MIAMIBEACH

INTERNAL AUDIT REPORT

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FROM: Norman Blaiotta, Senior Auditor NB

DATE: August 13, 2018
AUDIT: Selected Property Management Department Employees' Automated Vehicle Locator System Reports and Purchasing Credit Cards' Transactions Audit
PERIOD: October 1, 2015 – January 31, 2018

This audit report is the result of a Property Management Department Administration request to compare tested employees' Automated Vehicle Locator System reports to the times and locations listed on their individually prepared Daily Field Work Sheets, review staff's driving habits and perform a review of selected purchasing card transactions to determine their compliance with approved Citywide procedures.

INTRODUCTION

The City's 2017/18 fiscal year adopted budget book states that the Property Management Department is responsible for the day-to-day operations and maintenance of the City's real property assets, including over 84 municipal buildings and properties; the Lincoln Road District; 39 bridges; 15 monuments and fountains; three (3) swimming pools; and over six (6) miles of pedestrian areas along the beaches. To help maintain these facilities, the Property Management Department employs such licensed tradesworkers as painters, carpenters, electricians and plumbers. These tradesworkers are assigned work throughout the City ranging from the repair of lifeguard stands to the painting of offices based on received Property Management Work Request Forms, emails, scheduled preventive maintenance, etc.

All hours worked by Property Management staff are to be recorded on individually prepared Daily Field Work Sheets which capture the date that the work was performed, the applicable work order numbers, the location of each job site, the number of labor hours worked, a description of the work performed, a costing of the materials used, etc. These Daily Field Work Sheets are to be submitted at the end of each day to their supervisor for review before being forwarded to the Administration Section for further processing.

Tradesworkers and their supervisors are assigned specific City owned vehicles to be used during working hours in the completion of their duties. Occasionally, they are assigned Gator utility vehicles and other specialty vehicles to be used in the completion of their duties. Each of these vehicles is typically equipped with an Automated Vehicle Locator System (AVLS) provided by Track Star International, Inc. through a piggyback agreement with the City of Fort Lauderdale signed on May 19, 2016.

An AVLS is a geographic positioning system that tracks and reports vehicle/equipment activity including but not limited to location, speed and course of direction and may be installed in any City owned or controlled vehicle and/or equipment at any time without providing notification. As

a result, designated City personnel can generate system reports to determine whether the vehicles' engines are running, their location, if they were exceeding the designated speed limits, etc.

These AVLS reports are to agree with each employee's Daily Field Work Sheets. In addition, Citywide procedures were adopted in June 2014 which among other terms require in section VI(C) each department/division director to have a staff member review at least one vehicle every month for at least one shift and to review vehicle inactivity reports, over speed reports, vehicle locations, etc. as well as to compare AVLS reports against the users' activity logs, shift reports, and/or related activity reports.

The Property Management Department reorganized their staff on March 15, 2017 by reclassifying Classified or employees represented by a collective bargaining unit from a specific trade position (plumber, electrician, air conditioning mechanic, carpenter and painter) to a multi-use position such as Tradesworker I (unlicensed) and Tradesworker II (licensed). These changes allowed for the achievement of a flexible workforce that can address a variety of maintenance issues and prioritize small projects. Therefore, all tradesworkers are working in the field completing work orders as the time spent in the department's offices should be minimal.

Each p-card transaction is to be approved by the corresponding tradesworker's supervisor for usage at the designated work site. The supporting documentation of invoices, signed credit card slips, etc. are to be maintained by the tradesworkers and submitted daily to their supervisor for review. Once approved, the documents are submitted to the Administration Section so that the monies can be recovered from the end users through the internal service charges billing process.

The number of p-card transactions has diminished greatly with the implementation of W.W. Grainger, Inc. to purchase and deliver routine safety supplies pursuant to City Invitation to Bid No. 43-11/12 as awarded by the City Commission on January 16, 2013. The initial term of the contract was for two years with the City Manager having the ability to extend the contract with the same terms and conditions for three (3) additional one (1) year terms.

W.W. Grainger, Inc. established the storeroom at the Property Management Department's offices in September 2016. As a result, needed materials are sent to the storeroom operator whereby they are typically either charged out from the storeroom or are ordered and are made available within the next few days. Additionally, materials not readily available through W.W. Grainger Inc. are procured through Equal Level Community (E-Marketplace), which provides access to competitively bid contracts, including H.D. Supply, Graybar, Home Depot, etc. As a result, tradesworkers typically only use p-cards when materials are needed on the weekends or after hours as their usage have been reduced significantly.

OVERALL OPINION

Results from this audit show that additional work is necessary to fully comply with the Citywide Procedures regarding the use of the Automated Vehicle Locator System (AVLS) as a continuous monitoring tool, and that controls and procedures for herein presented processes could and should be improved. Furthermore, sufficient documentation should be maintained to provide reasonable assurance that testing is being performed with all results disclosed to staff so that they can be held accountable for any deficiencies.

The following shortcomings were noted that are in need of corrective action upon reviewing selected AVLS reports, the Daily Field Work Sheets and Property Management Department employees' purchasing credit card transactions:

- The Property Management Department did not comply with section VI(C) of the Citywide Automated Vehicle Locator System Procedures and perform documented testing which would have helped earlier identify the waste and misuse of City assets described in more detail in the subsequent findings.
- Numerous differences totaling $3,817.10 were noted for five (5) tested tradesworkers' vehicles between the Daily Field Work Sheets and the corresponding AVLS Reports Data during the period of 08/14/17 through 08/18/17.
- City vehicles were incorrectly used to pick-up food for Thanksgiving and year-end staff luncheons.
- 2,954 idling events lasting long than five (5) minutes were identified during 11/01/2017 through 01/31/2018 via AVLS generated reports that resulted in the wasting of gasoline and increased wear and tear on the vehicles' engines thereby heightening the likelihood of needed repairs.
- 2,651 speeding events were detected during 11/01/2017 through 01/31/2018 via AVLS generated reports that increased the likelihood that traffic accidents could occur.
- The Property Management Department's Standard Operating Procedures and the Vehicle Permission Form should state the allocation for driving time and require more detailed information on employees breaks and lunches, as well as to include narratives prohibiting idling and speeding events.
- Purchasing credit card transactional shortcomings are noted concerning the procurement of diesel fuel, listing the employee's full credit card number and expiration date, the purchase of food and transactions tagged to the incorrect vendor.

PURPOSE

The purpose of this audit is to determine whether tested employees' individually prepared Daily Field Work Sheets agreed with the Automated Vehicle Locator System reports; whether tested vehicle operators were excessively speeding and/or unnecessarily idling; and whether tested purchasing credit card transactions were compliant with designated Citywide procedures.

OBJECTIVES

1. Confirm that adequate internal controls were established and followed.

2. Confirm that the maintained supporting documentation is organized, sufficient and complete.

3. Confirm that tested Automated Vehicle Locator System reports agree with the tradesworkers' individually prepared Daily Field Work Sheets.

4. Confirm that tradesworkers did not speed while driving City vehicles, took direct traffic routes to work assignments and did not unnecessarily leave the vehicles' engines running or idling for extended periods.

5. Confirm that tested purchasing credit card transactions were compliant with the terms specified in the Citywide procedures.

FINDINGS, RECOMMENDATIONS AND MANAGEMENT RESPONSES

1. Finding: *The Property Management Department did not Comply with Section VI(C) of the Citywide Automated Vehicle Locator System Procedures and Perform Documented Testing which would have helped Earlier Identify the Waste and Misuse of City Assets that Occurred as Described in More Detail in the Subsequent Findings*
Section VI(C) of the Citywide Automated Vehicle Locator System or AVLS procedures (number FL.01.01) states that each department/division director shall designate appropriate personnel to review at least one vehicle every month for at least one shift and review vehicle inactivity reports and over speed reports, vehicle location, etc. In addition, they are to compare AVLS reports against the users' activity logs, shift reports and/or related activity reports.

Documentation was requested from the Property Management Department to verify that these analyses were being done timely but none were provided. Consequently, it was assumed that these reviews were not completed prior to this audit's commencement in deference to Section VI(C). As a result, the differences described in the subsequent findings were not identified and corrected earlier which resulted in an increased amount of waste and misuse of City assets.

Recommendation(s):
Going forward, the Property Management Department Director should routinely perform and document the analysis identified in Section VI(C) of the Citywide AVLS procedures. Furthermore, any identified deficiencies should be immediately addressed with the affected employees involved to help facilitate timely correction and to help reduce the associated amount of waste and misuse of City assets.

Management Response (Property Management Department):
The Operations Superintendent, functioning as the Department Director's designee, will run and keep records of weekly reports. The reports will capture data on vehicle inactivity, excessive speeding, and vehicle location. The programmed review of these will serve as a tool to identify and proactively address employees in violation of the Citywide AVLS procedures.

2. Finding: *Numerous Differences Totaling $3,817.10 were Noted for Five (5) Tradesworkers' Vehicles between the Daily Field Work Sheets and the Corresponding AVLS Reports Data during the period of 08/14/17 through 08/18/17*
Property Management Department Administrative staff and tradesworkers are assigned specific vehicles to be used daily in the performance of their assigned duties. Many of these vehicles were equipped with AVLS devices whereby management can generate reports in the TrackStar software of each vehicle's movement for any given day.

Meanwhile, Property Management tradesworkers submit manually prepared Daily Field Work Sheets to management detailing the work performed, the length of time spent, etc. at each location throughout the day totaling at least eight (8) hours to be charged back to the work requestor. As a result, these Daily Field Work Sheets should closely approximate the time spent at each location as recorded on the AVLS reports to help ensure that its work requestors were accurately billed. Any time charged to sick, vacation, union leave, etc. was excluded from analysis but would still be recorded on each tradesworker's Daily Field Work Sheets with the corresponding administrative codes.

Unfortunately, the Daily Field Work Sheets do not require the preparer to indicate the vehicle number of the truck that was used in the completion of their work which would be beneficial in determining accountability upon performing various AVLS analyses in adherence to Section VI(C) of Citywide procedure numbered FL.01.01. Although there is no known means to determine if the employee's assigned vehicle was operated by someone else, it was assumed that the vehicles were driven by the designated individuals unless proven otherwise.

Tested Property Management vehicles' AVLS reports were compared to the Daily Field Work Sheets for the period of 08/14/17 through 08/18/17. For the analysis purpose, only the outgoing travel was included as part of the service billed time as any listed administrative time was excluded. Although the Office of Internal Audit realizes that one week is a relatively small sample size, there is no known reason to believe that it doesn't provide a fair representation of the practices routinely followed.

It is imperative that the time spent on the work orders recorded on the Daily Field Work Sheets is accurate because it is multiplied by the fixed standard hourly rate (ex. $79.80 during the 2016/17 fiscal year) to determine the appropriate amount to charge to the corresponding work requestor. Any inaccuracies will result in at least one work requestor being misbilled as all 8.0 work day hours are to be charged out.

To determine the Daily Field Work Sheets accuracy, testing was performed on eleven (11) different assigned Property Management Department vehicles during 08/14/17 through 08/18/17. In doing so, it was noted that five (5) vehicles' results were deemed inconclusive, five (5) vehicles contained numerous differences and one (1) vehicle #4745 contained no differences. More specific detailed information is provided below for the five (5) deemed inconclusive and the five (5) containing numerous differences.

<u>Five Tested (5) Vehicles' Results Deemed Inconclusive</u>

i. Vehicle #4780 presented little or no activity during the tested week in August 2017 other than being powered-on and idling for less than five (5) minutes for four (4) of the five (5) days. Conversely, the Daily Field Work Sheets for this vehicle's assigned operator had him attending several locations on multiple work orders.

ii. Vehicle #4743 presented little or no activity during the tested week other than being powered-on and idling for a few minutes each day. Despite this fact, the Daily Field Work Sheets for this vehicle's assigned operator had him attending several

locations on multiple work orders. The only other recorded activity was on 08/15/17 when the vehicle remained at Terminal Isle until 3:30 pm, when it was driven to the Property Management building, arriving at 3:43 pm. This trip was not recorded in the vehicle operator's Daily Field Work Sheets.

iii. Vehicle #4744 presented little or no activity during the tested week other than being powered-on for about four (4) minutes during each of the first two (2) days. Yet, the Daily Field Work Sheets for this vehicle's assigned operator showed that he completed multiple work orders at various locations during these two (2) days. The remaining three (3) days of the week analyzed were charged to vacation leave.

iv. The AVLS report for vehicle #4562 presented little or no activity during the tested week other than being powered and idling on for about four (4) minutes during each of the first three (3) days. Furthermore, the AVLS recorded only the vehicle's power on in the fourth day, and only the vehicle's power off for the fifth day of the week. These AVLS reports differ from the Daily Field Work Sheets which stated that the vehicle operator was participating on multiple work orders at several locations.

v. Vehicle #13414 had no AVLS tracker installed[1].

Office of Internal Audit staff were unable to determine if these above first four vehicles' AVLS reports truly reflects the vehicles' activity or involves a system malfunction so they were excluded from additional analysis.

Five (5) Tested Vehicles Results Containing Numerous Differences

i. Vehicle #15410

This vehicle presented AVLS connectivity problems during multiple periods on the five (5) days tested. When connectivity was present, the following discrepancies between the AVLS reports and Daily Field Work Sheets were noted:

a. On 08/15/17 this vehicle had no GPS connectivity before 10:30am. Afterwards, the vehicle was noted being driven in the 15th Street and Washington Avenue area where it remained parked for approximately ten (10) minutes by the corner of 13th Street and Washington Avenue before being driven toward City Hall where it arrived at around 11:00am. Meanwhile, the Daily Field Work Sheets for this vehicle's assigned operator had him working at City Hall from 8:00am to 11:00am.

b. On 08/15/17, vehicle #15410 was located at several points within the square area formed by 17th Street, Lincoln Lane South, Meridian Avenue and Lincoln Lane North between 11:00am and 12:00pm, after which connectivity was lost. Yet the corresponding Daily Field Work Sheets for

1. All vehicles should have AVLS according to an email received from the Fleet Management Department; however, some were previously released before the AVLS could be installed. Fleet Management has since modified their procedure for releasing vehicles to ensure that this does not happen.

this vehicle's assigned operator reported that he was working at a location called "beachwalk" from 11:00am to 2:00pm.

c. On 08/16/17 this vehicle had no GPS connectivity before 6:22am. Afterwards, the vehicle was located close to the Daily Field Work Sheet's listed work location. However, by 8:00am the vehicle started moving toward the Property Management building and arrived there at 8:10am. However, the corresponding Daily Field Work Sheets for this vehicle's assigned operator had him working at the Lincoln Road Mall from 6:00am to 9:00am.

d. On 08/17/17 starting at 11:15am, this vehicle was driven from the Property Management building to different points in South Beach until 2:00pm whereupon it lost connectivity for the remainder of the day. Meanwhile, the Daily Field Work Sheets for this vehicle's assigned operator had him located at the Property Management Building from 8:00am to 2:30pm.

e. On 08/17/17, this vehicle left the Property Management building and drove towards Pennsylvania Avenue until 8:10am where it remained parked until being driven back to Property Management at 1:10pm. The Daily Field Work Sheets for this vehicle's assigned operator had him working at 1661 Pennsylvania Avenue from 8:00am to 2:00pm.

f. The total time difference between the Daily Field Work Sheets and the AVLS reports for this tested week for vehicle #15410 was five (5) hours and 45 minutes.

ii. Vehicle #4741

a. On 08/14/17 this vehicle left City Hall and was driven towards the Property Management building at 3:00pm. However, the corresponding Daily Field Work Sheets for this vehicle's assigned operator had him working at City Hall from 2:00pm to 3:30pm.

b. On 08/15/17 this vehicle left the Property Management building and was driven towards City Hall at 8:30am. Yet, the Daily Field Work Sheets for this vehicle's assigned operator had him located at the Property Management building from 7:30am to 8:00am and at City Hall from 8:00am to 11:30am.

c. On 08/1517 the Daily Field Work Sheets located the vehicle's operator from 11:30am to 2:00pm at the Property Management building. However, the AVLS reports showed that the vehicle left the Property Management Building at around 12:55pm and drove to Fleet Management (Terminal Isle) where it stayed until 1:45pm (50 minutes) before returning to the Property Management building. This travel was not recorded in the Daily Field Work Sheets but lunch time was recorded from 12:30pm to 1:00pm.

d. On 08/16/17 this vehicle left North Shore Park at 3:00pm and headed towards the Property Management building. Yet, the corresponding Daily Field Work Sheets placed the operator at the North Shore Park from 2:00pm to 3:30pm.

e. On 08/17/17 this vehicle left North Shore Park and drove towards South Point Park at 1:30pm. Meanwhile, the Daily Field Work Sheet for this vehicle's assigned operator stated that he was working at North Shore Park from 12:30pm to 2:30pm.

f. On 08/17/17 while returning from South Point Park, the vehicle remained stopped for 35 minutes (2:39pm to 3:14pm) at the corner of 6th Street and Jefferson Avenue where the South Shore Community Center is located. However, this location was not included in the employees' Daily Field Work Sheets reviewed.

g. On 08/18/17, the Daily Field Work Sheets for this vehicle's assigned operator listed him as working at the Oolite Building Parking Garage from 9:00am to 10:00am. Yet, the time recorded on the applicable work order, including travel time from the Community Center located at 6th Street, was only twenty (20) minutes, 9:20am to 9:40am.

h. On 08/18/17, when the vehicle left the Oolite Building Parking Garage and traveled towards its next scheduled work order at the 71st Street Welcome Sign, it was recorded as having taken an extended route via the MacArthur Causeway before heading north to 71st Street. There is no record in the Daily Field Work Sheets for such a travel route and the detour added an estimated 25 minutes to the trip.

i. The total time difference between the Daily Field Work Sheets and the AVLS reports for the week tested on vehicle #4741 was four (4) hours and 35 minutes.

iii. Vehicle #4742

a. On 08/14/17 this vehicle left the Property Management building and drove towards City Hall at 7:18am before returning to Property Management at 8:25am. However, the Daily Field Work Sheets for this vehicle's assigned operator had him working at City Hall from 7:00am to 9:30am.

b. On 08/14/17 this vehicle left the Property Management building around 10:00am and went to Terminal Isle before arriving at 10:10 am. Then it left at 10:15am and headed towards the 777 building where it arrived at 10:30am staying parked there until 11:00am. The Daily Field Work Sheets for this vehicle's assigned operator had him working at the 777 building from 9:30am to 11:30am.

c. On 08/15/17 this vehicle arrived at Fire Station #1 at 8:30am, before leaving around 10:00am. The Daily Field Work Sheets for this vehicle's assigned operator had him working at Fire Station #1 from 8:00am to 10:30am.

d. On 08/16/17 this vehicle was parked at Fire Station #1 from 9:30am until around 3:15pm, when it left and went to the Property Management building. The Daily Field Work Sheets reviewed for this vehicle's assigned operator had him located at Fire Station #1 from 12:30pm to 1:30pm and at the 777 building from 1:30pm to 3:00pm.

e. According to the AVLS report, this vehicle showed no activity on 08/17/17 other than being powered on at 3:18 pm and then powered off at 4:46 pm. The Daily Field Work Sheets for this vehicle's assigned operator had him at the Property Management. building from 7:30am to 10:00am, at the 777 Building from 10:00am to 12:00pm, at lunch from 12:00pm to 12:30pm, at the 777 Building from 12:30pm to 3:00pm, at Fleet Management from 3:00pm to 3:30pm, and finally at the Property Management building from 3:30pm to 4:00pm.

f. On 08/18/17 this vehicle left the Oolite building's area from 9:00am to approximately 9:30am to drive to 323 23rd Street where a Valero gas station is located. The Daily Field Work Sheets for this vehicle's assigned operator stated that he was working at the Oolite building from 8:30am to 12:00pm. Later that day, during lunch hour, the vehicle was located again at the same Valero gas station.

g. On 08/18/17 this vehicle left the Oolite building's vicinity by 2:45pm and went directly to the Property Management building. However, the Daily Field Work Sheets for this vehicle's assigned operator located him at the Oolite building from 12:30pm to 2:30pm and at the 16th Street Garage area from 2:30pm to 3:30pm.

h. The total time difference between the Daily Field Work Sheets and the AVLS reports for the week tested on vehicle #4742 was fifteen (15) hours.

iv. Vehicle #13413

a. On 08/14/17 this vehicle was taken around 9:30am and driven to the corner of Washington Avenue and 14th Street, then to the Property Management building, before going to the 777 Building (City Hall area) around 10:05am where it remained until 1:30 pm. Yet, the Daily Field Work Sheets for this vehicle's assigned operator had him working at the 777 Building area from 9:30am to 2:00pm.

b. Although on 08/14/17 the Daily Field Work Sheets for this vehicle's assigned operator had him working at the 15th Street Garage area from 2:30pm to 3:00pm, the vehicle was not present at this site at any time during the day according to the corresponding day's AVLS reports.

c. On 08/15/17 this vehicle left Fire Station #1 at 9:55am which differs from the Daily Field Work Sheets which show that the employee was working on the premises from 8:30am to 10:30am.

d. On 08/15/17 the vehicle left the City Hall area around 11:30am and drove toward 323 23rd Street where a Valero service station is located, after thirty (30) minutes there, the vehicle was driven to 1045 Dade Boulevard where a Publix Supermarket is located staying there for around fifteen (15) minutes before returning to City Hall 12:35pm, (a 65 minutes absence from the City Hall) to finally leave at 2:30am. The Daily Field Work Sheets for this vehicle's assigned operator stated that he was at City Hall from 10:30am to 3:00pm. A 30-minute lunch break would most likely take place during this timeframe, but it was not detailed in the Daily Field Work Sheets and it appeared to exceed the designated half hour.

e. On 08/16/17 this vehicle left the 777 Building around 2:30pm and headed toward the service building located at 2100 Meridian Avenue, then moved to Fire Station #1 where it stayed until approximately 3:15pm when it returned to the Property Management building. The Daily Field Work Sheets for this vehicle's assigned operator located him at the 777 Building from 10:30am to 3:00pm.

f. On 08/17/17 this vehicle left the Property Management building area around 8:30am and was driven to the service building located at 2100 Meridian Avenue. The vehicle stayed there until 2:30pm when it went to the 777 building area where it stayed for about ten (10) minutes before returning to the Property Management building. The Daily Field Work Sheets for this vehicle's assigned operator stated that he was working at the Property Management building from 7:30am to 10:00am, at the 777 Building from 10:00am to 2:30pm, and finally at the Property Management building from 2:30pm to 4:00pm.

g. On 08/18/17 this vehicle left the Oolite building's area around 2:10pm and went toward the Pump Room Sewer where it remained for about thirty (30) minutes. Then the vehicle started heading towards the Property Management building area around 2:45pm. The Daily Field Work Sheets for this vehicle's assigned operator located him at the Oolite building's area from 12:30pm to 3:00pm and at Pump Room Sewer from 3:00pm to 3:30pm.

h. The total time difference between the Daily Field Work Sheets and the AVLS reports for the week tested on vehicle #13413 was ten (10) hours and thirty (30) minutes.

v. Vehicle #13409

a. On 08/14/17 this vehicle arrived at approximately 7:45am at the Oolite building's area before leaving at 8:30am where it was driven and parked at

Old City Hall until 9:45am. Next, it returned to the Oolite building's area where it stayed for around fifteen (15) minutes before returning to the Property Management building where it remained from 10:15am to 1:30pm. After 1:30pm the vehicle made several trips, stopping sporadically at the parking garages located at Pennsylvania Avenue and 17th Street and at a parking lot near a hardware store located by Alton Road until it finally arrived at the Property Management building around 3:00pm. The Field Work Sheets for this vehicle's assigned operator had him working at the Oolite building's area from 8:00am to 10:00am, at Old City Hall from 10:00am to 12:00pm and at the Convention Center from 12:30pm to 4:00pm.

b. On 08/15/17 this vehicle left the Property Management building at 1:40pm and went to the Bass Museum where it stayed until 2:00pm (20 minutes including travel time). The Daily Field Work Sheets for this vehicle's assigned operator had him working at the Bass Museum from 1:00pm to 2:30pm.

c. On 08/15/17 the vehicle stayed for five (5) minutes from 2:45 to 2:50pm at 2100 Meridian Avenue which differs from the Daily Field Work Sheets which shows him working there from 2:30pm to 3:30pm.

d. Although on 08/16/17 the Daily Field Work Sheets for this vehicle's assigned operator had him located at the Oolite building from 8:00am to 11:30am, the vehicle was actually located at the garage located in 16th St & Washington Ave on two different occasions from 8:30am to 9:00am and between 10:10am and 11:10am according to the AVLS reports.

e. On 08/16/17, the Daily Field Work Sheets for this vehicle's assigned operator had him working at the 64th Street Garage from 11:30am to 2:00pm and at Fleet Management (Terminal Isle) form 2:00pm to 3:30pm. However, in this timeframe the vehicle made several short duration trips between the Oolite Building, Property Management building, a local hardware store and Terminal Isle per the AVLS reports. The longest stay was at Terminal Isle for about fifteen (15) minutes. After the short trips, the vehicle arrived at the City Hall area around 2:30pm.

f. On 08/17/17 the Daily Field Work Sheets for this vehicle's assigned operator had him working at Fleet Management (Terminal Isle) from 8:00am to 10:00am and at Fire Station #1 from 10:00am to 11:00am. However, the vehicle left Terminal Isle at 9:30am and was parked at Fire Station #1 only between 9:40am and 10:10am according to the AVLS reports.

g. On 08/18/17 the vehicle was parked in the Oolite building area between 7:30am and 8:30am. Afterwards, the vehicle arrived at 8:45am at the Botanical Garden, then was driven to City Hall where it stayed from 11:45am until 1;00pm, and then went toward the 16th Street Garage where

it stayed for less than five (5) minutes before returning to City Hall before returning to the Property Management building at 2:00pm. The Daily Field Work Sheets for this vehicle's assigned operator recorded him working at the Oolite building area from 7:00am to 10:00am, at the Botanical Garden from 10:00am to 1:30pm and at the City Hall Garage from 1:30pm to 3:00pm.

h. The total time difference between the Daily Field Work Sheets and the AVLS reports for the week tested on vehicle #13409 was twelve (12) hours.

The total time differences and the corresponding charges apparently incorrectly billed for the five (5) tested vehicles containing numerous differences are summarized in the table below:

Vehicle Number	Time Difference (hh:mm)	Time Difference (decimals)	Hourly Rate *	Difference in $
#15410	5:45	5.75		$ 458.85
#4741	4:35	4.58		$ 365.75
#4742	15:00	15.00	**$ 79.80**	$1,197.00
#13413	10:30	10.50		$ 837.90
#13409	12:00	12.00		$ 957.60
Total	**47:50**	**47.83**		**$3,817.10**

* The Property Management Department uniformly charged a standard labor hourly rate of $79.80 for all work charged out by tradesworkers during the 2016/17 fiscal year.

The above table shows that a total of $3,817.10 was incorrectly charged out to work requestors for the five (5) vehicles reviewed for the period of 08/14/17 through 08/18/17. If these differences remained constant for the year, then the estimated misbilling amount would equal $992,446 (($3,817.10 / 5 vehicles) x 25 vehicles[2] x 52 weeks = $992,446).

Lastly, although work orders created with vague or generic locations such as beachwalk showers, Collins Park, beach showers on the beachwalk, etc. may save staff time by not having to create additional work orders for different locations, the current practice complicates the subsequent reconciliation of the Daily Field Work Sheets to the AVLS reports.

Recommendation(s):
The individual preparers of the Daily Field Work Sheets should indicate the vehicle number of the truck used in the completion of their work orders to facilitate future analysis. Designated Property Management Department personnel should periodically compare the AVLS reports and the Daily Field Work Sheets as required per Section VI(C). The results of their testing should be documented and forwarded to department management so that the appropriate corrective actions can be taken. Furthermore, tradesworkers should be made cognizant that this analysis is being performed and made aware of its results to

2 The seventeen (17) Administration vehicles were excluded as these employees are not required to submit Daily Field Work Sheets.

better ensure accurate billings and to foster improved productivity. Finally, the Property Management Department should consider creating work orders for specific locations whenever possible rather than for vague or generic locations. At a minimum, they should specify the exact location in the "comments" section to facilitate identification and exactly where the work was performed.

Management Response (Property Management Department):

- Upon review of this audit, we found the AVL system is not always reliable. Some vehicles "disappear" from the geo-locator. We also found few specialty vehicles did not have AVLS. In order to ensure greater reliability and verifiable data, we will work with the Fleet Department to: 1) assure all Property Management vehicles have AVLS installed; 2) repair AVLs not sending signals and 3) confirm that all vehicles in our Department are reflected accordingly in Fleet (i.e. some older vehicles that once belonged to Property were reassigned to Parks, Beach Maintenance, etc., and may not appear as updated in Fleet)

- Vehicle #13413 will be scheduled to have the AVL installed / repaired.

- Vehicle #15410 is assigned to staff performing work orders on Lincoln Rd. Staff parks on Lincoln Rd and drives around in a Gator utility vehicle. The variance in hours for inactivity or lack of connectivity may be attributed to this.

- The Department will be more specific in creating work orders and staff will provide field sheets that capture the information clearly.

3. Finding: *City Vehicles were Incorrectly Used to Pick-up Food for Thanksgiving and Year-End Staff Luncheons*

Section I(B) of the Citywide AVLS procedure states that the City shall use AVLS to actively monitor: personnel and vehicle resources, the efficient deployment of personnel and vehicle resources, to ensure that employees are adhering to City and/or Department policies, and to investigate allegations of unlawful, unauthorized, or wrongful activity, etc.

The Detailed Vehicle Geofence Time (DVGT) report was generated for a three-month period between 11/01/2017 and 01/31/2018 for all forty-two (42) vehicles assigned to the Property Management Department. The DVGT report shows the amount of time a vehicle is located inside and outside of a pre-selected area or geofence, which in this case was the Miami Beach City limits.

The analysis performed on this report included reviewing the locations where the vehicle was parked while it was outside the City's boundaries to determine if these locations were aligned to expected duties and responsibilities. The expected duties and responsibilities can be mostly classified among two categories, visiting hardware stores and vehicle repair shops.

Inquiries were subsequently made to Property Management Department administration for those visited locations that did not fit the expectations and their responses were evaluated. The only exceptions noted during testing included vehicles #4745 and #13413 that made separate trips on 11/15/17 and 12/20/17 respectively to a food wholesaler

located at 2020 NW 22nd Street in Miami. Property Management Department administration confirmed that these trips were used to pick up food for their Thanksgiving and year-end staff luncheons.

Recommendation(s):
Property Management Department assigned vehicles should only be used for work related to their expected duties and responsibilities. Employees' personal vehicles should be used for all other purposes.

Management Response (Property Management Department):
The Department will monitor weekly AVLS reports and note any vehicle outside of City boundaries to ensure compliance and take corrective actions where necessary.

4. Finding: *2,954 Idling Events were Identified during 11/01/2017 to 1/31/2018 via Generated AVLS Reports that Resulted in the Wasting of Gasoline and Increased Wear and Tear on the Vehicles' Engines thereby Heightening the Likelihood of Needed Repairs*
Section IV(4) of the Citywide procedure HR.03.01 entitled City Vehicle Assignment, Operation and Maintenance states that *"City vehicles and heavy equipment shall not be left running while unattended. This prohibition shall not apply to public safety employees whose duties require constant operation of the vehicles."* Although one could argue that there is no means to know retrospectively if the idling vehicle was unattended, the preferred option is to power the vehicle down when it is not being driven to prevent the wasting of gasoline and to help reduce the amount of wear and tear on the engine.

The AVLS's Idle Vehicle Summary Report was generated and analyzed for a three-month period between 11/01/17 to 1/31/18 for all forty-two (42) vehicles assigned to the Property Management Department. However, the only idling event related to vehicle #13407 was discarded due to satellite connectivity issues, thus this vehicle is not included in the results identified below.

The tested vehicles are segregated in the AVLS as per their assigned divisions (Plumbing, Electrical, Administration, etc.) in the TrackStar system and obtained results are presented similarly. For analysis purpose, an idling event is defined as a vehicle with the ignition on and no movement for at least five (5) minutes, thus any idling events for less than five (5) minutes were not considered. This grace period allows sufficient time for the vehicle operator to complete their Daily Field Work Sheet entries associated with their recently completed work order and gives them time to locate their next engagement.

With the purpose to detect and discard wrongful readings due to system shortcomings, Idle Vehicle Summary Report results were compared to the Ignition Summary Report, which states the time and location a vehicle is ignited and/or turned off. Consequently, idling events were reviewed on both reports and discarded if satellite connectivity issues were detected. The results of our analysis indicate that idling was a common practice among tested vehicles.

Additional research was performed to determine the approximate cost of fuel wasted through idling. Information from the U.S. Department of Energy, Vehicle Technology

Office[3] referencing a study made by the Argonne National Laboratory[4] was used to determine the consumption during idling for selected gasoline and diesel vehicles. Also, fuel prices were obtained from the U.S. Energy Information Administration[5] and averaged for the months that the test was performed. It was determined that idling events wasted over 453 gallons of fuel at an estimated cost of $1,220 during the three-month period.

The following two charts present (1) the number of idling events by division, grouped by time length, and (2) the percentage of idling events by division, by hourly range. Although some of the readings appear to be extreme, reviewed data for these events present no evidence indicating system malfunction or satellite connectivity problems so they were included among the results.

Number of Idling Events
Vehicles by Service Division (Number of Vehicles)

Range in Hours	A/C (4)	Admin (17)	Elect (2)	Maintenance (10)	Painting (2)	Plumbing (6)	Total (41)
> 5min-1h *	234	554	304	763	166	910	2,931
1-2	1	2	4	4		2	13
2-3		1	2		1		4
3-4			2				2
6-7			1				1
7-8			1				1
10-11			1				1
34-35			1				1
Total Idling Events	**235**	**557**	**316**	**767**	**167**	**912**	**2,954**
Average**	**59**	**33**	**158**	**77**	**84**	**152**	**71**

* Idling events under five (5) minutes were excluded from analysis.
** Average idling events per vehicle (total idling events / total number of vehicles).

Percentage of Idling Events by Time Range by Division

Hour Range	A/C	Admin	Electrical	Maintenance	Painting	Plumbing	Total
7am - 9am	25.96%	12.39%	20.57%	20.47%	**25.15%**	13.27%	17.43%
9am - 11am	14.47%	**27.11%**	24.37%	17.21%	17.37%	21.60%	20.99%
11am - 1pm	**33.19%**	24.78%	16.14%	**24.38%**	21.56%	**26.86%**	**24.88%**
1pm - 3pm	10.64%	20.83%	**26.90%**	19.43%	23.35%	23.36%	21.23%
3pm - 5pm	15.74%	14.90%	12.03%	18.51%	12.57%	14.91%	15.47%
Total	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**

3 https://www.energy.gov/eere/vehicles/fact-861-february-23-2015-idle-fuel-consumption-selected-gasoline-and-diesel-vehicles

4 http://www.anl.gov/sites/anl.gov/files/idling_worksheet.pdf

5 https://www.eia.gov/dnav/pet/xls/PET_PRI_GND_DCUS_NUS_W.xls

Results summary:

1. A total of 2,954 idling events were detected in the three-month period reviewed for the forty-one (41) vehicles included in the results for an average of 71 times per vehicle. Most of these idling events (2,931 or 99.2%) were in the > 5 minutes to 1-hour range.
2. The highest percentage of events (24.88%) took place during the 11:00am – 1:00pm time range which could indicate a propensity to idle the engine during lunch time.

Details by vehicle numbers are presented in Exhibits A and B located at the end of this audit report.

Recommendation(s):
Idling should be kept at minimum as the vehicle should typically be powered off when it is not being driven unless it is immediately following the completion of a work order so that the appropriate entries into the Daily Field Work Sheets can be recorded and the location of the next engagement determined. Designated Property Management Department personnel should include idling testing during their required reviews per Section VI(C). Also, the reason should be documented on the Daily Field Work Sheet for any future instances whereby idling for longer than five (5) minutes occurs.

Management Response (Property Management Department):
One of the vehicles analyzed was a bucket truck. This vehicle reflected extended idling time as it required to be left on in order to operate. Notwithstanding, the Department will monitor weekly reports to determine any vehicles exceeding idling and take corrective actions where necessary. The Department will also maintain a log when vehicle from its fleet are used by other departments and/or special events/circumstances (Ex. Memorial Day Weekend, etc.).

5. Finding: *2,651Speeding Events were Detected during 11/01/2017 through 01/31/2018 via AVLS Generated Reports that Increased the Likelihood that Traffic Accidents Could Occur*
The Speed Violation Report from the AVLS was generated and analyzed for a three-month period between 11/01/2017 to 1/31/2018, for all forty-two (42) vehicles under the Property Management Department. For analysis purpose, a speeding event is defined as a vehicle being driven at a rate of speed of five (5) miles per hour more than the local posted speed limit to help offset any margin of error on the speed reading process. Also, every time the AVLS is triggered by a speeding event, the event is recorded in five-second intervals, referred to during this analysis as an "incidence". Finally, it has been determined that every recorded incidence within twenty-five (25)[6] seconds to each other will be considered as one same speeding event.

Two (2) AVLS shortcomings were detected while performing this test that might create or exacerbate a speeding event. It was observed that if an incidence occurred at the very moment that a vehicle was passing by at a lower speed limit street intersection, the system would record the lowest of the two options. Also, it was observed that the AVLS stated lower maximum speeds on certain streets and avenues than it is supposed to be. These two (2) system shortcomings would add or intensify speeding events.

6 - Time lapse determined by auditor through data observation.

To correct data from wrongful speed readings due to the system's shortcomings, results from the Speed Violation Report were analyzed applying data mining techniques that helped to identify wrong or exacerbated speed readings as explained above and to either discard or correct them. The results of our analysis indicated that speeding is a common practice among tested vehicles.

The following is some of the information compiled through the analysis. Details by vehicle are presented in Exhibit C at the end of the report.

Total Speeding incidents in the reviewed three-month period: 2,651

Top three speeds in excess of the posted local speed limits (listed in miles per hour)

Vehicle	Speed	Speed Limit	Speed Excess
Admin 17906	82	45	37
Admin 17902	78	45	33
Maintenance 4745	65	35	30
Admin 17903	65	35	30

Top three speeds excess recorded (listed in percentage of increase)

Vehicle	Speed	Speed Limit	Speed Excess
Admin 17906	53	20	165%
Plumbing 4743	25	10	150%
Admin 15406	24	10	140%

Top three highest time lapses for speeding events

Vehicle	Time Lapses
Admin 17906	16 min 44 secs
Admin 17902	6 min 39 secs
Plumbing 15419	6 min 35 secs

Top Three in Quantity of Speeding Events by Vehicle

Vehicle	# Speeding Events
Admin 17906	1000
Painting 13409	306
Maintenance 4742	152

Recommendation(s):
Designated Property Management Department personnel should include speeding events testing during required reviews per Section VI(C). Property Management Department Administration should hold repeated offenders accountable and take the appropriate disciplinary actions.

Management Response (Property Management Department):
The Department will monitor weekly reports to determine excessive speeding and address with corrective, disciplinary action.

6. Finding: *The Property Management Department's Standard Operating Procedures and the Vehicle Permission Form Should State the Proper Allocation for Driving Time and Should Require a More Detailed Information on Employees Breaks and Lunches, As Well As to Include Narratives Prohibiting Idling and Speeding Events.*
During testing performed in the present report, it was unclear how driving time to/from jobs was recorded in the Daily Field Work Sheets by tradesworkers. Although this information was requested from the Property Management Department, it was not provided. Consequently, and as explained in Finding #2, only the outgoing travel was included as part of the service billed time. However, it is the Property Management Department Administration's role to determine the methodology in which driving time is to be consistently allocated in the Daily Field Work Sheets by all tradesworkers.

Also, any time spent for breaks and/or lunches was not disclosed, except in rare occasions in the Daily Field Work Sheets. This non-working time should be disclosed as to determine the appropriate amount to charge to the corresponding work requestors and to facilitate subsequent reconciliations to the AVLS reports. Finally, idling and speeding events should be included in the Department's Standard Operating Procedures and the Vehicle Permission Form as prohibited conduct.

Recommendation(s):
The departmental Standard Operating Procedures and the Vehicle Permission Form should be updated accordingly.

Management Response (Property Management Department):
- The Department has established defined lunch and break times for staff and this should be reflected accordingly in future daily field sheets.

- Travel time will be recorded in each daily field sheet. Travel time used towards breaks will be charged to the break/lunch time. Additionally, staff will be encouraged to use the most efficient route to work locations.

7. Finding: *Purchasing Credit Card Transactional Shortcomings are Noted Concerning the Purchasing of Diesel Fuel, Listing the Employee's Full Credit Card Number and Expiration Date, the Purchase of Food and Transactions Tagged to the Incorrect Vendor*
Citywide procedures were adopted in March 2014 concerning the usage of purchasing credit cards or p-card payments. Among other detailed information, these procedures state that these p-cards should not be used for repetitive purchases whose combined totals exceed the City's threshold in any given fiscal year, for requiring competitive solicitations as well as including a list of strict restrictions (no personal use, no cash advances, no gasoline and/or oil products, etc.).

A cursory review was performed of all 2,046 transactions (1,964 credits + 82 adjustments) from the 264 p-card payments made on behalf of Property Management staff between March 2016 and September 2017. In doing so, the following shortcomings were noted:

a. The Citywide p-card procedures restricted listing explicitly states, "No gasoline and/or oil products except for Fleet and Fire or when on business travel". Yet, Property Management occasionally get diesel fuel deliveries since Fleet Management does not have the equipment necessary to get the fuel to the generators according to subsequent inquiries. As evidence of this, invoice #55999 dated 05/15/16 from All Power Generators charging $4.29 per gallon without delivery charges and $5.87 per gallon with delivery charges was paid with p-card ending in 8528. A Fleet Management Department's Senior Management Analyst commented that Fleet Management was paying approximately $1.60 per gallon in March 2016.

b. The Senior Administrative Manager's statement for the period ending 04/15/17 contained four separate credit card authorization forms with the employee's full credit card number and expiration date. Despite few City employees having access to the Munis System's Purchasing Card module, this information needs to be blocked out or omitted for security reasons.

c. The previous Property Management Department Director's p-card was used on 04/05/16 to purchase breakfast and lunch for 35 people on 04/07/16 from South Florida Catering N' Events at a total cost of $1,367.25 ($504.00 for breakfast and $863.25 for lunch).

d. Two transactions were tagged to the incorrect vendor. Two p-card transactions to pay for a (1) wheelchair repair cancelation fee and (2) cabinets for the Procurement Department for $384.60 and $960.00 respectively were incorrectly recorded in Munis as the Internal Revenue Service was listed as the vendor.

Recommendation(s)

The following recommendations should be implemented to help correct the aforementioned deficiencies:

a. The Property Management Department Director should preclude the use of p-cards to pay for fuel in accordance to Citywide p-card procedures whenever possible. Also, it is recommended that Property Management Department Director search for less expensive options to re-fuel generators that is more in alignment with the amounts being paid for gasoline by the City's Fleet Management Department.

b. Property Management Department personnel in charge of handling p-card documentation should black-out all credit card numbers, except for the last four for identification purposes, from any document on file to help avoid fraudulent use of the credit card number. The less information present, the better.

c. Although this finding relates to a former Department's Director, it is important to re-state that expenditures should always be in accordance to Citywide p-card procedures.

d. The vendors should be changed in the City's Financial System for the listed transactions.

Management Response (Property Management Department):

- The Department will ensure that expenditures for all employees adhere to the City purchase card (p-card) procedures.
- Any identifiable information provided as backup, such as authorization forms to the transaction will be removed when reconciling.
- Vendor information is automatically imported into Munis, the City's Financial System, by the Finance Department. Property Management personnel are unable to edit or update this information for listed transaction. However, the Department will inform the Finance Department if errors are found so they can manually update.

EXIT CONFERENCE

An exit conference was held on July 30, 2018 in OBPI's Conference Room. Participants included Property Management Department Director Adrian Morales, Assistant Property Management Department Director Ramon Duarte, Assistant Property Management Department Director Elizabeth Miro, Maintenance and Operations Superintendent Cadel Aldana, Interim Internal Auditor Mark Coolidge and Senior Auditor Norman Blaiotta. Audit findings and recommendations were discussed, as were management responses, which are included herein. All were in agreement with the contents of this audit report.

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cc: Mark Taxis, Assistant City Manager
Adrian Morales, Property Management Department Director
Jorge Cano, Fleet Management Department Director
John Woodruff, Chief Financial Officer

Exhibit A:

Idling Events by Vehicle (11/01/17 - 01/31/18)									
Range in Hours / Vehicle List	>5min-1h.	1-2	2-3	3-4	6-7	7-8	10-11	34-35	Total
A/C									
Vehicle: 13408	91	1							92
Vehicle: 15411	10								10
Vehicle: 4741	1								1
Vehicle: 4744	132								132
Admin									
Vehicle: 13406	1	1							2
Vehicle: 14404	35								35
Vehicle: 15404	6								6
Vehicle: 15405	14								14
Vehicle: 15406	37								37
Vehicle: 15410	80								80
Vehicle: 15412	78								78
Vehicle: 15418	87								87
Vehicle: 1664	7								7
Vehicle: 16901	3								3
Vehicle: 17902	82								82
Vehicle: 17903	21								21
Vehicle: 17904	56	1							57
Vehicle: 17905	2								2
Vehicle: 17906	31								31
Vehicle: 17907	14								14
Vehicle: 17908			1						1
Electrical									
Vehicle: 13410	180								180
Vehicle: 16910	124	4	2	2	1	1	1	1	136
Maintenance									
Vehicle: 13413	164								164
Vehicle: 16902	7								7
Vehicle: 16911	44								44
Vehicle: 16912	38								38
Vehicle: 4270	18								18
Vehicle: 4560	38								38
Vehicle: 4742	235								235
Vehicle: 4745	55								55
Vehicle: 4780	3								3

Range in Hours / Vehicle List	0-1	1-2	2-3	3-4	6-7	7-8	10-11	34-35	Total
Vehicle: 4830	161	4							165
Painting									
Vehicle: 13409	147		1						148
Vehicle: 13411	19								19
Plumbing									
Vehicle: 13415	354								354
Vehicle: 15419	35								35
Vehicle: 4562	13	1							14
Vehicle: 4743	158								158
Vehicle: 4828	107								107
Vehicle: 4829	243	1							244
Grand Total	**2,931**	**13**	**4**	**2**	**1**	**1**	**1**	**1**	**2,954**

Exhibit B:

Percentage of Idling Events by Time Range by Vehicle (11/01/17-01/31/18)						
Time Range / Vehicle List	7am - 9am	9am - 11am	11am - 1pm	1pm - 3pm	3pm - 5pm	Total
A/C						
Vehicle: 13408	16.30%	19.57%	25.00%	17.39%	21.74%	100%
Vehicle: 15411	30.00%	10.00%	30.00%	10.00%	20.00%	100%
Vehicle: 4741	100.00%	0.00%	0.00%	0.00%	0.00%	100%
Vehicle: 4744	31.82%	11.36%	39.39%	6.06%	11.36%	100%
Admin						
Vehicle: 13406	50.00%	50.00%	0.00%	0.00%	0.00%	100%
Vehicle: 14404	2.86%	34.29%	31.43%	14.29%	17.14%	100%
Vehicle: 15404	0.00%	33.33%	16.67%	50.00%	0.00%	100%
Vehicle: 15405	0.00%	28.57%	35.71%	14.29%	21.43%	100%
Vehicle: 15406	24.32%	40.54%	10.81%	18.92%	5.41%	100%
Vehicle: 15410	21.25%	7.50%	35.00%	17.50%	18.75%	100%
Vehicle: 15412	2.56%	23.08%	34.62%	26.92%	12.82%	100%
Vehicle: 15418	14.94%	29.89%	18.39%	18.39%	18.39%	100%
Vehicle: 1664	28.57%	0.00%	14.29%	14.29%	42.86%	100%
Vehicle: 16901	0.00%	0.00%	33.33%	66.67%	0.00%	100%
Vehicle: 17902	4.88%	37.80%	19.51%	26.83%	10.98%	100%
Vehicle: 17903	14.29%	28.57%	19.05%	14.29%	23.81%	100%
Vehicle: 17904	24.56%	29.82%	24.56%	17.54%	3.51%	100%
Vehicle: 17905	0.00%	50.00%	0.00%	50.00%	0.00%	100%
Vehicle: 17906	6.45%	22.58%	19.35%	22.58%	29.03%	100%
Vehicle: 17907	0.00%	35.71%	28.57%	14.29%	21.43%	100%
Vehicle: 17908	100.00%	0.00%	0.00%	0.00%	0.00%	100%
Electrical						
Vehicle: 13410	25.00%	19.44%	16.11%	33.33%	6.11%	100%
Vehicle: 16910	14.71%	30.88%	16.18%	18.38%	19.85%	100%
Maintenance						
Vehicle: 13413	23.17%	14.63%	26.22%	14.63%	21.34%	100%
Vehicle: 16902	14.29%	42.86%	14.29%	14.29%	14.29%	100%
Vehicle: 16911	36.36%	18.18%	18.18%	25.00%	2.27%	100%
Vehicle: 16912	23.68%	36.84%	21.05%	15.79%	2.63%	100%
Vehicle: 4270	11.11%	44.44%	16.67%	11.11%	16.67%	100%
Vehicle: 4560	18.42%	28.95%	10.53%	34.21%	7.89%	100%
Vehicle: 4742	20.43%	21.70%	25.53%	19.57%	12.77%	100%
Vehicle: 4745	16.36%	1.82%	5.45%	5.45%	70.91%	100%
Vehicle: 4780	0.00%	0.00%	0.00%	66.67%	33.33%	100%

Percentage of Idling Events by Time Range by Vehicle						
Time Range / Vehicle List	**7am - 9am**	**9am - 11am**	**11am - 1pm**	**1pm - 3pm**	**3pm - 5pm**	**Total**
Painting						
Vehicle: 13409	25.00%	17.57%	19.59%	23.65%	14.19%	100%
Vehicle: 13411	26.32%	15.79%	36.84%	21.05%	0.00%	100%
Plumbing						
Vehicle: 13415	14.12%	30.23%	22.32%	27.40%	5.93%	100%
Vehicle: 15419	8.57%	25.71%	25.71%	25.71%	14.29%	100%
Vehicle: 4562	0.00%	14.29%	42.86%	21.43%	21.43%	100%
Vehicle: 4743	13.29%	13.29%	40.51%	13.29%	19.62%	100%
Vehicle: 4828	16.82%	7.48%	12.15%	21.50%	42.06%	100%
Vehicle: 4829	11.89%	20.49%	30.33%	24.59%	12.70%	100%
Total	**17.43%**	**20.99%**	**24.88%**	**21.23%**	**15.47%**	**100%**

Exhibit C:

N/S: no speeding event

Vehicles	Highest Speed Excess (in miles p/hour)			Highest Speed Excess (in %)			Sum of Speeding Incidences: 2651		Highest Time Elapsed During a Speeding Event (mm:ss):
	Speed	Speed Limit	Speed Excess	Speed	Speed Limit	% over Max Speed	Speeding Incidences	Average Speeding Instances per Day	
Plumbing 4829	41	25	16	19	10	90%	105	2.8	2 min 0 sec
Plumbing 4828	40	30	10	40	30	33%	12	2.0	25 secs
Plumbing 4743	25	10	15	25	10	150%	55	2.8	1 min 15 sec
Plumbing 4562	36	30	6	36	30	20%	2	1.0	1 min 0 sec
Plumbing 15419	54	30	24	22	10	120%	75	3.4	6 min 35 sec
Plumbing 13415	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S	
Painting 13411	25	15	10	25	15	67%	9	2.3	40 sec
Painting 13409	72	45	27	43	20	115%	306	5.6	5 min 5 sec
Maintenance 4830	44	30	14	31	20	55%	61	2.7	49 secs
Maintenance 4780	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S	
Maintenance 4745	65	35	30	65	35	86%	25	1.8	1 min 14 sec
Maintenance 4742	49	30	19	21	10	110%	152	4.0	3 min 5 sec
Maintenance 4560	67	45	22	41	25	64%	4	2.0	2 min 4 sec
Maintenance 4270	44	30	14	32	20	60%	35	5.8	2 min 30 sec
Maintenance 16912	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S	
Maintenance 16911	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S	
Maintenance 16902	61	40	21	45	25	80%	146	4.4	2 min 51 sec
Maintenance 13413	60	45	15	33	20	65%	81	3.9	2 min 5 sec
A-C 4741	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S	
A-C 4744	32	20	12	32	20	60%	42	3.5	1 min 23 sec
A-C 13408	36	20	16	36	20	80%	43	3.6	1 min 28 sec
A-C 15411	34	20	14	34	20	70%	5	2.5	25 secs
Electrical 13407	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S	
Electrical 13410	54	35	19	54	35	54%	36	2.8	1 min 14 sec
Electrical 16910	53	30	23	53	30	77%	45	3.8	2 min 5 sec
Admin 1664	58	35	23	58	35	66%	34	8.5	3 min 5 sec
Admin 13406	69	60	9	48	40	20%	6	3.0	5 secs
Admin 14404	47	30	17	47	30	57%	18	1.6	1 min 5 sec
Admin 15404	51	35	16	22	10	120%	39	2.4	2 min 0 sec
Admin 15405	38	20	18	38	20	90%	17	5.7	3 min 50 sec

Vehicles	Highest Speed Excess (in miles p/hour)			Highest Speed Excess (in %)			Sum of Speeding Incidences: 2651		Highest Time Elapsed During a Speeding Event (mm:ss):
	Speed	Speed Limit	Speed Excess	Speed	Speed Limit	% over Max Speed	Speeding Incidences	Average Speeding Instances per Day	
Admin 15406	45	30	15	24	10	140%	42	2.2	1 min 25 sec
Admin 15410	37	20	17	37	20	85%	56	2.5	2 min 45 sec
Admin 15412	29	20	9	29	20	45%	17	1.7	57 secs
Admin 15418	56	30	26	56	30	87%	29	4.9	2 min 29 sec
Admin 16901	47	30	17	47	30	57%	21	4.2	2 min 5 sec
Admin 17902	78	45	33	61	30	103%	40	9.5	6 min 39 sec
Admin 17903	65	35	30	65	35	86%	74	10.6	3 min 4 sec
Admin 17904	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S	
Admin 17905	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S	
Admin 17906	82	45	37	53	20	165%	1000	17.2	16 min 44 sec
Admin 17907	56	30	26	56	30	87%	19	2.1	52 secs
Admin 17908	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S	