

# Case Study on Limiting Cruise Ships in Key West

## Proposed Amendments to the City Charter of Key West

- i. *Limiting persons disembarking from cruise ships to a total of 1500 persons per day.*
- ii. *Prohibiting cruise ships with a capacity of 1300 or more persons from disembarking.*
- iii. *To give priority to cruise lines with the best environmental and health records.*

## Executive Summary

Cruise ships are uniquely prone to the spread of infectious disease, as recent reports from U.S. Centers for Disease Control, *Miami Herald*, *Washington Post*, and *Wall Street Journal* make clear. The destructive environmental impacts of cruise ships on air and water quality are well-established. A return to previous cruise-ship size and disembarkation numbers in Key West would resume its negative impacts on the local environment and pose a serious risk to the health, safety, and economy of its citizens. Overcrowding from cruise ships would threaten the recovery of Key West's \$1 billion tourist industry, 92% of which is generated by multi-day tourists. Cruise ships account for 50% of visitors to the island, but contribute just 8% of tourism revenues. Cruise ships present Key West with a high-risk/low-reward proposition that must be urgently addressed.

### 1. Cruise Ships, Infectious Disease, and Limited Local Infrastructure

A return to previous cruise-ship operations in Key West would pose a serious risk to the health and safety of its citizens. This issue must be urgently addressed.

Cruise ships played a major role in the spread of the Covid-19 pandemic.<sup>1</sup> The disease has infected millions and killed hundreds of thousands of people around the world and brought the global economy to a halt.<sup>2</sup> The Centers for Disease Control (CDC) found that cruise ship-linked cases of Covid-19 accounted for 17% of all known cases from February 3 to March 13.<sup>3</sup> CDC director Robert R. Redfield “finds that cruise ship travel exacerbates the global spread of Covid-19 and that ... cruise ship travel markedly increases the risk and impact of the Covid-19 disease outbreak within the United States.”<sup>4</sup>

In Key West, two cruise ships, *Celebrity Infinity* and *Royal Caribbean Majesty of the Seas*, had Covid-19-positive passengers on board during their March 5 and March 6 visits.<sup>5</sup> Key West saw its first outbreak of the disease two weeks later.

More than 390 cruise ships carrying 1.2 million passengers and crew visited Key West last year.<sup>6</sup> With a population of just 27,000, Key West takes in 44 cruise-ship tourists for every resident. In Miami, home to the busiest cruise-ship port in the world, with 5.6 million cruise ship visitors, there are only 2 cruise-ship tourists per resident.

Our local health infrastructure could not support a major infection event spread by a visiting cruise ship. In Australia, 973 people were infected as the result of an outbreak aboard the *Ruby Princess*, a cruise ship carrying 2,700 passengers. On Australia's island state of Tasmania, *Ruby Princess* passengers triggered a hospital outbreak and 114 local Covid-19 cases. Twelve people died and

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thousands were quarantined, prompting the closing of two hospitals because of infections among staff and patients.<sup>7</sup> There is only one hospital serving Key West. On peak disembarkation days, Key West is visited by over 10,000 cruise ship

passengers and crew. A similar event in Key West would rapidly exceed the capacity of Lower Keys Medical Center, which is licensed for only 176 beds.<sup>8</sup>

Previous cruise-ship-based outbreaks of pandemic H1N1,<sup>9</sup> high-morbidity influenza,<sup>10</sup> and Norovirus<sup>11</sup> show that the spread of Covid-19 is more than a once-in-a-generation

problem. It is the deadliest example yet of how cruise ships support the spread of disease. Dr. Martin Cetron, the director of the CDC's Division of Global Migration and Quarantine, describes cruise ships as an "environment that has unique challenges. A single case can amplify to an outbreak extremely quickly."<sup>12</sup> Dr. Anthony S. Fauci, director of the National Institute of Allergy and Infectious Diseases, says "People on a large ship, all together, at the same time, all the time — you couldn't ask for a better incubator for infection."<sup>13</sup>

The case of the Ruby Princess in Australia highlights how even a single infected cruise ship can overwhelm local health infrastructure. Nor can the industry be trusted act in the public interest. Recent investigative reports have found that cruise lines were operating violation of CDC guidelines as the pandemic worsened. On May 1, the U.S. House Committee on Transportation and Infrastructure announced an investigation into Carnival Corporation's handling of the COVID-19 pandemic.<sup>14</sup>

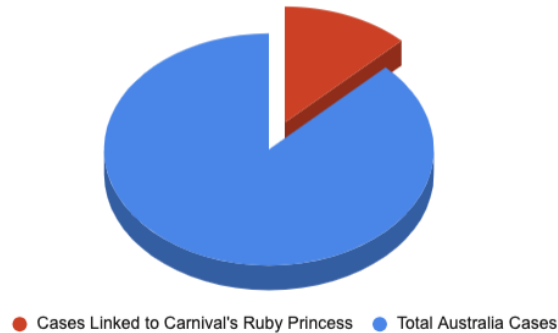
### 2. The Environment

The scientific community has established the fact that cruise ships have a negative impact on the environment, including impacts to air quality and marine ecosystems.<sup>15</sup> *Marine Policy* reports that "cruise ships represent less than 1% of the global merchant fleet yet ... are responsible for 25% of all waste generated by merchant vessels."<sup>16</sup>

Cruise ships are not subject to the same environmental standards as land-based industries, and there is little effective enforcement of the regulations that exist. The *World Water and Environmental Resources Congress* reports that "due to the concentration of cruise ships in a small number of environmentally sensitive areas, the potential environmental impacts of the industry are intensified."<sup>17</sup>

Among the worst offenders is Carnival Corporation, which was fined \$40 million in 2016 for environmental offenses that included the dumping of plastics and oily discharge into ocean waters.

Australia: One Cruise Ship caused 12% of Covid-19 cases



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Carnival was fined an additional \$20 million after violating the terms of its probation in 2019.<sup>18</sup> More than 130 Carnival ships docked in Key West last year, carrying over 450,000 people.

Although comprehensive studies of the direct environmental impacts of cruise ships in South Florida have yet to be completed, a report on the Florida Keys National Marine Sanctuary by the National Oceanic and Atmospheric Administration (NOAA) noted “concerns ... about environmental impacts of cruise ships, including discharges impairing water quality and sediment erosion.” NOAA noted that pollutants generated by cruise ships could be dispersed by ocean currents into Key West’s nearshore waters. “Pollutants generated by cruise ships include bilge water (water that collects in the lowest part of the ship’s hull that may contain oil, grease, and other contaminants), blackwater (sewage), graywater (waste from showers, sinks, laundries, and kitchens), ballast water (water taken onboard or discharged from a vessel to maintain its stability), and solid waste (food waste and garbage).

The federal report further noted the risk of benthic disturbances, whereby silt is re-suspended and transported.<sup>19</sup> A study in Bermuda found that suspended silt generated by benthic disturbances had “long-term effects on juvenile coral survival.”<sup>20</sup>

### 3. Tourism and the Economy — Challenges and Opportunities after Covid-19

Tourism is a \$1 billion industry in Key West.<sup>21</sup> Of its 2 million visitors per year, more than half arrive on cruise ships.<sup>22</sup> But the economic benefit of cruise ships is limited. While the average Key West visitor spends \$550 during their stay, cruise ship passengers spend only \$32.10 each. It takes 17 cruise ship passengers to equal the spending of a single non-cruise tourist. The total economic value from cruise ships, including spending by the cruise lines themselves, adds up to just 8% of total Key West tourist spending.<sup>23</sup>

Cruise ships are not a significant contributor to the City’s budget. Key West has the lowest dockage rates among comparable ports in Florida and the Caribbean. Half of all the fees paid by cruise ships in Key West go to private contractors. After accounting for expenses, the City earns only \$91,000 per year.<sup>24</sup>

The lost tourism resulting from the pandemic is a major economic blow for Key West. Shutting down early to avoid a larger outbreak cost our economy dearly. But by taking quick and effective measures, our leaders avoided the surge of Covid-19 cases that has affected tourist destinations around the world. We are still paying for that protection, but the fact that we have avoided a large-scale outbreak will be of priceless value to our brand as we work to promote future tourism. This asset must be managed wisely.

Indeed, signs indicate that Key West is poised to enjoy a strong economic recovery. Recent surveys show a steady drop in the number of travelers who will avoid all travel until the threat of Covid-19 is resolved. And with nearly 80% of Americans saying they will avoid travel outside the U.S., Key West’s appeal as the “American Caribbean” should allow it to outperform competing destinations for years to come.<sup>25</sup>

The problem of cruise ships must be contained in order to preserve Key West’s appeal as a destination. *Forbes* magazine says that “consumers will re-enter the travel market with caution and social

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distancing still top-of-mind.”<sup>26</sup> Vox predicts that travelers will “gravitate toward remote, isolated destinations.”<sup>27</sup> More than 50% of Americans say they will avoid crowded destinations until the Covid-19 threat is resolved.<sup>28</sup>

After this pandemic, tourists’ fears of traveling to affected areas will remain high. A major outbreak of disease in Key West would have catastrophic effects for our economy. We cannot ignore the CDC’s now well-established association between infectious disease and cruise ships. Given our limited health infrastructure, the old approach to cruise ship traffic of “more is better” now poses a direct threat to our appeal as a destination. As *Fodor’s Travel* writes: “The tourism industry that existed before the pandemic is gone. Now is the chance for destinations and travelers alike to decide if we really want things to go back to how they were before.”<sup>29</sup>

Key West can easily pivot to a model of tourism that reduces overcrowding and minimizes the risk of a cruise-ship-related major infection event. But the new model must have rational balance between risks and rewards. We cannot continue to accommodate the risks from over 1 million cruise ship passengers, who represent only 8% of our tourist economy, without threatening our tourism economy as a whole. We must focus on steps to protect the other 1 million multi-day tourists that make up 92% of our tourist economy, as well as our citizens.<sup>30</sup>

### 4. The Solution – Balancing Private and Public Interests

The proposed amendments to the City Charter seek to balance the economic desire for cruise ships with the larger health, environmental, and economic interests of Key West’s residents. The policy will reduce the ratio of infection risk from large daily cruise ship visits to a level more commensurate with our limited emergency and medical resources. It will also provide a measure of protection to our economy from future ship-borne infection risk. In addition, the amendments will create a partnering incentive, inviting only those cruise lines who have maintained the best record in health and environmental risk management.

The new policy does not eliminate cruise ship travel. It limits both the capacity of ships and the maximum number of disembarking visitors by approximately 50% per year. It also prioritizes cruise lines with the best records on human-health and environmental impact.

This change will not only reduce the health risk but also bring smaller vessels with less impact on our local environment. While Key West may only have authority to ensure cruise ships comply with local environmental rules, a collateral benefit of smaller and less frequent vessel traffic could be an improvement in the health of the surrounding waters and coral reef, which are beyond our local jurisdiction, but on which our tourism depends so heavily.

Ships permitted under the policy generally attract higher-spending customers and have less impact on the marine environment. Businesses that currently cater to cruise-ship passengers will have an opportunity to adjust their business models to serve a higher-spending customer base. Key West currently maintains dockage rates 31 times lower than the Port of Miami, providing a considerable margin for rate corrections that will offset cuts to revenue:

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

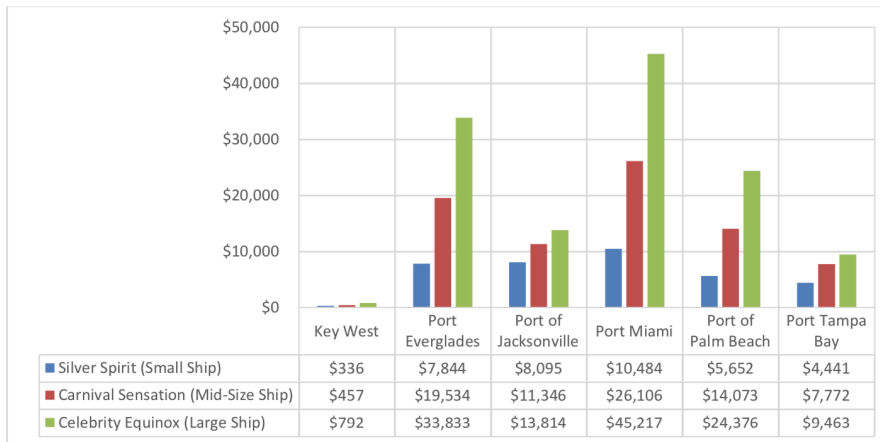


Figure 2. Daily Dockage Fees by Caribbean Port for Various Ship Sizes



In short, the proposal seeks to balance local economic, health, and environmental interests with a legally sound and rational set of regulatory limits. Its adoption by the Citizens of Key West will help insure a healthier and economically sound path forward.

## 5. Municipal Legal Authority Over Cruise Terminal Operations

Article VIII, Section 2(b) of the Florida Constitution grants broad home rule police power authority to cities to regulate activities within their jurisdiction, including the ability to regulate cruise ships utilizing cruise terminals located in the City of Key West. The City can exercise its home rule police powers for any public health safety and welfare reason if the regulations are supported by any rational basis and not preempted by state or federal law, or unconstitutional. The Florida Legislature also enacted a broad Municipal Home Rule Powers Act (Chapter 166 Florida Statutes) in 1973. This Act reaffirmed the broadest grant of home rule powers to municipalities. The Florida Supreme Court has regularly upheld home rule use of police powers by municipalities.

As late as 2011, the US Supreme Court has affirmed that federal maritime admiralty law allows state (or local) regulation on matters of local concern, provided the regulation does not “actually conflict

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with federal law or interfere with the uniform working of the maritime legal system.” This right of local regulation has been recognized by the Court since 1858, holding that such regulations “are necessary and indispensable in every commercial port, for the convenience and safety of commerce.” Moreover, in 1991 the Court confirmed the power to enact land-use and zoning controls are at the core of local police powers, and thus there is a presumption against federal preemption of local police power (“States have long possessed primary responsibility in our federal system to protect the health, welfare, safety, and morals of their citizens.”); and as late as 2008, emphasizing the need to remain “ever mindful” that “land use questions ... are the peculiar concern of local and state governments”.

Cruise Terminal regulations are also allowed under the dormant Commerce Clause of the U.S. Constitution. In resolving Commerce Clause claims, the U.S. Supreme Court has ruled that comprehensive local zoning and development ordinances that have only an incidental effect on interstate commerce are entirely within a City’s authority. As the Court stated in a 1970 case, “local benefits outweigh any burdens on interstate commerce unless it can be shown that the burden on interstate commerce is truly excessive.”

### 6. Conclusion — We Must Act

Urgent and permanent actions are needed to protect Key West and insure against future economic crises in a world changed by Covid-19.

Throughout its history, Key West has inspired and fascinated the world with its independent spirit. Key West was the southernmost stronghold of the Union during the Civil War, resisting the Confederate tilt of Florida. In 1982 its leaders protested federal overreach by leading a mock secession and establishing the Conch Republic. It continues to be a haven for artists and writers, misfits and dreamers, for hardworking people whose families call it home, and for all who fly the flag of “One Human Family.”

Today Key West has the opportunity, through necessary limitations on cruise ships, to protect the 92% of our tourism economy not tied to cruise ships and lead the way to a more sustainable and responsible future for all our residents. As Ernest Hemingway once said, “I would like to stay right here ... as I have been going so very well here and it is such a fine healthy life.”

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#### Sources

<sup>1</sup> “COVID CRUISE.” Miami Herald, April 23, 2020; “The pandemic at sea.” Washington Post, April 25, 2020.

<sup>2</sup> Johns Hopkins Coronavirus Resource Center. (As of April 27, there are over 3 million confirmed infections, with 212,000 deaths.)

<sup>3</sup> “Public Health Responses to COVID-19 Outbreaks on Cruise Ships.” United States Centers for Disease Control, March 27, 2020.

<sup>4</sup> “No Sail Order and Suspension of Further Embarkation; Notice of Modification and Extension.” U.S. CDC, April 15, 2020.

<sup>5</sup> “If you sailed on these cruise ships, you may have been exposed to coronavirus.” USA Today, April 7, 2020.

U.S. Centers for Disease Control, “CDC’s role in helping cruise ship travelers during the COVID-19 pandemic.” April 21, 2020.

<sup>6</sup> “Monthly Cruise ship Passenger Count Report, FY18-19.” City of Key West Port Operations.

<sup>7</sup> “Cruise Ships Set Sail Knowing the Deadly Risk to Passengers and Crew.” Wall Street Journal, May 1, 2020.

<sup>8</sup> FloridaHealthFinder.gov, accessed April 27, 2020.

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<sup>9</sup> Kate A. Ward, et al, "Outbreaks of Pandemic (H1N1) 2009 and Seasonal Influenza A (H3N2) on Cruise Ship." Emerging Infectious Diseases, November 2010.

<sup>10</sup> "A large outbreak of influenza A and B on a cruise ship causing widespread morbidity." Journal of Epidemiology and Infection, Volume 130, Issue 2. April 29, 2003.

<sup>11</sup> "Norovirus Outbreaks on Commercial Cruise Ships: A Systematic Review." Food and Environmental Virology, 6, 67–74 (2014)

<sup>12</sup> "COVID CRUISES." Miami Herald, April 23, 2020.

<sup>13</sup> "The pandemic at sea." Washington Post, April 25, 2020.

<sup>14</sup> "Congress to investigate Carnival Corporation's handling of COVID-19 on its cruise ships." Miami Herald, May 1, 2020.

<sup>15</sup> "Getting a Grip on Cruise Ship Pollution." Ross Klein, December 1, 2009.

<sup>16</sup> "The impact of cruise ship generated waste on home ports and ports of call." Marine Policy Volume 31, Issue 5, September 2007.

<sup>17</sup> "The Environmental Impact of Cruise Ships." World Water and Environmental Resources Congress 2005.

<sup>18</sup> "Carnival Cruise Lines Hit With \$20 Million Penalty for Environmental Crimes." NPR, June 4, 2019.

<sup>19</sup> "Florida Keys National Marine Sanctuary 2011 Condition Report." National Oceanic and Atmospheric Administration.

<sup>20</sup> "Environmental Effects of the Cruise Tourism Boom." Bulletin of Marine Science -Miami- 87(3):659-679 · July 2011

<sup>21</sup> "2018 Tourism in the Florida Keys & Key West," Rockport Analytics.

<sup>22</sup> There were 1.2 million combined passengers and crew last fiscal year, per City of Key West Port Operations.

<sup>23</sup> "The Impacts of the Cruise Ship Industry on the Quality of Life in Key West." Thomas J. Murray, October 2005.

<sup>24</sup> "Cruise Ship Tariff Analysis," Raftelis Financial Analysts, July 16, 2018. Cited in "Anti-cruise ship petition in the works," Key West Citizen, April 30, 2020.

<sup>25</sup> "Coronavirus Travel Sentiment Index," Destination Analysts, week of April 27, 2020.

<sup>26</sup> "Travel Biz Predictions for A Post COVID-19 World." Forbes.com, March 31, 2020.

<sup>27</sup> "The era of peak travel is over." Vox.com, April 22, 2020.

<sup>28</sup> "Coronavirus Traveler Sentiment Index."

<sup>29</sup> "7 Ways Travel MUST Change After Coronavirus." Fodor's Travel, April 28, 2020.

<sup>30</sup> "The Impacts of the Cruise Ship Industry on the Quality of Life in Key West." Thomas J. Murray, October 2005.

"2018 Tourism in the Florida Keys & Key West," Rockport Analytics.