

July 16, 2018

Doug Bradshaw
Director of Port and Marine Services
City of Key West
201 William Street
Key West, FL 33040

Subject: Cruise Ship Tariff Analysis

Dear Mr. Bradshaw:

Raftelis Financial Consultants, Inc. (“Raftelis”) has completed an evaluation of the tariff assessed to cruise ships docking at the City of Key West’s (“City”) Mallory Square and Outer Mole cruise ports. The objective of analysis was to determine the extent to which the tariff may need to be adjusted to ensure full cost recovery of cruise port operations. This letter report documents our analysis results, and recommendations for adjustments to the existing tariff.

Tariff Analysis Steps

The following tariff analysis steps were completed:

1. Reviewed the existing tariff, and port call activity, such as ship call schedules, ship characteristics (i.e., length and tonnage), and passenger counts.
2. Identified and substantiated City costs related to cruise port operations, including operating and capital related costs.
3. Compared annual cruise port revenues with substantiated costs, and assessed the extent to which the existing tariff allows the City to generate sufficient revenues to recover its costs.
4. Compared the City’s existing dockage and disembarkment fees to those assessed by other ports in Florida and the Caribbean to assess competitiveness.
5. Proposed adjustments to the existing tariff to generate sufficient revenues to fully recover cruise port related costs.

Existing Cruise Ship Tariff

The City’s existing cruise ship tariff consists of fees charged for dockage, disembarkment, and security. Dockage fees are the same at each cruise port and are assessed as either a charge per ton

or a charge per foot of the vessel’s overall length. For ships weighing 30,000 tons or less, dockage fees are assessed on the ships length overall (“LOA”), while for ships weighing more than 30,000 tons, dockage fees are assessed on a per gross registered tonnage (“GRT”) basis, which varies depending on the ships weight. The City’s existing dockage fees are shown in Table 1.

Table 1. Existing Dockage Fees (All Cruise Ports)

Tonnage	Dockage (Fee/Ton)	Dockage (Fee/Foot)
0 – 30,000	\$0.0000	\$0.55
30 – 40,000	\$0.0100	\$0.00
40 – 50,000	\$0.0090	\$0.00
50 – 60,000	\$0.0080	\$0.00
60 – 70,000	\$0.0070	\$0.00
70,000 or Greater	\$0.0065	\$0.00

Disembarkment fees are assessed to cruise lines on a per passenger basis according to the number of passengers on board each ship. The fees are the same for the Mallory Square, Outer Mole, and Pier B cruise ports. However, at Pier B, the City receives a 25 percent share of the disembarkment fees, with the remaining portion going to Pier B. Security fees are also assessed on a per passenger basis according to the number of passengers on board each ship. The existing disembarkment and security fees charged by the City are shown in Table 2.

Table 2. Existing Disembarkment and Security Fees

Cruise Port	Disembarkment Fee (per Passenger)	Security Fee (per Passenger)
Mallory Square	\$10.00	\$0.63
Outer Mole	\$10.00	\$0.63
Pier B*	\$10.00	\$0.00

*The City receives 25% or \$2.50 per passenger at Pier B.

Identification of Costs Related to Cruise Port Operations

Costs incurred by the City related to cruise port operations include management and staff labor and benefits costs, navy lease fee payments, Outer Mole transportation costs, port security costs, other non-labor costs associated within the Port Operations Department, and indirect costs from several other City departments. These costs are described in more detail below.

Navy Lease Fee Payments:

The Outer Mole cruise port is owned by the U.S. Navy, and while the pier at the Outer Mole was built to accommodate large naval vessels, cruise ships are also able to dock at this location. Thus, while the U.S. Navy owns the pier, cruise ship operations at the Outer Mole are managed by the City. As part of an existing agreement with the U.S. Navy, the City is required to pay the U.S. Navy \$3.75 per passenger for all cruise ships that dock at the Outer Mole. Based on scheduled cruise ship calls in fiscal year ("FY") 2019, as provided by the City, approximately 224,000 passengers are expected to arrive at the Outer Mole cruise port; therefore, approximately \$840,000 ($223,980 \times \3.75) in navy lease costs were estimated for the Outer Mole cruise port.

Outer Mole Transportation:

Passengers disembarking at the Navy's Outer Mole pier require transportation from the pier into the City. The City has a current agreement with Historic Tours of America ("HTA"), a private transportation firm, to provide this service. The agreement between the City and HTA states that the City is to pay HTA \$5.00 per disembarking passenger or crew member. Based on scheduled cruise ship calls in FY 2019 and certain estimates regarding the percentage of passengers and crew members disembarking and requiring transportation, approximately 179,000 passengers and 46,000 crew members were expected to disembark and require transportation from the Outer Mole pier to public land within the City. Therefore, approximately \$1,127,000 ($179,184 \times \$5.00 + 46,253 \times \5.00) in annual transportation costs were estimated for the Outer Mole cruise port.

Port Security:

The City places security guards on-site at the Mallory Square and Outer Mole cruise ports during scheduled ship calls. The City does not provide security guard services for ship calls at the Pier B cruise port. At the Mallory Square cruise port, two guards are required for a period of 9.0 hours per call, at an hourly rate of \$21.00 per hour. Based on the schedule of ship calls for FY 2019, there are anticipated to be 71 calls at Mallory Square; therefore, annual security costs at Mallory Square were estimated to be approximately \$27,000 ($2.0 \text{ guards per call} \times 9.0 \text{ hours per guard, per call} \times \$21.00 \text{ per hour} \times 71 \text{ ship calls}$).

At the Outer Mole, there are 107 ship calls scheduled for FY 2019, with five guards required for a period of 9.0 hours per call, at an hourly rate of \$21.00 per hour; therefore, annual security costs at Outer Mole were estimated to be approximately \$101,000 ($5.0 \text{ guards per call} \times 9.0 \text{ hours per guard, per call} \times \$21.00 \text{ per hour} \times 107 \text{ ship calls}$).

Other Direct Port Operations Department Costs:

The City's Port Operations Department oversees activities at the Mallory Square and Outer Mole cruise ports, as well as the Key West Historic Seaport, which includes Key West Bight Marina, City Marina at Garrison Bight, and the City's mooring field. Port Operations Department costs were allocated to cruise port operations based on the description of line item budget costs, as included in the City's adopted FY 2018 budget. For example, personnel related costs (salaries, benefits and other wages, including overtime and special pay) for departmental staff were allocated to the cruise

ports based on the labor allocation used as part of the City’s latest (2018) indirect cost allocation plan (prepared by Raftelis). Based on this study, 33.4 percent of the Port Operations Department’s personnel related costs were allocated to the two cruise ports. Other operating costs and minor capital outlays were allocated according to the purpose for which the cost was incurred. The individual allocation of personnel, operating, and minor capital costs is shown in Table 3.

Table 3. Allocation of Port Operations Department Costs to Cruise Port Operations

Budget Line Item	Budget Description/Notes	FY 2018 Budgeted Cost	Allocation to Cruise Ports (%)	Allocation to Cruise Ports (\$)
Personnel:				
Salaries, Wages, & Benefits	Personnel costs for Port Operations staff	\$319,426	33.4%	\$106,688
Other Operating:				
Professional Services	Mallory expansion study	\$50,000	100%	\$50,000
Accounting & Auditing	Special navy audit	\$10,000	100%	\$10,000
Travel & Per Diem	FCAA Annual Conference and FL Ports Council	\$9,000	100%	\$9,000
Communications / Postage	FedEx	\$100	0%	\$0
Rentals & Leases	Copier, P.O. box ship payments, port-a-potty	\$8,993	2.1%	\$185
Repairs & Maintenance	X-Ray maintenance and certification, port minor repair and maintenance	\$14,780	54.1%	\$8,000
Promotional Expenses	Cruise ship inaugural plaque	\$80	100%	\$80
Other Current Charges	BID advertising TWIC renewal badge	\$410	0%	\$0
Office Supplies	Access badge, supplies, water and marine unit supplies	\$5,500	0%	\$0
Books-Subscriptions-Memberships	FL Caribbean Cruise Association yearly dues, FL Ports Council dues	\$22,600	100%	\$22,600
Training	FL Caribbean Cruise Association registration fee	\$4,000	100%	\$4,000
Total Other Operating		\$125,463		\$103,865
Minor Capital Outlay:				
Machinery & Equipment	Cameras for Mallory Square and Outer Mole	\$30,000	100%	\$30,000
Grand Total		\$474,889	50.7%	\$240,553

As shown in Table 3, the amount of Port Operations Department costs allocated to cruise port operations included approximately \$107,000 in personnel costs, \$104,000 in other operating costs, and \$30,000 in minor capital outlay, which resulted in a total allocation of approximately \$241,000. It should be noted that the budgeted costs in Table 3 exclude departmental costs related to Outer Mole transportation and cruise port security, as these costs were estimated and allocated to either the Mallory Square or Outer Mole cruise ports separately.

The \$241,000 of Port Operations Department cost allocated to the cruise ports was then specifically allocated to either the Mallory Square and Outer Mole cruise ports. Some of these costs were directly related to either the Mallory Square or the Outer Mole based on the description of the cost, while other costs were common-to-both locations and proportioned based on the number of

passengers projected to be disembarking from each port in FY 2019. Based on information provided by the City, roughly 73,000 passengers were expected to disembark at Mallory Square during the year, while about 224,000 were expected to disembark at Outer Mole. Therefore, approximately one-quarter of the common-to-both costs would be allocated to Mallory Square, while the other three-quarters would be allocated to Outer Mole.

None of the City’s Port Operations Department costs allocable to the cruise ports were assumed to be related to activities at the Pier B cruise port. Therefore, the allocation of these costs between only the Mallory Square and Outer Mole cruise ports is shown in Table 4.

Table 4. Allocation of Port Operations Costs to the Mallory Square and Outer Mole Cruise Ports

Description	Mallory Square	Outer Mole	Total
Personnel:			
Direct	\$0	\$0	\$0
Common-to-Both	26,261	80,427	106,688
Total	\$26,261	\$80,427	\$106,688
Operations:			
Direct	\$50,000	\$10,000	\$60,000
Common-to-Both	10,797	33,068	43,865
Total	\$60,797	\$43,068	\$103,865
Minor Capital Outlay:			
Direct	\$0	\$0	\$0
Common-to-Both	7,384	22,616	30,000
Total	\$7,384	\$22,616	\$30,000
Grand Total	\$94,442	\$146,111	\$240,553

Cruise Port Capital Cost Estimates:

Annualized capital related costs associated with operating the cruise ports were estimated using data from the most recent fixed asset listing obtained from the City, as well as the future capital plan for the cruise ports. The fixed asset listing was used to estimate the annual repair and replacement costs at the ports, and included all assets in service as of September 30, 2017. The assets pertaining to the Port Operations Department were reviewed to determine if the assets were related to either the Mallory Square or Outer Mole cruise ports, and then segregated by location. For assets determined to be related to one of these two cruise ports, an annualized replacement value was calculated based on the asset’s acquisition date, original cost, estimated useful life, and using the Engineering News Record’s Construction Cost Index, which provides an annual index value representing the relative change in construction related costs by year.

The annualized replacement value of assets attributable to the Mallory Square cruise port was estimated to be approximately \$245,000, while the annualized replacement value of assets attributable to the Outer Mole cruise port was estimated to be approximately \$74,000. The annualized replacement value represents an estimate of the annual use of capital facilities currently

in place at each port location, and is an estimate of the long-term annual capital spend related to repair and replacement at each port in future years.

The future capital plan for the cruise ports was then used to identify costs related to capital additions and improvements. For example, three improvement projects were identified in the capital plan, which included (1) general pier improvements at the Mallory Square cruise port, (2) the construction of checkpoint shelters at the Mallory Square cruise port, and (3) new security monitoring device installations at Mallory Square and Outer Mole. Useful lives were estimated for these assets and using the estimated cost for each project, the annualized cost for projects at Mallory Square was estimated to be approximately \$161,000, while the annualized cost was estimated to be approximately \$18,000 for the Outer Mole.

Other City Department Costs:

Other City costs related to the cruise ports included costs related to the City's Police, Fire, and Emergency Medical Service ("EMS") Departments. These costs were attributable to the ports because when passengers disembark from the cruise ships, the functional population of the City increases, thereby increasing foot and vehicle traffic throughout the City. This increased population places added demands on City services, such as Police, Fire, and EMS. Therefore, these emergency services are provided not just to citizens of the City, but also to cruise ship passengers, as well as seasonal and transient residents, day trippers, and other visitors. In addition, a portion of the indirect costs related to City Commission, City Manager, Finance, Human Resources, Information Technology, Public Works, and Facilities Maintenance Departments were also allocated to the City Ports.

The cost of Police, Fire, and EMS services attributable to the cruise ship population was calculated based on the estimates of functional population, as detailed in the City's latest Comprehensive Plan, and a review of the number of passengers on board cruise ships that typically dock at the City's cruise ports.¹ The functional population estimates are summarized in Table 5.

Table 5. City of Key West Functional Population Components

Description	Amount
2013 Population Estimate	24,934
Estimated:	
Seasonal Residents	4,000
Transient Residents	14,000
Commuters	3,900
Day Trippers/Other Visitors	3,100
Cruise Ship Passengers	3,400
Total	53,334

Next, the total budgeted costs for the Police, Fire, and EMS Departments were identified using the City's adopted FY 2018 budget. These totals are shown in Table 6. The total budgeted costs for

¹ City of Key West Comprehensive Plan, Adopted March 5, 2013, Ordinance No. 13-04.

these City departments were divided by the total functional population to estimate the cost of service per unit of functional population. The cost per unit of functional population was then multiplied by the estimated number of cruise ship passengers that was included as part of the City's functional population (3,400). The resulting figure is an estimate of the cost of Police, Fire, and EMS attributable to the increased functional population resulting from passengers disembarking at the City's cruise ports. These calculations are shown in Table 6.

Table 6. Allocation of Police, Fire, and EMS Departmental Costs to Cruise Ports

Description	Amount
Police:	
FY 2018 Department Budget	\$15,289,296
Functional Population Served	53,334
Cost per Person	\$286.67
Cruise Ship Passengers	3,400
Cost of Police Service per Person	\$286.67
Allocation to Cruise Port Operations	\$974,680
Fire:	
FY 2018 Department Budget	\$8,628,287
Functional Population Served	53,334
Cost per Person	\$161.78
Cruise Ship Passengers	3,400
Cost of Fire Service per Person	\$161.78
Allocation to Cruise Port Operations	\$550,046
EMS:	
FY 2018 Department Budget	\$2,123,225
Functional Population Served	53,334
Cost per Person	\$39.81
Cruise Ship Passengers	3,400
Cost per Person	\$39.81
Allocation to Cruise Port Operations	\$135,354
Total Police, Fire, and EMS Allocation to Cruise Port Operations	\$1,660,081

As shown in Table 6, the total amount of indirect costs allocated from the City's Police, Fire, and EMS departments to cruise port operations was approximately \$1,660,000. This amount was then further allocated to each of the three individual cruise ports, based on the projected number of passengers expected to arrive at each location in FY 2019, as projected by the City. The number of passengers expected to disembark at each cruise port is summarized in Table 7.

Table 7. Projected Number of Passengers Disembarking by Cruise Port (FY 2019)

Cruise Port	Projected Passenger Disembarkments (FY 2019)	Percent of Total
Mallory Square	73,133	8.9%
Pier B	520,337	63.7%
Outer Mole	223,980	27.4%
Total	817,450	100.0%

The total amount of Police, Fire, and EMS costs allocated to cruise port operations was multiplied by each cruise port’s percentage of the total projected disembarking passengers to attribute these costs to each cruise port. Based on this calculation, the amount of cost allocable to each cruise port is shown in Table 8. Note that departmental costs from Police, Fire, and EMS were allocable to the Pier B cruise port as ship calls at this port contribute to the functional population figure included in the calculations.

In addition, departmental costs from the City’s City Commission, City Manager, Finance, Human Resources, Information Technology, Public Works, and Facilities Maintenance Departments were also allocated to the cruise ports. Costs from the City Commission, City Manager, and Finance were allocated to the cruise ports based on the proportion of Port Operations Department expenses budgeted in FY 2018, as compared to total budgeted City expenses. Human Resources costs were allocated based on the number of full-time equivalents (“FTE”) within the Port Operations Department as compared to total FTE’s at the City, as budgeted for FY 2018, while Information Technology costs were allocated in a similar manner, but based on the number of computers. Public Works and Facilities Maintenance Department costs were both allocated to the cruise ports based on the original cost of cruise port assets currently in service, as compared to the original cost of all City assets currently in service. Costs allocated from these departments were assigned to the Mallory Square and Outer Mole cruise ports based on the number of passengers expected to disembark at each location in FY 2019.

Table 8. Allocation of Police, Fire, EMS and Other Departmental costs by Cruise Port

City Department	Mallory Square	Pier B	Outer Mole	Total
Police	\$87,200	\$620,420	\$267,061	\$974,680
Fire	49,210	350,125	150,712	550,046
EMS	12,109	86,158	37,087	135,354
Other Departments	23,008	0	70,465	93,472
Total	\$171,527	\$1,056,702	\$525,324	\$1,753,553

Summary of Identified Cruise Port Costs:

The estimated amount of total annual costs incurred to operate each cruise port is summarized in Table 9 and compared to the current annual revenues generated at each port location. The amount

of annual revenue projected to be generated at each port location from the City’s existing dockage, disembarkment, and security fees are also included in Table 9.

Table 9. Summary of Projected Revenues and Allocated Costs by Cruise Port

Description	Mallory Square	Pier B	Outer Mole	Total
Revenues:				
Dockage	\$24,239	\$135,439	\$60,256	\$219,935
Disembarkment	731,330	1,300,843	2,239,800	4,271,973
Security	46,074	0	141,107	187,181
Total	\$801,643	\$1,436,282	\$2,441,164	\$4,679,088
Operating Expenses:				
Navy Lease Fees	\$0	\$0	\$839,925	\$839,925
Outer Mole Transportation	0	0	1,127,183	1,127,183
Port Security	26,838	0	101,115	127,953
Allocated Port Operations Costs	94,442	0	146,111	240,553
Other Departmental Allocations	171,527	1,056,702	525,324	1,753,553
Total Operating Expenses	\$292,807	\$1,056,702	\$2,739,657	\$4,089,167
Capital Expenses:				
Cash-Funded Capital Expenditures	\$406,112	\$0	\$92,667	\$498,779
Total Operating and Capital Expenses	\$698,919	\$1,056,702	\$2,832,324	\$4,587,946
Revenues Over/(Under) Expenses	\$102,724	\$379,579	-\$391,161	\$91,142

As shown in Table 9, under the existing tariffs, Mallory Square cruise port revenues exceeded substantiated costs by approximately \$103,000, while substantiated costs attributable to the Outer Mole cruise port exceeded revenues by roughly \$391,000. Therefore, for these two cruise port locations, revenues were expected to under recover associated expenses by approximately \$288,000 (\$391,161 – \$102,724).

Cruise Line Fee Comparisons

A cruise line fee comparison was completed to assess the competitiveness of the City’s tariff and to aid in preparing recommendations for fee adjustments. The fee comparison included a comparison of the City’s cruise line related fees to the fees charged by other select ports in the State of Florida and the Caribbean. It should be noted that the comparison ports in the State of Florida were considered to be “home ports”, while the comparison ports in the Caribbean were considered to be “ports of call”, similar to the City’s cruise ports. The City’s existing fees for dockage, wharfage (disembarkment), and security fees were detailed in Tables 1 and 2.

Dockage Fees:

The results of the comparison of dockage fees for home ports in the State of Florida are shown in Table 10, and indicate that the dockage fees charged by the City are significantly less than those charged by other ports in the state. For example, where the City assesses dockage fees on a per LOA basis (for ships weighing up to 30,000 tons), it assesses a fee of \$0.55 per foot; however, for ports that assessed dockage fees on a per LOA basis, fees per foot were much higher, ranging from \$2.75 per foot (Port of Palm Beach) to \$13.27 per foot (Port of Jacksonville).

For ships weighing more than 30,000 tons, the City assesses its dockage fees on a per GRT basis, ranging from \$0.0065 to \$0.01 per ton. These amounts are also much less than the fees per GRT assessed by other ports in the state. For example, other fees from the comparison were \$0.20 per GRT (Port Palm Beach), \$0.2776 per GRT (Port Everglades), and \$0.371 per GRT (Port Miami).

The difference between the dockage fees assessed by the City as compared to the fees assessed by other ports in Florida is illustrated in Figure 1. Daily dockage charges were calculated for cruise ships of various sizes (small, medium, and large) for the City and the five Florida ports. The Silver Spirit was selected as the small cruise ship (LOA of 610 feet, 28,258 GRT), while the Carnival Sensation (LOA of 855 feet, 70,367 GRT) and the Celebrity Equinox (LOA of 1,041 feet, 121,878 GRT) were selected as the medium and large ships, respectively, based on a review of scheduled ship calls at the City’s cruise ports during FY 2019.

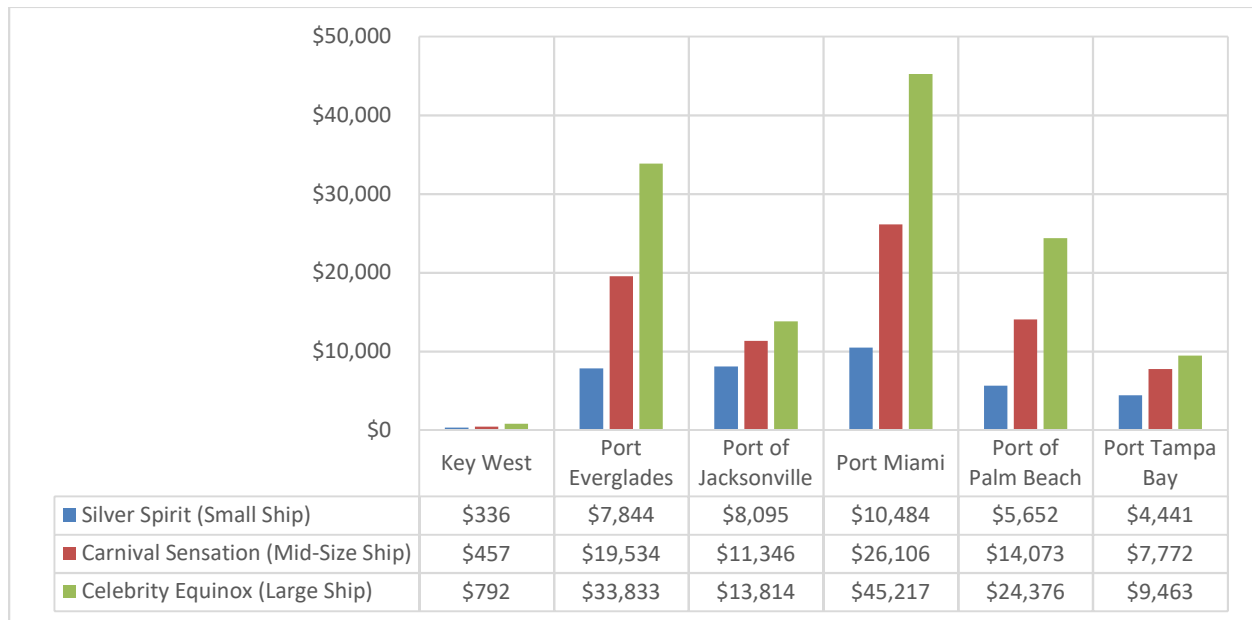
Figure 1 illustrates that the daily dockage charges calculated for the City are significantly lower for all ship sizes as compared to the home ports surveyed. This indicates that the City could increase its dockage fees to increase revenues to more adequately recover costs associated with operating its cruise ports, while continuing to assess dockage fees that are competitive with those charged by other ports in the state. However, home ports typically charge higher fees than ports of call.

Table 10. Dockage Fees at Select Home Ports in the State of Florida

Port	Fee Amount
Port Everglades, FL	Ships offering multiday cruises - \$0.2776 per GRT Ships offering daily cruises - \$0.1299 per GRT
Port of Jacksonville, FL	\$13.27 per LOA
Port Miami, FL	\$0.371 per GRT
Port of Palm Beach, FL	\$0.20 per GRT, or \$2.75 per LOA, whichever is greater

Port Tampa Bay, FL	Less than 550 ft. – \$5.00 per LOA
	551-600 ft. – \$7.04 per LOA
	601-650 ft. – \$7.28 per LOA
	651-700 ft. – \$7.57 per LOA
	701-725 ft. – \$8.03 per LOA
	726-750 ft. – \$8.33 per LOA
	751 ft. or more – \$9.09 per LOA

Figure 1. Daily Dockage Fees by Florida Port for Various Ship Sizes



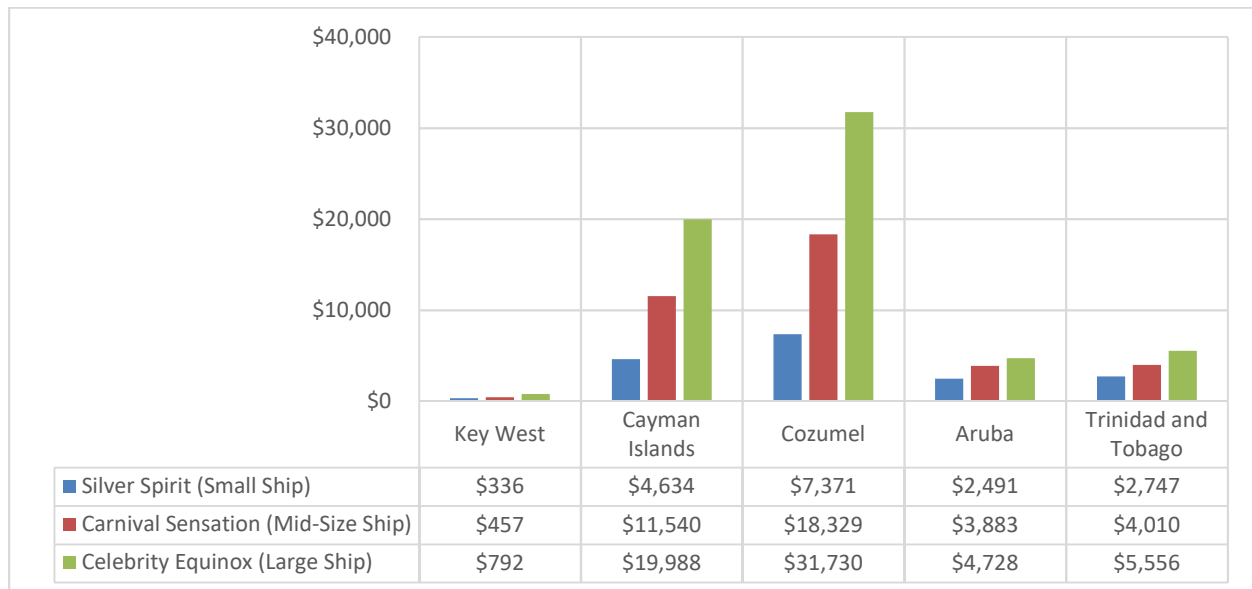
The dockage fees of ports of call within the Caribbean are shown in Table 11. In general, as shown in this table, the dockage fees charged by the City are still well below the fees charged by select ports of call in the Caribbean. Note, however, that several ports in the Caribbean do not assess dockage fees, but rather assess fees for use of the port or harbor, while one other port also assessed a fee for piloting service.

In an effort to provide a clearer comparison between the dockage fees assessed by the City and those of other select ports of call in the Caribbean, dockage fees were calculated for cruise ships of various sizes for the City and the other ports of call. The results are shown in Figure 2 and indicate that the City could adjust its dockage fees to increase revenues to more adequately recover costs associated with operating its cruise ports, while continuing to assess dockage fees that are competitive with those charged by other ports of call in the Caribbean.

Table 11. Dockage Fees at Select Ports of Call in the Caribbean

Caribbean Port	Fee Amount (\$USD)
Cayman Islands	\$0.164 per GRT, or \$0.41 per LOA, whichever is greater
Cozumel, Mexico	\$0.26 per GRT for use of port \$0.13 per meter for berthing
Aruba	Charged per vessel on periods of 12 hours: Up to 50 meters - \$2.10 per meter 50 to 75 meters - \$3.15 per meter 75 to 100 meters - \$4.20 per meter 100 to 125 meters - \$4.95 per meter 125 to 150 meters - \$5.55 per meter 150 to 175 meters - \$6.10 per meter 175 to 200 meters - \$6.70 per meter 200 meters and over - \$7.45 per meter May also assesses pilotage fees, depending on GRT.
Trinidad and Tobago	No specific dockage fees; however, noted dues for use of harbor and berthing. Port dues for use of harbor: From 17 to 10,000 GT - \$0.06 All capacity over 10,001 GT - \$1,300 Berthing dues: \$0.03 per GRT

Figure 2. Daily Dockage Fees by Caribbean Port for Various Ship Sizes



Wharfage (Disembarkment) Fees:

The results of the comparison of wharfage/disembarkment fees are shown in Table 12, and indicate that the disembarkment fees charged by the City are comparable to those charged by other ports in the State of Florida, but higher than those charged at select ports in the Caribbean. For example, the disembarkment fees included in the survey for the Florida ports ranged from \$2.00 to 12.01 per passenger, with the \$2.00 fee per passenger being charged by only one port (Port of Palm Beach, for coastal cruise passengers). Passenger fees for Caribbean ports included in the comparison ranged from \$2.55 to \$6.80 per passenger. As discussed previously, the City assesses disembarkment fees of \$10.00 per passenger.

Table 12. Wharfage/Disembarkment Fees at Select Ports in the State of Florida and the Caribbean

Port	Fee Amount
<u>Florida Port:</u>	
Port Everglades, FL	Vessels offering multiday cruises, no minimum number of sailings, embark, disembark, in transit - \$10.992 per passenger Vessels offering daily cruises, minimum 25 sailings per month, embark, disembark, in transit - \$2.520 per passenger
Port of Jacksonville, FL	\$10.39 per passenger
Port Miami, FL	\$12.01 per passenger
Port of Palm Beach, FL	Coastal cruise passengers - \$2.00 on / \$2.00 off Non-coastal cruise passengers (where vessel makes more than 12 calls at port facilities) - \$7.00 on / \$7.00 off Other non-coastal cruise passengers - \$10.00 on / \$10.00 off
Port Tampa Bay, FL	\$7.00 per passenger
<u>Caribbean Port:</u>	
St. Croix (Virgin Islands)	\$2.55 wharfage fee per passenger (includes dockage)
St. Thomas/St. John (Virgin Islands)	\$6.80 wharfage fee per passenger (includes dockage)
Aruba	1 to 20,000 pax - \$4.47 per passenger 20,001 to 50,000 pax - \$4.19 per passenger 50,001 to 100,000 pax - \$3.91 per passenger 100,001 pax and more - \$3.07 per passenger
Trinidad and Tobago	Head tax of \$5.00 per passenger

Tendering Fees:

Currently, the City is capable of allowing cruise ships to dock at the Mallory Square, Pier B, or Outer Mole cruise ports. However, the City has expressed interest in allowing cruise ships to drop anchor a short distance away and use small boats called tenders to transport disembarking passengers to the City's ports. Rather than assessing a disembarking, or passenger, fee, ports that offer this

service typically assess a tendering fee. A review of the tendering fees assessed by ports that allow for this type of passenger disembarkment was completed to provide the City with a general idea of the magnitude of these charges, as assessed by other ports. The results of this review are summarized in Table 13.

As shown in Table 13, tendering fees ranged from \$3.00 to \$7.50 per passenger. However, one port (Port Authority of the Cayman Islands) assessed fees on a per tender basis, with the fee ranging from \$30 to \$40 per tender, depending on the length of the tender. It was unclear if the ports included in the comparison provided tenders to transport passengers from the cruise ship to the port, or if the cruise ships were expected to provide their own tenders for this service. This difference would likely affect operational costs incurred by the port, and therefore, the tendering fee the port would assess.

Table 13. Tendering Fees at Select Ports

Port	Fee Amount
Catalina Island, California	\$3.00 per passenger, as of July 2017 \$3.50 per passenger, as of July 2018 \$4.00 per passenger, as of July 2019 \$4.50 per passenger, as of July 2020 \$5.00 per passenger, as of July 2021
Port Authority of the Cayman Islands	Any tender under 60', \$31.01 (U.S. dollars) per tender Any tender over 60', \$38.41 (U.S. dollars) per tender
Kona, Hawaii	\$7.50 per passenger
Monterey, California	\$7.00 per passenger
Santa Barbara, California	\$5.00 per passenger, depending on the total number of ship passengers and crew + \$10,000 per day to leaseholder of the dock

Tariff Adjustment Recommendations

It is recommended that the City increase its cruise ship tariff, effective October 1, 2018, in order to more fully recover the cost associated with operating the Mallory Square and Outer Mole cruise ports. Given that the City's dockage fees are significantly lower than those charged by other Florida ports, and generally lower than those charged by ports in the Caribbean, it is recommended that the City adjust its dockage fees. The dockage fees can be adjusted to generate sufficient revenues to cover the substantiated costs, while still being competitive with the dockage fees charged by other ports in the region. The recommended dockage fee adjustments are shown in Table 14. The City may also decide to increase its disembarkment fees in the future. If it were to increase its disembarkment fee from \$10 per passenger to \$11 per passenger, it would remain competitive with most of the current fees charged by other Florida ports, but would continue to be considerably higher than the disembarkment fees charged by other ports in the Caribbean.

Table 14. Recommended Dockage Fees

Tonnage	Existing Dockage (Fee/Ton)	Existing Dockage (Fee/Foot)	Recommended Dockage (Fee/Ton)	Recommended Dockage (Fee/Foot)
0 – 30,000	\$0.0000	\$0.55	\$0.0000	\$2.43
30 – 40,000	\$0.0100	\$0.00	\$0.0441	\$0.00
40 – 50,000	\$0.0090	\$0.00	\$0.0397	\$0.00
50 – 60,000	\$0.0080	\$0.00	\$0.0353	\$0.00
60 – 70,000	\$0.0070	\$0.00	\$0.0309	\$0.00
70,000 or Greater	\$0.0065	\$0.00	\$0.0287	\$0.00

The recommended dockage fees shown in Table 14 are expected to generate approximately \$288,000 in additional annual dockage fee revenue, as shown in Table 15 if cruise ship activity remains as assumed in this report. Furthermore, if the City were to modify its Dockage Fees as shown in Table 14, the additional annual revenues generated from the tariff would more closely match the costs associated with the associated port operations, as shown in Table 16.

Table 15. Dockage Revenue by Port Under Existing and Recommended Dockage Fees

Port	Revenue (Existing Fees)	Revenue (Recommended Fees)	\$ Change
Mallory Square	\$24,239	\$106,983	\$82,744
Outer Mole	60,256	265,949	205,693
Total	\$84,496	\$372,932	\$288,437

Table 16. Summary of Projected Cruise Port Revenues and Expenses (with Fee Adjustment)

Description	Mallory Square	Outer Mole	Total
Revenues:			
Dockage	\$106,983	\$265,949	\$372,932
Disembarkment	731,330	2,239,800	2,971,130
Security	46,074	141,107	187,181
Total	\$884,387	\$2,646,857	\$3,531,243
Total Operating and Capital Expenses	\$698,919	\$2,832,324	\$3,531,243
Revenues Over/(Under) Expenses	\$185,468	-\$185,468	\$0

Dockage Fee Comparison with Fee Adjustment:

Daily dockage charges for cruise ships of various sizes (small, medium, and large cruise ships) were recalculated using the recommended dockage fees, as shown in Table 14. The comparison indicates that the fees that would be charged to small, medium, and large cruise ships (assuming the City implements the recommended dockage fees) would remain competitive with those charged at

home ports in the State of Florida and at other select ports of call in the Caribbean, as shown in Figure 3 and Figure 4, respectively.

Figure 3. Comparison of Recommended City Dockage Fees with Fees Charged by Other Florida Ports (Fees/Day)

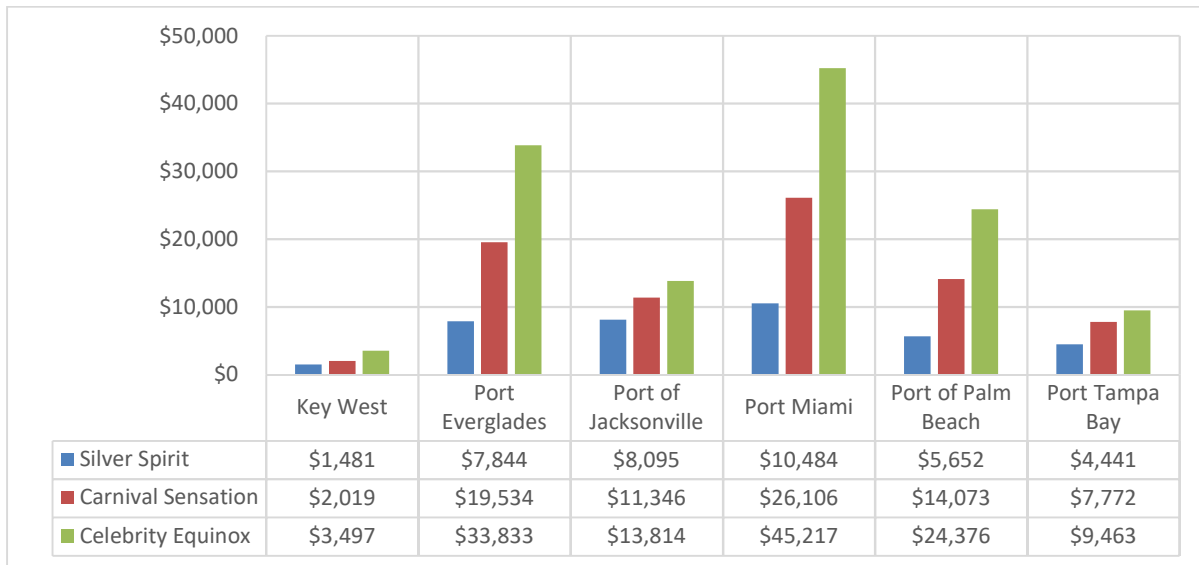
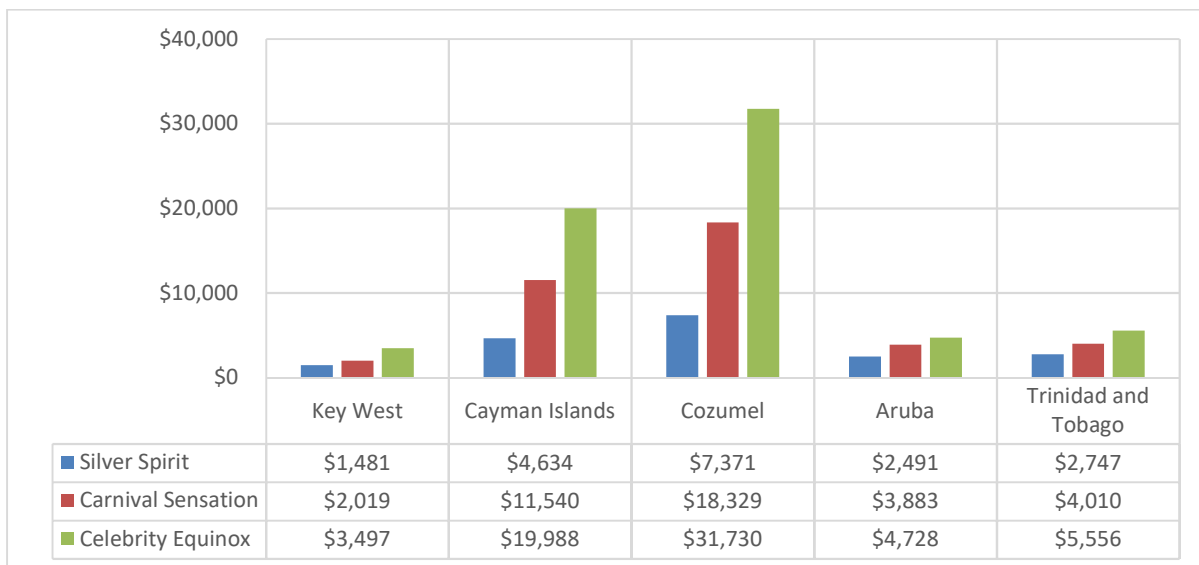


Figure 4. Comparison of Recommended City Dockage Fees with Fees Charged by Caribbean Ports (Fees/Day)

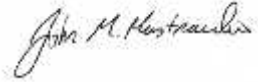


We appreciate the opportunity to assist the City with its assessment of its cruise port tariffs. Should you have questions or need any additional information, please do not hesitate to contact me at 518-391-8944.

Doug Bradshaw
City of Key West

July 16, 2018
Page 17

Very truly yours,
RAFTELIS

A handwritten signature in cursive script, appearing to read "John M. Mastracchio".

John M. Mastracchio, CFA
Vice President