Memorandum

Miami-Dade County Office of the Inspector General
A State of Florida Commission on Law Enforcement Accredited Agency
601 NW 1st Court ◆ South Tower, 22nd Floor ◆ Miami, Florida 33136
Phone: (305) 375-1946 ◆ Fax: (305) 579-2656
Visit our website at: www.miamidadeig.org

To: The Honorable Carlos A. Gimenez, Mayor, Miami-Dade County
         The Honorable Audrey M. Edmonson, Chairwoman
            and Members, Board of County Commissioners, Miami-Dade County

From: Mary T. Cagle, Inspector General

Date: March 14, 2019

Subject: OIG Final Report of Multi-Disciplinary Review Re: *PortMiami Parking Garages and Revenue Controls*, Ref. IG17-0026-I

Attached please find the above-captioned final multi-disciplinary review report issued by the Office of the Inspector General (OIG). The OIG's review of the Seaport Department's (Seaport) parking garage revenue collection process focused on determining whether the Seaport was collecting all tolls/monies owed by cruise passengers and daily parking patrons using the garages. Additionally, the OIG's review of the parking revenue data looked for unusual patterns or indicators that suggested circumvention of the parking systems operational controls, including indicators of possible fraud or theft. A draft of this report was previously provided to the Seaport for comment. The Seaport's response is included in the Final Report as Appendix A.

The Seaport Department anticipates upgrading and/or replacing its parking garage ticketing and revenue collection system in the near future. The report contains several recommendations that the OIG believes should be addressed when developing the scope and specifications in a Request for Proposal or other procurement solicitation for a new parking system.

The OIG is requesting that the department provide us with a status report on or before June 14, 2019, which details the department's procurement efforts and addresses the OIG's recommendations. For your reading convenience, an Executive Summary follows.

The OIG would like to thank Seaport management and personnel for their cooperation and for the courtesies extended to the OIG throughout the review.

Attachment

cc: Juan Kuryla, Director, Seaport Department, Miami-Dade County
     Juan J. Perez, Director, Miami-Dade Police Department
     Cathy Jackson, Director, Audit and Management Services Department
     Yinka Majekodunmi, Commission Auditor

OIG EXECUTIVE SUMMARY

OIG Multi-Disciplinary Review - PortMiami Parking Garages & Revenue Controls

This Office of the Inspector General (OIG) multidisciplinary review was launched following the arrest and criminal prosecution of a Seaport toll collector (County employee), who manipulated cash transactions to steal parking revenue. As part of our initial investigative review, conducted in partnership with the Miami-Dade Police Department, we sought to identify if other toll collectors were also involved in stealing parking fees. During our investigation, thousands of reconciled parking tickets were examined for indicators of possible fraud or theft. That review resulted in an identified subset, consisting of hundreds of tickets, that were further reviewed against the corresponding toll booth security video recording. This second review was unable to confirm any additional transactions indicating fraud and theft.

Next, the OIG's review embarked on a comprehensive analysis of parking revenue data. This review, performed by OIG Contract Oversight and Audit personnel, employed a data mining approach, using the Seaport's parking system data for the 12-month period July 1, 2016 through June 30, 2017. This approach applied various analytical methods in reviewing the parking data to identify trends and outlier events. Based on explanations provided by Seaport personnel, and knowledge of known fraud schemes involving overnight parking by cruise passengers, we were able to identify areas of weakness likely impacting revenue collection. The OIG further made queries looking for unusual patterns indicating circumvention of the parking facilities' operational controls.

As one could reasonably surmise, the vast majority of the Seaport's parking revenue comes from cruise passengers who park overnight in the garages for the length of their cruise.   The primary cruise days (embarking and disembarking) are Friday through Monday. For the universe of tickets analyzed (over 350,000 dispensed during a 12-month period), we found that 43% of the tickets were redeemed the same day, 36% were redeemed as overnight tickets (one or more nights), and 21% of the tickets went unredeemed.

We conducted further analysis of the redeemed same-day tickets. We isolated those tickets where no charge (or fee) was generated. These tickets included those where the patron parked for less than 15 minutes (e.g. for example picking up a cruise passenger) and those that where the fee was voided at exit by the toll collector. This latter category primarily consists of daily parking by other (non-employee) PortMiami workers, such as stevedores, porters, cruise line employees, and private security personnel, who have to pull a ticket to park in the garages, but may park for free upon showing the proper identification and credentials at the exit.

Further, as a subset of redeemed same-day tickets, the OIG isolated tickets pulled prior to 8 a.m. and redeemed the same day before noon. These tickets fit the parameters of the alleged scalped ticket scheme, whereby unscrupulous individuals sell same-day tickets (generally priced at $7) to disembarking cruise passengers with multiple days of overnight parking (priced at $20 per night), resulting in significant losses of parking revenue. Eleven (11) percent of the redeemed same-day tickets fit those parameters. Moreover the majority of these were dispensed/redeemed on cruise days. While some

of these tickets could be explained as patrons picking up disembarking cruise passengers, in light of the 15-minute parking grace period and the tendency of drivers to wait in swale areas to pick up their guests (e.g., makeshift cell phone lot), the volume of same-day tickets redeemed before noon appeared high, suggesting some credence to the scalped ticket scheme. Especially suspicious were 329 tickets dispensed from one garage, then redeemed in a different garage, which apart from being physically impossible (the garages are not connected), would require a manual override at the toll booth, as is detailed in the Seaport's response to the OIG's draft report.

As to the overnight parking tickets, there were 7,247 non-revenue tickets, where the fee was voided at exit by the toll collector. This typically involves tickets pulled by other (non-employee) port workers who must pull a ticket to enter the garage but may park for free upon showing any unredeemed ticket and their ID at exit. Since the Seaport's toll booths close at 4 p.m. on cruise days and are closed on non-cruise days, these port workers often exit the garage without having to turn in a ticket because the exit gate arm is raised. As such, the OIG was advised that these non-county, PortMiami workers tend to accumulate unredeemed tickets in their vehicles. As they can present any available ticket at exit, they could redeem older, accumulated, previously unredeemed tickets, skewing the data concerning the length of parking stays. Similarly, analysis of the 77,768 unredeemed tickets, suggests a significant number of these were also attributable to parking by these other PortMiami workers (and daily parkers) leaving when the toll booths are closed, meaning their tickets would go unredeemed.

Additionally, the review revealed inherent weaknesses in the parking systems' controls, including its capabilities for reliable data storage and retrieval. For instance, our review identified 39 days, including almost the entire month of September 2016, with missing parking data—the data showed gaps of missing tickets by sequence numbers.

While the OIG's review revealed shortfalls in the current parking system's data collection, retention, and retrieval capabilities, the Seaport is in the process of developing a Request for Proposals (RFP) for a more comprehensive parking system upgrade and/or replacement. This report thus sets forth a series of observations and recommendations, which we believe should be addressed in developing relevant scope and specification requirements for the proposed upgrades (or replacement). One of our recommendations addresses implementing system controls that prevent "in-in" and "out-out" sequences. Another addresses accounting for parking by non-county employee, PortMiami workers, and the possibility of incorporating programmed proximity cards into their ID cards. The new system should also incorporate "pay-on-foot" machines that could accept all forms of payment, thereby decreasing the handling of cash by toll both collectors at the garage exits.

The OIG appreciates the opportunity to provide our observations, data analysis results, and recommendations to the Seaport Department. We look forward to providing additional assistance in the form of contract oversight as the Seaport proceeds with its future procurement of a proposed new parking access revenue control system.

I.   INTRODUCTION & SYNOPSIS

As part of the Office of Inspector General's (OIG) ongoing efforts to detect and prevent waste, fraud and abuse in County operations, the OIG initiated a multi-disciplinary review of the Seaport Department's (Seaport[1]) parking garage revenue collection process. The OIG's review included investigative efforts in partnership with the Miami-Dade Police Department (MDPD), as well as data analysis and review by OIG Contract Oversight and Audit personnel. The OIG's collective efforts were spearheaded following the arrest and criminal prosecution of a Seaport toll collector (Seaport, County employee), who manipulated his handling of cash transactions, so as to steal parking revenue. Evidence of his crimes was revealed by examining security video footage of the toll collector and his booth area.

Given the heightened risk for theft - the nature of cash transactions - the OIG and MDPD expanded the review to proactively examine parking tickets for known indicators of fraud/theft. This expanded review sought to determine whether other Seaport toll collectors were involved in the theft of parking fees. The exhaustive individual examination of thousands of reconciled parking tickets revealed possible signs of fraud and theft of parking revenue. However, upon the review of security video recordings of individual toll booths corresponding to the suspicious activity, the suspected fraud and theft could not be verified.

Meanwhile, other OIG personnel undertook a data analysis review of parking revenue. The data consisted of all the information pertaining to parking tickets dispensed and redeemed and the corresponding parking revenue received for a 12-month period. This information was evaluated against cruise passenger travel patterns and other measurables to identify relevant trends and outlier events. The OIG's analysis sought to determine whether the Seaport was collecting all tolls/monies owed by cruise passengers and daily parking patrons using the garages. Moreover, we looked for unusual patterns or indicators that could identify circumvention of the parking systems operational controls.

Last, we note that the Seaport is in the process of developing the scope and specifications for a Request for Proposal (RFP) for a more comprehensive system upgrade to its parking operations. The OIG's multi-disciplinary review has identified areas of concern that, we believe, should be addressed in developing relevant scope and specifications requirements for the parking system upgrades. Several of these comments, observations and recommendations have previously been discussed informally with Seaport personnel during the OIG's review. The recommendations are presented in the final section of this memorandum.

---

[1] The term "Seaport" is used in reference to the department, its processes, and its personnel. The term "PortMiami" is used in reference to the land mass and the physical facilities operated on it.

II.   OIG JURISDICTIONAL AUTHORITY

In accordance with Section 2-1076 of the Code of Miami-Dade County, the Inspector General has the authority to make investigations of County affairs; audit, inspect and review past, present and proposed County programs, accounts, records, contracts and transactions; conduct reviews, audits, inspections, and investigations of County departments, offices, agencies, and Boards; and require reports from County officials and employees, including the Mayor, regarding any matter within the jurisdiction of the Inspector General.

III.   JOINT OIG AND MDPD INVESTIGATION

### Background: Parking Garage Ingress, Egress and Payment

During the normal course of business, a PortMiami patron enters a parking garage, presses a button at a ticket dispenser and retrieves a ticket. Once the ticket is retrieved, a mechanical security arm rises, granting access to the garage. The magnetic strip on the ticket records the date and time of entry, as well as a letter designator unique to the specific garage. The ticket is a product of the Toledo Ticket Company and is constructed of a thick-bonded paper two inches wide and three and one half inches long, with a magnetic strip and a six-digit serial number on one side. The opposite side, as depicted in **Figure A** on the next page, is marked with a wide arrow pointing to the edge with the words "Insert This End Up," and includes relevant printed information consistent with what is supposed to be recorded on the magnetic strip.

Figure A
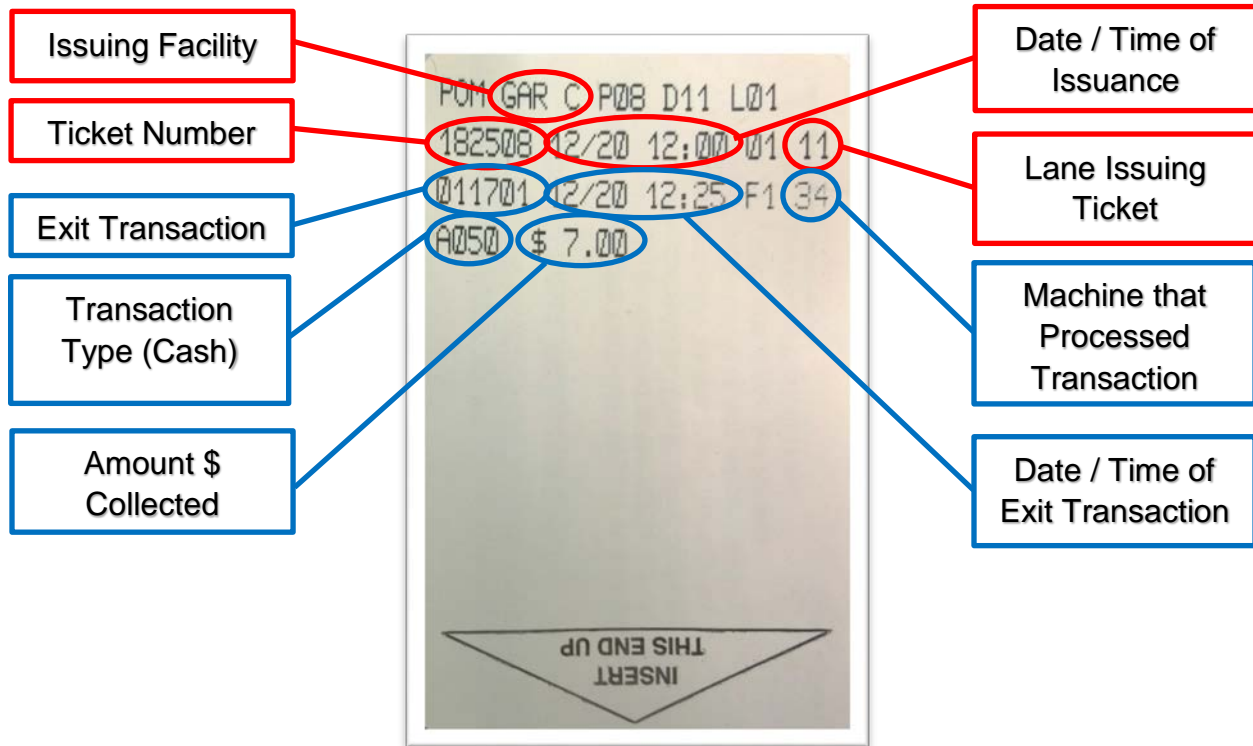
When patrons are ready to exit the garage, they drive up to a toll booth located on a roadway outside of the garage and present the ticket to a toll collector,[2] who inserts it into a "reader" connected to a cash register.[3] The reader automatically calculates the amount owed based on the entry and exit dates and times. It also prints the date and time of exit on the ticket. The patron has the option to pay with cash or a credit card. Once payment has been rendered, the toll collector activates a mechanical security arm, allowing the patron to exit.

Patrons also have the option of paying at a pay-on-foot kiosk located at the pedestrian entrance to the parking garage. If the parking fees are paid at the kiosk, the patron presents the reconciled ticket to the toll collector, and the reader confirms that the parking fees have been paid.

---

[2] Seaport toll collectors are Miami-Dade County employees.
[3] The term "reader" is used to describe a computerized device programmed to read the magnetic strip on the ticket, and compute the amount owed based on the entry/exit dates and times.

There are occasions when the reader is unable to access the information on the magnetic strip and calculate the amount owed. For example, the magnetic strip could be electronically or physically damaged, or the ticket dispenser or reader can malfunction. When a ticket is unreadable, the toll collector uses a different device that manually calculates the appropriate fee. In these situations, the toll collector is required to manually write "unreadable" on the parking ticket to document the malfunction and notify a supervisor. The unreadable parking ticket is then inserted into a different device that prints the exit date and time on the ticket. The ink from this printer is blue and is easily distinguished from the black ink from the automated reader.

Other PortMiami Parking Garage Users

Seaport employees with County-issued identification cards, authorized with parking privileges, are permitted to access any garage, without the need to pull a ticket. The use of these "proximity cards" to access the garages is not recorded in the parking revenue control system. That information is maintained in a separate system, which was not evaluated by the OIG.

On the other hand, other (non-employee) PortMiami workers, such as stevedores, porters, cruise line employees, and private security personnel, have to pull a ticket to park in the garages/lot, but may park free of charge. Upon exiting the garages, these workers are required to present their parking ticket and their employee ID to the toll collector. They are also required to endorse the ticket with their name and ID badge number in order to park without charge. In the circumstance that these workers cannot present a ticket upon exit, the charge is $7 – the daily parking rate.

Additionally, with this group of garage users, it is important to note that the ticket which is presented and endorsed upon exit, need <u>not</u> be the same ticket pulled upon entrance. It could be one pulled days ago that just happens to be conveniently located in one's vehicle. This practice becomes possible, as the OIG learned, because on days with cruise-related activity (Friday-Monday), at approximately 4 p.m. (the end of a toll collector's shift), one exit lane traffic control arm is raised and left in an upright position. This also occurs for the entire day on non-cruise days (Tuesday-Thursday). This creates a situation where these other PortMiami workers (who had earlier pulled a ticket) may exit the garage without having to turn in a ticket. This condition can result in these workers having multiple unredeemed tickets left in their vehicles, which then can result in scenarios where these workers redeem and endorse a ticket that could be several days, weeks, or months old. The open lane exit does not reasonably impact cruise patrons, inasmuch as they should all have left PortMiami prior to 4 pm. However, on non-cruise days, when the toll collector booths are closed and the gate arms are raised all day, it may reasonably impact visitors utilizing the garages for daily parking, unless they otherwise choose to pay at a pay-on-foot kiosk.

With respect to exiting the garages, toll collectors can manually override the parking system controls for patrons that qualify to park in specially marked parking spaces for the physically disabled when the parking is less than two hours.[4] Additionally, vehicles equipped with specialized equipment, such as ramps and lifts, park free of charge regardless of the time spent.[5] In such instances, the toll collector is supposed to complete a form documenting the disabled parking event, and the ticket is supposed to be annotated with an HO code, meaning a disabled (handicapped) operator who was not charged. Last, as noted previously, toll collectors can manually override the parking system controls for drivers with unreadable tickets, which are supposed to be marked "unreadable"; inserted into a different device that prints the exit date and time in blue ink on the ticket; requires the manual calculation of the fee; and requires a supervisor be informed.

Case Initiation and Methodology

A recent criminal investigation at Seaport, revealed that a toll collector, Darrel Alexander Cason, was manipulating his handling of cash transactions, so as to steal parking revenues.[6] Unfortunately, Mr. Cason was not the first Seaport toll collector who has been arrested and charged with theft. As a proactive measure, this joint investigation was initiated to detect other possible cases of theft. As the marking of tickets as unreadable was another known method by which toll collectors could steal parking revenue, investigators physically examined parking tickets having that indicator.

The investigation entailed the physical examination of thousands of individual parking tickets. Investigators looked for known indicators of fraud and theft, such as tickets marked unreadable; these tickets were subject to further examination. For those tickets later determined to be actually readable, investigators obtained security video recordings of the toll booths (for the specific dates and times) corresponding to where and when the suspicious activity purportedly occurred. Other records reviewed included daily cashbox reconciliation records and toll collector work schedules.

Investigators also consulted with Seaport personnel, who manage parking garage operations and the toll collection process, to gain a working knowledge of that system.

---

[4] See Section 30-388.2(3) of the Code of Miami-Dade County.

[5] See Section 30-388.2(4) of the Code of Miami-Dade County.

[6] In August 2015, investigators were alerted to suspicious behavior and possible theft by Mr. Cason. MDPD investigators, through live video feed, observed Mr. Cason pocketing toll revenues during his work shift. Thereafter, Mr. Cason was caught in an MDPD sting operation stealing toll money and was immediately terminated from County employment. MDPD conducted further investigation into Mr. Cason's past toll collecting activities and uncovered evidence of prior thefts. Mr. Cason was officially arrested and formally charged in May 2017. Mr. Cason's case was concluded in October 2017 with a plea.

They also went to PortMiami and inspected parking garages, toll booths, ticket dispensers and the cash office.

Results of the Joint Investigative Examination

In June 2017, investigators requested and received reconciled (a.k.a. redeemed) parking tickets for the approximately three-month period from April 2017, through June 14, 2017. An exhaustive physical examination of thousands of reconciled individual parking tickets revealed tickets with possible signs of fraud, such as those marked unreadable. These tickets were flagged with the intention of examining those transactions in greater detail.

Investigators consulted with Seaport Information Technology (IT) personnel and technicians. As a result of these meetings it was suggested that each parking ticket marked as unreadable be re-inserted into the reader to verify the toll collector's claim. The OIG Special Agents and MDPD Detectives, accompanied by Seaport personnel, then went to the toll booths where the previously marked parking tickets were reconciled and re-inserted each one into the original reader. While the exact number of tickets tested was not recorded, the vast majority were actually found to be readable, contrary to the toll collectors' claims as recorded on the tickets, raising suspicion of possible fraud and theft. Based on this verification step, unreadable tickets were separated from those now determined to be readable. This latter category was then subjected to further review and comparison to video footage corresponding to the appropriate tollbooth, time and date.

After an exhaustive examination of hundreds of reconciled parking tickets, where the parking ticket was marked as unreadable but was later determined to be actually readable, thus raising suspicion of fraud and theft, the review of the corresponding security video recording was unable to confirm any additional transactions indicating fraud and theft.

IV. <u>OIG DATA ANALYSIS – BACKGROUND & OVERVIEW</u>

Introduction, Objectives and Scope of Review

Concurrent with the investigative effort, OIG contract oversight and audit personnel initiated a "data mining" project using the Seaport's parking system data. The project intended to apply various analytical methods to review parking data collected and maintained by the Seaport's ScanNet system. The parking system data was provided to the OIG with the assistance of Royce Integrated Solutions and the Seaport's IT personnel. Furthermore, in order to properly interpret the data, OIG members had meetings with

representatives of Seaport-IT, Cruise Operations, Purchasing, and Finance to gain an understanding of all aspects of the parking operations.[7]

The data provided consisted of all tickets issued by the ticket dispensers for Garages C, D, G, and Lot E (collectively "Garages")[8] for the 12-month period between July 1, 2016 and June 30, 2017. After adjusting for duplicates, the data consisted of 368,149 parking tickets issued.[9] For each ticket issued, there were nine data fields consisting of:

Ticket Number	Garage Entrance Lane	Garage Exit Lane
Entrance Time	Entrance Date	Exit Date
Amount Collected	Entrance Time	Exit Time

Additionally, the dataset provided to the OIG also contained a system-generated fee amount for each redeemed ticket, which calculated what the fee should be based on the entrance and exit times.

The OIG also obtained documents, data, and/or electronic files for the following:

- Redeemed parking tickets for March 2017– August 2017
- Video recordings from inside toll collector booths
- Quarterly Distribution of Parking Revenues to Cruise Operators
- Published cruise schedules

The OIG's data analysis was intended to identify trends and outlier events. Also, based on explanations provided to us by Seaport personnel, and knowledge of known fraud schemes involving overnight parking by cruise passengers, we were able to identify areas of weakness likely impacting revenue collection by the Seaport. Other queries performed by the OIG looked for unusual patterns indicating circumvention of the parking facility's operational controls. While some of the patterns could be explained anecdotally by known factual scenarios, this review did not attempt to verify or confirm the actual

---

[7] The Seaport personnel consisted of Michelle Thames, Infrastructure Manager; Sergio Camargo, Superintendent–Cruise Operations; Gyselle Pino, Chief Procurement Officer; Fidel Lima, Revenue Supervisor; Andy Hecker, Chief Financial Officer; Juan Lopez, Controller; and Andrew Warburton, Asst. Controller.

[8] Garage J operates on a pre-paid basis and is not electronically linked to the existing parking revenue control system.

[9] The OIG was advised that due to system limitations, the data had to be extracted on a monthly basis. This introduced the potential for overlapping entries that resulted in duplicate data (duplicates), for the beginning and ending for each monthly period. For example, tickets issued at the end-of-a-month, but not redeemed until the following month, would appear in both month's data extractions. The OIG's analysis identified 29,396 duplicates in the original 397,545 raw data of tickets issued, which when properly adjusted yielded 368,149 tickets actually issued.

reasons behind the irregularities, nor did it attempt to extrapolate the financial impact of the potential revenue loss to the Seaport. However, since some of the data analyzed was already monetized, then tangentially some potential, but unverified financial impacts may be revealed in that data.

Last, the OIG is aware that the Seaport is in the process of developing the specifications for a new Parking Access and Revenue Control System, and that it is working towards developing and issuing an RFP in the foreseeable future. As such, preliminary observations and suggestions resulting from our data analysis were informally shared with Seaport executives and managerial staff during the course of our review. These observations, comments and recommendations have been formalized and are presented in the final section of this memorandum.

Parking Entries & Collections: Cruise Passengers & Other PortMiami Workers

By far, the vast majority of parking revenues come from PortMiami's cruise passengers. Cruise days (embarking and disembarking) are Fridays, Saturdays, Sundays and Mondays. Typically, cruise passengers board the ships between noon and 4 pm, and disembark from the ships between 7 a.m. and 11 a.m. Ship itineraries range on average from three days to two weeks, with some itineraries exceeding one month. The parking charges during the period of our review were $20 for overnight parking, $7 for daily parking, and $14 for daily parking for recreational or oversized vehicles.

For overnight parking patrons, if a patron claims to have lost their ticket, the toll collector charges a "Lost Ticket Fee," which is 10 days of overnight parking fees, at the overnight rate of $20 per day, or $200. A patron can overcome the 10-day charge, if they provide a boarding pass demonstrating the date of boarding.

During interviews with Seaport personnel, the OIG learned of alleged fraud schemes whereby unscrupulous individuals will attempt to sell parking garage day, or "same day" tickets (i.e. tickets pulled that morning) to disembarking cruise passengers. These scalpers will market the ticket as a way for the garage patron to save money at the toll booth when exiting the garage. A patron on a 7-day cruise would normally pay $140 for the 7-day garage stay. With the scalped same-day ticket, exiting the garage would only cost $7 – $14, plus the cost of the scalped ticket. As a result, the cruise lines would have been cheated of the full benefit of the overnight parking fee since all multi-day parking fees are rebated to the cruise lines. Thus, depending on the duration of the cruise for the returning passenger, these transactions could represent a significant loss of parking fees to the cruise lines.

In order to carry out this scheme, garage tickets would have to be pulled in the very early morning hours. The ticket dispensers require the weight of a vehicle triggering a

sensor in order for a ticket to dispense. Apparently, the weight of a golf cart, like the ones driven by workers at PortMiami, is heavy enough to trigger the sensor. In certain locations, bollards (vertical posts) are spaced sufficiently to permit golf carts to exit the garages without having to pass through the actual exit lanes. But, because there is no video recording equipment in the ticket dispensing areas, the OIG was not able to confirm the actual operation of the scheme. Instead, the OIG looked at trends and unusual patterns in the data to find corroboration of the scheme.

V.   OIG DATA – ANALYSIS & RESULTS

Identification of Missing Data – Data Integrity Concerns

As previously mentioned, the data received by the OIG for the 12-month period revealed 368,149 dispensed tickets (after removing duplicates). Our review identified 39 days, including almost the entire month of September 2016, with missing parking system data. In other words for those 39 days, the data reflects no parking activity at all. Except for an event like a hurricane,[10] or similar natural disaster, where PortMiami may be closed to the public and/or where the gate arm is raised for both garage entrance and exit, it is highly unusual to have any day without any parking activity.

Further examination of the data (by ticket number) shows gaps of missing tickets by sequence numbers. Accordingly, this missing data suggests inherent weaknesses in the current parking systems' operational controls, including its capabilities for reliable data storage and retrieval. Clearly any new parking and revenue controls system must ensure reliable and accurate data collection and storage.

Overall Analysis of 368,149 Tickets

Acknowledging that there are a host of missing parking data, the OIG analyzed the data that we received comprising of 368,149 tickets issued during the one-year period from July 1, 2016 to June 30, 2017. We analyzed dispensed tickets to determine the day of the week and time of day tickets were dispensed. That data was also considered in the context of the days experiencing cruise-related activity (generally, Friday through Monday), and those days without cruise-related activity (generally, Tuesday through Thursday). In tabular form (Table 1), the data provided a picture of what would be expected; the garages/lot experienced the highest number of entrances during scheduled cruise days. The busiest day was Friday, followed closely by Saturday, then Monday and Sunday. Less busy days were Thursday and Wednesday, with Tuesday experiencing the least traffic.

---

[10] The most recent such event being Hurricane Irma in September 2017, not 2016.

Table 1: Actual Tickets Pulled by Day & Time – July 1, 2016 to June 30, 2017

Time	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Total
< 6:00 a.m.	6,153	6,554	1,029	1,390	2,000	6,696	10,397	**34,219**
7:00 a.m.	7,090	7,612	1,757	2,514	3,631	7,729	11,567	**41,900**
8:00 a.m.	4,808	8,631	1,130	1,526	3,134	8,636	7,335	**35,200**
9:00 a.m.	4,858	5,579	1,231	1,243	2,394	5,139	7,590	**28,034**
10:00 a.m.	6,068	8,277	1,201	1,294	2,711	7,722	9,179	**36,452**
11:00 a.m.	6,453	8,160	1,265	1,319	2,683	8,109	10,035	**38,024**
12:00 p.m.	7,991	10,231	995	1,150	2,963	11,185	11,544	**46,059**
1:00 p.m.	7,151	10,674	1,031	1,448	3,154	13,369	10,539	**47,366**
2:00 p.m.	3,326	6,609	794	908	2,263	10,589	5,818	**30,307**
3:00 p.m.	1,345	3,302	533	594	1,316	6,685	3,201	**16,976**
4:00 p.m.	464	1,178	325	295	466	2,467	1,346	**6,541**
<Midnight	963	926	483	689	892	1,763	1,355	**7,071**
Total	**56,670**	**77,733**	**11,774**	**14,370**	**27,607**	**90,089**	**89,906**	**368,149**

Additional evaluation of the data reveals that garage entries were steady throughout the early morning to early afternoon. Early morning entries (6-8 a.m.) generally represent non-Seaport employees, or other PortMiami workers, such as cruise line employees, stevedores, porters, and private security personnel, and mid-morning to mid-afternoon entries generally represent embarking cruise passengers. Early morning entries may also include visitors to PortMiami for business, or to retrieve disembarking passengers. Overall, this evaluation of the data did not indicate anything remarkable.

For the analyzed universe of 368,149 tickets dispensed in the 12-month period, we determined that 156,410 (42.5%) were redeemed within the same day, 133,971 (36.4%) were overnight tickets (one or more nights), and 77,768 (21.1%) were not redeemed.

Unredeemed Tickets

Further analysis of the 77,768 unredeemed tickets show that most of the unredeemed tickets were dispensed on cruise days. Further, the greatest number of unredeemed tickets were generally issued between 6:00 a.m. (and earlier) and 8:00 a.m., on days with cruise-related activity, or Friday through Monday, when, as previously noted, the other port workers such as cruise line employees, stevedores, porters, and private security employees would be arriving for work, but before cruise passengers would begin arriving at the Seaport. On non-cruise days, or Tuesdays through Thursdays, the range for the greatest number of unredeemed tickets is from 6 a.m. (and earlier) through 10:00 a.m., then generally tapers off.

Table 2: Tickets Pulled and Not Redeemed – July 1, 2016 to June 30, 2017

Time	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Total
< 6:00 a.m.	1,905	2,369	803	977	1,020	2,894	3,709	**13,677**
7:00 a.m.	1,536	2,236	1,390	1,854	1,662	2,826	2,574	**14,078**
8:00 a.m.	818	1,623	882	1,012	1,146	1,688	1,172	**8,341**
9:00 a.m.	664	1,186	1,014	903	1,035	1,258	1,090	**7,150**
10:00 a.m.	600	1,296	868	805	938	1,303	1,010	**6,820**
11:00 a.m.	550	825	777	746	826	1,038	881	**5,643**
12:00 p.m.	565	818	532	411	517	836	910	**4,589**
1:00 p.m.	505	943	585	509	634	997	812	**4,985**
2:00 p.m.	311	588	452	391	518	719	442	**3,421**
3:00 p.m.	209	394	328	306	366	580	338	**2,521**
4:00 p.m.	123	252	224	208	226	342	195	**1,570**
<Midnight	776	710	384	604	725	949	825	**4,973**
Total	**8,562**	**13,240**	**8,239**	**8,726**	**9,613**	**15,430**	**13,958**	**77,768**

This data, as well as anecdotal information learned during the OIG's review, suggests that a significant number of the unredeemed tickets may be explained as due to daily (i.e. non-overnight) garage users, such as cruise line employees, stevedores, porters, and private security employees, exiting the parking garages on cruise days after 4 p.m., and throughout the day on non-cruise days, when exit tollbooth gate arms are left in a raised position. Further, on non-cruise days, since the toll booths are closed and the exit gate arms are left raised all day long, it is unlikely that daily garage users, including normally paying patrons, would redeem the tickets they pulled earlier that day, unless they paid at a pay-on-foot kiosk.

Another possible explanation for unredeemed tickets, especially those dispensed in the early mornings on cruise days, could be the work of scalpers who were unable to sell all of the tickets they pulled that morning.

Detailed Analysis of Daily Parking Data

As previously established, the OIG received data on 156,410 dispensed tickets that were redeemed within the same day. Table 3, on the next page, breaks out the revenues collected for these tickets.

Table 3: Daily Parking – Revenues Collected

Tickets Redeemed Less Than One Day	Ticket Count	System Calculated Fee Amount	Collected Amount
Paid Tickets Revenue Generating	135,453	$964,375	$964,356
Less than 15 minutes No Charge	18,338	0	0
Non-revenue Ticket	2,619	$18,824	0
Total	**156,410**	**$983,199**	**$964,356**

The electronic parking data provided to the OIG included a system calculated fee based on the entrance and exit times recorded for each transaction. Parking in the garage for less than 15 minutes is free. Non-revenue tickets are those where the fee is voided at exit by the toll collector. These primarily consist of daily parking by the other port workers (stevedores, porters, etc.) and may also consist of disabled parking patrons, parking less than two hours, where the fee is waived.

Possible Same Day Scalped Tickets – Revenue Loss to Seaport

As a subset of the 135,453 paid daily tickets, the OIG isolated those where the ticket was pulled prior to 8 a.m. and the patron exited before noon. Moreover, we only considered revenue generating or paid tickets. We used these parameters because they would fit the description of the alleged scalped ticket fraud scheme. Of the 135,453 tickets, we found 17,775 that fit these parameters. Table 4 breaks out these tickets by day of the week.

Table 4: Paid Tickets Pulled before 8:00 a.m. and exited before 12 p.m.

No. of	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Total
Tickets	3,253	3,950	266	384	1,310	4,067	4,545	17,775

Clearly, not all of the tickets identified in the table above are instances of scalping. But as would be expected, the data revealed more tickets fitting these parameters on cruise days. These parking patrons could be picking up disembarking cruise passengers, and we would assume that a number of them are. However, given the 15-minute free grace period for garage parking, the increased reliance on waiting in cell-phone lots, and driver tendencies towards illegally waiting on swale areas, then the volume of same-day tickets, redeemed before noon, appears to be high. This data suggests some credibility to the scalped ticket scheme.

Within the 17,775 same day, redeemed before noon, tickets shown above, are 329 tickets dispensed and redeemed from different garages. In other words, there were 329 instances where the ticket was pulled before 8 a.m. from Garage X and redeemed before noon at Garage Y. Other than errors in the data itself, it is difficult to come up with a

reasonable explanation for this occurrence, other than corroborating the aforementioned scalping scheme.

As a mathematical exercise, the OIG calculates that if only one-third of the above-described tickets for Friday through Monday were assumed to be scalped, and the average revenue loss of a scalped ticket is $80 (4 days @ the overnight parking rate), then the revenue loss would be $421,760.[11]

Detailed Analysis of Overnight Parking Data

As previously established, the OIG received data on 133,971 dispensed tickets that were redeemed after the day it was dispensed (i.e., overnight parking). As explained earlier, the electronic parking data provided to the OIG included a system calculated fee based on the entrance and exit dates and times recorded for each transaction. Non-revenue tickets are those where the fee is voided at exit by the toll collector. These primarily consist of daily parking by the other port workers (stevedores, porters, etc.) and may also consist of disabled parking patrons where the fee is waived. Table 5 breaks out the revenues collected for these tickets.

Table 5: Overnight Parking – Revenues Collected

Tickets Redeemed Less Than One Day	Ticket Count	System Calculated Fee Amount	Collected Amount
Paid Tickets Revenue Generating	126,724	$12,567,836	$12,557,804
Non-revenue Ticket	7,247	$ 735,252	0
Total	133,971	$13,303,088	$12,557,804

Overnight parking generally consists of cruise passengers. While there is an approximately $10,000 variance in the retrieved data's fee calculation vs. collected amount, it is immaterial to the overall analysis.

The high number of non-revenue overnight tickets is easily explained by the daily parking practices of the other PortMiami workers, such as cruise line employees, stevedores, porters, etc. As commented earlier, these other port workers park for free upon showing any garage ticket and their ID badge upon exit. The ticket need not be from the same day or from the same garage. As explained to the OIG, these other port workers likely have accumulated several tickets in their car because on those days where the gate arm is lifted, they are able to exit without turning in a ticket. As such, it is known that sometimes these workers redeem older, accumulated and previously unredeemed tickets, including possibly from different garages, while exiting the parking garages.

---

[11] Friday through Monday tickets (4,067+4,545+3,253+3,950) = 15,815 tickets; divided by 3 = 5,272; and 5,272 multiplied by $80.00 = $421,760.

The practice of voiding these other port workers' parking tickets under these circumstances will necessarily skew the data. For example, the data shows several lengthy garage stays that exceed the normal duration of a typical cruise.

- There were 55 records showing the time parked to be between 31 and 50 days. The system-calculated fee for these transactions was just over $43,000; however the data shows just over $2,300 being collected.

- There were 47 records showing the time parked to be between 51 and 100 days. The system-calculated fee for these transactions was just over $63,000; however, the data show just over $1,800 being collected.

- There were 47 records showing the time parked to be between 101 and 125 days. The system-calculated fee for these transaction was just over $50,000; however, the data show that no fees were collected for these transactions.

Other Data Irregularities

In the course of this examination, in addition to the 39 days of missing data described at the onset of this discussion, we observed other irregularities in the dataset that we received. They are described below.

- The dataset revealed 1,411 instances where the exit date/time stamp actually preceded the entrance date/time stamp. For these 1,411 records, there were no system-calculated fee amounts nor were any actual fees collected. Differences in times ranged from 2 minutes to 60 minutes.

  o In 209 instances, the entrance and exit were recorded from the same garage.

  o In 11 instances, the entrance and exits were recorded from different garages.

  o In 1,191 instances, the dataset did not record the entrance garage.

- The dataset also revealed 2,317 instances where the exit date/time stamp and the entrance date/time stamp were the same. For these 2,317 records, there were no system-calculated fee amounts nor were any actual fees collected.

  o In 1,788 instances, the entrance and exit were recorded from the same garage.

  o In 32 instances, the entrance and exits were recorded from different garages.

o In 497 instances, the dataset did not record the entrance garage.

- The dataset revealed over 32,000 instances where the entrance garage was not recorded, i.e., the Issue Device field was blank, but an entrance time was recorded.

These discrepancies illustrate shortfalls in the current system's data collection, retention, and retrieval capabilities, which we are confident will be addressed by the new system procurement.

VI. ADDITIONAL OBSERVATIONS, COMMENTS & RECOMMENDATIONS

The following observations, comments and recommendations, are based on OIG's multi-disciplinary analysis, as well as information gathered through field work, interviews, and data analysis. OIG personnel have previously shared informally some of these observations, comments and recommendations with Seaport personnel, as follows:

Observation 1:   **Proximity Card access to the Garages does not have an "anti-pass-back" feature.**

Under the current system, users with proximity (pre-programmed parking) card access are able to enter the Garages and then "pass-back" their proximity card for a second user to enter the garage. Parking access with proximity cards is controlled independently by the Seaport's security system, not by the revenue control system. During its multi-disciplinary review, the OIG learned that this shortcoming could be corrected internally by the Seaport-IT group, which was not aware that this weakness existed.

Recommendation 1: The OIG recommends that the security system be re-programmed to include the anti-pass-back feature; i.e. proximity cards must be used in consecutive "IN-OUT" sequence; and not permit "IN-IN" or "OUT-OUT" sequences.

Observation 2:   **Validating free parking for PortMiami workers is a time-consuming process.**

Employees of the cruise lines, stevedores, porters, and private security employees (other PortMiami workers), pull a ticket to enter a parking garage, but exit is authorized upon presenting any previously issued ticket, an employee identification, and manual endorsement of the parking ticket by the employee in the presence of a toll collector. This method of authorizing exit from the Garages is time consuming and requires the presence of a toll collector. Furthermore, during the review, the OIG was advised that facial

recognition was often used to verify identity rather than current authorization. These non-County employees are required to have authorized Seaport identification cards which can be proximity card enabled for access to the Garages.

Recommendation 2: It is recommended that all employee access, whether county employees or non-county employees, be controlled by proximity cards. This would provide better accountability for employee use of the parking garages. In informal discussions with Seaport personnel, this recommendation was deemed worthy of consideration for implementation.

Observation 3:   The Seaport does not have a policy or procedure to account for all parking tickets issued.

The OIG analysis of data for 368,149 parking tickets issued during a 12-month period indicated that 77,733, or 21% of the tickets were not redeemed. Further analysis of the data indicated that:

- The number of unredeemed parking tickets were proportionately higher on heavy cruise days, as illustrated in Table 2, as to Fridays, Saturdays, Sundays and Mondays. Tuesdays, Wednesdays, and Thursdays were relatively equal.

- On an hourly basis, a significantly higher proportion of the tickets were pulled before 6:00 a.m. and between 6:00 a.m. and 8:00 a.m. as illustrated in Table 3.

Neither the Seaport, nor the OIG, had any specific factual explanation for the high number of unredeemed parking tickets on these particular days and times, although there are there are two possible explanations for this occurrence. First, garage exit control arms are raised to the upright position when toll collectors are not present at Garages (e.g., after 4:00 p.m. on cruise days and all day during non-cruise days). This circumstance allows users to exit the Garages without paying, resulting in unredeemed tickets and/or revenue loss. Second, trends and unusual patterns in the data of unredeemed tickets appears to corroborate the operation of the alleged ticket scalping scheme. The operation of that scheme would also explain the existence of unredeemed tickets pulled in the very early morning hours, which the scalpers were unsuccessful in selling.

Recommendation 3: The OIG informally discussed the following recommendations with Seaport personnel, who agreed to consider their inclusion in the specifications for the new parking access revenues control system.

- Implement a procedure to account for all tickets issued.

- Implement a system to reduce the number of unredeemed tickets. This may include actual observation and/or the installation of cameras with license plate recognition technology, at the points of ingress and egress from the parking garages.

- Eliminate the practice of raising exit gate arms after toll collector shift ends, and on non-cruise days.

Observation 4:   Cash handling by toll booth collectors increase the risk for theft.

The OIG reviewed the video evidence which clearly demonstrated the method for this type of theft to occur using cash transactions. Further, this theft occurred even though toll collectors are fully aware that video cameras are installed in all toll booths.

Recommendation 4: In informal discussions, the OIG proposed several options for the Seaport agreed to consider: 1) replacing toll collectors/booths with additional "pay-on-foot" kiosks that accept all types of payment methods; 2) increasing the number of automated exit machines, which would operate like the pay-on-foot kiosks; and 3) if options 1 and 2 were implemented, the toll collectors could be reclassified as roaming service personnel to assist cruise passengers using the Garages.

Observation 5:   Revenue from Garage J is recorded separately.

Garage J is operated on a "pre-paid" basis and operates only when Terminal J is in use. Terminal J is located on the south side of PortMiami, while all other cruise terminals are on the north side. Seaport personnel explained that Garage J operates on a pre-paid system using manually issued parking receipts. Garage J was not part of the revenue control system reviewed by the OIG.

Recommendation 5:   In informal discussions, the OIG recommended and the Seaport agreed to consider several options concerning Garage J. First, the Seaport could continue to operate Garage J using the "pre-paid" basis for parking, but the Seaport would assure that Garage J would be integrated into the new parking revenue control system. As a second option, the Seaport would operate Garage J on the same basis as the other garages, while including the garage in the specifications for the new parking access revenue control system.

VII. RESPONSE TO THE DRAFT REPORT

This report, as a draft, was provided to the Seaport Department for review and comment. The OIG received a response from the Seaport Director, which is attached as Appendix A.

The Seaport Director stated that he concurs with the OIG's overall findings that the Seaport's parking system is inadequate. He advised that the department is in the process of developing a Request for Proposals for a replacement system; but in the meantime, the department has issued an Invitation to Bid to establish a contract for on-going monthly maintenance and repairs, and for some hardware and software upgrades to the current system.

Additionally, the response sets forth two specific actions that the department will take in light of the OIG's report. First, the Seaport will have its security personnel periodically review video footage of the cameras located at each garage entrance where parking tickets are pulled. The purpose of this review is to identify any instances of suspected fraud of the type raised by the OIG, where parking tickets pulled before 8:00 a.m. were redeemed the same day, prior to noon, raising the possibility that a one-day garage ticket could be sold to debarking cruise passengers from week-long cruises.

Second, the Seaport will confer with the OIG regarding the 329 suspicious tickets identified by the OIG, which were pulled from one garage before 8:00 a.m. and then redeemed the same day before noon at another garage. Because this condition requires a manual override, the Seaport intends to review this dataset to determine if there is an associated personnel pattern.

VIII. <u>OIG COMMENTS & CONCLUSION</u>

The OIG appreciates the efforts of the Seaport Department to advance and improve its parking garages and revenue controls. OIG staff have already begun monitoring the aforementioned Invitation to Bid procurement process for the maintenance and repair services. OIG staff have also been engaged in monitoring specification development for the replacement system.

While the Seaport's response did not specifically address each of the OIG's recommendations, we believe that many, if not most, will be addressed by virtue of the intended software/hardware upgrades, and eventually, through the procurement of a replacement system. <u>As such, the OIG requests to be provided with a status report in 90 days, on or before June 14, 2019</u>, that updates the Seaport's operational and procurement efforts relating to its parking garages and revenue controls and addresses the specific recommendations made by the OIG.

The OIG appreciates the opportunity to provide our observations, data analysis results, and recommendations to the Seaport Department. We look forward to providing additional assistance in the form of contract oversight as the Seaport proceeds with its future procurement of a proposed new parking access revenue control system.

MIAMI-DADE COUNTY

OFFICE OF THE INSPECTOR GENERAL

FINAL REPORT

Appendix A

Seaport Department's Response

Multi-Disciplinary Review

PortMiami Parking Garages and Revenue Controls

IG17-0026-I

February 26th, 2019

Ms. Mary T. Cagle, Inspector General
Office of the Inspector General
601 NW 1st Court
South Tower, 22nd Floor
Miami, FL 33136

> Re: OIG Report of Multi-Disciplinary Review
>   PortMiami Parking Garages and Revenue Controls- IG17-0026-I

Dear Ms. Cagle:

The Miami-Dade County Seaport Department (PortMiami, Port) completed its review of the draft report "*PortMiami Parking Garages and Revenue Controls – IG17-0026-I*" from the Office of the Inspector General (OIG) dated January 22, 2019.

PortMiami concurs with the OIG's overall findings that the Port's parking system is inadequate and is in the process of developing a Request for Proposal (RFP) to solicit vendor(s) to replace it with an acceptable system, including addressing the recommendations contained within the OIG report.

While the RFP process takes place, PortMiami has issued an Invitation to Bid for the current Parking Control System which will establish a contract for on-going monthly maintenance, repair services including installations, servicing, and upgrades of all equipment, hardware, and software for an integrated, real time, PCI compliant Parking Access and Revenue Control system.

Additionally, the Port is taking the following actions to help minimize the impact of our current parking system:

- The OIG Report references data integrity with a high focus on un-redeemed parking tickets and parking tickets redeemed the same day that were pulled before 8:00 am, recognizing the possibility that a ticket for one day's parking fee pulled in the morning can be marketed to debarking cruise passengers who have parked for seven days. The Port has operational video cameras at all garage entrances where parking tickets are pulled. Starting in March, with the assistance of our security personnel, we will begin periodic reviews of the videos

until a new parking system is implemented to help reduce or identify any fraud, if it is occurring.

- Over a twelve month period, the OIG report found 329 tickets that were pulled from one garage before 8:00 am and then redeemed the same day before noon at another garage. A review by Seaport-IT personnel found the system does not allow a ticket with an identifier at one garage to be processed at another unless a manual override is taken by a toll collector. We will request the data for these 329 tickets from the OIG to determine if there is an associated personnel pattern.

The Seaport Department appreciates all the time and effort your office has invested in providing us with a detailed report outlining the deficiencies of our Parking System and your suggestions on how to improve.

Sincerely,

Juan Kuryla
Director, C.E.O.
PortMiami