



# Memorandum



Miami-Dade County Office of the Inspector General  
A State of Florida Commission on Law Enforcement Accredited Agency  
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To: Ms. Alina T. Hudak, Deputy Mayor / Interim Director  
Public Works and Waste Management Department

From: Mary T. Cagle, Inspector General

Date: March 17, 2014

Subject: Receipt of PWWM's Status Report regarding re-deployment of the  
Visual Inventory of Roadway Assets Solution Van (VIRA Van)  
IG13-27

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The Office of the Inspector General (OIG) is in receipt of the Public Works and Waste Management Department's (PWWM) status report, dated March 10, 2014, regarding the above-captioned. (Attachment 1) The OIG had previously requested such a status report in our memorandum to you (Attachment 2) that set forth our observations about this underutilized asset.

The OIG has fully reviewed PWWM's response. The plan identifies the human resources need to operate the van; and PWWM has identified the operational support (repairs and software upgrades) needed in order to place the asset back in service.


The OIG is satisfied with PWWM's plan and no other responses are required.

# Memorandum



**Date:** March 10, 2014

**To:** Mary T. Cagle, Inspector General  
Office of the Inspector General

**From:** Alina T. Hudak, Deputy Mayor / Interim Director  
Public Works and Waste Management Department 

**Subject:** Office of the Inspector General Administrative Case Closure Report  
Ref. IG13-27 VIRA Van

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## Background

This memorandum provides the information requested by the Office of the Inspector General's (OIG) Case Closure Report IG13-27, in particular as it pertains to the Public Works and Waste Management Department's (PWWM) plan for the Visual Inventory of Roadway Assets Solution Van (VIRA van). The VIRA van, and the services it provides, was purchased by the County through the execution of Contract EPP-RFP 8390 on June 23, 2008. The terms of the Contract called for capturing a countywide digital image set to be incorporated in the County's Geographic Information System (GIS). The captured images were converted into a roadway asset inventory, which included sidewalks, traffic signs, and pavement conditions. It is important to note that PWWM obtained deliverables (e.g., vehicle, hardware, software, training, and visual inventory layer/data) from the vendor as per the contract requirements. The data collected included over 84,000 traffic signs, over 39,100 ADA ramps and connectors, 168 bridges, and over 3,400 miles of sidewalk, where approximately 20,600 issues were identified.

## VIRA Van Program and Next Steps

In general terms, PWWM agrees with the OIG report's findings that the VIRA van has not been utilized to its full potential, specifically between the years 2011 through 2013, due to budgetary and personnel constraints. However, as detailed below, and in light of the numerous benefits it provides the County, I instructed staff to make every effort possible to return the VIRA van to full working order to continue collecting data of the County's roadway system. To date, PWWM has procured vendors for the repair of damaged equipment on the VIRA van, and have expended a total of \$32,147.89 in effectuating most of the needed repairs. Currently, the VIRA van can be immediately placed in to service to capture images and to inventory all roadway assets with the exception of automatically producing the roadway crack density data. The component which measures this data is expected to be repaired by March 2014. Additionally, PWWM has procured a five (5) year software maintenance contract in the amount of \$62,500.

Once fully operational, the VIRA van program will be assigned to PWWM's Road, Bridge, Canal and Mosquito Control Division under the supervision of Mr. Manuel O. Garcia, Division Director. Mr. Michael Murphy, Supervisor, will be responsible for day to day management, as he is familiar with the GIS software the program employs. Additionally, Mr. Nasif Alshaier, Computer Services Manager, Information Technology Department, whom also has extensive knowledge of the program, will have technical oversight and provide technical support. Finally, in order to operate the VIRA van, and staff the program appropriately, the following is necessary:

- 1) Driver: A driver for the van must be assigned for a period of five (5) to six (6) months per year to inventory all County maintained roadways assets, and that of municipalities as applicable.

These duties will be assigned to Mr. Carlos Primo. Currently, Mr. Primo is a Clerk IV in the Road, Bridge, Canal and Mosquito Control Division. Mr. Primo is familiar with the van's operation as he previously drove it when the program was active. During the time the van is not being driven, Mr. Primo will continue to assist staff in the Mosquito Control Section.

- 2) Vehicle Computer Operator: The operator of the van's computer system must have extensive experience with Autocad and GIS. The employee will also create GIS layers and inventory the data captured by the VIRA van's equipment.

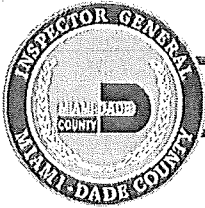
These duties will be assigned to Ms. Marli Do Nascimento. Currently, Ms. Do Nascimento is a Computer Aided drafter in the Road, Bridge, Canal and Mosquito Control Division, and has the required background.

### **Conclusion**

The VIRA Van remains an important asset to PWWM. Through the use of the VIRA van, the County has saved an estimated \$620,000 during the first year of the program alone. This amount is as a result of the Nesbitt Lawsuit, where the County was required to identify ADA deficiencies throughout County maintained roadways. It is estimated that in order to inventory all County maintained sidewalks, it would take two (2) inspectors a period of two (2) years. However, the sidewalk data collected by the VIRA van allowed the County to comply with the lawsuit's requirement. Furthermore, construction claims have been averted by reviewing data collected by the VIRA van in order to confirm if the damage claimed was present prior to the start of construction being administered by PWWM. One such case, resulted in the denial of a \$20,000 claim. Finally, the VIRA can be marketed to other County departments and Municipalities. For example, the City of Miami recently expressed an interest in establishing an interlocal agreement for PWWM to provide a visual inventory of their municipal roadway system.

Once fully restored, the VIRA van will continue collecting data of the County's roadway system which will be converted to a tangible resource utilized by PWWM in its direct service to County residents. Staff is working towards ensuring the VIRA van is fully operational by March 2014.

c: Antonio Cotarelo, P.E., County Engineer, PWWM  
Manuel O. Garcia, Division Director, Road, Bridge, Canal and Mosquito Control Division, PWWM



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To: Alina T. Hudak, Deputy Mayor  
Office of the Mayor

From: Patra Liu, Interim Inspector General

Date: October 11, 2013

Subject: Transmittal of OIG Administrative Case Closure Memo and Request for a Status Report from Miami-Dade Public Works and Waste Management (PWWM)

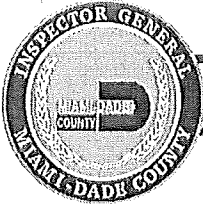
Attached please find a copy of the Office of the Inspector General (OIG) case closure report concerning an allegation that a Visual Inventory of Roadway Assets Solution Van (VIRA van), purchased by PWWM in 2008, is underutilized resulting in waste of the asset. Additionally, there was a second allegation pertaining to special treatment afforded to requests for stop signs made by County Commissioners.

As to the first allegation, it is substantiated but explained by the fact that there were technical malfunctions and budgetary and personnel related impacts. As to the VIRA van, the OIG requests a report from PWWM that details its plans for returning the van to a useable state and accomplishing its intended purpose. Upon receipt of this information from PWWM, and a finding that it satisfactorily addresses the concerns of the OIG, it is recommended that this investigation be closed. We respectfully request to receive report in 30 days.

As to the second allegation, it is unfounded. The OIG's review of actual stop sign requests shows no favoritism towards requests made by Commissioners. A copy of our closeout report will be provided to the BCC under separate cover.

Attachment

cc: Antonio Cotarelo, Interim County Engineer/Assistant Director of Construction, PWWM  
Frank Aira, Acting Chief, Traffic Signal and Signs Division PWWM  
Teresa Fuentes-Smart, Division Director, Technology Services Division, PWWM



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To: Patra Liu, Interim Inspector General *PLiu*

From: Laudelina Fernandez McDonald, Assistant Legal Counsel *LFM*

Date: October 10, 2013

Subject: Administrative Case Closure Report, Ref. IG13-27  
Miami-Dade Public Works and Waste Management/VIRA Van

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This case was assigned for investigation to Special Agent Michael Auch (SA Auch), who has retired from the OIG. This writer has been assigned the task of completing this report based on the reports, documents, notes, and findings compiled by SA Auch during the course of the investigation. Additionally, this writer conferred with SA Auch on various occasions and thoroughly discussed this report and his findings prior to his retirement.

## SYNOPSIS

On March 26, 2013, the Miami-Dade County Office of the Inspector General (OIG) received an anonymous complaint regarding a variety of issues, including personnel and supervision issues, at the Miami-Dade County Public Works and Waste Management Department (PWWM). Of the numerous issues, two allegations warranted further review:

1. PWWM spent \$1 million dollars to purchase a van with global positioning and video capabilities, but rarely used it because it was always out of service due to mechanical issues.
2. PWWM gave special treatment to requests for the installation of new stop signs when the request came from the Offices of Miami-Dade County Commissioners.

Regarding the first allegation, the OIG confirmed that in June 2008, PWWM's Technology Services Division (TSD) purchased a van known as the Visual Inventory of Roadway Assets Solution Van (VIRA van) for \$900,000. The investigation revealed that for the first year the van was used extensively. Sometime in June or July 2009, the van was transferred from TSD to the Traffic Engineering Division (TED) because TSD did not have adequate staff to operate vehicle. The OIG determined that the van continued to be used until the end of 2010, when the van became inoperable due to a VIRA system malfunction, and the vendor was unable to provide support because the service contract had expired. In August 2011, the service contract was renewed and the van was repaired to again become fully operational. However, the OIG learned that from 2011-2013, because of budgetary

cutbacks and work force shortages, the use of the van drastically declined. This lack of use led to a variety of mechanical problems that led to additional out-of-service time for the van. According to information provided by PWWM, it is clear that the van was not used to its full potential. As such, the allegation was substantiated.

In October 2012, the van was transferred from TED back to TSD. PWWM advised the OIG that they are conducting a complete mechanical assessment of the van in an effort to put the vehicle back into service.

As to the second allegation that PWWM gave special treatment to County Commissioners' requests for the installation of new stop signs over citizens' requests, we determined the allegation to be unfounded.

## **INVESTIGATIVE FINDINGS**

### ***VIRA Van Allegation***

During this investigation, the OIG learned that on June 28, 2008, PWWM purchased a VIRA van, and the hardware and software required to operate it, for \$900,000 (Contract No. EPP-RFP 8390). The agreement with the vendor, Enterprise Information Solutions, Inc. (EIS), included providing a data collection and pavement survey vehicle with all the hardware and software installed; furnishing and installing data collection software in the office; providing training, support, and maintenance services for one year; and completing the initial data collection services for sidewalks and signs.

In July 2009, PWWM transferred the responsibility for the operation of the van from TSD to TED. According to interviews of staff members, the reason for the move was due to budget cutbacks and subsequent staffing shortages. The operation of the van requires a minimum of two employees—one driver and one data entry specialist—to operate the equipment used to conduct the survey. Once the data is obtained, additional time is required back in the office to download the information to a server and to create reports that can be accessed by PWWM personnel.

Between January - December 2010, the van had collected data on 87,302 traffic signs; 39,243 pedestrian ramps; 5,727 streetlights; 3,500 miles of sidewalks; and 33,189 assets with American with Disabilities Act (ADA) implications. Personnel from the vendor, along with TSD staff, accomplished this data collection. In addition, plans were put in place so that municipalities could benefit from the van by having its roadway assets surveyed. According to PWWM, the plan was to conduct a complete updated survey of County assets every two years.

Between the end of 2010 through July 2011, the van became inoperable due to a VIRA system malfunction and the vendor was unable to provide support because the maintenance contract had expired. In August 2011, a new service contract was approved and the van was put back in operation. At this time, TED ran into staffing problems and resorted to using light-duty personnel to operate the van at reduced levels. During the final quarter of 2012, only 92 miles of assets were surveyed.

In January 2012, shortly after Public Works merged with Solid Waste, a decision was made, again based on staffing issues, to transfer the van back to TSD. In April 2012, the van had a major system failure and PWWM continued to struggle finding qualified operators for it.

In June 2013, PWWM advised the OIG that the van was undergoing a complete mechanical assessment so that it can be put back into service.

### ***Stop Signs Allegation***

As to the second allegation, the OIG reviewed 153 stop sign requests that were processed by PWWM from July 31, 2012 through June 18, 2013. This review revealed that PWWM denied requests made by the Offices of County Commissioners at a higher rate than requests made by the public at large. Table #1 below contains the findings of the OIG analysis of the data PWWM provided.

**Table 1**

<b>Request Category</b>	<b>Total Requests</b>	<b>Open Requests</b>	<b>Recommended</b>	<b>Denied</b>	<b>% of Denied Requests</b>
Commissioner's Office	30	12	1	17	57%
Public at Large	123	69	4	50	41%

### **CONCLUSION & CASE CLOSURE RECOMMENDATION**

Based upon the evidence uncovered during this investigation, the allegation that the VIRA van was out of service for extensive periods has been substantiated. Information provided by PWWM staff revealed that from 2011 through 2013, the van was rarely used. PWWM advised that this was due to staffing shortages and maintenance issues that were out of its control.

It is recommended that the OIG request a memorandum from PWWM that details its plan for returning the van to a useable state and accomplishing its intended purpose. Upon receipt of this information from PWWM, and a finding that it satisfactorily addresses the concerns of the OIG, it is recommended that this investigation be closed.

The allegation that PWWM gave special treatment to stop sign installation requests initiated by County Commissioners over citizen requests was unfounded.

This investigation was conducted in accordance with the *Principles and Standards for Offices of Inspector General* as promulgated by the Association of Inspectors General.