

Options for a Membership-wide Rate Study and Display Tool

A presentation and roundtable by Mike Fisher
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Agenda

- Purpose of this discussion
- Review of some potential options
- Discussion

Purpose of this Discussion

- AAHPA members often want to do a market rate study and send a request to the mail list to request rates.
- Having AAHPA serve as a central repository for rates, in one form or another, could save time for its member communities in accessing data as well as time and money for members' consultants when they are conducting rate studies.
- There are a lot of options to do this. Today we'll look at some examples and then open a discussion about these and other options.

Review of Potential Options

Potential options for sharing this information include:

- 1. Simple and minimal effort:** page with PDFs you can download
- 2. Simple but with a little more prep work:** a static table
- 3. More involved and requiring some web development:** a front-end on the website similar to the financial documents delivery system
- 4. More involved and requiring some coding and a third-party host:** a dynamic website, with ability to select the community / harbor and other options

Option 1: Simple Page with PDFs to Download

■ Creating/updating:

- This would simply require collection of rate sheets (ideally all in the same format, for consistency) and a page on AAHPA's website with links.
- Individual harbors would need to submit their rate sheets to the contact person at AAHPA, who would:
 - Verify the contents
 - Identify the currently posted content to remove (if any)
 - Post the new content and ensure the link points to the right spot

■ Using:

- Users would go to the AAHPA page to download the sheets they want and then work with them as they saw fit.

Example 1: Simple Page with PDFs to Download

HARBOR E-FORMS

- [2021 Harbor & Port Fee Schedule](#) ↗
- [2021 Harbor Enterprise Fund Budget](#) ↗
- [2022 Moorage Application](#)
- [Long Term Parking](#) ↗
- [Storage Agreement](#) ↗
- [Travel Lift Agreement](#) ↗
- [Cordova Harbor Presentation](#) ↗

SMALL BOAT HARBOR MAP

View the map [here](#) ↗.

Option 2: Static Table

- Creating/updating:
 - A slight step beyond the raw sheets, AAHPA could maintain a table with comparable information that is based on each member's rates.
 - Updating would require updating the appropriate sheet columns, and there may be multiple tables depending on what is included (different durations of moorage, port fees, etc.).
- Using:
 - Users would pull up the table(s) they want and grab the information they need.

Example 2: Static Table

	Annual	Semi-Ann	Monthly	Daily								
Commodity Rate	\$ 62.69	\$ 42.00	\$ 10.66	\$ 1.88								
Admin. Rate	\$ 50.00	\$ 33.50	\$ 8.50	\$ 1.50								
Tax Rate	7.85%	7.85%	7.85%	7.85%								
			67%									
2023												
	Annual \$62.69 + \$.05/ft X LOA +\$.05/ft caps at 86' Admin Fee \$50.00 Tax 7.85%		Semi Annual \$62.69 + \$.05/ft X LOA X 67%		Billed Monthly \$62.69 + \$.05/ft X LOA X 17%		Prompt Payment Monthly \$62.69 + \$.05/ft X LOA X 17%-.50/ft					
			Admin Fee \$33.50		Admin Fee \$8.50		Admin Fee \$8.50					
				Total Semi		Total Billed		Total Billed		Prompt Pay		Total
LOA	Annual	Tax	Annual	Annual	Tax	Annual	Month	Tax	Monthly	Month	Tax	Month
6	427.94	33.59	461.53	286.72	22.51	309.23	72.75	5.71	78.46	69.75	5.48	75.23
7	491.28	38.57	529.85	329.16	25.84	355.00	83.52	6.56	90.07	80.02	6.28	86.30
8	554.72	43.55	598.27	371.66	29.18	400.84	94.30	7.40	101.71	90.30	7.09	97.39
9	618.26	48.53	666.79	414.23	32.52	446.75	105.10	8.25	113.35	100.60	7.90	108.50
10	681.90	53.53	735.43	456.87	35.86	492.74	115.92	9.10	125.02	110.92	8.71	119.63
11	745.64	58.53	804.17	499.58	39.22	538.80	126.76	9.95	136.71	121.26	9.52	130.78
12	809.48	63.54	873.02	542.35	42.57	584.93	137.61	10.80	148.41	131.61	10.33	141.94
13	873.42	68.56	941.98	585.19	45.94	631.13	148.48	11.66	160.14	141.98	11.15	153.13
14	937.46	73.59	1,011.05	628.10	49.31	677.40	159.37	12.51	171.88	152.37	11.96	164.33
15	1,001.60	78.63	1,080.23	671.07	52.68	723.75	170.27	13.37	183.64	162.77	12.78	175.55
16	1,065.84	83.67	1,149.51	714.11	56.06	770.17	181.19	14.22	195.42	173.19	13.60	186.79
17	1,130.18	88.72	1,218.90	757.22	59.44	816.66	192.13	15.08	207.21	183.63	14.42	198.05

Option 3: Front-end with Downloads

- Creating/updating:
 - A slight step up from Option 1, this option would be similar to a single page of links but would allow for selection of which rate sheets to download.
 - It would also allow for multiple years to be available without complicating the layout.
 - Sheets could be selected based on community, harbor vs. port, year, etc.
 - This would require some web development work.
 - Like Option 1, AAHPA would need to manage the rate sheets as well as a back-end that tracks characteristics that would be subject to search.
- Using:
 - Users would select the options they want to search, click the search page, and download the sheets they want.

Example 3: Front-end with Downloads

The screenshot shows the website for the Alaska Department of Commerce, Community, and Economic Development, specifically the Division of Community and Regional Affairs. The page title is "Financial Documents Delivery System". The search interface includes the following elements:

- Search Criteria:**
 - Document Title:** A text input field.
 - Document Year:** Two dropdown menus with "to" between them.
 - Adoption Dates:** Two text input fields with "to" between them.
 - Fiscal Calendar:** Three radio button options: "Calendar Year", "Federal Fiscal Year", and "Fiscal Year".
- Category Type:** A list of checkboxes for "Audit", "Budget", and "Certified Financial Statement".
- Community:** A dropdown menu with options: "N/A", "Adak", "Adak Station", "Afognak", "Akiok", and "Akiachak".
- Region:** A dropdown menu with options: "Gulf Coast Region", "Interior Region", "Northern Region", "Northwest Region", "Southcentral Region", and "Southeast Region".

Example 3: Front-end with Downloads

Category Type:

- Audit
- Budget
- Certified Financial Statement

Community:

- N/A
- Adak
- Adak Station
- Afognak
- Akhiok
- Akiachak

Region:

- Gulf Coast Region
- Interior Region
- Northern Region
- Northwest Region
- Southcentral Region
- Southeast Region

Search criteria applied click Reset to clear all filters. x

Results/page: 50 v

	Community	Category Type	Year	Document Title	Fiscal Calendar	Adoption Date
<input type="button" value="View PDF"/>	Haines Borough	Audit	2021	Haines Borough Fiscal Year 2021 Audit	FY	12/13/2021
<input type="button" value="View PDF"/>	Hydaburg	Audit	2021	Hydaburg Fiscal Year 2021 Audit	FY	03/07/2022
<input type="button" value="View PDF"/>	Juneau	Audit	2021	Juneau Fiscal Year 2021 Audit	FY	12/28/2021
<input type="button" value="View PDF"/>	Kake	Audit	2021	Kake Fiscal Year 2021 Audit	FY	04/21/2022
<input type="button" value="View PDF"/>	Ketchikan	Audit	2021	Ketchikan Calendar Year 2021 Audit	CY	07/28/2022
<input type="button" value="View PDF"/>	Ketchikan Gateway Borough	Audit	2021	Ketchikan Gateway Borough Fiscal Year 2021 Audit	FY	12/23/2021
<input type="button" value="View PDF"/>	Petersburg Borough	Audit	2021	Petersburg Borough Fiscal Year 2021 Audit	FY	03/15/2022
<input type="button" value="View PDF"/>	Yakutat	Audit	2021	Yakutat Fiscal Year 2021 Audit	FY	12/17/2021
<input type="button" value="View PDF"/>	Craig	Audit	2020	Craig Fiscal Year 2020 Audit	FY	08/18/2021
<input type="button" value="View PDF"/>	Haines Borough	Audit	2020	Haines Borough Fiscal Year 2020 Audit	FY	01/15/2021
<input type="button" value="View PDF"/>	Hoonah	Audit	2020	Hoonah Calendar Year 2020 Audit	CY	09/23/2021
<input type="button" value="View PDF"/>	Hydaburg	Audit	2020	Hydaburg Fiscal Year 2020 Audit	FY	02/08/2021
<input type="button" value="View PDF"/>	Juneau	Audit	2020	Juneau Fiscal Year 2020 Audit	FY	12/09/2020
<input type="button" value="View PDF"/>	Kake	Audit	2020	Kake Fiscal Year 2020 Audit	FY	07/03/2021
<input type="button" value="View PDF"/>	Ketchikan	Audit	2020	Ketchikan Calendar Year 2020 Audit	CY	09/29/2021
<input type="button" value="View PDF"/>	Ketchikan Gateway Borough	Audit	2020	Ketchikan Gateway Borough Fiscal Year 2020 Audit	FY	12/28/2020

Option 4: Shiny App

- What the heck is a Shiny app?
 - Think of it as an interactive online data-exploration tool, or a web-based data explorer
 - It's called a Shiny app because the technology behind it was named that, and unless you have the ability to run it on your server, the apps are hosted at [ShinyApps.io](https://shinyapps.io).

Option 4: Shiny App

- Creating/updating:
 - We would collect and process rate information for each community / harbor and code a basic front end for the Shiny app.
 - Updates to rates would require that the rates data be updated and posted to the server. This would be relatively quick and easy. A spreadsheet template might be helpful for collecting updated information.
 - Updates to the interface would require an update of the R code. This would likely be easy, depending on the extent of the changes.
 - The app would be hosted on shinyapps.io (e.g., aahpa.shinyapps.io), unless AAHPA's host is capable of running a Shiny server.
 - There is a fee for hosting, which depends on the amount of use (25 hours of use per month is free and 100 hours per month is \$100 per year). See <https://www.shinyapps.io/> for details.

Option 4: Shiny App

- Using:
 - You can have an option to select communities for comparison and set other parameters. Anything that can be included in the data could be included in the interface.
 - The app could have both a chart and a table, depending on how you would want to use it, including options to download what you see on the screen.
 - The app could have many, many more features, as well. It just depends on your imagination (and our ability to code it, but we can do some amazing things!).

Example 4: Shiny App

Vessel Characteristics of Bristol Bay Salmon Fisheries

Select a Metric:

- Vessel Ages
- Vessel Lengths
- Vessel Lengths by Community
- Gross Tons
- Horsepower

Select a Year:

1978 2021

Length Range (feet):

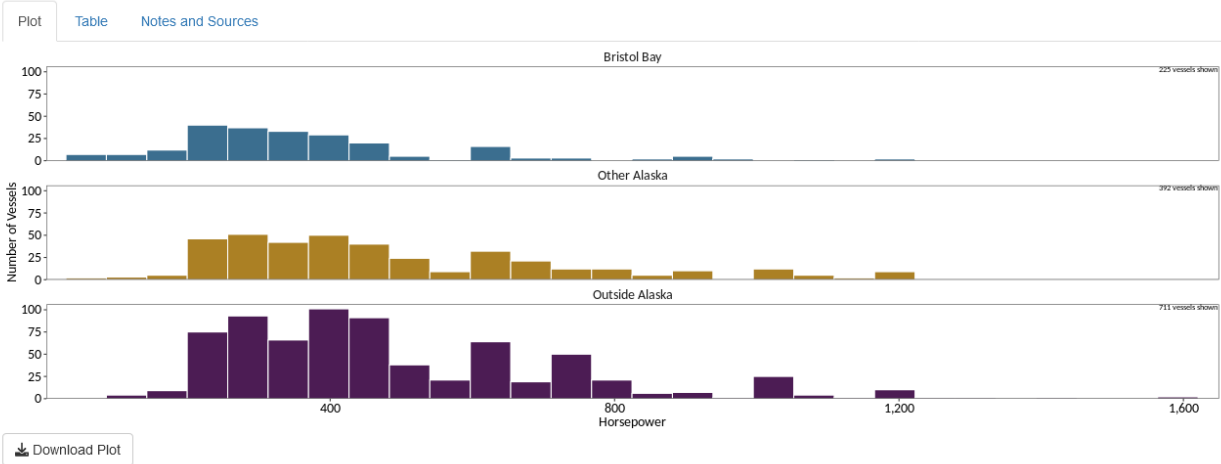
18 32

Horsepower Range:

1 1,650

Select a Region:

- Bristol Bay
- Other Alaska
- Outside Alaska



Plot Table Notes and Sources

Show 10 entries Search:

	Residency	Year	Number of Vessels	Median Horsepower	Horsepower-25th percentile	Horsepower-75th percentile
1	Bristol Bay	2021	225	320	250	430
2	Other Alaska	2021	392	425	300	619.5
3	Outside Alaska	2021	711	430	310	600

Showing 1 to 3 of 3 entries Previous 1 Next

Download Table

Example 4: Shiny App

Change Plot Appearance

Economic Trends in Bristol Bay Salmon Fisheries

Select a Fishery

- S 03T
- S 04T

Select a Metric

- Revenue
- Permits Fished
- Proportion of Total Revenue
- Proportion of Permits Fished
- Average Revenue per Permit

Select a Region

- Total
- All Permit Holders by Residency
- Bristol Bay Region Boroughs and Census Areas
- All Bristol Bay Region Communities
- BBEDC Communities
- Dillingham Census Area Communities
- Bristol Bay Borough Communities
- Lake and Peninsula Borough Communities

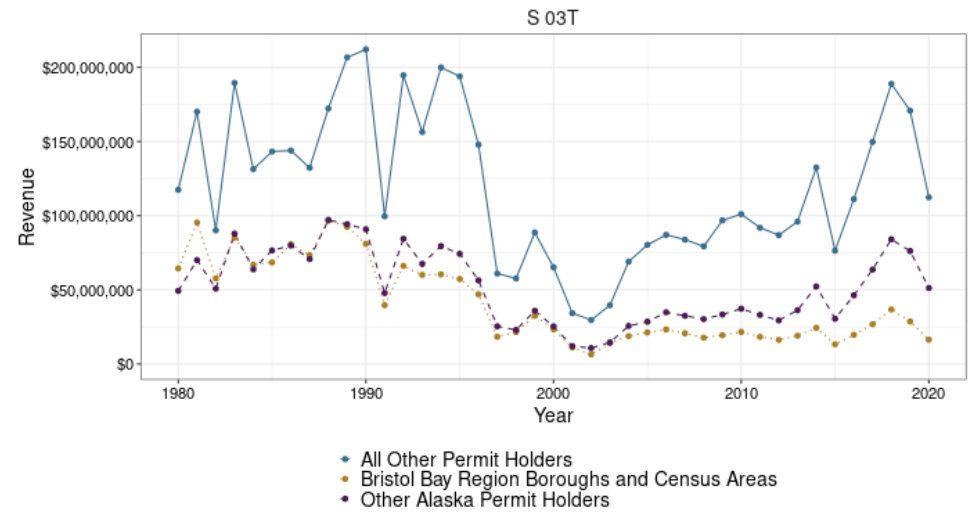
Select Sub-Regions

- All Other Permit Holders
- Other Alaska Permit Holders
- Bristol Bay Region Boroughs and Census Areas
- Select/Unselect All

Time Series

1980 2020

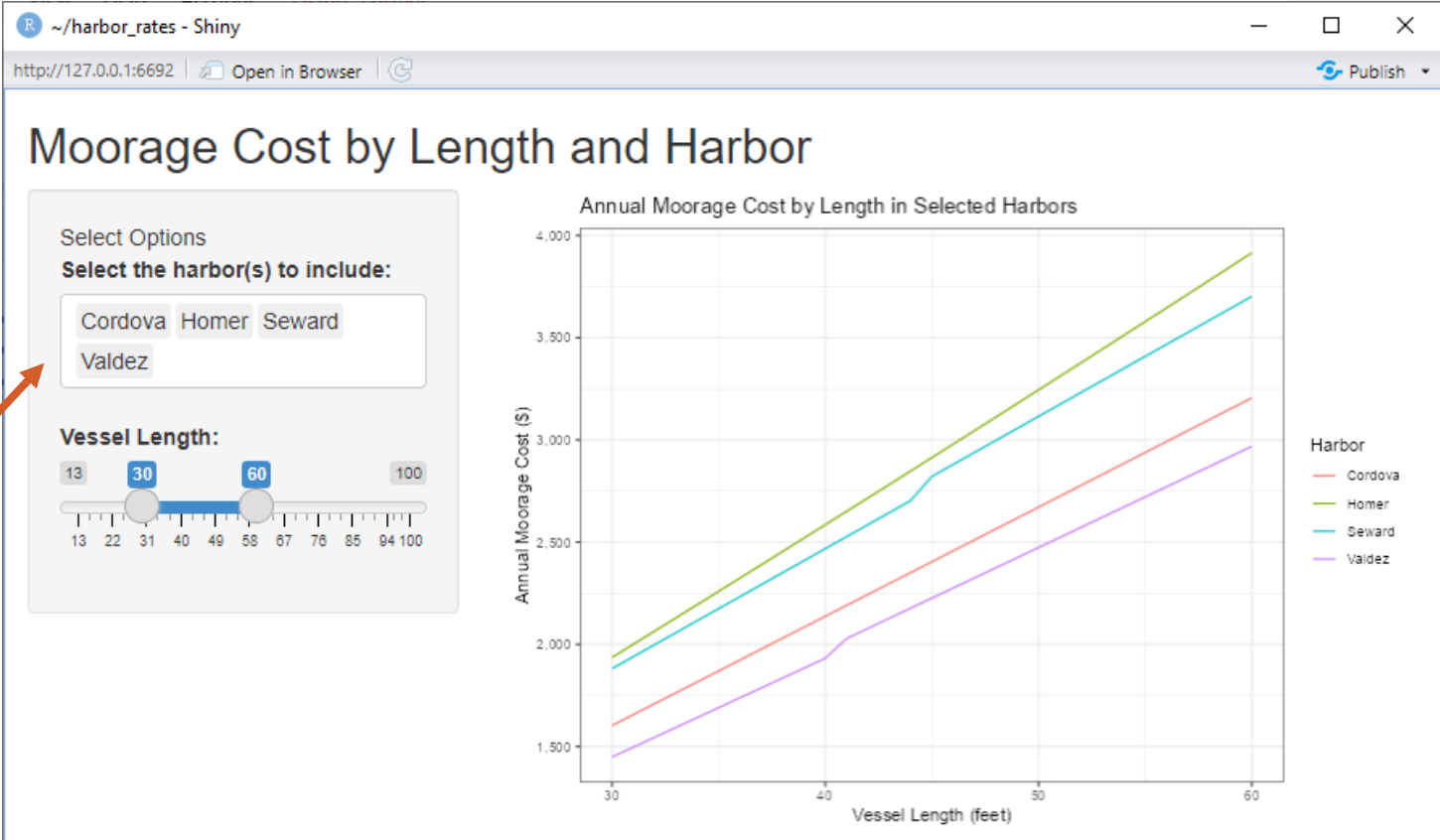
Plot Table Notes and Sources *Switch view between table, plot, or notes*



Download Plot

Download picture

Example 4: Shiny App



Select Options
Select the harbor(s) to include:
Cordova Homer Seward
Valdez

Harbor
Whittier
Juneau DHA
Juneau Statter
Unalaska Storrs Harbor
Unalaska CEM
Petersburg
Sitka

Option 4: Shiny App

- This is a very rudimentary and minimally featured example using vessel cost data from a recent rate study! It could be updated with many more features:
 - Improvements to how the chart looks
 - Other options for what to display (could show rate per foot)
 - Tabs for the chart, a table version, and more (links to each harbor's rate sheets? state map with dots for each harbor and ability to click on them for more info?)
 - Download buttons for the chart and table
- (We're pretty excited about what we can do with Shiny apps!)

Discussion

- What format works best for updating information?
- What format works best for accessing/using information?
- What do you need to get from this endeavor?
- What else do you want to get from this endeavor?
- Are there other options you can think of that I did not include?

Next Steps

- If you have other ideas today or tomorrow, please bring them up for discussion!
- If you have ideas after you return home, please share them.
- If you want to look at what has been done in Shiny apps, they maintain a gallery of sites at <https://shiny.rstudio.com/gallery/>.

Thank you!



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