

# Ketchikan Cruise Ship Rate Study

*Prepared for*

**City of Ketchikan**

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*Prepared by*



**Northern  
Economics**

P.O. Box 1109140

Anchorage, Alaska 99511

Phone: 907-274-5600

Fax: 907-290-2464

[www.northerneconomics.com](http://www.northerneconomics.com)

**PROFESSIONAL CONSULTING SERVICES IN APPLIED ECONOMICS AND SOCIAL SCIENCES**

**Principals:**

Marcus L. Hartley, M.S. – President  
Michael Fisher, MBA – Vice President  
Diane Sauer – Office Manager

**Consultants:**

Leah Cuyno, Ph.D.                      Joseph Lima, MBA  
Melissa Errend, M.S.                Tom Sanborn, MSc  
Colleen File, MBA                    Don Schug, Ph.D.

**Administrative Staff:**

Terri McCoy, B.A. – Editor



P.O. Box 110914  
Anchorage, Alaska 99511  
Phone: 907.274.5600  
Fax: 907.290.2464

Email: [mail@norecon.com](mailto:mail@norecon.com)  
[www.northerneconomics.com](http://www.northerneconomics.com)

## Preparers

Team Member	Project Role
Mike Fisher	Project Manager
Colleen File	Analyst and Author
Terri McCoy	Technical Editor

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## Introduction

This report presents a study of market rates for cruise ship ports in Alaska as well as two East Coast ports. The purpose of the report is to evaluate how Ketchikan's rates compare to its local peers and the two outside ports of interest.

The study looks at all Alaska ports that regularly see cruise ship traffic, including southeast and southcentral ports that see many of the same cruise ships that call in Ketchikan, as well as other ports that see smaller cruise ships. It does not include ports without public facilities and published tariffs. The eleven Alaska ports included in the study are shown in the map in Figure 1.

**Figure 1. Location of Comparison Ports in Alaska**



Source: Alaska Department of Natural Resources (2023), Alaska Department of Labor and Workforce Development (2021), and Natural Earth (2009)

There was also interest in seeing a comparison with East Coast ports in Maine and Nova Scotia. After initial research of ports in the state and province, it was decided that Bar Harbor, Maine, and Halifax, Nova Scotia, would be used in the comparison. Their location is shown in the map in Figure 2.

**Figure 2. Location of Comparison Ports in Maine and Nova Scotia**

Source: Natural Earth (2009), Statistics Canada (2021), and U.S. Census Bureau (2023)

Limited information is available to compare the level of activity at each port in a consistent manner. Estimated calls and passengers are shown for each of the comparison ports in Table 1, which presents estimates from different years based on published industry reports and research.

**Table 1. Cruise Ship Activity by Port**

Port	Cruise Ship Calls	(Year)	Passengers	(Year)
Anchorage	2	(2023)	13,700	(2019)
Dutch Harbor	22	(2023)		(2019)
Haines	81	(2023)	63,400	(2019)
Homer	2	(2023)	14,800	(2019)
Juneau	703	(2023)	1,305,700	(2019)
Ketchikan	651	(2023)	1,186,400	(2019)
Kodiak	26	(2023)	26,300	(2019)
Nome	20	(2023)		(2019)
Seward	103	(2023)	237,900	(2019)
Skagway	500	(2023)	1,035,800	(2019)
Whittier	46	(2023)	193,800	(2019)
Bar Harbor	117	(2016)	163,000	(2016)
Halifax	148	(2022)	239,493	(2022)

Source: Cruise Lines International Association (2023), Gabe et al (2017), Halifax Port Authority (2023b), and McDowell Group (2020)



## Port Rate Comparison

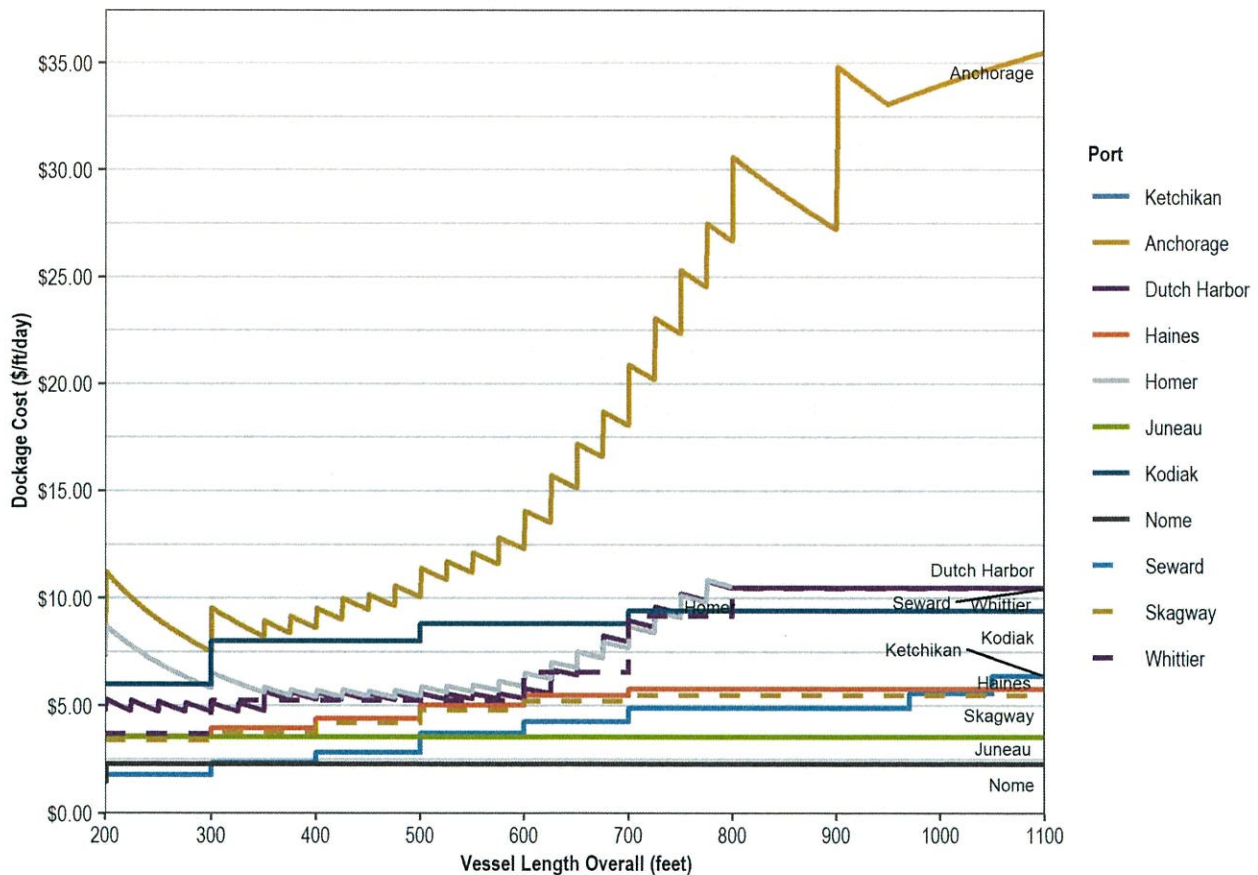
This section summarizes rates and fees applicable to cruise ships in each of the comparison ports. The section concludes with the estimation of a per-call cost for two typical cruise ships in Ketchikan.

### Comparison of Specific Rates and Fees

#### Dockage Rates

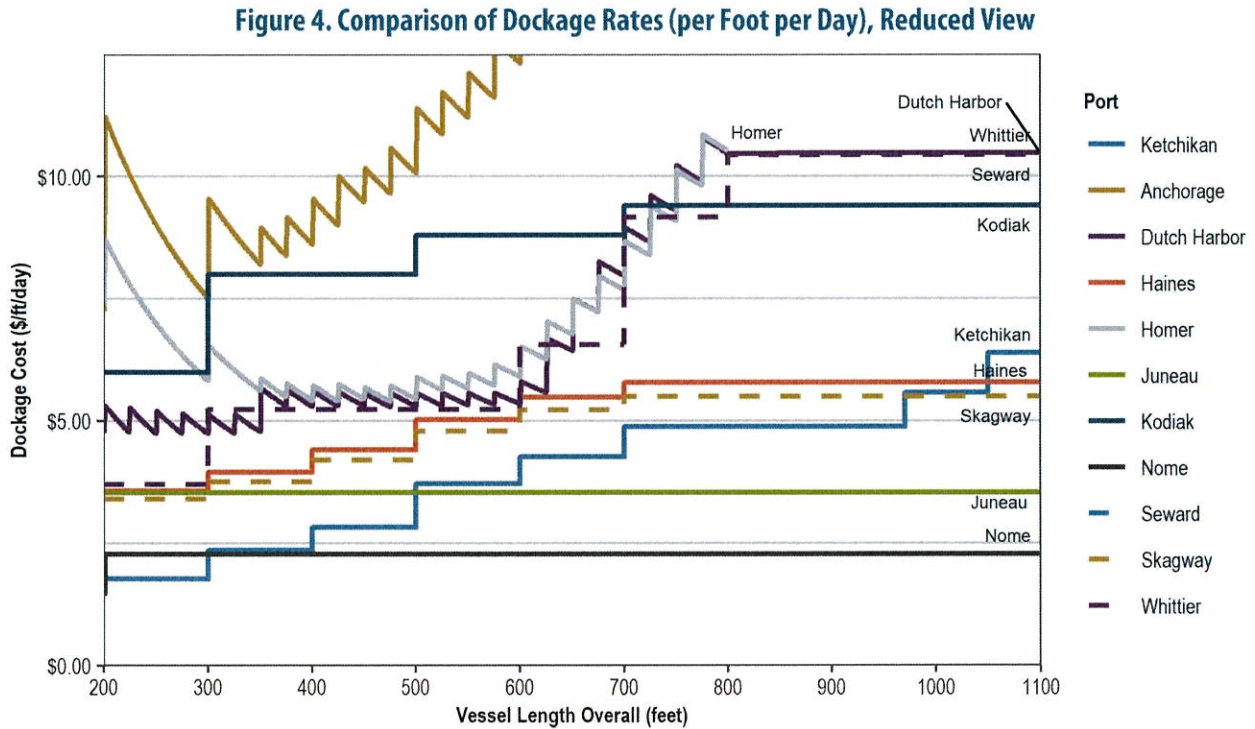
Figure 3 presents dockage rates (\$ per foot) for cruise ship ports, for vessels that are 200 to 1,100 feet in length and standardized to a 24-hour stay. Tender ports that do not have dock capacity for cruise ships are not included, nor is the Port of Halifax, which charges based on gross registered tonnage. Most ports charge less than \$11 per foot, though the Port of Alaska in Anchorage charges more than \$35 per foot for cruise ships at the high end of this range. Sawtooth costs show ports that charge a flat amount for a range of vessel lengths.

Figure 3. Comparison of Dockage Rates (per Foot per Day)



Source: Alaska Railroad Corporation (2022a, 2022b), City and Borough of Juneau (2023), City of Kodiak (2020), City of Unalaska (2023), City/Port of Nome (2022), Haines Borough (2023), Municipality of Skagway (2023), Port of Alaska (2024), Port of Homer (2023), Port of Ketchikan (2021), and Northern Economics, Inc. analysis

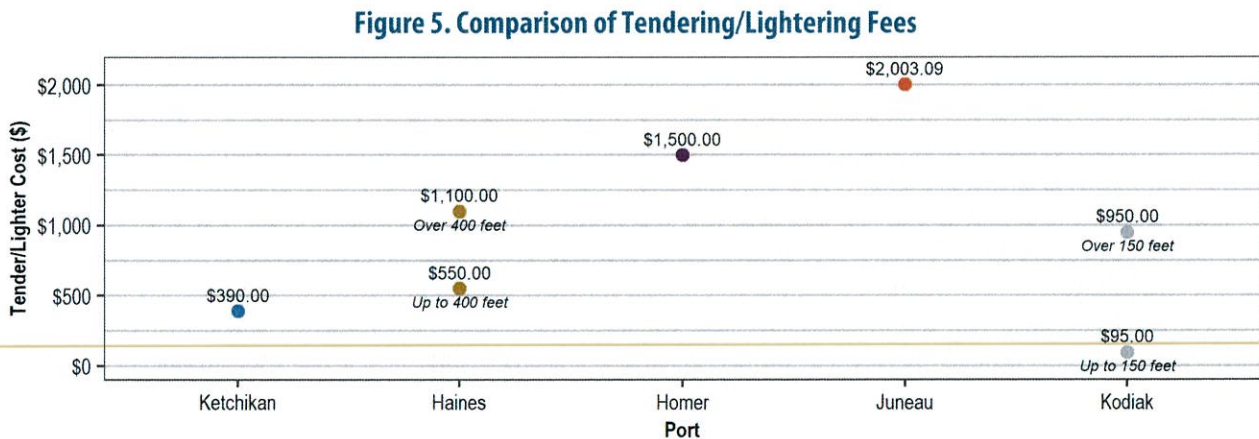
Figure 4 narrows the view from Figure 3 to the lower range of dockage rates, for comparison.



Source: Alaska Railroad Corporation (2022a, 2022b), City and Borough of Juneau (2023), City of Kodiak (2020), City of Unalaska (2023), City/Port of Nome (2022), Haines Borough (2023), Municipality of Skagway (2023), Port of Alaska (2024), Port of Homer (2023), Port of Ketchikan (2021), and Northern Economics, Inc. analysis

### Lightering

Figure 5 compares tendering or lightering fees for cruise ships that anchor offshore and transport their passengers to port in a smaller vessel. Note that these are only the flat fees, and any per-passenger fees assessed on the tendered or lightered passengers are shown below, in Figure 6.



Source: City and Borough of Juneau (2023), City of Kodiak (2020), Haines Borough (2023), Port of Homer (2023), Port of Ketchikan (2021), and Northern Economics, Inc. analysis



### Per-Passenger Fees

All fees assessed on a per-passenger basis are shown in Figure 6, on the next page. Due to the variety of fees charged, each port is shown in its own chart. Partially transparent bars indicate where there are two separate charges that are additive (Juneau, Nome, Seward, Whittier, and Bar Harbor) to focus on the total charges in each port. The solid bar for each of those ports shows the total charge per passenger. A number of these ports assess a development fee on a per-passenger basis, and the Port of Alaska is the only port to charge for security this way.

### Security Fees

Figure 7 (on the page following Figure 6) presents security fees at each port. Some ports (Seward, Skagway, and Whittier) assess a per-visit fee that is subject to a monthly cap. Dutch Harbor and Halifax charge hourly, and Nome charges for a 12-hour shift. Haines charges for security by vessel length, and as noted above, Anchorage charges a security fee on a per-passenger basis. Kodiak does not provide a rate, but the tariff notes that if needed, security will be provided at cost plus a small markup. Other ports also gave rates for additional security, if needed.

### Water Service

Eight of the comparison ports offer water service. Five of them assess flat fees for hookup or service and per 1,000 gallons of water (see Figure 8), while three of them use a tiered rate structure with a higher rate for the first 1,000 gallons and a much lower rate for each additional 1,000 gallons (Figure 9). These latter ports do not have a separate hookup or service fee since it is built into the initial volume of service.

The Port of Ketchikan is unique in that it does not charge for water on a per-gallon basis and instead charges a fee per service that varies by vessel length, as shown below in Table 2.

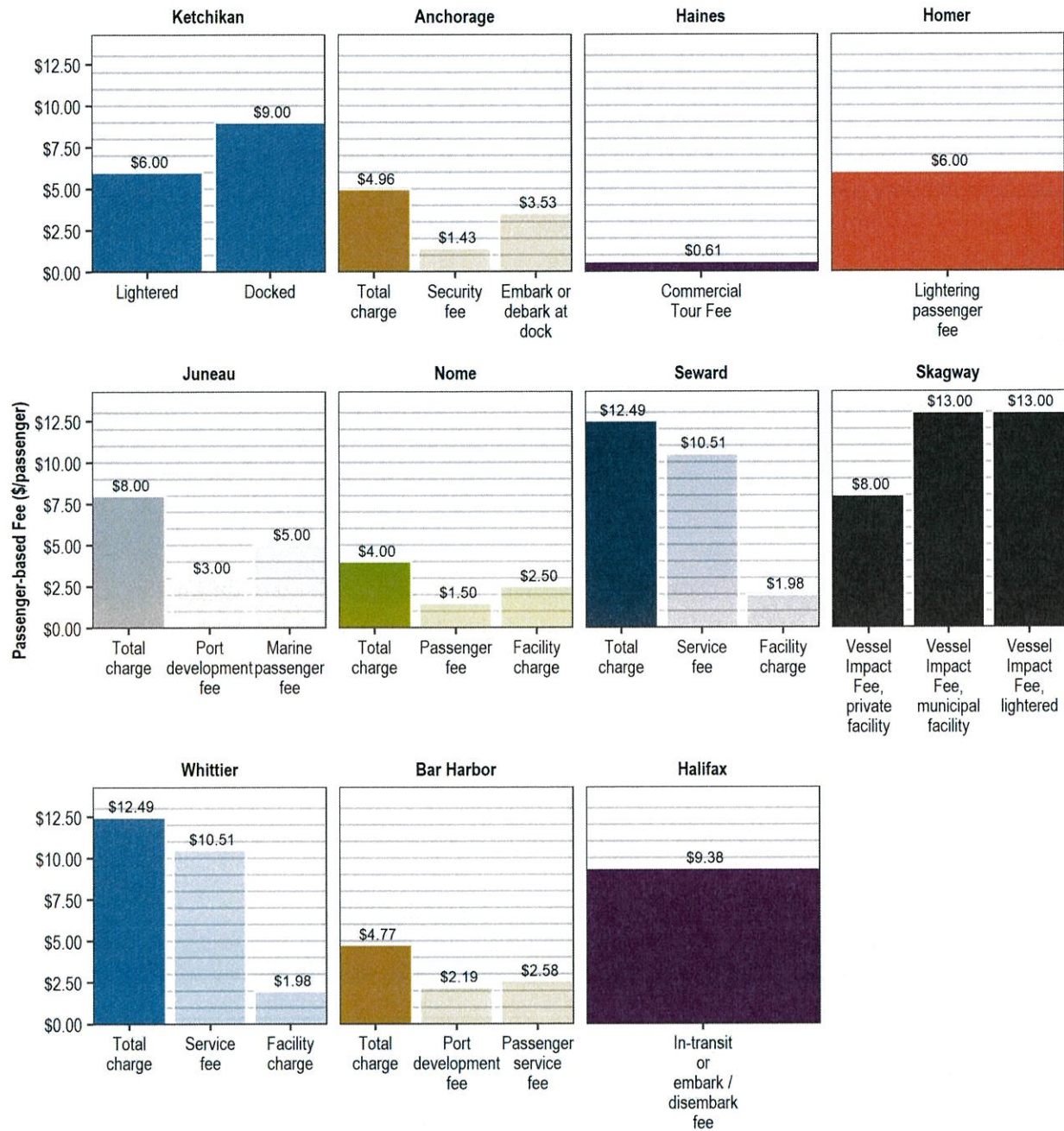
**Table 2. Water Service Fee for Port of Ketchikan**

Vessel Length (feet)	Per Service Charge (\$)	Vessel Length (feet)	Per Service Charge (\$)
<200	60	600-699	480
200-299	120	700-799	600
300-399	180	800-899	720
400-499	240	900-1,100	840
500-599	360		

Source: Port of Ketchikan (2021)

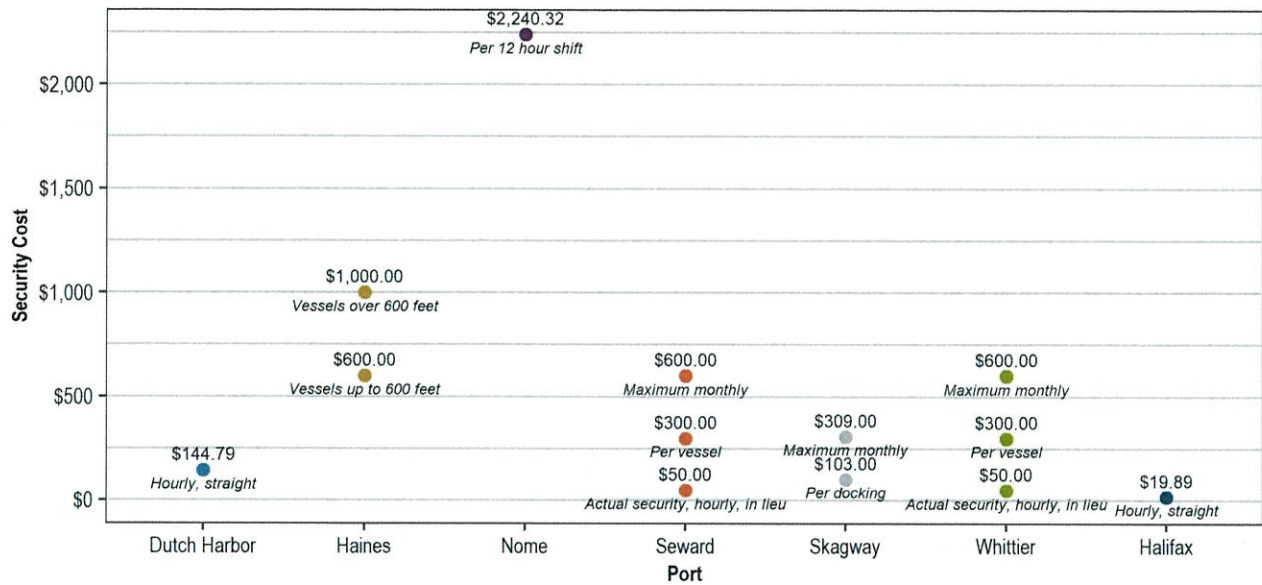


Figure 6. Comparison of Per-Passenger Fees



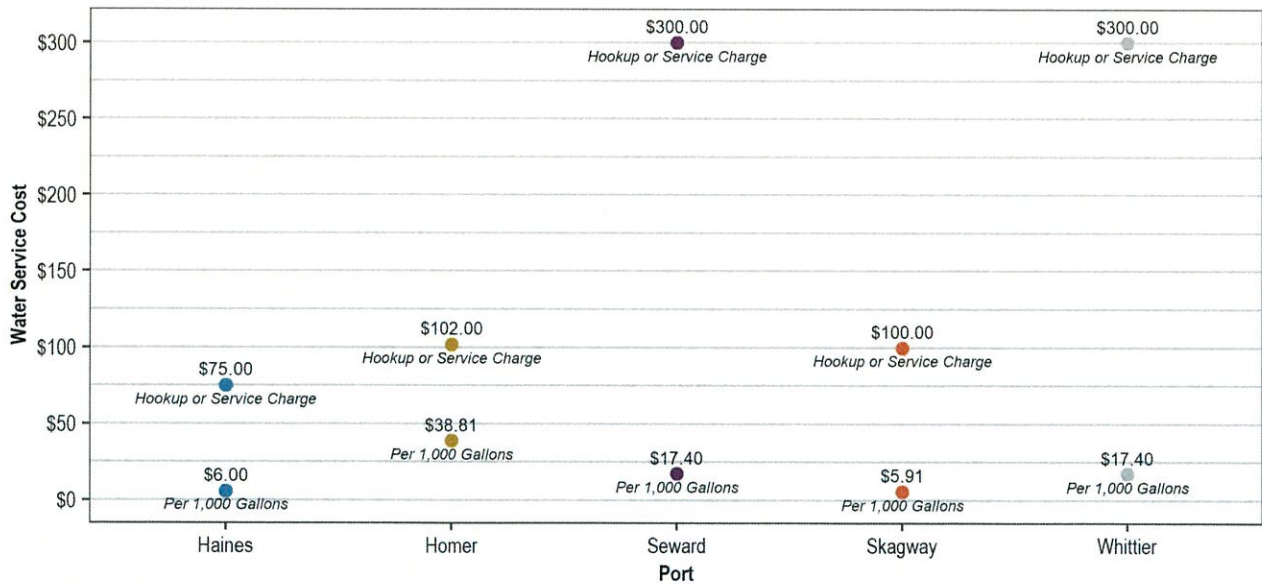
Source: Alaska Railroad Corporation (2022a, 2022b), City and Borough of Juneau (2023), City/Port of Nome (2022), Haines Borough (2023), Municipality of Skagway (2023), Port of Alaska (2024), Port of Halifax (2023a), Port of Homer (2023), Port of Ketchikan (2021), Town of Bar Harbor (2022), and Northern Economics, Inc. analysis

Figure 7. Comparison of Security Fees



Source: Alaska Railroad Corporation (2022a, 2022b), City of Unalaska (2023), City/Port of Nome (2022), Haines Borough (2023), Municipality of Skagway (2023), Port of Halifax (2023a), and Northern Economics, Inc. analysis

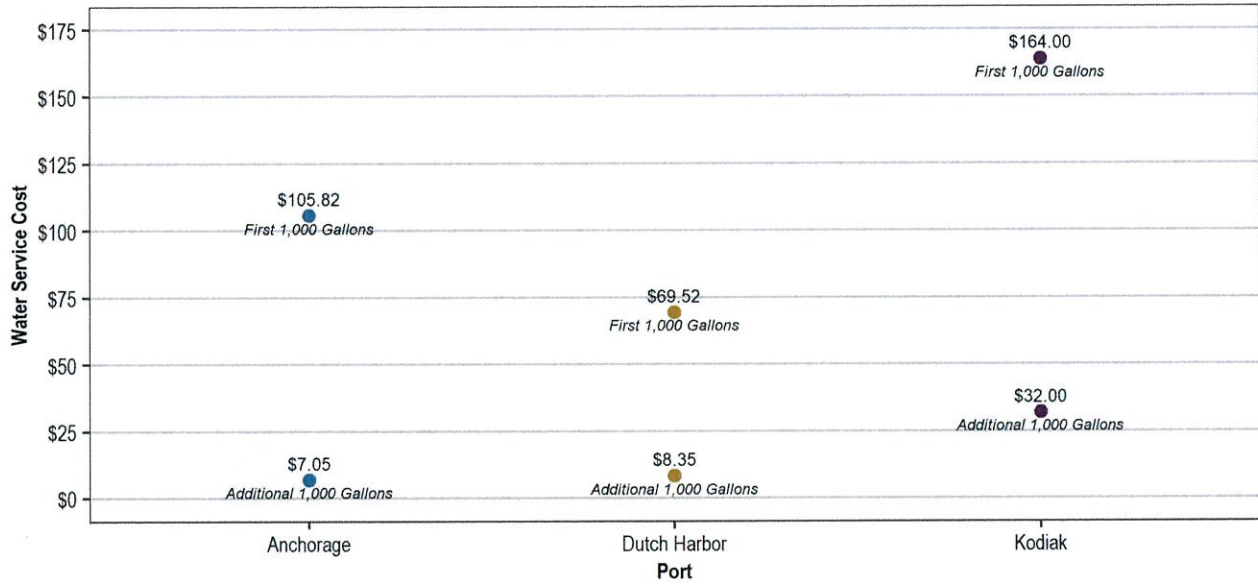
Figure 8. Comparison of Water Service Fees, Ports with Flat Water Rates



Note: Homer has a minimum charge of 5,000 gallons.

Source: Alaska Railroad Corporation (2022a, 2022b), Haines Borough (2023), Municipality of Skagway (2023), Port of Homer (2023), and Northern Economics, Inc. analysis

**Figure 9. Comparison of Water Service Fees, Ports with Tiered Water Rates**

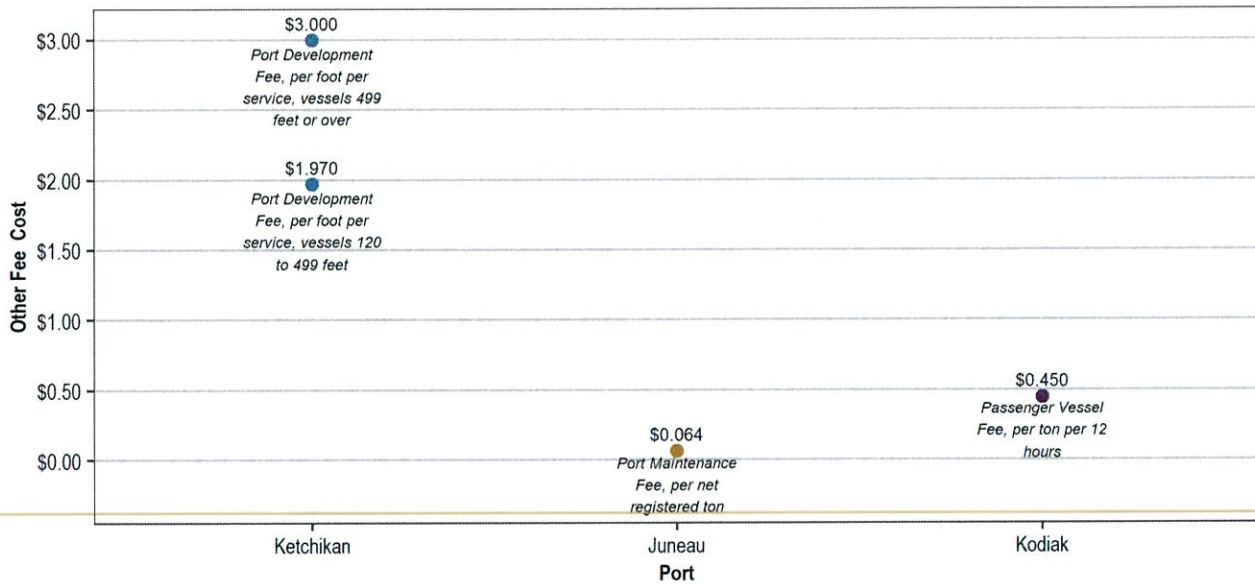


Source: City of Kodiak (2020), City of Unalaska (2023), Port of Alaska (2024), and Northern Economics, Inc. analysis

### Other Fees

Figure 10 presents additional fees charged in Ketchikan, Juneau, and Kodiak. Ketchikan charges a Port Development Fee based on vessel length. Juneau charges a Port Maintenance Fee based on net registered tonnage. Kodiak is unique in that it charges a Passenger Vessel Fee based on the vessel's tonnage (presumed to be gross registered tonnage), rather than the passenger count.

**Figure 10. Comparison of Other Fees**



Source: City and Borough of Juneau (2023), City of Kodiak (2020), Port of Ketchikan (2021), and Northern Economics, Inc. analysis



## Comparison of Total Cost per Call

This section uses the fees described above to estimate the cost of a call by two comparison ships. Port of Ketchikan staff were interested in the *Quantum of the Seas* as an upper end of its facilities' capacity as well as a 955-foot ship to represent its typical cruise vessel. This analysis uses the *Carnival Legend* as the model for the 955-foot ship. Characteristics of these two ships in shown in Table 3.

**Table 3. Characteristics of Two Typical Cruise Ships Calling in Ketchikan**

Vessel Name	Length (feet)	Gross Registered Tonnage	Net Registered Tonnage	Average Number of Passengers
Quantum of the Seas	1,141	168,666	154,078	4,160
Carnival Legend	963	88,500	53,626	2,327

Source: Carnival Corporation (2023), Cruise Ship Technical Historical Association (2023), Royal Caribbean Blog (2022), and Port of Ketchikan input on average passenger count

Table 4 and Figure 11 show the estimated total charges for the two cruise ships to call at each port. For several ports, a docking or tendering situation is specified to capture the different charges for each case in the ports' tariffs. Where only tendering is mentioned, the port cannot accommodate these ships, either due to the maximum size given in the tariff (Homer) or due to being a tender port (Nome and Bar Harbor).

As shown by the analysis, Ketchikan's cost for docking these ships is slightly higher (2%) than Juneau for the *Quantum of the Seas* and about 12% higher for the *Carnival Legend*. Tendering is much less expensive for the ships in Ketchikan, however, at only 64% of Juneau's total charge for the *Quantum* and 72% for the *Legend*.

For a larger vessel like the *Quantum*, Ketchikan's dock rates are lower than those in Kodiak, Seward, Skagway, and Whittier, but higher than Anchorage, Bar Harbor, Dutch Harbor, Haines, Halifax, Homer, Juneau, and Nome. For the more typical *Legend*, Ketchikan's dock rates are lower than those in Anchorage, Halifax, Kodiak, Seward, Skagway, Whittier, but higher than Bar Harbor, Dutch Harbor, Haines, Homer, Juneau, and Nome.

Table 4. Cost per Port of Call, by Comparison Ship and by Port

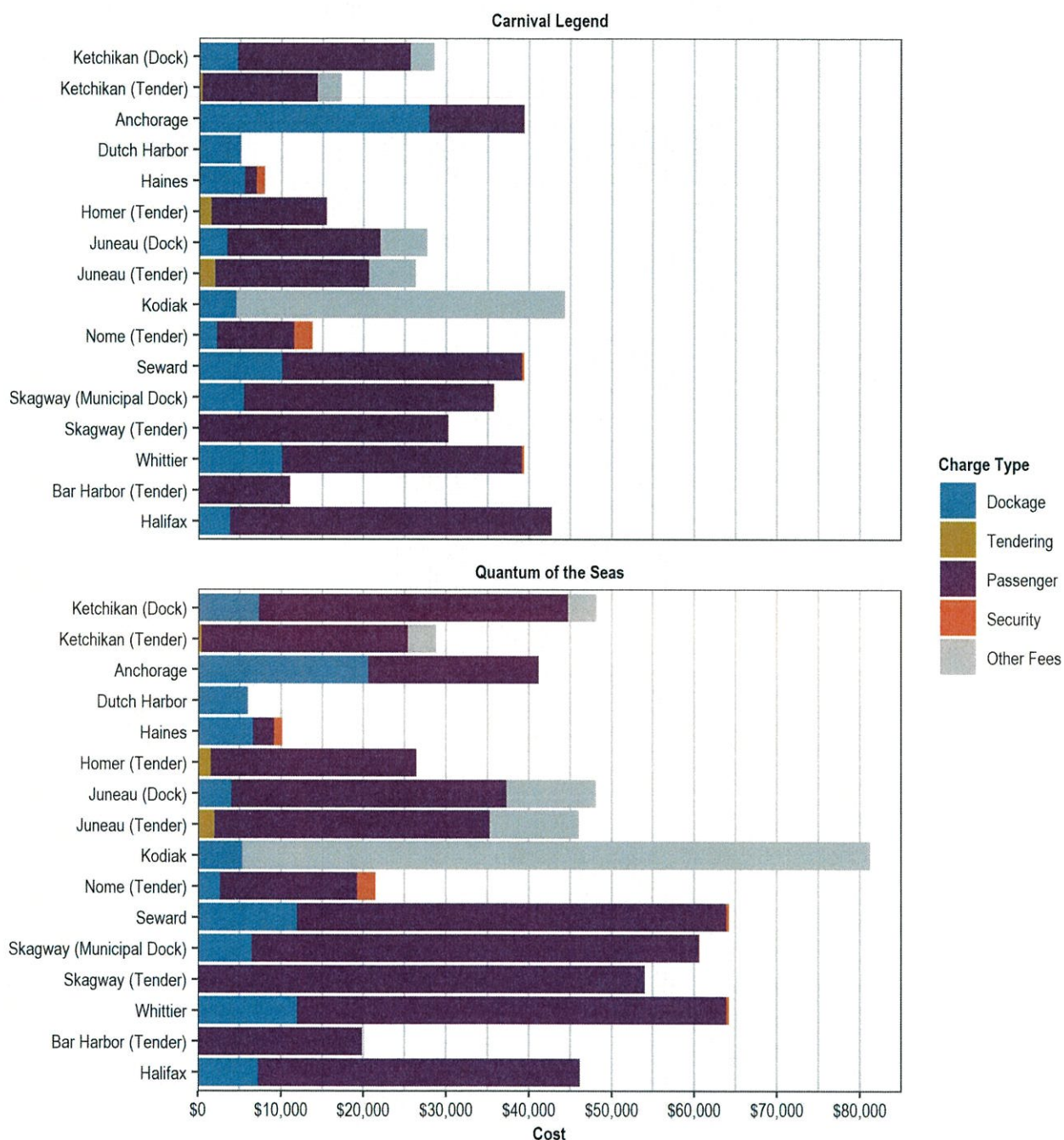
Port	Type of Charge					Total
	Dockage	Tendering	Passenger	Security	Other Fees	
Quantum of the Seas						
Anchorage	20,561	0	20,634	0	0	41,194
Dutch Harbor	5,974	0	0	0	0	5,974
Haines	6,595	0	2,538	1,000	0	10,133
Homer (Tender)	0	1,500	24,960	0	0	26,460
Juneau (Dock)	4,028	0	33,280	0	9,861	47,169
Juneau (Tender)	0	2,003	33,280	0	9,861	45,144
Ketchikan (Dock)	7,291	0	37,440	0	3,423	48,154
Ketchikan (Tender)	0	390	24,960	0	3,423	28,773
Kodiak	5,363	0	0	0	75,900	81,262
Nome (Tender)	2,601	0	16,640	2,240	0	21,482
Seward	11,912	0	51,958	300	0	64,170
Skagway (Municipal Dock)	6,469	0	54,080	103	0	60,652
Skagway (Tender)	0	0	54,080	0	0	54,080
Whittier	11,912	0	51,958	300	0	64,170
Bar Harbor (Tender)	0	0	19,843	0	0	19,843
Halifax	7,236	0	39,000	0	0	46,236
Carnival Legend						
Anchorage	27,891	0	11,542	0	0	39,433
Dutch Harbor	5,042	0	0	0	0	5,042
Haines	5,566	0	1,419	1,000	0	7,986
Homer (Tender)	0	1,500	13,962	0	0	15,462
Juneau (Dock)	3,399	0	18,616	0	3,432	25,447
Juneau (Tender)	0	2,003	18,616	0	3,432	24,051
Ketchikan (Dock)	4,699	0	20,943	0	2,889	28,531
Ketchikan (Tender)	0	390	13,962	0	2,889	17,241
Kodiak	4,526	0	0	0	39,825	44,351
Nome	2,196	0	9,308	2,240	0	13,744
Seward	10,054	0	29,064	300	0	39,418
Skagway (Municipal Dock)	5,460	0	30,251	103	0	35,814
Skagway (Tender)	0	0	30,251	0	0	30,251
Whittier	10,054	0	29,064	300	0	39,418
Bar Harbor (Tender)	0	0	11,100	0	0	11,100
Halifax	3,797	0	39,000	0	0	42,797

Assumptions: Docking for less than 12 hours, on a single calendar day. Haines passenger fee is the Commercial Tour Fee. Security fee is based on a single docking, under the monthly cost limit, and includes 12 hours of labor for Nome. Does not include other security labor fees or water service since demand is unknown and variable.

Source: Alaska Railroad Corporation (2022a, 2022b), Carnival Corporation (2023), City and Borough of Juneau (2023), City of Kodiak (2020), City of Unalaska (2023), City/Port of Nome (2022), Cruise Ship Technical Historical Association (2023), Haines Borough (2023), Municipality of Skagway (2023), Port of Alaska (2024), Port of Homer (2023), Port of Ketchikan (2021), Royal Caribbean Blog (2022), Town of Bar Harbor (2022), and Northern Economics, Inc. analysis



Figure 11. Cost per Port of Call, by Comparison Ship and by Port



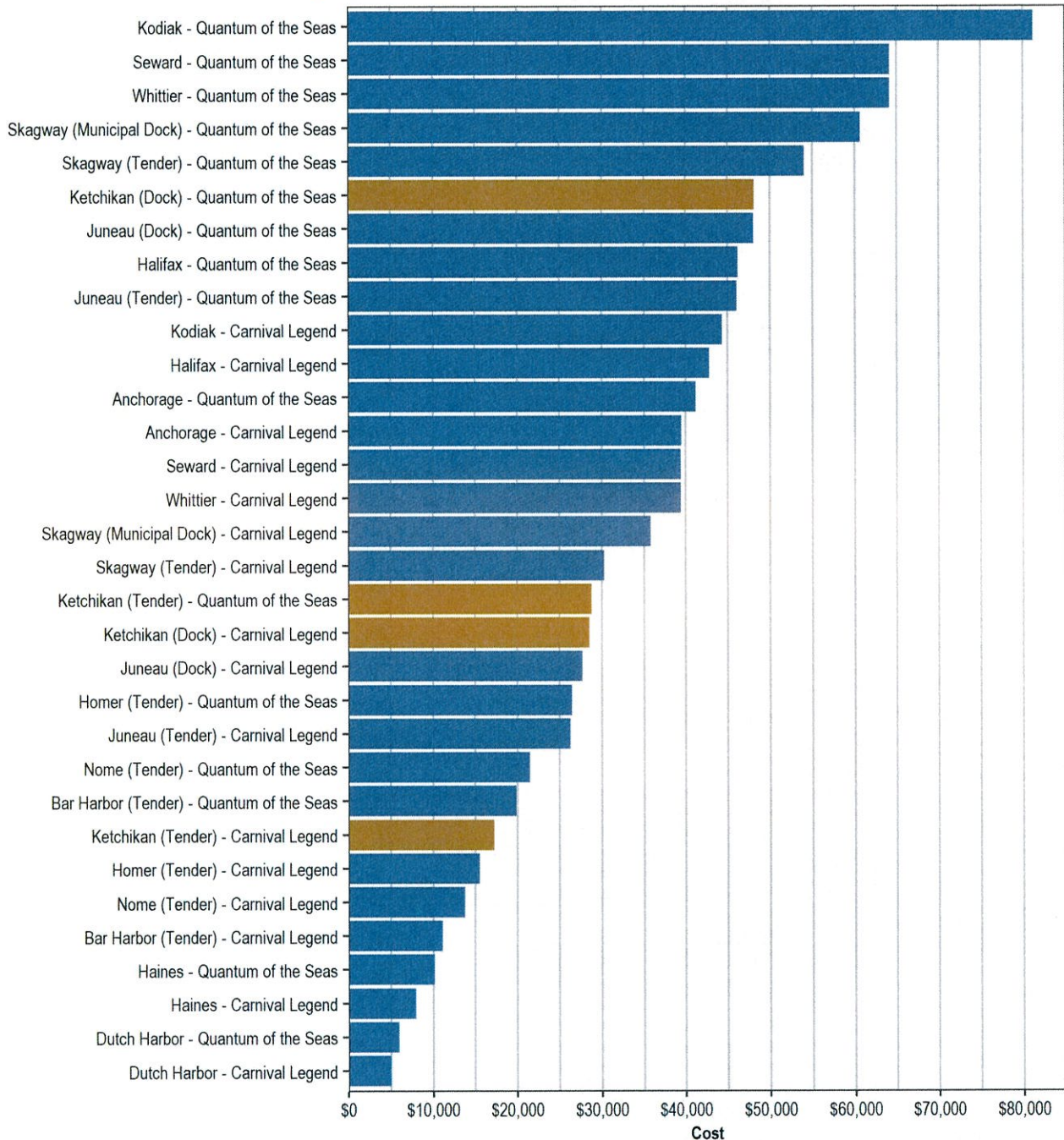
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Figure 12 combines all of the port and ship costs shown in Figure 11 and presents them in descending order. The gold bars indicate the values for Ketchikan, for each comparison with other ports.

**Figure 12. Cost per Port of Call, in Descending Order**



*Assumptions: Docking for less than 12 hours, on a single calendar day. Haines passenger fee is the Commercial Tour Fee. Security fee is based on a single docking, under the monthly cost limit, and includes 12 hours of labor for Nome. Does not include other security labor fees or water service since demand is unknown and variable.*

*Source: Alaska Railroad Corporation (2022a, 2022b), Carnival Corporation (2023), City and Borough of Juneau (2023), City of Kodiak (2020), City of Unalaska (2023), City/Port of Nome (2022), Cruise Ship Technical Historical Association (2023), Haines Borough (2023), Municipality of Skagway (2023), Port of Alaska (2024), Port of Homer (2023), Port of Ketchikan (2021), Royal Caribbean Blog (2022), Town of Bar Harbor (2022), and Northern Economics, Inc. analysis*

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