

# **Juneau Small Cruise Ship Infrastructure Planning Market Assessment and Economic Analysis**

PREPARED FOR:

**PND Engineers, Inc. and  
City and Borough of Juneau**

February 2020

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**McDowell Group Anchorage Office**

1400 W. Benson Blvd., Suite 510  
Anchorage, Alaska 99503

**McDowell Group Juneau Office**

9360 Glacier Highway, Suite 201  
Juneau, Alaska 99801

**Website: [www.mcdowellgroup.net](http://www.mcdowellgroup.net)**



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# Introduction and Methodology

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## Introduction

While large cruise ships represent the vast majority of cruise passengers in Juneau, the small cruise ship market has long been recognized as a valuable source of visitors to the Capital City. Small cruise ship visitors usually overnight in Juneau on either or both ends of their cruise, translating to higher per-passenger spending and bed tax revenues. This market has also been growing in recent years, without commensurate dock space to accommodate it. In order to better plan for and accommodate this valuable visitor market, the City and Borough of Juneau contracted with a team lead by PND Engineers to conduct *Small Cruise Ship Infrastructure Master Planning*. This phase of the project, led by McDowell Group, presents a market assessment and economic analysis of Juneau's small cruise ship market.

## Methodology

The main source of information for this analysis was interviews with representatives of the following cruise lines. These lines shared information on their vessels, traffic, docking needs, local spending, and perspective on Juneau as a small ship port.

- UnCruise
- Alaskan Dream
- Lindblad
- The Boat Company
- American Cruise Lines
- Windstar
- Ponant (CLAA)
- Silversea (CLAA)

Note that Ponant and Silversea referred questions to Cruise Line Agencies of Alaska (CLAA), their dock agent. Only one cruise line (Fantasy) did not respond to requests for information, although they informed CBJ Docks and Harbors that they will not be returning to Alaska in 2020.

The study team also drew upon traffic information from their cruise passenger traffic database, based primarily on data provided to McDowell Group by CLAA, and maintained as part of an ongoing contract with the State of Alaska to track visitor volume to the state.

Passenger spending estimates were based on results of a visitor survey at the Juneau airport in summer 2018, conducted by McDowell Group for Travel Juneau. Estimates also drew upon data from the 2016 *Alaska Visitor Statistics Program*, a periodic study of visitors undertaken by McDowell Group for the State of Alaska. Crew member spending was based on a survey of Ketchikan crew members in summer 2016, adjusted to apply to Juneau small ships. Cruise lines provided information on their spending in Juneau.

For purposes of this report, "small ship" is considered a vessel with a capacity of fewer than 350 passengers. Yachts and charter boats of fewer than 20 passengers are not included unless they are part of a fleet of larger ships, as with two Alaskan Dream vessels.

# Juneau Small Cruise Ship Market

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This section presents an overview of Juneau’s small cruise ship market, including details on every ship that called at Juneau in 2019, as well as details on ships’ schedules for 2020, and longer term traffic trends.

## Current Small Ship Market

### Cruise Lines and Vessels

Eight cruise lines brought 21 small cruise ship vessels to Juneau in 2019. UnCruise brought six vessels; Alaskan Dream brought five; Lindblad brought four; The Boat Company brought two; and all other lines brought one vessel each. Alaska’s small vessels are U.S.-flagged with two exceptions: the Star Legend (Windstar) and Le Soleal (Ponant). One 2020 ship is noted in the following table because of a change in size for next season: the Star Legend is being lengthened and renamed the Star Breeze this winter. Also note that the Island Spirit will not be returning in 2020.

### Passenger and Crew Capacity

In terms of passenger capacity, the bulk of Juneau’s small vessels fall into the 50- to 100-passenger range. While the upper limit of the “small ship” definition is 350 passengers, only three vessels have capacities of over 100: Star Legend (210), Le Soleal (264), and American Constellation (170). (The 2020 Star Breeze will carry 312 passengers.) Seven vessels are on the smaller end, with capacities of between 10 and 40 passengers. In terms of crew members, most small vessels have passenger-to-crew ratios of between 3-to-1 and 2-to-1.

### Juneau Calls

Juneau’s small ships made a total of 272 calls in 2019, ranging from five to 24 calls per ship. A “call” means a ship has brought a group of passengers to Juneau – either embarking/disembarking, or on a port call. If a ship “turns” in Juneau (ends one voyage, then starts another one), then it counts as two calls, since there are two groups of passengers.

### Passenger and Crew Volume

Juneau’s small cruise ship passenger volume is estimated at 18,400 for 2019. UnCruise accounted for the largest share at 5,565 passengers, followed by Lindblad at 4,332, then Alaskan Dream at 3,014. Crew members are generally counted once per season, rather than once per visit. Small ships brought around 770 crew members to Juneau in 2019.

### Docks

Lines that moored and/or anchored downtown in 2019 include UnCruise (Seadrome), Lindblad (Intermediate Vessel Float/IFV and Cruiseship Terminal/CT), The Boat Company (IVF), Ponant (AJ dock in 2019; will anchor in 2020), and Fantasy Cruises (IVF). Windstar alternates between anchoring and using the AJ and Alaskan Steamship docks. Two lines use Auke Bay docks: Alaskan Dream (Allen Marine dock) and American Cruise Lines (Delta Western dock located between the Alaska Marine Highway System and Allen Marine docks).

## Turnaround Ports

Nearly all vessels used Juneau as a turnaround port on most of their 2019 voyages, with some using Juneau for both embarkation and disembarkation, and others using it for one end of their voyage (Sitka and Ketchikan are the usual alternative turnaround ports). Only two ships regularly used Juneau as a port call rather than a turnaround port in 2019: Star Legend and Alaskan Dream. In addition, Lindblad offered two voyages on two vessels (four voyages total) using Juneau as a port call on positioning cruises, sailing between Seattle and Sitka at the beginning and end of the season.

It should also be noted that some vessels use different turnaround ports within a season. For example, several UnCruise vessels have round-trip Juneau itineraries as well as Juneau-Sitka and Juneau-Ketchikan itineraries.

**Table 1. Juneau Small Cruise Ship Market Profile, 2019**

	Passenger Capacity	Crew Capacity	# Juneau Calls 2019	Total Passengers 2019	# of Hours in Port	Dock	Turnaround Ports
<b>UnCruise</b>							
Safari Endeavor	86	34	10	1,211	12	Seadrome	Jun/Sit
SS Legacy	86	35	18	940	12	Seadrome	Juneau
Wilderness Discoverer	76	26	10	999	12	Seadrome	Jun/Sit/Ktn
Wilderness Explorer	76	26	13	1,121	12	Seadrome	Jun/Sit/Ktn
Wilderness Adventurer	60	25	24	1,235	12	Seadrome	Jun/Ktn
Safari Quest	22	10	5	59	12	Seadrome	Juneau
<b>Alaskan Dream</b>							
Alaskan Dream	40	18	16	555	8	Allen Marine	Sit/Ktn
Chichagof Dream	76	30	18	843	8	Allen Marine	Jun/Sit
Admiralty Dream	54	21	18	838	8	Allen Marine	Jun/Sit
Baranof Dream	49	21	16	648	8	Allen Marine	Jun/Sit
Misty Fjord	10	5	18	130	8	Allen Marine	Jun/Sit
<b>Lindblad</b>							
Sea Bird	62	22	6	680	17	CT (inside)	Jun/Sit
Sea Lion	62	22	7	807	17	CT (inside)	Jun/Ktn
Quest	100	49	7	1,309	17	IVF	Jun/Sit
Venture	100	49	8	1,536	17	IVF	Jun/Sit
<b>Windstar</b>							
Star Legend	210	164	11	2,168	8-12	Anchor/AJ/AS	Van/Sew
<i>Star Breeze (2020)</i>	<i>312</i>	<i>190</i>	<i>9</i>	<i>n/a</i>	<i>8-12</i>	Anchor/AJ/AS	<i>Van/Sew</i>
<b>The Boat Company</b>							
Mist Cove	24	13	16	434	24-30	IVF	Jun/Sit
Liseron	20	12	16	320	24-30	IVF	Jun/Sit
<b>Ponant</b>							
Le Soleal	264	139	6	620	36	AJ*	Jun/Van
<b>American Cruise Line</b>							
American Constellation	170	26	13	1,444	20	DW	Juneau
<b>Fantasy Cruises</b>							
Island Spirit	32	10	16	512	n/a	IVF	Jun/Sit/Pbg
<b>TOTAL VESSELS:</b>	<b>21</b>		<b>TOTAL CALLS:</b>	<b>272</b>		<b>TOTAL PASSENGERS:</b>	<b>18,400</b>

Sources: CLAA, cruise lines.

Note: Fantasy 2019 passenger total is based on capacity and number of Juneau calls.

AS: Alaska Steamship; CT: Cruiseship Terminal; IVF: Intermediate Vessel Float; DW: Delta Western at Auke Bay.

\*Le Soleal will anchor in 2020.

## Docking/Moorage Schedule

Demand for berths is much higher on certain days of the week than on others, and many vessels are in port simultaneously. Based on 2020 schedules, below is a sample week of maximum demand. It shows the highest demand on Sundays with four vessels, followed by Saturdays and Wednesdays with three vessels each. Note that two vessels are listed on two days; they overnight in Juneau (American Constellation and Mist Cove). Also note that this reflects a sample week; another week would show slightly different patterns, as some vessels vary their schedule week to week.

**Table 2. Small Vessel Berth Demand in a Sample Week, Summer 2020**

	Vessel	Hours
Sunday	Safari Endeavour	6am-5pm
	Venture	6am-11pm
	Sea Lion	6am-11pm
	Mist Cove	Midnight-3pm
Monday	NO CALLS	
Tuesday	American Constellation	8pm-midnight
Wednesday	American Constellation	Midnight-3pm (overnight)
	Star Breeze	Noon-9pm
	Le Soleal	6am-6pm
Thursday	NO CALLS	
Friday	SS Legacy	6am-6pm
Saturday	Wilderness Discoverer	6am-6pm
	Wilderness Adventurer	6am-6pm
	Mist Cove	10am-midnight

Sources: CLAA, cruise lines.

The following table shows detailed schedules for small ships' arrivals/departures to and from Juneau in 2020. Some vessels have very regular arrival/departure dates and times, while others vary throughout the season. The bulk of turnarounds occur on weekends: all UnCruise vessels turn on Fridays, Saturdays, and Sundays; Lindblad's two larger vessels always turn on Saturdays and Sundays, while their two smaller vessels sometimes do so; and both the Boat Company's vessels turn on Saturdays and Sundays.

**Table 3. Juneau Small Cruise Ship Arrival/Departure Schedule, 2020**

	ARRIVAL		DEPARTURE		Dates
	Days	Times	Days	Times	
<b>UnCruise</b>					
Safari Endeavor	Sunday	6-7am	Sunday	5-6pm	5/24, 6/7, 6/21, 7/5, 7/19, 8/2, 8/16, 8/23, 9/6, 9/13
SS Legacy	Friday	6-7am	Friday	5-6pm	5/8, 5/15, 5/22, 5/29, 6/5, 6/12, 6/19, 6/26, 7/3, 7/10, 7/17, 7/24, 7/31, 8/7, 8/14
Wilderness Discoverer	Saturday	6-7am	Saturday	5-6pm	5/2, 5/16, 5/30, 6/13, 6/27, 7/11, 7/25, 8/8, 8/22, 9/5
Wilderness Explorer	Saturday	6-7am	Saturday	5-6pm	4/25, 5/9, 5/23, 6/6, 6/20, 7/4, 7/18, 8/1, 8/15, 8/29, 9/12, 9/19
Wilderness Adventurer	Saturday	6-7am	Saturday	5-6pm	4/11, 4/18, 4/25, 5/2, 5/9, 5/16, 5/23, 5/30, 6/6, 6/13, 6/20, 6/27, 7/4, 7/11, 7/18, 7/25, 8/1, 8/8, 8/15, 8/22, 8/29, 9/5, 9/12, 9/19, 9/26
Safari Quest	Friday	6-7am	Friday	5-6pm	5/29, 6/5, 6/12, 6/19, 6/26, 7/3, 7/10, 7/17, 7/24, 7/31, 8/7, 8/14, 8/21, 8/28

	ARRIVAL		DEPARTURE		Dates
	Days	Times	Days	Times	
<b>Lindblad</b>					
Sea Bird	Friday	6am	Friday	11pm	5/22, 7/31
	Monday	6am	Monday	11pm	6/1, 8/10
	Thursday	6am	Thursday	11pm	6/11, 8/20
	Sunday	6am	Sunday	11pm	6/21, 8/30
	Wednesday	6am	Wednesday	11pm	7/1
	Saturday	6am	Saturday	11pm	7/11
	Tuesday	6am	Tuesday	11pm	7/21
Sea Lion	Thursday	6am	Thursday	11pm	5/21, 7/30
	Sunday	6am	Sunday	11pm	5/31, 8/9
	Wednesday	6am	Wednesday	11pm	6/10, 8/19
	Saturday	6am	Saturday	11pm	6/20, 8/29
	Tuesday	6am	Tuesday	11pm	6/30
	Friday	6am	Friday	11pm	7/10
	Monday	6am	Monday	11pm	7/20
Quest	Saturday	6am	Saturday	11pm	5/30, 6/13, 6/27, 7/11, 7/25, 8/3, 8/22
Venture	Sunday	6am	Sunday	11pm	5/24, 6/7, 6/21, 7/5, 7/19, 8/2, 8/16, 8/30, 9/13
<b>Windstar</b>					
Star Breeze	Thursday	12pm	Thursday	10pm	5/21
	Wednesday	7am	Wednesday	3pm	6/3
	Saturday	12pm	Saturday	9pm	6/13
	Wednesday	8am	Wednesday	10pm	6/24
	Sunday	12pm	Sunday	9pm	7/5
	Wednesday	12pm	Wednesday	9pm	7/15
	Monday	12pm	Monday	9pm	7/27
	Saturday	8pm	Saturday	9pm	8/8
	Tuesday	12pm	Tuesday	9pm	8/18
<b>The Boat Company</b>					
Mist Cove	Saturday	10am	Sunday	3pm	5/9-10, 5/23-24, 6/6-7, 6/20-21, 7/11-12, 7/25-26, 8/8-9, 8/22-23, 9/5-6, 9/19-20
Liseron	Saturday	10am	Sunday	3pm	5/2-3, 5/16-17, 5/30-31, 6/13-14, 6/27-28, 7/18-19, 8/1-2, 8/15-16, 8/29-30, 9/12-13
<b>Scenic Luxury Cruises</b>					
Scenic Eclipse	Sunday	1pm	Sunday	midnight	9/13
<b>Ponant</b>					
Le Soleal	Wednesday	6-9am	Wednesday	6pm	7/22, 8/5, 8/19, 9/2
<b>American Cruise Line</b>					
Amer. Constellation	Monday	6am	Tuesday	3pm	6/15-16
	Thursday	8pm	Friday	3pm	6/25-26
	Sunday	8pm	Monday	3pm	7/5-6
	Wednesday	8pm	Thursday	3pm	7/15-16, 7/22-23, 7/29-30
	Wednesday	3am	Wednesday	3pm	8/5
	Tuesday	8pm	Wednesday	3pm	8/11-12, 8/18-19, 8/25-26, 9/1-2

Sources: CLAA, cruise lines.

Allen Marine not included because they use their own dock and plan to continue doing so.



## Traffic Trends

Juneau’s small cruise ship market has ranged between roughly 13,000 and 19,000 passengers over the last five years. The most recent season, 2019, saw the most traffic at 18,400. It is worth noting that small cruise ship traffic was once even higher, reaching around 20,000 passengers a decade ago. Traffic dropped abruptly in 2011 after Cruise West ceased operations, and has been steadily rebuilding since.

One recent trend is a lengthening of season, with some ships arriving in Alaska earlier and/or leaving later in the season. UnCruise has largely led this trend, although The Boat Company also plans on a longer season in 2020. Another trend is “whole boat” charters of the vessels, sometimes with multi-generational family reunions. One operator observed an increase in families with children on their voyages.

Several contacts noted an issue of overcapacity and a “soft market” in 2019. Indeed, many voyages operated under full capacity. There was generally optimism that the ships would be closer to capacity in 2020 based on early bookings. One line was already sold out for 2020.

**Table 4. Juneau Small Cruise Ship Market Volume, 2014-2019 (2020 Projected)**

	2014	2015	2016	2017	2018	2019	2020 (proj.)
UnCruise	8,164	6,088	5,589	5,798	6,214	5,565	5,800
Alaskan Dream	2,159	2,236	2,935	3,150	3,172	3,014	3,000
Lindblad	2,119	2,032	1,920	1,947	3,055	4,332	4,500
Windstar	-	-	-	-	2,045	2,168	2,800
The Boat Company	704	704	686	678	581	754	800
Ponant	249	1,313	884	-	-	620	600
Fantasy Cruises	336	336	n/a	n/a	608	364	-
Scenic	-	-	-	-	-	-	200
American Cruise Line	744	557	1,100	810	1,831	1,444	1,700
<b>Total</b>	<b>14,640</b>	<b>13,266</b>	<b>13,114</b>	<b>12,876</b>	<b>17,614</b>	<b>18,409</b>	<b>19,400</b>

Sources: CLAA, cruise lines.

## 2020 and Beyond

Based on observations from cruise executives, 2020 looks like it will see a slight increase from 2019, from 18,400 to 19,400. Cruise lines made the following observations on future Juneau traffic.

- **UnCruise** will maintain their current schedule in 2020, and likely 2021, with one exception: they are adding several voyages for their smallest vessel, the Safari Quest, which will use Juneau for both embarkation and disembarkation.
- **Alaskan Dream** plans a 2020 season very similar to 2019, with a few more calls by their smallest vessel (Kruzof). They also noted that a few more voyages will use Juneau as a port call rather than as a turnaround port. (They used Juneau as a turnaround port on 90% of their 2019 voyages.)
- **Lindblad** has no plans to change their Alaska capacity in the next couple of years as they have added two vessels in the last several years. Additional vessels in the longer term are possible.

- **American Cruise Line** plans to maintain their current schedule for the foreseeable future, although they plan on 12 voyages, down from 13, due to incorporating two 10-day itineraries. Additional vessels in the longer term are possible but have not yet been planned.
- **The Boat Company** is adding three voyages for each of their two vessels in 2020, extending the season both in May and September.
- **Ponant** plans the same itinerary in 2020 as in 2019: three “turns” in Juneau, with passengers embarking and disembarking at each turn.
- **Windstar** will make two fewer calls in Juneau in 2020 compared to 2019, as they are incorporating a couple of longer itineraries. However, they will bring more passengers, due to their larger vessel. They plan to continue stopping in Juneau as a port call in 2020, but will use Juneau to embark/disembark once in 2021.
- **Scenic Luxury Cruises’** Scenic Eclipse will make one stop in Juneau in 2020, on its first Alaska voyage. It will be at anchor. They are not yet on the 2021 schedule, although that could change.
- **Fantasy Cruises** will not be returning to Alaska in 2020.
- **American Queen Steamboat Company** plans to enter the Alaska market in 2021 with a 186-passenger vessel.

It is challenging to estimate long-term growth in the cruise market, regardless of vessel size. Many factors are at play: the health of the U.S. economy, geo-political events, the emergence or growth of other markets (these vessels are moveable assets that can be shifted easily to other regions of the country or world), and Forest Service and National Park permitting, to name a few examples. With these caveats in mind, Juneau can expect small vessel traffic to increase only a modest amount over the next five to ten years.

- The major lines (UnCruise, Lindblad, and Alaskan Dream) do not have firm plans to increase their capacity in the next several years.
- There are barriers to growth in the market, including an increase in mid-size, luxury options (such as Hurtigruten, Viking, Silversea, and Seabourn); this is likely to affect demand for the smaller vessels, which are at about the same price point.
- After significant growth over the last five years, it may take several years for demand to catch up with capacity. Coupled with a soft 2019 season for both large and small ship lines, near term growth plans have slowed.

Cruise line representatives shared their perspectives on Juneau as a port-of-call, as well as docking in downtown versus Auke Bay.

## Advantages

Cruise line contacts noted the following advantages to calling at Juneau:

- Jet service
- Hotels
- Variety of activities including flightseeing, hiking, museums
- Restaurants, breweries, and distilleries
- Retail shops
- Provisions and supplies (Costco, Fred Meyer, etc.)

One contact pointed out that there are going to be large ships anywhere in Southeast where there is frequent jet service. One line used to use Petersburg as a turnaround port, but the air schedule was too inconvenient.

## Disadvantages

The following disadvantages to calling in Juneau were noted by cruise lines.

- Insufficient dock space
- Some docks not suited to small cruise ships
- Some docks in need of maintenance/upgrades
- Recent, rapid growth of large ships
- Yachts competing for dock space
- Inadequate hotel space
- Hotels not up to standards of clientele
- Transportation services can be spotty
- Expensive (noted of Alaska in general as a cruise ship destination)
- Inadequate security facilities for foreign-flagged vessels
- Conflicts with other dock users, fishing vessels, floatplanes
- Lack of parking.

Despite these disadvantages, cruise lines were generally in agreement that Juneau was a preferred turnaround port for their vessels based on the advantages noted above. From a passenger perspective, cruise lines noted their appreciation of the retail, dining, and tour options available in Juneau, even if the hustle and bustle of downtown is somewhat incongruous with the “remote” feel of their overall cruise.

## **Downtown versus Auke Bay**

Downtown was noted as much more convenient than Auke Bay for a variety of reasons: proximity to hotels, availability of activities, and transportation. One noted the appeal to passengers of seeing “the capital” as well as having lodging, shopping, and dining options close at hand. Contacts noted the convenience and cost-saving of having the passengers walk from the vessel to and from their hotel. There is also value in keeping tourism concentrated in one location, to limit impacts.

One contact observed that developing infrastructure in the Auke Bay area would not be well received by the community. There is no advantage in terms of itinerary since most vessels go around Admiralty Island anyway. Statter Harbor was also cited as inconvenient due to the long distance between the parking lot and the small cruise dock.

American Cruise Line currently docks in the Auke Bay area, at the Delta Western dock located between the AMHS and Allen Marine docks. An ACL representative said they would rather dock downtown but cannot due to the lack of docking space (their ship increased in size from previous years, when they were able to dock downtown). They said their current docking location was inconvenient and not good for the guest experience. The Boat Company likewise prefers downtown docks, recalling their prior experience in Auke Bay was inconvenient (likely Statter Harbor).

Alaskan Dream uses their own dock in Auke Bay and does not plan to change. They do, however, have an interest in dock facilities for small cruise ships in the downtown area as an option for their whale-watching catamarans. They observed that their schedule would correspond well with the small cruise vessels, which generally don't overnight at dock. While Allen Marine's whale watching vessels are not profiled in this study, they (as well as other dayboat operators) are potential users of new docking facilities.

A Lindblad representative was more open to the possibility of docking in the Auke Bay area, to avoid the crowded downtown waterfront and preserve the wilderness theme of their cruises.

# Infrastructure Considerations

A variety of information was gathered from nearly all of Juneau’s small cruise ship lines regarding vessel size, configuration, and docking needs. (While Alaskan Dream was included in cruise line interviews, they did not provide information on their vessels and docking needs because they plan to continue using their own dock.)

## Vessel Size

Note that Windstar is lengthening their vessel this winter: the Star Legend will be renamed the Star Breeze, and lengthened from 440 feet to 522 feet. Also, in 2021 the American Queen Steamboat Company will be bringing a vessel to Alaska measuring 343 feet in length, with a beam of 60 feet and water draft of 17 feet.

**Table 5. Juneau Small Cruise Ship Size, 2019/2020**

	Displacement Tonnage (LT)	Ship Length (ft)	Beam	Water Draft	Masthead Height <sup>1</sup>
<b>UnCruise</b>					
Safari Endeavor	n/a	217	40'	8.5'	Max 72'
SS Legacy	n/a	192	40'	9.3'	Max 72'
Wilderness Discoverer	n/a	176	39'	7.0'	Max 72'
Wilderness Explorer	n/a	186	38'	7.5'	Max 72'
Wilderness Adventurer	n/a	160	39'	6.5'	Max 72'
Safari Quest	n/a	103	28'	7.0'	Max 72'
<b>Lindblad</b>					
Sea Bird	418	164	31'	9'1/2"	50'
Sea Lion	418	164	31'	9'1/2"	50'
Quest	2,128	238	48'	12.5'	52'
Venture	2,128	238	44'	12.5'	52'
<b>Windstar</b>					
Star Breeze (2020)	n/a	522	62' <sup>2</sup>	32'	59'
<b>The Boat Company</b>					
Mist Cove	572 <sup>3</sup>	156	32'	8'	50'
Liseron	409 <sup>3</sup>	146	28'	8'	44'
<b>Scenic Luxury Cruises</b>					
Scenic Eclipse	n/a	544	70'	17'	n/a
<b>Ponant</b>					
Le Soleal	n/a	466	60'	15'	99'
<b>American Cruise Line</b>					
American Spirit	2,153	220	50'	8'	61'8"

Source: Cruise lines, online vessel databases.

Notes: Alaskan Dream is not included in this table because they use their own docks and plan to continue doing so. Fantasy Cruises is not included because they will not be returning to Juneau in 2020.

<sup>1</sup> The Douglas Bridge height is 66.4 feet at zero tide.

<sup>2</sup> 74 feet including lifeboats.

<sup>3</sup> The Boat Company did not provide displacement tonnage; these figures reflect ITC tonnage.

## Docking Needs

The following docking needs were reported by the interviewed lines. Ponant and Silversea representatives were not available; a CLAA representative responded in their stead. Fantasy is not included because they will not be returning to Juneau in 2020.

### Vessel Mobility and Maneuverability

- **UnCruise:** All twin screw with one bow thruster. No stern thrusters.
- **Lindblad:** All vessels dual screw conventional propulsion.
- **Boat Company:** Both vessels twin screw – one vessel has a bow thruster.
- **Windstar:** Twin Screw, CPP
- **American:** Twin Screw conventional with one bow thruster
- **Silversea:** Advanced, thrusters
- **Ponant:** Advanced, thrusters

### Berthing Configuration and Needs

- **UnCruise:**
  - Port/Starboard: Depends on boat and fueling location on the vessel and dock. Most boats can go either side to the dock, but some fuel amidships making that side preferable.
  - No line handlers or longshoremen needed.
  - Prefer 2-5 feet freeboard height.
- **Lindblad:**
  - Port/Starboard: Either.
  - No line handlers or longshoremen needed.
  - Freeboard height: Mid-max 1 meter.
  - Prefer perpendicular gangway ramps.
- **Boat Company:**
  - Port/Starboard: Starboard
  - No line handlers or longshoremen needed.
  - Prefer 6 feet freeboard height. No gangway would then be needed.
- **Windstar:**
  - Port/Starboard: No preference
  - Line handlers/longshoremen are needed.
- **American:**
  - Port/Starboard: No preference
  - No line handlers/longshoremen needed.
  - Main deck is 4' 8" above the waterline.
  - If the floating dock is close in height to the main deck, then we have a short gangway that will work fine. If there is a sizeable difference (> 3') in the height of the deck above the dock, then a small platform with steps up to the ~5' above waterline would allow use of the short gangway.

- **Ponant/Silversea:**
  - Port/Starboard: Starboard
  - Line handlers/longshoremen are needed.
  - 8' is adequate for height above water level.

## Water and Sewer Needs

- **UnCruise:** Both water and sewer preferred.
- **Lindblad:** Both water and sewer needed.
- **Boat Company:** We take on water and may off load sewage if available though currently not needed
- **Windstar:** Both water and sewer preferred.
- **American:** Potable water required. Sewer not required.
- **Ponant/Silversea:** Potable water needed, sewage not needed

## Waste Disposal

- **UnCruise:** Trash, recycling, oil, hazardous waste off-load needed.
- **Lindblad:** Trash and recycling off-load needed. Oil/hazardous waste off-load preferred.
- **Boat Company:** Trash and recycling off-load needed. No oil/hazardous waste.
- **Windstar:** Trash, recycling, oil, hazardous waste off-load preferred, including potentially handling regulated garbage.
- **American:** Trash and recycling required. Approximately 30 yds/ week max. Oils/hazardous offload not required, but preferred as a backup if available.
- **Ponant/Silversea:** Garbage is off-loaded by barge and if recycling were competitive or available it may be utilized. Oil/hazardous waste is managed in MARPOL ports. If available may be utilized; currently not cost-effective or not available.

## Shore Power

- **UnCruise:** Typically 208 3 phase 100 amp min. Max 440 volt 3 phase, 400 amp. Wifi is important.
- **Lindblad:** Not required.
- **Boat Company:** No shore power needed.
- **Windstar:** Ship not set up for shore power.
- **American:** Not required.
- **Ponant/Silversea:** Not sure.

## Fueling Needs

- **UnCruise:** Number 2 diesel every week or every other week. Typical amounts between 1,500 and 3,400 gallons per vessel depending on vessel and if weekly or every other week.
- **Lindblad:** Number 2 diesel.
- **Boat Company:** None; fuel in Sitka.
- **Windstar:** Not normally fueling in Juneau. Will be MGO (Marine Gas Oil) if we did fuel in Juneau.

- **American:** Number 2 diesel, 10,000 gal./week avg.
- **Ponant/Silversea:** MGO, voyage-specific (voyages are not routine). Currently managed in Juneau by feeder barge when required and in Sitka at the new cruise ship dock.

## Parking and Staging

- **UnCruise:**
  - Typically at dock for 12 hours. Van and 25' box trucks for supplies, fuel trucks and busses or vans for guests. Normally three support cars/small vans for staff and vendors. Note that is highly preferred to have a drive on/off float with truck ramp to the vessel.
  - Covered staging area only needed if no drive on and off ramp is in the design. If no drive on ramp then area for baggage, store and other gear will be needed at the top of the ramp; roughly 40X40 would work. Dock must be secure to account for SOLAS voyages and general security. Restrooms are always a good idea.
  - If drive down ramp no cranes needed. If like Seadrome today, powered carts are needed.
  - If the dock is at least 20 feet wide no extra area is needed for assembly and loading.
- **Lindblad:** Vessel transport for deliveries and luggage.
- **Boat Company:**
  - Two vehicles for the turnaround period, a pick-up and a van.
  - Upland staging with shelter, benches, restrooms would be nice.
  - It would be nice to drive a vehicle on dock for provisioning and luggage.
- **Windstar:** Not applicable; does not normally turn in Juneau.
- **American:**
  - No upland parking/staging required.
  - Having a covered area with benches for passengers to wait for transportation from the ship would be nice, although of limited number.
  - Loading requirements: Nothing heavier than what we move via hand carts.
  - Assembly area: Any normal dock should suffice.
- **Ponant/Silversea:**
  - All managed by the Agent; current capabilities are sufficient. The issue is when dock space is not available and deliveries at anchor are a challenge. Most calls will have smaller delivery vans (2-3) per call of incidental provisions; 30 mins per vehicle on dock or in adjacent uplands.
  - Covered shelter, benches, restrooms, security booth, etc.: all currently available except restrooms at CBJ Cruise Ship Terminal.
  - Assembly area: Sufficient while at a dock but when at anchor an area needs to be designated for security screening if embarking/disembarking passengers in Juneau (Ponant has some calls in 2020 turning at anchor, not Silverseas).



## Security

- **UnCruise:** Security needed for SOLAS (Safety Of Life At Sea) voyage and general security. Needs lockable gate and should have cameras.
- **Lindblad:** Security needed as per ISPS (International Ship and Port Security).
- **Boat Company:** No security needed.
- **American:** The vessel does have a Security Plan and must be at an approved PAF (Public Access Facility) or secure port location.
- **Ponant/Silversea:** Not required – already provided.

The Marine Exchange of Alaska shared the following observations about small cruise ship security:<sup>1</sup>

*There are several factors that come into play in determining security requirements for small passenger vessels. The Coast Guard regulations in 33 CFR 104 apply. Generally all vessels with over 150 passengers are subject to the Coast Guard maritime security regulations as is the facility they moor to. Other vessels engaged in international trade/voyages with more than 12 passengers are also subject to the regulations.*

*For planning purposes, any facility that accommodates small passenger vessels should have a Facility Security Plan and the associated access control (fencing, barriers, signage) and personnel with security duties available and deployed when they are required.*

*Silver Seas and Ponant are foreign flagged vessels with more than 150 passengers so they always will require to be berthed at a facility that has a security plan that is implemented. The Boat Company has too few passengers to require a security plan.*

## CBJ Capacity Assessment

Port of Juneau staff examined reservation data over the 2017 to 2019 period for the Intermediate Vessel Float, which served three cruise lines representing five vessels in 2019 (The Boat Company, Lindblad, and Fantasy), along with a wide variety of yachts and other vessels. They determined that the number of days at or over capacity ranged from 31 days in 2017, to 60 days in 2018, to 51 days in 2019. The average number of linear feet (LF) over capacity per day, by month, ranged from 0 in some May and September months to 275 feet in August 2019.

**Table 6. IVF Vessel Float: Capacity Analysis, 2017-2019**

	AVERAGE LF OVER CAPACITY PER DAY					# of days at or over capacity
	May	June	July	August	September	
2017	0	134	157	104	0	<b>31 days</b>
2018	175	66	237	224	44	<b>60 days</b>
2019	0	193	201	275	0	<b>51 days</b>

Source: Port of Juneau.

<sup>1</sup> Provided via email, 2/10/20.

The following observations by Port staff accompany this analysis:

- The above numbers are only from the schedule. This does not reflect walk-in customers, tenders, and fishing vessels that are not added to the schedule. About 25% of the vessels turned away are excessive size.
- Recommended space between ships is 10', more for vessels over 100'. The inside of the IVF is often constricted by tide. One day a week when the Royal Princess is in port there is only 75' between the IVF and the ship.
- In June and September once or twice a week the Port turns away docking requests due to no space. In July and August, the Port turns away docking requests due to no space five days a week.

Port of Juneau staff recommend constructing a 350 ft. float with berths on both sides. The additional 700 lineal feet of moorage would accommodate a new small ship and vessels currently turned away in peak season.<sup>2</sup>

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<sup>2</sup> Communicated via email, Port of Juneau staff, January 24, 2020.

# Economic Analysis

There are two types of small cruise passengers in Juneau: those who start and/or end their cruise in Juneau, and those who stop in Juneau for just a day visit in between other ports. Passengers who embark/disembark in Juneau tend to spend more because they usually stay at least one night in town. A survey of 36 small cruise ship passengers at the Juneau Airport in summer 2018 revealed an average spending of \$575 per person while in Juneau. While the sample size is small, it is the best data available. Multiplying \$575 by the number of embarking/disembarking passengers in 2019 yields a spending estimate of \$9.2 million.

In 2019, only two small vessels regularly used Juneau as a port-of-call rather than an embarkation/disembarkation point (Alaskan Dream and Star Legend), bringing roughly 3,000 passengers for day visits. It is reasonable to assume that these passengers spent approximately the same as large ship passengers on similar itineraries. Large cruise ship passenger spending was estimated at \$162 per person in 2016. Multiplying \$162 by the number of day visit passengers in 2019 yields a spending estimate of roughly \$500,000.

Some crew members overnight in Juneau, particularly if they are starting or finishing their tour with the vessel. It is difficult to estimate their spending as no surveys of crew members have been conducted in Juneau. A survey of 103 crew members off large ships was conducted in Ketchikan in 2016, revealing that they spent an average of \$430 per person over the course of the summer. This study assumes per-crew-member spending of \$400 in Juneau over the course of the season. Unlike large ship crew members in Ketchikan, small ship crew members are not making big purchases at box stores; on the other hand, they do occasionally spend money in hotels and restaurants between shifts. Multiplying the average spending of \$400 by the 770 crew members yields a total spending estimate of roughly \$300,000.

Cruise lines make a variety of purchases in Juneau: fuel, provisions, laundry services, bus/van services, rental cars, hotel rooms on behalf of their passengers, and dockage fees, among others. Five cruise lines provided information on their spending in Juneau. Extrapolating their spending to apply to all lines based on relative passenger traffic yields an estimate of \$3 million in cruise line spending in 2019.

Adding together spending by passengers, crew members, and cruise lines yields a total spending estimate of \$13 million in summer 2019.

**Table 7. Small Ship Cruise Line, Passenger, and Crew Spending in Juneau, 2019**

	Volume	Per Person Spending	Total Spending
Embarking/disembarking passengers	16,000	\$575	<b>\$9,200,000</b>
Day passengers	3,000	\$162	<b>\$500,000</b>
Crew members	770	\$400	<b>\$300,000</b>
Cruise lines	n/a	n/a	<b>\$3,000,000</b>
<b>Total</b>			<b>\$13 million</b>

Source: McDowell Group estimates.

Note: Crew member per-person spending estimate applies to the entire season, not to each visit.