

CITY AND BOROUGH OF SITKA

A COAST GUARD CITY

MEMORANDUM

To: Mayor Eisenbeisz and Assembly Members

Thru: John Leach, Municipal Administrator

From: Amy Ainslie, Planning & Community Development Director *AA*

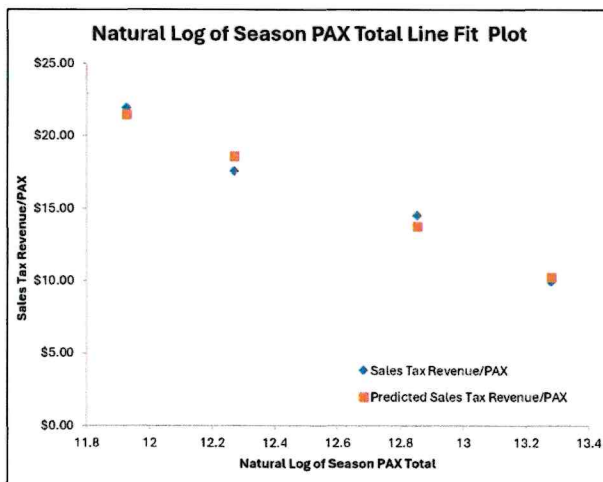
Date: May 16, 2024

Subject: Correction to Sales Tax Projections

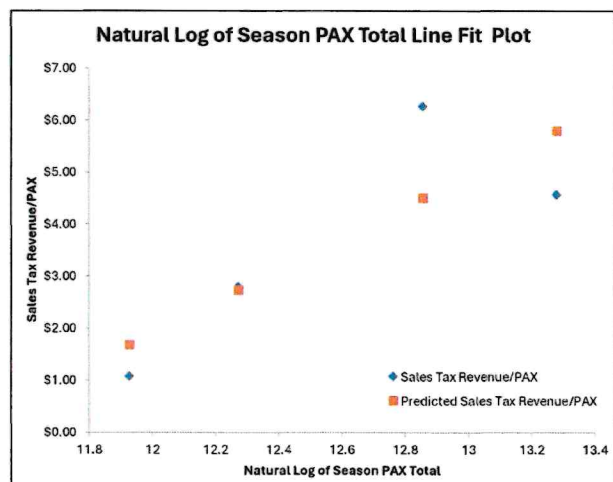
At the December 7th Tourism Task Force Town Hall, information was shared with the public regarding sales tax projections based on the number of cruise passengers per season. An explanation of the methodology used is included for reference.

Upon reviewing information in preparation for this meeting, a calculation error was discovered. Inadvertently, 2020 was used as the baseline year rather than 2021. The calculations have been re-run with this correction. The resulting model is less accurate in predicting sales tax revenue per passenger because the actual data is not as “uniform” in terms of a predictable relationship (such as a linear or logarithmic function). Instead of a 97% fit, the updated model has a 67% fit. Sales tax per passenger is also significantly lower. A comparison of the results is shown below:

2020 Baseline Results



2021 Baseline Results



Predicted Sales Tax Revenue based on Season Passenger (PAX) Total						
	2020 Baseline Results - Published December 7, 2023					
Season PAX Total	150,000	250,000	350,000	450,000	550,000	650,000
Sales Tax Revenue/PAX	\$21.51	\$17.28	\$14.49	\$12.41	\$10.75	\$9.37
Total Cruise Sales Tax Revenue (MM)	\$3.2	\$4.3	\$5.1	\$5.6	\$5.9	\$6.1
	2021 Baseline Results - Published May 16, 2024					
Season PAX Total	150,000	250,000	350,000	450,000	550,000	650,000
Sales Tax Revenue/PAX	\$1.65	\$3.21	\$4.23	\$5.00	\$5.61	\$6.12
Total Cruise Sales Tax Revenue (MM)	\$0.2	\$0.8	\$1.5	\$2.2	\$3.1	\$4.0

The spike in sales tax per passenger observed in 2022 makes the relationship between season passenger total and sales tax revenue per passenger less uniform, and therefore an overall trend is harder to describe.

This result was referenced on page 7 of the Tourism Task Force Recommendations:

From a tax revenue perspective, the key findings were:

- Sales tax revenue, equalizing for inflation and new tax collection for online sales, has experienced significant growth from pre-pandemic levels to present. New and improved municipal services have been made available, and substantial contributions to public infrastructure have been made as a result.
- However, sales tax returns appear to have “diminishing returns” in relation to the number of cruise visitors. Based on predictive analysis performed for the December 7th town hall meeting, the sales tax revenue per passenger declines as the total of passengers per passenger increases, meaning that as passenger numbers go up, the increase in total sales tax revenue goes up by a smaller and smaller amount.

It is recommended that the second bullet be struck entirely, and that this memorandum be included as Appendix E: Correction to Sales Tax Projections

This information was provided to the public based on interest in better understanding the relationship between cruise visitation and sales tax. While it was used as a discussion point and included as a finding, the information, in my opinion, did not directly inform any of the recommendations. I offer my most sincere apology for this error and wish to affirm that it was inadvertent and disclosed as soon as found.

METHODOLOGY FOR PREDICTING SALES TAX REVENUES AT DIFFERENT LEVELS OF CRUISE TOURISM

In order to make predictions about sales tax revenue from cruise tourism, several assumptions had to be made. As with any modelling exercise, it's important to understand the assumptions made and the methodology used so that we can understand the results and their limitations.

Assumptions:

- Determining the amount of sales tax from cruise tourism:
 - We do not have sufficiently detailed data to know the amount of tax revenue that comes directly from sales made to cruise visitors. So, 2021 was used as a baseline for what our sales tax revenue would be without cruise tourism since this was a summer season that had negligible cruise tourism but strong independent traveler visitation.
 - Year-to-year changes in sales tax revenue can be influenced by other factors and industries, so this is an imperfect way to measure sales tax revenue from cruise tourism. However, this is the best way to approximate it given the available data.
- Sales tax attributed to cruise tourism is measured in the months of April – October.
- The Remote Sellers sales tax revenue (tax from online sales) was removed.
- Due to a change in our local taxation rules, the actual sales tax rate for July – September 2023 was 5% rather than the usual 6% summer sales tax. The summer sales tax rate will be 6% again starting next year as voted on by Sitkans in the 2023 local election. To predict future sales tax revenue more accurately, the 2023 sales tax revenue was adjusted to reflect what it would have been at 6%.
- All numbers were adjusted for inflation and are stated in 2023 dollars to make an “apples to apples” comparison between years.

Methodology Used:

- Additional sales tax revenue above the amount in 2021 for 2018, 2019, 2022, and 2023 is the amount attributed as sales tax revenue from cruise tourism in each year.
- Sales tax revenue per passenger was calculated by dividing the sales tax revenue from cruise tourism as explained above by actual passenger counts each year.
- Using the actual sales tax revenue per passenger as calculated above, a logarithmic function was used to create a mathematical model for predicting sales tax revenue per passenger.
- The resulting mathematical model was 97% accurate in predicting sales tax revenue per passenger for 2018, 2019, 2022, and 2023 which indicates that it is a very robust model that fits the actual results closely, meaning that it is a good model for making predictions given the assumptions made.
- The resulting predictions of total sales tax revenue from cruise visitation multiplies the model generated sales tax revenue per passenger by each level of cruise visitation (stated as a season passenger total).