

# JUNEAU VISITOR CIRCULATOR STUDY Final Report



February 8, 2024



Prepared by LSC Transportation Consultants



# Juneau Visitor Circulator Study

## *Final Report*

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## **INTRODUCTION**

Juneau, Alaska has long been a major cruise ship destination for those seeking outdoor adventure, sightseeing, and wildlife viewing. This massive influx in tourism over time has led to an increase in traffic congestion and environmental pollution in and around Downtown Juneau during peak summer months. It also has led to visitor use of the Capital Transit fixed routes to a degree that impacts resident's mobility in peak visitor activity periods. To address these issues, the City and Borough of Juneau (CBJ) hired LSC Transportation Consultants, Inc. to evaluate the possibility of a public transit circulator strategies that could facilitate visitor travel within the area and help to solve these identified problems.

This document is the first in a series of working papers that will be developed over the course of the study to provide opportunities for public review and input.

### **Study Goals**

The goal of the Circulator Study was to determine what types of transportation services the CBJ should consider, which service(s) would be most appropriate for the region, and how the CBJ could fund and implement such a program. Key questions to be addressed in the study included the following:

- How can a circulator service best address the impacts of high visitor levels on the community?
- How can improved circulator services enhance the local economy by better serving visitors and helping to spread visitors to a broader range of establishments and activities?
- What destinations should be served, and what are the appropriate hours and days of service?
- What is the appropriate role of the public sector (Capital Transit) versus private transportation services? How best can a visitor circulator service coordinate with existing transit services?
- Given the realities of financial and driver availability limits, what is an *implementable* strategy for circulator services?

### **Study Process**

A series of Technical Memoranda (Tech Memos) were completed over the course of the study to provide opportunities for stakeholder review and input. The first Tech Memo summarized Juneau as it exists today in relation to tourism, transportation, and land use development. At this point, local stakeholders, business owners, and transportation providers were engaged in both an online community survey and in-person workshop to discuss current regional challenges and possible solutions. The second Tech Memo evaluated potential demand for visitor circulator services. The third and final memo then discussed potential service and capital alternatives while incorporating the stakeholder input received after Tech Memo 1. The final Juneau Circulator Study encompasses the information vetted through the tech memos review, with the addition of a final chapter presenting the final plan recommendations.

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## EXISTING COMMUNITY CONDITIONS

### INTRODUCTION

Juneau is a unique destination with a diverse range of visitor attractions, including historical sites, harbors, sight-seeing, shopping, and hiking. Located at the base of Mount Juneau, it is both a mountain town and a maritime coastal port along the Gastineau Channel. While the city is home to only 32,000 residents, the region typically attracts more than 1 million visitors each year. This level of activity, concentrated in the busy summer season, impacts the very limited roadway network.

This chapter provides an in-depth overview of major characteristics including population, activity centers, existing traffic volumes, and future planned development. The chapter then concludes with relevant planning documents considered in this study.

### STUDY AREA CHARACTERISTICS

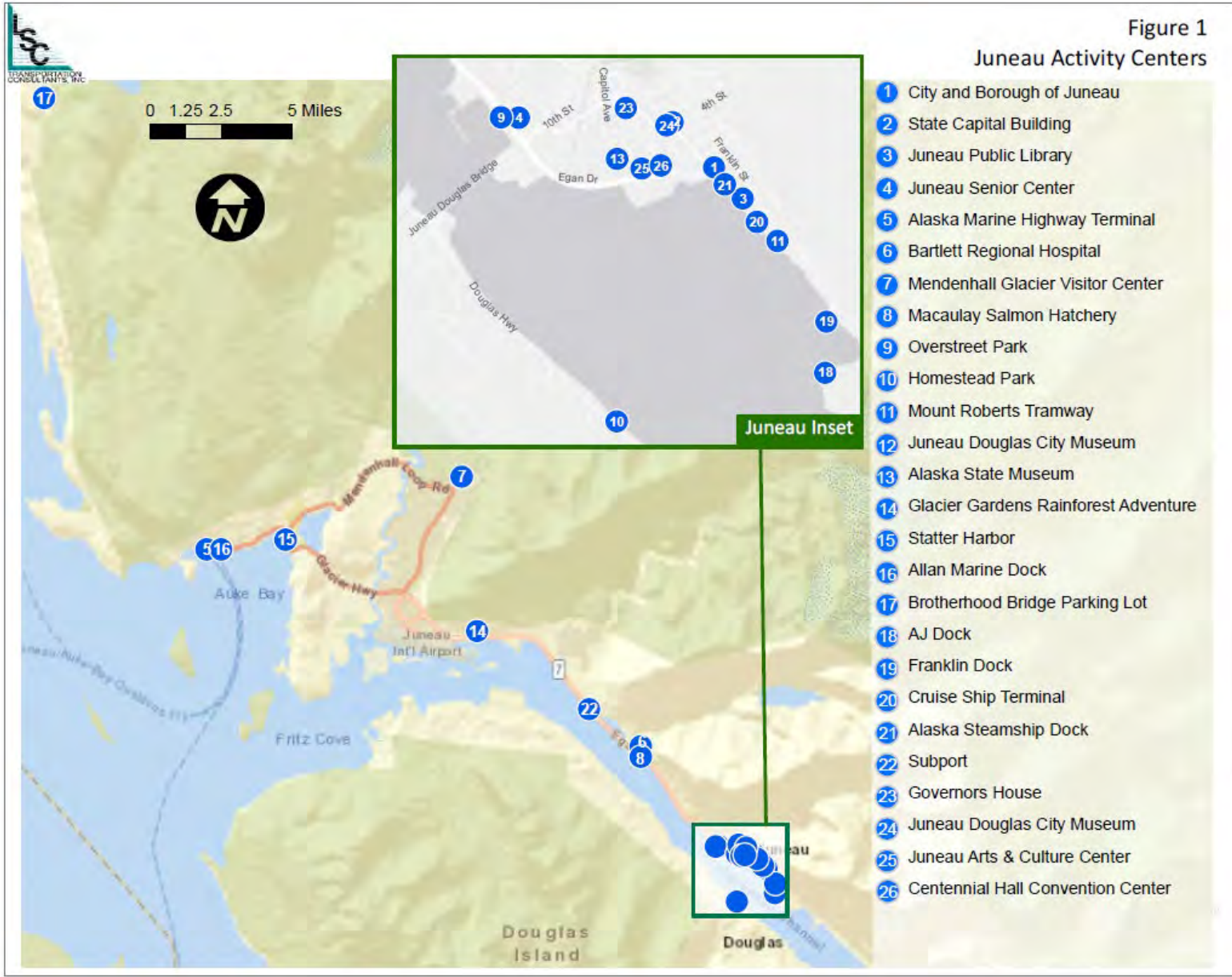
#### Population

The population of Juneau has stayed consistent over the last 20 years, as shown in Table 1. A slight decline in population is anticipated in the coming decades. With this information in mind, this study will focus on anticipated visitor populations.

	Historic			Projected		
	2000	2010	2020	2030	2040	2050
Population	30,668	31,275	32,195	31,261	30,229	28,692
<i>Source: US Census Bureau American Community Survey and Alaska Dept. of Labor and Workforce Development</i>						

#### Activity Centers

Major activity centers are important to recognize as potential transit trip generators. For the purpose of this study, an activity center may be a government agency, tourism destination, or any other interesting location attracting higher levels of day-to-day traffic. These centers are important not only for the possibility of providing transportation services but also for anticipating potential conflicts transportation services. As shown in Figure 1, activity centers are primarily located in Downtown Juneau and within Mendenhall Valley (the Mendenhall Glacier and Statter Harbor).



## ***Downtown Juneau***

Downtown Juneau is also shown in Figure 1. As illustrated, downtown Juneau is full of many points of interest including the Alaska State Capital, State Museum, Centennial Hall Conference Center, Mount Roberts Tramway, and the Governor’s Mansion. There are also a wide variety of retail shops, breweries, bars, and restaurants popular with both tourists and residents alike located along South Franklin Street and Front Street. Downtown Juneau is also the access point for hiking trails and the Last Chance Mining Museum located on Basin Road.

## ***Mendenhall Glacier***

Nearly 13 miles north of Downtown Juneau is the Mendenhall Glacier. Attracting around 700,000 visitors annually, the area offers not only the Mendenhall Glacier Visitor Center, but also several hiking trails and scenic viewpoints around Mendenhall Lake and guided adventures. Being located within the Tongass National Forest, the area is managed by the United States Forest Service (USFS).

In an effort to better accommodate annual visitors, the USFS is considering a series of improvements for the Mendenhall Glacier Recreation Area (MGRA). These improvements will include expanded parking facilities, increased visitor amenities (shelters and drop off/pick up locations), and improved trail access through the MGRA.

## ***Macaulay Fish Hatchery (DIPAC)***

The Macaulay Fish Hatchery (commonly referred to as the DIPAC Fish Hatchery) is primarily open between May and September between 10 am and 6 pm Monday through Friday and from 10am to 5 pm Saturday and Sunday. The destination offers an experiential learning tour of the salmon hatchery, saltwater aquariums, and tide pools. There is also a small gift shop with various types of locally made foods. In 2019, prior to the pandemic, the hatchery recorded its highest annual visitor count with over 90,000 people visiting. A hatchery representative indicated that a majority of summer guests arrive via tours scheduled from their respective cruise ships, often arriving in large, contracted vehicles.

## ***Juneau International Airport***

The Juneau International Airport is located 8.5 miles north of downtown Juneau, approximately 15 minutes by vehicle. Alaska Airlines and Delta Air Lines are the only two commercial services to the airport, operating alongside the following local air travel providers: Alaska Seaplanes, Coastal Helicopters, Island Air Express, NorthStar Trekking, Temsco Helicopters, Wings of Alaska Airways, and Ward Air. Alaska Airlines provides direct flights from Anchorage, Seattle, Ketchikan, Sitka, Yakutat, Cordova, and Wrangell.

Delta Air Lines provides direct flights from Seattle seven days per week in the summer and weekends only in the winter. Annual enplanements and deplanements by airline and year are shown in Table 2. As shown, prior to the pandemic total enplanements remained steady with a total of over 300,000 enplanements and deplanements year over year. While passenger activity declined during the pandemic, based on current enplanement and deplanements of 2022 year-to-date air travel to and from the region is returning to pre-pandemic levels. The airport employs over 1,000 people locally and provides commercial air travel to over 300,000 people on average per year.

<b>Table 2: Annual Enplanements/Deplanement</b>						
	<u>Delta Airlines</u>		<u>Alaska Airlines</u>		<u>Total</u>	
	Enplaned	Deplaned	Enplaned	Deplaned	Enplaned	Deplaned
2016	20,462	19,397	302,546	300,852	323,008	320,249
2017	21,323	20,472	313,251	313,530	334,574	334,002
2018	20,797	20,332	322,929	323,718	343,726	344,050
2019	22,987	22,682	315,475	316,528	338,462	339,210
2020	9,290	9,690	133,451	135,118	142,741	144,808
2021	16,276	17,539	240,251	238,224	256,527	255,763
% Change 2016 - 2019	12%	17%	4%	5%	5%	6%
<i>Source: Juneau International Airport, 2022</i>						

The Juneau Air and Ferry Visitor Survey, Summer 2018 prepared by McDowell Group indicated that 56 percent of travelers arriving by air were traveling for vacation/pleasure. Their top activities in the area were Mendenhall Glacier (63 percent), shopping (61 percent), hiking (45 percent) and the tramway (44 percent). Those arriving by air were planning to travel in the Juneau area by rental vehicle (27 percent), taxi (27 percent), personal vehicle (25 percent), hotel shuttle (18 percent) and public transit (10 percent).

**Cruise Docks**

The Juneau area welcomes nearly 1,000 cruise ships each summer season, each docking near and around the downtown Juneau area. There are six major docks in Juneau Harbor: AJ Dock, S. Franklin Street Dock, Intermediate Vessel Float, Cruise Ship Terminal, Alaska Steam Ship Dock, and Seadrome Dock.

Alaska Steam Dock and Cruise Ship Terminal are south of downtown Juneau running parallel to Franklin Street. Intermediate Vessel Float is a small dock adjacent to Cruise Ship Terminal on the south side. Heading southward, these docks are followed by South Franklin and AJ Dock Figure 2 shows a more detailed map of each dock location including the proposed Huna Totem dock. While some docks are very close to downtown Juneau (Alaska Steam Dock), Franklin Dock and AJ Dock are a 15- and 30-minute walk, respectively (Table 3).

	<b>Table 3: Distance to Downtown Juneau</b>	
	<u>Walking</u>	
	<u>Distance</u> <u>(Mi)</u>	<u>Time</u> <u>(Min.)</u>
Seadrome Dock	0.5	10
Alaska Steam Ship Dock	0.2	5
Cruise Ship Terminal	0.4	9
Intermediate Vessel Float	0.5	11
Franklin Street Dock	0.7	15
AJ Dock	1.5	30

Figure 2  
Juneau Cruise Docks



## TRAFFIC VOLUMES AND DELAYS

For the purpose of this study, pre-Covid Annual Average Daily Traffic (AADT) volumes were analyzed, as shown in Tables 4 and 5. For most major roads (Table 4), traffic volumes have remained steadily increasing year over year prior to the pandemic. Of the major roadways near Juneau, Mendenhall Loop Road has seen the greatest increase in daily traffic volumes increasing 14 percent, with a high of 5,353 vehicles per day in 2017. The second largest growth in volumes could be seen along Riverside Road with 9 percent growth since 2012. While the pandemic has reduced these volumes to close to 2012 levels, they can be expected to return to pre-pandemic levels in the future.

**Table 4: Juneau AADT by Location and Year - Major Roads**

Year	Juneau - Auke Bay	Juneau - Egan @ 3mile	Juneau - Riverside Dr.	Juneau - Mendenhall	Juneau - Sunny Pt.	
2012	2,086	21,428	3,920	4,508	25,281	
2013	2,107	21,225	3,969	-	25,254	
2014	2,108	21,412	3,967	4,520	26,795	
2015	2,189	21,719	3,861	5,181	27,201	
2016	2,191	22,585	3,915	3,518	24,963	
2017	2,142	21,320	4,042	5,353	24,749	
2018	2,125	21,449	4,045	5,016	25,137	
2019	2,205	22,317	4,291	5,141	24,910	
2020	2,120	16,900	3,850	4,230	20,200	Pandemic
2021	2,150	17,800	3,980	4,530	22,200	
<b>% Change 2012-19</b>	6%	4%	9%	14%	-1%	
<b>% Change 2012-21</b>	3%	-17%	2%	0%	-12%	
<i>Source: LSC Transportation Consultants and Alaska Traffic Data</i>						

Downtown Juneau traffic volume data is shown in Table 5. The roadway that had grown the most pre-pandemic, was Thane Road near Mt Roberts Tram Parking (38 percent), followed by Glacier Highway and Willoughby Avenue - Between Behrends Avenue and 12<sup>th</sup> Street (28 percent). These volumes and traffic patterns will be considered in greater depth in later Tech Memos as possible circulator solutions are being evaluated.

## VISITOR CHARACTERISTICS

The *Juneau Visitor and Economic Impact Study* was completed by McDowell Group in 2017. The study was written using data gathered by the Alaska Visitor Statistics Program 7 (AVSP) conducted in 2016. Key characteristics of Juneau visitors included the following:

- Of the 1,093,000 out of state visitors, 1,015,000 (93 percent) arrived by cruise ship, followed by 61,000 visitors (6 percent) who arrived by Air, and 17,000 visitors (2 percent) who arrived by ferry.



**Table 5: Downtown Juneau AADT by Location and Year - Local Roads**

Location	2014	2015	2016	2017	2018	2019	2014-18 Change
Glacier Highway/Willoughby Ave Between Norway Point & Ross Way	969	1,063	-	1,071	1,061	1,130	17%
Glacier Highway and Highland Dr	20,580	22,713	23,619	22,805	20,777	21,620	5%
Behrends Ave. - Between Glacier Highway/Willoughby Ave & Ross Way	120	150	192	138	176	155	29%
Highland Dr & Behrends Ave	2,034	1,930	1,862	2,095	2,479	2,642	30%
Glacier Highway/Willoughby Ave - Between Behrends Ave & 12th St	2,093	2,037	1,965	2,127	2,523	2,689	28%
12th St - Between Egan Dr & Glacier Highway/ Willoughby Ave	2,448	2,488	2,864	3,179	2,732	2,791	14%
Glacier Highway/Willoughby Ave - Between 12th St & 10th St	2,882	2,694	2,681	2,914	3,208	3,278	14%
Glacier Highway/Willoughby Ave - Between 10th St & Glacier Ave	5,055	5,136	5,112	5,157	5,276	5,391	7%
Glacier Highway/Willoughby Ave - Between Whittier St & Egan Dr	1,564	1,819	1,810	1,532	1,596	1,630	4%
12th St and 10th St	21,000	21,318	22,733	21,949	18,158	18,894	-10%
10th St - Between Egan Dr & Willoughby Ave	5,248	5,332	5,465	6,066	4,935	5,042	-4%
Glacier Ave - Between Egan Dr & Willoughby Ave	1,691	1,717	1,838	1,804	1,750	1,865	10%
Glacier Ave & Whittier St	14,940	15,166	15,803	15,258	11,942	12,426	-17%
Whittier St & Willoughby Ave	13,887	14,098	-	-	13,212	13,748	-1%
Willoughby Ave & Main St	12,250	12,436	13,796	13,320	13,212	13,748	12%
Gold St- Between 4th St & 8th St	491	502	509	560	479	460	-6%
4th St - Between Franklin St & Gold St	1,298	1,323	1,276	1,358	913	1,124	-13%
Franklin St - Between Front St & 4th St	-	-	-	-	2,020	1,524	--
Seward St - Between 4th & Front St	-	-	-	-	835	1,124	--
Seward St - Between Front St & Marine Way	1,850	1,880	1,299	1,441	1,252	1,279	-31%
Ferry Way - Between Marine Way & Franklin St	1,372	1,394	913	1,013	1,019	1,041	-24%
Franklin St - Between Mt Roberts Tram Parking & Marine Way Roundabout	5,266	5,351	5,955	5,860	3,925	4,010	-24%
Thane Rd & Mt Roberts Tram Parking	3,369	3,423	3,407	4,183	3,716	3,797	13%

Source: LSC Transportation Consultants and Alaska Traffic Data

- Cruise passengers were most likely to participate in whale watching and other day cruises (31 percent), followed by city/sightseeing tours, tram, hiking/nature walks, and wildlife viewing. Highway/ferry visitors reported a wide range of activities, topped by hiking/nature walks, wildlife viewing, and museums. Air visitors were much more likely to go fishing (17 percent) than other markets.
- The average age of Juneau visitors was 56.2 years. The average age of those visiting only Juneau were the youngest (47.3 years), while marine highway/ferry visitors were the oldest at 57.3 years.
- The most common age group was 65 and older (33 percent) for all travel markets. This percentage reflects an increase from 27 percent in 2011.

The *Alaska Visitor Volume Report* was also completed by the McDowell Group in 2020 and includes data from the 2018-2019 winter season and 2019 summer season. According to the study, 98 percent of all Alaska’s cruise ship visitors visit Juneau, making it the busiest port in Alaska (p.6). Prior to the pandemic, cruise passenger volume over the previous decade had grown at an average of 3.7 percent year over year. However, 2019 experienced the largest increase in cruise passenger volume with a 9 percent increase over the previous year. Another point of interest included the visitor industry executives McDowell Group interviewed for the report. A summary of these interviews provided the following insights in relation to cruise ship passengers:

- “Passengers were less likely to purchase land tours with their cruise. Lower average incomes and last-minute planning were cited as factors.” (Pg 8)
- “Cruise passengers are becoming more savvy about traveling independently and planning less traditional land tours. They want more customization.” (Pg 8).
- “They are more comfortable navigating on their own than in the past. One contact also observed a trend of cruise passengers desiring smaller groups.” (Pg 8).

These observations could indicate cruise passengers potential preference in planning their own day trips and shore excursions with the flexibility provided by public transit instead of pre-planned tour. Less reliance on private, curated tours could mean an increase in visitors using technology to research alternative ways of getting in and around Juneau and its various attractions.

## EXISTING TRANSPORTATION SERVICES

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### INTRODUCTION

The following chapter describes the existing transit and transportation network that provides mobility throughout the City of Juneau with connections to Douglas Island and Mendenhall Valley. These services include both public and private entities and are described in further detail below.

### TRANSPORTATION SERVICES

#### Public Transportation - Capital Transit

Since 1970, Capital Transit has provided public transportation for Juneau. Capital Transit offers nine fixed routes and a paratransit dial-a-ride service (Capital AKcess). The following sections provide an overview of existing routes and ridership.

#### *Existing Routes and Services*

As of November 7, 2022, Capital Transit revised their current fixed route services. These routes are summarized below and shown in Figure 3. An overview of each route's schedule and frequency is summarized in Table 6. Capital Transit has been affected by the nationwide driver shortage and periodically needs to suspend service to some routes due to low staffing. Notifications are posted on the Capital Transit website ( <https://juneaucapitaltransit.org/>).

- **Route 1: Douglas** begins at the Treadwell Ice Arena in Douglas and travels north towards Downtown Juneau. Major stops along the route include the Douglas Post Office, the Breeze-In, the Federal Building, and the State Museum.
- **Route 3 & 4: Mendenhall Valley** runs in both counterclockwise (Route 3) and clockwise (Route 4) directions. The route travels between Mendenhall Valley and Downtown Juneau making stops at the Valley Transit Center, Nugget Mall, Fred Meyer, Bartlett Regional Hospital, Federal Building, State Museum, and the Downtown Transit Center.
- **Route 5: University Connector** begins at the University of Alaska and continues on to Auke Bay and the Valley Transit Center.
- **Route 6: Riverside/Airport Connector** runs between the Juneau International Airport, Nugget Mall, and the Valley Transit Center.
- **Route 7: Lemon Creek Express** has one early morning run that begins at the Valley Transit Center making stops at the Nugget Mall, Fred Meyer, the Federal Building, and the Downtown Transit Center and two afternoon runs heading in the opposite direction.
- **Route 8: Downtown/Valley Express** runs between the Downtown and the Valley Transit Centers making stops at Fred Meyer, Glacier Highway, Tonsgard Court, Dredge Lake Road, and Auke Bay.
- **Route 9: Egan Express** runs once in the morning between the Downtown and the Valley Transit Centers making one stop only at the Federal Building.

- **Route 10: Taku Express** runs between the Juneau Job Center and the Valley Transit Center making stops at Dimond Park, Julep Street and Riverside Drive, and Mendenhall Loop Road.

Capital Transit offers a Ride Free Zone for locals and visitors who may experience mobility issues or are interested in getting to the Capital, Juneau-Douglas City Museum, Dimond Courthouse, Juneau Hostel, or other locations at the top of the hill. There are four bus stops in the Ride Free Zone – the Marine Parking Garage (at the Downtown Library), on Franklin Street near the old Gunakadeit Park (Pocket Park), on Fourth Street near Rainbow Foods, and the Downtown Transit Center. A map of the Capital Transit Ride Free Zone is found here: <http://capitaltransit.wpenginepowered.com/wp-content/uploads/2017/08/Capital-Transit-Ride-Free-Zone-Map.pdf>

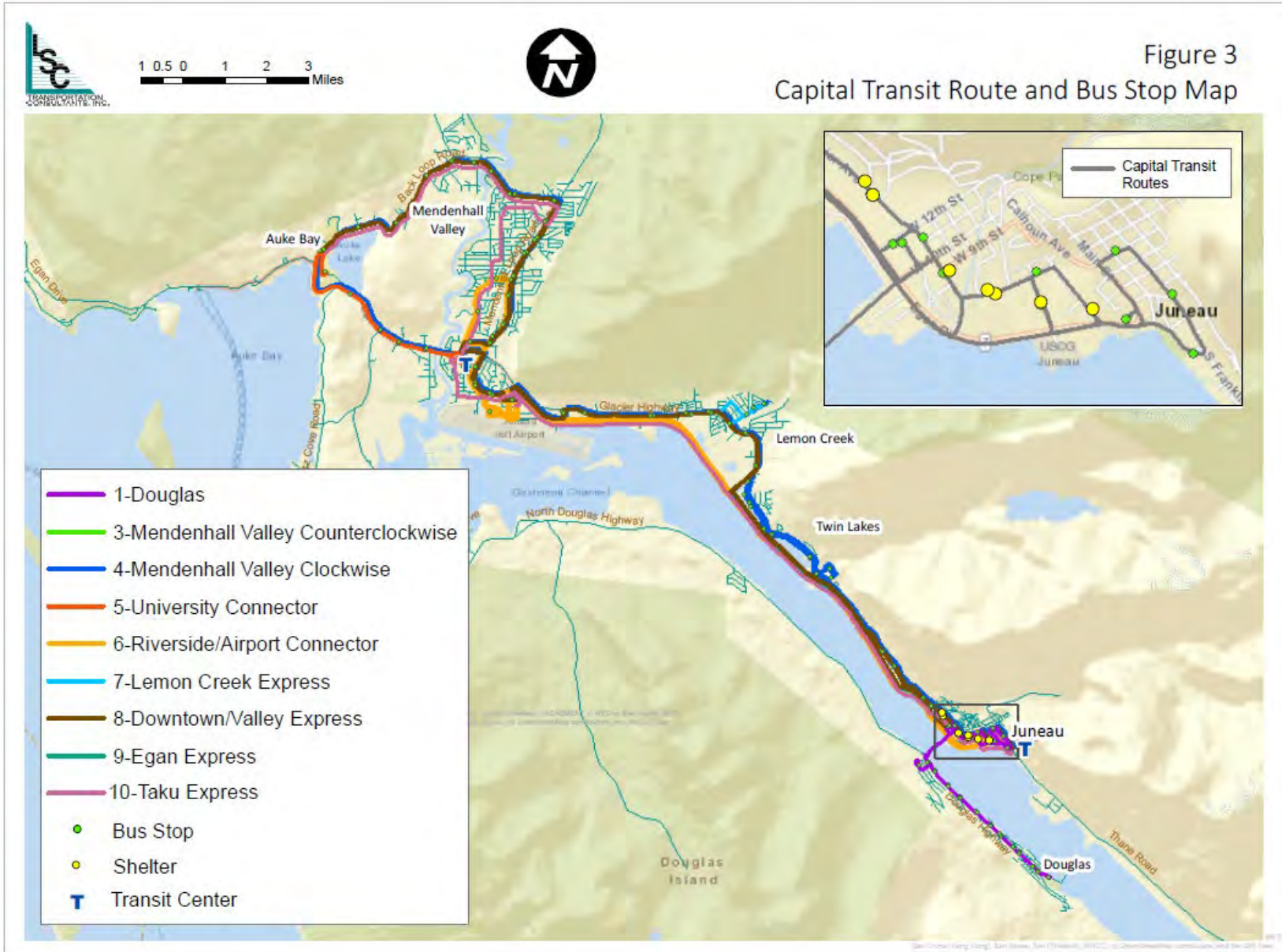
Route	Service Hours						Service Frequency (Minutes)
	Weekday Service		Weekend Service				
	Start	End	Saturday Start	Saturday End	Sunday Start	Sunday End	
Route 1: Douglas	6:58 AM	10:48 PM	6:58 AM	10:48 PM	8:58 AM	5:48 PM	Half-Hourly
Route 3: Mendenhall Loop Counterclockwise	7:58 AM	11:36 PM	7:58 AM	11:36 PM	8:58 AM	6:06 PM	Hourly
Route 4: Mendenhall Loop Clockwise	6:44 AM	11:16 PM	6:49 AM	11:16 PM	9:19 AM	6:36 PM	Hourly
Route 5: University Connector	6:48 AM	4:56 PM	Note 1	-	-	-	Hourly
Route 6: Riverside/Airport Connector	6:50 AM	5:28 PM	Note 1	-	-	-	Hourly
Route 7: Lemon Creek Express	6:50 AM	7:25 AM	Note 2	-	-	-	1 AM Run, 2 PM Runs
Route 8: Valley Express	6:38 PM	5:03 PM	-	-	-	-	Half-Hourly
Route 9: Egan Express	6:35 AM	7:22 AM	-	-	-	-	3 AM Runs, 2 PM Runs
Route 10: Taku Connector	6:16 AM	7:01 AM	-	-	-	-	3 AM Runs

*Source: Capital Transit, 2022*

*Note 1: Mid-day runs (10 AM - 2 PM) currently not operated due to staff shortage.*

*Note 2: 7:05 AM and Mid-day runs (9 AM - 2 PM) currently not operated due to staff shortage.*

Major connections between routes are made at the Downtown Transit Center and the Valley Transit Center. There are about 128 bus stops within the Capital Transit system, 15 of which are located in downtown Juneau, as also shown in Figure 3. Of the bus stops located in the downtown area, there are seven covered bus shelters.



## Bus Stops and Shelters

Major connections between routes are made at the Downtown Transit Center and the Valley Transit Center. There are about 128 bus stops within the Capital Transit system, 15 of which are located in downtown Juneau, as also shown in Figure 3. Of the bus stops located in the downtown area, there are seven covered bus shelters.

## Historic and Recent Ridership

Annual ridership over the last seven years is shown in Figure 4. Ridership was around 1 million passengers each year up until FY 2020/21 when ridership dropped from 1,036,923 passengers in FY 2019/20 to 485,128 passengers (a decline of 53 percent). In the most recent year (FY 2021/22) ridership rebounded somewhat by 25 percent to 606,648 but is still 41 percent lower than in FY 2019/20.

Figure 5 and Table 7 depicts monthly ridership by fiscal year. As shown, peak ridership tends to occur during the summer months, though that month may vary between June, July, and August. The summer ridership growth over the last two years is relatively strong (29 to 36 percent, depending on month) compared to the remainder of the year (22 percent), possibly reflecting the return of summer visitors.

**Table 7: Capital Transit Ridership by Month**

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
FY 2016	83,163	82,322	92,218	89,675	98,201	100,420	110,129	106,558	99,980	94,585	80,127	83,642	<b>1,121,020</b>
FY 2017	78,568	80,354	89,810	85,130	89,917	97,510	104,619	100,855	91,188	85,936	75,386	77,248	<b>1,056,521</b>
FY 2018	76,186	76,201	86,398	84,649	92,418	96,977	90,072	97,568	83,045	79,280	72,641	73,543	<b>1,008,978</b>
FY 2019	76,881	76,027	86,539	89,440	97,931	97,858	94,355	99,846	86,563	82,991	75,151	68,722	<b>1,032,304</b>
FY 2020	73,843	71,018	85,100	86,777	97,842	96,126	99,830	103,929	88,636	85,960	76,604	71,258	<b>1,036,923</b>
FY 2021	39,780	31,657	39,122	39,116	39,108	50,488	41,051	42,400	43,345	45,092	35,187	38,782	<b>485,128</b>
FY 2022	37,630	43,121	52,419	54,298	59,673	68,847	53,017	54,673	47,985	47,275	44,347	43,363	<b>606,648</b>

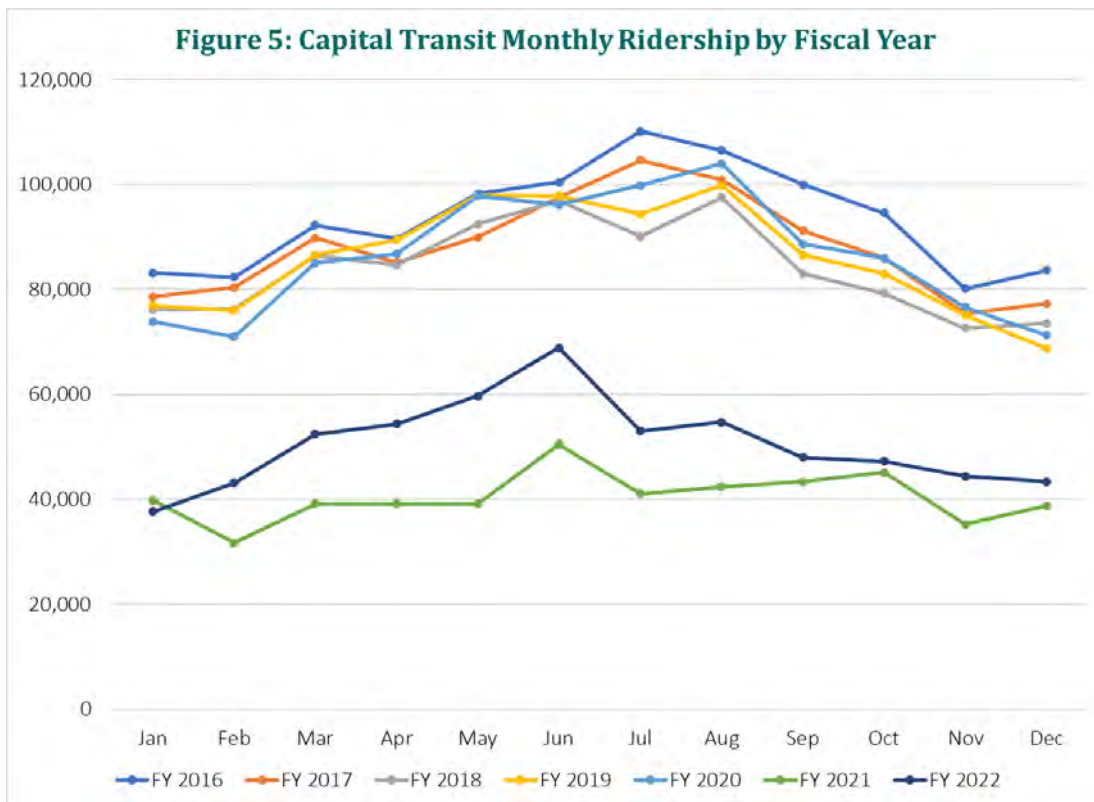
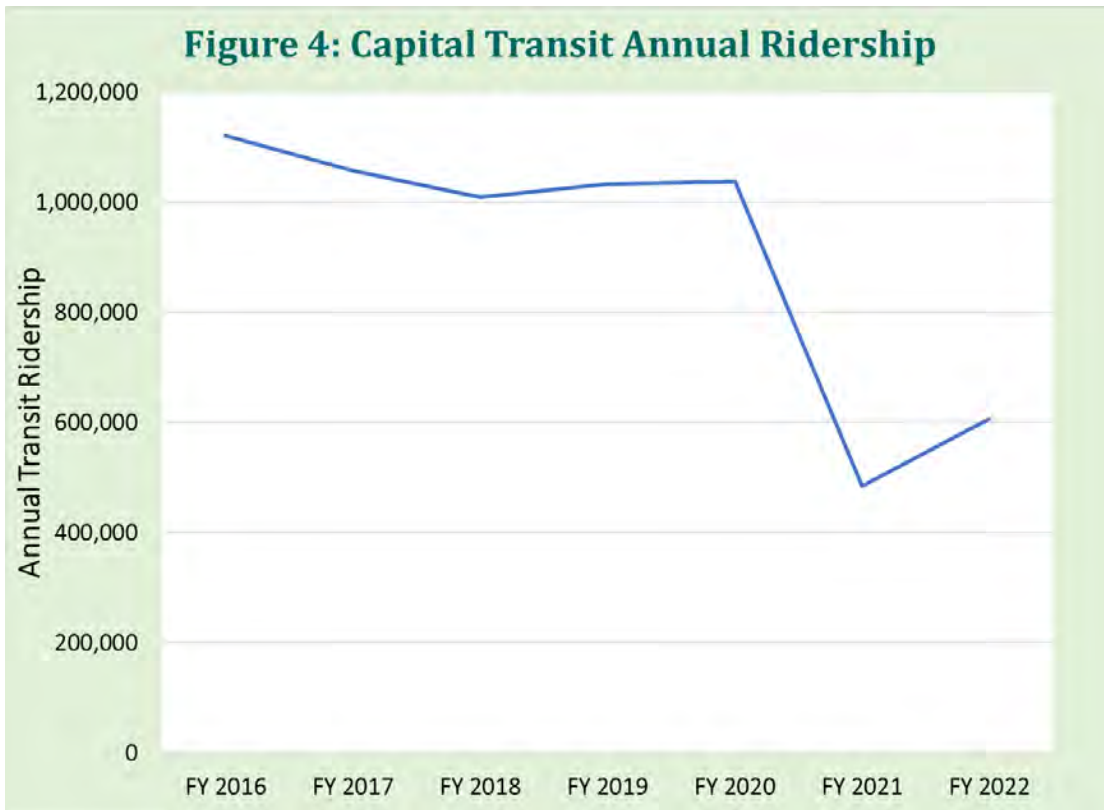
Source: Capital Transit Ridership, FY 2015/16 - FY 2021/22

## Ridership Characteristics

The firm of Rain Coast Data conducted the *Juneau Transit Survey*<sup>1</sup> in April and May of 2022, which surveyed a total of 625 Juneau residents (of which 363 were Capital Transit users). Key findings pertinent to the circulator issue are as follows:

- Primary reasons for using Capital Transit are to travel to work (69 percent of riders) and shopping (66 percent of riders).
- Most riders are long-time users of the system, with a majority using it for more than 10 years.

<sup>1</sup> "Juneau Transit Survey 2022," Rain Coast Data, May 2022, <https://capitaltransit.wpenginepowered.com/wp-content/uploads/2022/09/Final-CBJ-Transit-Survey-with-Appendix.pdf>



- 45 percent were members of a low-income household, 47 percent were Alaska Natives, 15 percent were persons with a disability and 13 percent were age 65 or above.
- Riders indicated a preference for a simpler route network with more frequent and consistent service.

### ***Operations, Fleet, and Maintenance***

Capital Transit operates out of a modern operational and maintenance facility, located at 10099 Bentwood Place in the Mendenhall Valley. Capital Transit has a fleet of 17 35-foot Gillig buses and 1 40-foot Proterra electric bus that are inspected, maintained, and stored in this facility. Staff reports that there is no capacity at this facility for a substantial increase in the fleet.

### **Capital AKcess**

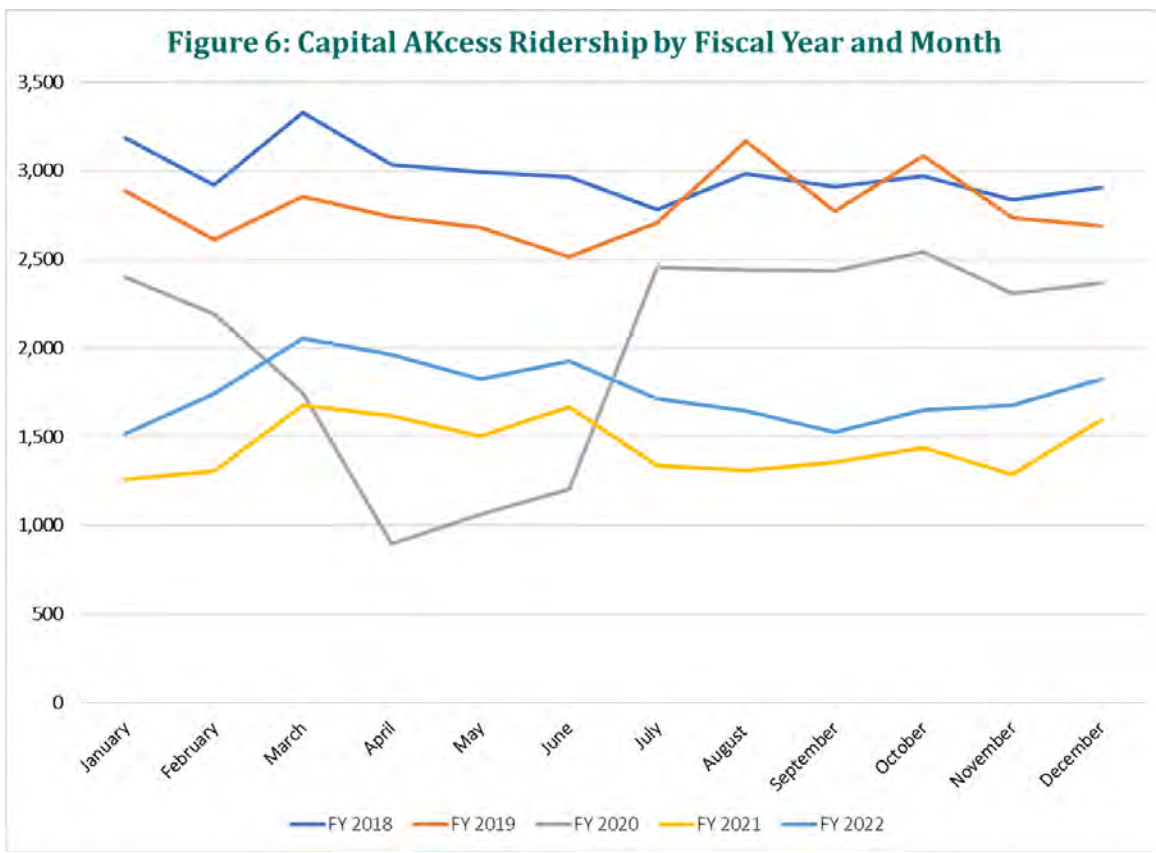
Capital AKcess provides paratransit service in accordance with the Americans with Disabilities Act of 1990. Their services are intended to provide disabled individuals who are unable to use fixed route services and who are certified as ADA paratransit eligible as outlined in their Rider’s Guide. Visitors may also ride Capital AKcess if they are able to provide specific eligibility documentation. As shown in Table 8 and Figure 6, ridership was above 30,000 passengers per year prior to the pandemic. While FY 2021 saw a decrease to 17,358 passengers, ridership has been steadily rising.

**Table 8: Capital Akcess Annual Ridership by Month**

	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022
January	3,186	2,887	2,399	1,258	1,516
February	2,921	2,612	2,193	1,306	1,741
March	3,328	2,855	1,747	1,680	2,054
April	3,034	2,740	894	1,616	1,961
May	2,995	2,683	1,061	1,502	1,824
June	2,968	2,517	1,204	1,669	1,925
July	2,783	2,707	2,457	1,339	1,715
August	2,984	3,170	2,440	1,311	1,647
September	2,913	2,774	2,436	1,354	1,527
October	2,970	3,087	2,544	1,440	1,651
November	2,838	2,736	2,308	1,287	1,676
December	2,907	2,690	2,368	1,596	1,827
<b>Total</b>	<b>35,827</b>	<b>33,458</b>	<b>24,051</b>	<b>17,358</b>	<b>21,064</b>

*Source: Capital Transit, November 2022*





**Cost for Services**

Table 9 summarizes Capital Transit’s cost per mile, hour, and passenger trip for both fixed route and demand response services during FY 2022. As shown, the fixed route cost per mile was \$12.05 and cost per hour was \$164.72. Demand Response services cost a little less at \$5.25 per mile and \$95.06 per hour.

<b>Table 9: FY 2022 Capital Transit Cost for Services</b>		<b>Total</b>
<b>Fixed Route</b>		
Vehicle Revenue Miles		491,823
Vehicle Revenue Hours		35,972
Regular Unlinked Passenger Trips		606,648
	Cost Per Ride	\$9.77
	Cost Per Mile	\$12.05
	Cost Per Hour	\$164.72
<b>Demand Response</b>		
Vehicle Revenue Miles		177,352
Vehicle Revenue Hours		9,794
Regular Unlinked Passenger Trips		18,762
Sponsored Unlinked Passenger Trips		2,302
	Cost Per Ride	\$44.20
	Cost Per Mile	\$5.25
	Cost Per Hour	\$95.06
<i>Source: Capital Transit FY 2022 Grant Reporting</i>		

These values were created using Capital Transit's budget costs and revenue, including grants. Fare revenues for that fiscal year were approximately \$116,000. In addition to fares and local funding, Capital Transit received the following a Federal 5311 grant for \$979,379 and a CARES Act grant for \$2,031,150. Historically in years without pandemic related funding, over 70% of Capital Transit's funding comes from Juneau residents through property and sales taxes.

## **Private Transportation Services**

The region has approximately 27 various private tour and transportation providers that cruise ship passengers and other visitors may book while visiting Juneau. Their services include transportation and tours to Mendenhall Glacier, and other attractions, shopping districts, helicopter tours, and other sightseeing/outdoor adventures. LSC Transportation Consultants, Inc. reached out to private transportation services in Juneau. In response, each private entity provided varying levels of details about their operations. The following section provides a brief description of each major transportation service provider in the area, followed by smaller companies and the services they currently provide.

### ***Alaska Coach Tours***

Alaska Coach Tours provides private group tours in Juneau and other major communities of southeast Alaska including Ketchikan, Skagway, and Sitka. The company was formed in 2004 with the sole purpose of providing transportation and tours for Royal Caribbean, Celebrity, Regent, Oceania, UnCruise Adventures, and Lindblad Expeditions/National Geographic cruise lines in Southeast Alaska. Their entire fleet is made up of 85 motorcoaches.

### ***Holland America-Princess Alaska-Yukon***

Holland America Princess (HAP) provides eight primary tours within Juneau, in addition to six other tours provided on behalf of various cruise lines directly. With a fleet of 73 revenue vehicles, the service provides tour transportation to approximately 500,000 passengers annually, with a weekly total of about 24,000 passengers during the peak season.

HAP has their own Maintenance Department consisting of a Foreman, Lead Mechanic, 4-5 Mechanic Technicians (year-round), 1-2 seasonal Mechanic Technicians, and 1 Parts Administrator. Historically, the operation employs up to 80 drivers in the peak summer, though pandemic and driver shortages have reduced this figure to about 45 drivers per season in recent years. HAP utilizes RTA software for its preventative maintenance program that tracks annual maintenance, scheduled maintenance, and defect repairs in accordance with FMSCA requirements. RTA interfaces with the Zonar electronic inspection and GPS tracking system that is installed in all HAP commercial vehicles.

HAP currently keeps a diesel fuel tank on property and has an arrangement in place with Petro 49 for fueling needs – including delivery of biodiesel that is mixed on property with regular diesel during tank fill ups at a range of between 5 and 8 percent. The tank on property was provided by Petro as part of their service. During the season, the tank is filled approximately twice a week.

## ***Juneau Tours***

Juneau Tours have been providing tour and transportation services to the Juneau area for 17 years for both visitors and residents. Serving over 90,000 visitors annually, they provide four types of tours during the summer season. They have a 3.5-hour whale watching and marine life boat tour that you may book with a group or as a private excursion. Each also includes transportation to and from Statter Harbor. There are also two types of bus tours; one that focuses only on visiting the Mendenhall Glacier, and another that visits both the Mendenhall Glacier as well as downtown Juneau. During the winter season they also provide special event transportation within downtown Juneau using their trolley bus.

## ***M & M Tours of Juneau***

M&M Tours provides three major bus tours within Juneau as well as one overnight tour from Juneau to Haines. The three Juneau bus tours include the following: the “Juneau Highlights” tour featuring Douglas Island, historic Juneau sites (Capital Building, and Marine Park), The “Blue Bus Glacier Express” that runs between downtown Juneau and the Mendenhall Glacier, and the “AJ Mine Gastineau Mill Tour” that includes transportation and a guided tour of the AJ Mine. The “Red Trolley Tour” has also been offered in the past but is currently unavailable for booking. When in operation, the Red Trolley Tour provides transportation to the Capitol Building, the Governor’s Mansion, City and State Museum, the hatchery, and Marine Park. M&M also provides several other adventure tours such as sea kayaking, river rafting, and whale watching. Air tours to see the Mendenhall Glacier and enjoy a sled dog experience are also offered.

## ***Other Transportation Services***

Other transportation service providers operate on a smaller vehicle fleet (30 vehicles or less) and include the following local taxi and shuttle companies:

- Dlux Rides
- Evergreen Taxi
- Juneau Taxi and Tours
- Glacier Taxi and Tours
- Capital Cab
- Goldbelt Transportation
- First Student
- Crew International Tours
- Mendenhall Glacier Transport
- Alaska and Yukon Tours
- Juneau Adventure Tours
- Alaska Shore Excursions
- Liquid Alaska Tours
- Gastineau Guiding
- Juneau Shore Tours

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## RELEVANT PLANNING DOCUMENTS AND PLANS

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### INTRODUCTION

This chapter first presents a review of key planning documents that impact the issue of a circulator service. This is followed by a summary of planned improvements to the port area that will affect visitor activity patterns in the next few years.

### Blueprint Downtown Juneau Area Plan (2022)

The Draft Blueprint Downtown Juneau Area Plan provides an overview of the Downtown area, planning process, vision, goals, priorities, recommended actions, and measurements for success. While currently in Public Review, the Area Plan stands to serve as a comprehensive plan for Downtown Juneau. The Area Plan identifies goals that include providing diverse housing, a variety of mobility options and amenities, safety measures, managed tourism tactics, economic stability measures, and a sense of place that prioritizes walking and bicycling.

Chapter 7 of the plan focuses most on transportation, pedestrians, and streetscape. The most pertinent to our study is the plan's summary of a tourist transit circulator. Three general concepts are discussed:

- A “tourist shuttle” would relocate all existing staging areas outside of the downtown dock area to an undefined new location, with arriving cruise passengers using this shuttle to access private tour operators at the new location.
- A “Capital Transit circulator” would serve the downtown area as well as the Flats/Glacier Avenue areas to the west.
- According to the plan, a visioning process resulted in the desire for further study to better understand the potential to reduce traffic levels, logistics, connections with tour buses, costs, and potential staging areas.

Lastly, there are many actions identified that support the Plan's goals and priorities. Amongst these actions, ones that encourage transportation use and aim to improve the area's sense of place are most related to the subject of a possible circulator service. In particular, this document indicates that “A “circulator” system to easily move pedestrians across the downtown core is a highly supported and critical step to reduce the number of vehicles on the street, as well as downtown parking demand.” (Pg. 24). The plan also includes an action to “Actively market the existing, free Capital Transit circulator and maximize its availability with increased frequency.” (p 193)

### Tourism Best Management Practices (2022)

Travel Juneau develops an annual Best Management Practices document to guide various aspects of private tourism-oriented business operations in Juneau. Key to this particular study are the agreements and restrictions between transportation companies on vehicle staging and operations, as well as the tour

broker operations. This includes limitations on particular roadways, such as use of South Franklin Street north of the Red Dog Saloon and 12<sup>th</sup> Street and Calhoun Avenue. Other major best practices related to transportation include the following:

- Drivers agree not to impede traffic and to maintain a safe travelling speed. Drivers agree not to use Sandy Beach, Twin Lakes, Cope Park, Eagle Beach, or Auke Bay Recreation Area (including the Auke Bay Recreation access road) as tour destinations.
- Drivers of all vehicles agree to turn engines off at every reasonable opportunity when loading and unloading passengers and/or when staging in the various loading zones, staging areas and tour venues throughout the CBJ.
- Drivers agree to avoid transiting residential streets within the City and Borough of Juneau unless conducting a specific pick-up or drop-off in the immediate vicinity.

A possible circulator would also need to abide by best management practices and be present for pre-season transportation meetings in order to align with other public and private transportation providers in Juneau.

### **City and Borough of Juneau Transit Development Plan (2014)**

A Transit Development Plan (TDP) was conducted by Nelson Nygaard in 2014 to review the Capital Transit System and Care-a-Van services.<sup>2</sup> Informed by the information gathered and conclusions made in the 2013 Comprehensive Operations Analysis (COA), the TDP provided recommendations that supported the following five major goals:

1. Ensure that routes have adequate time to operate on-schedule.
2. Better match service levels with ridership demands to ensure resources are being used in the most efficient way possible.
3. Evaluate requests/demands for service to new areas.
4. Strive to ensure high-quality and convenient service.
5. Ensure that service design, marketing information, buses, and other elements of the service are as legible and easy to understand as possible.

In support of these goals, several short-term recommendations and actions were made including “Implement a Downtown Circulator route.” There was significant demand expressed during this study for a dedicated downtown circulator to provide service every 15 minutes. The implementation of a downtown circulator bus that operates from 7:00 AM to 11:00 PM seven days a week would cost approximately \$600,000 per year to operate and cannot be accommodated within existing budget levels.<sup>1</sup> Instead, service would be provided around the downtown loop every 30 minutes by the Douglas route.” (Pg. 2-2)

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<sup>2</sup> “City and Borough of Juneau Transit Development Plan: Final Report,” Nelson Nygaard, Feb 2014; <http://juneaucapitaltransit.org/wp-content/uploads/2016/04/JUNEAUTDP-Final-140213.pdf>

## City and Borough of Juneau Comprehensive Operations Analysis (2013)

The COA for CBJ was completed in 2013 by Nelson/Nygaard Associates Inc. The COA provides an overview of demographic trends as they relate to transit system characteristics. While it provided a summary of Capital Transit's system and routes it also conducted a fair share of public outreach and community engagement with a study advisory group, stakeholders, and transit operators. It was noted throughout the analysis that both stakeholders and the general public were generally interested in a circulator transit service that would serve downtown. While conducting a "tradeoff exercise," 75 percent of stakeholders stated that they'd like to see downtown improved by creating a separate downtown circulator route, while 25 percent preferred making better use of existing bus routes serving downtown.

## City and Borough of Juneau Comprehensive Plan (2013)

An update to the CBJ Comprehensive Plan was completed in 2013. Chapter 8 discusses eight policies and actions to support transportation services within the region. Those related to public transportation within Juneau include the following:

- **Policy 8.4.** To support the improvement of transportation facilities and systems that reinforce Juneau's role as the capital city of Alaska and a regional transportation and service center.
- **Policy 8.5.** To promote a balanced, well-integrated local multi-modal surface transportation system that provides safe, convenient, and energy-efficient access and transport for people and commodities.
- **Policy 8.6.** To promote and facilitate transportation alternatives to private vehicles as a means of reducing traffic congestion, air pollution and the consumption of fossil fuels, and to provide safe and healthy means of transportation to all people.

While a circulator would support any of the above-mentioned policies, it would best implement the intentions of Policy 8.5 and is listed as an action under 8.5IA6.

## Juneau Circulator Feasibility Study Supplement (2011)

In 2011 Moore & Associates completed a Feasibility Study for a Juneau Circulator. The study included public outreach via direct mail and online directed towards year-round residents living and or working in downtown Juneau. The major survey findings from the study included the following:

- When asked which type of service residents preferred, 63 percent indicated a year-round service.
  - o Of those respondents, 46 percent answered that they would use it frequently if implemented.
- When asked how the service should be provided, 50 percent said they'd like the service to be provided by Capital Transit, followed by 26 percent answering they'd like it to be instead of Capital Transit.
- Preferred routes and destinations included the Federal Building (46 percent), Dept of Labor /Fish and Game (40 percent), and 12<sup>th</sup> Street/Calhoun Avenue (38 percent).
- 50 percent of respondents wanted the service to come every 30 minutes, followed by 45 percent preferring the service to run every 15 minutes.

- When asked how frequently participants might use the service, 42 percent stated 0-2 times per week, followed by 33 percent who would use the service 3-5 times per week. Only 15 percent indicated that they would not use the service at all.

With survey results and data collection in mind, the Feasibility Study offered six different alternatives for a downtown circulator. Each alternative shared the same following assumptions:

- Summer service would run seven days per week between 7:00AM and 8:00 PM
- Winter service would only run Monday through Friday between 9:00 AM and 6:00 PM.
- The service would run on 15-minute headways in only one direction.
- The service would be provided using two vehicles.
- In the summer, the service terminus would be the Princess Dock and in Winter it would be at the Library stop located at South Franklin and Egan.

Each alternative varied slightly with destinations and routes. The Feasibility Study recommended Alternative B with the following destinations in mind: downtown retail and restaurants, City Museum, State Buildings, Department of Labor, Department of Fish and Game, and other Key Employers along Egan Drive.

### **2003 Long Range Waterfront Master Plan for the City and Borough of Juneau**

Bermello, Ajamil & Partners, Inc. completed the Long Range Waterfront Master Plan in 2003. The plan provides an overall vision for Juneau’s waterfront area. The plan had the four following overarching goals:

1. Enhance community quality of life.
2. Strengthen tourism product offerings as well as downtown retail, entertainment, residential and service activities.
3. Improve Juneau’s image and attractiveness for investment.
4. Recognize current waterfront uses and provide protection for pockets of working waterfront.

To best plan for the future of Juneau’s downtown waterfront, the plan divided the area into the following six subareas:

- Area A: Juneau-Douglas Bridge to Gold Creek
- Area B: Subport
- Area C: Downtown
- Area D: Franklin Street Corridor
- Area E: AJ Rock Dump
- Area F: Little Rock Dump

After an extensive public outreach process, the plan supports the continuation of mixed-use development throughout Areas A and B. Area C’s (Downtown) goal is to maintain and support historic character, walkability, and open space. Area D (South Franklin) acts as an extension of the downtown towards south cruise ship docks and its corridor is to be expanded and maintained. Lastly Areas E and F would continue to serve as an “important economic engine and logistics point for the community of Juneau” through the continuation of waterfront dependent and industrial uses.



## **Downtown Juneau Tourism Transportation Impact Study (2003)**

This study was conducted by Kittelson and Associates, Inc. in 2003, and predates much of the subsequent port improvements, as well as the Downtown Transit Center. At the time, Capital Transit routes extended along S. Franklin Street to the Mt. Roberts Tramway. This study focused on roadway and pedestrian improvements in the dock areas, and did not include recommendations regarding a circulator service, though many of the stakeholders contacted as part of the study identified the desire for a downtown shuttle/circulator service.

## **FUTURE PLANNED DEVELOPMENTS**

There are several planned developments to occur in the upcoming decade. However, for the purpose of this study, developments that has an impact on downtown and the cruise visitor experience are highlighted below.

### **Seawalk Connection**

The Juneau Seawalk is planned to ultimately connect from Overstreet Park to the AJ Dock. Currently the Seawalk connects Overstreet Park to Gold Creek and begins again at Marine Park making its way south the South Franklin Dock. The South Franklin Dock to AJ Dock stretch of the project is currently in the planning stages and anticipated to begin construction in 2025.

### **Àak'w Landing**

The vacant land and dock space located near Whittier Street and Egan Drive recently changed ownership from Norwegian Cruise Line to the Huna Totem Group. In November 2022, a conceptual plan was presented to the Assembly outlining a multiphase development project that includes a new dock, retail space, open park and entertainment space, and the potential for either conference, residential units, or office space. The proposed development also features a large parking lot and bus station. The design is currently in the early development stages with the intention to begin Phase 1 construction in 2024.

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A circulator service for Juneau considers how best to provide transportation to visitors and tourists. To better understand those visiting the region, various tourist surveys were summarized below. The following sections describe visitor volumes, demographics, and modes of transportation.

## **JUNEAU VISITOR OVERVIEW**

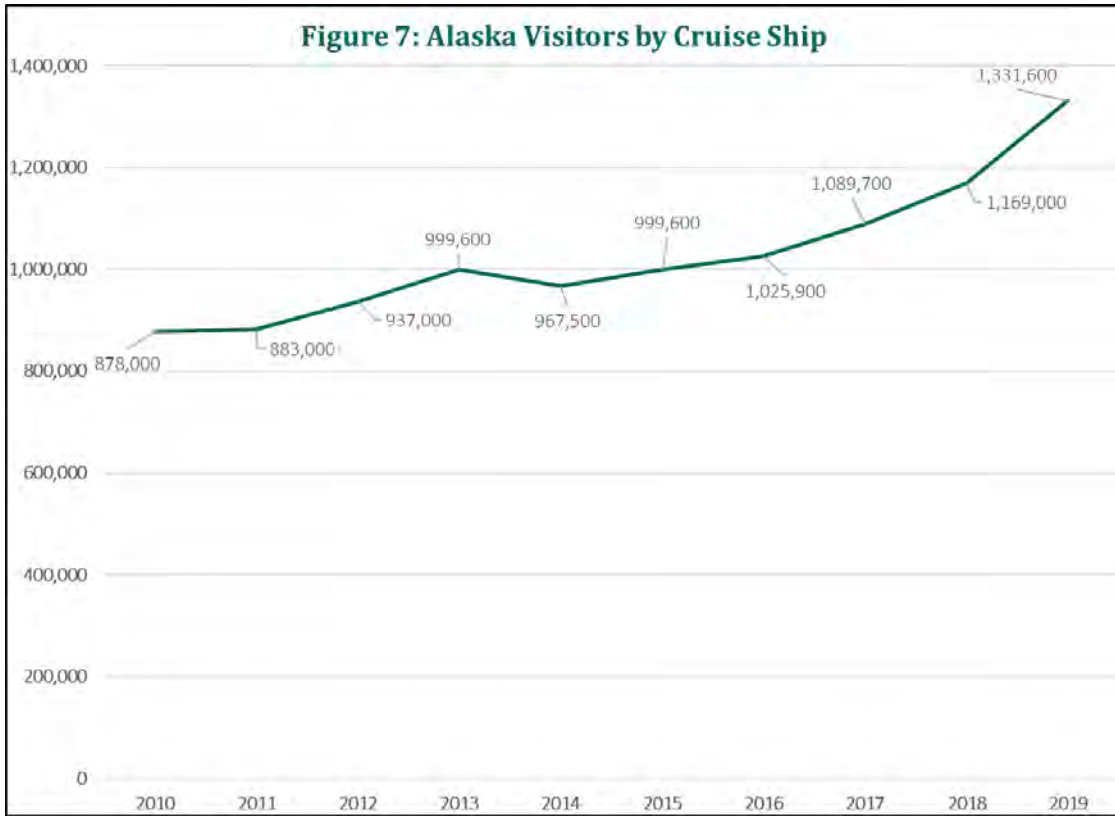
Prior to the pandemic, several visitor surveys were conducted in Juneau as well as the greater region of Alaska. In 2016, the Alaska Visitor Statistics Program (AVSP) contracted the McDowell Group to survey Juneau travelers. AVSP is a statewide survey of Alaska visitors commissioned by the Alaska Department of Commerce, Community, and Economic Development and the Alaska Travel Industry Association. In 2017, McDowell Group summarized this data in the *Juneau Visitor Profile and Economic Impact Study*. Major takeaways from this report included the following:

- An estimated 1,093,000 out of state visitors traveled to Juneau between May and September of 2016.
- A huge majority of visitors arrived by cruise ship (93 percent or 1,016,490), followed by air (6 percent or 65,580), and highway/ferry (2 percent or 21,860).
- While visiting Juneau, cruise ship visitors participated in whale watching and other day cruises (31 percent), followed by city/sightseeing tours, tram, hiking/nature walks, and wildlife viewing.

Most recently, the *Alaska Visitor Volume Report* was completed by McDowell Group in 2020. According to their summary of the AVSP, 1,305,700 cruise ship passengers visited Juneau in 2019, indicating another increase over the previous year by 13 percent. Their report goes on to show steady growth in cruise ship visitor volume year over year prior to the pandemic as shown in Figure 7. According to Cruiseline International Association 1.1 million people visited Juneau in 2022 with another 1.6 million visitors being projected for 2023.

## **Visitor by Mode of Transportation**

More recently, Travel Juneau contracted McDowell to conduct a *Juneau Air and Ferry Visitor Survey*. This report estimated a total of 1,229,100 visitors between May and September of 2018. This represented an increase of visitors to the area by 12.5 percent. Similar to 2016, 94 percent, or 1,155,300, of visitors arrived by cruise ship, followed by 5 percent (63,000) arriving by air, and 1 percent (15,000) arriving by ferry (Table 10 and Figure 8).



**Table 10: Alaska Visitors by Mode of Travel**

Year	Air	Cruise Ship	Highway/ Ferry	Total	% Change Cruise Visitors	% Change Overall
2010	578,400	878,000	76,000	1,532,400	-	-
2011	604,500	883,000	69,300	1,556,800	0.6%	1.6%
2012	580,500	937,000	69,100	1,586,600	6.1%	1.9%
2013	619,400	999,600	74,800	1,693,800	6.7%	6.8%
2014	623,600	967,500	68,500	1,659,600	-3.2%	-2.0%
2015	703,400	999,600	77,000	1,780,000	3.3%	7.3%
2016	747,100	1,025,900	84,500	1,857,500	2.6%	4.4%
2017	750,500	1,089,700	86,100	1,926,300	6.2%	3.7%
2018	760,100	1,169,000	97,200	2,026,300	7.3%	5.2%
2019	790,900	1,331,600	90,500	2,213,000	13.9%	9.2%

*Source: Alaska Visitor Volume Report, McDowell 2020*



The *Juneau Air and Ferry Visitor Survey* summarizes 728 non-cruise ship visitors who spent at least one night in Juneau. When studying various modes of transportation for these specific visitors, the following mode split information was identified:

- Air visitors were about equally likely to use rental vehicles (27 percent), taxis (27 percent), and personal vehicles (25 percent) to get around Juneau, while slightly fewer visitors reported using hotel/lodging transport (18 percent) and public transportation/buses (10 percent).
- Among air visitors, vacation/pleasure visitors reported a much wider variety of transportation types compared with other visitors: 34 percent used taxis, 27 percent used rental vehicles, 26 percent used hotel/lodging transport, and 16 percent used public transportation/buses. Business visitors reported the highest usage of rental vehicles (43 percent), while 19 percent reported using taxis. VFRs mostly relied upon personal vehicles to get around (75 percent), with 14 percent using rental vehicles and 10 percent using taxis.
- Ferry visitors relied heavily on personal vehicles to get around Juneau (66 percent), with less than 15 percent reporting using each of the other modes of transportation.

### General Visitor Characteristics

General visitor demographics were collected during the 2016 survey. Major demographic characteristics identified by the survey included the following conclusions:

- U.S. residents represented 81 percent of Juneau visitors, with Western states being the most common region of origin (32 percent), followed by the South (24 percent), Midwest (15

percent), and East (11 percent). Within the West, California, Washington, Oregon, and Arizona were the most prominent states.

- The average age of Juneau visitors was 56.2 years. Juneau Only visitors were the youngest at 47.3 years, on average, while highway/ferry visitors were the oldest at 57.3 years.
- The most common age group was 65 and older (33 percent) for all travel markets. This percentage reflects an increase from 27 percent in 2011.

## **CRUISE SHIP AND PASSENGER ACTIVITY**

A key factor in the overall visitor demand for transportation services is the level and pattern of cruise ship visitation. Juneau's cruise ship season is greatest during the months of May through September. With an average of just over a million cruise ship passengers per season, an influx of over 17,000 people can impact the port over the course of a single day. Table 11 presents an example of the cruise ship capacity that is in port for each day over a peak summer week in 2002.

Figure 9 presents the arrival and departure times (by day and by passenger capacity), while Figure 10 presents a running total of cumulative capacity in port. This data indicates the following:

- Each day can vary and there is no consistent pattern. This indicates that a circulator program would need to vary and react to port activity.
- Daily cruise ships in port at once vary between 4 and 6 ships, with individual ship capacities ranging from as low as 70 passengers and upwards to nearly 5,000 passengers.
- Ships typically arrive in port in the 6 AM and 7 AM hour, though there is typically at least one ship arriving in the early afternoon (1 PM hour) and scattered arrivals at other times up until 3 PM.
- Ships predominantly depart between 9 PM and 11 PM, though there are departures as early as the 1 PM hour and another concentration around 5 PM.
- The length of stay in port varies between 7 hours and 16 hours, with an average of 11.3 hours. Longer stays in port increase the potential for individual passengers to make a second shore trip.
- The peak week peak capacity (17,453 passengers) was reached on both Wednesday and Saturday, both in the afternoon hours. Even within this peak week, the peak capacity in port varies by approximately 6,000 passengers (or roughly 30 percent).
- As many as 8,652 passengers may arrive within an hour and 9,175 over a two-hour period, putting an obvious strain on the ability of ground transportation to serve the passengers reaching the docks. At the end of the day, up to 12,813 of ship capacity can depart in any one hour.

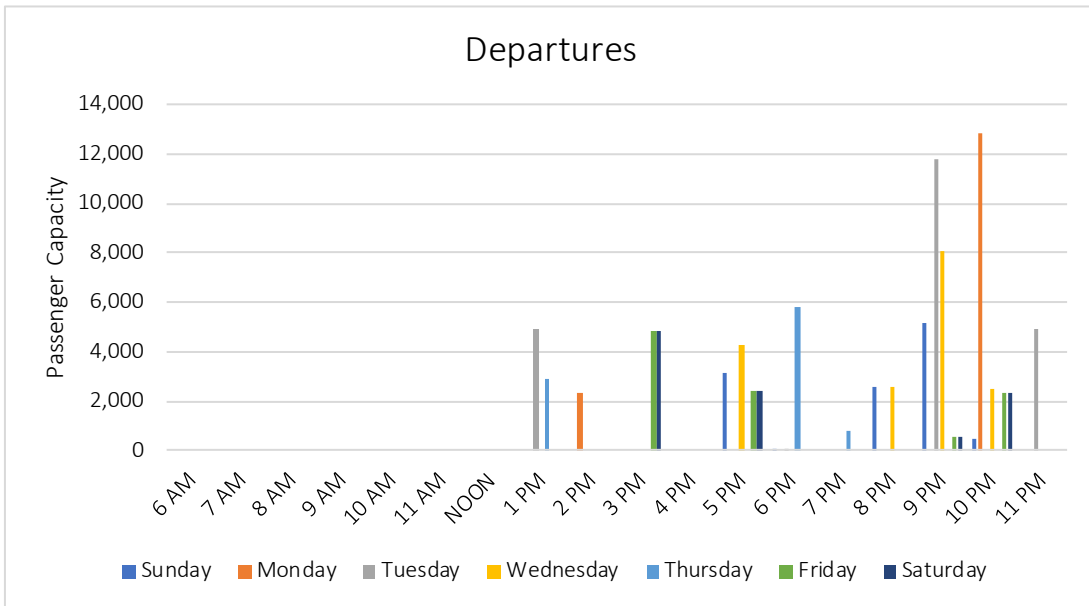
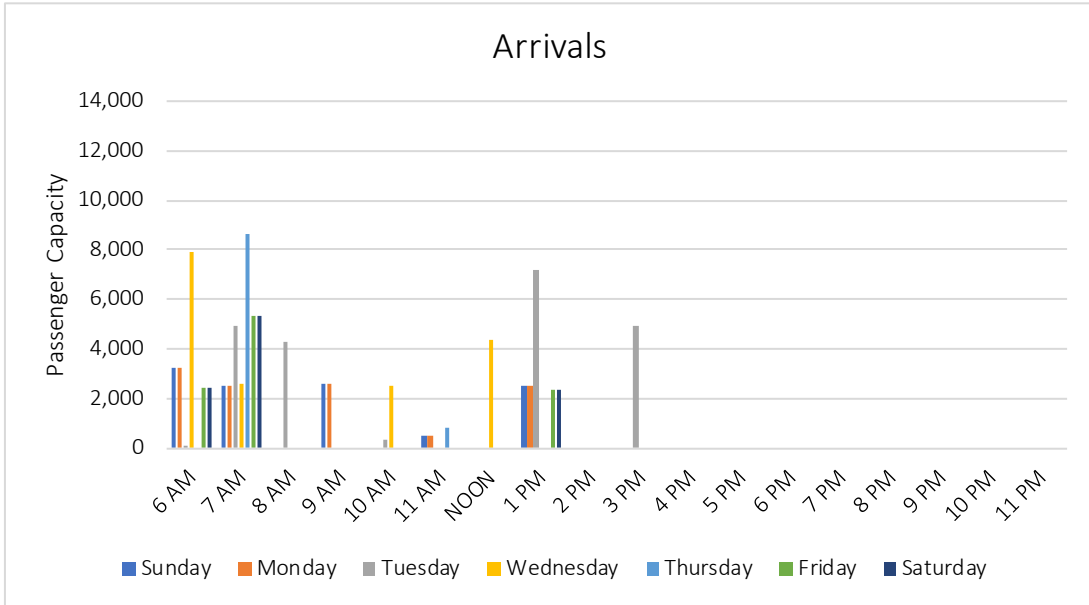
**Table 11: Ships in Port by Day and Hour for Peak Summer Week**

July 31 - Aug 6

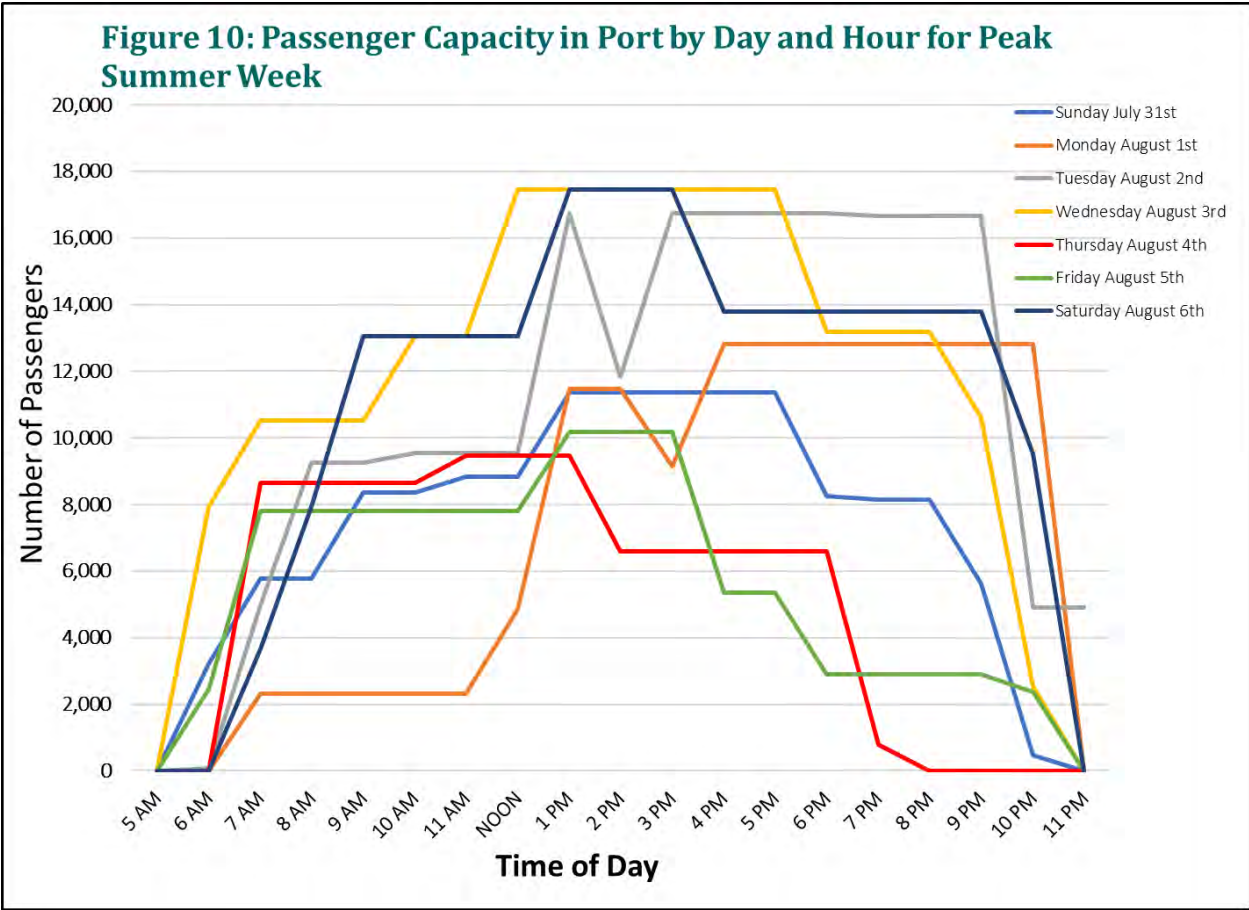
Ship	Capacity	Hour												Hours in Port									
		5 AM	6 AM	7 AM	8 AM	9 AM	10 AM	11 AM	NOON	1 PM	2 PM	3 PM	4 PM		5 PM	6 PM	7 PM	8 PM	9 PM	10 PM	11 PM		
National Geographic Grand Princess	100																					13	
Carnival Spirit	2,549																						12
Celebrity Millennium	2,590																						14
Silver Shadow	466																						12
Radiance of the Sea	2,546																						8
Ships in Port	0	2	3	3	4	4	5	5	6	6	6	6	6	5	4	4	3	1	0	0	0		
Capacity Arriving	0	3,222	2,549	0	2,590	0	466	0	2,546	0	0	0	0	0	0	0	0	0	0	0	0		
Capacity Departing	0	0	0	0	0	0	0	0	0	0	0	0	3,122	100	0	2,546	5,139	466	0	0	0		
Capacity in Port	0	3,222	5,771	5,771	8,361	8,361	8,827	8,827	11,373	11,373	11,373	11,373	11,373	11,373	8,251	8,151	8,151	5,605	466	0	0		
Norwegian Sun	2,323																					7	
Eurodam	2,525																					11	
Koningsdam	3,194																					10	
Solstice	3,420																					10	
Crown Princess	3,674																					7	
Ships in Port	0	0	1	1	1	1	1	2	4	4	3	4	4	4	4	4	4	4	4	0	0		
Capacity Arriving	0	0	2,323	0	0	0	0	2,525	6,614	0	0	3,674	0	0	0	0	0	0	0	0	0		
Capacity Departing	0	0	0	0	0	0	0	0	0	2,323	0	0	0	0	0	0	0	0	12,813	0	0		
Capacity in Port	0	0	2,323	2,323	2,323	2,323	2,323	4,848	11,462	11,462	9,139	12,813	12,813	12,813	12,813	12,813	12,813	12,813	12,813	0	0		
National Geographic Sea	70																					13	
Norwegian Bliss	4,903																					7	
Majestic Princess	4,272																					14	
Star Breeze	312																					12	
Ovation of Seas	4,819																					9	
Westerdam	2,362																					9	
Norwegian Encore	4,903																					9	
Ships in Port	0	1	2	3	3	4	4	4	6	5	6	6	6	6	5	5	5	5	1	1	0		
Capacity Arriving	0	70	4,903	4,272	0	312	0	0	7,181	0	4,903	0	0	0	0	0	0	0	0	0	0		
Capacity Departing	0	0	0	0	0	0	0	0	0	4,903	0	0	0	0	70	0	0	11,765	0	4,903	0		
Capacity in Port	0	70	4,973	9,245	9,245	9,557	9,557	9,557	16,738	11,835	16,738	16,738	16,738	16,738	16,668	16,668	16,668	4,903	4,903	0	0		
Ruby Princess	3,672																					16	
Royal Princess	4,272																					12	
Serenade of the Sea	2,580																					14	
Nieuw Amsterdam	2,527																					14	
Discovery Princess	4,402																					10	
Ships in Port	0	2	3	3	3	4	4	5	5	5	5	5	5	4	4	4	3	1	0	0	0		
Capacity Arriving	0	7,944	2,580	0	0	2,527	0	4,402	0	0	0	0	0	0	0	0	0	0	0	0	0		
Capacity Departing	0	0	0	0	0	0	0	0	0	0	0	0	0	4,272	0	2,580	8,074	2,527	0	0	0		
Capacity in Port	0	7,944	10,524	10,524	10,524	13,051	13,051	17,453	17,453	17,453	17,453	17,453	17,453	13,181	13,181	13,181	10,601	2,527	0	0	0		
Norwegian Jewel	2,866																					7	
Noordam	2,366																					12	
Eclipse	3,420																					12	
Regatta	803																					8	
Ships in Port	0	0	3	3	3	3	4	4	4	3	3	3	3	3	1	0	0	0	0	0	0		
Capacity Arriving	0	0	8,652	0	0	0	803	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Capacity Departing	0	0	0	0	0	0	0	0	2,866	0	0	0	0	0	5,786	803	0	0	0	0	0		
Capacity in Port	0	0	8,652	8,652	8,652	8,652	9,455	9,455	9,455	6,589	6,589	6,589	6,589	6,589	803	0	0	0	0	0	0		
Disney Wonder	2,456																					12	
Seabourn Odyssey	540																					15	
Quantum of the Sea	4,819																					9	
Zuiderdam	2,364																					10	
Ships in Port	0	1	3	3	3	3	3	3	4	4	4	3	3	2	2	2	2	2	1	0	0		
Capacity Arriving	0	2,456	5,359	0	0	0	0	0	2,364	0	0	0	0	0	0	0	0	0	0	0	0		
Capacity Departing	0	0	0	0	0	0	0	0	0	0	4,819	0	2,456	0	0	0	540	2,364	0	0	0		
Capacity in Port	0	2,456	7,815	7,815	7,815	7,815	7,815	7,815	10,179	10,179	10,179	10,179	5,360	5,360	2,904	2,904	2,904	2,364	0	0	0		
Carnival Splendor	3,619																					9	
Grand Princess	3,122																					16	
Seven Seas Mariner	779																					16	
Silver Shadow	466																					16	
Carnival Spirit	2,549																					10	
Ships in Port	0	0	1	2	4	4	4	4	5	5	5	4	4	4	4	4	4	4	3	0	0		
Capacity Arriving	0	0	3,672	4,272	5,107	0	0	0	4,402	0	0	0	0	0	0	0	0	0	0	0	0		
Capacity Departing	0	0	0	0	0	0	0	0	0	0	3,672	0	0	0	0	0	4,272	9,509	0	0	0		
Capacity in Port	0	0	3,672	7,944	13,051	13,051	13,051	13,051	17,453	17,453	17,453	13,781	13,781	13,781	13,781	13,781	13,781	9,509	0	0	0		

# Figure 9: Hourly Arriving and Departing Ship Capacity by Day and Hour

Peak Summer Week







**MENDENHALL GLACIER VISITOR ACTIVITY**

Mendenhall Glacier is the prime visitor destination in the Juneau area, generating 378,000 commercial visitors in 2021 (85 percent of the 2019 pre-pandemic figure). The majority of these visitors (approximately two-thirds) specifically visit the Visitor Center area.

The USFS regulates private transportation services to Mendenhall Glacier Recreation Area. Per the most recent award (in 2015) the USFS lists a total of 13 firms that provide transportation to/from the glacier (2 shuttle services, 2 taxi companies, 1 limo company and 8 other transport/tour companies). These companies are allowed a specific capacity (totaling 157,179 visitors per year to the Visitor Center and an additional 81,553 visitors per year to other access points).

The average length of time spent at Mendenhall Glacier ranges from 75 to 90 minutes. Visits to the glacier are often packaged together with stops at other visitor activities, such as the fish hatchery. Per the *Mendenhall Glacier Recreation Area Market Demand and Economic Analysis* report prepared by the USFS in 2022, a round-trip to the Glacier can be had for as little as \$50.

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## PUBLIC AND STAKEHOLDER OUTREACH

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During late October and early November of 2022 an online community survey was launched and shared with local businesses and members of the community. The following is a brief overview of the online survey followed by a summary of the on-site stakeholder outreach conducted during LSC’s on-site visit November 8<sup>th</sup>-10<sup>th</sup>, 2022.

### **ONLINE COMMUNITY SURVEY RESULTS**

An online community survey was conducted between October 28<sup>th</sup> and November 18<sup>th</sup>, 2022. This survey aimed to better understand the community’s perspective of the current challenges related to cruise ship passengers and other tourism occurring in Juneau. A total of 38 people, representing 34 different organizations completed the survey. The following is a summary of their responses.

#### **Q1. What organization do you represent?**

A total of 38 people took the survey, representing 34 different organizations throughout Juneau. A complete list of these participating organizations can be found in Appendix A. The following is an abbreviated list of those who participated:

- Alaska State Museum
- AWARE
- Juneau Lighthouse Tours
- Greater Juneau Chamber of Commerce
- Red Dog Saloon
- Travel Juneau
- USDA Forest Service

#### **Q2. On a scale of 1 (not a problem) to 5 (very serious problem), please indicate your perception of the following issues during the peak summer tourism season:**

Survey participants were given five potential issues that occur during the summer peak season. Of these potential issues downtown parking problems was ranked as the greatest problem with 39 percent of respondents indicating it as a 5 (very serious problem), followed by downtown traffic congestion (37 percent, ranked as a 4).

#### **Q3: Beyond the cruise ship docks, what visitor activity centers do you think a circulator should serve?**

About 18 percent of respondents agreed that downtown Juneau and the Alaska State Museum should be served by a circulator, followed by the airport (13 percent) and the Mendenhall Glacier (12 percent). Of the 9 percent of participants who indicated “other”, destinations included the Ferry Terminal, Perseverance Trail, and the State Capitol.

**Q4: On a scale of 1 (not important at all) to 5 (very important), please identify the importance of potential goals of a visitor circulator service.**

When asked which circulation service goals were most important, survey respondents indicated that improving the experience provided to Juneau visitors and spreading visitor activity & spending beyond existing locations.

**Q5: In general, do you support the concept of a summer visitor circulator service?**

A majority of community members (76 percent) responded that they do support the concept of a summer visitor service with only 5 percent indicating that they weren't in support. Of the 19 percent who said "maybe" their answers stated that it would depend on what the study finds and recommends, if it can actually reduce congestion, if it were provided by existing transportation businesses in the area, and what the costs will be to the community.

**Q6. How do you think a Juneau Circulator could benefit you and your business?**

When asked the above question, the most frequent response included something to the effect of reducing congestion in Juneau and supporting locally-owned businesses. Other benefits highlighted the need desire to distribute tourists to new destinations in and around Juneau, provide positive environmental impacts, and alleviate pressure on Capital Transit during peak season. There were a handful of individuals who did not see a benefit to adding a Circulator service to the region.

**STAKEHOLDER PRESENTATION AND WORKSHOP**

During an on-site stakeholder meeting on November 8th, 2022, a group of 16 community members gathered to discuss potential types of circulator transportation services and the benefits and challenges of each. This stakeholder group was made up of representatives of CBJ, National Forest Service, Travel Juneau, the Downtown Business Association, existing transportation providers, cruise ship corporations, and tour businesses.

During the stakeholder meeting, there were several existing challenges identified by our stakeholder group ranging from the overcrowding of Capital Transit buses to auto and pedestrian congestion along South Franklin Street. It was agreed by attendees that adding more buses of any kind to South Franklin would not result in less congestion but rather add to the competition.

**Current Transportation Challenges**

The following is a short list of current challenges being faced by business owners and transportation providers:

- Morning cruise passengers are filling up Capital Transit buses due to visitors' ability to research cheaper transportation to and from the Glacier. This results in overfilled buses and the inability for Capital Transit to pick up other riders along their route.
- Driver shortages.
- Visitors are looking for a cheaper way to get to Mendenhall Glacier.
- The CBJ and local environmental groups are concerned about road congestion and increased CO2 emissions in the downtown Juneau and Glacier areas.

- Lack of efficiency and safety issues near glacier area.
- Poor visitor experience when guests get lost/can't make connections between various destinations.
- Major sidewalk congestion between South Franklin Dock to downtown core/up the hill (Willoughby District).

### **Potential Benefits**

When considering the possibility of a Circulator service in Juneau, stakeholders indicated that they would like it to provide the following benefits to Juneau and its residents and business owners:

- Decrease congestion downtown.
- Increase visitor spending while in port.
- Decrease overcrowding on Capital Transit buses due to visitors at peak times.
- Improve visitor experience in getting around Juneau.
- Move more people deeper into the core of Downtown Juneau (beyond immediate wharf area) and thus supporting more locally-owned businesses.
- Encourage the likelihood of a second outing while in port.

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## NEEDS ASSESSMENT AND SERVICE CONCEPTS

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The following provides an overview of the perceived challenges and issues currently being faced by Juneau in relation to large populations of peak season visitors. This assessment is then followed by a brief description of three potential transportation alternatives to be considered further moving forward.

### NEEDS ASSESSMENT

Based on the data collected throughout the study process (as presented above and in Technical Memorandum One) as well as stakeholder interviews and community surveys, the following three major transportation challenges have been identified.

In assessing the need for expanded public circulator/transit options, a key consideration is the existing ability for private firms to meet these needs. Put simply, there is no need to provide a public service if the private sector is already adequately serving the need. As documents in this study, the private transportation industry in Juneau is very robust. Therefore, this assessment of needs focuses on those elements not currently well-served by the private firms or where current services result in issues.

### Downtown Juneau Visitor Congestion

The high levels of summer cruise ship passenger activity combined with the very constrained geography of downtown Juneau leads to a concentration of visitors in the immediate dock area, particularly along South Franklin Street and Marine Way. This results in a variety of issues:

- Traffic congestion.
- A limited ability for visitors (particularly those with mobility limitations) to explore the downtown area more than a block or two beyond the waterfront. This results in a diminishment in the quality of a Juneau visit, congestion on the sidewalks and in the stores, and a reduction in business activity in the outlying areas such as north of 3<sup>rd</sup> Street.
- Reduced visitation levels at facilities such as the Alaska State Museum and the Wickersham State Historic Site.

The need for expanded visitor transit service in the downtown area would also be increased through the expansion of port facilities (per the Huna Totem proposal) which will spread visitor activity beyond the current concentrated area.

### Visitor Impact on Capital Transit Capacity

The growth in cruise passenger activity levels has resulted in times during peak summer days when visitors (largely traveling to and from Mendenhall Glacier) have filled Capital Transit buses leaving and returning to downtown Juneau. This in turn can result in Juneau residents being precluded from being able to accomplish their transit trip due to the lack of capacity on the buses. For trips such as medical appointments or employment, this can have a substantial impact on individuals, indicating a need for additional transit capacity.

During the summer months of 2023, Capital Transit kept a running count of days, number of passengers, and at which stops people were left behind by Capital Transit due to being over capacity. As shown in Tables 12, 13, and 14, the following is true in regard to visitor impacts on Capital Transit during the busy summery months:

- Days that experienced the greatest number of passengers being left behind were Wednesdays (221 passengers or 41 percent) followed by Mondays (134 passengers or 25 percent).
- By time of day, the largest proportion of passengers left behind occurs in the 2:00 PM hour (a total of 185 passengers over the survey period). As shown in Table 12, passengers are largely left at the curb between 10:00 AM and 3:30 PM, with an additional smaller increase between 5:30 PM and 6:30 PM.
- As shown in Table 13, an analysis of high capacity (more than 10,000 cruise ship passengers) days were compared against number of passengers being left behind at stops by Capital Transit. While there were many high-capacity days that experienced a fair share of left behind passengers, there were several high-capacity days that experienced very few left behind passengers.

**TABLE 12: Capital Transit Passengers Unserviced by Time of Day**

Half Hour Starting	Number of Incidences				Total Number of Passengers			
	Rt 3	Rt 4	Rt 8	Total	Rt 3	Rt 4	Rt 8	Total
8:00	0	0	1	1	0	0	12	12
8:30	0	0	1	1	0	0	2	2
9:00	0	0	0	0	0	0	0	0
9:30	2	0	0	2	3	0	0	3
10:00	2	1	1	4	8	25	1	34
10:30	9	0	0	9	19	0	0	19
11:00	2	8	0	10	3	26	0	29
11:30	8	8	0	16	22	18	0	40
12:00	3	3	0	6	4	6	0	10
12:30	6	1	0	7	34	1	0	35
13:00	1	2	0	3	1	7	0	8
13:30	3	4	0	7	15	4	0	19
14:00	2	17	0	19	2	112	0	114
14:30	7	2	0	9	55	26	0	81
15:00	2	6	0	8	4	38	0	42
15:30	0	0	0	0	0	0	0	0
16:00	1	0	1	2	2	0	1	3
16:30	0	0	0	0	0	0	0	0
17:00	0	1	0	1	0	2	0	2
17:30	2	3	0	5	9	12	0	21
18:00	0	13	0	13	0	40	0	40
18:30	1	1	0	2	2	1	0	3
19:00	0	2	0	2	0	12	0	12
19:30	0	1	0	1	0	1	0	1

Source: LSC Transportation Consultants and ()  
 Note: Data date range May 8 - August 16, 2023



**Table 13: Analysis of Passengers Unserved on Capital Transit vs. Ship Capacity**

Date	# of Capital Transit Passengers Left at Stop	Total Daily Cruise Ship Capacity in Port	Day of Week	Ship Capacity Exceeds 10,000
5/8/2023	10	11,870	Monday	Yes
5/12/2023	2	8,240	Friday	
5/13/2023	1	9,455	Saturday	
5/14/2023	31	6,182	Sunday	
5/16/2023	10	15,618	Tuesday	Yes
6/2/2023	12	9,250	Friday	
6/5/2023	2	13,460	Monday	Yes
6/7/2023	13	14,502	Wednesday	Yes
6/19/2023	64	11,860	Monday	Yes
6/20/2023	3	19,942	Tuesday	Yes
6/27/2023	4	17,620	Tuesday	Yes
6/30/2023	19	10,400	Friday	Yes
7/8/2023	6	7,667	Saturday	
7/10/2023	1	11,220	Monday	Yes
7/11/2023	1	18,700	Tuesday	Yes
7/12/2023	62	12,436	Wednesday	Yes
7/13/2023	3	9,450	Thursday	
7/14/2023	16	8,970	Friday	
7/15/2023	4	8,206	Saturday	
7/16/2023	5	9,071	Sunday	
7/17/2023	5	11,160	Monday	Yes
7/19/2023	65	14,502	Wednesday	Yes
7/20/2023	11	10,604	Thursday	Yes
7/21/2023	14	8,490	Friday	
7/22/2023	1	9,507	Saturday	
7/24/2023	29	11,160	Monday	Yes
7/25/2023	3	14,620	Tuesday	Yes
7/28/2023	8	8,040	Friday	
7/29/2023	2	8,206	Saturday	
7/30/2023	8	10,113	Sunday	Yes
7/31/2023	23	11,160	Monday	Yes
8/1/2023	1	16,860	Tuesday	Yes
8/2/2023	21	13,512	Wednesday	Yes
8/3/2023	2	8,392	Thursday	
8/5/2023	1	7,355	Saturday	
8/8/2023	4	15,618	Tuesday	Yes
8/9/2023	26	13,426	Wednesday	Yes
8/10/2023	7	12,500	Thursday	Yes
8/15/2023	2	13,800	Tuesday	Yes
8/16/2023	34	11,420	Wednesday	Yes
Total	536			

Source: Capital Transit Passenger Counts, Summer Months 2023

For purposes of driver scheduling, it would be good to have a criteria that could be used to define in advance when passenger overcrowding is expected to occur. To provide this, the data was analyzed to assess the relationship between the total scheduled cruise ship capacity in port and the number of passengers left behind. The lower this criteria, the more of the overcrowding problem is addressed but the higher the cost of tripper service. On the other hand, if this criteria is set too high, much of the overcrowding would not be addressed. As shown in Table 14, this analysis indicates that almost all of the overcrowding (94 percent) was observed on days when a ship capacity of at least 7,000 beds were in port.

**Table 14: Analysis of Cruise Ship Capacity in Port Criteria for Scheduling Tripper Buses**

*Based on Summer 2023 Data*

Daily Cruise Ship Capacity in Port	# Passengers Left on Days with More than Identified Daily Cruise Ship Capacity in Port	Behind Passengers Provided with Tripper Service With Specified Daily Cruise Ship Capacity Criteria	# Days per Year With More than Identified Daily Cruise Ship Capacity
5,000	536	100%	40
6,000	536	100%	40
7,000	505	94%	39
8,000	498	93%	37
9,000	450	84%	30
10,000	428	80%	25
11,000	390	73%	22
12,000	224	42%	15
13,000	155	29%	13
14,000	104	19%	9
15,000	23	4%	6
16,000	9	2%	4
17,000	8	1%	3
18,000	4	1%	2
19,000	3	1%	1

*Source: Capital Transit Passenger Counts, Summer Months 2023*

### **Inconvenient Public Transit to Mendenhall Glacier**

Capital Transit’s closest stop to the Mendenhall Glacier Visitors Center is at Dredge Lake Road / Mendenhall Loop Road, which is a 1 ¼ mile walk (on a paved multipurpose path) to the Visitor Center. While Capital Transit does not directly market to visitors, many visitors have discovered that the transit program provides a much less expensive transportation option between the cruise ship docks to the glacier than the private transportation services. Once at the glacier, however, some passengers find the walk back to the transit stop to be too much of a challenge and ask the private firms for trips back to the waterfront.

## **POTENTIAL ALTERNATIVES**

The following are concepts identified as potentially addressing the needs discussed above. Each of these concepts (except Option 5) will be analyzed and presented in the following chapters, including service impacts and ridership potential.

### **Option 1: Downtown Circulator (Public Transit)**

One ‘Downtown Circulator’ option would be a publicly run transit service. The service area would run as far east as South Franklin Street, running north towards 6<sup>th</sup> Street and the Capital Building, before heading down Main Street towards Egan Drive. This service could also run west towards the Museum, Overstreet Park as well as the future site of the Huna Totem Dock. It would be a well-marketed, simple, easy to use, and frequent service that would help in distributing locals and visitors throughout town for increased economic development.

### **Option 2: Downtown Circulator (Private Transportation Providers)**

Another ‘Downtown Circulator’ option worth exploring further would be a privately run transit service. Just like Option 1, the circulator would run as far east as South Franklin Street, running north towards 6<sup>th</sup> Street and the Capital Building, before heading down Main Street towards Egan Drive.

### **Option 3: Capital Transit Tripper**

A Tripper service would shadow existing Capital Transit Route 3 or 4 on peak summer season days to provide additional service along runs that are inundated with visitor passengers. It would only run during peak days and hours to allow additional service for local passengers. Routes being assisted by a tripper bus would need clear signage showing that an additional bus is coming.

### **Option 4: Limited Capital Transit Service to Mendenhall Glacier**

Limited Capital Transit service to a possible staging area approximately ¼ mile south from the Glacier Spur Road Parking Lot could occur during the afternoons of peak season. This service would add about 5 minutes running time to the existing Route 8. By providing afternoon service only, the goal of this limited service would be to retrieve visitors that had taken transit to Dredge Lake Road and walked to the Glacier, without making the public transit access to the glacier so attractive that it significantly impacts the private transportation firms and/or adds significantly to the impact that visitors are having on the Capital Transit capacity.

### **Option 5: Full Circulator Service to the Mendenhall Glacier**

Early in the study, it was determined that providing a convenient low-fare public transit option directly to and from the Mendenhall Glacier would effectively out-compete the local private transportation firms currently providing that same service. Furthermore, the anticipated demand would also be so great that it would likely put multiple private firms out of business.

In addition, meeting such demand would require a large fleet of 15 buses or more. Even when considering a very limited service (about 4 buses running every 15 minutes on a 1-hour loop) the service would still be overwhelmed at peak times, with long lines and wait times to board, resulting in a poor visitor experience.

Given that direct service to the Glacier would result possibly putting local private providers out of business while providing either a very expansive service or a limited and less efficient service, a direct circulator service to the Mendenhall Glacier was not considered further in the study.

## INTRODUCTION

Building upon previous chapters, this chapter details various possible options beginning with publicly and privately operated downtown circulators, followed by the Capital Transit tripper service, and concluding with limited service to the Mendenhall Glacier. The following options are all expected to serve the passenger and tourist volumes experienced in Juneau during the peak summer season. For this reason, we have used the August average daily passenger capacity from 2022 combined with the arrivals and departures information presented earlier in the study. This information is summarized in Table 15 below and expanded upon later in this Tech Memo. The occupancy rate of passengers versus capacity varies from year to year; for planning purposes, we multiplied the maximum capacity for each ship by a factor of 0.90 to define the demand level of passengers.

**Table 15: Daily Cruise Capacity and Passengers by Day of Week**

*Average August Figures*

Day of the Week	Passenger Capacity	Expected Passenger Volumes
Sunday	11,356	10,220
Monday	13,042	11,738
Tuesday	16,492	14,843
Wednesday	19,604	17,644
Thursday	7,084	6,375
Friday	8,582	7,724
Saturday	5,931	5,338

*Source: Cruise Arrivals and Departures, August 2022*

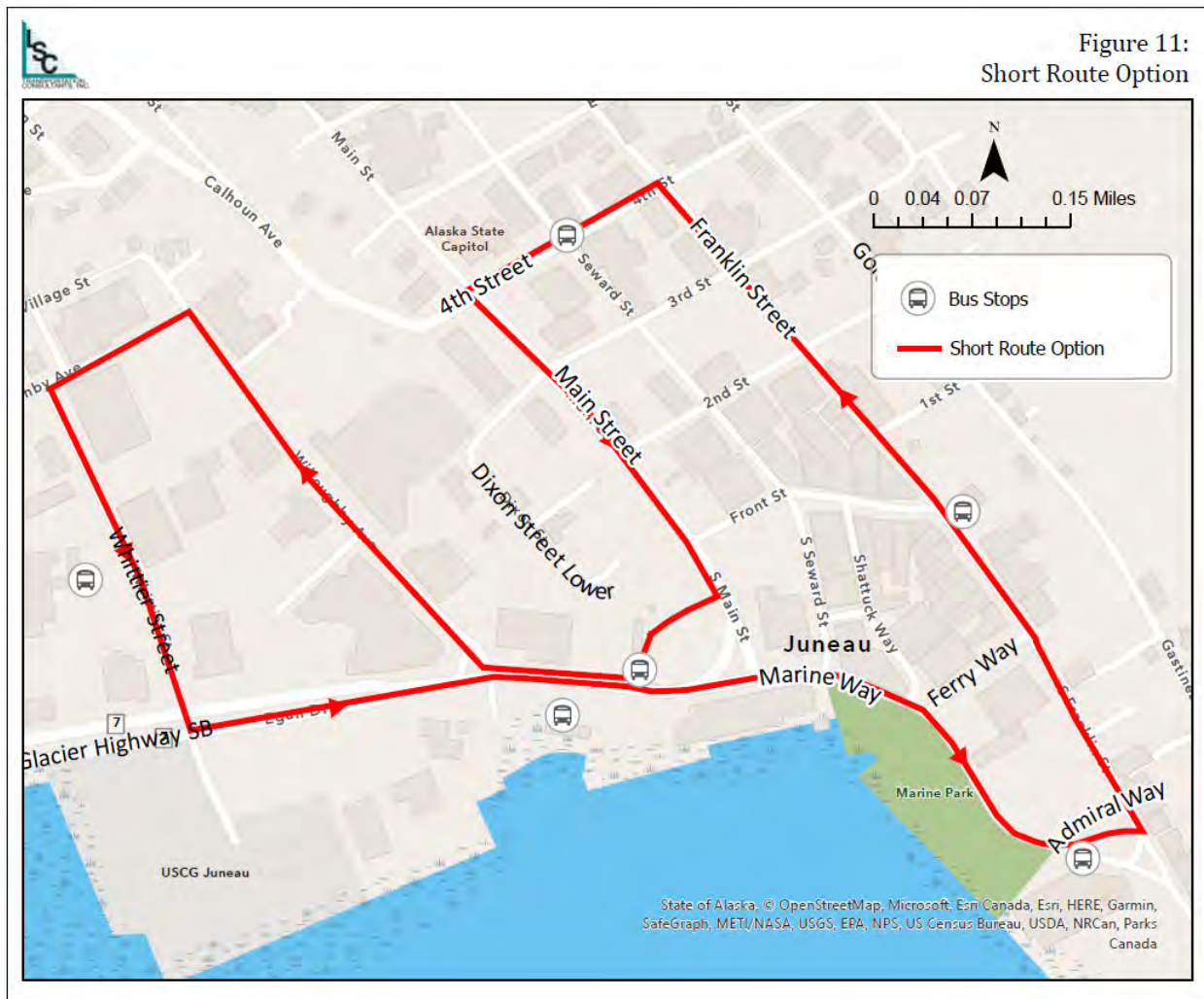
## DOWNTOWN CIRCULATOR

The general concept of a downtown circulator is to provide a short, simple, high-frequency transit service connecting the dock areas with nearby visitor-oriented activities. The goals for this service would be to better distribute visitors around the area to expand visitor spending, reduce pedestrian congestion in the areas immediately around the docks, and enhance the visitor experience while in Juneau by improving access to other cultural and historic sites. While it would focus on serving visitors, it would also help residents and downtown workers to move around the area without adding to traffic and parking problems. As discussed below, two route options were evaluated.

## Short Route Option

The Short Route Option is shown in Figure 11. As shown, it circulates in a counter-clockwise direction running east along Egan Drive, north along South Franklin Street, turning left along 4<sup>th</sup> Street, and heading south on Main Street towards the Downtown Transit Center (DTC). From the DTC, the service runs west turning north along Willoughby Avenue before turning left on Whittier Street. After stopping at the Alaska State Museum, the service turns back onto Egan Drive and begins the route again. Major stops include the Downtown Transit Center, the Alaska State Capital, and the Alaska State Museum. Note that the route does not extend south along Franklin Street beyond Marine Way to avoid adding to the congestion in this area and getting excessively delayed.

As shown in Table 16, this route would require an estimated 15 minutes to operate (including passenger loading and unloading time). Given this short time and considering the difficulties of keeping to a defined schedule, it would not operate on a defined schedule but would rather simply operate continual loops. On average, four round trips would be completed each hour.

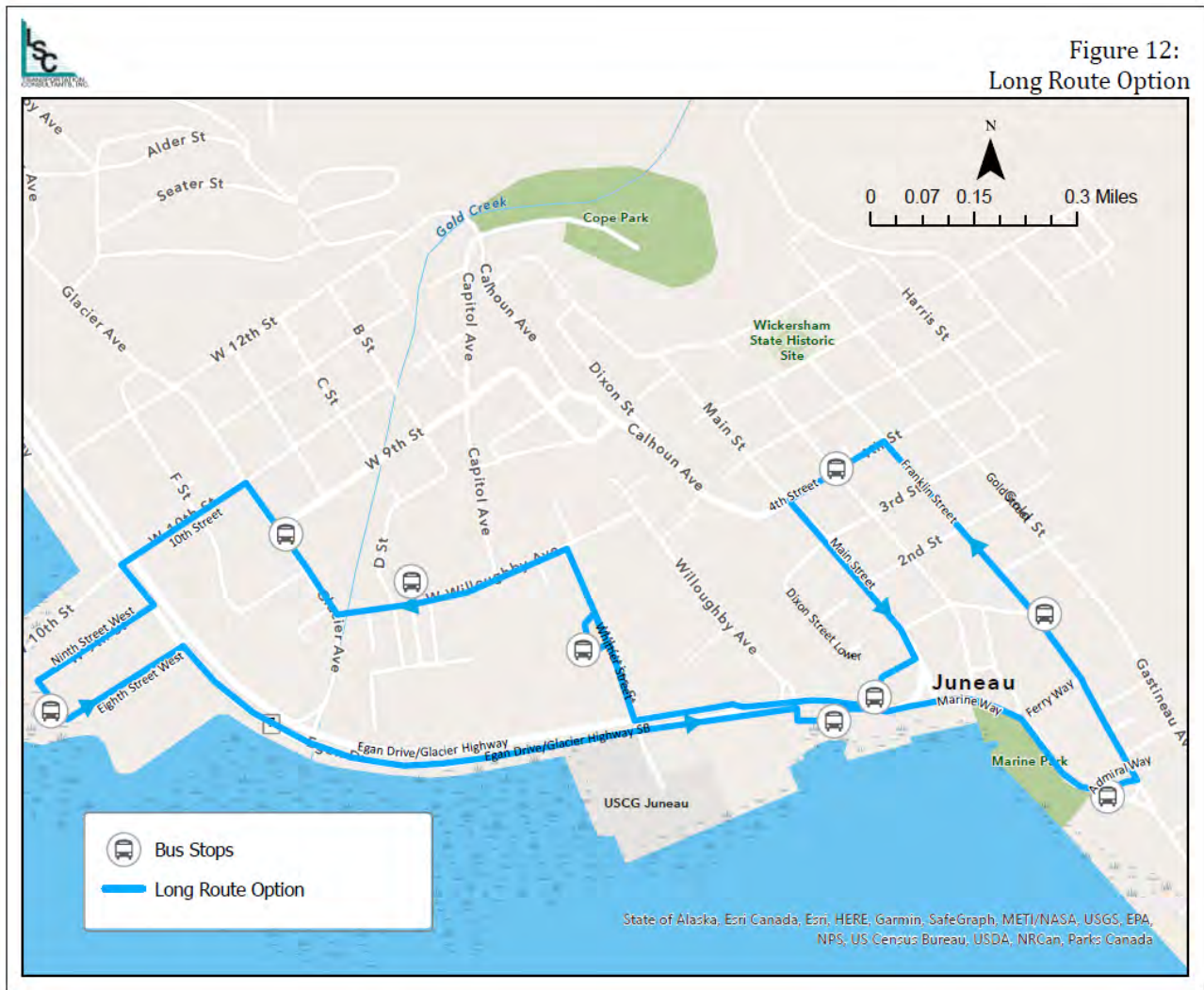


**Table 16: Example Downtown Circulator Running Times**

Stop	Miles From Start	Total Minutes
<b>Short Route Option</b>		
Downtown Transit Center		0
Alaska State Museum	0.4	2
Egan & Willoughby (76 Egan)	0.6	5
Library/Marine Parking Garage	0.9	9
Front & Franklin	1.0	11
Seward & 4th	1.3	13
Downtown Transit Center	1.5	15
<i>Cycles per Hour</i>		<i>4.0</i>
<b>Long Route Option</b>		
Downtown Transit Center		0
Alaska State Museum	0.3	2
9th & Glacier (Federal Building)	0.7	4
Overstreet Park	1.0	7
Egan & Willoughby (76 Egan)	1.7	10
Library/Marine Parking Garage	1.9	14
Front & Franklin	2.1	16
Seward & 4th	2.3	18
Downtown Transit Center	2.5	20
<i>Cycles per Hour</i>		<i>3.0</i>

**Long Route Option**

The longer Downtown Circulator is shown in Figure 12. Similar to the shorter route option, the route circulates in a counter-clockwise direction running east along Egan Drive, north along South Franklin Street, turning left along 4<sup>th</sup> Street, and heading south on Main Street towards the downtown transit center. From the transit center, the service runs west turning north along Whittier Street to stop at the Alaska State Museum. From there the service continues north along Whittier Street, turns left on Willoughby Avenue stopping at the existing bus stop near Foodland Shopping Center before continuing onto Glacier Avenue. The route then turns onto 10<sup>th</sup> Street, traveling onward to Overstreet Park before returning along Egan Drive to begin the route again. Major stops include the Downtown Transit Center, the Alaska State Capital, the Alaska State Museum, and Overstreet Park. This route requires 20 minutes per loop to operate, including loading and unloading time. It would operate continually.



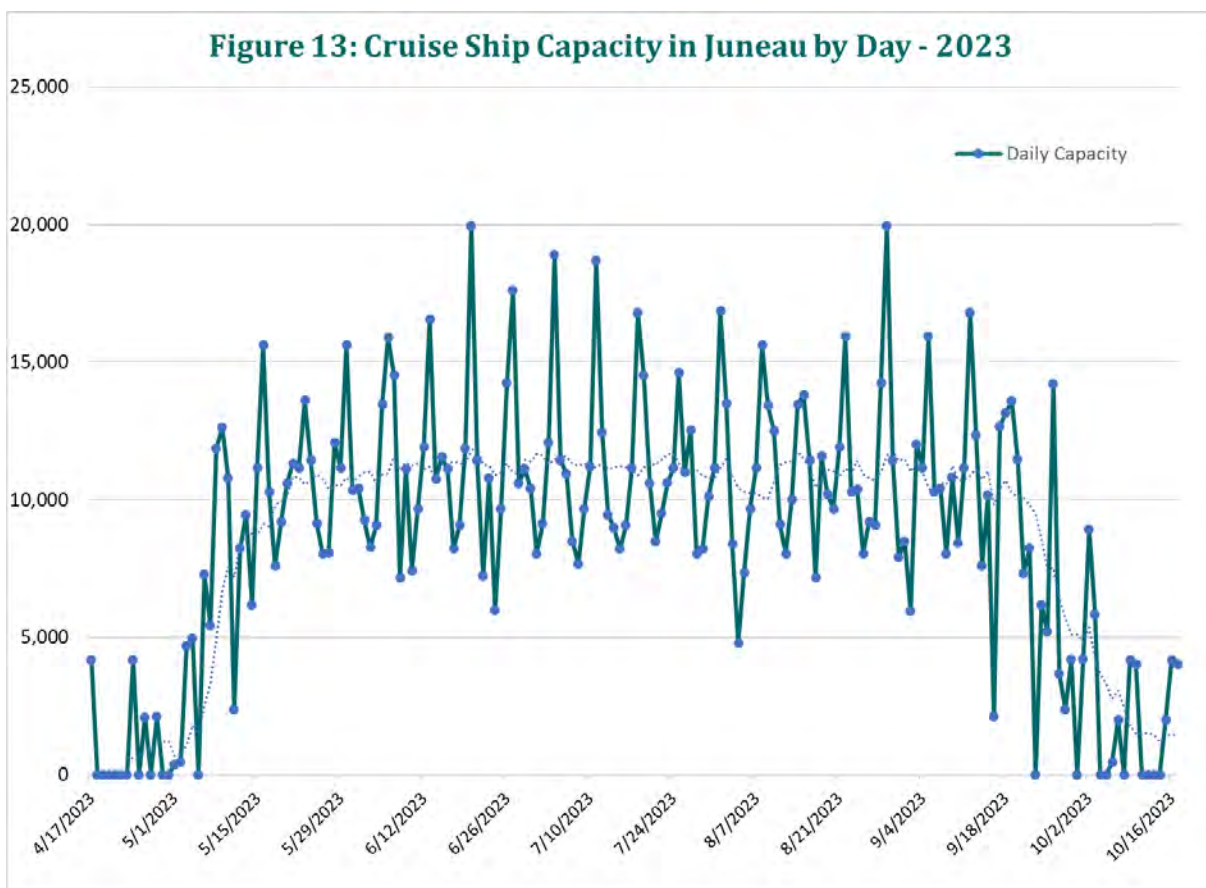
### Other Route Options Considered

During the course of our analysis, we also considered a route that ran north of downtown along Calhoun Avenue. This option proved to be too narrow for frequent transit service, with limited sight distance. As it also did not serve very many additional visitor attractions, it was removed from further analysis.

### Season of Service

As a basis for evaluating the length of the operating season, the total cruise ship capacity in Juneau was plotted for the 2023 cruising season. Figure 13 shows how the daily total cruise ship capacity by day varies dramatically from day to day, but the busy season generally extends from mid-May through mid-September. Based on this, two scenarios were evaluated for the length of the season: a shorter season from May 15 to September 20 (129 days) and a longer season from May 1 to October 3 (156 days). Service would be operated seven days a week.





### Projected Passenger Trips on a Busy Day

Potential daily ridership on a circulator service was estimated for a “design day” defined as the fifth busiest day of the 2023 cruising season. This design level results in a system capacity that is adequate for the large proportion of days, while avoiding additional costs that would only potentially be needed a few days per year. It considered total passenger activity and assessed how various groups of passengers with differing schedules of activities while in Juneau would use a circulator service. As shown in Table 17, the analysis procedure consisted of the following steps:

- Figure 13 shows the anticipated cruise ship capacity for 2023 by day. The fifth highest value was 17,600.
- A 90 percent occupancy factor was applied to identify 15,840 cruise ship passengers visiting Juneau on the design day.
- It is reported that a small proportion of passengers choose to not leave the ship. Assuming a five percent proportion, the number of passengers debarking totals 15,000.

**Table 17: Estimate of Daily Circulator Ridership on Design Day**

Daily Ship Capacity - 5th Highest Day	17,600				
Estimated Occupancy	90%				
Daily Passengers	15,840				
Percent Not Leaving the Ship	5%				
Daily Ship Passengers on the Dock	15,000				
Percent by Length of Stay	≥ 8 Hours		< 8 Hours		
	93%		7%		
	14,000		1,000		
Percent With Prebooked Excursion	Yes	No	Yes	No	
	60%	40%	75%	25%	
	8,400	5,600	750	250	
Percent Without Prebooked Excursion Making Same Day Excursion	Yes		No		
	75%	25%	75%	25%	
	4,200	1,400	190	60	
Percent Making an Excursion Returning to Ship	75%	75%			
Percent Making a Second Excursion	25%	25%			
	2,100	1,400			Total
<i>Total Potential Circulator Ridership</i>	<i>2,100</i>	<i>1,400</i>	<i>1,400</i>	<i>60</i>	<i>4,960</i>

**Shorter Route**

Percent Choosing to Use Circulator	15%	15%	20%	20%	TOTAL
Persons Using Circulator	315	210	280	10	815
One-Way Passenger-Trips per Person	1.5	1.5	1.5	1.5	
Daily One-Way Circulator Passenger-Trips	470	320	420	20	1,230

**Longer Route**

Percent Choosing to Use Circulator	20%	20%	25%	25%	TOTAL
Persons Using Circulator	420	280	350	20	1,070
One-Way Passenger-Trips per Person	1.75	1.75	1.75	1.75	
Daily One-Way Circulator Passenger-Trips	740	490	610	40	1,880

- A passenger's potential use of a circulator service depends on their overall length of stay in Juneau, as those with a longer length of stay (defined as 8 hours or more) have a greater opportunity to use the circulator as a "second excursion" over the course of their stay (considering the time needed to disembark the boat, the required time to be back on the boat before sailing and the typical length of time for an excursion). Total passengers were therefore split into those with a longer stay versus a shorter stay. A review of cruise ship arrival and departure times indicates that over the 2023 season, 93 percent of ships are in Juneau for 8 hours or more, and 7 percent for less than 8 hours.
- For those passengers with a longer stay, it is estimated (based on discussions and observations) that 60 percent arrive in Juneau with an excursion already pre-booked. Of the remaining 40 percent, it is estimated that 75 percent arrange an excursion once they are on the dock. In total, 90 percent of these passengers with longer stays take an excursion, while 10 percent choose to not take an excursion.
- Of those taking an excursion, it is estimated that 75 percent return to the ship either directly from the excursion or after a visit to the immediate downtown shops and restaurants near the docks, while 25 percent are interested in taking a "secondary excursion" further afield and are thus potential circulator riders. Applying this factor to those passengers with a longer stay taking an excursion, a total of 3,500 potential circulator riders consists of passengers with a longer stay taking an excursion.
- The 10 percent of longer-stay passengers not taking an excursion (1,400 passengers) also are potential circulator riders.
- For those 1,000 passengers per day with a relatively short stay in Juneau, anecdotal information indicates that 75 percent arrive with a pre-booked excursion and an additional 75 percent of the remainder book an excursion on the dock. This yields 60 additional passengers that are potential circulator passengers. In total, 4,960 passengers were potential circulator passengers over the course of the design day.
- Given this level of potential ridership, a key factor is the proportion of passengers that choose to use the circulator service. One source of guidance is provided in the *Transportation Planning Process for Transit in Federal Land Management Areas* (US DOT Federal Transit Administration, April 2008). This indicates a typical transit use rate of 20 percent among recreational travelers. Based on discussions with local staff and tour operators as well as LSC's observations, this is a reasonable base figure, given a \$ 5-day pass fare level. This is applied to the longer route option for those passengers using the circulator as a secondary excursion (with relatively short available time). For those not making another excursion (and therefore having additional available time) a higher proportion of 25 percent is assumed. The shorter route is expected to be less popular, in particular given the high level of awareness of Overstreet Park. A 15 percent factor is applied for those who make another excursion and 20 percent for those who do not make another excursion.
- Applying these factors, a total of 815 people are forecast to use the shorter circulator option over the design day, and 1,070 are forecast to use the longer circulator option.
- Some passengers will choose to use the circulator for one one-way trip, either choosing to walk back from their destination or simply riding the service without stopping. For the shorter option, if 50 percent choose to walk back, the number of boardings per pass purchasers per

day would be 1.5. Given the longer walking distance, a higher 1.75 passenger-trips per person is used for the longer route option.

- Applying these factors, total design day ridership is estimated to be 1,230 for the shorter route option and 1,880 for the longer route option.

### **Hourly Ridership and Vehicle Requirements**

It is important to estimate hourly ridership to assess the required vehicle capacity and the need for additional vehicles in operation. Table 18 provides an analysis of hourly circulator ridership by hour of day for both the short and long routes. The pattern of ship arrivals and departures by hour was drawn from Table 2 of Chapter 2. Adjusted for one hour to exit the boat and the need to be back onboard one hour before sailing yields the overall passenger capacity off of the ships at any one time. This is then used to identify the proportion of circulator riders not taking other excursions in any one hour. For those using the circulator as a “secondary” trip (also taking another excursion), it is estimated that 90 percent take their primary excursion first (and therefore would tend to use the circulator later in the day) and the remaining 10 percent have a later primary excursion and thus would use the circular earlier in the day. This yields the variation in ridership by the hour for these secondary circulator riders. The resulting ridership by hour reaches a peak of 148 for the shorter route option and 226 for the longer route option, both at 4:00 PM. Ridership is relatively high from 2:00 PM through 8:00 PM, and relatively low in the morning hours and 9:00 PM.

The passenger loads are estimated by applying two factors. First, the number of cycles per hour is considered. As shown in Table 16, above, the shorter route option has a cycle length of 15 minutes, indicating that 4 cycles can be operated each hour, while the longer route option requires 20 minutes thus operating 3 cycles per hour. Secondly, not all passengers will be onboard at any one point around the route. Based on the distribution of trip generators and the variation in demand by hour, a maximum of 80 percent of ridership is assumed to be onboard at any one point. For the shorter route option, a maximum passenger load of 30 is estimated, indicating that a bus with a 30-passenger capacity would be sufficient. For the more popular longer route, a peak passenger load of 60 is estimated, indicating that two 30-passenger capacity vehicles would be needed. As shown in the bottom of Table 18, yielding a maximum passenger load of 30 passenger-trips on the longer route requires 2 vehicles in operation between 2 PM and 9 PM.

### **Operational Costs**

To explore variations in service based on season length and daily hours of service, several scenarios were evaluated. It should be noted that a majority (78 percent) of Capital Transit’s funding comes from the General Fund. With this in mind, the following scenarios were considered in the circulator analysis:

- Considering the daily variation in ship capacity (shown in Figure 13, above), a short season was defined (the 129 days between May 15 and September 20) as well as a long season (the 156 days from May 1 to October 3).
- Considering the hourly variation in circulator passenger demand, a short span of service (11 AM to 9 AM) and a long span of service (9 AM to 9 PM) were defined

**Table 18: Analysis of Hourly Circulator Ridership and Peak Load**

	Total	6 AM	7 AM	8 AM	9 AM	10 AM	11 AM	NOON	1 PM	2 PM	3 PM	4 PM	5 PM	6 PM	7 PM	8 PM	9 PM	10 PM		
<b>SHORTER ROUTE</b>																				
<b>Primary Circulator Riders (Do Not Take Other Tour)</b>																				
Average Capacity Arriving in Port	2,767	4,564	610	740	406	248	629	2,429	0	700	0	0	0	0	0	0	0	0		
Average Capacity Departing Port	0	0	0	0	0	0	0	1,110	332	1,377	0	1,758	851	115	732	3,723	2,933			
Capacity Arriving on the Dock			2,767	4,564	610	740	406	248	629	2,429	0	700	0	0	0	0	0			
Capacity Departing Back to the Ship								1,110	332	1,377	0	1,758	851	115	732	3,723	2,933	700		
Total Capacity on the Dock	0	0	2,767	7,332	7,942	8,682	7,978	7,894	7,146	9,574	7,816	7,666	7,551	6,819	3,096	163	0			
% Capacity on the Dock	0%	0%	3%	8%	9%	9%	9%	9%	8%	10%	8%	8%	8%	7%	3%	0%	0%			
Percent by Hour			3%	8%	9%	9%	9%	9%	8%	10%	8%	8%	8%	7%	3%	0%				
Total Primary Circulator Riders	440		13	35	38	41	38	38	34	46	37	36	36	32	15	1				
<b>Secondary Circulator Riders (Do Take Other Tour)</b>																				
Capacity Arriving on the Dock								2,767	4,564	610	740	406	248	629	2,429	0	700			
Capacity Departing Back to the Ship								1,110	332	1,377	0	1,758	851	115	732	3,723	2,933			
Total Capacity on the Dock								1,657	5,890	5,123	5,863	4,511	3,908	4,422	6,118	2,396	163			
% Capacity on the Dock								4%	15%	13%	15%	11%	10%	11%	15%	6%	0%			
Total Secondary Riders	790																			
-- Take Circulator Trip Second	711		0	0	0	0	0	29	105	91	104	80	69	78	109	43	3			
-- Take Circulator Trip First	79		2	6	7	7	7	7	6	8	7	7	6	6	3	0				
																				Ridership By
																				Span
																				Short
																				Long
<b>Total Riders</b>	1,230		16	41	45	49	45	74	145	145	148	123	112	117	126	43			1,126	1,212
Buses in Operation			1	1	1	1	1	1	1	1	1	1	1	1	1	1				
Cycles per Hour	4		4	4	4	4	4	4	4	4	4	4	4	4	4	4				
% at Peak Location	80%																			
<b>Peak Load</b>			3	8	9	10	9	15	29	29	30	25	22	23	25	9				
<b>LONGER ROUTE</b>																				
<b>Total Riders</b>	1,880		24	63	68	75	68	113	221	221	226	188	171	179	193	66			1,721	1,852
Buses in Operation			1	1	1	1	1	1	2	2	2	2	2	2	2	1				
Cycles per Hour	3		3	3	3	3	3	3	6	6	6	6	6	6	6	3				
% at Peak Location	80%																			
<b>Peak Load</b>			6	17	18	20	18	30	29	29	30	25	23	24	26	18				

Table 19 summarizes costs by both the Short and Long Route Options and for the various combinations of season and span options. The total season hours and miles were calculated. It was determined that the second bus required at peak times under the longer route option is only needed on days with a cruise ship capacity of 9,000 or more (99 days over the shorter season and 104 days over the longer season). Using the cost factors discussed in Technical Memorandum One, the consideration of fully allocated costs is recommended for the implementation of a circulator route to move forward.

<b>Table 19: Downtown Circulator Operating Costs</b>								
<i>Assuming Capital Transit Unit Costs</i>								
Season Option	Short: May 15 to Sept 20				Long: May 1 to October 3			
	Shorter Route Option		Longer Route Option		Shorter Route Option		Longer Route Option	
Route Length Option	11AM-9PM	9AM-9PM	11AM-9PM	9AM-9PM	11AM-9PM	9AM-9PM	11AM-9PM	9AM-9PM
Daily Span Option	11AM-9PM	9AM-9PM	11AM-9PM	9AM-9PM	11AM-9PM	9AM-9PM	11AM-9PM	9AM-9PM
Bus 1 Hours per Day	10	12	10	12	10	12	10	12
Bus 1 Days per Year	129	129	129	129	156	156	156	156
Bus 2 Hours per Day	0	0	7	7	0	0	7	7
Bus 2 Days per Year	0	0	99	99	0	0	104	104
Bus 1 Daily Vehicle-Miles	59	71	75	90	59	71	75	90
Bus 2 Daily Vehicle-Miles	--	--	53	53	--	--	53	53
Annual Vehicle-Hours	1,290	1,548	1,983	2,241	1,560	1,872	2,288	2,600
Annual Vehicle-Miles	7,637	9,164	14,873	16,808	9,235	11,082	17,160	19,500
Fully Allocated Operating Costs	\$229,200	\$274,900	\$359,800	\$406,700	\$277,100	\$332,500	\$415,200	\$471,900
Allocated Overhead Cost per Hour	\$68.51							

*Note: Fixed costs allocated by vehicle-hours.*

Fully allocated costs include the marginal costs (the direct costs associated with service such as driver salaries and fuel) and also include a “fair share” of the many fixed costs (which do not vary depending on service levels) needed to operate a transit service, such as administrative salaries/benefits, dispatcher salaries/benefits, facility costs, accounting/legal staff, etcetera).

Given that the majority of Capital Transit funding comes from local General Funds, including allocated overhead costs is important to avoid the need for General Funds to support any new visitor-related service. These costs are allocated based on an additional cost per vehicle-hour of service of \$68.51. Fully allocated costs range from a low of \$229,200 per year up to \$471,900 per year.

## **Fare Analysis**

To assess seasonal fare revenue, it is first necessary to estimate total seasonal ridership, in terms of both total boardings and total individuals purchasing passes. As shown in Table 20, the daily ship capacity data were evaluated to identify a factor of 0.63 reflecting the average capacity over the 5<sup>th</sup> highest (design day) capacity. This is applied to the design day ridership (during the assumed span of service) and multiplied by the days per season to yield the total seasonal ridership (1-way passenger-trips).

This is estimated to range from 91,100 for the most limited option up to 181,200 for the most extensive option. These figures can then be divided by the average boardings per individual to yield the total annual individual ridership, which ranges from 60,700 to 120,800. With the allocated total operating costs of the service in consideration, it is recommended that this circulator service be offered to passengers for a daily pass cost of \$5.00 (with free boarding for children aged 5 and younger). This would allow free reboarding

over the course of a day<sup>3</sup>. At a pass cost of \$5 per individual, total fare revenue ranges from \$303,500 up to \$604,000.

### **Operating Cost/Fare Revenue Balance**

Unusual for public transit services, the passenger fare revenues shown in Table 20 exceed the operating cost estimates shown in Table 19, yielding a net positive operating balance as shown at the bottom of Table 20. If allocated fixed costs are included, this positive balance on a fully allocated basis ranges from \$74,300 up to \$132,100. Note that the operating costs do not include marketing or capital costs, as discussed below.

<b>Table 20: Downtown Circulator Fare Revenue Analysis</b>								
<b>Season Option Route Length Option Daily Span Option</b>	<b>Short: May 15 to Sept 20</b>				<b>Long: May 1 to October 3</b>			
	<b>Shorter Route Option</b>		<b>Longer Route Option</b>		<b>Shorter Route Option</b>		<b>Longer Route Option</b>	
	<b>11AM-9PM</b>	<b>9AM-9PM</b>	<b>11AM-9PM</b>	<b>9AM-9PM</b>	<b>11AM-9PM</b>	<b>9AM-9PM</b>	<b>11AM-9PM</b>	<b>9AM-9PM</b>
Design Day Ridership	1,126	1,212	1,721	1,852	1,126	1,212	1,721	1,852
Average Cruise Visitors in Service Season	11,039	11,039	11,039	11,039	10,123	10,123	10,123	10,123
Design Day Cruise Visitors	17,600	17,600	17,600	17,600	17,600	17,600	17,600	17,600
Ratio of Avg/5th Highest	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63
Average Daily Ridership Over Service Season	706	760	1,079	1,162	706	760	1,079	1,162
Number of Days in Season	129	129	129	129	156	156	156	156
Total Annual Ridership (1-Way Psgr-Trips)	91,100	98,000	139,200	149,800	110,200	118,500	168,400	181,200
Total Annual Individual Riders	60,700	65,300	92,800	99,900	73,500	79,000	112,300	120,800
Base Fare - Day Pass	\$ 5.00							
<b>Fare Revenue</b>	<b>\$303,500</b>	<b>\$326,500</b>	<b>\$464,000</b>	<b>\$499,500</b>	<b>\$367,500</b>	<b>\$395,000</b>	<b>\$561,500</b>	<b>\$604,000</b>
<b>Assuming Fully Allocated Costs</b>								
Fully Allocated Operating Costs	\$229,200	\$274,900	\$359,800	\$406,700	\$277,100	\$332,500	\$415,200	\$471,900
<b>Total Operating Net Balance</b>	<b>\$74,300</b>	<b>\$51,600</b>	<b>\$104,200</b>	<b>\$92,800</b>	<b>\$90,400</b>	<b>\$62,500</b>	<b>\$146,300</b>	<b>\$132,100</b>

### **Institutional Implementation Options**

There are two institutional options to be considered in the implementation of this service. These options are discussed in detail below.

#### **Direct Capital Transit Operation**

The discussion above assumes that Capital Transit (CBJ) staff directly provides a circulator service, at existing Capital Transit costs. Directly operating service is one option, with both advantages and disadvantages:

##### Advantages

- Allows the service to be more easily monitored and modified.
- Can ensure a higher quality of service.

<sup>3</sup> One option would be to also offer a season pass for a significant discount, such as \$20 per season. This would allow Juneau residents (particularly those living in the downtown area) to use the circulator at a nominal price per trip while still generating the same fare revenue by cruise passengers.

### Disadvantages

- CBJ may have more difficulty staffing a seasonal service, given personnel rules and limited driver pool.
- Capital Transit does not have the physical capacity at the operations center to house additional vehicles.

### ***Contracted Operation***

Another option, particularly for a new seasonal program, would be to contract for service. CBJ would develop and release a Request For Proposal (RFP) that would be the basis of a competitive bidding process. This RFP would need to include the following:

- A clear description of the scope of services (hours, number of vehicles, etc.).
- Minimum specifications for vehicles (including a backup vehicle).
- Performance measures, including service quality, minimum driver requirements (drug and alcohol testing, ADA training, driver licensing, and experience).
- Reporting requirements.
- Insurance requirements.
- Requirements to brand the vehicle.
- Requirements regarding fare handling.
- Payment basis (typically a fixed cost per month plus an additional cost per vehicle-hour of service)
- A clear description of the selection process

Through this RFP process, an operator would be selected. CBJ staff would still be responsible for reviewing reports, contract conformity and payment, marketing, ticketing, and addressing any public or passenger complaints. Fares would be the property of CBJ (rather than the operator).

### Advantages

- A contractor may be able to staff the program more expeditiously.
- Allows the service to be modified or terminated without impacting CBJ staff.
- May result in a lower cost.
- Significantly, vehicles can be stored and maintained without impacting the capacity of the Capital Transit operations center.

### Disadvantages

- Addressing operational complaints can be more complicated by the contractual relationship.
- Vehicle quality may be more uncertain.
- Requires an RFP process and ongoing CBJ administration.

Transit programs often use contracting for the initial years of a new demonstration program, transitioning to in-house service once the service plan and staffing requirements have been clearly defined through experience. One strategy is to undertake an RFP process and have the public transit entity effectively submit a bid. This can provide detailed information on which to base the decision to contract, and if so,



which is the appropriate contractor. Note that under this option the CBJ would still incur costs for the administrative and monitoring process, which are not included in the operating costs presented above.

### **Vehicle Requirements and Costs**

As presented in Table 18 (above), one vehicle would be operated on the shorter route alternative, and two vehicles on the longer route alternative. A backup vehicle would also be needed to cover the time during which vehicles are out of service for repairs. Optimally, all vehicles would be branded with a unique wrap (as part of the marketing strategy).

Considering the expected passenger loads and the constrained streets in the downtown area, the optimal vehicle would be 30 feet to 35 feet in length, accommodating approximately 30 seated passengers. It would need to be wheelchair accessible. While a trolley replica bus would be viable, it is not a necessity.

Vehicle costs vary widely depending on the manufacturer and propulsion. A medium diesel bus currently runs on the order of \$800,000, while battery electric buses are approximately \$200,000 to \$250,000 more at around \$1 million a vehicle.

If circulator service is contracted, vehicles could be provided through the contractor. If the service is provided by Capital Transit, additional vehicles would be needed. This could be through a lease in the short term until funds can be assembled for purchase. In either scenario, the vehicles would need to be stored off-site from Capital Transit's maintenance yard.

### **Fuel Type**

The vehicles would optimally use zero-emission Battery Electric Bus (BEB) technology, for both the air emission benefits as well as the reduced noise impact on downtown streets. The daily vehicle mileage shown in Table 19 is well within the daily operational range of BEB vehicles (even considering the additional energy requirements of climbing up to 4<sup>th</sup> Street) without the need for route charging or switching out vehicles mid-day. In the short term (over the next two to three years), however, BEB propulsion is not a viable option given the time required for grant application and installation of charging equipment as well as the lack of the necessary space at the Capital Transit operations center for the vehicles and equipment.

Moreover, the first few years of operation will likely lead to adjustments in the operating plan that could change the vehicle needs of the service. It is recommended that CBJ initially implement this service using diesel buses (preferably with more recent and lower emission engines) and also start pursuing grants (such as the Federal Transit Administration 5339(c) Low or No Emission Grant Program) for purchase of two to three BEB vehicles as well as charging equipment.

### **Circulator Stops and Recommended Improvements**

Stop improvements would depend on the route length option chosen. Except for one stop (Egan & Willoughby), all stops are already in place. These bus stop improvements are further discussed below.

### ***Shorter Route Option Stops***

The Downtown Transit Center is already an established transit stop at the heart of Downtown Juneau. To create a stronger presence of the circulator service, clear signage would be posted to indicate it as a part of the service.



The *Alaska State Museum* stop already includes a larger overhang and seating area. It would only require signage indicating its inclusion in the service.



The stop located at the Foodland Shopping Center on Willoughby is already an established bus stop with a shelter and bench. We would recommend this stop have additional signage related to the Circulator service specifically.



The stop located at *Egan & Willoughby (76 Egan)* would require signage as well as a shelter and pad as it is not currently a bus stop. There is an area near the east end of the current driveway (as shown) that could accommodate a shelter. This would require an agreement with the current owners.



The *Library/Marine Parking Garage* is an established Capital Transit stop. It includes shelter and benches. To create an obvious stop along the circulator this location would also require signage.



The stop at *Front Street & Franklin Avenue* would require both signage and benches. It will also need enforcement of a bus-only no parking zone.



Similar to the Front and Franklin the stop at *Seward Street & 4<sup>th</sup>* would require both signage and benches.



### ***Additional Stops on Longer Route Option***

The *9th & Glacier (Federal Building)* stops already have an impressive shelter with benches. The only improvement needed is signage.



As Overstreet Park is also an existing stop with a good shelter and benches, the only improvements needed are signage.



The costs of these improvements would total to be between \$64,000 to \$73,000 depending on whether the short or long route is implemented, as shown in Table 21. A total capital cost table for each route that includes vehicle costs as well are presented in Table 22. As shown, costs for the shorter route would be approximately \$2.1 million while the longer route would cost closer to \$3.2 million. This is merely an estimate based on current costs of construction and material as well as the desire to purchase battery electric vehicles over diesel.

**Table 21: Circulator Bus Stop Improvement Costs**

Stop	Recommended Improvements			Notes	
	Signage	Benches	Shelter & Pad		
<b>Shorter Route Option</b>					
Downtown Transit Center	R	*	*		
Alaska State Museum	R	*	*		
Egan & Willoughby (76 Egan)	R	*	R		
Library/Marine Parking Garage	R	*	*		
Front & Franklin	R	R	*	Increased enforcement of No Parking in Bus Bay needed. Benches will require minor grading and paving. (\$5,000)	
Seward & 4th	R	R	*	Benches on existing Sidewalk. (\$1,000)	
<b>Longer Route Option (Additional Stops)</b>					
Willoughby and D St.(Foodland Shopping Center)	R	*	*	Already an existing bus stop with shelter and bench	
9th & Glacier (Federal Building)	R	*	*		
Overstreet Park	R	*	*		
Total Units - Short Route	6	2	1		
Total Units - Long Route	9	2	1		
	Unit Cost	\$3,000	See Notes	\$40,000	Total
Total Cost - Short Route		\$18,000	\$6,000	\$40,000	\$64,000
Total Cost - Long Route		\$27,000	\$6,000	\$40,000	\$73,000

**Traffic Assessment**

Traffic operations associated with the circulator route can be considered in two ways: the traffic operational ability for the buses to operate, and the impact on overall traffic operations. Regarding the first consideration, the two circulator route options were designed to avoid difficult traffic movements. As discussed above, options that use any of the narrow streets with sharp intersection angles in the upper portions of downtown (such as Calhoun Avenue) were dismissed as infeasible. Left turn movements onto particularly busy streets (such as Egan Drive, with 11,000 vehicles per day) would only be made at signalized locations: at Whittier Street on the shorter option and West 10<sup>th</sup> Street on the longer option. The necessity of using a signalized intersection for left turns onto Egan Drive is one reason that the western portion of the longer route option operates in the counterclockwise direction, as there is no ability to use a signal to egress the Overstreet Park area. Given these considerations and the fact that existing Capital Transit buses operate adequately around the Marine Way / Franklin Street / 4<sup>th</sup> Street / Seward Street loop, it is concluded that traffic conditions will not unduly delay bus operations.

Regarding the impact of bus operations on general traffic conditions, the service would only add up to 4 vehicles per hour, which would constitute a small proportional increase. As an example, Marine Way carries approximately 3,400 vehicles per day per AKDOT data, which indicates approximately 340 vehicles in the peak hour. 4 additional buses per hour is equal to just over a 1 percent increase in total traffic activity in the peak hour. Another consideration is whether buses stopping in traffic lanes at bus stops would unduly impede traffic.

**Table 22: Circulator Service - Capital Costs**

Item	Unit	Unit Cost	Total
<b>Shorter Route</b>			
Signage	6	\$3,000	\$18,000
Benches	2	<i>See Table 7</i>	\$6,000
Shelter & Pad	1	\$40,000	\$40,000
Buses	2	\$1,050,000	\$2,100,000
		<b>Total</b>	<b>\$2,164,000</b>
<b>Longer Route</b>			
Signage	9	\$3,000	\$27,000
Benches	2	<i>See Table 7</i>	\$6,000
Shelter & Pad	1	\$40,000	\$40,000
Buses	3	\$1,050,000	\$3,150,000
		<b>Total</b>	<b>\$3,223,000</b>

All of the bus stops would allow the bus to pull out of the traffic lane (assuming adequate enforcement of no parking regulations), except for the 4<sup>th</sup> Street stop. 4<sup>th</sup> Street in this location carries 1,200 vehicles per day. With 10 percent in the peak hour and over the two directions, this is equal to an average of 60 vehicles per hour per direction or 1 vehicle per minute per direction in the peak hour. While individual drivers or two will be delayed during bus boarding on 4<sup>th</sup> Street, this would overall only be a minor inconvenience. In sum, either circulator option could be operated without any substantial traffic impacts.

**Benefits to Visitors and Residents**

As identified early on in the study, there were challenges associated with the congestion of tourists located along South Franklin Street and Marine Way. Business owners indicated that they would prefer visitors to have the opportunity to make their way further north into the downtown area of Juneau. The circulator as proposed here aims to distribute visitors further north than the immediate South Franklin Street area while also allowing an opportunity to visit the Capital Building, State Museum, and Overstreet Park.

The key benefit to residents is primarily seen in its impacts to more locally-owned businesses in the downtown Juneau area, however, residents would also be able to ride this circulator for a reduced fair. As an added benefit, this service could also be operated on an as-needed basis for residents for events such as the Juneau Folk Festival, Gold Medal Basketball Tournament, and the Sealaska Heritage Celebration events.

## **Marketing Campaign and Costs**

Both short and long-route Downtown Circulator options would require a strong marketing effort. A marketing campaign could be organized internally or outsourced to a marketing agency through an RFP. A successful marketing campaign would focus on target audiences, through several strategies as described in additional detail below.

### ***Goals and Objectives***

The major goals and objectives that should be accomplished through a Downtown Circulator marketing campaign should include:

- **Raising Awareness/Education:** Creating awareness and improving local knowledge of the Downtown Circulator.
- **Increasing On-Shore Activities:** Cultivating a diverse selection of on-shore activities for cruise ship passengers.
- **Increasing Tourist Presence throughout Downtown:** Encouraging visitors to venture deeper into Downtown and further north than the immediate Franklin and Egan Street corridor.
- **Building Relationships with the Downtown Business Association:** Coordinating collaborative partnerships amongst business owners in the downtown area.

### ***Overview of Marketing Strategies***

The marketing campaign could feature the following strategies:

- **Target Audiences:** Marketing materials, radio ads, and/or TV commercials should target the audience and general messaging for such marketing materials and commercials.
- **Brand Identity:** The service would want to stand alone and be fully branded with a distinct name, logo, and color scheme. It may require its own website or at least a distinct page within an existing website.
- **Community Gatekeepers:** Building on the list of stakeholders and community members identified during this study, a list of key gatekeepers should be identified, as well as appropriate means and timing for contacting them about the circulator service. These gatekeepers include downtown business owners and employees, cruise ship liaisons, government agencies, and other major tourism community leaders. Their role would be to distribute marketing materials to raise awareness about the service within the community as well as amongst tourists.
- **Marketing Materials:** Several mediums of marketing materials should be developed for outreach. The following materials could be provided in English as well as other languages for distribution through the near community and cruise ship coordinators.
  - Press releases to the local Chamber of Commerce and City and Borough of Juneau.
  - Printed flyers, visitor guides, etcetera
  - News Media Print and Web Ads.
  - Social media platforms and posts such as Facebook, Instagram, and Twitter.

- **Website Updates:** All related websites should be updated with clear information regarding the new service. This could include Travel Juneau, Capital Transit, Juneau.org, etc.
- **Suggestions for Promotional Events:** A few pop-up promotional events could introduce the service to potential passengers.

## **CAPITAL TRANSIT TRIPPER SERVICE**

One impact of the growth in cruise ship activity is the sporadic overloading of Capital Transit buses by cruise ship passengers, largely as they travel to and from Mendenhall Glacier. This is increasingly resulting in local resident passengers being left at the curb as buses reach their passenger capacity. During the summer of 2023, Capital Transit staff is collecting data that includes when buses reached capacity and at which bus stops they were unable to serve local passengers as a result. It should be noted that at the time of this data collection, permits held by private tour companies to visit the Glacier had run out, causing more tourists to seek alternative ways to visit Mendenhall. Below provides a summary of the data collected thus far for the period between May 8<sup>th</sup> and July 20<sup>th</sup>:

- A total of 384 passengers have been left behind at bus stops so far during the summer season of 2023, 7 of which were passengers using a wheelchair.
- Passengers were left behind on a total of 20 days (27 percent of all days), consisting of 5 days in May, 7 days in July, and 15 days (out of 20) in July.
- These overcrowded runs are occurring on Routes 3 and 4, except for 3 instances on Route 8 Express.
- 44 percent of passengers, or 168 passengers, of those being left at stops due to over-capacity occurred on Wednesdays. This was followed by 21 percent (82 passengers) being left behind on a Monday. It should be noted that Wednesday is also the busiest average day for cruise ship activity.
- 51 percent of passengers (or 194 passengers) being left at bus stops due to over-capacity occurred between noon and 4 PM. This was followed by 35 percent (133 passengers) of these observed cases occurring between 8 AM and noon.
- In no particular order, the most common locations where passengers are being left on the curb are at SEARHC, Western Auto, Downtown Transit Center, the Federal Building, and Floyd Dryden Middle School. Between 20 and 29 passengers have been left behind at all of these locations.

Given the sporadic pattern of capacity problems, it is not effective to address this issue by increasing the scheduled frequency of service. Rather, transit systems facing this type of issue typically operate “tripper service,” consisting of additional buses dispatched as needed. These additional bus runs are not shown on the schedule.

Under this alternative, Capital Transit would schedule drivers to be available on standby (either in the downtown area or at the operations center, depending on specific times of day and use patterns) for specific days and times along Routes 3 and 4. The drivers would be dispatched as route drivers report overcrowding is occurring. Buses being assisted by a tripper bus would need clear signage showing that an additional bus is coming.

## **Operational Costs**

While additional data will need to be gathered during the peak summer of 2023 to better define when overcrowding is occurring and how it relates to total cruise ship capacity in port, it is useful to review potential costs associated with running the Tripper Service. As shown in Table 23, estimates were calculated for 4 to 8 hours per day and for 30 to 90 days per season, assuming that half of the runs during the standby tripper periods would be operated (generating vehicle-miles). The total allocated operating cost ranges from \$23,800 to \$143,000 depending on the days of operation per season and the hours per day the service is being provided.

Days per Year Hours per Day	30			60			90		
	4	6	8	4	6	8	4	6	8
Annual Vehicle-Hours	120	180	240	240	360	480	360	540	720
Annual Vehicle-Miles	1,740	2,610	3,480	3,480	5,220	6,960	5,220	7,830	10,440
Total Allocated Operating Costs	\$23,800	\$35,700	\$47,600	\$47,600	\$71,600	\$95,400	\$71,600	\$107,300	\$143,000

## **Fare Revenue**

The additional ridership served by the tripper runs can be calculated using data regarding the observed passengers left behind (Table 12) and the daily cruise capacity in port. With this in mind, an estimated additional 700 passenger-trips would be served each season, which would generate an increase in fare revenue of \$1,200. These figures could vary significantly depending on cruise activity and changes in private shuttle access to the glacier.

## **Benefits to Visitors and Residents**

The tripper bus alternative as described above is meant to directly benefit local residents who currently use Capital Transit services. Over the course of this study, it was mentioned several times that drivers were having to leave local resident passengers behind due to overcrowding along existing fixed route services. As discussed in Chapter 7, an informal version of this service was deployed during the summer of 2023 when Capital Transit observed higher over-capacity rates than usual.

## **EXPANDED CAPITAL TRANSIT SERVICE TO MENDENHALL GLACIER**

The current Capital Transit services provide a low level of public access to Mendenhall Glacier. The closest stop (Mendenhall Valley Road/Dredge Lake Road) is served by three routes (3, 4, and 8) that together serve the stop up to 35 times per day. Travel time to and from downtown is approximately 45 minutes and a fare of \$2 (\$1 for youth) is required per one-way trip. This fare is only 10 percent of the costs of a private sector tour. While frequent, relatively inexpensive, and reasonably quick, accessing the glacier through public transit currently requires a 1.5-mile walk in each direction along a multipurpose paved trail. As a result (in large part from the overall need to walk 3 miles round trip), cruise passenger use of public transit is currently moderate. Even so, it can result in overcrowding on the buses as discussed above.



Improving public transit access to Mendenhall Glacier is a challenging public policy question, focusing on the role of the public and private sectors. On one hand, providing better public access to a popular public lands attraction is a benefit to the public at large. However, the private sector tour operators are in large part doing an effective job providing access (at a market rate price) to the glacier. Greatly enhancing public transit access, such as by providing direct access to the visitor center parking lot at the current fares, would also greatly increase cruise passenger demand on Capital Transit. As a result, (1) visitors would effectively use all existing capacity on the key routes at peak times thereby markedly reducing mobility among Juneau residents or (2) Capital Transit would need to greatly expand capacity between downtown and the Glacier, effectively replacing the existing private fleets with a publicly subsidized option. Due to these impacts, it is clear that a comprehensive expansion of public transit is not feasible and is therefore not considered further.

### **Limited Expansion of Capital Transit Service to Mendenhall Glacier**

One option was evaluated that would provide a limited improvement to Capital Transit service to Mendenhall Glacier that would improve public access without greatly impacting the current balance between private and public services. Specifically, this would consist of extending the existing Route 8<sup>4</sup> afternoon five runs per day (Monday to Friday only) to the staging area approximately 0.3 miles south of the Glacier Spur Road Parking Lot during the peak season. This extension is shown in Figure 14.

This service would add about 2.5 miles and 5 minutes of running time to the existing Route 8. By providing afternoon service only, the goal of this limited service would be largely to retrieve visitors that this service would add about 2.5 miles and 5 minutes of running time to the existing Route 8. By providing afternoon service only, the goal of this limited service would be largely to retrieve visitors that had taken transit to Dredge Lake Road and walked to the Glacier, without making the public transit access to the glacier so attractive that it significantly impacts the private transportation firms and/or adds significantly to the impact that visitors are having on the Capital Transit capacity.

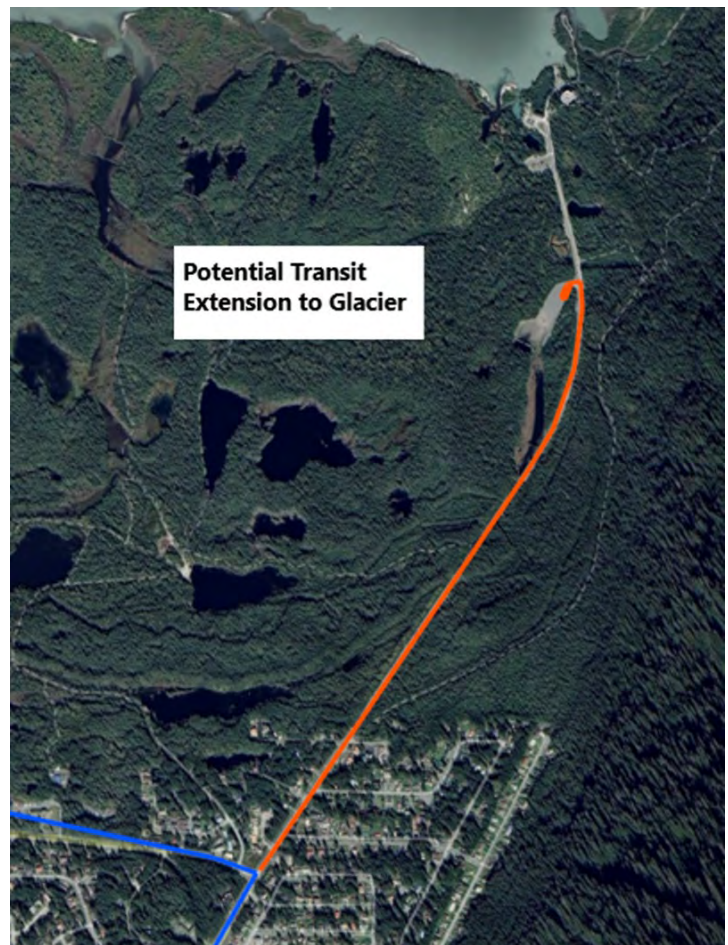


Figure 14: Route 8 Extension to Mendenhall Bus Staging Area

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<sup>4</sup> Routes 3 and 4 do not have sufficient available running time to accommodate this route extension.

Table 24 presents an example schedule showing service times at the Mendenhall bus staging lots. As shown, the stop would be served every half hour from 3:08 PM to 5:08 PM. This does provide the opportunity for visitors to make a short afternoon trip to visit the glacier, perhaps after conducting another tour earlier in the day. While the driver break at the Valley Transit Center would be reduced from 18 minutes to 13 minutes, this is still a sufficient break.

<b>Table 24: Route 8 Sample Afternoon Schedule Serving Mendenhall Glacier</b>												
Downtown Transit Center	Federal Building	Glacier Hwy / Anka St	Fred Meyer	Dep. Valley Transit Center	<b>Mendenhall Bus Staging Lot</b>	Dredge Lake Road	Auke Bay	Arr: Valley Transit Center	Dep. Valley Transit Center	Fred Meyer	Glacier Hwy / Anka St	Downtown Transit Center
2:35 PM	2:38 PM	2:47 PM	2:52 PM	3:00 PM	<b>3:08 PM</b>	3:11 PM	3:18 PM	3:25 PM	3:38 PM	3:43 PM	3:46 PM	4:01 PM
3:05 PM	3:05 PM	3:05 PM	3:05 PM	3:05 PM	<b>3:38 PM</b>	3:41 PM	3:48 PM	3:55 PM	4:08 PM	4:13 PM	4:16 PM	4:31 PM
3:35 PM	3:35 PM	3:35 PM	3:35 PM	3:35 PM	<b>4:08 PM</b>	4:11 PM	4:18 PM	4:25 PM	4:38 PM	4:43 PM	4:46 PM	5:01 PM
4:05 PM	4:05 PM	4:05 PM	4:05 PM	4:05 PM	<b>4:38 PM</b>	4:41 PM	4:48 PM	4:55 PM	<b>4:57 PM</b>	<b>5:02 PM</b>	<b>5:05 PM</b>	<b>5:20 PM</b>
4:35 PM	4:35 PM	4:35 PM	4:35 PM	4:35 PM	<b>5:08 PM</b>	5:11 PM	5:18 PM	5:25 PM	<b>5:27 PM</b>	<b>5:32 PM</b>	<b>5:35 PM</b>	<b>5:50 PM</b>

<i>New Partial Runs</i>
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### Operational Costs

For the first three runs, additional vehicle-miles would be generated but driver hours would not be increased. For the last two runs that go out of service at the Valley Transit Center (shown in blue in Table 24), the runs would need to be extended to the DTC, adding additional vehicle-hours as well as vehicle-miles. As shown in Table 25, this results in 31 additional vehicle-miles and 1.22 additional vehicle-hours per day. Over the course of a shorter season from May 15 to September 20, the total annual operating costs would equal \$25,300 on a total allocated basis. For a longer season from May 1<sup>st</sup> through October 3<sup>rd</sup>, the total allocated costs would equal \$30,500.

	<b>Table 25: Estimated Incremental Operational Costs of Route 8 Service to Mendenhall Glacier</b>	
	<b>Length of Season</b>	
	Short	Long
Number of Daily Runs	5	
Additional Daily Vehicle Miles	31	
Additional Daily Vehicle Hours	1.22	
Days in Season (Mon-Fri)	92	111
Annual Vehicle-Miles	2,852	3,441
Annual Vehicle-Hours	112	135
Annual Total Allocated Operating Cost	\$25,300	\$30,500

### ***Projected Passenger Trips***

A reasonable estimate is that this service improvement would expand daily ridership by 50 passenger-trips per day (including more passengers making outbound trips on earlier runs). This would result in between 9,675 and 11,700 additional one-way passengers per year depending on seasonal length of service (Table 26).

	Shorter Season	Longer Season
Total Estimated Daily Passengers	50	50
Total Estimated Annual Passengers Longer Season	4,600	5,550
Projected Fare Revenue	\$7,600	\$9,200
Projected Operating Subsidy -- Fully Allocated Basis	\$17,700	\$21,300

### ***Capital Requirements***

This option would not require additional vehicles. However, a bus stop would need to be provided at the bus staging area, generally where the canopy is shown in the adjacent photo. Providing this stop and its specific design and location would need to be negotiated with the US Forest Service. A reasonable budget for stop improvements would be \$10,000.



### ***Implementation***

The approval process for a public transit stop on Forest Service land is currently uncertain, including whether annual fees would be required. This would require further discussions with the Forest Service (including consideration regarding the overall Mendenhall Glacier Recreation Area Master Plan) prior to implementation. At the Public Works and Facilities Committee (PWFC) meeting on January 29<sup>th</sup>, 2024 it was decided that this particular recommendation would not be moved forward for Assembly Approval.

### **Benefits to Visitors and Residents**

This alternative would provide benefits to both visitors and residents by providing limited services to the Mendenhall Glacier. The intention of this alternative is to provide additional service to and from the Glacier, thus lessening overcapacity issues along Capital Transit.

## CONCLUSIONS

The discussion above describes the opportunities, advantages, disadvantages, and issues associated with transit options to address visitor mobility issues. Based on this analysis, the Consultant Team has the following recommendations:

- A **Tripper service** is needed at peak times to assist with the over-capacity scenarios Capital Transit is currently experiencing. This alternative should be implemented on a near-term basis. The full extent of the periods when drivers should be scheduled will depend on further data analysis.
- The **circulator service** is also recommended for implementation immediately, as it can provide a net benefit to the downtown economy while improving the visitor experience. The longer route option is the better of the two route options as it would serve the popular Overstreet Park, provides a better value for the cost of the fare, could serve future improvements to the Hoonah Totem projects, and does not require additional bus stop requirements over those of the shorter option. Contracting this service would be a logical first step of implementation. At least initially, contracted service would have fewer challenges to implement due to the advantages listed above. A monitoring program (including passenger surveys) would be beneficial to assess the service and define any appropriate modifications.
- **Limited improvement in Capital Transit service to Mendenhall Glacier** can be accomplished with only a relatively modest cost and without significantly impacting the private sector tour operators. It would be a logical step in balancing public access without greatly impacting either the public transit or private tour services. This, however, will require additional discussions with the Forest Service and is a longer-term recommendation. As noted earlier, while this service was analyzed and will be included in the study for future possible consideration, it is not formally being recommended by the PWFC at this time.

## POTENTIAL FUNDING SOURCES

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### INTRODUCTION

This chapter presents an overview of potential funding sources that could be used to fund any of the above-discussed options. This information is presented at a high level, and additional analysis would be needed to determine political feasibility.

Note that this discussion excludes federal operating funding sources for expanded services. Juneau is not an urbanized area as defined for purposes of Federal Transit Administration grant programs, which limits federal operating funding. As the available funds are already fully utilized, funding the options considered in this study with federal funding would reduce funds available for other important existing transit services. Other sources would be needed, as discussed below.

### POTENTIAL FUNDING SOURCES

#### Marine Passenger Fee

Juneau collects a \$5 per passenger fee on every arriving cruise ship passenger, and those funds can be used to fund projects that enhance the tourism experience and offset community impacts created by the cruise ship industry. Those funds could potentially be used to fund seasonal summertime service improvements such as a downtown circulator service provided that such service provides a direct benefit to cruise ship passengers or mitigates problems caused by the industry.

#### Taxes and Fees Imposed on Visitors

Most local governments, not surprisingly, prefer to implement taxes and fees that are paid by visitors rather than their residents. Two common ways in which this is done are through hotel taxes and rental car fees, which are set at varying rates.

#### Fuel and Vehicle Taxes

In Alaska, local governments can enact registration taxes based on vehicle value or age and the proceeds can be used for any purpose. Local governments can also enact fuel taxes, and while most are used for road purposes, they could also be used for transit purposes such as providing additional services.

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## RECOMMENDED VISITOR CIRCULATION PLAN

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### INTRODUCTION

Building on the detailed discussion and evaluations presented in previous chapters, this chapter first provides a brief overview of the existing conditions and challenges. It concludes with the final recommended plan, including service, capital, marketing, management, and implementation plans. This plan chapter was reviewed by both the Juneau Counsel on Sustainability as well as the Juneau Downtown Business Association. Their comment letters can be found under Appendix B with their input and feedback incorporated into this chapter.

### EXISTING CONDITIONS AND CHALLENGES

In the initial stages of the Circulator Study, LSC Transportation Consultants worked closely with Juneau staff, Capital Transit representatives, and current transit providers in gathering information relating to visitor volumes, transportation ridership, and crowding not only within the downtown Juneau area and docks but also along Capital Transit routes. During this phase of the study, we discovered the following major findings:

- **Downtown Juneau Visitor Congestion:** The high levels of summer cruise ship passenger activity combined with the very constrained geography of downtown Juneau leads to a concentration of visitors in the immediate dock area, particularly along South Franklin Street and Marine Way. This results in a variety of issues:
  - Traffic congestion.
  - A limited ability for visitors (particularly those with mobility limitations) to explore the downtown area more than a block or two beyond the waterfront. This results in a diminishment in the quality of a Juneau visit, congestion on the sidewalks and in the stores, and a reduction in business activity in the outlying areas such as north of 3<sup>rd</sup> Street.
  - Reduced visitation levels at facilities outside of the immediate downtown/dock area such as the Alaska State Museum and the Wickersham State Historic Site.
- **Visitor Impact on Capital Transit Capacity:** The growth in cruise passenger activity levels has resulted in times during peak summer days when visitors (largely traveling to and from Mendenhall Glacier) have filled Capital Transit buses leaving and returning to downtown Juneau. This in turn can result in Juneau residents being precluded from being able to accomplish their transit trip due to the lack of capacity on the buses. For trips such as medical appointments or employment, this can have a substantial impact on individuals, indicating a need for additional transit capacity. Weekdays that experienced the highest instances of “left behind” passengers were Mondays and Tuesdays.
  - Days that experienced the greatest number of passengers being left behind were Wednesdays (221 passengers or 41 percent) followed by Mondays (134 passengers or 25 percent).
  - An analysis of high-capacity (more than 10,000 cruise ship passengers) days revealed that though many high-capacity days experienced a fair share of left-behind passengers,

several high-capacity days experienced very few left-behind passengers. The large majority of capacity problems occurred on days with more than 7,000 cruise ship passengers.

- Inconvenient Public Transit to Mendenhall Glacier:** Capital Transit’s closest stop to the Mendenhall Glacier Visitors Center is at Dredge Lake Road / Mendenhall Loop Road, which is a 1 ¼ mile walk (on a paved multipurpose path) to the Visitor Center. While Capital Transit does not directly market to visitors, many visitors have discovered that the transit program provides a much less expensive transportation option between the cruise ship docks to the glacier than the private transportation services. Once at the glacier, however, some passengers find the walk back to the transit stop to be too much of a challenge and ask the private transportation providers for trips back to the waterfront.

## RECOMMENDED SERVICE AND OPERATIONS PLAN

The following three services were recommended to the PWFC to alleviate the pedestrian congestion within downtown Juneau and address challenges related to Mendenhall Glacier access and overcrowding along Capital Transit. While an overview of each service and its operation plan is included in Table 27 and Figure 15 below, the committee recommended service recommendations 1 and 2 for further approval from the City and Borough of Juneau Assembly. The following presents a summary of all three recommendations, though the reader is encouraged to refer to previous chapters of this report for additional discussion.

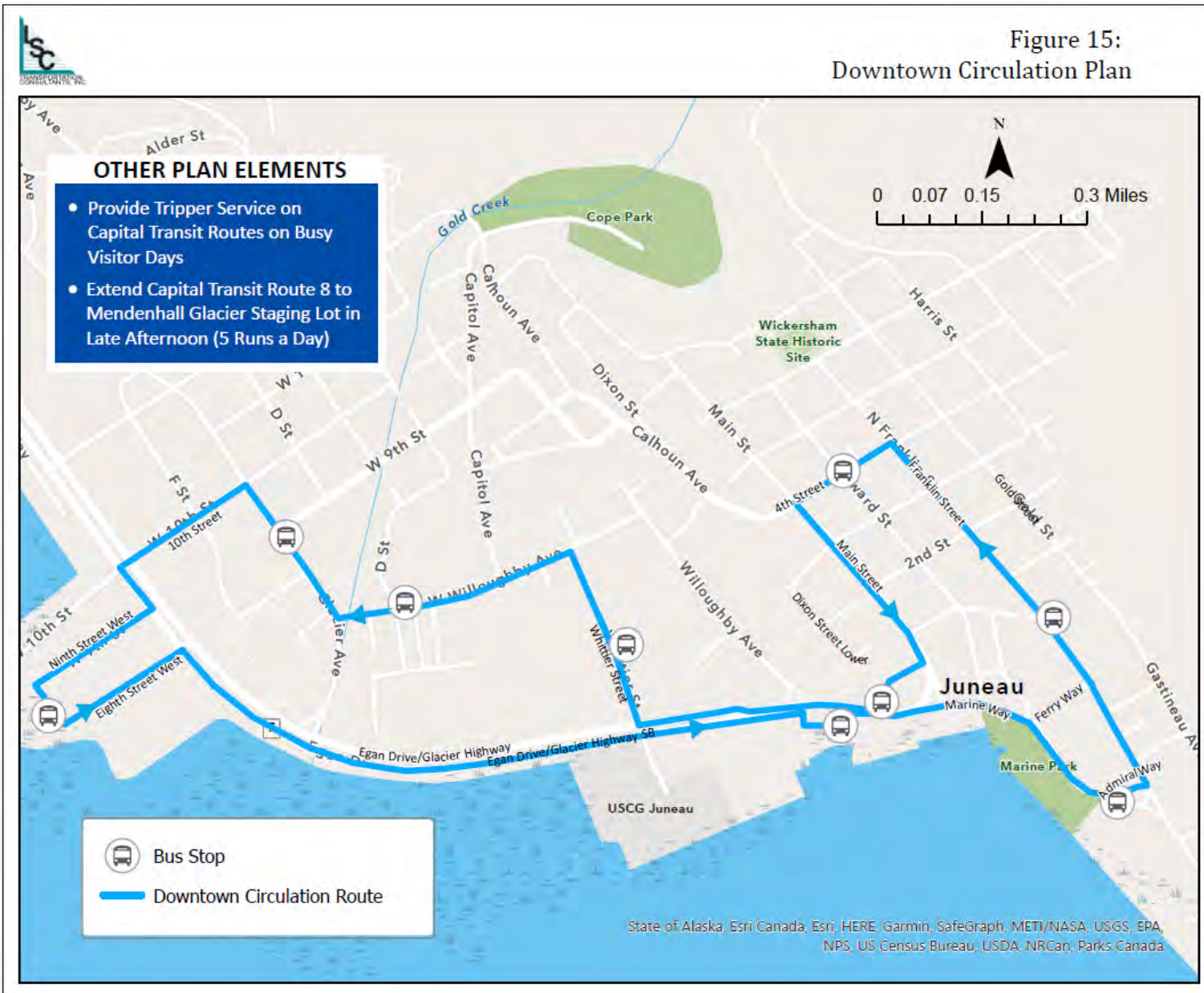
<b>Table 27: Recommended Service and Operations Plan</b>				
<b>Service</b>	<b>Description</b>	<b>Dates/ Season</b>	<b>Days of Week</b>	<b>Time of Day</b>
Downtown Circulator - Long Route Option	Frequent service from Downtown Juneau to Overland Park.	May 1st - October 3rd	Daily	9:00 AM - 9:00 PM
Capital Transit Tripper	Occasional service to accommodate high demand periods on Capital Transit routes	May 1st - October 3rd	Daily*	Varies
Limited Capital Transit Service to Mendenhall Glacier	Limited afternoon return service from the Mendenhall Glacier staging area.	May 1st - October 3rd	Daily	3:00 PM - 5:00 PM

*\* Note: Capital Transit Tripper is only be run on days where cruise ship port capacity exceeds 7,000 passengers.*

### **Service Recommendation 1: Downtown Circulator Service**

A Downtown Circulator service should be initiated, following the route shown in Figure 15. The route circulates in a counterclockwise direction running east along Egan Drive, north along South Franklin Street, turning left along 4<sup>th</sup> Street, and heading south on Main Street towards the Downtown Transit Center. From the transit center, the service runs west and turns north along Whittier Street to stop at the Alaska State Museum.





From there the service continues north along Whittier Street, turns left on Willoughby Avenue stopping at the existing bus stop near Foodland Shopping Center before continuing onto Glacier Avenue. The route then turns onto 10<sup>th</sup> Street, traveling onward to Overstreet Park before returning along Egan Drive to begin the route again.

Stops consist of the following:

- Library/Marine Parking Garage
- Front Street & Franklin Avenue
- Seward Street & 4<sup>th</sup> Street
- Downtown Transit Center
- Alaska State Museum
- Foodland
- 9<sup>th</sup> & Glacier (Federal Building)
- Overstreet Park
- Egan & Willoughby (76 Egan)

This route requires 20 minutes per loop to operate, including loading and unloading time. It would operate continually, rather than on a set schedule.

### ***Seasonal Schedule and Hours of Operation***

Based on passenger data, service should be operated 7 days a week from early May through early October. The daily span of service should run from 9:00 AM to 9:00 PM. (Extending to 9:00 PM provides more opportunity to serve passengers having dinner on shore.) On busier days (approximately 104 days of the total 156-day operating season), one vehicle should be operated from 9:00 AM to 2:00 PM and two vehicles should be in operation from 2:00 PM to 9:00 PM (providing service roughly every 10 minutes).

### ***Fare***

A day pass should be offered for \$5.00, providing the opportunity for multiple hop-on/hop-off trips over the course of a day. In addition, persons showing a valid Capital Transit monthly pass should be allowed to board for free. For residents who do not purchase monthly passes, a season pass should be offered for \$20 per year.

Regarding fare collection, all fares collected would be considered property of CBJ. The contractor would collect fares, counts, and reconcile revenue, then deposit all fare revenue with CBJ or a CBJ bank account.

### ***Service Operator***

For at least the initial two years of implementation, it is recommended that a transit contractor be used to operate the service, provide the vehicles, and maintain the vehicles. Using a contractor allows the service to be implemented faster and provides greater flexibility to adapt services (and staffing levels) as real-world experience with the service is gained. This also addresses the fact that the existing Capital Transit facility does not currently have the space to store additional vehicles. Though the day-to-day operation of the service would be the responsibility of the contractor, CBJ would still be responsible for other tasks as discussed in the Management Plan, below.

Under this arrangement, the contractor would propose their fixed costs (management, share of facility utilities, insurance, providing the vehicles, etc.) into a monthly cost, and the variable costs of service (driver wages/benefits, fuel, maintenance, etc.) into the hourly fee to be paid by CBJ.

## Capital Needs

Two vehicles will be needed for peak operations. An additional vehicle should be available as a spare, for a total of three. For the initial implementation, vehicles should be provided by the service contractor. Specifications regarding the vehicles (including the age and condition, as well as emission technologies) should be defined in the RFP. Over the longer term, zero-emission battery electric buses would be appropriate. This, however, needs to be an element in a broader zero-emission strategy for Capital Transit.

A small transit bus (capacity of approximately 30 passengers) would optimally be operated. This could be a traditional bus or a trolley replica. Vehicles (including the spare vehicle) should be branded in a distinct paint and logo schedule. Optimally, vehicles would be wrapped, though it may be necessary for initial service to rely on large magnetic signage to designate the circulator buses. Vehicles will need to be wheelchair accessible. The nine bus stops should be distinctively signed as Circulator stops. As shown in Table 28, new benches are recommended at three stops, along with a shelter (with bench) at Egan & Willoughby.<sup>5</sup>

Stop	Recommended Improvements			Notes
	Signage	Benches	Shelter & Pad	
Library/Marine Parking Garage	R	*	*	
Front & Franklin	R	R	*	Increased enforcement of No Parking in Bus Bay needed. Benches will require minor grading and paving. (\$5,000)
Seward & 4th	R	R	*	Benches on existing Sidewalk. (\$1,000)
Downtown Transit Center	R	*	*	
Alaska State Museum	R	R	*	
Willoughby and D St.(Foodland Shopping Center	R	*	*	Already an existing bus stop with shelter and bench
9th & Glacier (Federal Building)	R	*	*	
Overstreet Park	R	*	*	
Egan & Willoughby (76 Egan)	R	*	R	
Total Units	9	2	1	
Unit Cost	\$3,000	See Notes	\$40,000	Total
Total Cost	\$27,000	\$8,000	\$40,000	\$75,000

## Potential Future Enhancements

Once the Downtown Circulator has been established and is running frequently, the resources could be used to provide additional services outside of its regular summer schedule. This may include services for special events in the downtown area, as well as seasonal services to other nearby activity centers such as Eaglecrest Ski Area.

<sup>5</sup> The stop at the Alaska State Museum would optimally be in the Museum's drop-off area (rather than on the east side of Whittier Street, if the Museum would allow it.

## **Service Recommendation 2: Capital Transit Peak Season Tripper Service**

A “tripper” service is recommended to continue shadowing existing Capital Transit Routes 3 and/or 4 on peak summer season days to provide additional service along runs that are overloaded with visitor passengers. It would only run during peak days and hours to allow additional service for local passengers. This additional service should not be shown on the schedule. Rather, Capital Transit drivers should be on standby (on the payroll) to operate along routes as needed when passengers are left at the curb.

It is recommended that Capital Transit set service criteria to accommodate 95 percent of the existing observed left-behind passengers (as shown in Table 14). The Tripper service should be scheduled for days when cruise ship capacity in port is forecasted to exceed 7,000 passengers. Based on 2023’s cruise port capacity calendar, this criteria would require bus tripper service to be scheduled 39 days during the cruise ship season. On each day, drivers should be scheduled for an 8-hour shift. Existing data (shown in Table 12) indicates that a work shift from 10:00 AM to 6:30 PM with a lunch break could best add capacity when needed, though this may vary based on the specific annual cruise ship port capacity calendar. As this tripper service can be provided using the existing Capital Transit fleet, there are no capital needs associated with this strategy.

## **Service Recommendation 3: Limited Capital Transit Service to Mendenhall Glacier**

It was originally recommended that limited Capital Transit service be provided to the staging area approximately ¼ mile south of the Glacier Spur Road Parking Lot during the afternoons of peak season. This should consist of five runs of Route 8 (half-hourly from 3:08 PM to 5:08 PM). This service would potentially add about 2.5 miles and 5 minutes of running time to the existing Route 8. It can be accommodated without significant changes to the transit schedules.

By providing afternoon service only, the goal of this limited service would be largely to retrieve visitors who had taken transit to Dredge Lake Road and walked to the Glacier, without making the public transit access to the glacier so attractive that it significantly impacts the private transportation firms and/or adds significantly to the impact that visitors are having on Capital Transit capacity.

Implementing this strategy would require the approval of the US Forest Service. As they are in the process of finalizing the environmental review of access improvements, it may be several years or more before this strategy can be negotiated and implemented. While this service recommendation is not being taken to the Assembly for further action, it is recommended that CBJ staff continue to coordinate with the USFS in planning for the staging area lot.

## **Seasonal Schedule and Hours of Operation**

The Mendenhall Glacier stop would only be served every half hour from 3:08 PM to 5:08 PM. This would provide the opportunity for visitors to make a short afternoon trip to visit the glacier, perhaps after conducting another tour earlier in the day. An example schedule is provided in Table 24 in Chapter 8.

## ***Capital Improvements***

While this strategy does not require additional vehicles, a stop will need to be established at the staging area, including a shelter and concrete pad. This could be a stand-alone structure or integrated into a larger USFS facility. A budget of \$40,000 has been identified for this improvement.

## ***Marketing Plan***

The Downtown Circulator options would require a strong marketing effort. A marketing campaign could be organized internally or outsourced to a marketing agency through an RFP. A successful marketing campaign would focus on target audiences, through several strategies as described in additional detail below. The following was created based on goals and objectives, outlining the strategies and techniques necessary to meet these goals.

## **Goals and Objectives**

The major goals and objectives that should be accomplished through a Downtown Circulator marketing campaign should include:

- **Raising Awareness/Education:** Creating awareness and improving local knowledge of the Downtown Circulator.
- **Increasing On-Shore Activities:** Cultivating a diverse selection of on-shore activities for cruise ship passengers.
- **Increasing Tourist Presence throughout Downtown:** Encouraging visitors to venture deeper into Downtown and further north than the immediate Franklin and Egan Street corridor.
- **Building Relationships with the Downtown Business Association:** Coordinating collaborative partnerships amongst business owners in the downtown area.

## **Overview of Marketing Strategies**

The marketing campaign for the Downtown Circulator should feature the following strategies:

- **Target Audiences:** Marketing materials, radio ads, and/or TV commercials should target the audience and general messaging for such marketing materials and commercials.
- **Brand Identity:** The service would want to stand alone and be fully branded with a distinct name, logo, and color scheme. It may require its own website or at least a distinct page within an existing website.
- **Community Stakeholders:** Building on the list of stakeholders and community members identified during this study, a list of key community stakeholders should be identified, as well as appropriate means and timing for contacting them about the circulator service. This group would include members of the downtown business owners and employees, cruise ship liaisons, government agencies, and other major tourism community leaders. Their role would be to distribute marketing materials to raise awareness about the service within the community as well as amongst tourists.

- **Marketing Materials:** Several mediums of marketing materials should be developed for outreach. The following materials could be provided in English as well as other languages for distribution through the near community and cruise ship coordinators.
- Press releases to the local Chamber of Commerce and City and Borough of Juneau.
- Printed flyers, visitor guides, etcetera
- News Media Print and Web Ads.
- Social media platforms and posts such as Facebook, Instagram, and Twitter.
- **Website Updates:** All related websites should be updated with clear information regarding the new service. This could include Travel Juneau, Capital Transit, Juneau.org, etc.
- **Suggestions for Promotional Events:** A few pop-up promotional events could introduce the service to potential passengers.

### **Raising Community Awareness**

Community engagement is the core emphasis in the rolling out of the Downtown Circulator. Identifying who needs to be notified of the service is essential in creating an outreach effort that is effective and all-encompassing.

### ***Community Stakeholders***

Another essential part of reaching these specific subgroups of riders is the coordination and inclusion of community stakeholders throughout the implementation of new services. The CBJ should have two approaches when marketing new routes and services to the public and visitors: 1) sharing information when the public and visitors seek it and 2) going to the public and visitors to share information. The first approach will include updating all current means of providing information (transit guides, maps, website, etc.) to include the Circulator service alongside other forms of regional transportation. For the second strategy, identifying and engaging community stakeholders who have access to potential passengers will be critical.

A coordinated effort to keep these stakeholder contacts aware of current services, changes to services, and updated marketing materials should continue to go on before, during, and after Downtown Circulator services have been implemented.

### **MARKETING STRATEGIES**

The following section deals with the other four marketing strategies: marketing materials, website updates, promotional events, and marketing timelines. This section concludes with a sample schedule for rolling out the new services campaign.

## Marketing Materials

### *Photography*

It is important to create a library of high-resolution photography for use in press releases, print and web ads, and social media posts to help guide and raise awareness of transit services. In the early stages of the circulator service, a photographer should be hired for a photo shoot of the circulator bus, drivers, passengers, and the circulator at iconic places such as Overstreet Park. Having a library of high-resolution photography lends itself to having better marketing materials across all types of media during the launch of this service.



### *Print Advertising*

Printed materials include flyers, posters, billboards, and newspaper print ads. They should appear related in general look and feel, however, their content may differ slightly depending on the specific type of audience under consideration and where the content will be posted. They may feature either website links or QR codes for people to be directed to the website for the most up-to-date information.

### *Online Advertising*

Similar to print advertising, online ads may include very simple content that engages the audience to click on the ad to learn more about recent service changes. Ads may be of various sizes depending on the online news media outlet that they are to be featured on. Ads will be clickable and direct viewers to the circulator website to learn more. While the circulator service should be marketed to local residents and business owners, it is also important to create online advertising specifically targeting cruise ship passengers.



## ***Social Media***

Similar to other marketing materials, each post should be customized to attract and engage a particular audience. Featuring specific photography and language style that speaks to your primary rider demographics aids in pulling each individual into the post. An effort should be made to include several types of demographic populations in the photoshoot.

## **Website Updates**

The most important online material will include the creation of and updates to the Downtown Circulator website. The schedule of services should be easy for someone to find when visiting the site. In addition, any changes to service should be clear and concise with a schedule that is easily understood.

## **Promotional Events**

While the distribution of marketing materials in both print and digital formats is paramount in launching new services in the area, hosting a series of in-person events complements the effort and allows time to engage with both residents and visitors on a personal level.



## **MARKETING TIMELINE**

The timing of marketing activities is crucial. All in-person events and supporting materials should be planned far enough in advance to allow people to plan to attend, but close enough to an impending change that the public will maintain focus and enthusiasm for the change. The following is a sample schedule for rolling out new services, assuming a launch in late April in early May 2025.

### **October 2024 (7 months to launch)**

- Set an official launch date in April 2025 for beginning services in May 2025.
- Engage with graphic design and marketing consultants.
- Create a plan of deliverables.
- Graphic design and marketing consultant to begin the logo design process.
- Naming contest or marketing consultant to begin the naming process.

### **December (5 months to launch)**

- Graphics designer to create posters, flyers, print and web ads, and any other visual marketing materials for launch events.
- Engage with stakeholders to announce the Downtown Circulator service.
- Plan to attend other community events.



### **February (3 months to launch)**

- Send follow-up emails to stakeholders to inform them of the Downtown Circulator fellow employees, clients, and their communities. Ensure that the website is active and updated.
- Schedule radio, web, and print ads announcing the new service coming soon.
- Print and produce all large format billboard/poster banners for distribution at various bus stops.

### **March (8 weeks to launch)**

- Run ads, follow up with stakeholders, and attend any other community events.
- Post print announcements
- Draft Press Release
- Begin posting to social media channels.

### **May (launch month) and Beyond**

- Email stakeholders of implemented changes.
- Send Press Release to all local news outlets.
- Hold a media event in downtown Juneau, such as a ribbon cutting.
- Post social media ads targeting specific communities in the region.
- Receive edited photography and share it with a graphic design consultant for marketing materials.
- Hire a photographer to capture transit ridership, staff, and buses for marketing materials.
- Monitor passenger comments and complaints to identify particular issues or areas of concern, and modify public information (website, posters) as appropriate.
- Follow up with stakeholders to receive any feedback and make sure that communities and clients have been made aware of service changes.

As outlined above, the outreach plan for rolling out new transit services should begin at least six months ahead of new service implementation. The marketing effort begins with hiring a marketing and/or graphic design consultant to determine a plan to launch the service in early May 2025. In addition to a website, logo and branding, and social media materials, the process includes posting large-scale marketing materials such as bus stop boards and/or bus wraps.

Lastly, once the new Downtown Circulator service has been launched and the schedules and websites have been updated, a post-effort that focuses on receiving additional input should be initiated. During this time outreach to stakeholders, residents, and visitors should be held to better understand what can be done to make the service better moving forward.

## **MANAGEMENT PLAN**

The following section describes the costs of management tasks towards implementing the above-recommended services.

### **Service Recommendation 1: Downtown Circulator**

At least for the first few years, the Downtown Circulator should be operated through the use of a transit contractor. CBJ staff, however, will still need to take on substantial responsibilities:

- Preparing and administering a Request For Proposals (RFP) process to retain the best-qualified transit service operator.
- Managing the funding for the service and expenditures (including reviewing contractor invoicing).
- Implementing the marketing plan for the Circulator (as discussed above).
- Implementing the transit stop amenity improvements and signage.
- Monitoring service operations and public response to the Circulator service. This includes serving as an opportunity for the public to provide input on the service and any complaints regarding the contractor.

This additional workload is estimated to total approximately \$16,000 in staff time for initial implementation, and an additional \$24,000 per year in ongoing staff time.

### **Service Recommendation 2: Capital Transit Tripper**

Management of the tripper service should be provided through the normal course of Capital Transit operations. Vehicle hours expended on this service should be tracked, as well as the date, time, location, and number of passenger boardings served by the tripper buses.

### **Service Recommendation 3: Limited Extension to Mendenhall**

Although this option is not being recommended for Assembly action, ongoing coordination with the USFS regarding transit passengers accessing the Mendenhall Glacier as well as the time needed to manage the bus stop improvements can be accomplished existing staff.

## **Monitoring and Reporting**

An important element of the overall visitor circulation strategy is a robust monitoring and reporting process. This will be important in providing decision-makers and the community with a good, data-based understanding of the effectiveness of the strategies. Monitoring of the Downtown Circulator should include the following:

- Requiring the service contractor to record ridership by day, vehicle, and run start time, as well as to document the service vehicle-hours, any accidents and incidents, and any public input or complaints received.
- Conducting passenger surveys in several periods throughout the operating season to obtain information on the following:

- Passenger type (cruise passenger, other visitor, resident, etc.)
- Size of travel group
- Trip purpose
- Number of trips per day and per week
- Perception of the service from various criteria (convenience, quality of stops, value, etc.)
- Where and when they learned about the service
- Suggestions and comments
- Conducting passenger boarding and alighting counts in several periods throughout the operating season.
- Providing email and phone opportunities to provide public input regarding the service, or to provide any complaints to CBJ regarding the service contractor.
- Preparing an annual end-of-season report summarizing the data collected and making recommendations regarding changes to the services.
- Making presentations to the Borough Assembly and the Juneau Commission on Sustainability.

## IMPLEMENTATION PLAN

As described in Chapter 8, each specific service under the recommended plan varies in the scope of implementation. The following describes items to consider in the implementation of each service as shown in Table 29. Note that while the Limited Service to Mendenhall Glacier recommendation is included, it is not currently being considered for implementation at this time.

The *Downtown Circulator* will require not only the procurement of a private transportation provider for operations but also a substantial effort in marketing and branding the service. After the official approval of the Circulator Study, a Request for Proposals should be drafted and issued (March through May 2024). It is then suggested that the bus stop improvements indicated in Tables 21 and 22 be implemented during the summer months of 2024. In coordination with interviewing and hiring a private contractor, the process of branding the circulator service should begin. It should have a memorable name that fits with the region and has an easily recognizable logo. Marketing materials would include radio, television, news, and social media campaign materials notifying the public and cruise providers of the available service. The circulator service is anticipated to begin in May 2025.

As the *Capital Transit Tripper* service was already in operation as of the summer of 2023, the implementation of this strategy will require fewer resources than the circulator. It is recommended that the 2024 cruise ship port capacity calendar be used to plan tripper services on days exceeding 7,000 passengers. Based on the 2023 calendar, this will be for approximately 39 days throughout the season and will require additional driver staff to accommodate the increase in service. As this service is not to be advertised, it requires no marketing materials or additional public awareness.

The implementation of *Limited Service to Mendenhall Glacier* will need to be an ongoing conversation between the City and Borough of Juneau and the Forest Service. With the release of the recent *Visitor Improvement Project plan*, providing even limited afternoon services to Mendenhall still may be a long-

term service. Please note that Limited Service to Mendenhall Glacier is not being recommended to the Assembly by the PWFC at this time.

## **FINANCIAL PLAN**

### **Operating Financial Plan**

#### ***Operating Costs***

The costs and revenues associated with operations and management of the strategies are shown in Table 30. Costs are estimated for initial implementation (before service initiation), Year One of service, Year Two of service, and Long-Term. As vehicles are planned to be provided through the service contract in Years One and Two, the operating costs include vehicle lease costs. In the long term, the provision of publicly owned vehicles will eliminate these lease costs. Specific costs are estimated as follows:

Costs for the operation of the Downtown Circulator as well as provision of vehicles will be determined through the RFP process. For planning purposes, the existing Capital Transit budget was used to develop a cost equation that can estimate the cost of service, as follows:

- Operating Cost =  $\$163.10 \times \text{vehicle-hours of service} + \$2.45 \times \text{vehicle-miles of service}$
- Vehicle Cost = \$3,500 per month

These costs are forecast to total \$524,400 in the near term, and \$471,900 in the long term. Marketing costs are estimated to total \$15,000 for initial implementation (branding) and then \$13,000 per year thereafter. Management costs are estimated to total \$16,000 for implementation and then \$24,000 per year. In sum, the Downtown Circulator will incur costs of \$31,000 for implementation, \$561,400 per year in the near term, and \$508,900 in the long term.

**Table 29: Implementation Plan**

Service/Task	2024												2025											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec
<b>Downtown Circulator</b>																								
Circulator Study Approval	█	█																						
Prepare and Issue Request for Proposals			█	█	█																			
Bus Stop Improvements					█	█	█	█	█	█														
Interview and Select Private Contractor												█	█											
Branding and Marketing							█	█	█	█	█	█	█	█										
Launch Press Release															█	█	█							
Operate Circulator Service																	█	█	█	█	█	█	█	█
<b>Capital Transit Tripper</b>																								
Expand Tripper Service						█	█	█	█	█	█						█	█	█	█	█	█	█	█
<b>Limited Capital Transit Service to Mendenhall Glacier</b>																								
Ongoing Communication with Forest Service	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█
<b>Monitoring</b>																								
Collect Monitoring Data					█	█	█	█	█	█						█	█	█	█	█	█	█	█	█
Prepare/Present Monitoring Report																						█	█	█

**Table 30: Operating Financial Plan**

	Initial Implementation	Year One Operations	Year Two Operations	Long-Term Operations
<b>OPERATING COSTS</b>				
<b>Downtown Circulator</b>				
Operations Cost	\$0	\$471,900	\$471,900	\$471,900
Vehicle Lease Cost	\$0	\$52,500	\$52,500	\$0
Subtotal	\$0	\$524,400	\$524,400	\$471,900
<i>Marketing Costs</i>				
Ads (Radio, TV, Newspaper)	\$0	\$10,000	\$10,000	\$10,000
Branding Identity	\$15,000	\$0	\$0	\$0
Materials (Flyers, Info postcards)	\$0	\$3,000	\$3,000	\$3,000
Subtotal	\$15,000	\$13,000	\$13,000	\$13,000
<i>Management Costs</i>				
Preparing RFP	\$8,000			
Managing the Contract and Funding		\$5,000	\$5,000	\$5,000
Monitoring the Service		\$3,000	\$3,000	\$3,000
Reporting to the Council and Committees		\$3,500	\$3,500	\$3,500
Managing Marketing Tasks		\$4,500	\$4,500	\$4,500
Monitoring and Reporting		\$8,000	\$8,000	\$8,000
Stop Improvement implementation	\$8,000			
Subtotal	\$16,000	\$24,000	\$24,000	\$24,000
Subtotal: Downtown Circulator	\$31,000	\$561,400	\$561,400	\$508,900
<b>Capital Transit Tripper Service</b> <i>39 days per season, 8 hours per day</i>	\$0	\$62,000	\$62,000	\$62,000
<b>Mendenhall Extension</b>	\$0	\$0	\$0	\$30,500
<b>TOTAL</b>	\$31,000	\$623,400	\$623,400	\$601,400
<b>OPERATING REVENUES</b>				
Downtown Circulator Fare Revenues (1)	\$0	\$453,000	\$604,000	\$604,000
Mendenhall Glacier Fare Revenues	\$0	\$0	\$0	\$9,200
Subtotal	\$0	\$453,000	\$604,000	\$613,200
Marine Passenger Fee	\$31,000	\$170,400	\$19,400	\$0
<b>TOTAL</b>	\$31,000	\$623,400	\$623,400	\$613,200
<b>BALANCE</b>	\$0	\$0	\$0	\$11,800
Note 1: Assuming ridership in Year 1 is 75% of full potential ridership.				

The cost of 8 hours per day of tripper service on 39 days per year, at Capital Transit's current cost rate, is \$62,000 per year. If Capital Transit service was to extend to Mendenhall Glacier in the long term, this would increase annual operating costs by \$30,500 in today's dollars. In sum, the three service strategies will incur a cost of \$31,000 for start-up expenses, \$623,400 per year in the near term, and \$601,400 per year in the long term.

## Operating Revenues

Downtown Circulator passenger fares (at \$5.00 for a day pass and discounts for residents) are forecast to generate \$604,000 per year once passenger potential is fully realized. Experience with new transit services indicates that the first year of service typically does not meet the full ridership potential, as marketing efforts take time to be fully effective and potential passengers are not fully aware of the service. A 25 percent reduction in passenger revenue was therefore applied for the first year of service. In the long term, once Capital Transit service is extended to Mendenhall Glacier, this is expected to also generate a relatively modest fare revenue of \$9,200 per year.

As other local and federal operating sources are fully allocated to existing Capital Transit services, the remaining required operating funding should be generated through the Marine Passenger Fees. As shown in the bottom of Table 30, this equates to \$31,000 for initial implementation, \$170,400 for Year 1 operation, and \$19,400 for Year 2 operation. In the long term, the reduction in operating costs associated with the provision of public vehicles is forecast to allow fare revenues to fully cover costs, which would avoid the need for Marine Passenger Fees. It is important to underscore, however, that there is a substantial level of uncertainty regarding both the fare revenue estimate and the operating cost estimate, and any additional funding would be addressed through the Marine Passenger Fee program.

## Capital Financial Plan

### Capital Costs

The capital costs of the visitor circulation strategies consist of the following, as shown in Table 31:

- \$3,150,000 for the purchase of three zero-emission buses (including one spare vehicle)
- \$73,000 in stop improvements for the Downtown Circulator
- \$40,000 allocated for public bus stop improvements at Mendenhall Glacier

<b>Table 31: Capital Funding Plan</b>	
<b>Service/Item</b>	<b>Cost</b>
<b>Capital Costs</b>	
Downtown Circulator	
Stop Improvements (Benches, Signage, Shelter)	\$73,000
Zero Emission Vehicles (3)	\$3,150,000
Limited Services to Mendenhall	
Bus Stop Improvement	\$40,000
<b>Total</b>	<b>\$3,263,000</b>
<b>Revenues</b>	
Federal Funding	\$2,520,000
Marine Passenger Fee	\$743,000
<b>Total</b>	<b>\$3,263,000</b>
<b>Balance</b>	<b>\$0</b>

## ***Capital Revenues***

Revenues to address the total of \$3,263,000 in capital funding needs consist of the following:

- Federal Transit Administration Section funds, such as the 5339(c) Low or No Emission Grant Program, are available for up to 80 percent of the cost of zero-emission buses.
- Marine Passenger Fees should address the remaining 20 percent of the vehicle purchase costs as well as all of the bus stop improvement costs.

In total, this calculates to \$2,520,000 in federal funds and \$743,000 in Marine Passenger Fee revenues. If federal funding is not fully available, Marine Passenger Fee requirements may be higher.





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155 S. Seward Street • Juneau, AK 99801

October 20, 2023

Alexandra Pierce, CBJ Tourism Manager  
155 S. Seward St  
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**Subject: Draft *JUNEAU VISITOR CIRCULATOR STUDY* Review of Report-JCOS Comments and Recommendations**

The City and Borough's Commission on Sustainability (JCOS), which recommends sustainability policy to Juneau's elected officials, has strongly supported a shift toward electric vehicles for the CBJ transit system and continues to do so for the circulator concept. The whole goal of cruise ship shore power is to remove emissions and improve air quality. An electric circulator system complements this effort to reduce air emissions issues in downtown Juneau and not compound the existing problem.

In 2010-2011, JCOS helped develop the *Juneau Climate Action & Implementation Plan* (JCAP), resulting in the CBJ Assembly adoption of the plan in 2011 (Resolution 2593). The JCAP set a goal of reducing greenhouse gas emissions by 25% by 2032. The JCAP includes several goals and recommendations relating to electric vehicle adoption for the CBJ transit system:

**Goal T-1: Reduce municipal fleet-related emissions.**

Strategy TI-A. "Purchase low or zero-emission vehicles or renewable fuel vehicles to test for fleet use."

**Goal T-2: Increase Capital Transit ridership**

Strategy T-2. "Purchase only alternative/renewable fuel or hybrid transit vehicles." This developed from the recommendation in the 2008 (15 years ago) CBJ Transit Development Plan that the CBJ consider future fleet purchases of alternative fuel vehicles such as hybrid-electric.

**Goal T-3: Reduce emissions per vehicle mile driven.**

Strategy T3-B. "Consider the feasibility and economic viability of replacing the existing fleet with electric buses."

In 2018, the Assembly adopted the *Juneau Renewable Energy Strategy* (Resolution 2808) developed and drafted by the JCOS. Building on actions in the earlier JCAIP, the 2018 JRES supports increased use of renewable energy in the community. The JRES strengthens our community's long-term commitment to the similar goals expressed in the 2011 JCAIP and repeatedly identified under the CBJ Assembly's annual sustainability goals. Reduced reliance on fossil fuels for transportation is one of the four key strategy areas

the JRES identified. **Incorporating electric circulator buses would be of great value to the CBJ in taking the next steps to make these community aspirations a reality while simultaneously marketing Juneau as a clean port destination.**

Juneau Commission on Sustainability's key areas of comments and recommendation on the JUNEAU VISITOR CIRCULATOR STUDY:

### **Federal Funding Opportunities and Assistance**

JCOS requests a thorough identification of federal funding opportunities to help pay for the circulator expansion of CBJ Transit since it is apparent that there are several DOT, EPA, and perhaps other programs available to assist the CBJ in instituting a circulator without all costs being borne by the Juneau taxpayers or ridership fares. JCOS helping CBJ has been extremely successful in securing millions of federal dollars through the Section 5339(C) LOW OR NO EMISSION GRANT PROGRAM in acquiring replacement and for new improved service buses. Another CBJ success to build on is the 5339 (B) BUS FACILITIES GRANT PROGRAM that is appropriately managed would pay for downtown bus charging facilities and safe, well-lit and perhaps heated bus pick up/drop off stations along the circulator route to provide safe and dry facilities for our residents and visitors alike. While JCOS is experienced with these two programs, independent discussions with our Congressional delegation staff and review of the Inflation Reduction Act and the Bipartisan Infrastructure bill championed by Senator Lisa Murkowski would provide economic opportunities to timely make a clean circulator system in downtown Juneau a reality without paying for it entirely on the backs of Juneau taxpayers. In the final report, we would like to see a detailed discussion on all federal and state funding opportunities and mechanisms to help pay for the circulator system.

### **Juneau Resident Value Added Benefits**

JCOS requests additional work and discussion on providing "value" to our Juneau residents. The report does a fine job at visitor benefits but is missing a section on value-adding the Juneau circulator system to Juneau residents and taxpayers.

JCOS would like to request a discussion on a downtown park and ride section. Downtown parking is an actual or perceived problem for residents. However, parking and visitor congestion is a problem that the circulator concept attempts to alleviate. Therefore, extending the value of the circulator concept to serve the needs of Juneau residents should be articulated in the final report. The circulator study should consider a CBJ-designated downtown "park and ride" parking lot(s). If the report and CBJ supported incorporating park-and-ride lots into the circulator concept, it would provide a valuable service to Juneau workers and visitors (requiring more than a 2-hour parking limit) to park their vehicles and then ride to and from the downtown corridor.

Juneau also hosts several significant events in Juneau, including the Juneau Folk Festival, Gold Medal Basketball Tournament, and the Sealaska Heritage Celebration events. A circulator that operates outside the tourist season that can assist in Juneau hosting these and more events not only helps visitors but it will increase restaurant and shopping traffic to our downtown corridor for these events.

Another salient discussion point is that these circulators can provide "beyond tourism season" on-call transportation from local downtown hotels and designated downtown pick-up stations to Eaglecrest for

our growing winter tourism. Residents can use this system to reduce congestion and parking requirements at Eaglecrest. The final report could also explore and discuss other opportunities that increase the circulator concept's value proposition to improve and optimize Juneau resident's services and more fully utilize transportation investments outside the traditional tourism season.

### **Avoid Mendenhall Glacier Visitor Center Issues with the Downtown Circulator**

The whole discussion of the Mendenhall Glacier, its permitting, its impacts, its potential disruption, and displacement of private businesses and local operations is a distraction to implementing here-and-now solutions for the downtown circulator. The CBJ does not control the access to the visitor center and while the CBJ is encouraged to negotiate and consult, the CBJ does not control the permitting and access to the Glacier. JCOS is not recommending a protracted discussion with the US Forest Service and its management of the Mendenhall visitor center that serves to stall solutions and implementation time for a downtown circulator. This important topic can be dealt with in another study or effort separate from the immediate issues concerning a downtown circulator.

### **Profit/Loss/ Cost Sensitivity Analysis and Public-Private Partnerships**

JCOS recommends a more robust exploration and discussion in this crucial area of the report. Circulators can make money and, if properly managed with efficiency and competency, contribute to Capital Transit's bottom line in capital and operations, improving economics as well as perceived value to Juneau residents. JCOS would recommend that the report conduct a sensitivity analysis on fee structures with beneficial scenarios that support local ridership.

For example, could CBJ Capital Transit monthly passes be incorporated to provide free additional circulator service?

Could monthly park-and-ride fare service that included access to off-downtown-corridor parking be integrated so that Juneau residents did not have to pay a high daily rate? The daily circulator rate could be raised and the monthly rate reduced so that the Capital Transit could afford "several," meaning three (3) or more buses to provide optimal service and keep locals and tourists from waiting in the rain. An effective circulator must be safe and reliable. Therefore, a more robust downtown circulator may be required based on ridership, especially if CBJ management effectively used and parlayed federal funding to help initially pay for the capital investment.

JCOS understands, based on past reports and anecdotal information, that our visitors are willing to pay for a proven, safe, effective, and timely service. However, no surveys or cost sensitivity analysis based on other competitive correlations appear in the report and should be considered.

Also, more information would be required to optimize services with a public/private partnership in that the CBJ could offer the service to a private operator but receive a "cut" to pay for capital infrastructure, replacement, and managerial operations. These options and costs need more exploration to maximize service at the lowest price for Juneau residents while optimizing revenue from visitors alike with appropriate fee structures of daily versus more extended duration fees.

In summary, the JCOS appreciates the invitation to comment. JCOS requests that our comments and other public comments be placed in a report appendix and made an integral component of the final report. We

also ask that in case a written and documentable invite has not already occurred, both Juneau tribal entities, the Douglas Indian Association and the Central Council of the Tlingit and Haida Indian Tribes of Alaska, be directly and cordially invited to make comments for CBJ to maximize any future Justice 40 and environmental justice points for any future federal funding grant and programmatic funding.

Sincerely,

A handwritten signature in cursive script that reads "Gretchen Keiser". The signature is written in black ink on a white background.

Gretchen Keiser, JCOS Chair



October 30, 2023

Alexandra Pierce  
Tourism Director  
155 South Seward Street  
Juneau, AK 99802

RE: Downtown Business Association (DBA) comments on the Juneau Visitor Circulator Study

Dear Ms. Pierce,

Thank you for attending and presenting at our recent DBA board meeting on October 10. The DBA board appreciates your efforts to advance Juneau's visitor industry, which many of our 135 downtown member businesses, their employees, and families rely on. A clean, safe, reliable downtown circulator has been a DBA priority for over a decade, expressed in several letters, presentations, and resolutions shared with partners and the CBJ. We hope our comments now are timely and helpful to optimize the success of a downtown circulator plan. We concur that a downtown circulator will have benefits for cruise ship passengers to Juneau as well as locals.

According to a Cruise Line Industry Association (CLIA) report in 2018 (pre-COVID), the median age of Alaska cruise passengers is 54 and slightly older than other cruise line destination vacationers. Most Alaska cruise travelers are employed (72 percent), and 21 percent have retired. According to former Mayor Greg Fisk in his downtown circulator presentations, the average Alaska cruise passenger has a walking radius of  $\frac{1}{4}$  mile. This limited walking distance is further limited by travelers with health or mobility conditions. Additionally, some cruise visitors do not visit or shop in Juneau for lack of downtown shopping access options due to weather or mobility issues. This phenomenon is especially true for vessels not docking at 16B public docks. Overcoming this transportation barrier with a convenient downtown circulator provides options for eager-to-spend customers at DBA eateries, drinking establishments, and shops, beneficially impacting DBA members and CBJ sales tax revenues. A small percentage of increased shopping visitors that would otherwise "stay on the ship" would help pay for the circulator through increased sales tax from this "stay on the ship" segment.

The visitor industry is an important economic component of DBA members and CBJ tax revenues. A downtown circulator has several economic and social benefits. We also note that a poorly designed and/or poorly managed circulator that does not meet the standard of safety, cleanliness, quick access, and disembarkation or poorly planned stop locations would be problematic. Therefore, CBJ leadership, management, and planning, not infrastructure, are perhaps the determining criteria for a downtown circulator's success. The DBA is interested and supportive of a circulator that adds value to the Juneau visitor experience, our downtown members, and residents. The Juneau Visitor Industry 2022 survey identifies that spreading out tourist congestion is a high priority and important to Juneau residents. Likewise, heavy traffic areas with shops experiencing high rental rates can be mitigated with proper planning of circulator stops that are well planned and coordinated with DBA and its members.

Additional comments regarding recommendations:

Below are some key comments from our membership regarding possible recommendations:

- The identification of appropriate circulator stops will require specific design considerations to reallocate foot traffic from high-density areas while also harmonizing and adding value. These properties with high lease rates should not be negatively impacted by the circulator.
- Circulator stops must be clean and well-lit with no loitering for non-patrons. Maintaining these high standards will be necessary to ensure a positive experience for visitors and residents.
- Consideration should be given to circulator stops that can provide downtown employees with a park-and-ride option to their place of employment from Franklin, Seward, and Main Street.
- A circulator should provide downtown residents access to groceries, hardware, banking, and pharmacy services. Thus, we favor the long route described in the study completed by LSC Transportation Consultants and strongly support a stop at the Foodland Shopping Center.
- The Mendenhall Glacier Visitor Center has unique access issues requiring bifurcation from the downtown circulator project. We recommend that this project stays focused on being a downtown-specific solution that provides immediate access to a vibrant and accessible shopping area while simultaneously dispersing downtown congestion-related visitor traffic.
- The circulator should utilize clean energy (electric or hybrid preferred) and provide the public with easy, non-step access on and off the bus with timely and dependable service.
- In terms of scheduling, we favor at least two circulators with no more than 15-minute intervals to allow visitors with limited time to shop and spend locally.
- Year-round service would benefit our downtown residents who do not drive.

Please know that we appreciate your presence at our recent DBA board meeting and for allowing us the opportunity to discuss this study with you. We fully support a well-designed circulator with adequate service and proper city management to address the needs of Juneau's visitor industry, a core economic driver upon which our members, their employees, and their families rely.

Venetia V Santana  
President, DBA Board of Directors