City and Borough of Wrangell
Special Port Commission Meeting
AGENDA

Friday, March 10, 2023
6:00 PM

Location: Borough Assembly Chambers
City Hall

1. CALL TO ORDER

2. ROLL CALL

3. AMENDMENTS TO THE AGENDA

4. PUBLIC HEARING

a. Approval of Fee and Rate Schedule Ports and Harbors

5. ADJOURN

CITY & BOROUGH OF WRANGELL, ALASKA
PORT COMMISSION PUBLIC HEARING AGENDA STATEMENT

AGENDA ITEM TITLE:	DATE:	March 10, 2023
	Agenda Section	**4**

Approval of Ports & Harbors Fee and Rate Schedule

SUBMITTED BY:
Andrew Eyon, Admin Assistant

Reviews/Approvals/Recommendations	
☐	Commission, Board or Committee
Name(s)	
Name(s)	
☐	Attorney
☐	Insurance

FISCAL NOTE:		
Expenditure Required: $XXX Total		
FY 20: $	FY 21: $	FY22: $
Amount Budgeted:		
	FY20 $XXX	
Account Number(s):		
	XXXXX XXX XXXX	
Account Name(s):		
	Enter Text Here	
Unencumbered Balance(s) (prior to expenditure):		
	$XXX	

ATTACHMENTS: 1. Proposed Fee and Rate Schedule 2. Annual Rate Comparison with Chart 3. Port Ship Rates 4. Juneau Rate Study

PUBLIC HEARING PROCEDURE (CHAIR): Declare the Public Hearing open. The Chair shall ask if there are any persons who wish to speak on this Public Hearing item. Persons who signed up to talk on this item shall be called to the podium.

Once all persons have been heard, declare the Public Hearing closed and entertain a motion.

RECOMMENDATION MOTION:
Move to Approve the Ports & Harbors Fee and Rate Schedule, as presented.

City and Borough of Wrangell

Harbor and Port Facilities Fee Schedule

Category	Description of Rate/Fee Type	Basis	Effective as of: 4/21/2021 (RES 4-21-1571)	7/1/2022	7/1/2023
	Daily Moorage - Invoiced (per foot) *Invoiced on a Monthly Basis	0 - 30 feet	$ 0.98	$ 1.00	$ 1.11
		31 - 55 feet	$ 1.18	$ 1.20	$ 1.34
		56 - 100 feet	$ 1.38	$ 1.41	$ 1.56
		101 feet and up	$ 2.16	$ 2.20	$ 2.45
	Designated Bow Tie Skiff Zone	N/A	$35.00 flat fee per month		
	Monthly Moorage (per foot)	0 - 30 feet	$ 4.32	$ 4.41	$ 4.90
		31 - 55 feet	$ 4.87	$ 4.97	$ 5.52
		56 - 100 feet	$ 5.40	$ 5.51	$ 6.12
		101 feet and up	$ 6.49	$ 6.62	$ 7.35
		Live Aboards (monthly)	$ 85.00	$ 86.70	$ 96.32
B. Reserved Moorage	**Annual Moorage** (per foot)	0 - 30 feet	$ 30.30	$ 30.91	$ 34.34
		31 - 55 feet	$ 35.72	$ 36.43	$ 40.48
		56 feet and up	$ 41.14	$ 41.96	$ 46.62
		Wait List Deposit	$50 for each reserved slot		
C. Customer Service Moorage	**Wait List Deposit**	Each	$ 50.00	$ 50.00	$ 50.00
	Annual	N/A	1.5x the annual moorage rate		
D. Electric Utility Service	**Daily Utility Service** (by amp size)	20 amp 120 v	$ 5.00	$ 5.10	$ 5.67
		30 amp 120 v	$ 8.00	$ 8.16	$ 9.07
		50 amp single phase	$ 10.00	$ 10.20	$ 11.33
		50 amp 3 phase	$ 30.00	$ 30.60	$ 34.00
		100 amp 3 phase	$ 50.00	$ 51.00	$ 56.66
E. Outside Dock Face Moorage	**Daily Outside Moorage** (per foot)	00 – 99 feet	$ 1.07	$ 1.23	$ 1.37
		100 – 199 feet	$ 1.39	$ 1.60	$ 1.77
		200 – 299 feet	$ 1.55	$ 1.78	$ 1.98
		300 – 499 feet	$ 1.77	$ 2.04	$ 2.27
		500 – 599 feet	$ 2.09	$ 2.40	$ 2.67
		600 feet and up	$ 2.38	$ 2.73	$ 3.04
		00 – 99 feet	$ 1.07	$ 1.23	$ 1.37

F. Inside Dock Face Moorage	Daily Inside Moorage (per foot)	100 – 199 feet	$ 1.39	$ 1.60	$ 1.77
		200 – 299 feet	$ 1.55	$ 1.78	$ 1.98
		300 – 499 feet	$ 1.77	$ 2.04	$ 2.27
		500 – 599 feet	$ 2.09	$ 2.40	$ 2.67
		600 feet and up	$ 2.38	$ 2.73	$ 3.04
G. Barge Ramp Facility	**Daily** (per lineal foot)	Per foot ($500.00 minimum)	$ 2.00	$ 2.00	$ 2.22
	Beach Landing (per lineal foot)	Per foot ($25.00 minimum)	$ 0.10	$ 0.10	$ 0.11
H. Wharfage	General cargo	Per ton	$ 2.50	$ 2.50	$ 2.78
	Vehicles	Per ton	$ 2.50	$ 2.50	$ 2.78
	Explosives	Per ton	$ 6.25	$ 6.25	$ 6.94
	Lumber	Per thousand milled board feet	$ 1.00	$ 1.00	$ 1.11
	Empty containers	Each	$ 3.75	$ 3.75	$ 4.17
	Less than 500 tons of Sand and Gravel	Per ton	$ 1.00	$ 1.00	$ 1.11
	500 to 1500 tons of Sand and Gravel	Per ton	$ 500 + (0.20/ton for each ton over 500)		
	Greater than 1500 tons of Sand and Gravel	Per ton	$ 800 + (0.05/ton for each ton over 500)		
I. Storage	Outside Storage	Per foot	$ 0.50	$ 0.51	$ 0.57
J. Gridiron	Daily Use ?	Per foot	$ 1.00	$ 1.02	$ 1.13
K. Launch Ramp	Daily Fee	Per Launch	$ 10.00	$ 10.00	$ 12.00
	Annual Permit w/ stall	Flat fee	$ 25.00	$ 25.00	$ 28.00
	Annual Permit w/out stall	Flat fee	$ 50.00	$ 50.00	$ 55.00
L. Parking	No charge - Parking limitations to be enforced by Wrangell PD				
M. Harbormaster Services	Replace Mooring Lines	$10 plus the cost of the line			
	Skiff Rental w/Personnel	Per hour (minimum of 1 hour)	$ 175.00	$ 178.50	$ 198.31
	Pumping	$25/per pump + Labor			
	Labor	Labor costs will be the actual costs of the employee. They willl include wages and employee costs.			
	Raising of Boats	$175 plus cost of materials and professional services			
N. Water Rates	Commercial and Industrial Water	See WMC 15.04.640			
O. Hoists	Use of Hoists	Per hour (Billed in 10min intervals)	$ 30.00	$ 30.00	$ 30.00
P. Sea Plane Floats	Day Pass	Per day	$ 5.00	$ 5.25	$ 5.83
	Monthly Pass	Per month	$ 100.00	$ 105.00	$ 116.66
	Annual Permit (reserved)	Per year	$ 420.00	$ 441.00	$ 489.95
Q. Impoundment Fee	Impounded vessel, vehicle, float, etc.	Per impound	$ 300.00	$ 306.00	$ 339.97
R. Summer Float Use	Transient Moorage	0 - 80 feet	$ 0.65	$ 0.66	$ 0.74

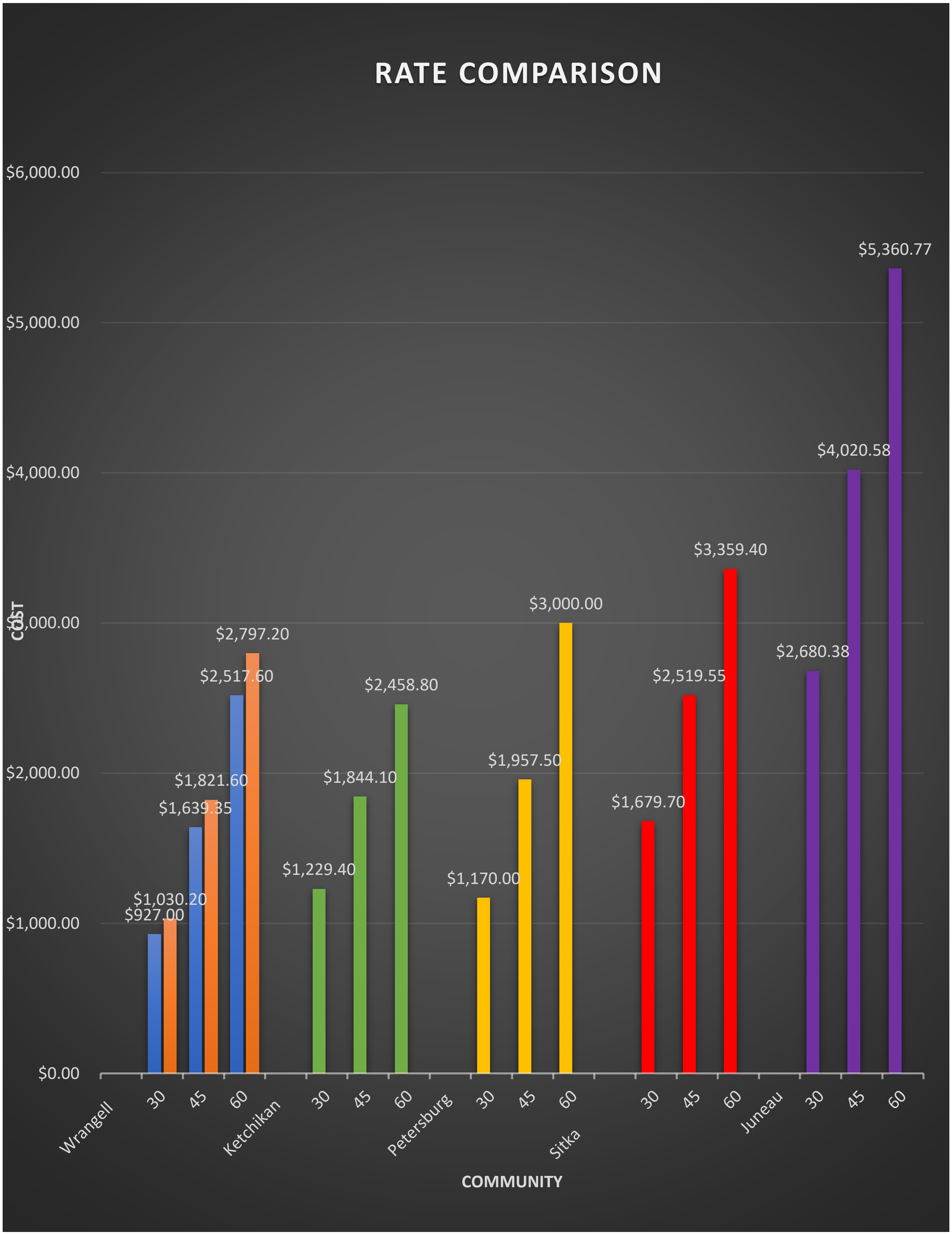
Item a.

R. Summer Float Use	(per foot)	81 feet and up	$ 0.95	$ 0.97	$ 1.08
S. Passenger Vessels Motorized	**Daily**	Per departure	$ 10.00	$ 10.20	$ 11.33
	Monthly	Per foot /month	$ 2.00	$ 2.04	$ 2.27
	Annual	Flat Rate	$ 400.00	$ 408.00	$ 453.29
T. Port Development Fees	**Daily**	120 - 499	$ 1.50	$ 1.53	$ 1.70
		500 and up	$ 2.38	$ 2.42	$ 2.69
U. Lightering Fee	40 percent of applicable dockage and port fees				
V. Marine Service Center Rates and Fees	**Travel Lift Haul Out Rate** (per foot)	0 - 40 feet	$ 13.64	$ 13.92	$ 15.46
		41 - 58 feet	$ 15.00	$ 15.30	$ 17.00
		59 - 75 feet	$ 16.26	$ 16.59	$ 18.43
		76 - 90 feet	$ 18.76	$ 19.14	$ 21.26
		91 - 120 feet	$ 21.26	$ 21.68	$ 24.09
		121 - 140 feet	$ 23.78	$ 24.25	$ 26.94
		141 feet and up	$ 25.91	$ 26.43	$ 29.36
	Travel Lift Minimum (Hourly Rate)	150-ton per hour use	$ 360.00	$ 367.20	$ 407.96
		300-ton per hour use	$ 600.00	$ 612.00	$ 679.93
	Environmental Fee	Per foot	$ 1.00	$ 1.02	$ 1.13
	Short Term Monthly Storage	Per square foot/per month	$ 0.59	$ 0.80	$ 0.89
	Long Term Monthly Storage	Per square foot/per month	$ 0.37	$ 0.55	$ 0.61
	Long Term Monthly Storage After 12 Consecutive Months	Per square foot/per month	$ 0.74	$ 1.10	$ 1.22
	Inspection Hoist Fee	First 2-hours: 60 percent of haul out rate			
	Hydraulic Trailer Fee	Round trip	$ 10.46	$ 10.67	$ 11.85
		One-way (per foot)	$ 5.23	$ 5.33	$ 5.93
		Minimum Fee	$ 250.00	$ 255.00	$ 283.31
		Off-site Transportation	one-way fee plus travel time at $350/hour (1		
		Long-term Storage Reservation Fee	$ 100.00	$ 102.00	$ 113.32
	Business Lease Rates	***The marine service center business lease rates are not included in this fee and rate schedule as each lease agreement and its terms operate independent of any rates/fees presented in this schedule.			
W. Port Security Personnel	**Cruise Ship Security Personnel**	Per hour	$ 30.00	$ 30.00	$ 30.00
X. Meyers Chuck	**Transient Moorage** (per foot)	Daily - Invoiced	$ 0.40	$ 0.41	$ 0.45
		Monthly	$ 1.75	$ 1.79	$ 1.98
	Reserved Moorage (Per foot)	Annual	$ 12.00	$ 12.24	$ 12.48
Y. Commercial Passenger Vessel Wharfage	**Passenger Wharfage Fees**	Upon tie-up Effective 01/01/2024		*$7.00 per person	
		For lightering Effective 01/01/2024		*$5.00 per person	

Z. Commercial Passenger Vessel Potable Water Fees	**Water Fees by Vessel Length** (Each Servicing) *All servicing is subject to availability. The Harbor Master and Public Works Director have full discretion on whether the Borough has sufficient supply to meet commercial passenger vessel fresh water demand.	199 feet or less	N/A	$ 60.00	$ 66.66
		200 to 299 feet		$ 120.00	$ 133.32
		300 to 399 feet		$ 180.00	$ 199.98
		400 to 499 feet		$ 240.00	$ 266.64
		500 to 599 feet		$ 360.00	$ 399.96
		600 to 699 feet		$ 480.00	$ 533.28
		700 to 799 feet		$ 600.00	$ 666.60
		800 to 899 feet		$ 720.00	$ 799.92
		900 to 1,100 feet		$ 840.00	$ 933.24

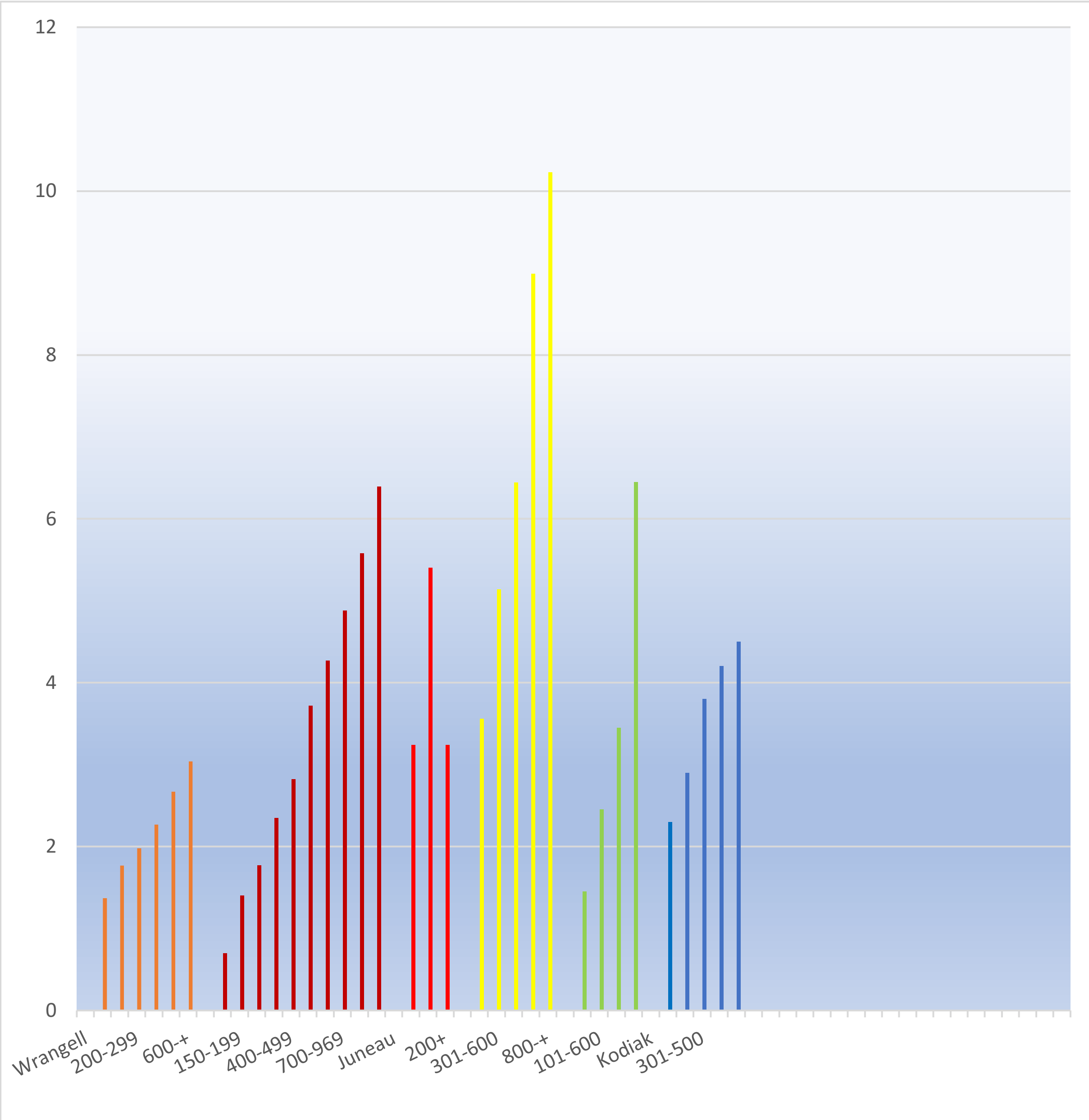
				Annaul Rate Change
Wrangell				
	30	$927.00	$1,030.20	$103.20
	45	$1,639.35	$1,821.60	$182.25
	60	$2,517.60	$2,797.20	$279.60
Ketchikan				
	30	$1,229.40		
	45	$1,844.10		
	60	$2,458.80		
Petersburg				
	30	$1,170.00		
	45	$1,957.50		
	60	$3,000.00		
Sitka				
	30	$1,679.70		
	45	$2,519.55		
	60	$3,359.40		
Juneau				
	30	$2,680.38		
	45	$4,020.58		
	60	$5,360.77		

WRG Current Rate	WRG Proposed Rate
Ketchikan Rate	Petersburg Rate
Sitka Rate	Juneau Rate


RATE COMPARISON
$6,000.00
$5,000.00
$4,000.00
$3,000.00
$2,000.00
$1,000.00
$0.00
COST
$927.00
$1,030.20
$1,639.35
$1,821.60
$2,517.60
$2,797.20
$1,229.40
$1,844.10
$2,458.80
$1,170.00
$1,957.50
$3,000.00
$1,679.70
$2,519.55
$3,359.40
$2,680.38
$4,020.58
$5,360.77
Wrangell
30
45
60
Ketchikan
30
45
60
Petersburg
30
45
60
Sitka
30
45
60
Juneau
30
45
60
COMMUNITY

Wrangell	
0-99	$1.37
100-199	$1.77
200-299	$1.98
300-499	$2.27
500-599	$2.67
600-+	$3.04
Ketchikan	
0-149	$0.70
150-199	$1.40
200-299	$1.77
300-399	$2.35
400-499	$2.82
500-599	$3.72
600-699	$4.27
700-969	$4.88
970-1049	$5.58
1050+	$6.39
Juneau	
0-65	$3.24
65-200	$5.40
200+	$3.24
Sewrad	
0-300	$3.56
301-600	$5.14
601-700	$6.44
701-800	$8.99
800-+	$10.23
Valdez	
0-100	$1.45
101-600	$2.45
601-900	$3.45
900+	$6.45
Kodiak	
0-150	$2.30
151-300	$2.90
301-500	$3.80
501-700	$4.20
700+	$4.50

Petersburg lightering fee $400
Float side inner Harbor $500 per stop
Port Dock $600 per stop
Drive Down Float $700 per stop
Homeland Security Fee $400 per stop



Wrangell Lightering fee 40% of Dockage and Port Development fee combined
Port Development Fee 120'-499' $1.53 per foot new $1.66 per foot 500+ $2.42 foot new $2.69
Commercial Passenger Warfage $5 new $7 per person. Lightering $3 new $5

Ketchikan

Kodiak Charges a tonnage fee of $.40 a per net ton of registered ship

Juneau Lightering fee: $1837.70 per day
Port Maintenance Fee $.059 per net registered ton
Marine Passenger Fee $5 per person
Port Development Fee $3 per person

Seward Service Fee Per Person $10.30
Facility Charge per passenger $2.25
Improvement Fee Per Passenger $20

Port of Juneau – Docks & Harbors Rate Setting Project

City and Borough of Juneau

September 1, 2022

FDR

Executive Summary

The City and Borough of Juneau Docks and Harbors (D&H)[1] contracted HDR Engineering Inc. (HDR) to conduct a study of the D&H enterprise's rate fee structure and on the impact of any potential rate changes to D&H stakeholders.

Key findings include:

- Stakeholders are not likely sensitive to modest changes in rates.
- Based on anecdotal information provided by stakeholders selected by D&H, overall Rates are a small fraction of users' overall costs
- The use of the consumer price index for rate indexing should be re-assessed. Wage rates, which represent about one half of D&H expenditures, have greatly outpaced CPI over the last decade. The current indexation may be inadequate to keep up with cost pressures for D&H.
- To ensure alignment with the established rate setting principles, D&H's rates should be increased to ensure D&H assets are maintained in a state of good repair. Existing reserve balances are inadequate to maintain these assets.
- The magnitude of the required rate increases is dependent on D&H's future capital program for expansion / new assets. The greater the capital requirements, the higher the rate increase.
- Docks and Harbors should maintain a replacement reserve analysis and forward-looking capital plan to determine the degree to which Funds balances and rates are sufficient to deal with ongoing maintenance and future capital investment requirements.
- Future increases would be tied to any needs identified by the ongoing replacement reserve analysis plus reflect any investments in new assets.
- Based on the replacement reserve analysis conducted through this study, current D&H funding is insufficient to maintain assets in a state of good repair.
- The funding gap could be narrowed or eliminated in at least two different ways:

    1. Additional funding from CBJ.
    2. Increasing rates – D&H rates would have to increase about 9 percent to eliminate the gap.
    3. Some combination of the above.

- Overall Rates are a small fraction of users' overall costs which suggests a 9 percent rate increase could be obtained without any deleterious user impacts.

1 *D&H will be used in this report*

1

Introduction & Purpose

The City and Borough of Juneau Docks and Harbors (D&H) is an Assembly administered Enterprise that serves recreational users, commercial fishers, commercial charter operators, live-aboard vessels, commercial boat yard use, and cruise ship passengers and crews. D&H oversees several harbors and the two downtown cruise berths.

The Docks enterprise oversees the cruise ship terminal docks. The primary stakeholders are the cruise lines that visit Juneau. The Harbors enterprise is responsible for several harbors used by commercial, recreational, and live-aboard vessel owners. These include Douglas Harbor, Harris Harbor, Aurora Harbor, and Statter Harbor. Users at these harbors include recreational vessels, commercial fishing vessels, and live-aboard vessel owners. Charter operators also use Statter Harbor, Auke Bay, and the downtown facilities. Harbor enterprise assets also includes launch ramps for vessels, parking, and other revenue generating assets.

D&H contracted HDR Engineering Inc. (HDR) to conduct a study of D&H Enterprise's rate fee structure. The current rates cover the full range of services, including permits (e.g., loading permits and tour sales permits), dockage, port maintenance, port development, moorage, passenger, and several other fees. D&H receives little support from other sources (e.g., state) so the revenue from these rates needs to cover current operating expenses as well as future capital expenditures. D&H faces a potential revenue shortfall as costs have increased in recent years and assets need to be maintained in a state of good repair in future years. Consequently, D&H will need to explore both mitigating expenditures and augmenting revenues.

As part of this effort, HDR considered both cost-based (i.e., based on costs of providing services) and market-based approaches. The latter includes both looking at market comparable metrics, as well as marked demand-based approaches (e.g., increasing rates in cases where demand outstrips supply). HDR performed the following services.

- Conducted a thorough review of applicable documents related to current tariffs, facilities, users, and D&H budget.
- Facilitated stakeholder outreach to tenants, key stakeholders, and other user groups. Meetings provided insights to sensitivity to rate changes and the potential effects of those changes on usage. Meetings also provided information for later tasks such as the tariff review and proposed harbor rate schedule.
- Review of D&H's current tariff structure with an emphasis on potential pricing anomalies and rates creating potential market distortions.
- Developed a rate methodology for proposed types of adjustments to rates to address revenue objectives to recoup costs (operating and future capital projects to maintain assets in a state of good repair and for any improvements). Per discussions with D&H, HDR was to focus on the largest revenue generating user categories, generally those revenue sources that accounted for about 80 percent of total revenues.
- The rate methodology is founded on a "replacement reserve" type of analysis to identify the level of annual cashflow needed to appropriately maintain D&H's assets to ensure they are maintained in a state of good repair and additional reserves are available for new capital assets.[2] The details of the analysis are documented in an MS Excel proforma financial model that is provided as a project deliverable. The model can be updated over time to ensure that sufficient reserves are available in the future.

2 Based on cost information provided by D&H as opposed to an independent assessment of needs as would be the case in a rigorous replacement reserve analysis.

2

D&H Revenues & Expenditures[3]

Revenues

D&H has revenue streams for each of the Docks Enterprise and Harbor Enterprise. Revenues are not commingled between Docks and Harbors. Revenues for Docks in fiscal year (FY) 2021 was historically low due to COVID and its impact on the cruise line industry worldwide. Juneau is the Southeast Alaska cruise hub and the largest cruise destination for the state. 99% of all cruise visitors in the region visit Juneau compared to 90 percent for Ketchikan.[4] Historically, revenues have been nearly $2 million per year, with a positive spike in FY2019. Dock revenue comes from moorage and vessel weight-based charges for cruise ships. Head tax related charges for cruise passengers do not accrue to D&H but rather are received by D&H from CBJ to fund projects and to cover dock related debt service. Cruise related charges for the passenger head tax are lower than that of Ketchikan, the next largest cruise destination.

Revenues for Harbors were nearly $4.1 million in FY2021 and in the previous five years were between $4.2 and $4.6 million. Harbors revenues come from a more diverse set of sources and user groups. The largest sources of revenue by vessel user groups include recreation vessels, commercial fishing, luxury charters, launch ramp users, and the live-aboard community. At about $1.7 million, recreational vessels are the largest source of revenue by far. Other important user groups include commercial leases, vendor booth permits, and parking.[5]

COVID-19 had a major impact on the distribution of D&H revenues by source. Examining pre-COVID revenues (2019 CY (calendar year)) provides a better picture for rate planning purposes. Revenues derived from recreational vessels and cruise ships accounted for 56.6 percent of total D&H revenues in 2019. Commercial leases are the next largest source at 16.1 percent. More than 80% of D&H revenues are concentrated from recreation vessels, cruise ships, commercial leases, commercial fishing, and vendor booth permits. A myriad of other revenues sources comprises the remaining revenue base.

For the vessel user groups, revenue from moorage fees at the four primary harbors (Statter Harbor, Douglas Harbor, Harris Harbor, and Aurora Harbor) are the largest source of revenues. D&H does not differentiate between user types but does set differential charges for daily, monthly, bi-annual, and annual. One can also pay for reserved space at Statter Harbor. In addition to moorage fees, there is also a residence surcharge for live-aboard users. Launch ramp users pay for either a daily or annual permit and D&H has different rates for recreational and commercial users.

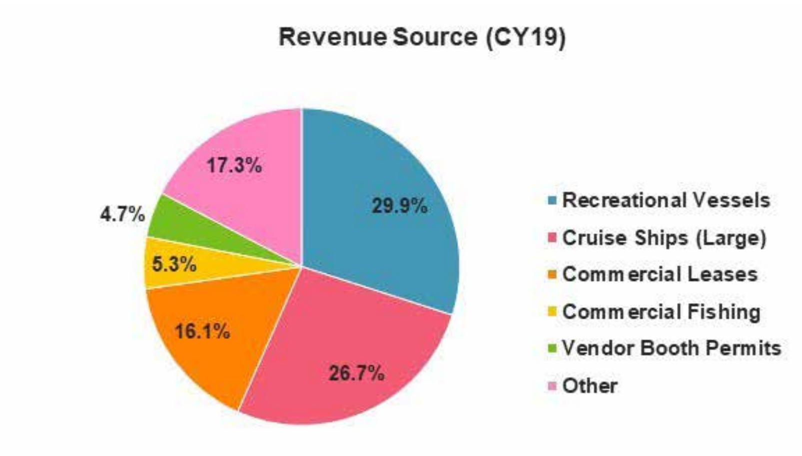


Figure 1. Distribution of CBJ Revenues, 2019 CY

An important issue to note is that there is common usage at many of the harbors thus D&H is not able to differentiate charges by type of user. It is also not certain based on our financial review if costs of providing services (especially at Douglas Harbor, Harris Harbor, and Aurora Harbor) are different at each of the relevant harbors. This would also apply to different ramps used by ramp users.

3 *Revenue and expenditure data provided by D&H to HDR on December 15, 2021, email attachments "Docks Funds Balance Overview" and Harbor Fund Balance Overview'.*
4 *Economic Impact Report, Cruise Lines International Association – Alaska. https://akcruise.org/economy/economic-impact-by-region/*
5 *An October 8, 2021, memo from the Port Director to the Dock and Harbors Finance Sub-Committee (Defining Docks & Harbors User Groups) lists revenues by user groups.*

D&H moorage rates for daily and monthly are in general much lower than that from other Alaska port fa **Figure 2** and **Figure 3)**. D&H differentiates moorage rates by facility for monthly (and annual) for downtown harbors versus Auke Bay which is remote.

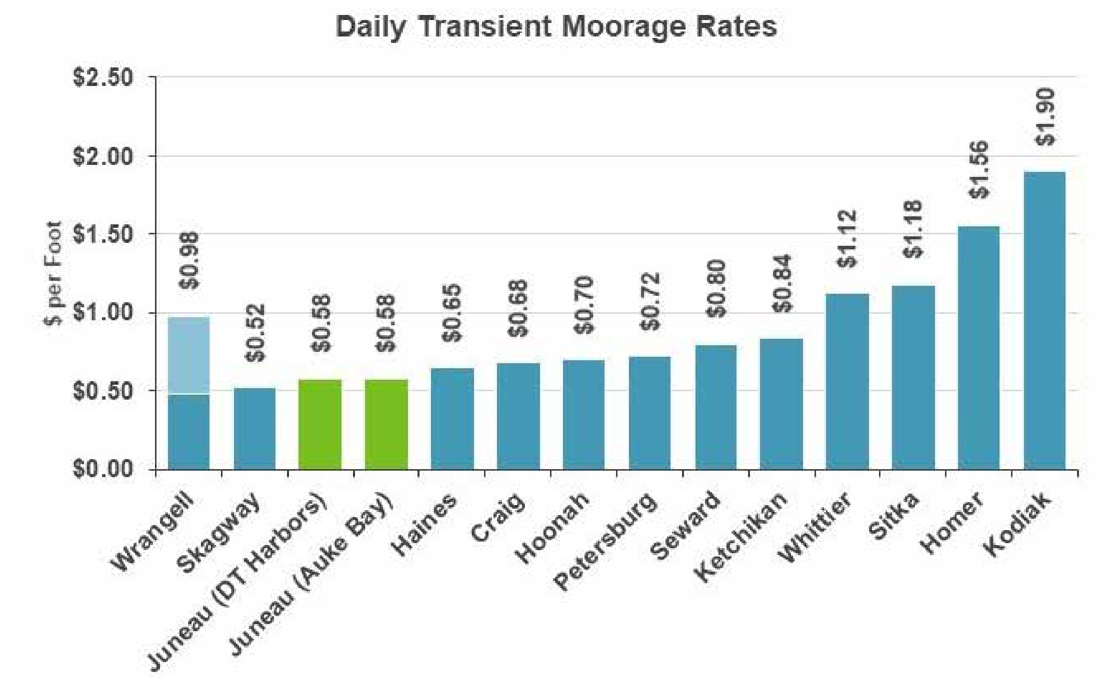


Figure 2. 2020 Comparison of Daily Moorage Rates, dollars per foot, 2020
Light blue area reflects the difference between the pre-paid rates at Wrangell ($0.48/foot) and the invoiced rates at Wrangell ($0.98/foot)

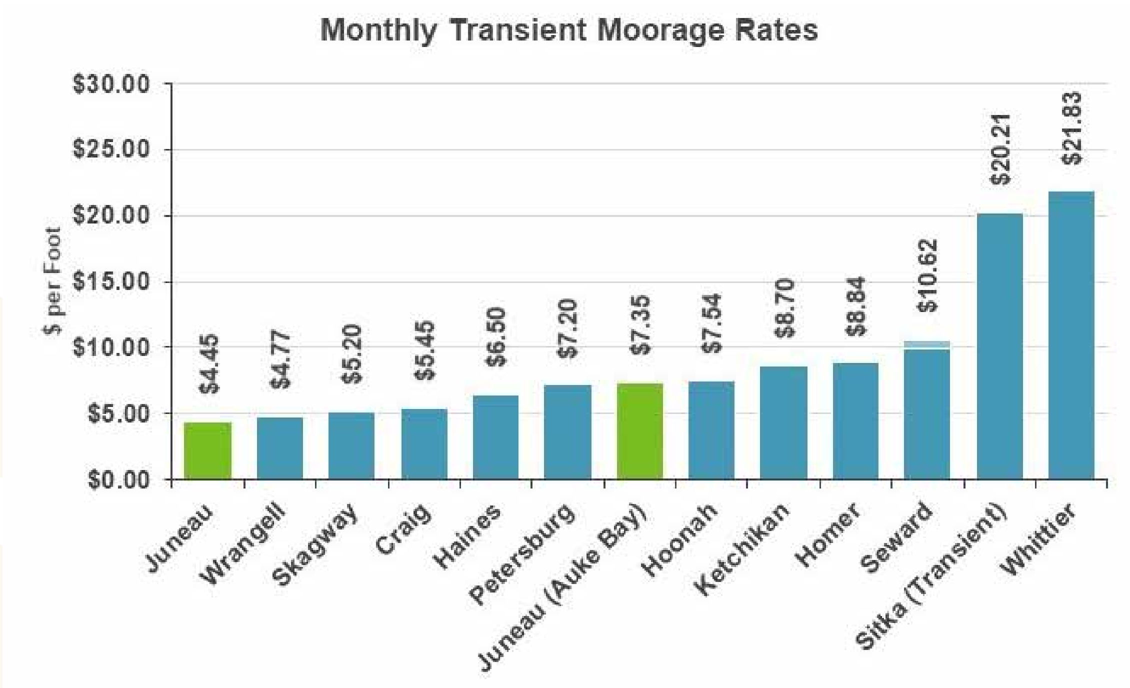


Figure 3. Comparison of Monthly Moorage Rates, dollars per foot, 2020
Light blue area reflects the difference between the reserved rates at Seward ($9.97/foot) and the transient rates at Seward ($10.92/foot)

When annual moorage rates are examined, D&H downtown rates are higher than most other facilities, w[...] exception of Homer, Whittier and D&H's Auke Bay facility.

In general, about half of D&H moorage revenues for both downtown harbors and Statter Harbor are based on the monthly tariff. For downtown, less than 10 percent of revenues are based on the daily tariff whereas for Statter Harbor, about 27% of revenues are based on the daily tariff. [6]

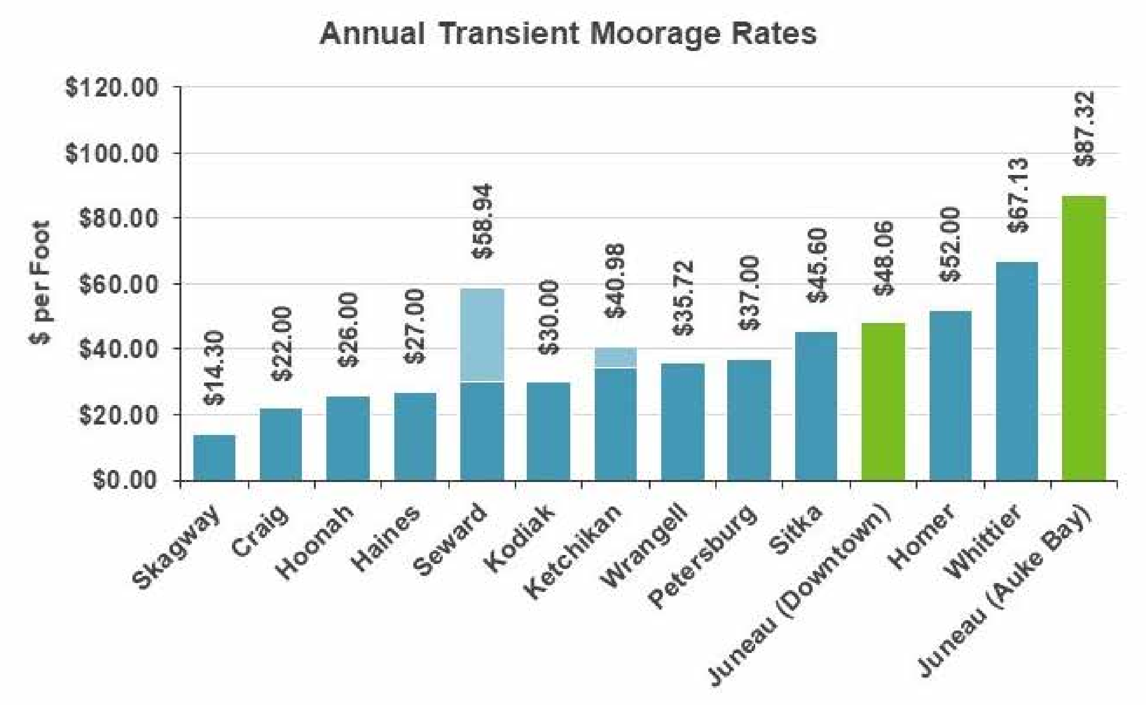


Figure 4. Comparison of Annual Moorage Rates, dollars per foot, 2020

Light blue area for Seward reflects the difference between the reserved rates at Seward ($26.97/foot) and the transient rates at Seward ($58.94/foot). Light blue area for Ketchikan reflects the difference between the Inside City rates at Ketchikan ($34.48/foot) and the Outside City rates at Ketchikan ($40.98/foot).

Port Expenditures

Use of revenues from Docks and Harbors users is not commingled and goes to providing services and maintaining assets in a state of good repair for each area, respectively.

COVID had a significant negative impact on cruise ship passenger counts which form the basis of revenues for Docks. Pre-COVID, the budgeted expenses for Docks were $1.95 million and actual expenses were $1.71 million. In the previous five years actual expenses ranged from about $1.19 million to about $1.73 million. While in most years actual expenses were less than budgeted expenses, there was a shortfall in FY 2021. Combined with reduced revenue due to COVID, the Docks funds balance decreased substantially in FY 2021. The FY 2021 fund balance is about $1.82 million. The Dock Fund balance in 2021 is less than half of 2018 levels due to COVID-19 and capital investments in 2019.

COVID did not have much of an impact on Harbor revenues as most of the user base is local. As noted above, revenues have been steadily increasing from about $3.4 million in FY 2013 to nearly $4.6 million in FY 2021. During this time, budgeted expenses have also gone up proportionally with actual expenses increasing somewhat less. Harbors fund balances have also declined materially since 2013, amounting to $1.4M at the end of FY2021, of which $791,900 is restricted for debt service. The drawdown in balances mainly relates to capital outlays of about $7.4M over that time-period. As with Docks, Harbors needs to set aside these funds for future contingencies. Unlike Docks, Harbors serve a wider range of stakeholders. As such, there is a more diverse set of possible issues to deal with in the future.

6 *Based on 2019 fiscal year data.*

D&H needs to set aside these funds for future contingencies. This includes years with poor financial res[...] 2021) and years when D&H incurs additional costs to maintain assets in a state of good repair. As assets age, these expenses can increase exponentially. This is especially so for higher valued assets used for servicing cruise vessels. As such, it is especially important to maintain a robust funds balance to be able to service and replace assets at their scheduled time.

Almost half[7] of D&H expenditures (excluding capital) are related to personnel. While D&H rates are now indexed to inflation, we have seen that general wage inflation has far exceeded that of the Consumer Price Index. If these trends continue, the indexation of D&H rates will likely be insufficient to keep up with changes to labor rates. Other measures of inflation may be more suitable for indexing D&H rates.

Figure 5 and **Figure 6** provide a summary of revenue, expenditure, and fund balances from 2013 to 2021.

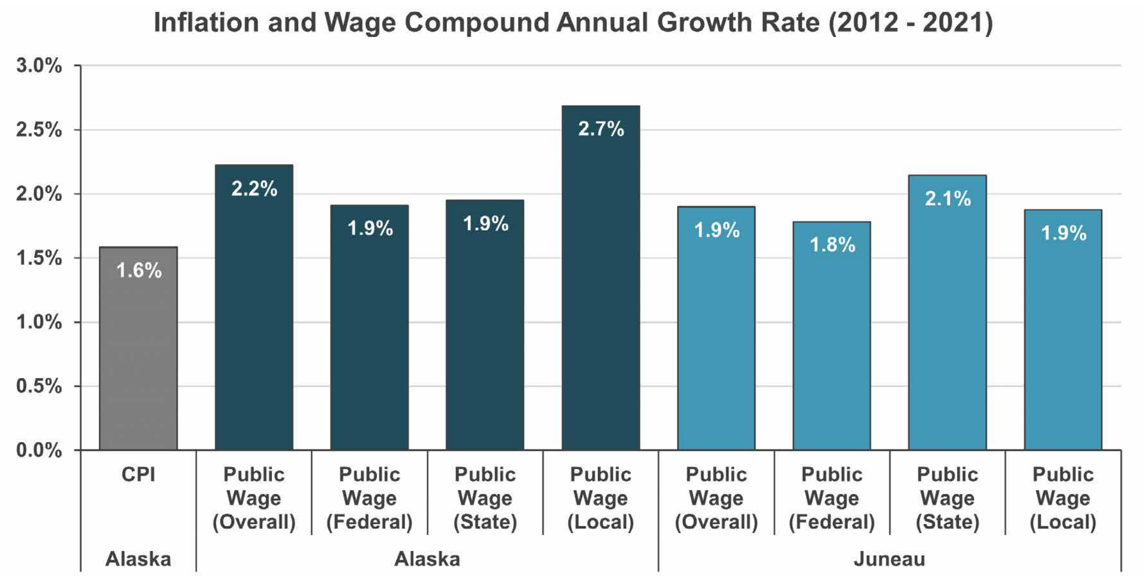


Figure 5. Wage versus CPI Inflation, 2012 - 2021

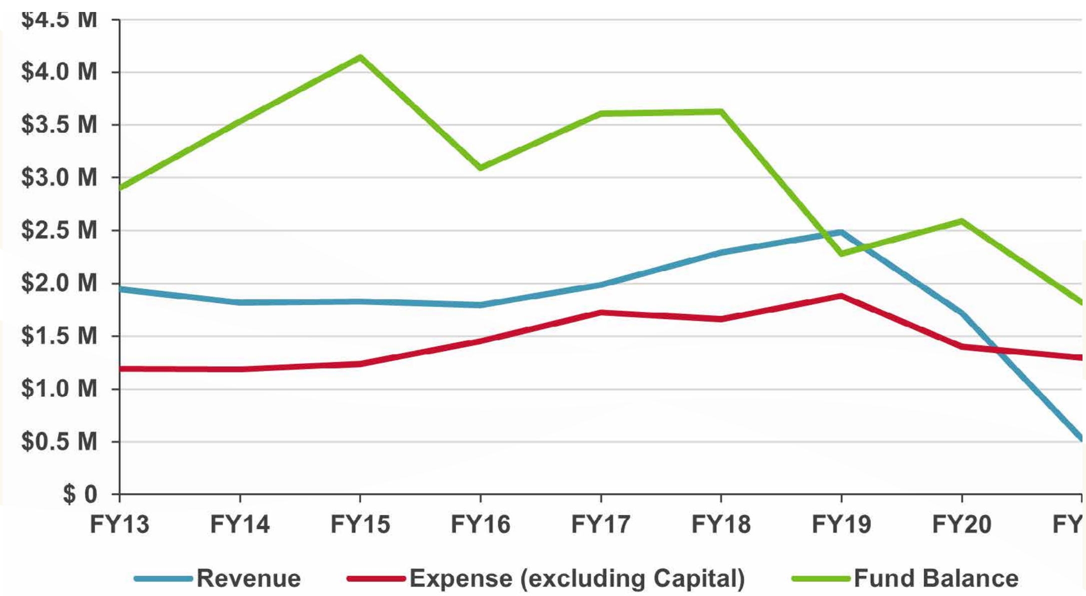
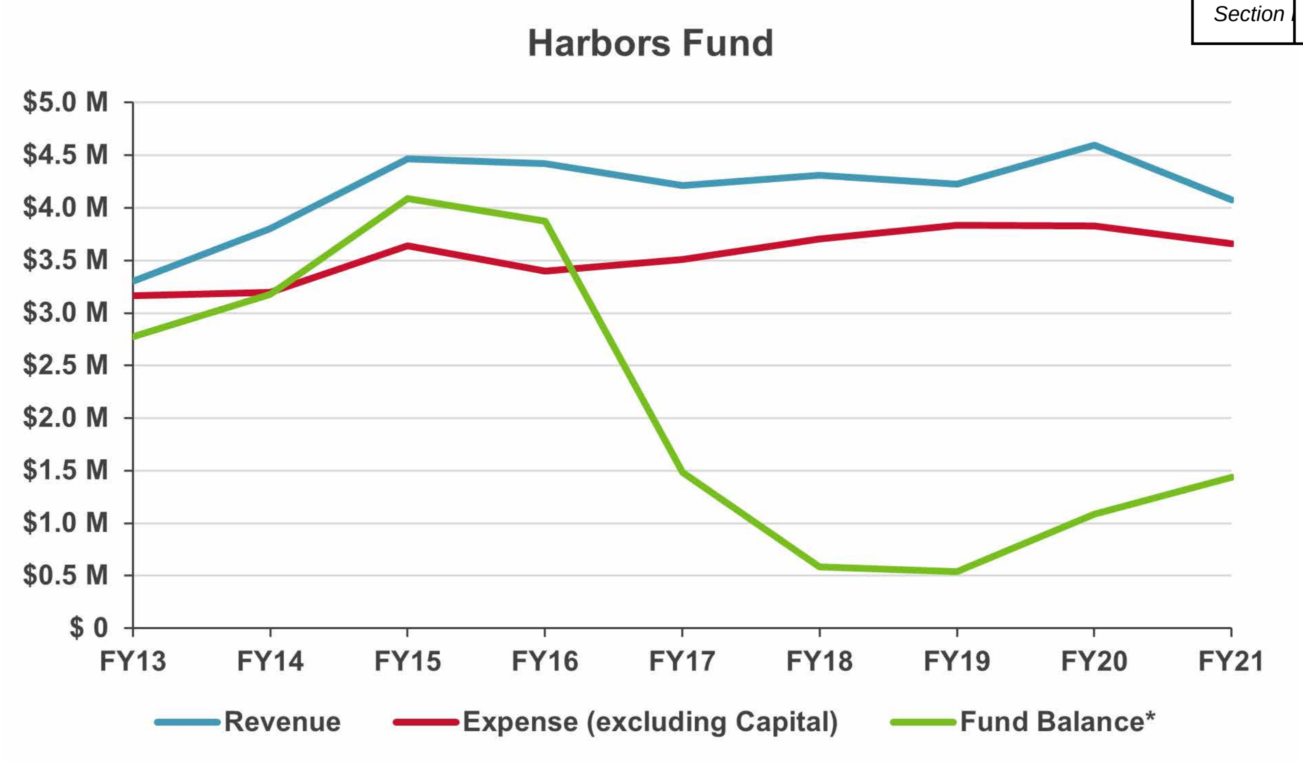


Figure 6. CBJ Docks Fund Balance, 2013 to 2021

7 *From FY2013 to FY 2021, personnel expenditures were 48% of non-capital expenditures. This data was provided by D&H for 2013-2021.*



Portion of the balance is reserved for debt repayment

Figure 7. CBJ Harbors Fund Balance, 2013 - 2021

Expenditures for both Docks and Harbors consist of fixed personnel and building costs and some generally fixed operations and maintenance costs. As noted above, maintaining assets in a state of good repair also requires variable costs that occur every few years and can result in spikes in expenditures.[8] Additionally, some of the variable costs will be for major rehabilitation and even entire replacement of assets that require a significant infusion of funds that require setting aside money in reserves. This would also apply to any proposed new assets.

As such, HDR recommends that D&H maintain a rigorous replacement reserve analysis to determine the amount of funds needed to deal with these state of good repair issues. This would allow D&H to establish rates to accumulate adequate reserves every year to have these funds (i.e., escrow funds annually to pay for major expenses when they occur). Part of this exercise would include assigning annual cost schedules for each of the facilities D&H maintains. Some of the costs are specific to maintaining the infrastructure and others are shared costs (e.g., general D&H personnel costs). Having a better idea of future expenditures is essential for establishing the revenues required to fund these expenditures. Once that is established, it also provides a better framework for establish rates to meet these revenue targets.

Through this rate setting project, HDR developed a financial model to estimate to establish a replacement reserve analysis that can be used to determine the level of rates required to maintain D&H's assets in a state of good repair and to provide for future capital needs. Using D&H asset and cost inputs[9], HDR has estimated the rate increase necessary to fund D&H's financial needs.

8 *A November 19, 2021, memo from the Port Director to the Board and City Manager (FY2021 Review – Docks & Harbors Operations) highlights several recent projects (see item #5).*

9 *The cost information was exogenous to this study and provided by D&H. HDR has not independently validated these inputs.*

3 Stakeholder Perspectives

Between April 5th and 9th, 2022, HDR conducted outreach with different D&H user groups. HDR conducted the outreach to ascertain sensitivity to any changes in rates and services and how any changes might affect their business model (commercial users) and harbor usage (non-commercial users). The responses are confidential and as such are not included in the report. [10]

Outreach User Group participants were:

- Cruise Lines
- Charter Operators
- Recreation Boaters
- Launch Ramp Users
- Live-Aboard Community
- Commercial Fishing

General points raised during the outreach included:

Docks

- Alaska is a world class cruise line destination and the stop at Juneau is an integral part of the cruise (e.g., taking in a whale watching charter).
- Current cruise related taxes and fees (D&H, state, etc.) are a small part of total Cruise trip costs for passengers (cruise, airfare to Seattle, charters, and other expenses). Any modest changes to these taxes are not likely to alter a decision to take a cruise to Alaska.
  - » However, D&H needs to take into consideration any rate change at other ports.
- Cruise lines would value certainty in any potential rate increase and would prefer any increase to be set 12 to 18 months in advance to adequately incorporate into their business model and itineraries.

Harbors

- For recreational boaters in general, the fees paid to D&H are only a small component of the total costs of boating. The major cost drivers include the costs of the boat, fuel, insurance, etc. Boating is a way of life for recreational boaters. The more price sensitive recreational boaters may opt for using launch ramps instead of paying moorage, but this also implies that they bear the costs of storing and transporting the boat (truck, and trailer chassis). In some cases, a recreational boater may both moor a vessel and use launch ramps depending on a variety of circumstances.
- There are not many substitutes to the services D&H offers recreational boaters and most are pleased with existing service levels. Given this and that D&H related costs are not a large component of total costs, recreational boaters would not likely change their behavior much if there were a modest fee increase.
- Nearly all charter boat customers are out-of-state visitors disembarking from cruise lines. The Juneau cruise is often an integral component of their trip. If you take a cruise to Alaska, you are likely going to take a charter in Juneau unless price points change drastically for them.
- Moorage is not one of the top cost drivers for charter operators. That being said, typical charter rates range from $140-$200 so there is relatively more price sensitivity to D&H rates than for cruise lines. This presents more of an issue if the rate in question were a head tax rather than a moorage rates; the latter being a small component

10 *Responses are not to be interpreted as results from a census of all users, but rather responses from groups of individuals selected by D&H.*

of total costs for charter operators.

- D&H related costs are not a top cost driver for commercial fishing vessels. Primary cost drivers are vessel costs, crew, fuel, etc. However, they may be price takes (i.e., accept what processors offer) and their ability to pass along costs may depend as much on general prices for their products increasing. In the case of vertically integrated fisheries/processors this is less of an issue.
- The live-aboard community use their vessels as both house boats and for recreational boating. Boating is more than just a way of life (i.e., primary hobby) but also where they live. Since there is also a monthly residence surcharge (in addition to moorage), D&H fees make up a higher share of costs than for purely recreation vessels. However, as these vessels are also house boats, D&H fees not only need to be put in context of recreational vessels costs but also costs of housing. As such, one can consider D&H related fees as a percentage of recreational boating and housing costs. In many cases, these house boats are somewhat larger than a purely recreational vessel and entail greater operational costs than a purely recreational vessel due to their dual purpose. The live-aboard option represents a lower-cost housing option for the community which may be in the interest of the municipality. However, the community shares and competes for space with other users and as such are not any different from that standpoint to D&H with respect to setting fair and equitable rates for D&H services.
- The demand for parking at Statter Harbor is greater than supply.
- The demand for reserved spaces is greater than supply.
- Nearly all stakeholders would rather not have a cut in service levels, and many would be willing to pay a modest amount more to maintain or increase service levels.

4

Perspectives on Changing Rates and Elasticity of Demand

When setting rates (and any prices in general), gauging the sensitivity of users to price changes is paramount. The economic term for this sensitivity is "price elasticity." Changes that reduce output less (less elastic) are more economically efficient than those that lead to larger changes in the demand for services. Often this entails charging different prices for different users or differential pricing based on quantity or quality. This exercise becomes more challenging when pricing for shared facilities so differential pricing by group is not practical and often politically risky. D&H's current rate structure does provide for discounts based on quantity, or to be precise duration (daily, monthly, semi-annual, and annual). Moving forward there are a few points to consider that are useful in providing rate recommendations.

- The more substitutes are available for a product or service, the more "elastic" or sensitive demand is to changes in prices. Conversely, when fewer substitutes are available prices are less elastic.
- When the cost of the service in question is only a small component of total user costs, changes in the costs of that service matter less to the overall usage of the overall service (e.g., costs of state license plates as a ratio of costs to operating a vehicle).
- A product or service is currently underpriced if demand for it is greater than the available supply.
- Products or services that provide more value should be priced higher than services that provide less value.
- Differential pricing (by group, quantity, or quality) that increases overall demand the most is more economically efficient. Conversely, rate increases that decrease output the least are more efficient than rate increases that decrease output more.
- Economically efficient differential pricing is based on charging lower elasticity groups relatively more. This is the essence of "Ramsey pricing" that is used in rate setting by utilities and other similar entities.
- Providing better (lower per unit) pricing when buying in bulk or for longer-term contracts makes economic sense if it increases demand more than uniform pricing.
    - » However, these discounts need to be put in context of the user. For example, if the longer-term contract also provides more value (over and above the price break) to the user (e.g., improved certainty of having a parking spot in your office building's garage) then D&H needs to be cautious in providing too large a price break.
    - » Similarly, longer-term users may be less price elastic to changes in rates since the overall service (e.g., less uncertainty on finding a space, less hassle compared to getting daily permits, etc.) is of great value. As above, D&H needs to exercise caution in setting too large a price break. Further, given the likelihood of the group being less price elastic to changes in rates, one would expect to see less changes to demand than with changes to relatively more elastic daily users.
    - » A review of moorage rates shows that in many cases the implied daily rate of paying monthly (assuming you use the service daily) is only about a ¼ of the daily rate. This appears to be a steep discount. For launch ramp users the implied daily rate is much lower.

5

Rate Setting Principles

When reviewing potential rate setting actions, it is critical to review and understand not just the users of the service but also the principles or objectives that the rate setter has established. It is important to note that the D&H Enterprise funds are operated and financed in a manner similar to private business with the objective to provide goods and services to the general public on a continuing basis and be financed or recovered primarily through user charges.

D&H Docks and Harbors has a well-articulated set of principles/criteria and are documented in the ***Docks & Harbors - Rate Setting Policy*** that we summarize and paraphrase below. Any rate changes or restructuring must be aligned with these principles.

4. Rates must be fair and reasonable – a defined and consistent approach and striving to allocate an equitable share of the cost to every user.
5. Rates must be consistent - establishing this rate setting policy we will have a consistent approach to every rate and rate change.
6. Rates must be supported by data and an explanation of how the data justifies the rate.
7. Rates must be sufficient to support the operations of docks and harbors.
8. Rates must replace capital investments.
9. Rates must build reserves for contingencies and future growth.
10. Where currently significant disparity exists between the cost allocation to user groups these need to be adjusted in a fair and appropriate manner.

The rate setting policy is quite robust and broadly consistent with policies applied in other ports. The policy is set with a focus of the D&H Enterprise to operate as a business entity and not as a public entity with broader societal objectives; that purpose rests at the municipality itself. The D&H Enterprises must set rates to cover operational costs, maintain existing assets and to build reserves to fund future growth. In establishing new rates, care must be taken to ensure that the rates are fair, consistent, and equitable across user groups.

In assessing how the current rates align with the ***Docks & Harbors - Rate Setting Policy***, we offer the following:

1. Rates must be fair and reasonable:

    a. Passenger head tax rates for Docks apply to cruise passengers are lower than that charged at Ketchikan but higher than that charged at Skagway. Juneau is the featured Alaska cruise destination and has the largest number of cruise visitors per year than any other Alaska destination. The rates are in general a very small share of a passenger's total cost for that cruise.
    b. Rates for Harbors are established without differentiation between individual user groups and can therefore be considered fair. The equity and value of having such large discounts provided for longer term users relative to daily users is an issue worth exploring further. Overall Harbor rates are a small portion of any one user's total usage cost.

2. Rates must be consistent.

    a. D&H have now established rates to be inflation adjusted going forward to facilitate consistency. Existing rates are now indexed to consumer inflation. Other inflation indices may be better aligned with port related cost drivers and should be considered.

3. Rates must be supported by data and an explanation of how the data justifies the rate.

    a. From a market-oriented viewpoint existing rates are well supported.
    b. Rates are a small fraction of users' overall costs.
    c. Facility utilization is high.
    d. There are no real competitive alternatives.
    e. Users have indicated that they are not sensitive to modest price changes which is consistent with the evidence in a-to-d above.
    f. From a cost orientation viewpoint, there is not well documented evidence of the cost by service or a projection of the future costs for asset renewal and new infrastructure.

4. Rates must be sufficient to support the operations of docks and harbors.

    a. Rates currently do cover annual operational expenses for Harbors and pre-COVID covered Docks operational expenses.

5. Rates must replace capital investments.

    a. It is unclear from existing financial data and reports that existing rates are sufficient to build reserves to fund new assets and existing asset replacement. Existing fund balances for both Docks and Harbors are significantly lower than previous levels. The replacement reserve analysis that follows indicates that existing rates are not sufficient.

6. Rates must build reserves for contingencies and future growth.

    a. It is unclear from existing financial data and reports that existing rates are sufficient to build reserves to fund new assets and existing asset replacement. Existing fund balances for both Docks and Harbors are significantly lower than previous levels. The replacement reserve analysis that follows indicates that existing rates are not sufficient.

7. Where currently significant disparity exists between the cost allocation to user groups these need to be adjusted in a fair and appropriate manner.

    a. For Harbors, the rate approach does not distinguish between user groups. There is a large price differential between daily rates versus the implicit daily rate associated with the longer-term rates. This equity related to this disparity should be explored further.

The following observations/reservations are based on the above:

1. D&H should continue to view their rate setting philosophy with a business-oriented philosophy.
2. D&H could raise rates from existing levels without any deleterious impacts on users or any negative competitive consequences for Docks and Harbors.
3. D&H should assess the relative price differentials and implied "volume" discounts between daily and long-term moorage rates.
4. D&H should set future rates to augment fund balances so that funds are available to maintain existing infrastructure and support the acquisition of future assets.
5. The reserve analysis that follows indicates that current rates are inadequate to maintain assets in a state of good repair and support future growth.
6. D&H should consider other mechanisms for indexing rates as opposed to consumer inflation.

6

Replacement Reserve Analysis (RRA)

A replacement reserve analysis is a long run capital planning process that will help D&H anticipate the financial requirements for the repair and replacement of port facilities and the acquisition of additional assets. The output of the replacement reserve analysis is an estimate of the annual reserve that should be set aside to maintain D&H's facilities in a state of good repair.[11]

To conduct the RRA, the following inputs are required for each D&H facility:

- Average remaining life of the facility;
- The replacement cost of the facility; and,
- The potential external funding available for the asset replacement from non-D&H funding sources.

These inputs were collected for all D&H facilities and documented in the financial model provided as a project deliverable.[12] The total replacement value in 2022 dollars for all D&H facilities is estimated to be $195.2 million.

The annual profile of the required replacement expenditures over the next 40 years is provided below. These estimates are net of potential external funding that could be used to fund the facility replacements at least partially. These external funding sources include but are not limited to federal discretionary grant funding, passenger fees and ADOT Harbor Grants.

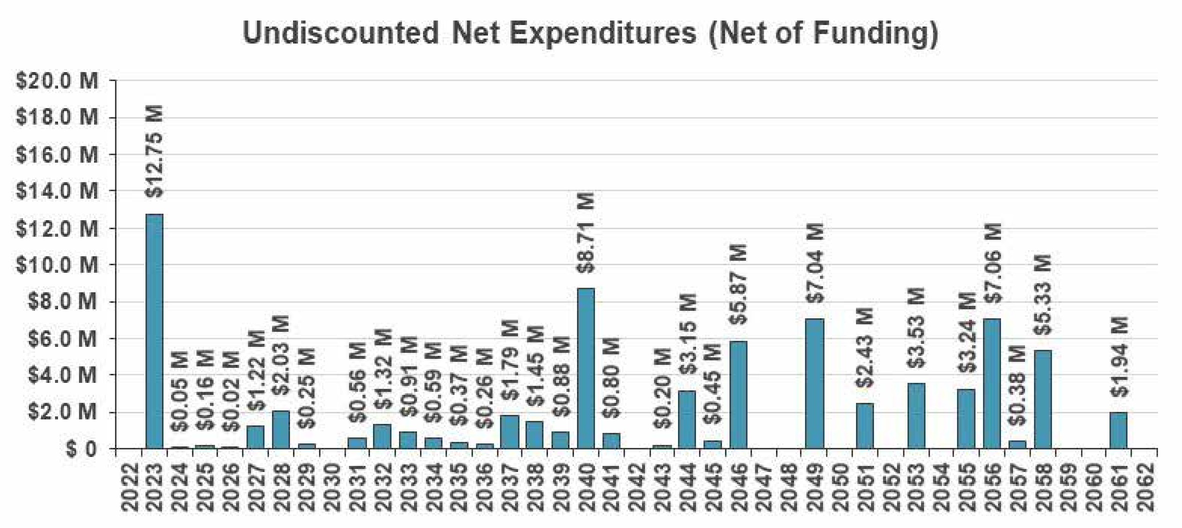


Figure 8. Annual reserve requirements by year, 2020

The RRA assumes that when an asset reaches the end of its "average remaining life", it is fully replaced and therefore funding is required. As illustrated in Figure 8, there are some years in which there are no assets reach the end of their remaining life and no replacement expenditures required. In other years, some assets do reach the end of their remaining life and they are assumed to be replaced with large funding requirements such as in 2040 where $8.7M is required.

The total reserve requirement by facility is provided below in 2022 dollars. Some of the replacements will receive funding from external sources and are therefore for D&H, the net expenditure estimates are the most relevant.

11 *HDR discussed the need to have such an analysis during monthly Board meetings. This exercise is a result of those suggestions and discussions with D&H during the development of the report.*

12 *The data was provided by D&H staff. HDR did not independently verify these data.*

Table 1 – Reserve Requirement by Facility

	GROSS EXPENDITURES	FUNDING	NET EXPENDITURES
Statter	$31.0 M	$15.2 M	$15.8 M
S Aurora	$24.3 M	$11.6 M	$12.7 M
Douglas	$13.9 M	$6.6 M	$7.3 M
Harris	$13.4 M	$6.4 M	$7.0 M
ABLF	$7.0 M	$ 0	$7.0 M
N Aurora	$7.2 M	$3.6 M	$3.6 M
Wayside Park Float	$3.1 M	$ 0	$3.1 M
ABLF Uplands	$3.0 M	$ 0	$3.0 M
Statter Uplands	$2.4 M	$ 0	$2.4 M
Taku Harbor	$4.3 M	$2.1 M	$2.3 M
ABMS	$1.6 M	$ 0	$1.6 M
Seawalk	$31.3 M	$29.8 M	$1.5 M
Norway Point Float	$1.4 M	$ 0	$1.4 M
National Guard Dock	$1.3 M	$ 0	$1.3 M
Port of Juneau Uplands	$19.2 M	$18.3 M	$0.9 M
Harris Harbor Uplands	$0.7 M	$ 0	$0.7 M
Amalga	$2.2 M	$1.6 M	$0.6 M
AS Pontoon	$11.8 M	$11.2 M	$0.6 M
CT Pontoon	$10.0 M	$9.5 M	$0.5 M
N Douglas Boat Launch	$0.8 M	$0.4 M	$0.4 M
Echo Cove	$0.5 M	$0.3 M	$0.3 M
Aurora Harbor Uplands	$0.3 M	$ 0	$0.3 M
Douglas Harbour Uplands	$0.2 M	$ 0	$0.2 M
IVF	$2.6 M	$2.5 M	$0.1 M
PFO	$1.6 M	$1.5 M	$0.1 M
TOTAL	**$195.2 M**	**$120.4 M**	**$74.7 M**

The RRA converts the 40 years of annual replacement related expenditures to an equivalent annual amount. To do this, the 40 years of expenditures are discounted to a present value using a real discount rate of 3%.[13] Then, this present value is converted into an annual equivalent amount reflecting the 40-year planning horizon.

The annual amount required to maintain D&H facilities in a state of good repair going forward is $1.9M. That is, to maintain D&H's existing facilities, D&H revenues must exceed expenditures by $1.9 M per year to be able to establish reserves that can be used to maintain and replace assets once they reach the end of their asset life. This $1.9 M estimate excludes any capital needs for new facilities or other assets.

If we examine the three years prior to COVID-19, D&H revenues exceeded non-capital expenditures by about $1.2 M (in 2022$) per year which is about $0.7M less than that identified through the RRA. Existing fund balances can be used to contribute to the replacement of assets, but the total fund balance is only $3.3M at the end of fiscal 2021 which is equivalent to only $0.1 million per year over a 40-year horizon. D&H's funding gap, excluding any net capital investment in new infrastructure, is about $0.6M a year. Any planned capital projects would have to also be funded which would add to this shortfall.

The RRA was conducted for the combined assets of D&H. Managing D&H assets and rates from a holistic perspective would provide D&H management greater flexibility in financial planning.

The details (e.g., data inputs, assumptions, and methods) of the RRA are provided as a separate deliverable – the D&H Financial Model coded in MS Excel.

13 See OMB Circular A-4 p.33 https://www.whitehouse.gov/wp-content/uploads/legacy_drupal_files/omb/circulars/A4/a-4.pdf

7

Rate Recommendations

Setting rates is a policy issue that must be determined by D&H. It must reflect D&H's rate setting principles, policy objectives and future capital program. If we re-examine, D&H's rating principles we note that it is core to principles that rates must be sufficient to support the operations of docks and harbors, rates must replace capital investments, and that rates must build reserves for contingencies and future growth.

We find that based on the RRA, D&H's existing funding is inadequate to achieve these objectives. To meet D&H's policy objectives, additional funding is required to provide sufficient reserves to fund asset replacement to fund any capital investment in new infrastructure. The additional funding could come from: direct new funding from D&H, through increasing D&H rates, or through any combination of the above.

To eliminate the funding gap solely through D&H rates, an average increase of about nine percent would be required. We do believe that a rate increase of that magnitude would not have any deleterious impacts on D&H users.

HDR makes the following recommendations:

1. D&H make a one-time increase for all rates to meet their capital replacement requirements as well as their future capital program. Based on the Replacement Reserve Analysis, the magnitude of the increase would have to be nine percent to for asset replacements. The actual rate increase should also reflect their capital plan for new infrastructure investments.
2. D&H provide an advance notice to users of the one-time increase of 12 months.
3. D&H maintain the indexation of rates and fees. However, using consumer inflation to adjust rates is not entirely reflective of D&H Docks and Harbors cost pressures (e.g., rising wage rates greater than the CPI) and alternative cost indices more reflective of the D&H operating environment should be explored.
4. D&H should consider removing the firewall between docks and harbors to provide greater flexibility in meeting financial obligations (i.e., balancing financial statements).
5. For the purposes of this study, HDR is proposing an across-the-board increase. In the future, D&H may wish to differentiate increases by source (facility) but that is outside the scope of this report.

CITY AND BOROUGH OF
JUNEAU
ALASKA'S CAPITAL CITY

Port of Juneau Rate Setting Project
City and Bureau of Juneau
September 1, 2022