage more frequent transit usage in occasional riders. For those who typically drive alone, when asked why they choose to do so, the most frequent responses were “I need to visit multiple destinations before returning home” and “Transit takes too much time compared to driving”. Forty-one individuals wrote in a variation on “Transit is unavailable at the times/locations I need it”. These responses are related – if transit were made more convenient, these survey respondents would be more likely and more willing to travel around Southern Maine on public transit. Overall, survey respondents cited frequency and coverage as the top changes that could cause them to use public transit more often. (**STANTEC please provide link survey monkey results here**)

In addition to general attitudes towards transit, we also asked whether respondents would be supportive of local sales tax with dedicated funding toward regional transit. Overall, 37% of respondents support the idea of a local tax, while only 14% were unsupportive, and 49% responded that their support depends on the amount of the tax or what specifically the tax is used for. Not surprisingly, of the respondents who use active transportation (transit, walking, or cycling) as their primary means of travel, 46% support a local tax, and 7% were against a local tax. Of the respondents who drive alone, carpool, or are picked-up/dropped-off, 32% support a local tax, and 50% responded that it would depend on the amount or the use of the tax—18% were unsupportive. Although not currently permitted by state law, public interest in levying a dedicated local tax for transit funding exists, and with outreach and proper championing by various interest groups, could provide a viable path forward towards improving the financial resources of the regional transit agencies.

Travel Patterns

Out of the survey responses, approximately 83% of trip origins and 91% of trip destinations are located inside the PACTS area (Figure 13). Generally speaking, trip destinations are less diverse than trip origins. Portland is the destination for approximately half of all survey respondents. Other common destinations include South Portland and Falmouth which combine for approximately one quarter of all destinations. Interestingly Sanford, which is located outside of the PACTS area, is the fifth most common destination out of all survey respondents. In terms of trip origins, out of the 17% of respondents that begin their trip outside of the PACTS area, the most popular origins include Sanford, Kennebunk, and Kittery in the south; Auburn and Brunswick in the north; and Long Island in the east. Approximately 66% of survey respondents have a destination town different from their origin town. Given the prevalence of Sanford as both an origin and a destination, and given that transit service is already provided here by YCCAC, improving connectivity between Sanford (and Kennebunk) and the PACTS area may be a quick-win with regards to streamlining transit services in Southern Maine.
Figure 13 Trip origins and destinations of survey respondents.

**In which town does your trip typically begin?**

- Portland: 37%
- South Portland: 13%
- Peaks Island: 5%
- Scarborough: 4%
- Westbrook: 4%
- Yarmouth: 3%
- Cape Elizabeth: 3%
- Others: 28%
- Freeport: 3%

**In which town does your trip typically end?**

- Portland: 50%
- Falmouth: 12%
- South Portland: 13%
- Sanford: 3%
- Yarmouth: 6%
- Others: 16%
Travel Time

According to the survey results, the average trip time by car is 24 minutes, while that same average trip time on transit is 40 minutes. The shorter the travel time on transit, the more likely the service is to attract ridership. In looking at the standard deviations of trip time, transit trip time standard deviation is double what it is by car (36 minutes, compared to 18 minutes). This suggests that travel time reliability is low on transit which suggests that there are issues related to connectivity, transferring, and/or on-time performance. Improving the travel time reliability is another ridership growth strategy that is often feasible with limited funds.

Travel time appears to be an issue in particular between Portland and South Portland, with several respondents commenting that the trip takes too long and connectivity is poor. Three respondents also pointed out that there should be direct transit service between Westbrook and the Maine Mall. The distance is less than 5 miles between Maine Mall and the Westbrook city center (roughly Spring St. and Main St.), but the trip on transit requires a transfer in Downtown Portland and takes around 90 minutes. Other commentary with regards to travel time was related to the desire for faster service, possibly in the form of limited-stop shuttle routes similar to the BREEZ, and improved reliability and on-time performance of existing services.

Unsurprisingly, survey respondents who are traveling to and from locations outside of the PACTS area had concerns about the travel time of their trip on transit. A few respondents noted that coverage should be extended to the communities south of Arundel. These respondents did not seem to be aware that services delivered by YCCAC already exist in Sanford, Wells, Kennebunk, Ogunquit, and York, and are connected to Biddeford and ShuttleBus-ZOOM services via the WAVE. It is unclear whether the issue is that communication or advertisement of these services is unsatisfactory, or that the services are not delivered in a way that is useful for populations served, or both. Other respondents noted that transit options within Portland’s peninsula (St. John St. to the Eastern Promenade) are lacking, and that operating a route with frequent service within the peninsula should be relatively cost effective compared to operating many of the current routes, which run between cities and have long alignments. Based on the responses received, METRO’s route 8 in its current format does not appear to be effective in offering a desirable transit option within the peninsula, due to the indirectness of routing combined with the limitations of operating a one-way loop.

Transit Trip Purposes

The most common trip purpose for transit is commuting to/from work, followed by leisure. Very few are using transit to commute to/from school or college, in fact, this only makes up 9% of trips - this represents an opportunity for ridership growth. Comparatively speaking, the 2001 National Household Travel Survey has found that school trips to make up 16.7% of all transit trips (Figure 14). The same survey has also found that work trips, while still the primary trip purpose, are less prevalent than survey results have indicated that they are in Southern Maine. The results from the Southern Maine survey are compared to those of the National Household Travel Survey of All Transit Riders in the pie charts below. These findings suggest that if schools, colleges, and universities in Southern Maine are better served by transit, a measurable ridership boost could be expected.
Figure 14 Transit trip purposes in Southern Maine and in the NHTS.

Ability to Transfer

Out of the survey respondents who indicated that they have used public transit, 88% used the services of a single agency on their last trip, and 12% used multiple agencies. It is possible that more than 12% are using multiple agencies but choose to do so infrequently, or only when necessary. With respect to the ability to transfer from one transit service to another, the majority of respondents felt the wait is too long. Out of those who used multiple services on their last trip and responded that they were ‘dissatisfied’ or ‘extremely dissatisfied’ with the length of time waited for a transfer, all but one were transferring to/from Greater Portland METRO services. The most common connecting service out of these responses is a tie between ShuttleBus-ZOOM and South Portland Bus Service, but answers also included the Amtrak Downeaster and Casco Bay Lines. There are also three instances of respondents indicating that they used three (or more) transit services on their last trip. Two out of
the three used METRO, ShuttleBus-ZOOM, and YCCAC, and the third used METRO, ShuttleBus-ZOOM, and South Portland Bus Service. Satisfaction is slightly higher with regards to the transfer policy and the distance between transfer locations but there is still room for improvement.

Some respondents pointed out that METRO and South Portland Bus Service should be better coordinated, some even going so far as to say these services should be operated by one agency. More than one noted that they would love to use transit to travel between South Portland and Falmouth but that it is not feasible with the current transfer situation. Others commented that there should be a quick ferry operating between South Portland’s Ferry Village and Downtown Portland, as the current routing over the Casco Bay Bridge can be long, circuitous, and require more transfers than desirable. Comments surrounding the desire for improved transfers and service connectivity were the second-largest theme, after the desire for improved frequency. Transfers between transit buses and other modes (trains, ferries, and intercity buses) seem to be another area that is quite limited. Several respondents noted that it is challenging to travel between the Casco Bay Lines ferry docks and the Portland Transportation Center terminal.

**Communication of Transit Services**

Some transit users are unaware of who is operating the service they use, which suggests there is brand fragmentation to some extent. As an example, some users are unaware that BREEZ is a service offered by METRO and others are unaware that the Lakes Region Explorer is operated by RTP. In general, many survey respondents noted that available information about transit options, and how to use them, is severely lacking. Many others identified the desire for easily accessible schedule and bus arrival information. Respondents who use the Southern Maine Transit Tracker (SMTT) for next bus arrival information said that it can be inaccurate and doesn’t provide information for all the agencies. It is only available for Greater Portland METRO, South Portland Bus Service, and Casco Bay Lines services.

Out of the survey respondents, 67% indicated that they check schedules online, 45% indicated that they review printed schedules, and 37% use the SMTT. It is important to recognize that these numbers may be misleading based on the fact that individuals with smartphones and who are comfortable using the internet were more likely to complete this online survey, but it is still likely that online (static PDF) schedules will remain the most prevalent mode of checking transit schedules. Moreover, 80% of survey respondents use Facebook, which is the most common platform of social media, and is a good way for transit agencies to engage with riders and the community, and to respond to comments and concerns. In light of these results, and the ongoing trend towards storing information digitally, there may be an opportunity for PACTS to create a webpage to tie all routing and scheduling information together and provide Southern Mainers with a one-stop shop to answer their questions about how best to use transit to navigate from point A to point B. Several survey respondents commented that with the multitude of agencies and different brands of services within each agency, it is quite confusing to find route, schedule, and general trip planning information.
4. Setting Outcomes and Measuring Performance

In Destination 2040, PACTS established clear goals or “guiding principles” for the future of transit services in Southern Maine:

PACTS will plan, fund, and maintain a transportation system that will –

1. Maintain a Regional Focus
2. Support Economic Development
3. Prioritize Mobility, Safety & Accessibility
4. Incorporate Energy Conservation
5. Integrate Land Use
6. Protect Environmental Quality

In developing the measurable short-term goals, Moving Southern Maine Forward recognizes the importance of ensuring its goals are applicable to all transit agencies, not just bus agencies, while also acknowledging that different modes will have varying degrees of capacity to adjust service to achieve these goals. This distinction is particularly important because Destination 2040 was focused more on buses, roads, and infrastructure and using it to establish measurable transit goals would be a limited approach.

Instead, Moving Southern Maine Forward uses Destination 2040 as a starting point to develop the following measurable goals and objectives. The goals and objectives aim to capture the performance of all modes, including buses, ferries, trains, and paratransit services.

Measurable Goals

Increase regional ridership
Community buy-in to transit improvements is best measured in the form of ridership. Put simply, if service updates are beneficial to users, ridership will grow. And, given the number of transit users traveling to/from areas outside of Portland, the more regionally focused the service updates are, the more beneficial they will be to Southern Maine residents as a whole, and the greater the impact to ridership. Moreover, ridership is not only linked to service updates. The more the awareness and perception of transit can be improved regionally, the greater the ridership is expected to be across all services.

Decrease travel time
As discussed in the survey results analysis, the factors most likely to affect ridership are service frequency, and service reliability. That is, the more frequent the service, the more punctual the service, and the more convenient the stop locations, the more likely one is to choose transit for their trip, resulting in greater ridership. Travel time, therefore, is perhaps the most important transit-related community value, particularly as it relates to travel to and from work, as the survey results suggest that work commutes are the most common trip purpose. Frequency, reliability and coverage are not goals themselves; rather they are means of achieving the goal of decreasing travel time. This measurable goal is not applicable to all ferry and train users – only to those that use multiple modes of transportation during their trips.

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13 In the context of paratransit, increasing ridership is interpreted as increasingly leveraging a Family of Services model for trip delivery where all modes of accessible conventional transit are used to deliver a trip and predicated on a person’s ability, not disability.
Optimize the return on the investment in transit
It has been demonstrated across the United States that people are willing to invest in or pay more to use transit if they feel there is value in the investment that results in improved service. Measuring the value of transit investments using appropriate metrics is key. One way of measuring this on existing service is by tracking passenger miles divided by total miles. Passengers per trip during peak and off-peak hours is another option if passenger mile data is not tracked, though this provides less insight regarding level of ridership. More subjective transit benefits including a reduction in traffic congestion, cleaner air, and economic growth address quality of life and are also important to consider. It is noted that optimizing the return on the investment in transit is limited insofar as regional mandates and legislation require service to be delivered in areas or during hours that may be deemed non-productive.

Reduce emissions
This goal aligns with the Destination 2040 initiatives of incorporating energy conservation and protecting environmental quality. It may have slight ridership impacts as some people make travel choices based on environmental impact, and cleaner air will also bring larger quality of life benefits which impacts where people choose to live.

Improve safety
This goal is relatively self-explanatory, with the clarification that in addition to accident rates, safety also refers to other events that affect the traveler’s experience such as near misses and mechanical breakdowns. Where transit is concerned, the safer that transit services are, the more likely riders are to use transit, and the more favorable it will be viewed within the community. This includes both actual safety and perceived safety.

Improve connectivity
Improved connectivity may be achieved through the implementation of a regional smart card for fare payment creating easier transfers and new transfer points, and integrating the transit system with bicycle and pedestrian infrastructure and improving scheduling and routing. This goal also relates to several of the Destination 2040 initiatives including maintain a regional focus; support economic development; prioritize mobility, safety & accessibility; and integrate land use. Improved connectivity is more easily achieved on rubber tired services, but is also achievable on the ferry and train by focusing improvements on transfer hubs such as Amtrak Downeaster Stations and the Casco Bay Lines Ferry Terminal.

Objectives
Objectives, benchmarking, and performance targets are extensions of the measurable goals described above. Whereas the goals are regionally-focused and are intended to be tracked by PACTS, objectives and benchmarks are tailored to the individual transit agencies delivering the service. Some goals can be monitored more frequently, in some cases daily, whereas other goals are more appropriate to evaluate over a longer time period, such as month to month or from year to year.
5. What’s Needed

The foundation for this plan, Moving Southern Maine Forward, is to improve the experience of the transit user. This can be done through the following:

A. **Optimize service planning and delivery.** The regional network should optimize service delivery and expand the transit options for people who currently use transit, or would likely use transit, such as students, seniors, and workday commuters. This also includes optimizing rubber tired service delivery for individuals who live in the PACTS area but do not currently have public transit as a viable travel option due to their location. Creating supportive land use and zoning by encouraging growth in the Priority Centers and Corridors (identified in Destination 2040), is essential to making transit an attractive and feasible option for more customers.

B. **Increase promotion and public awareness.** More agencies need to increase the visibility of transit and the public’s awareness of transit options and benefits. Most PACTS-area residents are unaware of their transit options, the agencies providing them, where to learn about transit, or how to plan a trip.

C. **Improve regional integration.** Providing seamless, affordable travel to the public is the most important mission of transit in Southern Maine. Currently, when traveling between towns on transit in the PACTS region, the limited coordination of services deters the use of transit. Better coordination of services and strong focus on collaboration between agencies would improve ridership, revenue and public support.

D. **Expand funding sources.** The PACTS region, along with many other places, has a critical need for increased funding for transit, and needs to diversify funding sources to include a greater proportion of dedicated funding from sustainable state and local sources. This is necessary because there is uncertainty surrounding federal funding. A diversity of funding mitigates financial risk and positions the region to better serve its aging population and a changing workforce.

Through the needs analysis, service concepts to advance the above actions were developed, and presented at the PACTS Transit Committee, where they were discussed and refined over several meetings. These service concepts form the foundation for the recommendations found in the next section (6 - What We Need to Do).
6. What We Need to Do

This chapter summarizes the major recommendations of Moving Southern Maine Forward. These recommendations grew organically from previous work, stakeholder outreach, PACTS Transit Committee workshops and internal meetings with agencies, and industry practices. The recommendations are numbered for referencing purposes only and this does not reflect a hierarchy or prioritization order.

The following pages present the major recommendations under four broad categories of needs identified in the previous chapter. This section is intended to highlight the recommendations and the objectives they aim to achieve.

A. Optimize Service Planning and Delivery

It’s essential to optimize transit offerings for people who use transit currently, or would benefit from better service, like students and seniors, and for residents in more dispersed and low density areas of Southern Maine. This includes providing additional or more frequent services, and/or more direct services. By making transit a more viable and convenient option for different types of trips—not only home to work or home to school trips—regional transit ridership can grow and transit can contribute to the quality of life around the region.

Current challenges facing public transit use in Southern Maine include the varied operating landscape and the need to link multiple services managed by different agencies. Fortunately, GPCOG, PACTS, and the transit agencies have pillars on which to build, including existing transfer infrastructure and designated development areas around Priority Centers. By leveraging these strengths and servicing underserved markets, such as students, the recommendations below can help stimulate ridership growth.

Recommendation 1

Improve transit options for commuting to and from school or college by:

- Improving service frequency and coverage on routes serving schools, such as METRO route 4 to the University of Southern Maine

Box 2. Students and transit ridership.

According to the online survey, students make up a relatively low percentage of the region’s ridership (9% in the online survey vs. 16% from NHTS). Nevertheless, student ridership is strong on some services, in particular SPBS and METRO.

Most agencies in Southern Maine have routes or services aimed at serving college, universities, and high schools. In fact, Portland METRO’s recent ridership bump largely stems from providing public high school students with bus passes and convenient service along routes 9A and 9B. In addition, about a third of South Portland Bus’s ridership are students.

Recent research shows that using transit at a young age correlates with transit usage in later years. Agencies in Southern Maine should encourage and grow ridership among students to try to capture them as future riders.
Moving Southern Maine Forward

- Implementing region-wide school passes (U-Pass) for region-wide transit services

Box 3. What’s a U-Pass?

A U-Pass serves as a tool to incentivize students to use transit not only to get to school, but to travel for other purposes. Typically, institutions like schools and universities will purchase transit passes in bulk at a discounted rate, guaranteeing some minimum revenue for a transit agency, while supplying reduced fares to students (and staff). In this way, students receive an annual or semester pass, and can use transit anytime. An added bonus for transit agencies is that riders with unlimited ride passes are more likely to use transit, even for short trips, boosting ridership.

In Southern Maine, all agencies offer a reduced student fare, but not U-Passes as described above. METRO is planning a U-Pass with USM for August 2018.

Recommendation 2

Improve route and service connectivity at transit hubs by:

- Exploring opportunities to upgrade transit hub infrastructure, leveraging opportunities such as the current Transit Stop Access Project
- Harmonizing schedules at key transfer locations by establishing a working group of schedulers and planners from regional transit agencies and stakeholders
- Building out hubs as destinations in their own right by improving coordination with city/town planning staff

Box 4. Land use and transit development.

It’s important that transit complement land use and vice versa. Having dense, mixed-use developments but no transit forces land to be consumed by parking, and inversely, having a transit ‘hub’ in the middle of a parking lot or in low density areas makes transit use difficult for purposeful trips. By working with planning staff to ensure zoning for mixed uses and higher density around transit infrastructure, transit-oriented development (TOD) can help reduce car use and long trips.

Some proposed locations first include existing hubs (improving amenities, like live arrival boards) and then expanding into other towns, like Wells and Brunswick.

- Assessing and improving interagency transit connections at different hubs such as:
  - Connecting Sh-Zoom’s Intercity route at the PTC
  - Providing a direct bus ride from the PTC to the CBL terminal (redesigning METRO route 8 or 1), with a “Rails to Sails” branding and promotion
  - Improving the connectivity of Shuttlebus-Zoom and YCCAC at the Saco Transportation Center
Recommendation 3
Monitor the performance/productivity of public transit service by adopting and publishing region-wide service standards by:

- Developing region-wide service standards adapted to the different modes in the region and different operating environments (rural, urban, and suburban), and create a dashboard hosted online at GPCOG/PACTS website for improved transparency.

Box 5. Transit performance dashboards.

The MBTA in Boston, WMATA in Washington, D.C., and SFMTA in San Francisco are transit agencies that publish online dashboards that help the public track performance across different metrics. Some of these are interactive too. GPCOG and agencies should work to implement similar dashboard capabilities to entice riders, improve accountability, and demonstrate the valuable and dependable services they provide in Southern Maine.

Example of main dashboard from the MBTA.
• Implementing performance monitoring software

**Recommendation 4**

Explore the potential for mobility as a service (MAAS) solutions, including microtransit, for low-density, low-productivity areas of the region by:

• Researching case studies and developing a local model for MAAS in suburban and rural areas that could be implemented as a possible pilot project in the PACTS area.

**Box 6. MAAS and microtransit.**

Mobility as a service, MAAS, refers to the growing interest in tailoring travel based on a specific trip, at a certain time, and for certain purposes. Put simply, MAAS uses technology and a variety of travel modes to determine the best-suited modes for a trip. So for example, while Max might ride a bike to work for a 3-mi commute every day, on rainy days, he uses transit. While not owning a car, Max can use car-sharing services, like Zipcar, to use a car to run errands at a shopping mall.

By offering many solutions, particularly in low density areas, such as car-sharing and ride-sharing, residents without cars or who prefer not to drive, can travel more easily.

What is microtransit?

A big challenge for transit, particularly in low-density areas with poor pedestrian infrastructure, is the ‘first mile/last mile’ problem. While in dense urban areas, most people walk to access transit, in suburban and rural areas, the street network may be fragmented, sidewalks may be lacking, and distances to cul-de-sacs homes might be more than a bearable walk from the nearest bus stop.

Many transit agencies across the nation are working with municipalities and TNCs, like Uber and Lyft, to provide connections from transit services to the final destination of riders, such as their homes. Furthermore, options like bike sharing can also help gap the first/last mile problem.

By developing microtransit solutions in specific areas throughout the region, like in identified Priority Centers (from Destination 2040), GPCOG can help transit become more of a practical option for more people, connecting rural, low-density homes to transit services, similar to existing park-and-rides along I-95.

**B. Increase Promotion and Public Awareness**

The visibility of public transit plays an underappreciated role in attracting new ridership, and retaining existing ridership. Typically limited to vehicles and bus stops and shelters, transit branding in Southern Maine is not striking, except perhaps for two prominent brands, Casco Bay Lines, with its emblematic yellow-red-black livery and newly redesigned terminal, and the Amtrak Downeaster, with a nationally recognized logo and a diversified regional marketing program.

Furthermore, the diversity of transit agencies, their branding and their promotional activities vary substantially, and in order for a more cohesive travel experience, both regarding trip planning and execution (wayfinding, harmonized schedules, etc.), shared experiences and unified strategies aim to benefit transit and ridership throughout Southern Maine. Indeed, many survey respondents noted that communication about transit options, and how to use them, appears to be lacking.
The following recommendations aim at guiding new marketing and promotional strategies to enhance visibility of all transit throughout Southern Maine. GPCOG, PACTS, and the agencies have engaged in previous efforts including a branding and marketing effort in 2013 that recommended better cooperation and coordination of marketing programs promoting transit services. The development of shared design standards among some agencies could enhance awareness and bring fresh and current perspectives.

**Recommendation 5**

Increase public awareness of regional transit connections and availability by:

- Creating a new regional transit website that will offer regional travel resources, agencies website links, fare and pass information, and a link to a travel planning app that connects all agencies in one central location. A printed schedule for distribution to the public and at transit hubs may also be produced to supplement this effort.
- Improving the existing SMTT app to capture more transit options (as well as cycling and car- and ride-sharing options) and make data available for third-party developers, such as Google Maps, Transit App, and RocketMan.

Box 7. Transit apps and GTFS feeds.

GPCOG, SPBS, METRO and CBL went through considerable effort to develop the widely used Southern Maine Transit Tracker app (SMTT). Nevertheless, SMTT does not include the Amtrak Downeaster, Sh-Zoom, or services by RTP (Lakes Region Explorer) and YCCAC (Wave or Orange Line).

While developing a travel planning app or site for the region is recommended, GPCOG and the transit agencies should also provide open source data (GTFS data), so users can use any app of their choice.

This would include publicly providing, as most transit agencies currently do, General Transit Feed Specification (GTFS) data online. GTFS is a standardized data format for storing public transit routes, stops, and schedules. This data can be used for trip planning and powerful systems analysis. Presently, only Casco Bay Lines, METRO, and SPBS provide GTFS feeds.
Recommendation 6

Explore more opportunities for unified branding of transit services by:

- Revisiting the concept of a regional transit brand. It is essential to identify why previous investigations into a unified brand did not pan out and ensure exploration into this topic is done differently this time.

  A regional brand would be supported by a regional transit website and would not replace the individual transit brands but rather elevate the existing agency brands by expanding their visibility and promoting a consistent and more efficient rider experience. Engaging riders and non-riders for feedback and input onto resulting branding ideas is essential, and the resulting regional brand should enhance, not replace, the existing transit branding.

Recommendation 7

Transit agencies should participate and coordinate with regional efforts attempting to address the social and economic impacts of homelessness by:

- Engaging with on-going regional efforts to address and reduce homelessness, such as the efforts led by Thrive 2027 and GPCOG.
- Communicating their concerns relative to homeless populations, as well as their ideas about how transit services can contribute to reducing homelessness in the region over time.
- Seeking opportunities to partner with social service agencies in addressing the root causes of homelessness in Southern Maine and around transit stops.

Recommendation 8

Improve the visibility of transit in the region by:

- Installing real-time arrival boards and displays at transit hubs
- Developing new promotional materials and advertisements aligned with a new unified branding and marketing strategy
- Improving wayfinding and transit signage
- Advocating for greater stakeholder input from a
variety of interests, including local business and municipalities
- Collaborating with town tourism groups, like the Biddeford+Saco Chamber of Commerce and Visit Portland, to improve marketing and awareness of transit for tourism purposes. This strategy can also leverage transit use coupled with special pricing for events or retail

C. Improve Regional Integration

Providing visual harmonization and improving trip planning throughout the region across all modes will require greater cooperation among agencies for many reasons, not limited to benefiting from peer experiences, potential for reduced costs from economies of scale, and improved travel experiences for passengers using multiple agencies.

GPCOG, PACTS, and the agencies should take pragmatic steps toward improved regional integration. In Southern Maine, transit agencies currently collaborate on numerous projects and planning studies, honor transfers, and also share maintenance facilities. Moving Southern Maine Forward provides some large aspirational goals, and recognizes the difficulty of integration. Nevertheless, opportunities such as developing a regionwide U-Pass system can act a springboard for recommendations provided below.

Recommendation 9

Explore the potential for improving regional integration (where applicable) by:
- Exploring quick wins such as improved scheduling at the hubs
- Identifying opportunities for common scheduling software
- Implementing ‘family of services’ delivery method to leverage investment in improving accessibility of conventional transit services

Box 10. What is family of services?

With the growing costs of providing door-to-door trips for elderly and persons with disabilities, coupled with surging demand, transit agencies across North America are looking for new ways to accommodate ridership from these segments while minimizing costs.

Agencies in Toronto and York Region (Canada), in Houston and Ann Arbor, offer examples of agencies that are working to provide alternatives to door-to-door trips based on a passenger’s ability rather than disability. By using trip-by-trip eligibility, passengers can combine paratransit service with fixed-route. For instance, a rider could call for a trip, such as from RTP or YCCAC, who would then deliver them to a transit hub, where the subsequent trip leg could occur on a bus or train.

By better integrating fixed route and paratransit services, passengers benefit from more travel flexibility, while agencies can lower the overall cost of such trips, and reduce the burden on demand-response services. Technology can play a large role in route matching and arrival notices. Finally, family of services requires that fixed route services maximize universal accessibility by doing things like improving bus stop conditions, and ensuring ADA-compliance at train and ferry terminals. On-going bus stop and shelter programs in the PACTS region sets a good starting point for a family of services pilot.

Delivery of trips through family of services can help mitigate some of the negative impacts of patient ‘dumping’ from MaineCare onto accessible demand-response services offered by YCCAC and RTP.
Recommendation 10

Explore the creation of a unified fare payment solution by:

- Exploring the creation of a unified fare payment system and marketing campaign and identify key players and advocates capable of facilitating its successful implementation.
- Providing fare incentives to riders to encourage early adoption of new fare media
- Exploring fare options such as time-of-day pricing and low income passes

While most agencies currently only use paper passes and tickets (The Downeaster also accepts electronic tickets and passes), a few have expressed interest in replacing these systems, including both METRO and Casco Bay Lines. Both agencies have also expressed interest in consulting experts to provide guidance on equipment selection and navigating regulation associated with its use. METRO is targeting a 2019/2020 launch of a next-generation electronic fare media system.

This opportunity offers not only METRO, but the other agencies as well, to use advanced fare media that would enable cross-agency transfers facilitating travel for passengers. Some examples in the US include the ORCA card in the Puget Sound area, and the Clipper pass in the San Francisco Bay Area.

Added benefits to electronic fare media include:
- Lower processing costs
- Better quality travel data (origin-destination data)
- Reduced fare evasion
- Ability to program different concessions, like senior and low-income fares

Nevertheless, using a unified payment solution for NNEPRA is challenging given Amtrak’s proprietary fare collection methods. Moreover, CBL fares are regulated by the Utilities Commission, which have effective and efficient public transit service. The transit agencies currently rely heavily on federal funding and should pursue more local funding sources to reduce dependence on the FTA and encourage more local ownership of transit.

Recommendation 11

Split funds according to a rigorous and competitive funding methodology by:

- Developing and implementing a new prioritization framework for the allocation of federal funds. The framework should include evaluation criteria, weighting and metrics that reflect broad stakeholder input, maintain the quality and reliability of the existing system, and support transit improvements that enhance the overall rider experience on transit.

While PACTS allocates FTA funding according to requests from each agency, recent forecasts predict a budget deficit, forcing a reconsideration of the method used to rank and fund regional projects.

Part of the work from Moving Southern Maine Forward included developing a framework to help evaluate projects, as well as plan for refining evaluation criteria and processes. The framework proposed in Moving Southern Maine Forward follow best practices from other regions across the nation, including the Los Angeles Metro Area, focused on funding projects that achieve regional goals, and improve mobility and environmental sustainability.

Currently, PACTS is testing different ways of using a competitive funding approach via applications completed by agencies that are later scored and ranked to determine funding requests.
**Recommendation 12**

Explore new non-fare revenue sources, while growing existing sources, to decrease reliance on federal funding by:

- Carrying out quick wins, such as ramping up transit advertising
- Investigating ramp up of programs like annual Eco-Passes and how the new fare technologies may be leveraged

**Recommendation 13**

Identify new local funding opportunities and finance structures that would help diversify transit funding and reduce reliance on federal sources by:

- Working with municipalities and stakeholders to assess state law and the ability for the region to levy local taxes
- Exploring new opportunities with municipalities such as impact fees or TIF funding structures
7. How to Get There

While the previous chapter provided evidence-based recommendations, the current chapter explores next steps needed to refine the timing and implementation of the recommendations. The phasing of recommendations and actions will evolve though the results of the modeling, guidance from industry best practices, and ongoing collaboration of the PACTS Transit Committee. The implementation plan should be developed following the adoption of this document to guide the work of the PTC, and exist as a living document that is able to adjust to financial changes or opportunities.

Modeling

Scenario modeling was used to assess the service concepts for project ridership, revenues, and costs at a regional level. The purpose of the model is to provide a better understanding of the budget and upfront investments needed to unlock the potential for downstream regional mobility benefits, ridership growth, and cost savings.

Nonetheless, there are certain limitations to the predictive ability of any model. First, models are built on assumptions and current data, and the availability of data varied across agencies. Second, the models cannot account for unforeseen events, and in Southern Maine, some examples of this might include but are not limited to poor summer weather that would impact seasonal ferry ridership, or winter storms that disproportionately impact the Downeaster, or rising gas prices that curb tourism to the region. For this reason some recommendations would be more difficult to apply and thus model for the Downeaster and Casco Bay Lines, such as the adoption of a regional fare strategy and medium. Third, the model looks at the regional impacts of the recommendations; as such, it is important to keep in mind that we are taking a high-level view, looking at all modes, and not one in particular. Finally, the model is only one of many tools used to guide decision making and prioritizing processes.

Next Steps

Moving Southern Maine Forward needs a champion to succeed. Past planning efforts in the region produced recommendations not entirely different from those presented now. Nevertheless, while some cooperation has succeeded in ushering important changes, such as the SMTT, bus stop improvements, and active transportation priorities, it is now necessary for the PTC to take a lead on enhancing multimodal transit in the region.

To reach the goals outlined in this plan, the PTC needs to encourage cooperation and trust among transit agencies, and the transit discussion needs to encourage more of the region’s voices. As the region continues to accommodate growth, land use should be developed with transit in mind and local municipalities should be encouraged to invest in transit-supportive infrastructure, such as sidewalks, and perhaps most importantly, to enact local funding sources. Due to the volume and complexity of the recommendations, it is important to prioritize each item and ensure a rigorous implementation plan is followed. Otherwise, there will be little accountability, progress will become stalled, and the value of the plan’s findings and recommendations will be limited.

Finally, Moving Southern Maine Forward lays the foundation for the next important phase, a long-range transit plan, and encourages collaboration between agencies to improve operations, while fostering a more attractive transit offering for riders. The long-range plan will continue the work to improve mobility in Southern Maine.