7 SERVICE DEVELOPMENT

The need and opportunity for public transportation in the Midcoast region of Maine has been voiced consistently and clearly by residents and community stakeholders over the past several years. The interest in public transportation led to the development of the Midcoast Transit Study and was confirmed over the course the project through participation in public meetings, stakeholder interviews and resident surveys. Indeed, among the more than 700 residents who participated in an online survey, 90% stated the time was right to consider expanding transit service in the region.

Currently, there is a limited amount of public transportation services in Camden, Rockport, Rockland, and Thomaston, provided by Coastal Trans. The service is demand responsive, meaning people must have a reservation to get a ride. Coastal Trans and is primarily designed to serve older adults, people with disabilities, and people participating in human and health service programs such as vocational rehab, sheltered workshops, and job training. The intent of the service, therefore, is to provide a basic level of service to the region's most transit-dependent riders.

The objective of this study is to understand and document the need for public transportation services in the Midcoast region among the wider population; and translating these needs into transit service options that offer potential to meet these needs. The focus of this section is on identifying the key markets for transit service in the corridor and presenting recommendations for service that would appeal to each market.

THE MARKET FOR TRANSIT

Crafting effective transit service involves identifying the key markets, understanding their service needs, and then designing services that meet those needs. In some cases, a single service can balance the needs of a variety of different market groups; in other cases, however, a proposed transit service may be focused on meeting the needs of one group at the expense of another.

Transit markets can be defined in many different ways. Markets can be geographic, demographic, or socio-economic. For this study, we have defined the key market groups for transit service in the following way:

- **"Urban" residents** –while it is difficult to call any of the study-area communities truly urban, Rockland and Camden do have many of the community features that can allow residents to live car-free if they choose. In particular, these communities have decent pedestrian infrastructure, near-by jobs and services (grocery stores, banks, libraries, social services, and intercity transportation in the case of Rockland), and relatively affordable alternative forms of transportation (Coastal Trans and short taxi trips). Additionally, both Camden and Rockland have housing to support senior citizens, low-

income individuals, and individuals with disabilities. These are market groups already served by Coastal Trans, but are important potential fixed-route transit riders as well.

- **Corridor commuters** – the four study-area communities share many regional destinations, and residents of the communities travel extensively throughout the Camden-to-Thomaston corridor to access jobs and services not found in their own communities. This market segment includes daily commuters and others traveling to destinations outside their own community for errands and appointments.
- **Seasonal visitors** – the Midcoast region is a popular summer-time destination for vacationers and festival-goers with the local populating increasing three-fold between July 4th and Labor Day. In addition to vacationers, this seasonal population also includes temporary workers, including international workers who typically do not have access to an automobile. Despite the fact that vacationers and summer workers make do without transit options, the market is a clear need. Potential seasonal transit users include visitors arriving by boat (privately or on group tours) or the Main Eastern Railroad; recreational vehicle (RV) travelers; summer residents; and visitors who may prefer not to drive and park in a community not well known to them. .

Within each of these market groups, there are choice riders and transit-dependent riders. Experience in other communities suggests that unless transit service is very frequent (every 15 minutes or better), choice riders usually limit their transit use to work and/or school trips (unless they are tourists). Thus, the estimated number of daily transit trips taken by choice riders is directly related to the proximity of a transit service to destinations such as schools and businesses. For transit-dependent riders, trip purposes are usually more varied, and include daily errands, appointments, and social visits, as well as work and school trips. Currently, transit-dependent resident in the study area rely on Coastal Trans or taxis for their mobility needs. An analysis of Coastal Trans and Schooner Bay Taxi ridership suggests an existing market of approximately 140 transit-dependent passenger trips per day within the study area (see Appendix C).

THE OPERATING ENVIRONMENT FOR TRANSIT

The most reliable indicator of where public transportation is needed – and will likely be successful – is population and employment density. This reflects the fact that where there are more people who can walk to a bus route, there will be more riders. In the Midcoast region, the highest year-round population densities are found in Camden and Rockland.

Rockland has, by far, the greatest concentration of employers in the study area, followed by Camden. Rockport and Thomaston have some large and regionally significant employers as well, including Wal-Mart (Thomaston) and Pen Bay Medical Center (Rockport), but they tend to be located closer to the Rockland border than to the population centers of either town.

Traffic conditions in the study area vary significantly by season (see Appendix A). For example, in January, a maximum of 400-600 vehicles per direction pass through Rockport every hour. In August, 800 or more vehicles per direction pass through Rockport during peak hours. In general, traffic volumes along Route 1 through the region begin to increase at the end of May and are in the 600-800 vehicles per hour range for sustained periods on weekends only between Memorial Day and July 4th. Between July 4th and Labor Day, high traffic volumes for extended periods of time occur every day of the week. Thus, any fixed-route transit service in the study area must

adjust for likely traffic congestion on weekends between Memorial Day and July 4th, and all days of the week between July 4th and Labor Day.

SERVICE OPTIONS

Given the markets and operating environment for transit in the study area, the study team developed four distinct service options for consideration:

1. Camden to Thomaston Comprehensive Service
2. Camden to Thomaston Limited-Stop Service
3. Rockland-Focused Service
4. Seasonal Service

Each of these options offer different opportunities to meet local needs; they all also reflect community input collected over the course of the study. Each option was also developed around a set of transit service design principles that have proven nationally to be fundamental to successful transit service. An example of how another similarly sized and positioned community successfully applied these guidelines is shown in Appendix B. The guidelines include:

- ***Service Should be Simple***: For people to use transit, service should be designed so that it is easy to use and understand.
- ***Service Should Operate at Regular Intervals***: In general, people can easily remember repeating patterns, but have difficulty remembering irregular sequences.
- ***Routes Should Operate Along a Direct Path***: The fewer directional changes a route makes, the easier it is to understand. Circuitous alignments can be disorienting and difficult to remember. Routes should not deviate from the most direct corridor unless there is a very compelling reason (i.e. a high concentration of potential riders).
- ***Routes Should be Symmetrical***: Routes should operate along the same alignment in both directions to make it easy for riders to know how to get back to where they came from. Where there are one-way streets or turn restrictions, directional service should operate as closely as possible to its opposite pair.
- ***Service Should be Well Coordinated***: At major transfer locations including Ferry terminals, schedules should be coordinated to the greatest extent possible to minimize connection times.

Each service option is presented in the following text; a summary table (Figure 5) showing key characteristics is included at the end of this section.

Option 1: Camden to Thomaston Comprehensive Service

Service Overview

Option 1 is designed as a comprehensive service traveling the entire length of the corridor from Camden to Thomaston (see Figure 1). The route is designed to serve the greatest number of origins and destinations in the study area, including the four regional commercial centers

(Camden, Rockport, Rockland and Thomaston) as well as most major recreational facilities and employers. The route would take roughly an hour and twenty minutes to travel the length of the corridor during non-summer months, and two hours during summer traffic congestion.

The service would primarily stay on Route 1, except for deviations to Camden Hills Regional High School (at bell times and during academic year only); to Pen Bay Medical Center; to Wal-Mart; and in downtown Rockland, the service would travel west of downtown Rockland along Route 1A and deviate west to serve the Fieldcrest Apartments and Bartlett Woods. As it is current designed, Option 1 would operate for 12 hours per day (6:00 AM to 6:00 PM), weekdays only. **Maintaining hourly frequency would require an annual operating investment of approximately $605,000[1].**

Market Served and Expected Ridership

Option 1 is designed to appeal to the majority of potential riders in the service area by connecting the primary population centers to the majority of key destinations. The challenge with the service, however, is that the travel time is long, in part due to deviations off the route and the length of the route (20 miles). This means the schedule must balance competing needs to be predictable without allowing too much time in the schedule.

Route 1 is expected to carry roughly 220 trips per weekday (see Appendix A). These riders will primarily be comprised of existing Coastal Trans riders; people traveling to work, high school students traveling to school and tourists during the summer month. **The cost per passenger trip is roughly estimated as $11.00.**

Service Design Alternatives

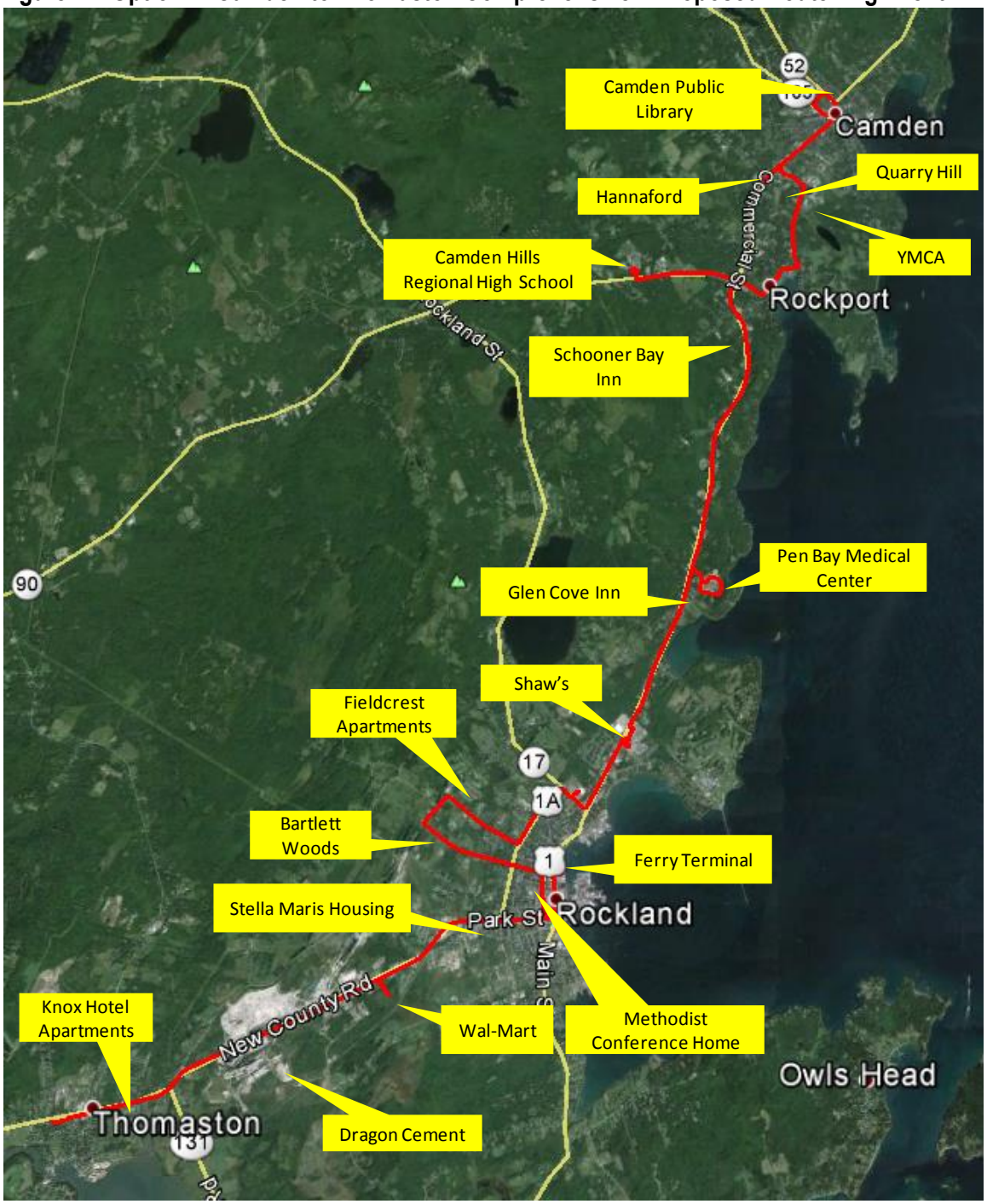
The Camden to Thomaston Comprehensive option is currently designed as a fixed-route service with scheduled stops. It is possible to operate the services as a flexible or "flex" service during the mid-day (9:00 AM to 3:00 PM), when traffic is light and the high school is not served. Operating as a "flex" service allows the bus to deviate from the fixed-route upon request.

Strengths and Weaknesses

Strengths	Weaknesses
Travels the highest density and most destination-rich corridor in community.	Implementation of a flex route could attract some riders but would also loose others.
Provides service to all four study-area communities.	Long travel time and route deviations mean service will not likely be attractive to most choice riders.
Could be implemented with mid-day "flex" option to provide higher level of service to people with higher needs and off-route travelers.	Without additional resources, service quality erodes during summer months.
Serves Rockland Ferry Terminal.	Does not service Samoset Resort.

[1] Assumes 12 hours a day over 160 weekdays during base season and 90 during summer season; hourly cost is estimated at $60 per hour. Three buses are necessary to operate the service during base and four during summer.

Figure 1 – Option 1: Camden to Thomaston Comprehensive – Proposed Route Alignment



Option 2: Camden to Thomaston Limited Stop

Service Overview

Option 2 reflects a similar design as Option 1 by serving the Route 1 corridor between Camden and Thomaston. However, Option 2 is designed as a faster, more direct service with fewer stops and fewer deviations off the main corridor. A one-way, end-to-end trip is expected to require one hour travel time as compared with Option 1, which requires one hour and twenty minutes each way. The faster travel time of this option is likely to appeal to people traveling to work and tourist, but be less attractive to transit-dependent riders. **To maintain hourly service frequency, the annual operating cost associated with Option 2 is approximately $425,000[2].**

The service would largely stay on Route 1, except in downtown Rockland, where the proposed service would travel west of downtown Rockland along Route 1A, but unlike Option it would not deviate further west and thus would not serve the Fieldcrest Apartments and Bartlett Woods. As it is current designed, Option 1 would operate for 12 hours per day (6:00 AM to 6:00 PM), weekdays only.

Market Served and Estimated Ridership

Option 2 includes fewer access points (i.e. bus stops) than Option 1, and less internal circulation in Rockland, but offers riders faster, more direct service. Primary users of the service, therefore will be people traveling to work and people wanting to travel between communities (i.e. from Camden to Rockland). The service would also likely appeal to summer travelers, especially people working in Rockland, Rockport and Camden, including younger workers traveling for summer jobs.

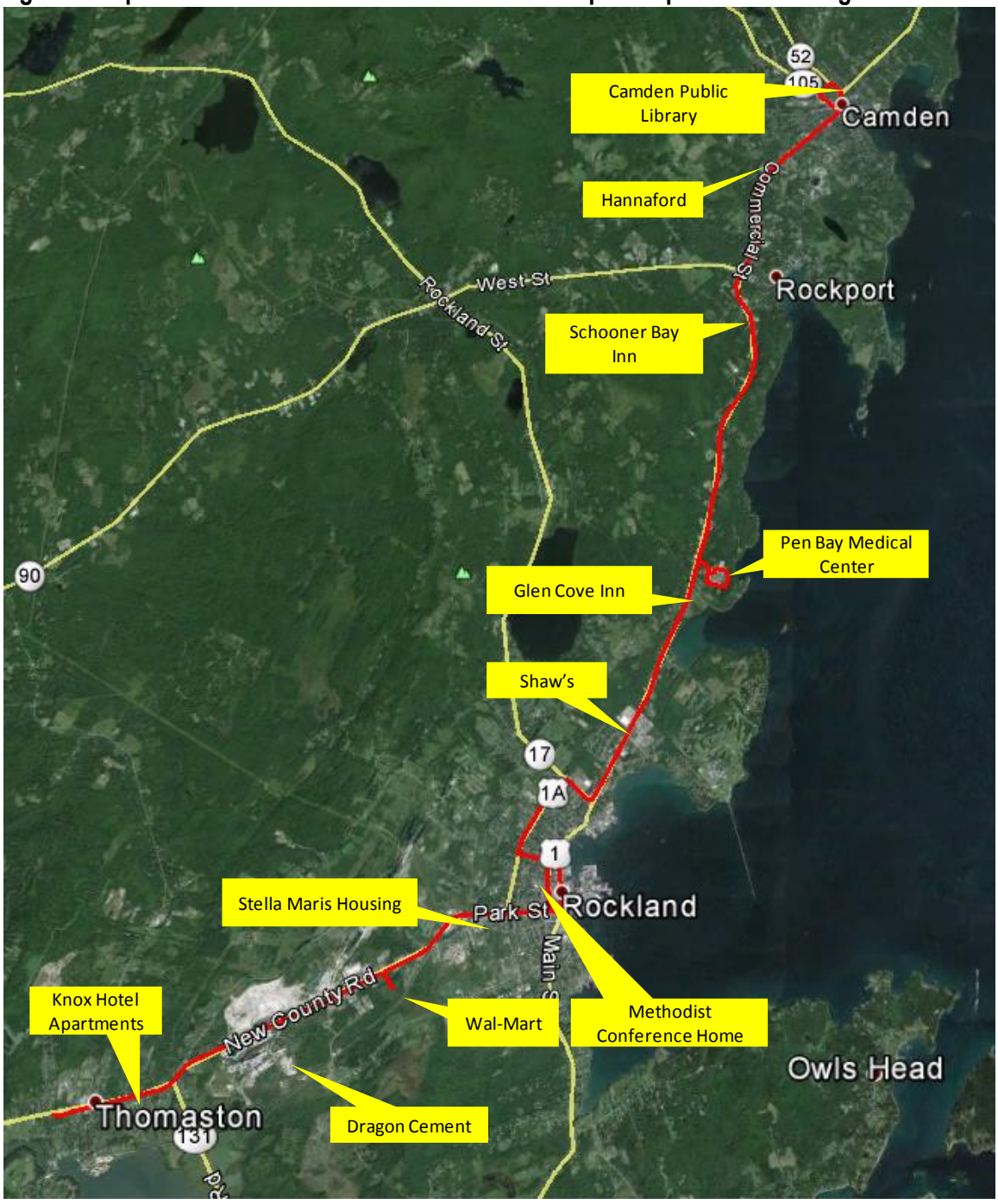
Route 1 is expected to provide roughly 150 passenger trips per weekday (see Appendix C). These riders will primarily be comprised of people traveling for work and tourists traveling during the summer months). **The cost per trip is broadly estimated as $11.30.**

Strengths and Weaknesses

Strengths	Weaknesses
Follows the fastest, most direct path between communities and thus is most comparable to travel by private automobile. Simple service design is easy to understand and easy to use. Travels the highest density and most destination rich corridor in community. Provides service to all four regional communities. Serves Rockland Ferry Terminal.	Limited stops mean some riders will need to walker longer distances to get to the route. Accessing the service requires walking to Route 1. Does not service several key destinations, incluiding Camden Hills High School, Samoset resort, Quarry Hill and the YMCA.

[2] Assumes 12 hours a day for 250 weekdays per year – 160 weekdays during base period and 90 during summer season (2 vehicles); Hourly costs are estimated at $60.

Figure 2 - Option 2: Camden to Thomaston Limited-Stop – Proposed Route Alignment



Option 3: Rockland-Focused Service (Pen Bay Medical Center to Wal-Mart)

Service Overview

Option 3 is designed to focus service on Rockland and key destinations just outside of downtown Rockland, including the Pen-Bay Medical Center in Rockport and Wal-Mart in Thomaston. The option is designed to appeal to a broad range of market segments, but in a limited geographic area. Option 3 is also designed to allow for incremental expansion if a phased approach is taken to the implementation of comprehensive corridor-wide service (Option 1). As it is currently designed, Option 3 would operate on weekdays from 6:00 AM to 6:00 PM. **To maintain hourly frequency, annual operating costs are estimated at approximately $360,000[3].**

Market Served and Ridership Projections

Option 3 is focused on people living in Rockland and providing connections to regional destinations. As a result, it serves Rockland residents and tourists well, providing them connections to regional employment, shopping, medical services, and shops and activities in downtown Rockland. The service is expected to appeal to Rockland residents and tourists staying in the area, including people on boats and traveling by ferry. Despite serving Rockland residents well, the option will have limited appeal to Rockport and Thomaston residents and does not serve Camden at all.

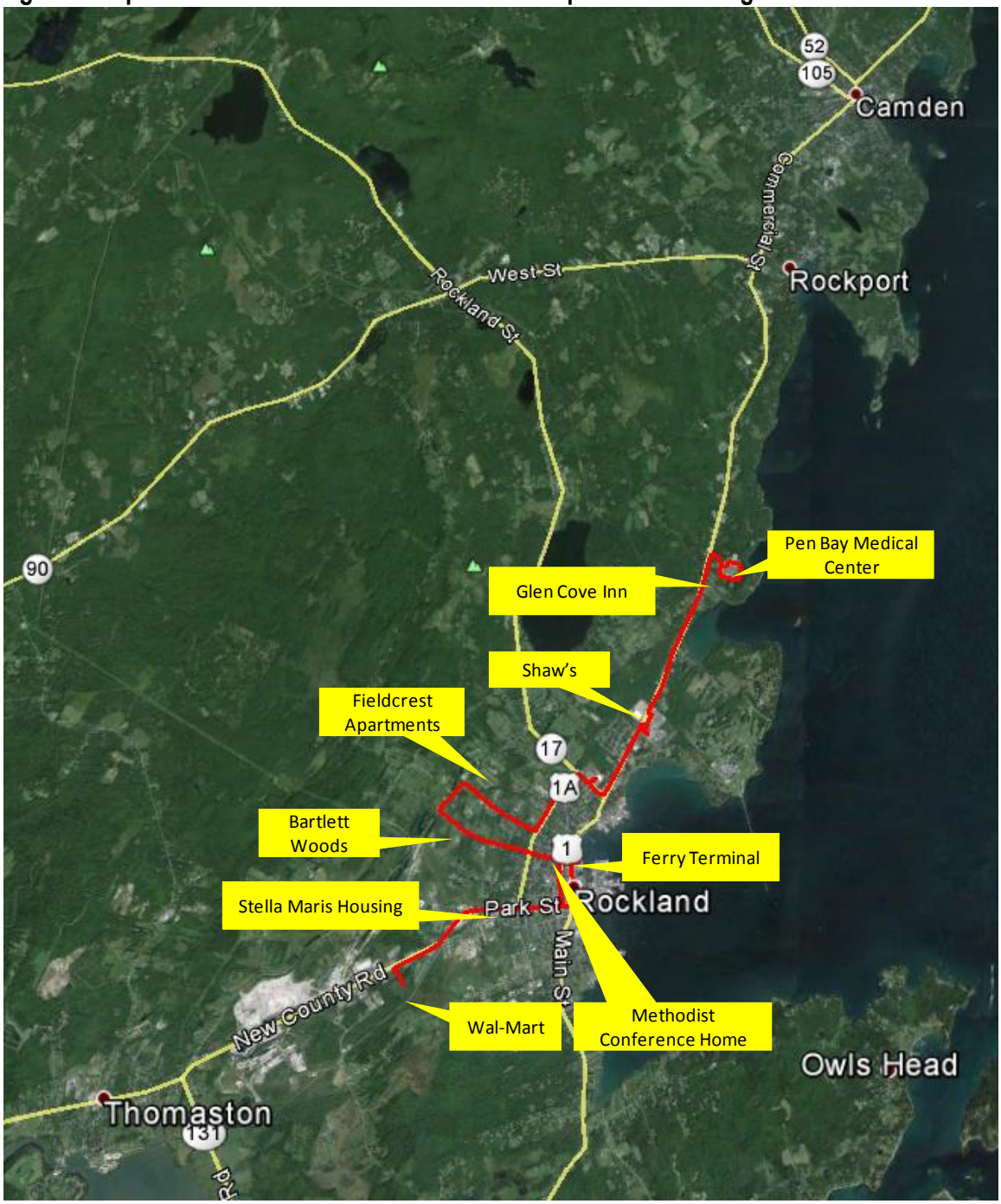
Option 3 is expected to provide roughly 160 trips per weekday. **The estimated cost per trip is $9.00.** These riders will primarily be comprised of people living in Rockland and working at Route 1 employers; people traveling to PenBay Medical Center for employment and office visits; shopper and tourists.

Strengths and Weaknesses

Strengths	Weaknesses
Potential as a "starter" service for region. Connects areas and destinations with highest demand. Can easily be expanded (to Rockport or Camden) or contracted depending on demand (downtown Rockland to Wal-Mart). Can help alleviate parking demand, especially for people working in downtown Rockland who live too far away to walk.	Services limited geographic area. Alignment includes deviations that will increase travel times for some riders especially riders traveling from north of Rockland to Wal-Mart.

[3] Annual operating costs assume 250 days per year and 12 hours per day with two vehicles in operation. Hourly costs estimated at $60.

Figure 3 - Option 3: Rockland-Focused Service – Proposed Route Alignment



Option 4: Seasonal Service (Camden to Wal-Mart via Samoset Resort)

Service Overview

Option 4 is designed to operate between the region's largest and most densely populated communities as well as the most tourist oriented areas– Rockland and Camden; it also provides direct service to the Samoset Resort and Wal-Mart. Because the option is designed to bring people to and from the key tourist markets, this option also provides the most economic-development benefits and is expected to have the largest impact on traffic and parking congestion. The service is designed to operate seven days per week during the summer months only (Memorial Day and Labor Day) between the hours of 6:00 AM and 6:00 PM. **To maintain hourly frequency, operating costs are estimated at approximately $195,000**[4].

Market Served and Ridership Estimates

The primary markets served by Option 4 include people living and working in Rockland and Camden, especially people who work during the summer months only, such as youths and people working in downtown Camden and downtown Rockland. The route will also appeal to summer residents visiting Camden, Rockland and Samoset Resort. The service also likely appeals to downtown merchants because it provides an option for employees to get to work without driving and likely alleviates – at least partially – parking demand. The service should also serve transit dependent riders, including older adults, recognizing that the service is recommended as a summer time only service; however, older adults and persons with disabilities are more likely to used fixed-route service when the weather is good. Year round needs for these riders may be met by Coastal Trans.

Option 4 is estimated to carry approximately 150 people, most of which would be derived from people living in corridor, plus a sizeable number of employees and guests at the Samoset Resort. **The estimated cost per trip is $14.40.**

Strengths and Weaknesses

Strengths	Weaknesses
Provides a fast and direct link between highest needs communities. Serves three of the four communities in Mid-Coast region. Offers most economic-development potential and opportunities to alleviate parking demand. Could function as "starter" service to serve time with greatest need and opportunity.	Limited appeal to transit dependent community, except for youths employed during summer months.

[4] Assumes 90 days of service, 12 hours of day, three vehicles and $60 per hour.

Figure 4 - Option 4: Tourist-Focused Service – Route Alignment

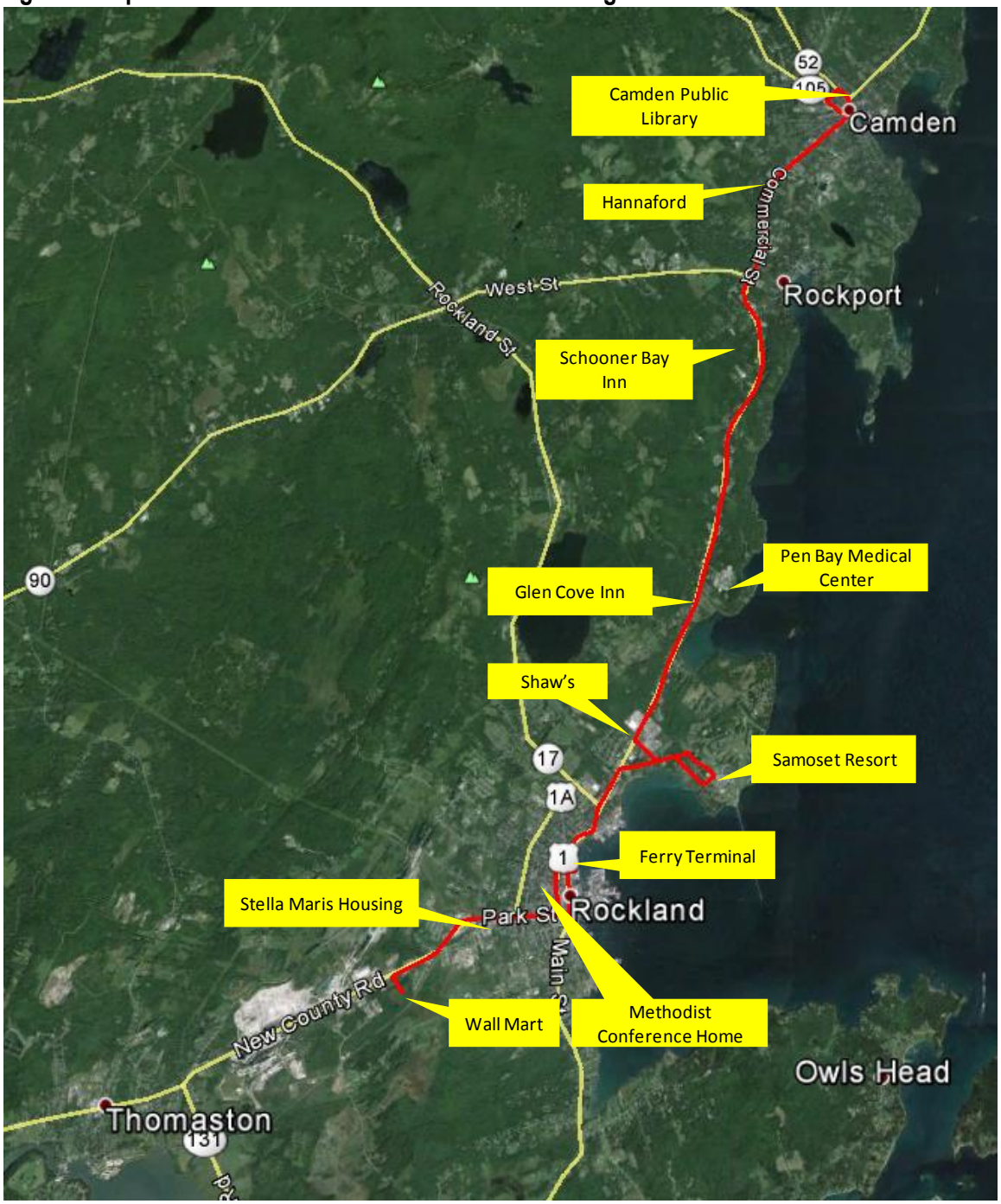


Figure 5 - Summary of Service Option Characteristics

Service Options	Service Period	Route Length (One-Way Miles)	Service Frequency	Vehicles Needed (Base / Summer)	Estimated Daily Riders	Primary Markets Segments Served	Service Days	Estimated Annual Operating Cost*	Estimated Cost Per Passenger Trip
Camden to Thomaston Comprehensive	Year Round	20	Hourly	3 / 4	220	Rockland Urban Residents Corridor Commuters Seasonal Visitors	Weekdays	$605,000	$11.00
Camden to Thomaston Limited-Stop	Year Round	15	Hourly	2 / 3	150	Corridor Commuters	Weekdays	$425,000	$11.30
Rockland-Focused	Year Round	9	Hourly	2 / 2	160	Rockland Urban Residents	Weekdays	$360,000	$9.00
Seasonal Service	Summer	13	Hourly	0 / 3	150	Seasonal Visitors	Weekdays and Weekends	$195,000	$14.40

EVALUATION OF PROPOSED OPTIONS

After developing service options, the study team evaluated the individual options to determine which option, or combination of options, held the most promise for the Midcoast region. The evaluation process involved a series of iterative steps, rather than a highly structured screening process. In order to fully evaluate each option, however, the study team completed more detailed analysis on several key service parameters:

- **Create Detailed Routing and Stop Placement Plan:** In order to fully understand and evaluate the advantages and disadvantages of the individual options, it was necessary to create a detailed routing plan. This analysis helped the study team consider important factors such as travel time, the number of stops, the safety of stopping on major roads and the market served.
- **Simplicity of Service Design:** As outlined earlier, services that are simple and easy to understand attract the most riders and are easiest to operate. As part of the evaluation process, therefore, the study team considered if the option would be too complex to communicate easily and clearly with the community, including summer residents who may be occasional visitors to the area.
- **Ridership Estimates:** The study team also broadly estimated ridership for each service option by considering existing transit-dependent ridership and accessibility to key destinations.
- **Cost per Trip:** The cost effectiveness of the service as measured by the cost to provide each trip (or cost per rider) was an important consideration for selecting the preferred alternative.
- **Total Investment:** Another key evaluation criteria was the total investment cost required to get the service started, including annual operating costs but also capital investments.

The evaluation process also considered the input and comments of stakeholders and members of the public.

Impacts on ADA Paratransit Service

In accordance with the Federal Americans with Disabilities Act (ADA), operating fixed-route transit requires the Midcoast region to also provide complementary paratransit service for individuals who are unable to use local fixed-route service. Under ADA, transit operators must offer complementary paratransit service for ADA eligible individuals unable to use fixed-route services and taking a trip that begins and ends within ¾ of a mile from a fixed-route. Travel must occur during the operating hours of regular transit service. ADA also sets fares for complementary paratransit service at not more than twice the adult cash fare.

As a result, the evaluation process also considered the impact of the service design on ADA paratransit services. In general, longer routes that serve a larger area are more expensive to serve with ADA paratransit service. Likewise, longer operating hours, including service operated into the evening and on weekends, tend to increase ADA costs. All of the proposed options were developed assuming similar service schedules. The primary differences are associated with geographic coverage areas and service periods (year-round or summer-only). In terms of the costs of providing ADA paratransit service, therefore, Option 4 is the most favorable, as it operates in the summer only, with very little coverage in Thomaston or Rockport. It is also worth noting that ADA paratransit service is not required where and when flex service is available.

EVALUATION RESULTS

Ultimately, Option 3: Rockland-Focused (Pen Bay Medical Center to Wal-Mart) was identified as the alternative that best balances community needs, goals and objectives. Key reasons for selecting this option include:

- It is estimated to be the most cost effective service on a cost per passenger basis.
- It is the simplest to schedule, understand and operate.
- It serves most of the major destinations in the region, including downtown Rockland, the Pen Bay Medical Center, Shaw's, Fieldcrest Apartments, Bartlett Woods, the Ferry Terminal and Wal-Mart.
- It provides hourly service and the travel time can be scheduled so that departures from major destinations occur on a clock-face schedule.
- It establishes a strong starter route that can be extended over time.

The preferred option is described in more detail in the following chapter.

8 RECOMMENDED TRANSIT SERVICE

Option 3 – Rockland-Focused Service

As highlighted in the previous section, the study team recommends a targeted transit service that is focused on the City of Rockland, plus destinations just outside of Rockland in Rockport (Pen Bay Medical Center) and Thomaston (Wal-Mart). Rockland has the highest transit need and transit potential in the study area based on its demographic and land-use characteristics. This option is designed to appeal to a broad range of market segments, but in a limited geographic area. It is also designed to allow for incremental expansion if a phased approach is taken to the implementation of comprehensive corridor-wide service.

Option 3 features service from Pen Bay Medical Center in south Rockport to Wal-Mart in north Thomaston, with the majority of coverage focused on Rockland. Service would be hourly and would include the following major destination:

Town Centers

- Downtown Rockland

Retail

- Rockland Shaw's
- Rockland Hannaford
- Wal-Mart

Medical/Rehabilitation

- Pen Bay Medical Center
- Maine Vocational and Rehabilitation Associates

Specialized Housing

- Fieldcrest Apartments (Rockland)
- Bartlett Woods (Rockland)
- Methodist Conference Home (Rockland)
- Stella Maris House (Rockland)

Educational

- University College at Rockland (URock)
- Oceanside High School East

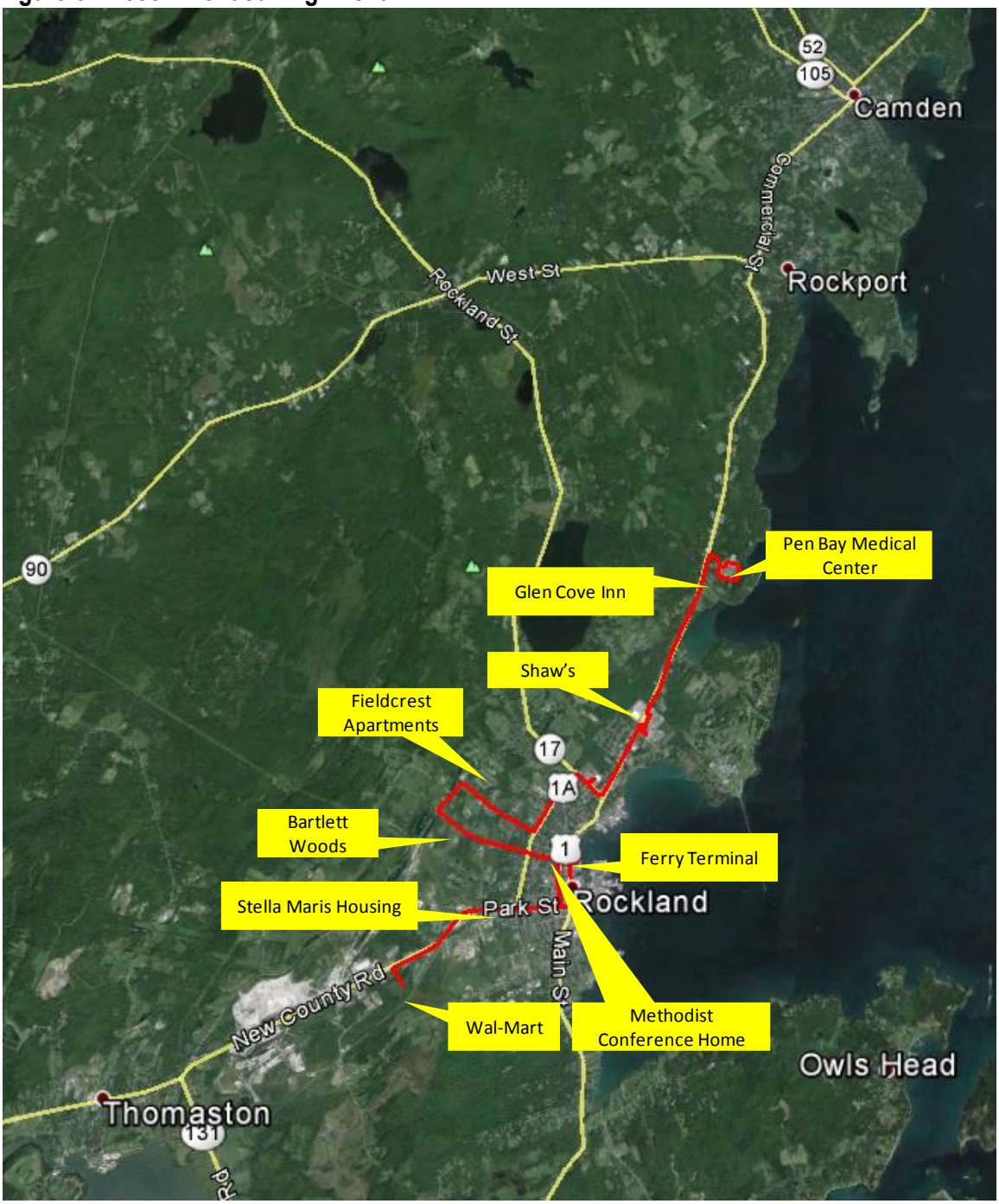
Recreational

- Rockland Library

Transportation

- Rockland Ferry Terminal

Figure 6 - Recommended Alignment



The alignment shown above is approximately nine miles, so travel time from one end of the route to the other would take 40 to 45 minutes. If hourly service is provided, time would also be available for flex service. However, flex service may not be possible in the summer months when traffic congestion is heavier and more unpredictable.

The service would initially operate for 12 hours per day (6:00 AM to 6:00 PM), weekdays only. It may be expanded over time as ridership grows and as funding become available.

Market Segments Served and Ridership Projections

An analysis of existing Coastal Trans and Schooner Bay ridership shows that approximately 75% of trips that begin and end in the study area are concentrated in the Wal-Mart to Pen Bay Medical Center sub-corridor. Within Rockland, Option 3 will provide a high level of accessibility to residents of several specialized housing communities and most of the city's major employers. This option is expected to appeal to broad range of riders within Rockland, but have limited appeal to Rockport and Thomaston residents as the route would not be easily accessible to the majority of residents of those communities.

The following table shows an estimate of the expected ridership for Option 3:

Figure 7 - Estimated Ridership of Recommended Alignment

Ridership Source	Employees / Students / Existing Rider	Capture Rate	Expected Riders	Expected Transit Trips
Baseline Corridor Ridership	69	75.0%	52	104
Pen Bay Health Care	1500	1.0%	15	30
Oceanside East High School	550	1.0%	6	11
Wal-Mart	300	1.0%	3	6
Boston Financial Data Services	238	0.5%	1	2
Hannaford Supermarkets	75	1.0%	1	2
Shaw's Supermarkets	105	1.0%	1	2
Home Depot	100	1.0%	1	2
O'Hara Corporation	50	1.0%	1	1
Total Estimated Weekday Ridership			80	159

Fleet and Bus Stop Requirements

At approximately nine miles, hourly service could be provided along the Option 3 alignment with two vehicles. One additional vehicle will be required, to serve as a spare. As discussed in the Schedule and Travel Time section below, the estimated schedule for this route leaves sufficient time for flex service and "recovery." This buffer means that, unlike with other service options, Option 3 will not require the deployment of an additional bus in the summer months.

The study team has identified approximately 30 locations along the proposed route where bus stops may be appropriate. If signs are placed at each location, this would require up to 60 bus stop signs. It should be noted that the presence of a bus stop sign does not necessarily mean that buses will be stopping at the location on every trip. Bus stops only create an opportunity for riders to access the system, but only a fraction of stops will be used on any given trip. The signs also increase awareness of the service and help

prospective riders visualize the route. In general, stop spacing is typically greater in more urbanized areas like downtown Rockland than in less-dense environments like along Route 1 north and south of Rockland.

Schedule and Travel Time

The recommended service option begins at the Pen Bay Medical Center, provides local circulation in Rockland, and ends at Wal-Mart. The one-way travel time is estimated to be approximately 40 minutes. The table below shows the projected travel time between key destinations, taking into account the time needed for passengers to board and alight the bus. Travel times in the opposite direction would be similar.

Figure 8 - Indicative Schedule (minutes past the hour)

1	2	3	4		5
Pen Bay Medical Center	Rockland Shaw's	Rockland Hannaford	Rockland Ferry Terminal	Stella Maris House	Wal-Mart
-	:10	:15	:25	:30	:40

While the route can be run in less than an hour, hourly service frequency is recommend for several reasons:

- Clock-face intervals are easier for passengers to remember, and make the service simpler to use.
- A buffer between trips allows buses to "recover" if they fell behind schedule on the previous trip (this will be particularly important in summer months), and gives drivers an opportunity to use the restroom if needed.
- Extra time can be used to accommodate flex trip requests.

IMPLEMENTATION AND FUNDING

Once a proposed service option is agreed upon, there are a series of stops involved with first getting the service started and then operating and managing the service; this report provides guidance on each of these steps in the following section.

Initial Implementation

Starting a new public transportation service requires going through a series of steps, including raising funds to purchasing vehicles, developing marketing materials and operating service. In the initial stages of this process, the community needs a leader or champion to get things started. The work of the champion is to build support and enthusiasm for the service, find supporters and people who will help identify and secure funding and lead a local conversation about service management and operations.

In other communities, the champion has been a member of the community with a passion for public transportation and/or an individual committed to public transportation. The champion could also be a single staff member – or group of individuals – from local institutions, such as the City of Rockland, Mid-Coast Maine Regional Planning Commission, or the even this study's Steering Committee.

Management/Oversight

Getting the transit service started also requires that the service founders or champions develop sufficient service management infrastructures (i.e. identify a potential oversight structure and operator) so that the

service can reasonably attract funding, but, at the same time, recognizing that until the service starts, many of these ideas will be theoretical.

Given the resources currently available in the corridor, Nelson\Nygaard recommends that the City of Rockland function as the project manager for the transit service, but that a private entity, such as Coastal Trans, operates the service. The proposed transit service is oriented around the City of Rockland and the City has demonstrated a commitment to service development. However, the City does not have experience with operating and providing transit service. Thus, contracting out the service will allow the City to manage and direct the service without assuming responsibility for operations. Another advantage of this approach is that the new transit service can rely on other City infrastructure, including financial and accounting systems to manage and oversee the service. This structure is used by small transit agencies around the country – especially in the initial stages of service development. It is likely the City will need to dedicate at least a half-time (0.5) Full-Time Equivalent (FTE) to fulfill a Transit Manager position.

The Mid-Coast Maine Regional Planning Commission should also be a partner in the transit service development, especially in the early stages, by helping with service planning, mapping and grant writing. The MRPC may also play a role in identifying, funding and supporting the development of transit supportive infrastructure (i.e. sidewalks and crosswalks) along the route, which spans multiple jurisdictions.

Service Investment Requirements and Funding Plan

Cost Estimate

Supporting quality transit services on an ongoing basis is one of the biggest hurdles facing any transit system. While significant resources are available through federal programs, federal funds must be matched with local and/or state money, which may be as high as 50% of the total operating costs. As a result, the Midcoast Region will have to raise funds from local communities and partners. Raising funds for the transit service, therefore will require a combination of pursing federal grant resources and working with local community partners and institutions to raise local funds.

The recommended service is estimated to cost $685,000 in the first year, including both the costs associated with purchasing vehicles and developing capital facilities ($325,000) and the cost to operate the service ($360,000) (see Figure 9). After the first year, the costs decrease substantially and are close to $400,000 annually, including ongoing development of capital resources and development of a capital reserve fund to support vehicle replacement funds. The local communities are expected to need to raise roughly $245,000 in the first year and about $200,000 per year for subsequent years.

Figure 9 – Estimated Costs and Local Match[5]

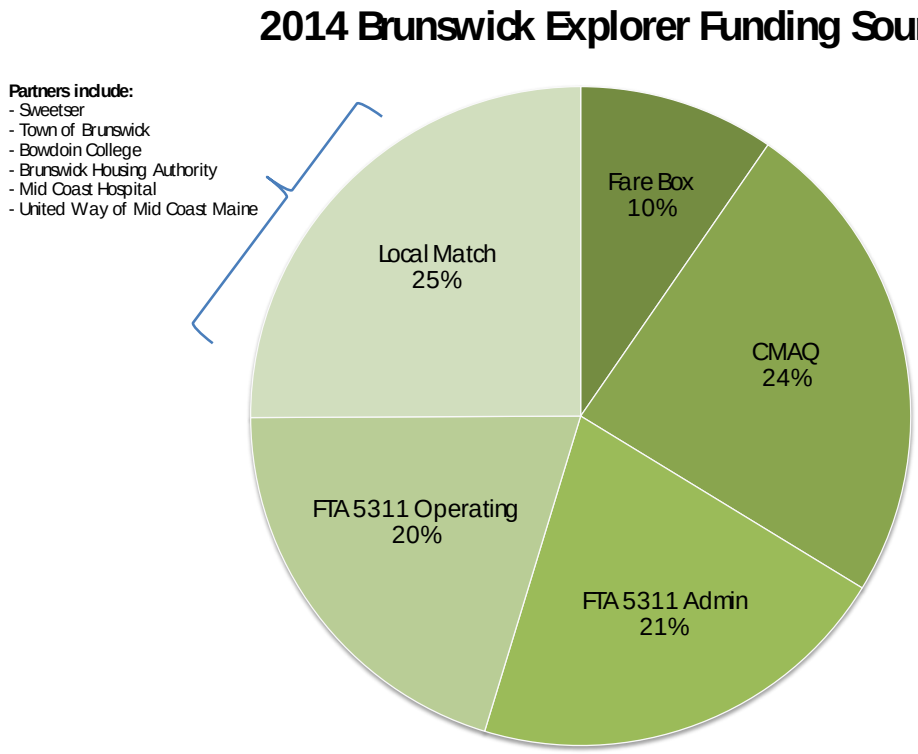
Year	1	2	3	4	5	6	7	8	9	10
Vehicles required for service	3	3	3	3	3	3	3	3	3	3
Vehicles purchased or replaced	3				2		1			1
Vehicle Purchases	$225,000				$172,500		$90,750			$97,500
Signage; Stops: Shelters	$100,000	$ 10,000	$ 10,000	$ 10,000	$ 10,000	$ 10,000	$ 10,000	$ 10,000	$ 10,000	$ 10,000
Fund Capital Reserve		$ 10,000	$ 10,000	$ 10,000		$ 20,000		$ 20,000	$ 20,000	
Total	**$325,000**	**$20,000**	**$20,000**	**$20,000**	**$182,500**	**$30,000**	**$100,750**	**$30,000**	**$30,000**	**$107,500**
Estimate Local Match	$65,000	$ 12,000	$ 12,000	$ 12,000	$ 34,500	$ 22,000	$ 20,150	$ 22,000	$ 22,000	$ 21,500
Capital Fund Balance		$ 10,000	$ 20,000	$ 30,000	$ (4,500)	$ 15,500	$ (4,650)	$ 15,350	$ 35,350	$ (13,850)
Operating Costs	$360,000	$370,800	$381,924	$393,382	$405,183	$417,339	$429,859	$442,755	$456,037	$469,718
Local Match	$180,000	$185,400	$190,962	$196,691	$202,592	$208,669	$214,929	$221,377	$228,019	$234,859
Total Costs (Capital and Operating)	**$685,000**	**$390,800**	**$401,924**	**$413,382**	**$587,683**	**$447,339**	**$530,609**	**$472,755**	**$486,037**	**$577,218**
Assumed Federal and State Funds	$440,000	$193,400	$198,962	$204,691	$350,592	$216,669	$295,529	$229,377	$236,019	$320,859
Local Match Requirement	$245,000	$197,400	$202,962	$208,691	$237,092	$230,669	$235,079	$243,377	$250,019	$256,359

[5] Assumes $75,000 per vehicle, $60 hourly operating cost, and 3% annual cost escalation

Funding Plan

Most transit systems in the United States get a significant portion of their funding from federal grants, with the remainder of funds coming from passenger fares, advertising revenues and contributions from other level of government (city, county, state, special districts, etc.). As an example the 2014 budgeted funding sources for the Brunswick Explorer are shown below; in this case 65% of funding comes from Federal grants, 10% from fare revenues, and 25% from a variety of local contributions.

As service is being planned in the study area, Nelson\Nygaard recommends a similar approach of pursuing federal resources and supplementing these sources with state and local funds, plus fares. Each of the funding sources is desribed in the following text.



Federal Funding Resources

Federal surface transportation funding is currently guided by the Moving Ahead for Progress in the 21st Century (MAP-21) legislation, which was signed into law in 2012. One of MAP-21's central goals was to reverse the proliferation of smaller and more specialized programs and consolidate them into larger programs that give funders more flexibility.

FTA Section 5311 (Rural Area Formula Funds)

This program provides funding assistance for public transportation projects in non-urbanized areas. The program, first established in the late 1970s, remains a key FTA program. However, some structural changes were made with the passage of MAP-21 that are relevant for this plan:

- **Consolidation of JARC with 5311** – Activities eligible under the former Job Access and Reverse Commute (JARC) Program, which provided services to low-income individuals to access jobs, are now eligible under the Section 5311 program. In addition, the method by which FTA allocates funds to the states now includes the number of low-income individuals as a factor. There is no floor or ceiling on the amount of funds that a state has to program on job access and reverse commute activities.

The Federal funding share for FTA 5311 is 80% for capital assistance and 50% for operating assistance.

Congestion Mitigation and Air Quality Funds (CMAQ)

The Congestion Mitigation and Air Quality Improvement (CMAQ) program provides a flexible funding source to State and local governments for transportation projects and programs to help meet the requirements of the Clean Air Act. The Brunswick Explorer has budgeted $75,128 in CMAQ funds for FY2014. However, as of Federal FY2014, the Midcoast region is no longer considered an air quality non-attainment region, making these funds unavailable for the time being.

FTA Section 5310 (Enhanced Mobility of Seniors and Individuals with Disabilities)

Under MAP-21, FTA Section 5310 includes more eligible activities to enhance mobility for seniors and people with disabilities. These activities are 1) former New Freedom activities -- improvements that exceed the requirements of the Americans with Disabilities Act (ADA); 2) public transportation projects to improve access to fixed route transit; 3) public transit projects expressly designed for seniors and people with disabilities, where transit is insufficient, inappropriate or unavailable; and 4) alternatives to public transportation that assist seniors and people with disabilities. Some changes to the FTA 5310 program are summarized below:

- **New Distribution Formula** – Funds are apportioned based on each state's share of the targeted populations and are now apportioned to both states (for all areas under 200,000) and large urbanized areas (over 200,000).
- **Selection Process** – Projects must now be "included" rather than "derived from" a coordinated transportation plan. Projects no longer need to be selected based on a competitive process (this is optional).
- **Operating Assistance is now an eligible activity** – Section 5310 for the first time can be used for operating assistance. No more than 45% of program funds can be used for operations.
- **Minimum Expenditures on 5310 Activities** – At least 55 percent of program funds must be spent on the types of capital projects eligible under the former section 5310 – public transportation projects planned, designed, and carried out to meet the special needs of seniors and individuals with disabilities when public transportation is insufficient, inappropriate, or unavailable.

The Federal share for capital projects under FTA 5310 is 85% with a 15% required local match for ADA accessible vehicles and 80% with a 20% required local match for other capital equipment. The Federal share for operating assistance is 50%.

FTA Section 5339 (Bus and Bus Facilities Program)

A new formula grant program is established under Section 5339, replacing the previous Section 5309 discretionary Bus and Bus Facilities program. This capital program provides funding to replace, rehabilitate, and purchase buses and related equipment, and to construct bus-related facilities. As part of the distribution formula, each state will receive a $1.25 million allocation for capital assistance. The federal share for capital projects remains at 80% with a required 20% match.

State Resources

Maine is going through significant changes in its available funding structure with the restructuring of MaineCare. Currently, several rural transit agencies in Maine receive the bulk of their funding through MaineCare.[6] However, select fixed-route services, such as the Brunswick Explorer, rely heavily on Federal 5311 funding. For this reason, the section below focuses on the 5311 application process:

In order to receive 5311 funds, an entity must be one of the following: [7]

- State agency
- Local governmental agency or division
- Tribal government
- Private non-profit organization
- Transit agency
- Private for-profit organization (§ 5311(f) intercity bus program only)

Maine uses a Regional Provider system determined through the Biennial Operations Plan (BOP) process to properly allocate resources; CostalTrans is one of these Providers. The BOP fulfils the Federal Transit Administration's coordination requirements and allows the state to receive federal money, which it can then disburse to providers using a distribution formula based on the census. Allocations are based on population and square mileage of designated regions; Knox County is Region 5. To apply for this funding, a Regional Provider must submit a "simplified BT-30 form", the 2011 checklist and form associated with this can be found on the MEDOT website.

Local Funding Sources

Building local partnerships that can result in funding assistance from social service agencies and other organizations takes time. It is likely that for the first several years of service, local funding will be primarily the responsibility of the Town of Rockland, with support and assistance from local partners and municipalities. As stated previous, the costs are considerable and are expected to range up to $245,000 in the first year with ongoing costs along the lines of $200,000.

As soon as the community decides to embark on developing transit service development, it needs to begin the conversation with local area municipalities and institutions to begin to raise support and money for the service. There are three essential considerations in developing local sources:

- **Focus on sustainability** – As part of identifying funding sources, the Midcoast region should ensure municipalities and institutions agree to funding the service for a set period of time, say up

[6] MaineDOT Biennial Operations Plan for Transit 2011–2012 p.4
http://www.maine.gov/mdot/ptp/documents/2012bop/Exec%20Summ.pdf

[7] MaineDOT: State Management Plan 2011,
http://www.maine.gov/mdot/ptp/documents/StateManagementPlanJuly2011.pdf

to three years or as long as five years. The objective with the approach is to ensure the service is sustainable and has an opportunity to succeed over the long term.

- **Ensure transparency and equity** – Funders and partners that are involved in funding the transportation service must feel that their financial participation is based on principles that are transparent and equitable. Developing a cost sharing plan, so that participants understand why they are beign asked to pay how much and leaves them – for the most part – with a sense that the costs are shared equally will help ensure continued participation.

- **Demonstrate value** – A critical part of receiving funding is being able to demonstrate to funders that their investment is producing results. As a result, as part of developing a funding (and management plan), the transit manager needs to set goals; identify performance and progress measurements; and report on progress. Frequent and ongoing communication between the transit service managers to the funders is critical to ensuring continued support – both financially and publically.

Cost Sharing Formulas

The most common cost sharing methods or formulas are based on service hours, miles, and population, as well as combination formulas.

- **Population-based** cost sharing is based on the total population for each jurisdiction or service area; or in some cases based on a segment of the population such as the number of elderly or people with disabilities within a city.
- **A service quantity formula is based on units of service** provided within a jurisdiction or service area. Units of service are defined as the revenue hours that a vehicle is in service.
- **A service quantity formula based on miles** is similar to service hours, although

Fares

The question of whether to charge a fare or not is complex. For many smaller and more rural transit systems, the cost of collecting fares combined with the impact on federal funds outweighs the benefit of charging a fare. If a fare is charged on the proposed Rockland-focused service, it would likely raise between $30,000 and $40,000 annually[8]. If employers or other groups contribute to the service in exchange for their affiliates riding for free, the potential revenue would decrease substantially.

National experience demonstrates that transit service operating fare-free will attract more riders, especially in small towns and rural areas. Operating fare-free may be effective for the services recommended as part of this study, especially if services are oriented towards employers and employers help fund the service. In addition, in nearly every case, if an institution or employer contributes to transit service operations, its affiliates are entitled to ride the service for free. There are also several tourist-oriented transit routes that operate fare free, even when other routes in the area have a fare.

It is important to note that if transit routes are fare-free, ADA complementary paratransit service must also be provided fare free.[9]

Private Sector Initiatives

-way trip; however Federal funding regulations mean some riders (i.e. older adults and persons with disabilities) must be eligible to ride for reduced rates during some time periods, as a result the average fare received will be less than $1.00.

[9] Federal statute limits the charge for ADA complementary paratransit service to twice the fixed route fare. If the service is provided fare free, no fares may be charged to paratransit users.

A growing trend in the transit industry is to establish public/private partnerships as a way to increase revenues for transit and transportation programs and services. The private sector can be broadly interpreted to include employers, merchants, retail establishments and private non-profit organizations. Contributions could take the form of ongoing operating support or could also be used for one-time capital purchases such as passenger shelters and benches.

Employer Contributions

The role of business groups and major employers could be viewed similarly to the role of public agencies and municipalities in financially supporting a service and promoting it. The major difference is that employers and business groups tend to provide funds for capital or one-time contributions rather than ongoing operating support. Paying for a passenger shelter or bench would be a valuable financial contribution from the private sector. Employers or merchants that benefit from a service may be interested in supporting it, particularly if a bus stop were located at their front door to maximize convenience for their employees or customers. Employers could also help subsidize the cost of transit tickets or passes. Potential employer contributors in the study area include:

- Wal-Mart
- Hannaford Supermarket
- Pen Bay Medical Center
- Methodist Conference Home
- Boston Financial Data Services
- University College of Maine – Rockland (URock)

As an example, Moscow Valley Transit, a service in the state of Washington is supported by a public/private partnership with a portion of their funds coming from a Wal-Mart Foundation community grant in the amount of $85,000, representing approximately 15% of operating costs.

Service Clubs and Business Organizations

Organizations such as the Rotary Club, Kiwanis, and Lions often pay for special projects. For transportation, they might pay for or help contribute toward the cost of a new vehicle or a bus bench or shelter near senior citizen housing. These organizations might also pay for fare reimbursement for after school or child care programs. The following organizations have clubs in Knox County:

- Kiwanis Rockland
- Camden Lions Club
- Rockland Lions Club
- Rotary Club of Rockland
- Rotary Club of Camden

Physical contributions such as benches and shelters are good opportunities for an organization to advertise.

Social Service Agencies

Agencies whose clients benefit from the availability of transit service should be approached and encouraged to contribute to the services. Cost sharing is an important element in developing a sustainable funding strategy. Potential agency partners, all with high Coastal Trans ridership currently, include:

- Quarry Hill
- Coastal Opportunities

- Midcoast Mental Health
- Maine Vocational

However, the interest of social service agencies in participate in a funding partnership will depend on the ability of the transit service to accommodate the mobility needs of their clients. Thus, a Rockland-focused approach may be less appealing to some agencies than a corridor-wide comprehensive approach.

OPERATIONS AND SERVICE PLAN

Chapters 7 and 8 of this document lay out a clear plan for service design, including route alignment and schedule. Many of the other operational issues, such as hiring and training drivers, setting up and staffing a customer service desk and developing a marketing and outreach plan will need to be developed as the community works closer to implementation. The operations plan described below assumes that the ADA paratransit service will be operated by Coastal Trans, although that agreement will need additional discussion as implementation becomes closer.

Develop Vehicle/Fleet and Maintenance Plan

The study team recommends using smaller, light-duty transit vehicles to operate the service. Conservative ridership estimates show that the vehicles will initially carry approximately 160 passengers per day, so the vehicle capacity of 16 should be adequate for initial service.

In developing the recommended implementation plan, a number of other preferred vehicle characteristics were raised and should be included in the specifications for the new vehicles.

- Vehicles should have exterior bicycle racks, allowing for greater overall coverage with riders being able to bicycle to other destinations from the stops.
- While all vehicles will be accessible, they should also allow for baby carriages in the consideration of aisle widths.
- For clarity in marketing, fixed-route vehicles should be branded separately from Coastal Trans' demand response service, particularly if the vehicle types are similar.
- For added safety, vehicles should include prominently displayed information on the rear of the vehicle announcing "Vehicle Stops Frequently" or "Vehicle Stops at Designated Bus Stops" to ensure adjacent motorists know to give transit vehicles adequate berth.
- Buses should include space to accommodate bags or portable grocery carts.

Identify, Secure and Mark Bus Stops

Although the current plan does not call for development of full scale bus stops (i.e. shelters and benches) it is worth noting that bus stops are one of the most effective means of communicating the presence of transit service in the area. They provide an opportunity to post information about the available system, including both route schedules and system maps. In addition, well placed stops and shelters can help make passengers feel safer and more comfortable. Accordingly, careful maintenance of bus stops and especially shelters is important to projecting a clean and safe image of the system. Opportunities to improve passenger facilities include upgrading bus stops with signs only to include some or all of the following amenities:

- Route and schedule information
- Transit maps
- Sheltered waiting areas
- Benches/seating
- Lighting (ideally provided by existing source such as street lamps and/or store lighting)
- Trash receptacles

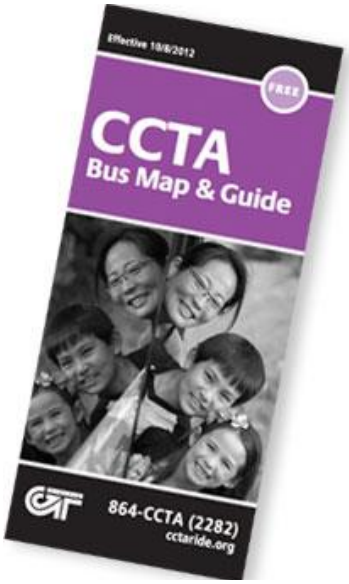
- Local area maps and local information
- Bicycle racks

Moving forward, the region should establish desired standards and specified amenities to be included at bus stops. These standards and guidelines should be incorporated into ongoing roadway and infrastructure projects, and included as part of any development plans as applicable. The selected oversight agency for the service should further identify key locations for needed improvements and allocate capital funds to complete these on an ongoing basis.

MARKETING

Once funding is secured to launch transit service in the study area, but before service commences, marketing and outreach can help build support and momentum for the service and start developing ridership. A marketing and outreach campaign typically includes the following elements:

- **Press releases** – information about the key features of the service, including route, schedules, fares, and hours of operation can be made available through social media posts and features in key publications as details become finalized.
- **Website and print brochures** – for a new service, it is recommended to develop a "rider guide" brochure and accompanying website that include a route map and schedule along with detailed information on how to use the service. Information in the rider guide should include service hours of operation, fare policy and purchase information, bus stop and park & ride locations, contact information, and instructions on how to request flex trips and paratransit service (i.e. Coastal Trans demand-response service). Brochures should be distributed to public institutions (libraries, colleges, medical facilities, etc.) throughout the corridor and made available to social service providers, employers, and others who may request them for their staff and clients.



Source: Chittenden County Transportation Authority

- **Site visits and travel training** – on-site informational sessions are recommended with human resources and other key staff at destinations along the corridor. With sufficient information and materials (rider guides), these individuals can serve as "ambassadors" for the transit service once service begins. Targeted destinations should include schools, hospitals, senior housing facilities, recreation centers, libraries, social service providers, inns and hotels, and major employers. In addition, a travel-training program for older adults, persons with disabilities, and students can help these groups of likely riders become comfortable and familiar with accessing the service and reading schedules.
- **Informational displays at community events** – fairs and festivals can be a good opportunity to share service information with a broad cross-section of the corridor communities. Displaying a bus at these events is a particularly effective way to capture the attention of prospective riders and to create "buzz" about the new service..
- **Install bus stop signs and amenities** – some new transit services begin operating without installing bus stop signs. Instead they rely on a "flag-stop" system, in which riders are expected to

flag down a bus anywhere along its route. This approach is not recommended because it usually results in lower ridership and slower ridership growth. The presence of highly-visible bus stop signs helps raise awareness of existing (or future) transit service and gives prospective riders confidence that they are waiting for the bus in the right place. The effectiveness and utility of the signs is further increased if route and schedule information is displayed at the stop. Over time, installing passenger amenities such as benches and shelters at select stops can both improve the visibility of the stop and enhance the over-all transit experience. Enhanced amenities are typically installed based on ridership figures or the presence of sensitive populations such as senior citizens.

- **Google Transit implementation** – Google Transit is a powerful trip planning and online mapping tool that can improve the transit experience of riders and make transit options known to potential riders. Google's free trip planner presents transit users (and prospective users) with an online tool similar to the driving directions that so many internet users are already familiar with. Google Transit makes public transportation easy to navigate and removes an element of the unknown that acts as a barrier for many potential transit riders. Users can access Google Transit data on any internet-enabled device including hand-held mobile devices. Transit providers can make their route and schedule information available on Google Maps by joining the Google Transit Partners Program and uploading their service data in a specified format called the General Transit Feed Specification (GTFS).

STAFFING, MANAGEMENT AND GOVERNANCE

A critical part of the Midcoast transit service is sustainability. Working from this plan, the most pressing issue will be identifying funding partners, applying for grants and assembling the required financial resources. Looking ahead, however, it is critical to remember the longer term goals of sustaining the service after grant funds have been used. The primary method to make the service sustainable is to ensure it is well-used and develops a strong constituency. At the same time, it is also worth taking some strategic steps to strengthen service constituencies and broadening support for the service. We have identified three such potential actions, each of which may be started as soon as possible after the service is implemented. These tasks include establishing a longer term governance structure, developing a performance monitoring and evaluation system, and considering expansion potential.

Establishing a Longer Term Governance Structure

Consider developing an Advisory Committee or Board of Directors to oversee service development.

Nelson/Nygaard recommends setting up the transit service to be managed by a Transit Manager housed in the City of Rockland with service provided under contract. This may be an appropriate structure for service operations and maintenance in the short-term. With the longer term goal of self-sufficiency and sustainability in mind, however, it may be more appropriate to develop an Advisory Committee or Board of Directors to help oversee service management and set policy direction for the service. Such a committee or board will help ensure the service is truly a community service, help broaden support, and ensure decisions about service development are created with stakeholder input.

Performance Monitoring and Evaluation

Bus service should be consistently monitored to ensure service productivity and so that services may be adapted to meet rider needs.

There is a clear desire for transit service in the Midcoast region; this sentiment was strong throughout the planning effort. The initial service is designed to be simple and convenient to use, while serving the areas of greatest identified need. For service to be sustainable in the long term, the Midcoast region should review its service, operations and ridership on an ongoing basis, with more formal assessments occurring at least quarterly, if not monthly in the initial stages. Monitoring should use simple performance measures to track following service elements:

Service Reliability – With little recent service history, schedule estimates may be either conservative or aggressive, and only with a regular track record of running service time can these be evaluated. Once established, schedules, headways and time points can be adjusted as needed. This effort will ensure the service is reliable and meets riders' expectations.

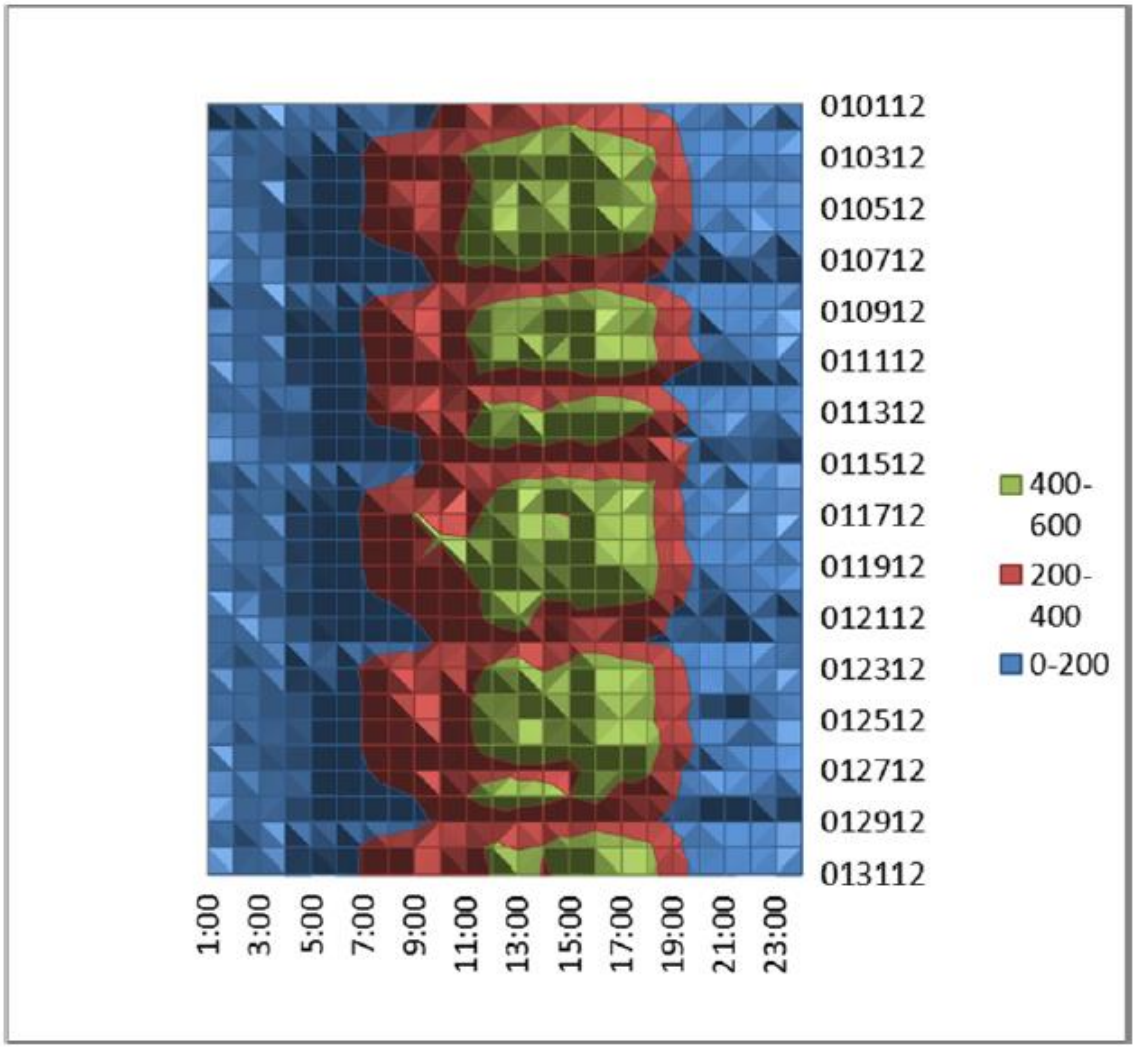
Evaluate ridership by route and stop – While some stops will certainly see higher ridership than others, ridership should be tracked by stop (boardings and alightings) and adjust as needed. Some stops may be too close together, allowing one to be eliminated, while others may need to be slightly relocated, or changed to/from front door service to best serve riders. Also, high ridership stops are ideal candidates for investments in bus stop infrastructure and amenities.

Assess service span – Initial plans call for service to begin at 6:00 AM end by 6:00 PM. Monitoring ridership and running time by time period will help reveal when and where there is demand for earlier or later service, and whether higher or lower service frequencies may be appropriate at certain time periods.

APPENDIX A – TRAFFIC COUNTS

Will be inserted as a PDF in final version (example below)

Figure 1 - Northbound Traffic Volume by Hour and Day (January 2013)



APPENDIX B – CASE STUDY

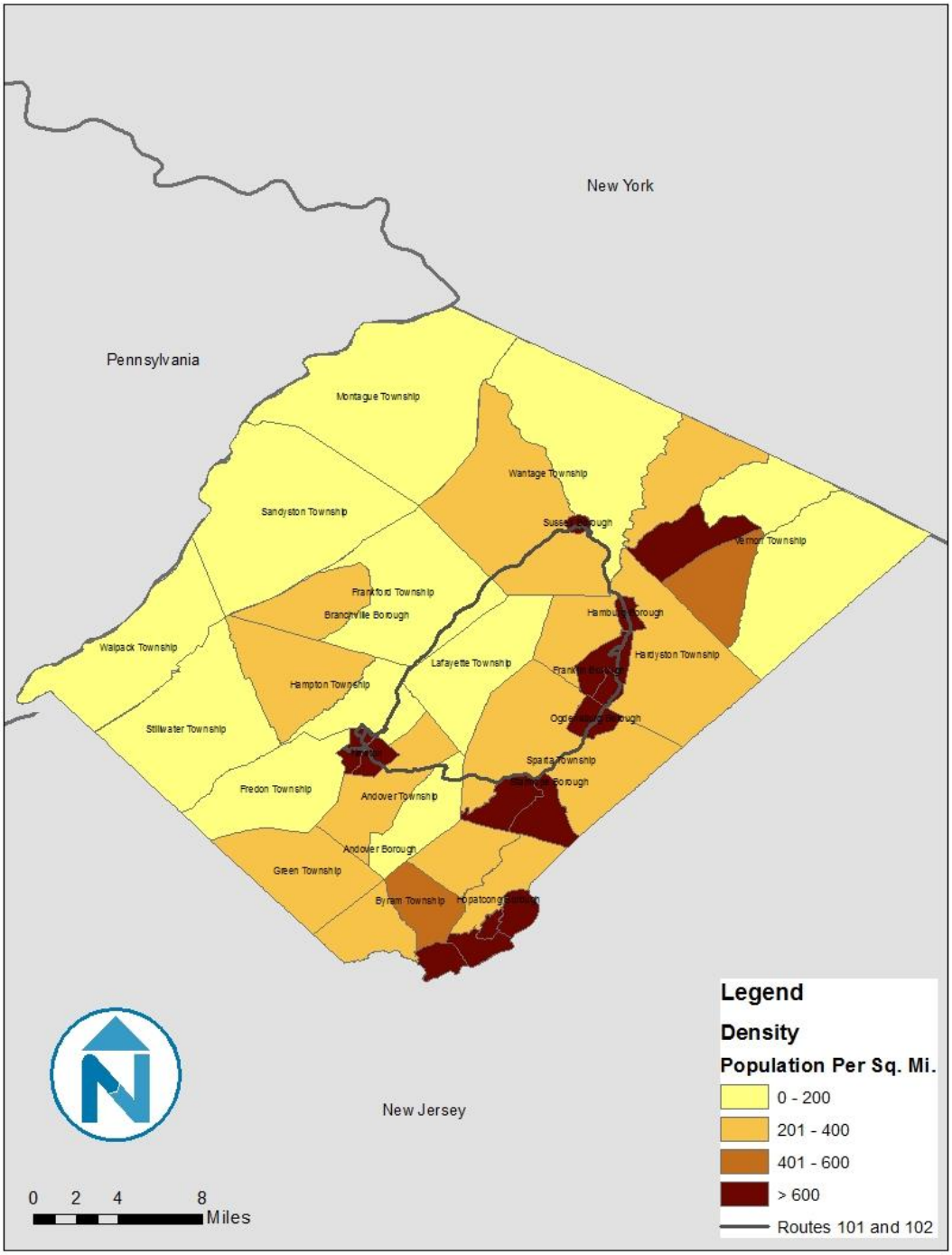
The following case study illustrates the relationship between service design and service productivity. It focused on a region with many similarities to the Midcoast region of Maine.

Skylands Ride – Sussex County, NJ

Sussex County is the northernmost county in the State of New Jersey. The very southern tip of the county is economically and culturally tied to the New York City Metropolitan Area and is served by NJ Transit rail service. The remainder of the 535-sqare mile county is primarily rural, with a few small towns and cities. These small communities are not served by NJ Transit, which focuses mostly on urban and suburban commuter service. Instead, they are served by Skylands Ride, a county-operated transit service that includes 18 demand-response vehicles and three fixed-route buses.

For more than 30 years, Skylands Ride operated a fixed-route loop service connecting the towns of Newton, Ogdensburg, Franklin, Hamburg, and Sussex. The populations of these five towns range from 2,100 to 8,000 residents and together account for approximately 21,000 people (Figure 1).

Figure 10 - Sussex County, NJ



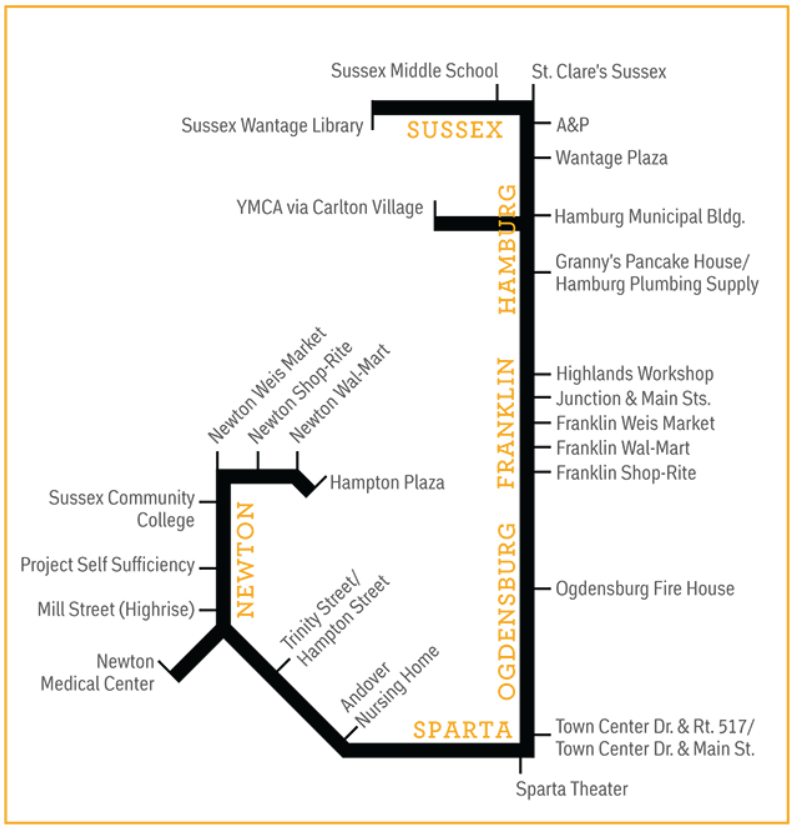
The fixed-route "Loop" service operated bi-directionally, with clockwise service referred to as Route 101 and counter-clockwise service known as Route 102. Defining the routes by direction of service, rather than geographic coverage area, made the service overly-complex as passengers had to become familiar with two separate schedules even if their travels never took them beyond a small segment of the route.

Due to declining Loop ridership, in 2010, Sussex County invited Nelson\Nygaard to conduct an analysis of the county's transit services and make recommendations for improvement.

The study team found that 98% of fixed-route ridership was concentrated in the eastern two-thirds of the Loop, and recommended that fixed-route service through the mostly rural western portion of the route should be discontinued (although demand-response service would continue to be available). Additional recommendations included increasing service frequency from six trips per direction to 11 round-trips per day, developing a user-friendly system map and "ride guide" to attract new riders, and extending service to the county's only YMCA.

At the end of 2011, Sussex County re-launched its Loop service as "Skylands Connect," a 20-mile fixed-route connecting five towns (and part of one township – an administrative unit between a town and a county) along a single corridor (Figure 2).

Figure 11 - Skylands Connect New System Map



Travel time from one end of the route to the other is approximately one hour and 45 minutes, but few passengers ride end-to-end. With three buses operating concurrently, buses serve each stop every hour and 15 minutes from approximately 5:00 AM until 6:30 PM.

Since the simplified and more frequent Skylands Connect service replaced the Loop, ridership has increased by 15% to 260 average daily passengers. Productivity has also improved from 6.1 passengers per revenue hour to 7 passengers per revenue hour (Figure 3).

Figure 12 – Skylands Loop/Connect Ridership

	Year	Total Passengers	Average Daily Passengers	Passengers per Revenue Hour
Loop	2008	55,372	224	6.1
	2009	56,814	230	6.2
	2010	56,243	228	6.2
	2011	56,198	227	6.1
Connect	2012	58,971	250	6.7
	2013	61,583	260	7.0

APPENDIX C – RIDERSHIP ESTIMATES

The following section describes how baseline (transit-dependent) and additional choice ridership were calculated for each of the four service options described in Chapter 7 of this report.

Baseline Ridership

It is possible to estimate the immediate market for transit in the study area by examining the ridership of existing services that provide alternatives to automobile travel.

Residents and visitors who rely on Coastal Trans and/or Schooner Bay Taxi for their mobility needs are most likely to be the "early adopters" of additional transit service and represent the most immediate market for the service. The study team analyzed ridership data for both operators for the following time periods:

- June 1st to 15th 2012
- October 1st to 15th 2012

Ridership data was filtered to only include trips meeting the follow characteristics, which are in line with the expected characteristics of a potential fixed-route transit service:

- Weekday trips only
- Trips with both origins and destinations in Camden, Rockport, Rockland, and Thomaston
- Trips between the hours of 6:00 AM and 8:00 PM only (with the assumption that some of the later trips could be taken a bit earlier if transit service were available until 6:00 or 7:00 PM).

An average of 53 Coastal Trans and 84 Schooner Bay Taxi trips per day met these characteristics in June, for a total of 137 average daily passenger trips. In October, an average of 30 Coastal Trans and 108 Schooner Bay trips per day met all the characteristics, for a total of 138 passenger trips. Thus, the immediate market for transit service in the corridor is likely at least 137 passenger trips per day (or 69 unique individuals, each taking two one-way trips per day).

Without question, some existing riders would continue to use Coastal Trans or Schooner Bay Taxi for various reasons included disabilities that prevent them from using scheduled fixed-route service or the need for more immediate service than an hourly transit service can provide. However, fixed-route riders tend to use transit more frequently than demand-response and taxi users because of the scheduling limitations of demand-response service and the cost of taxi service. The more frequent use of fixed-route service would be expected to off-set any reduction in projected transit ridership among residents who will continue using Coastal Trans and Pen Bay Taxi.

How many people use fixed-route service in the long-term depends on the design of the service. The baseline of **137** mostly transit-depended passenger trips in the corridor may be supplemented by a significant number of choice riders if service is substantially frequent, reliable, and available at key destinations in the corridor. On the other hand, the baseline ridership itself may be less than 137 daily passenger trips if service is only available in parts of the corridor.

Choice Ridership

As a general rule, choice riders use transit primarily for work and school trips. Additional trip purposes, such as shopping and recreational trips, attract significant choice riders only if a service operates every 15 minutes or better. Thus, the estimated number of daily transit trips taken by choice riders is directly related to the proximity of a transit service to destinations such as schools and businesses. The following assumptions were used to estimate choice ridership for each of the four scenarios:

- Non-tourist choice riders will come primarily from the largest employers and high schools in the corridor.
- Seasonal choice riders will come primarily from inns and hotels.
- For major employers and high schools located within two blocks of the proposed route, 1% of employees / students will choose to use the transit service.
- For major employers and high schools located more than two blocks, but within ¼ of the proposed routes, ½% of employees / students will choose to use the transit service.
- Each rider will take two one-way trips per day.

Ridership Estimates by Service Option

Figure 1 - Option 1 (Camden to Thomaston Comprehensive Service) Estimated Ridership

Ridership Source	Employees / Students / Existing Riders	Capture Rate	Expected Riders	Expected Transit Trips
Baseline Corridor Ridership	69	100.0%	69	137
Pen Bay Health Care	1500	1.0%	15	30
Camden Hills Regional High School	663	1.0%	7	13
Oceanside East High School	550	1.0%	6	11
Wal-Mart	300	1.0%	3	6
Boston Financial Data Services	238	0.5%	1	2
Camden National	225	1.0%	2	5
Hannaford Supermarkets	150	1.0%	2	3
Pen Bay YMCA	125	1.0%	1	3
Quarry Hill	125	1.0%	1	3
Shaw's Supermarkets	105	1.0%	1	2
Home Depot	100	1.0%	1	2
Dragon Products	90	0.5%	0	1
Lyman Morse	80	0.5%	0	1
O'Hara Corporation	50	1.0%	1	1
Total Estimated Weekday Ridership			109	219

Figure 2 - Option 2 (Camden to Thomaston Limited-Stop Service) Estimated Ridership

Ridership Source	Employees / Students / Existing Rider	Capture Rate	Expected Riders	Expected Transit Trips
Baseline Corridor Ridership	69	60.0%	41	83
Pen Bay Health Care	1500	1.0%	15	30

Oceanside East High School	550	1.0%	6	11
Wal-Mart	300	1.0%	3	6
Boston Financial Data Services	238	0.5%	1	2
Camden National	225	1.0%	2	5
Hannaford Supermarkets	150	1.0%	2	3
Shaw's Supermarkets	105	1.0%	1	2
Home Depot	100	1.0%	1	2
Dragon Products	90	0.5%	0	1
Lyman Morse	80	0.5%	0	1
O'Hara Corporation	50	1.0%	1	1
Total Estimated Weekday Ridership			73	146

Figure 13 - Option 3 (Rockland-Focused) Estimated Ridership

Ridership Source	Employees / Students / Existing Rider	Capture Rate	Expected Riders	Expected Transit Trips
Baseline Corridor Ridership	69	75.0%	52	104
Pen Bay Health Care	1500	1.0%	15	30
Oceanside East High School	550	1.0%	6	11
Wal-Mart	300	1.0%	3	6
Boston Financial Data Services	238	0.5%	1	2
Hannaford Supermarkets	75	1.0%	1	2
Shaw's Supermarkets	105	1.0%	1	2
Home Depot	100	1.0%	1	2
O'Hara Corporation	50	1.0%	1	1
Total Estimated Weekday Ridership			80	159

Figure 4 - Option 4 (Seasonal Service) Estimated Ridership

Ridership Source	Employees / Students / Existing Rider	Capture Rate	Expected Riders	Expected Transit Trips
Baseline Corridor Ridership	69	50.0%	35	69
Hotel Guests	1,570	2.0%	31	63
Hotel Employees	775	1.0%	8	16
Total Estimated Weekday Ridership			74	147