



Potential Service Options

INTRODUCTION

The basis for any transit plan is the careful consideration of realistic public transportation service alternatives. Capital requirements, financial plans, and management options can then be developed to support the planned services. Each service alternative must be evaluated using locally established goals and objectives. Any alternative that does not support the mission statement or the corresponding goals and objectives of public transportation should not be considered for implementation.

The following discussion evaluates the potential for new or expanded services in the Seward study area. The alternatives were based on information and input gathered from the Working Group and the public. These new services are designed to meet the demand that may not be met through coordination alone. These options were developed and evaluated to determine the most appropriate service for Seward.

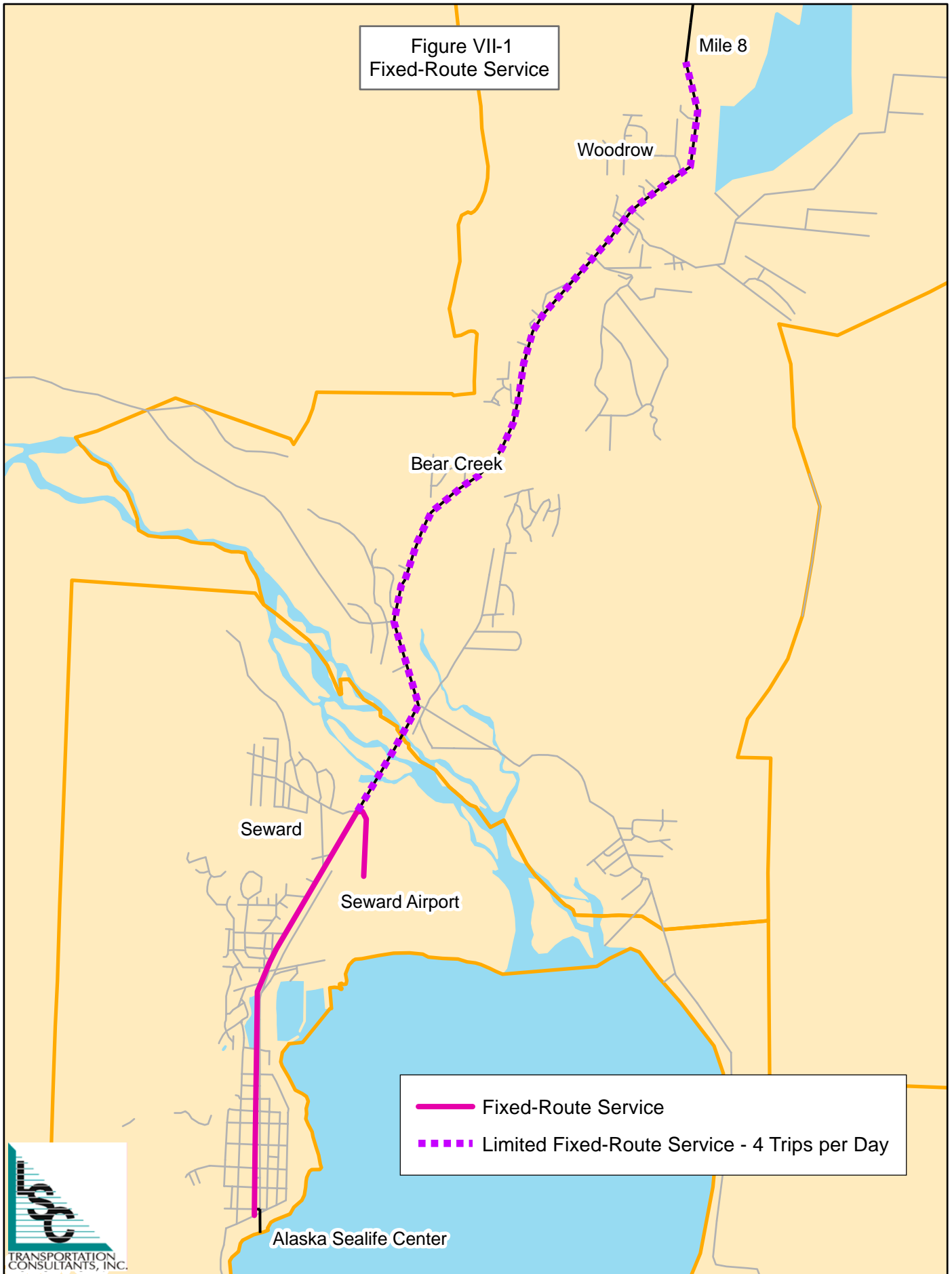
OPTION I: FIXED-ROUTE SERVICE

This fixed-route service is proposed to operate from Alaska Sealife Center and travel along Seward Highway (State Highway 9) to the Seward Airport and back. This option is shown in Figure VII-1 to give a graphic representation of the proposed route structure. In addition, the service would extend service to Mile 8 with two trips in the morning and two trips in the evening. These trips to Mile 8 are designed to get people from Woodrow and other communities along the Seward Highway for services and for work in the City of Seward. The in-town fixed-route service will provide service to Alaska Vocational Technical Center (AVTEC), Food Mart, Safeway, the airport, and other locations along the Seward Highway. This fixed-route service would operate Monday through Friday from 6:00 a.m. to 6:00 p.m. This route would operate with one vehicle on a 40-minute headway and two vehicles during the peak hours with a 20-minute headway when the vehicle is

Potential Service Options

providing in-town services in Seward. Peak service hours will be from 6:00 to 9:00 a.m. and from 3:00 to 6:00 p.m.

Figure VII-1
Fixed-Route Service



Paratransit Service Area

To comply with the Americans with Disabilities Act (ADA), paratransit service must be provided in a similar service area as the fixed-route system. Paratransit service must be offered during the same times as any fixed-route service, and the minimum service area will be established at three-quarters of a mile from the fixed route. Paratransit service is typically much more costly per passenger to operate than fixed-route service because of the characteristics of the service. Fixed routes are established to meet the highest demand travel patterns, while paratransit service must serve many origins and destinations in a dispersed pattern.

The trip between Alaska Sealife Center and the airport is approximately three miles and the trip between Alaska Sealife Center and the Mile 8 marker is approximately eight miles. Based on existing providers in the area, an estimate of \$65 per hour cost of operation is considered. The fixed-route service will provide 20 in-town round-trips and four round-trips to Mile 8 per day. This service would operate with a total of three buses—two used for the fixed-route service (peak and non-peak service) and the other used for the paratransit service.

Following is a summary of the estimated operation and capital for Option I for both fixed-route and paratransit service:

- Total Annual Operating Cost: \$489,000
 - In-town Operating Cost: \$220,000
 - Mile 8 Operating Cost: \$74,000
 - Paratransit Cost: \$195,000
- Annual Service Hours: 7,500
- Ridership: 29,400
- Average Passengers per Hour: 3.4
- Average Cost per Trip: \$23.07
- Capital Costs: Three small buses and one modified van (including a spare vehicle) = \$383,000

If this type of service were to operate seven days a week, the estimated operation and capital for Option I for both fixed-route and paratransit service would be as follows:

- Total Annual Operating Cost: \$693,000
 - In-town Operating Cost: \$312,000
 - Mile 8 Operating Cost: \$104,000
 - Paratransit Cost: \$277,000
- Annual Service Hours: 10,650
- Ridership: 39,176
- Average Passengers per Hour: 3.2
- Average Cost per Trip: \$24.48
- Capital Costs: Three small buses and one modified van (including a spare vehicle) = \$383,000

OPTION II: ROUTE-DEVIATION SERVICE

This option provides route-deviation services in Seward and the area between Seward and Mile 8. Similar to the fixed-route structure in Option I, the service would be provided from Alaska Sealife Center and travel along Seward Highway (State Highway 9) to the Seward Airport and back. The service will also extend service to Mile 8 with two trips in the morning and two trips in the evening. However, the vehicle would be available to deviate off the fixed route to pick up call-in ride requests. The vehicle could deviate up to three-quarters of a mile off the fixed route, but is required to return to the fixed route within one block of the point of deviation to ensure that all intersections along the route are served. One vehicle would perform this service during non-peak hours. Two small buses or body-on-chassis vehicles would be needed during peak hours, with 30-minute headways. Passengers would be able to board anywhere along the route without prescheduling a pick-up. Figure VII-2 illustrates the deviated fixed route. Under this option, the ADA service will be eliminated and hence will greatly reduce the operating costs.

Following is a summary of the estimated operation and capital for Option II for the route-deviation service:

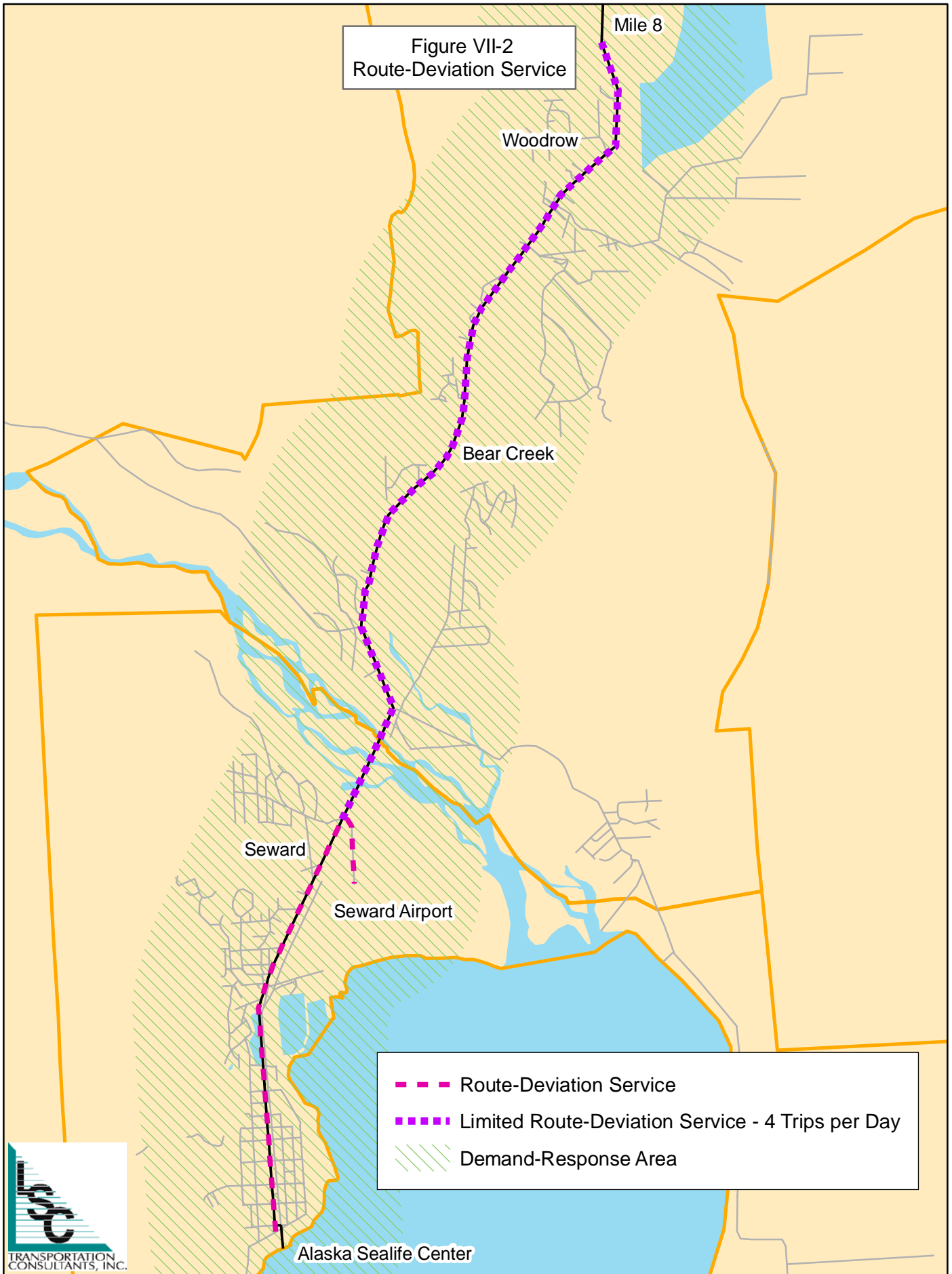
- Total Annual Operating Cost: \$294,000
 - In-town Operating Cost: \$220,000
 - Mile 8 Operating Cost: \$74,000
- Annual Service Hours: 4,500

Potential Service Options

- Ridership: 15,750
- Average Passengers per hour: 3.0
- Average Cost per Trip: \$24.59
- Capital Costs: Three small buses (including a spare vehicle) = \$348,000

If this type of service were to operate seven days a week, the estimated operation and capital for Option II for the route-deviation service would be as follows:

- Total Annual Operating Cost: \$416,000
 - In-town Operating Cost: \$312,000
 - Mile 8 Operating Cost: \$104,000
- Annual Service Hours: 6,390
- Ridership: 20,430
- Passengers per Hour: 2.7
- Cost per Trip: \$27.94
- Capital Costs: Three small buses (including a spare vehicle) = \$348,000



OPTION III: DEMAND-RESPONSE SERVICE

In this alternative, one van is used to operate demand-response service in Seward and the area along Seward Highway between Downtown Seward and Mile 8. Figure VII-3 illustrates the proposed service area. A demand-response service would effectively serve the Seward area without any structured routes. Demand-response transit service, frequently termed dial-a-ride, is characterized as door-to-door transit service scheduled by a dispatcher. With demand-response service, advance reservations are required, but with such a small service area, a same-day service and possibly a one-hour advance reservation will be possible. Ridership on a demand-response service is generally lower than a fixed-route system.

Following is a summary of the estimated operation and capital costs for Option III for a demand-response service:

- Total Annual Operating Cost: \$195,000
- Annual Service Hours: 3,000
- Ridership: 5,500
- Passengers per Hour: 1.8
- Cost per Trip: \$35.45
- Capital Costs: Two body-on-chassis (including a spare vehicle) = \$130,000

If this type of service were to operate seven days a week, the estimated operation and capital for Option III for a demand-response service would be as follows:

- Total Annual Operating Cost: \$277,000
- Annual Service Hours: 4,260
- Ridership: 7,372
- Passengers per Hour: 1.7
- Cost per Trip: \$37.57
- Capital Costs: Two body-on-chassis (including a spare vehicle) = \$130,000



OPTION IV: SERVICE TO ANCHORAGE

Existing Services

Seward Bus Lines provides one trip a day year-round between Seward and Anchorage. The bus departs from Seward at 9:30 a.m. with a return trip from Anchorage at 2:30 p.m. A one-way trip from Seward to Anchorage would take approximately 2.5 to three hours. Advance reservations on this service are required. However, this service is not wheelchair-accessible. For commuters going from Seward into Anchorage, one option would be to create a vanpool or a carpool through the Anchorage Share-A-Ride. The vanpool service is done through VPSI, Inc., the vanpool contractor for the Municipality of Anchorage. Volunteer drivers pick up riders at specific points, drop them off at or near their worksite, and return them to their pick-up points at the end of each work day. The monthly vanpool fares covers all operating, maintenance, and insurance costs, which are divided equally among the riders in exchange for a guaranteed seat. Anchorage Share-A-Ride also has a matching service for carpooling where they maintain a database of people registered with them and are interested in either starting a carpool, or people that may already have a carpool running but want to add more riders to the carpool. Though this vanpool/carpool option already exists, no vanpool/carpool groups currently exist that commute from Seward into Anchorage.

Proposed Services

Since Seward Bus Lines vehicles are not wheelchair-accessible, Seward Bus Lines could agree to operate services with a wheelchair-accessible vehicle or a potential provider could provide new services. If a potential provider operates this new service, the service would operate for two days a week, depending on the requests for service.

Following is a summary of the estimated operation, and capital costs for two round-trips a week to Anchorage:

- Total Annual Operating Cost: \$58,000
- Annual Service Hours: 887
- Capital Costs: Two body-on-chassis (including a spare vehicle) = \$130,000

If Seward Bus Lines would operate a wheelchair-accessible vehicle, the only capital cost that would need to be considered would be:

- Capital Costs: One bus = \$116,000

CONCLUSION

These new services are designed to address needs that have been identified by residents and key stakeholders that may not be able to be met through coordination of existing services. While not all of them will ultimately come to fruition as actual service, they are options that address the needs of the community.